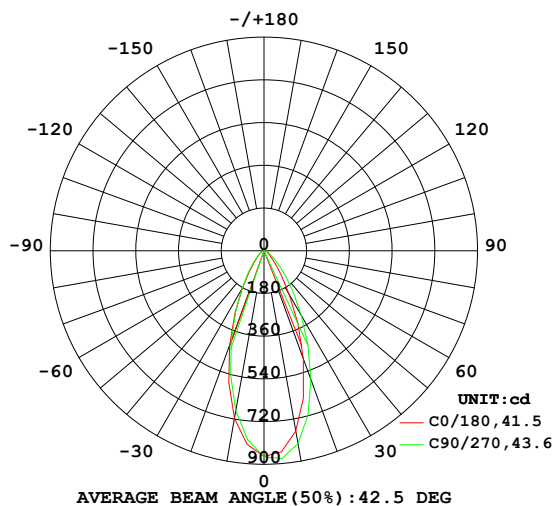


## LUMINAIRE PHOTOMETRIC TEST REPORT

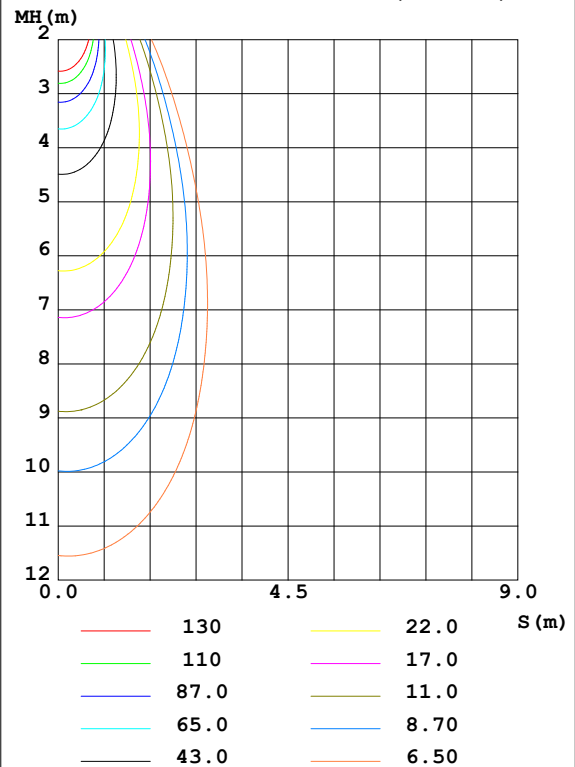
Test:U:120.0V I:0.0593A P:5.830W PF:0.8196 Freq:59.98Hz Lamp Flux:624.496x1 lm		
NAME: LED6.5PAR20DIM FL40	TYPE:LED	WEIGHT:
SPEC.:12aSA-PR550SG-W1D-04 120V60HZ	DIM.:	SERIAL No.:A2205729A001
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 107.11 lm/W			
MODEL		I <sub>max</sub> (cd)	883.2	S/MH (C0/180)	0.63
NOMINAL POWER (W)	6.5	LOR (%)	100.0	S/MH (C90/270)	0.60
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	624.50	η UP,DN (C0-180)	1.4,54.9
NOMINAL FLUX (lm)	624.496	CIE CLASS	DIRECT	η UP,DN (C180-360)	1.4,42.3
LAMPS INSIDE	1	η up (%)	2.8	CIBSE SHR NOM	0.75
TEST VOLTAGE (V)	120	η down (%)	97.2	CIBSE SHR MAX	0.75

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:CQL  
Test Date:2022-06-16

γ Range: 0 - 180DEG  
γ Interval: 5.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.363T  
Humidity:50%  
Test Distance:7.110m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	771.8	820.3	824.8	778.4	718.2	676.3	684.1	727.5	0- 10	77.18	77.18	12.4,12.4
20	486.8	552.0	578.2	514.3	425.7	386.1	404.5	451.7	10- 20	171.6	248.8	39.8,39.8
30	214.2	259.8	314.9	272.0	182.2	173.4	188.7	211.6	20- 30	156.9	405.7	65,65
40	81.53	97.91	146.3	132.6	67.95	71.81	76.62	88.67	30- 40	96.31	502.0	80.4,80.4
50	33.74	39.92	61.47	59.16	30.55	31.11	32.12	36.40	40- 50	50.30	552.3	88.4,88.4
60	19.36	21.76	27.59	26.21	17.71	17.08	18.16	19.62	50- 60	26.76	579.1	92.7,92.7
70	11.38	13.09	14.96	13.47	9.877	9.055	9.715	10.76	60- 70	15.87	594.9	95.3,95.3
80	5.330	6.478	7.014	5.881	4.052	3.325	3.626	4.551	70- 80	8.555	603.5	96.6,96.6
90	1.621	2.144	2.143	1.789	1.213	1.146	1.322	1.371	80- 90	3.351	606.9	97.2,97.2
100	1.470	1.447	1.691	1.757	1.376	1.464	1.599	1.544	90-100	1.588	608.4	97.4,97.4
110	2.007	2.124	2.409	2.297	1.968	2.039	2.148	2.101	100-110	1.942	610.4	97.7,97.7
120	2.104	2.149	2.295	2.271	2.211	2.392	2.513	2.380	110-120	2.250	612.6	98.1,98.1
130	2.546	2.481	2.600	2.700	2.541	2.876	3.158	2.847	120-130	2.223	614.9	98.5,98.5
140	3.245	3.064	3.241	3.354	3.104	3.527	3.993	3.501	130-140	2.339	617.2	98.8,98.8
150	4.674	4.242	4.327	4.635	4.257	4.705	5.130	4.626	140-150	2.455	619.6	99.2,99.2
160	6.625	6.293	6.095	6.254	5.619	5.942	6.107	5.864	150-160	2.452	622.1	99.6,99.6
170	7.053	6.976	6.854	6.689	5.786	5.901	6.120	6.108	160-170	1.805	623.9	99.9,99.9
180	6.213	6.316	6.319	6.237	6.222	6.325	6.328	6.225	170-180	0.5902	624.5	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 531.4 lm

%lum = 85.1%

%lamp = 85.1%

Conical surface Flux(120deg): 579.08 lm

%lum = 92.7%

%lamp = 92.7%

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25DEG  
 Operators:CQL  
 Test Date:2022-06-16

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 5.0DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.363T  
 Humidity:50%  
 Test Distance:7.110m [K=1.0000]  
 Remarks:

## UGR(Unified Glare Rating) Table

Test:U:120.0V I:0.0593A P:5.830W PF:0.8196 Freq:59.98Hz Lamp Flux:624.496x1 lm										
NAME: LED6.5PAR20DIM FL40					TYPE:LED			WEIGHT:		
SPEC.:12aSA-PR550SG-W1D-04 120V60HZ					DIM.:			SERIAL No.:A2205729A001		
MFR.: EVERFINE					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	6.7	7.7	6.9	7.9	8.1	9.6	10.6	9.9	10.9	11.1
3H	7.4	8.3	7.7	8.5	8.8	10.1	11.0	10.4	11.3	11.5
4H	7.7	8.6	8.0	8.8	9.1	10.3	11.2	10.6	11.5	11.7
6H	8.0	8.8	8.3	9.1	9.4	10.5	11.3	10.9	11.6	11.9
8H	8.1	8.8	8.4	9.2	9.5	10.6	11.4	10.9	11.7	12.0
12H	8.2	8.9	8.5	9.2	9.6	10.7	11.4	11.0	11.7	12.1
4H 2H	7.0	7.9	7.3	8.2	8.4	9.6	10.5	10.0	10.8	11.0
3H	7.9	8.7	8.3	9.0	9.3	10.3	11.0	10.6	11.3	11.7
4H	8.4	9.0	8.8	9.4	9.8	10.6	11.3	11.0	11.6	12.0
6H	8.8	9.4	9.2	9.8	10.2	10.9	11.5	11.4	11.9	12.3
8H	8.9	9.5	9.4	9.9	10.3	11.1	11.6	11.5	12.0	12.5
12H	9.1	9.6	9.5	10.0	10.5	11.2	11.7	11.7	12.1	12.6
8H 4H	8.6	9.1	9.0	9.5	10.0	10.6	11.2	11.1	11.6	12.0
6H	9.1	9.6	9.6	10.0	10.5	11.1	11.6	11.6	12.0	12.5
8H	9.4	9.8	9.9	10.3	10.8	11.3	11.7	11.8	12.2	12.7
12H	9.7	10.0	10.2	10.5	11.0	11.6	11.9	12.1	12.4	12.9
12H 4H	8.6	9.1	9.1	9.5	10.0	10.6	11.1	11.1	11.6	12.0
6H	9.2	9.6	9.7	10.1	10.6	11.1	11.5	11.6	12.0	12.5
8H	9.5	9.9	10.0	10.4	10.9	11.4	11.7	11.9	12.2	12.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.6 / - 0.7					+ 0.9 / - 1.1				
1.5H	+ 1.0 / - 0.7					+ 1.6 / - 1.4				
2.0H	+ 0.8 / - 0.6					+ 2.2 / - 1.1				

CIE Pub.117, 624.5 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = -1.6$ )

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:CQL  
Test Date:2022-06-16

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 5.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.363T  
Humidity:50%  
Test Distance:7.110m [K=1.0000]  
Remarks:

## UTILIZATION FACTORS TABLE

Test:U:120.0V I:0.0593A P:5.830W PF:0.8196 Freq:59.98Hz Lamp Flux:624.496x1 lm		
NAME: LED6.5PAR20DIM FL40	TYPE:LED	WEIGHT:
SPEC.:12aSA-PR550SG-W1D-04 120V60HZ	DIM.:	SERIAL No.:A2205729A001
MFR.: EVERFINE	SUR.:	Shielding Angle:

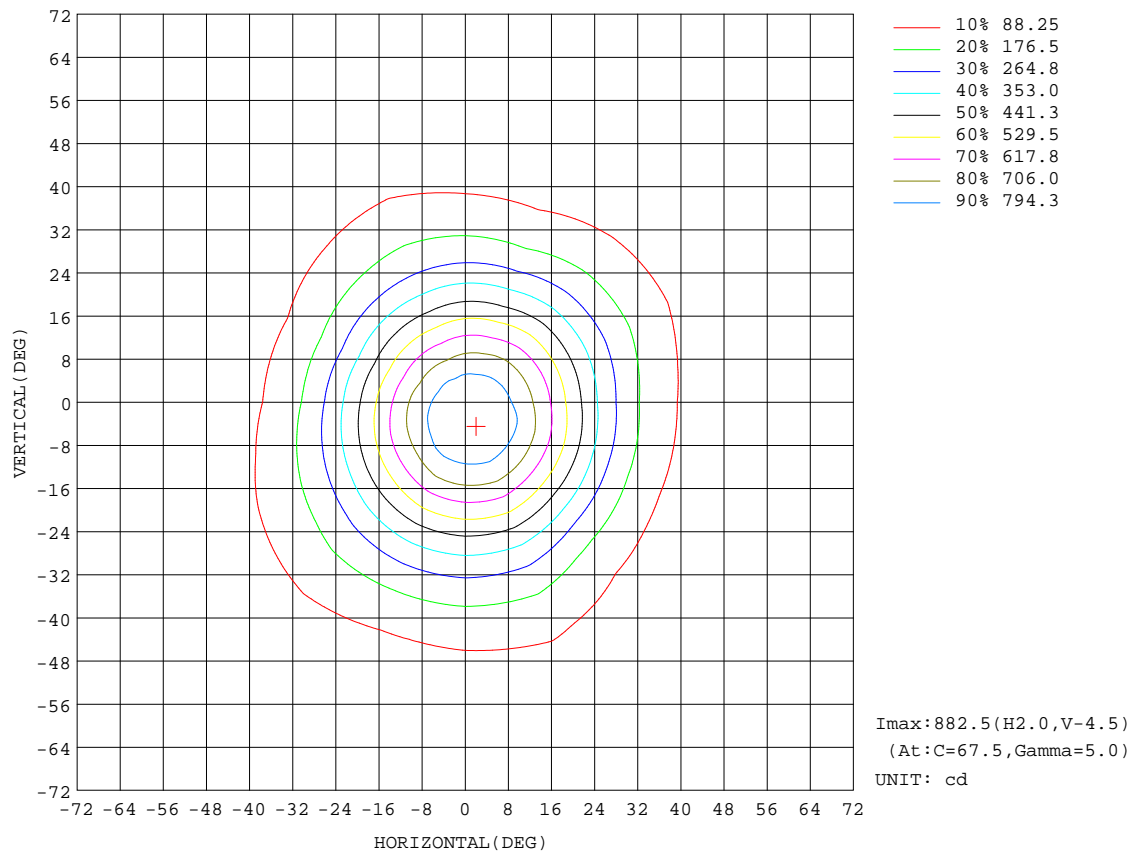
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT)    k(RI) x RCR = 5									
k = 0.60	79	72	67	79	71	67	78	71	67	63
0.80	87	80	76	87	80	75	85	79	75	70
1.00	93	86	82	92	85	81	90	85	80	76
1.25	98	91	87	96	91	86	94	89	85	80
1.50	101	95	91	99	94	90	97	92	89	83
2.00	105	99	95	103	98	95	100	96	93	86
2.50	107	102	98	105	101	97	101	98	95	88
3.00	109	105	101	107	103	100	103	100	97	90
4.00	111	108	105	109	106	103	105	102	100	92
5.00	113	110	107	110	108	106	106	104	102	93
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004										
Suspended										
SHRNM = 1.25										

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:CQL  
Test Date:2022-06-16

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 5.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.363T  
Humidity:50%  
Test Distance:7.110m [K=1.0000]  
Remarks:

## ISOCANDELA DIAGRAM

Test:U:120.0V I:0.0593A P:5.830W PF:0.8196 Freq:59.98Hz Lamp Flux:624.496x1 lm		
NAME: LED6.5PAR20DIM FL40	TYPE:LED	WEIGHT:
SPEC.:12aSA-PR550SG-W1D-04 120V60HZ	DIM.:	SERIAL No.:A2205729A001
MFR.: EVERFINE	SUR.:	Shielding Angle:

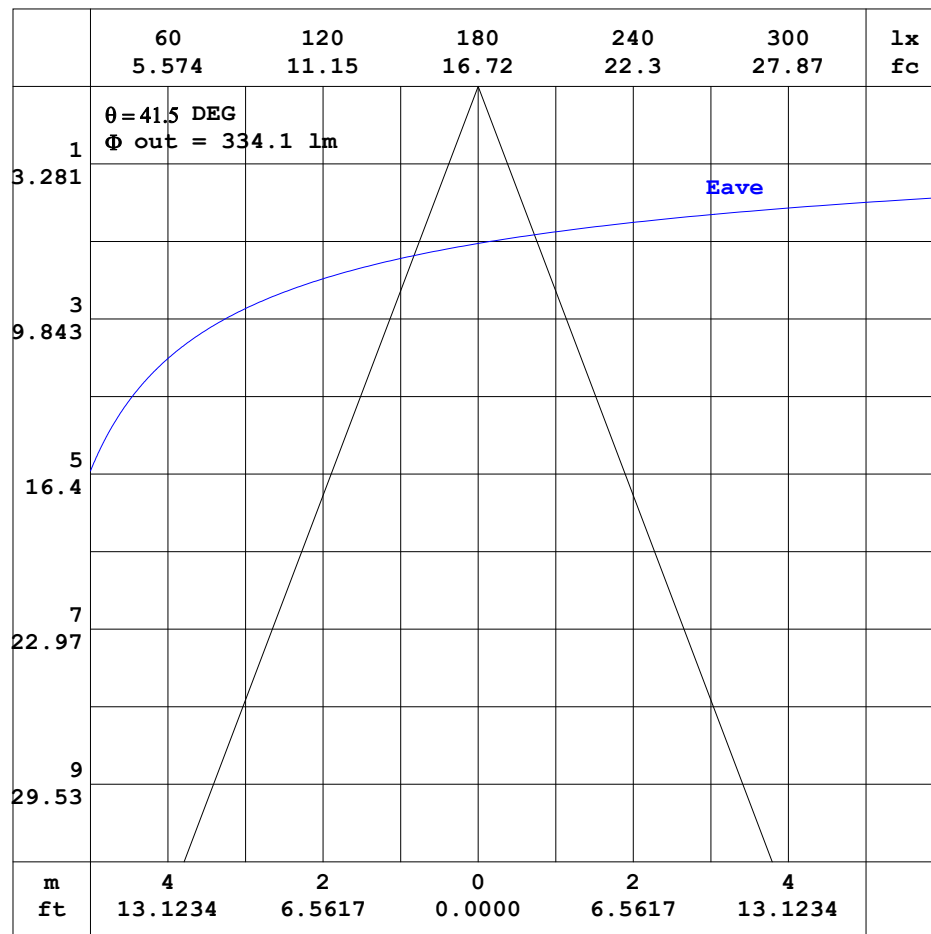


C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:CQL  
Test Date:2022-06-16

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 5.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.363T  
Humidity:50%  
Test Distance:7.110m [K=1.0000]  
Remarks:

## AAI CURVES

Test:U:120.0V I:0.0593A P:5.830W PF:0.8196 Freq:59.98Hz Lamp Flux:624.496x1 lm		
NAME: LED6.5PAR20DIM FL40	TYPE:LED	WEIGHT:
SPEC.:12aSA-PR550SG-W1D-04 120V60HZ	DIM.:	SERIAL No.:A2205729A001
MFR.: EVERFINE	SUR.:	Shielding Angle:



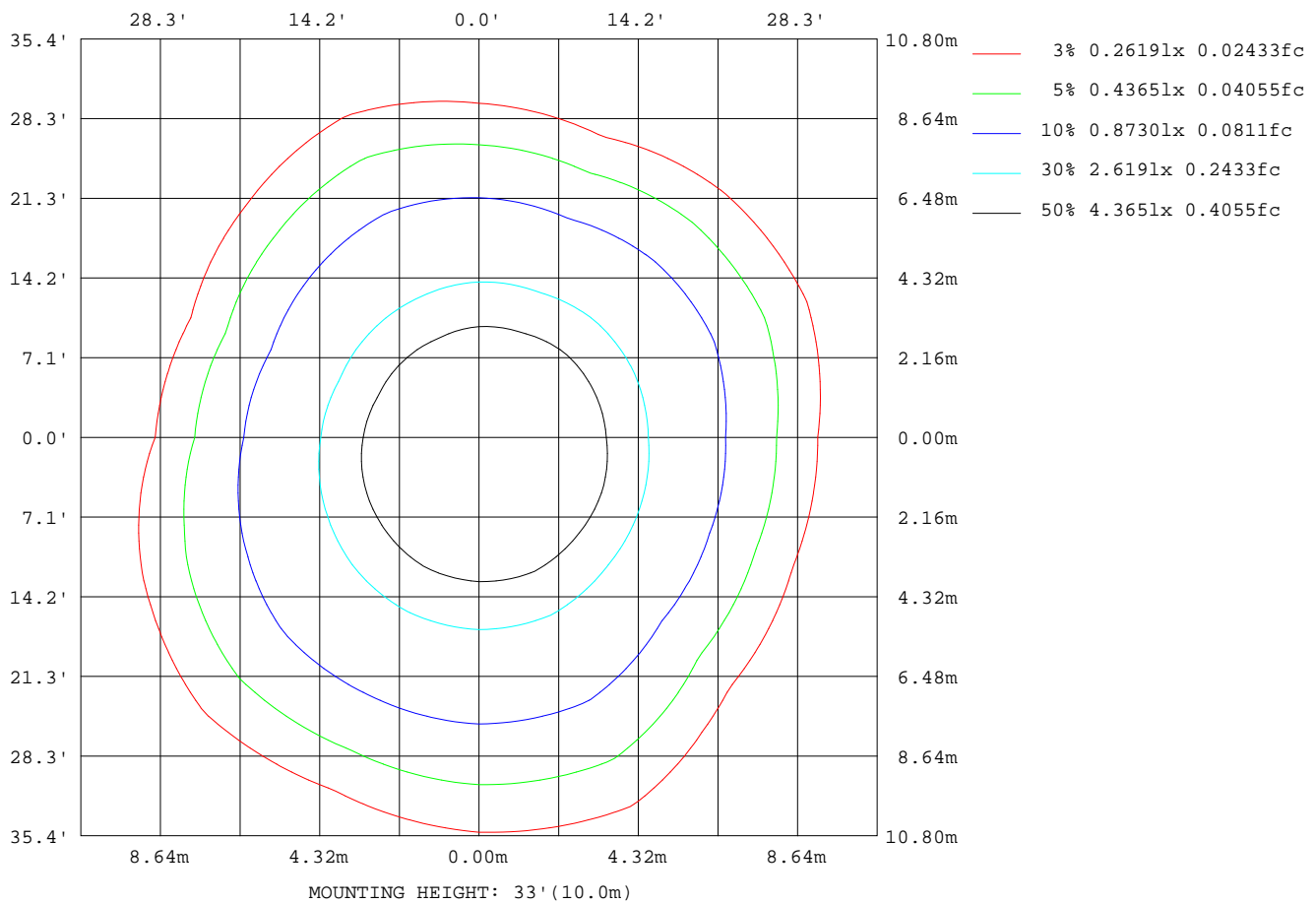
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25DEG  
 Operators: CQL  
 Test Date: 2022-06-16

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 5.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.363T  
 Humidity: 50%  
 Test Distance: 7.110m [K=1.0000]  
 Remarks:

### ISOLUX DIAGRAM

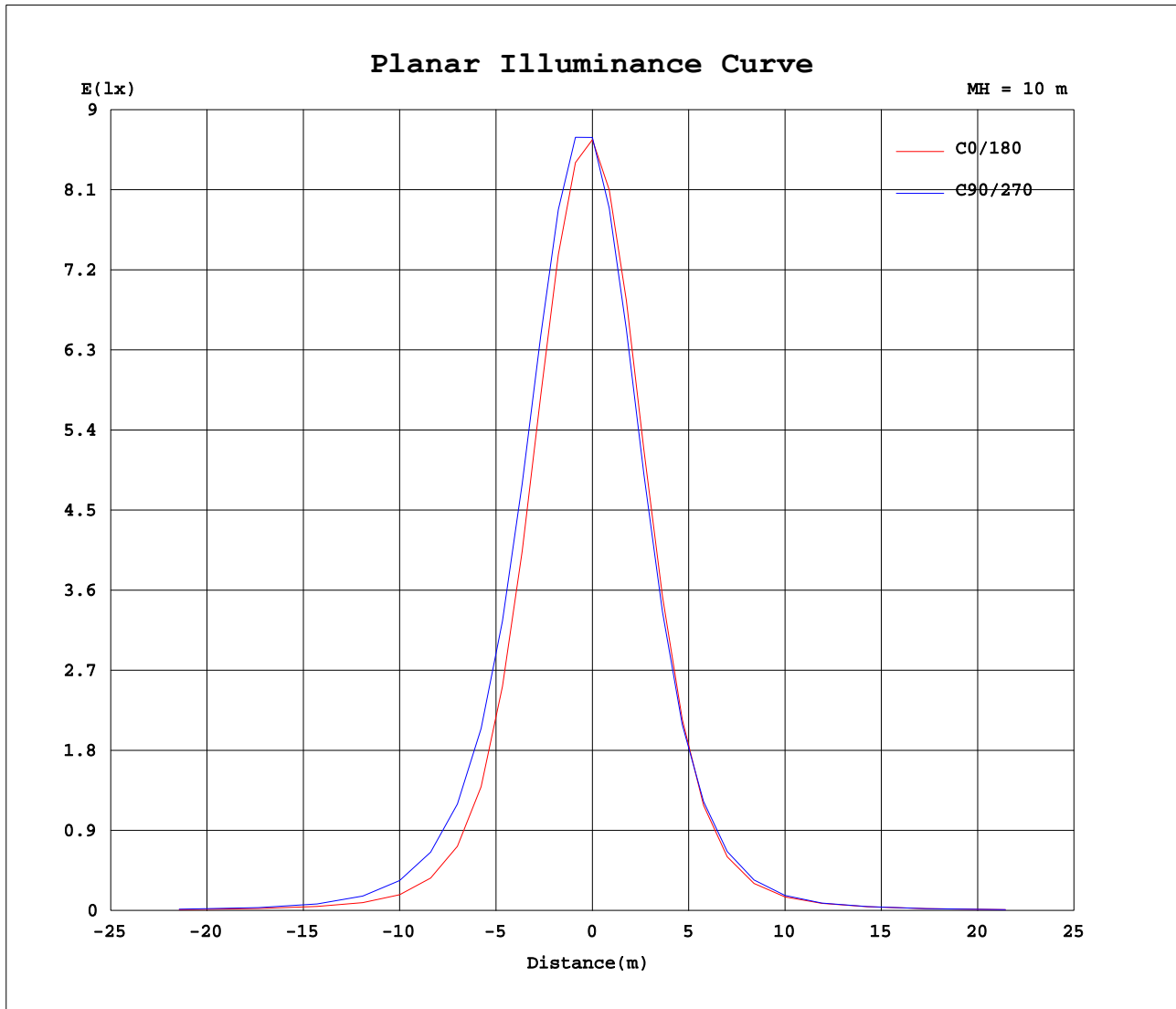
Test:U:120.0V I:0.0593A P:5.830W PF:0.8196 Freq:59.98Hz Lamp Flux:624.496x1 lm		
NAME: LED6.5PAR20DIM FL40	TYPE:LED	WEIGHT:
SPEC.:12aSA-PR550SG-W1D-04 120V60HZ	DIM.:	SERIAL No.:A2205729A001
MFR.: EVERFINE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25DEG  
 Operators: CQL  
 Test Date: 2022-06-16

γ Range: 0 - 180DEG  
 γ Interval: 5.0DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.363T  
 Humidity: 50%  
 Test Distance: 7.110m [K=1.0000]  
 Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25DEG  
Operators: CQL  
Test Date: 2022-06-16

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 5.0DEG  
Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.363T  
Humidity: 50%  
Test Distance: 7.110m [K=1.0000]  
Remarks:



## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.0593A P:5.830W PF:0.8196 Freq:59.98Hz Lamp Flux:624.496x1 lm		
NAME: LED6.5PAR20DIM FL40	TYPE:LED	WEIGHT:
SPEC.:12aSA-PR550SG-W1D-04 120V60HZ	DIM.:	SERIAL No.:A2205729A001
MFR.: EVERFINE	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	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	866	864	867	867	869	867	870	871	866	864	867	867	869	867	870	871			
5	850	868	876	883	879	871	854	839	819	801	797	790	799	806	824	840			
10	772	804	820	835	825	811	778	752	718	686	676	669	684	699	728	749			
15	643	681	705	728	717	700	656	618	574	538	529	525	544	558	595	618			
20	487	525	552	585	578	559	514	470	426	389	386	387	405	415	452	469			
25	338	367	397	437	437	419	381	336	289	259	264	272	281	286	318	334			
30	214	230	260	310	315	300	272	228	182	159	173	188	189	183	212	225			
35	132	137	160	213	218	205	191	154	110	96.1	112	130	121	114	138	150			
40	81.5	82.1	97.9	146	146	133	133	104	67.9	59.7	71.8	88.1	76.6	69.4	88.7	96.8			
45	50.4	51.2	61.3	98.9	95.4	84.0	89.4	69.8	43.6	39.0	46.0	57.8	48.1	42.9	55.6	62.4			
50	33.7	35.3	39.9	65.3	61.5	52.3	59.2	46.7	30.6	27.9	31.1	38.4	32.1	29.9	36.4	40.5			
55	24.8	26.1	28.5	43.0	39.9	34.4	38.6	31.7	22.9	21.0	22.7	26.4	23.7	22.8	26.0	28.0			
60	19.4	20.0	21.8	29.1	27.6	24.9	26.2	22.4	17.7	16.1	17.1	18.9	18.2	17.7	19.6	20.7			
65	15.1	15.7	17.1	20.8	20.4	18.8	18.8	16.3	13.5	12.2	12.8	13.6	13.6	13.5	14.7	15.5			
70	11.4	11.9	13.1	15.1	15.0	14.0	13.5	11.8	9.88	8.75	9.06	9.33	9.71	9.78	10.8	11.2			
75	8.10	8.68	9.54	10.7	10.6	9.92	9.27	8.07	6.67	5.79	5.88	5.95	6.37	6.52	7.40	7.75			
80	5.33	5.93	6.48	7.15	7.01	6.53	5.88	5.00	4.05	3.39	3.33	3.34	3.63	3.82	4.55	4.89			
85	3.11	3.66	3.98	4.36	4.15	3.80	3.32	2.69	2.13	1.77	1.70	1.71	1.88	2.00	2.40	2.73			
90	1.62	1.99	2.14	2.29	2.14	2.09	1.79	1.38	1.21	1.15	1.15	1.27	1.32	1.30	1.37	1.45			
95	1.22	1.30	1.29	1.34	1.46	1.59	1.51	1.21	1.20	1.21	1.24	1.38	1.41	1.38	1.35	1.25			
100	1.47	1.61	1.45	1.51	1.69	1.82	1.76	1.40	1.38	1.42	1.46	1.59	1.60	1.57	1.54	1.49			
105	1.73	1.88	1.71	1.83	2.00	2.09	2.01	1.68	1.67	1.72	1.76	1.87	1.88	1.85	1.80	1.74			
110	2.01	2.17	2.12	2.26	2.41	2.45	2.30	1.99	1.97	2.01	2.04	2.16	2.15	2.16	2.10	2.05			
115	2.18	2.37	2.41	2.52	2.60	2.59	2.29	2.13	2.11	2.17	2.22	2.32	2.32	2.30	2.30	2.22			
120	2.10	2.13	2.15	2.26	2.30	2.27	2.27	2.27	2.21	2.30	2.39	2.53	2.51	2.41	2.38	2.17			
125	2.25	2.19	2.22	2.31	2.36	2.35	2.45	2.49	2.36	2.48	2.64	2.83	2.79	2.69	2.57	2.35			
130	2.55	2.43	2.48	2.57	2.60	2.57	2.70	2.73	2.54	2.64	2.88	3.18	3.16	3.01	2.85	2.60			
135	2.86	2.69	2.74	2.87	2.91	2.87	3.01	3.03	2.75	2.84	3.16	3.51	3.56	3.38	3.14	2.83			
140	3.25	3.00	3.06	3.17	3.24	3.23	3.35	3.47	3.10	3.23	3.53	3.91	3.99	3.85	3.50	3.12			
145	3.82	3.50	3.51	3.58	3.67	3.69	3.90	4.06	3.62	3.78	4.04	4.42	4.57	4.41	4.01	3.58			
150	4.67	4.31	4.24	4.23	4.33	4.40	4.64	4.80	4.26	4.43	4.70	5.00	5.13	5.00	4.63	4.20			
155	5.68	5.34	5.27	5.15	5.20	5.26	5.48	5.59	4.95	5.16	5.39	5.60	5.67	5.54	5.28	4.95			
160	6.62	6.41	6.29	6.11	6.10	6.11	6.25	6.33	5.62	5.78	5.94	6.07	6.11	6.04	5.86	5.66			
165	7.14	7.06	6.99	6.88	6.81	6.72	6.71	6.76	5.93	6.01	6.13	6.26	6.29	6.24	6.16	6.06			
170	7.05	7.01	6.98	6.92	6.85	6.72	6.69	6.66	5.79	5.84	5.90	6.02	6.12	6.13	6.11	6.02			
175	6.24	6.29	6.29	6.29	6.22	6.18	6.14	6.15	5.61	5.70	5.78	5.83	5.84	5.80	5.72	5.62			
180	6.21	6.28	6.32	6.35	6.32	6.27	6.24	6.17	6.22	6.27	6.32	6.35	6.33	6.27	6.23	6.18			

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:CQL  
Test Date:2022-06-16

γ Range: 0 - 180DEG  
γ Interval: 5.0DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.363T  
Humidity:50%  
Test Distance:7.110m [K=1.0000]  
Remarks: