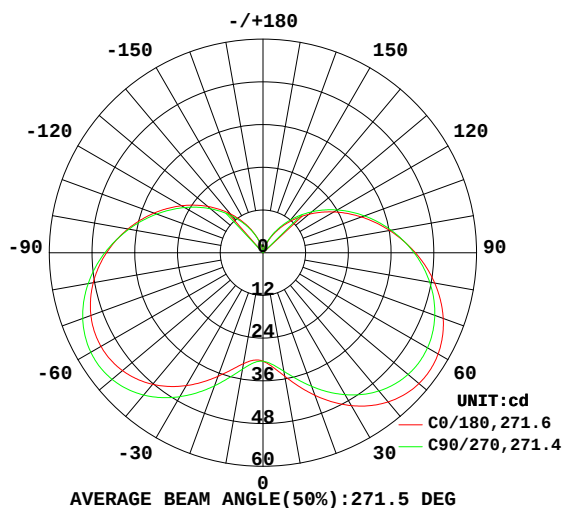
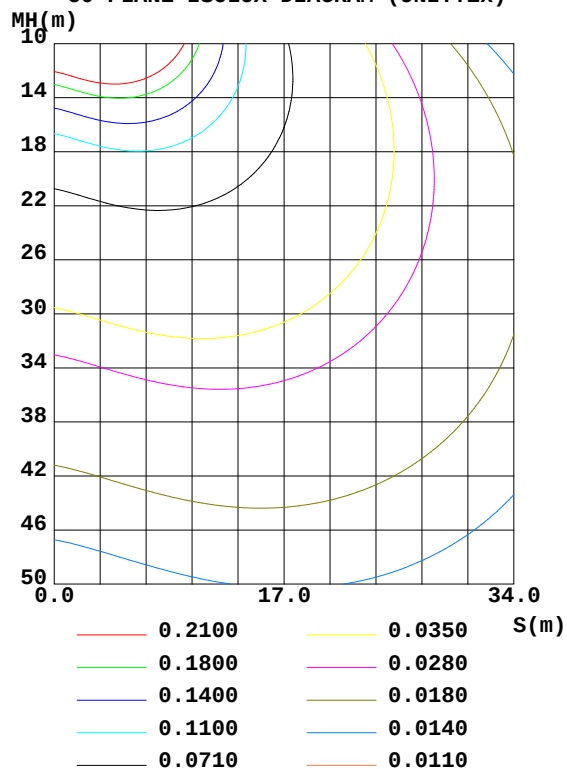


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.08V I:0.0381A P:4.7720W PF:0.5444 Freq:50.00Hz Lamp Flux:461.509x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: C11a_11aSA-C470ST-Q1NNN-01	DIM.:	SERIAL No.: A2116079G001
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 96.71 lm/W			
MODEL		I _{max} (cd)	58.00	S/MH(C0/180)	2.23
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	2.33
RATED VOLTAGE(V)		TOTAL FLUX(lm)	461.51	η UP, DN(C0-180)	15.7, 33.5
NOMINAL FLUX(lm)	461.509	CIE CLASS	SEMI-D.	η UP, DN(C180-360)	16.6, 34.1
LAMPS INSIDE	1	η up(%)	32.3	CIBSE SHR NOM	2.00
TEST VOLTAGE(V)		η down(%)	67.7	CIBSE SHR MAX	2.00

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM

C0 PLANE ISOLUX DIAGRAM (UNIT:lx)


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.1DEG
Operators: lsc
Test Date: 2021-12-01

Checker: HXP

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System: EVERFINE G0-R5000_V2 SYSTEM V2.00.429
Humidity: 49%
Test Distance: 1.528m [K=1.0000]
Remarks:

Assessor:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	35.24	34.90	33.80	32.51	31.63	32.02	33.20	34.47	0- 10	3.058	3.058	0.66,0.66
20	42.60	41.74	39.93	38.03	36.93	37.75	39.76	41.75	10- 20	10.45	13.51	2.93,2.93
30	49.58	48.18	46.03	43.99	43.09	44.28	46.69	49.01	20- 30	20.07	33.58	7.28,7.28
40	54.70	52.89	50.68	48.79	48.24	49.68	52.18	54.52	30- 40	30.90	64.47	14,14
50	57.17	55.19	53.20	51.64	51.51	53.05	55.33	57.43	40- 50	41.16	105.6	22.9,22.9
60	56.81	54.91	53.37	52.29	52.58	54.07	55.86	57.45	50- 60	49.09	154.7	33.5,33.5
70	53.86	52.33	51.35	50.83	51.45	52.78	53.88	54.79	60- 70	53.44	208.2	45.1,45.1
80	48.96	47.89	47.54	47.57	48.41	49.44	49.86	50.04	70- 80	53.75	261.9	56.8,56.8
90	42.81	42.21	42.45	42.94	43.95	44.67	44.44	43.95	80- 90	50.36	312.3	67.7,67.7
100	36.14	35.90	36.56	37.42	38.54	38.98	38.25	37.27	90-100	44.14	356.4	77.2,77.2
110	29.43	29.43	30.34	31.42	32.59	32.83	31.81	30.55	100-110	36.24	392.7	85.1,85.1
120	22.97	23.07	24.08	25.26	26.44	26.56	25.42	24.04	110-120	27.72	420.4	91.1,91.1
130	16.84	16.96	17.94	19.14	20.28	20.36	19.24	17.87	120-130	19.47	439.8	95.3,95.3
140	11.20	11.25	12.09	13.22	14.28	14.38	13.42	12.18	130-140	12.17	452.0	97.9,97.9
150	6.267	6.249	6.855	7.803	8.727	8.877	8.219	7.218	140-150	6.394	458.4	99.3,99.3
160	2.556	2.489	2.800	3.450	4.086	4.239	3.961	3.312	150-160	2.525	460.9	99.9,99.9
170	0.1072	0.0759	0.0756	0.0787	0.4186	0.7972	0.8502	0.4079	160-170	0.5732	461.5	100,100
180	0.0739	0.0733	0.0727	0.0716	0.0738	0.0747	0.0731	0.0719	170-180	0.0095	461.5	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 83.878 lm

%lum = 18.2%

%lamp = 18.2%

Conical surface Flux(120deg): 154.72 lm

%lum = 33.5%

%lamp = 33.5%

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:lsc
 Test Date:2021-12-01

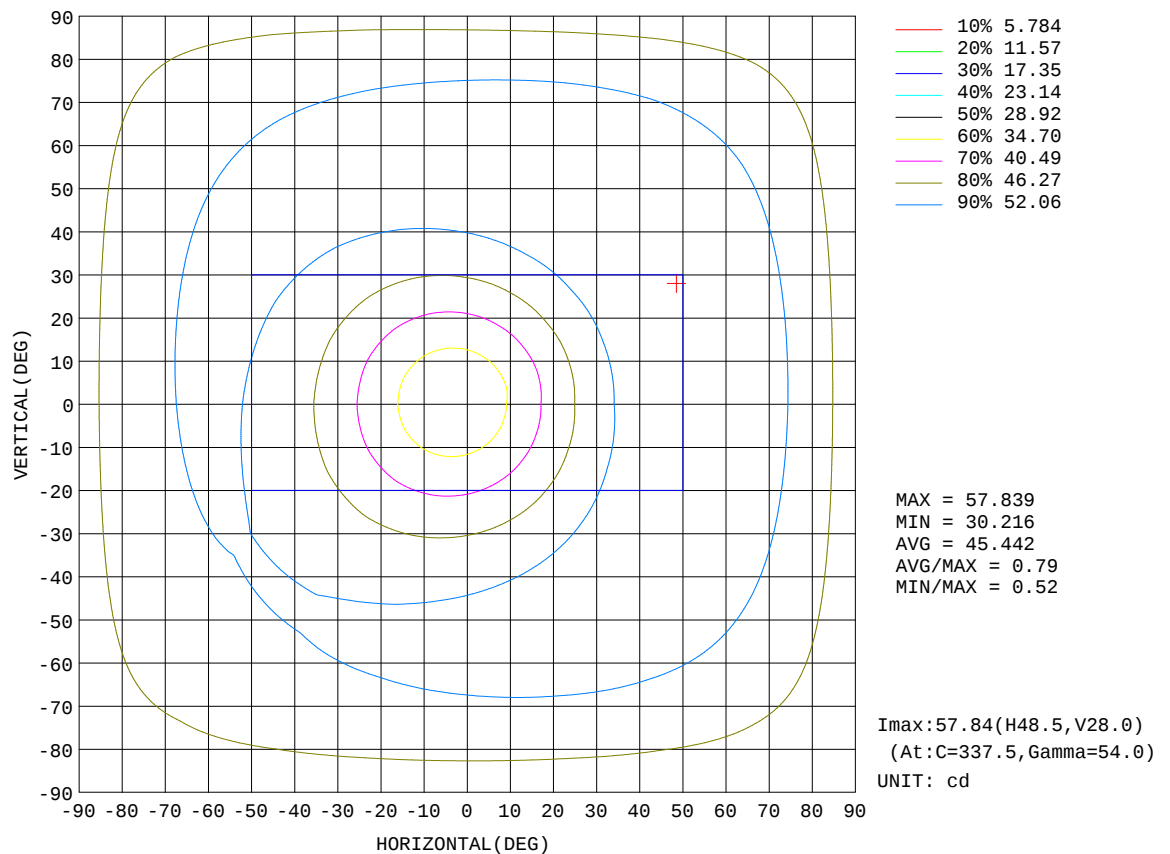
Checker: HXP

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE G0-R5000_V2 SYSTEM V2.00.429
 Humidity:49%
 Test Distance:1.528m [K=1.0000]
 Remarks:

Assessor:

ISOCANDELA DIAGRAM

Test:U:230.08V I:0.0381A P:4.7720W PF:0.5444 Freq:50.00Hz Lamp Flux:461.509x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: C11a_11aSA-C470ST-Q1NNN-01	DIM.:	SERIAL No.: A2116079G001
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.1DEG
Operators: lsc
Test Date: 2021-12-01

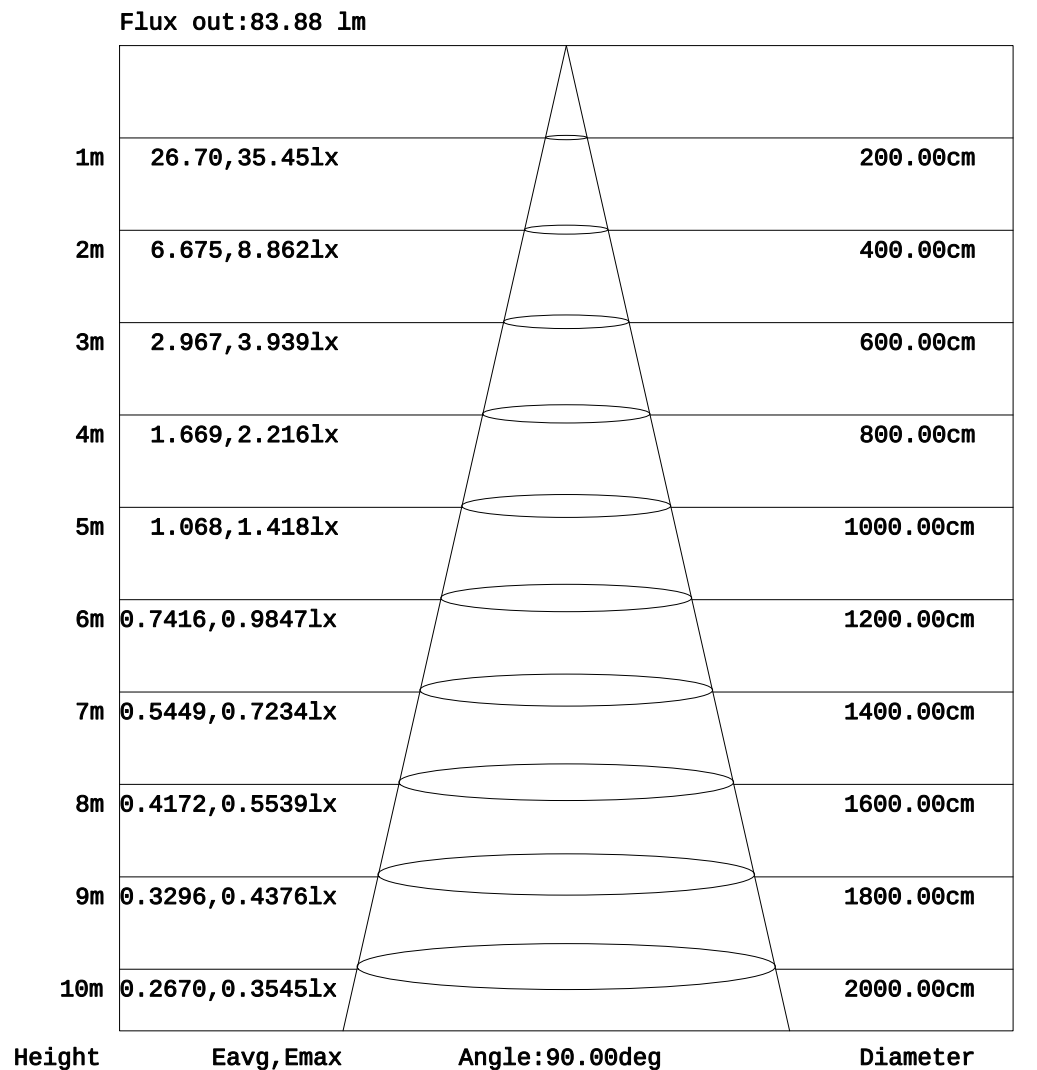
Checker: HXP

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System: EVERFINE G0-R5000_V2 SYSTEM V2.00.429
Humidity: 49%
Test Distance: 1.528m [K=1.0000]
Remarks:

Assessor:

AAI Figure

Test:U:230.08V I:0.0381A P:4.7720W PF:0.5444 Freq:50.00Hz Lamp Flux:461.509x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: C11a_11aSA-C470ST-Q1NNN-01	DIM.:	SERIAL No.: A2116079G001
MFR.:	SUR.:	Shielding Angle:



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

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:lsc
 Test Date:2021-12-01

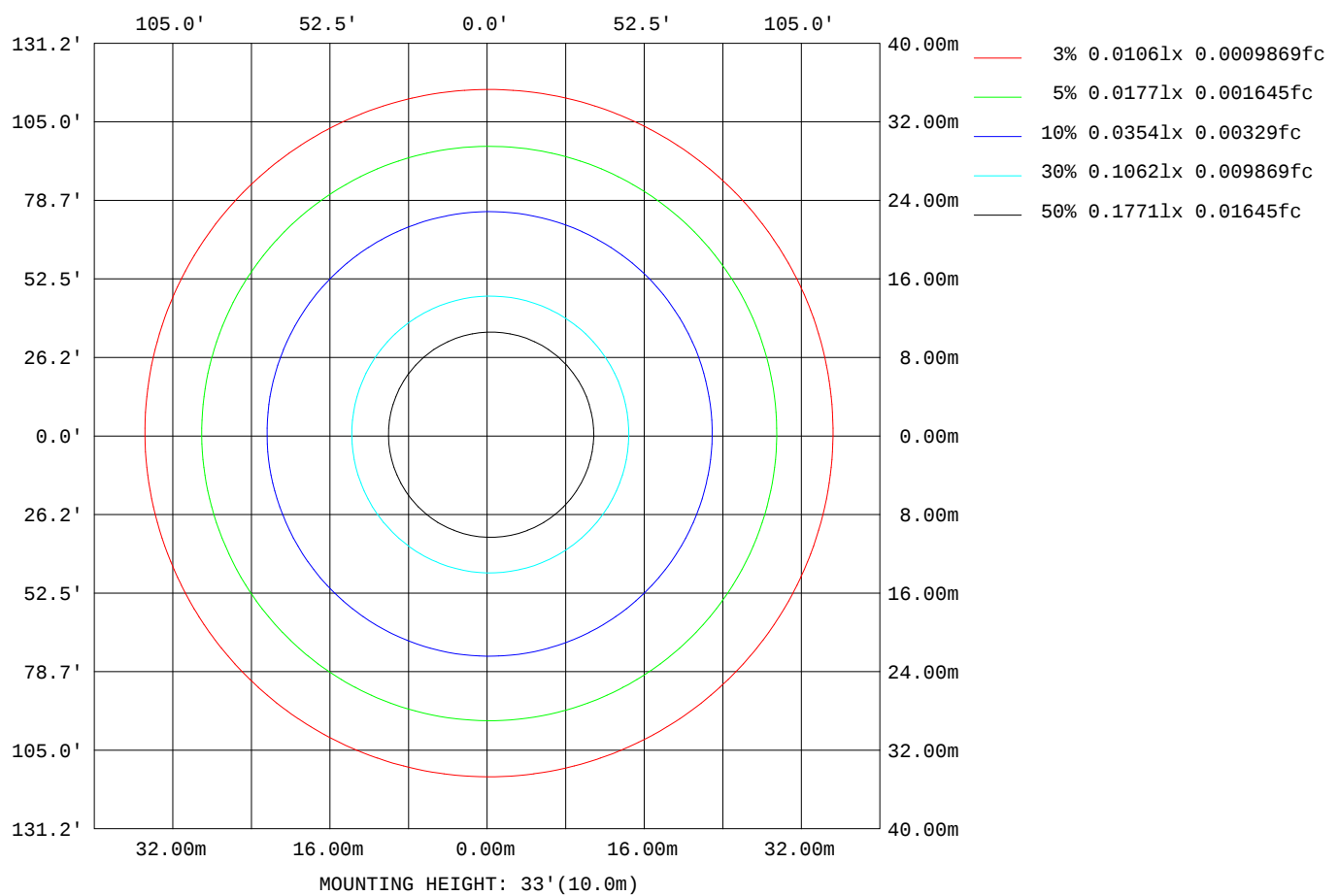
γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE G0-R5000_V2 SYSTEM V2.00.429
 Humidity:49%
 Test Distance:1.528m [K=1.0000]
 Remarks:

Checker: HXP

Assessor:

ISOLUX DIAGRAM

Test:U:230.08V I:0.0381A P:4.7720W PF:0.5444 Freq:50.00Hz Lamp Flux:461.509x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: C11a_11aSA-C470ST-Q1NNN-01	DIM.:	SERIAL No.: A2116079G001
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: lsc
 Test Date: 2021-12-01

Checker: HXP

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE G0-R5000_V2 SYSTEM V2.00.429
 Humidity: 49%
 Test Distance: 1.528m [K=1.0000]
 Remarks:

Assessor:

LED Avg.L Report

Test:U:230.08V I:0.0381A P:4.7720W PF:0.5444 Freq:50.00Hz Lamp Flux:461.509x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: C11a_11aSA-C470ST-Q1NNN-01	DIM.:	SERIAL No.: A2116079G001
MFR.:	SUR.:	Shielding Angle:

AvgL	cd/m2
L_0~180(65)av	9622
L_0~180(75)av	14814
L_0~180(85)av	39924
L_90~270(65)av	9611
L_90~270(75)av	14812
L_90~270(85)av	39953
L_45(65)av	9624
L_45(75)av	14828
L_45(85)av	39973

Standard: GB/T 29293-2012

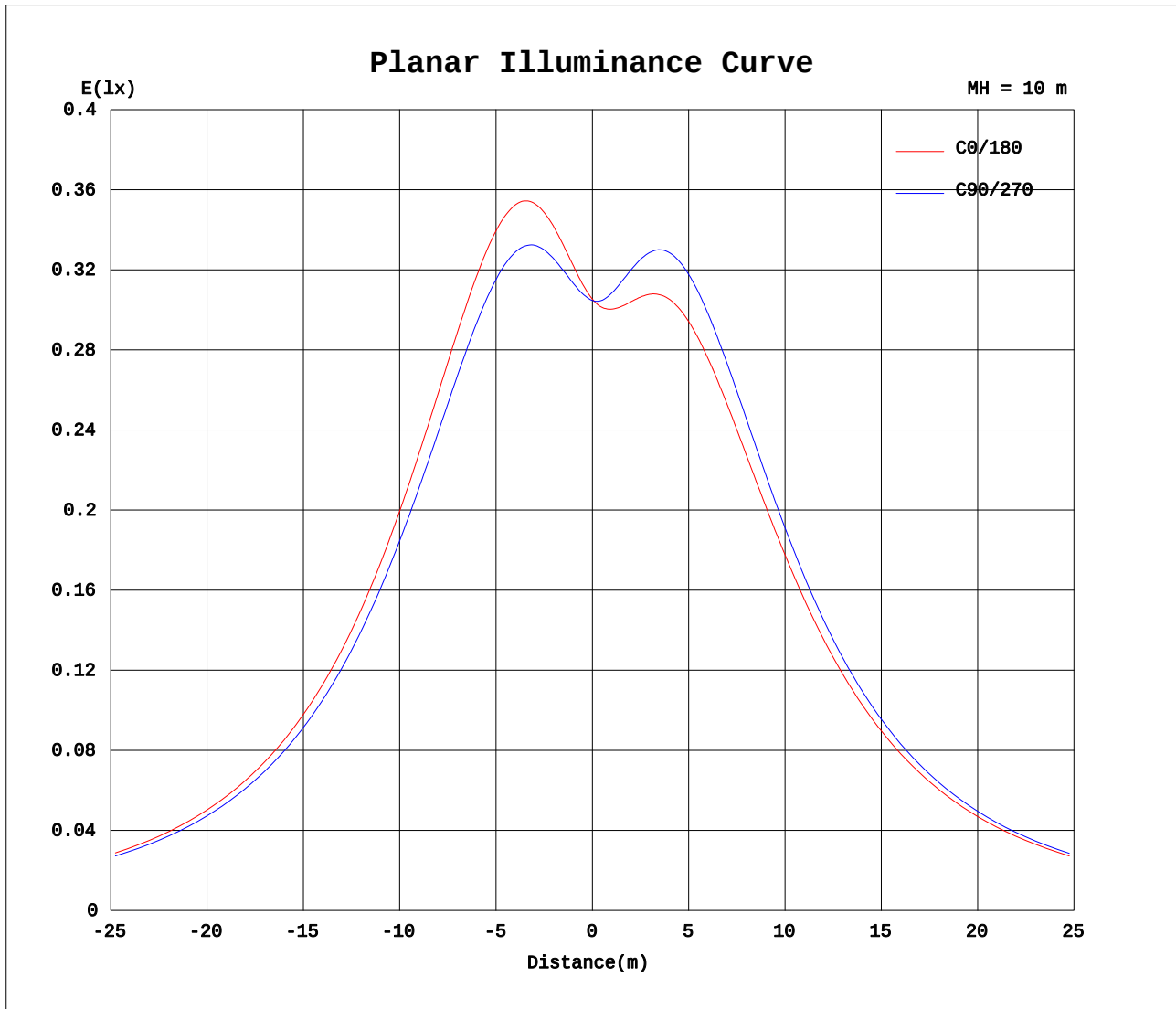
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:lsc
 Test Date:2021-12-01

Checker: HXP

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE G0-R5000_V2 SYSTEM V2.00.429
 Humidity:49%
 Test Distance:1.528m [K=1.0000]
 Remarks:

Assessor:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.1DEG
Operators: lsc
Test Date: 2021-12-01

Checker: HXP

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System: EVERFINE G0-R5000_V2 SYSTEM V2.00.429
Humidity: 49%
Test Distance: 1.528m [K=1.0000]
Remarks:

Assessor:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.08V I:0.0381A P:4.7720W PF:0.5444 Freq:50.00Hz Lamp Flux:461.509x1 lm																	
NAME:									TYPE:						WEIGHT:		
SPEC.: C11a_11aSA-C470ST-Q1NNN-01									DIM.:						SERIAL No.: A2116079G001		
MFR.:									SUR.:						Shielding Angle:		

Table--1

UNIT: cd

C(°) γ (°)																		
	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5		
0	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5		
5	32.3	32.3	32.1	31.9	31.6	31.2	30.8	30.6	30.3	30.3	30.5	30.7	31.1	31.4	31.8	32.1		
10	35.2	35.2	34.9	34.4	33.8	33.1	32.5	32.0	31.6	31.7	32.0	32.5	33.2	33.9	34.5	34.9		
15	38.8	38.7	38.2	37.6	36.7	35.9	35.1	34.5	34.0	34.1	34.6	35.4	36.3	37.2	37.9	38.5		
20	42.6	42.3	41.7	40.9	39.9	38.9	38.0	37.4	36.9	37.1	37.8	38.7	39.8	40.8	41.8	42.3		
25	46.2	45.8	45.1	44.2	43.1	42.0	41.1	40.5	40.0	40.3	41.1	42.1	43.3	44.5	45.5	46.1		
30	49.6	49.0	48.2	47.2	46.0	44.9	44.0	43.4	43.1	43.4	44.3	45.4	46.7	48.0	49.0	49.6		
35	52.4	51.8	50.8	49.7	48.6	47.5	46.6	46.1	45.9	46.3	47.2	48.4	49.7	51.0	52.1	52.6		
40	54.7	53.9	52.9	51.8	50.7	49.6	48.8	48.4	48.2	48.8	49.7	50.9	52.2	53.5	54.5	55.0		
45	56.3	55.4	54.4	53.3	52.2	51.3	50.5	50.1	50.1	50.7	51.7	52.8	54.1	55.3	56.3	56.7		
50	57.2	56.3	55.2	54.2	53.2	52.3	51.6	51.4	51.5	52.2	53.1	54.1	55.3	56.5	57.4	57.7		
55	57.3	56.4	55.4	54.4	53.6	52.8	52.2	52.1	52.3	53.0	53.9	54.9	55.9	57.0	57.8	58.0		
60	56.8	55.9	54.9	54.1	53.4	52.7	52.3	52.3	52.6	53.3	54.1	54.9	55.9	56.8	57.4	57.5		
65	55.6	54.7	53.9	53.2	52.6	52.1	51.8	51.9	52.3	53.0	53.7	54.4	55.2	55.9	56.4	56.4		
70	53.9	53.1	52.3	51.8	51.4	51.0	50.8	51.0	51.4	52.1	52.8	53.4	53.9	54.4	54.8	54.7		
75	51.6	50.9	50.3	49.9	49.6	49.4	49.4	49.6	50.1	50.7	51.3	51.8	52.1	52.4	52.6	52.5		
80	49.0	48.3	47.9	47.6	47.5	47.5	47.6	47.8	48.4	49.0	49.4	49.7	49.9	50.0	50.0	49.8		
85	46.0	45.5	45.2	45.1	45.1	45.2	45.4	45.7	46.3	46.8	47.2	47.3	47.3	47.2	47.1	46.8		
90	42.8	42.4	42.2	42.3	42.4	42.7	42.9	43.3	44.0	44.4	44.7	44.6	44.4	44.2	44.0	43.6		
95	39.5	39.2	39.1	39.3	39.6	39.9	40.3	40.7	41.3	41.8	41.9	41.8	41.4	41.0	40.6	40.2		
100	36.1	35.9	35.9	36.2	36.6	37.0	37.4	37.9	38.5	38.9	39.0	38.7	38.2	37.8	37.3	36.8		
105	32.8	32.6	32.7	33.0	33.5	33.9	34.5	34.9	35.6	35.9	35.9	35.6	35.0	34.5	33.9	33.4		
110	29.4	29.3	29.4	29.8	30.3	30.9	31.4	31.9	32.6	32.9	32.8	32.4	31.8	31.2	30.5	30.0		
115	26.2	26.0	26.2	26.7	27.2	27.8	28.3	28.9	29.5	29.8	29.7	29.3	28.6	27.9	27.3	26.7		
120	23.0	22.9	23.1	23.5	24.1	24.7	25.3	25.8	26.4	26.7	26.6	26.1	25.4	24.7	24.0	23.5		
125	19.9	19.8	20.0	20.4	21.0	21.6	22.2	22.7	23.3	23.6	23.4	23.0	22.3	21.6	20.9	20.4		
130	16.8	16.8	17.0	17.4	17.9	18.5	19.1	19.7	20.3	20.5	20.4	19.9	19.2	18.5	17.9	17.3		
135	14.0	13.9	14.0	14.4	15.0	15.5	16.1	16.7	17.2	17.4	17.3	16.9	16.3	15.6	15.0	14.4		
140	11.2	11.1	11.3	11.6	12.1	12.6	13.2	13.7	14.3	14.5	14.4	14.0	13.4	12.8	12.2	11.7		
145	8.62	8.50	8.64	8.95	9.37	9.87	10.4	10.9	11.4	11.6	11.5	11.2	10.7	10.1	9.57	9.09		
150	6.27	6.15	6.25	6.51	6.85	7.30	7.80	8.25	8.73	8.86	8.88	8.66	8.22	7.72	7.22	6.75		
155	4.22	4.10	4.16	4.36	4.63	5.01	5.44	5.83	6.23	6.34	6.39	6.26	5.93	5.50	5.08	4.68		
160	2.56	2.45	2.49	2.61	2.80	3.10	3.45	3.76	4.09	4.16	4.24	4.19	3.96	3.64	3.31	2.99		
165	1.37	1.28	1.23	1.27	1.41	1.51	1.85	2.05	2.38	2.41	2.50	2.49	2.36	2.14	1.93	1.67		
170	0.11	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.42	0.48	0.80	0.89	0.85	0.74	0.41	0.41		
175	0.08	0.08	0.07	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07		
180	0.07	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07		

C Range: 0 - 360DEG
C Interval: 22.5DEG
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γ Range: 0 - 180DEG
γ Interval: 0.5DEG
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Checker: HXP

Assessor: