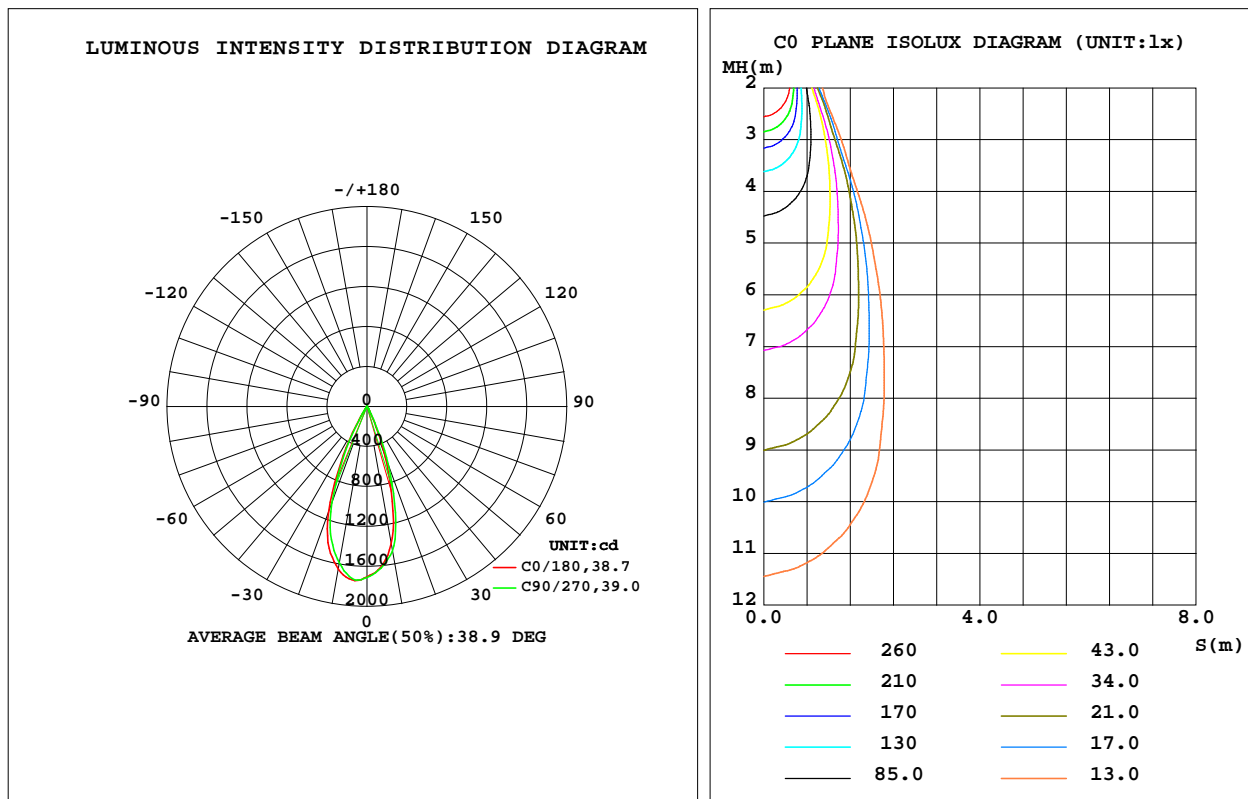


## LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.8V I:0.0533A P:10.70W PF:0.9093 Freq:49.99Hz Lamp Flux:734.64lx1 lm		
NAME: LLS-M60GEXBX0300	TYPE:	WEIGHT:
SPEC.:LLS-M60GEXBX0300-T11NW8B-DC	DIM.: 300*50*45mm	SERIAL No.:
MFR.: COLORS	SUR.:300*50mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 68.66 lm/W			
MODEL	LLS-M60GEXBX0300	I <sub>max</sub> (cd)	1747	S/MH(C0/180)	0.52
NOMINAL POWER(W)	10	LOR(%)	100.0	S/MH(C90/270)	0.66
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	734.64	h UP,DN(C0-180)	0.9,39.8
NOMINAL FLUX(lm)	734.641	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.5,58.9
LAMPS INSIDE	1	h up(%)	1.4	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	220	h down(%)	98.6	CIBSE SHR MAX	0.60



C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2020-09-16

Range: 0 - 180DEG  
Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.950m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

### ZONAL FLUX DIAGRAM:

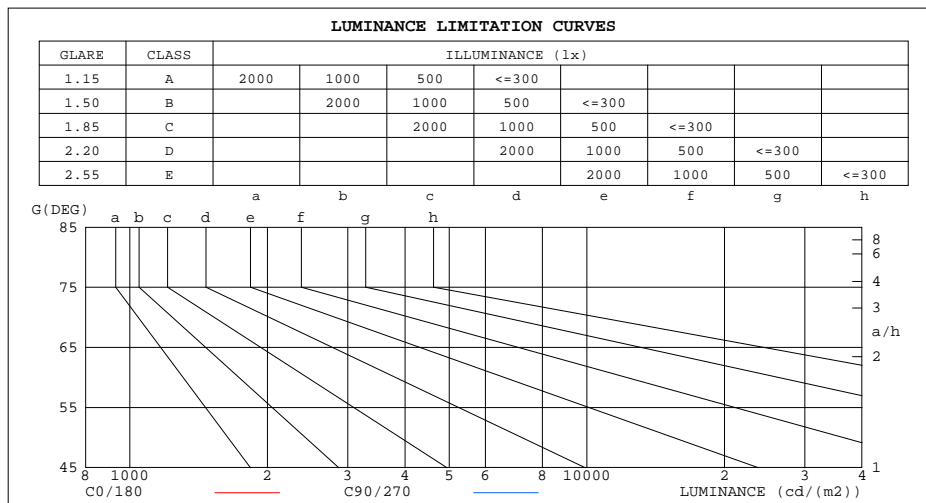
g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
10	1400	1470	1473	1476	1654	1591	1589	1588	0- 10	155.1	155.1	21.1,21.1
20	538.4	626.6	629.5	633.3	1124	1029	1030	1028	10- 20	334.6	489.7	66.7,66.7
30	60.94	65.98	68.45	68.76	216.1	195.9	165.7	193.1	20- 30	189.8	679.5	92.5,92.5
40	15.83	18.88	19.29	19.36	19.85	21.55	21.53	21.54	30- 40	31.82	711.3	96.8,96.8
50	3.737	4.513	4.659	4.716	6.835	6.142	6.124	6.150	40- 50	8.316	719.6	98,98
60	1.507	1.787	1.959	1.916	2.503	1.885	1.813	1.860	50- 60	2.895	722.5	98.4,98.4
70	0.6355	0.6402	0.6223	0.5601	1.022	0.5259	0.4659	0.5098	60- 70	1.166	723.7	98.5,98.5
80	0.5186	0.3073	0.3478	0.2938	1.013	0.1942	0.1000	0.1738	70- 80	0.4930	724.2	98.6,98.6
90	0.3850	0.1134	0.1471	0.0735	0.9297	0.0870	0.0267	0.0735	80- 90	0.3250	724.5	98.6,98.6
100	0.3041	0.0668	0.0736	0.0668	0.8063	0.0337	0.0267	0.0334	90-100	0.2173	724.7	98.7,98.7
110	0.3218	0.0869	0.0668	0.0866	0.5279	0.0267	0.0334	0.0267	100-110	0.1669	724.9	98.7,98.7
120	0.2991	0.1542	0.0868	0.1474	0.0927	0.0267	0.0668	0.0267	110-120	0.1378	725.0	98.7,98.7
130	0.4275	0.4142	0.3198	0.4014	0.1337	0.0935	0.1670	0.0935	120-130	0.1491	725.2	98.7,98.7
140	1.072	1.050	0.9868	1.025	0.4017	0.4342	0.4824	0.4141	130-140	0.3404	725.5	98.8,98.8
150	4.982	4.625	4.517	4.504	1.429	1.570	1.605	1.554	140-150	0.9584	726.5	98.9,98.9
160	13.24	14.05	13.73	13.79	6.201	6.470	6.470	6.398	150-160	2.822	729.3	99.3,99.3
170	18.78	20.04	19.66	19.50	13.52	12.32	12.33	12.21	160-170	3.697	733.0	99.8,99.8
180	18.36	20.05	20.05	19.99	18.28	20.01	20.05	19.86	170-180	1.636	734.6	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:JYH  
 Test Date:2020-09-16

g Range: 0 - 180DEG  
 g Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:10.950m [K=1.0000]  
 Remarks:

### LUMINANCE LIMITATION CURVES

Test:U:220.8V I:0.0533A P:10.70W PF:0.9093 Freq:49.99Hz Lamp Flux:734.64lx1 lm		
NAME: LLS-M60GEXBX0300	TYPE:	WEIGHT:
SPEC.:LLS-M60GEXBX0300-T11NW8B-DC	DIM.: 300*50*45mm	SERIAL No.:
MFR.: COLORS	SUR.:300*50mm	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	342	179
80	199	134
75	147	127
70	124	121
65	117	186
60	201	261
55	264	334
50	388	483
45	661	839

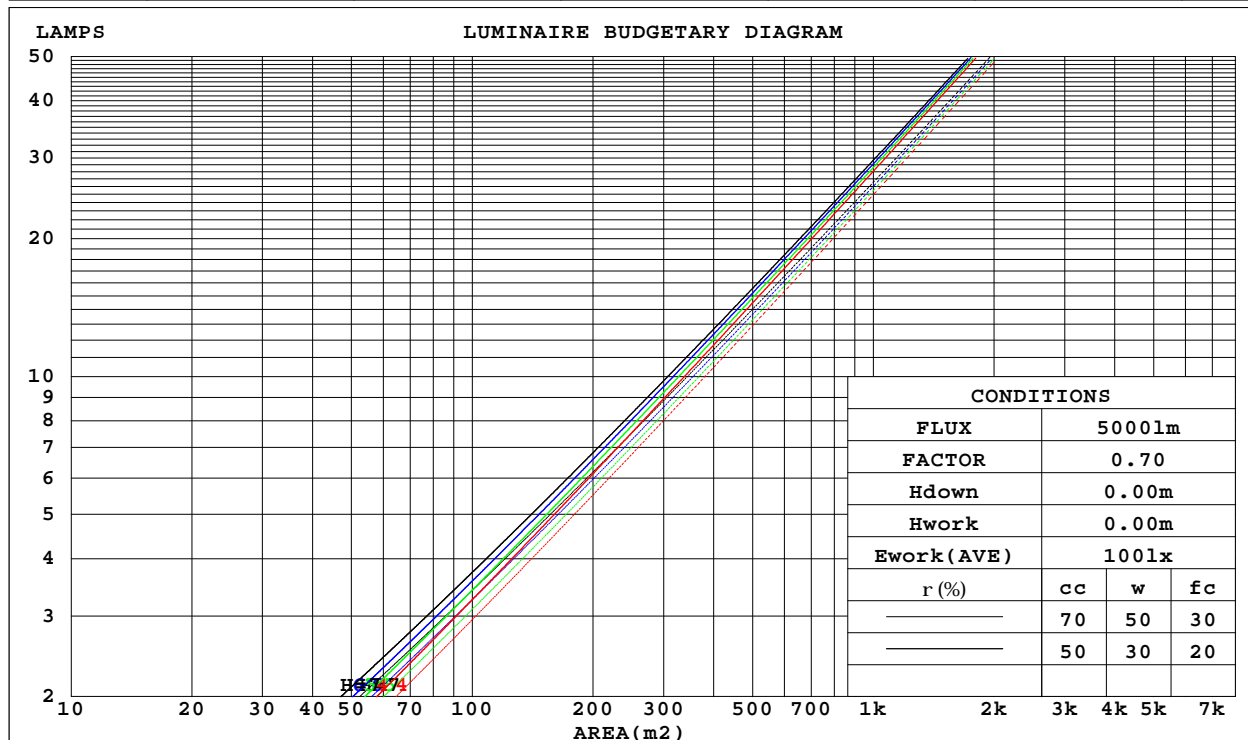
C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:JYH  
 Test Date:2020-09-16

g Range: 0 - 180DEG  
 g Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:10.950m [K=1.0000]  
 Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.8V I:0.0533A P:10.70W PF:0.9093 Freq:49.99Hz Lamp Flux:734.64lx1 lm		
NAME: LLS-M60GEXBX0300	TYPE:	WEIGHT:
SPEC.:LLS-M60GEXBX0300-T11NW8B-DC	DIM.: 300*50*45mm	SERIAL No.:
MFR.: COLORS	SUR.:300*50mm	Shielding Angle:

r <sub>cc</sub>	80%			70%			50%			30%			10%			0
r <sub>w</sub>	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
r <sub>fc</sub>	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															



C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2020-09-16

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.950m [K=1.0000]  
Remarks:

WEC AND CCEC

Test:U:220.8V I:0.0533A P:10.70W PF:0.9093 Freq:49.99Hz Lamp Flux:734.64lx1 lm		
NAME: LLS-M60GEXBX0300	TYPE:	WEIGHT:
SPEC.:LLS-M60GEXBX0300-T11NW8B-DC	DIM.: 300*50*45mm	SERIAL No.:
MFR.: COLORS	SUR.:300*50mm	Shielding Angle:

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.201	.201	.201	.172	.172	.172	.117	.117	.117	.067	.067	.067	.022	.022	.022	
1.0	.180	.168	.157	.154	.144	.136	.105	.099	.094	.061	.057	.055	.019	.018	.018	
2.0	.163	.143	.127	.139	.123	.110	.096	.085	.076	.055	.050	.045	.018	.016	.015	
3.0	.149	.124	.104	.128	.107	.091	.088	.074	.063	.051	.043	.037	.016	.014	.012	
4.0	.137	.109	.088	.118	.094	.076	.081	.066	.054	.047	.038	.032	.015	.013	.010	
5.0	.127	.097	.075	.109	.084	.065	.075	.059	.046	.044	.034	.027	.014	.011	.009	
6.0	.119	.087	.064	.102	.076	.056	.071	.053	.040	.041	.031	.024	.013	.010	.008	
7.0	.112	.079	.056	.096	.069	.049	.067	.048	.035	.039	.028	.021	.012	.009	.007	
8.0	.106	.073	.050	.091	.063	.044	.063	.044	.031	.037	.026	.018	.012	.009	.006	
9.0	.100	.067	.045	.087	.058	.039	.060	.041	.028	.035	.024	.017	.011	.008	.006	
10.0	.096	.063	.041	.083	.054	.036	.057	.038	.025	.033	.023	.015	.011	.007	.005	

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2020-09-16

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.950m [K=1.0000]  
Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.8V I:0.0533A P:10.70W PF:0.9093 Freq:49.99Hz Lamp Flux:734.64lx1 lm										
NAME: LLS-M60GEXBX0300						TYPE:		WEIGHT:		
SPEC.:LLS-M60GEXBX0300-T11NW8B-DC						DIM.: 300*50*45mm		SERIAL No.:		
MFR.: COLORS						SUR.:300*50mm		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	1.5	2.2	1.7	2.4	2.6	2.4	3.2	2.7	3.3	3.5
	3H	1.4	2.1	1.7	2.3	2.6	2.4	3.0	2.6	3.3
	4H	1.4	2.1	1.7	2.3	2.6	2.3	3.0	2.6	3.2
	6H	1.5	2.1	1.8	2.4	2.6	2.3	2.9	2.6	3.2
	8H	1.5	2.1	1.9	2.4	2.7	2.3	2.9	2.6	3.1
	12H	1.6	2.2	2.0	2.5	2.8	2.3	2.8	2.6	3.1
4H	2H	1.4	2.0	1.7	2.3	2.5	2.3	2.9	2.6	3.2
	3H	1.3	1.9	1.7	2.2	2.5	2.2	2.8	2.6	3.1
	4H	1.4	1.9	1.7	2.2	2.5	2.2	2.7	2.6	3.0
	6H	1.5	1.9	1.9	2.3	2.7	2.2	2.7	2.6	3.0
	8H	1.6	2.0	2.0	2.4	2.8	2.2	2.6	2.6	3.0
	12H	1.8	2.2	2.2	2.5	3.0	2.2	2.6	2.6	3.0
8H	4H	1.3	1.7	1.7	2.1	2.5	2.1	2.5	2.5	2.9
	6H	1.4	1.8	1.9	2.2	2.6	2.1	2.5	2.6	2.9
	8H	1.6	1.9	2.1	2.4	2.8	2.1	2.4	2.6	2.9
	12H	1.9	2.2	2.4	2.6	3.1	2.2	2.5	2.7	2.9
12H	4H	1.2	1.6	1.7	2.0	2.4	2.0	2.4	2.5	2.8
	6H	1.4	1.7	1.9	2.1	2.6	2.1	2.4	2.5	2.8
	8H	1.6	1.9	2.1	2.3	2.8	2.1	2.4	2.6	2.8
Variations with the observer position at spacings:										
S = 1.0H	+ 1.9 / - 3.5					+ 2.4 / - 4.3				
1.5H	+ 3.5 / - 3.0					+ 4.2 / - 3.8				
2.0H	+ 2.7 / - 1.6					+ 3.7 / - 2.1				

CIE Pub.117, 734.6 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -1.1)

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2020-09-16

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.950m [K=1.0000]  
Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.8V I:0.0533A P:10.70W PF:0.9093 Freq:49.99Hz Lamp Flux:734.64lx1 lm		
NAME: LLS-M60GEXBX0300	TYPE:	WEIGHT:
SPEC.:LLS-M60GEXBX0300-T11NW8B-DC	DIM.: 300*50*45mm	SERIAL No.:
MFR.: COLORS	SUR.:300*50mm	Shielding Angle:

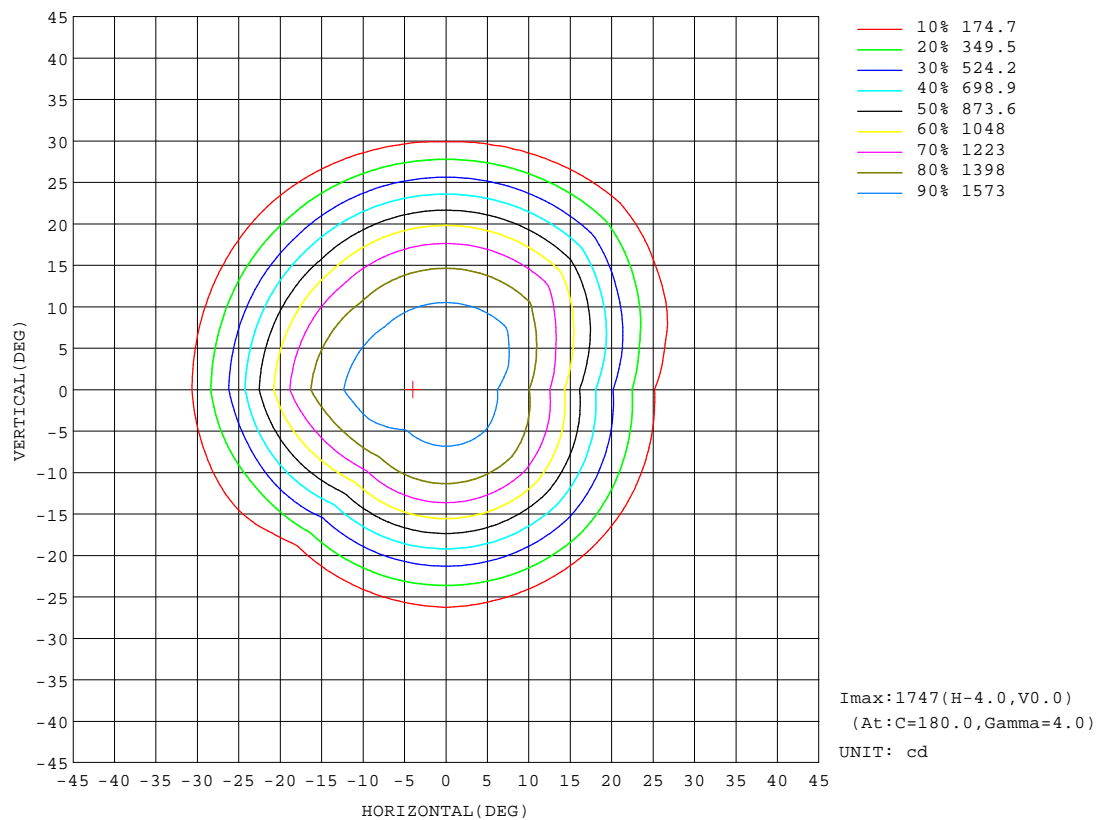
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	90	84	80	89	84	80	88	83	80	77
0.80	97	91	88	96	91	88	95	90	87	84
1.00	101	95	92	100	95	92	98	94	91	87
1.25	104	99	96	103	99	96	101	97	95	91
1.50	107	102	99	105	102	99	103	100	97	93
2.00	109	105	102	108	104	101	105	102	100	94
2.50	111	107	104	109	106	103	106	103	101	95
3.00	112	109	106	110	107	105	107	104	103	96
4.00	114	111	109	112	110	108	108	106	105	97
5.00	115	113	111	113	111	110	109	107	106	98
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:JYH  
 Test Date:2020-09-16

g Range: 0 - 180DEG  
 g Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:10.950m [K=1.0000]  
 Remarks:

### ISOCANDELA DIAGRAM

Test:U:220.8V I:0.0533A P:10.70W PF:0.9093 Freq:49.99Hz Lamp Flux:734.64lx1 lm		
NAME: LLS-M60GEXBX0300	TYPE:	WEIGHT:
SPEC.:LLS-M60GEXBX0300-T11NW8B-DC	DIM.: 300*50*45mm	SERIAL No.:
MFR.: COLORS	SUR.:300*50mm	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2020-09-16

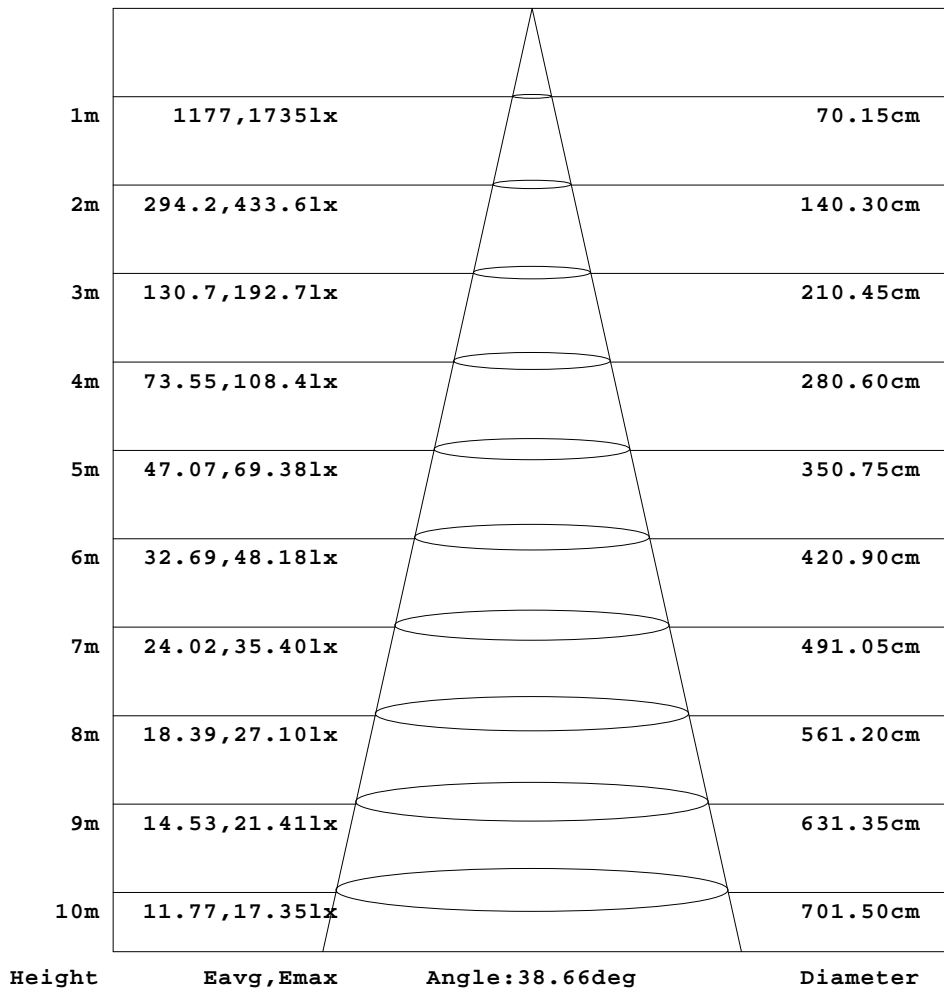
Range: 0 - 180DEG  
Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.950m [K=1.0000]  
Remarks:



### AAI Figure

Test:U:220.8V I:0.0533A P:10.70W PF:0.9093 Freq:49.99Hz Lamp Flux:734.64lx1 lm		
NAME: LLS-M60GEXBX0300	TYPE:	WEIGHT:
SPEC.:LLS-M60GEXBX0300-T11NW8B-DC	DIM.: 300*50*45mm	SERIAL No.:
MFR.: COLORS	SUR.:300*50mm	Shielding Angle:

Flux out:489.7 lm



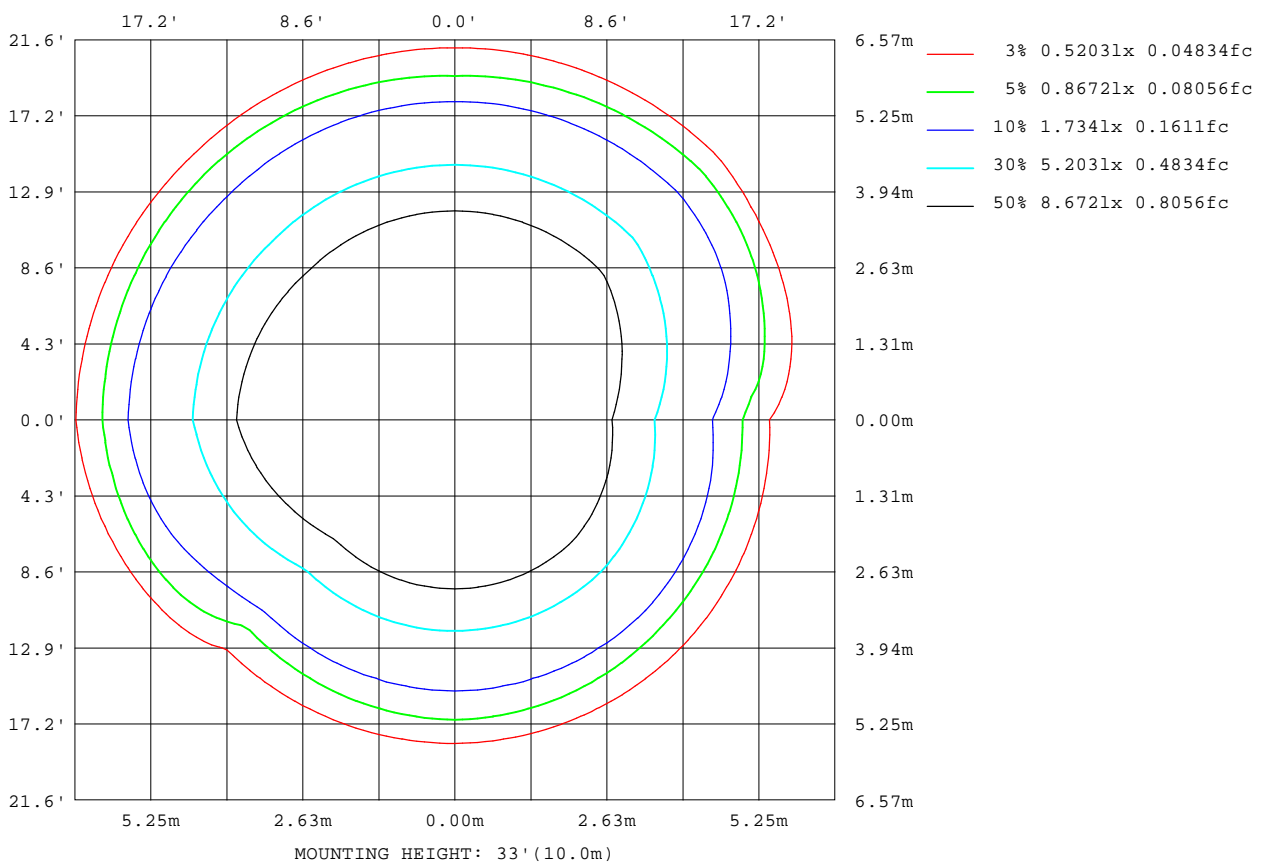
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2020-09-16

g Range: 0 - 180DEG  
Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.950m [K=1.0000]  
Remarks:

### ISOLUX DIAGRAM

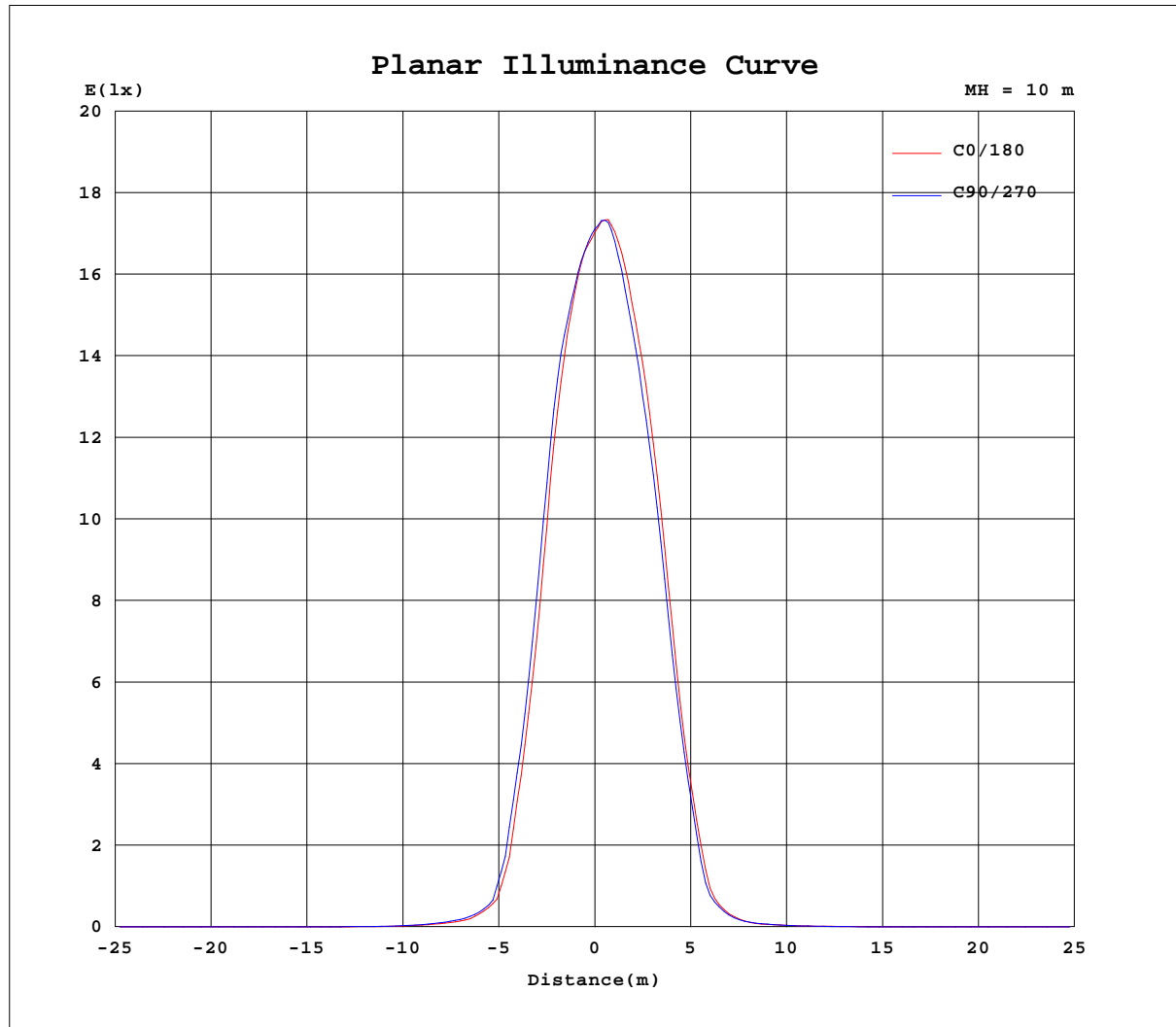
Test:U:220.8V I:0.0533A P:10.70W PF:0.9093 Freq:49.99Hz Lamp Flux:734.64lx1 lm		
NAME: LLS-M60GEXBX0300	TYPE:	WEIGHT:
SPEC.:LLS-M60GEXBX0300-T11NW8B-DC	DIM.: 300*50*45mm	SERIAL No.:
MFR.: COLORS	SUR.:300*50mm	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:JYH  
 Test Date:2020-09-16

Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:10.950m [K=1.0000]  
 Remarks:

### Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: JYH  
Test Date: 2020-09-16

deg Range: 0 - 180DEG  
deg Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity: 65.0%  
Test Distance: 10.950m [K=1.0000]  
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.8V I:0.0533A P:10.70W PF:0.9093 Freq:49.99Hz Lamp Flux:734.64lx1 lm		
NAME: LLS-M60GEXBX0300	TYPE:	WEIGHT:
SPEC.:LLS-M60GEXBX0300-T11NW8B-DC	DIM.: 300*50*45mm	SERIAL No.:
MFR.: COLORS	SUR.:300*50mm	Shielding Angle:

Table--1

UNIT: cd

C(DEG) g (DEG)	0	45	90	135	180	225	270	315										
0	1704	1713	1711	1712	1704	1713	1711	1712										
5	1614	1626	1624	1624	1740	1730	1728	1728										
10	1400	1470	1473	1476	1654	1591	1589	1588										
15	984	1101	1103	1106	1469	1382	1379	1377										
20	538	627	629	633	1124	1029	1030	1028										
25	182	230	233	234	627	574	574	569										
30	60.9	66.0	68.4	68.8	216	196	166	193										
35	26.9	33.5	34.1	34.2	58.9	53.7	53.4	53.2										
40	15.8	18.9	19.3	19.4	19.8	21.5	21.5	21.5										
45	7.02	8.59	8.90	8.94	11.8	11.7	11.7	11.7										
50	3.74	4.51	4.66	4.72	6.84	6.14	6.12	6.15										
55	2.27	2.69	2.87	2.88	3.93	3.31	3.25	3.26										
60	1.51	1.79	1.96	1.92	2.50	1.88	1.81	1.86										
65	0.74	1.15	1.18	1.21	1.68	1.10	1.06	1.09										
70	0.64	0.64	0.62	0.56	1.02	0.53	0.47	0.51										
75	0.57	0.45	0.49	0.43	1.07	0.25	0.24	0.23										
80	0.52	0.31	0.35	0.29	1.01	0.19	0.10	0.17										
85	0.45	0.24	0.23	0.19	0.97	0.13	0.07	0.11										
90	0.39	0.11	0.15	0.07	0.93	0.09	0.03	0.07										
95	0.33	0.09	0.09	0.07	0.89	0.05	0.03	0.04										
100	0.30	0.07	0.07	0.07	0.81	0.03	0.03	0.03										
105	0.31	0.08	0.07	0.07	0.65	0.03	0.03	0.03										
110	0.32	0.09	0.07	0.09	0.53	0.03	0.03	0.03										
115	0.33	0.13	0.07	0.10	0.44	0.03	0.04	0.03										
120	0.30	0.15	0.09	0.15	0.09	0.03	0.07	0.03										
125	0.30	0.25	0.22	0.25	0.07	0.05	0.10	0.03										
130	0.43	0.41	0.32	0.40	0.13	0.09	0.17	0.09										
135	0.60	0.61	0.52	0.59	0.23	0.24	0.29	0.22										
140	1.07	1.05	0.99	1.02	0.40	0.43	0.48	0.41										
145	2.17	2.00	1.93	1.97	0.74	0.76	0.82	0.75										
150	4.98	4.63	4.52	4.50	1.43	1.57	1.61	1.55										
155	8.89	8.95	8.73	8.79	3.35	3.58	3.59	3.53										
160	13.2	14.0	13.7	13.8	6.20	6.47	6.47	6.40										
165	16.4	18.0	17.6	17.7	9.94	9.57	9.57	9.48										
170	18.8	20.0	19.7	19.5	13.5	12.3	12.3	12.2										
175	18.4	20.3	20.2	20.2	15.9	15.3	15.3	15.2										
180	18.4	20.1	20.1	20.0	18.3	20.0	20.1	19.9										

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2020-09-16

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.950m [K=1.0000]  
Remarks: