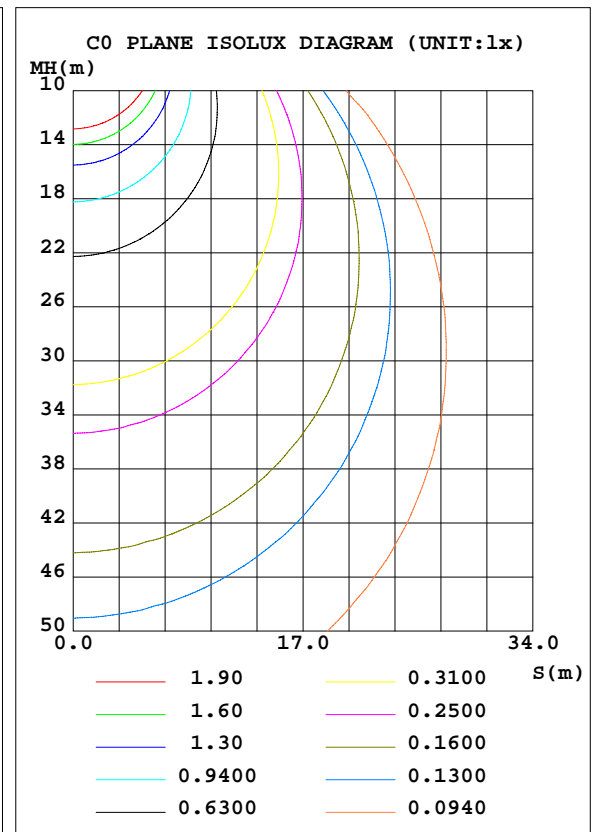
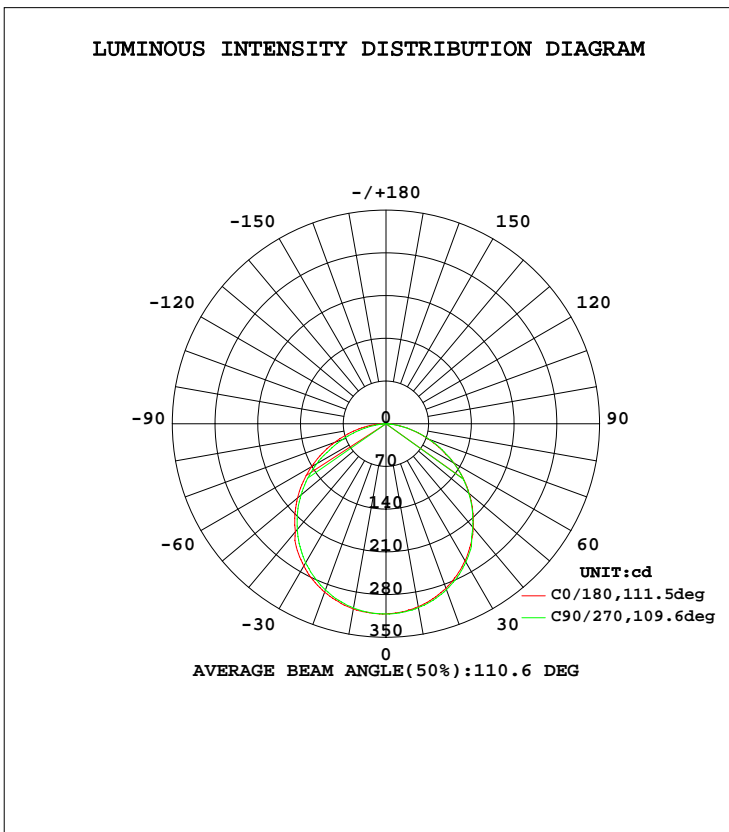


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.4V I:0.0520A P:11.60W PF:0.9540 Lamp Flux:871.363x1 lm		
NAME: LED panel light	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 75.12 lm/W			
MODEL	20836LEDD	I _{max} (cd)	311.9	S/MH(C0/180)	1.28
NOMINAL POWER(W)	12	LOR(%)	100.0	S/MH(C90/270)	1.25
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	871.36	η UP, DN(C0-180)	0.1,48.6
NOMINAL FLUX(lm)	871.363	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.2,51.0
LAMPS INSIDE	1	η up(%)	0.3	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	230	η down(%)	99.7	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	304.5	306.1	308.2	306.5				0- 10	29.49	29.49	3.38,3.38
20	287.1	289.4	293.8	289.9				10- 20	84.50	114.0	13.1,13.1
30	259.4	262.0	269.4	263.2				20- 30	128.1	242.1	27.8,27.8
40	222.4	221.2	231.1	226.3				30- 40	153.7	395.8	45.4,45.4
50	177.9	177.2	189.3	181.8				40- 50	157.5	553.3	63.5,63.5
60	128.3	127.7	141.1	130.8				50- 60	140.5	693.8	79.6,79.6
70	74.69	75.64	89.79	76.15				60- 70	104.1	798.0	91.6,91.6
80	27.74	27.23	40.67	26.40				70- 80	57.21	855.2	98.1,98.1
90	0.1107	0.3425	1.548	0.5106				80- 90	13.34	868.5	99.7,99.7
100	0.1504	0.2993	0.2058	0.4384				90-100	0.2764	868.8	99.7,99.7
110	0.1862	0.7056	0.2494	0.7135				100-110	0.4048	869.2	99.7,99.7
120	0.2651	0.8053	0.3406	0.9407				110-120	0.4959	869.7	99.8,99.8
130	0.3205	0.6139	0.4196	0.7938				120-130	0.5250	870.2	99.9,99.9
140	0.3642	0.4942	0.4909	0.5742				130-140	0.3865	870.6	99.9,99.9
150	0.4235	0.4744	0.5502	0.5620				140-150	0.3064	870.9	99.9,99.9
160	0.4985	0.5382	0.5938	0.5780				150-160	0.2424	871.1	100,100
170	0.5898	0.5861	0.6333	0.6138				160-170	0.1637	871.3	100,100
180	0.6373	0.6378	0.6412	0.6338				170-180	0.0586	871.4	100,100
DEG	LUMINOUS INTENSITY:cd								UNIT:lm		

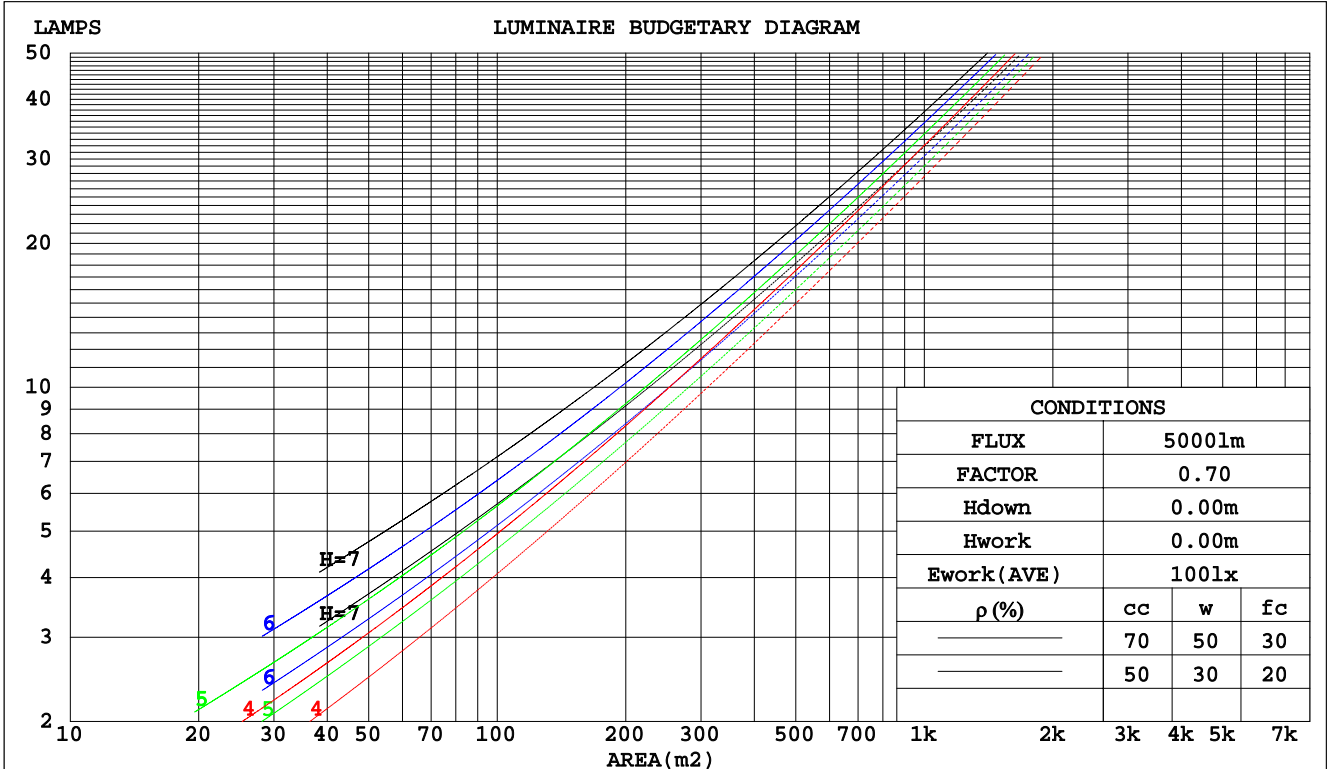
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:27 March 2019

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:230.4V I:0.0520A P:11.60W PF:0.9540 Lamp Flux:871.363x1 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	.64	.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	.48	.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	.27	.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:230.4V I:0.0520A P:11.60W PF:0.9540 Lamp Flux:871.363x1 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	.282	.162	.052	.270	.156	.050	.259	.150	.048	
2.0	.287	.157	.048	.281	.155	.048	.269	.149	.046	.258	.145	.045	.248	.140	.044	
3.0	.266	.142	.042	.261	.140	.042	.250	.136	.041	.241	.132	.040	.232	.128	.040	
4.0	.246	.128	.038	.242	.126	.037	.232	.123	.037	.224	.120	.036	.216	.117	.036	
5.0	.228	.116	.034	.224	.115	.033	.216	.112	.033	.208	.110	.033	.201	.107	.032	
6.0	.212	.106	.030	.208	.105	.030	.201	.103	.030	.194	.101	.030	.187	.099	.029	
7.0	.197	.098	.028	.194	.097	.028	.187	.095	.027	.181	.093	.027	.175	.091	.027	
8.0	.185	.090	.025	.181	.089	.025	.176	.088	.025	.170	.086	.025	.165	.085	.025	
9.0	.173	.084	.023	.170	.083	.023	.165	.082	.023	.160	.080	.023	.155	.079	.023	
10.0	.163	.078	.022	.160	.077	.022	.155	.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	.193	.193	.193	.165	.165	.165	.113	.113	.113	.065	.065	.065	.021	.021	.021	
1.0	.182	.159	.137	.156	.136	.118	.107	.094	.082	.061	.054	.048	.020	.017	.015	
2.0	.174	.134	.101	.149	.116	.087	.102	.080	.061	.059	.047	.036	.019	.015	.012	
3.0	.166	.117	.077	.143	.101	.067	.098	.070	.047	.057	.041	.028	.018	.013	.009	
4.0	.159	.103	.061	.136	.089	.053	.094	.062	.037	.054	.037	.022	.017	.012	.007	
5.0	.151	.093	.050	.130	.081	.044	.090	.056	.031	.052	.033	.018	.017	.011	.006	
6.0	.144	.085	.042	.124	.073	.037	.086	.051	.026	.050	.030	.015	.016	.010	.005	
7.0	.137	.078	.036	.118	.067	.031	.082	.047	.022	.047	.028	.013	.015	.009	.004	
8.0	.131	.072	.031	.113	.062	.027	.078	.044	.019	.045	.026	.012	.015	.008	.004	
9.0	.125	.067	.028	.108	.058	.024	.075	.041	.017	.043	.024	.010	.014	.008	.003	
10.0	.119	.063	.025	.103	.055	.022	.071	.038	.016	.042	.023	.009	.014	.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:230.4V I:0.0520A P:11.60W PF:0.9540 Lamp Flux:871.363x1 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	16.2	17.7	16.4	17.9	18.1	16.1	17.6	16.4	17.8	18.1
3H	17.5	18.9	17.8	19.1	19.4	17.5	18.9	17.8	19.1	19.4
4H	18.0	19.3	18.3	19.6	19.9	18.0	19.3	18.3	19.6	19.9
6H	18.3	19.6	18.7	19.9	20.1	18.3	19.6	18.7	19.8	20.1
8H	18.4	19.6	18.8	19.9	20.2	18.4	19.6	18.7	19.9	20.2
12H	18.4	19.6	18.8	19.9	20.2	18.4	19.5	18.7	19.8	20.1
4H 2H	16.7	18.0	17.0	18.3	18.6	16.7	18.0	17.0	18.3	18.5
3H	18.3	19.4	18.6	19.7	20.0	18.3	19.4	18.6	19.7	20.0
4H	18.9	19.9	19.3	20.3	20.6	18.9	19.9	19.3	20.3	20.6
6H	19.3	20.2	19.7	20.6	21.0	19.3	20.2	19.7	20.6	21.0
8H	19.4	20.3	19.8	20.7	21.0	19.4	20.3	19.8	20.6	21.0
12H	19.4	20.2	19.9	20.6	21.0	19.4	20.2	19.8	20.6	21.0
8H 4H	19.1	20.0	19.5	20.3	20.7	19.1	20.0	19.5	20.3	20.7
6H	19.6	20.4	20.1	20.8	21.2	19.6	20.3	20.1	20.8	21.2
8H	19.8	20.4	20.3	20.9	21.3	19.8	20.4	20.2	20.8	21.3
12H	19.9	20.4	20.4	20.9	21.4	19.8	20.4	20.3	20.8	21.3
12H 4H	19.1	19.9	19.5	20.3	20.7	19.1	19.9	19.5	20.3	20.7
6H	19.7	20.3	20.1	20.7	21.2	19.7	20.3	20.1	20.7	21.2
8H	19.9	20.4	20.3	20.9	21.3	19.8	20.4	20.3	20.8	21.3
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 871.4 lm Total Lamp Luminous Flux. (8log(F/F0) = -0.5)

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:230.4V I:0.0520A P:11.60W PF:0.9540 Lamp Flux:871.363x1 lm		
NAME: LED panel light	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

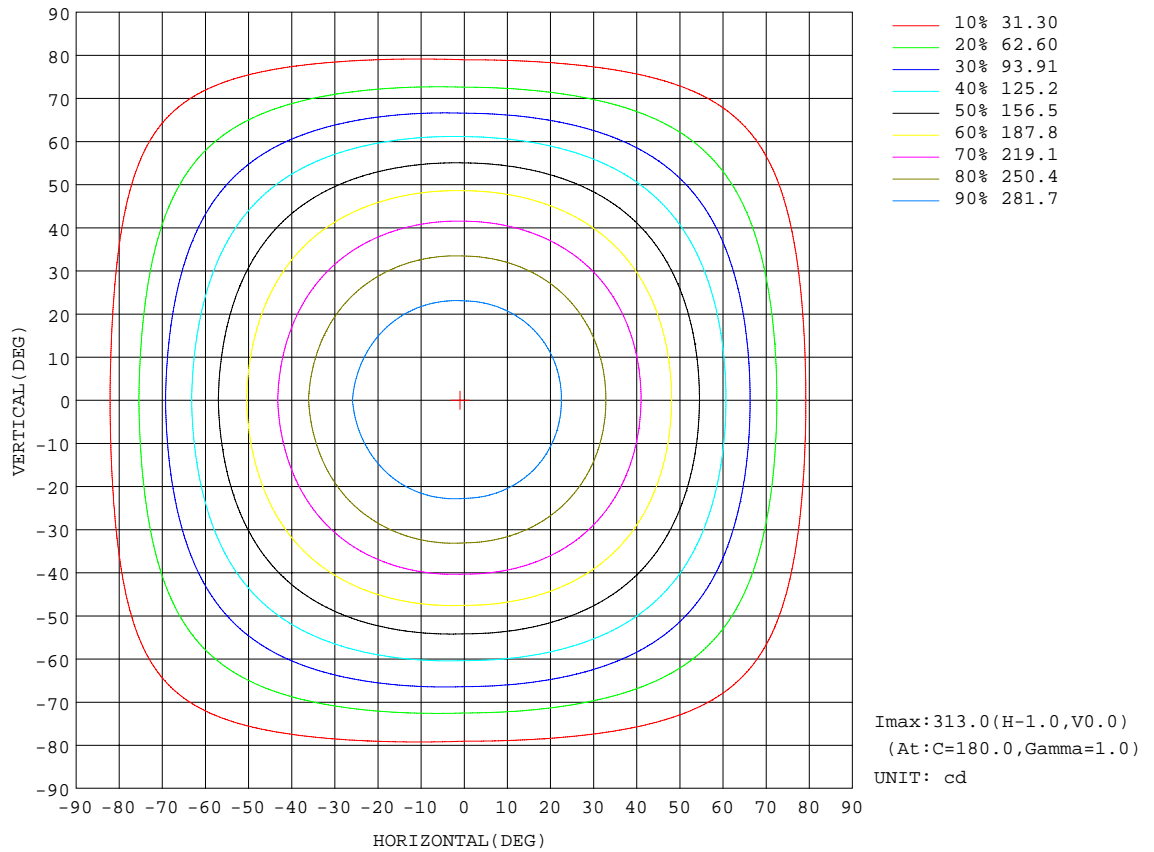
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	58	46	39	57	46	39	56	46	39	33
0.80	68	56	49	67	56	49	65	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	74
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	98	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:230.4V I:0.0520A P:11.60W PF:0.9540 Lamp Flux:871.363x1 lm		
NAME: LED panel light	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

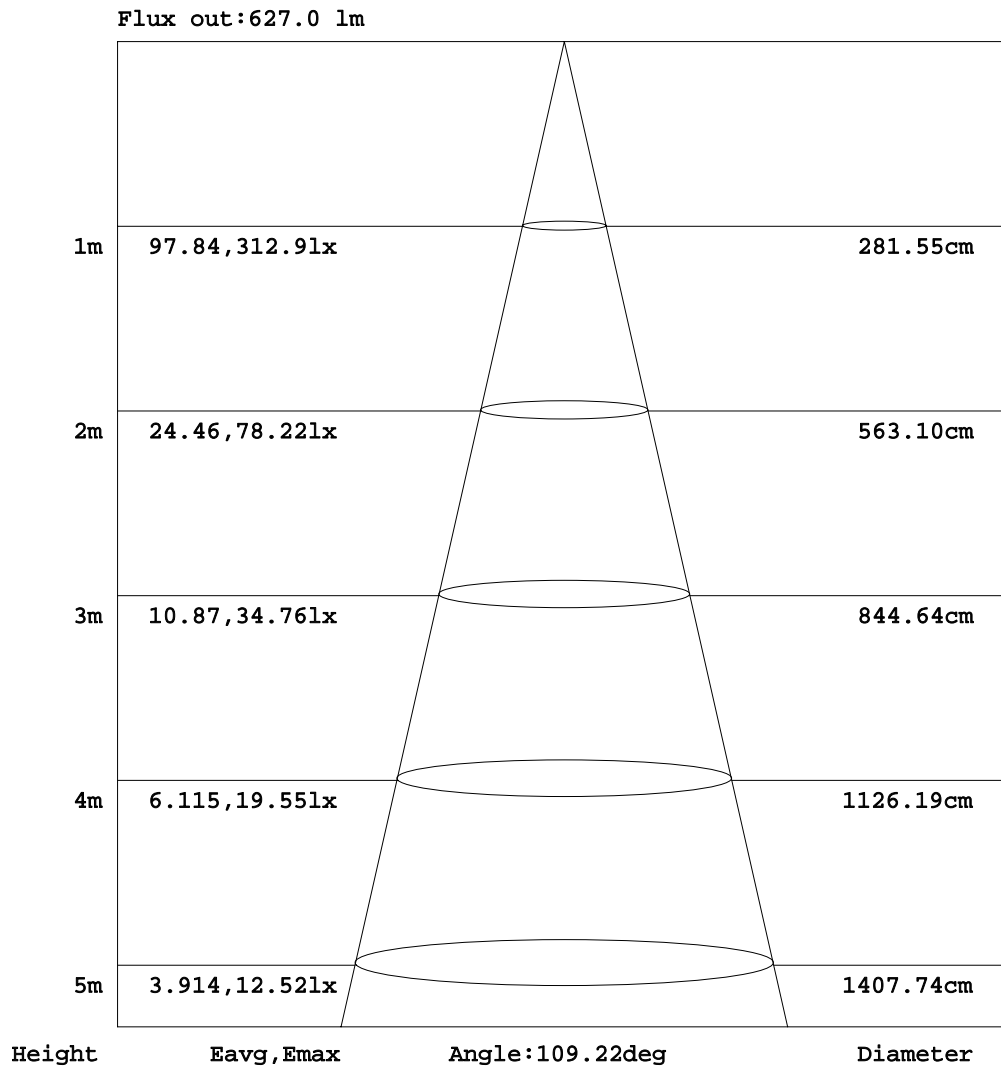


C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 27 March 2019

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:230.4V I:0.0520A P:11.60W PF:0.9540 Lamp Flux:871.363x1 lm		
NAME: LED panel light	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:



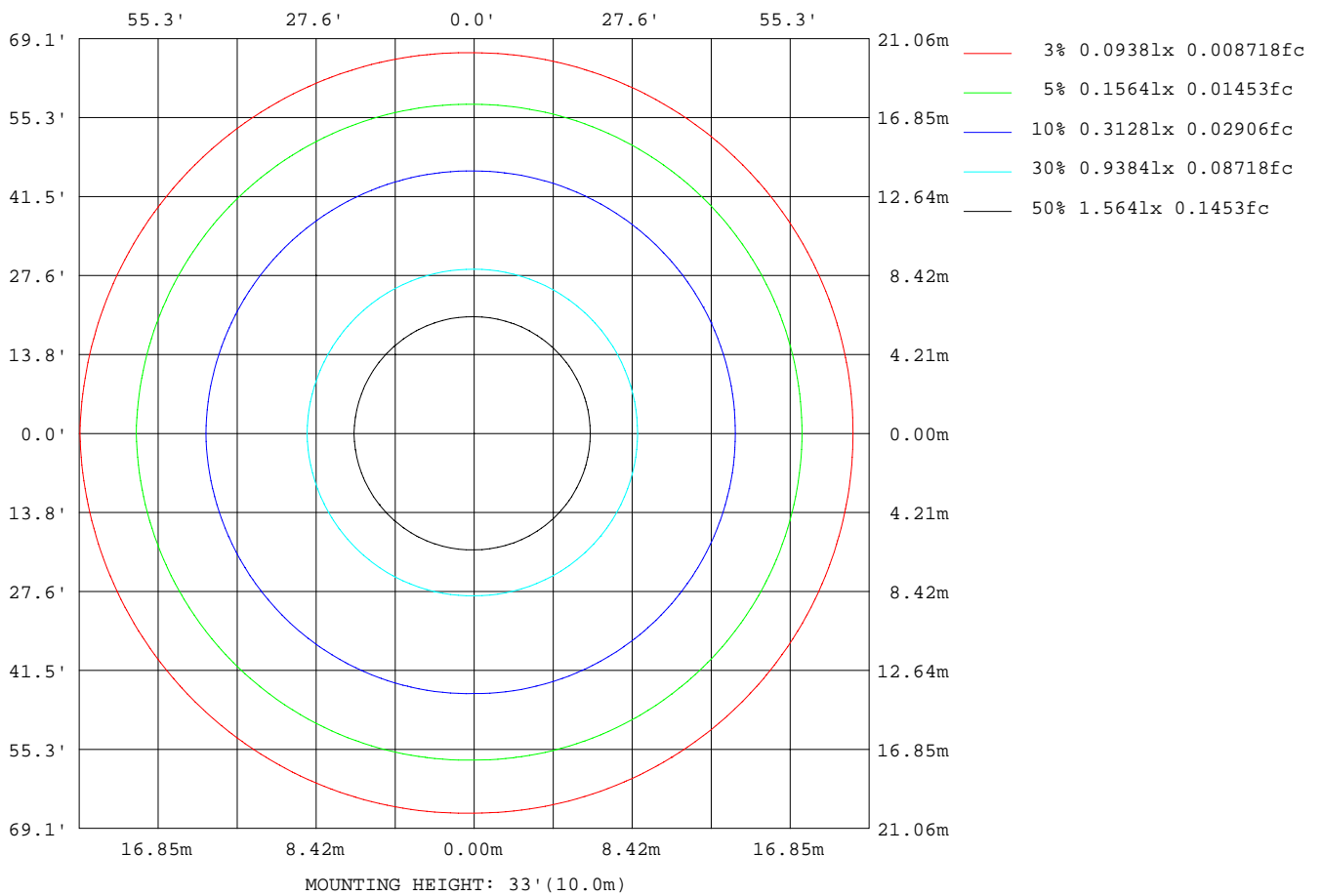
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:230.4V I:0.0520A P:11.60W PF:0.9540 Lamp Flux:871.363x1 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:230.4V I:0.0520A P:11.60W PF:0.9540 Lamp Flux:871.363x1 lm		
NAME: LED panel light	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

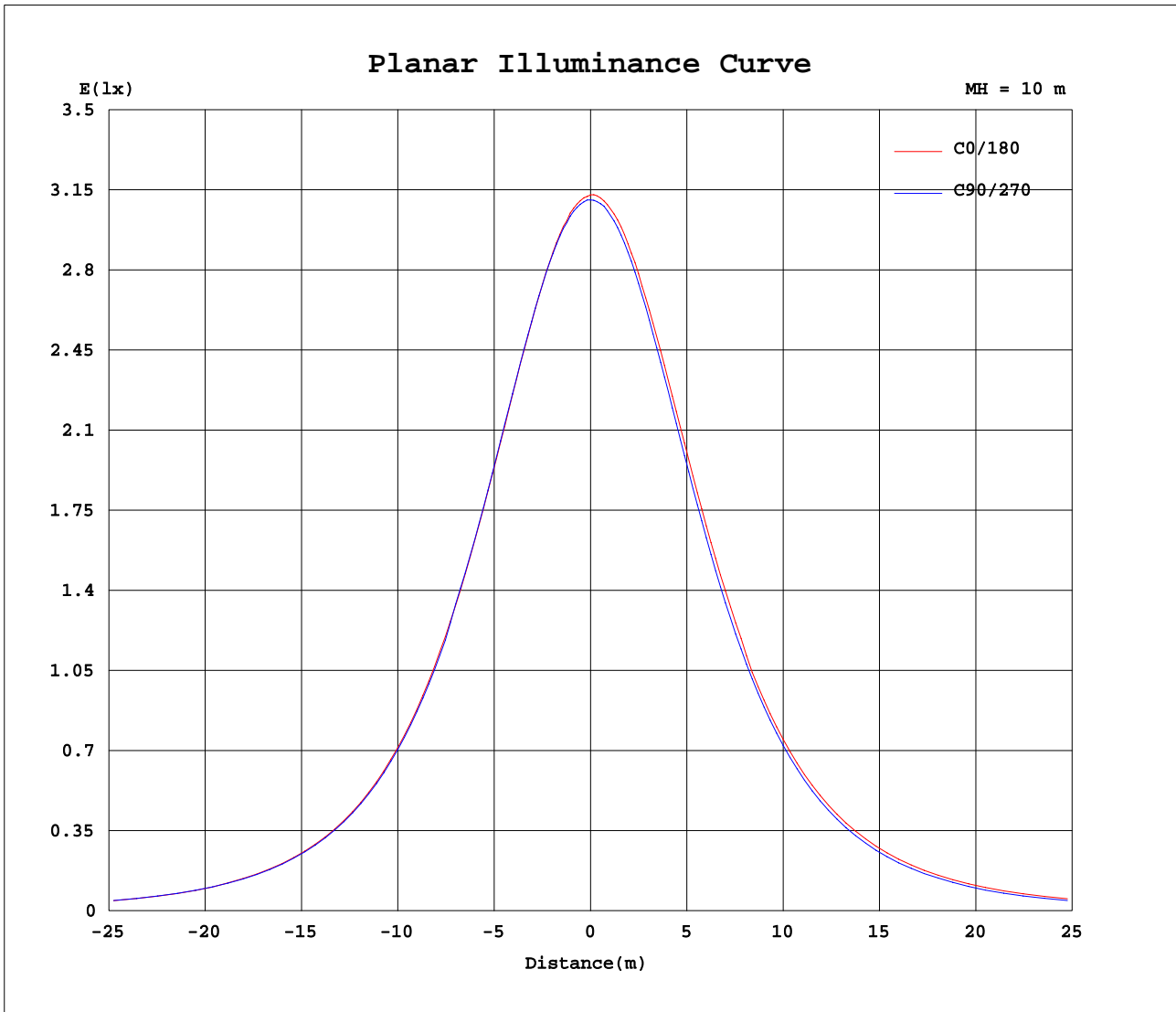
AvgL	cd/m2
L_0~180(65)av	2551
L_0~180(75)av	2215
L_0~180(85)av	1583
L_90~270(65)av	2413
L_90~270(75)av	1955
L_90~270(85)av	823
L_45(65)av	2477
L_45(75)av	2070
L_45(85)av	1149

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:230.4V I:0.0520A P:11.60W PF:0.9540 Lamp Flux:871.363x1 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	312	312	312	312															
5	309	310	311	310															
10	305	306	308	307															
15	297	299	302	300															
20	287	289	294	290															
25	274	277	283	278															
30	259	262	269	263															
35	242	244	254	246															
40	222	221	231	226															
45	201	200	211	205															
50	178	177	189	182															
55	154	153	166	157															
60	128	128	141	131															
65	100	102	116	102															
70	74.7	75.6	89.8	76.2															
75	50.2	50.6	64.5	50.5															
80	27.7	27.2	40.7	26.4															
85	8.30	7.11	19.3	7.24															
90	0.11	0.34	1.55	0.51															
95	0.13	0.23	0.16	0.30															
100	0.15	0.30	0.21	0.44															
105	0.19	0.63	0.25	0.49															
110	0.19	0.71	0.25	0.71															
115	0.22	0.73	0.28	0.73															
120	0.27	0.81	0.34	0.94															
125	0.29	0.80	0.39	0.87															
130	0.32	0.61	0.42	0.79															
135	0.35	0.52	0.46	0.64															
140	0.36	0.49	0.49	0.57															
145	0.40	0.47	0.53	0.56															
150	0.42	0.47	0.55	0.56															
155	0.45	0.51	0.56	0.57															
160	0.50	0.54	0.59	0.58															
165	0.55	0.55	0.61	0.59															
170	0.59	0.59	0.63	0.61															
175	0.61	0.61	0.64	0.63															
180	0.64	0.64	0.64	0.63															

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