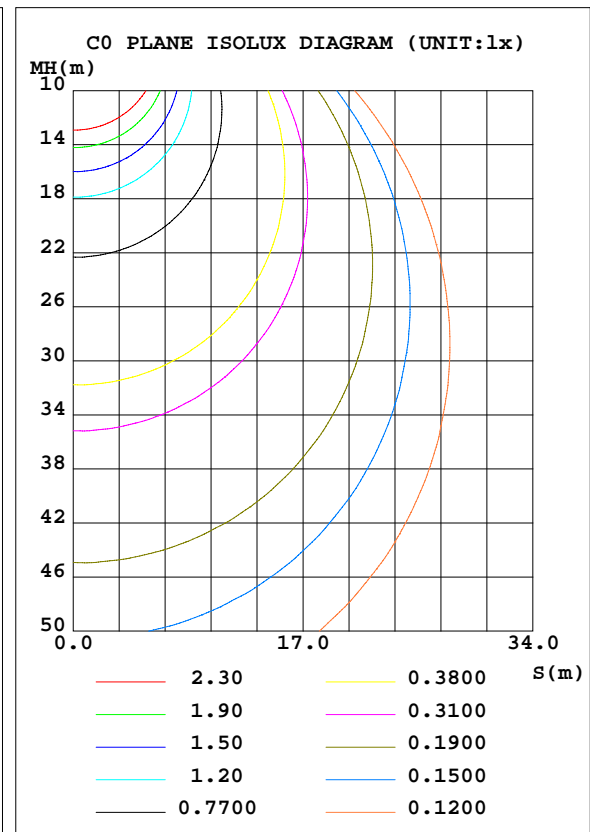
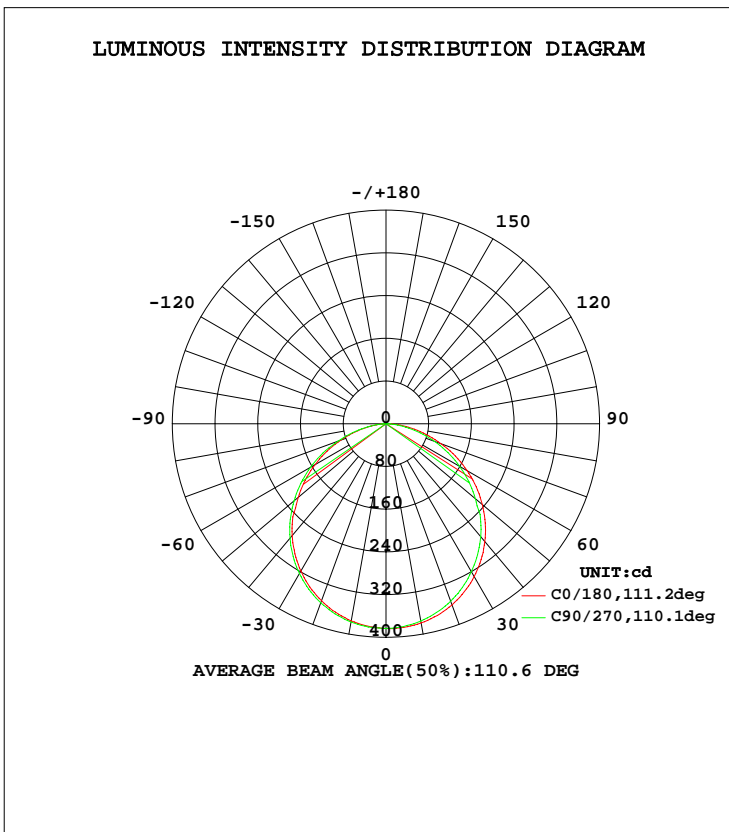


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.2V I:0.1590A P:17.30W PF:0.9060 Lamp Flux:1072.57x1 lm		
NAME: LED panel light	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 62.00 lm/W			
MODEL	20849LEDD	Imax(cd)	383.8	S/MH(C0/180)	1.24
NOMINAL POWER(W)	18	LOR(%)	100.0	S/MH(C90/270)	1.26
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1072.6	η UP, DN(C0-180)	0.0,51.0
NOMINAL FLUX(lm)	1072.57	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,48.9
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120	η down(%)	100.0	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:27 March 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:8.600m [K=1.0000]
 Remarks: 最新方案

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270				γ	Φ zone	Φ total	Φ lum, lamp
10	378.7	375.3	374.8	377.0				0- 10	36.26	36.26	3.38,3.38
20	361.3	353.8	352.9	357.0				10- 20	103.8	140.1	13.1,13.1
30	330.3	319.8	318.5	324.2				20- 30	157.2	297.3	27.7,27.7
40	287.8	276.0	273.4	279.7				30- 40	189.2	486.5	45.4,45.4
50	235.7	218.6	214.5	224.8				40- 50	194.8	681.3	63.5,63.5
60	175.5	159.1	153.6	162.7				50- 60	173.1	854.3	79.7,79.7
70	109.1	96.86	90.40	95.78				60- 70	129.3	983.7	91.7,91.7
80	48.80	37.97	32.97	35.53				70- 80	71.42	1055	98.4,98.4
90	1.687	0	0	0.0010				80- 90	17.13	1072	100,100
100	0	0	0	0				90-100	0.0234	1072	100,100
110	0	0.0479	0	0.1985				100-110	0.0286	1072	100,100
120	0	0.2184	0	0.3936				110-120	0.1245	1072	100,100
130	0	0.0437	0	0.2387				120-130	0.1012	1072	100,100
140	0	0	0.0002	0				130-140	0.0181	1072	100,100
150	0	0	0.0755	0.0395				140-150	0.0072	1073	100,100
160	0.0277	0.0160	0.1310	0.1072				150-160	0.0211	1073	100,100
170	0.1228	0.0915	0.1469	0.1073				160-170	0.0258	1073	100,100
180	0.1508	0.1352	0.1548	0.1232				170-180	0.0119	1073	100,100
DEG	LUMINOUS INTENSITY:cd								UNIT:lm		

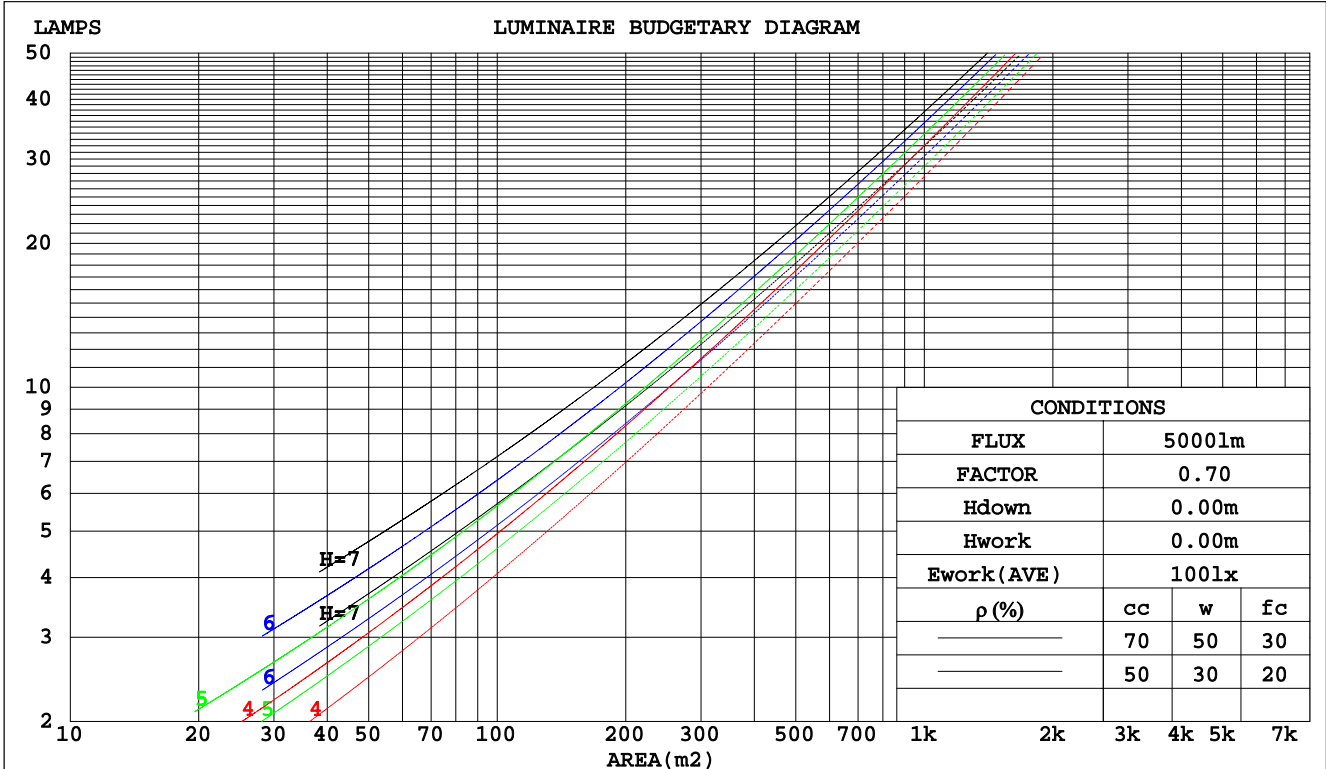
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:27 March 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:8.600m [K=1.0000]
Remarks: 最新方案

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.2V I:0.1590A P:17.30W PF:0.9060 Lamp Flux:1072.57x1 lm		
NAME: LED panel light	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																0
pfc	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	.00
1.0	1.04	.00	.96	1.02	.98	.95	.98	.94	.92	.94	.91	.89	.90	.88	.86	.84
2.0	.91	.84	.78	.89	.83	.77	.85	.80	.76	.82	.78	.74	.79	.75	.72	.70
3.0	.80	.72	.65	.78	.71	.65	.75	.69	.63	.72	.67	.62	.70	.65	.61	.59
4.0	.71	.62	.55	.69	.61	.55	.67	.60	.54	.65	.58	.53	.62	.57	.53	.50
5.0	.63	.54	.48	.62	.54	.47	.60	.52	.47	.58	.51	.46	.56	.50	.46	.44
6.0	.57	.48	.42	.56	.47	.41	.54	.47	.41	.52	.46	.41	.51	.45	.40	.38
7.0	.52	.43	.37	.51	.42	.37	.49	.42	.36	.48	.41	.36	.46	.40	.36	.34
8.0	.47	.39	.33	.46	.38	.33	.45	.38	.32	.44	.37	.32	.43	.37	.32	.30
9.0	.43	.35	.29	.43	.35	.29	.41	.34	.29	.40	.34	.29	.39	.33	.29	.27
10.0	.40	.32	.27	.39	.32	.27	.38	.31	.26	.37	.31	.26	.36	.31	.26	.24



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:27 March 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:8.600m [K=1.0000]
 Remarks: 最新方案

WEC AND CCEC

Test:U:120.2V I:0.1590A P:17.30W PF:0.9060 Lamp Flux:1072.57x1 lm		
NAME: LED panel light	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.304	.173	.055	.297	.169	.054	.284	.163	.052	.272	.157	.050	.260	.151	.049	
2.0	.288	.158	.048	.282	.155	.048	.270	.150	.047	.259	.145	.046	.249	.141	.044	
3.0	.267	.142	.043	.262	.140	.042	.251	.136	.041	.242	.132	.041	.233	.129	.040	
4.0	.247	.128	.038	.242	.127	.037	.233	.124	.037	.225	.121	.036	.217	.118	.036	
5.0	.229	.117	.034	.224	.115	.034	.216	.113	.033	.209	.110	.033	.202	.108	.032	
6.0	.212	.106	.030	.208	.105	.030	.201	.103	.030	.194	.101	.030	.188	.099	.029	
7.0	.198	.098	.028	.194	.097	.028	.188	.095	.027	.182	.093	.027	.176	.092	.027	
8.0	.185	.090	.025	.182	.089	.025	.176	.088	.025	.171	.086	.025	.165	.085	.025	
9.0	.173	.084	.023	.171	.083	.023	.165	.082	.023	.160	.080	.023	.156	.079	.023	
10.0	.163	.078	.022	.161	.078	.022	.156	.076	.022	.151	.075	.021	.147	.074	.021	

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.191	.191	.191	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.180	.156	.135	.154	.134	.116	.105	.092	.080	.061	.053	.047	.019	.017	.015	
2.0	.172	.132	.099	.147	.114	.085	.101	.079	.060	.058	.046	.035	.019	.015	.011	
3.0	.164	.115	.075	.141	.099	.065	.097	.069	.046	.056	.040	.027	.018	.013	.009	
4.0	.157	.101	.059	.134	.087	.051	.092	.061	.036	.053	.036	.021	.017	.012	.007	
5.0	.149	.091	.048	.128	.079	.041	.088	.055	.029	.051	.032	.017	.016	.011	.006	
6.0	.142	.082	.040	.122	.071	.034	.084	.050	.024	.049	.029	.015	.016	.010	.005	
7.0	.135	.076	.034	.116	.065	.029	.080	.046	.021	.047	.027	.012	.015	.009	.004	
8.0	.129	.070	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.014	.008	.004	
9.0	.123	.065	.026	.106	.056	.022	.073	.040	.016	.043	.023	.009	.014	.008	.003	
10.0	.117	.060	.023	.101	.053	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:27 March 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:8.600m [K=1.0000]
 Remarks: 最新方案

UGR(Unified Glare Rating) Table

Test:U:120.2V I:0.1590A P:17.30W PF:0.9060 Lamp Flux:1072.57x1 lm										
NAME: LED panel light					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:1		
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	17.4	18.9	17.7	19.1	19.3	17.1	18.6	17.3	18.8	19.0
3H	19.0	20.4	19.3	20.6	20.8	18.5	19.9	18.8	20.1	20.4
4H	19.6	20.9	19.9	21.2	21.4	19.1	20.4	19.4	20.6	20.9
6H	20.1	21.3	20.4	21.6	21.9	19.4	20.7	19.8	20.9	21.2
8H	20.2	21.4	20.6	21.7	22.0	19.5	20.7	19.9	21.0	21.3
12H	20.3	21.5	20.7	21.8	22.1	19.5	20.7	19.9	21.0	21.3
4H 2H	18.0	19.3	18.3	19.6	19.8	17.7	19.0	18.0	19.3	19.6
3H	19.7	20.9	20.1	21.2	21.5	19.3	20.5	19.7	20.8	21.1
4H	20.5	21.5	20.8	21.9	22.2	20.0	21.1	20.4	21.4	21.7
6H	21.1	22.0	21.5	22.4	22.7	20.5	21.4	20.9	21.8	22.2
8H	21.3	22.2	21.7	22.5	22.9	20.6	21.5	21.1	21.9	22.3
12H	21.5	22.3	21.9	22.6	23.1	20.7	21.5	21.1	21.9	22.3
8H 4H	20.7	21.6	21.1	22.0	22.3	20.3	21.2	20.7	21.5	21.9
6H	21.5	22.2	21.9	22.6	23.0	20.9	21.7	21.4	22.1	22.5
8H	21.8	22.4	22.2	22.8	23.3	21.2	21.8	21.6	22.2	22.7
12H	22.0	22.6	22.5	23.0	23.5	21.3	21.8	21.7	22.3	22.7
12H 4H	20.7	21.5	21.1	21.9	22.3	20.3	21.1	20.7	21.5	21.9
6H	21.5	22.2	22.0	22.6	23.0	21.0	21.6	21.5	22.1	22.5
8H	21.9	22.4	22.3	22.9	23.3	21.3	21.8	21.7	22.3	22.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.2 / - 0.2				
1.5H	+ 0.1 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117 Corrected 1073 lm Total Lamp Luminous Flux.(8log(F/F0) = 0.2)

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:27 March 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:8.600m [K=1.0000]
 Remarks: 最新方案

UTILIZATION FACTORS TABLE

Test:U:120.2V I:0.1590A P:17.30W PF:0.9060 Lamp Flux:1072.57x1 lm		
NAME: LED panel light	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

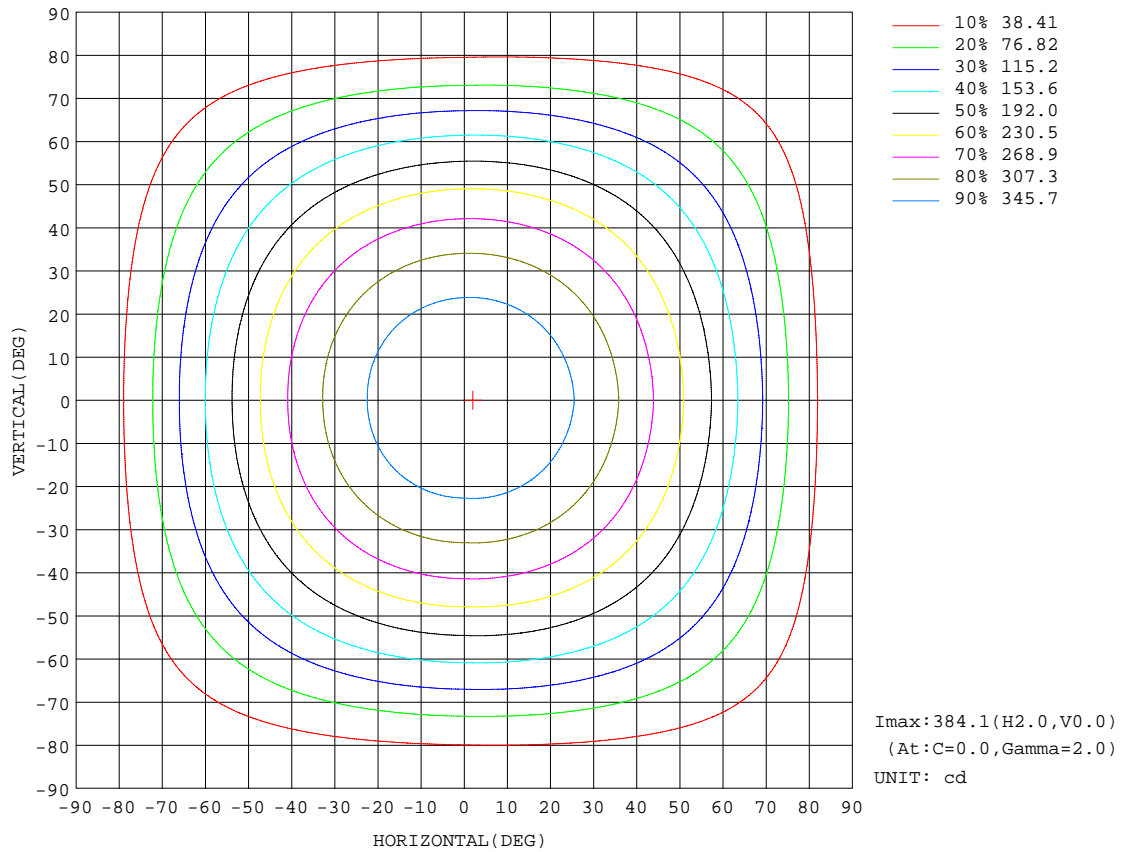
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	58	46	39	57	46	39	56	46	39	33
0.80	68	56	49	67	56	49	65	55	49	42
1.00	76	65	58	75	65	58	73	66	57	50
1.25	84	73	66	82	72	66	79	71	65	58
1.50	89	79	72	87	78	71	84	76	70	63
2.00	95	87	81	93	86	80	90	83	78	70
2.50	99	92	86	97	90	85	93	87	83	75
3.00	103	96	90	100	94	89	96	91	87	79
4.00	106	101	96	104	99	95	100	96	92	83
5.00	109	104	100	106	102	99	102	99	95	86
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:27 March 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:8.600m [K=1.0000]
 Remarks: 最新方案

ISOCANDELA DIAGRAM

Test:U:120.2V I:0.1590A P:17.30W PF:0.9060 Lamp Flux:1072.57x1 lm		
NAME: LED panel light	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

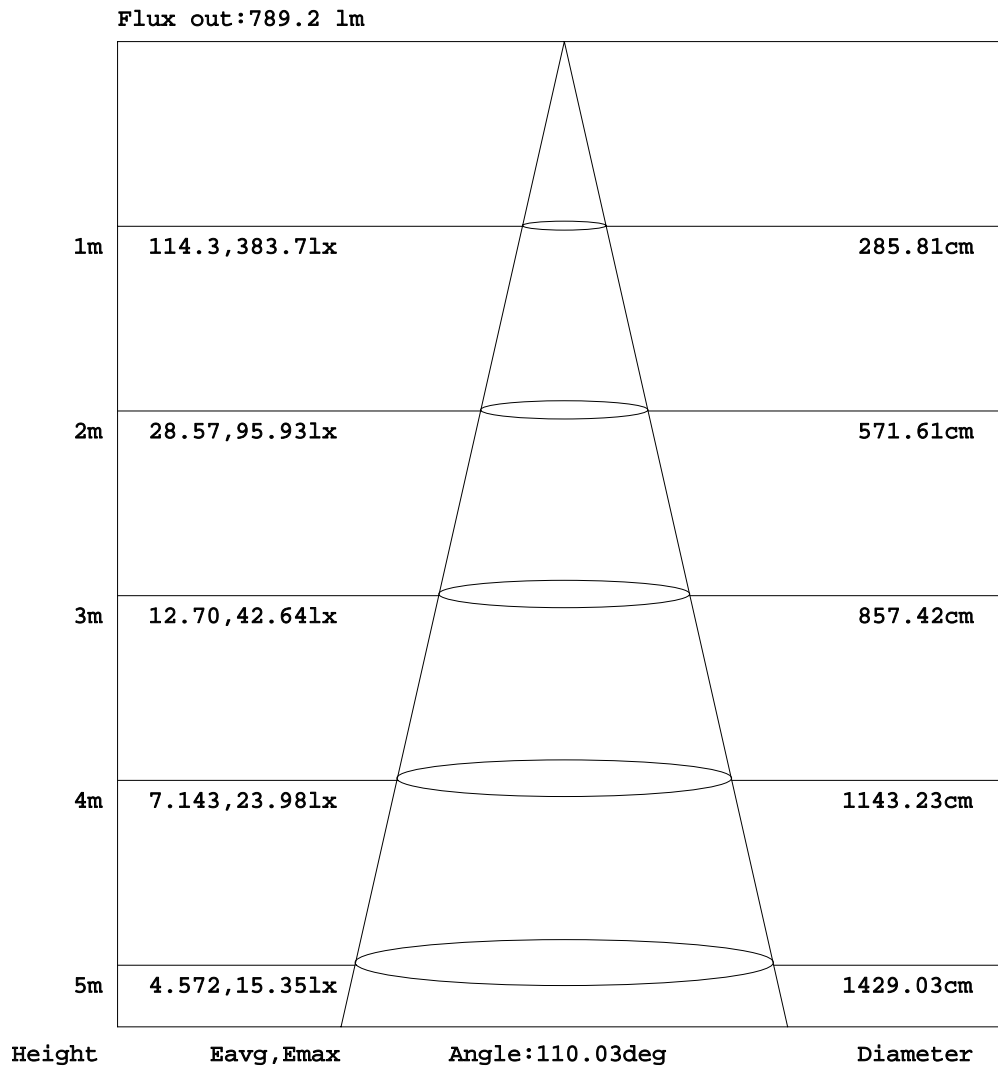


C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 27 March 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 8.600m [K=1.0000]
 Remarks: 最新方案

AAI Figure

Test:U:120.2V I:0.1590A P:17.30W PF:0.9060 Lamp Flux:1072.57x1 lm		
NAME: LED panel light	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:



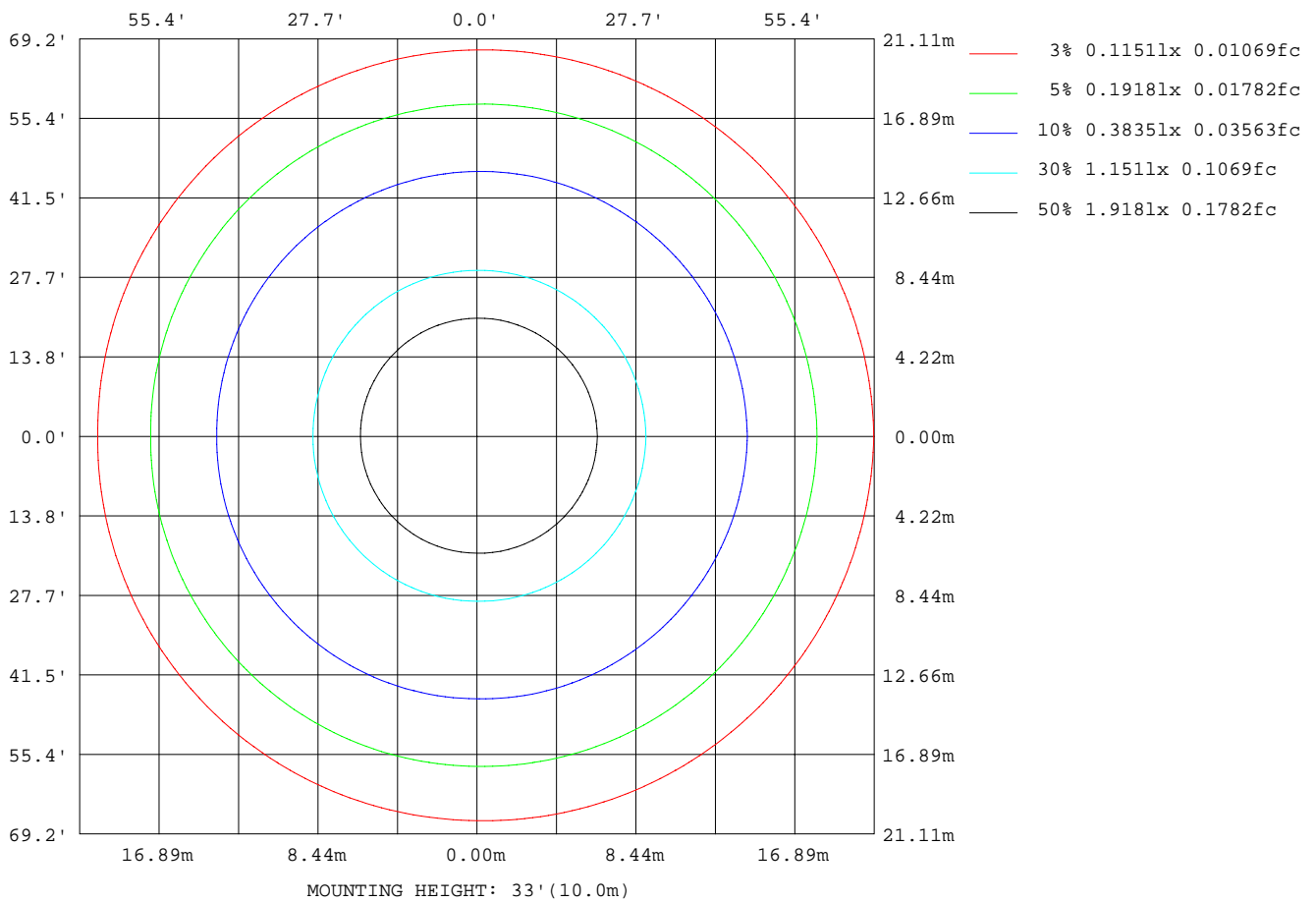
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:27 March 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:8.600m [K=1.0000]
 Remarks: 最新方案

ISOLUX DIAGRAM

Test:U:120.2V I:0.1590A P:17.30W PF:0.9060 Lamp Flux:1072.57x1 lm		
NAME: LED panel light	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:27 March 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:8.600m [K=1.0000]
 Remarks: 最新方案

LED Avg.L Report

Test:U:120.2V I:0.1590A P:17.30W PF:0.9060 Lamp Flux:1072.57x1 lm		
NAME: LED panel light	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

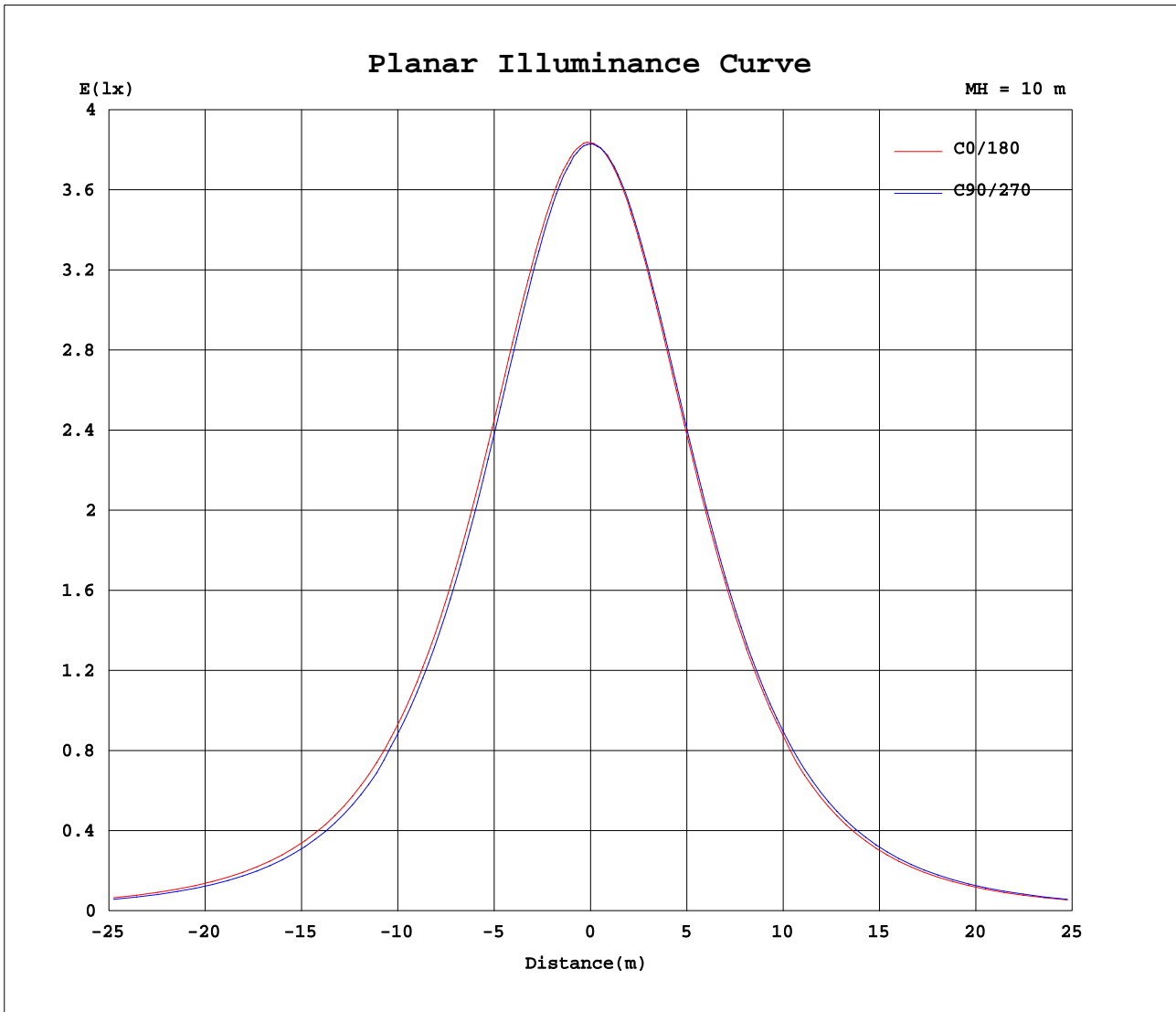
AvgL	cd/m2
L_0~180(65)av	3141
L_0~180(75)av	2671
L_0~180(85)av	1857
L_90~270(65)av	3056
L_90~270(75)av	2534
L_90~270(85)av	1289
L_45(65)av	3072
L_45(75)av	2564
L_45(85)av	1455

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:27 March 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:8.600m [K=1.0000]
 Remarks: 最新方案

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 27 March 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 8.600m [K=1.0000]
 Remarks: 最新方案

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.2V I:0.1590A P:17.30W PF:0.9060 Lamp Flux:1072.57x1 lm		
NAME: LED panel light	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	90	180	270															
0	383	383	383	383															
5	383	381	381	382															
10	379	375	375	377															
15	372	366	365	369															
20	361	354	353	357															
25	347	338	337	342															
30	330	320	319	324															
35	311	299	298	303															
40	288	276	273	280															
45	263	250	247	254															
50	236	219	215	225															
55	206	190	185	195															
60	175	159	154	163															
65	144	128	122	130															
70	109	96.9	90.4	95.8															
75	78.0	66.6	60.3	64.6															
80	48.8	38.0	33.0	35.5															
85	22.7	12.1	9.65	10.4															
90	1.69	0.00	0.00	0.00															
95	0.00	0.00	0.00	0.00															
100	0.00	0.00	0.00	0.00															
105	0.00	0.00	0.00	0.11															
110	0.00	0.05	0.00	0.20															
115	0.00	0.21	0.00	0.34															
120	0.00	0.22	0.00	0.39															
125	0.00	0.11	0.00	0.33															
130	0.00	0.04	0.00	0.24															
135	0.00	0.00	0.00	0.03															
140	0.00	0.00	0.00	0.00															
145	0.00	0.00	0.05	0.00															
150	0.00	0.00	0.08	0.04															
155	0.00	0.01	0.10	0.08															
160	0.03	0.02	0.13	0.11															
165	0.08	0.06	0.14	0.10															
170	0.12	0.09	0.15	0.11															
175	0.13	0.11	0.15	0.12															
180	0.15	0.14	0.15	0.12															

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:27 March 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:8.600m [K=1.0000]
 Remarks: 最新方案