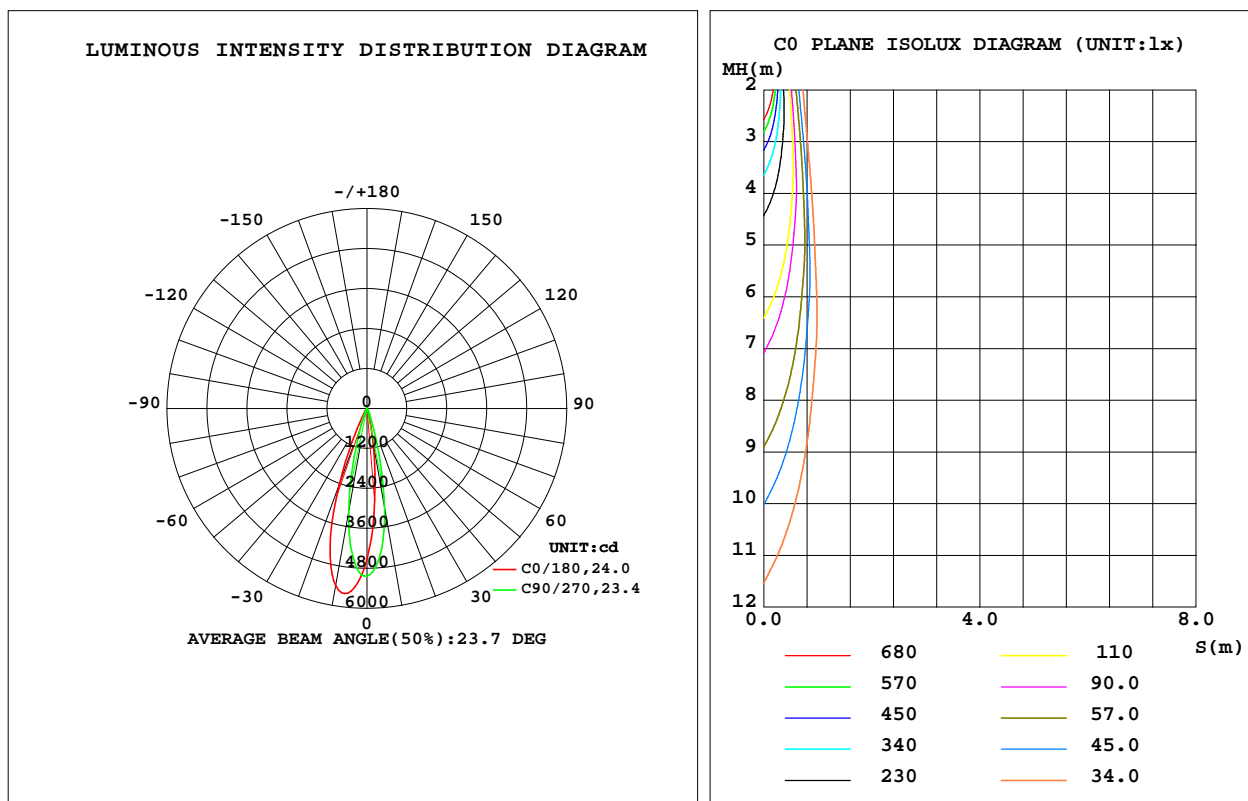


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.6V I:0.0588A P:11.96W PF:0.9213 Freq:49.99Hz Lamp Flux:1097.31x1 lm		
NAME: LLS-M60SEXBS35WB	TYPE:	WEIGHT:
SPEC.:LLS-M60SEXBS35WB-T12NW9D-DC	DIM.: 300*35*35mm	SERIAL No.:
MFR.: COLORS	SUR.:300*35mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 91.77 lm/W			
MODEL	LLS-M60SEXBS35WB	I _{max} (cd)	5598	S/MH(C0/180)	0.22
NOMINAL POWER(W)	12	LOR(%)	100.0	S/MH(C90/270)	0.39
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	1097.3	h UP,DN(C0-180)	0.8,38.6
NOMINAL FLUX(lm)	1097.31	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.4,60.1
LAMPS INSIDE	1	h up(%)	1.3	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	220	h down(%)	98.7	CIBSE SHR MAX	1.00



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2020-10-12

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:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

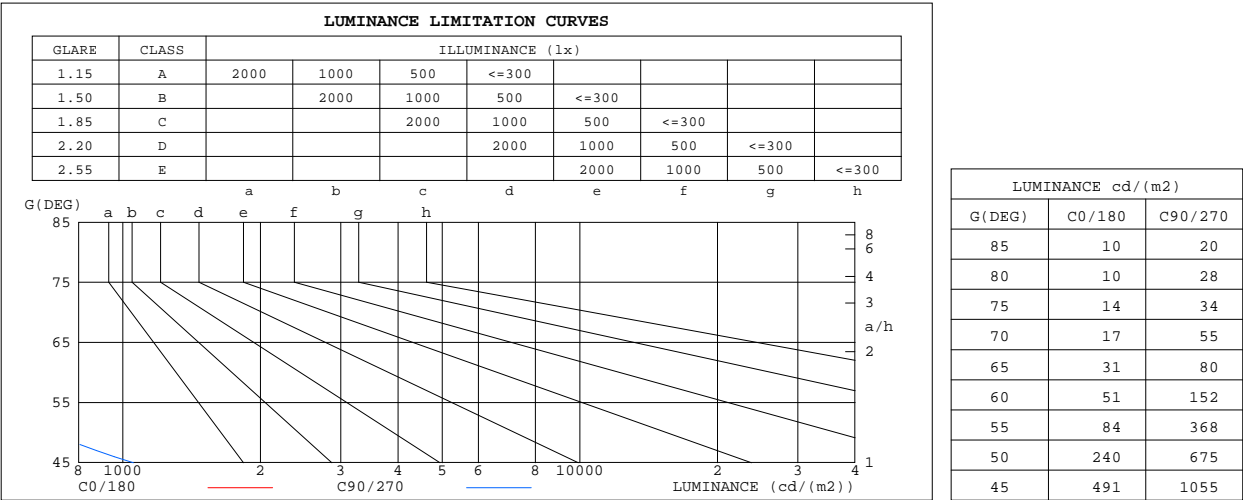
g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
10	1056	1713	3042	4435	5407	4523	3202	1929	0- 10	378.3	378.3	34.5,34.5
20	160.1	218.6	442.5	1256	2456	1221	507.0	206.3	10- 20	496.3	874.6	79.7,79.7
30	40.22	58.69	107.1	194.0	265.3	144.6	85.57	53.11	20- 30	153.9	1028	93.7,93.7
40	9.099	12.38	24.22	49.54	60.05	40.91	24.78	13.71	30- 40	38.65	1067	97.3,97.3
50	2.312	3.790	6.506	10.18	14.10	9.414	6.813	4.258	40- 50	11.97	1079	98.3,98.3
60	0.3815	0.4263	1.136	2.781	3.914	2.573	1.283	0.4950	50- 60	3.444	1083	98.7,98.7
70	0.0872	0.0802	0.2809	0.3935	0.4472	0.3943	0.1935	0.1541	60- 70	0.7000	1083	98.7,98.7
80	0.0267	0	0.0735	0.0730	0.1001	0.1138	0.0067	0.0470	70- 80	0.1413	1083	98.7,98.7
90	0.0134	0.0067	0.0067	0	0.0134	0.0267	0.0067	0.0200	80- 90	0.0268	1083	98.7,98.7
100	0.0134	0.0200	0.0067	0.0133	0.0134	0.0134	0.0200	0.0134	90-100	0.0123	1083	98.7,98.7
110	0.0134	0.0335	0.0067	0.0200	0.0200	0.0134	0.0200	0.0134	100-110	0.0162	1083	98.7,98.7
120	0.0998	0.1137	0.0067	0.0468	0.0401	0.0134	0.0603	0.0398	110-120	0.0290	1083	98.7,98.7
130	0.6657	0.4483	0.1669	0.1539	0.0869	0.0867	0.1937	0.2796	120-130	0.1138	1084	98.8,98.8
140	2.518	1.677	0.8205	0.5826	0.2949	0.3786	0.7349	1.238	130-140	0.4306	1084	98.8,98.8
150	9.133	5.339	2.699	1.950	1.151	1.465	2.148	4.167	140-150	1.229	1085	98.9,98.9
160	38.71	21.81	8.899	6.545	3.672	4.769	7.070	17.35	150-160	3.361	1089	99.2,99.2
170	45.90	38.71	25.04	25.74	18.56	20.81	21.08	28.95	160-170	5.823	1094	99.7,99.7
180	33.98	33.97	32.92	34.83	34.08	34.24	32.58	34.75	170-180	2.864	1097	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:2020-10-12

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:220.6V I:0.0588A P:11.96W PF:0.9213 Freq:49.99Hz Lamp Flux:1097.31x1 lm		
NAME: LLS-M60SEXBS35WB	TYPE:	WEIGHT:
SPEC.:LLS-M60SEXBS35WB-T12NW9D-DC	DIM.: 300*35*35mm	SERIAL No.:
MFR.: COLORS	SUR.:300*35mm	Shielding Angle:



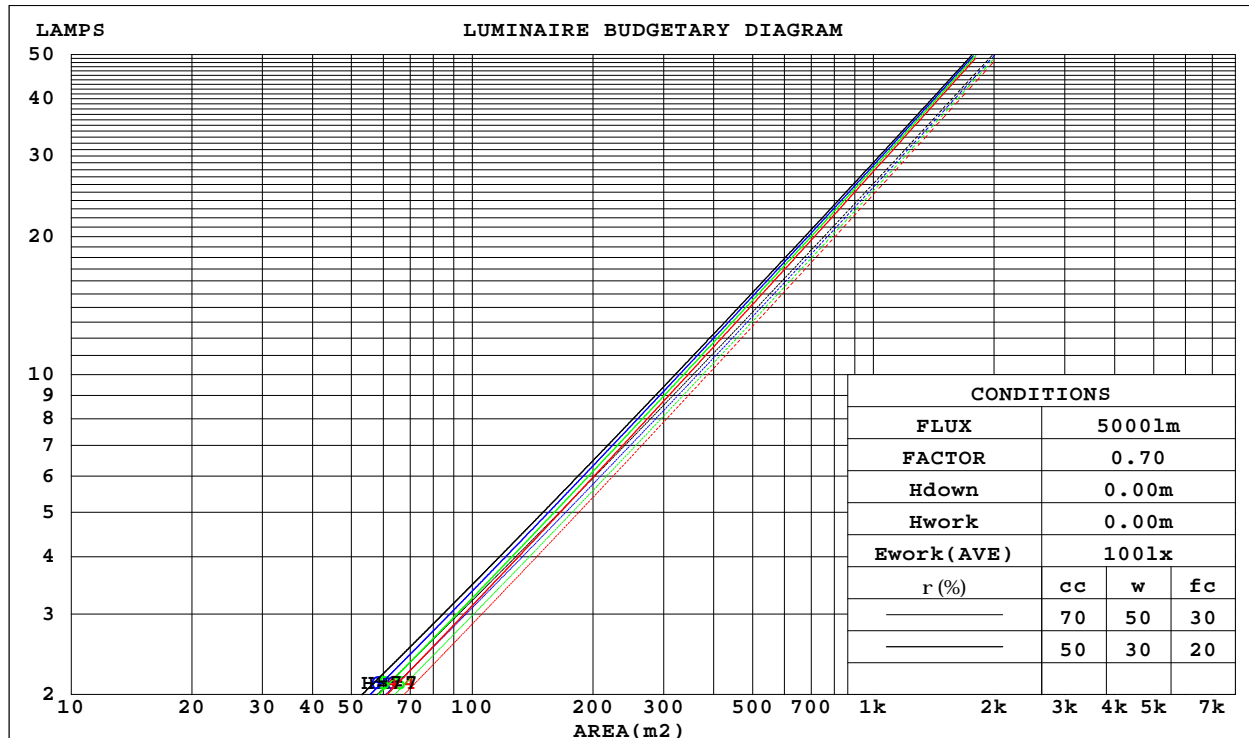
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2020-10-12

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:220.6V I:0.0588A P:11.96W PF:0.9213 Freq:49.99Hz Lamp Flux:1097.31x1 lm		
NAME: LLS-M60SEXBS35WB	TYPE:	WEIGHT:
SPEC.:LLS-M60SEXBS35WB-T12NW9D-DC	DIM.: 300*35*35mm	SERIAL No.:
MFR.: COLORS	SUR.:300*35mm	Shielding Angle:

r _{cc}	80%			70%			50%			30%			10%			0
r _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
r _{fc}	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:2020-10-12

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:220.6V I:0.0588A P:11.96W PF:0.9213 Freq:49.99Hz Lamp Flux:1097.31x1 lm		
NAME: LLS-M60SEXBS35WB	TYPE:	WEIGHT:
SPEC.:LLS-M60SEXBS35WB-T12NW9D-DC	DIM.: 300*35*35mm	SERIAL No.:
MFR.: COLORS	SUR.:300*35mm	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						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.138	.078	.025	.131	.075	.024	.118	.068	.022	.106	.061	.020	.095	.055	.018	
2.0	.128	.070	.021	.122	.067	.021	.111	.062	.019	.101	.057	.018	.092	.052	.016	
3.0	.119	.063	.019	.114	.061	.018	.105	.057	.017	.097	.053	.016	.089	.049	.015	
4.0	.112	.058	.017	.108	.056	.017	.100	.053	.016	.093	.050	.015	.086	.047	.014	
5.0	.105	.054	.016	.102	.052	.015	.095	.050	.015	.089	.047	.014	.083	.044	.013	
6.0	.100	.050	.014	.097	.049	.014	.091	.047	.014	.085	.044	.013	.080	.042	.013	
7.0	.095	.047	.013	.092	.046	.013	.087	.044	.013	.082	.042	.012	.078	.040	.012	
8.0	.090	.044	.012	.088	.043	.012	.083	.042	.012	.079	.040	.012	.075	.039	.011	
9.0	.086	.042	.012	.084	.041	.012	.080	.040	.011	.076	.038	.011	.073	.037	.011	
10.0	.083	.040	.011	.081	.039	.011	.077	.038	.011	.074	.037	.010	.071	.036	.010	

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	.200	.200	.200	.171	.171	.171	.117	.117	.117	.067	.067	.067	.021	.021	.021	
1.0	.178	.167	.158	.152	.144	.136	.104	.099	.094	.060	.057	.055	.019	.018	.018	
2.0	.160	.142	.128	.137	.123	.110	.094	.085	.077	.054	.049	.045	.017	.016	.015	
3.0	.145	.123	.105	.125	.106	.091	.086	.074	.064	.049	.043	.038	.016	.014	.012	
4.0	.133	.108	.089	.114	.093	.077	.078	.065	.054	.045	.038	.032	.015	.012	.011	
5.0	.122	.096	.076	.105	.083	.066	.072	.058	.046	.042	.034	.028	.014	.011	.009	
6.0	.114	.086	.065	.098	.074	.057	.067	.052	.040	.039	.031	.024	.013	.010	.008	
7.0	.106	.077	.057	.091	.067	.050	.063	.047	.035	.037	.028	.021	.012	.009	.007	
8.0	.100	.071	.051	.086	.061	.044	.059	.043	.031	.034	.025	.019	.011	.008	.006	
9.0	.094	.065	.046	.081	.056	.040	.056	.040	.028	.033	.023	.017	.011	.008	.006	
10.0	.089	.060	.041	.077	.052	.036	.053	.037	.026	.031	.022	.015	.010	.007	.005	

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2020-10-12

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:220.6V I:0.0588A P:11.96W PF:0.9213 Freq:49.99Hz Lamp Flux:1097.31x1 lm											
NAME: LLS-M60SEXBS35WB					TYPE:			WEIGHT:			
SPEC.:LLS-M60SEXBS35WB-T12NW9D-DC					DIM.: 300*35*35mm			SERIAL No.:			
MFR.: COLORS					SUR.:300*35mm			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	2H	-3.6	-2.9	-3.4	-2.8	-2.6	0.8	1.5	1.0	1.6	1.8
	3H	-3.7	-3.1	-3.5	-2.9	-2.7	0.7	1.3	0.9	1.5	1.7
	4H	-3.8	-3.2	-3.5	-3.0	-2.8	0.6	1.2	0.9	1.4	1.6
	6H	-3.9	-3.3	-3.6	-3.1	-2.8	0.5	1.1	0.8	1.3	1.6
	8H	-3.9	-3.4	-3.6	-3.1	-2.9	0.5	1.0	0.8	1.3	1.5
	12H	-4.0	-3.5	-3.7	-3.2	-2.9	0.4	0.9	0.7	1.2	1.5
4H	2H	-3.8	-3.2	-3.5	-3.0	-2.7	0.6	1.2	0.9	1.4	1.6
	3H	-3.9	-3.4	-3.6	-3.2	-2.9	0.4	0.9	0.8	1.2	1.5
	4H	-4.0	-3.6	-3.7	-3.3	-2.9	0.3	0.8	0.7	1.1	1.4
	6H	-4.1	-3.7	-3.8	-3.4	-3.0	0.2	0.6	0.6	1.0	1.3
	8H	-4.2	-3.8	-3.8	-3.5	-3.1	0.2	0.6	0.6	0.9	1.3
	12H	-4.3	-3.9	-3.8	-3.5	-3.1	0.1	0.5	0.5	0.9	1.3
8H	4H	-4.2	-3.8	-3.8	-3.5	-3.1	0.2	0.5	0.6	0.9	1.3
	6H	-4.3	-4.0	-3.9	-3.6	-3.2	0.1	0.4	0.5	0.8	1.2
	8H	-4.4	-4.1	-3.9	-3.7	-3.2	-0.0	0.3	0.5	0.7	1.2
	12H	-4.4	-4.2	-4.0	-3.7	-3.2	-0.1	0.2	0.4	0.6	1.1
12H	4H	-4.3	-3.9	-3.8	-3.5	-3.1	0.1	0.5	0.5	0.8	1.3
	6H	-4.4	-4.1	-3.9	-3.7	-3.2	-0.0	0.3	0.5	0.7	1.2
	8H	-4.4	-4.2	-4.0	-3.7	-3.2	-0.1	0.2	0.4	0.6	1.1
Variations with the observer position at spacings:											
S = 1.0H	+ 2.6 / -12.3					+ 4.4 / -10.1					
1.5H	+ 3.6 / - 7.8					+ 6.2 / - 8.7					
2.0H	+ 5.7 / - 9.3					+ 6.1 / -10.9					

CIE Pub.117, 1097 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.3)

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2020-10-12

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:220.6V I:0.0588A P:11.96W PF:0.9213 Freq:49.99Hz Lamp Flux:1097.31x1 lm		
NAME: LLS-M60SEXBS35WB	TYPE:	WEIGHT:
SPEC.:LLS-M60SEXBS35WB-T12NW9D-DC	DIM.: 300*35*35mm	SERIAL No.:
MFR.: COLORS	SUR.:300*35mm	Shielding Angle:

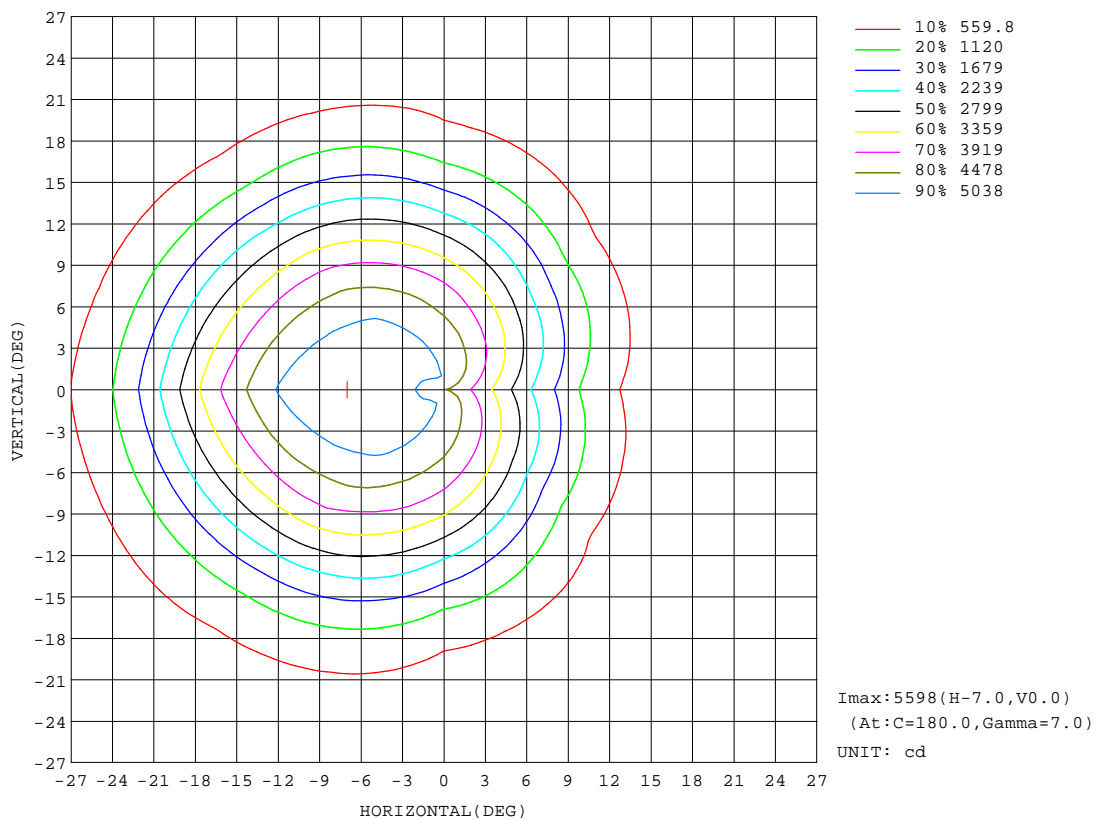
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	90	84	81	89	84	80	89	83	80	77
0.80	97	92	88	96	91	88	95	91	88	84
1.00	101	96	92	100	95	92	98	95	91	88
1.25	104	100	97	103	99	96	101	98	95	91
1.50	107	103	100	106	102	99	103	100	98	93
2.00	109	105	102	108	104	102	105	102	100	95
2.50	111	107	104	109	106	103	106	103	101	95
3.00	112	109	106	110	107	105	107	105	103	96
4.00	114	111	109	112	110	108	108	106	105	98
5.00	115	113	112	113	111	110	109	108	106	99
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:2020-10-12

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:220.6V I:0.0588A P:11.96W PF:0.9213 Freq:49.99Hz Lamp Flux:1097.31x1 lm		
NAME: LLS-M60SEXBS35WB	TYPE:	WEIGHT:
SPEC.:LLS-M60SEXBS35WB-T12NW9D-DC	DIM.: 300*35*35mm	SERIAL No.:
MFR.: COLORS	SUR.:300*35mm	Shielding Angle:



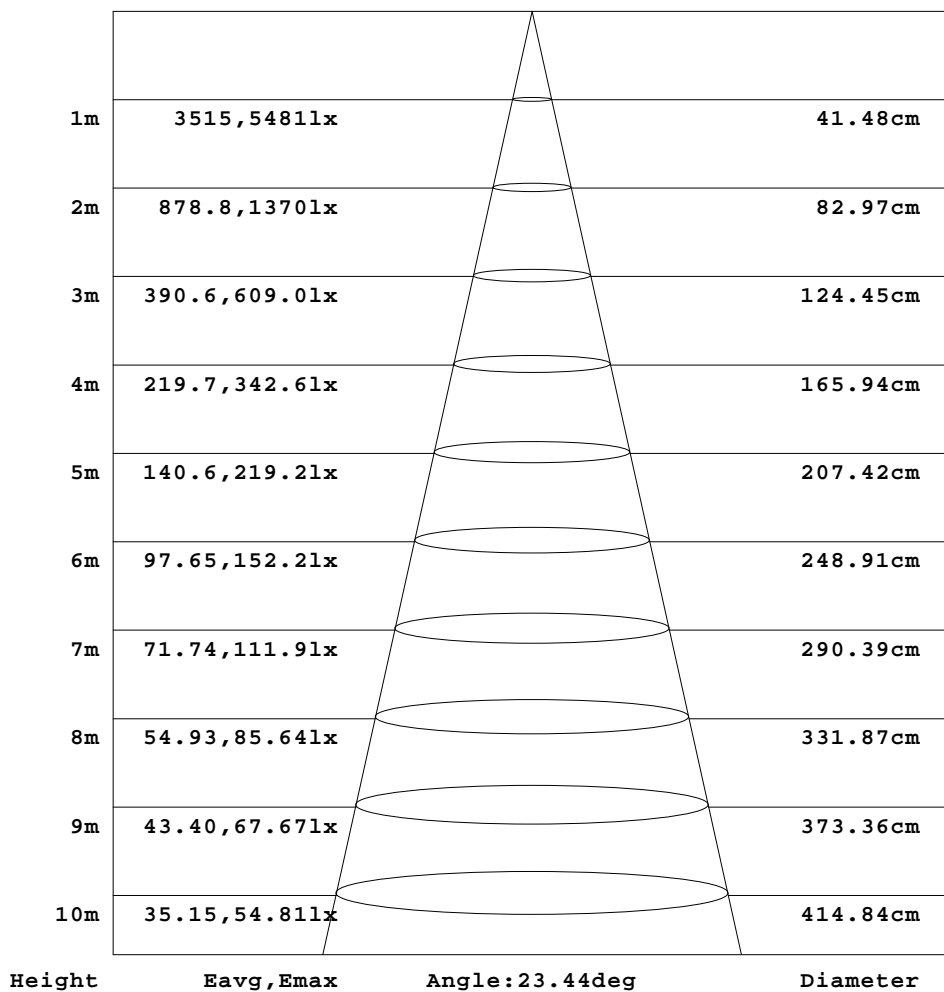
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2020-10-12

deg 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:220.6V I:0.0588A P:11.96W PF:0.9213 Freq:49.99Hz Lamp Flux:1097.31x1 lm		
NAME: LLS-M60SEXBS35WB	TYPE:	WEIGHT:
SPEC.:LLS-M60SEXBS35WB-T12NW9D-DC	DIM.: 300*35*35mm	SERIAL No.:
MFR.: COLORS	SUR.:300*35mm	Shielding Angle:

Flux out:499.0 lm



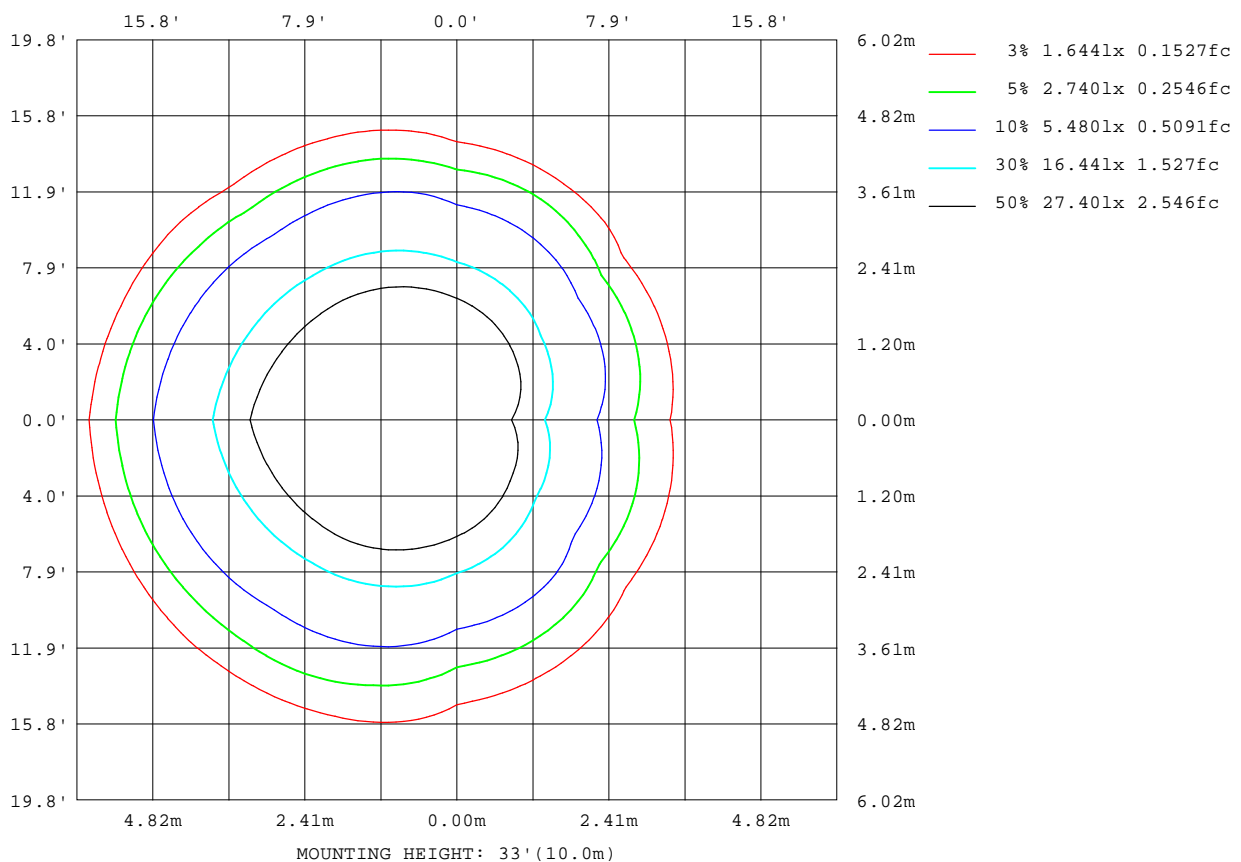
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2020-10-12

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:

ISOLUX DIAGRAM

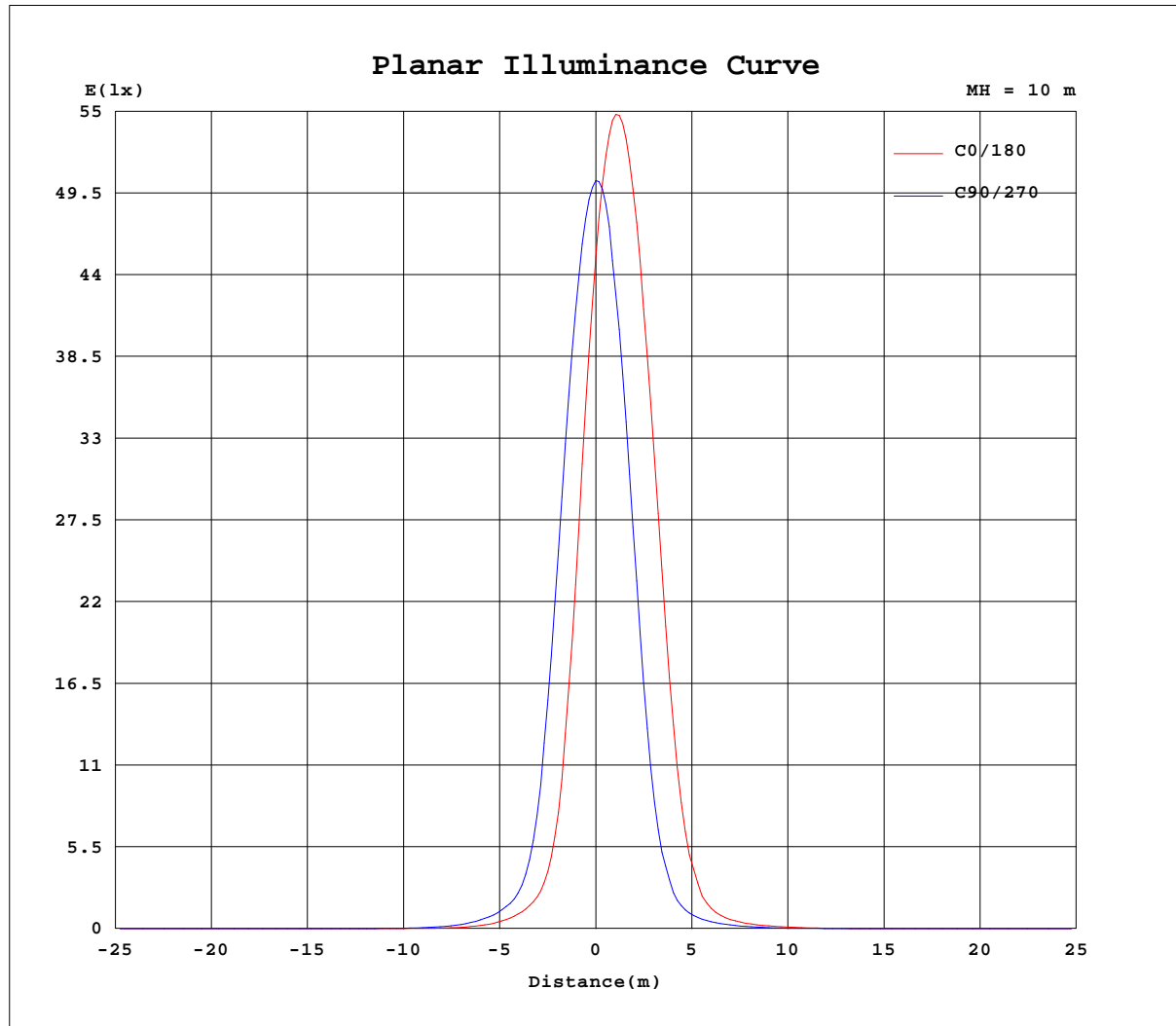
Test:U:220.6V I:0.0588A P:11.96W PF:0.9213 Freq:49.99Hz Lamp Flux:1097.31x1 lm		
NAME: LLS-M60SEXBS35WB	TYPE:	WEIGHT:
SPEC.:LLS-M60SEXBS35WB-T12NW9D-DC	DIM.: 300*35*35mm	SERIAL No.:
MFR.: COLORS	SUR.:300*35mm	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JYH
Test Date: 2020-10-12

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:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JYH
Test Date: 2020-10-12

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:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.6V I:0.0588A P:11.96W PF:0.9213 Freq:49.99Hz Lamp Flux:1097.31x1 lm		
NAME: LLS-M60SEXBS35WB	TYPE:	WEIGHT:
SPEC.:LLS-M60SEXBS35WB-T12NW9D-DC	DIM.: 300*35*35mm	SERIAL No.:
MFR.: COLORS	SUR.:300*35mm	Shielding Angle:

Table--1

UNIT: cd

C(DEC) g (DEC)	0	45	90	135	180	225	270	315										
0	4522	4894	5035	4930	4522	4894	5035	4930										
5	2753	3559	4450	5195	5501	5249	4548	3716										
10	1056	1713	3042	4435	5407	4523	3202	1929										
15	346	551	1388	2918	4274	2952	1497	635										
20	160	219	443	1256	2456	1221	507	206										
25	83.4	117	200	455	877	375	172	97.2										
30	40.2	58.7	107	194	265	145	85.6	53.1										
35	18.5	27.6	53.1	102	114	74.2	47.3	28.9										
40	9.10	12.4	24.2	49.5	60.0	40.9	24.8	13.7										
45	5.21	7.25	11.2	21.9	31.3	20.4	11.3	7.65										
50	2.31	3.79	6.51	10.2	14.1	9.41	6.81	4.26										
55	0.72	1.33	3.17	5.81	7.16	5.67	3.59	1.69										
60	0.38	0.43	1.14	2.78	3.91	2.57	1.28	0.50										
65	0.19	0.22	0.51	0.85	1.52	0.81	0.39	0.30										
70	0.09	0.08	0.28	0.39	0.45	0.39	0.19	0.15										
75	0.05	0.01	0.13	0.19	0.23	0.23	0.07	0.09										
80	0.03	0.00	0.07	0.07	0.10	0.11	0.01	0.05										
85	0.01	0.00	0.03	0.00	0.02	0.07	0.01	0.02										
90	0.01	0.01	0.01	0.00	0.01	0.03	0.01	0.02										
95	0.01	0.01	0.01	0.00	0.01	0.02	0.01	0.01										
100	0.01	0.02	0.01	0.01	0.01	0.01	0.02	0.01										
105	0.01	0.02	0.01	0.01	0.02	0.01	0.02	0.01										
110	0.01	0.03	0.01	0.02	0.02	0.01	0.02	0.01										
115	0.02	0.07	0.01	0.03	0.02	0.01	0.03	0.01										
120	0.10	0.11	0.01	0.05	0.04	0.01	0.06	0.04										
125	0.28	0.21	0.08	0.09	0.05	0.01	0.10	0.10										
130	0.67	0.45	0.17	0.15	0.09	0.09	0.19	0.28										
135	1.36	0.91	0.39	0.29	0.16	0.15	0.37	0.63										
140	2.52	1.68	0.82	0.58	0.29	0.38	0.73	1.24										
145	4.53	2.97	1.52	1.11	0.60	0.79	1.29	2.27										
150	9.13	5.34	2.70	1.95	1.15	1.46	2.15	4.17										
155	20.8	10.5	4.69	3.45	2.03	2.56	3.62	8.56										
160	38.7	21.8	8.90	6.55	3.67	4.77	7.07	17.4										
165	48.2	34.9	16.8	14.0	7.89	10.6	13.8	26.3										
170	45.9	38.7	25.0	25.7	18.6	20.8	21.1	29.0										
175	35.4	34.9	29.5	31.8	30.1	28.3	25.5	28.7										
180	34.0	34.0	32.9	34.8	34.1	34.2	32.6	34.7										

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2020-10-12

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: