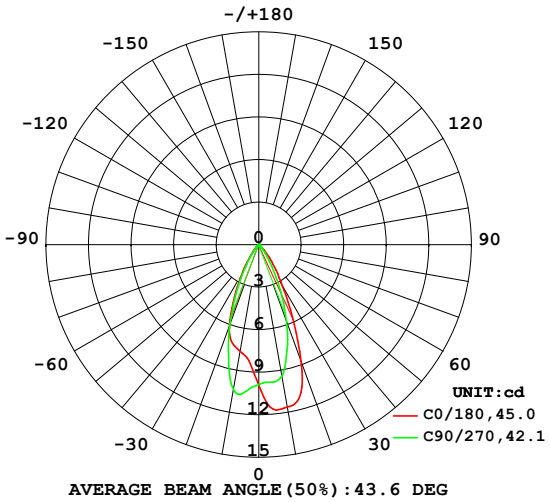
LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:11.998V I:0.0519A P:0.6227W PF:1.0000 Freq:49.99Hz Lamp Flux:6.46212x1 lm		
NAME: HCP-271110 RGBW Red	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

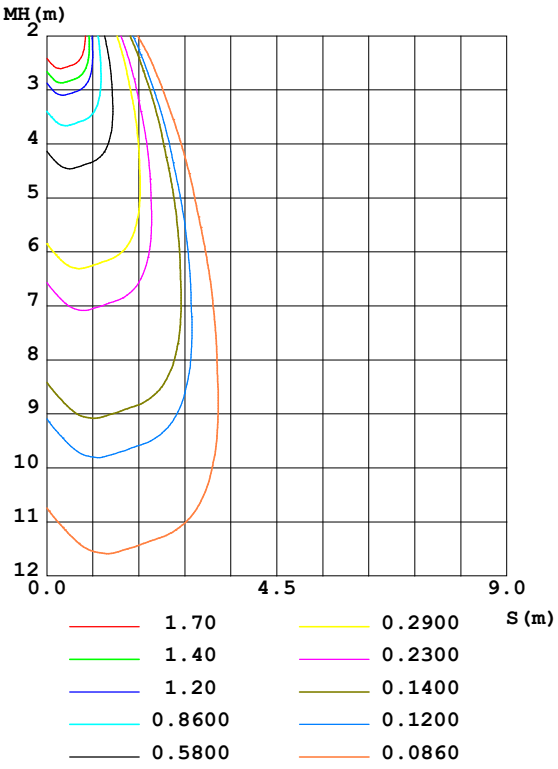
DATA OF LAMP		PHOTOMETRIC DATA		Eff: 10.38 lm/W	
MODEL	HCP-271110 RGBW Red	Imax(cd)	11.81	S/MH(C0/180)	0.71
NOMINAL POWER(W)	0.6	LOR(%)	100.0	S/MH(C90/270)	0.69
RATED VOLTAGE(V)	12	TOTAL FLUX(lm)	6.4621	η UP,DN(C0-180)	0.0,50.3
NOMINAL FLUX(lm)	6.46212	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.7
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	12	η down(%)	100.0	CIBSE SHR MAX	0.70

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



AVERAGE BEAM ANGLE(50%):43.6 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:2022-11-25

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 RGBW 红光 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	11.62	11.01	9.400	8.040	7.647	8.433	10.36	11.64	0- 10	0.9464	0.9464	14.6,14.6
20	8.742	6.752	5.673	5.958	6.042	5.993	5.945	7.555	10- 20	2.363	3.309	51.2,51.2
30	3.335	2.401	2.036	2.331	2.429	2.230	2.108	2.880	20- 30	1.950	5.259	81.4,81.4
40	1.092	0.6397	0.5176	0.5874	0.6070	0.5159	0.4897	0.7803	30- 40	0.8527	6.112	94.6,94.6
50	0.1743	0.1435	0.1393	0.1740	0.1473	0.1042	0.0998	0.1086	40- 50	0.2553	6.367	98.5,98.5
60	0.0565	0.0478	0.0522	0.0652	0.0478	0.0260	0.0218	0.0304	50- 60	0.0671	6.435	99.6,99.6
70	0.0174	0.0174	0.0174	0.0218	0	0	0	0	60- 70	0.0225	6.457	99.9,99.9
80	0.0000	0	0	0	0	0	0	0	70- 80	0.0051	6.462	100,100
90	0	0	0	0	0	0	0	0	80- 90	0.0001	6.462	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:2022-11-25

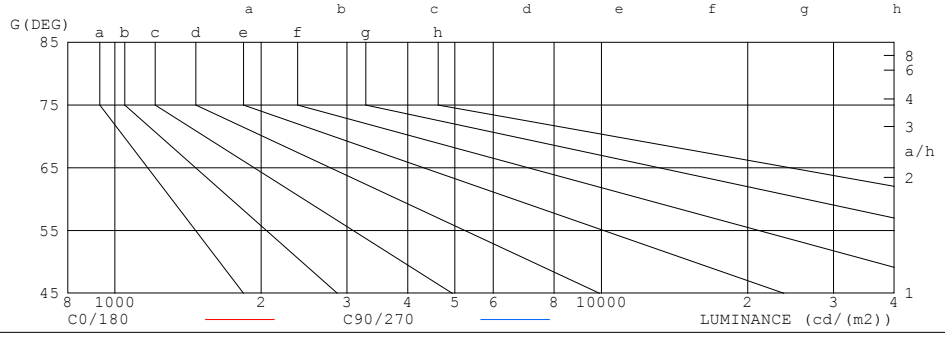
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:8.003m [K=1.0000]
Remarks: 55地埋 RGBW 红光 衡力30度

LUMINANCE LIMITATION CURVES

Test:U:11.998V I:0.0519A P:0.6227W PF:1.0000 Freq:49.99Hz Lamp Flux:6.46212x1 lm		
NAME: HCP-271110 RGBW Red	**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	0	0
80	0	0
75	0	0
70	1	1
65	1	1
60	1	1
55	2	1
50	3	2
45	7	4

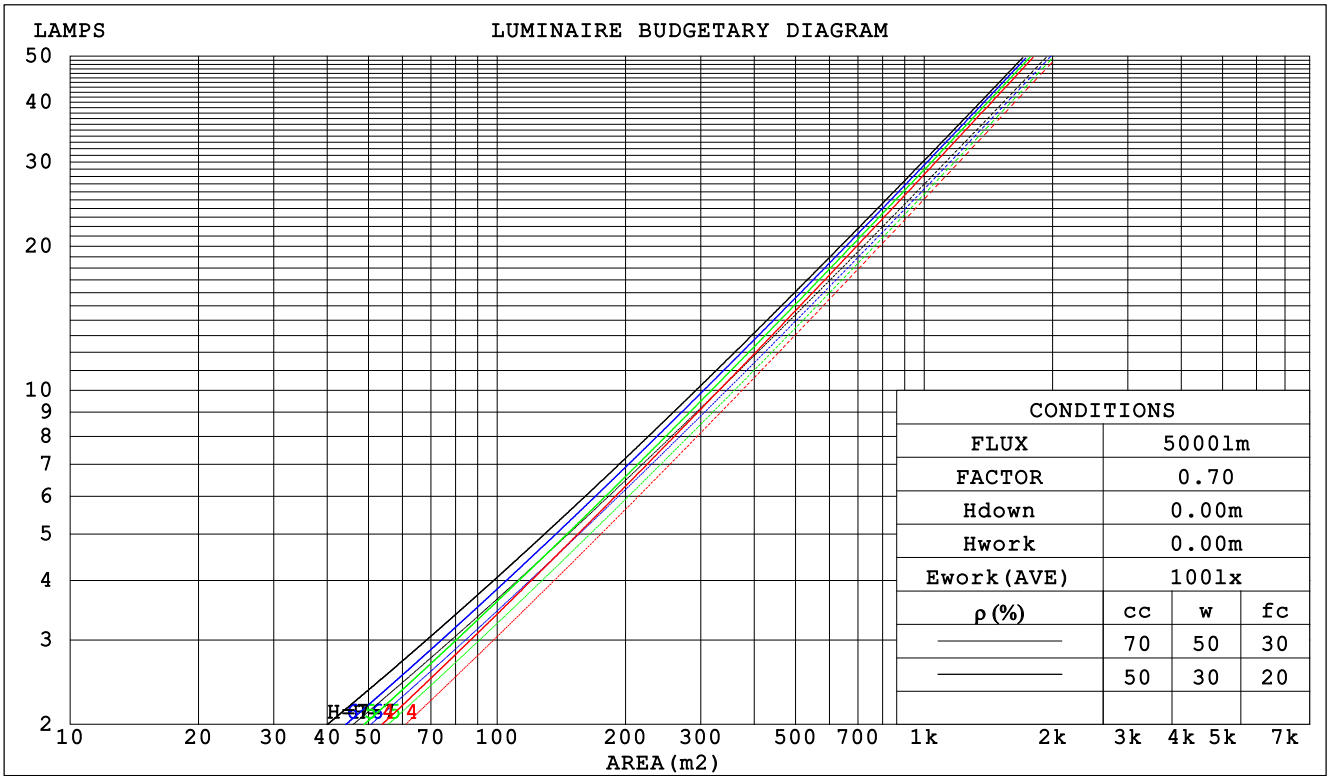
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-11-25

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 RGBW 红光 衡力30度

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:11.998V I:0.0519A P:0.6227W PF:1.0000 Freq:49.99Hz Lamp Flux:6.46212x1 lm		
NAME: HCP-271110 RGBW Red	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	1.02	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	.92	.87	.84	.91	.87	.83	.89	.85	.82	.87	.84	.81	.85	.83	.80	.79
5.0	.87	.82	.78	.86	.81	.78	.85	.80	.77	.83	.79	.76	.82	.78	.76	.74
6.0	.83	.77	.73	.82	.77	.73	.80	.76	.73	.79	.75	.72	.78	.74	.72	.70
7.0	.78	.73	.69	.78	.73	.69	.77	.72	.69	.75	.71	.68	.74	.71	.68	.67
8.0	.75	.69	.65	.74	.69	.65	.73	.68	.65	.72	.68	.65	.71	.67	.64	.63
9.0	.71	.66	.62	.71	.65	.62	.70	.65	.62	.69	.65	.62	.68	.64	.61	.60
10.0	.68	.62	.59	.67	.62	.59	.67	.62	.59	.66	.62	.59	.65	.61	.58	.57



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-11-25

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 RGBW 红光 衡力30度

WEC AND CCEC

Test:U:11.998V I:0.0519A P:0.6227W PF:1.0000 Freq:49.99Hz Lamp Flux:6.46212x1 lm		
NAME: HCP-271110 RGBW Red	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	.094	.030	.159	.091	.029	.147	.084	.027	.135	.078	.025	.125	.072	.023	
2.0	.158	.086	.027	.152	.084	.026	.142	.079	.024	.132	.074	.023	.123	.070	.022	
3.0	.150	.080	.024	.145	.078	.023	.136	.074	.022	.128	.070	.021	.120	.067	.021	
4.0	.142	.074	.022	.138	.072	.021	.131	.069	.021	.123	.066	.020	.117	.064	.019	
5.0	.135	.069	.020	.132	.068	.020	.125	.065	.019	.119	.063	.019	.113	.061	.018	
6.0	.129	.065	.019	.126	.064	.018	.120	.062	.018	.115	.060	.018	.110	.058	.017	
7.0	.123	.061	.017	.121	.060	.017	.116	.058	.017	.111	.057	.017	.106	.055	.016	
8.0	.118	.058	.016	.116	.057	.016	.111	.056	.016	.107	.054	.016	.103	.053	.015	
9.0	.113	.055	.015	.111	.054	.015	.107	.053	.015	.103	.052	.015	.100	.051	.015	
10.0	.109	.052	.014	.107	.052	.014	.103	.051	.014	.100	.050	.014	.096	.049	.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	.064	.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	.114	.077	.051	.098	.067	.045	.067	.047	.032	.039	.028	.019	.013	.009	.006	
7.0	.107	.070	.043	.092	.060	.038	.064	.042	.027	.037	.025	.016	.012	.008	.005	
8.0	.101	.063	.037	.087	.055	.033	.060	.039	.023	.035	.023	.014	.011	.007	.005	
9.0	.096	.058	.032	.083	.050	.028	.057	.035	.020	.033	.021	.012	.011	.007	.004	
10.0	.091	.054	.028	.079	.046	.025	.055	.033	.018	.032	.019	.010	.010	.006	.003	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-11-25

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 RGBW 红光 衡力30度

UTILIZATION FACTORS TABLE

Test:U:11.998V I:0.0519A P:0.6227W PF:1.0000 Freq:49.99Hz Lamp Flux:6.46212x1 lm		
NAME: HCP-271110 RGBW Red	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

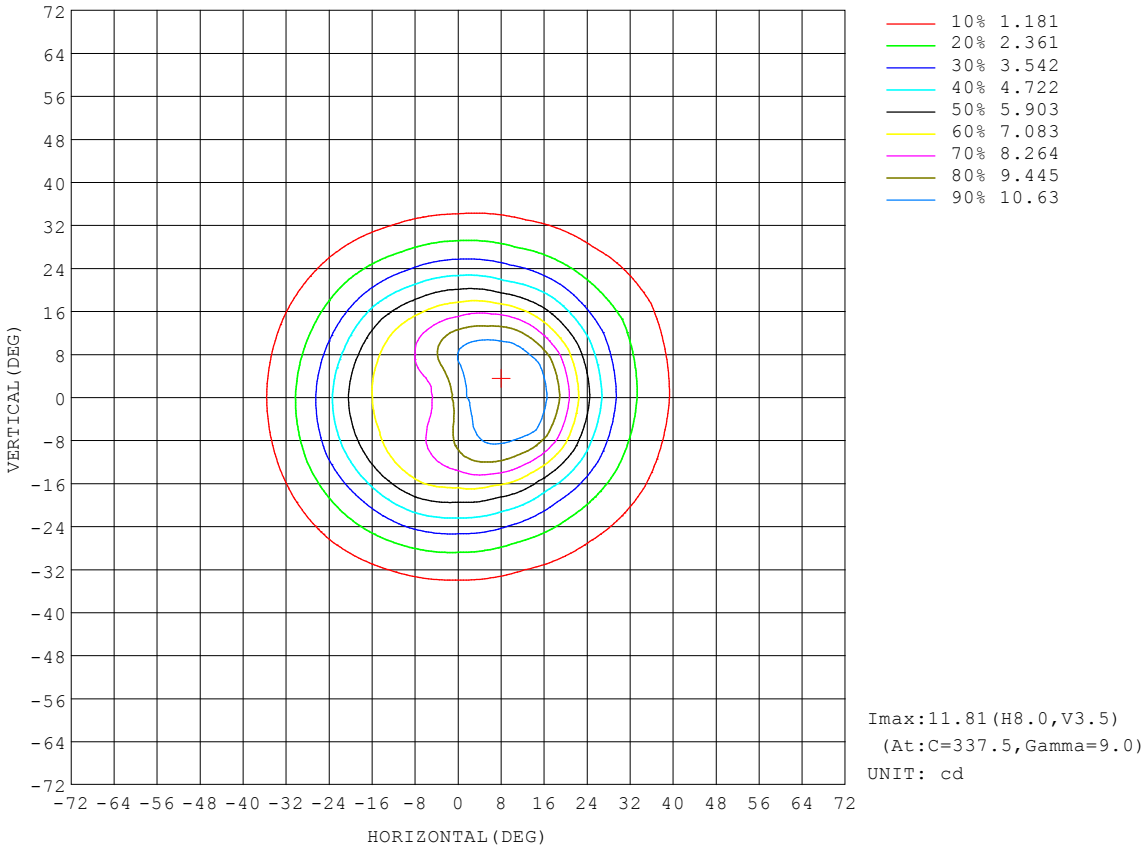
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	88	82	78	88	82	78	87	81	78	75
0.80	96	90	86	95	89	86	94	89	86	82
1.00	100	94	91	99	94	91	97	94	90	86
1.25	104	99	95	103	98	95	101	97	94	90
1.50	106	102	99	105	101	98	103	100	97	93
2.00	109	105	102	108	104	101	105	102	100	94
2.50	111	107	104	109	106	103	106	103	101	95
3.00	112	109	106	110	107	105	107	105	103	97
4.00	114	111	109	112	110	108	108	107	105	98
5.00	115	113	111	113	111	110	109	108	107	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:2022-11-25

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 RGBW 红光 衡力30度

ISOCANDELA DIAGRAM

Test:U:11.998V I:0.0519A P:0.6227W PF:1.0000 Freq:49.99Hz Lamp Flux:6.46212x1 lm		
NAME: HCP-271110 RGBW Red	**TYPE:**	**WEIGHT:**
SPEC.:	**DIM.:**	**SERIAL No.:**
MFR.: EVERFINE	**SUR.:**	**Shielding Angle:**

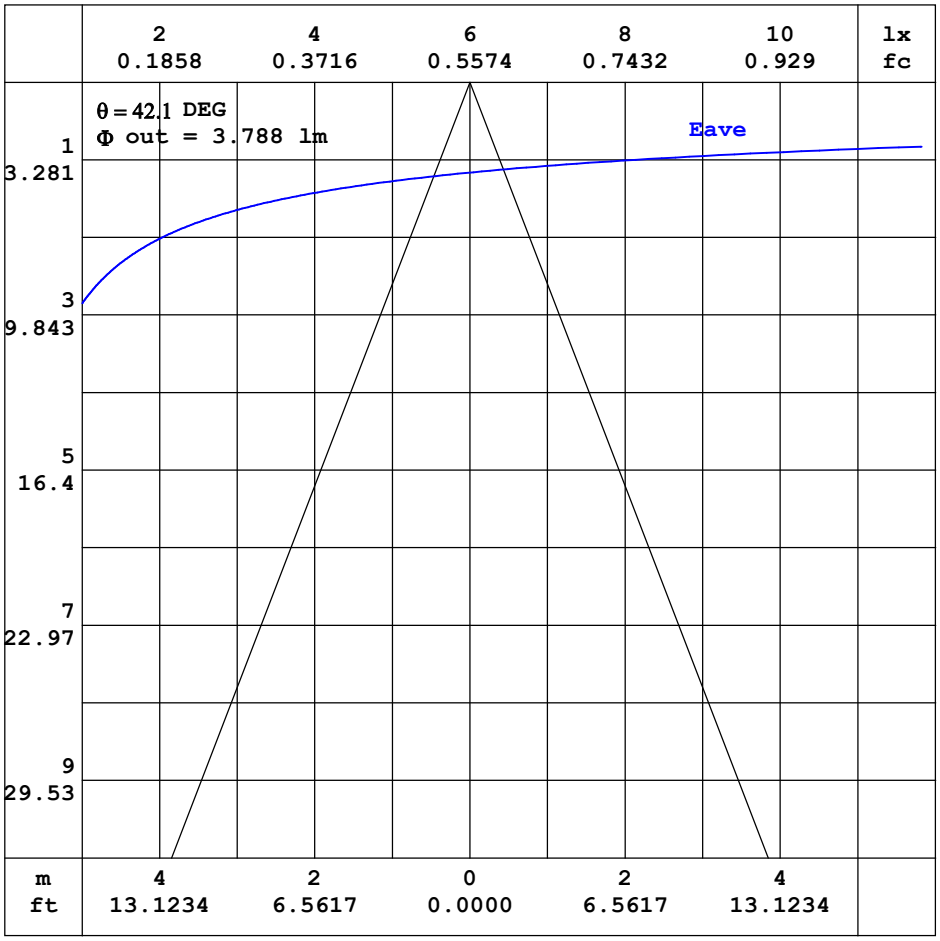


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-11-25

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 RGBW 红光 衡力30度

AAI CURVES

Test:U:11.998V I:0.0519A P:0.6227W PF:1.0000 Freq:49.99Hz Lamp Flux:6.46212x1 lm		
NAME: HCP-271110 RGBW Red	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



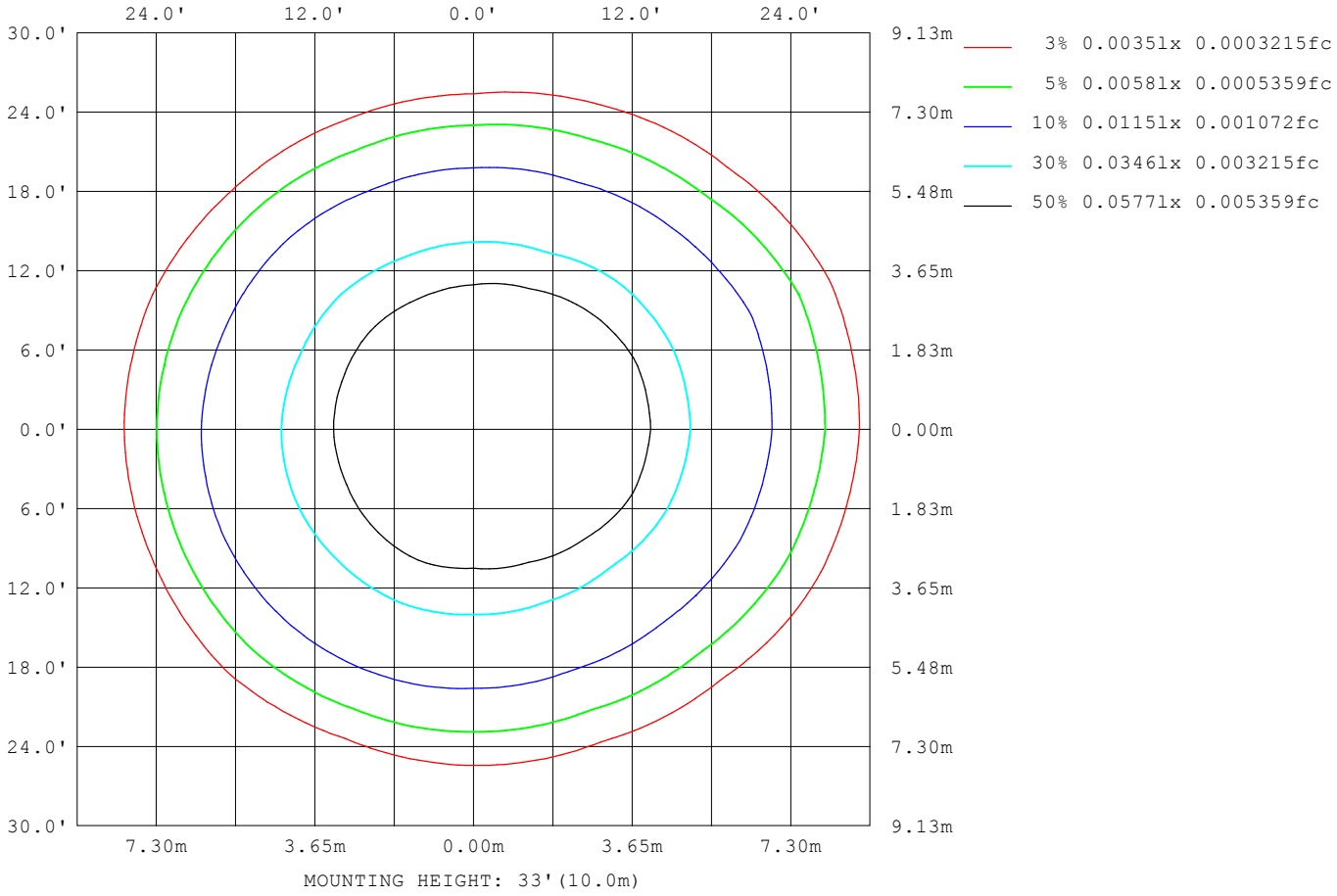
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-11-25

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 RGBW 红光 衡力30度

ISOLUX DIAGRAM

Test:U:11.998V I:0.0519A P:0.6227W PF:1.0000 Freq:49.99Hz Lamp Flux:6.46212x1 lm		
NAME: HCP-271110 RGBW Red	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:2022-11-25

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 RGBW 红光 衡力30度

LED Avg.L Report

Test:U:11.998V I:0.0519A P:0.6227W PF:1.0000 Freq:49.99Hz Lamp Flux:6.46212x1 lm		
NAME: HCP-271110 RGBW Red	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

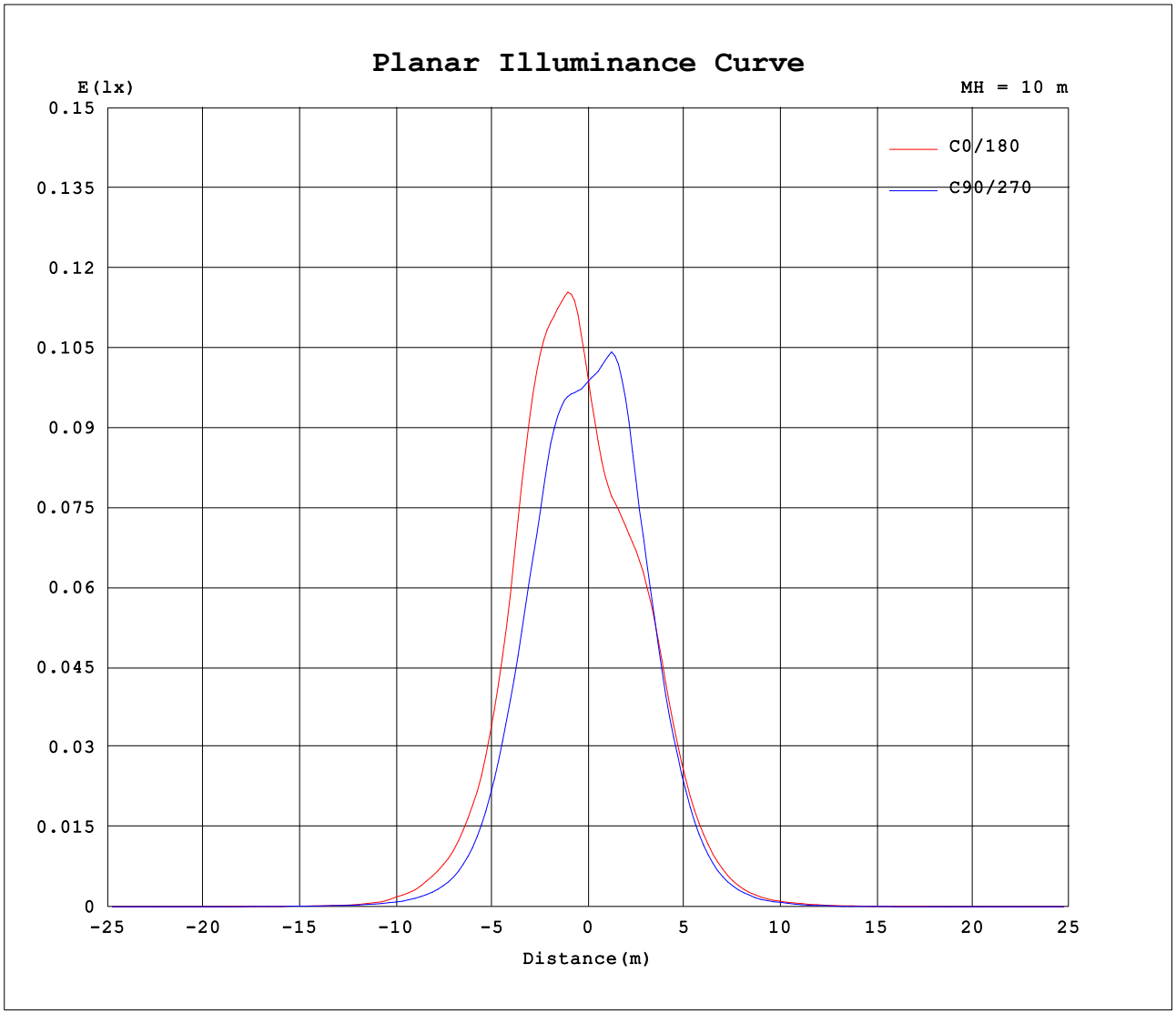
AvgL	cd/m2
L_0~180(65)av	1
L_0~180(75)av	0
L_0~180(85)av	0
L_90~270(65)av	0
L_90~270(75)av	0
L_90~270(85)av	0
L_45(65)av	0
L_45(75)av	0
L_45(85)av	0

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-11-25

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 RGBW 红光 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:2022-11-25

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 RGBW 红光 衡力30度

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:11.998V I:0.0519A P:0.6227W PF:1.0000 Freq:49.99Hz Lamp Flux:6.46212x1 lm		
NAME: HCP-271110 RGBW Red	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	9.92	9.82	9.88	9.86	9.87	9.87	9.81	9.89	9.92	9.82	9.88	9.86	9.87	9.87	9.81	9.89			
5	11.6	11.3	10.9	10.4	9.75	9.06	8.55	8.30	8.21	8.33	8.82	9.62	10.4	11.0	11.4	11.6			
10	11.6	11.4	11.0	10.3	9.40	8.67	8.04	7.73	7.65	7.87	8.43	9.43	10.4	11.1	11.6	11.7			
15	11.1	10.8	9.56	8.47	7.74	7.53	7.44	7.21	7.21	7.33	7.58	7.86	8.26	9.10	10.4	11.0			
20	8.74	8.21	6.75	5.90	5.67	5.94	5.96	5.98	6.04	5.95	5.99	5.80	5.95	6.39	7.55	8.56			
25	5.62	5.15	4.17	3.78	3.68	3.87	3.88	4.08	4.10	3.93	3.86	3.69	3.82	4.04	4.88	5.52			
30	3.34	3.00	2.40	2.07	2.04	2.17	2.33	2.45	2.43	2.30	2.23	2.05	2.11	2.29	2.88	3.33			
35	1.94	1.69	1.29	1.05	1.02	1.05	1.19	1.25	1.30	1.23	1.14	1.02	1.04	1.19	1.51	2.00			
40	1.09	0.92	0.64	0.51	0.52	0.49	0.59	0.58	0.61	0.61	0.52	0.49	0.49	0.62	0.78	1.10			
45	0.52	0.39	0.31	0.23	0.26	0.23	0.31	0.31	0.30	0.30	0.23	0.25	0.23	0.32	0.38	0.52			
50	0.17	0.12	0.14	0.10	0.14	0.10	0.17	0.16	0.15	0.17	0.10	0.13	0.10	0.14	0.11	0.18			
55	0.09	0.04	0.08	0.03	0.08	0.04	0.10	0.07	0.07	0.10	0.04	0.08	0.03	0.08	0.04	0.09			
60	0.06	0.03	0.05	0.03	0.05	0.03	0.07	0.03	0.05	0.07	0.03	0.05	0.02	0.05	0.03	0.06			
65	0.03	0.00	0.03	0.00	0.03	0.00	0.04	0.01	0.01	0.03	0.00	0.03	0.00	0.03	0.00	0.03			
70	0.02	0.00	0.02	0.00	0.02	0.00	0.02	0.00	0.00	0.02	0.00	0.02	0.00	0.02	0.00	0.02			
75	0.01	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.01			
80	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			
85	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			
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:2022-11-25

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 RGBW 红光 衡力30度