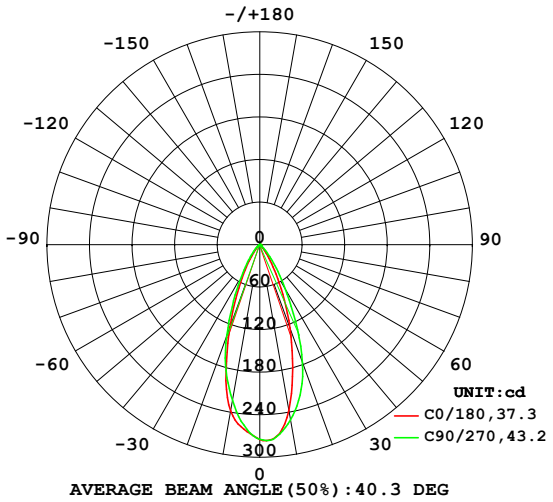
LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:11.998V I:0.2189A P:2.6264W PF:1.0000 Freq:0Hz Lamp Flux:144.935x1 lm		
NAME: HCP271101 5500K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

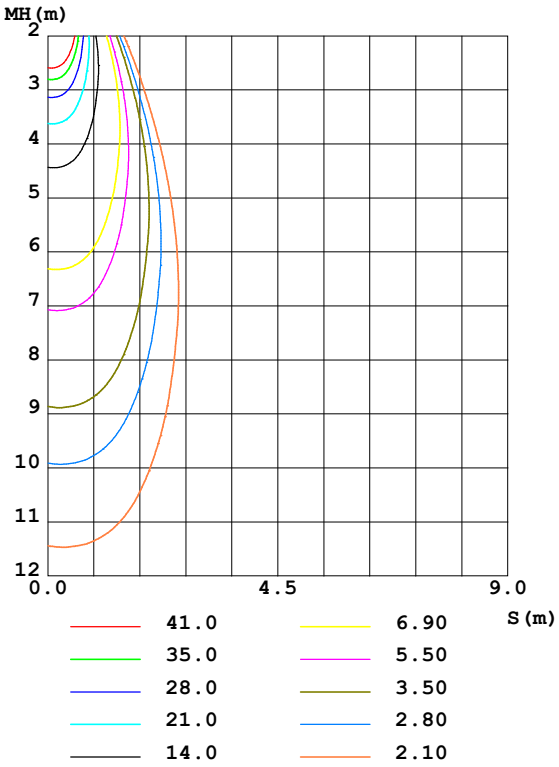
DATA OF LAMP		PHOTOMETRIC DATA		Eff: 55.18 lm/W	
MODEL	HCP271101 5500K	Imax(cd)	278.4	S/MH(C0/180)	0.61
NOMINAL POWER(W)	2.5	LOR(%)	100.0	S/MH(C90/270)	0.65
RATED VOLTAGE(V)	12	TOTAL FLUX(lm)	144.94	η UP,DN(C0-180)	0.0,53.3
NOMINAL FLUX(lm)	144.935	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,46.7
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	12	η down(%)	100.0	CIBSE SHR MAX	0.65

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



AVERAGE BEAM ANGLE(50%):40.3 DEG

C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-11-24

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.003m [K=1.0000]
Remarks: 55地埋 双色CW 正光 衡力30度

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	237.0	255.2	251.0	241.4	238.0	225.0	222.7	232.2	0- 10	24.45	24.45	16.9,16.9
20	124.7	150.9	176.6	143.8	123.7	126.8	136.3	125.9	10- 20	52.70	77.15	53.2,53.2
30	41.71	55.49	71.54	50.51	42.13	45.00	52.32	45.96	20- 30	40.48	117.6	81.2,81.2
40	10.16	15.48	22.16	13.93	11.03	13.66	16.75	12.97	30- 40	18.02	135.7	93.6,93.6
50	2.788	3.260	4.454	3.459	3.037	3.635	4.440	3.444	40- 50	5.957	141.6	97.7,97.7
60	1.234	1.321	1.587	1.387	1.263	1.410	1.588	1.332	50- 60	1.992	143.6	99.1,99.1
70	0.5478	0.6129	0.7000	0.6217	0.5119	0.5768	0.6378	0.5511	60- 70	0.9454	144.5	99.7,99.7
80	0.1132	0.1393	0.1568	0.1394	0.0994	0.0953	0.0997	0.0994	70- 80	0.3493	144.9	100,100
90	0	0	0	0	0	0	0	0	80- 90	0.0391	144.9	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-11-24

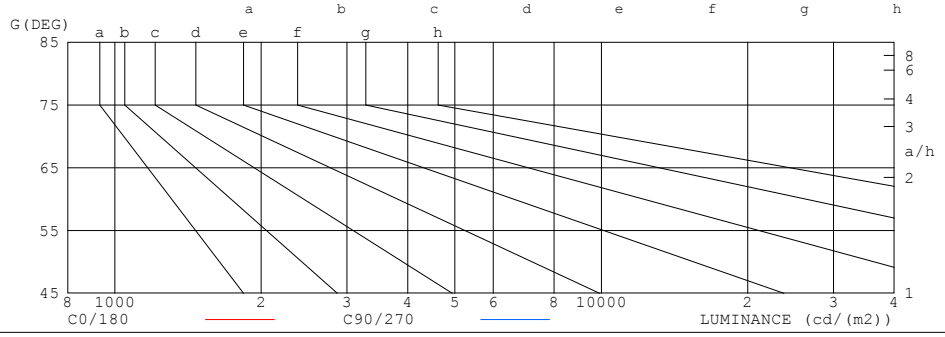
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.003m [K=1.0000]
Remarks: 55地埋 双色CW 正光 衡力30度

LUMINANCE LIMITATION CURVES

Test:U:11.998V I:0.2189A P:2.6264W PF:1.0000 Freq:0Hz Lamp Flux:144.935x1 lm			
NAME:	HCP271101 5500K	**TYPE:**	**WEIGHT:**
SPEC.:		**DIM.:**	**SERIAL No.:**
MFR.: EVERFINE		**SUR.:**	**Shielding Angle:**

LUMINANCE LIMITATION CURVES

GLARE	CLASS	ILLUMINANCE (lx)							
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	4	6
80	7	9
75	11	15
70	16	20
65	20	26
60	25	32
55	31	43
50	43	69
45	71	145

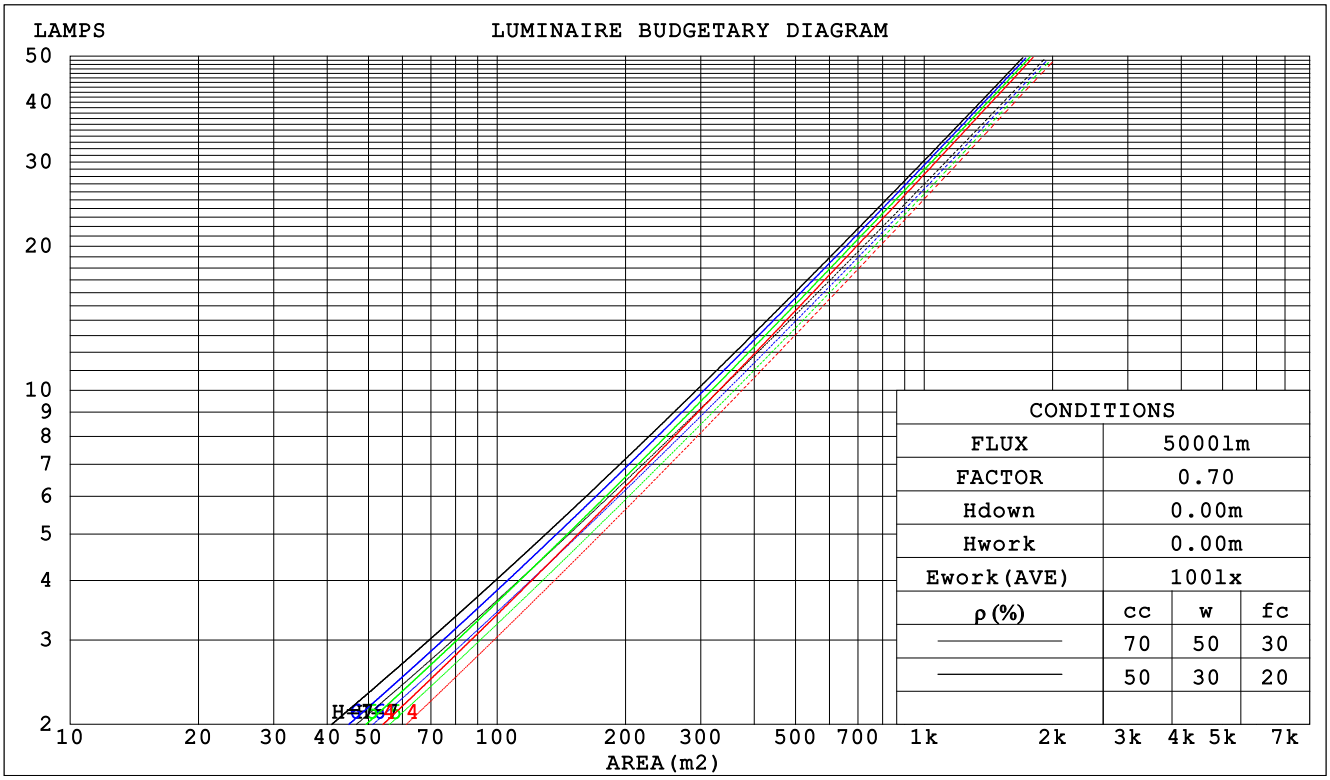
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-11-24

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.003m [K=1.0000]
Remarks: 55地埋 双色CW 正光 衡力30度

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:11.998V I:0.2189A P:2.6264W PF:1.0000 Freq:0Hz Lamp Flux:144.935x1 lm		
NAME: HCP271101 5500K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Coefficients of Utilization(CU)												
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.11	1.09	1.07	1.09	1.07	1.05	1.05	1.04	1.02	1.01	1.00	.99	.98	.97	.96	.94
2.0	1.04	1.01	.98	1.03	.99	.96	.99	.97	.94	.97	.94	.92	.94	.92	.90	.89
3.0	.98	.94	.90	.97	.93	.89	.94	.91	.88	.92	.89	.86	.90	.87	.85	.84
4.0	.93	.88	.84	.91	.87	.83	.89	.85	.82	.87	.84	.81	.86	.83	.80	.79
5.0	.88	.82	.78	.87	.82	.78	.85	.81	.77	.83	.80	.77	.82	.79	.76	.75
6.0	.83	.78	.74	.82	.77	.74	.81	.76	.73	.79	.76	.73	.78	.75	.72	.71
7.0	.79	.73	.70	.78	.73	.70	.77	.72	.69	.76	.72	.69	.75	.71	.68	.67
8.0	.75	.70	.66	.75	.69	.66	.74	.69	.66	.73	.68	.65	.72	.68	.65	.64
9.0	.72	.66	.63	.71	.66	.63	.70	.66	.62	.69	.65	.62	.69	.65	.62	.61
10.0	.69	.63	.60	.68	.63	.60	.67	.63	.60	.67	.62	.59	.66	.62	.59	.58



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-11-24

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.003m [K=1.0000]
Remarks: 55地埋 双色CW 正光 衡力30度

WEC AND CCEC

Test:U:11.998V I:0.2189A P:2.6264W PF:1.0000 Freq:0Hz Lamp Flux:144.935x1 lm		
NAME: HCP271101 5500K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Wall Exitance Coeffcients(WEC)												
0.0																
1.0	.166	.095	.030	.160	.091	.029	.147	.084	.027	.136	.078	.025	.125	.072	.023	
2.0	.158	.087	.027	.152	.084	.026	.142	.079	.024	.132	.074	.023	.123	.070	.022	
3.0	.149	.080	.024	.145	.078	.023	.136	.074	.022	.128	.070	.021	.120	.066	.021	
4.0	.142	.074	.022	.138	.072	.021	.130	.069	.021	.123	.066	.020	.116	.063	.019	
5.0	.135	.069	.020	.131	.067	.020	.124	.065	.019	.118	.062	.019	.113	.060	.018	
6.0	.128	.064	.018	.125	.063	.018	.119	.061	.018	.114	.059	.017	.109	.057	.017	
7.0	.122	.060	.017	.120	.060	.017	.114	.058	.017	.110	.056	.016	.105	.055	.016	
8.0	.117	.057	.016	.114	.056	.016	.110	.055	.016	.106	.054	.015	.102	.052	.015	
9.0	.112	.054	.015	.110	.053	.015	.106	.052	.015	.102	.051	.015	.098	.050	.014	
10.0	.107	.051	.014	.105	.051	.014	.102	.050	.014	.098	.049	.014	.095	.048	.014	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Ceiling Cavity Exitance Coefficients(CCEC)												
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.170	.157	.146	.146	.135	.125	.100	.093	.087	.057	.054	.050	.018	.017	.016	
2.0	.154	.133	.114	.132	.114	.099	.091	.079	.069	.052	.046	.040	.017	.015	.013	
3.0	.141	.113	.091	.121	.098	.079	.083	.068	.056	.048	.040	.033	.015	.013	.011	
4.0	.130	.099	.074	.112	.085	.065	.077	.059	.045	.044	.035	.027	.014	.011	.009	
5.0	.121	.087	.061	.104	.075	.053	.072	.052	.038	.042	.031	.022	.013	.010	.007	
6.0	.113	.077	.051	.097	.067	.045	.067	.047	.032	.039	.028	.019	.013	.009	.006	
7.0	.106	.070	.044	.092	.060	.038	.063	.042	.027	.037	.025	.016	.012	.008	.005	
8.0	.101	.063	.037	.087	.055	.033	.060	.038	.023	.035	.023	.014	.011	.007	.005	
9.0	.095	.058	.033	.082	.050	.028	.057	.035	.020	.033	.021	.012	.011	.007	.004	
10.0	.091	.053	.029	.078	.046	.025	.054	.033	.018	.032	.019	.011	.010	.006	.003	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-11-24

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.003m [K=1.0000]
Remarks: 55地埋 双色CW 正光 衡力30度

UTILIZATION FACTORS TABLE

Test:U:11.998V I:0.2189A P:2.6264W PF:1.0000 Freq:0Hz Lamp Flux:144.935x1 lm		
NAME: HCP271101 5500K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

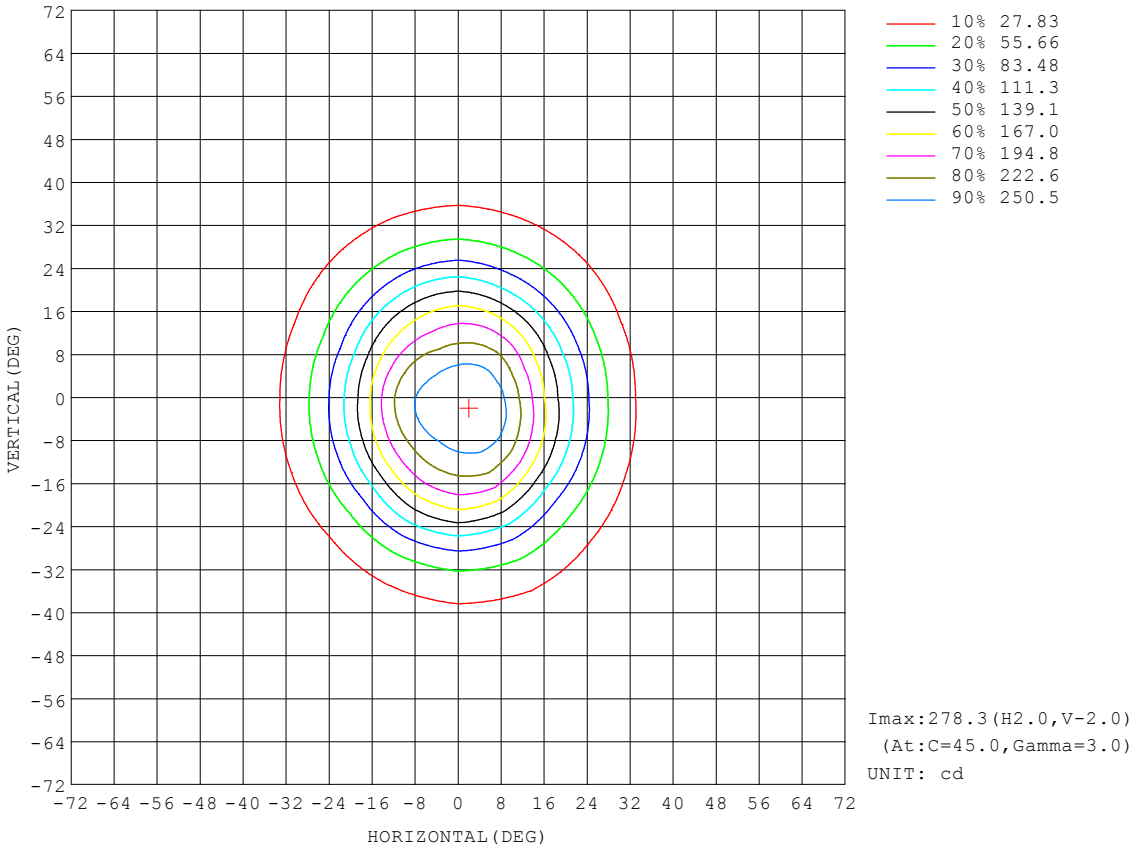
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	88	81	77	87	81	77	86	81	77	74
0.80	95	89	85	94	89	85	93	88	85	81
1.00	99	94	90	99	93	90	97	93	89	86
1.25	103	98	95	102	98	94	100	96	94	89
1.50	106	101	98	105	101	98	103	99	96	92
2.00	109	105	101	107	103	101	105	102	99	94
2.50	110	107	104	109	105	103	106	103	101	95
3.00	112	108	106	110	107	105	107	104	102	96
4.00	114	111	109	112	110	108	108	106	105	98
5.00	115	113	111	113	111	109	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: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-11-24

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.003m [K=1.0000]
Remarks: 55地埋 双色CW 正光 衡力30度

ISOCANDELA DIAGRAM

Test:U:11.998V I:0.2189A P:2.6264W PF:1.0000 Freq:0Hz Lamp Flux:144.935x1 lm		
NAME: HCP271101 5500K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

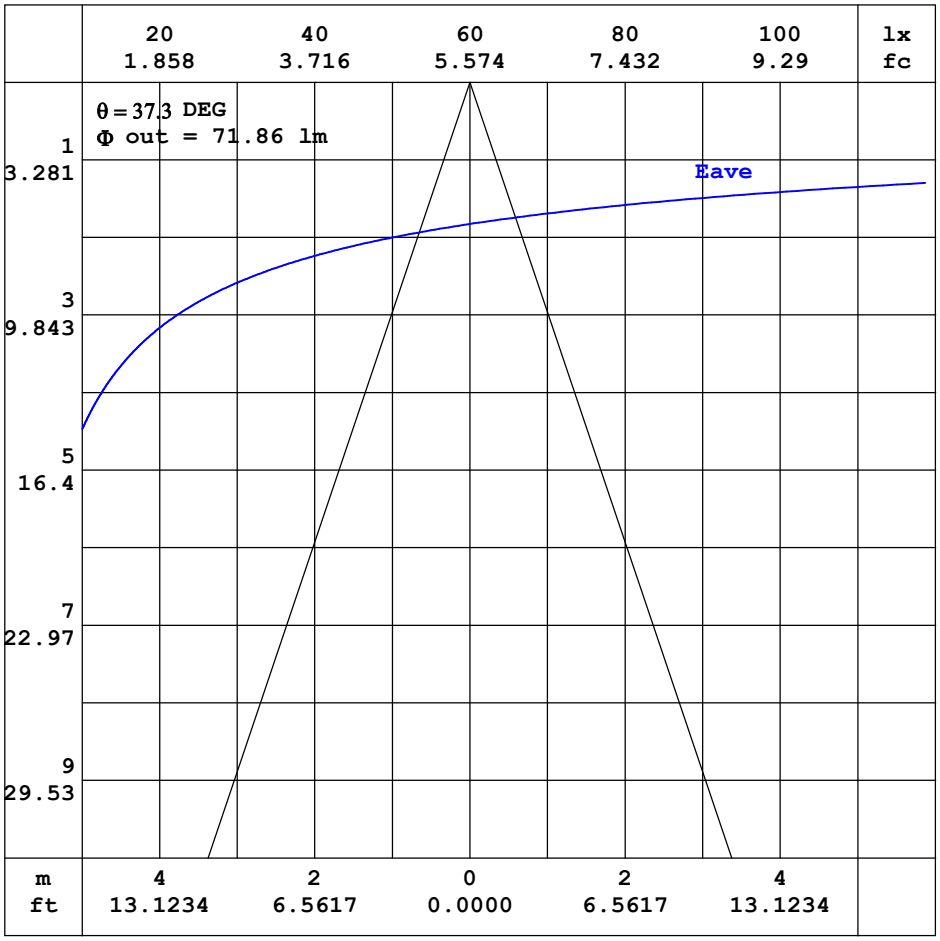


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-11-24

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.003m [K=1.0000]
Remarks: 55地埋 双色CW 正光 衡力30度

AAI CURVES

Test:U:11.998V I:0.2189A P:2.6264W PF:1.0000 Freq:0Hz Lamp Flux:144.935x1 lm			
NAME:	HCP271101 5500K	TYPE:	WEIGHT:
SPEC.:		DIM.:	SERIAL No.:
MFR.: EVERFINE		SUR.:	Shielding Angle:



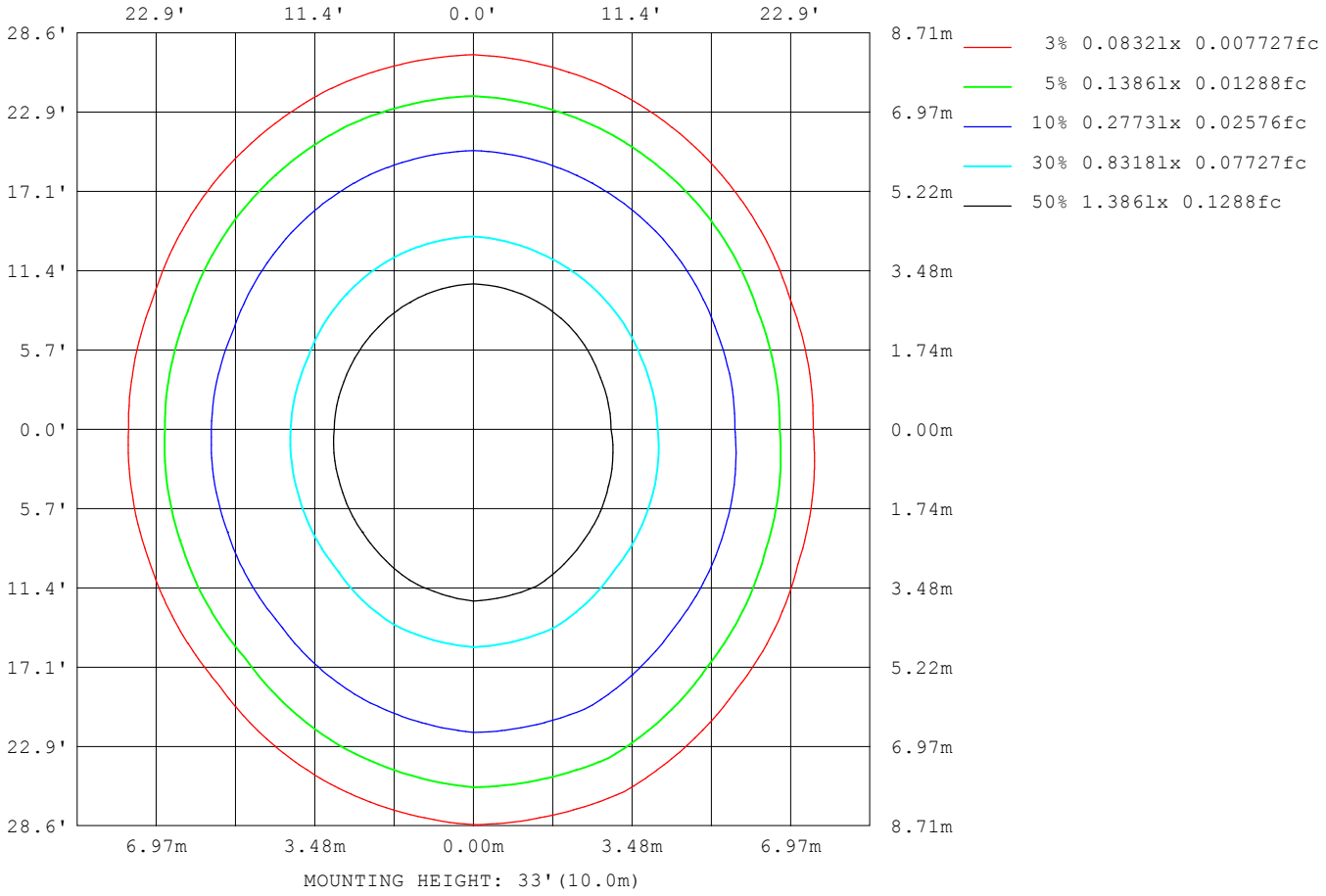
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-11-24

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.003m [K=1.0000]
Remarks: 55地埋 双色CW 正光 衡力30度

ISOLUX DIAGRAM

Test:U:11.998V I:0.2189A P:2.6264W PF:1.0000 Freq:0Hz Lamp Flux:144.935x1 lm		
NAME: HCP271101 5500K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-11-24

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.003m [K=1.0000]
Remarks: 55地埋 双色CW 正光 衡力30度

LED Avg.L Report

Test:U:11.998V I:0.2189A P:2.6264W PF:1.0000 Freq:0Hz Lamp Flux:144.935x1 lm		
NAME: HCP271101 5500K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

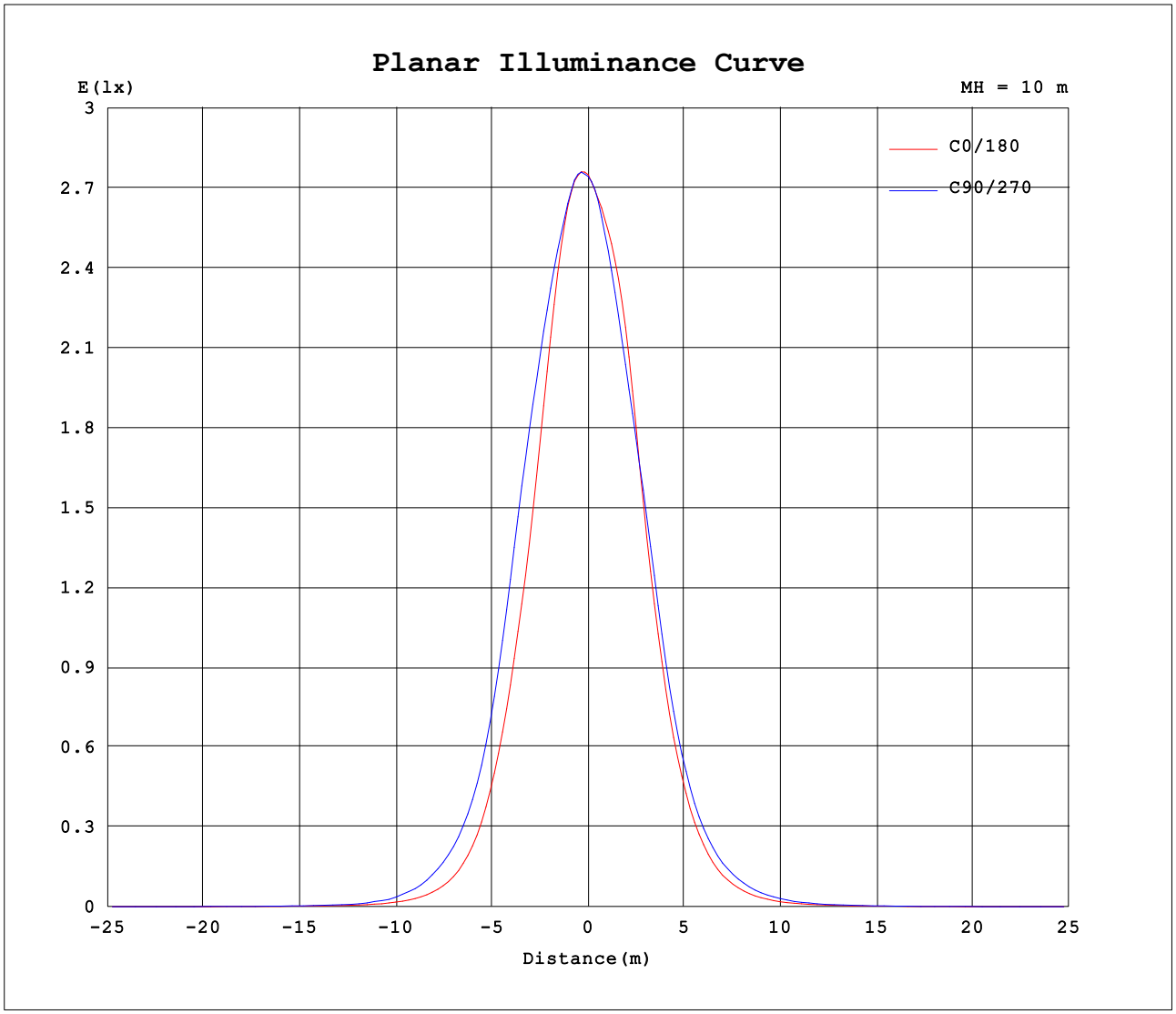
AvgL	cd/m2
L_0~180(65)av	20
L_0~180(75)av	11
L_0~180(85)av	2
L_90~270(65)av	25
L_90~270(75)av	14
L_90~270(85)av	4
L_45(65)av	22
L_45(75)av	13
L_45(85)av	3

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-11-24

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.003m [K=1.0000]
Remarks: 55地埋 双色CW 正光 衡力30度

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-11-24

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.003m [K=1.0000]
Remarks: 55地埋 双色CW 正光 衡力30度

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:11.998V I:0.2189A P:2.6264W PF:1.0000 Freq:0Hz Lamp Flux:144.935x1 lm		
NAME: HCP271101 5500K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

Table--1 UNIT: cd

γ (DEG) \ C(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	275	274	275	274	274	274	274	274	275	274	275	274	274	274	274	274			
5	272	276	277	275	272	271	266	264	261	257	254	255	256	260	262	265			
10	237	248	255	256	251	245	241	240	238	232	225	220	223	228	232	232			
15	180	194	213	224	220	212	201	191	184	179	178	180	184	185	183	178			
20	125	135	151	172	177	165	144	131	124	121	127	132	136	131	126	121			
25	77.4	85.5	94.2	114	120	110	89.6	80.9	75.4	72.7	77.8	84.0	87.5	82.1	78.9	76.6			
30	41.7	48.0	55.5	68.9	71.5	63.7	50.5	44.9	42.1	40.7	45.0	49.6	52.3	49.1	46.0	42.2			
35	20.7	24.2	30.6	40.1	41.3	34.9	26.8	23.5	21.7	21.9	25.2	28.4	30.0	27.7	24.8	21.4			
40	10.2	12.0	15.5	21.4	22.2	18.5	13.9	11.8	11.0	11.4	13.7	15.8	16.7	15.4	13.0	10.7			
45	5.05	5.89	7.18	9.83	10.2	9.01	6.81	5.78	5.56	5.96	7.34	8.37	8.93	8.08	6.71	5.44			
50	2.79	3.01	3.26	4.04	4.45	4.30	3.46	3.13	3.04	3.17	3.63	4.02	4.44	4.01	3.44	2.92			
55	1.80	1.88	1.97	2.27	2.47	2.43	2.08	1.93	1.89	1.98	2.18	2.38	2.53	2.34	2.04	1.84			
60	1.23	1.25	1.32	1.43	1.59	1.52	1.39	1.28	1.26	1.33	1.41	1.55	1.59	1.53	1.33	1.26			
65	0.86	0.86	0.92	0.97	1.09	1.03	0.95	0.86	0.85	0.91	0.93	1.03	1.04	1.02	0.88	0.87			
70	0.55	0.53	0.61	0.62	0.70	0.64	0.62	0.53	0.51	0.57	0.58	0.65	0.64	0.64	0.55	0.55			
75	0.30	0.29	0.34	0.32	0.39	0.34	0.35	0.29	0.26	0.31	0.30	0.35	0.32	0.35	0.30	0.31			
80	0.11	0.09	0.14	0.10	0.16	0.11	0.14	0.10	0.10	0.13	0.10	0.14	0.10	0.14	0.10	0.13			
85	0.03	0.00	0.04	0.02	0.06	0.04	0.04	0.01	0.00	0.04	0.01	0.05	0.02	0.04	0.00	0.04			
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-11-24

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.003m [K=1.0000]
Remarks: 55地埋 双色CW 正光 衡力30度