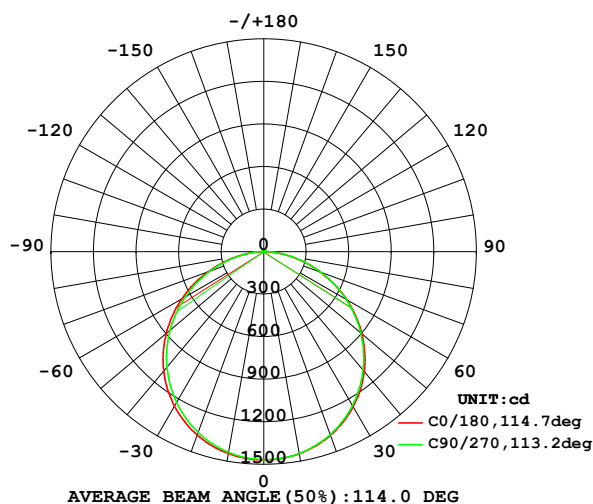


LUMINAIRE PHOTOMETRIC TEST REPORT

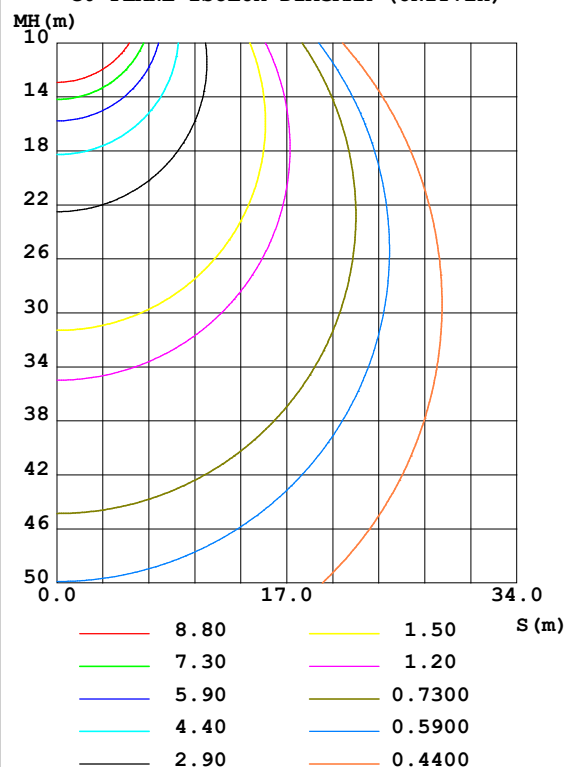
Test:U:120.5V I:0.3279A P:39.24W PF:0.9929 Lamp Flux:4333.44x1 lm		
NAME: LED panel light	TYPE:	WEIGHT:
SPEC.:PL603X603 40W 3000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 110.44 lm/W			
MODEL		I _{max} (cd)	1469	S/MH (C0/180)	1.27
NOMINAL POWER(W)	40	LOR(%)	100.0	S/MH (C90/270)	1.25
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	4333.4	η UP,DN(C0-180)	0.6,50.0
NOMINAL FLUX(lm)	4333.44	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.5,48.9
LAMPS INSIDE	1	η up (%)	1.1	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120	η down (%)	98.9	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Bonnie
Test Date:2017-10-21

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO1900_V2(N) SYSTEM V2.0.295
Humidity:65.0%
Test Distance:8.690m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum,lamp
10	1446	1445	1445	1436					0- 10	138.9	138.9	3.21,3.21
20	1378	1372	1375	1356					10- 20	398.8	537.7	12.4,12.4
30	1262	1252	1259	1229					20- 30	606.5	1144	26.4,26.4
40	1103	1090	1098	1063					30- 40	734.5	1879	43.4,43.4
50	904.2	893.1	898.5	863.4					40- 50	765.8	2645	61,61
60	675.0	669.7	668.4	639.7					50- 60	696.3	3341	77.1,77.1
70	426.6	430.4	419.9	401.7					60- 70	536.5	3877	89.5,89.5
80	185.9	196.6	180.7	172.5					70- 80	315.8	4193	96.8,96.8
90	7.459	11.47	5.514	3.984					80- 90	94.47	4288	98.9,98.9
100	4.089	4.059	3.266	3.361					90-100	3.513	4291	99,99
110	5.963	5.882	4.832	4.923					100-110	4.795	4296	99.1,99.1
120	7.787	7.738	6.420	6.542					110-120	6.203	4302	99.3,99.3
130	9.471	9.347	8.183	8.256					120-130	7.153	4309	99.4,99.4
140	10.82	10.66	9.446	9.555					130-140	7.319	4317	99.6,99.6
150	11.69	11.56	10.67	10.85					140-150	6.682	4323	99.8,99.8
160	12.39	12.35	11.92	12.05					150-160	5.395	4329	99.9,99.9
170	12.85	12.89	12.74	12.79					160-170	3.549	4332	100,100
180	13.00	13.05	13.06	13.02					170-180	1.234	4333	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

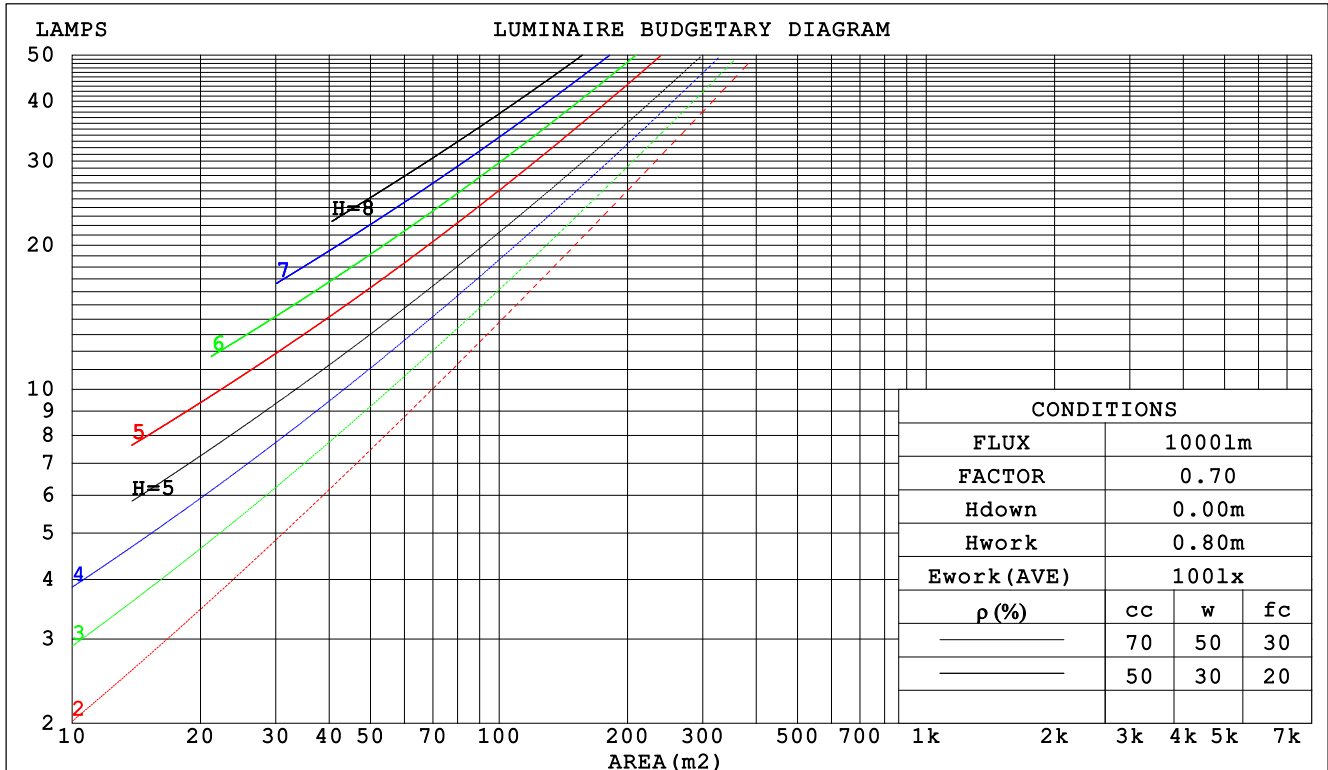
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Bonnie
 Test Date:2017-10-21

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO1900_V2(N) SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:8.690m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.5V I:0.3279A P:39.24W PF:0.9929 Lamp Flux:4333.44x1 lm		
NAME: LED panel light	TYPE:	WEIGHT:
SPEC.:PL603X603 40W 3000K	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	Coefficients of Utilization(CU)															
RCR:Room Cavity Ratio																
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	1.01	1.01	1.01	.99
1.0	1.03	.99	.95	1.01	.97	.93	.96	.93	.90	.92	.90	.87	.89	.86	.84	.82
2.0	.90	.83	.77	.88	.81	.76	.84	.79	.74	.81	.76	.72	.77	.74	.70	.68
3.0	.79	.70	.64	.77	.69	.63	.74	.67	.62	.71	.65	.61	.68	.64	.59	.57
4.0	.70	.61	.54	.68	.60	.53	.66	.58	.53	.63	.57	.52	.61	.55	.51	.49
5.0	.62	.53	.46	.61	.52	.46	.59	.51	.45	.57	.50	.45	.55	.49	.44	.42
6.0	.56	.47	.40	.55	.46	.40	.53	.45	.40	.51	.44	.39	.49	.43	.39	.37
7.0	.51	.42	.36	.50	.41	.35	.48	.41	.35	.47	.40	.35	.45	.39	.34	.32
8.0	.46	.38	.32	.45	.37	.32	.44	.37	.31	.43	.36	.31	.41	.35	.31	.29
9.0	.42	.34	.28	.42	.34	.28	.40	.33	.28	.39	.33	.28	.38	.32	.28	.26
10.0	.39	.31	.26	.38	.31	.26	.37	.30	.26	.36	.30	.25	.35	.29	.25	.23



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Bonnie
 Test Date:2017-10-21

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G01900_V2(N) SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:8.690m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:120.5V I:0.3279A P:39.24W PF:0.9929 Lamp Flux:4333.44x1 lm					
NAME: LED panel light			TYPE:		WEIGHT:
SPEC.:PL603X603 40W 3000K			DIM.:		SERIAL No.:1
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	.315	.179	.057	.308	.176	.056	.294	.169	.054	.281	.162	.052	.269	.156	.050	
2.0	.295	.162	.050	.289	.159	.049	.276	.154	.048	.265	.149	.047	.254	.144	.045	
3.0	.272	.145	.043	.267	.143	.043	.256	.139	.042	.246	.135	.041	.236	.131	.040	
4.0	.251	.130	.038	.246	.129	.038	.236	.125	.037	.227	.122	.037	.219	.119	.036	
5.0	.232	.118	.034	.227	.117	.034	.219	.114	.033	.210	.111	.033	.203	.108	.033	
6.0	.215	.108	.031	.211	.106	.031	.203	.104	.030	.196	.102	.030	.189	.100	.030	
7.0	.200	.099	.028	.196	.098	.028	.189	.096	.028	.183	.094	.027	.177	.092	.027	
8.0	.186	.091	.026	.183	.090	.025	.177	.088	.025	.171	.087	.025	.166	.085	.025	
9.0	.175	.084	.024	.172	.084	.023	.166	.082	.023	.161	.081	.023	.156	.079	.023	
10.0	.164	.079	.022	.161	.078	.022	.156	.077	.022	.152	.075	.021	.147	.074	.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	.199	.199	.199	.170	.170	.170	.116	.116	.116	.067	.067	.067	.021	.021	.021	
1.0	.189	.164	.142	.162	.141	.122	.110	.097	.085	.064	.056	.049	.020	.018	.016	
2.0	.181	.140	.106	.155	.121	.091	.106	.083	.064	.061	.049	.037	.020	.016	.012	
3.0	.173	.123	.082	.148	.106	.071	.102	.073	.050	.059	.043	.029	.019	.014	.010	
4.0	.166	.109	.066	.142	.094	.058	.098	.066	.041	.057	.039	.024	.018	.013	.008	
5.0	.158	.099	.055	.136	.086	.048	.094	.060	.034	.054	.035	.020	.017	.011	.007	
6.0	.151	.091	.047	.130	.078	.041	.089	.055	.029	.052	.032	.017	.017	.011	.006	
7.0	.144	.084	.041	.124	.073	.036	.086	.051	.026	.050	.030	.015	.016	.010	.005	
8.0	.138	.078	.037	.118	.068	.032	.082	.047	.023	.048	.028	.014	.015	.009	.005	
9.0	.131	.073	.033	.113	.063	.029	.078	.045	.021	.046	.026	.012	.015	.009	.004	
10.0	.126	.069	.031	.108	.060	.027	.075	.042	.019	.044	.025	.011	.014	.008	.004	

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Bonnie
 Test Date:2017-10-21

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO1900_V2(N) SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:8.690m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.5V I:0.3279A P:39.24W PF:0.9929 Lamp Flux:4333.44x1 lm										
NAME: LED panel light					TYPE:			WEIGHT:		
SPEC.:PL603X603 40W 3000K					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	17.5	19.1	17.8	19.3	19.5	17.5	19.0	17.8	19.3	19.5
3H	19.1	20.5	19.4	20.8	21.0	19.1	20.5	19.4	20.8	21.0
4H	19.7	21.1	20.1	21.4	21.6	19.8	21.1	20.1	21.4	21.6
6H	20.2	21.5	20.6	21.8	22.1	20.3	21.5	20.6	21.8	22.1
8H	20.4	21.6	20.7	21.9	22.2	20.4	21.7	20.8	22.0	22.3
12H	20.5	21.6	20.8	21.9	22.3	20.6	21.7	20.9	22.1	22.4
4H 2H	18.2	19.5	18.5	19.8	20.1	18.1	19.5	18.5	19.7	20.0
3H	19.9	21.1	20.3	21.4	21.7	19.9	21.1	20.3	21.4	21.7
4H	20.7	21.8	21.1	22.1	22.4	20.7	21.8	21.1	22.1	22.5
6H	21.3	22.2	21.7	22.6	23.0	21.3	22.3	21.8	22.7	23.1
8H	21.5	22.4	21.9	22.8	23.2	21.6	22.5	22.0	22.9	23.3
12H	21.6	22.5	22.1	22.9	23.3	21.8	22.6	22.2	23.0	23.4
8H 4H	21.0	21.9	21.4	22.2	22.7	21.0	21.9	21.4	22.3	22.7
6H	21.7	22.5	22.2	22.9	23.3	21.8	22.5	22.2	23.0	23.4
8H	22.0	22.7	22.5	23.1	23.6	22.1	22.8	22.6	23.2	23.7
12H	22.3	22.8	22.8	23.3	23.8	22.4	23.0	22.9	23.4	23.9
12H 4H	21.0	21.8	21.4	22.2	22.6	21.0	21.8	21.5	22.2	22.7
6H	21.8	22.5	22.3	22.9	23.4	21.9	22.5	22.3	23.0	23.4
8H	22.1	22.7	22.6	23.2	23.7	22.2	22.8	22.7	23.3	23.8
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					+ 0.1 / - 0.3				

CIE Pub.117 Corrected 4333 lm Total Lamp Luminous Flux. (8log(F/F0) = 5.1)

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Bonnie
 Test Date:2017-10-21

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO1900_V2(N) SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:8.690m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.5V I:0.3279A P:39.24W PF:0.9929 Lamp Flux:4333.44x1 lm		
NAME: LED panel light	TYPE:	WEIGHT:
SPEC.:PL603X603 40W 3000K	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) $k(RI) \times RCR = 5$									
$k = 0.60$	57	45	38	56	45	38	55	44	38	31
0.80	67	55	48	66	55	47	64	54	47	40
1.00	75	64	57	74	63	56	72	65	56	48
1.25	82	72	64	81	71	64	78	69	63	56
1.50	87	77	70	86	76	70	82	74	68	61
2.00	94	86	79	92	84	78	89	82	77	68
2.50	98	90	84	96	89	83	92	86	81	73
3.00	102	95	89	99	93	88	95	90	86	77
4.00	106	100	95	103	98	94	99	94	91	82
5.00	108	103	99	106	101	97	101	97	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: Bonnie
 Test Date: 2017-10-21

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO1900_V2 (N) SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 8.690m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.5V I:0.3279A P:39.24W PF:0.9929 Lamp Flux:4333.44x1 lm		
NAME: LED panel light	TYPE:	WEIGHT:
SPEC.:PL603X603 40W 3000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

Conical surface Flux(90deg):

2264.1 lm

%lum = 52.2%

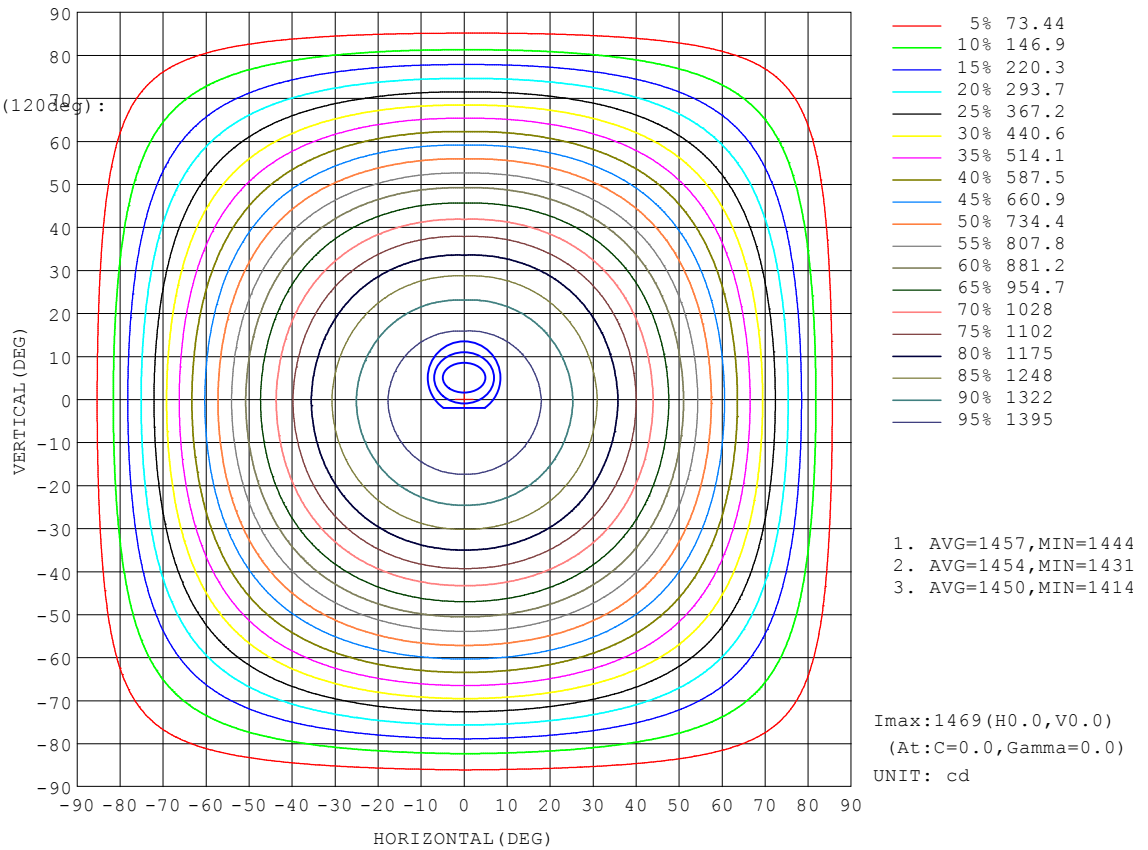
%lamp = 52.2%

Conical surface Flux(120deg):

3340.8 lm

%lum = 77.1%

%lamp = 77.1%

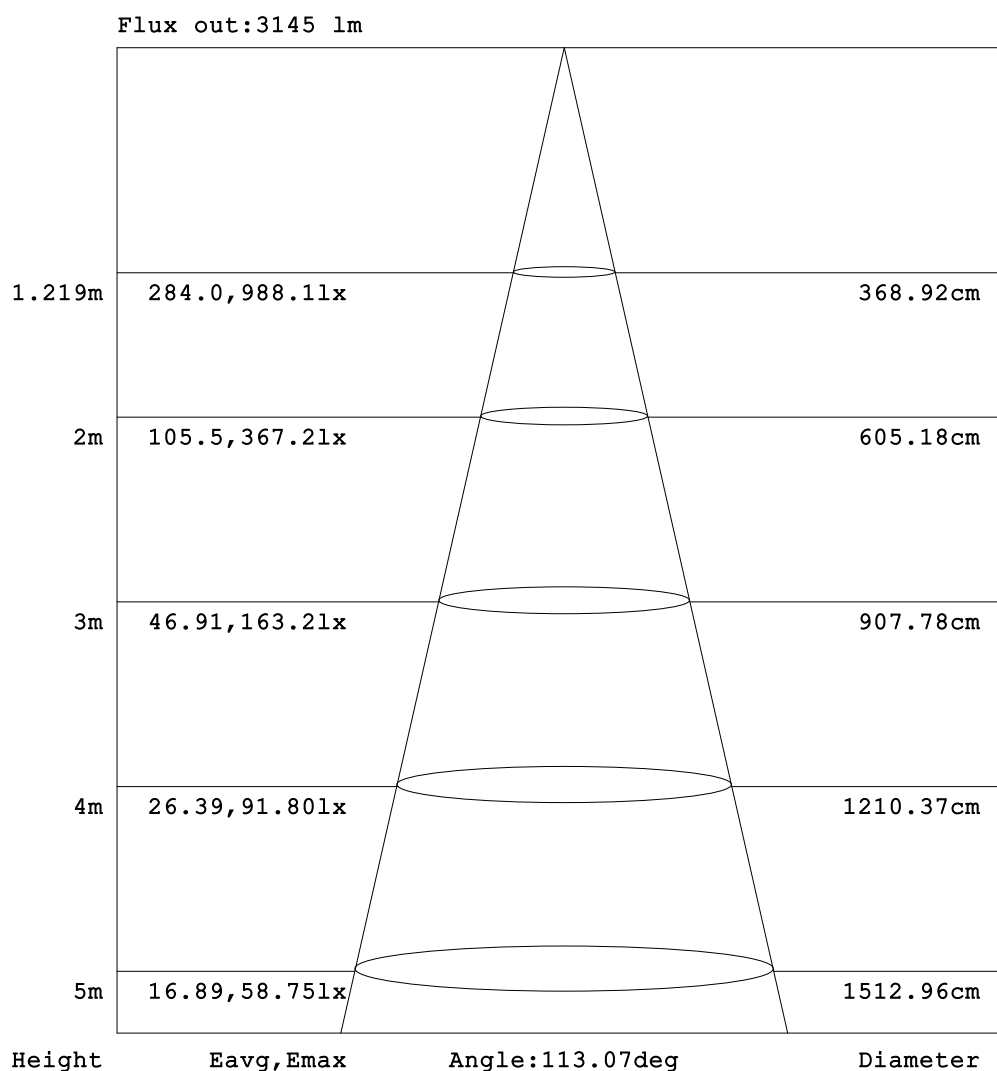


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Bonnie
Test Date:2017-10-21

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO1900_V2(N) SYSTEM V2.0.295
Humidity:65.0%
Test Distance:8.690m [K=1.0000]
Remarks:

AAI Figure

Test:U:120.5V I:0.3279A P:39.24W PF:0.9929 Lamp Flux:4333.44x1 lm		
NAME: LED panel light	TYPE:	WEIGHT:
SPEC.:PL603X603 40W 3000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:



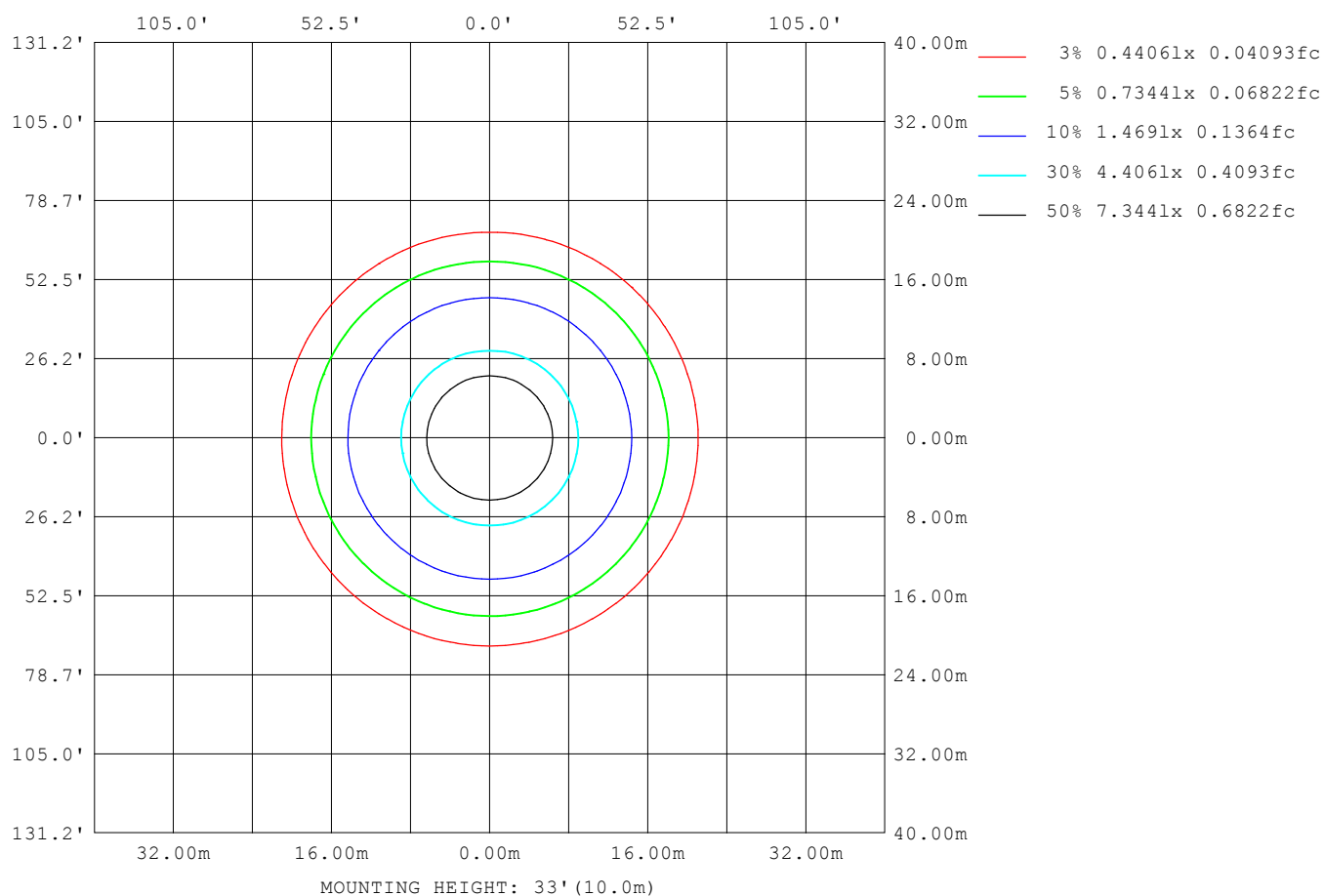
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Bonnie
 Test Date:2017-10-21

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO1900_V2(N) SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:8.690m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:120.5V I:0.3279A P:39.24W PF:0.9929 Lamp Flux:4333.44x1 lm		
NAME: LED panel light	TYPE:	WEIGHT:
SPEC.:PL603X603 40W 3000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Bonnie
 Test Date:2017-10-21

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G01900_V2 (N) SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:8.690m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:120.5V I:0.3279A P:39.24W PF:0.9929 Lamp Flux:4333.44x1 lm		
NAME: LED panel light	TYPE:	WEIGHT:
SPEC.:PL603X603 40W 3000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

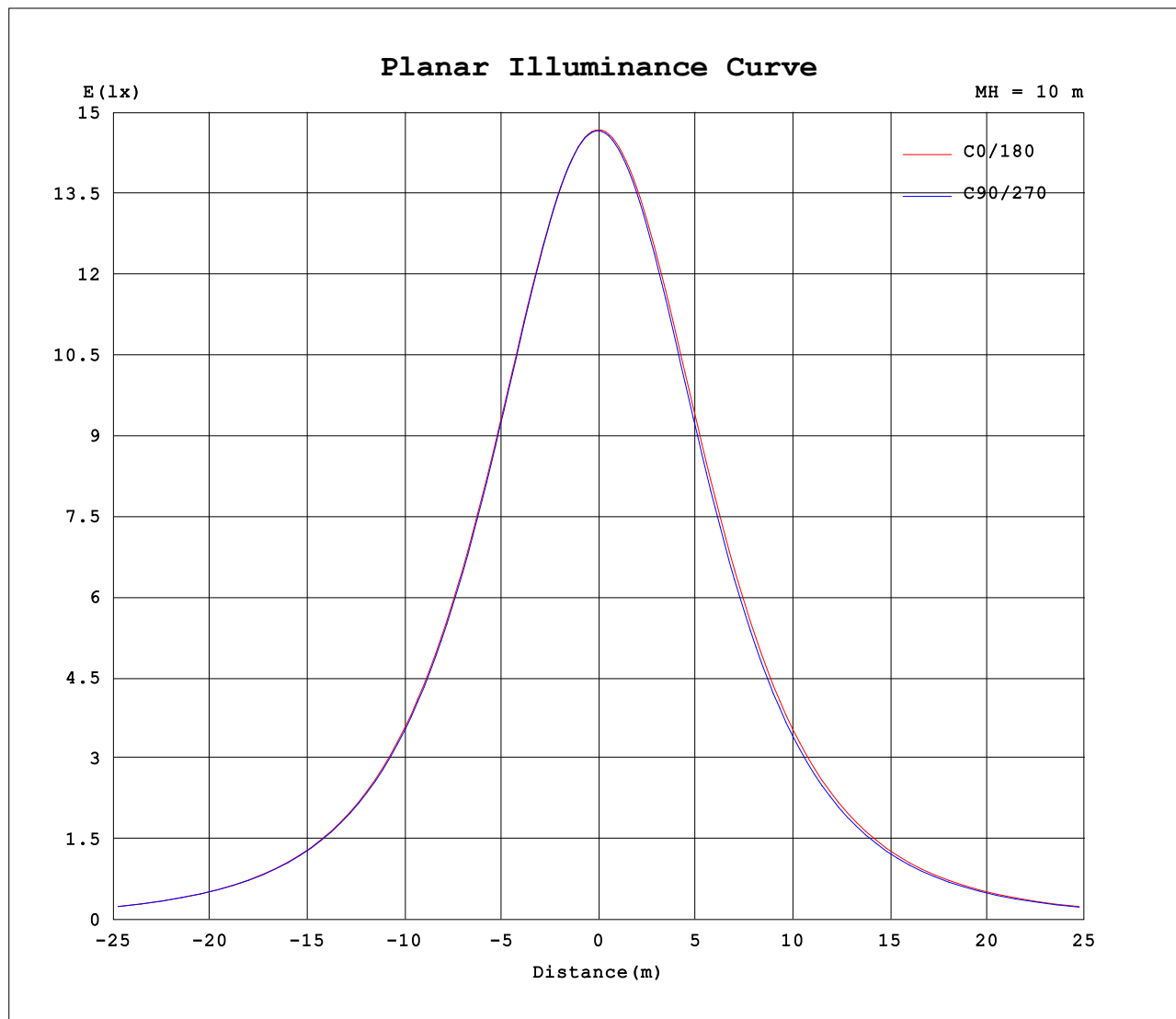
AvgL	cd/m2
L_0~180 (65) av	3605
L_0~180 (75) av	3214
L_0~180 (85) av	2615
L_90~270 (65) av	3526
L_90~270 (75) av	3188
L_90~270 (85) av	2705
L_45 (65) av	3554
L_45 (75) av	3196
L_45 (85) av	2666

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Bonnie
 Test Date:2017-10-21

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO1900_V2(N) SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:8.690m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Bonnie
Test Date: 2017-10-21

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO1900_V2 (N) SYSTEM V2.0.295
Humidity: 65.0%
Test Distance: 8.690m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.5V I:0.3279A P:39.24W PF:0.9929 Lamp Flux:4333.44x1 lm		
NAME: LED panel light	TYPE:	WEIGHT:
SPEC.:PL603X603 40W 3000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	90	180	270															
0	1469	1467	1469	1467															
5	1463	1462	1463	1458															
10	1446	1445	1445	1436															
15	1418	1415	1416	1402															
20	1378	1372	1375	1356															
25	1325	1317	1323	1298															
30	1262	1252	1259	1229															
35	1188	1175	1184	1150															
40	1103	1090	1098	1063															
45	1008	995	1003	967															
50	904	893	898	863															
55	793	784	787	754															
60	675	670	668	640															
65	552	551	545	522															
70	427	430	420	402															
75	303	310	296	284															
80	186	197	181	172															
85	84.8	94.7	79.3	75.0															
90	7.46	11.5	5.51	3.98															
95	3.17	3.17	2.58	2.65															
100	4.09	4.06	3.27	3.36															
105	5.01	4.96	4.05	4.12															
110	5.96	5.88	4.83	4.92															
115	6.87	6.80	5.63	5.70															
120	7.79	7.74	6.42	6.54															
125	8.68	8.60	7.30	7.45															
130	9.47	9.35	8.18	8.26															
135	10.2	10.0	8.80	8.87															
140	10.8	10.7	9.45	9.56															
145	11.3	11.1	10.0	10.2															
150	11.7	11.6	10.7	10.9															
155	12.1	12.0	11.3	11.5															
160	12.4	12.4	11.9	12.0															
165	12.7	12.7	12.5	12.6															
170	12.9	12.9	12.7	12.8															
175	12.9	13.0	12.9	13.0															
180	13.0	13.1	13.1	13.0															

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Bonnie
 Test Date:2017-10-21

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO1900_V2(N) SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:8.690m [K=1.0000]
 Remarks: