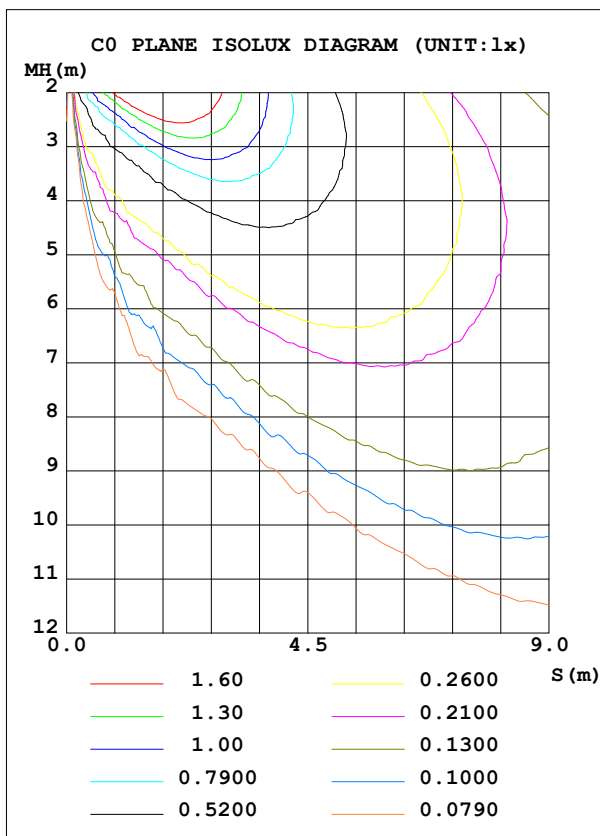
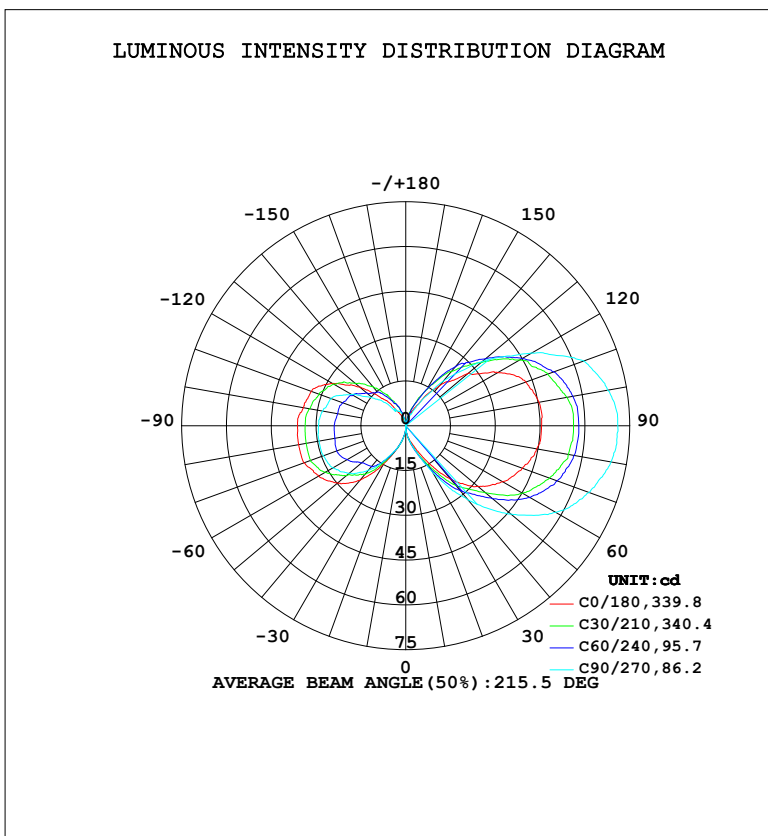




LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.35V I:0.2015A P:13.595W PF:0.5607 Freq:60.01Hz Lamp Flux:402.904x1 lm		
NAME: Monarch 7191-CH	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Avenue Lighting	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	HF7191-CH	Imax (cd)	79.02	S/MH (C0/180)	9.35
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	9.94
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	402.90	η UP, DN (C0-180)	32.8, 34.3
NOMINAL FLUX (lm)	402.904	CIE CLASS	DIFFUSE	η UP, DN (C180-360)	15.4, 17.5
LAMPS INSIDE	1	η up (%)	48.2	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	120.416	η down (%)	51.8	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 24.5°C  
 Operators: Dingmin Zhang  
 Test Date: 2025-11-15

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.463  
 Humidity: 65.0%  
 Test Distance: 30.000m [K=0.9305]  
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

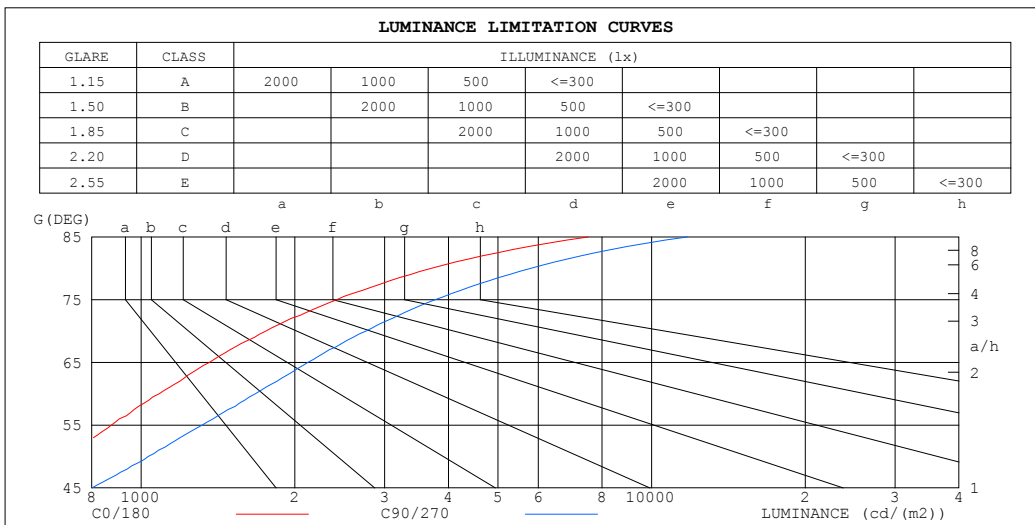
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\%lum, lamp$
10	3.097	3.763	3.652	3.096	3.529	3.432	3.436	3.524	0- 10	0.2140	0.2140	0.05,0.05
20	6.609	8.364	8.275	7.863	7.870	7.461	7.449	7.284	10- 20	1.603	1.817	0.45,0.45
30	13.13	16.13	17.92	17.07	14.57	13.31	12.39	11.56	20- 30	5.085	6.902	1.71,1.71
40	23.41	28.20	32.39	33.64	23.86	19.92	19.43	16.15	30- 40	12.28	19.18	4.76,4.76
50	31.56	39.26	45.95	48.78	29.81	23.61	24.78	18.67	40- 50	21.65	40.84	10.1,10.1
60	37.57	46.36	58.02	62.67	33.65	25.83	28.16	21.76	50- 60	31.59	72.43	18,18
70	41.60	50.31	65.35	72.31	36.33	26.87	29.33	23.10	60- 70	40.54	113.0	28,28
80	44.53	53.91	69.78	77.34	36.41	27.12	29.48	23.14	70- 80	46.44	159.4	39.6,39.6
90	45.49	55.25	70.98	78.95	36.23	27.12	29.22	23.05	80- 90	49.21	208.6	51.8,51.8
100	45.29	54.50	68.64	76.60	34.82	26.44	28.25	22.35	90-100	48.99	257.6	63.9,63.9
110	42.78	49.73	63.45	69.57	33.66	24.36	26.70	21.22	100-110	45.27	302.9	75.2,75.2
120	35.58	43.95	48.79	59.62	28.29	23.44	21.01	19.09	110-120	38.38	341.3	84.7,84.7
130	27.38	36.68	33.49	45.46	20.09	21.00	14.55	15.99	120-130	28.59	369.8	91.8,91.8
140	17.44	26.22	19.49	30.24	11.95	16.48	9.626	12.96	130-140	18.43	388.3	96.4,96.4
150	8.380	14.17	7.950	15.66	5.528	10.80	5.778	9.289	140-150	9.795	398.1	98.8,98.8
160	4.187	5.861	3.181	6.451	2.511	6.603	4.831	5.932	150-160	3.816	401.9	99.7,99.7
170	0.8394	1.757	0.8350	1.506	0.0837	1.235	1.418	1.501	160-170	0.9829	402.9	100,100
180	0	0	0	0	0	0	0	0	170-180	0.0314	402.9	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:24.5°C  
 Operators:Dingmin Zhang  
 Test Date:2025-11-15

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.463  
 Humidity:65.0%  
 Test Distance:30.000m [K=0.9305]  
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.35V I:0.2015A P:13.595W PF:0.5607 Freq:60.01Hz Lamp Flux:402.904x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	7515	11739
80	3701	5799
75	2417	3766
70	1755	2757
65	1360	2120
60	1084	1674
55	874	1316
50	708	1032
45	567	801

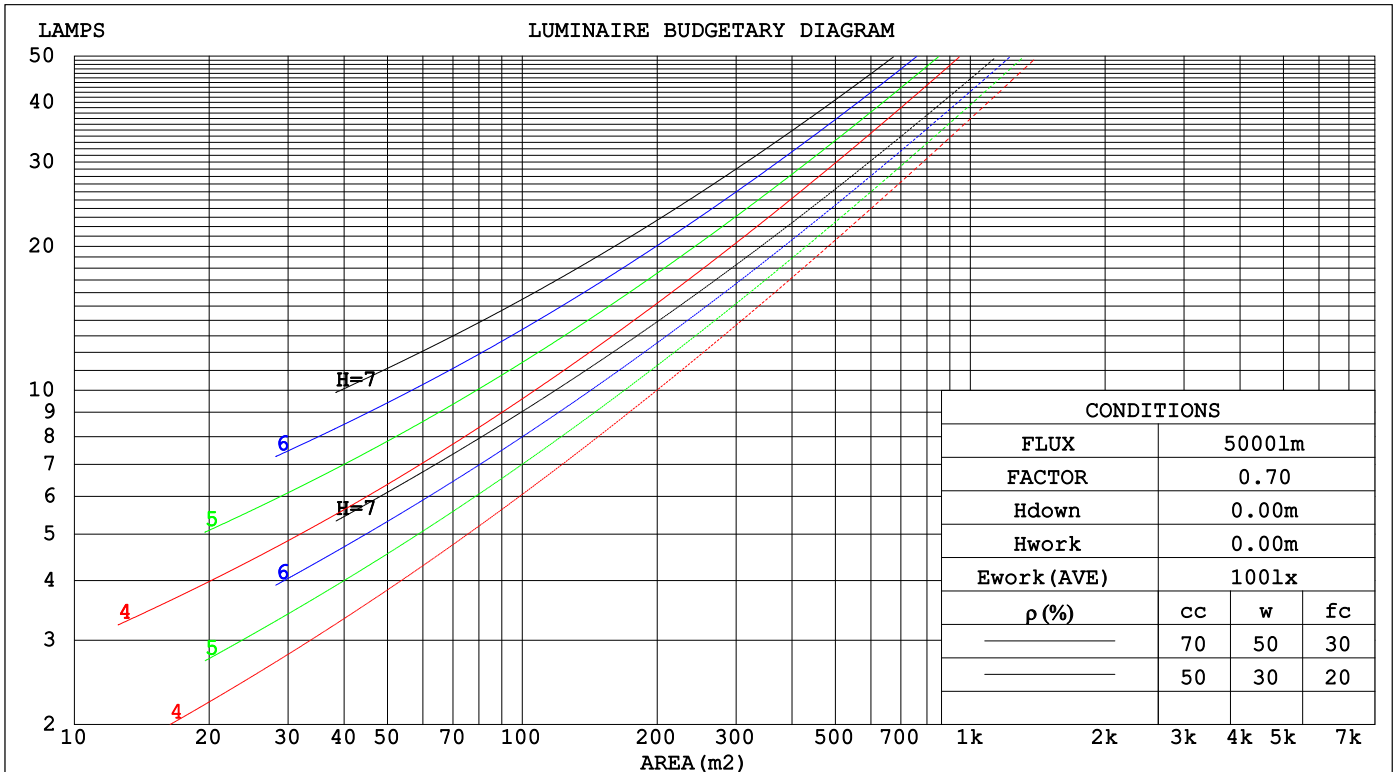
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 24.5°C  
 Operators: Dingmin Zhang  
 Test Date: 2025-11-15

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.463  
 Humidity: 65.0%  
 Test Distance: 30.000m [K=0.9305]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.35V I:0.2015A P:13.595W PF:0.5607 Freq:60.01Hz		
Lamp Flux:402.904x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.08	1.08	1.08	.99	.99	.99	.84	.84	.84	.70	.70	.70	.58	.58	.58	.52
1.0	.85	.78	.73	.78	.72	.67	.64	.60	.56	.52	.49	.46	.41	.38	.36	.30
2.0	.70	.62	.54	.64	.56	.50	.53	.47	.41	.42	.37	.33	.32	.29	.26	.21
3.0	.60	.50	.42	.54	.46	.39	.44	.38	.32	.35	.30	.25	.27	.23	.19	.14
4.0	.52	.42	.34	.47	.38	.31	.38	.31	.25	.30	.25	.20	.23	.18	.15	.11
5.0	.45	.35	.28	.41	.32	.25	.33	.26	.21	.26	.21	.16	.20	.15	.12	.08
6.0	.40	.30	.23	.36	.28	.21	.30	.22	.17	.23	.18	.13	.17	.13	.09	.06
7.0	.35	.26	.20	.32	.24	.18	.26	.20	.15	.21	.15	.11	.16	.11	.08	.05
8.0	.32	.23	.17	.29	.21	.15	.24	.17	.12	.19	.13	.10	.14	.10	.07	.04
9.0	.29	.20	.15	.26	.19	.13	.22	.15	.11	.17	.12	.08	.13	.09	.06	.03
10.0	.26	.18	.13	.24	.17	.12	.20	.14	.09	.16	.11	.07	.12	.08	.05	.03



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:24.5°C  
 Operators:Dingmin Zhang  
 Test Date:2025-11-15

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.463  
 Humidity:65.0%  
 Test Distance:30.000m [K=0.9305]  
 Remarks:

WEC AND CCEC

Test:U:120.35V I:0.2015A P:13.595W PF:0.5607 Freq:60.01Hz								
Lamp Flux:402.904x1 lm								
NAME:			TYPE:			WEIGHT:		
SPEC.:			DIM.:			SERIAL No.:		
MFR.:			SUR.:			Shielding Angle:		

ρ <sub>cc</sub>	80%			70%			50%			30%			10%			0
ρ <sub>w</sub>	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ <sub>fc</sub>	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.455	.259	.082	.433	.247	.078	.392	.225	.072	.354	.204	.066	.319	.185	.060	
2.0	.372	.204	.063	.352	.194	.060	.314	.175	.054	.280	.157	.049	.247	.140	.044	
3.0	.320	.171	.051	.302	.162	.049	.268	.145	.044	.236	.129	.040	.206	.114	.035	
4.0	.283	.147	.043	.266	.139	.041	.234	.124	.037	.205	.110	.033	.177	.096	.029	
5.0	.253	.129	.037	.238	.122	.036	.208	.109	.032	.181	.096	.028	.156	.083	.025	
6.0	.229	.115	.033	.215	.109	.031	.188	.096	.028	.163	.085	.025	.140	.073	.022	
7.0	.209	.104	.029	.196	.098	.028	.172	.087	.025	.148	.076	.022	.126	.066	.019	
8.0	.193	.094	.026	.181	.089	.025	.158	.079	.023	.136	.069	.020	.116	.059	.017	
9.0	.179	.086	.024	.167	.082	.023	.146	.072	.020	.126	.063	.018	.107	.054	.016	
10.0	.166	.080	.022	.156	.075	.021	.136	.067	.019	.117	.058	.017	.099	.050	.014	

ρ <sub>cc</sub>	80%			70%			50%			30%			10%			0
ρ <sub>w</sub>	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ <sub>fc</sub>	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.558	.558	.558	.477	.477	.477	.325	.325	.325	.187	.187	.187	.060	.060	.060	
1.0	.561	.525	.493	.480	.451	.425	.328	.310	.294	.189	.179	.171	.061	.058	.055	
2.0	.556	.504	.461	.476	.434	.399	.326	.300	.278	.188	.175	.163	.060	.057	.053	
3.0	.549	.490	.442	.471	.422	.383	.323	.293	.269	.187	.171	.158	.060	.056	.052	
4.0	.542	.478	.430	.465	.413	.373	.320	.288	.263	.185	.169	.156	.059	.055	.051	
5.0	.534	.469	.422	.459	.406	.367	.316	.284	.259	.183	.167	.154	.059	.054	.051	
6.0	.527	.462	.416	.453	.400	.362	.312	.280	.256	.181	.165	.152	.058	.054	.050	
7.0	.519	.456	.412	.447	.395	.359	.309	.277	.254	.179	.163	.151	.058	.053	.050	
8.0	.513	.451	.408	.441	.391	.356	.305	.275	.253	.178	.162	.151	.057	.053	.050	
9.0	.506	.446	.406	.436	.387	.354	.302	.272	.251	.176	.161	.150	.057	.053	.050	
10.0	.500	.443	.404	.431	.384	.353	.299	.270	.250	.175	.160	.149	.057	.053	.050	

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:24.5°C  
 Operators:Dingmin Zhang  
 Test Date:2025-11-15

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.463  
 Humidity:65.0%  
 Test Distance:30.000m [K=0.9305]  
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.35V I:0.2015A P:13.595W PF:0.5607 Freq:60.01Hz										
Lamp Flux:402.904x1 lm										
NAME:			TYPE:			WEIGHT:				
SPEC.:			DIM.:			SERIAL No.:				
MFR.:			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	10.4	11.6	11.3	12.5	13.6	11.7	12.9	12.5	13.8	14.9
3H	14.1	15.2	15.0	16.1	17.3	15.7	16.8	16.6	17.7	18.9
4H	16.1	17.1	17.0	18.0	19.2	17.9	18.9	18.8	19.8	21.0
6H	18.2	19.1	19.1	20.1	21.3	20.3	21.3	21.2	22.2	23.4
8H	19.4	20.3	20.3	21.2	22.4	21.7	22.6	22.6	23.5	24.7
12H	20.7	21.6	21.6	22.5	23.8	23.1	24.0	24.1	25.0	26.2
4H 2H	11.9	12.9	12.8	13.8	15.0	12.7	13.7	13.6	14.6	15.8
3H	15.6	16.5	16.5	17.5	18.7	16.7	17.6	17.6	18.5	19.8
4H	17.7	18.5	18.6	19.5	20.7	19.0	19.8	19.9	20.8	22.0
6H	19.9	20.6	20.8	21.6	22.9	21.5	22.2	22.4	23.2	24.5
8H	21.1	21.8	22.0	22.8	24.0	22.9	23.6	23.8	24.6	25.8
12H	22.5	23.1	23.4	24.1	25.4	24.5	25.1	25.5	26.1	27.4
8H 4H	18.6	19.3	19.6	20.3	21.6	19.6	20.3	20.6	21.3	22.6
6H	21.2	21.7	22.1	22.8	24.1	22.3	22.9	23.3	23.9	25.2
8H	22.6	23.1	23.5	24.1	25.4	23.9	24.4	24.9	25.4	26.7
12H	24.1	24.6	25.1	25.6	26.9	25.7	26.1	26.7	27.2	28.5
12H 4H	18.9	19.6	19.9	20.6	21.9	19.8	20.4	20.7	21.4	22.7
6H	21.6	22.1	22.6	23.1	24.4	22.6	23.1	23.6	24.1	25.5
8H	23.1	23.6	24.1	24.6	25.9	24.2	24.7	25.3	25.7	27.1
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.2				
2.0H	+ 0.3 / - 0.4					+ 0.3 / - 0.3				

CIE Pub.117, 402.9 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = -3.2)  
 Area: 0.0693 m2

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:24.5°C  
 Operators:Dingmin Zhang  
 Test Date:2025-11-15

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.463  
 Humidity:65.0%  
 Test Distance:30.000m [K=0.9305]  
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.35V I:0.2015A P:13.595W PF:0.5607 Freq:60.01Hz Lamp Flux:402.904x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

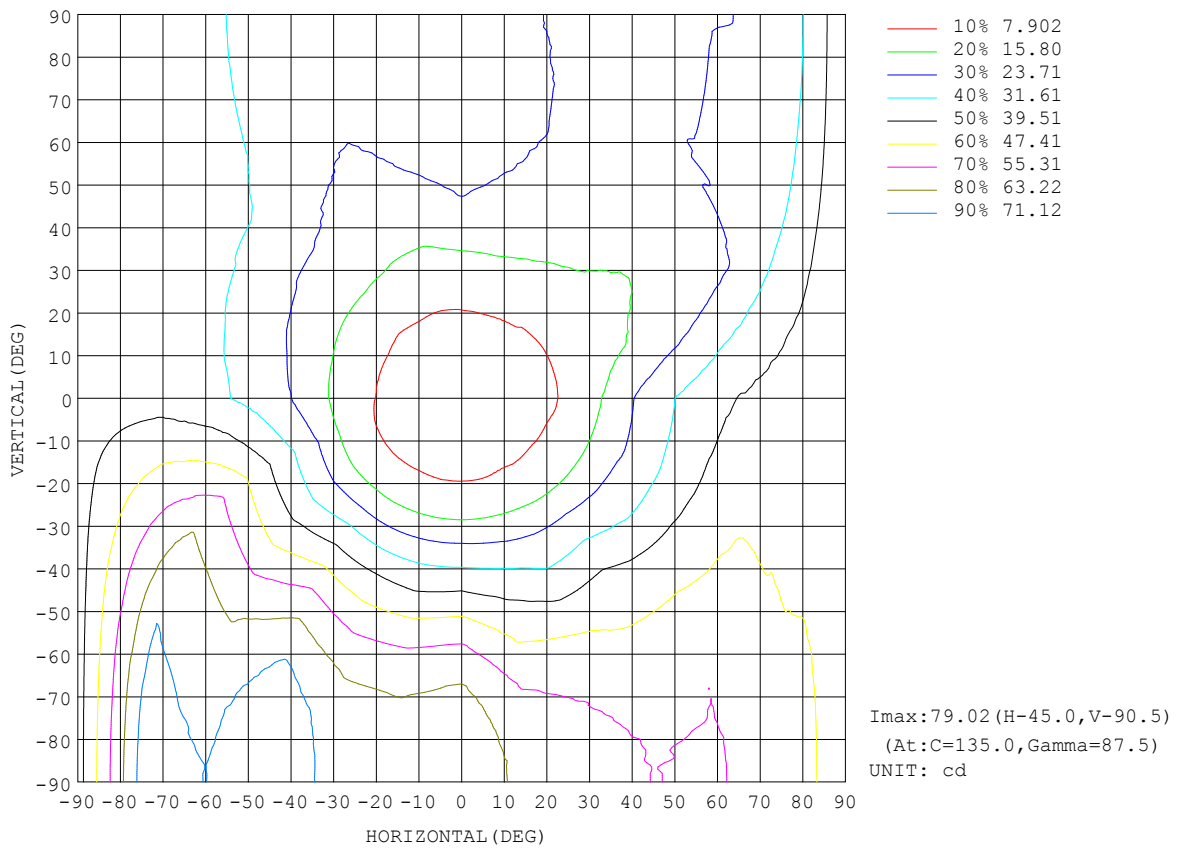
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) k(RI) x RCR = 5									
k = 0.60	33	19	12	31	19	11	28	17	10	3
0.80	41	26	17	39	25	17	34	22	15	5
1.00	48	33	23	45	31	22	39	30	20	8
1.25	55	40	29	51	37	28	44	33	25	11
1.50	61	45	35	56	42	33	48	37	29	14
2.00	69	54	44	63	51	41	54	44	36	18
2.50	74	61	51	68	57	47	58	49	41	21
3.00	78	66	56	72	61	53	61	53	45	24
4.00	84	73	65	77	68	60	65	58	52	28
5.00	88	78	70	81	73	65	68	62	56	31
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:24.5°C  
 Operators:Dingmin Zhang  
 Test Date:2025-11-15

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.463  
 Humidity:65.0%  
 Test Distance:30.000m [K=0.9305]  
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.35V I:0.2015A P:13.595W PF:0.5607 Freq:60.01Hz Lamp Flux:402.904x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

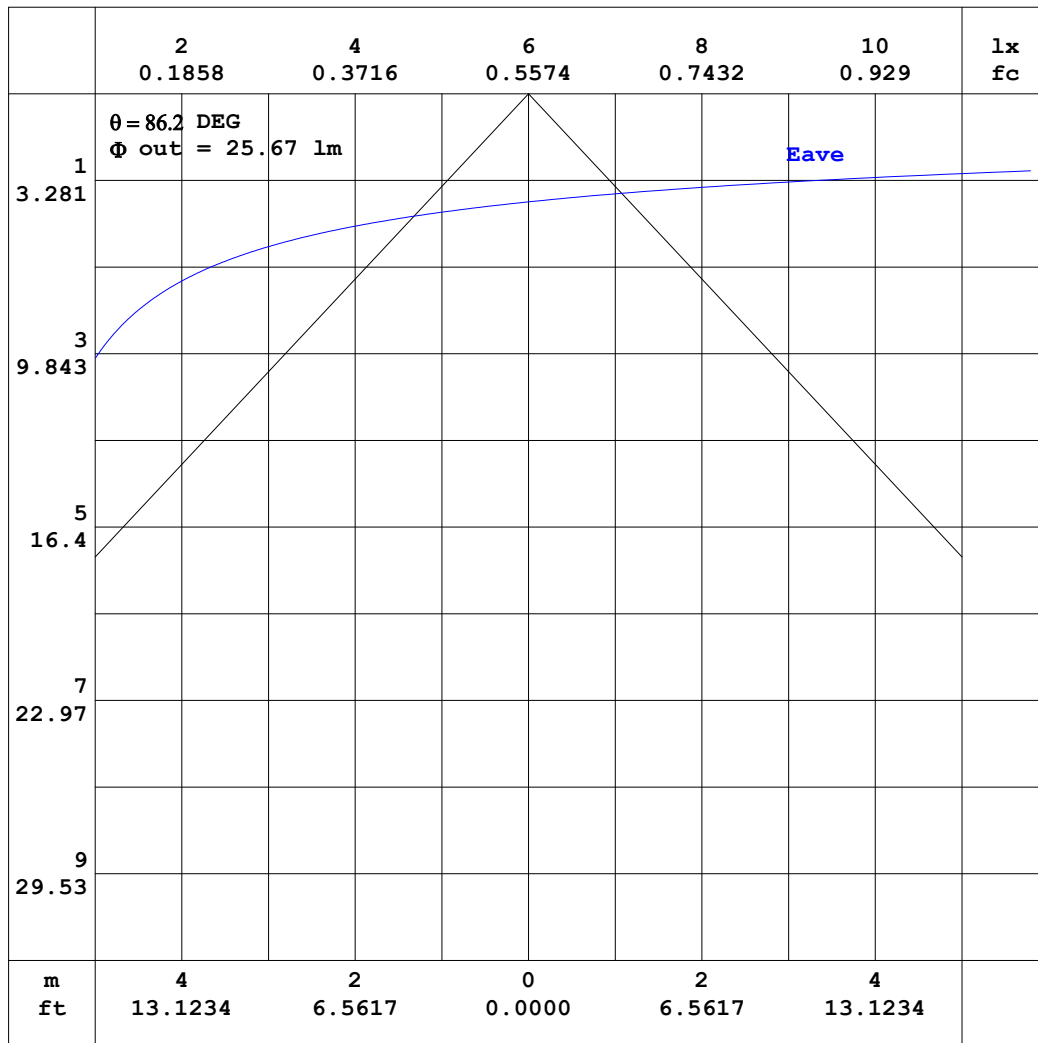


C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:24.5°C  
 Operators:Dingmin Zhang  
 Test Date:2025-11-15

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.463  
 Humidity:65.0%  
 Test Distance:30.000m [K=0.9305]  
 Remarks:

AAI CURVES

Test:U:120.35V I:0.2015A P:13.595W PF:0.5607 Freq:60.01Hz		
Lamp Flux:402.904x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



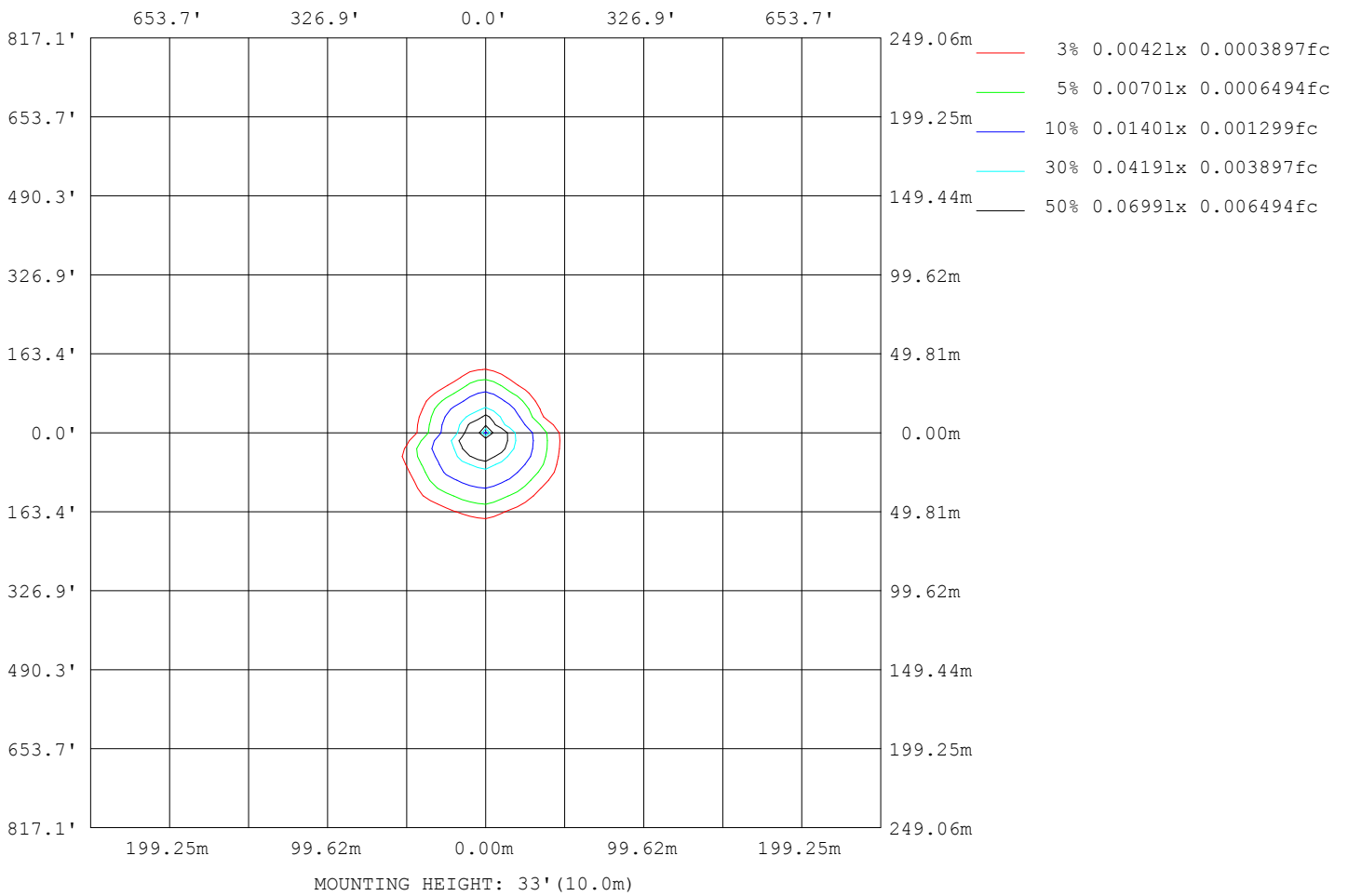
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 24.5°C  
 Operators: Dingmin Zhang  
 Test Date: 2025-11-15

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.463  
 Humidity: 65.0%  
 Test Distance: 30.000m [K=0.9305]  
 Remarks:

ISOLUX DIAGRAM

Test:U:120.35V I:0.2015A P:13.595W PF:0.5607 Freq:60.01Hz Lamp Flux:402.904x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:24.5°C  
 Operators:Dingmin Zhang  
 Test Date:2025-11-15

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.463  
 Humidity:65.0%  
 Test Distance:30.000m [K=0.9305]  
 Remarks:

## LED Avg.L Report

Test:U:120.35V I:0.2015A P:13.595W PF:0.5607 Freq:60.01Hz Lamp Flux:402.904x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

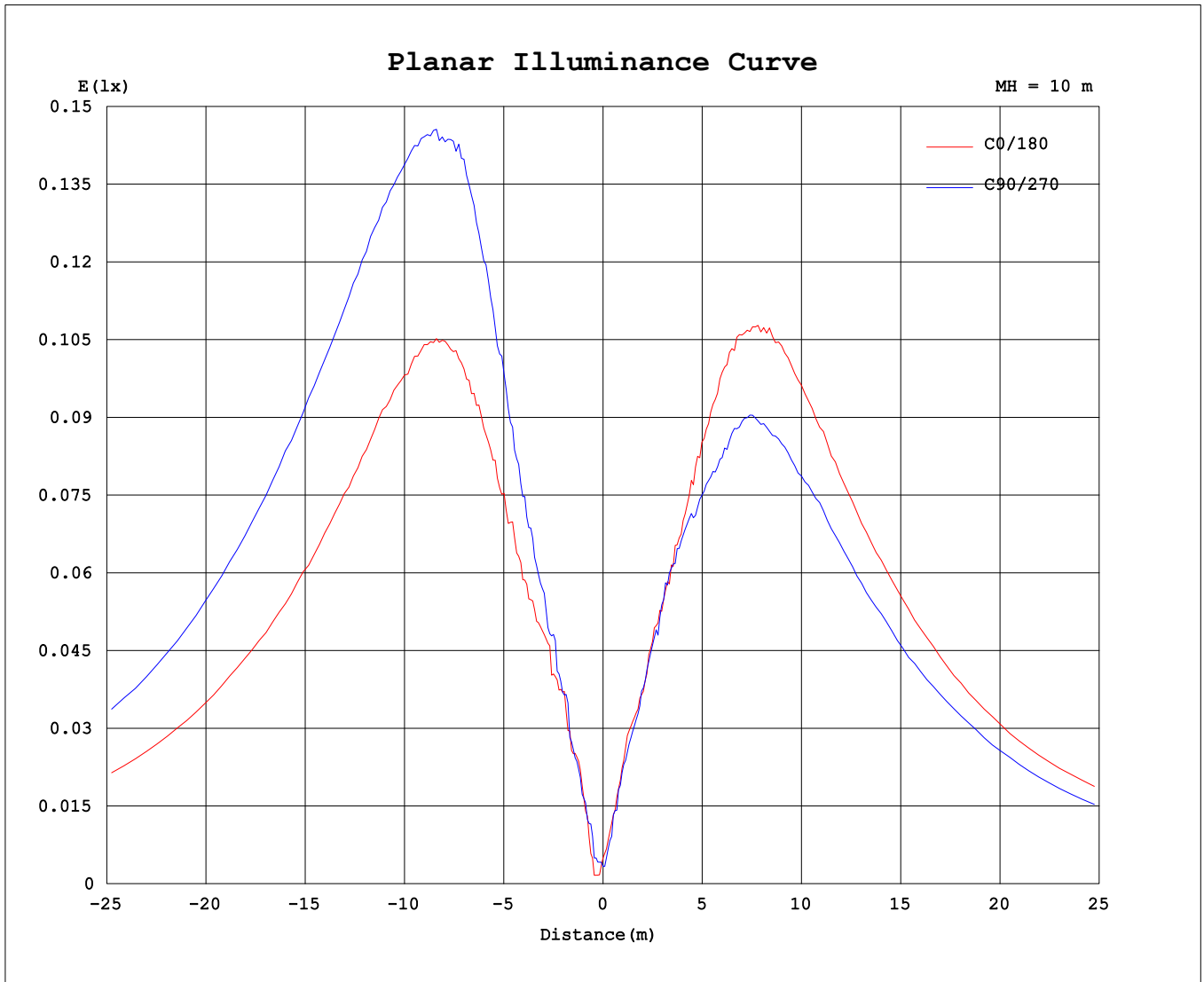
AvgL	cd/m2
L_0~180 (65) av	1273
L_0~180 (75) av	2223
L_0~180 (85) av	6772
L_90~270 (65) av	1554
L_90~270 (75) av	2706
L_90~270 (85) av	8302
L_45 (65) av	1405
L_45 (75) av	2478
L_45 (85) av	7616

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:24.5°C  
Operators:Dingmin Zhang  
Test Date:2025-11-15

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.463  
Humidity:65.0%  
Test Distance:30.000m [K=0.9305]  
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 24.5°C  
Operators: Dingmin Zhang  
Test Date: 2025-11-15

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.463  
Humidity: 65.0%  
Test Distance: 30.000m [K=0.9305]  
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.35V I:0.2015A P:13.595W PF:0.5607 Freq:60.01Hz		
Lamp Flux:402.904x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C (DEG) \ γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	0.50	0.18	0.50	0.42	0.33	0.33	0.33	0.25	0.17	0.25	0.08	0.17	0.50	0.18	0.50	0.42	0.33	0.33	0.33
5	1.42	1.42	1.42	1.59	1.68	1.59	1.58	1.26	1.34	1.34	1.34	1.19	2.02	2.18	2.01	1.85	1.92	1.59	1.92
10	3.10	3.51	3.85	3.76	3.60	3.35	3.65	3.09	2.94	3.10	2.93	2.76	3.53	3.35	3.61	3.43	3.42	3.31	3.44
15	5.10	5.19	5.68	5.51	5.52	5.36	5.36	5.36	5.27	5.09	5.03	4.61	5.53	5.53	5.61	5.44	5.51	5.10	5.44
20	6.61	7.36	7.88	8.36	8.54	8.28	8.27	8.27	8.13	7.86	7.53	7.03	7.87	7.95	7.95	7.46	7.53	7.53	7.45
25	9.37	10.5	11.3	11.8	11.9	12.1	12.0	12.0	12.0	11.4	11.0	10.8	10.8	10.9	10.5	10.1	10.1	9.71	9.55
30	13.1	14.4	15.1	16.1	17.0	17.7	17.9	17.5	17.3	17.1	16.2	16.1	14.6	14.6	13.7	13.3	12.9	12.0	12.4
35	18.1	19.2	20.6	22.6	22.8	24.0	25.4	25.3	25.0	25.3	23.4	23.8	19.3	18.8	17.8	17.3	15.7	15.0	16.2
40	23.4	23.9	26.2	28.2	28.1	30.6	32.4	31.9	32.6	33.6	29.8	30.5	23.9	22.1	21.3	19.9	17.9	17.8	19.4
45	27.8	28.0	30.0	34.0	32.4	36.1	39.3	38.1	39.7	41.1	36.5	36.9	27.2	24.8	23.4	22.2	18.4	20.1	22.3
50	31.6	32.5	35.0	39.3	37.9	41.4	46.0	44.3	45.5	48.8	42.9	43.6	29.8	27.6	26.0	23.6	19.4	22.1	24.8
55	34.7	37.1	40.5	43.8	43.2	45.4	52.3	50.6	51.3	56.3	49.1	50.7	32.1	30.0	28.5	25.0	21.1	24.1	26.8
60	37.6	41.8	45.2	46.4	48.1	48.9	58.0	55.9	56.4	62.7	55.0	56.6	33.7	32.4	31.1	25.8	22.7	25.5	28.2
65	39.8	45.2	48.3	48.5	51.2	52.9	62.1	59.4	60.9	67.3	60.1	61.7	34.7	34.3	32.8	26.3	24.1	27.1	28.9
70	41.6	47.9	51.2	50.3	54.0	56.0	65.3	62.9	64.0	72.3	64.0	65.6	36.3	35.2	34.0	26.9	24.6	28.1	29.3
75	43.3	48.2	53.6	52.4	55.7	57.5	67.6	65.3	66.6	75.1	66.8	69.2	36.4	35.4	33.9	27.1	24.5	28.3	29.5
80	44.5	48.5	55.3	53.9	57.3	58.6	69.8	66.1	67.5	77.3	69.1	71.7	36.4	35.9	33.9	27.1	24.1	28.3	29.5
85	45.4	49.3	56.2	55.0	57.8	60.1	70.9	67.0	67.8	78.8	70.1	73.5	36.4	36.2	33.8	27.1	24.0	28.2	29.4
90	45.5	49.6	56.2	55.2	57.9	60.1	71.0	67.4	67.9	78.9	71.1	74.0	36.2	35.7	33.7	27.1	24.0	28.3	29.2
95	45.7	49.4	56.1	55.2	57.8	60.0	70.5	67.3	67.2	78.4	70.6	73.7	36.0	35.1	33.6	27.1	23.6	28.0	28.9
100	45.3	48.4	54.8	54.5	56.8	58.8	68.6	66.1	65.5	76.6	69.1	71.8	34.8	34.2	32.7	26.4	23.2	27.3	28.2
105	44.1	47.7	52.4	52.4	55.2	57.1	66.4	64.2	63.9	73.0	67.0	69.1	34.3	33.9	32.1	25.6	23.1	27.0	27.2
110	42.8	46.8	50.6	49.7	52.8	55.9	63.5	61.6	60.9	69.6	64.1	65.6	33.7	32.4	30.8	24.4	22.5	26.8	26.7
115	40.2	43.7	46.9	46.7	49.2	53.2	55.8	56.9	56.8	64.5	59.9	61.6	31.6	31.1	29.5	23.6	21.6	25.3	24.2
120	35.6	40.3	44.1	44.0	45.0	49.6	48.8	51.4	52.4	59.6	55.2	56.6	28.3	29.2	28.0	23.4	20.4	23.2	21.0
125	30.4	36.9	38.9	41.4	40.5	44.4	40.4	45.7	46.8	52.8	48.5	49.8	23.8	27.2	25.6	22.8	18.7	21.5	17.1
130	27.4	32.2	32.9	36.7	35.0	38.0	33.5	40.4	42.1	45.5	41.5	42.4	20.1	24.2	22.2	21.0	17.2	19.4	14.6
135	21.0	26.5	28.3	32.3	30.1	32.3	25.6	33.2	36.0	38.8	35.0	34.4	15.5	21.3	19.8	18.9	15.7	17.3	12.1
140	17.4	22.0	23.6	26.2	25.8	26.1	19.5	26.7	28.3	30.2	28.4	27.5	11.9	17.7	17.1	16.5	14.7	14.9	9.63
145	13.4	18.3	18.8	20.7	19.8	19.5	12.5	21.0	22.0	22.6	21.6	21.8	9.20	15.1	13.8	13.9	12.5	12.1	6.11
150	8.38	12.8	13.8	14.2	14.2	13.8	7.95	13.3	15.2	15.7	15.3	14.7	5.53	10.3	11.1	10.8	10.0	9.21	5.78
155	6.03	8.30	10.4	9.71	9.20	9.54	4.27	9.16	10.1	10.1	10.3	8.20	4.18	7.44	8.37	8.03	8.21	8.03	5.36
160	4.19	6.05	6.65	5.86	6.18	5.70	3.18	5.61	6.27	6.45	6.25	5.78	2.51	4.52	6.10	6.60	6.63	6.52	4.83
165	2.35	3.60	4.35	4.10	3.68	3.18	1.93	3.27	3.76	3.61	3.42	3.01	1.17	1.51	2.86	4.17	4.43	4.11	3.27
170	0.84	1.27	1.93	1.76	1.59	1.42	0.84	0.67	1.50	1.51	1.42	1.25	0.08	0.08	1.00	1.24	1.51	1.67	1.42
175	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	0.00	0.00	0.00
180	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	0.00	0.00	0.00

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature:24.5°C

Operators:Dingmin Zhang

Test Date:2025-11-15

γ Range: 0 - 180DEG

γ Interval: 0.5DEG

Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.463

Humidity:65.0%

Test Distance:30.000m [K=0.9305]

Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.35V I:0.2015A P:13.595W PF:0.5607 Freq:60.01Hz Lamp Flux:402.904x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C (DEG) \ γ (DEG)	285	300	315	330	345														
0	0.25	0.17	0.25	0.08	0.17														
5	1.84	2.08	1.76	1.76	2.01														
10	3.68	3.75	3.52	3.76	3.68														
15	5.45	5.61	5.53	5.35	5.27														
20	7.70	7.85	7.28	7.03	7.03														
25	10.2	10.0	9.29	8.79	8.96														
30	12.9	12.8	11.6	10.6	11.3														
35	16.3	15.4	13.8	12.3	13.7														
40	19.3	17.3	16.2	13.7	15.8														
45	21.0	18.9	17.1	15.2	17.2														
50	22.5	19.8	18.7	16.7	18.8														
55	23.8	20.3	20.3	18.4	20.3														
60	24.7	21.1	21.8	20.7	22.1														
65	25.5	21.8	22.6	22.2	23.3														
70	25.6	21.8	23.1	23.5	24.1														
75	25.6	21.9	23.2	23.8	24.5														
80	25.2	21.6	23.1	23.7	24.5														
85	24.9	21.6	23.1	23.6	24.5														
90	24.6	21.6	23.0	23.3	24.5														
95	24.3	21.6	22.9	23.2	24.4														
100	24.2	21.6	22.4	22.7	23.9														
105	24.1	20.9	21.5	22.2	23.1														
110	24.0	20.3	21.2	21.5	22.6														
115	23.2	19.8	20.2	20.5	21.5														
120	22.2	18.7	19.1	18.7	20.2														
125	20.3	17.7	17.4	16.5	17.6														
130	19.0	16.8	16.0	14.6	16.6														
135	17.1	15.8	14.6	12.7	13.6														
140	15.4	14.4	13.0	11.0	12.0														
145	13.3	12.1	10.9	9.55	10.8														
150	9.70	9.97	9.29	8.79	7.70														
155	6.94	8.20	7.78	7.20	5.51														
160	5.09	5.86	5.93	5.36	3.94														
165	2.09	4.02	3.88	3.18	2.43														
170	0.74	1.45	1.50	1.34	0.45														
175	0.00	0.00	0.00	0.00	0.00														
180	0.00	0.00	0.00	0.00	0.00														

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:24.5°C  
 Operators:Dingmin Zhang  
 Test Date:2025-11-15

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.463  
 Humidity:65.0%  
 Test Distance:30.000m [K=0.9305]  
 Remarks: