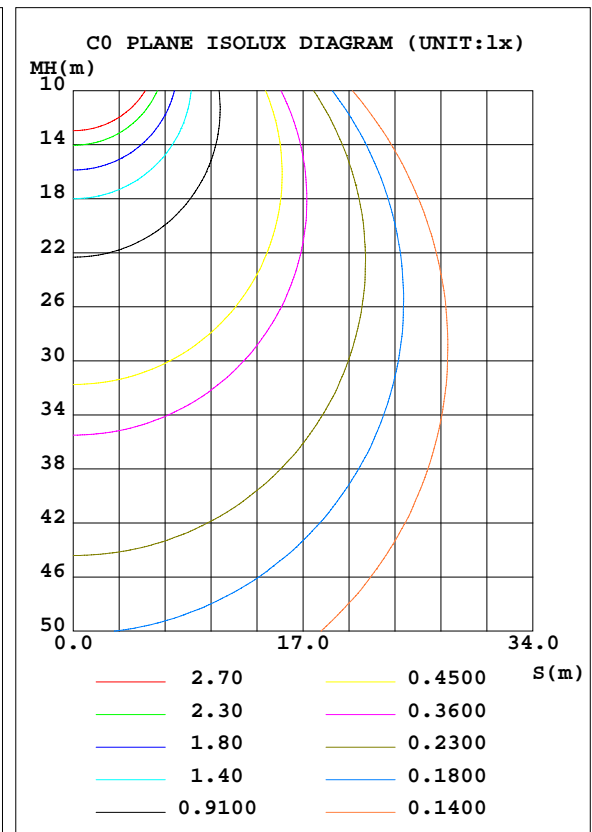
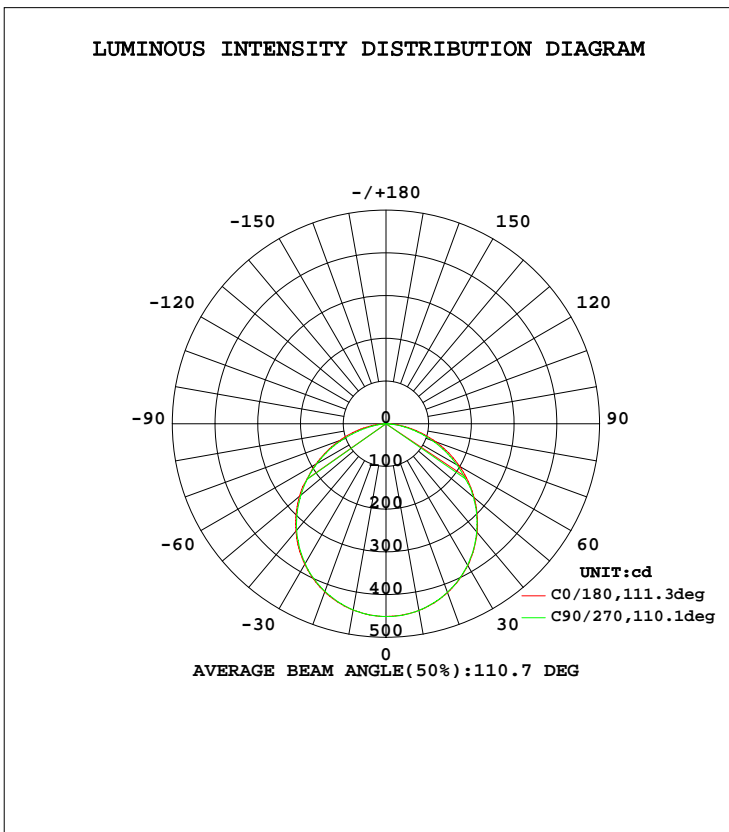


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.0V I:0.1440A P:17.10W PF:0.9900 Lamp Flux:1262.65x1 lm		
NAME: LED panel light	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 73.84 lm/W			
MODEL	20837LEDD	I _{max} (cd)	451.4	S/MH(C0/180)	1.25
NOMINAL POWER(W)	24	LOR(%)	100.0	S/MH(C90/270)	1.25
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1262.6	η UP, DN(C0-180)	0.0,50.7
NOMINAL FLUX(lm)	1262.65	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,49.2
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:28 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	443.5	443.8	442.9	442.4				0- 10	42.68	42.68	3.38,3.38
20	421.0	419.7	419.2	417.4				10- 20	122.2	164.9	13.1,13.1
30	382.8	382.3	380.2	378.3				20- 30	185.2	350.1	27.7,27.7
40	331.7	330.6	328.1	325.2				30- 40	222.9	573.0	45.4,45.4
50	269.5	267.6	264.8	260.4				40- 50	230.0	803.0	63.6,63.6
60	199.1	191.2	189.6	186.8				50- 60	204.5	1008	79.8,79.8
70	124.5	115.3	116.2	106.2				60- 70	152.3	1160	91.9,91.9
80	52.94	43.93	47.46	31.52				70- 80	83.00	1243	98.4,98.4
90	0.0437	0.0715	0	0.0043				80- 90	19.20	1262	100,100
100	0	0	0	0				90-100	0.0016	1262	100,100
110	0	0.0362	0	0.0317				100-110	0.0014	1262	100,100
120	0	0.3555	0	0.3395				110-120	0.0958	1262	100,100
130	0	0.3115	0.0198	0.1719				120-130	0.1344	1262	100,100
140	0	0.1876	0.1580	0.1716				130-140	0.1028	1262	100,100
150	0.0513	0.1559	0.2254	0.2036				140-150	0.0860	1262	100,100
160	0.1538	0.2077	0.2608	0.2356				150-160	0.0872	1263	100,100
170	0.2646	0.2714	0.3201	0.2636				160-170	0.0695	1263	100,100
180	0.3003	0.2915	0.3082	0.2875				170-180	0.0268	1263	100,100
DEG	LUMINOUS INTENSITY:cd								UNIT:lm		

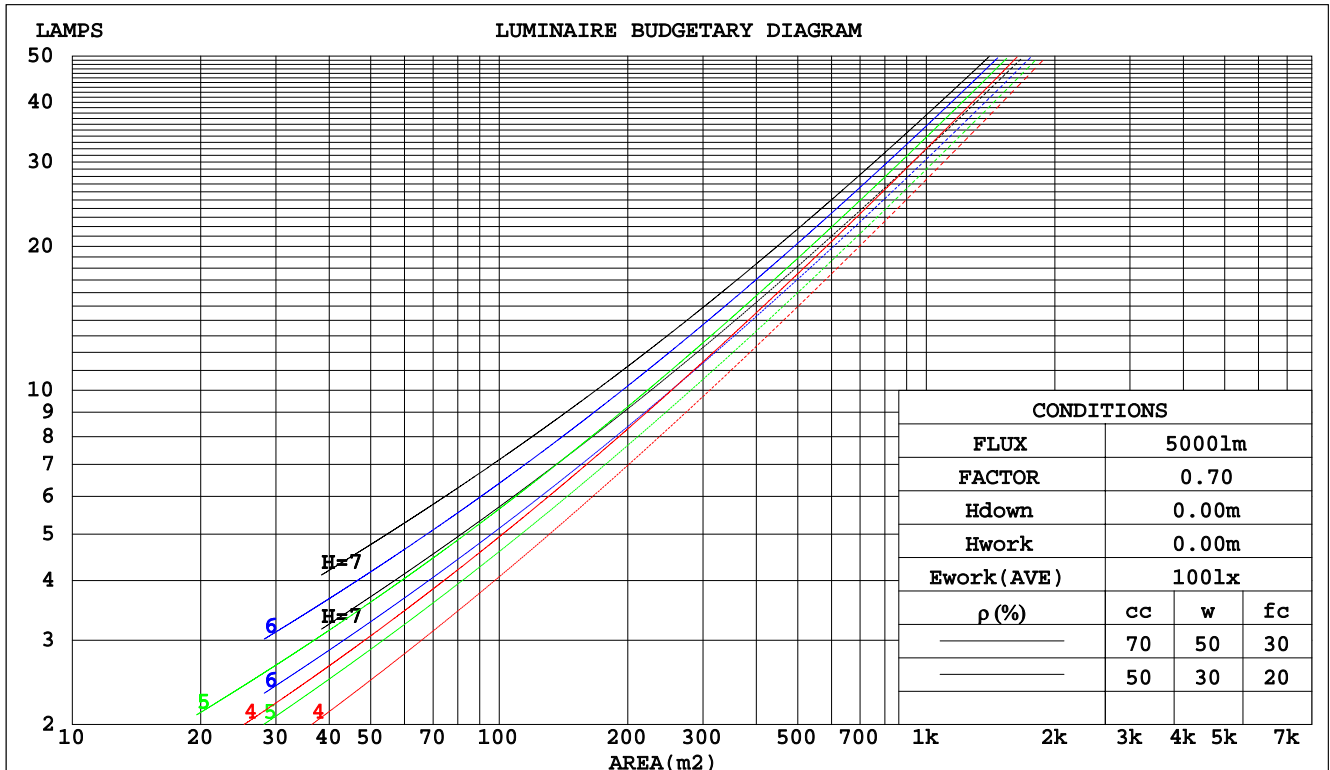
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:28 March 2019

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:120.0V I:0.1440A P:17.10W PF:0.9900 Lamp Flux:1262.65x1 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																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	1.00	.96	1.02	.98	.95	.98	.95	.92	.94	.91	.89	.90	.88	.86	.84
2.0	.91	.84	.78	.89	.83	.78	.85	.80	.76	.82	.78	.74	.79	.76	.72	.70
3.0	.80	.72	.65	.78	.71	.65	.75	.69	.63	.73	.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	.53	.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: 28 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:120.0V I:0.1440A P:17.10W PF:0.9900 Lamp Flux:1262.65x1 lm		
NAME: LED panel light	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	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 Coefficients(WEC)									
0.0																
1.0	.303	.172	.055	.296	.169	.054	.283	.162	.052	.271	.156	.050	.259	.150	.048	
2.0	.287	.157	.048	.281	.155	.048	.269	.150	.047	.259	.145	.045	.249	.141	.044	
3.0	.267	.142	.043	.261	.140	.042	.251	.136	.041	.241	.132	.041	.232	.129	.040	
4.0	.247	.128	.038	.242	.127	.037	.233	.123	.037	.224	.120	.036	.216	.118	.036	
5.0	.229	.116	.034	.224	.115	.034	.216	.112	.033	.208	.110	.033	.201	.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	.091	.027	
8.0	.185	.090	.025	.182	.089	.025	.176	.088	.025	.170	.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	.021	.151	.075	.021	.147	.074	.021	

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	.191	.191	.191	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.180	.157	.135	.154	.134	.116	.105	.092	.081	.061	.053	.047	.019	.017	.015	
2.0	.172	.132	.099	.147	.114	.086	.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	.088	.051	.092	.061	.036	.053	.036	.021	.017	.012	.007	
5.0	.149	.091	.048	.128	.079	.042	.088	.055	.029	.051	.032	.017	.016	.011	.006	
6.0	.142	.083	.040	.122	.071	.035	.084	.050	.024	.049	.029	.015	.016	.010	.005	
7.0	.135	.076	.034	.116	.066	.029	.080	.046	.021	.047	.027	.012	.015	.009	.004	
8.0	.129	.070	.029	.111	.061	.025	.077	.043	.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	.061	.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:28 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:120.0V I:0.1440A P:17.10W PF:0.9900 Lamp Flux:1262.65x1 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	17.9	19.4	18.1	19.6	19.8	17.7	19.2	18.0	19.4	19.6
3H	19.4	20.8	19.7	21.0	21.2	19.1	20.5	19.4	20.7	21.0
4H	20.0	21.3	20.3	21.5	21.8	19.7	21.0	20.0	21.2	21.5
6H	20.4	21.6	20.7	21.9	22.2	20.0	21.2	20.3	21.5	21.8
8H	20.5	21.7	20.9	22.0	22.3	20.1	21.3	20.4	21.6	21.9
12H	20.6	21.8	21.0	22.1	22.4	20.1	21.3	20.5	21.6	21.9
4H 2H	18.4	19.8	18.7	20.0	20.3	18.3	19.6	18.6	19.9	20.1
3H	20.1	21.3	20.5	21.6	21.9	19.9	21.1	20.3	21.4	21.7
4H	20.8	21.9	21.2	22.2	22.6	20.6	21.6	20.9	21.9	22.3
6H	21.4	22.3	21.8	22.7	23.1	21.0	22.0	21.4	22.3	22.7
8H	21.6	22.5	22.0	22.8	23.2	21.2	22.0	21.6	22.4	22.8
12H	21.7	22.5	22.2	22.9	23.3	21.2	22.0	21.6	22.4	22.8
8H 4H	21.1	22.0	21.5	22.3	22.7	20.8	21.7	21.2	22.1	22.5
6H	21.8	22.5	22.2	22.9	23.3	21.4	22.2	21.9	22.6	23.0
8H	22.1	22.7	22.5	23.1	23.6	21.6	22.3	22.1	22.7	23.2
12H	22.3	22.8	22.7	23.3	23.7	21.7	22.3	22.2	22.7	23.2
12H 4H	21.1	21.9	21.5	22.3	22.7	20.8	21.6	21.3	22.0	22.4
6H	21.8	22.5	22.3	22.9	23.3	21.5	22.1	22.0	22.6	23.0
8H	22.1	22.7	22.6	23.1	23.6	21.7	22.3	22.2	22.7	23.2
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117 Corrected 1263 lm Total Lamp Luminous Flux.(8log(F/F0) = 0.8)

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:28 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:120.0V I:0.1440A P:17.10W PF:0.9900 Lamp Flux:1262.65x1 lm		
NAME: LED panel light	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

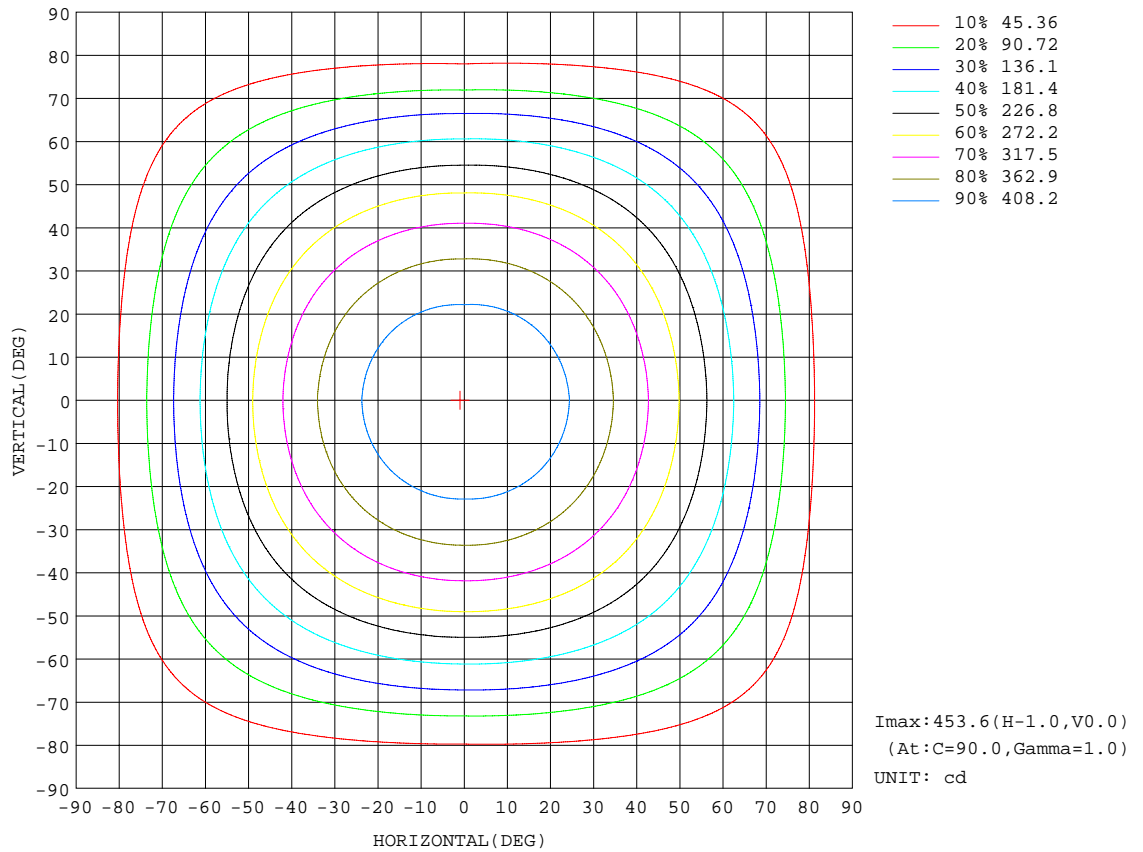
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	58	46	39	57	46	39	56	46	39	33
0.80	68	56	49	67	56	49	65	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	94	86	80	90	84	78	71
2.50	99	92	86	97	90	85	93	88	83	75
3.00	103	96	90	100	94	89	96	91	87	79
4.00	107	101	96	104	99	95	100	96	92	83
5.00	109	104	100	106	102	99	102	99	96	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:28 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:120.0V I:0.1440A P:17.10W PF:0.9900 Lamp Flux:1262.65x1 lm		
NAME: LED panel light	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

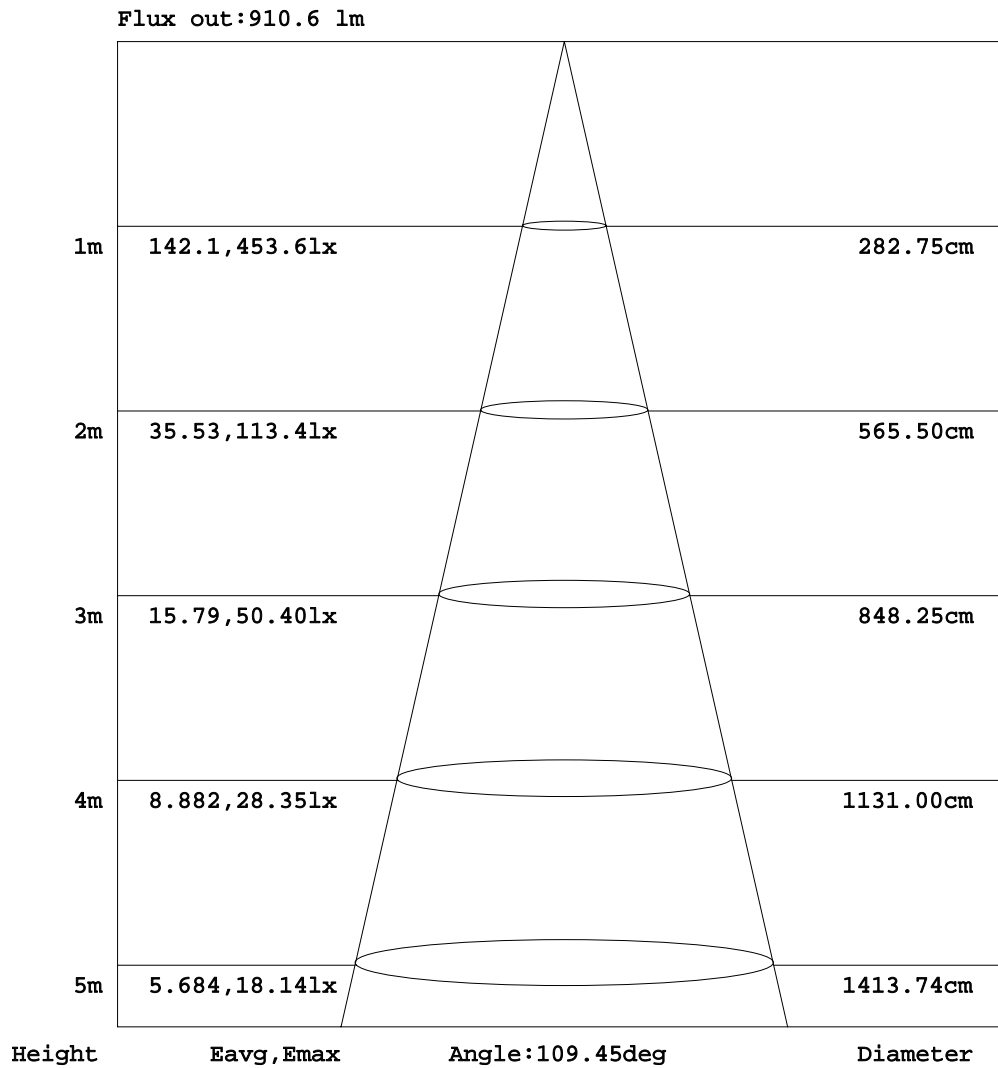


C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 28 March 2019

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:120.0V I:0.1440A P:17.10W PF:0.9900 Lamp Flux:1262.65x1 lm		
NAME: LED panel light	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:



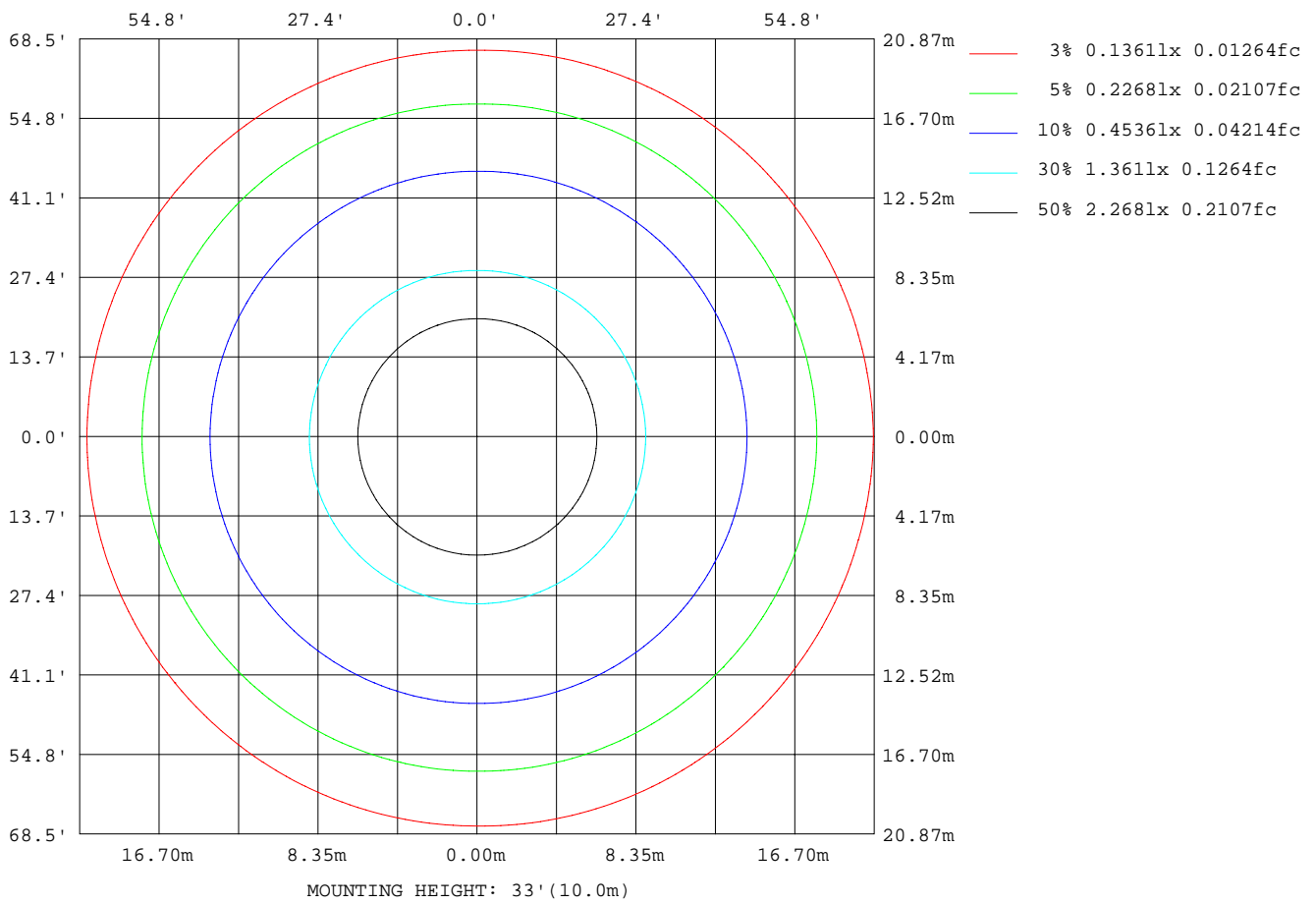
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:28 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:120.0V I:0.1440A P:17.10W PF:0.9900 Lamp Flux:1262.65x1 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: 28 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:120.0V I:0.1440A P:17.10W PF:0.9900 Lamp Flux:1262.65x1 lm		
NAME: LED panel light	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

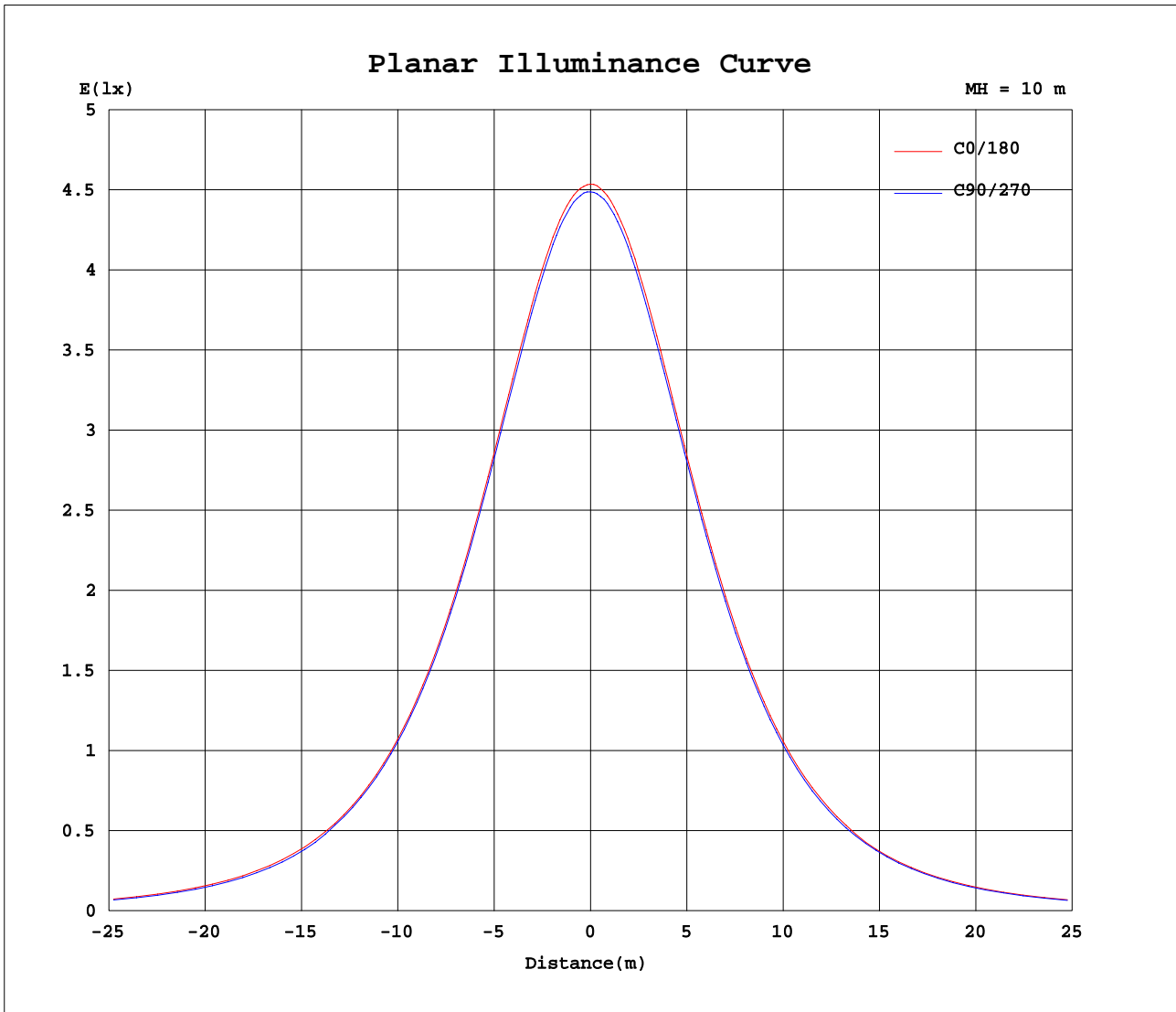
AvgL	cd/m2
L_0~180(65)av	3726
L_0~180(75)av	3227
L_0~180(85)av	2324
L_90~270(65)av	3572
L_90~270(75)av	2815
L_90~270(85)av	1210
L_45(65)av	3623
L_45(75)av	2964
L_45(85)av	1613

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:28 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: 28 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:120.0V I:0.1440A P:17.10W PF:0.9900 Lamp Flux:1262.65x1 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	451	451	451	451															
5	449	450	449	449															
10	443	444	443	442															
15	434	434	433	432															
20	421	420	419	417															
25	404	403	401	400															
30	383	382	380	378															
35	359	357	355	353															
40	332	331	328	325															
45	302	300	298	294															
50	270	268	265	260															
55	235	228	226	224															
60	199	191	190	187															
65	162	153	153	148															
70	125	115	116	106															
75	86.5	78.2	80.5	67.5															
80	52.9	43.9	47.5	31.5															
85	22.7	14.2	17.8	6.92															
90	0.04	0.07	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	0.00															
110	0.00	0.04	0.00	0.03															
115	0.00	0.16	0.00	0.23															
120	0.00	0.36	0.00	0.34															
125	0.00	0.36	0.00	0.24															
130	0.00	0.31	0.02	0.17															
135	0.00	0.29	0.09	0.18															
140	0.00	0.19	0.16	0.17															
145	0.01	0.14	0.19	0.20															
150	0.05	0.16	0.23	0.20															
155	0.09	0.18	0.25	0.24															
160	0.15	0.21	0.26	0.24															
165	0.22	0.23	0.30	0.25															
170	0.26	0.27	0.32	0.26															
175	0.27	0.25	0.31	0.28															
180	0.30	0.29	0.31	0.29															

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:28 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