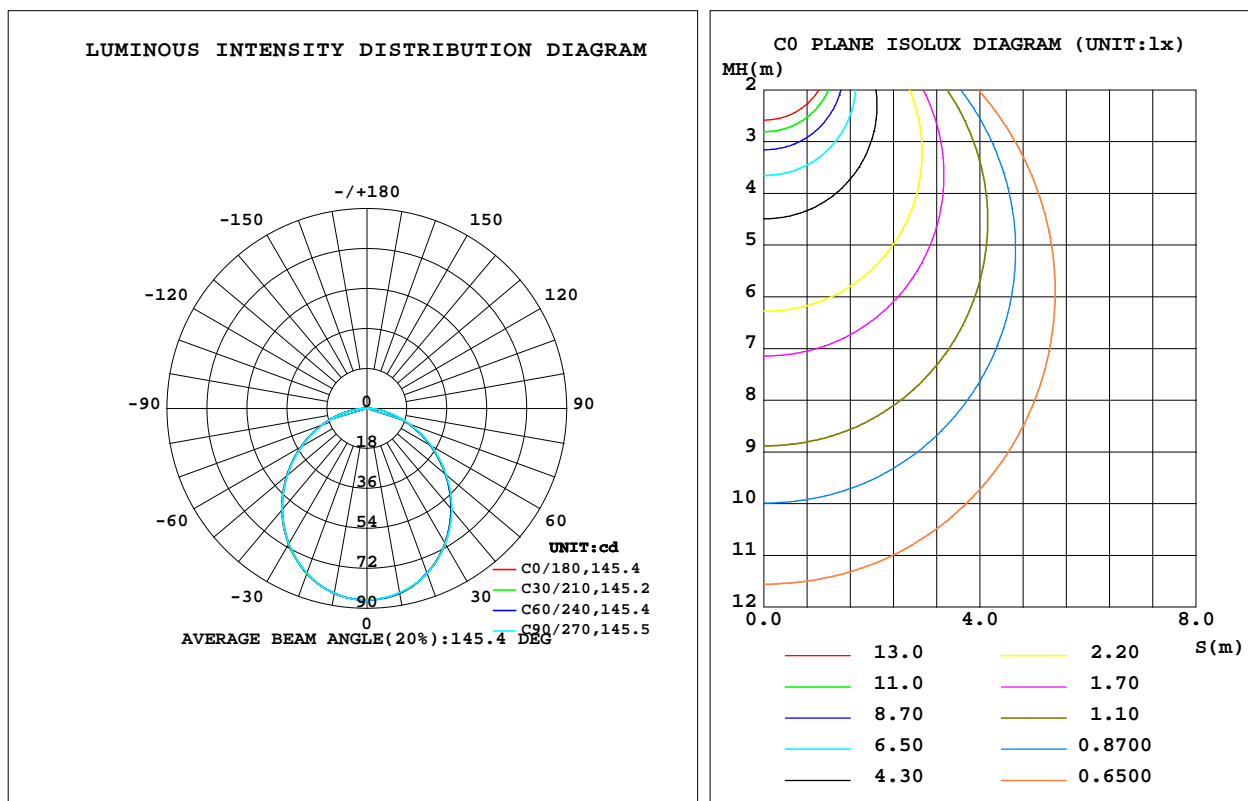


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.01V I:0.0362A P:4.3097W PF:0.9915 Freq:59.98Hz Lamp Flux:230.882x1 lm		
NAME: MVP-1-NK	TYPE:	WEIGHT:
SPEC.:4.3W	DIM.:	SERIAL No.:
MFR.: LiBo	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 53.57 lm/W			
MODEL	MVP-1-NK	I _{max} (cd)	86.25	S/MH(C0/180)	1.22
NOMINAL POWER(W)	4.3	LOR(%)	100.0	S/MH(C90/270)	1.22
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	230.88	h UP,DN(C0-180)	0.2,49.7
NOMINAL FLUX(lm)	230.882	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.2,49.9
LAMPS INSIDE	1	h up(%)	0.4	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120	h down(%)	99.6	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:16 July 2020

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	84.58	84.46	84.20	84.34	84.62	84.47	84.48	84.40	0- 10	8.144	8.144	3.53,3.53
20	79.04	79.10	79.01	79.11	79.08	78.99	78.90	78.88	10- 20	23.17	31.31	13.6,13.6
30	70.11	70.55	70.45	70.67	70.64	70.19	70.32	70.19	20- 30	34.56	65.87	28.5,28.5
40	58.81	59.25	59.42	59.83	59.71	59.24	59.43	59.02	30- 40	40.70	106.6	46.2,46.2
50	46.09	46.43	46.63	47.43	47.31	46.83	46.87	46.30	40- 50	41.00	147.6	63.9,63.9
60	32.72	32.96	33.29	34.23	34.28	33.88	33.83	33.13	50- 60	35.91	183.5	79.5,79.5
70	19.67	19.85	20.21	21.19	21.43	21.12	21.00	20.22	60- 70	26.72	210.2	91,91
80	8.048	8.143	8.467	9.393	9.749	9.505	9.415	8.600	70- 80	15.39	225.6	97.7,97.7
90	0.0022	0.1157	0.1705	0.3006	0.2409	0.0943	0.0597	0.0013	80- 90	4.420	230.0	99.6,99.6
100	0.0516	0.0437	0.0434	0.0436	0.0240	0.0193	0.0214	0.0273	90-100	0.0183	230.0	99.6,99.6
110	0.1318	0.1110	0.1121	0.1076	0.0890	0.0886	0.0862	0.0964	100-110	0.0718	230.1	99.7,99.7
120	0.2072	0.1744	0.1773	0.1713	0.1570	0.1419	0.1508	0.1567	110-120	0.1339	230.2	99.7,99.7
130	0.2476	0.2229	0.2255	0.2211	0.1965	0.1855	0.1915	0.1969	120-130	0.1694	230.4	99.8,99.8
140	0.2597	0.2593	0.2558	0.2473	0.2057	0.1936	0.2255	0.2096	130-140	0.1717	230.6	99.9,99.9
150	0.2499	0.2470	0.2794	0.2325	0.1880	0.1771	0.2220	0.1926	140-150	0.1450	230.7	99.9,99.9
160	0.2102	0.2065	0.2239	0.1890	0.1588	0.1412	0.1742	0.1670	150-160	0.0967	230.8	100,100
170	0.2056	0.1972	0.1783	0.1805	0.1665	0.1477	0.1616	0.1769	160-170	0.0509	230.9	100,100
180	0.1991	0.2114	0.2022	0.2162	0.2010	0.2142	0.2019	0.2162	170-180	0.0175	230.9	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:16 July 2020

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:120.01V I:0.0362A P:4.3097W PF:0.9915 Freq:59.98Hz Lamp Flux:230.882x1 lm											
NAME: MVP-1-NK					TYPE:			WEIGHT:			
SPEC.:4.3W					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	5.8	7.3	6.1	7.5	7.8	5.9	7.4	6.1	7.6	7.8	
	7.2	8.6	7.5	8.8	9.1	7.3	8.7	7.6	8.9	9.1	
	7.8	9.1	8.1	9.3	9.6	7.8	9.1	8.1	9.4	9.7	
	8.1	9.4	8.5	9.7	9.9	8.2	9.5	8.6	9.7	10.0	
	8.2	9.4	8.6	9.7	10.0	8.4	9.6	8.7	9.8	10.1	
	8.2	9.4	8.6	9.7	10.0	8.4	9.6	8.8	9.9	10.2	
4H	2H	6.4	7.7	6.7	8.0	8.2	6.4	7.7	6.7	8.0	8.2
	3H	8.0	9.1	8.3	9.4	9.7	8.0	9.2	8.4	9.5	9.8
	4H	8.6	9.7	9.0	10.0	10.3	8.7	9.7	9.1	10.1	10.4
	6H	9.1	10.1	9.5	10.4	10.8	9.2	10.1	9.6	10.5	10.9
	8H	9.3	10.2	9.7	10.5	10.9	9.4	10.3	9.8	10.6	11.0
	12H	9.3	10.1	9.7	10.5	10.9	9.5	10.3	9.9	10.7	11.1
8H	4H	8.9	9.7	9.3	10.1	10.5	8.9	9.8	9.3	10.2	10.6
	6H	9.5	10.2	10.0	10.6	11.1	9.6	10.3	10.0	10.7	11.2
	8H	9.7	10.4	10.2	10.8	11.3	9.8	10.5	10.3	10.9	11.4
	12H	9.8	10.4	10.3	10.8	11.3	10.0	10.6	10.5	11.0	11.5
12H	4H	8.9	9.7	9.3	10.1	10.5	8.9	9.7	9.4	10.1	10.5
	6H	9.6	10.2	10.0	10.6	11.1	9.6	10.3	10.1	10.7	11.2
	8H	9.8	10.4	10.3	10.8	11.3	9.9	10.5	10.4	10.9	11.4
Variations with the observer position at spacings:											
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.2					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.2					

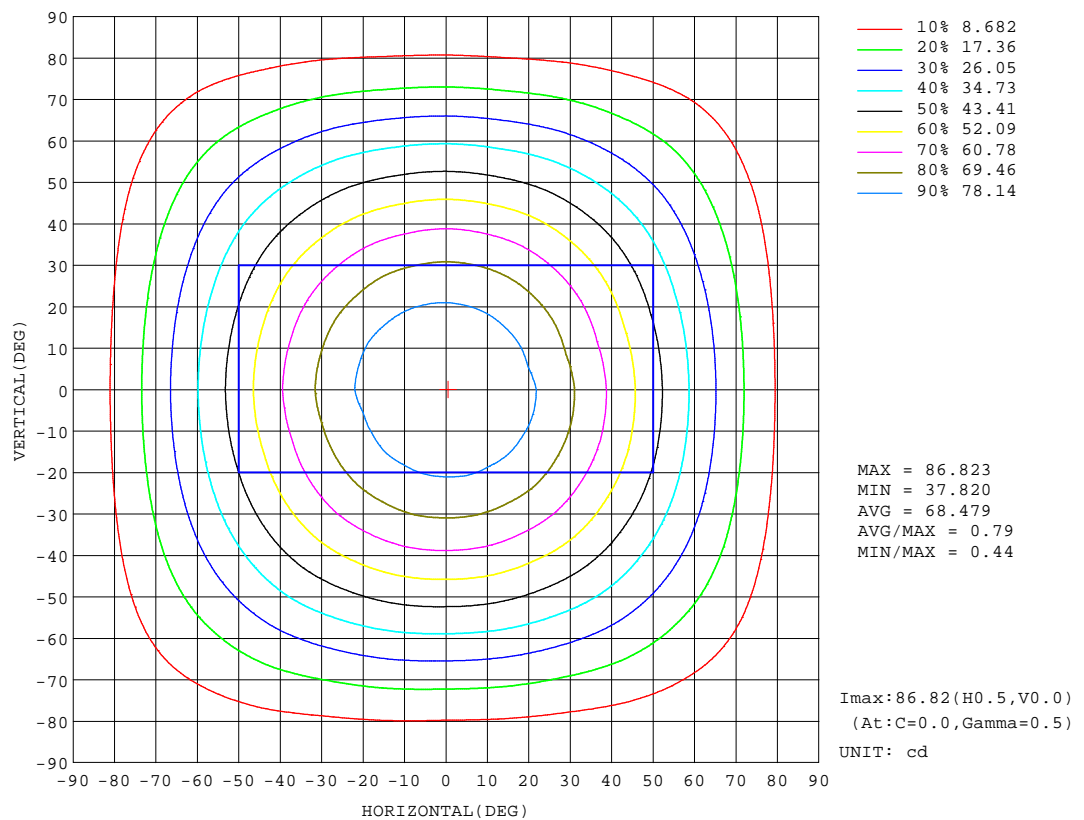
CIE Pub.117, 230.9 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = -5.1)

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:16 July 2020

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:120.01V I:0.0362A P:4.3097W PF:0.9915 Freq:59.98Hz Lamp Flux:230.882x1 lm		
NAME: MVP-1-NK	TYPE:	WEIGHT:
SPEC.:4.3W	DIM.:	SERIAL No.:
MFR.: LiBo	SUR.:	Shielding Angle:



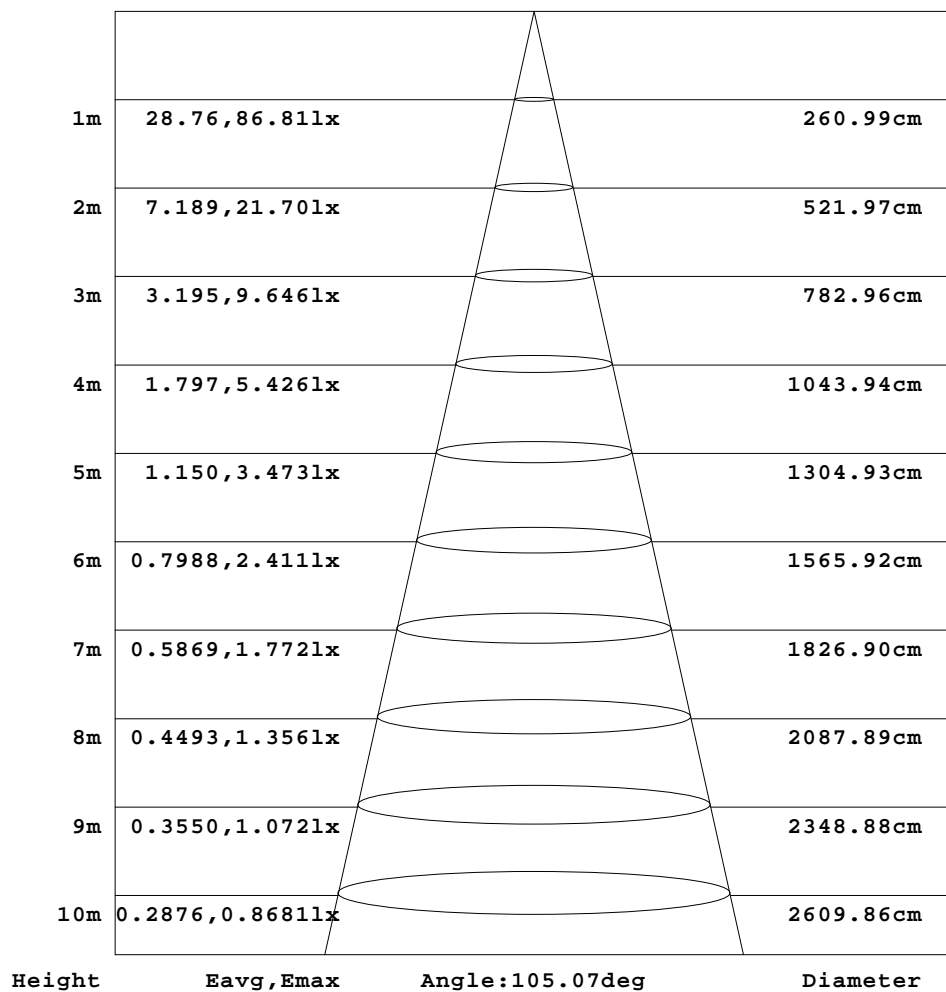
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:16 July 2020

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:120.01V I:0.0362A P:4.3097W PF:0.9915 Freq:59.98Hz Lamp Flux:230.882x1 lm		
NAME: MVP-1-NK	TYPE:	WEIGHT:
SPEC.:4.3W	DIM.:	SERIAL No.:
MFR.: LiBo	SUR.:	Shielding Angle:

Flux out:159.1 lm



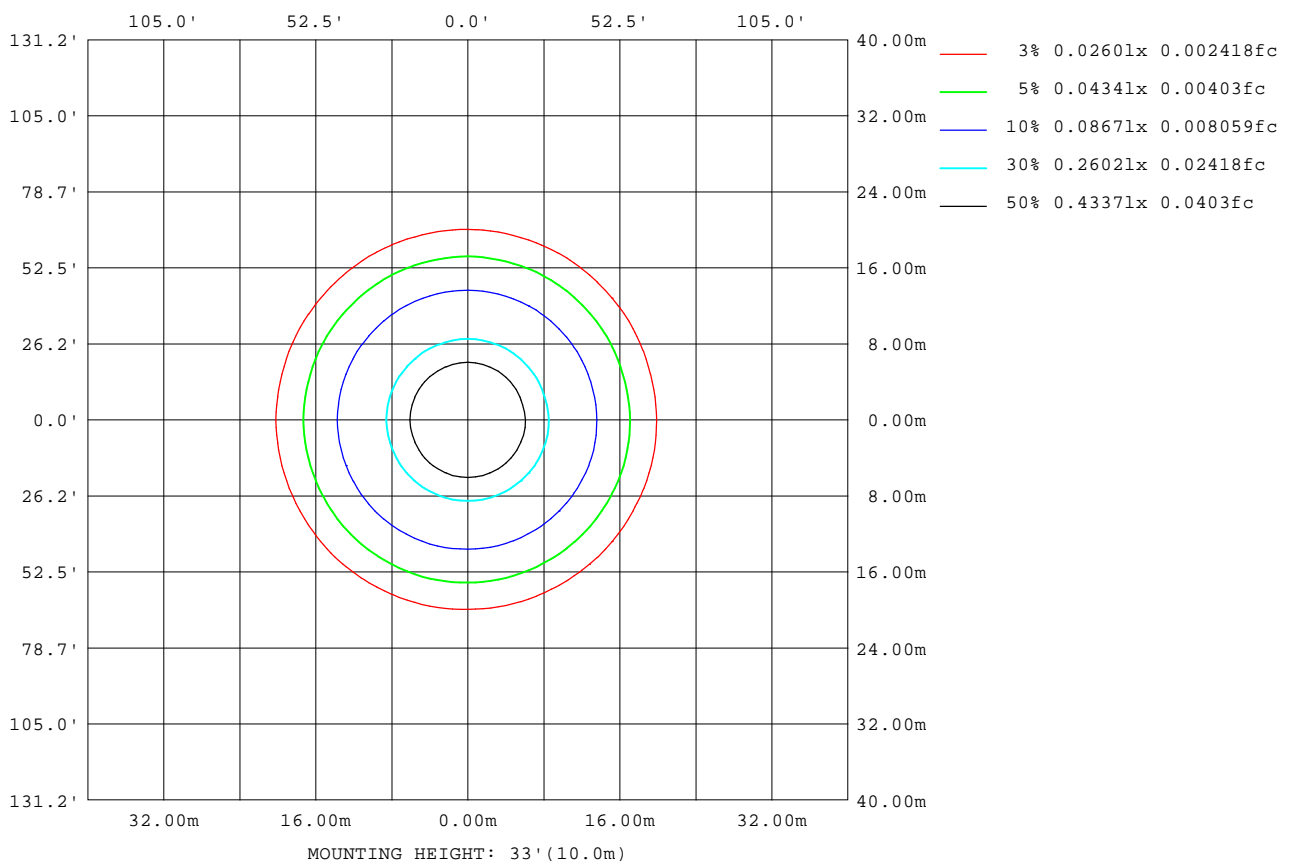
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:16 July 2020

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:120.01V I:0.0362A P:4.3097W PF:0.9915 Freq:59.98Hz Lamp Flux:230.882x1 lm		
NAME: MVP-1-NK	TYPE:	WEIGHT:
SPEC.:4.3W	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:16 July 2020

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:120.01V I:0.0362A P:4.3097W PF:0.9915 Freq:59.98Hz Lamp Flux:230.882x1 lm		
NAME: MVP-1-NK	TYPE:	WEIGHT:
SPEC.:4.3W	DIM.:	SERIAL No.:
MFR.: LiBo	SUR.:	Shielding Angle:

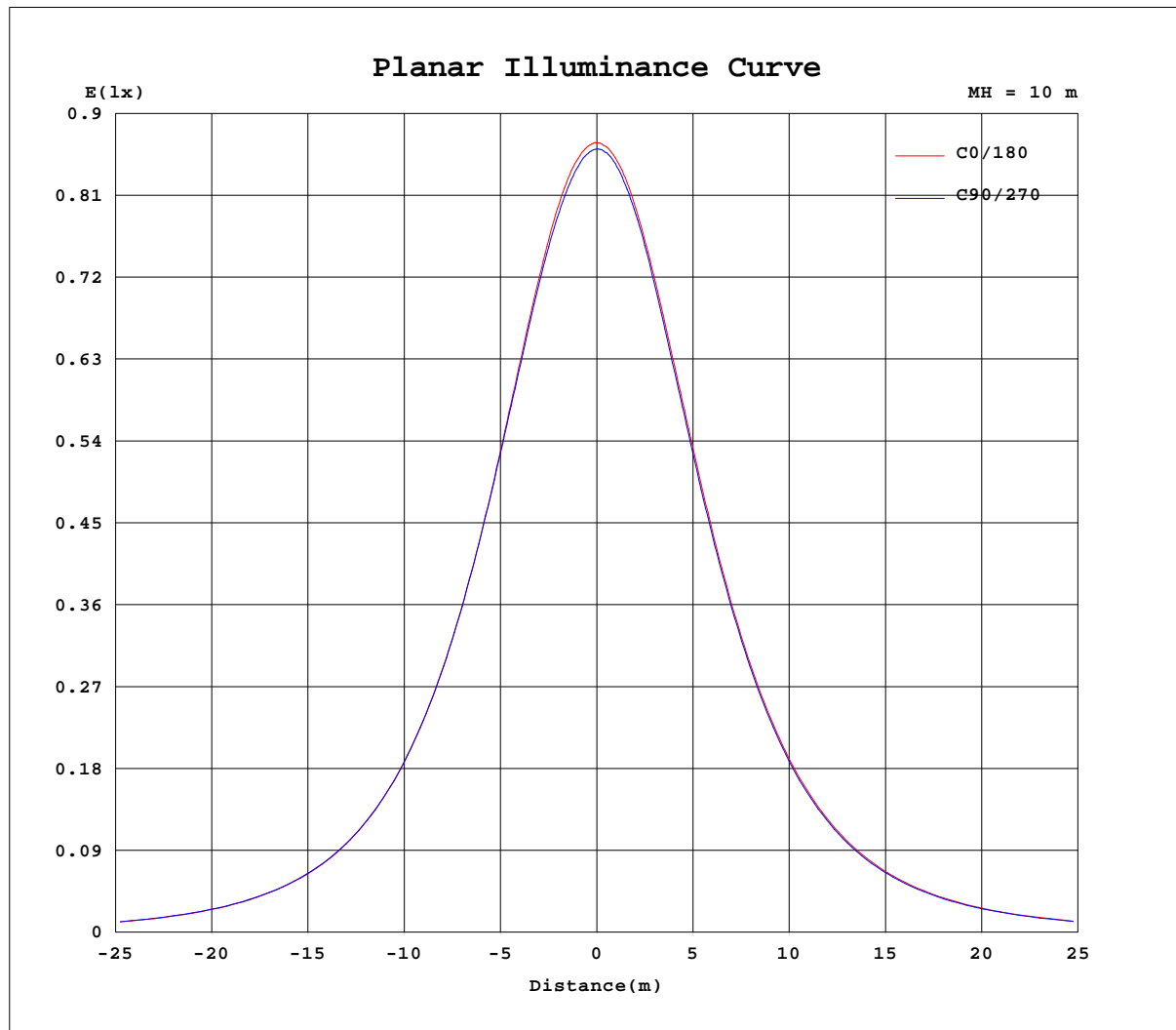
AvgL	cd/m2
L_0~180(65)av	127
L_0~180(75)av	112
L_0~180(85)av	22
L_90~270(65)av	128
L_90~270(75)av	112
L_90~270(85)av	92
L_45(65)av	128
L_45(75)av	112
L_45(85)av	92

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:16 July 2020

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: 16 July 2020

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:120.01V I:0.0362A P:4.3097W PF:0.9915 Freq:59.98Hz Lamp Flux:230.882x1 lm		
NAME: MVP-1-NK	TYPE:	WEIGHT:
SPEC.:4.3W	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	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2
5	85.8	85.7	85.7	85.8	85.7	85.7	85.6	85.6	85.7	85.7	85.7	85.8	85.9	85.8	85.8	85.8	85.8	85.9	85.9
10	84.6	84.5	84.4	84.5	84.4	84.3	84.2	84.2	84.2	84.3	84.4	84.5	84.6	84.4	84.5	84.5	84.5	84.5	84.5
15	82.2	82.2	82.2	82.3	82.2	82.3	82.1	81.9	82.0	82.1	82.1	82.2	82.3	82.1	82.2	82.2	82.3	82.2	82.3
20	79.0	79.1	79.0	79.1	78.9	79.1	79.0	79.0	78.9	79.1	79.0	79.1	79.1	79.0	79.2	79.0	79.0	78.9	78.9
25	74.9	75.1	75.1	75.2	75.0	75.2	75.1	75.2	75.0	75.2	75.1	75.3	75.3	75.1	75.2	74.9	75.0	74.9	75.0
30	70.1	70.3	70.3	70.5	70.4	70.5	70.4	70.6	70.5	70.7	70.6	70.7	70.6	70.3	70.4	70.2	70.3	70.2	70.3
35	64.7	65.0	64.9	65.1	64.9	65.2	65.2	65.5	65.3	65.5	65.4	65.5	65.4	65.1	65.2	64.9	65.1	64.8	65.1
40	58.8	59.2	59.1	59.2	59.2	59.5	59.4	59.7	59.6	59.8	59.7	59.8	59.7	59.4	59.2	59.2	59.3	59.1	59.4
45	52.6	52.9	52.7	52.9	52.8	53.2	53.2	53.4	53.5	53.8	53.7	53.8	53.6	53.4	53.4	53.2	53.3	53.0	53.2
50	46.1	46.4	46.2	46.4	46.3	46.6	46.6	47.0	47.1	47.4	47.3	47.4	47.3	47.0	47.1	46.8	47.0	46.7	46.9
55	39.4	39.7	39.5	39.7	39.6	39.9	40.0	40.4	40.5	40.9	40.8	40.9	40.8	40.6	40.6	40.4	40.5	40.3	40.4
60	32.7	32.9	32.8	33.0	32.9	33.3	33.3	33.8	33.8	34.2	34.2	34.3	34.3	34.0	34.1	33.9	34.0	33.7	33.8
65	26.1	26.3	26.1	26.3	26.3	26.6	26.7	27.1	27.2	27.6	27.6	27.8	27.8	27.6	27.6	27.4	27.5	27.3	27.3
70	19.7	19.8	19.6	19.9	19.8	20.1	20.2	20.7	20.8	21.2	21.2	21.4	21.4	21.2	21.3	21.1	21.3	21.0	21.0
75	13.6	13.7	13.5	13.8	13.7	14.1	14.1	14.6	14.6	15.1	15.0	15.4	15.4	15.1	15.3	15.1	15.2	14.9	15.0
80	8.05	8.11	7.97	8.14	8.10	8.42	8.47	8.90	8.94	9.39	9.37	9.70	9.75	9.55	9.73	9.50	9.65	9.35	9.42
85	0.54	3.28	3.21	3.33	3.32	3.55	3.63	3.94	4.08	4.39	4.48	4.71	4.81	4.66	4.72	4.59	4.63	4.43	4.40
90	0.00	0.03	0.07	0.12	0.14	0.19	0.17	0.21	0.17	0.30	0.26	0.48	0.24	0.21	0.42	0.09	0.20	0.04	0.06
95	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100	0.05	0.05	0.05	0.04	0.05	0.04	0.04	0.05	0.05	0.04	0.04	0.05	0.02	0.02	0.02	0.02	0.02	0.02	0.02
105	0.09	0.08	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.07	0.08	0.05	0.05	0.05	0.05	0.05	0.05	0.05
110	0.13	0.12	0.12	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.09	0.09	0.08	0.09	0.08	0.08	0.09
115	0.17	0.16	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.14	0.15	0.15	0.13	0.12	0.11	0.11	0.11	0.12	0.12
120	0.21	0.20	0.19	0.17	0.17	0.18	0.18	0.17	0.17	0.17	0.18	0.18	0.16	0.15	0.14	0.14	0.14	0.15	0.15
125	0.24	0.22	0.21	0.20	0.20	0.20	0.21	0.20	0.20	0.20	0.20	0.21	0.18	0.17	0.16	0.16	0.16	0.16	0.17
130	0.25	0.24	0.23	0.22	0.22	0.23	0.23	0.22	0.22	0.22	0.22	0.22	0.20	0.19	0.18	0.19	0.18	0.19	0.19
135	0.26	0.24	0.24	0.25	0.24	0.25	0.24	0.24	0.24	0.24	0.23	0.24	0.21	0.20	0.19	0.19	0.20	0.20	0.21
140	0.26	0.25	0.25	0.26	0.26	0.26	0.26	0.25	0.25	0.25	0.24	0.23	0.21	0.20	0.19	0.19	0.21	0.22	0.23
145	0.26	0.25	0.25	0.26	0.27	0.28	0.27	0.27	0.26	0.25	0.23	0.23	0.21	0.19	0.18	0.19	0.20	0.21	0.23
150	0.25	0.24	0.24	0.25	0.27	0.29	0.28	0.27	0.26	0.23	0.22	0.22	0.19	0.18	0.17	0.18	0.20	0.21	0.22
155	0.23	0.23	0.22	0.23	0.25	0.26	0.26	0.25	0.23	0.21	0.20	0.21	0.17	0.17	0.16	0.15	0.18	0.20	0.20
160	0.21	0.22	0.21	0.21	0.22	0.23	0.22	0.22	0.20	0.19	0.19	0.20	0.16	0.16	0.15	0.14	0.15	0.17	0.17
165	0.20	0.20	0.19	0.20	0.20	0.21	0.20	0.20	0.19	0.18	0.18	0.18	0.15	0.15	0.14	0.15	0.15	0.16	0.17
170	0.21	0.21	0.21	0.20	0.19	0.18	0.18	0.18	0.18	0.18	0.18	0.19	0.17	0.16	0.15	0.15	0.15	0.16	0.16
175	0.20	0.20	0.21	0.20	0.19	0.19	0.19	0.19	0.20	0.20	0.18	0.18	0.17	0.17	0.17	0.17	0.18	0.17	0.17
180	0.20	0.20	0.20	0.21	0.20	0.20	0.20	0.20	0.20	0.22	0.21	0.20	0.20	0.20	0.20	0.21	0.20	0.20	0.20

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: MEDIUM

Temperature:25.3DEG

Operators:

Test Date:16 July 2020

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:120.01V I:0.0362A P:4.3097W PF:0.9915 Freq:59.98Hz Lamp Flux:230.882x1 lm		
NAME: MVP-1-NK	TYPE:	WEIGHT:
SPEC.:4.3W	DIM.:	SERIAL No.:
MFR.: LiBo	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C(DEG) g (DEG)	285	300	315	330	345														
0	86.2	86.2	86.2	86.2	86.2														
5	85.8	85.8	85.8	85.8	85.8														
10	84.4	84.5	84.4	84.5	84.5														
15	82.1	82.1	82.1	82.2	82.2														
20	78.8	78.9	78.9	79.0	79.0														
25	74.9	75.0	74.9	74.9	74.8														
30	70.3	70.3	70.2	70.2	69.9														
35	65.0	65.1	64.9	64.8	64.6														
40	59.2	59.3	59.0	59.0	58.8														
45	53.0	53.1	52.8	52.8	52.5														
50	46.6	46.7	46.3	46.3	46.1														
55	40.1	40.1	39.8	39.7	39.5														
60	33.5	33.5	33.1	33.1	32.8														
65	27.0	27.0	26.6	26.5	26.2														
70	20.6	20.6	20.2	20.2	19.8														
75	14.6	14.6	14.1	14.1	13.7														
80	9.04	9.01	8.60	8.53	8.18														
85	4.12	4.01	3.72	3.63	3.38														
90	0.00	0.00	0.00	0.00	0.00														
95	0.00	0.00	0.00	0.00	0.01														
100	0.03	0.03	0.03	0.03	0.03														
105	0.06	0.06	0.06	0.07	0.07														
110	0.09	0.09	0.10	0.10	0.10														
115	0.12	0.12	0.13	0.13	0.14														
120	0.15	0.15	0.16	0.16	0.17														
125	0.17	0.17	0.18	0.19	0.20														
130	0.20	0.19	0.20	0.20	0.21														
135	0.21	0.21	0.21	0.21	0.22														
140	0.23	0.21	0.21	0.21	0.22														
145	0.23	0.22	0.21	0.20	0.21														
150	0.23	0.21	0.19	0.20	0.20														
155	0.21	0.19	0.18	0.19	0.20														
160	0.18	0.17	0.17	0.18	0.19														
165	0.18	0.17	0.17	0.17	0.18														
170	0.17	0.17	0.18	0.19	0.20														
175	0.18	0.17	0.19	0.20	0.19														
180	0.20	0.21	0.22	0.21	0.20														

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: MEDIUM

Temperature:25.3DEG

Operators:

Test Date:16 July 2020

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: