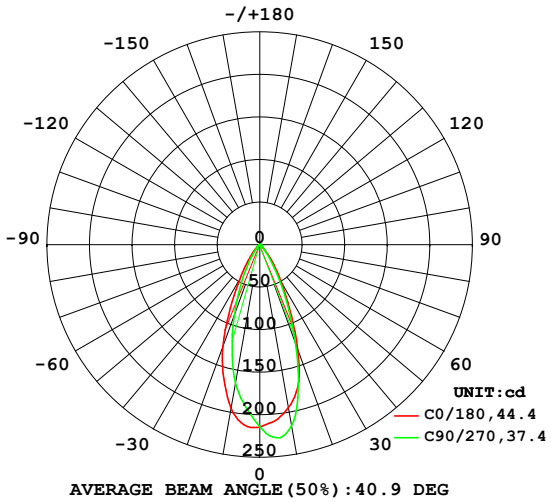
LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:11.998V I:0.2166A P:2.5988W PF:1.0000 Freq:0Hz Lamp Flux:119.39x1 lm		
NAME: HCP-271101 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

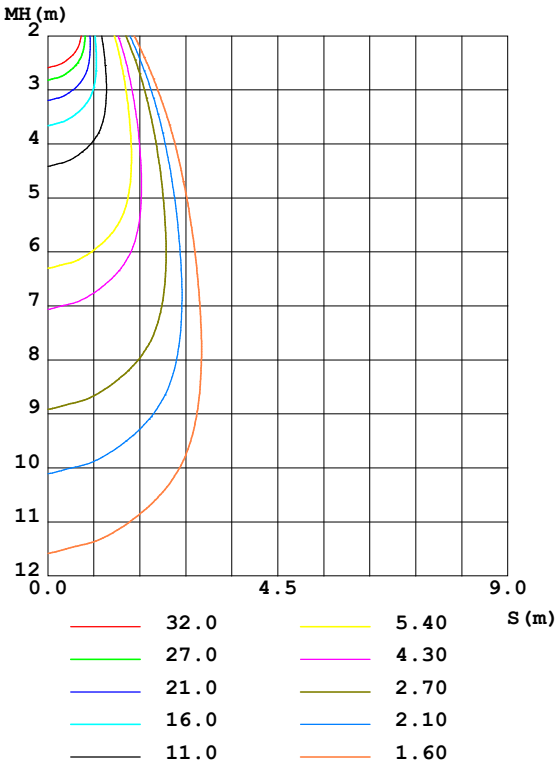
DATA OF LAMP		PHOTOMETRIC DATA Eff: 45.94 lm/W			
MODEL	HCP-271101 3000K	Imax(cd)	232.3	S/MH(C0/180)	0.69
NOMINAL POWER(W)	2.5	LOR(%)	100.0	S/MH(C90/270)	0.57
RATED VOLTAGE(V)	12	TOTAL FLUX(lm)	119.39	η UP,DN(C0-180)	0.0,54.8
NOMINAL FLUX(lm)	119.39	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,45.2
LAMPS INSIDE	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%):40.9 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WW 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	194.5	201.9	216.2	215.9	195.0	176.7	165.0	175.8	0- 10	19.47	19.47	16.3,16.3
20	130.6	128.7	122.5	133.5	127.1	100.3	87.64	101.1	10- 20	43.60	63.07	52.8,52.8
30	50.77	46.83	42.26	46.95	47.91	35.56	30.64	38.12	20- 30	33.82	96.89	81.2,81.2
40	14.79	12.31	10.70	13.25	14.57	10.39	8.560	11.02	30- 40	14.95	111.8	93.7,93.7
50	2.822	2.710	2.727	3.094	3.499	2.940	2.638	2.749	40- 50	4.858	116.7	97.7,97.7
60	1.165	1.091	1.104	1.182	1.250	1.119	1.028	1.059	50- 60	1.617	118.3	99.1,99.1
70	0.5304	0.4956	0.4782	0.5217	0.5118	0.4424	0.4036	0.4424	60- 70	0.7643	119.1	99.7,99.7
80	0.1089	0.1089	0.1088	0.1219	0.0908	0.0777	0.0519	0.0562	70- 80	0.2817	119.4	100,100
90	0	0	0	0	0	0	0	0	80- 90	0.0302	119.4	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

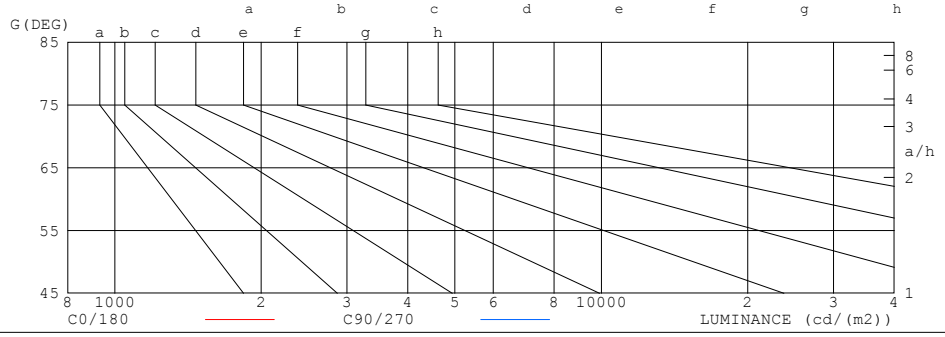
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.003m [K=1.0000]
Remarks: 55地埋 双色WW 正光 衡力30度

LUMINANCE LIMITATION CURVES

Test:U:11.998V I:0.2166A P:2.5988W PF:1.0000 Freq:0Hz Lamp Flux:119.39x1 lm		
NAME: HCP-271101 3000K	**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	4
80	6	6
75	11	10
70	16	14
65	19	18
60	23	22
55	30	29
50	44	42
45	96	72

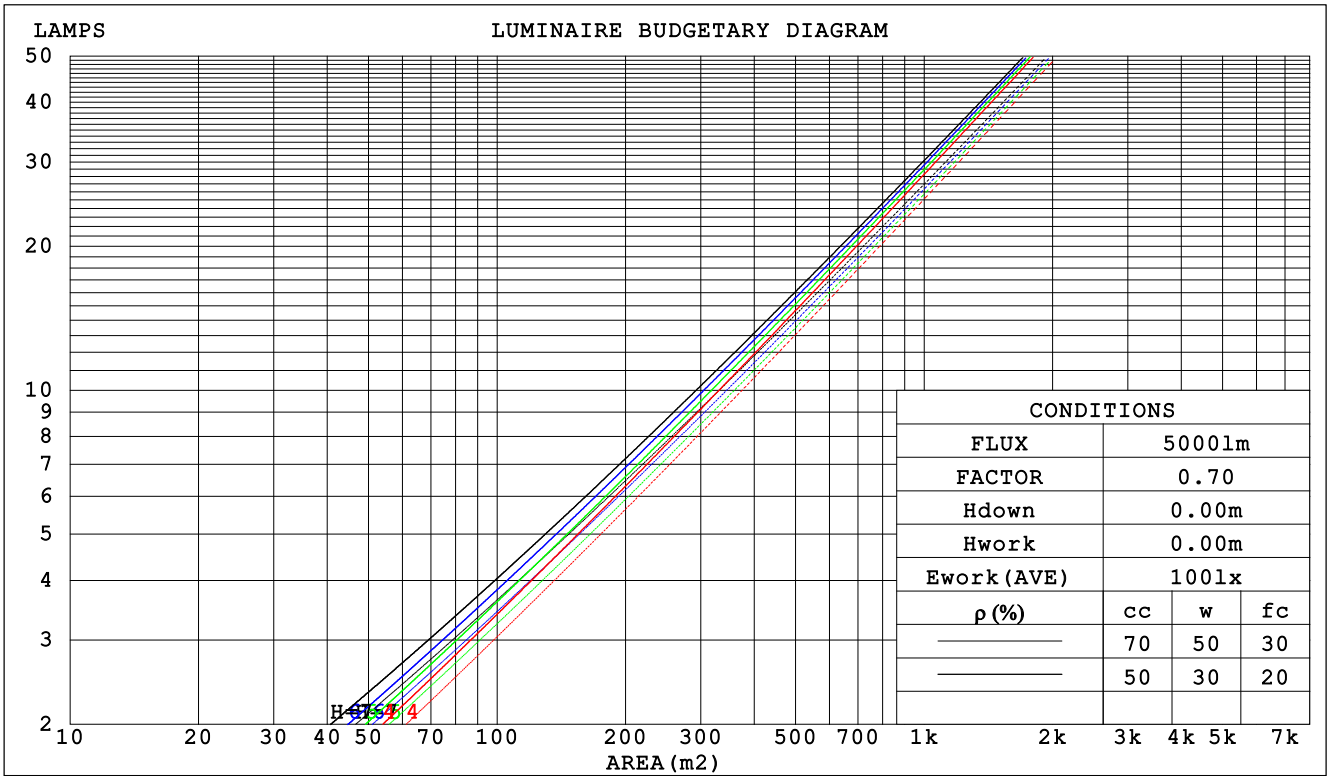
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-11-24

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WW 正光 衡力30度

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:11.998V I:0.2166A P:2.5988W PF:1.0000 Freq:0Hz Lamp Flux:119.39x1 lm		
NAME: HCP-271101 3000K	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	.97	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	.87	.84	.91	.87	.83	.89	.85	.82	.87	.84	.81	.86	.83	.80	.79
5.0	.87	.82	.78	.87	.82	.78	.85	.81	.77	.83	.79	.77	.82	.78	.76	.75
6.0	.83	.77	.74	.82	.77	.73	.81	.76	.73	.79	.75	.72	.78	.75	.72	.71
7.0	.79	.73	.70	.78	.73	.69	.77	.72	.69	.76	.72	.69	.75	.71	.68	.67
8.0	.75	.70	.66	.74	.69	.66	.73	.69	.65	.72	.68	.65	.71	.68	.65	.64
9.0	.71	.66	.63	.71	.66	.62	.70	.66	.62	.69	.65	.62	.68	.65	.62	.61
10.0	.68	.63	.60	.68	.63	.60	.67	.63	.59	.66	.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WW 正光 衡力30度

WEC AND CCEC

Test:U:11.998V I:0.2166A P:2.5988W PF:1.0000 Freq:0Hz Lamp Flux:119.39x1 lm		
NAME: HCP-271101 3000K	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	.167	.095	.030	.160	.091	.029	.147	.085	.027	.136	.078	.025	.125	.073	.023	
2.0	.158	.087	.027	.153	.084	.026	.142	.079	.025	.132	.074	.023	.124	.070	.022	
3.0	.150	.080	.024	.145	.078	.023	.136	.074	.022	.128	.070	.022	.120	.067	.021	
4.0	.142	.074	.022	.138	.072	.021	.130	.069	.021	.123	.066	.020	.117	.063	.019	
5.0	.135	.069	.020	.131	.067	.020	.125	.065	.019	.119	.063	.019	.113	.060	.018	
6.0	.129	.064	.018	.125	.063	.018	.120	.061	.018	.114	.059	.017	.109	.057	.017	
7.0	.123	.061	.017	.120	.060	.017	.115	.058	.017	.110	.056	.016	.106	.055	.016	
8.0	.117	.057	.016	.115	.057	.016	.110	.055	.016	.106	.054	.015	.102	.052	.015	
9.0	.112	.054	.015	.110	.054	.015	.106	.052	.015	.102	.051	.015	.099	.050	.014	
10.0	.108	.052	.014	.106	.051	.014	.102	.050	.014	.099	.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	.045	.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	.107	.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	.096	.058	.032	.082	.050	.028	.057	.035	.020	.033	.021	.012	.011	.007	.004	
10.0	.091	.053	.028	.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WW 正光 衡力30度

UTILIZATION FACTORS TABLE

Test:U:11.998V I:0.2166A P:2.5988W PF:1.0000 Freq:0Hz Lamp Flux:119.39x1 lm		
NAME: HCP-271101 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

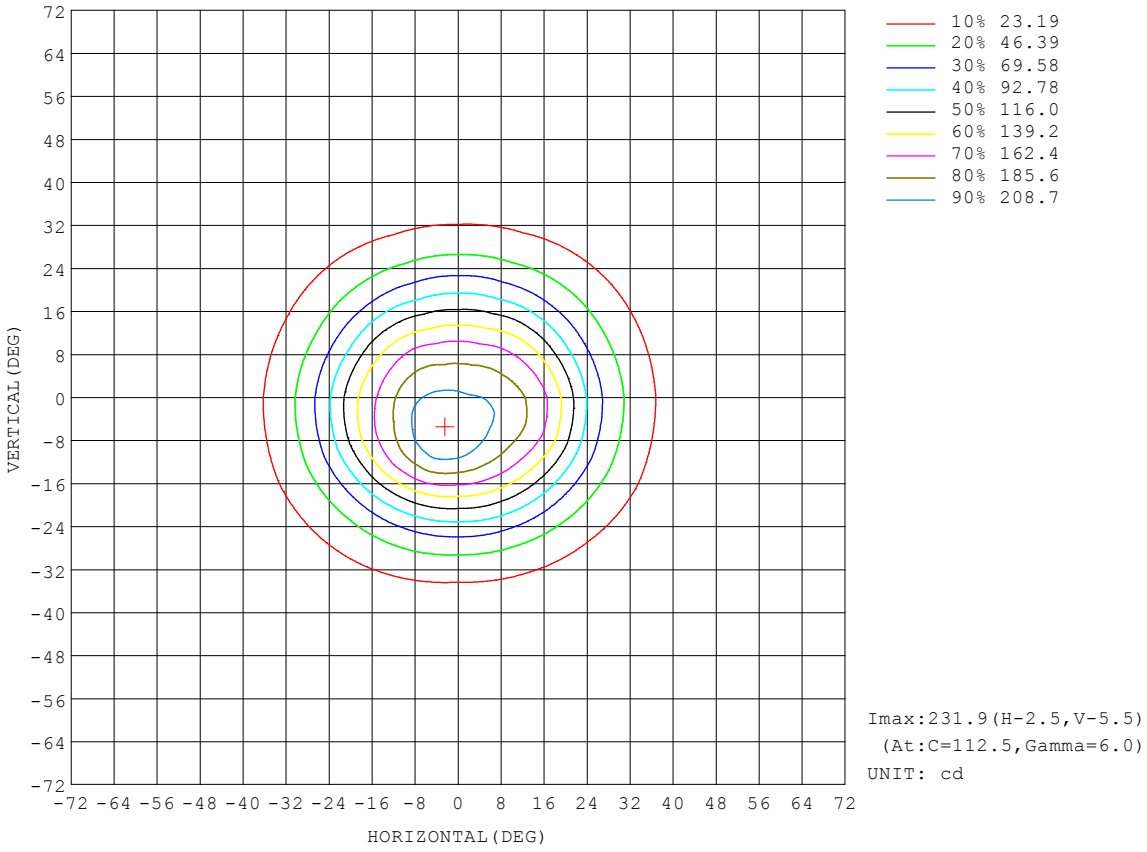
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	88	81	78	87	81	77	86	81	77	74
0.80	95	89	85	94	89	85	93	88	85	81
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	104	101	105	102	99	94
2.50	110	107	104	109	105	103	106	103	101	95
3.00	112	109	106	110	107	105	107	104	103	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WW 正光 衡力30度

ISOCANDELA DIAGRAM

Test:U:11.998V I:0.2166A P:2.5988W PF:1.0000 Freq:0Hz Lamp Flux:119.39x1 lm		
NAME: HCP-271101 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

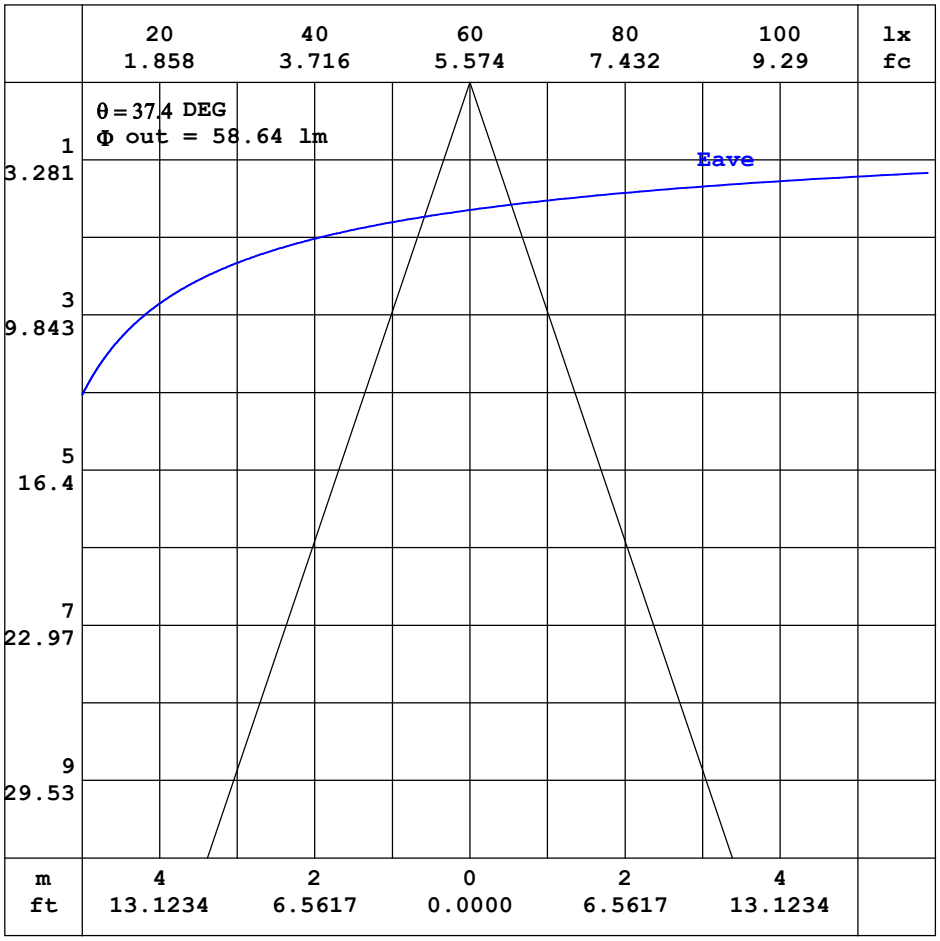


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-11-24

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WW 正光 衡力30度

AAI CURVES

Test:U:11.998V I:0.2166A P:2.5988W PF:1.0000 Freq:0Hz Lamp Flux:119.39x1 lm		
NAME: HCP-271101 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



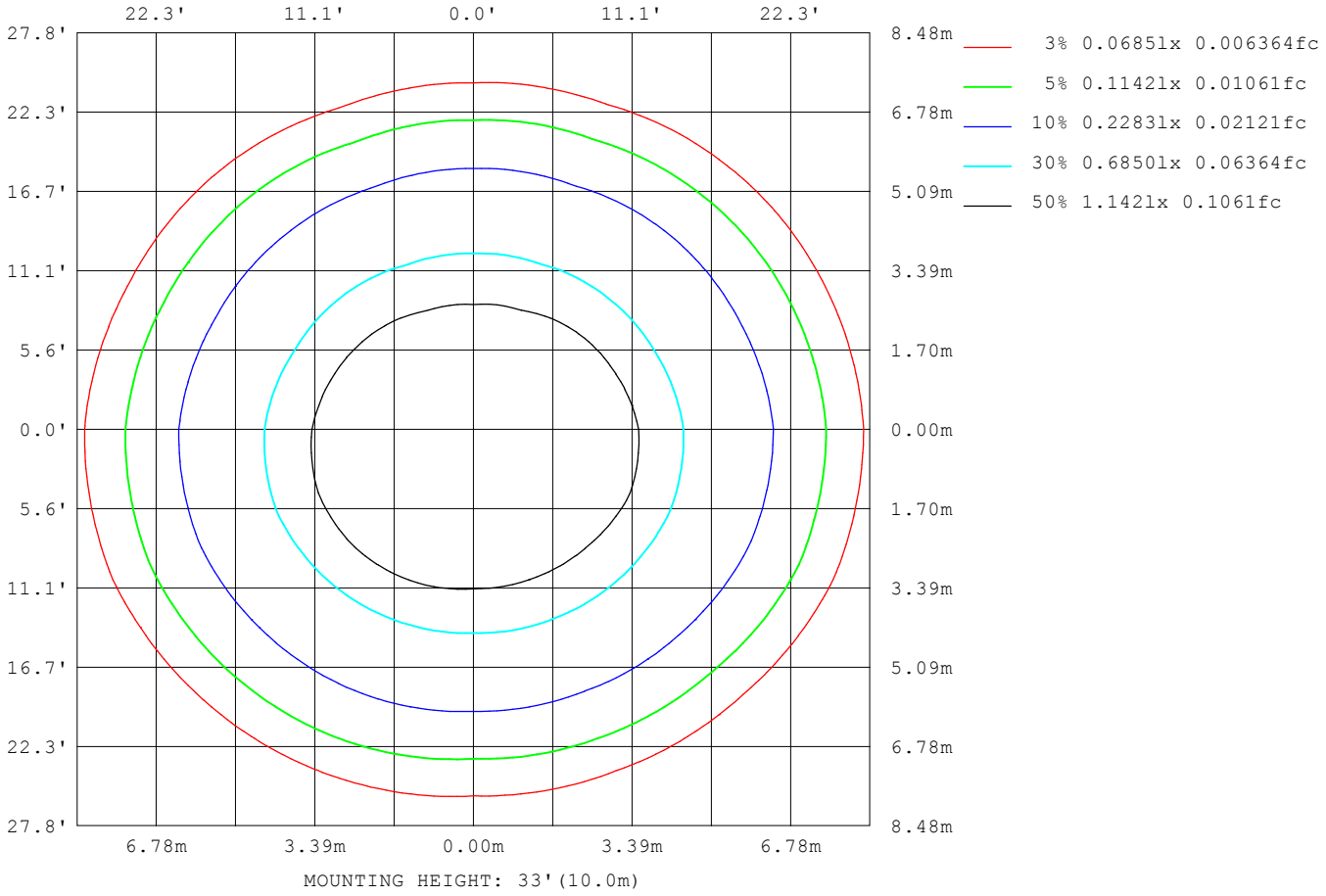
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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WW 正光 衡力30度

ISOLUX DIAGRAM

Test:U:11.998V I:0.2166A P:2.5988W PF:1.0000 Freq:0Hz Lamp Flux:119.39x1 lm		
NAME: HCP-271101 3000K	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WW 正光 衡力30度

LED Avg.L Report

Test:U:11.998V I:0.2166A P:2.5988W PF:1.0000 Freq:0Hz Lamp Flux:119.39x1 lm		
NAME: HCP-271101 3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

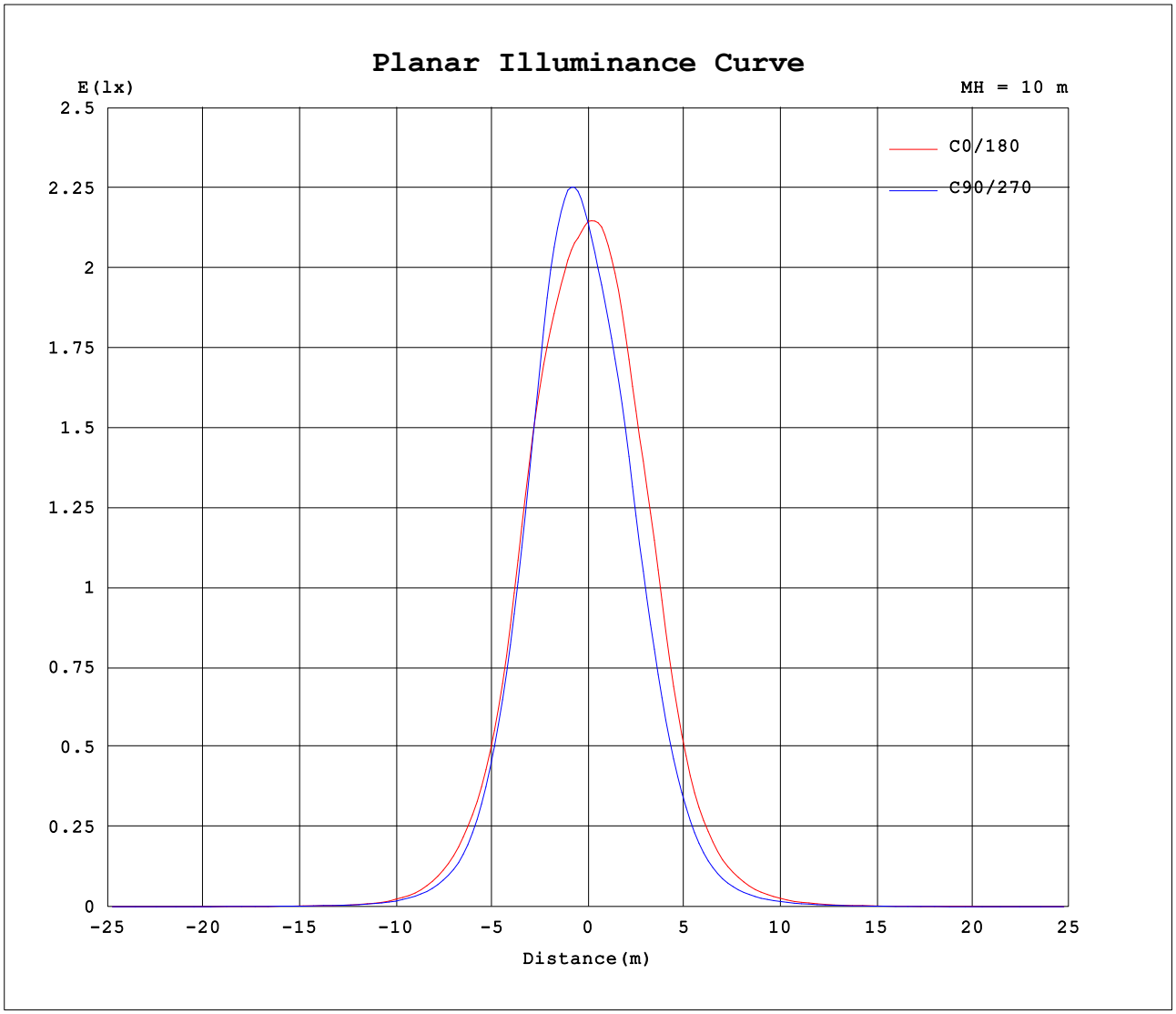
AvgL	cd/m2
L_0~180(65)av	19
L_0~180(75)av	11
L_0~180(85)av	2
L_90~270(65)av	17
L_90~270(75)av	9
L_90~270(85)av	2
L_45(65)av	18
L_45(75)av	10
L_45(85)av	2

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WW 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WW 正光 衡力30度

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:11.998V I:0.2166A P:2.5988W PF:1.0000 Freq:0Hz Lamp Flux:119.39x1 lm		
NAME: HCP-271101 3000K	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	215	214	214	214	214	213	214	213	215	214	214	214	214	213	214	213			
5	208	213	217	222	228	231	228	221	213	204	198	193	192	192	195	200			
10	194	201	202	208	216	223	216	205	195	185	177	167	165	167	176	185			
15	173	178	173	173	176	183	182	173	163	153	141	129	126	130	144	158			
20	131	136	129	124	122	128	133	135	127	112	100	89.2	87.6	90.3	101	114			
25	83.5	86.4	81.7	78.9	76.9	79.3	82.7	86.6	82.4	70.3	61.5	55.5	54.8	56.5	63.4	72.1			
30	50.8	51.4	46.8	43.4	42.3	44.9	46.9	50.3	47.9	40.5	35.6	31.0	30.6	32.1	38.1	43.7			
35	29.2	28.7	24.7	22.6	21.3	23.5	25.7	27.7	26.8	22.6	19.6	16.4	16.1	17.1	20.7	24.7			
40	14.8	14.7	12.3	11.0	10.7	12.0	13.3	14.9	14.6	12.2	10.4	8.71	8.56	9.03	11.0	12.9			
45	6.78	6.88	5.46	5.04	5.12	5.82	6.44	7.57	7.67	6.60	5.57	4.73	4.67	4.87	5.53	6.21			
50	2.82	2.94	2.71	2.63	2.73	2.95	3.09	3.51	3.50	3.25	2.94	2.66	2.64	2.70	2.75	2.78			
55	1.73	1.75	1.64	1.57	1.66	1.72	1.81	1.96	1.97	1.87	1.72	1.64	1.61	1.63	1.61	1.68			
60	1.16	1.14	1.09	1.03	1.10	1.11	1.18	1.23	1.25	1.23	1.12	1.07	1.03	1.06	1.06	1.14			
65	0.81	0.79	0.76	0.68	0.75	0.74	0.81	0.82	0.83	0.83	0.73	0.72	0.67	0.73	0.72	0.80			
70	0.53	0.51	0.50	0.43	0.48	0.45	0.52	0.51	0.51	0.53	0.44	0.46	0.40	0.46	0.44	0.51			
75	0.29	0.25	0.28	0.24	0.27	0.23	0.29	0.26	0.26	0.29	0.23	0.24	0.21	0.25	0.23	0.29			
80	0.11	0.08	0.11	0.06	0.11	0.08	0.12	0.10	0.09	0.13	0.08	0.10	0.05	0.10	0.06	0.11			
85	0.03	0.00	0.03	0.00	0.03	0.00	0.04	0.00	0.01	0.04	0.00	0.03	0.00	0.03	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WW 正光 衡力30度