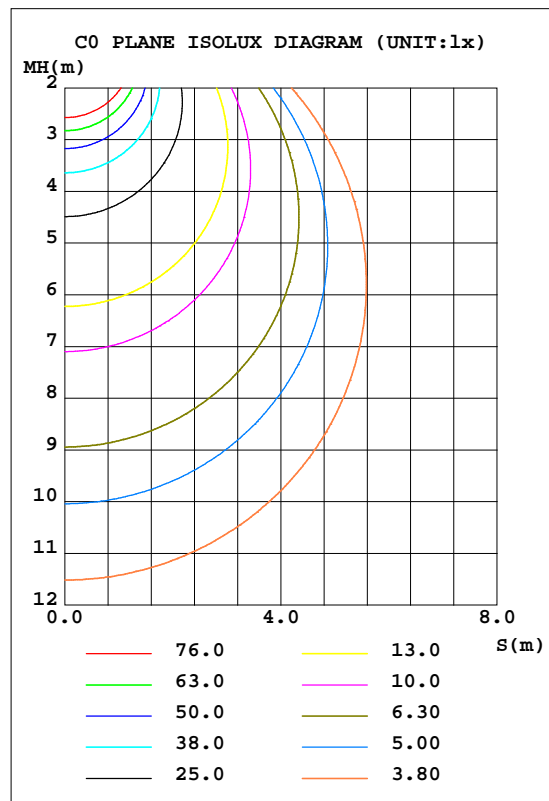
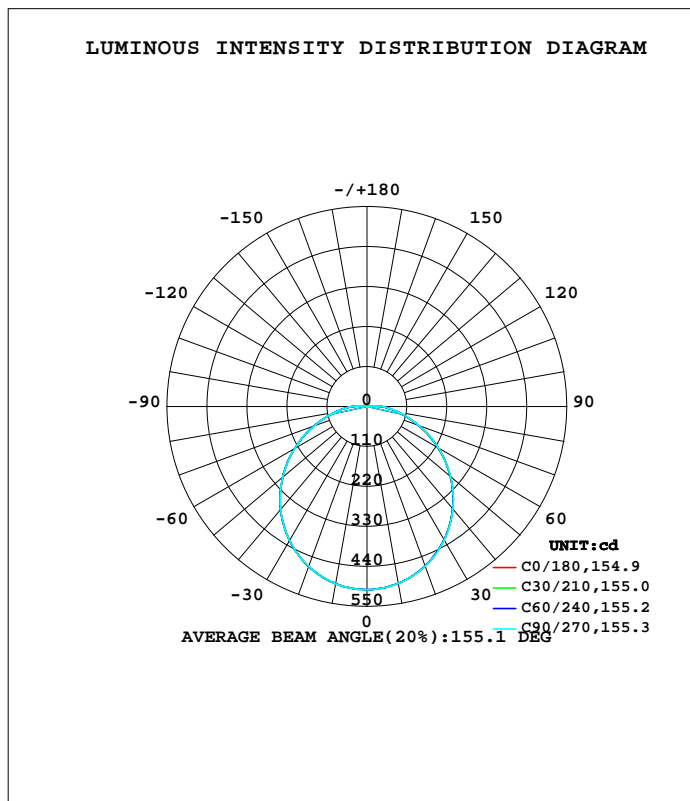


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.91V I:0.1787A P:20.308W PF:0.9478 Freq:59.98Hz Lamp Flux:1550.8x1 lm		
NAME: DLS8-MCT	TYPE:	WEIGHT:
SPEC.:20W	DIM.:	SERIAL No.:
MFR.: LiBo	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 76.36 lm/W
MODEL	DLS8-MCT	I <sub>max</sub> (cd)	504.1	S/MH(C0/180)	1.26	
NOMINAL POWER(W)	20	LOR(%)	100.0	S/MH(C90/270)	1.26	
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1550.8	h UP, DN(C0-180)	1.2,48.8	
NOMINAL FLUX(lm)	1550.8	CIE CLASS	DIRECT	h UP, DN(C180-360)	1.2,48.9	
LAMPS INSIDE	1	h up(%)	2.4	CIBSE SHR NOM	1.25	
TEST VOLTAGE(V)	120	h down(%)	97.6	CIBSE SHR MAX	1.35	



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2020-05-28

g Range: 0 - 180DEG  
 g Interval: 0.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.402  
 Humidity:65.0%  
 Test Distance:3.010m [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	494.2	494.3	494.5	494.8	494.9	494.6	495.1	494.4	0- 10	47.66	47.66	3.07,3.07
20	466.7	467.1	467.6	468.0	468.5	468.0	468.3	467.4	10- 20	136.4	184.1	11.9,11.9
30	423.6	424.4	424.7	425.4	425.8	425.4	425.9	424.2	20- 30	206.6	390.7	25.2,25.2
40	366.7	367.9	368.0	369.2	369.6	368.9	369.6	367.3	30- 40	249.1	639.8	41.3,41.3
50	299.3	300.7	300.7	302.2	303.1	302.2	302.5	300.1	40- 50	259.2	899.0	58,58
60	225.1	226.4	226.4	228.4	229.3	228.3	228.3	226.0	50- 60	236.8	1136	73.2,73.2
70	149.3	151.1	150.8	153.2	153.6	152.0	152.7	150.1	60- 70	187.4	1323	85.3,85.3
80	84.07	86.99	86.23	88.38	87.22	86.55	87.34	85.14	70- 80	124.1	1447	93.3,93.3
90	37.76	38.18	40.36	38.82	39.30	39.21	39.48	38.07	80- 90	66.64	1514	97.6,97.6
100	11.39	3.638	1.414	3.703	5.548	1.694	1.169	3.094	90-100	21.36	1535	99,99
110	3.198	2.329	2.359	2.154	3.213	2.037	2.177	1.959	100-110	2.561	1538	99.2,99.2
120	4.190	3.341	3.715	3.213	4.325	3.393	3.808	3.171	110-120	3.016	1541	99.4,99.4
130	5.268	2.877	5.130	2.073	4.748	1.857	5.002	2.155	120-130	3.419	1544	99.6,99.6
140	2.851	2.232	5.094	1.861	2.677	1.668	4.857	1.797	130-140	2.784	1547	99.8,99.8
150	2.067	1.874	4.021	1.788	2.367	1.477	3.154	1.962	140-150	1.585	1549	99.9,99.9
160	3.614	2.851	2.262	3.233	2.822	2.182	2.574	2.384	150-160	1.187	1550	99.9,99.9
170	2.131	1.513	2.284	2.002	1.629	1.229	2.404	2.579	160-170	0.7340	1551	100,100
180	1.444	1.522	1.416	1.522	1.447	1.521	1.416	1.523	170-180	0.1636	1551	100,100
DEG	LUMINOUS INTENSITY:cd								UNIT:lm			

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2020-05-28

g Range: 0 - 180DEG  
 g Interval: 0.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.402  
 Humidity:65.0%  
 Test Distance:3.010m [K=1.0000]  
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:119.91V I:0.1787A P:20.308W PF:0.9478 Freq:59.98Hz Lamp Flux:1550.8x1 lm										
NAME: DLS8-MCT					TYPE:			WEIGHT:		
SPEC.:20W					DIM.:			SERIAL No.:		
MFR.: LiBo					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	12.3	13.9	12.6	14.1	14.4	12.4	13.9	12.7	14.1	14.4
3H	14.0	15.4	14.3	15.7	16.0	14.0	15.4	14.4	15.7	16.0
4H	14.8	16.1	15.1	16.4	16.7	14.8	16.2	15.2	16.5	16.8
6H	15.5	16.8	15.9	17.1	17.4	15.6	16.8	15.9	17.1	17.5
8H	15.8	17.1	16.2	17.4	17.7	15.9	17.1	16.3	17.5	17.8
12H	16.2	17.4	16.6	17.7	18.1	16.3	17.5	16.7	17.8	18.2
4H 2H	13.0	14.3	13.3	14.6	14.9	13.0	14.3	13.3	14.6	14.9
3H	14.8	16.0	15.2	16.4	16.7	14.9	16.1	15.3	16.4	16.8
4H	15.8	16.8	16.2	17.2	17.6	15.8	16.9	16.2	17.3	17.6
6H	16.6	17.6	17.1	18.0	18.4	16.7	17.7	17.2	18.1	18.5
8H	17.1	18.0	17.5	18.4	18.8	17.2	18.1	17.6	18.5	18.9
12H	17.6	18.4	18.0	18.8	19.3	17.7	18.5	18.1	18.9	19.4
8H 4H	16.1	17.0	16.6	17.4	17.9	16.2	17.1	16.6	17.5	17.9
6H	17.2	18.0	17.7	18.4	18.9	17.3	18.1	17.8	18.5	19.0
8H	17.8	18.5	18.3	19.0	19.5	17.9	18.6	18.4	19.1	19.6
12H	18.5	19.1	19.0	19.6	20.1	18.6	19.2	19.1	19.7	20.2
12H 4H	16.2	17.0	16.6	17.4	17.9	16.2	17.0	16.7	17.5	17.9
6H	17.4	18.1	17.9	18.5	19.0	17.4	18.1	17.9	18.6	19.1
8H	18.1	18.6	18.6	19.1	19.7	18.1	18.7	18.6	19.2	19.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.1 / - 0.3					+ 0.1 / - 0.3				

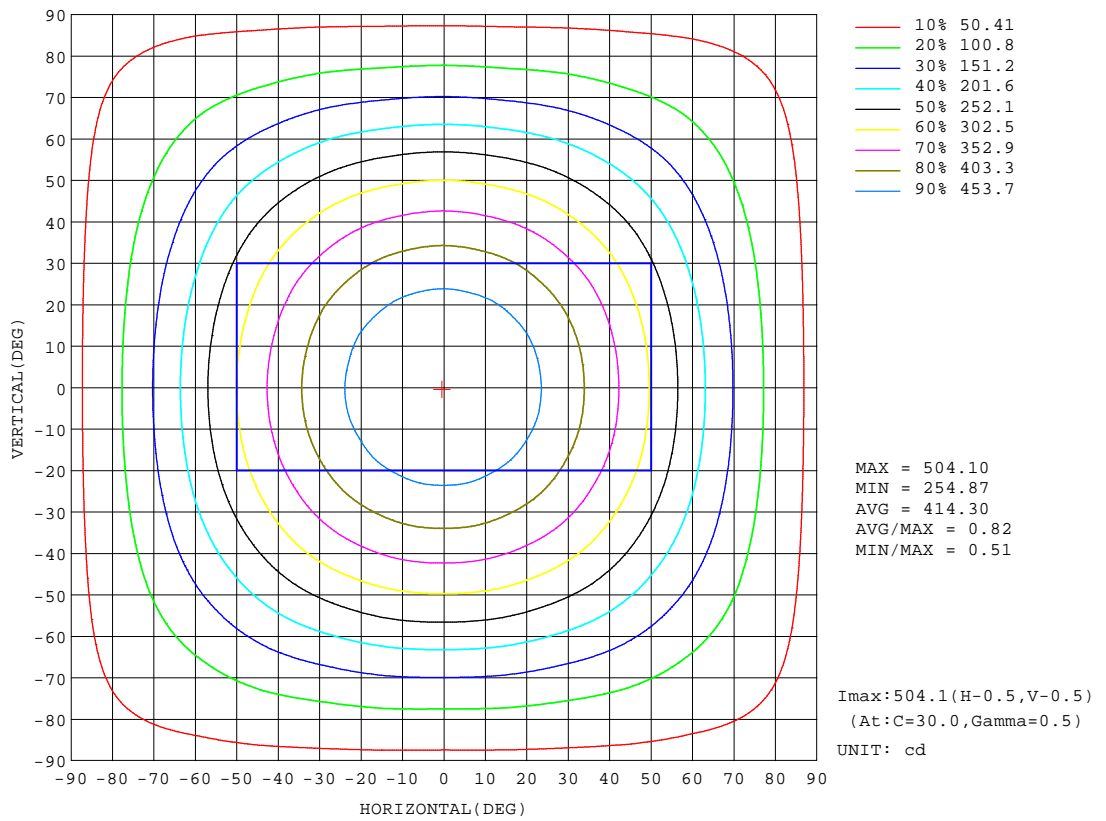
CIE Pub.117, 1551 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 1.5)

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2020-05-28

g Range: 0 - 180DEG  
 g Interval: 0.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.402  
 Humidity:65.0%  
 Test Distance:3.010m [K=1.0000]  
 Remarks:

ISOCANDELA DIAGRAM

Test:U:119.91V I:0.1787A P:20.308W PF:0.9478 Freq:59.98Hz Lamp Flux:1550.8x1 lm		
NAME: DLS8-MCT	TYPE:	WEIGHT:
SPEC.:20W	DIM.:	SERIAL No.:
MFR.: LiBo	SUR.:	Shielding Angle:



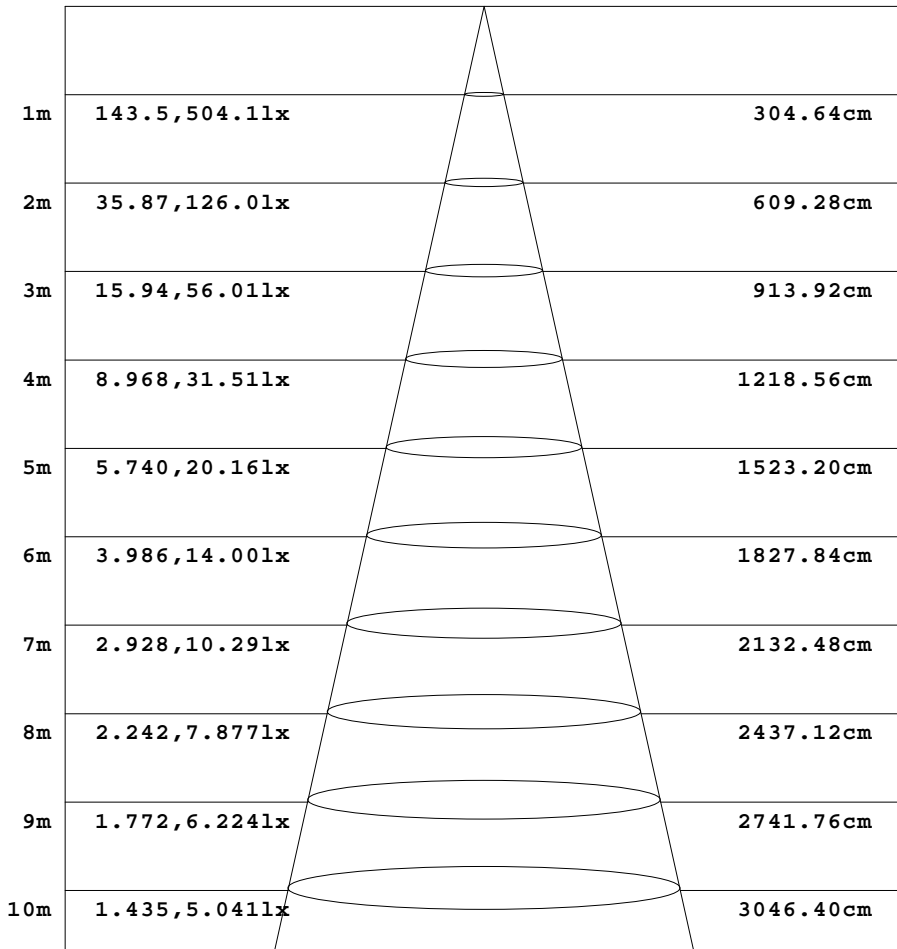
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2020-05-28

g Range: 0 - 180DEG  
 g Interval: 0.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.402  
 Humidity:65.0%  
 Test Distance:3.010m [K=1.0000]  
 Remarks:

AAI Figure

Test:U:119.91V I:0.1787A P:20.308W PF:0.9478 Freq:59.98Hz Lamp Flux:1550.8x1 lm		
NAME: DLS8-MCT	TYPE:	WEIGHT:
SPEC.:20W	DIM.:	SERIAL No.:
MFR.: LiBo	SUR.:	Shielding Angle:

Flux out:1069 lm



Height                      Eavg, Emax                      Angle:113.43deg                      Diameter

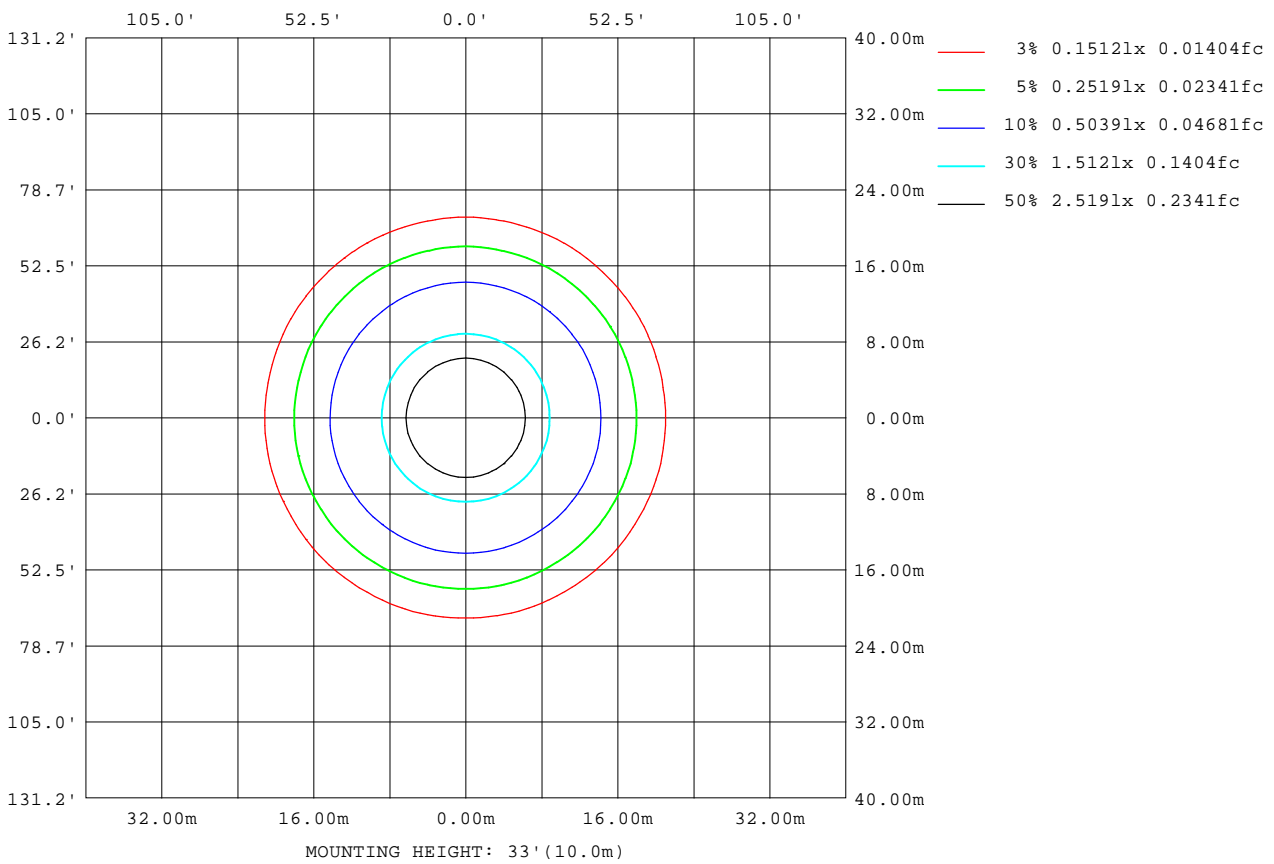
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2020-05-28

g Range: 0 - 180DEG  
 g Interval: 0.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.402  
 Humidity:65.0%  
 Test Distance:3.010m [K=1.0000]  
 Remarks:

**ISOLUX DIAGRAM**

Test:U:119.91V I:0.1787A P:20.308W PF:0.9478 Freq:59.98Hz Lamp Flux:1550.8x1 lm		
NAME: DLS8-MCT	TYPE:	WEIGHT:
SPEC.:20W	DIM.:	SERIAL No.:
MFR.: LiBo	SUR.:	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2020-05-28

g Range: 0 - 180DEG  
 g Interval: 0.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.402  
 Humidity:65.0%  
 Test Distance:3.010m [K=1.0000]  
 Remarks:

LED Avg.L Report

Test:U:119.91V I:0.1787A P:20.308W PF:0.9478 Freq:59.98Hz Lamp Flux:1550.8x1 lm		
NAME: DLS8-MCT	TYPE:	WEIGHT:
SPEC.:20W	DIM.:	SERIAL No.:
MFR.: LiBo	SUR.:	Shielding Angle:

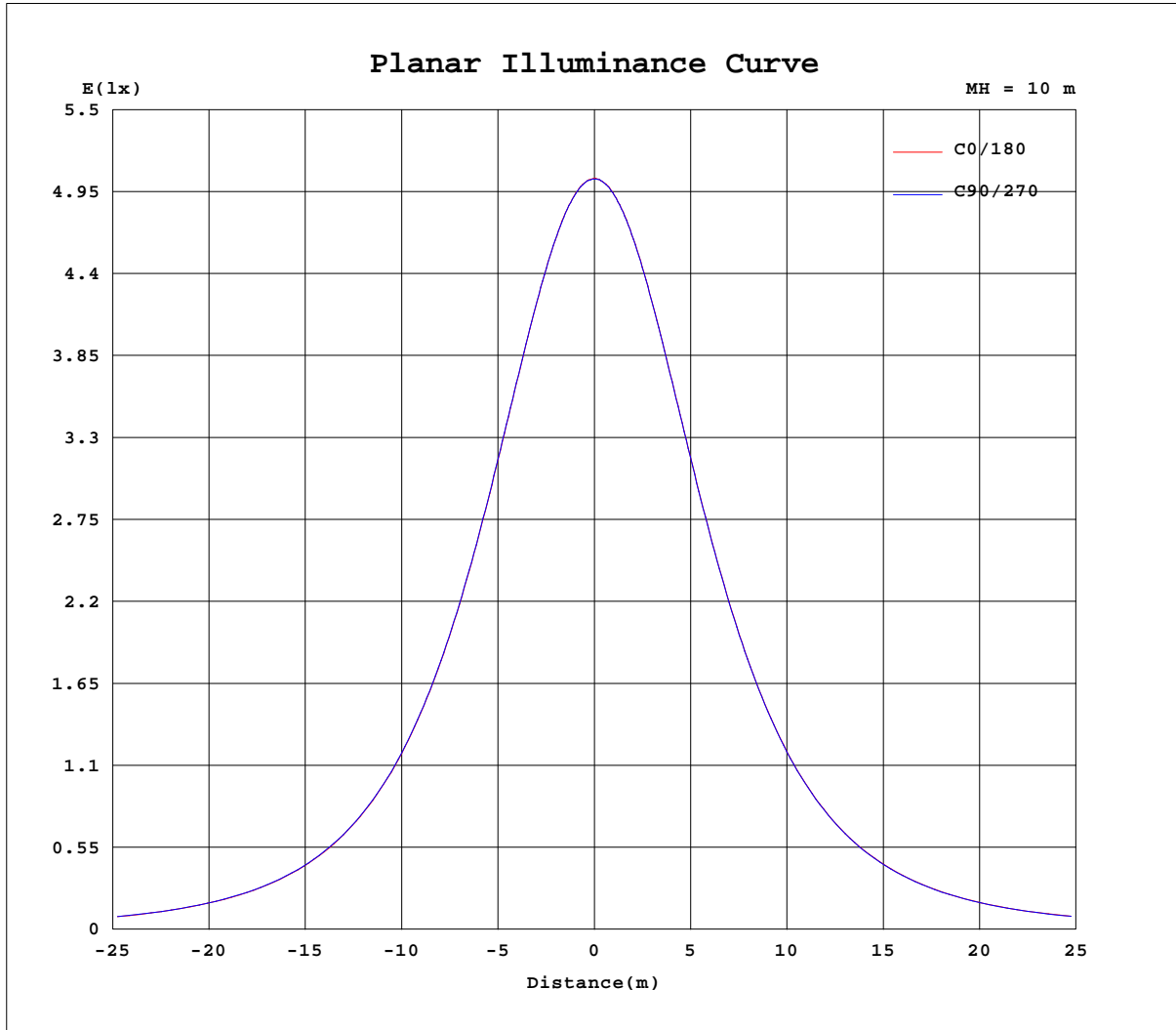
AvgL	cd/m2
L_0~180(65)av	895
L_0~180(75)av	899
L_0~180(85)av	1379
L_90~270(65)av	896
L_90~270(75)av	906
L_90~270(85)av	1400
L_45(65)av	895
L_45(75)av	902
L_45(85)av	1396

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2020-05-28

g Range: 0 - 180DEG  
 g Interval: 0.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.402  
 Humidity:65.0%  
 Test Distance:3.010m [K=1.0000]  
 Remarks:

**Planar Illuminance Curve**



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2020-05-28

g Range: 0 - 180DEG  
 g Interval: 0.5DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.402  
 Humidity: 65.0%  
 Test Distance: 3.010m [K=1.0000]  
 Remarks:



LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:119.91V I:0.1787A P:20.308W PF:0.9478 Freq:59.98Hz Lamp Flux:1550.8x1 lm		
NAME: DLS8-MCT	TYPE:	WEIGHT:
SPEC.:20W	DIM.:	SERIAL No.:
MFR.: LiBo	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C(DEG) g (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504	504
5	501	501	501	501	501	502	501	502	501	502	502	502	502	502	502	502	501	502	502
10	494	494	494	494	494	495	494	495	494	495	495	495	495	495	495	495	495	495	495
15	483	483	483	483	483	483	483	483	483	484	483	484	484	484	484	484	484	484	484
20	467	468	467	467	467	468	468	468	468	468	468	468	468	468	469	468	469	468	468
25	447	448	447	448	447	448	448	449	448	449	448	449	449	449	450	449	449	449	449
30	424	425	424	424	424	425	425	425	424	425	425	426	426	425	426	425	426	425	426
35	397	398	397	398	397	398	398	399	398	399	399	399	399	399	400	399	400	399	399
40	367	368	367	368	368	369	368	369	368	369	369	370	370	369	370	369	370	369	370
45	334	335	335	335	335	336	336	337	336	337	336	337	338	337	338	337	338	336	337
50	299	301	300	301	300	302	301	302	301	302	302	303	303	302	303	302	303	302	303
55	263	264	263	264	263	265	264	265	265	266	265	266	267	266	267	266	267	265	266
60	225	226	225	226	226	227	226	228	227	228	228	229	229	228	230	228	229	228	228
65	187	188	187	188	188	189	188	190	189	191	190	191	191	190	191	190	191	189	190
70	149	151	150	151	150	152	151	153	152	153	152	154	154	152	154	152	153	152	153
75	114	116	115	117	116	118	117	118	117	118	117	118	118	117	118	117	118	117	118
80	84.1	85.7	85.0	87.0	86.0	87.5	86.2	88.0	86.8	88.4	86.8	87.6	87.2	85.9	87.6	86.5	88.1	86.4	87.3
85	59.2	59.9	59.9	61.1	60.8	61.7	61.2	62.0	61.3	61.9	61.1	61.4	61.0	60.6	61.4	60.8	61.2	60.4	60.8
90	37.8	32.7	32.8	38.2	39.9	40.7	40.4	40.8	40.1	38.8	33.6	34.0	39.3	39.3	39.7	39.2	39.7	39.2	39.5
95	22.4	18.9	18.2	18.8	21.7	24.2	24.0	23.9	21.0	15.4	15.7	18.3	23.4	21.0	18.0	12.4	19.2	22.0	22.1
100	11.4	9.17	3.04	3.64	3.36	1.53	1.41	1.58	3.48	3.70	1.19	3.53	5.55	3.31	1.02	1.69	3.24	1.62	1.17
105	2.28	1.86	1.68	1.57	1.62	2.58	2.33	2.67	1.80	1.59	1.70	1.76	1.66	1.61	1.49	1.42	1.35	1.64	1.64
110	3.20	2.70	2.63	2.33	1.98	2.27	2.36	2.19	2.15	2.15	2.62	2.90	3.21	2.76	2.33	2.04	1.81	2.25	2.18
115	3.93	4.14	3.04	2.83	2.71	2.70	3.22	2.97	2.92	2.86	3.12	3.75	3.99	3.53	2.79	2.62	2.39	2.49	2.90
120	4.19	3.97	3.65	3.34	3.20	3.38	3.72	3.36	3.32	3.21	3.46	3.76	4.33	3.85	3.35	3.39	3.02	3.33	3.81
125	4.47	4.47	4.42	3.41	4.01	3.93	4.35	4.04	3.76	2.87	3.78	4.56	4.59	4.55	3.41	2.61	3.33	3.69	4.35
130	5.27	4.65	3.38	2.88	3.75	4.62	5.13	5.33	4.55	2.07	3.22	4.40	4.75	4.51	3.08	1.86	2.94	3.64	5.00
135	4.71	4.16	2.63	2.44	3.64	4.86	5.60	5.69	4.94	2.10	2.86	4.04	4.92	4.27	2.47	1.78	3.08	3.64	4.47
140	2.85	2.84	2.23	2.23	3.41	4.51	5.09	5.63	4.43	1.86	2.19	2.70	2.68	2.46	1.95	1.67	2.73	4.53	4.86
145	2.31	2.30	2.19	2.11	3.04	3.20	4.15	3.55	2.55	1.81	1.86	1.88	1.91	1.65	1.58	1.57	2.14	2.84	3.15
150	2.07	1.85	2.25	1.87	2.81	2.97	4.02	2.89	2.11	1.79	2.14	2.17	2.37	1.59	1.85	1.48	2.34	2.62	3.15
155	3.00	2.92	2.95	2.97	2.53	2.76	2.78	2.68	2.46	2.85	2.74	2.25	2.31	2.17	2.17	2.57	2.49	3.87	3.04
160	3.61	4.27	3.15	2.85	2.85	2.88	2.26	2.48	2.58	3.23	2.53	2.67	2.82	3.71	3.09	2.18	2.07	2.76	2.57
165	2.71	2.31	2.29	2.70	3.77	3.23	2.84	1.91	1.81	2.19	2.17	3.54	3.09	2.87	3.29	2.43	2.10	2.06	2.30
170	2.13	1.44	1.48	1.51	2.32	2.26	2.28	2.07	1.67	2.00	2.06	1.83	1.63	1.81	2.02	1.23	1.26	1.68	2.40
175	1.45	1.42	1.48	1.46	1.42	1.44	1.45	1.61	2.07	2.24	2.10	1.42	1.21	1.21	1.23	1.31	1.35	1.37	1.73
180	1.44	1.45	1.48	1.52	1.46	1.43	1.42	1.42	1.46	1.52	1.51	1.46	1.45	1.45	1.47	1.52	1.46	1.42	1.42

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2020-05-28

g Range: 0 - 180DEG  
 g Interval: 0.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.402  
 Humidity:65.0%  
 Test Distance:3.010m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:119.91V I:0.1787A P:20.308W PF:0.9478 Freq:59.98Hz Lamp Flux:1550.8x1 lm		
NAME: DLS8-MCT	TYPE:	WEIGHT:
SPEC.:20W	DIM.:	SERIAL No.:
MFR.: LiBo	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C(DEG) g (DEG)	285	300	315	330	345														
0	504	504	504	504	504														
5	502	502	501	502	501														
10	495	495	494	495	494														
15	483	484	483	483	483														
20	468	468	467	468	467														
25	448	448	448	448	447														
30	425	425	424	425	424														
35	398	399	397	398	397														
40	368	369	367	368	367														
45	336	336	335	335	334														
50	301	302	300	301	300														
55	265	265	264	264	263														
60	227	228	226	227	225														
65	189	189	188	189	187														
70	151	152	150	151	149														
75	116	117	115	116	114														
80	86.0	87.0	85.1	85.8	84.0														
85	60.0	60.2	59.5	59.7	58.9														
90	38.8	38.9	38.1	38.4	37.9														
95	21.9	18.7	17.0	20.8	21.5														
100	1.59	3.45	3.09	3.01	8.93														
105	1.79	1.60	1.39	1.51	1.59														
110	2.16	2.12	1.96	2.45	2.58														
115	2.95	2.85	2.50	2.76	3.47														
120	3.58	3.28	3.17	3.34	3.63														
125	4.38	3.29	2.76	4.12	4.18														
130	4.23	2.71	2.16	3.29	4.44														
135	3.75	2.78	2.02	2.50	3.72														
140	4.37	2.89	1.80	2.06	2.64														
145	2.99	2.25	2.58	2.18	2.15														
150	3.21	2.12	1.96	1.73	2.02														
155	2.94	2.26	2.98	2.05	2.34														
160	2.86	2.35	2.38	2.25	3.09														
165	2.36	2.17	2.13	2.26	4.04														
170	2.26	2.12	2.58	2.20	2.19														
175	1.83	1.57	1.36	1.66	1.64														
180	1.42	1.46	1.52	1.51	1.46														

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2020-05-28

g Range: 0 - 180DEG  
 g Interval: 0.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.402  
 Humidity:65.0%  
 Test Distance:3.010m [K=1.0000]  
 Remarks: