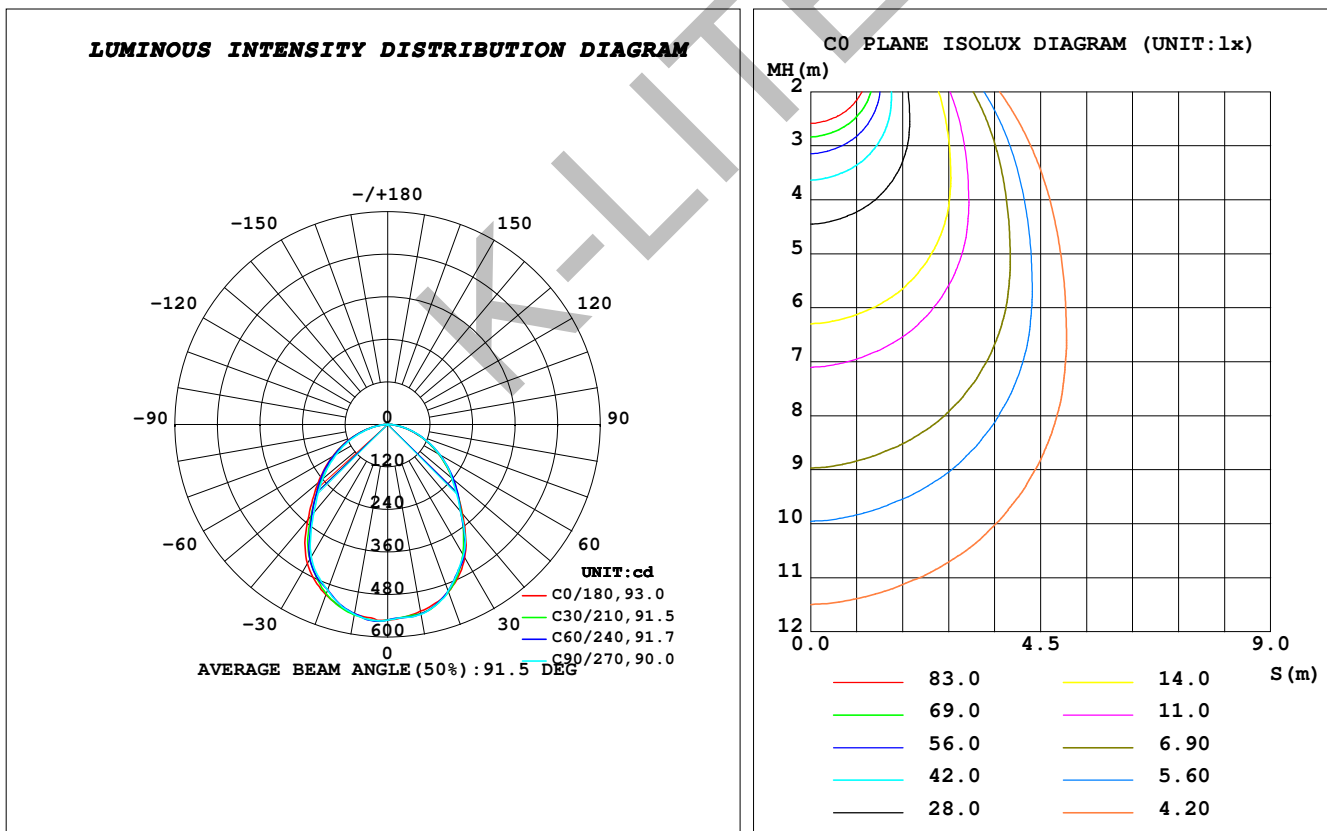


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.01V I:0.0762A P:17.482W PF:0.9739 Freq:49.99Hz Lamp Flux:2160.9x1 lm		
NAME: MUSHROOM	TYPE: BOLLARDS	WEIGHT:
SPEC.: WW, NICHIA	DIM.: Ø168 x 703	SERIAL No.: 2183
MFR.: K-LITE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 73.86 lm/W
MODEL	KL-5582	I _{max} (cd)	555.4	S/MH (C0/180)	1.22	
NOMINAL POWER (W)	16	LOR (%)	59.8	S/MH (C90/270)	1.17	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	1291.3	η UP, DN (C0-180)	0.1, 29.8	
NOMINAL FLUX (lm)	2160.9	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.1, 29.8	
LAMPS INSIDE	1	η up (%)	0.1	CIBSE SHR NOM	1.25	
TEST VOLTAGE (V)	230	η down (%)	59.6	CIBSE SHR MAX	1.30	



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 28 October 2020

γ Range: 0 - 180DEG
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:

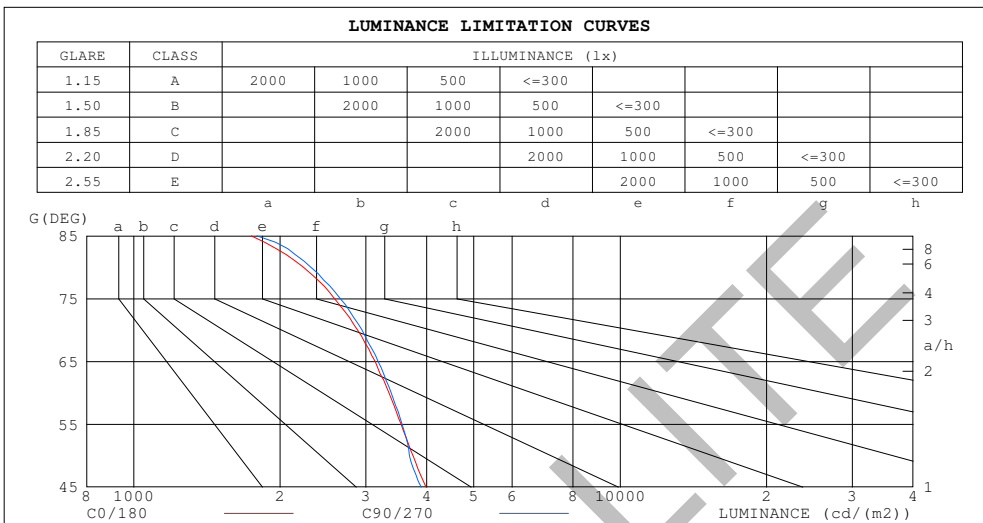
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	ϕ zone	ϕ total	%lum, lamp
10	534.7	542.4	543.5	538.1	542.3	544.1	543.8	542.8	0- 10	52.21	52.21	4.04,2.42
20	501.7	501.0	499.2	507.7	511.7	502.3	496.8	503.1	10- 20	148.2	200.4	15.5,9.27
30	434.7	426.5	427.2	445.9	453.1	442.3	431.4	432.3	20- 30	217.2	417.6	32.3,19.3
40	328.0	324.9	320.0	342.9	350.6	335.3	323.4	325.5	30- 40	240.4	658.0	51,30.4
50	239.4	240.9	236.8	252.1	256.4	250.1	239.7	239.5	40- 50	220.7	878.6	68,40.7
60	166.3	167.9	168.9	175.0	179.0	176.4	166.2	165.8	50- 60	185.4	1064	82.4,49.2
70	97.95	99.55	100.6	103.3	105.3	103.3	96.83	97.20	60- 70	133.8	1198	92.8,55.4
80	38.53	39.70	40.09	40.37	40.69	39.22	36.58	37.50	70- 80	72.53	1270	98.4,58.8
90	1.511	2.048	1.523	1.816	1.741	2.050	1.926	1.833	80- 90	18.19	1289	99.8,59.6
100	0.9480	0.2809	0.7638	0.2469	1.371	0.1881	1.078	0.0490	90-100	1.370	1290	99.9,59.7
110	0.3232	0.1753	0.8596	0.3565	1.049	0.5677	1.191	0	100-110	0.6604	1291	99.9,59.7
120	0	0.4493	0.5448	0.0473	0.0021	0.0398	0.4751	0.0706	110-120	0.4273	1291	100,59.7
130	0	0.0483	0.3540	0.1904	0	0.0893	0.0477	0	120-130	0.1470	1291	100,59.8
140	0	0.0401	0.2220	0.3076	0.0007	0.0973	0.0296	0	130-140	0.0728	1291	100,59.8
150	0	0.0080	0.1459	0	0.0527	0.0024	0.0008	0	140-150	0.0357	1291	100,59.8
160	0	0.0071	0.0000	0	0.1188	0	0	0.0021	150-160	0.0105	1291	100,59.8
170	0.0029	0.0011	0.0003	0	0.0773	0.0556	0	0.0190	160-170	0.0035	1291	100,59.8
180	0	0	0	0	0	0	0	0	170-180	0.0007	1291	100,59.8
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:28 October 2020

γ Range: 0 - 180DEG
 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:230.01V I:0.0762A P:17.482W PF:0.9739 Freq:49.99Hz Lamp Flux:2160.9x1 lm		
NAME: MUSHROOM	TYPE: BOLLARDS	WEIGHT:
SPEC.: WW, NICHIA	DIM.: Ø168 x 703	SERIAL No.: 2183
MFR.: K-LITE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1744	1792
80	2233	2312
75	2588	2659
70	2883	2946
65	3135	3177
60	3348	3383
55	3547	3561
50	3749	3689
45	3987	3902

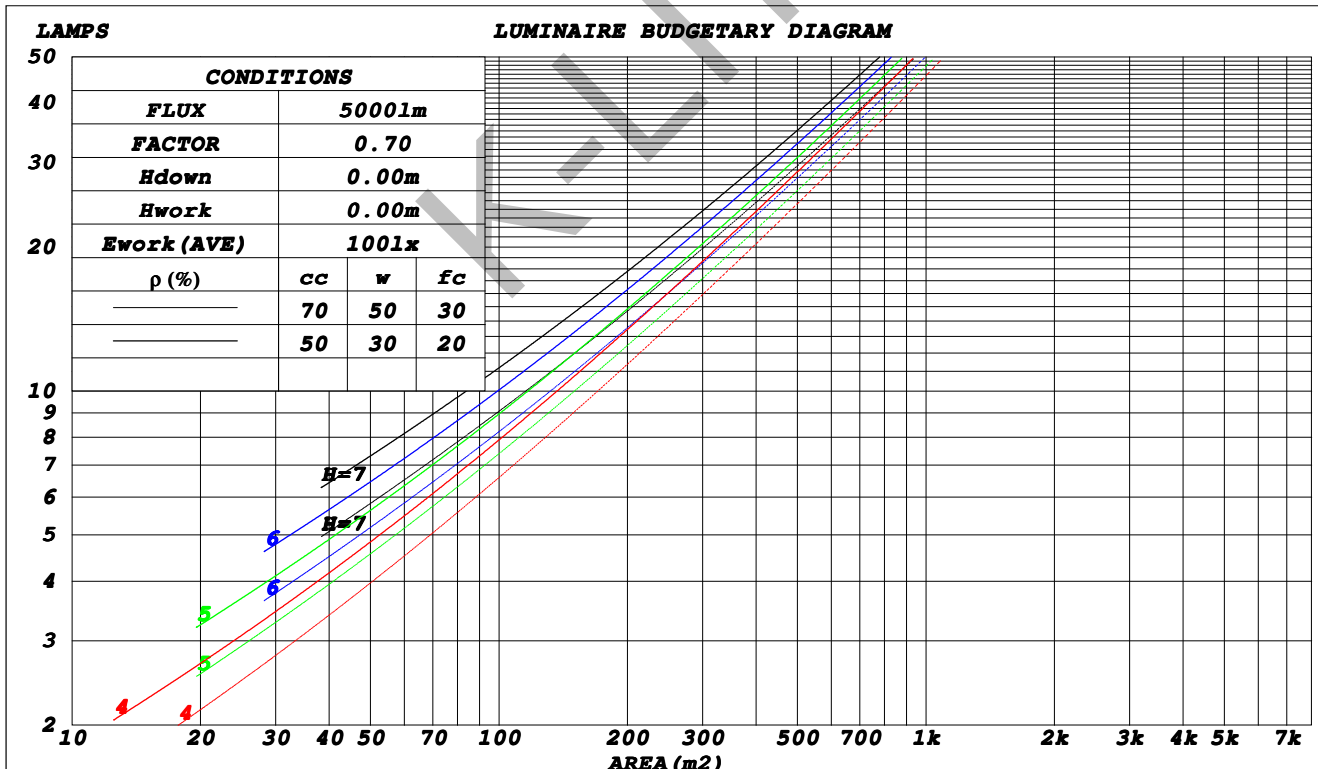
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 28 October 2020

γ Range: 0 - 180DEG
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:230.01V I:0.0762A P:17.482W PF:0.9739 Freq:49.99Hz Lamp Flux:2160.9x1 lm		
NAME: MUSHROOM	TYPE: BOLLARDS	WEIGHT:
SPEC.: WW, NICHIA	DIM.: Ø168 x 703	SERIAL No.: 2183
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	.71	.71	.71	.69	.69	.69	.66	.66	.66	.63	.63	.63	.61	.61	.61	.60
1.0	.63	.60	.58	.61	.59	.57	.59	.57	.55	.56	.55	.54	.54	.53	.52	.51
2.0	.55	.51	.48	.54	.51	.48	.52	.49	.46	.50	.48	.45	.48	.46	.44	.43
3.0	.49	.44	.41	.48	.44	.40	.46	.42	.39	.45	.41	.39	.43	.40	.38	.37
4.0	.44	.39	.35	.43	.38	.35	.41	.37	.34	.40	.36	.34	.39	.36	.33	.32
5.0	.39	.34	.30	.39	.34	.30	.37	.33	.30	.36	.32	.29	.35	.32	.29	.28
6.0	.36	.30	.27	.35	.30	.27	.34	.30	.26	.33	.29	.26	.32	.29	.26	.25
7.0	.32	.27	.24	.32	.27	.24	.31	.27	.24	.30	.26	.23	.29	.26	.23	.22
8.0	.30	.25	.21	.29	.25	.21	.28	.24	.21	.28	.24	.21	.27	.24	.21	.20
9.0	.27	.23	.19	.27	.22	.19	.26	.22	.19	.26	.22	.19	.25	.22	.19	.18
10.0	.25	.21	.18	.25	.21	.18	.24	.20	.18	.24	.20	.17	.23	.20	.17	.16



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 28 October 2020

γ Range: 0 - 180DEG
 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:230.01V I:0.0762A P:17.482W PF:0.9739 Freq:49.99Hz Lamp Flux:2160.9x1 lm		
NAME: MUSHROOM	TYPE: BOLLARDS	WEIGHT:
SPEC.: WW, NICHIA	DIM.: Ø168 x 703	SERIAL No.: 2183
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	.172	.098	.031	.168	.096	.030	.160	.092	.029	.153	.088	.028	.146	.085	.027	
2.0	.163	.089	.027	.159	.088	.027	.152	.085	.026	.146	.082	.026	.140	.079	.025	
3.0	.152	.081	.024	.149	.080	.024	.142	.077	.023	.137	.075	.023	.132	.073	.023	
4.0	.141	.073	.022	.138	.072	.021	.133	.070	.021	.128	.068	.021	.123	.067	.020	
5.0	.131	.067	.019	.128	.066	.019	.123	.064	.019	.119	.063	.019	.115	.061	.018	
6.0	.122	.061	.017	.120	.060	.017	.115	.059	.017	.111	.058	.017	.108	.057	.017	
7.0	.114	.056	.016	.112	.056	.016	.108	.055	.016	.104	.054	.016	.101	.052	.015	
8.0	.107	.052	.015	.105	.052	.015	.101	.051	.014	.098	.050	.014	.095	.049	.014	
9.0	.100	.048	.014	.099	.048	.013	.096	.047	.013	.093	.046	.013	.090	.046	.013	
10.0	.094	.045	.013	.093	.045	.013	.090	.044	.012	.088	.043	.012	.085	.043	.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	.115	.115	.115	.098	.098	.098	.067	.067	.067	.038	.038	.038	.012	.012	.012	
1.0	.108	.094	.082	.092	.081	.071	.063	.056	.049	.036	.032	.028	.012	.010	.009	
2.0	.102	.080	.061	.088	.069	.053	.060	.048	.037	.035	.028	.022	.011	.009	.007	
3.0	.097	.069	.047	.084	.060	.041	.057	.041	.028	.033	.024	.017	.011	.008	.005	
4.0	.093	.061	.037	.080	.053	.032	.055	.037	.023	.032	.022	.013	.010	.007	.004	
5.0	.088	.055	.030	.076	.047	.026	.052	.033	.019	.030	.019	.011	.010	.006	.004	
6.0	.084	.050	.025	.072	.043	.022	.050	.030	.016	.029	.018	.009	.009	.006	.003	
7.0	.080	.046	.022	.069	.040	.019	.048	.028	.013	.028	.016	.008	.009	.005	.003	
8.0	.076	.042	.019	.066	.037	.016	.045	.026	.012	.026	.015	.007	.009	.005	.002	
9.0	.073	.039	.016	.063	.034	.014	.043	.024	.010	.025	.014	.006	.008	.005	.002	
10.0	.069	.037	.015	.060	.032	.013	.042	.022	.009	.024	.013	.005	.008	.004	.002	

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 28 October 2020

γ Range: 0 - 180DEG
 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:230.01V I:0.0762A P:17.482W PF:0.9739 Freq:49.99Hz Lamp Flux:2160.9x1 lm										
NAME: MUSHROOM					TYPE:BOLLARDS			WEIGHT:		
SPEC.:WW, NICHIA					DIM.: Ø168 x 703			SERIAL No.:2183		
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	14.3	15.7	14.5	15.9	16.1	14.3	15.7	14.5	15.9	16.1
3H	15.6	16.9	15.9	17.1	17.4	15.6	16.9	15.9	17.1	17.4
4H	16.1	17.3	16.4	17.6	17.8	16.1	17.4	16.4	17.6	17.9
6H	16.4	17.6	16.7	17.9	18.2	16.4	17.6	16.8	17.9	18.2
8H	16.5	17.7	16.9	17.9	18.2	16.6	17.7	16.9	18.0	18.3
12H	16.6	17.7	16.9	18.0	18.3	16.6	17.7	17.0	18.0	18.3
4H 2H	14.8	16.1	15.1	16.3	16.6	14.8	16.1	15.1	16.3	16.6
3H	16.3	17.4	16.6	17.7	18.0	16.3	17.4	16.7	17.7	18.0
4H	16.9	17.9	17.3	18.2	18.6	16.9	17.9	17.3	18.3	18.6
6H	17.4	18.3	17.8	18.6	19.0	17.4	18.3	17.8	18.7	19.0
8H	17.5	18.4	17.9	18.7	19.1	17.6	18.4	18.0	18.8	19.2
12H	17.6	18.4	18.0	18.8	19.2	17.6	18.4	18.1	18.8	19.2
8H 4H	17.1	18.0	17.6	18.3	18.7	17.2	18.0	17.6	18.4	18.8
6H	17.7	18.4	18.2	18.8	19.3	17.8	18.5	18.2	18.9	19.3
8H	18.0	18.6	18.4	19.0	19.5	18.0	18.6	18.5	19.0	19.5
12H	18.1	18.6	18.6	19.1	19.6	18.1	18.7	18.6	19.1	19.6
12H 4H	17.1	17.9	17.6	18.3	18.7	17.2	17.9	17.6	18.3	18.7
6H	17.8	18.4	18.2	18.8	19.3	17.8	18.4	18.3	18.8	19.3
8H	18.0	18.6	18.5	19.0	19.5	18.1	18.6	18.5	19.0	19.5
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
1.5H	+ 0.1 / - 0.3					+ 0.2 / - 0.2				
2.0H	+ 0.3 / - 0.3					+ 0.3 / - 0.3				

CIE Pub.117, 2161 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 2.7$)
 Area: 0.1 m2

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:K-LITE
 Test Date:28 October 2020

γ Range: 0 - 180DEG
 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:230.01V I:0.0762A P:17.482W PF:0.9739 Freq:49.99Hz Lamp Flux:2160.9x1 lm		
NAME: MUSHROOM	TYPE: BOLLARDS	WEIGHT:
SPEC.: WW, NICHIA	DIM.: Ø168 x 703	SERIAL No.: 2183
MFR.: K-LITE	SUR.:	Shielding Angle:

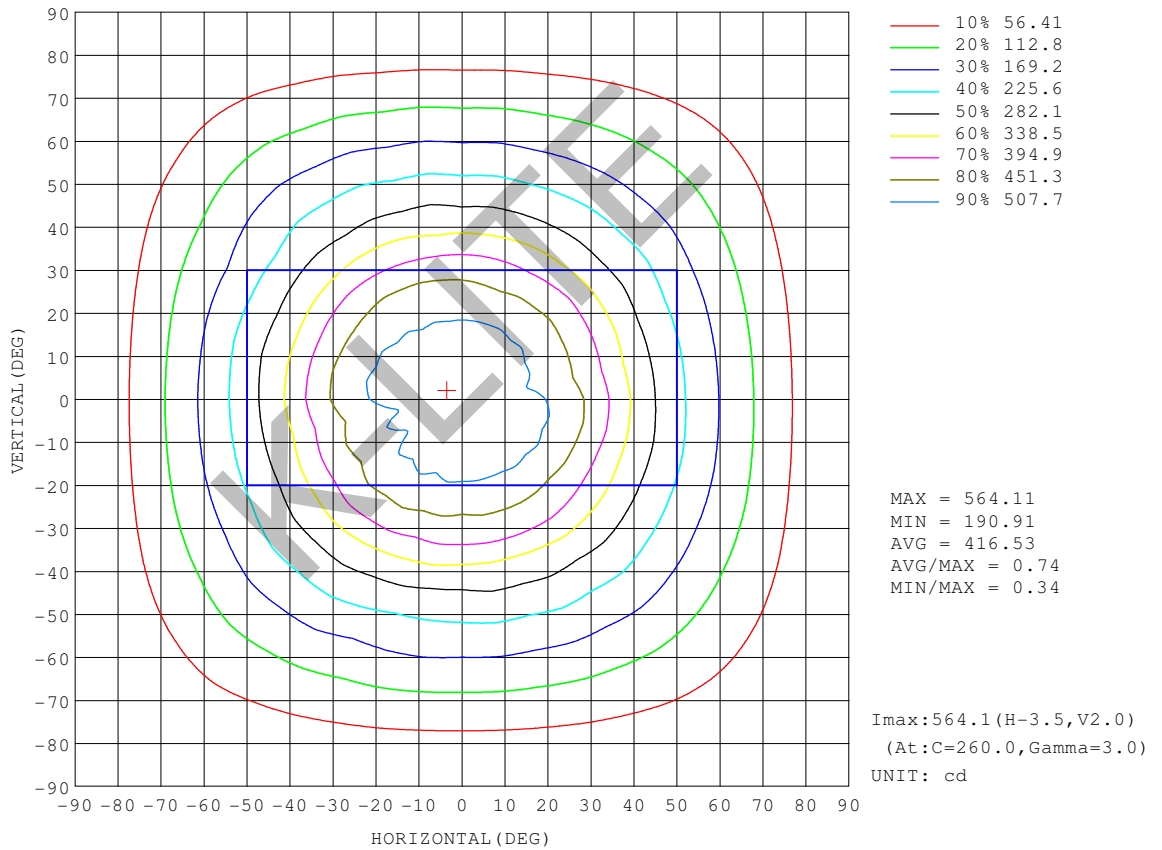
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	37	30	26	36	30	26	36	30	26	22
0.80	42	36	32	42	36	32	41	35	32	28
1.00	47	41	37	47	41	37	45	41	37	33
1.25	51	46	42	51	45	41	49	44	41	37
1.50	54	49	45	53	48	45	51	47	44	40
2.00	58	53	50	57	53	49	55	51	48	44
2.50	60	56	52	59	55	52	57	53	51	46
3.00	62	58	55	61	57	54	58	55	53	48
4.00	64	61	58	63	60	58	60	58	56	51
5.00	65	63	61	64	62	60	61	59	58	52
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: 28 October 2020

γ Range: 0 - 180DEG
 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:230.01V I:0.0762A P:17.482W PF:0.9739 Freq:49.99Hz Lamp Flux:2160.9x1 lm		
NAME: MUSHROOM	TYPE: BOLLARDS	WEIGHT:
SPEC.: WW, NICHIA	DIM.: Ø168 x 703	SERIAL No.: 2183
MFR.: K-LITE	SUR.:	Shielding Angle:



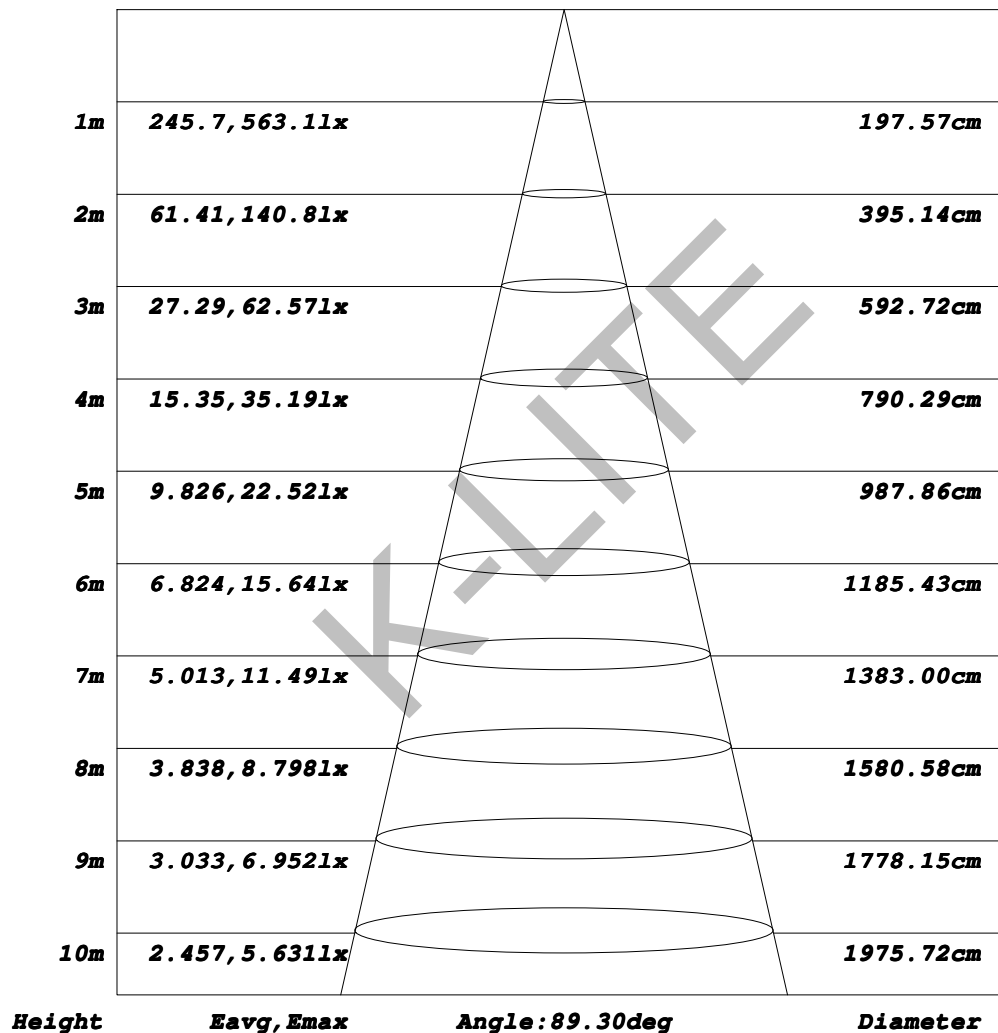
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 28 October 2020

γ Range: 0 - 180DEG
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:230.01V I:0.0762A P:17.482W PF:0.9739 Freq:49.99Hz Lamp Flux:2160.9x1 lm		
NAME: MUSHROOM	TYPE:BOLLARDS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: Ø168 x 703	SERIAL No.:2183
MFR.: K-LITE	SUR.:	Shielding Angle:

Flux out:771.7 lm



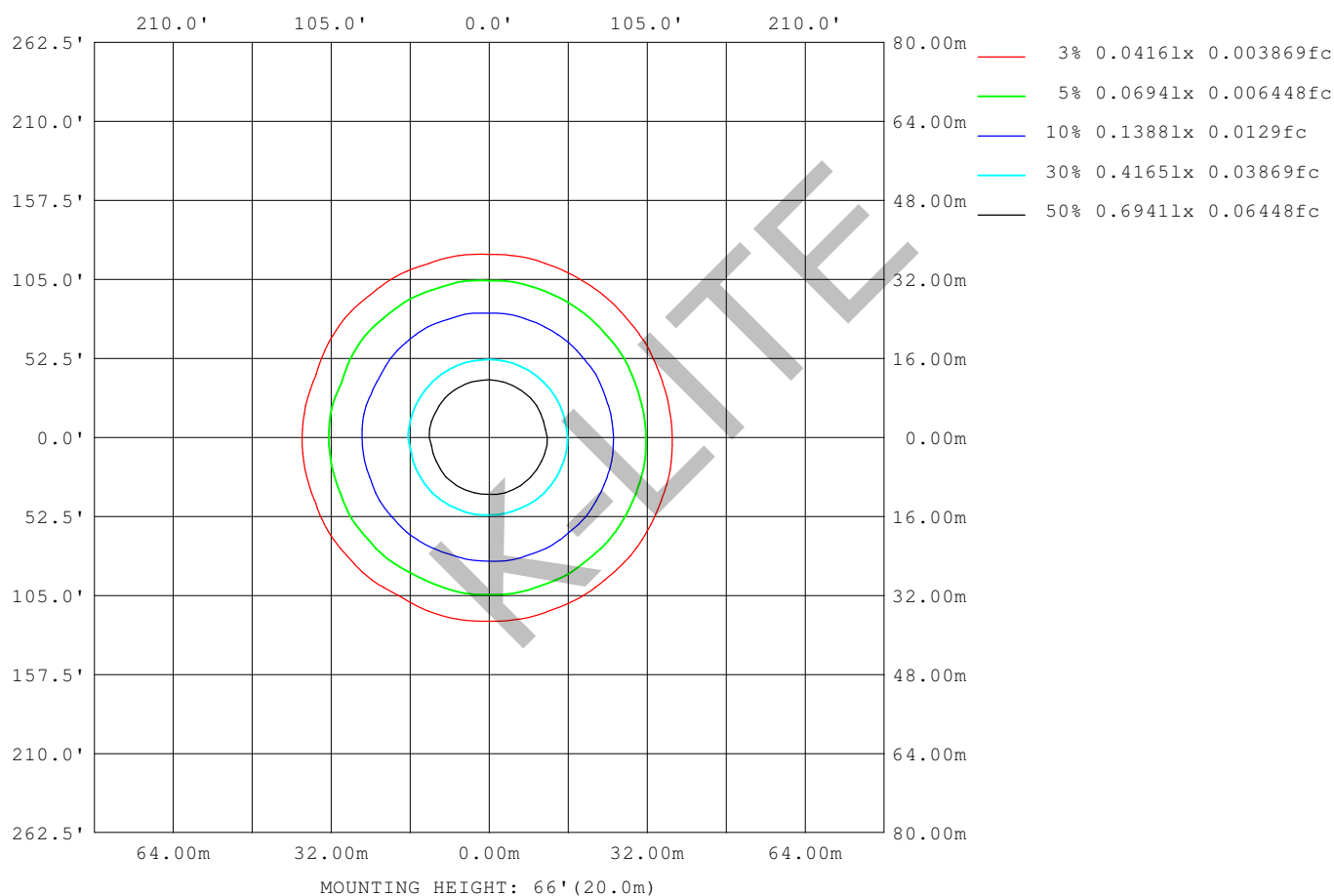
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 28 October 2020

γ Range: 0 - 180DEG
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:230.01V I:0.0762A P:17.482W PF:0.9739 Freq:49.99Hz Lamp Flux:2160.9x1 lm		
NAME: MUSHROOM	TYPE: BOLLARDS	WEIGHT:
SPEC.: WW, NICHIA	DIM.: Ø168 x 703	SERIAL No.: 2183
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: 28 October 2020

γ Range: 0 - 180DEG
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:230.01V I:0.0762A P:17.482W PF:0.9739 Freq:49.99Hz Lamp Flux:2160.9x1 lm		
NAME: MUSHROOM	TYPE:BOLLARDS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: Ø168 x 703	SERIAL No.:2183
MFR.: K-LITE	SUR.:	Shielding Angle:

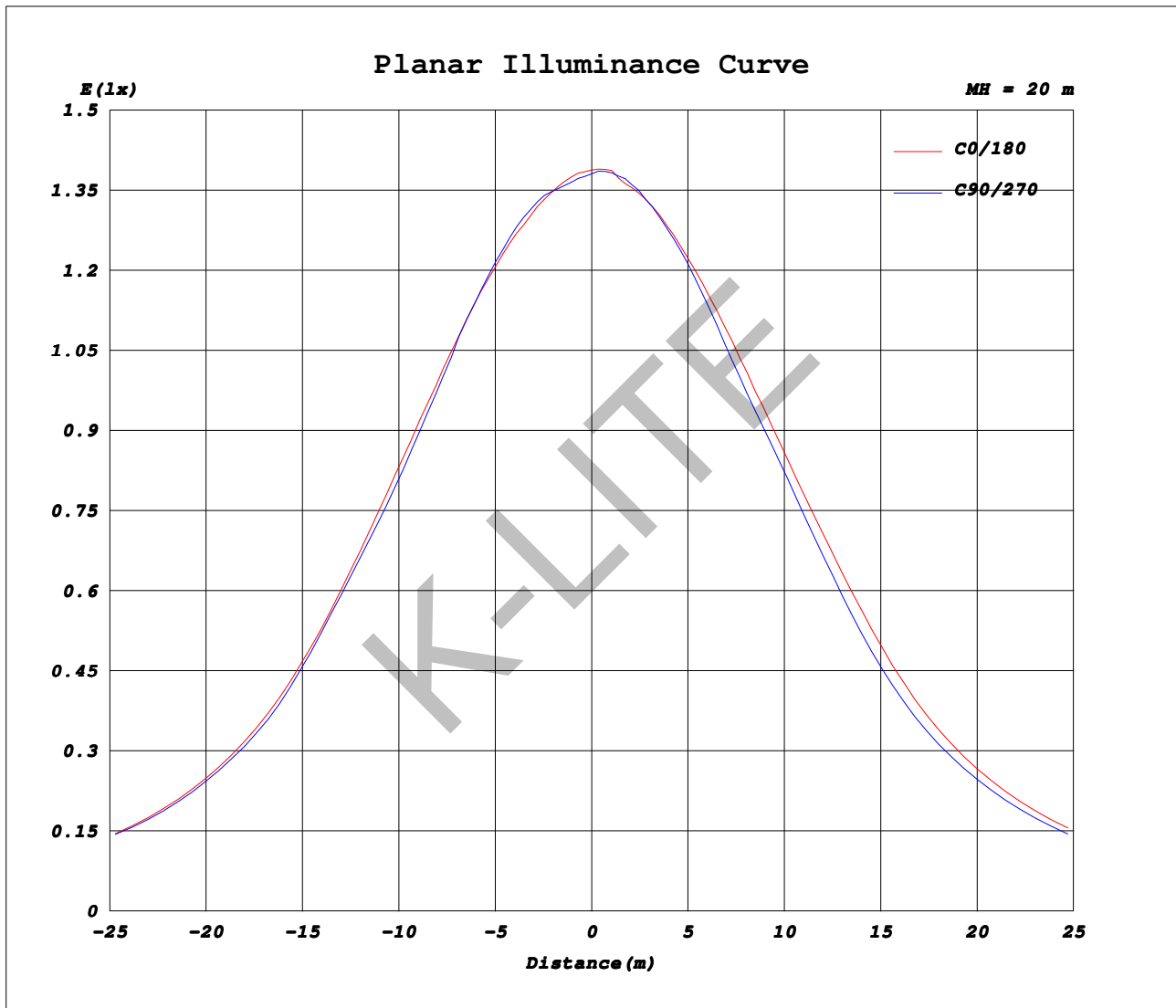
AvgL	cd/m2
L_0~180 (65) av	3233
L_0~180 (75) av	2661
L_0~180 (85) av	1751
L_90~270 (65) av	3135
L_90~270 (75) av	2581
L_90~270 (85) av	1652
L_45 (65) av	3202
L_45 (75) av	2633
L_45 (85) av	1741

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:28 October 2020

γ Range: 0 - 180DEG
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: 28 October 2020

γ Range: 0 - 180DEG
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:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.01V I:0.0762A P:17.482W PF:0.9739 Freq:49.99Hz Lamp Flux:2160.9x1 lm		
NAME: MUSHROOM	TYPE: BOLLARDS	WEIGHT:
SPEC.: WW, NICHIA	DIM.: Ø168 x 703	SERIAL No.: 2183
MFR.: K-LITE	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C (DEG) \ γ (DEG)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0	552	552	552	552	552	552	552	552	552	552	552	552	552	552	552	552	552	552	552
5	545	544	544	544	546	546	546	547	547	547	546	546	547	544	547	549	550	551	547
10	535	537	539	542	542	543	543	543	543	544	543	542	541	538	539	539	542	543	542
15	522	524	526	527	527	527	526	527	527	527	528	529	528	526	527	517	527	522	529
20	502	502	504	502	502	500	500	498	500	499	503	501	508	507	509	500	507	504	512
25	472	471	472	468	466	462	464	462	464	464	470	472	478	480	483	477	481	480	486
30	435	431	431	424	426	427	430	429	430	427	428	433	439	445	447	447	447	449	453
35	384	378	377	373	379	378	378	377	379	380	384	384	389	398	401	403	400	405	408
40	328	324	325	324	327	323	320	319	322	320	326	331	332	342	344	347	345	349	351
45	280	280	281	279	284	276	282	277	281	276	276	285	284	296	293	303	294	305	300
50	239	240	241	239	244	238	244	238	241	237	237	241	243	254	250	261	253	264	256
55	202	203	203	201	207	201	206	202	206	204	204	199	205	214	212	222	214	224	217
60	166	166	167	166	170	166	170	167	170	169	171	171	164	175	174	183	177	185	179
65	132	132	132	132	134	132	134	132	135	134	136	137	132	138	138	145	140	147	142
70	98.0	98.9	98.4	98.7	101	98.5	100	99.6	100	101	101	103	99.8	104	103	109	105	110	105
75	66.5	67.5	67.2	67.4	68.5	67.4	68.3	68.0	68.3	68.7	68.7	70.3	68.5	70.2	69.4	73.7	71.0	74.6	71.2
80	38.5	39.4	39.2	39.5	39.9	39.5	39.8	39.7	39.9	40.1	40.1	40.9	39.8	40.6	40.1	42.5	40.8	43.0	40.7
85	15.1	16.2	15.8	16.5	16.0	16.4	15.9	16.3	14.7	15.6	14.3	16.4	15.9	16.4	15.5	16.8	15.3	16.8	15.4
90	1.51	1.99	2.12	2.09	2.12	1.98	1.90	1.81	1.69	1.52	1.71	1.89	1.88	1.86	1.77	1.63	1.47	1.67	1.74
95	0.13	0.15	0.03	0.57	1.54	1.73	1.66	1.44	1.37	1.40	1.38	1.63	1.65	1.62	1.24	0.41	0.12	0.46	0.55
100	0.95	1.43	1.56	1.64	0.44	0.13	0.44	0.37	0.68	0.76	0.75	0.70	0.46	0.15	0.34	1.21	1.12	1.28	1.37
105	0.75	1.07	1.11	1.00	0.64	0.12	0.07	0.18	0.02	0.00	0.01	0.11	0.02	0.36	0.97	0.99	0.96	1.09	1.23
110	0.32	0.29	0.21	0.10	0.03	0.32	0.93	1.13	0.99	0.86	0.92	0.66	0.16	0.27	0.44	0.56	0.71	0.87	1.05
115	0.00	0.00	0.00	0.00	0.31	0.84	1.01	0.92	0.92	0.84	0.67	0.49	0.30	0.02	0.17	0.30	0.44	0.50	0.65
120	0.00	0.00	0.00	0.00	0.03	0.86	0.84	0.76	0.73	0.54	0.39	0.52	0.40	0.10	0.00	0.09	0.22	0.04	0.00
125	0.00	0.00	0.00	0.00	0.04	0.18	0.53	0.52	0.55	0.52	0.43	0.46	0.46	0.17	0.01	0.00	0.00	0.01	0.04
130	0.00	0.00	0.00	0.00	0.01	0.09	0.29	0.33	0.38	0.35	0.35	0.43	0.49	0.29	0.09	0.00	0.00	0.00	0.00
135	0.00	0.00	0.00	0.00	0.01	0.08	0.16	0.24	0.26	0.20	0.34	0.33	0.40	0.32	0.21	0.05	0.00	0.00	0.00
140	0.00	0.00	0.00	0.00	0.02	0.06	0.11	0.17	0.22	0.22	0.27	0.25	0.32	0.30	0.31	0.00	0.00	0.02	0.00
145	0.00	0.00	0.00	0.00	0.00	0.06	0.09	0.12	0.17	0.19	0.23	0.22	0.28	0.26	0.00	0.09	0.00	0.01	0.01
150	0.00	0.00	0.00	0.00	0.02	0.00	0.06	0.10	0.13	0.15	0.19	0.19	0.23	0.00	0.00	0.00	0.00	0.04	0.05
155	0.00	0.00	0.00	0.00	0.01	0.05	0.00	0.00	0.00	0.03	0.01	0.00	0.00	0.01	0.09	0.00	0.00	0.09	0.11
160	0.00	0.00	0.00	0.00	0.00	0.01	0.04	0.06	0.07	0.00	0.00	0.07	0.07	0.00	0.00	0.00	0.00	0.09	0.12
165	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.09
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.08
175	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.06	0.07
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 28 October 2020

γ Range: 0 - 180DEG
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:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.01V I:0.0762A P:17.482W PF:0.9739 Freq:49.99Hz Lamp Flux:2160.9x1 lm		
NAME: MUSHROOM	TYPE:BOLLARDS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: Ø168 x 703	SERIAL No.:2183
MFR.: K-LITE	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C (DEG) \ γ (DEG)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
0	552	552	552	552	552	552	552	552	552	552	552	552	552	552	552	552	552		
5	553	554	554	555	555	555	554	554	554	553	553	552	552	551	551	547	548		
10	545	543	546	543	545	542	544	541	544	544	545	543	544	542	544	537	539		
15	530	530	531	528	528	524	526	523	526	523	527	525	528	525	528	521	525		
20	511	511	508	504	501	496	498	495	497	497	501	499	504	502	505	497	503		
25	484	484	476	474	475	474	473	470	469	463	466	467	473	471	476	467	475		
30	449	448	440	444	441	439	435	432	431	428	428	425	432	432	437	428	437		
35	401	400	393	396	388	384	379	376	378	376	380	374	380	382	387	380	387		
40	343	342	337	337	334	334	329	324	323	323	327	324	327	324	331	326	332		
45	298	293	288	291	282	288	283	286	279	281	282	279	282	277	287	277	287		
50	255	250	244	252	248	251	243	246	240	242	241	239	242	237	246	237	246		
55	215	208	208	216	210	213	205	208	202	205	203	201	204	200	208	200	208		
60	175	168	175	180	173	176	169	171	166	168	166	165	167	164	170	165	170		
65	137	135	138	142	137	139	133	135	131	132	131	130	132	130	134	130	134		
70	102	100	103	105	101	103	98.5	99.7	96.8	98.1	97.1	96.7	97.9	96.5	98.9	96.7	99.6		
75	68.8	67.8	69.0	71.0	67.9	69.1	66.0	66.9	64.9	65.9	65.2	65.2	65.7	65.3	66.7	65.5	67.1		
80	38.9	38.7	39.0	40.1	38.3	38.9	37.0	37.5	36.6	37.2	36.9	37.2	37.5	37.5	38.0	37.4	38.5		
85	14.0	14.7	14.1	14.9	13.6	14.3	13.2	13.9	13.2	14.0	13.6	14.3	14.0	14.6	14.1	14.5	14.6		
90	1.85	1.97	2.02	2.06	2.04	2.00	1.95	1.91	1.93	1.92	1.99	1.96	1.96	1.71	1.50	1.32	1.49		
95	0.54	0.54	0.32	1.59	1.84	1.80	1.76	1.74	1.74	1.75	1.82	1.77	1.72	1.24	0.37	0.00	0.04		
100	1.50	1.62	1.65	0.37	0.00	0.61	0.88	1.05	1.08	1.01	0.87	0.51	0.00	0.10	0.94	0.93	0.83		
105	1.33	1.42	1.44	1.34	0.82	0.05	0.04	0.02	0.04	0.05	0.03	0.05	0.08	0.51	0.70	0.73	0.65		
110	1.11	1.11	0.92	0.71	0.43	0.12	0.75	1.16	1.19	1.16	1.02	0.43	0.00	0.00	0.11	0.25	0.28		
115	0.68	0.67	0.57	0.34	0.01	0.30	0.90	0.98	1.02	0.81	0.38	0.29	0.06	0.00	0.00	0.00	0.00		
120	0.07	0.28	0.16	0.00	0.08	0.40	0.77	0.70	0.48	0.16	0.14	0.14	0.13	0.01	0.00	0.00	0.00		
125	0.02	0.00	0.00	0.00	0.05	0.41	0.45	0.25	0.08	0.04	0.03	0.03	0.03	0.03	0.00	0.00	0.00		
130	0.00	0.00	0.00	0.00	0.18	0.33	0.23	0.08	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
135	0.00	0.00	0.00	0.10	0.23	0.21	0.11	0.06	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
140	0.00	0.00	0.11	0.00	0.19	0.12	0.07	0.04	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
145	0.01	0.00	0.00	0.03	0.00	0.07	0.05	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
150	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
155	0.00	0.02	0.00	0.00	0.03	0.03	0.03	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
160	0.00	0.09	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00		
165	0.00	0.01	0.08	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
170	0.00	0.00	0.00	0.06	0.05	0.04	0.03	0.00	0.00	0.01	0.03	0.02	0.03	0.01	0.00	0.00	0.00		
175	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:28 October 2020

γ Range: 0 - 180DEG
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: