



Light Output Ratio:	70.6%	
Luminaire Power:	40.7 W	
SHR Nominal:	0.00	Calculated using the TM5
SHR Maximum:	1.00	fine grid method.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

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ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

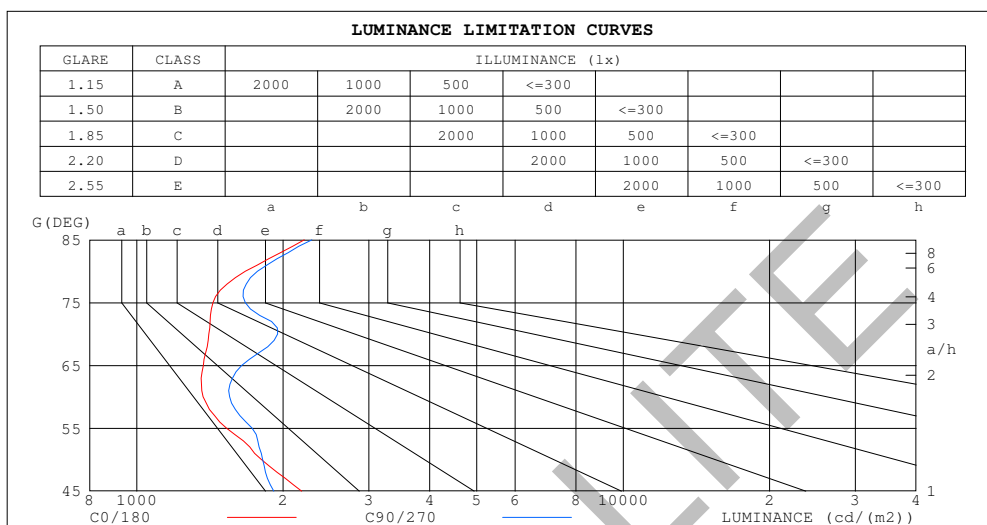
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	726.8	786.1	969.6	1215	1377	1344	1051	792.7	0- 10	2321	2321	54.4, 38.4
20	141.9	117.1	101.7	107.9	141.2	159.3	167.1	159.1	10- 20	1106	3427	80.3, 56.6
30	47.24	32.35	26.25	24.27	27.19	35.89	51.10	57.29	20- 30	319.6	3747	87.8, 61.9
40	20.91	18.45	19.06	20.43	20.97	21.06	21.76	22.84	30- 40	184.9	3932	92.1, 65
50	11.58	11.39	11.66	11.80	12.15	12.19	12.20	11.88	40- 50	118.0	4050	94.9, 66.9
60	6.841	6.993	7.752	8.291	8.346	7.761	7.310	6.979	50- 60	85.46	4135	96.9, 68.3
70	4.807	5.301	6.658	8.297	7.592	6.076	5.270	4.930	60- 70	66.09	4201	98.4, 69.4
80	2.900	2.893	3.072	3.287	3.305	3.324	3.062	2.837	70- 80	46.22	4247	99.5, 70.2
90	1.029	1.016	1.072	1.170	1.206	1.150	1.086	0.9757	80- 90	21.37	4269	100, 70.6
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY: μ A10cd									UNIT: lm		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.852m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.22V I:0.1816A P:40.697W PF:0.9734 Freq:50.00Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: CW, NICHIA, BA-10°	DIM.: Ø170 x 68	SERIAL No.: 5195
MFR.: K-LITE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	2211	2291
80	1672	1771
75	1435	1673
70	1407	1949
65	1370	1645
60	1370	1552
55	1528	1727
50	1804	1816
45	2184	1914

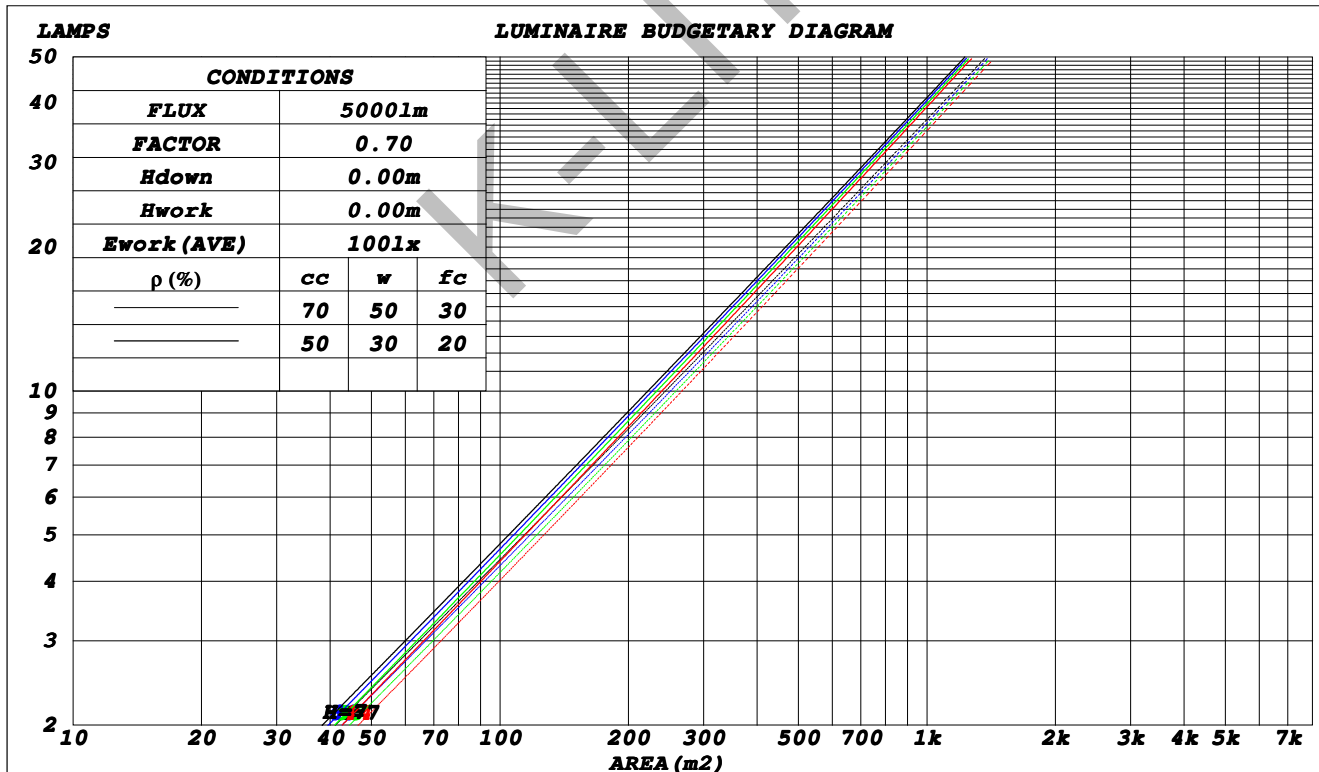
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.22V I:0.1816A P:40.697W PF:0.9734 Freq:50.00Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: CW, NICHIA, BA-10°	DIM.: Ø170 x 68	SERIAL No.: 5195
MFR.: K-LITE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	.84	.84	.84	.82	.82	.82	.78	.78	.78	.75	.75	.75	.72	.72	.72	.71
1.0	.79	.78	.77	.78	.77	.75	.75	.74	.73	.72	.72	.71	.70	.69	.69	.68
2.0	.76	.73	.71	.74	.72	.71	.72	.71	.69	.70	.69	.68	.68	.67	.66	.65
3.0	.72	.70	.68	.71	.69	.67	.70	.68	.66	.68	.66	.65	.67	.65	.64	.63
4.0	.70	.67	.65	.69	.66	.64	.68	.65	.64	.66	.64	.63	.65	.64	.62	.61
5.0	.67	.65	.62	.67	.64	.62	.66	.63	.62	.65	.63	.61	.64	.62	.61	.60
6.0	.65	.63	.61	.65	.62	.60	.64	.62	.60	.63	.61	.60	.62	.61	.59	.59
7.0	.64	.61	.59	.63	.61	.59	.63	.60	.59	.62	.60	.58	.61	.59	.58	.57
8.0	.62	.59	.58	.62	.59	.57	.61	.59	.57	.61	.59	.57	.60	.58	.57	.56
9.0	.61	.58	.56	.61	.58	.56	.60	.58	.56	.60	.57	.56	.59	.57	.56	.55
10.0	.60	.57	.55	.59	.57	.55	.59	.57	.55	.59	.56	.55	.58	.56	.55	.54



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:230.22V I:0.1816A P:40.697W PF:0.9734 Freq:50.00Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:CW, NICHIA, BA-10°	DIM.: Ø170 x 68	SERIAL No.:5195
MFR.: K-LITE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)										
0.0																	
1.0	.103	.058	.018	.098	.056	.018	.089	.051	.016	.081	.047	.015	.074	.043	.014		
2.0	.093	.051	.016	.090	.049	.015	.082	.046	.014	.076	.042	.013	.069	.039	.012		
3.0	.086	.046	.014	.082	.044	.013	.076	.041	.013	.071	.039	.012	.066	.036	.011		
4.0	.079	.041	.012	.076	.040	.012	.071	.038	.011	.066	.036	.011	.062	.034	.010		
5.0	.073	.037	.011	.071	.036	.011	.067	.035	.010	.062	.033	.010	.059	.031	.009		
6.0	.068	.034	.010	.066	.033	.010	.063	.032	.009	.059	.031	.009	.056	.029	.009		
7.0	.064	.032	.009	.062	.031	.009	.059	.030	.009	.056	.029	.008	.053	.028	.008		
8.0	.060	.029	.008	.059	.029	.008	.056	.028	.008	.053	.027	.008	.051	.026	.008		
9.0	.057	.027	.008	.055	.027	.008	.053	.026	.007	.051	.025	.007	.049	.025	.007		
10.0	.054	.026	.007	.053	.025	.007	.050	.025	.007	.048	.024	.007	.047	.023	.007		

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.134	.134	.134	.115	.115	.115	.078	.078	.078	.045	.045	.045	.014	.014	.014	
1.0	.119	.111	.104	.102	.095	.090	.070	.066	.062	.040	.038	.036	.013	.012	.012	
2.0	.107	.094	.083	.091	.081	.072	.063	.056	.050	.036	.032	.029	.012	.010	.010	
3.0	.096	.080	.067	.082	.069	.058	.056	.048	.041	.033	.028	.024	.010	.009	.008	
4.0	.087	.069	.056	.074	.060	.048	.051	.042	.034	.030	.024	.020	.010	.008	.007	
5.0	.079	.060	.047	.068	.052	.041	.047	.036	.029	.027	.021	.017	.009	.007	.006	
6.0	.072	.053	.040	.062	.046	.034	.043	.032	.024	.025	.019	.014	.008	.006	.005	
7.0	.067	.047	.034	.057	.041	.030	.040	.029	.021	.023	.017	.012	.007	.006	.004	
8.0	.062	.043	.029	.053	.037	.026	.037	.026	.018	.021	.015	.011	.007	.005	.004	
9.0	.057	.038	.026	.049	.033	.022	.034	.023	.016	.020	.014	.009	.006	.005	.003	
10.0	.054	.035	.023	.046	.030	.020	.032	.021	.014	.019	.013	.008	.006	.004	.003	

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.22V I:0.1816A P:40.697W PF:0.9734 Freq:50.00Hz Lamp Flux:6050x1 lm											
NAME: VELA					TYPE:RECESSED CEILING			WEIGHT:			
SPEC.:CW, NICHIA, BA-10°					DIM.: Ø170 x 68			SERIAL No.:5195			
MFR.: K-LITE					SUR.:			Shielding Angle:			
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3	
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3	
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Room dimensions		Viewed crosswise				Viewed endwise					
x = 2H y = 2H	1.6	2.2	1.8	2.4	2.5	1.6	2.2	1.8	2.4	2.5	
	3H	3.0	3.5	3.2	3.7	3.9	3.4	4.0	3.7	4.2	4.4
	4H	3.6	4.2	3.9	4.4	4.6	4.2	4.7	4.4	5.0	5.2
	6H	4.3	4.9	4.6	5.1	5.3	4.8	5.3	5.1	5.6	5.8
	8H	4.7	5.2	5.0	5.5	5.7	5.1	5.6	5.4	5.9	6.1
12H	5.0	5.5	5.3	5.8	6.1	5.4	5.9	5.7	6.2	6.5	
4H	2H	2.1	2.7	2.4	2.9	3.1	2.1	2.7	2.4	2.9	3.1
	3H	3.7	4.3	4.0	4.5	4.8	4.2	4.7	4.5	4.9	5.2
	4H	4.6	5.0	4.9	5.3	5.6	5.0	5.5	5.3	5.8	6.1
	6H	5.4	5.8	5.8	6.1	6.5	5.7	6.2	6.1	6.5	6.8
	8H	5.8	6.2	6.2	6.6	6.9	6.1	6.5	6.5	6.9	7.2
12H	6.3	6.6	6.7	7.0	7.4	6.5	6.9	6.9	7.2	7.6	
8H	4H	4.9	5.3	5.3	5.7	6.0	5.3	5.7	5.7	6.0	6.4
	6H	5.9	6.3	6.3	6.6	7.1	6.2	6.5	6.6	6.9	7.3
	8H	6.5	6.8	6.9	7.2	7.6	6.7	7.0	7.1	7.4	7.8
	12H	7.0	7.3	7.5	7.7	8.2	7.2	7.4	7.7	7.9	8.4
	12H	4H	4.9	5.3	5.3	5.7	6.1	5.3	5.7	5.7	6.1
6H	6.0	6.3	6.5	6.7	7.2	6.3	6.6	6.7	7.0	7.4	
8H	6.6	6.9	7.1	7.3	7.8	6.8	7.1	7.3	7.5	8.0	
Variations with the observer position at spacings:											
S = 1.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.2					
1.5H	+ 0.1 / - 0.2					+ 0.1 / - 0.2					
2.0H	+ 0.3 / - 0.3					+ 0.3 / - 0.3					

CIE Pub.117, 6050 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 6.3$)
Area: 0.1 m²

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.22V I:0.1816A P:40.697W PF:0.9734 Freq:50.00Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:CW, NICHIA, BA-10°	DIM.: Ø170 x 68	SERIAL No.:5195
MFR.: K-LITE	SUR.:	Shielding Angle:

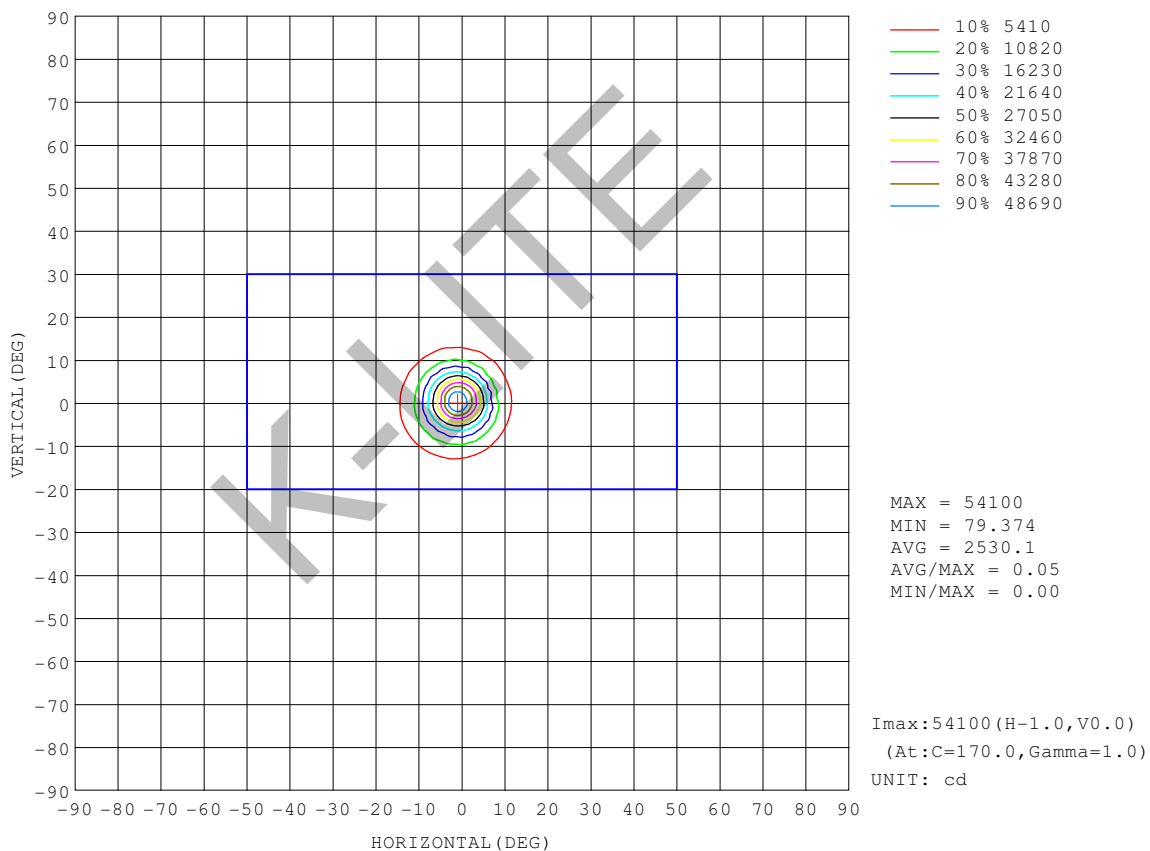
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	61	57	54	61	57	54	60	56	54	51
0.80	66	62	59	66	62	59	65	61	59	56
1.00	69	65	63	69	65	62	68	65	62	59
1.25	72	68	66	71	68	66	70	67	65	62
1.50	74	71	68	73	70	68	72	69	67	64
2.00	76	73	71	75	72	70	73	71	69	65
2.50	77	74	72	76	74	72	74	72	70	66
3.00	78	76	74	77	75	73	75	73	72	67
4.00	80	78	76	79	77	75	76	75	73	68
5.00	81	79	78	79	78	77	77	76	75	69
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.852m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:230.22V I:0.1816A P:40.697W PF:0.9734 Freq:50.00Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:CW, NICHIA, BA-10°	DIM.: Ø170 x 68	SERIAL No.:5195
MFR.: K-LITE	SUR.:	Shielding Angle:



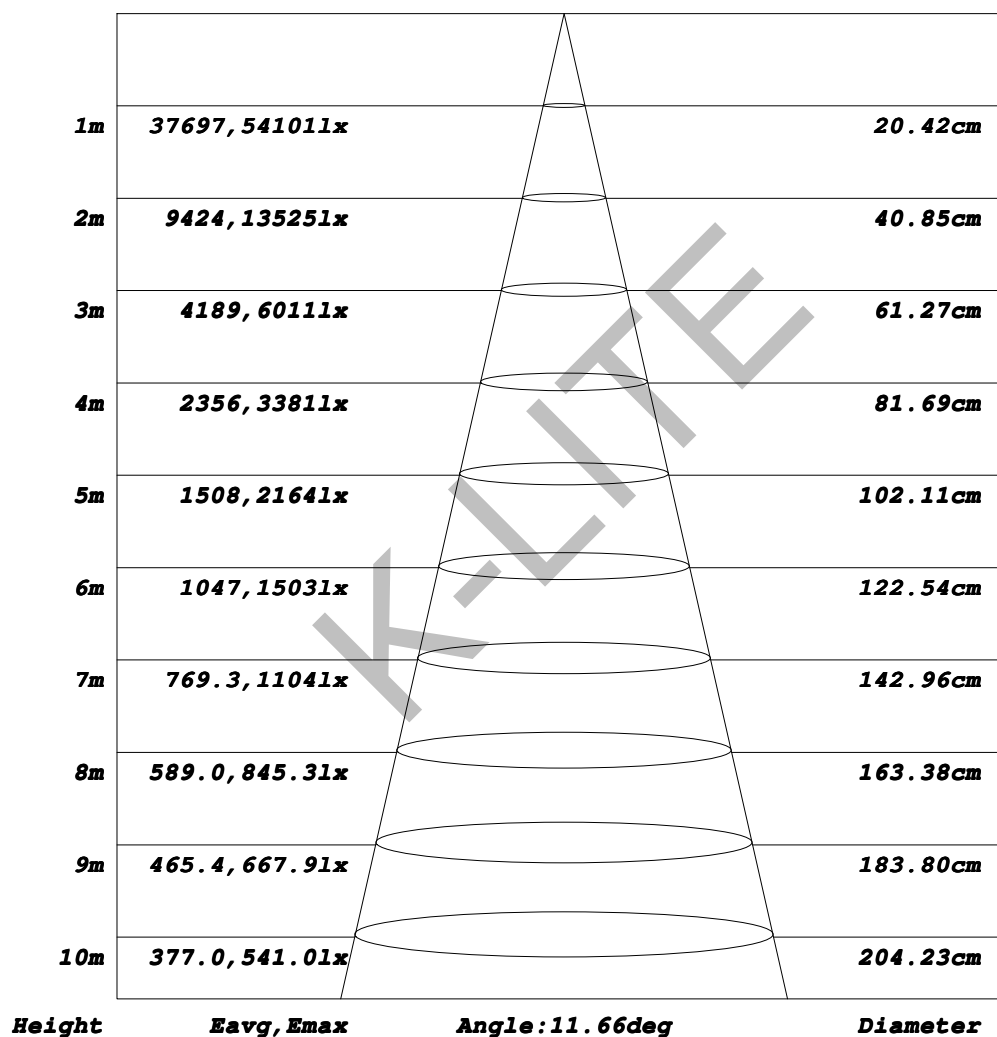
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.22V I:0.1816A P:40.697W PF:0.9734 Freq:50.00Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:CW, NICHIA, BA-10°	DIM.: Ø170 x 68	SERIAL No.:5195
MFR.: K-LITE	SUR.:	Shielding Angle:

Flux out:1308 lm



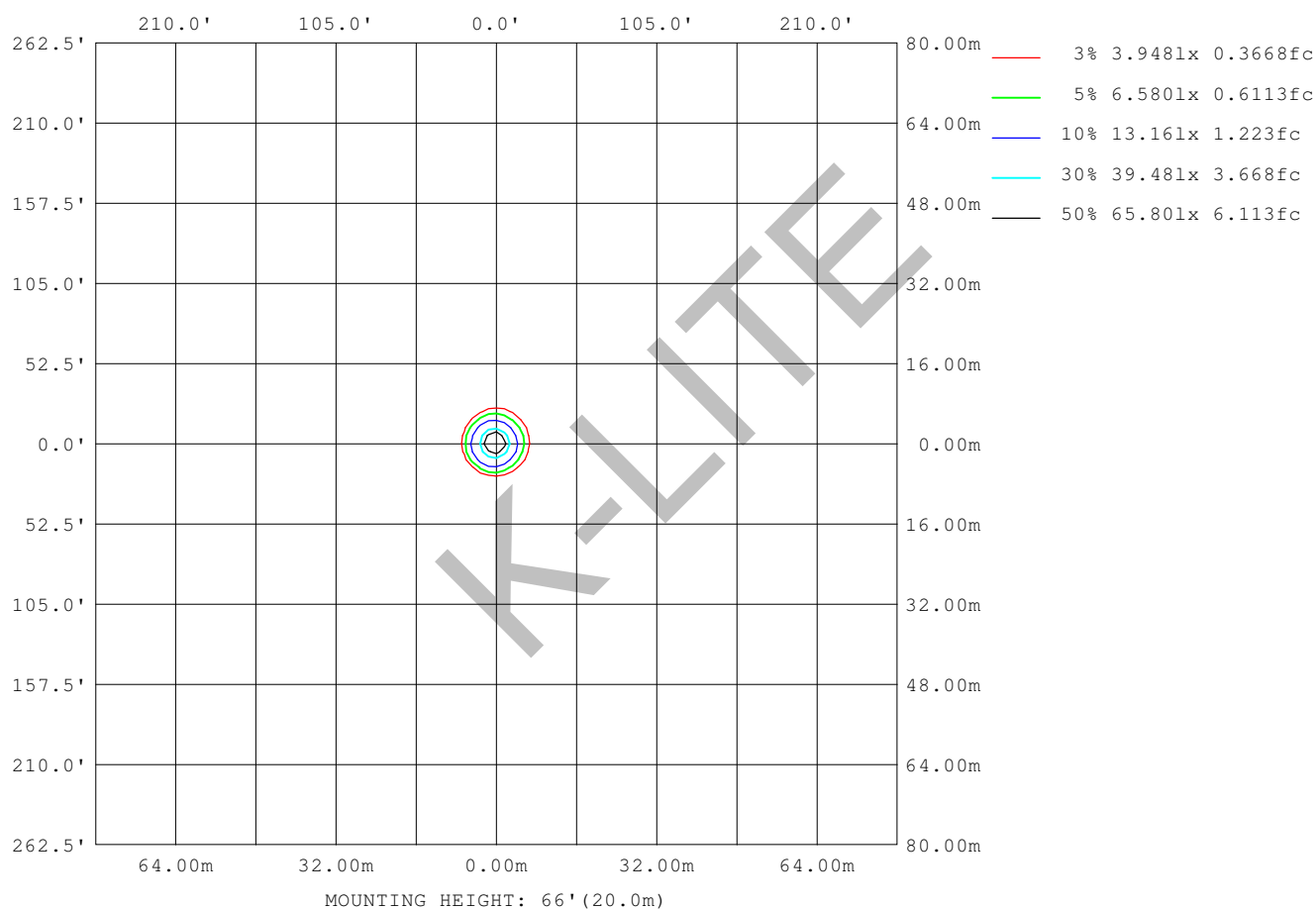
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.852m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:230.22V I:0.1816A P:40.697W PF:0.9734 Freq:50.00Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:CW, NICHIA, BA-10°	DIM.: Ø170 x 68	SERIAL No.:5195
MFR.: K-LITE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:230.22V I:0.1816A P:40.697W PF:0.9734 Freq:50.00Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:CW, NICHIA, BA-10°	DIM.: Ø170 x 68	SERIAL No.:5195
MFR.: K-LITE	SUR.:	Shielding Angle:

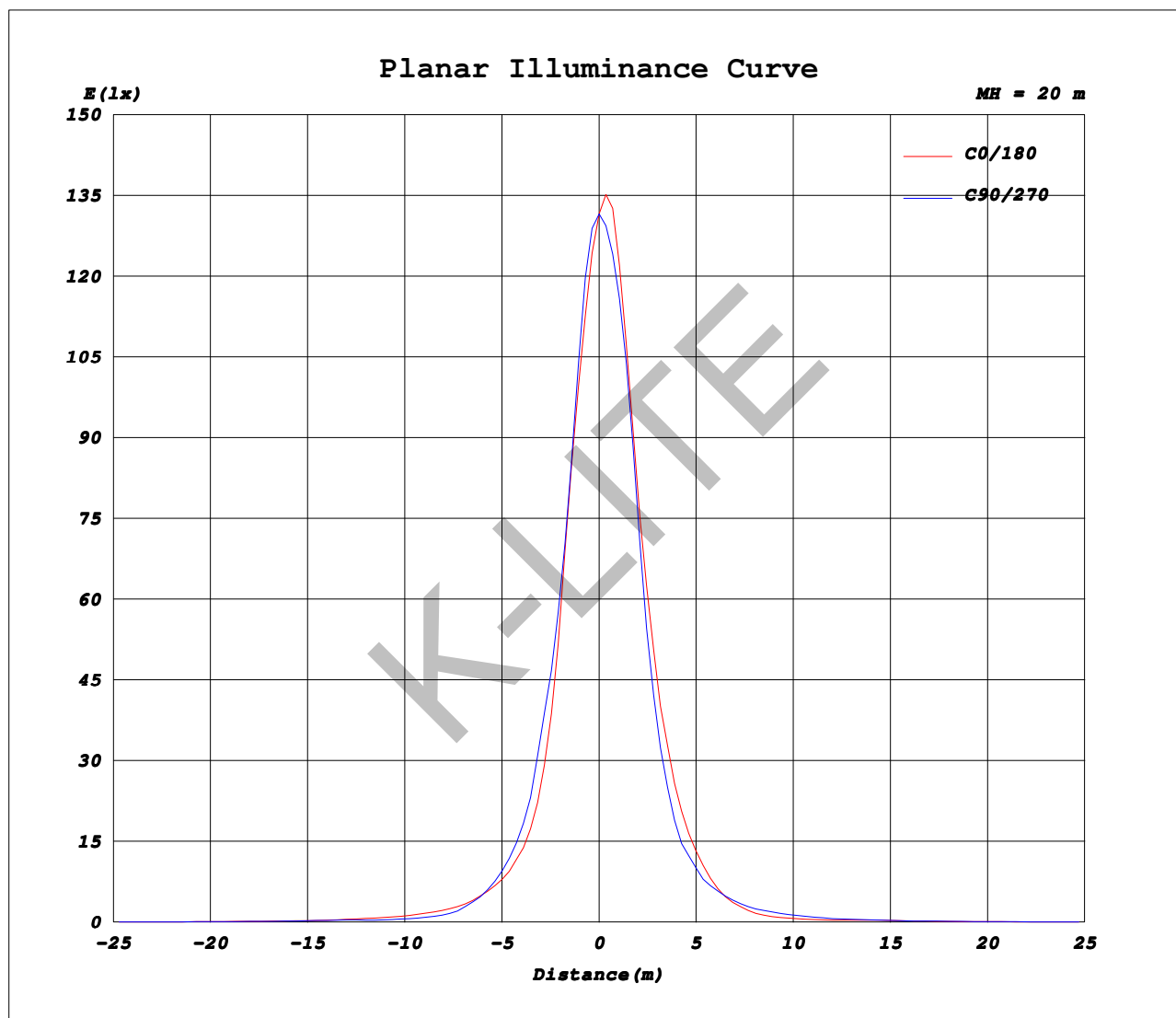
AvgL	cd/m2
L_0~180 (65) av	1562
L_0~180 (75) av	1683
L_0~180 (85) av	2472
L_90~270 (65) av	1553
L_90~270 (75) av	1639
L_90~270 (85) av	2353
L_45 (65) av	1562
L_45 (75) av	1657
L_45 (85) av	2358

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
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γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

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γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

```



Light Output Ratio:	70.6%	
Luminaire Power:	40.78 W	
SHR Nominal:	0.00	Calculated using the TM5
SHR Maximum:	1.00	fine grid method.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

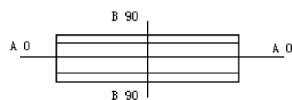
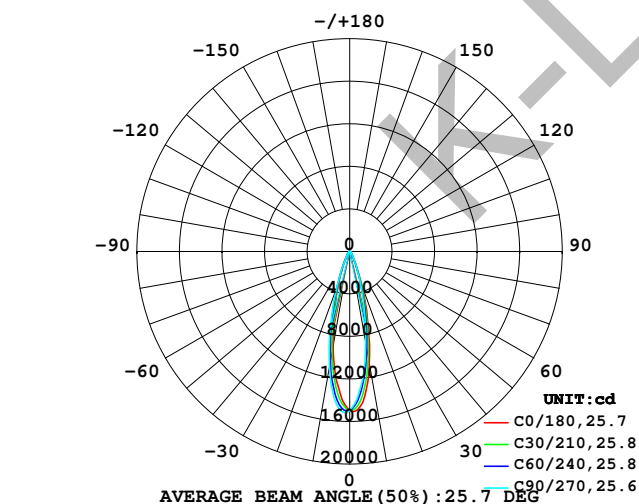
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

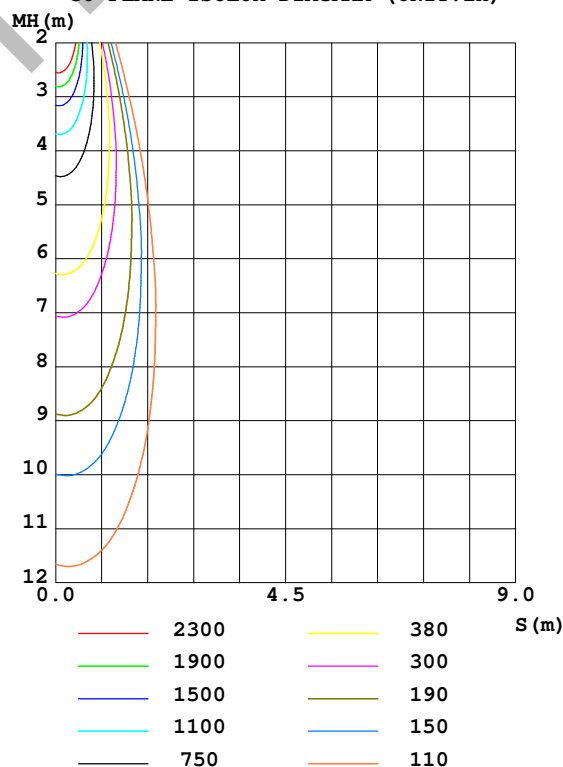
Test:U:230.51V I:0.1817A P:40.781W PF:0.9736 Freq:49.99Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: CW, NICHIA, BA-28°	DIM.: Ø170 x 68	SERIAL No.: 5196
MFR.: K-LITE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 104.76 lm/W
MODEL	KL-7555	I _{max} (cd)	15239	S/MH (C0/180)	0.41	
NOMINAL POWER (W)	45	LOR (%)	70.6	S/MH (C90/270)	0.47	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	4272.1	η UP, DN (C0-180)	0.0, 33.5	
NOMINAL FLUX (lm)	6050	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 37.1	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.00	
TEST VOLTAGE (V)	230	η down (%)	70.6	CIBSE SHR MAX	1.00	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT: lx)



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.852m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

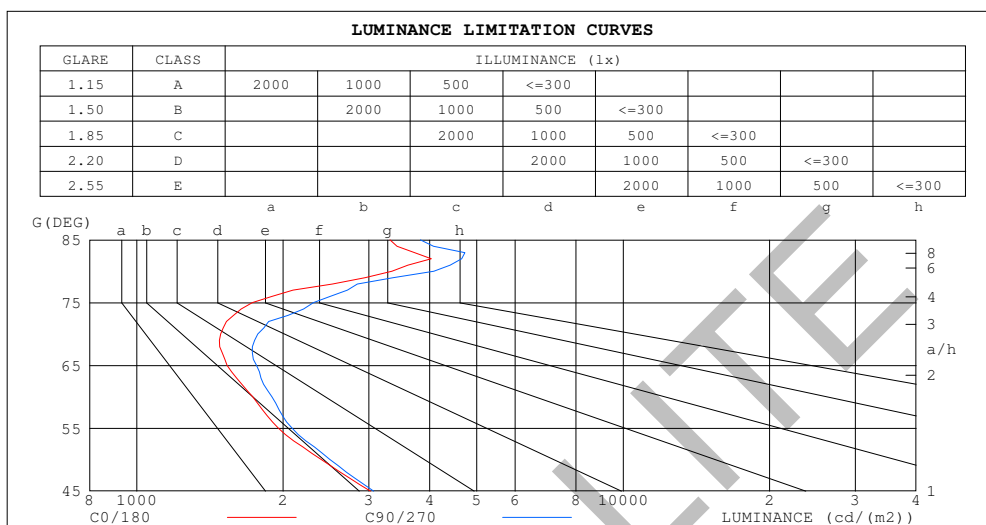
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1073	964.7	881.0	855.1	906.6	1012	1105	1128	0- 10	1171	1171	27.4,19.4
20	327.6	287.8	272.7	274.9	291.7	323.1	347.8	347.5	10- 20	1634	2805	65.7,46.4
30	71.81	68.19	72.06	78.40	80.16	78.05	75.07	75.96	20- 30	724.5	3529	82.6,58.3
40	29.99	29.73	30.69	32.63	33.47	32.63	31.50	31.14	30- 40	297.9	3827	89.6,63.3
50	15.39	15.49	16.03	17.02	17.40	17.03	16.25	15.84	40- 50	174.9	4002	93.7,66.2
60	8.650	8.903	9.474	9.837	10.09	9.846	9.046	8.491	50- 60	108.8	4111	96.2,68
70	5.085	5.350	6.064	6.629	6.339	5.959	5.404	4.983	60- 70	70.97	4182	97.9,69.1
80	5.808	6.735	7.075	7.651	7.776	6.918	5.793	5.307	70- 80	55.40	4237	99.2,70
90	1.034	1.053	1.135	1.209	1.227	1.178	1.120	1.017	80- 90	34.70	4272	100,70.6
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY: μ 10cd									UNIT: lm		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.852m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.51V I:0.1817A P:40.781W PF:0.9736 Freq:49.99Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:CW, NICHIA, BA-28°	DIM.: Ø170 x 68	SERIAL No.:5196
MFR.: K-LITE	SUR.:	Shielding Angle:



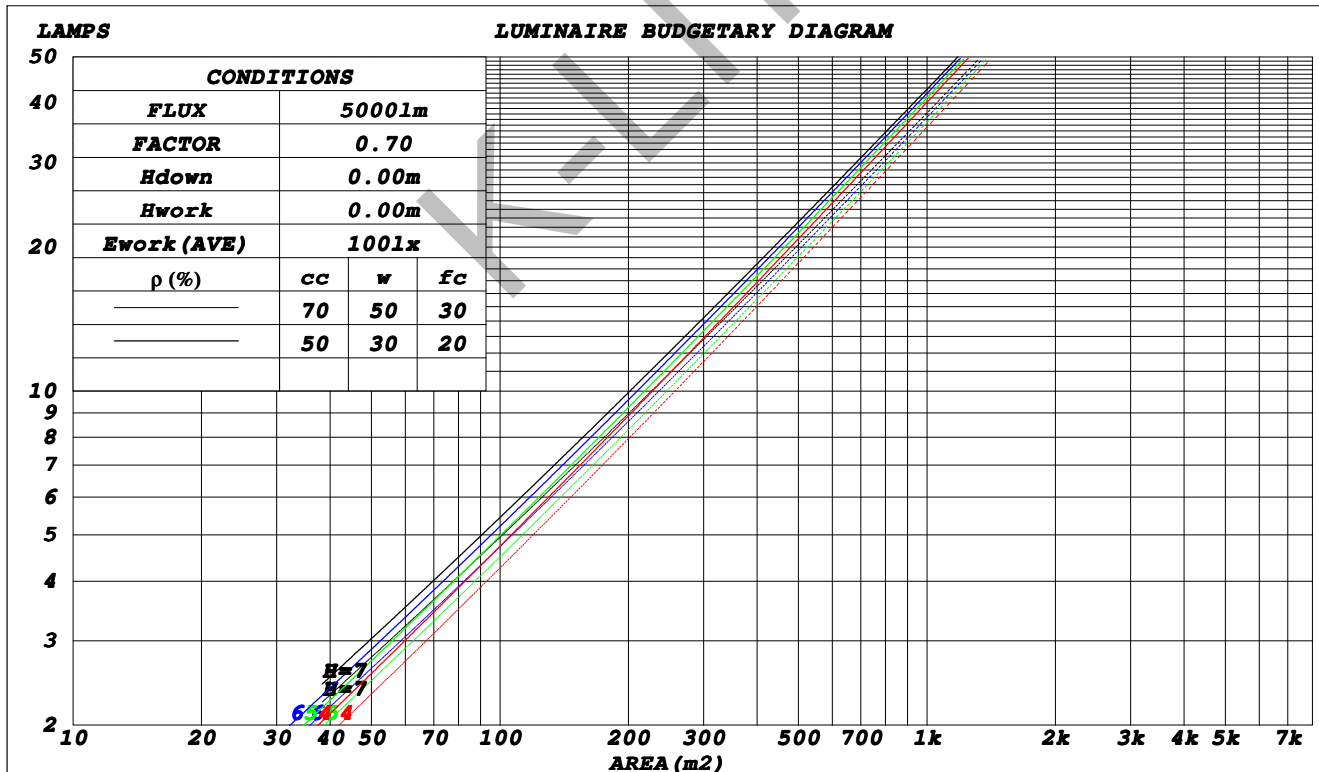
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.51V I:0.1817A P:40.781W PF:0.9736 Freq:49.99Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:CW, NICHIA, BA-28°	DIM.: Ø170 x 68	SERIAL No.:5196
MFR.: K-LITE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	.84	.84	.84	.82	.82	.82	.78	.78	.78	.75	.75	.75	.72	.72	.72	.71
1.0	.78	.77	.75	.77	.75	.74	.74	.73	.72	.71	.70	.70	.69	.68	.68	.66
2.0	.74	.71	.69	.72	.70	.68	.70	.68	.67	.68	.67	.65	.66	.65	.64	.63
3.0	.70	.66	.64	.69	.66	.63	.67	.64	.62	.65	.63	.61	.64	.62	.60	.59
4.0	.66	.63	.60	.65	.62	.60	.64	.61	.59	.62	.60	.58	.61	.59	.58	.57
5.0	.63	.59	.57	.62	.59	.56	.61	.58	.56	.60	.57	.56	.59	.57	.55	.54
6.0	.60	.57	.54	.60	.56	.54	.59	.56	.53	.58	.55	.53	.57	.55	.53	.52
7.0	.58	.54	.52	.57	.54	.52	.56	.53	.51	.56	.53	.51	.55	.53	.51	.50
8.0	.56	.52	.50	.55	.52	.49	.54	.51	.49	.54	.51	.49	.53	.51	.49	.48
9.0	.53	.50	.48	.53	.50	.48	.53	.50	.47	.52	.49	.47	.51	.49	.47	.46
10.0	.52	.48	.46	.51	.48	.46	.51	.48	.46	.50	.48	.46	.50	.47	.46	.45



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.852m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:230.51V I:0.1817A P:40.781W PF:0.9736 Freq:49.99Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:CW, NICHIA, BA-28°	DIM.: Ø170 x 68	SERIAL No.:5196
MFR.: K-LITE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)										
0.0																	
1.0	.122	.069	.022	.117	.067	.021	.108	.062	.020	.100	.058	.019	.093	.054	.017		
2.0	.112	.061	.019	.108	.060	.018	.101	.056	.017	.094	.053	.017	.088	.050	.016		
3.0	.104	.055	.017	.101	.054	.016	.094	.051	.016	.089	.049	.015	.083	.046	.014		
4.0	.097	.050	.015	.094	.049	.015	.089	.047	.014	.084	.045	.014	.079	.043	.013		
5.0	.091	.046	.013	.088	.045	.013	.084	.044	.013	.079	.042	.012	.075	.040	.012		
6.0	.085	.043	.012	.083	.042	.012	.079	.041	.012	.076	.039	.012	.072	.038	.011		
7.0	.081	.040	.011	.079	.039	.011	.075	.038	.011	.072	.037	.011	.069	.036	.011		
8.0	.077	.037	.011	.075	.037	.010	.072	.036	.010	.069	.035	.010	.066	.034	.010		
9.0	.073	.035	.010	.071	.035	.010	.069	.034	.010	.066	.033	.009	.064	.032	.009		
10.0	.069	.033	.009	.068	.033	.009	.066	.032	.009	.063	.031	.009	.061	.031	.009		

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.135	.135	.135	.115	.115	.115	.078	.078	.078	.045	.045	.045	.014	.014	.014	
1.0	.121	.111	.103	.103	.095	.088	.071	.066	.061	.041	.038	.035	.013	.012	.011	
2.0	.109	.094	.081	.093	.081	.070	.064	.056	.049	.037	.032	.028	.012	.010	.009	
3.0	.099	.080	.065	.085	.069	.056	.059	.048	.039	.034	.028	.023	.011	.009	.008	
4.0	.091	.070	.053	.078	.060	.046	.054	.042	.032	.031	.025	.019	.010	.008	.006	
5.0	.084	.061	.044	.072	.053	.038	.050	.037	.027	.029	.022	.016	.009	.007	.005	
6.0	.078	.054	.037	.067	.047	.032	.046	.033	.023	.027	.019	.014	.009	.006	.004	
7.0	.073	.049	.032	.063	.042	.028	.043	.030	.020	.025	.017	.012	.008	.006	.004	
8.0	.069	.044	.027	.059	.038	.024	.041	.027	.017	.024	.016	.010	.008	.005	.003	
9.0	.065	.040	.024	.056	.035	.021	.039	.025	.015	.022	.014	.009	.007	.005	.003	
10.0	.061	.037	.021	.053	.032	.018	.037	.023	.013	.021	.013	.008	.007	.004	.003	

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.51V I:0.1817A P:40.781W PF:0.9736 Freq:49.99Hz Lamp Flux:6050x1 lm											
NAME: VELA					TYPE:RECESSED CEILING			WEIGHT:			
SPEC.:CW, NICHIA, BA-28°					DIM.: Ø170 x 68			SERIAL No.:5196			
MFR.: K-LITE					SUR.:			Shielding Angle:			
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3	
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3	
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Room dimensions											
Viewed crosswise						Viewed endwise					
x = 2H y = 2H		3.5	4.3	3.8	4.5	4.7	3.6	4.4	3.8	4.6	4.8
3H		4.4	5.1	4.6	5.3	5.5	4.6	5.4	4.9	5.6	5.7
4H		4.9	5.7	5.2	5.9	6.1	5.3	6.0	5.6	6.3	6.5
6H		6.3	7.0	6.6	7.2	7.5	6.5	7.2	6.8	7.4	7.7
8H		7.1	7.8	7.4	8.0	8.3	7.4	8.0	7.7	8.3	8.6
12H		7.5	8.2	7.8	8.4	8.7	7.9	8.5	8.2	8.8	9.1
4H 2H		3.9	4.6	4.1	4.8	5.0	4.0	4.7	4.2	4.9	5.1
3H		5.0	5.6	5.3	5.9	6.1	5.2	5.8	5.5	6.1	6.3
4H		5.7	6.3	6.1	6.6	6.9	6.1	6.7	6.4	6.9	7.3
6H		7.3	7.9	7.7	8.2	8.5	7.4	7.9	7.8	8.2	8.6
8H		8.2	8.7	8.6	9.0	9.4	8.3	8.8	8.7	9.1	9.5
12H		8.7	9.1	9.1	9.5	9.9	8.9	9.3	9.3	9.7	10.1
8H 4H		6.2	6.7	6.6	7.1	7.4	6.5	7.0	6.9	7.4	7.7
6H		8.1	8.5	8.5	8.9	9.3	8.2	8.6	8.6	9.0	9.4
8H		9.0	9.4	9.5	9.8	10.2	9.1	9.4	9.5	9.8	10.3
12H		9.6	9.9	10.1	10.4	10.8	9.7	10.0	10.2	10.5	10.9
12H 4H		6.4	6.8	6.8	7.2	7.6	6.7	7.1	7.1	7.5	7.9
6H		8.4	8.8	8.8	9.2	9.6	8.5	8.8	8.9	9.2	9.7
8H		9.3	9.6	9.8	10.1	10.6	9.4	9.7	9.9	10.2	10.7
Variations with the observer position at spacings:											
S = 1.0H		+ 0.3 / - 0.3					+ 0.3 / - 0.3				
1.5H		+ 0.2 / - 0.2					+ 0.5 / - 0.4				
2.0H		+ 0.3 / - 0.3					+ 0.5 / - 0.6				

CIE Pub.117, 6050 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 6.3$)
Area: 0.1 m²

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.51V I:0.1817A P:40.781W PF:0.9736 Freq:49.99Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:CW, NICHIA, BA-28°	DIM.: Ø170 x 68	SERIAL No.:5196
MFR.: K-LITE	SUR.:	Shielding Angle:

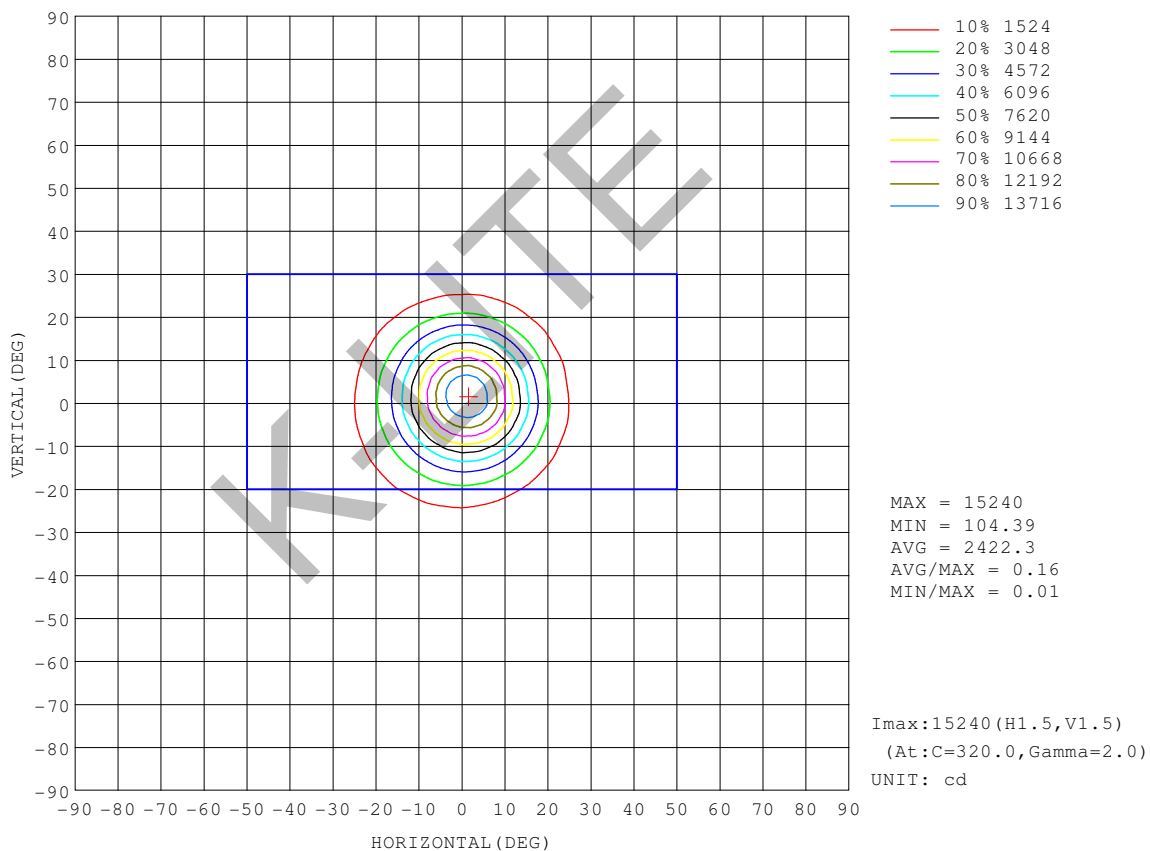
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	60	55	53	60	55	52	59	55	52	50
0.80	65	61	58	65	61	58	64	60	58	55
1.00	69	64	62	68	64	61	67	64	61	58
1.25	72	68	65	71	67	65	69	66	64	61
1.50	74	70	67	73	69	67	71	68	66	63
2.00	76	72	70	75	72	69	73	70	68	64
2.50	77	74	72	76	73	71	74	71	70	65
3.00	78	75	73	77	74	73	74	73	71	66
4.00	80	78	76	78	76	75	76	74	73	68
5.00	81	79	77	79	78	76	76	75	74	69
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.852m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:230.51V I:0.1817A P:40.781W PF:0.9736 Freq:49.99Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:CW, NICHIA, BA-28°	DIM.: Ø170 x 68	SERIAL No.:5196
MFR.: K-LITE	SUR.:	Shielding Angle:



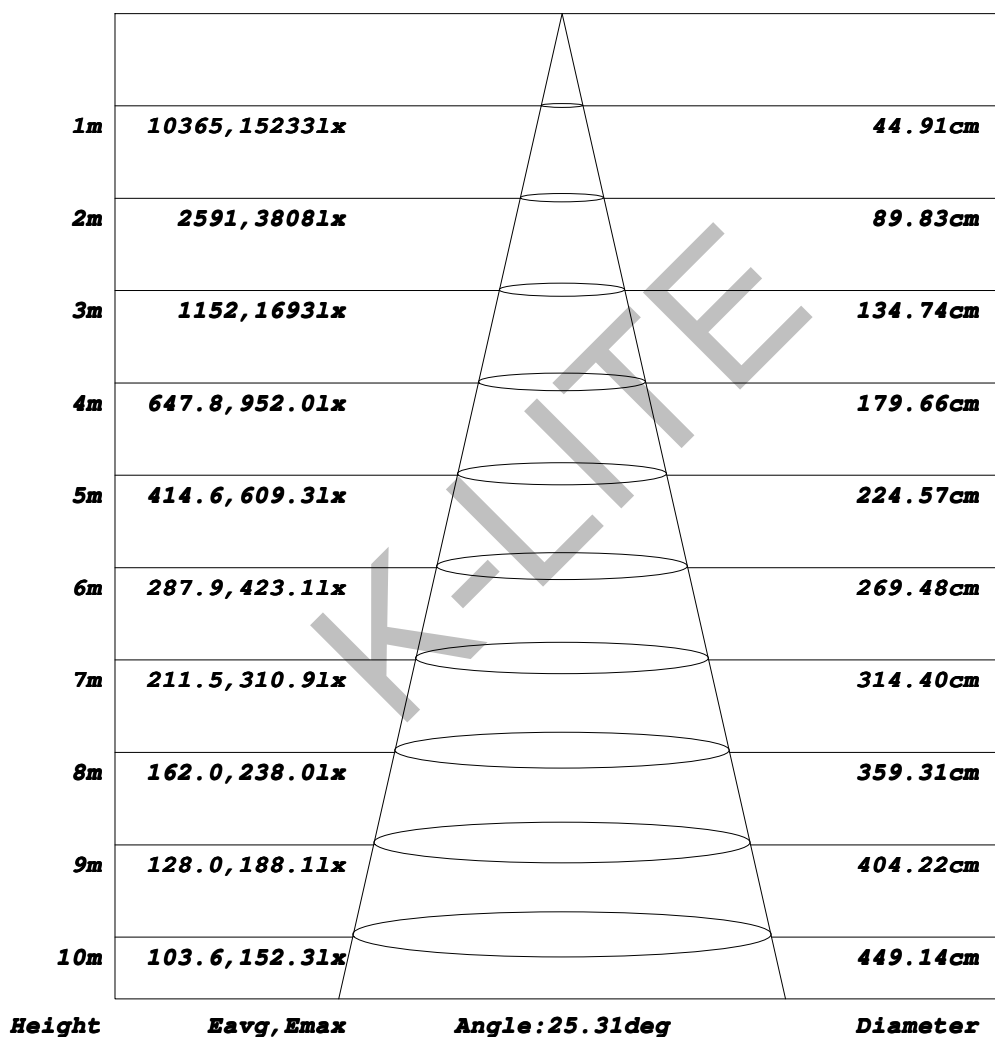
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:24 November 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.51V I:0.1817A P:40.781W PF:0.9736 Freq:49.99Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:CW, NICHIA, BA-28°	DIM.: Ø170 x 68	SERIAL No.:5196
MFR.: K-LITE	SUR.:	Shielding Angle:

Flux out:1736 lm



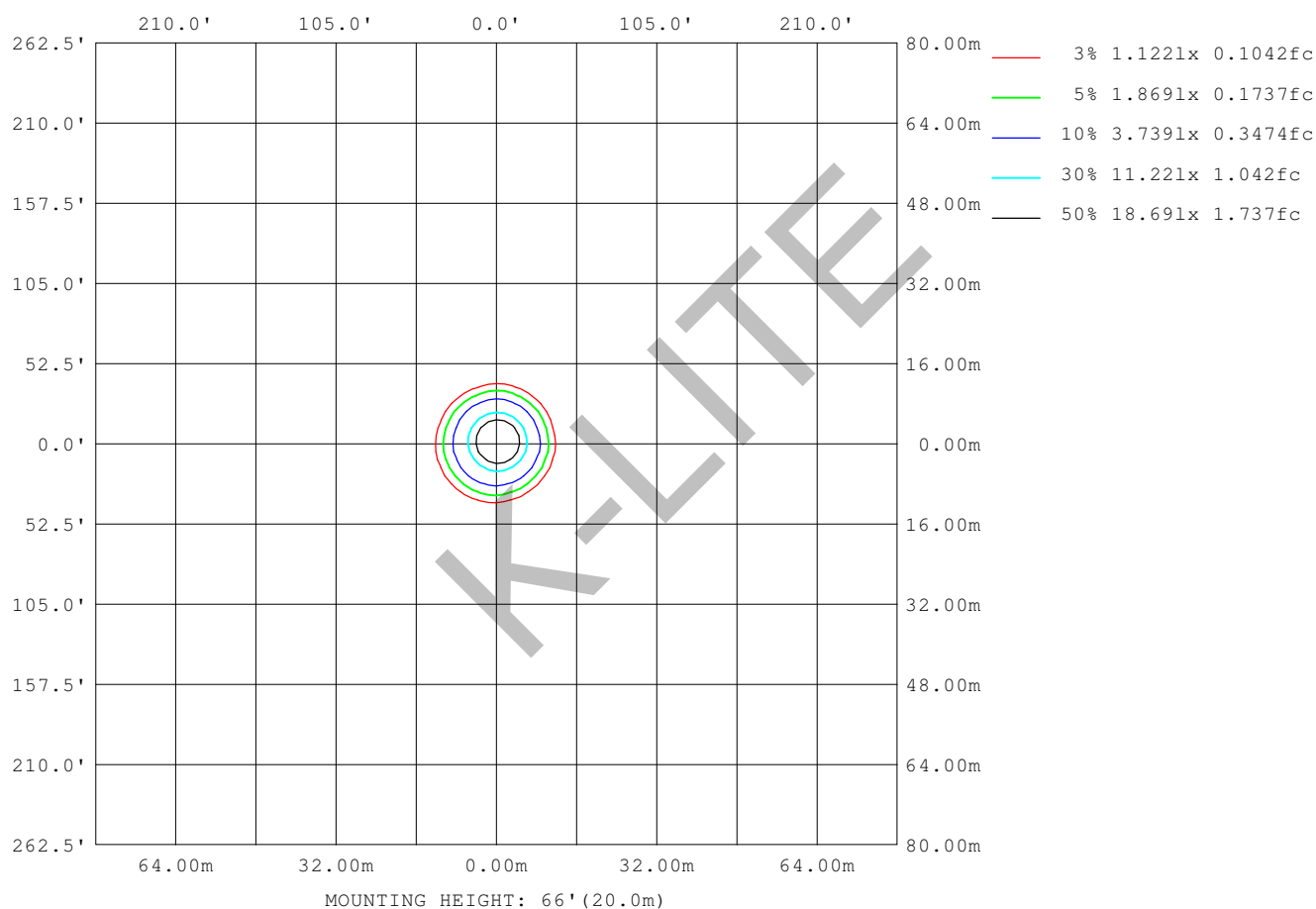
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.852m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:230.51V I:0.1817A P:40.781W PF:0.9736 Freq:49.99Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:CW, NICHIA, BA-28°	DIM.: Ø170 x 68	SERIAL No.:5196
MFR.: K-LITE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:230.51V I:0.1817A P:40.781W PF:0.9736 Freq:49.99Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:CW, NICHIA, BA-28°	DIM.: Ø170 x 68	SERIAL No.:5196
MFR.: K-LITE	SUR.:	Shielding Angle:

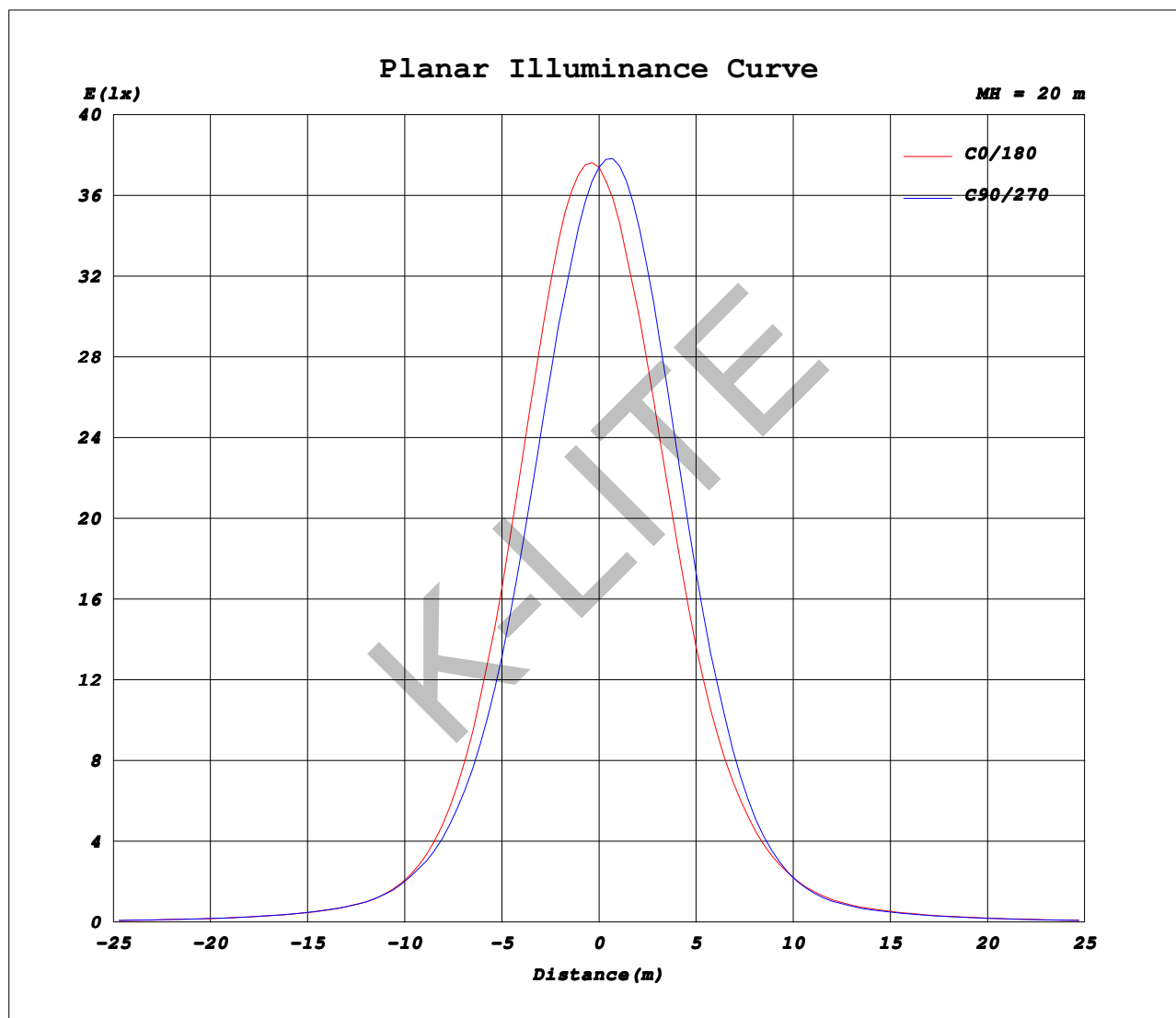
AvgL	cd/m2
L_0~180 (65) av	1707
L_0~180 (75) av	2029
L_0~180 (85) av	4301
L_90~270 (65) av	1698
L_90~270 (75) av	2135
L_90~270 (85) av	3990
L_45 (65) av	1708
L_45 (75) av	2020
L_45 (85) av	3765

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

```



Light Output Ratio:	67.5%	
Luminaire Power:	40.36 W	
SHR Nominal:	0.00	Calculated using the TM5
SHR Maximum:	1.00	fine grid method.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

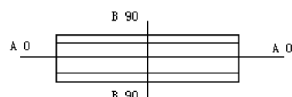
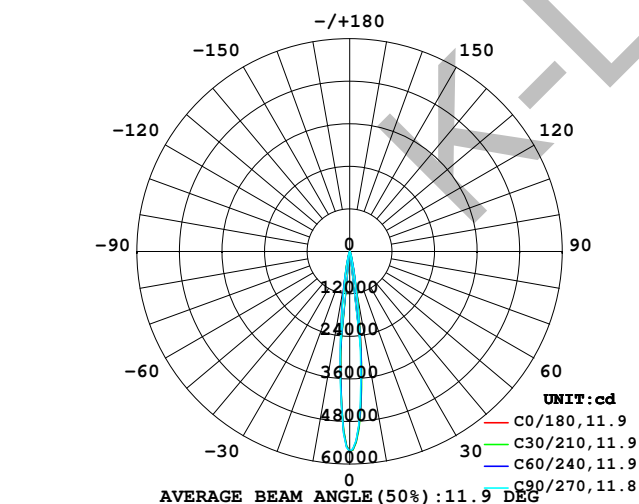
γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

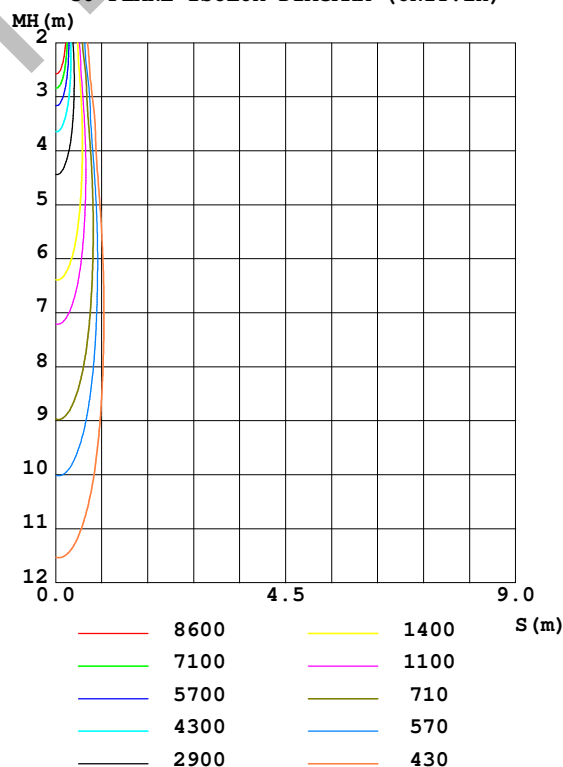
Test:U:230.51V I:0.1799A P:40.355W PF:0.9734 Freq:49.98Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: NW, NICHIA, BA-10°	DIM.: Ø170 x 68	SERIAL No.: 5197
MFR.: K-LITE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 101.18 lm/W
MODEL	KL-7555	I _{max} (cd)	56345	S/MH (C0/180)	0.19	
NOMINAL POWER (W)	45	LOR (%)	67.5	S/MH (C90/270)	0.19	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	4083.2	η UP, DN (C0-180)	0.0, 35.7	
NOMINAL FLUX (lm)	6050	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 31.8	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.00	
TEST VOLTAGE (V)	230	η down (%)	67.5	CIBSE SHR MAX	1.00	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT: lx)



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.852m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

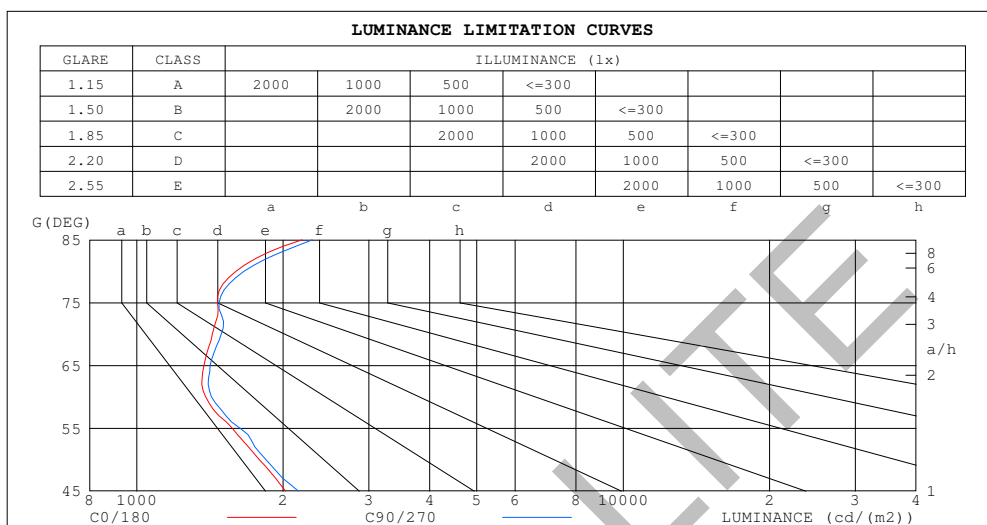
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1041	1096	1024	1015	906.1	885.3	876.7	931.5	0- 10	2439	2439	59.7, 40.3
20	125.2	137.6	132.7	105.6	89.07	84.23	91.08	107.3	10- 20	894.0	3333	81.6, 55.1
30	38.64	43.27	40.17	32.73	28.28	27.14	28.19	32.03	20- 30	276.9	3609	88.4, 59.7
40	18.70	20.18	19.98	19.06	17.41	17.10	17.31	18.00	30- 40	165.2	3775	92.4, 62.4
50	11.31	11.71	11.86	11.48	10.95	10.79	10.97	11.10	40- 50	109.9	3885	95.1, 64.2
60	6.832	6.954	7.129	6.935	6.840	6.928	6.951	6.849	50- 60	79.72	3964	97.1, 65.5
70	4.827	5.025	5.111	5.232	5.277	5.612	5.369	5.075	60- 70	59.32	4024	98.5, 66.5
80	2.739	2.827	2.889	2.834	2.738	2.640	2.655	2.785	70- 80	40.49	4064	99.5, 67.2
90	0.9760	0.9908	1.036	0.9837	0.9822	0.9308	0.9180	0.9488	80- 90	19.10	4083	100, 67.5
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY: μ A10cd									UNIT: lm		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.852m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.51V I:0.1799A P:40.355W PF:0.9734 Freq:49.98Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: NW, NICHIA, BA-10°	DIM.: Ø170 x 68	SERIAL No.: 5197
MFR.: K-LITE	SUR.:	Shielding Angle:



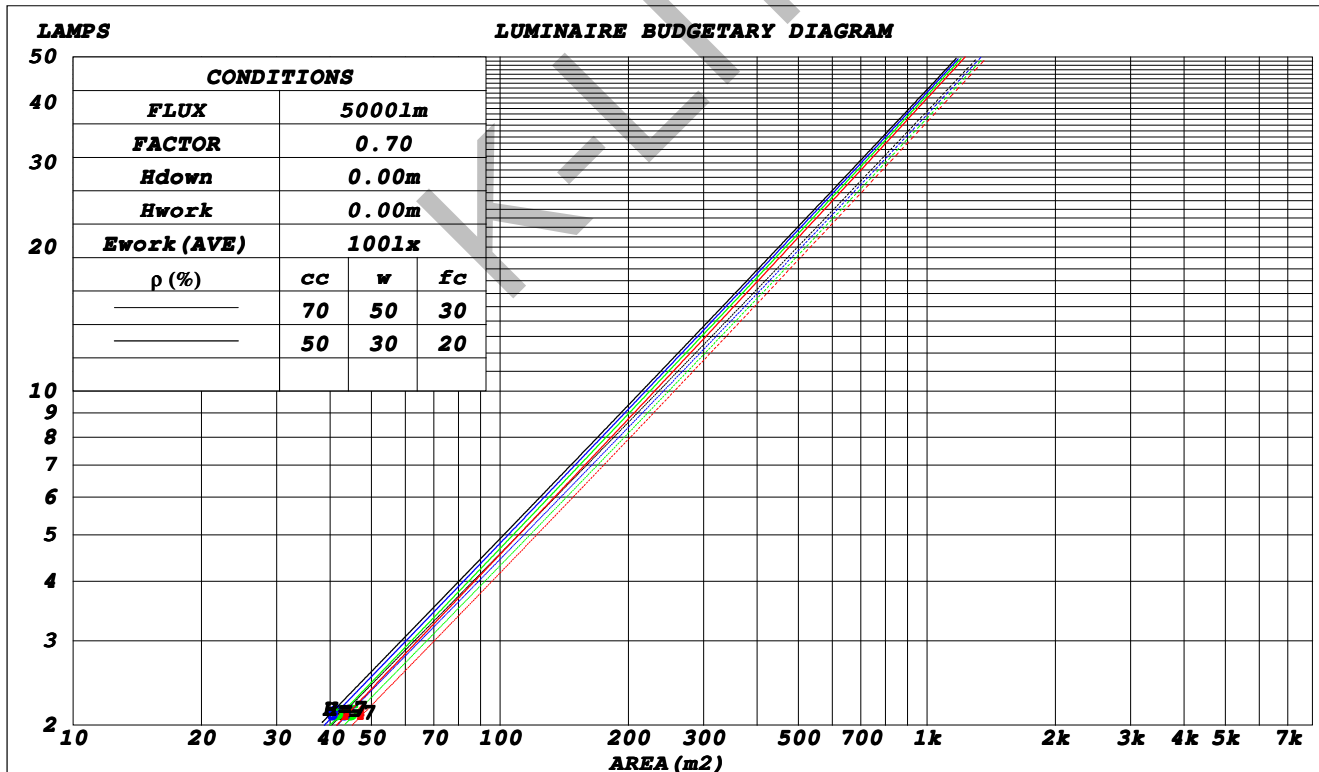
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.51V I:0.1799A P:40.355W PF:0.9734 Freq:49.98Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: NW, NICHIA, BA-10°	DIM.: Ø170 x 68	SERIAL No.: 5197
MFR.: K-LITE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	.80	.80	.80	.78	.78	.78	.75	.75	.75	.72	.72	.72	.69	.69	.69	.67
1.0	.76	.75	.74	.75	.73	.72	.72	.71	.70	.69	.69	.68	.67	.67	.66	.65
2.0	.73	.71	.69	.71	.70	.68	.69	.68	.67	.67	.66	.65	.66	.65	.64	.63
3.0	.70	.67	.65	.69	.67	.65	.67	.65	.64	.66	.64	.63	.64	.63	.62	.61
4.0	.67	.65	.63	.67	.64	.62	.65	.63	.62	.64	.62	.61	.63	.61	.60	.60
5.0	.65	.63	.61	.65	.62	.60	.64	.62	.60	.63	.61	.59	.62	.60	.59	.58
6.0	.63	.61	.59	.63	.61	.59	.62	.60	.58	.61	.59	.58	.61	.59	.58	.57
7.0	.62	.59	.58	.62	.59	.57	.61	.59	.57	.60	.58	.57	.60	.58	.57	.56
8.0	.61	.58	.56	.60	.58	.56	.60	.58	.56	.59	.57	.56	.59	.57	.56	.55
9.0	.59	.57	.55	.59	.57	.55	.59	.57	.55	.58	.56	.55	.58	.56	.55	.54
10.0	.58	.56	.54	.58	.56	.54	.58	.56	.54	.57	.55	.54	.57	.55	.54	.53



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:230.51V I:0.1799A P:40.355W PF:0.9734 Freq:49.98Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:NW, NICHIA, BA-10°	DIM.: Ø170 x 68	SERIAL No.:5197
MFR.: K-LITE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)										
0.0																	
1.0	.095	.054	.017	.090	.052	.016	.082	.047	.015	.074	.043	.014	.067	.039	.013		
2.0	.086	.047	.015	.083	.045	.014	.076	.042	.013	.069	.039	.012	.063	.036	.011		
3.0	.079	.042	.013	.076	.041	.012	.070	.038	.012	.065	.036	.011	.060	.033	.010		
4.0	.073	.038	.011	.070	.037	.011	.065	.035	.010	.061	.033	.010	.057	.031	.009		
5.0	.067	.034	.010	.065	.033	.010	.061	.032	.009	.057	.030	.009	.054	.029	.009		
6.0	.062	.031	.009	.061	.031	.009	.057	.029	.009	.054	.028	.008	.051	.027	.008		
7.0	.058	.029	.008	.057	.028	.008	.054	.027	.008	.051	.026	.008	.048	.025	.007		
8.0	.055	.027	.008	.053	.026	.007	.051	.025	.007	.048	.025	.007	.046	.024	.007		
9.0	.052	.025	.007	.051	.025	.007	.048	.024	.007	.046	.023	.007	.044	.022	.006		
10.0	.049	.023	.007	.048	.023	.006	.046	.022	.006	.044	.022	.006	.042	.021	.006		

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)										
0.0	.129	.129	.129	.110	.110	.110	.075	.075	.075	.043	.043	.043	.014	.014	.014		
1.0	.114	.106	.100	.097	.091	.086	.067	.063	.059	.038	.036	.035	.012	.012	.011		
2.0	.101	.090	.080	.087	.077	.069	.060	.053	.048	.034	.031	.028	.011	.010	.009		
3.0	.091	.076	.065	.078	.066	.056	.054	.046	.039	.031	.027	.023	.010	.009	.008		
4.0	.082	.066	.054	.071	.057	.047	.049	.040	.033	.028	.023	.019	.009	.008	.006		
5.0	.075	.058	.045	.064	.050	.039	.044	.035	.028	.026	.020	.016	.008	.007	.005		
6.0	.068	.051	.038	.059	.044	.033	.041	.031	.024	.024	.018	.014	.008	.006	.005		
7.0	.063	.045	.033	.054	.039	.029	.037	.027	.020	.022	.016	.012	.007	.005	.004		
8.0	.058	.040	.028	.050	.035	.025	.035	.025	.018	.020	.015	.010	.006	.005	.003		
9.0	.054	.036	.025	.046	.032	.022	.032	.022	.015	.019	.013	.009	.006	.004	.003		
10.0	.050	.033	.022	.043	.029	.019	.030	.020	.014	.017	.012	.008	.006	.004	.003		

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.51V I:0.1799A P:40.355W PF:0.9734 Freq:49.98Hz Lamp Flux:6050x1 lm											
NAME: VELA					TYPE:RECESSED CEILING			WEIGHT:			
SPEC.:NW, NICHIA, BA-10°					DIM.: Ø170 x 68			SERIAL No.:5197			
MFR.: K-LITE					SUR.:			Shielding Angle:			
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3	
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3	
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Room dimensions		Viewed crosswise				Viewed endwise					
x = 2H y = 2H	1.8	2.4	2.0	2.6	2.7	1.9	2.5	2.0	2.6	2.7	
	3H	3.2	3.8	3.4	3.9	4.1	3.2	3.7	3.4	3.9	4.1
	4H	3.9	4.5	4.2	4.7	4.9	3.8	4.4	4.1	4.6	4.8
	6H	4.5	5.1	4.8	5.3	5.5	4.5	5.0	4.7	5.2	5.4
	8H	4.9	5.4	5.2	5.6	5.9	4.8	5.3	5.1	5.5	5.8
12H	5.2	5.7	5.5	5.9	6.2	5.2	5.7	5.5	5.9	6.2	
4H	2H	2.3	2.9	2.6	3.1	3.3	2.3	2.9	2.6	3.1	3.3
	3H	4.0	4.5	4.3	4.7	5.0	3.9	4.4	4.2	4.6	4.9
	4H	4.8	5.3	5.1	5.6	5.9	4.7	5.1	5.0	5.4	5.7
	6H	5.6	6.0	6.0	6.4	6.7	5.4	5.9	5.8	6.2	6.5
	8H	6.0	6.4	6.4	6.7	7.1	5.9	6.2	6.2	6.6	6.9
12H	6.4	6.8	6.8	7.1	7.5	6.3	6.7	6.7	7.0	7.4	
8H	4H	5.1	5.5	5.5	5.9	6.2	5.0	5.4	5.4	5.7	6.1
	6H	6.1	6.4	6.5	6.8	7.2	6.0	6.3	6.4	6.7	7.1
	8H	6.6	6.9	7.1	7.3	7.8	6.5	6.8	6.9	7.2	7.6
	12H	7.2	7.4	7.7	7.9	8.3	7.1	7.3	7.5	7.8	8.2
	12H	4H	5.2	5.5	5.6	5.9	6.3	5.0	5.4	5.4	5.8
6H	6.2	6.5	6.7	6.9	7.4	6.1	6.4	6.5	6.8	7.2	
8H	6.8	7.1	7.3	7.5	8.0	6.7	6.9	7.1	7.4	7.8	
Variations with the observer position at spacings:											
S = 1.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
1.5H	+ 0.1 / - 0.2					+ 0.1 / - 0.2					
2.0H	+ 0.3 / - 0.4					+ 0.4 / - 0.2					

CIE Pub.117, 6050 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 6.3$)
Area: 0.1 m²

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.51V I:0.1799A P:40.355W PF:0.9734 Freq:49.98Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:NW, NICHIA, BA-10°	DIM.: Ø170 x 68	SERIAL No.:5197
MFR.: K-LITE	SUR.:	Shielding Angle:

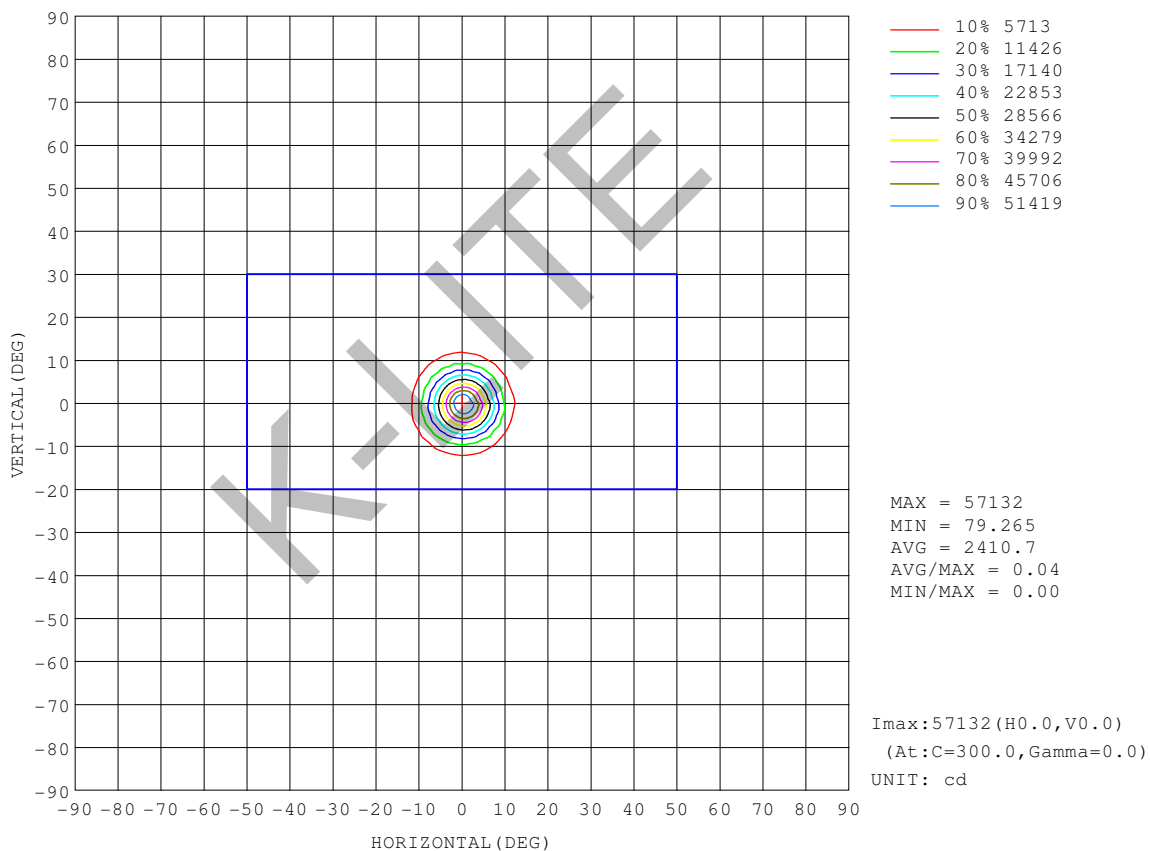
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	59	54	52	58	54	52	58	54	52	49
0.80	64	60	57	63	59	57	62	59	57	54
1.00	67	63	60	66	62	60	65	62	60	57
1.25	69	66	63	68	65	63	67	64	62	59
1.50	71	68	65	70	67	65	69	66	64	61
2.00	73	70	68	72	69	67	70	68	66	63
2.50	74	71	69	73	70	69	71	69	67	63
3.00	75	73	71	74	72	70	72	70	69	64
4.00	77	75	73	75	73	72	73	71	70	65
5.00	77	76	75	76	75	73	73	72	71	66
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.852m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:230.51V I:0.1799A P:40.355W PF:0.9734 Freq:49.98Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:NW, NICHIA, BA-10°	DIM.: Ø170 x 68	SERIAL No.:5197
MFR.: K-LITE	SUR.:	Shielding Angle:



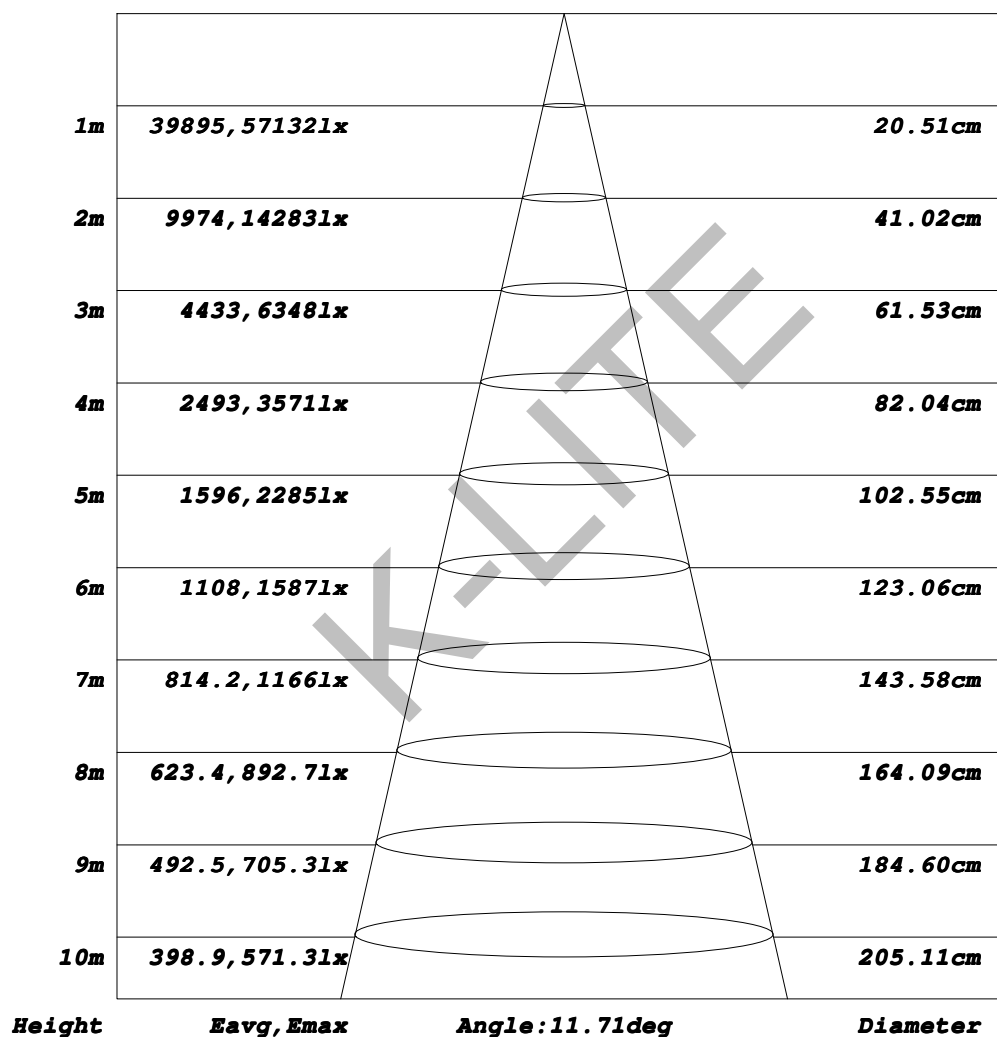
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:24 November 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.51V I:0.1799A P:40.355W PF:0.9734 Freq:49.98Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:NW, NICHIA, BA-10°	DIM.: Ø170 x 68	SERIAL No.:5197
MFR.: K-LITE	SUR.:	Shielding Angle:

Flux out:1385 lm



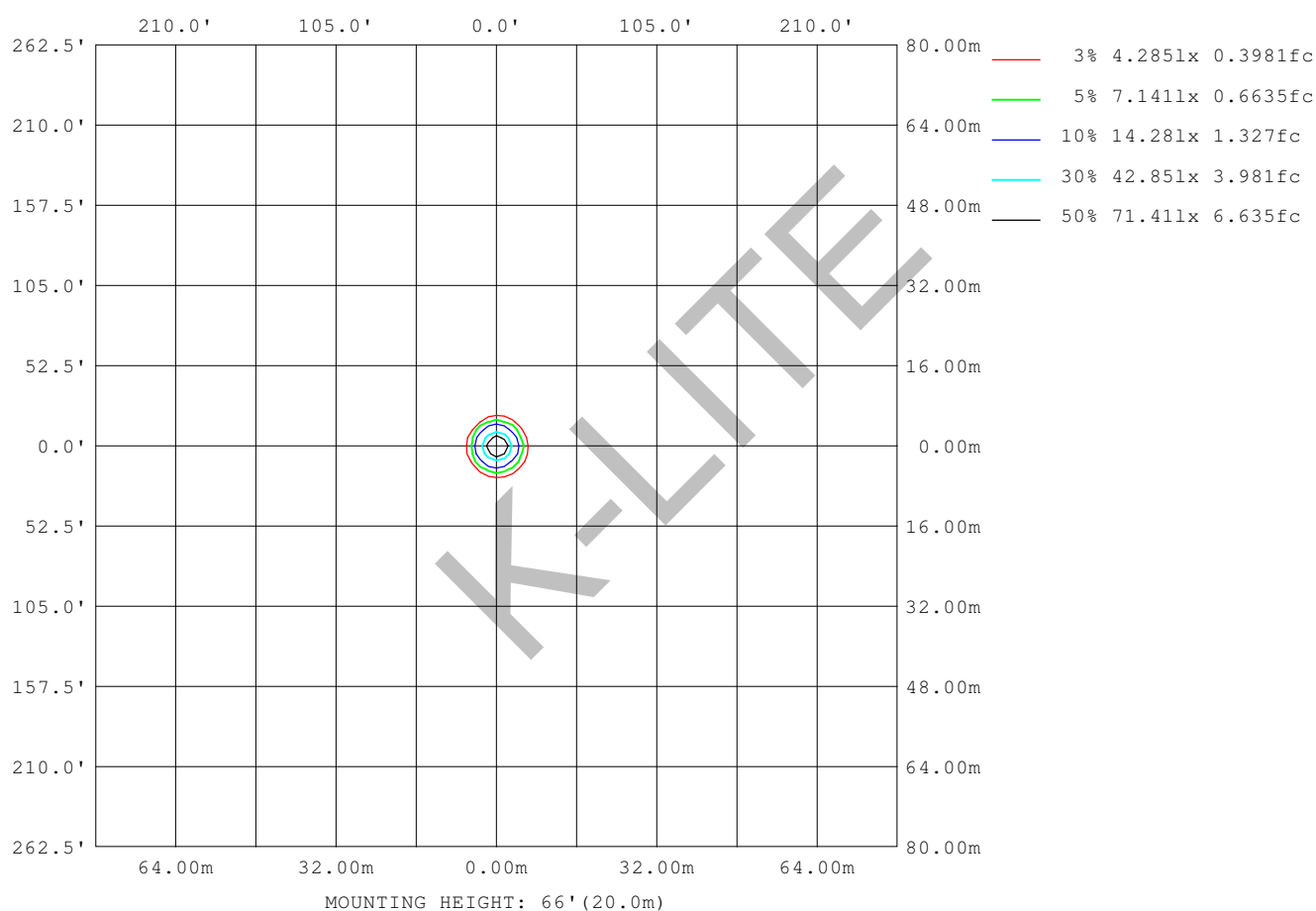
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.852m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:230.51V I:0.1799A P:40.355W PF:0.9734 Freq:49.98Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:NW, NICHIA, BA-10°	DIM.: Ø170 x 68	SERIAL No.:5197
MFR.: K-LITE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:230.51V I:0.1799A P:40.355W PF:0.9734 Freq:49.98Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: NW, NICHIA, BA-10°	DIM.: Ø170 x 68	SERIAL No.: 5197
MFR.: K-LITE	SUR.:	Shielding Angle:

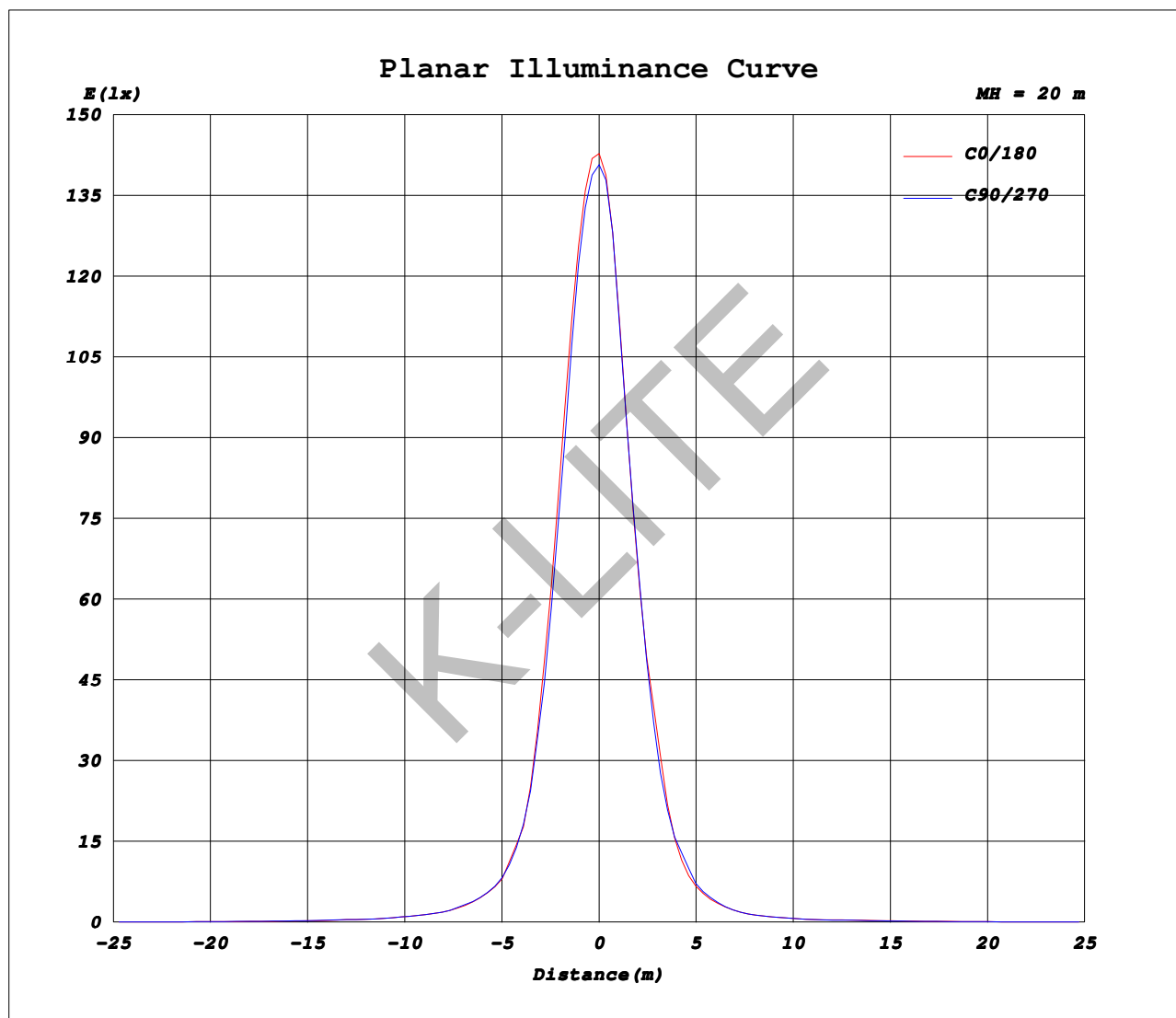
AvgL	cd/m2
L_0~180 (65) av	1377
L_0~180 (75) av	1425
L_0~180 (85) av	2069
L_90~270 (65) av	1414
L_90~270 (75) av	1453
L_90~270 (85) av	2114
L_45 (65) av	1418
L_45 (75) av	1472
L_45 (85) av	2060

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

```



Light Output Ratio:	66.4%	
Luminaire Power:	40.28 W	
SHR Nominal:	0.00	Calculated using the TM5
SHR Maximum:	1.00	fine grid method.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

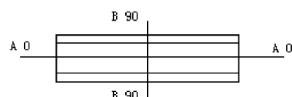
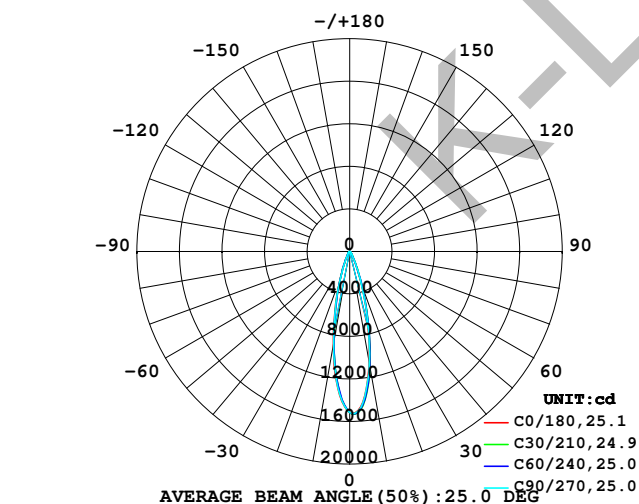
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

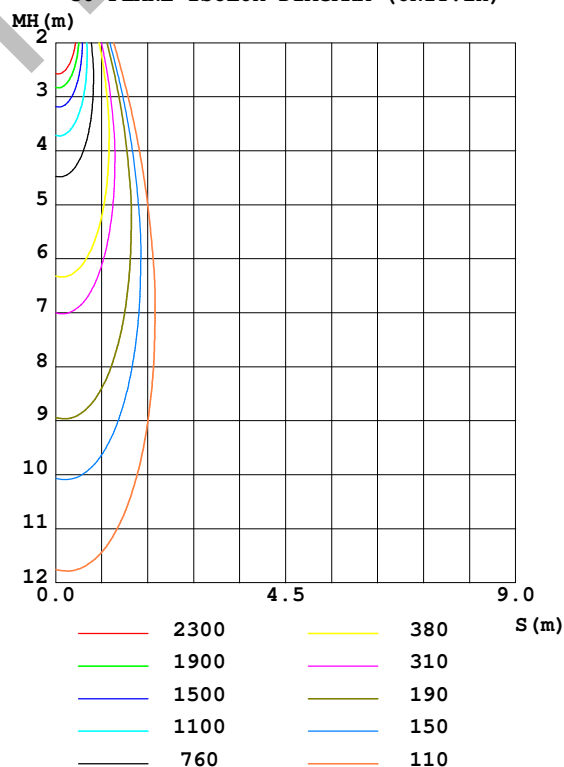
Test:U:230.53V I:0.1796A P:40.284W PF:0.9730 Freq:50.00Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: NW, NICHIA, BA-28°	DIM.: Ø170 x 68	SERIAL No.: 5198
MFR.: K-LITE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 99.68 lm/W
MODEL	KL-7555	I _{max} (cd)	15317	S/MH (C0/180)	0.39	
NOMINAL POWER (W)	45	LOR (%)	66.4	S/MH (C90/270)	0.39	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	4015.3	η UP, DN (C0-180)	0.0, 35.4	
NOMINAL FLUX (lm)	6050	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 31.0	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.00	
TEST VOLTAGE (V)	230	η down (%)	66.4	CIBSE SHR MAX	1.00	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT: lx)



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.852m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

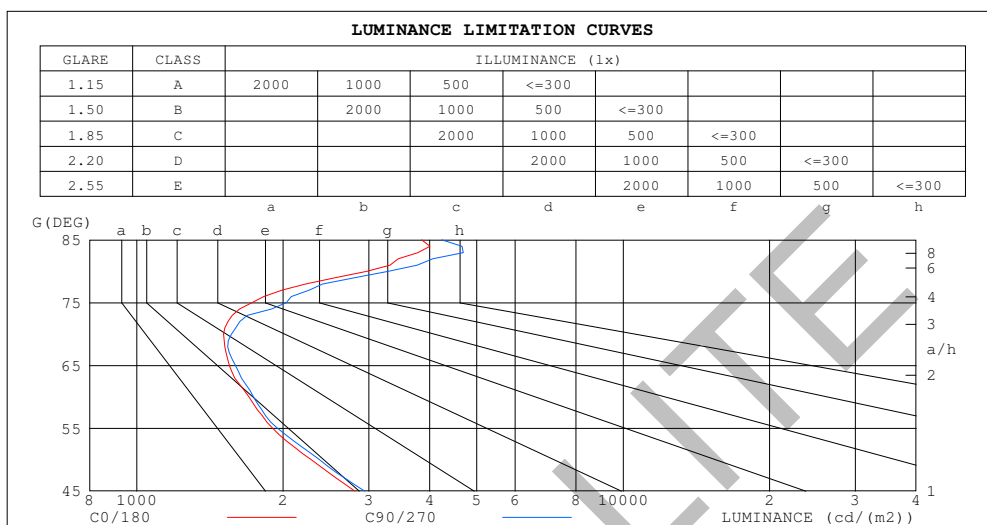
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1059	1107	1072	978.0	893.6	857.5	880.3	952.3	0- 10	1169	1169	29.1,19.3
20	319.6	339.6	324.5	284.7	254.2	241.2	245.0	271.7	10- 20	1571	2740	68.2,45.3
30	62.88	67.53	65.97	62.26	57.86	56.58	56.17	58.81	20- 30	632.0	3372	84,55.7
40	27.11	28.48	28.75	27.95	26.03	25.77	25.51	25.80	30- 40	245.9	3618	90.1,59.8
50	14.61	15.19	15.28	14.80	14.12	14.06	13.84	14.10	40- 50	152.5	3771	93.9,62.3
60	8.464	8.430	8.704	8.673	8.395	8.170	8.156	8.295	50- 60	97.47	3868	96.3,63.9
70	5.136	5.202	5.371	5.392	5.405	5.490	5.357	5.092	60- 70	64.83	3933	97.9,65
80	5.154	5.123	5.735	6.773	7.025	6.003	5.774	5.984	70- 80	51.67	3984	99.2,65.9
90	1.134	1.139	1.126	1.016	0.9949	0.9360	0.9337	0.9889	80- 90	30.85	4015	100,66.4
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY: μ A10cd									UNIT: lm		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.852m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.53V I:0.1796A P:40.284W PF:0.9730 Freq:50.00Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: NW, NICHIA, BA-28°	DIM.: Ø170 x 68	SERIAL No.: 5198
MFR.: K-LITE	SUR.:	Shielding Angle:



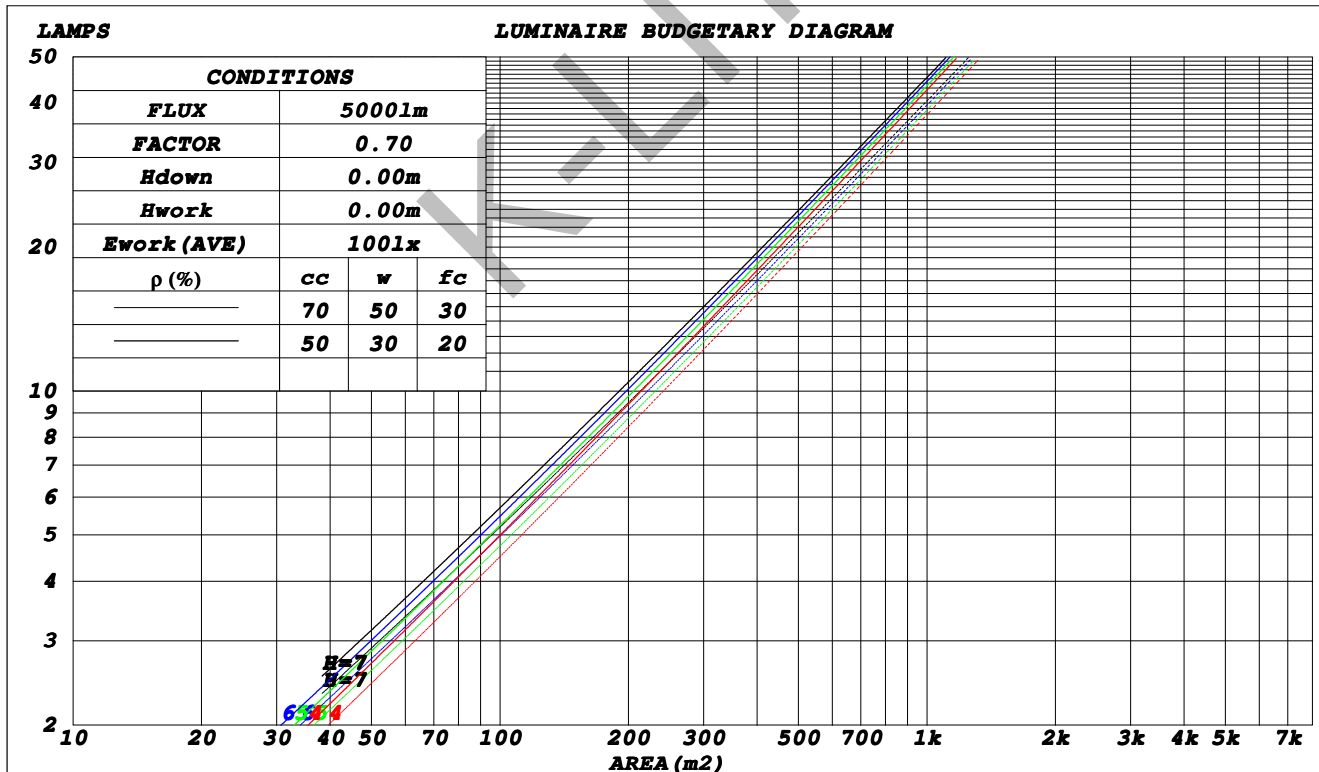
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.53V I:0.1796A P:40.284W PF:0.9730 Freq:50.00Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: NW, NICHIA, BA-28°	DIM.: Ø170 x 68	SERIAL No.: 5198
MFR.: K-LITE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	.79	.79	.79	.77	.77	.77	.74	.74	.74	.71	.71	.71	.68	.68	.68	.66
1.0	.74	.72	.71	.72	.71	.70	.70	.69	.68	.67	.66	.66	.65	.64	.64	.62
2.0	.69	.67	.65	.68	.66	.64	.66	.64	.63	.64	.63	.61	.62	.61	.60	.59
3.0	.66	.63	.60	.65	.62	.60	.63	.61	.59	.62	.60	.58	.60	.59	.57	.56
4.0	.62	.59	.57	.62	.59	.57	.60	.58	.56	.59	.57	.55	.58	.56	.55	.54
5.0	.60	.56	.54	.59	.56	.54	.58	.55	.53	.57	.55	.53	.56	.54	.52	.52
6.0	.57	.54	.51	.57	.54	.51	.56	.53	.51	.55	.52	.51	.54	.52	.50	.50
7.0	.55	.52	.49	.55	.51	.49	.54	.51	.49	.53	.51	.49	.52	.50	.48	.48
8.0	.53	.50	.47	.53	.49	.47	.52	.49	.47	.51	.49	.47	.51	.48	.47	.46
9.0	.51	.48	.46	.51	.48	.46	.50	.47	.46	.50	.47	.45	.49	.47	.45	.45
10.0	.49	.46	.44	.49	.46	.44	.49	.46	.44	.48	.46	.44	.48	.45	.44	.43



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:230.53V I:0.1796A P:40.284W PF:0.9730 Freq:50.00Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: NW, NICHIA, BA-28°	DIM.: Ø170 x 68	SERIAL No.: 5198
MFR.: K-LITE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)										
0.0																	
1.0	.112	.064	.020	.108	.062	.020	.100	.057	.018	.092	.053	.017	.085	.049	.016		
2.0	.103	.057	.017	.100	.055	.017	.093	.052	.016	.086	.048	.015	.080	.045	.014		
3.0	.096	.051	.015	.093	.050	.015	.087	.047	.014	.081	.045	.014	.076	.042	.013		
4.0	.089	.046	.014	.086	.045	.013	.081	.043	.013	.077	.041	.012	.072	.039	.012		
5.0	.083	.042	.012	.081	.042	.012	.077	.040	.012	.073	.038	.011	.069	.037	.011		
6.0	.078	.039	.011	.076	.039	.011	.073	.037	.011	.069	.036	.011	.066	.035	.010		
7.0	.074	.037	.010	.072	.036	.010	.069	.035	.010	.066	.034	.010	.063	.033	.010		
8.0	.070	.034	.010	.069	.034	.010	.066	.033	.009	.063	.032	.009	.061	.031	.009		
9.0	.067	.032	.009	.065	.032	.009	.063	.031	.009	.060	.030	.009	.058	.030	.009		
10.0	.064	.031	.008	.062	.030	.008	.060	.029	.008	.058	.029	.008	.056	.028	.008		

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)										
0.0	.126	.126	.126	.108	.108	.108	.074	.074	.074	.042	.042	.042	.014	.014	.014		
1.0	.113	.104	.097	.097	.090	.083	.066	.062	.057	.038	.036	.033	.012	.011	.011		
2.0	.102	.088	.076	.088	.076	.066	.060	.052	.046	.035	.030	.027	.011	.010	.009		
3.0	.093	.075	.061	.080	.065	.053	.055	.045	.037	.032	.026	.022	.010	.009	.007		
4.0	.085	.065	.050	.073	.056	.043	.050	.039	.031	.029	.023	.018	.009	.008	.006		
5.0	.079	.057	.042	.068	.050	.036	.047	.035	.026	.027	.020	.015	.009	.007	.005		
6.0	.073	.051	.035	.063	.044	.031	.043	.031	.022	.025	.018	.013	.008	.006	.004		
7.0	.068	.046	.030	.059	.040	.026	.040	.028	.018	.023	.016	.011	.008	.005	.004		
8.0	.064	.041	.026	.055	.036	.023	.038	.025	.016	.022	.015	.010	.007	.005	.003		
9.0	.060	.038	.022	.052	.033	.020	.036	.023	.014	.021	.014	.008	.007	.004	.003		
10.0	.057	.034	.020	.049	.030	.017	.034	.021	.012	.020	.012	.007	.006	.004	.002		

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.53V I:0.1796A P:40.284W PF:0.9730 Freq:50.00Hz Lamp Flux:6050x1 lm										
NAME: VELA					TYPE:RECESSED CEILING			WEIGHT:		
SPEC.:NW, NICHIA, BA-28°					DIM.: Ø170 x 68			SERIAL No.:5198		
MFR.: K-LITE					SUR.:			Shielding Angle:		
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions						Viewed crosswise				
x = 2H y = 2H						Viewed endwise				
3H						3.5	4.3	3.7	4.5	4.6
4H						4.4	5.2	4.7	5.4	5.6
6H						5.1	5.8	5.3	6.0	6.2
8H						6.1	6.8	6.4	7.0	7.2
12H						6.1	6.8	6.4	7.0	7.2
2H						6.9	7.6	7.2	7.8	8.1
3H						7.7	8.3	8.0	8.6	8.9
4H						7.7	8.3	8.0	8.6	8.9
6H						8.7	9.2	9.2	9.6	9.9
8H						8.7	9.2	9.2	9.6	9.9
12H						9.6	9.9	10.0	10.3	10.8
2H						6.2	6.7	6.6	7.0	7.4
3H						7.8	8.2	8.2	8.6	9.0
4H						8.7	9.0	9.1	9.5	9.9
6H						9.6	9.9	10.0	10.3	10.8
8H						9.6	9.9	10.0	10.3	10.8
12H						10.3	10.6	10.6	11.1	11.6
2H						6.3	6.8	6.7	7.1	7.5
3H						8.1	8.4	8.5	8.9	9.3
4H						9.1	9.4	9.6	9.9	10.3
6H						9.1	9.4	9.6	9.9	10.3
8H						10.3	10.6	10.6	11.1	11.6
12H						11.6	12.1	12.1	12.6	13.1
Variations with the observer position at spacings:										
S = 1.0H						+ 0.2 / - 0.3				
1.5H						+ 0.2 / - 0.1				
2.0H						+ 0.2 / - 0.2				

CIE Pub.117, 6050 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 6.3$)
Area: 0.1 m²

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:24 November 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.53V I:0.1796A P:40.284W PF:0.9730 Freq:50.00Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: NW, NICHIA, BA-28°	DIM.: Ø170 x 68	SERIAL No.: 5198
MFR.: K-LITE	SUR.:	Shielding Angle:

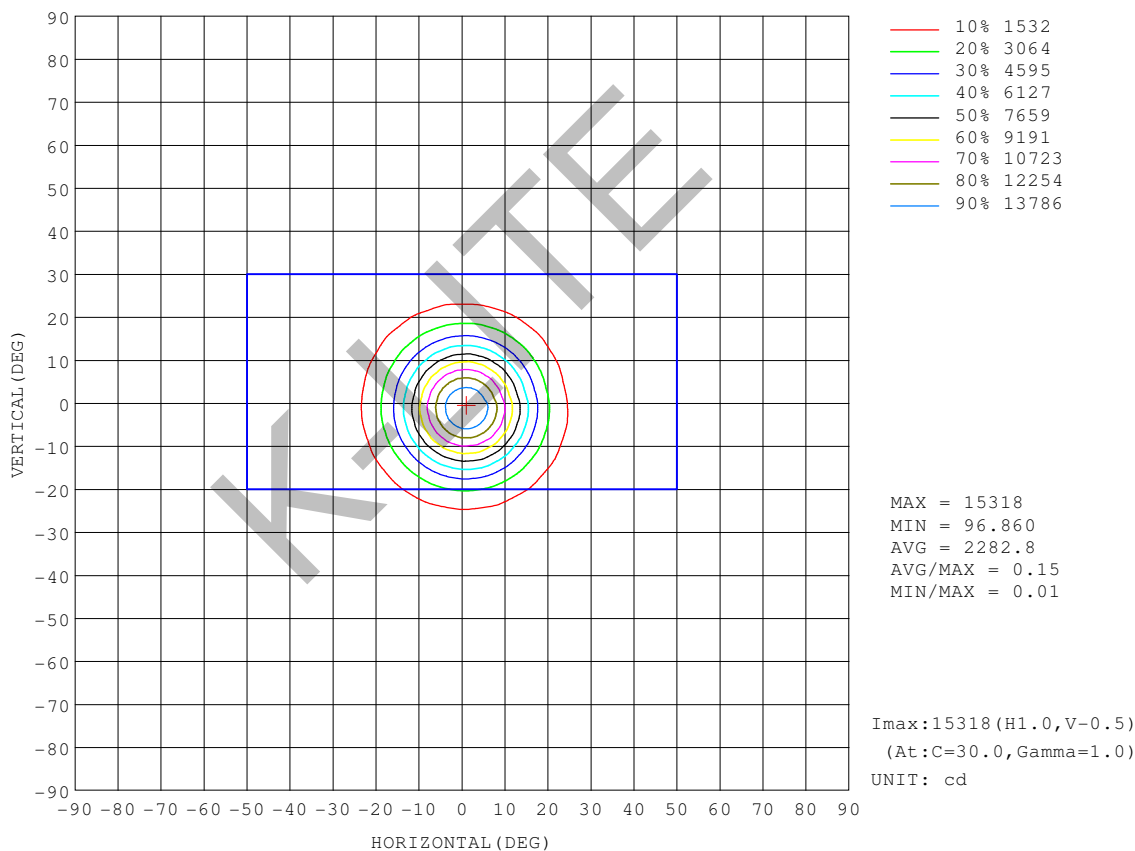
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	57	52	50	56	52	50	56	52	50	47
0.80	62	58	55	61	57	55	60	57	55	52
1.00	65	61	58	64	60	58	63	60	58	55
1.25	67	64	61	67	63	61	65	62	60	57
1.50	69	66	63	68	65	63	67	64	62	59
2.00	71	68	66	70	67	65	68	66	64	61
2.50	72	70	67	71	69	67	69	67	66	62
3.00	74	71	69	72	70	68	70	68	67	62
4.00	75	73	71	74	72	70	71	70	69	64
5.00	76	74	73	74	73	72	72	71	70	65
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.852m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:230.53V I:0.1796A P:40.284W PF:0.9730 Freq:50.00Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:NW, NICHIA, BA-28°	DIM.: Ø170 x 68	SERIAL No.:5198
MFR.: K-LITE	SUR.:	Shielding Angle:



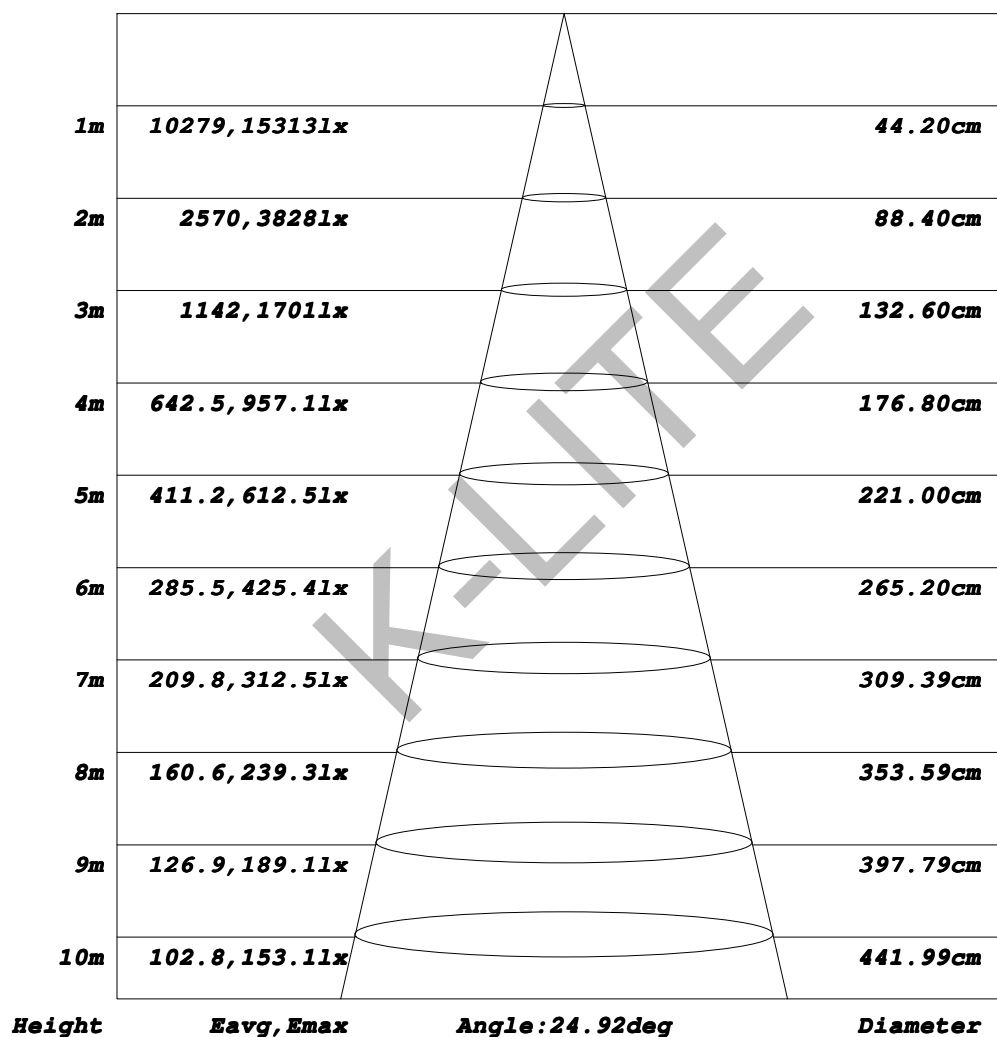
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:24 November 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.53V I:0.1796A P:40.284W PF:0.9730 Freq:50.00Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:NW, NICHIA, BA-28°	DIM.: Ø170 x 68	SERIAL No.:5198
MFR.: K-LITE	SUR.:	Shielding Angle:

Flux out:1721 lm



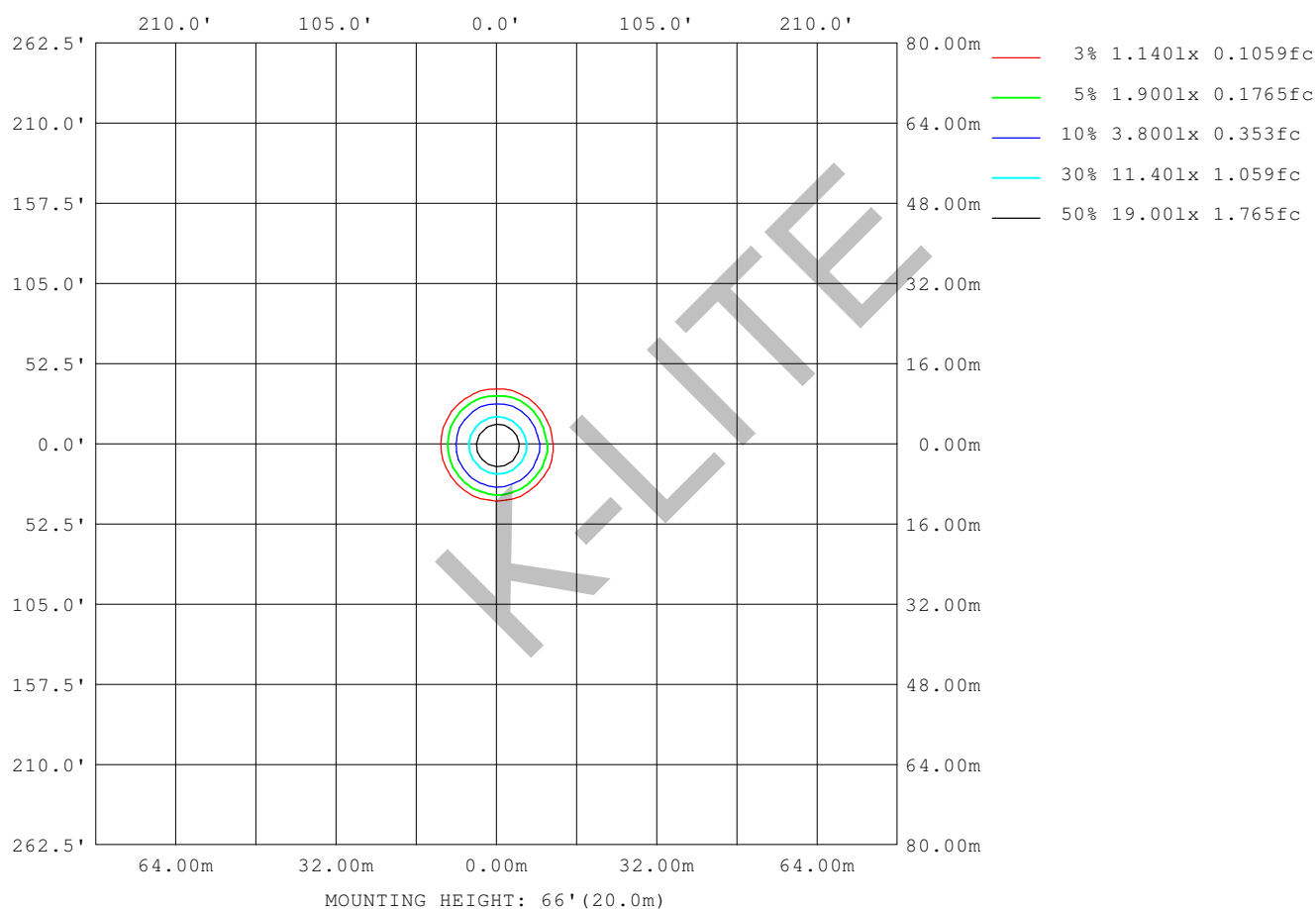
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.852m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:230.53V I:0.1796A P:40.284W PF:0.9730 Freq:50.00Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:NW, NICHIA, BA-28°	DIM.: Ø170 x 68	SERIAL No.:5198
MFR.: K-LITE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:230.53V I:0.1796A P:40.284W PF:0.9730 Freq:50.00Hz Lamp Flux:6050x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:NW, NICHIA, BA-28°	DIM.: Ø170 x 68	SERIAL No.:5198
MFR.: K-LITE	SUR.:	Shielding Angle:

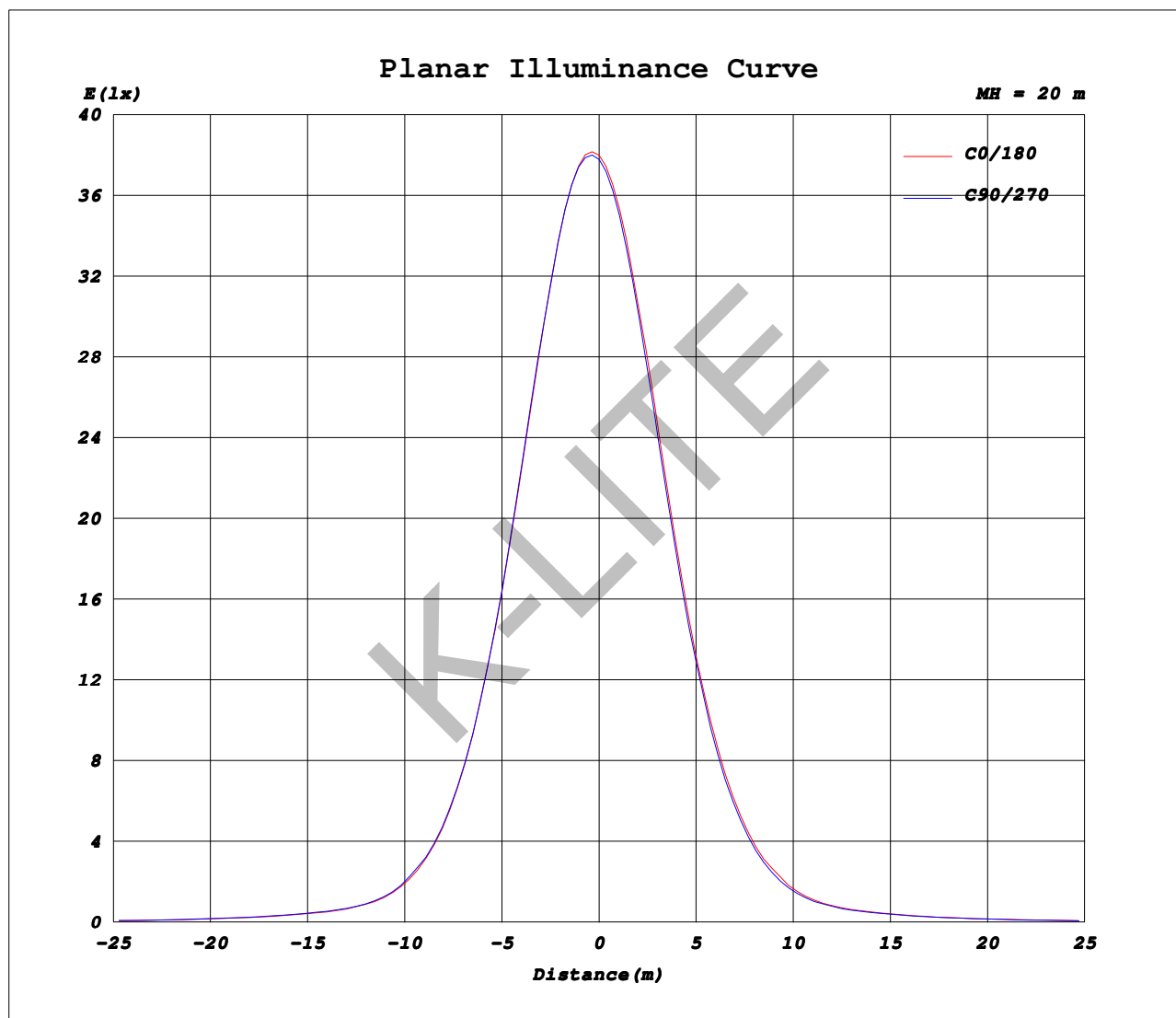
AvgL	cd/m2
L_0~180 (65) av	1557
L_0~180 (75) av	1927
L_0~180 (85) av	3553
L_90~270 (65) av	1549
L_90~270 (75) av	2000
L_90~270 (85) av	3644
L_45 (65) av	1556
L_45 (75) av	1972
L_45 (85) av	3341

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:24 November 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

```



Light Output Ratio:	65.9%	
Luminaire Power:	40.07 W	
SHR Nominal:	0.00	Calculated using the TM5
SHR Maximum:	1.00	fine grid method.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

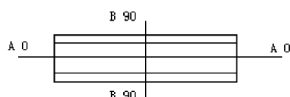
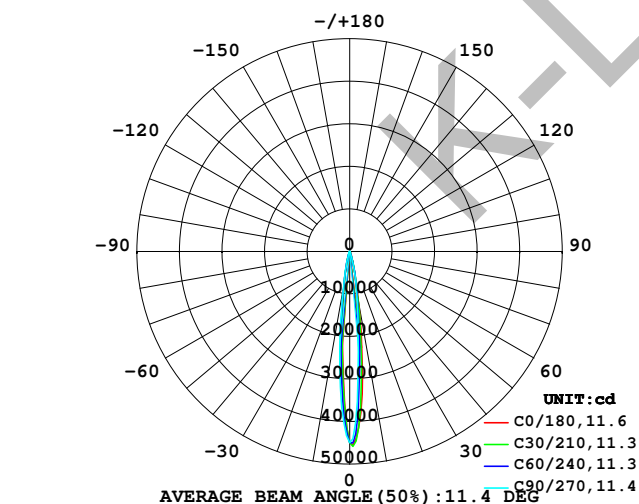
γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

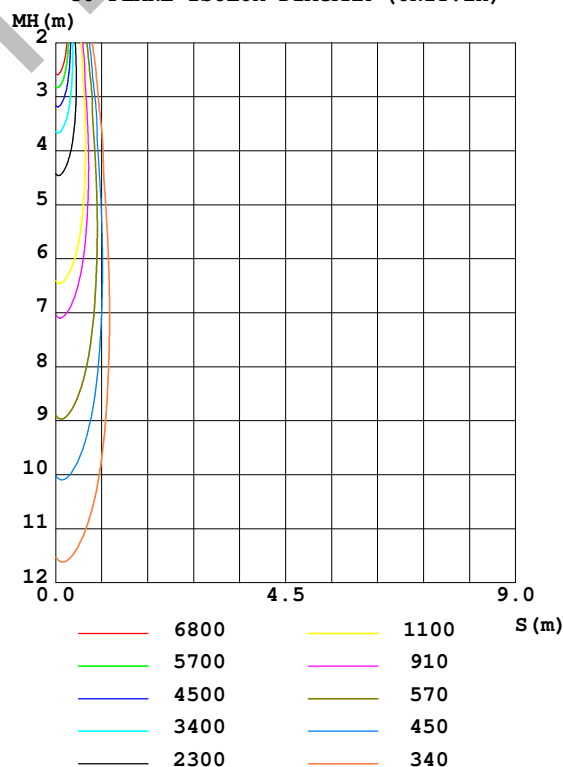
Test:U:230.60V I:0.1787A P:40.071W PF:0.9726 Freq:49.99Hz Lamp Flux:5671x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: WW, NICHIA, BA-10°	DIM.: Ø170 x 68	SERIAL No.: 5199
MFR.: K-LITE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 93.20 lm/W
MODEL	KL-7555	I _{max} (cd)	45871	S/MH (C0/180)	0.15	
NOMINAL POWER (W)	45	LOR (%)	65.9	S/MH (C90/270)	0.21	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	3734.7	η UP, DN (C0-180)	0.0, 32.9	
NOMINAL FLUX (lm)	5671	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 33.0	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.00	
TEST VOLTAGE (V)	230	η down (%)	65.9	CIBSE SHR MAX	1.00	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT: lx)



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.852m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

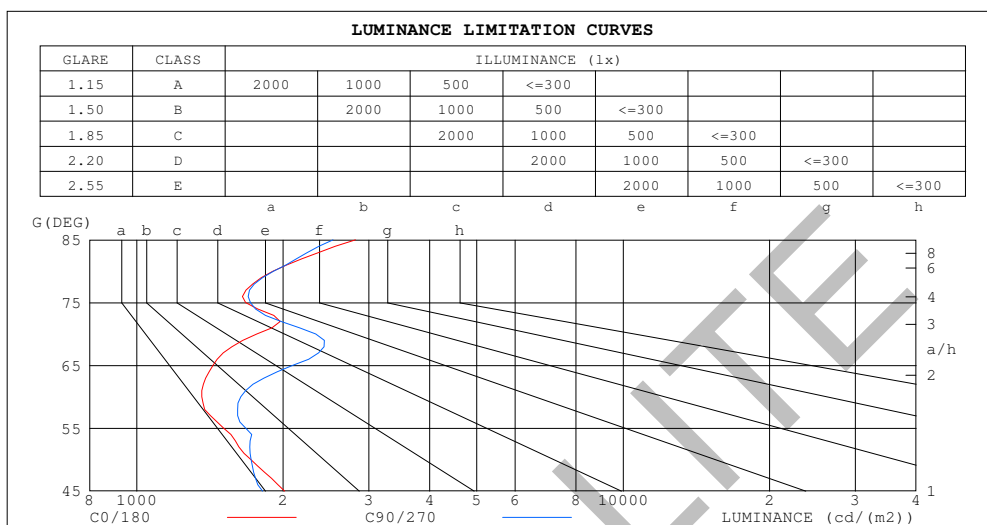
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1195	1073	944.1	848.2	774.4	783.2	858.4	1092	0- 10	1963	1963	52.5,34.6
20	151.0	134.4	98.71	77.44	82.06	102.0	128.4	148.1	10- 20	997.3	2960	79.3,52.2
30	41.94	29.94	23.39	22.62	24.59	29.70	40.06	46.51	20- 30	269.5	3229	86.5,56.9
40	21.17	20.40	20.39	19.52	19.14	19.49	20.71	22.26	30- 40	174.0	3403	91.1,60
50	10.97	10.98	11.08	11.06	10.58	10.41	10.61	10.86	40- 50	110.0	3513	94.1,62
60	6.767	7.288	8.206	8.695	7.964	7.117	6.764	6.580	50- 60	79.29	3593	96.2,63.4
70	6.005	7.362	8.001	7.205	7.205	6.933	6.073	5.335	60- 70	73.36	3666	98.2,64.6
80	3.291	3.192	3.328	3.215	3.230	3.112	3.118	3.053	70- 80	46.74	3713	99.4,65.5
90	1.258	1.165	1.144	1.139	1.127	1.076	1.104	1.137	80- 90	21.95	3735	100,65.9
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY: μ A10cd									UNIT: lm		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.852m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.60V I:0.1787A P:40.071W PF:0.9726 Freq:49.99Hz Lamp Flux:5671x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: WW, NICHIA, BA-10°	DIM.: Ø170 x 68	SERIAL No.: 5199
MFR.: K-LITE	SUR.:	Shielding Angle:



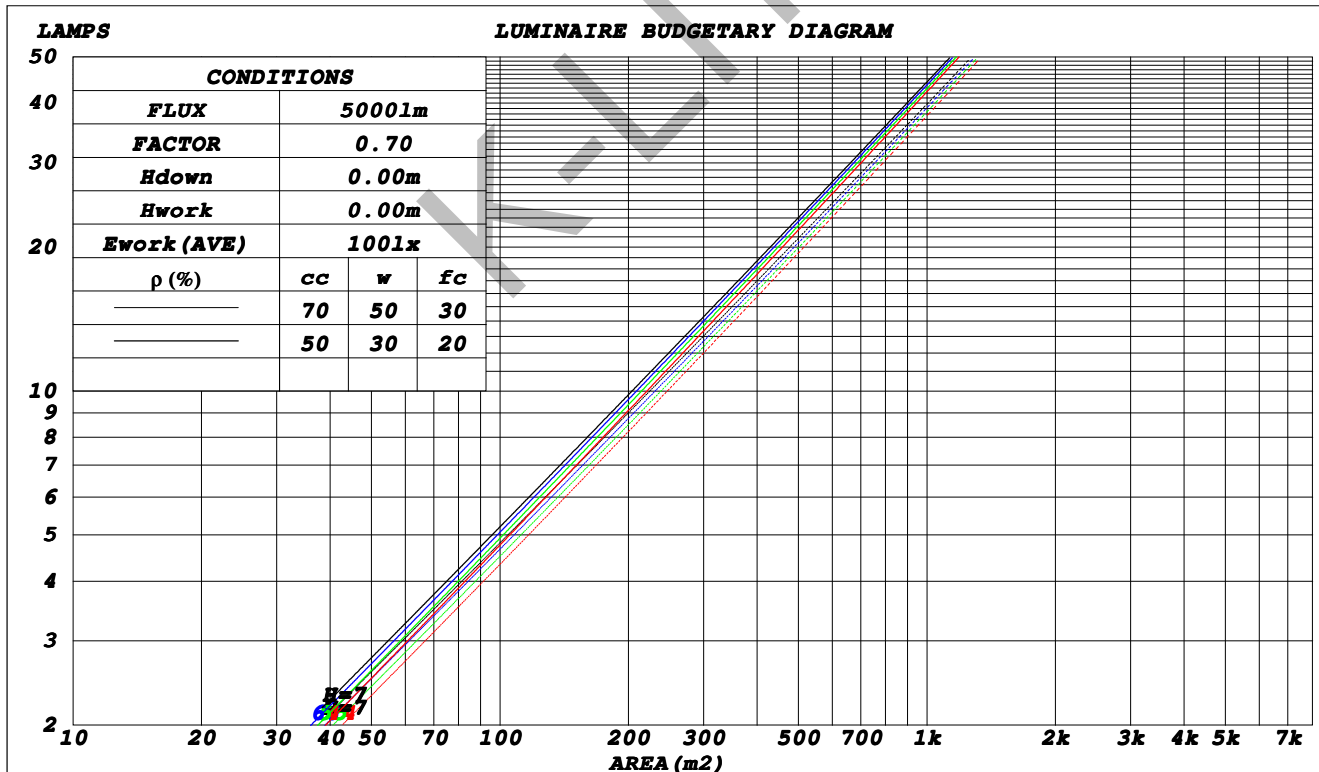
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.60V I:0.1787A P:40.071W PF:0.9726 Freq:49.99Hz Lamp Flux:5671x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: WW, NICHIA, BA-10°	DIM.: Ø170 x 68	SERIAL No.: 5199
MFR.: K-LITE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	.78	.78	.78	.77	.77	.77	.73	.73	.73	.70	.70	.70	.67	.67	.67	.66
1.0	.74	.73	.71	.72	.71	.70	.70	.69	.68	.67	.67	.66	.65	.65	.64	.63
2.0	.70	.68	.66	.69	.67	.66	.67	.65	.64	.65	.64	.63	.63	.62	.62	.61
3.0	.67	.65	.63	.66	.64	.62	.65	.63	.61	.63	.62	.60	.62	.60	.59	.58
4.0	.65	.62	.60	.64	.61	.60	.63	.60	.59	.61	.60	.58	.60	.59	.58	.57
5.0	.62	.60	.58	.62	.59	.57	.61	.59	.57	.60	.58	.56	.59	.57	.56	.55
6.0	.61	.58	.56	.60	.58	.56	.59	.57	.55	.58	.56	.55	.58	.56	.55	.54
7.0	.59	.56	.54	.59	.56	.54	.58	.56	.54	.57	.55	.54	.56	.55	.53	.53
8.0	.57	.55	.53	.57	.55	.53	.57	.54	.53	.56	.54	.52	.55	.54	.52	.52
9.0	.56	.54	.52	.56	.53	.52	.55	.53	.52	.55	.53	.51	.54	.53	.51	.51
10.0	.55	.52	.51	.55	.52	.51	.54	.52	.51	.54	.52	.50	.53	.52	.50	.50



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:230.60V I:0.1787A P:40.071W PF:0.9726 Freq:49.99Hz Lamp Flux:5671x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:WW, NICHIA, BA-10°	DIM.: Ø170 x 68	SERIAL No.:5199
MFR.: K-LITE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)										
0.0																	
1.0	.099	.056	.018	.094	.054	.017	.086	.049	.016	.079	.045	.015	.072	.042	.013		
2.0	.090	.049	.015	.086	.048	.015	.080	.044	.014	.073	.041	.013	.068	.038	.012		
3.0	.082	.044	.013	.079	.043	.013	.074	.040	.012	.068	.038	.012	.064	.035	.011		
4.0	.076	.039	.012	.073	.038	.011	.069	.036	.011	.064	.034	.010	.060	.033	.010		
5.0	.070	.036	.010	.068	.035	.010	.064	.033	.010	.060	.032	.009	.057	.030	.009		
6.0	.065	.033	.009	.064	.032	.009	.060	.031	.009	.057	.030	.009	.054	.028	.008		
7.0	.061	.030	.009	.060	.030	.008	.057	.029	.008	.054	.028	.008	.051	.027	.008		
8.0	.058	.028	.008	.056	.028	.008	.054	.027	.008	.051	.026	.007	.049	.025	.007		
9.0	.054	.026	.007	.053	.026	.007	.051	.025	.007	.049	.024	.007	.047	.024	.007		
10.0	.052	.025	.007	.051	.024	.007	.048	.024	.007	.047	.023	.007	.045	.023	.006		

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)										
0.0	.125	.125	.125	.107	.107	.107	.073	.073	.073	.042	.042	.042	.013	.013	.013		
1.0	.111	.104	.097	.095	.089	.083	.065	.061	.058	.038	.035	.034	.012	.011	.011		
2.0	.100	.087	.077	.085	.075	.066	.059	.052	.046	.034	.030	.027	.011	.010	.009		
3.0	.090	.075	.062	.077	.064	.054	.053	.045	.038	.031	.026	.022	.010	.008	.007		
4.0	.082	.065	.052	.070	.056	.045	.048	.039	.032	.028	.023	.019	.009	.007	.006		
5.0	.074	.056	.043	.064	.049	.038	.044	.034	.027	.025	.020	.016	.008	.007	.005		
6.0	.068	.050	.037	.059	.043	.032	.040	.030	.023	.023	.018	.013	.008	.006	.004		
7.0	.063	.044	.031	.054	.038	.027	.037	.027	.019	.022	.016	.012	.007	.005	.004		
8.0	.058	.040	.027	.050	.035	.024	.035	.024	.017	.020	.014	.010	.007	.005	.003		
9.0	.054	.036	.024	.047	.031	.021	.032	.022	.015	.019	.013	.009	.006	.004	.003		
10.0	.051	.033	.021	.044	.028	.018	.030	.020	.013	.018	.012	.008	.006	.004	.003		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:K-LITE
 Test Date:24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:1.852m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.60V I:0.1787A P:40.071W PF:0.9726 Freq:49.99Hz Lamp Flux:5671x1 lm										
NAME: VELA					TYPE:RECESSED CEILING			WEIGHT:		
SPEC.:WW, NICHIA, BA-10°					DIM.: Ø170 x 68			SERIAL No.:5199		
MFR.: K-LITE					SUR.:			Shielding Angle:		
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions						Viewed crosswise				
x = 2H y = 2H						Viewed endwise				
3H						2.5	3.1	2.7	3.3	3.4
4H						5.0	5.7	5.3	5.8	6.0
6H						5.7	6.3	5.9	6.5	6.7
8H						6.2	6.8	6.5	7.0	7.2
12H						6.5	7.1	6.8	7.3	7.6
2H						6.8	7.4	7.1	7.6	7.9
3H						6.6	7.1	6.9	7.4	7.7
4H						6.2	6.7	6.6	7.0	7.3
6H						7.0	7.5	7.4	7.8	8.1
8H						7.2	7.7	7.6	8.0	8.3
12H						7.5	7.9	7.9	8.2	8.6
2H						7.6	8.0	8.0	8.4	8.7
3H						8.0	8.4	8.4	8.7	9.1
4H						8.0	8.4	8.4	8.7	9.1
6H						6.9	7.3	7.3	7.6	8.0
8H						7.7	8.0	8.1	8.4	8.8
12H						8.1	8.4	8.6	8.9	9.3
2H						8.7	8.9	9.1	9.4	9.8
3H						6.6	7.0	7.0	7.3	7.7
4H						7.7	8.0	8.2	8.5	8.9
6H						8.3	8.6	8.8	9.0	9.5
8H						6.9	7.3	7.3	7.6	8.0
12H						7.8	8.1	8.2	8.5	8.9
2H						8.3	8.6	8.8	9.0	9.5
Variations with the observer position at spacings:										
S = 1.0H						+ 0.2 / - 0.3				
1.5H						+ 0.1 / - 0.2				
2.0H						+ 0.3 / - 0.3				

CIE Pub.117, 5671 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 6.0$)
Area: 0.1 m²

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.60V I:0.1787A P:40.071W PF:0.9726 Freq:49.99Hz Lamp Flux:5671x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: WW, NICHIA, BA-10°	DIM.: Ø170 x 68	SERIAL No.: 5199
MFR.: K-LITE	SUR.:	Shielding Angle:

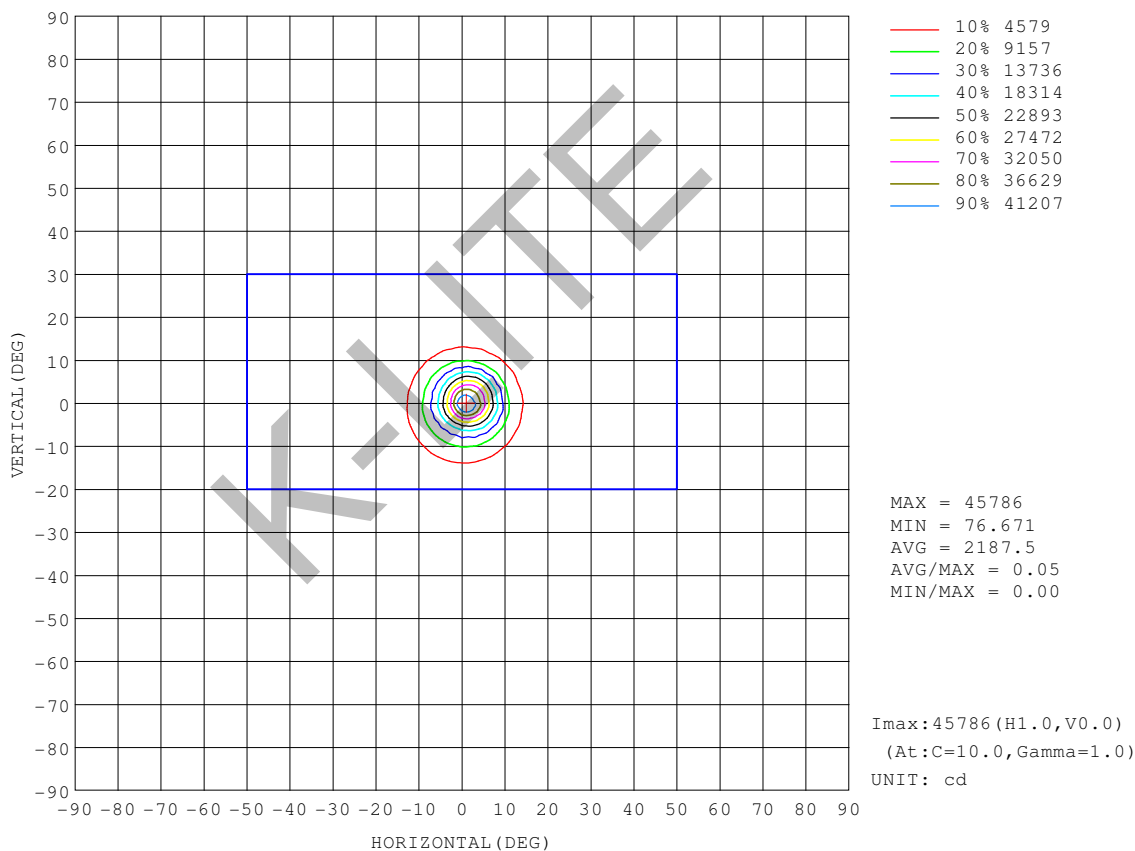
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	57	52	50	56	52	50	56	52	50	47
0.80	62	58	55	61	57	55	60	57	55	52
1.00	64	61	58	64	60	58	63	60	57	55
1.25	67	63	61	66	63	61	65	62	60	57
1.50	69	66	63	68	65	63	67	64	62	59
2.00	71	68	66	70	67	65	68	66	64	60
2.50	72	69	67	71	68	67	69	67	65	61
3.00	73	71	69	72	70	68	70	68	67	62
4.00	75	73	71	73	71	70	71	69	68	64
5.00	75	74	72	74	73	71	71	70	69	64
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.852m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:230.60V I:0.1787A P:40.071W PF:0.9726 Freq:49.99Hz Lamp Flux:5671x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:WW, NICHIA, BA-10°	DIM.: Ø170 x 68	SERIAL No.:5199
MFR.: K-LITE	SUR.:	Shielding Angle:



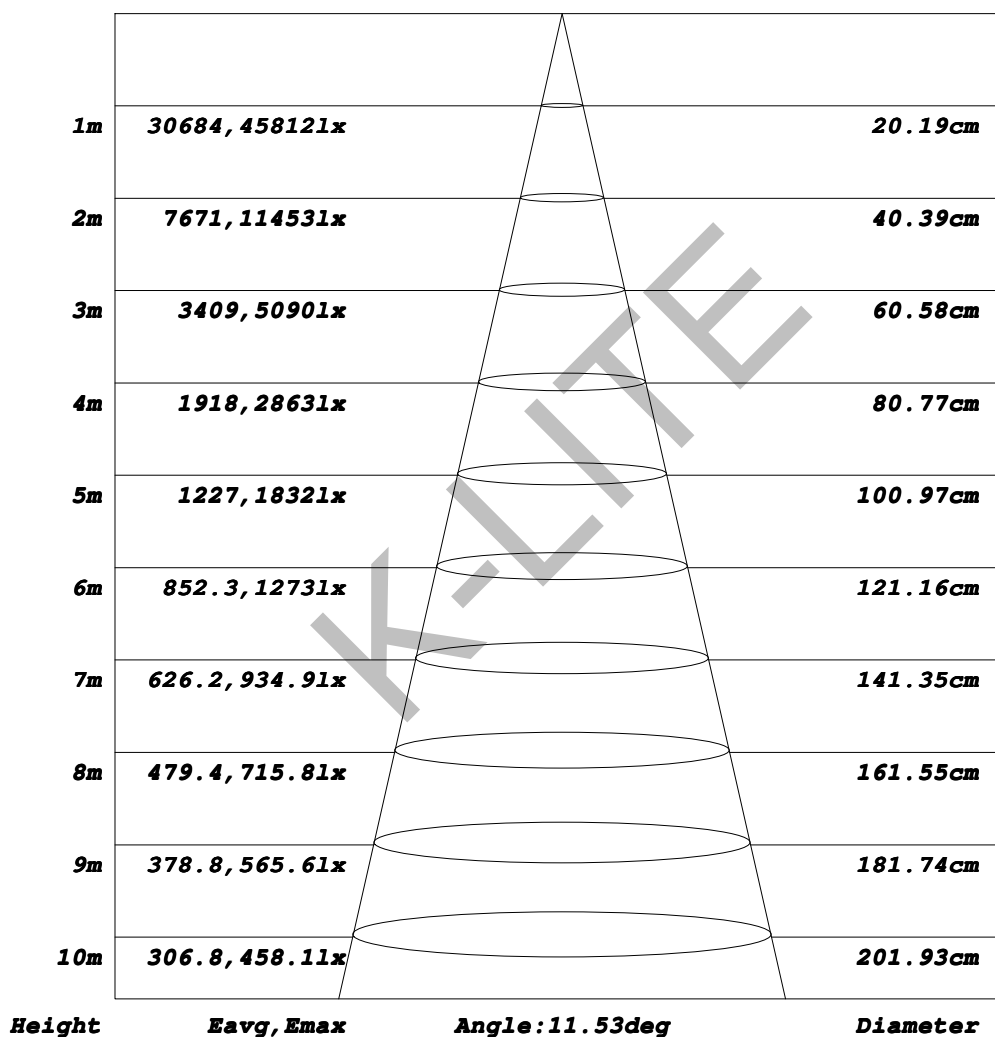
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:24 November 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.60V I:0.1787A P:40.071W PF:0.9726 Freq:49.99Hz Lamp Flux:5671x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:WW, NICHIA, BA-10°	DIM.: Ø170 x 68	SERIAL No.:5199
MFR.: K-LITE	SUR.:	Shielding Angle:

Flux out:1065 lm



Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.852m [K=1.0000]
 Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

```

LED Avg.L Report

Test:U:230.60V I:0.1787A P:40.071W PF:0.9726 Freq:49.99Hz Lamp Flux:5671x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:WW, NICHIA, BA-10°	DIM.: Ø170 x 68	SERIAL No.:5199
MFR.: K-LITE	SUR.:	Shielding Angle:

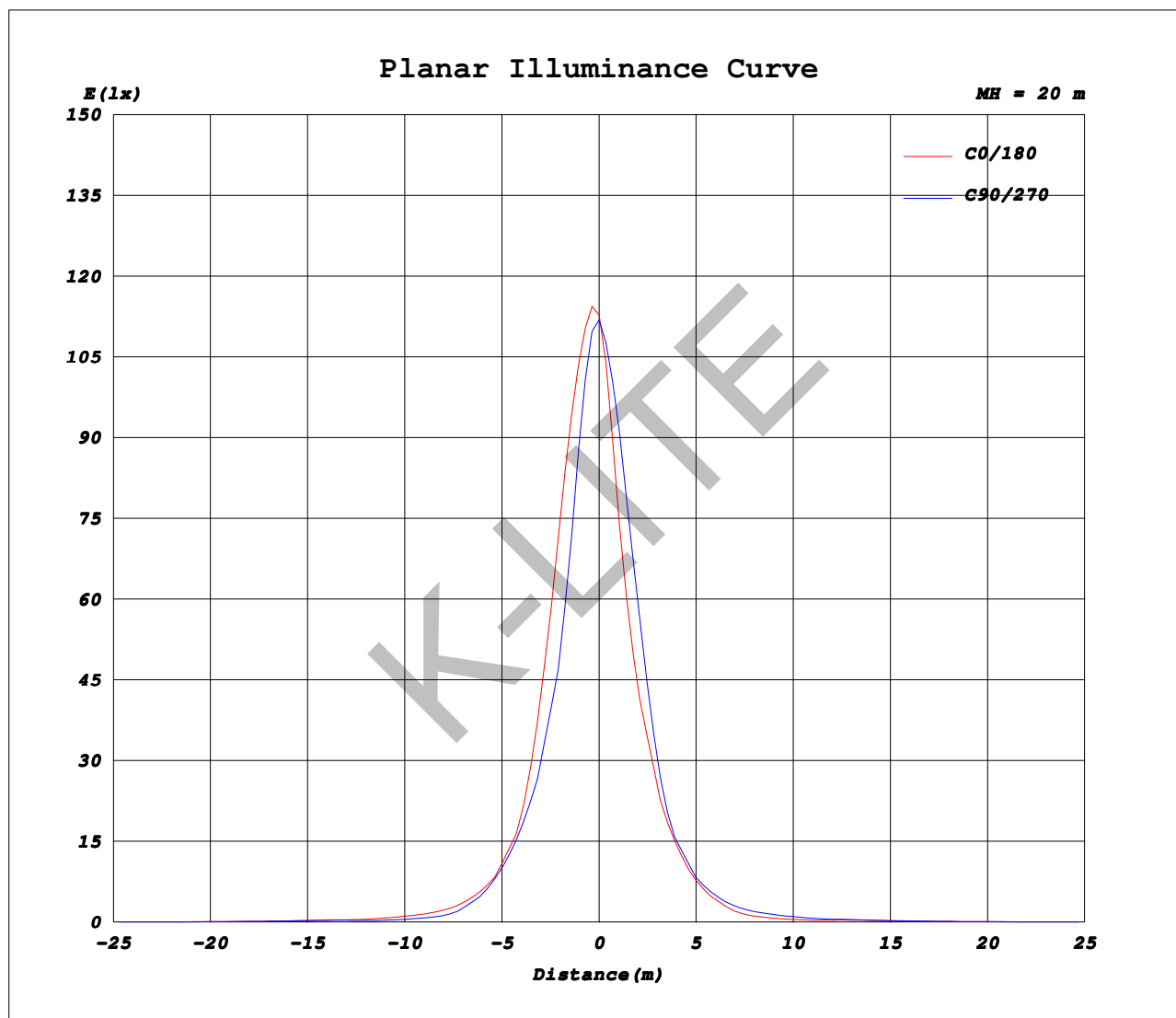
AvgL	cd/m2
L_0~180 (65) av	1811
L_0~180 (75) av	1616
L_0~180 (85) av	2529
L_90~270 (65) av	1776
L_90~270 (75) av	1645
L_90~270 (85) av	2486
L_45 (65) av	1781
L_45 (75) av	1630
L_45 (85) av	2471

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:24 November 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

```




Light Output Ratio:	66.5%	
Luminaire Power:	39.98 W	
SHR Nominal:	0.00	Calculated using the TM5
SHR Maximum:	1.00	fine grid method.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

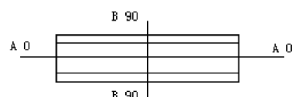
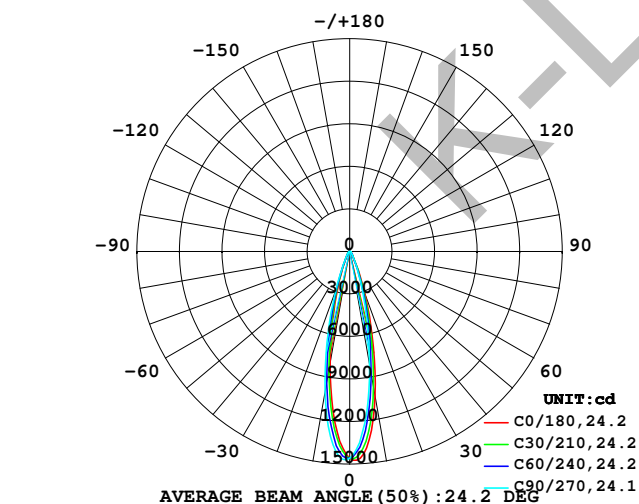
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

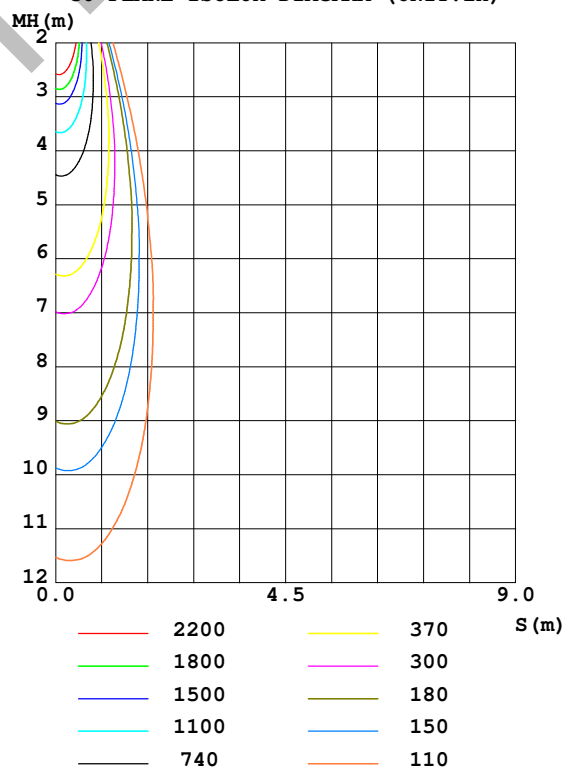
Test:U:229.51V I:0.1790A P:39.977W PF:0.9729 Freq:49.99Hz Lamp Flux:5671x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: WW, NICHIA, BA-28°	DIM.: Ø170 x 68	SERIAL No.: 5200
MFR.: K-LITE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 94.36 lm/W
MODEL	KL-7555	I _{max} (cd)	14885	S/MH (C0/180)	0.37	
NOMINAL POWER (W)	45	LOR (%)	66.5	S/MH (C90/270)	0.45	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	3772.2	η UP, DN (C0-180)	0.0, 31.8	
NOMINAL FLUX (lm)	5671	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 34.7	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.00	
TEST VOLTAGE (V)	230	η down (%)	66.5	CIBSE SHR MAX	1.00	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT: lx)



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.852m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

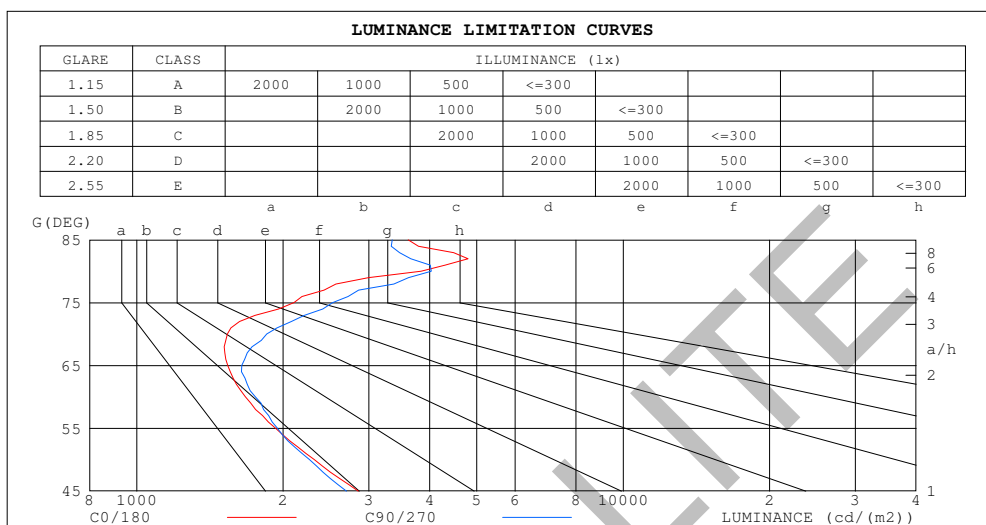
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1036	921.7	816.0	767.7	797.3	889.0	1003	1069	0- 10	1111	1111	29.4,19.6
20	304.2	258.9	225.3	206.9	212.2	240.3	282.0	312.7	10- 20	1440	2551	67.6,45
30	60.40	58.68	57.49	56.45	54.56	56.31	59.71	61.96	20- 30	571.6	3123	82.8,55.1
40	27.75	27.24	26.60	26.32	26.34	26.39	27.18	28.05	30- 40	243.4	3366	89.2,59.4
50	14.84	14.53	14.55	14.44	14.39	14.09	14.24	14.73	40- 50	151.4	3517	93.2,62
60	8.334	8.576	8.756	8.746	8.522	8.373	8.128	8.205	50- 60	96.82	3614	95.8,63.7
70	5.237	5.653	6.322	6.566	6.457	5.917	5.811	5.145	60- 70	66.46	3681	97.6,64.9
80	6.651	5.955	6.999	6.185	6.787	6.461	6.672	5.768	70- 80	59.91	3741	99.2,66
90	1.193	1.118	1.040	1.045	1.009	0.9985	0.9994	1.126	80- 90	31.65	3772	100,66.5
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY: μ 10cd									UNIT: lm		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.852m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:229.51V I:0.1790A P:39.977W PF:0.9729 Freq:49.99Hz Lamp Flux:5671x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: WW, NICHIA, BA-28°	DIM.: Ø170 x 68	SERIAL No.: 5200
MFR.: K-LITE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	3616	3351
80	3840	4033
75	2105	2528
70	1535	1850
65	1538	1644
60	1671	1752
55	1929	1946
50	2315	2264
45	2854	2700

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

```


WEC AND CCEC

Test:U:229.51V I:0.1790A P:39.977W PF:0.9729 Freq:49.99Hz Lamp Flux:5671x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:WW, NICHIA, BA-28°	DIM.: Ø170 x 68	SERIAL No.:5200
MFR.: K-LITE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0		
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0		
ρ_{fc}	20%			20%			20%			20%			20%			0		
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)											
0.0																		
1.0	.115	.065	.021	.110	.063	.020	.102	.059	.019	.094	.054	.017	.087	.051	.016			
2.0	.105	.058	.018	.102	.056	.017	.095	.053	.016	.088	.050	.016	.082	.047	.015			
3.0	.097	.052	.016	.094	.050	.015	.088	.048	.015	.083	.045	.014	.078	.043	.013			
4.0	.091	.047	.014	.088	.046	.014	.083	.044	.013	.078	.042	.013	.074	.040	.012			
5.0	.085	.043	.012	.082	.042	.012	.078	.041	.012	.074	.039	.012	.070	.038	.011			
6.0	.079	.040	.011	.078	.039	.011	.074	.038	.011	.070	.037	.011	.067	.035	.010			
7.0	.075	.037	.011	.073	.037	.010	.070	.035	.010	.067	.034	.010	.064	.033	.010			
8.0	.071	.035	.010	.070	.034	.010	.067	.033	.010	.064	.032	.009	.061	.032	.009			
9.0	.067	.033	.009	.066	.032	.009	.064	.031	.009	.061	.031	.009	.059	.030	.009			
10.0	.064	.031	.009	.063	.030	.009	.061	.030	.008	.059	.029	.008	.057	.028	.008			

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)										
0.0	.127	.127	.127	.108	.108	.108	.074	.074	.074	.042	.042	.042	.014	.014	.014		
1.0	.114	.105	.097	.097	.090	.083	.067	.062	.057	.038	.036	.033	.012	.012	.011		
2.0	.103	.088	.076	.088	.076	.066	.060	.053	.046	.035	.031	.027	.011	.010	.009		
3.0	.094	.075	.061	.080	.065	.053	.055	.045	.037	.032	.026	.022	.010	.009	.007		
4.0	.086	.065	.050	.074	.057	.043	.051	.039	.031	.029	.023	.018	.009	.008	.006		
5.0	.079	.058	.042	.068	.050	.036	.047	.035	.026	.027	.020	.015	.009	.007	.005		
6.0	.073	.051	.035	.063	.044	.031	.044	.031	.022	.025	.018	.013	.008	.006	.004		
7.0	.068	.046	.030	.059	.040	.026	.041	.028	.018	.024	.016	.011	.008	.005	.004		
8.0	.064	.041	.026	.055	.036	.022	.038	.025	.016	.022	.015	.010	.007	.005	.003		
9.0	.060	.038	.022	.052	.033	.020	.036	.023	.014	.021	.014	.008	.007	.004	.003		
10.0	.057	.035	.020	.049	.030	.017	.034	.021	.012	.020	.013	.007	.006	.004	.002		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:K-LITE
 Test Date:24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:1.852m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:229.51V I:0.1790A P:39.977W PF:0.9729 Freq:49.99Hz Lamp Flux:5671x1 lm											
NAME: VELA					TYPE:RECESSED CEILING			WEIGHT:			
SPEC.:WW, NICHIA, BA-28°					DIM.: Ø170 x 68			SERIAL No.:5200			
MFR.: K-LITE					SUR.:			Shielding Angle:			
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3	
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3	
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Room dimensions		Viewed crosswise					Viewed endwise				
x = 2H y = 2H	3H	4.8	5.5	5.0	5.7	5.9	4.9	5.6	5.1	5.8	6.0
	4H	5.7	6.4	5.9	6.6	6.8	5.9	6.6	6.2	6.9	7.1
	6H	7.1	7.8	7.4	8.0	8.2	7.4	8.1	7.7	8.3	8.5
	8H	8.2	8.9	8.5	9.1	9.4	8.1	8.7	8.4	9.0	9.2
	12H	8.7	9.4	9.1	9.6	9.9	8.5	9.2	8.8	9.4	9.7
4H	2H	4.1	4.9	4.4	5.1	5.3	4.0	4.7	4.3	4.9	5.2
	3H	5.5	6.1	5.8	6.4	6.6	5.6	6.2	5.9	6.5	6.8
	4H	6.6	7.2	6.9	7.5	7.8	6.8	7.4	7.1	7.7	8.0
	6H	8.2	8.7	8.6	9.0	9.4	8.3	8.8	8.7	9.2	9.5
	8H	9.4	9.9	9.8	10.2	10.6	9.1	9.6	9.5	9.9	10.3
8H	4H	7.1	7.6	7.5	8.0	8.3	7.3	7.7	7.7	8.1	8.5
	6H	9.0	9.4	9.5	9.8	10.3	8.9	9.3	9.3	9.7	10.1
	8H	10.2	10.6	10.7	11.0	11.4	9.7	10.1	10.2	10.5	10.9
	12H	10.9	11.2	11.4	11.7	12.1	10.5	10.8	10.9	11.2	11.7
	12H	4H	7.2	7.7	7.6	8.0	8.4	7.4	7.9	7.8	8.2
6H		9.3	9.7	9.8	10.1	10.5	9.2	9.6	9.7	10.0	10.5
8H		10.5	10.8	11.0	11.3	11.7	10.1	10.5	10.6	10.9	11.4
Variations with the observer position at spacings:											
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.2					
1.5H	+ 0.1 / - 0.2					+ 0.2 / - 0.3					
2.0H	+ 0.1 / - 0.2					+ 0.2 / - 0.3					

CIE Pub.117, 5671 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 6.0$)
Area: 0.1 m²

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:229.51V I:0.1790A P:39.977W PF:0.9729 Freq:49.99Hz Lamp Flux:5671x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: WW, NICHIA, BA-28°	DIM.: Ø170 x 68	SERIAL No.: 5200
MFR.: K-LITE	SUR.:	Shielding Angle:

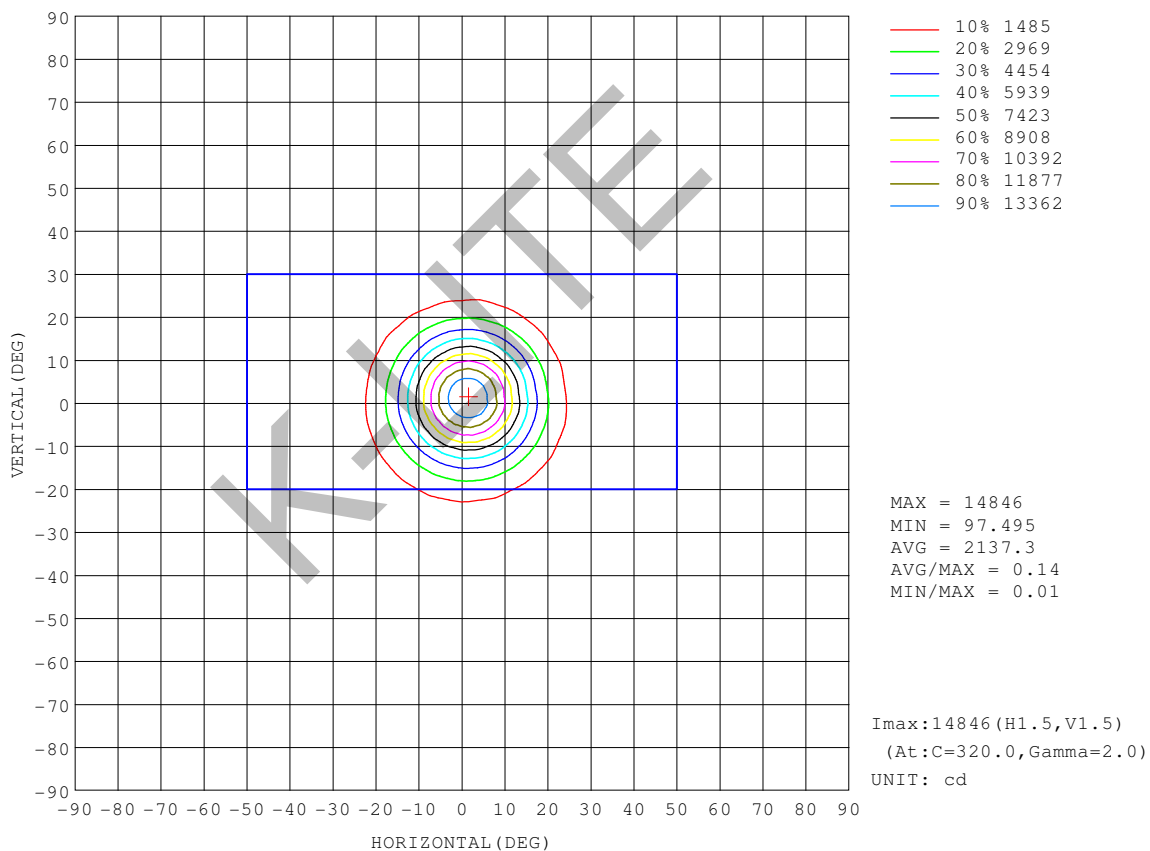
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	57	52	49	56	52	49	56	52	49	47
0.80	61	57	55	61	57	54	60	57	54	52
1.00	65	60	58	64	60	58	63	60	57	54
1.25	67	63	61	67	63	61	65	62	60	57
1.50	69	66	63	68	65	63	67	64	62	59
2.00	71	68	66	70	67	65	68	66	64	61
2.50	72	70	67	71	69	67	69	67	65	61
3.00	74	71	69	72	70	68	70	68	67	62
4.00	75	73	71	74	72	70	71	70	69	64
5.00	76	74	73	75	73	72	72	71	70	65
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.852m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:229.51V I:0.1790A P:39.977W PF:0.9729 Freq:49.99Hz Lamp Flux:5671x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:WW, NICHIA, BA-28°	DIM.: Ø170 x 68	SERIAL No.:5200
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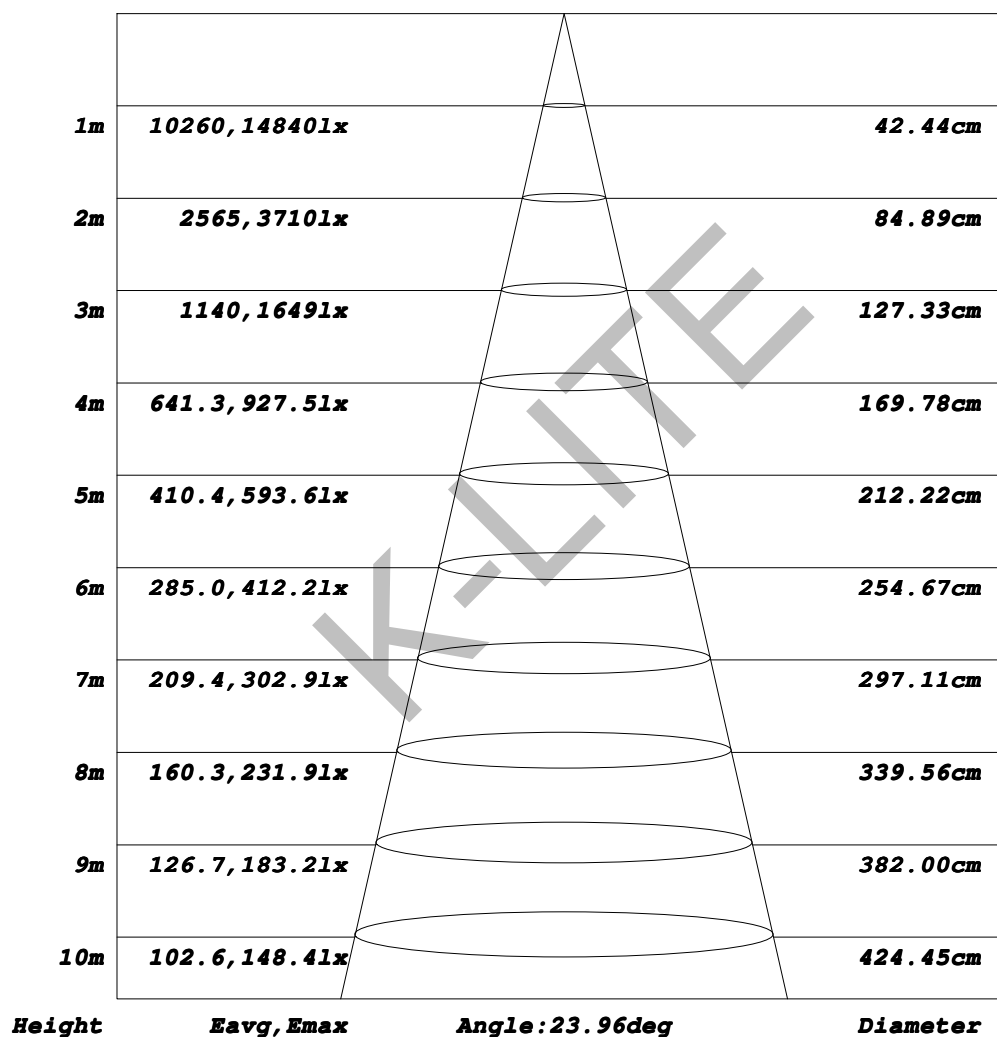
C Range: 0 - 360DEG
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Test Date:24 November 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

AAI Figure

Test:U:229.51V I:0.1790A P:39.977W PF:0.9729 Freq:49.99Hz Lamp Flux:5671x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:WW, NICHIA, BA-28°	DIM.: Ø170 x 68	SERIAL No.:5200
MFR.: K-LITE	SUR.:	Shielding Angle:

Flux out:1456 lm



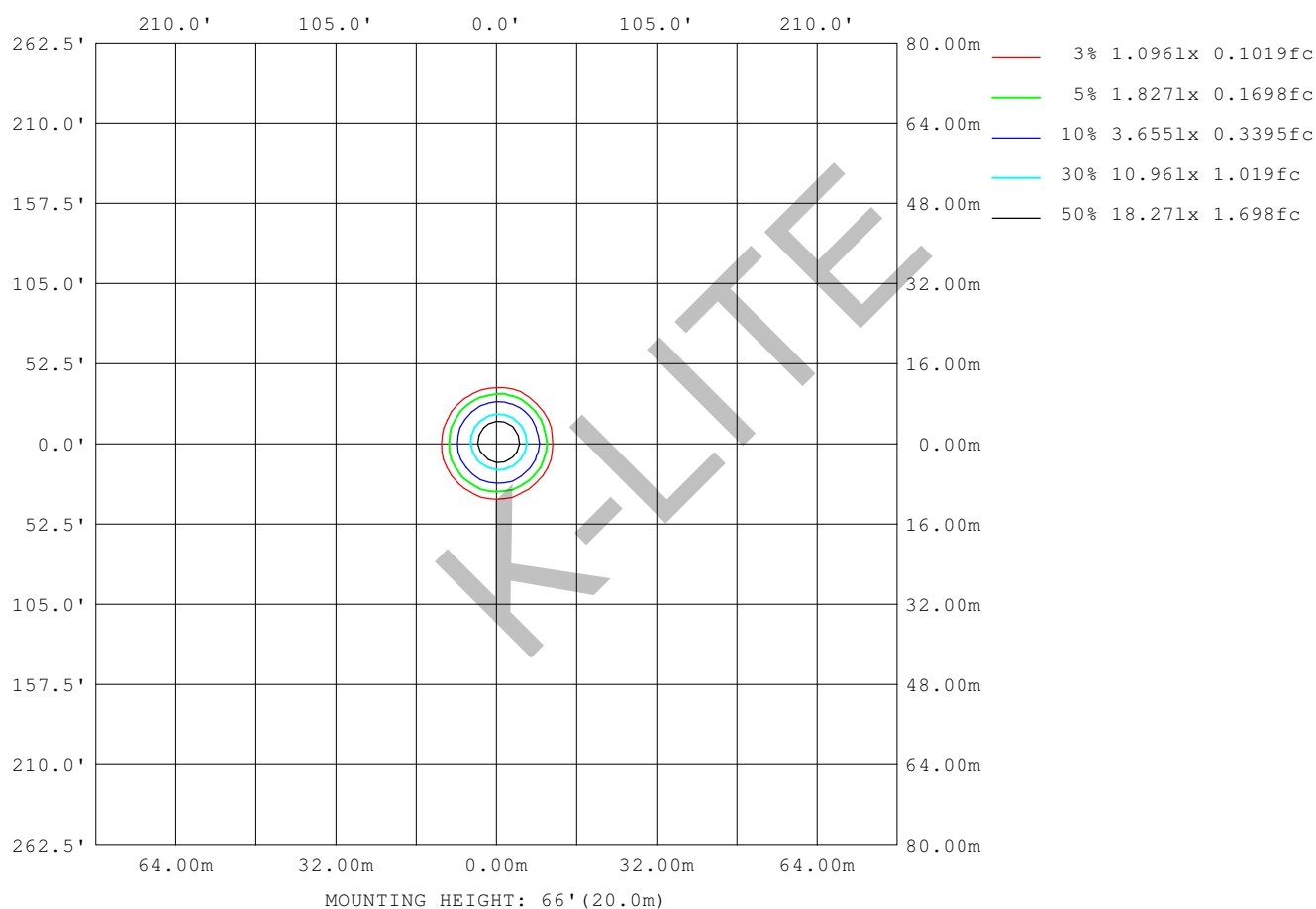
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
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 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 24 November 2022

γ Range: 0 - 90DEG
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 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.852m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:229.51V I:0.1790A P:39.977W PF:0.9729 Freq:49.99Hz Lamp Flux:5671x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:WW, NICHIA, BA-28°	DIM.: Ø170 x 68	SERIAL No.:5200
MFR.: K-LITE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.852m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:229.51V I:0.1790A P:39.977W PF:0.9729 Freq:49.99Hz Lamp Flux:5671x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: WW, NICHIA, BA-28°	DIM.: Ø170 x 68	SERIAL No.: 5200
MFR.: K-LITE	SUR.:	Shielding Angle:

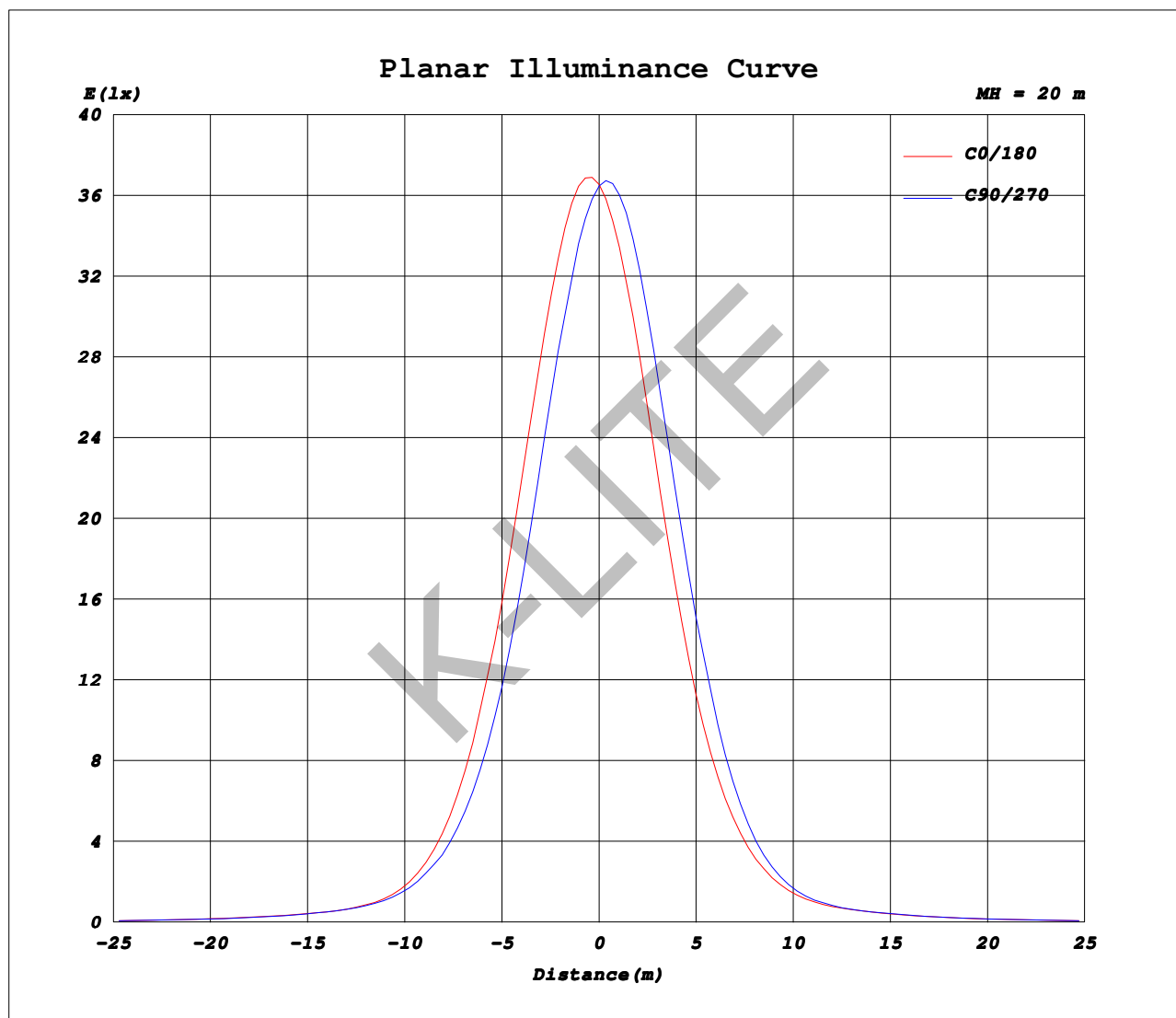
AvgL	cd/m2
L_0~180 (65) av	1575
L_0~180 (75) av	2408
L_0~180 (85) av	3193
L_90~270 (65) av	1565
L_90~270 (75) av	2341
L_90~270 (85) av	3272
L_45 (65) av	1597
L_45 (75) av	2278
L_45 (85) av	3689

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 24 November 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:


```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

```



Light Output Ratio:	80.3%	
Luminaire Power:	41.29 W	
SHR Nominal:	0.50	Calculated using the TM5
SHR Maximum:	0.65	fine grid method.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 14 July 2022

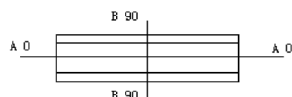
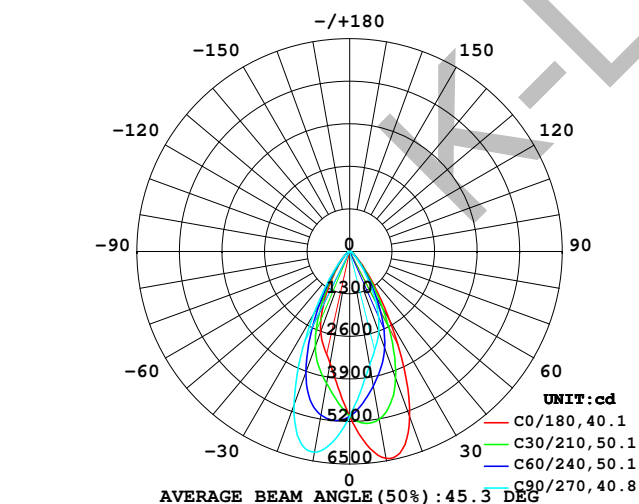
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

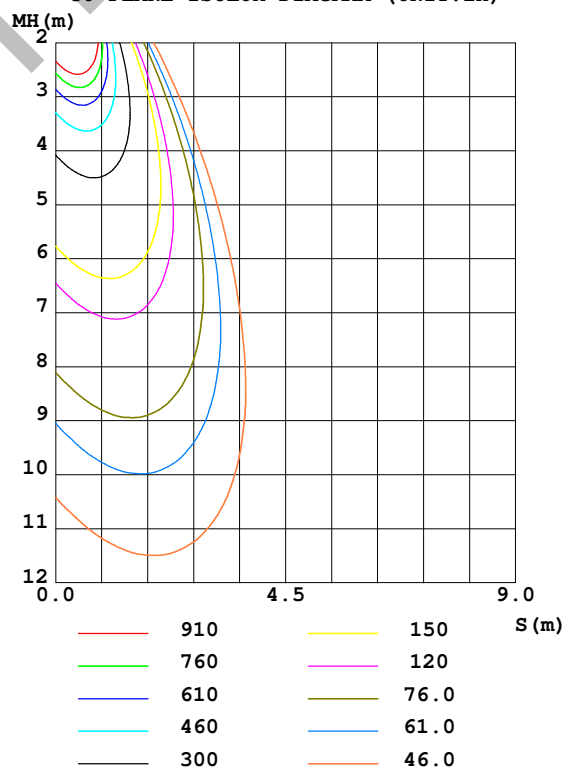
Test:U:230.71V I:0.1798A P:41.294W PF:0.9952 Freq:49.99Hz Lamp Flux:5345x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: CW, NICHIA	DIM.: Ø170 x 68	SERIAL No.: 4709
MFR.: K-LITE	SUR.:	Shielding Angle: 45°

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 103.95 lm/W
MODEL	KL-7555	I _{max} (cd)	7385	S/MH (C0/180)	0.61	
NOMINAL POWER (W)	45	LOR (%)	80.3	S/MH (C90/270)	0.85	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	4292.3	η UP, DN (C0-180)	0.0, 34.6	
NOMINAL FLUX (lm)	5345	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 45.7	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50	
TEST VOLTAGE (V)	230	η down (%)	80.3	CIBSE SHR MAX	0.65	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT: lx)



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 14 July 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.825m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

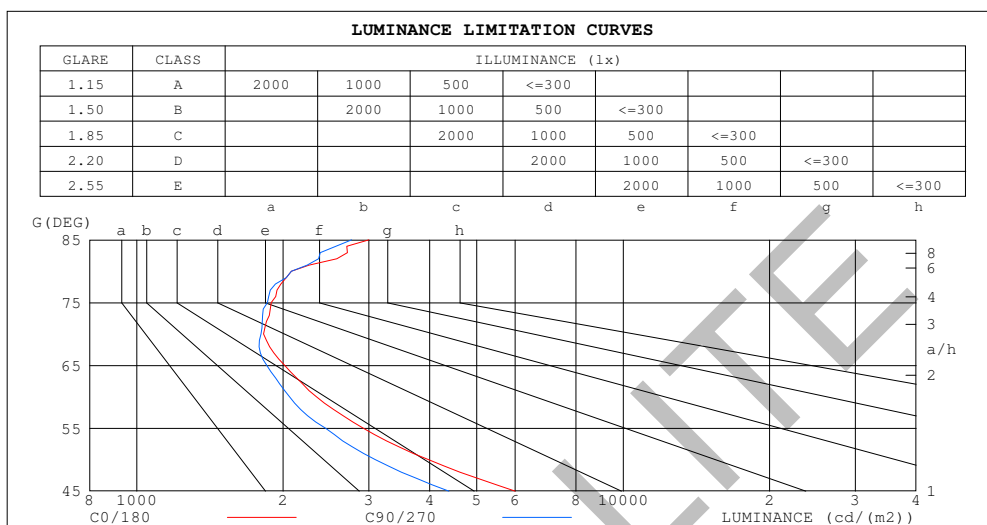
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	6420	4656	3537	3160	3475	4554	6225	7260	0- 10	475.9	475.9	11.1, 8.9
20	5363	3572	2609	2309	2605	3461	4980	6038	10- 20	1258	1733	40.4, 32.4
30	2479	1825	1416	1251	1358	1664	2191	2629	20- 30	1291	3025	70.5, 56.6
40	771.7	626.9	519.3	468.6	495.4	574.2	663.3	771.3	30- 40	694.0	3719	86.6, 69.6
50	257.8	220.2	198.1	187.7	195.2	212.4	229.7	259.9	40- 50	284.5	4003	93.3, 74.9
60	118.1	107.3	102.8	99.92	100.4	104.5	108.5	117.7	50- 60	136.9	4140	96.5, 77.5
70	62.92	61.32	61.44	60.31	58.81	58.49	58.97	61.11	60- 70	79.85	4220	98.3, 79
80	36.43	35.74	36.06	35.43	34.75	35.12	33.54	34.96	70- 80	49.09	4269	99.5, 79.9
90	8.377	7.588	7.206	7.266	7.315	6.874	7.178	7.706	80- 90	23.05	4292	100, 80.3
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY: cd									UNIT: lm		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 14 July 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.825m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.71V I:0.1798A P:41.294W PF:0.9952 Freq:49.99Hz Lamp Flux:5345x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: CW, NICHIA	DIM.: Ø170 x 68	SERIAL No.: 4709
MFR.: K-LITE	SUR.:	Shielding Angle: 45°



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	3002	2767
80	2078	2081
75	1890	1856
70	1823	1800
65	2013	1850
60	2340	2059
55	2922	2442
50	3973	3088
45	5997	4379

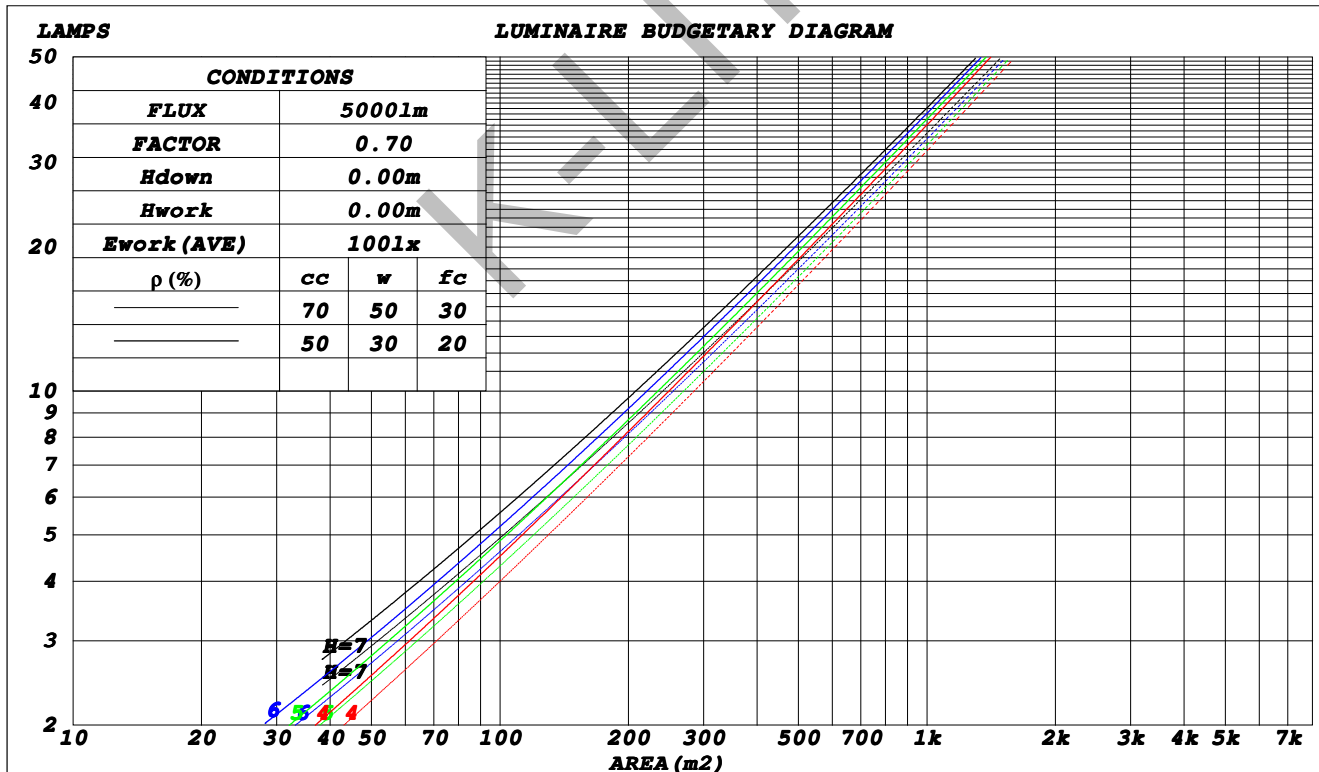
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 14 July 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.71V I:0.1798A P:41.294W PF:0.9952 Freq:49.99Hz Lamp Flux:5345x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: CW, NICHIA	DIM.: Ø170 x 68	SERIAL No.: 4709
MFR.: K-LITE	SUR.:	Shielding Angle: 45°

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	.96	.96	.96	.93	.93	.93	.89	.89	.89	.85	.85	.85	.82	.82	.82	.80
1.0	.88	.86	.84	.87	.85	.83	.83	.82	.80	.80	.79	.78	.77	.77	.76	.74
2.0	.82	.78	.75	.80	.77	.75	.78	.75	.73	.75	.73	.71	.73	.71	.70	.68
3.0	.76	.72	.68	.75	.71	.68	.73	.69	.67	.71	.68	.66	.69	.67	.65	.63
4.0	.71	.66	.63	.70	.66	.62	.68	.64	.61	.67	.63	.61	.65	.62	.60	.59
5.0	.66	.61	.58	.65	.61	.58	.64	.60	.57	.63	.59	.57	.61	.58	.56	.55
6.0	.62	.57	.54	.62	.57	.53	.60	.56	.53	.59	.56	.53	.58	.55	.52	.51
7.0	.59	.54	.50	.58	.53	.50	.57	.53	.50	.56	.52	.49	.55	.52	.49	.48
8.0	.55	.50	.47	.55	.50	.47	.54	.50	.47	.53	.49	.46	.52	.49	.46	.45
9.0	.52	.47	.44	.52	.47	.44	.51	.47	.44	.50	.46	.44	.50	.46	.44	.42
10.0	.49	.45	.42	.49	.45	.42	.48	.44	.41	.48	.44	.41	.47	.44	.41	.40



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 14 July 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.825m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:230.71V I:0.1798A P:41.294W PF:0.9952 Freq:49.99Hz Lamp Flux:5345x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:CW, NICHIA	DIM.: Ø170 x 68	SERIAL No.:4709
MFR.: K-LITE	SUR.:	Shielding Angle:45°

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.155	.088	.028	.150	.086	.027	.140	.080	.026	.131	.075	.024	.122	.071	.023		
2.0	.147	.081	.025	.142	.078	.024	.134	.074	.023	.126	.071	.022	.119	.067	.021		
3.0	.139	.074	.022	.135	.072	.022	.127	.069	.021	.120	.066	.020	.114	.063	.020		
4.0	.131	.068	.020	.127	.067	.020	.121	.064	.019	.115	.062	.019	.110	.060	.018		
5.0	.124	.063	.018	.121	.062	.018	.115	.060	.018	.110	.058	.017	.105	.056	.017		
6.0	.117	.059	.017	.115	.058	.017	.110	.056	.016	.105	.055	.016	.101	.053	.016		
7.0	.112	.055	.016	.109	.054	.016	.105	.053	.015	.101	.052	.015	.097	.050	.015		
8.0	.106	.052	.015	.104	.051	.015	.100	.050	.014	.097	.049	.014	.093	.048	.014		
9.0	.101	.049	.014	.100	.049	.014	.096	.048	.013	.093	.047	.013	.090	.046	.013		
10.0	.097	.047	.013	.095	.046	.013	.092	.045	.013	.089	.044	.013	.087	.044	.012		

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)										
0.0	.153	.153	.153	.131	.131	.131	.089	.089	.089	.051	.051	.051	.016	.016	.016		
1.0	.138	.126	.115	.118	.108	.099	.081	.075	.069	.047	.043	.040	.015	.014	.013		
2.0	.127	.106	.089	.108	.092	.077	.074	.063	.054	.043	.037	.032	.014	.012	.010		
3.0	.117	.091	.071	.100	.079	.061	.069	.055	.043	.040	.032	.025	.013	.010	.008		
4.0	.109	.080	.057	.093	.069	.050	.064	.048	.035	.037	.028	.021	.012	.009	.007		
5.0	.102	.070	.047	.088	.061	.041	.060	.042	.029	.035	.025	.017	.011	.008	.006		
6.0	.096	.063	.039	.082	.054	.034	.057	.038	.024	.033	.022	.014	.011	.007	.005		
7.0	.091	.057	.033	.078	.049	.029	.054	.035	.021	.031	.020	.012	.010	.007	.004		
8.0	.086	.052	.029	.074	.045	.025	.051	.032	.018	.030	.019	.011	.010	.006	.003		
9.0	.082	.048	.025	.070	.041	.022	.049	.029	.015	.028	.017	.009	.009	.006	.003		
10.0	.078	.044	.022	.067	.038	.019	.047	.027	.013	.027	.016	.008	.009	.005	.003		

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 14 July 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.71V I:0.1798A P:41.294W PF:0.9952 Freq:49.99Hz Lamp Flux:5345x1 lm										
NAME: VELA					TYPE:RECESSED CEILING			WEIGHT:		
SPEC.:CW, NICHIA					DIM.: Ø170 x 68			SERIAL No.:4709		
MFR.: K-LITE					SUR.:			Shielding Angle:45°		
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions						Viewed crosswise				
x = 2H y = 2H						Viewed endwise				
3H						7.1	8.0	7.3	8.2	8.4
4H						7.5	8.4	7.8	8.6	8.8
6H						7.8	8.6	8.0	8.9	9.1
8H						8.1	8.9	8.4	9.1	9.4
12H						8.3	9.0	8.6	9.3	9.6
2H						8.4	9.2	8.8	9.5	9.7
3H						8.7	9.5	8.9	9.8	10.0
4H						9.0	9.9	9.2	10.1	10.3
6H						9.1	10.0	9.4	10.2	10.5
8H						9.3	10.2	9.6	10.4	10.6
12H						9.5	10.3	9.8	10.5	10.8
2H						9.6	10.4	10.0	10.7	10.9
3H						9.7	10.5	10.1	10.8	11.0
4H						9.8	10.6	10.2	10.9	11.1
6H						9.9	10.7	10.3	11.0	11.2
8H						10.0	10.8	10.4	11.1	11.3
12H						10.1	10.9	10.5	11.2	11.4
2H						10.2	11.0	10.6	11.3	11.5
3H						10.3	11.1	10.7	11.4	11.6
4H						10.4	11.2	10.8	11.5	11.7
6H						10.5	11.3	10.9	11.6	11.8
8H						10.6	11.4	11.0	11.7	11.9
12H						10.7	11.5	11.1	11.8	12.0
2H						10.8	11.6	11.2	11.9	12.1
3H						10.9	11.7	11.3	12.0	12.2
4H						11.0	11.8	11.4	12.1	12.3
6H						11.1	11.9	11.5	12.2	12.4
8H						11.2	12.0	11.6	12.3	12.5
12H						11.3	12.1	11.7	12.4	12.6
2H						11.4	12.2	11.8	12.5	12.7
3H						11.5	12.3	11.9	12.6	12.8
4H						11.6	12.4	12.0	12.7	12.9
6H						11.7	12.5	12.1	12.8	13.0
8H						11.8	12.6	12.2	12.9	13.1
12H						11.9	12.7	12.3	13.0	13.2
Variations with the observer position at spacings:										
S = 1.0H						+ 1.5 / - 1.4			+ 0.8 / - 1.0	
1.5H						+ 2.8 / - 1.3			+ 1.5 / - 0.8	
2.0H						+ 1.9 / - 0.7			+ 1.2 / - 0.6	

CIE Pub.117, 5345 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 5.8$)
Area: 0.1 m²

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:14 July 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.825m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.71V I:0.1798A P:41.294W PF:0.9952 Freq:49.99Hz Lamp Flux:5345x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:CW, NICHIA	DIM.: Ø170 x 68	SERIAL No.:4709
MFR.: K-LITE	SUR.:	Shielding Angle:45°

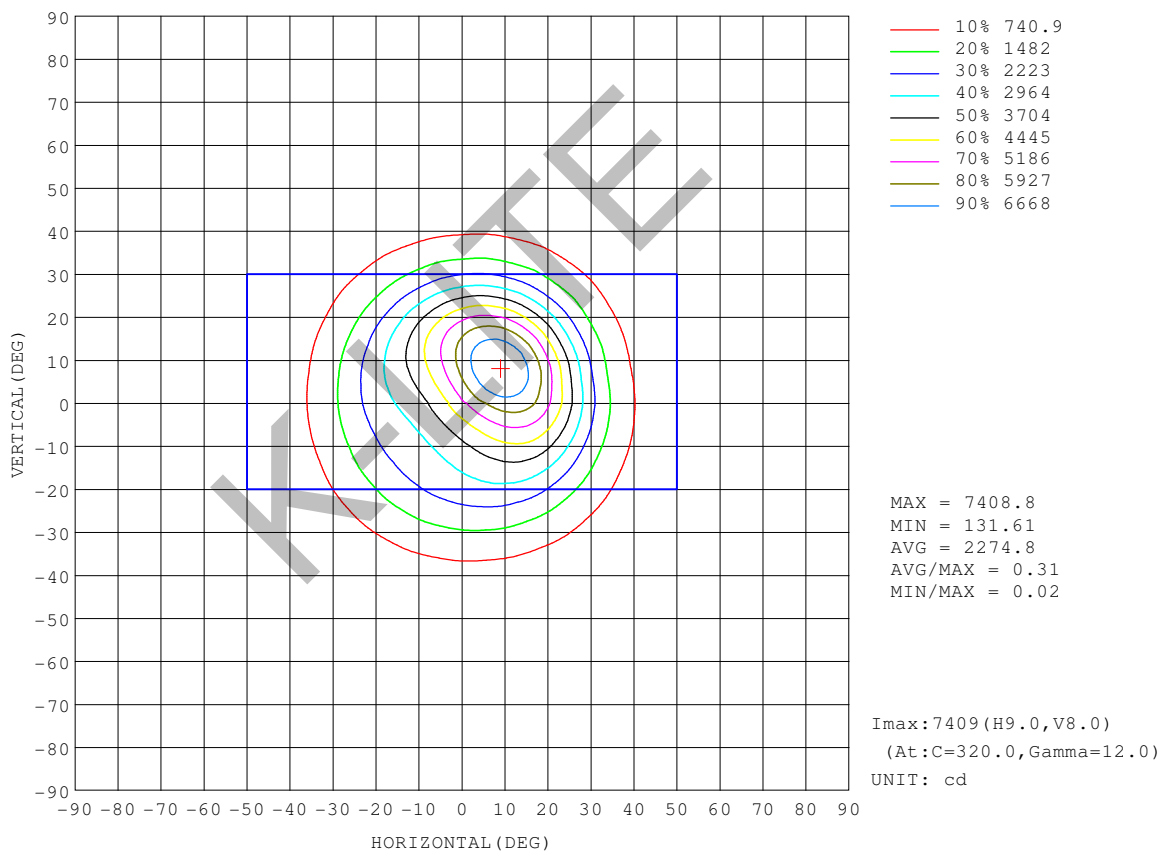
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	67	61	58	66	61	58	66	61	58	54
0.80	73	68	64	73	68	64	72	67	64	61
1.00	77	72	69	76	72	69	75	72	68	65
1.25	81	76	73	80	76	72	78	75	72	68
1.50	83	79	76	82	78	75	80	77	74	71
2.00	86	82	79	85	81	78	82	79	77	73
2.50	87	84	81	86	83	80	83	81	79	74
3.00	89	86	83	87	84	82	84	82	80	75
4.00	91	88	86	89	87	85	86	84	83	77
5.00	92	90	88	90	88	86	87	85	84	78
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 14 July 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.825m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:230.71V I:0.1798A P:41.294W PF:0.9952 Freq:49.99Hz Lamp Flux:5345x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:CW, NICHIA	DIM.: Ø170 x 68	SERIAL No.:4709
MFR.: K-LITE	SUR.:	Shielding Angle:45°



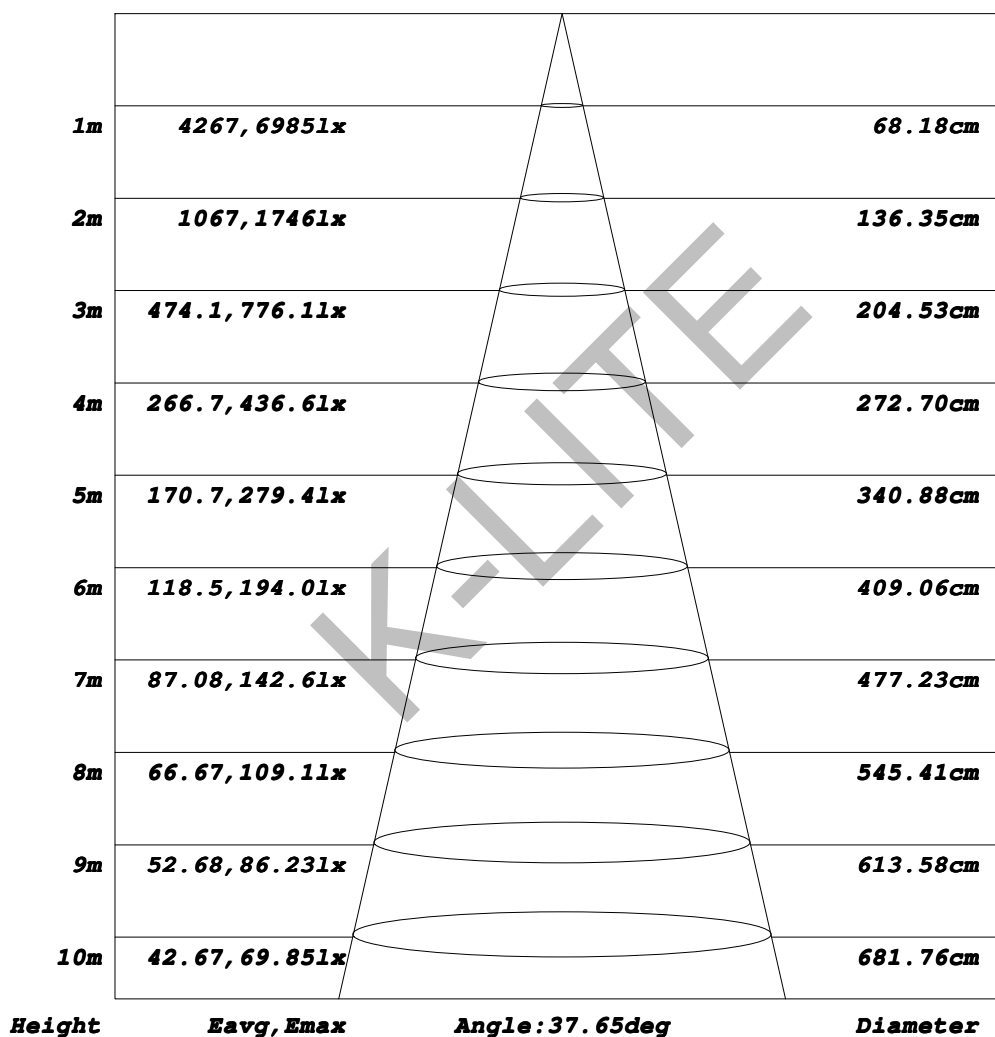
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:14 July 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.825m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.71V I:0.1798A P:41.294W PF:0.9952 Freq:49.99Hz Lamp Flux:5345x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:CW, NICHIA	DIM.: Ø170 x 68	SERIAL No.:4709
MFR.: K-LITE	SUR.:	Shielding Angle:45°

Flux out:1589 lm



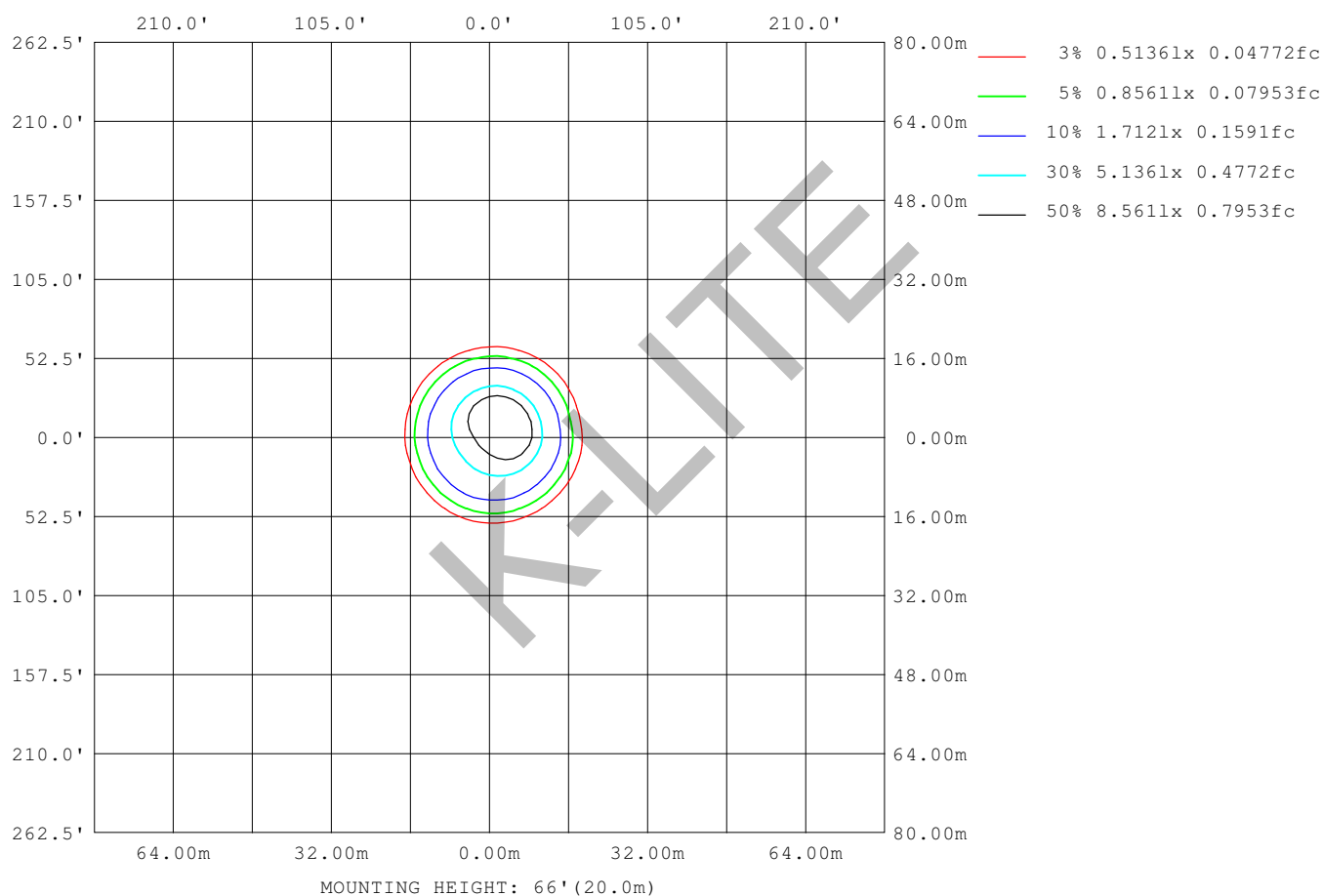
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 14 July 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.825m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:230.71V I:0.1798A P:41.294W PF:0.9952 Freq:49.99Hz Lamp Flux:5345x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: CW, NICHIA	DIM.: Ø170 x 68	SERIAL No.: 4709
MFR.: K-LITE	SUR.:	Shielding Angle: 45°



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 14 July 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:230.71V I:0.1798A P:41.294W PF:0.9952 Freq:49.99Hz Lamp Flux:5345x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: CW, NICHIA	DIM.: Ø170 x 68	SERIAL No.: 4709
MFR.: K-LITE	SUR.:	Shielding Angle: 45°

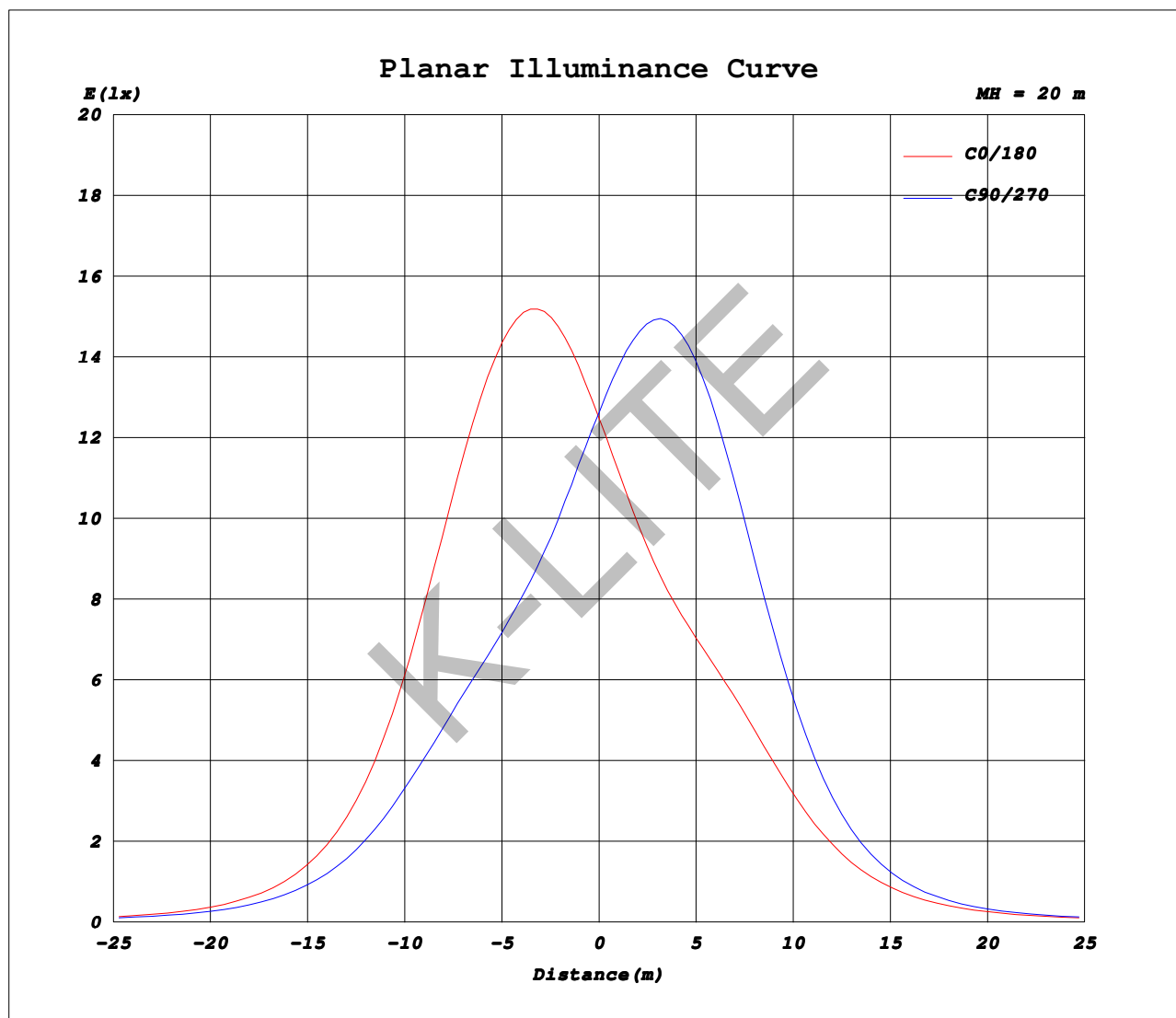
AvgL	cd/m2
L_0~180 (65) av	1913
L_0~180 (75) av	1818
L_0~180 (85) av	2699
L_90~270 (65) av	1853
L_90~270 (75) av	1810
L_90~270 (85) av	2682
L_45 (65) av	1874
L_45 (75) av	1829
L_45 (85) av	2562

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 14 July 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 14 July 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.825m [K=1.0000]
Remarks:

```



```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.825m [K=1.0000]
Remarks:

```



Light Output Ratio:	85.8%	
Luminaire Power:	40.5 W	
SHR Nominal:	0.75	Calculated using the TM5
SHR Maximum:	0.75	fine grid method.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 14 July 2022

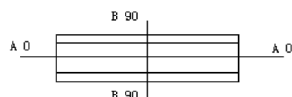
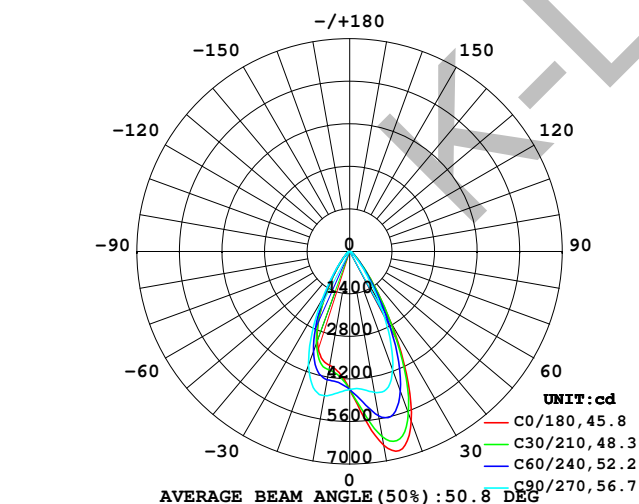
γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

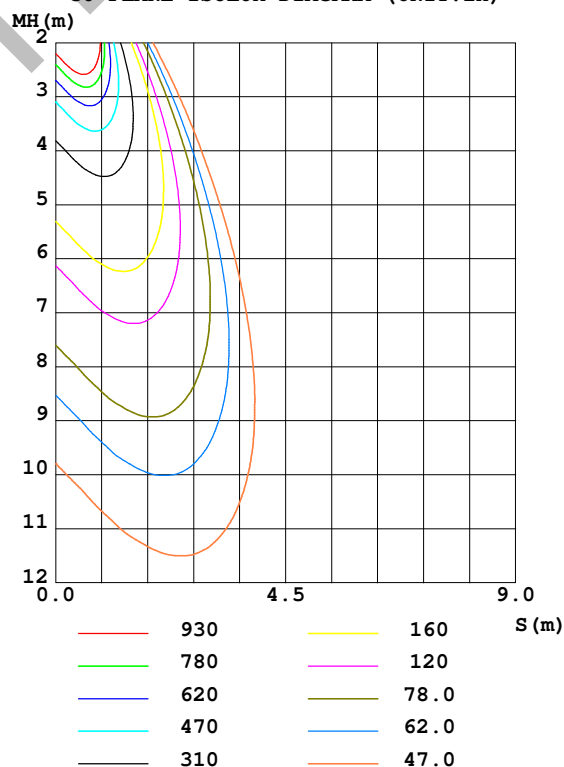
Test:U:230.70V I:0.1764A P:40.497W PF:0.9953 Freq:50.00Hz Lamp Flux:5220x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: NW, NICHIA	DIM.: Ø170 x 68	SERIAL No.: 4710
MFR.: K-LITE	SUR.:	Shielding Angle: 45°

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 110.53 lm/W
MODEL	KL-7555	I _{max} (cd)	6754	S/MH (C0/180)	0.78	
NOMINAL POWER (W)	45	LOR (%)	85.8	S/MH (C90/270)	0.83	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	4476.3	η UP, DN (C0-180)	0.0, 44.3	
NOMINAL FLUX (lm)	5220	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 41.4	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.75	
TEST VOLTAGE (V)	230	η down (%)	85.8	CIBSE SHR MAX	0.75	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT: lx)



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 14 July 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.825m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

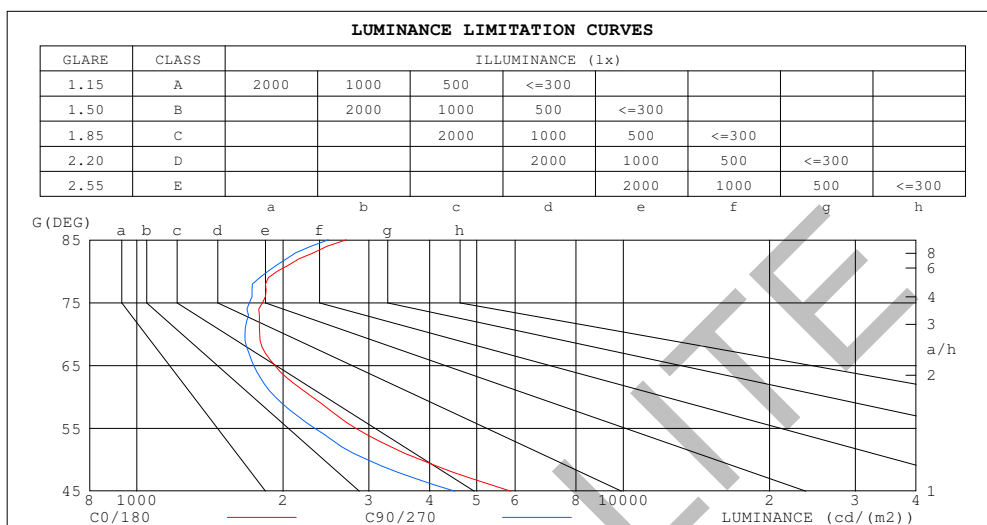
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	6468	5874	4706	3955	3809	4099	4820	5800	0- 10	455.4	455.4	10.2, 8.72
20	5929	5296	4152	3326	3127	3329	3970	5029	10- 20	1346	1801	40.2, 34.5
30	2753	2540	1995	1604	1505	1554	1824	2261	20- 30	1429	3231	72.2, 61.9
40	783.2	759.4	593.4	478.1	466.0	479.3	534.4	636.2	30- 40	717.7	3948	88.2, 75.6
50	247.3	242.2	190.8	162.9	166.6	170.1	179.9	205.2	40- 50	262.2	4211	94.1, 80.7
60	115.3	109.4	96.06	90.58	92.36	92.17	93.23	102.3	50- 60	123.5	4334	96.8, 83
70	61.64	60.11	57.04	56.39	57.45	56.87	56.00	57.67	60- 70	74.77	4409	98.5, 84.5
80	34.02	33.63	32.30	32.07	32.81	32.10	31.67	31.69	70- 80	46.50	4455	99.5, 85.4
90	7.193	7.106	6.690	6.632	6.865	6.806	6.732	6.582	80- 90	20.95	4476	100, 85.8
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY: cd									UNIT: lm		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 14 July 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.825m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.70V I:0.1764A P:40.497W PF:0.9953 Freq:50.00Hz Lamp Flux:5220x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: NW, NICHIA	DIM.: Ø170 x 68	SERIAL No.: 4710
MFR.: K-LITE	SUR.:	Shielding Angle: 45°



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	2696	2476
80	1945	1863
75	1815	1705
70	1790	1670
65	1921	1738
60	2291	1924
55	2817	2320
50	3821	2973
45	5871	4502

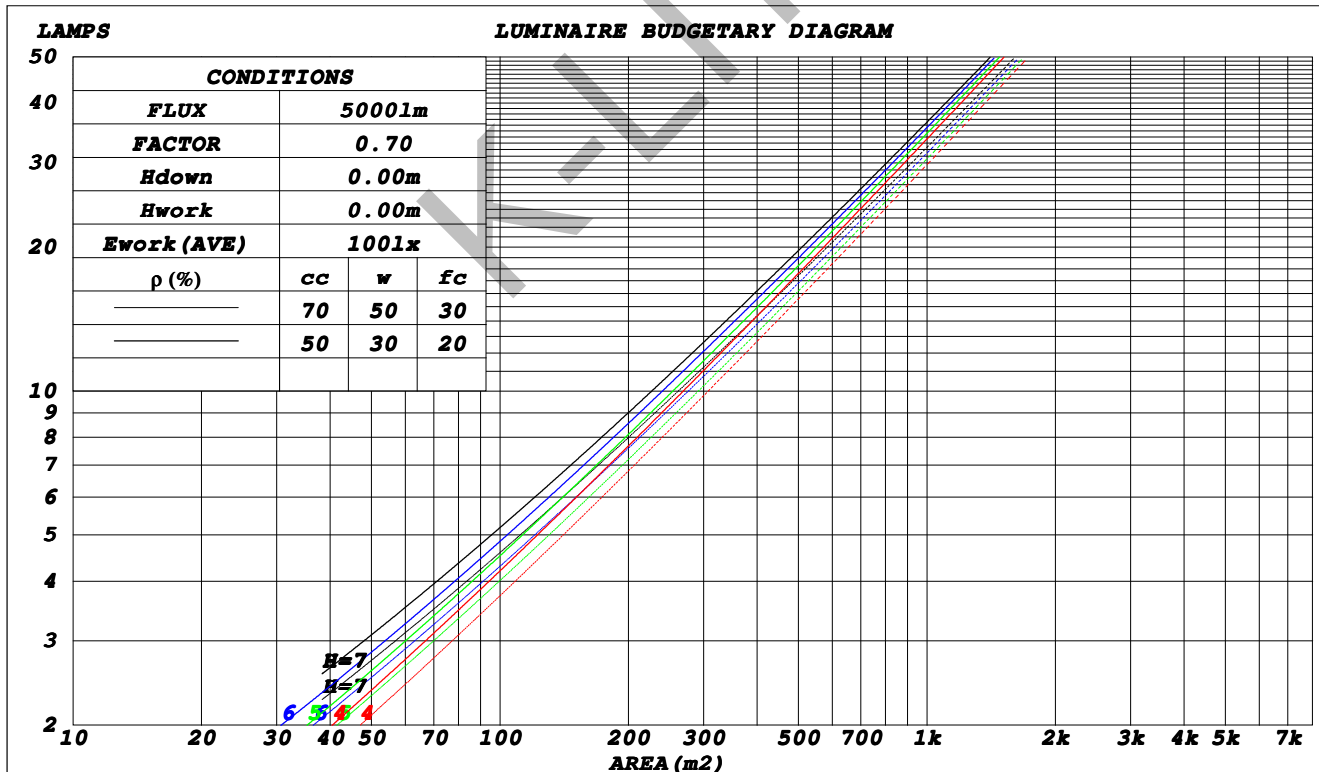
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 14 July 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.70V I:0.1764A P:40.497W PF:0.9953 Freq:50.00Hz Lamp Flux:5220x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: NW, NICHIA	DIM.: Ø170 x 68	SERIAL No.: 4710
MFR.: K-LITE	SUR.:	Shielding Angle: 45°

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.02	1.02	1.02	.00	.00	.00	.95	.95	.95	.91	.91	.91	.88	.88	.88	.86
1.0	.94	.92	.90	.93	.90	.89	.89	.87	.86	.86	.85	.83	.83	.82	.81	.79
2.0	.87	.84	.81	.86	.83	.80	.83	.80	.78	.81	.78	.76	.78	.76	.75	.73
3.0	.81	.77	.73	.80	.76	.73	.78	.74	.72	.76	.73	.70	.74	.71	.69	.68
4.0	.76	.71	.67	.75	.70	.67	.73	.69	.66	.71	.68	.65	.70	.67	.65	.63
5.0	.71	.66	.62	.70	.65	.62	.69	.64	.61	.67	.64	.61	.66	.63	.60	.59
6.0	.67	.61	.58	.66	.61	.58	.65	.60	.57	.63	.60	.57	.62	.59	.56	.55
7.0	.63	.58	.54	.62	.57	.54	.61	.57	.53	.60	.56	.53	.59	.56	.53	.52
8.0	.59	.54	.50	.59	.54	.50	.58	.53	.50	.57	.53	.50	.56	.52	.50	.48
9.0	.56	.51	.47	.56	.51	.47	.55	.50	.47	.54	.50	.47	.53	.50	.47	.46
10.0	.53	.48	.45	.53	.48	.45	.52	.48	.44	.51	.47	.44	.51	.47	.44	.43



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 14 July 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:230.70V I:0.1764A P:40.497W PF:0.9953 Freq:50.00Hz Lamp Flux:5220x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: NW, NICHIA	DIM.: Ø170 x 68	SERIAL No.: 4710
MFR.: K-LITE	SUR.:	Shielding Angle: 45°

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.164	.093	.030	.158	.090	.029	.147	.084	.027	.137	.079	.025	.128	.074	.024		
2.0	.155	.085	.026	.150	.083	.025	.141	.078	.024	.132	.074	.023	.125	.071	.022		
3.0	.146	.078	.023	.142	.076	.023	.134	.073	.022	.127	.070	.021	.120	.067	.021		
4.0	.138	.072	.021	.135	.070	.021	.128	.068	.020	.122	.065	.020	.116	.063	.019		
5.0	.131	.067	.019	.128	.066	.019	.122	.063	.019	.116	.061	.018	.111	.059	.018		
6.0	.124	.062	.018	.122	.061	.018	.116	.060	.017	.112	.058	.017	.107	.056	.017		
7.0	.118	.058	.017	.116	.058	.016	.111	.056	.016	.107	.055	.016	.103	.053	.016		
8.0	.113	.055	.015	.111	.054	.015	.107	.053	.015	.103	.052	.015	.099	.051	.015		
9.0	.108	.052	.015	.106	.052	.014	.102	.051	.014	.099	.049	.014	.095	.048	.014		
10.0	.103	.049	.014	.101	.049	.014	.098	.048	.014	.095	.047	.013	.092	.046	.013		

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)										
0.0	.163	.163	.163	.140	.140	.140	.095	.095	.095	.055	.055	.055	.018	.018	.018		
1.0	.148	.135	.123	.126	.116	.106	.086	.080	.073	.050	.046	.043	.016	.015	.014		
2.0	.135	.114	.096	.116	.098	.083	.079	.068	.058	.046	.039	.034	.015	.013	.011		
3.0	.125	.097	.076	.107	.084	.066	.073	.058	.046	.042	.034	.027	.014	.011	.009		
4.0	.116	.085	.061	.099	.073	.053	.068	.051	.037	.040	.030	.022	.013	.010	.007		
5.0	.108	.075	.050	.093	.065	.044	.064	.045	.031	.037	.027	.018	.012	.009	.006		
6.0	.102	.067	.042	.088	.058	.037	.061	.041	.026	.035	.024	.015	.011	.008	.005		
7.0	.096	.061	.036	.083	.053	.031	.057	.037	.022	.033	.022	.013	.011	.007	.004		
8.0	.091	.055	.031	.079	.048	.027	.054	.034	.019	.032	.020	.011	.010	.007	.004		
9.0	.087	.051	.026	.075	.044	.023	.052	.031	.016	.030	.018	.010	.010	.006	.003		
10.0	.083	.047	.023	.072	.041	.020	.050	.029	.014	.029	.017	.009	.009	.006	.003		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 14 July 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.825m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.70V I:0.1764A P:40.497W PF:0.9953 Freq:50.00Hz Lamp Flux:5220x1 lm										
NAME: VELA					TYPE:RECESSED CEILING			WEIGHT:		
SPEC.:NW, NICHIA					DIM.: Ø170 x 68			SERIAL No.:4710		
MFR.: K-LITE					SUR.:			Shielding Angle:45°		
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions						Viewed crosswise				
x = 2H y = 2H						Viewed endwise				
3H						8.1	9.1	8.4	9.3	9.4
4H						8.4	9.3	8.6	9.5	9.7
6H						8.5	9.4	8.8	9.6	9.8
8H						8.7	9.5	9.0	9.7	10.0
12H						8.8	9.6	9.1	9.8	10.1
2H						8.9	9.6	9.2	9.9	10.2
3H						8.1	9.0	8.4	9.2	9.4
4H						8.5	9.2	8.8	9.5	9.8
6H						8.8	9.4	9.1	9.7	10.0
8H						9.1	9.7	9.4	10.0	10.3
12H						9.2	9.8	9.6	10.1	10.5
4H						9.4	9.9	9.8	10.3	10.7
6H						8.8	9.4	9.2	9.7	10.1
8H						9.3	9.7	9.7	10.1	10.5
12H						9.5	9.9	10.0	10.4	10.8
2H						9.8	10.2	10.3	10.6	11.1
3H						8.8	9.3	9.2	9.7	10.1
4H						9.3	9.7	9.8	10.1	10.6
6H						9.6	10.0	10.1	10.4	10.9
8H						9.8	10.2	10.3	10.6	11.1
12H						9.8	10.3	10.2	10.7	11.1
2H						9.3	9.7	9.8	10.1	10.6
3H						9.6	10.0	10.1	10.4	10.9
4H						9.8	10.2	10.3	10.6	11.1
6H						9.8	10.3	10.2	10.7	11.1
8H						9.3	9.7	9.8	10.1	10.6
12H						9.6	10.0	10.1	10.4	10.9
Variations with the observer position at spacings:										
S = 1.0H		+ 1.5 / - 1.8				+ 1.2 / - 1.6				
1.5H		+ 2.8 / - 1.5				+ 2.1 / - 1.4				
2.0H		+ 1.9 / - 0.9				+ 1.5 / - 0.8				

CIE Pub.117, 5220 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 5.7$)
Area: 0.1 m²

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:14 July 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.825m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.70V I:0.1764A P:40.497W PF:0.9953 Freq:50.00Hz Lamp Flux:5220x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:NW, NICHIA	DIM.: Ø170 x 68	SERIAL No.:4710
MFR.: K-LITE	SUR.:	Shielding Angle:45°

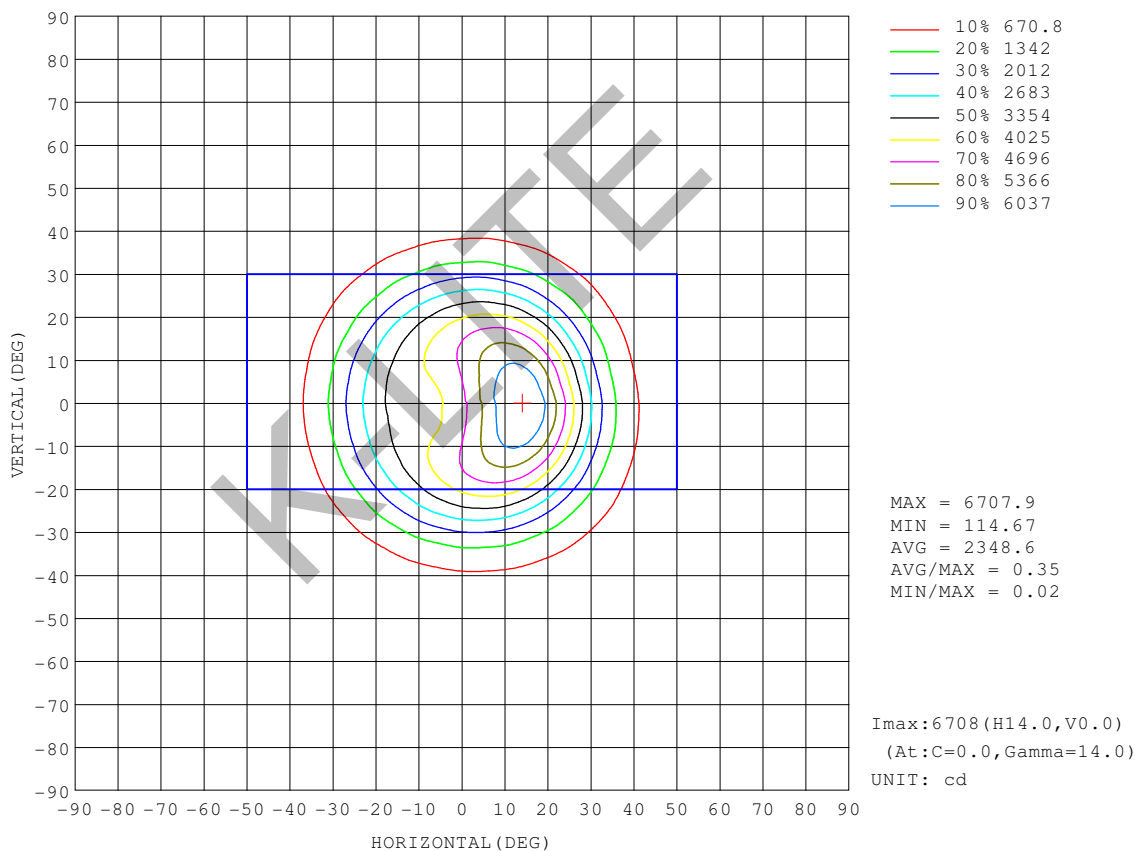
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	72	66	63	72	66	63	71	66	63	59
0.80	79	73	70	78	73	70	77	72	69	66
1.00	83	78	74	82	77	74	81	77	74	70
1.25	87	82	78	86	81	78	84	80	77	74
1.50	89	85	82	88	84	81	86	83	80	76
2.00	92	88	85	91	87	84	88	85	83	78
2.50	93	90	87	92	89	86	89	87	85	79
3.00	95	92	89	93	90	88	90	88	86	81
4.00	97	94	92	95	93	91	92	90	89	82
5.00	98	96	94	96	94	93	93	91	90	83
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 14 July 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.825m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:230.70V I:0.1764A P:40.497W PF:0.9953 Freq:50.00Hz Lamp Flux:5220x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:NW, NICHIA	DIM.: Ø170 x 68	SERIAL No.:4710
MFR.: K-LITE	SUR.:	Shielding Angle:45°



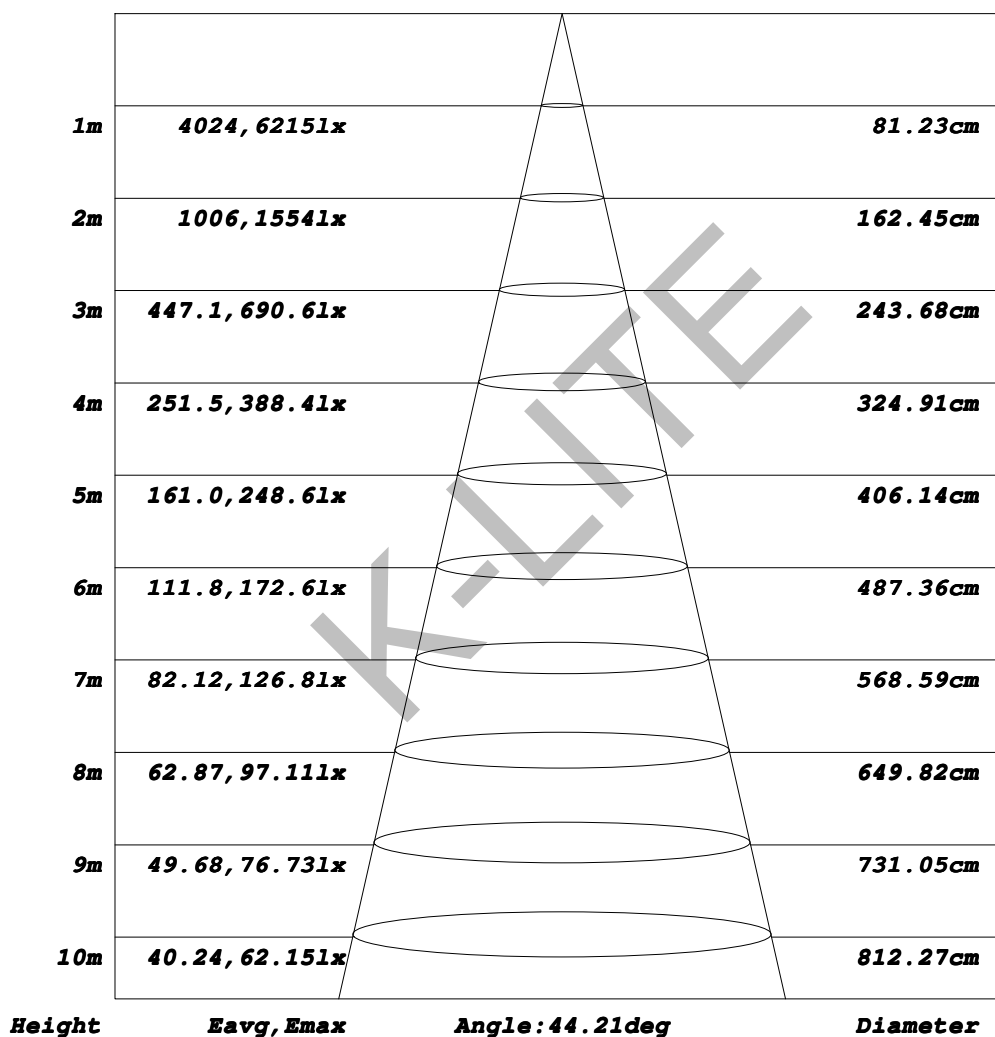
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:14 July 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.825m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.70V I:0.1764A P:40.497W PF:0.9953 Freq:50.00Hz Lamp Flux:5220x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:NW, NICHIA	DIM.: Ø170 x 68	SERIAL No.:4710
MFR.: K-LITE	SUR.:	Shielding Angle:45°

Flux out:2278 lm



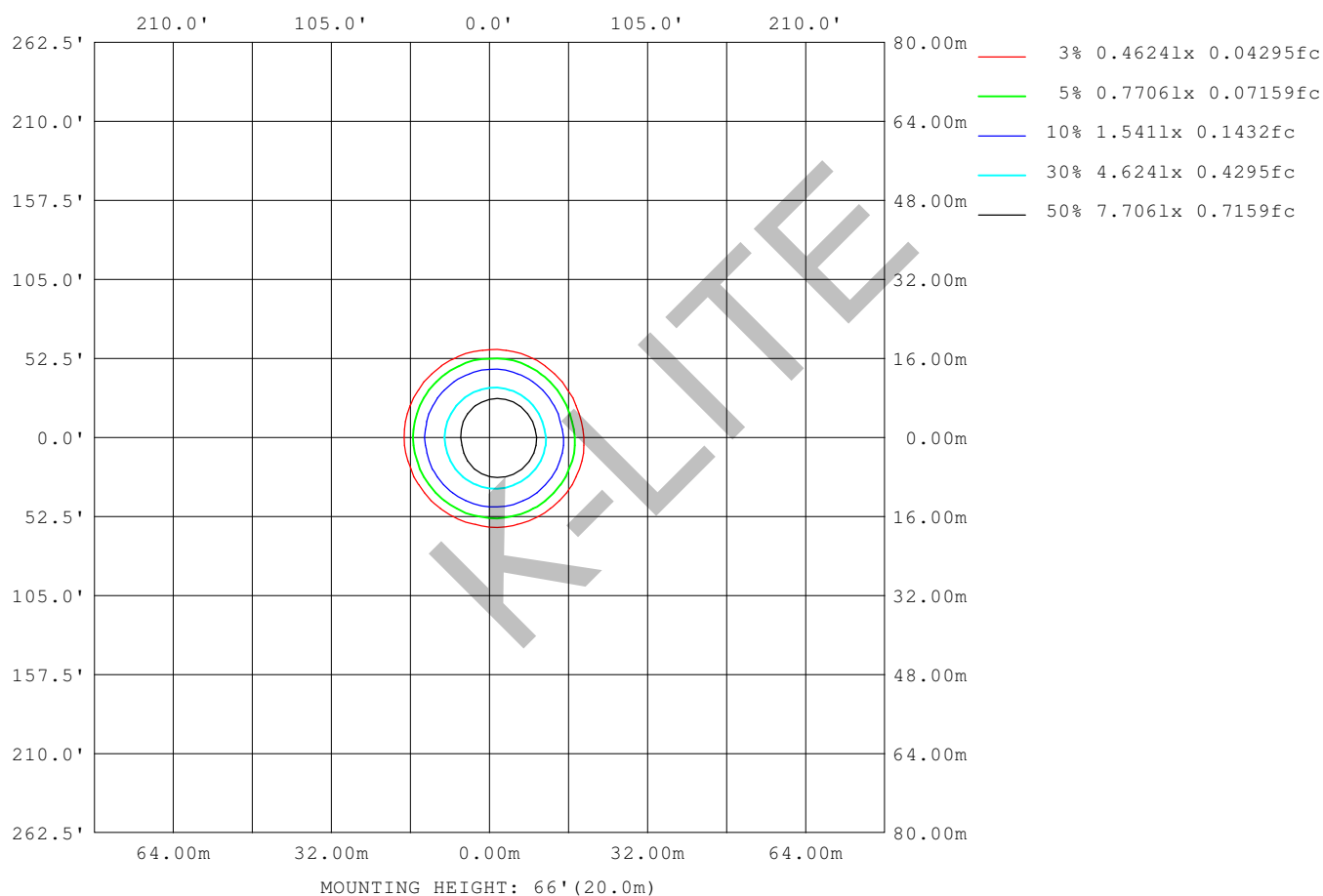
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 14 July 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.825m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:230.70V I:0.1764A P:40.497W PF:0.9953 Freq:50.00Hz Lamp Flux:5220x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: NW, NICHIA	DIM.: Ø170 x 68	SERIAL No.: 4710
MFR.: K-LITE	SUR.:	Shielding Angle: 45°



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 14 July 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:230.70V I:0.1764A P:40.497W PF:0.9953 Freq:50.00Hz Lamp Flux:5220x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: NW, NICHIA	DIM.: Ø170 x 68	SERIAL No.: 4710
MFR.: K-LITE	SUR.:	Shielding Angle: 45°

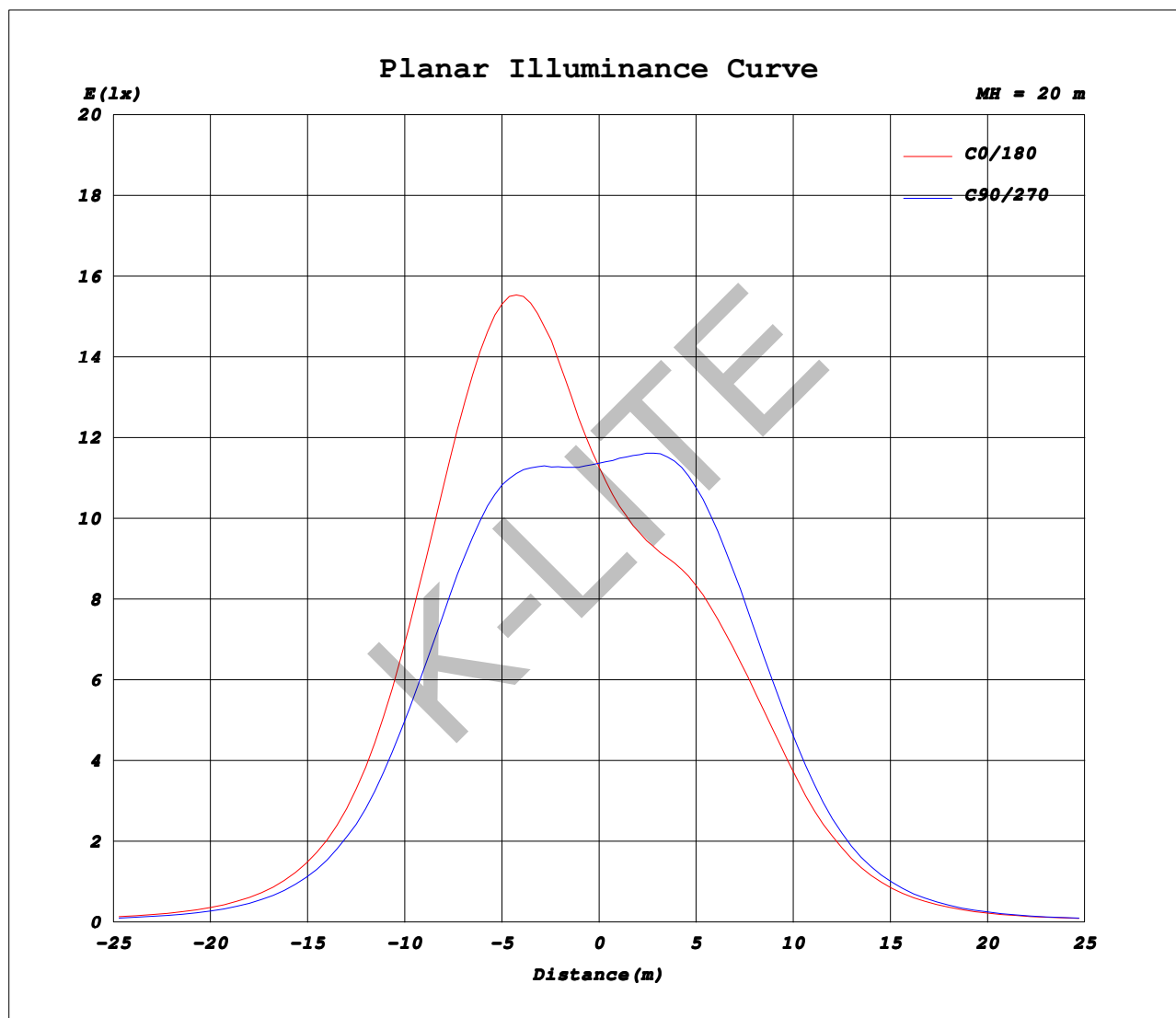
AvgL	cd/m2
L_0~180 (65) av	1821
L_0~180 (75) av	1758
L_0~180 (85) av	2477
L_90~270 (65) av	1716
L_90~270 (75) av	1685
L_90~270 (85) av	2361
L_45 (65) av	1758
L_45 (75) av	1733
L_45 (85) av	2335

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 14 July 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 14 July 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.825m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.825m [K=1.0000]
Remarks:

```




Light Output Ratio:	71.4%	
Luminaire Power:	40.73 W	
SHR Nominal:	0.50	Calculated using the TM5
SHR Maximum:	0.65	fine grid method.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 20 June 2022

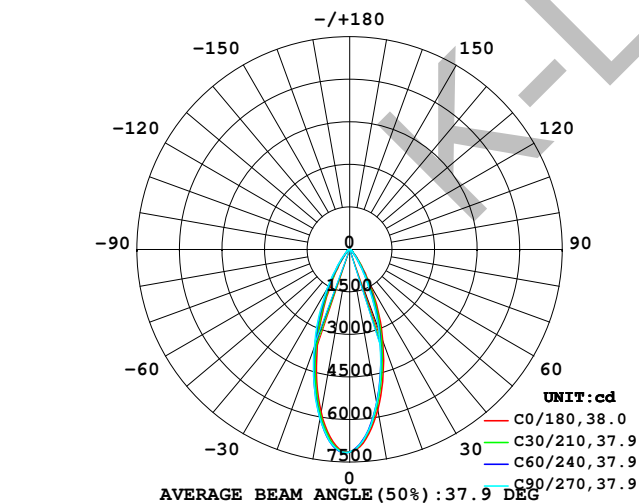
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

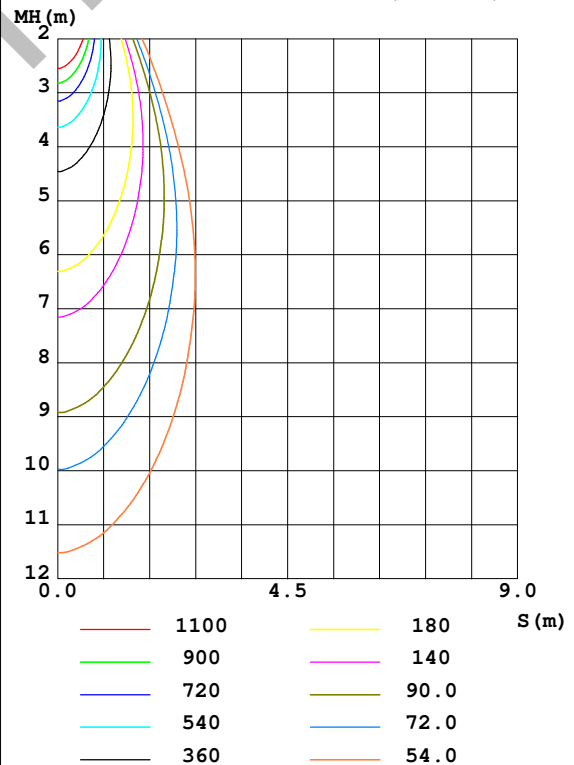
Test:U:230.71V I:0.1773A P:40.732W PF:0.9956 Freq:49.99Hz Lamp Flux:5250x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: WW, NICHIA	DIM.: Ø170 x 68	SERIAL No.: 4620
MFR.: K-LITE	SUR.:	Shielding Angle: 45°

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 92.01 lm/W
MODEL	KL-7555	I _{max} (cd)	7183	S/MH (C0/180)	0.60	
NOMINAL POWER (W)	45	LOR (%)	71.4	S/MH (C90/270)	0.65	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	3747.5	η UP, DN (C0-180)	0.0, 33.3	
NOMINAL FLUX (lm)	5250	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 38.1	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50	
TEST VOLTAGE (V)	230	η down (%)	71.4	CIBSE SHR MAX	0.65	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT: lx)



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 20 June 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.825m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

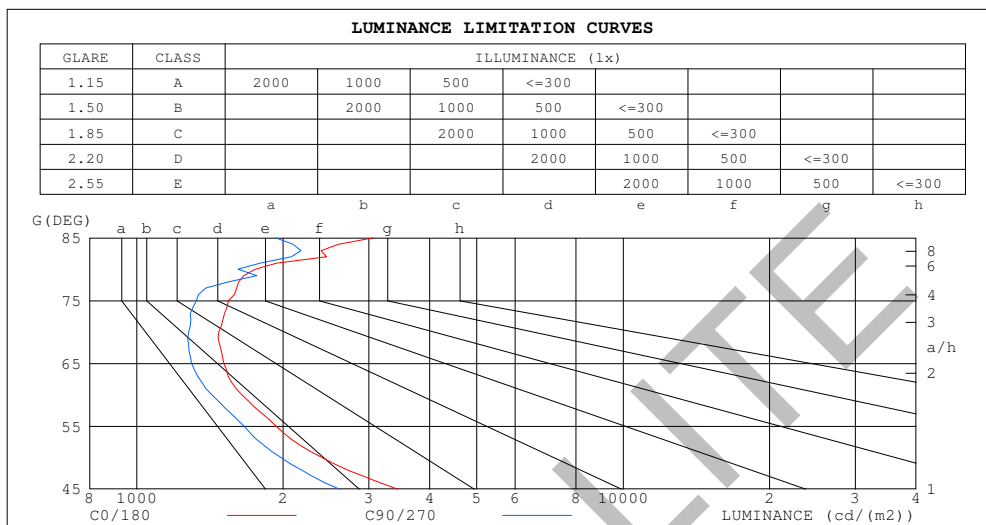
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	5729	5537	5509	5644	5824	5986	6049	5915	0- 10	612.7	612.7	16.3,11.7
20	3419	3152	3010	3050	3246	3505	3653	3580	10- 20	1254	1866	49.8,35.5
30	1443	1196	1065	1055	1176	1403	1586	1598	20- 30	1010	2877	76.8,54.8
40	435.3	344.1	306.3	304.8	344.1	407.7	492.4	510.7	30- 40	469.9	3347	89.3,63.7
50	154.0	134.1	127.1	127.3	136.3	151.9	170.4	178.9	40- 50	183.7	3530	94.2,67.2
60	82.04	76.00	71.31	70.48	74.31	82.40	89.45	89.58	50- 60	96.56	3627	96.8,69.1
70	50.25	47.10	43.75	43.43	45.25	49.02	51.83	53.07	60- 70	60.92	3688	98.4,70.2
80	30.35	33.65	28.04	27.56	29.92	31.02	30.83	32.41	70- 80	39.63	3727	99.5,71
90	7.827	5.855	6.379	6.565	5.976	6.000	8.547	9.221	80- 90	20.09	3748	100,71.4
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:K-LITE
 Test Date:20 June 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:1.825m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.71V I:0.1773A P:40.732W PF:0.9956 Freq:49.99Hz Lamp Flux:5250x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: WW, NICHIA	DIM.: Ø170 x 68	SERIAL No.: 4620
MFR.: K-LITE	SUR.:	Shielding Angle: 45°



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	3061	1931
80	1753	1615
75	1544	1326
70	1473	1279
65	1511	1297
60	1645	1427
55	1934	1661
50	2402	1977
45	3441	2610

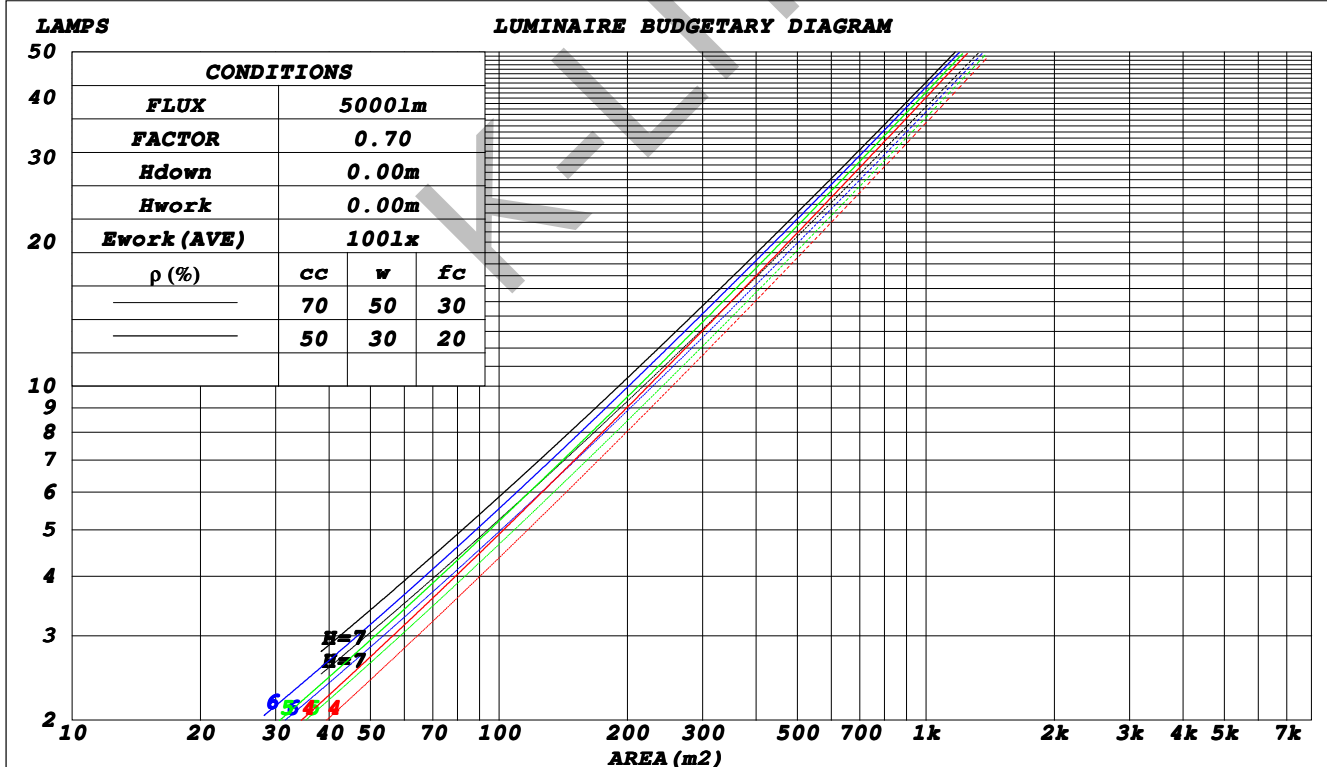
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 20 June 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.71V I:0.1773A P:40.732W PF:0.9956 Freq:49.99Hz Lamp Flux:5250x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: WW, NICHIA	DIM.: Ø170 x 68	SERIAL No.: 4620
MFR.: K-LITE	SUR.:	Shielding Angle: 45°

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	.85	.85	.85	.83	.83	.83	.79	.79	.79	.76	.76	.76	.73	.73	.73	.71
1.0	.79	.77	.75	.77	.76	.74	.74	.73	.72	.72	.71	.70	.69	.69	.68	.67
2.0	.74	.71	.68	.72	.70	.67	.70	.68	.66	.68	.66	.65	.66	.64	.63	.62
3.0	.69	.65	.63	.68	.65	.62	.66	.63	.61	.64	.62	.60	.63	.61	.59	.58
4.0	.65	.61	.58	.64	.60	.58	.62	.59	.57	.61	.58	.56	.60	.57	.56	.54
5.0	.61	.57	.54	.60	.57	.54	.59	.56	.53	.58	.55	.53	.57	.54	.52	.51
6.0	.58	.54	.51	.57	.53	.50	.56	.53	.50	.55	.52	.50	.54	.51	.49	.48
7.0	.55	.51	.48	.54	.50	.48	.53	.50	.47	.52	.49	.47	.52	.49	.47	.46
8.0	.52	.48	.45	.52	.48	.45	.51	.47	.45	.50	.47	.45	.49	.47	.44	.44
9.0	.49	.46	.43	.49	.45	.43	.48	.45	.43	.48	.45	.42	.47	.44	.42	.41
10.0	.47	.43	.41	.47	.43	.41	.46	.43	.41	.46	.43	.41	.45	.42	.40	.40



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 20 June 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:230.71V I:0.1773A P:40.732W PF:0.9956 Freq:49.99Hz Lamp Flux:5250x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:WW, NICHIA	DIM.: Ø170 x 68	SERIAL No.:4620
MFR.: K-LITE	SUR.:	Shielding Angle:45°

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.130	.074	.023	.126	.072	.023	.117	.067	.021	.108	.062	.020	.101	.058	.019		
2.0	.122	.067	.021	.118	.065	.020	.111	.062	.019	.104	.058	.018	.097	.055	.017		
3.0	.115	.061	.018	.111	.060	.018	.105	.057	.017	.099	.054	.017	.093	.052	.016		
4.0	.108	.056	.017	.105	.055	.016	.100	.053	.016	.094	.051	.015	.090	.049	.015		
5.0	.102	.052	.015	.100	.051	.015	.095	.049	.015	.090	.048	.014	.086	.046	.014		
6.0	.097	.048	.014	.094	.048	.014	.090	.046	.013	.086	.045	.013	.083	.044	.013		
7.0	.092	.045	.013	.090	.045	.013	.086	.044	.013	.083	.042	.012	.079	.041	.012		
8.0	.087	.043	.012	.086	.042	.012	.082	.041	.012	.079	.040	.012	.076	.039	.011		
9.0	.083	.040	.011	.082	.040	.011	.079	.039	.011	.076	.038	.011	.074	.037	.011		
10.0	.080	.038	.011	.078	.038	.011	.076	.037	.010	.073	.036	.010	.071	.036	.010		

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)										
0.0	.136	.136	.136	.116	.116	.116	.079	.079	.079	.046	.046	.046	.015	.015	.015		
1.0	.122	.112	.103	.105	.096	.089	.072	.066	.061	.041	.038	.036	.013	.012	.012		
2.0	.111	.095	.080	.095	.081	.069	.065	.056	.048	.038	.033	.028	.012	.011	.009		
3.0	.102	.081	.064	.088	.070	.056	.060	.049	.039	.035	.028	.023	.011	.009	.008		
4.0	.095	.071	.052	.081	.061	.045	.056	.042	.032	.032	.025	.019	.010	.008	.006		
5.0	.088	.062	.043	.076	.054	.037	.052	.038	.026	.030	.022	.016	.010	.007	.005		
6.0	.083	.055	.036	.071	.048	.031	.049	.034	.022	.028	.020	.013	.009	.006	.004		
7.0	.078	.050	.031	.067	.043	.027	.046	.030	.019	.027	.018	.011	.009	.006	.004		
8.0	.073	.045	.026	.063	.039	.023	.044	.028	.016	.025	.016	.010	.008	.005	.003		
9.0	.070	.042	.023	.060	.036	.020	.042	.025	.014	.024	.015	.008	.008	.005	.003		
10.0	.066	.038	.020	.057	.033	.017	.040	.024	.012	.023	.014	.007	.007	.005	.002		

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 20 June 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.71V I:0.1773A P:40.732W PF:0.9956 Freq:49.99Hz Lamp Flux:5250x1 lm										
NAME: VELA					TYPE: RECESSED CEILING			WEIGHT:		
SPEC.: WW, NICHIA					DIM.: Ø170 x 68			SERIAL No.: 4620		
MFR.: K-LITE					SUR.:			Shielding Angle: 45°		
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions						Viewed crosswise				
x = 2H y = 2H						Viewed endwise				
3H						4.4	5.4	4.7	5.5	5.7
4H						5.0	5.9	5.3	6.1	6.3
6H						5.4	6.2	5.7	6.4	6.6
8H						5.8	6.6	6.1	6.8	7.1
12H						6.1	6.8	6.4	7.1	7.4
2H						6.4	7.1	6.7	7.3	7.6
3H						6.6	7.4	6.9	7.6	7.8
4H						7.0	7.8	7.3	8.0	8.2
6H						7.3	8.0	7.6	8.3	8.6
8H						7.6	8.3	8.0	8.6	8.9
12H						7.6	8.3	8.0	8.6	8.9
2H						5.8	6.6	6.1	6.8	7.0
3H						6.5	7.2	6.8	7.5	7.8
4H						7.0	7.6	7.4	7.9	8.3
6H						7.6	8.2	8.0	8.5	8.9
8H						8.0	8.6	8.4	8.9	9.3
12H						8.5	9.0	8.9	9.3	9.7
4H						7.2	7.7	7.6	8.0	8.4
6H						7.9	8.4	8.4	8.8	9.2
8H						8.5	8.9	8.9	9.3	9.7
12H						9.1	9.4	9.6	9.9	10.3
4H						7.2	7.7	7.6	8.0	8.4
6H						8.0	8.4	8.5	8.8	9.3
8H						8.6	9.0	9.1	9.4	9.9
Variations with the observer position at spacings:										
S = 1.0H	+ 1.0 / - 0.8					+ 0.6 / - 0.6				
1.5H	+ 2.0 / - 0.7					+ 1.2 / - 0.4				
2.0H	+ 1.1 / - 0.4					+ 0.7 / - 0.4				

CIE Pub.117, 5250 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 5.8$)
Area: 0.1 m²

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 20 June 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.71V I:0.1773A P:40.732W PF:0.9956 Freq:49.99Hz Lamp Flux:5250x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:WW, NICHIA	DIM.: Ø170 x 68	SERIAL No.:4620
MFR.: K-LITE	SUR.:	Shielding Angle:45°

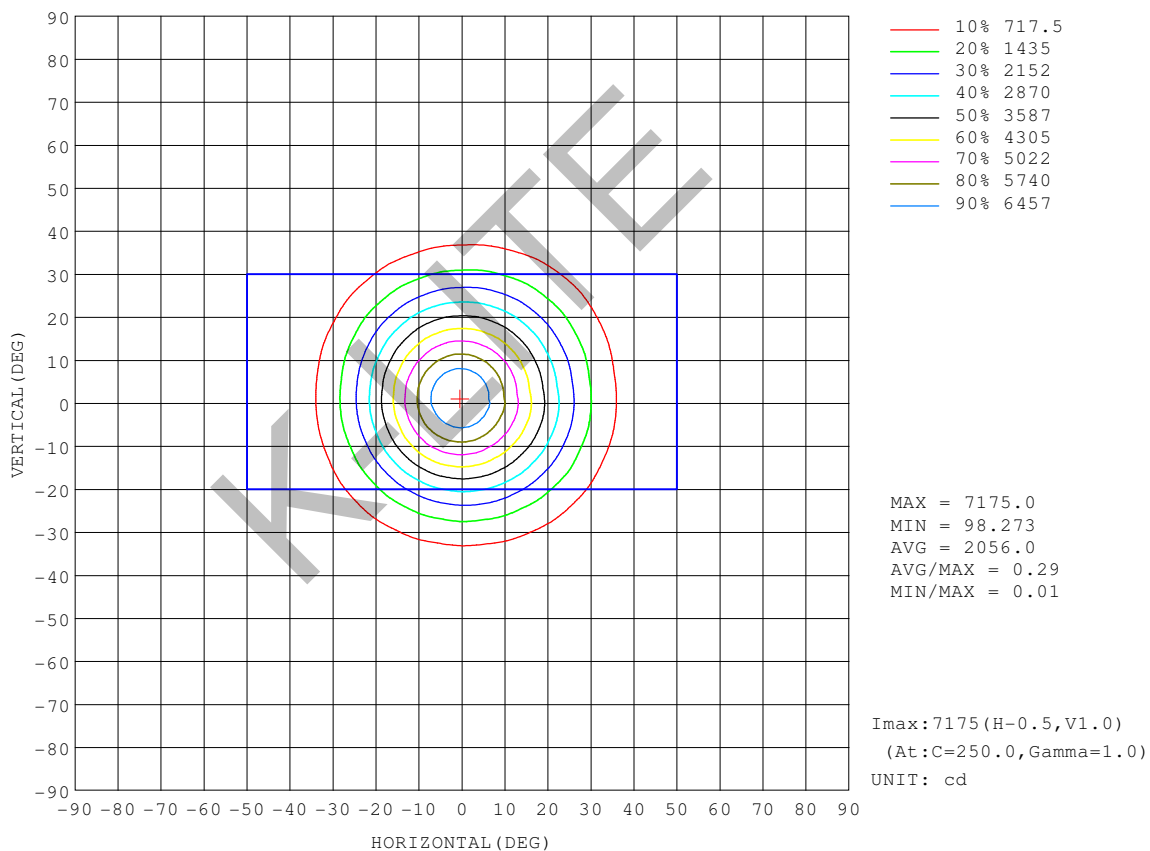
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	61	56	53	60	56	53	60	55	53	50
0.80	66	62	59	66	61	59	65	61	58	55
1.00	69	65	62	69	65	62	68	65	62	59
1.25	72	68	66	72	68	65	70	67	65	62
1.50	74	71	68	74	70	68	72	69	67	64
2.00	77	73	71	76	73	70	74	71	69	65
2.50	78	75	73	77	74	72	74	72	71	66
3.00	79	76	74	78	75	74	75	73	72	67
4.00	81	78	77	79	77	76	77	75	74	69
5.00	82	80	78	80	79	77	77	76	75	70
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 20 June 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.825m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:230.71V I:0.1773A P:40.732W PF:0.9956 Freq:49.99Hz Lamp Flux:5250x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:WW, NICHIA	DIM.: Ø170 x 68	SERIAL No.:4620
MFR.: K-LITE	SUR.:	Shielding Angle:45°



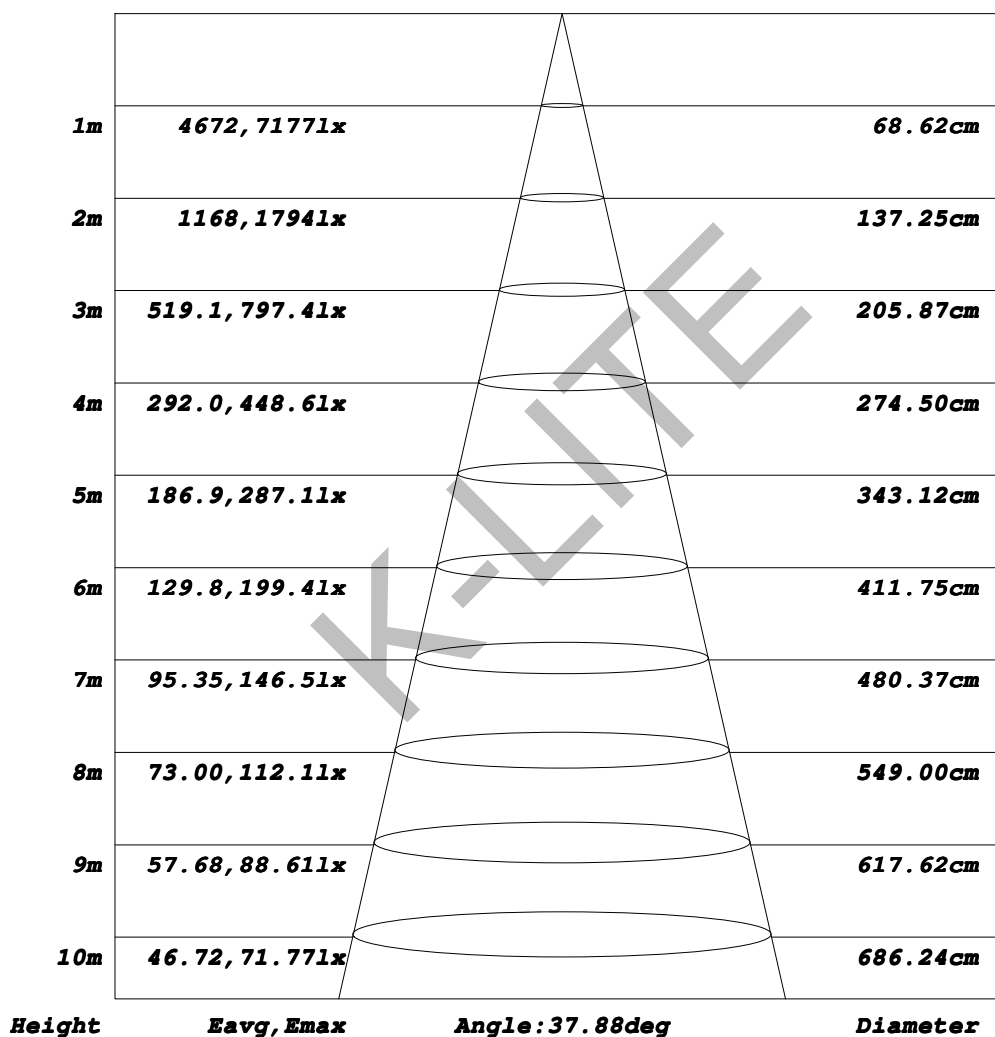
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:20 June 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.825m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.71V I:0.1773A P:40.732W PF:0.9956 Freq:49.99Hz Lamp Flux:5250x1 lm		
NAME: VELA	TYPE:RECESSED CEILING	WEIGHT:
SPEC.:WW, NICHIA	DIM.: Ø170 x 68	SERIAL No.:4620
MFR.: K-LITE	SUR.:	Shielding Angle:45°

Flux out:1740 lm



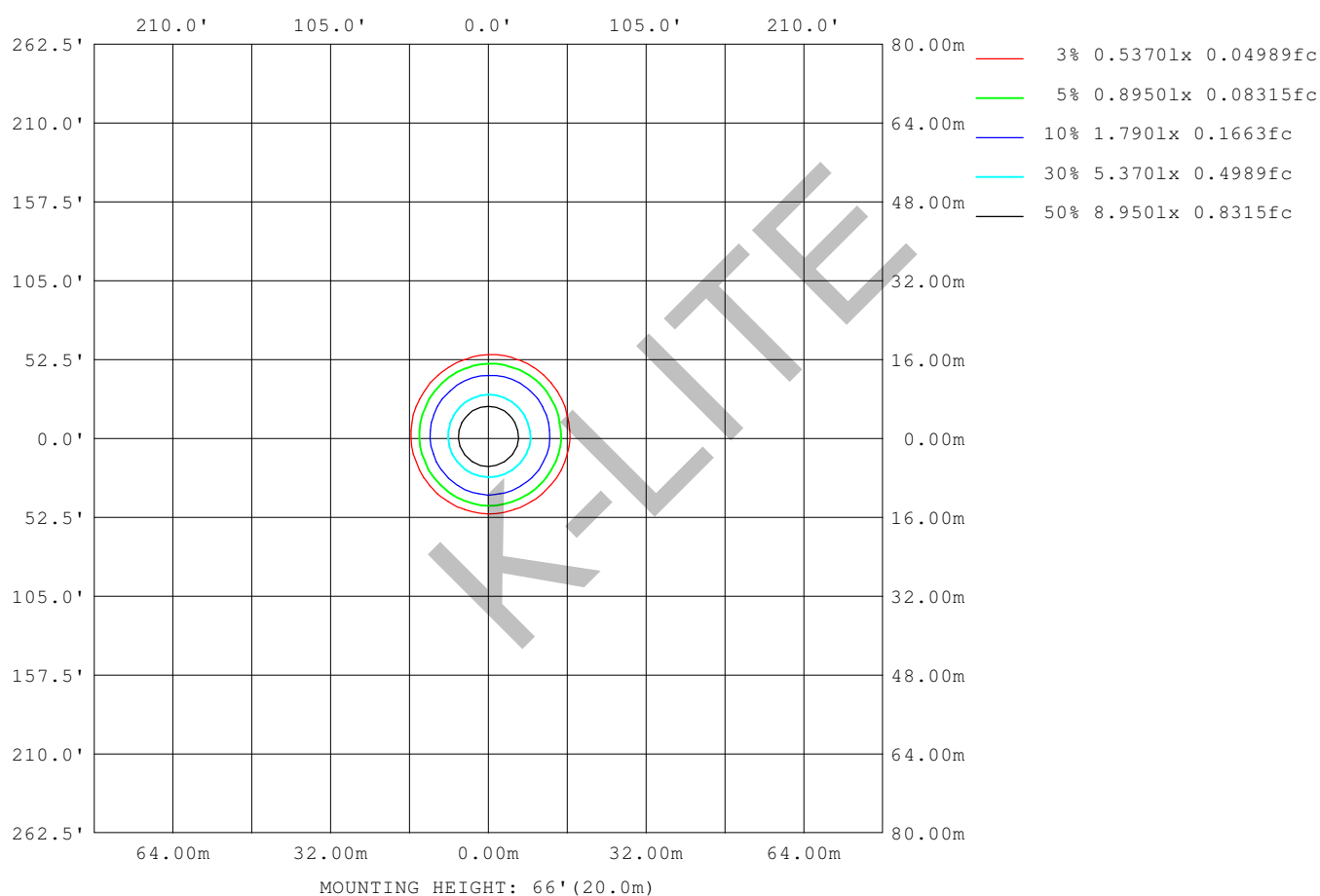
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 20 June 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.825m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:230.71V I:0.1773A P:40.732W PF:0.9956 Freq:49.99Hz Lamp Flux:5250x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: WW, NICHIA	DIM.: Ø170 x 68	SERIAL No.: 4620
MFR.: K-LITE	SUR.:	Shielding Angle: 45°



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 20 June 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:230.71V I:0.1773A P:40.732W PF:0.9956 Freq:49.99Hz Lamp Flux:5250x1 lm		
NAME: VELA	TYPE: RECESSED CEILING	WEIGHT:
SPEC.: WW, NICHIA	DIM.: Ø170 x 68	SERIAL No.: 4620
MFR.: K-LITE	SUR.:	Shielding Angle: 45°

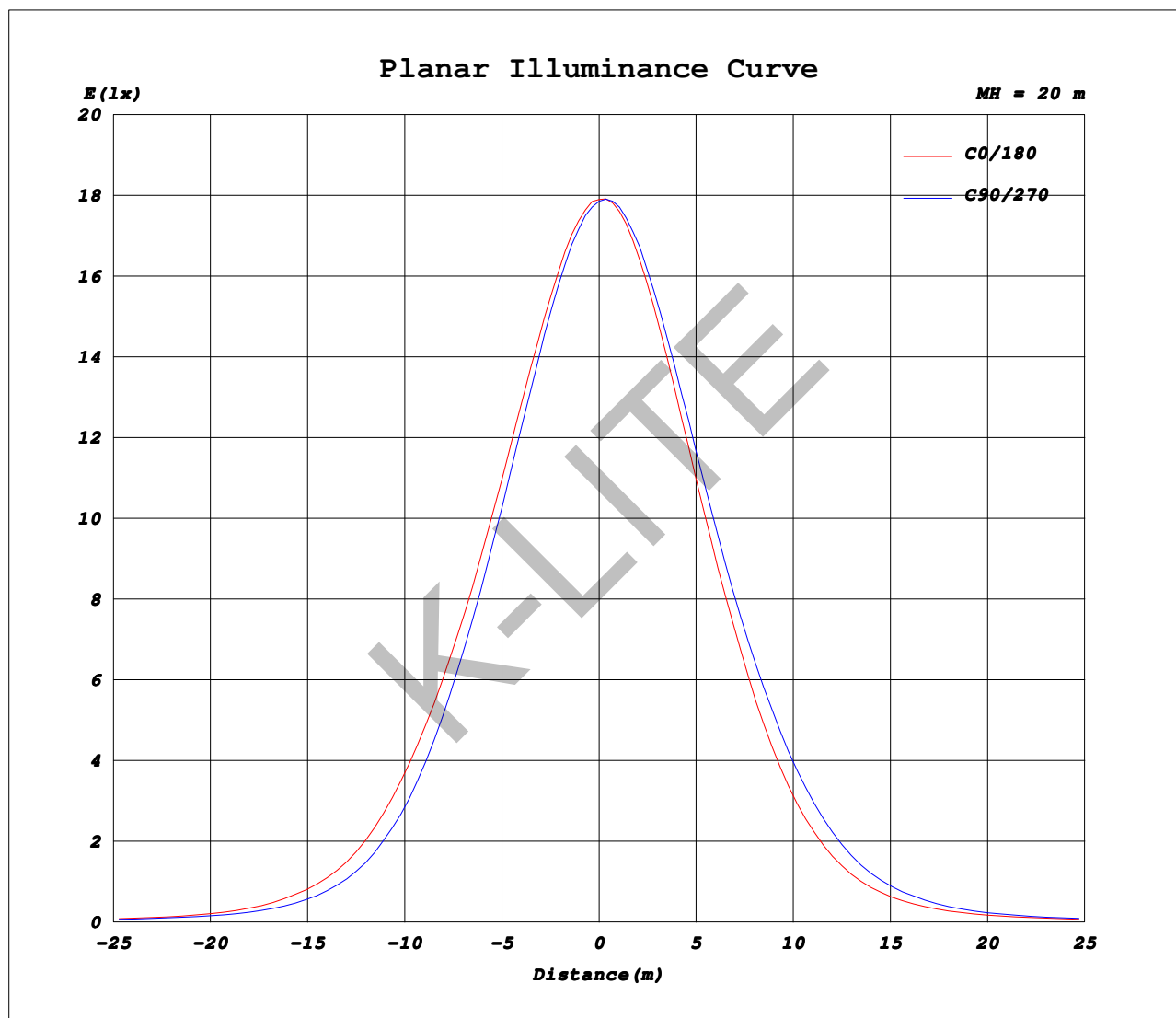
AvgL	cd/m2
L_0~180 (65) av	1431
L_0~180 (75) av	1456
L_0~180 (85) av	2472
L_90~270 (65) av	1427
L_90~270 (75) av	1446
L_90~270 (85) av	2427
L_45 (65) av	1437
L_45 (75) av	1469
L_45 (85) av	2252

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 20 June 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 20 June 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

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γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.825m [K=1.0000]
Remarks:

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γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.825m [K=1.0000]
Remarks:

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