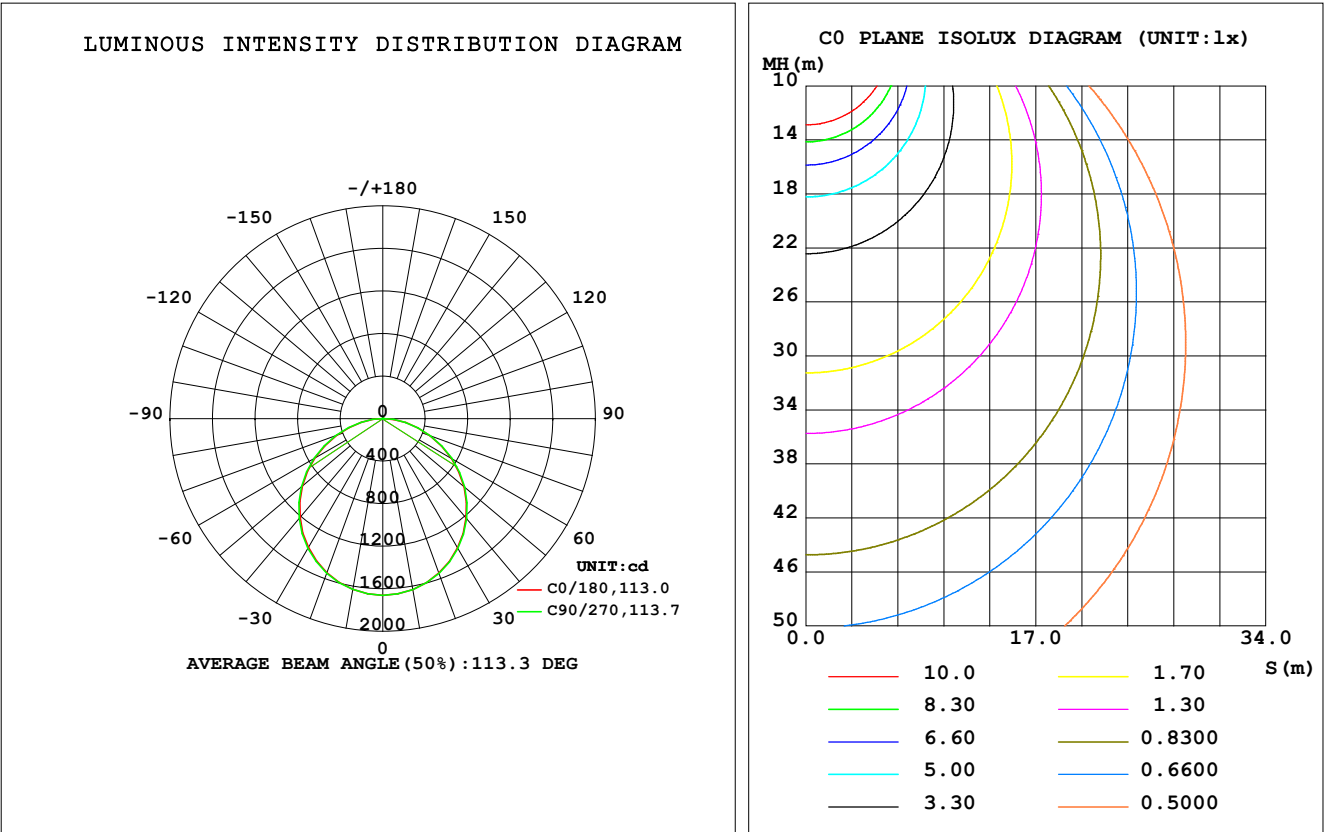


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.25V I:0.2244A P:48.159W PF:0.9745 Freq:49.99Hz Lamp Flux:4844.43x1 lm		
NAME: LED PANEL LIGHT	TYPE:ROMA	WEIGHT:
SPEC.:6500K	DIM.: 595*595*9mm	SERIAL No.:01
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 100.59 lm/W
MODEL	158101	I _{max} (cd)	1660	S/MH(C0/180)	1.25	
NOMINAL POWER(W)	50	LOR(%)	100.0	S/MH(C90/270)	1.26	
RATED VOLTAGE(V)	220.0	TOTAL FLUX(lm)	4844.4	η UP,DN(C0-180)	0.1,50.1	
NOMINAL FLUX(lm)	4844.43	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.1,49.6	
LAMPS INSIDE	1	η up(%)	0.3	CIBSE SHR NOM	1.25	
TEST VOLTAGE(V)	220.0	η down(%)	99.7	CIBSE SHR MAX	1.35	



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:King
Test Date:2025-07-01

γ Range: 0 - 120DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.6
Humidity:65.0%
Test Distance:9.950m [K=1.0402]
Remarks:

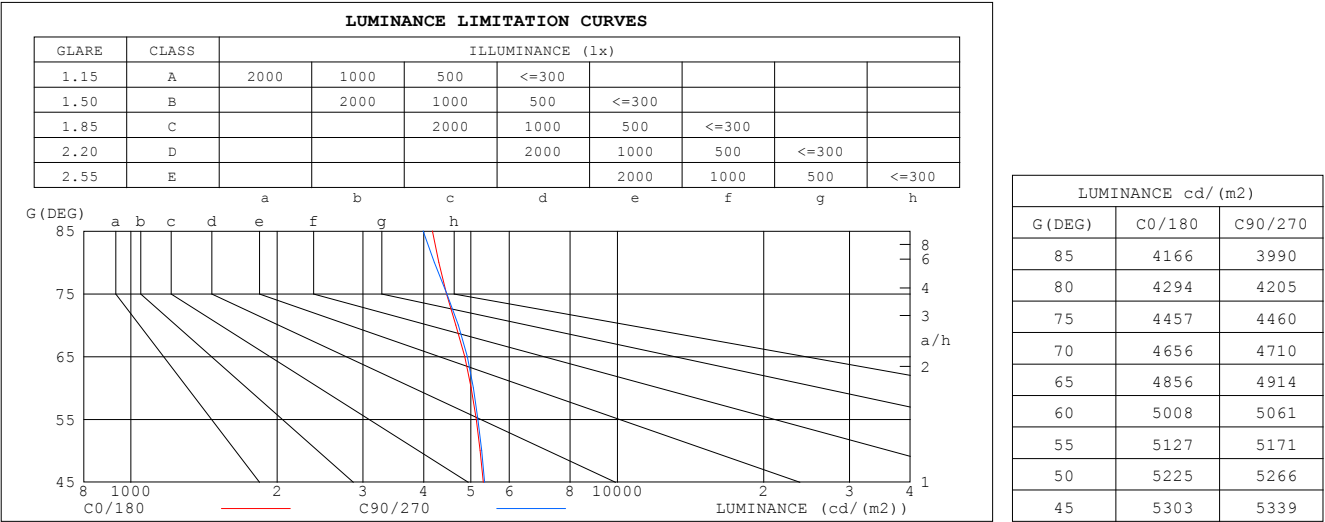
ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum,lamp
10	1631	1633	1630	1631					0- 10	157.1	157.1	3.24,3.24
20	1545	1549	1541	1546					10- 20	450.2	607.3	12.5,12.5
30	1405	1412	1399	1409					20- 30	683.0	1290	26.6,26.6
40	1220	1228	1212	1224					30- 40	825.2	2115	43.7,43.7
50	997.3	1006	987.1	999.7					40- 50	858.9	2974	61.4,61.4
60	743.4	751.8	733.1	744.4					50- 60	780.3	3755	77.5,77.5
70	472.8	478.5	462.6	471.0					60- 70	601.9	4357	89.9,89.9
80	221.4	216.9	201.7	212.8					70- 80	358.6	4715	97.3,97.3
90	13.51	10.63	8.507	9.215					80- 90	115.5	4831	99.7,99.7
100	2.452	2.529	3.000	3.029					90-100	4.822	4835	99.8,99.8
110	3.554	3.677	4.177	4.252					100-110	3.517	4839	99.9,99.9
120	4.529	4.703	5.226	5.296					110-120	4.409	4843	100,100
130	0	0	0	0					120-130	1.141	4844	100,100
140	0	0	0	0					130-140	0	4844	100,100
150	0	0	0	0					140-150	0	4844	100,100
160	0	0	0	0					150-160	0	4844	100,100
170	0	0	0	0					160-170	0	4844	100,100
180	0	0	0	0					170-180	0	4844	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

LUMINANCE LIMITATION CURVES

Test:U:220.25V I:0.2244A P:48.159W PF:0.9745 Freq:49.99Hz Lamp Flux:4844.43x1 lm		
NAME: LED PANEL LIGHT	TYPE:ROMA	WEIGHT:
SPEC.:6500K	DIM.: 595*595*9mm	SERIAL No.:01
MFR.:	SUR.:	Shielding Angle:



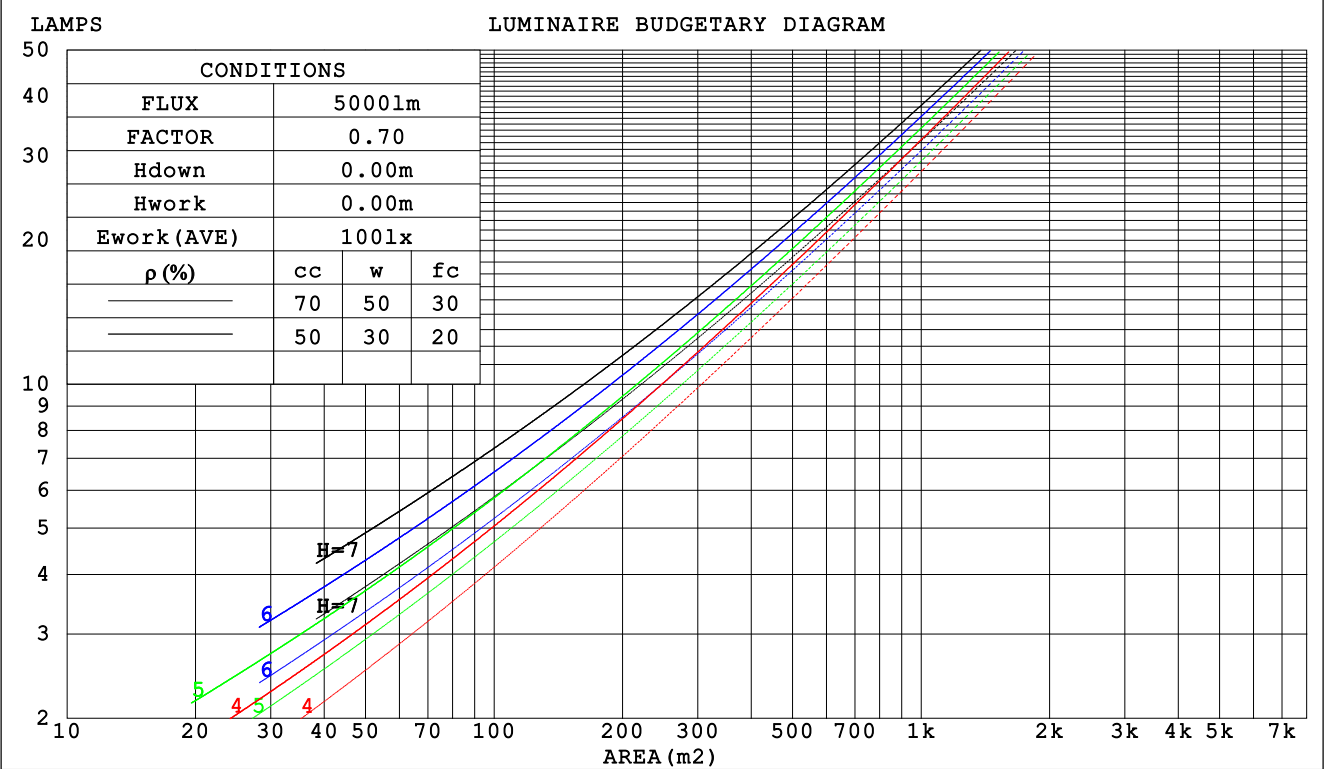
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:King
Test Date:2025-07-01

γ Range: 0 - 120DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.6
Humidity:65.0%
Test Distance:9.950m [K=1.0402]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.25V I:0.2244A P:48.159W PF:0.9745 Freq:49.99Hz Lamp Flux:4844.43x1 lm		
NAME: LED PANEL LIGHT	TYPE:ROMA	WEIGHT:
SPEC.:6500K	DIM.: 595*595*9mm	SERIAL No.:01
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	1.19	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	1.03	.99	.95	1.01	.97	.93	.97	.93	.90	.93	.90	.88	.89	.87	.85	.83	
2.0	.90	.83	.77	.88	.82	.76	.84	.79	.74	.81	.76	.72	.78	.74	.71	.69	
3.0	.79	.70	.64	.77	.69	.63	.74	.67	.62	.71	.66	.61	.69	.64	.60	.58	
4.0	.70	.61	.54	.68	.60	.54	.66	.58	.53	.63	.57	.52	.61	.56	.51	.49	
5.0	.62	.53	.46	.61	.52	.46	.59	.51	.46	.57	.50	.45	.55	.49	.44	.42	
6.0	.56	.47	.40	.55	.46	.40	.53	.45	.40	.51	.45	.39	.50	.44	.39	.37	
7.0	.51	.42	.36	.50	.41	.35	.48	.41	.35	.47	.40	.35	.45	.39	.35	.33	
8.0	.46	.38	.32	.46	.37	.32	.44	.37	.31	.43	.36	.31	.42	.36	.31	.29	
9.0	.42	.34	.29	.42	.34	.28	.41	.33	.28	.40	.33	.28	.38	.32	.28	.26	
10.0	.39	.31	.26	.39	.31	.26	.38	.30	.26	.37	.30	.25	.36	.30	.25	.24	



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:King
Test Date:2025-07-01

γ Range: 0 - 120DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.6
Humidity:65.0%
Test Distance:9.950m [K=1.0402]
Remarks:

WEC AND CCEC

Test:U:220.25V I:0.2244A P:48.159W PF:0.9745 Freq:49.99Hz Lamp Flux:4844.43x1 lm					
NAME: LED PANEL LIGHT			TYPE:ROMA		WEIGHT:
SPEC.:6500K			DIM.: 595*595*9mm		SERIAL No.:01
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						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.318	.181	.057	.310	.177	.056	.297	.170	.054	.284	.164	.053	.273	.158	.051	
2.0	.297	.163	.050	.290	.160	.049	.278	.155	.048	.267	.150	.047	.257	.145	.046	
3.0	.273	.145	.044	.268	.143	.043	.257	.139	.042	.247	.136	.042	.238	.132	.041	
4.0	.252	.131	.038	.247	.129	.038	.237	.126	.038	.229	.123	.037	.221	.120	.037	
5.0	.232	.118	.034	.228	.117	.034	.220	.114	.034	.212	.112	.033	.205	.109	.033	
6.0	.215	.108	.031	.211	.107	.031	.204	.104	.030	.197	.102	.030	.190	.100	.030	
7.0	.200	.099	.028	.197	.098	.028	.190	.096	.028	.184	.094	.027	.178	.092	.027	
8.0	.187	.091	.026	.184	.090	.026	.178	.089	.025	.172	.087	.025	.167	.086	.025	
9.0	.175	.085	.024	.172	.084	.024	.167	.082	.023	.162	.081	.023	.157	.080	.023	
10.0	.164	.079	.022	.162	.078	.022	.157	.077	.022	.152	.076	.022	.148	.075	.021	

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						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.193	.193	.193	.165	.165	.165	.112	.112	.112	.065	.065	.065	.021	.021	.021	
1.0	.183	.158	.136	.157	.136	.117	.107	.093	.081	.062	.054	.047	.020	.017	.015	
2.0	.175	.134	.100	.150	.115	.086	.103	.080	.060	.059	.046	.035	.019	.015	.011	
3.0	.167	.117	.076	.143	.101	.066	.099	.070	.046	.057	.041	.027	.018	.013	.009	
4.0	.160	.103	.060	.137	.089	.052	.094	.062	.037	.055	.036	.022	.018	.012	.007	
5.0	.152	.093	.049	.131	.080	.043	.090	.056	.030	.052	.033	.018	.017	.011	.006	
6.0	.145	.085	.041	.125	.073	.036	.086	.051	.025	.050	.030	.015	.016	.010	.005	
7.0	.138	.078	.035	.119	.067	.031	.082	.047	.022	.048	.028	.013	.015	.009	.004	
8.0	.132	.072	.031	.113	.062	.027	.078	.044	.019	.046	.026	.011	.015	.008	.004	
9.0	.125	.067	.027	.108	.058	.024	.075	.041	.017	.044	.024	.010	.014	.008	.003	
10.0	.120	.063	.025	.103	.054	.021	.072	.038	.015	.042	.023	.009	.014	.007	.003	

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:King
 Test Date:2025-07-01

γ Range: 0 - 120DEG
 γ Interval: 5.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.6
 Humidity:65.0%
 Test Distance:9.950m [K=1.0402]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.25V I:0.2244A P:48.159W PF:0.9745 Freq:49.99Hz Lamp Flux:4844.43x1 lm										
NAME: LED PANEL LIGHT					TYPE:ROMA			WEIGHT:		
SPEC.:6500K					DIM.: 595*595*9mm			SERIAL No.:01		
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	18.6	20.1	18.8	20.3	20.5	18.6	20.1	18.9	20.3	20.6
3H	20.1	21.5	20.4	21.8	22.0	20.2	21.6	20.5	21.8	22.1
4H	20.8	22.1	21.1	22.4	22.6	20.8	22.1	21.1	22.4	22.7
6H	21.3	22.5	21.6	22.8	23.1	21.3	22.5	21.6	22.8	23.1
8H	21.4	22.6	21.8	22.9	23.2	21.4	22.7	21.8	22.9	23.2
12H	21.5	22.7	21.9	23.0	23.3	21.5	22.7	21.9	23.0	23.3
4H 2H	19.2	20.5	19.5	20.8	21.1	19.2	20.6	19.5	20.8	21.1
3H	20.9	22.1	21.3	22.4	22.7	21.0	22.1	21.3	22.4	22.8
4H	21.7	22.8	22.1	23.1	23.4	21.7	22.8	22.1	23.1	23.5
6H	22.3	23.3	22.7	23.7	24.0	22.3	23.3	22.7	23.7	24.0
8H	22.6	23.5	23.0	23.8	24.2	22.5	23.4	23.0	23.8	24.2
12H	22.7	23.5	23.2	23.9	24.4	22.7	23.5	23.1	23.9	24.3
8H 4H	22.0	22.9	22.4	23.3	23.6	22.0	22.9	22.4	23.3	23.7
6H	22.8	23.5	23.2	23.9	24.4	22.8	23.5	23.2	23.9	24.4
8H	23.1	23.8	23.6	24.2	24.7	23.1	23.7	23.5	24.2	24.6
12H	23.4	23.9	23.8	24.4	24.9	23.3	23.9	23.8	24.3	24.8
12H 4H	22.0	22.8	22.4	23.2	23.6	22.0	22.9	22.5	23.2	23.7
6H	22.8	23.5	23.3	23.9	24.4	22.8	23.5	23.3	23.9	24.4
8H	23.2	23.8	23.7	24.2	24.7	23.2	23.8	23.7	24.2	24.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.1 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117, 4844 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 5.5$)

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:King
 Test Date:2025-07-01

γ Range: 0 - 120DEG
 γ Interval: 5.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.6
 Humidity:65.0%
 Test Distance:9.950m [K=1.0402]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.25V I:0.2244A P:48.159W PF:0.9745 Freq:49.99Hz Lamp Flux:4844.43x1 lm		
NAME: LED PANEL LIGHT	TYPE:ROMA	WEIGHT:
SPEC.:6500K	DIM.: 595*595*9mm	SERIAL No.:01
MFR.:	SUR.:	Shielding Angle:

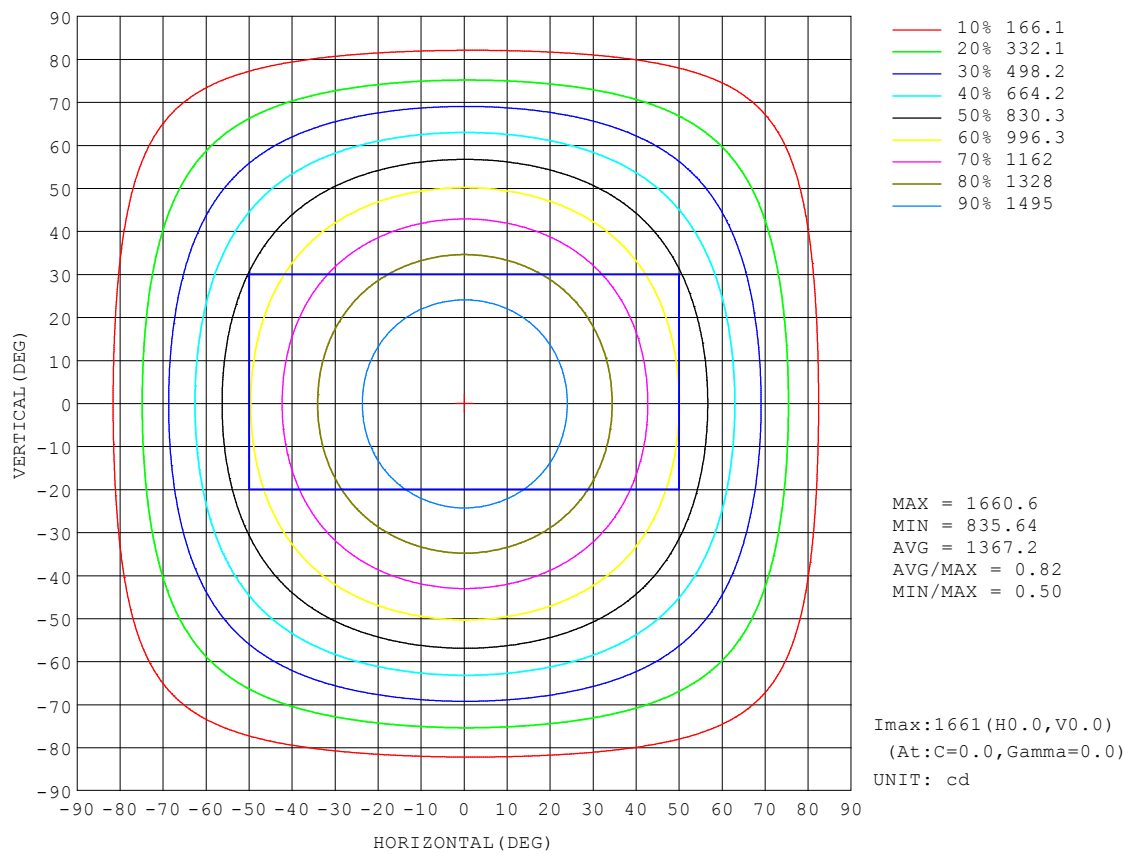
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	57	45	38	56	45	38	55	45	38	31
0.80	67	55	48	66	55	48	64	54	47	40
1.00	75	64	57	74	64	56	72	65	56	49
1.25	82	72	65	81	71	64	78	70	63	56
1.50	87	77	70	86	77	70	83	75	69	61
2.00	94	86	79	93	84	78	89	82	77	69
2.50	98	90	84	96	89	83	92	86	81	73
3.00	102	95	89	100	93	88	95	90	86	77
4.00	106	100	95	103	98	94	99	95	91	82
5.00	108	103	99	106	101	98	101	98	94	85
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:King
 Test Date:2025-07-01

γ Range: 0 - 120DEG
 γ Interval: 5.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.6
 Humidity:65.0%
 Test Distance:9.950m [K=1.0402]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:220.25V I:0.2244A P:48.159W PF:0.9745 Freq:49.99Hz Lamp Flux:4844.43x1 lm		
NAME: LED PANEL LIGHT	TYPE:ROMA	WEIGHT:
SPEC.:6500K	DIM.: 595*595*9mm	SERIAL No.:01
MFR.:	SUR.:	Shielding Angle:

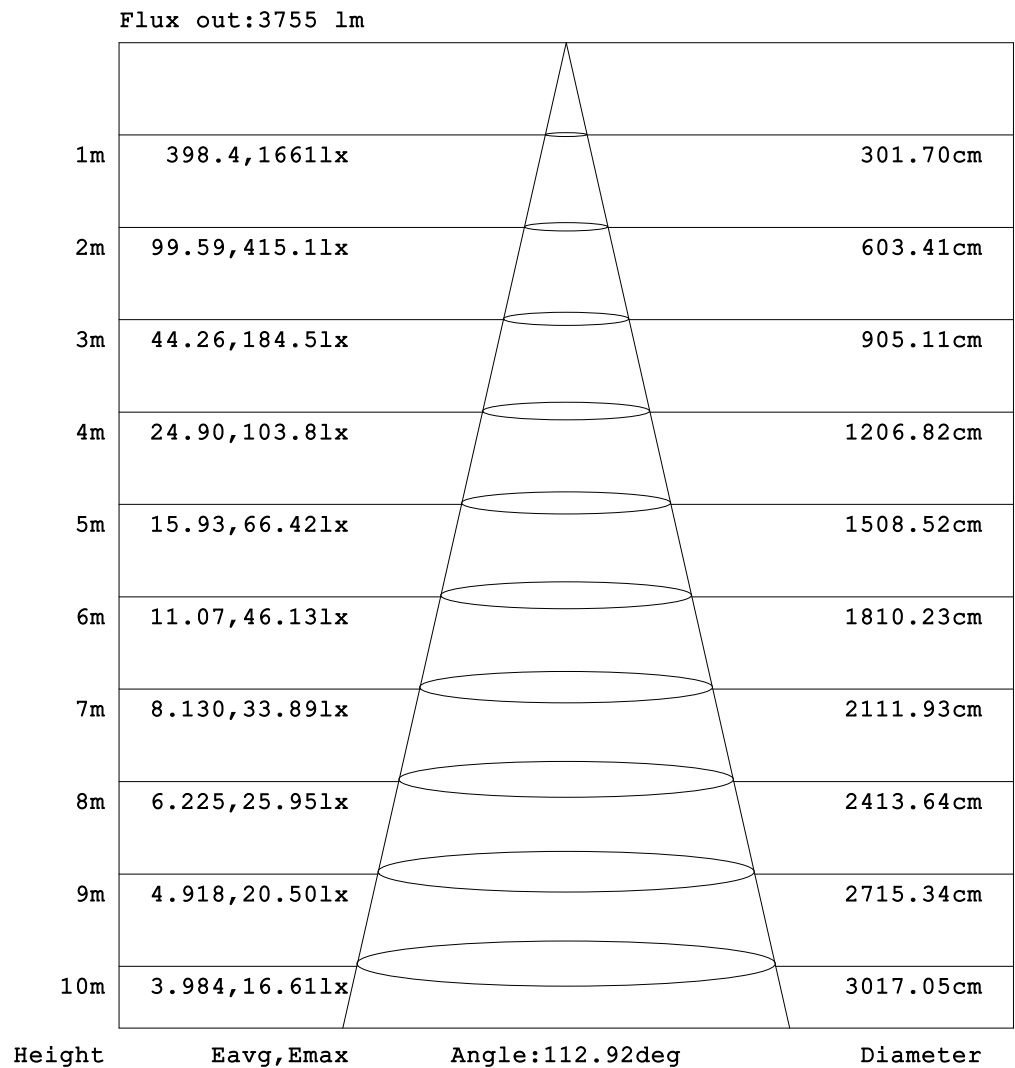


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:King
Test Date:2025-07-01

γ Range: 0 - 120DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.6
Humidity:65.0%
Test Distance:9.950m [K=1.0402]
Remarks:

AAI Figure

Test:U:220.25V I:0.2244A P:48.159W PF:0.9745 Freq:49.99Hz Lamp Flux:4844.43x1 lm		
NAME: LED PANEL LIGHT	TYPE:ROMA	WEIGHT:
SPEC.:6500K	DIM.: 595*595*9mm	SERIAL No.:01
MFR.:	SUR.:	Shielding Angle:



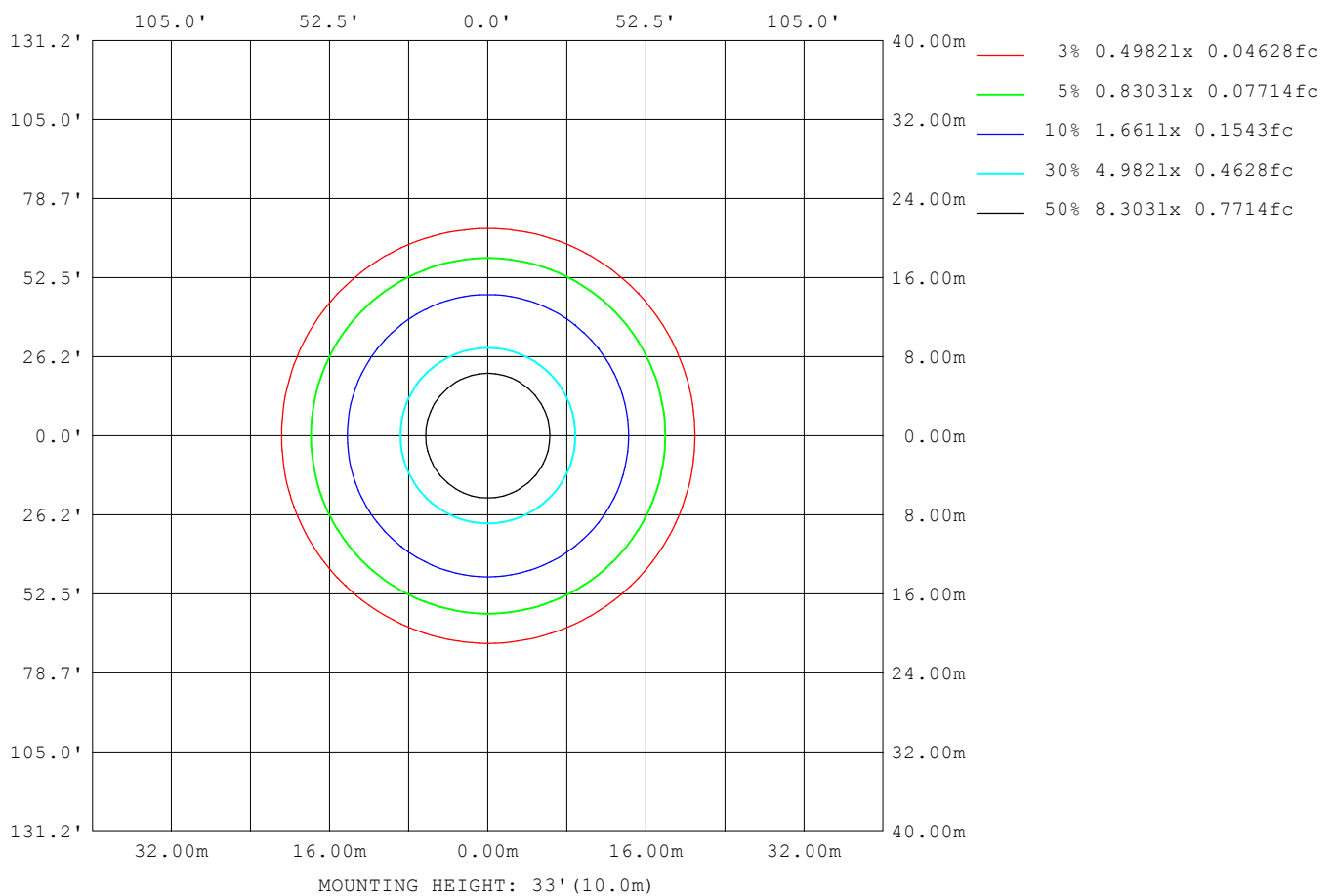
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:King
 Test Date:2025-07-01

γ Range: 0 - 120DEG
 γ Interval: 5.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.6
 Humidity:65.0%
 Test Distance:9.950m [K=1.0402]
 Remarks:

ISOLUX DIAGRAM

Test:U:220.25V I:0.2244A P:48.159W PF:0.9745 Freq:49.99Hz Lamp Flux:4844.43x1 lm		
NAME: LED PANEL LIGHT	TYPE:ROMA	WEIGHT:
SPEC.:6500K	DIM.: 595*595*9mm	SERIAL No.:01
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:King
Test Date:2025-07-01

γ Range: 0 - 120DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.6
Humidity:65.0%
Test Distance:9.950m [K=1.0402]
Remarks:

LED Avg.L Report

Test:U:220.25V I:0.2244A P:48.159W PF:0.9745 Freq:49.99Hz Lamp Flux:4844.43x1 lm		
NAME: LED PANEL LIGHT	TYPE:ROMA	WEIGHT:
SPEC.:6500K	DIM.: 595*595*9mm	SERIAL No.:01
MFR.:	SUR.:	Shielding Angle:

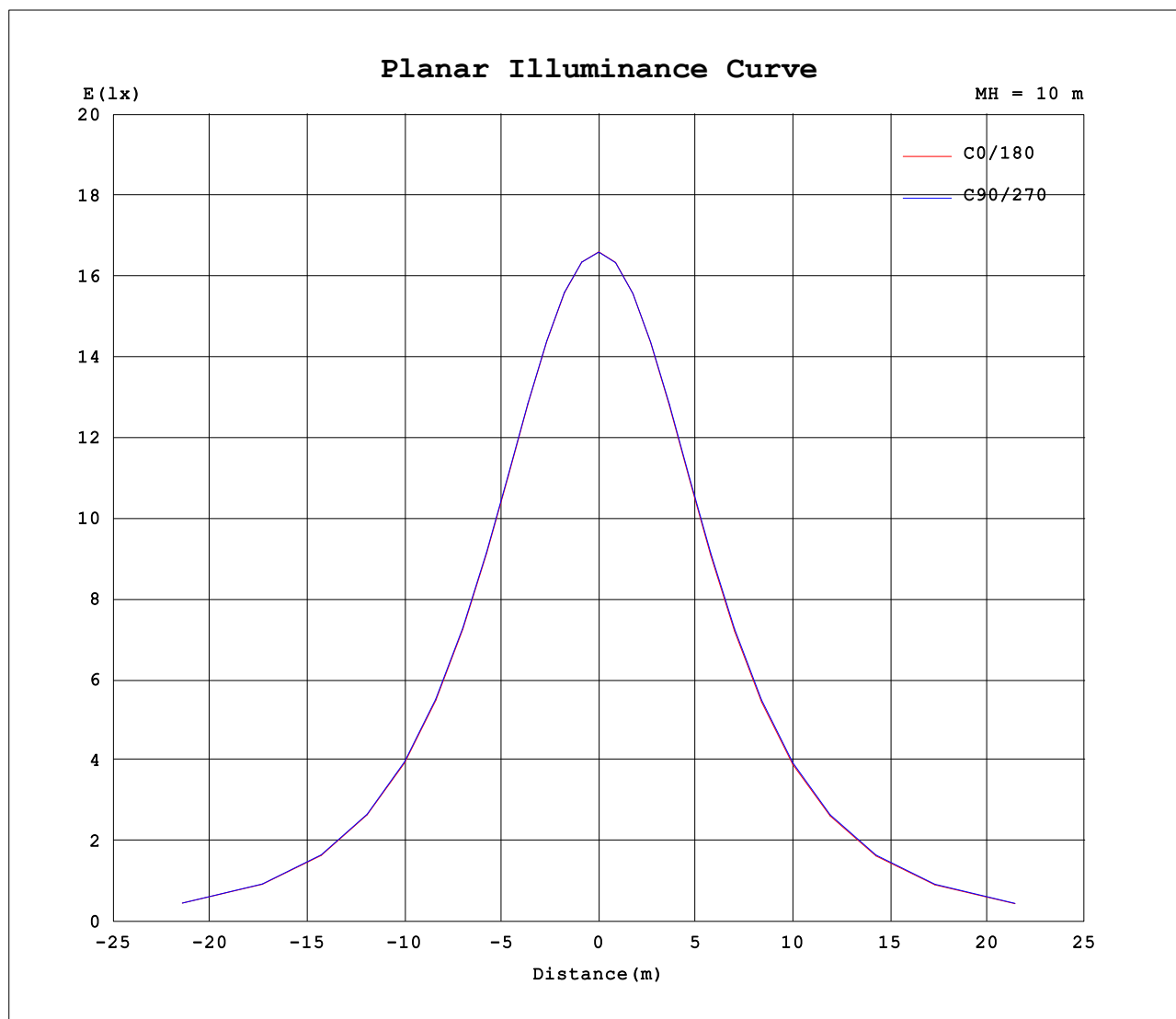
AvgL	cd/m2
L_0~180 (65) av	4812
L_0~180 (75) av	4360
L_0~180 (85) av	3833
L_90~270 (65) av	4882
L_90~270 (75) av	4412
L_90~270 (85) av	3910
L_45 (65) av	4853
L_45 (75) av	4386
L_45 (85) av	3860

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:King
Test Date:2025-07-01

γ Range: 0 - 120DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.6
Humidity:65.0%
Test Distance:9.950m [K=1.0402]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: King
Test Date: 2025-07-01

γ Range: 0 - 120DEG
 γ Interval: 5.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.404.6
Humidity: 65.0%
Test Distance: 9.950m [K=1.0402]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.25V I:0.2244A P:48.159W PF:0.9745 Freq:49.99Hz Lamp Flux:4844.43x1 lm		
NAME: LED PANEL LIGHT	TYPE:ROMA	WEIGHT:
SPEC.:6500K	DIM.: 595*595*9mm	SERIAL No.:01
MFR.:	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	90	180	270															
0	1660	1660	1660	1660															
5	1653	1654	1652	1653															
10	1631	1633	1630	1631															
15	1595	1597	1593	1595															
20	1545	1549	1541	1546															
25	1481	1487	1477	1483															
30	1405	1412	1399	1409															
35	1318	1326	1311	1321															
40	1220	1228	1212	1224															
45	1113	1122	1103	1117															
50	997	1006	987	1000															
55	873	881	863	875															
60	743	752	733	744															
65	609	617	598	609															
70	473	479	463	471															
75	343	343	328	335															
80	221	217	202	213															
85	108	103	90.6	99.1															
90	13.5	10.6	8.51	9.21															
95	1.96	2.04	2.44	2.41															
100	2.45	2.53	3.00	3.03															
105	3.01	3.08	3.58	3.62															
110	3.55	3.68	4.18	4.25															
115	4.06	4.22	4.75	4.84															
120	4.53	4.70	5.23	5.30															
125	0.00	0.00	0.00	0.00															
130	0.00	0.00	0.00	0.00															
135	0.00	0.00	0.00	0.00															
140	0.00	0.00	0.00	0.00															
145	0.00	0.00	0.00	0.00															
150	0.00	0.00	0.00	0.00															
155	0.00	0.00	0.00	0.00															
160	0.00	0.00	0.00	0.00															
165	0.00	0.00	0.00	0.00															
170	0.00	0.00	0.00	0.00															
175	0.00	0.00	0.00	0.00															
180	0.00	0.00	0.00	0.00															

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:King
 Test Date:2025-07-01

γ Range: 0 - 120DEG
 γ Interval: 5.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.404.6
 Humidity:65.0%
 Test Distance:9.950m [K=1.0402]
 Remarks: