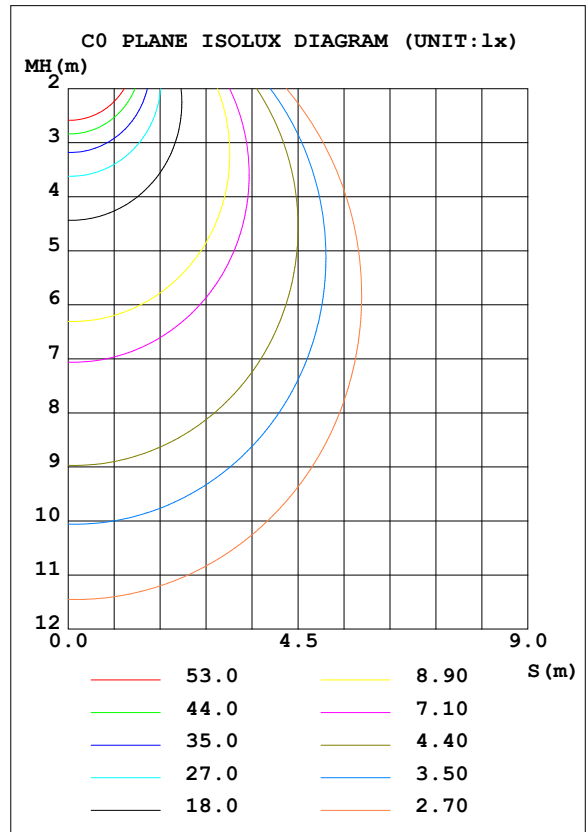
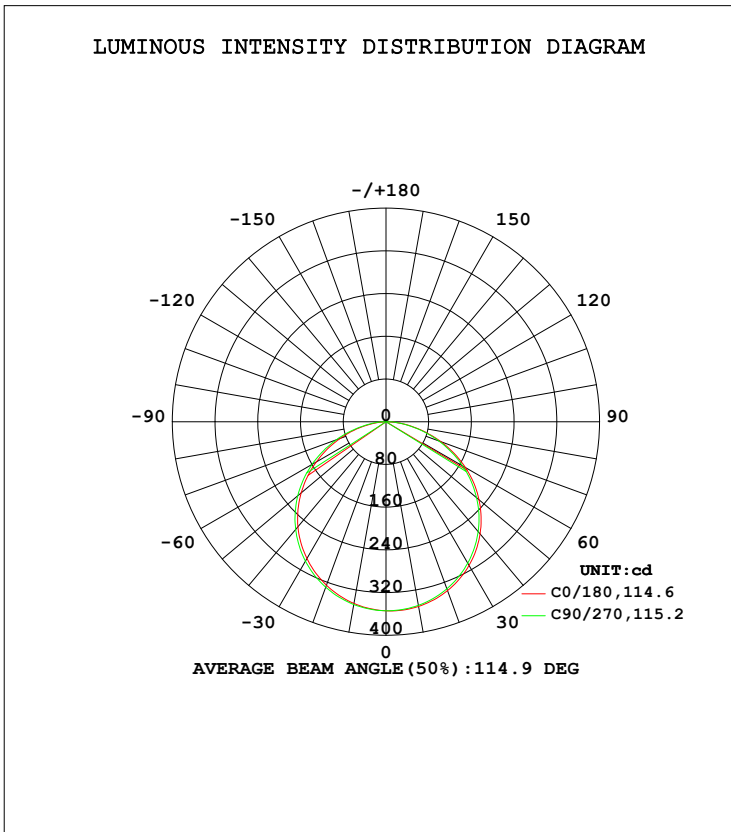


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:24.001V I:0.3939A P:9.4540W PF:1.0000 Freq:0Hz Lamp Flux:1047.77x1 lm		
NAME: PM1202039	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.01*0.91	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 110.83 lm/W			
MODEL		I _{max} (cd)	354.4	S/MH (C0/180)	1.24
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	1.27
RATED VOLTAGE (V)		TOTAL FLUX (lm)	1047.8	η UP, DN (C0-180)	0.3, 51.2
NOMINAL FLUX (lm)	1047.77	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.3, 48.2
LAMPS INSIDE	1	η up (%)	0.6	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)		η down (%)	99.4	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: JZ
 Test Date: 2024-01-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.444
 Humidity: 65.0%
 Test Distance: 8.700m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

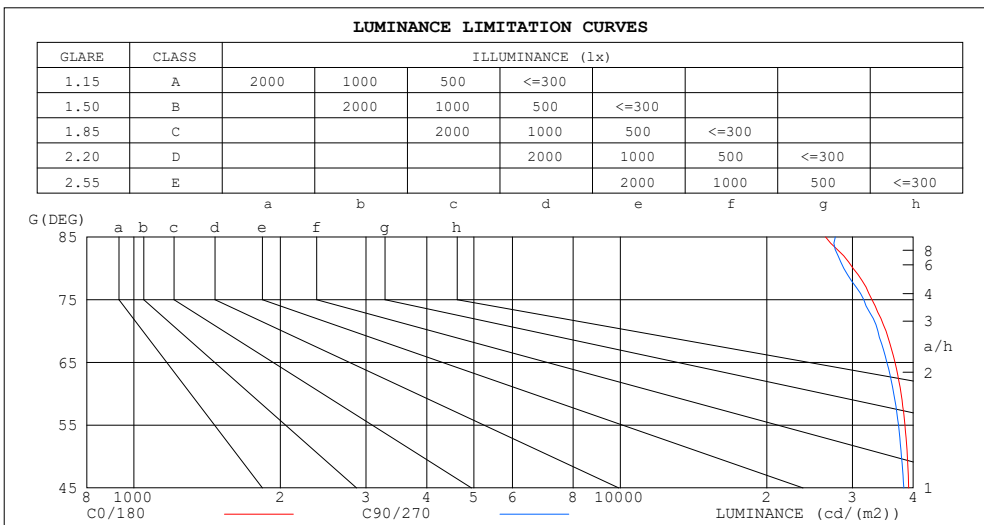
γ	C0	C90	C180	C270				γ	Φ zone	Φ total	%lum, lamp
10	351.2	349.1	345.5	347.5				0- 10	33.52	33.52	3.2,3.2
20	336.7	333.0	325.9	329.8				10- 20	96.34	129.9	12.4,12.4
30	310.9	306.0	296.0	301.6				20- 30	147.0	276.8	26.4,26.4
40	274.2	268.5	256.6	263.2				30- 40	178.8	455.6	43.5,43.5
50	227.5	221.4	207.4	215.7				40- 50	187.3	643.0	61.4,61.4
60	171.9	166.0	150.8	160.0				50- 60	170.6	813.6	77.6,77.6
70	109.5	105.3	91.48	99.06				60- 70	130.5	944.1	90.1,90.1
80	47.54	45.51	34.71	40.50				70- 80	74.98	1019	97.3,97.3
90	2.937	7.190	0.8448	6.332				80- 90	21.93	1041	99.4,99.4
100	0.3666	0.5543	0.5420	0.7397				90-100	1.582	1043	99.5,99.5
110	0.5293	0.6161	0.7639	0.6364				100-110	0.6032	1043	99.6,99.6
120	0.7390	0.8255	0.9855	0.7512				110-120	0.7204	1044	99.6,99.6
130	0.9360	1.059	1.207	0.9605				120-130	0.8430	1045	99.7,99.7
140	1.121	1.244	1.404	1.182				130-140	0.8849	1046	99.8,99.8
150	1.330	1.429	1.540	1.355				140-150	0.8332	1046	99.9,99.9
160	1.502	1.577	1.656	1.512				150-160	0.6828	1047	99.9,99.9
170	1.564	1.675	1.693	1.589				160-170	0.4540	1048	100,100
180	1.663	1.712	1.700	1.687				170-180	0.1581	1048	100,100
DEG	LUMINOUS INTENSITY:cd								UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JZ
 Test Date:2024-01-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
 Humidity:65.0%
 Test Distance:8.700m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:24.001V I:0.3939A P:9.4540W PF:1.0000 Freq:0Hz Lamp Flux:1047.77x1 lm		
NAME: PM1202039	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.01*0.91	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	26411	27671
80	30087	28803
75	32918	31655
70	35176	33848
65	36716	35318
60	37771	36487
55	38476	37307
50	38901	37848
45	39152	38269

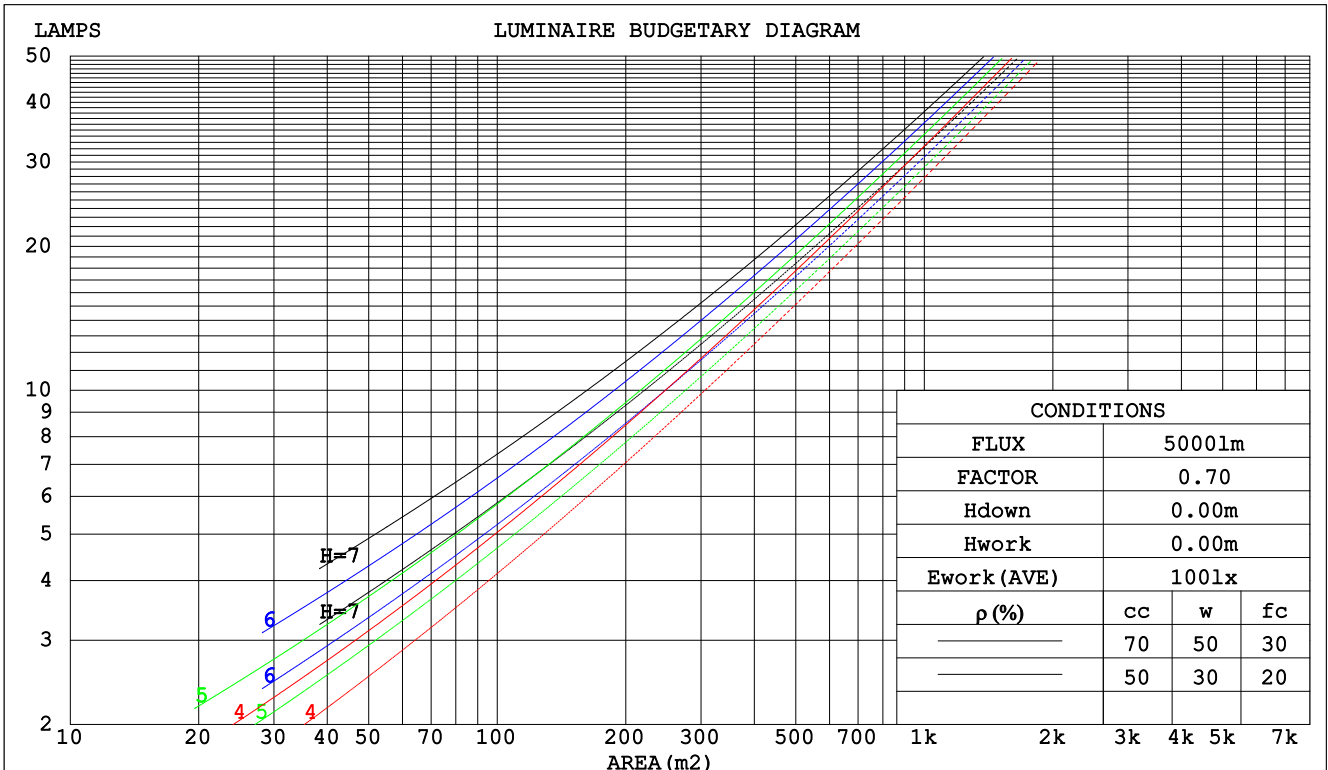
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JZ
 Test Date:2024-01-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
 Humidity:65.0%
 Test Distance:8.700m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.001V I:0.3939A P:9.4540W PF:1.0000 Freq:0Hz		
Lamp Flux:1047.77x1 lm		
NAME: PM1202039	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.01*0.91	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	1.01	1.01	1.01	.99
1.0	1.04	.99	.95	1.01	.97	.94	.97	.94	.91	.93	.90	.88	.89	.87	.85	.83
2.0	.90	.83	.77	.88	.82	.76	.84	.79	.74	.81	.76	.73	.78	.74	.71	.69
3.0	.79	.71	.64	.77	.70	.63	.74	.68	.62	.71	.66	.61	.69	.64	.60	.58
4.0	.70	.61	.54	.68	.60	.54	.66	.59	.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	.32
8.0	.46	.38	.32	.45	.37	.32	.44	.37	.31	.43	.36	.31	.42	.35	.31	.29
9.0	.42	.34	.28	.42	.34	.28	.41	.33	.28	.39	.33	.28	.38	.32	.28	.26
10.0	.39	.31	.26	.39	.31	.26	.37	.30	.26	.36	.30	.25	.36	.30	.25	.23



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JZ
 Test Date:2024-01-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
 Humidity:65.0%
 Test Distance:8.700m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:24.001V I:0.3939A P:9.4540W PF:1.0000 Freq:0Hz		
Lamp Flux:1047.77x1 lm		
NAME: PM1202039	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.01*0.91	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	.314	.178	.057	.307	.175	.056	.293	.168	.054	.280	.162	.052	.269	.156	.050	
2.0	.295	.161	.050	.288	.159	.049	.276	.154	.048	.265	.149	.047	.255	.144	.045	
3.0	.272	.145	.043	.266	.143	.043	.256	.139	.042	.246	.135	.041	.237	.131	.041	
4.0	.251	.130	.038	.246	.129	.038	.236	.125	.037	.228	.122	.037	.219	.119	.036	
5.0	.232	.118	.034	.227	.117	.034	.219	.114	.034	.211	.111	.033	.204	.109	.033	
6.0	.215	.108	.031	.211	.106	.031	.203	.104	.030	.196	.102	.030	.190	.100	.030	
7.0	.200	.099	.028	.196	.098	.028	.190	.096	.028	.183	.094	.027	.177	.092	.027	
8.0	.187	.091	.026	.183	.090	.026	.177	.089	.025	.172	.087	.025	.166	.085	.025	
9.0	.175	.085	.024	.172	.084	.024	.166	.082	.023	.161	.081	.023	.156	.079	.023	
10.0	.164	.079	.022	.162	.078	.022	.157	.077	.022	.152	.076	.021	.148	.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	.195	.195	.195	.167	.167	.167	.114	.114	.114	.065	.065	.065	.021	.021	.021	
1.0	.186	.161	.139	.159	.138	.120	.109	.095	.083	.063	.055	.048	.020	.018	.016	
2.0	.178	.137	.103	.152	.118	.089	.104	.082	.062	.060	.047	.036	.019	.015	.012	
3.0	.170	.119	.079	.146	.103	.069	.100	.072	.048	.058	.042	.028	.019	.014	.009	
4.0	.162	.106	.063	.139	.092	.055	.096	.064	.039	.055	.037	.023	.018	.012	.008	
5.0	.155	.096	.052	.133	.083	.045	.092	.058	.032	.053	.034	.019	.017	.011	.006	
6.0	.148	.087	.044	.127	.076	.038	.088	.053	.027	.051	.031	.016	.016	.010	.005	
7.0	.141	.080	.038	.121	.070	.033	.084	.049	.024	.049	.029	.014	.016	.009	.005	
8.0	.134	.075	.034	.116	.065	.029	.080	.045	.021	.047	.027	.012	.015	.009	.004	
9.0	.128	.070	.030	.111	.061	.026	.077	.043	.019	.045	.025	.011	.014	.008	.004	
10.0	.123	.065	.027	.106	.057	.024	.073	.040	.017	.043	.024	.010	.014	.008	.003	

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JZ
 Test Date:2024-01-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
 Humidity:65.0%
 Test Distance:8.700m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:24.001V I:0.3939A P:9.4540W PF:1.0000 Freq:0Hz										
Lamp Flux:1047.77x1 lm										
NAME: PM1202039				TYPE:				WEIGHT:		
SPEC.:				DIM.:				SERIAL No.:		
MFR.:				SUR.: 0.01*0.91				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	25.5	27.1	25.8	27.3	27.5	25.4	26.9	25.7	27.1	27.4
3H	27.1	28.5	27.4	28.8	29.0	27.0	28.4	27.3	28.6	28.9
4H	27.8	29.1	28.1	29.4	29.6	27.6	28.9	27.9	29.2	29.5
6H	28.2	29.5	28.6	29.8	30.1	28.1	29.3	28.4	29.6	29.9
8H	28.4	29.6	28.7	29.9	30.2	28.2	29.4	28.6	29.7	30.0
12H	28.5	29.7	28.9	30.0	30.3	28.3	29.5	28.7	29.8	30.1
4H 2H	26.1	27.5	26.5	27.7	28.0	26.0	27.4	26.4	27.7	27.9
3H	27.9	29.1	28.3	29.4	29.7	27.8	29.0	28.2	29.3	29.6
4H	28.7	29.8	29.1	30.1	30.4	28.6	29.6	28.9	30.0	30.3
6H	29.3	30.3	29.7	30.6	31.0	29.1	30.1	29.5	30.5	30.8
8H	29.5	30.4	29.9	30.8	31.2	29.3	30.2	29.8	30.6	31.0
12H	29.7	30.5	30.1	30.9	31.3	29.5	30.3	29.9	30.7	31.1
8H 4H	29.0	29.9	29.4	30.2	30.6	28.8	29.7	29.3	30.1	30.5
6H	29.7	30.5	30.2	30.9	31.3	29.6	30.3	30.0	30.7	31.2
8H	30.0	30.7	30.5	31.1	31.6	29.9	30.5	30.4	31.0	31.4
12H	30.3	30.8	30.7	31.3	31.8	30.1	30.7	30.6	31.2	31.6
12H 4H	29.0	29.8	29.4	30.2	30.6	28.9	29.7	29.3	30.1	30.5
6H	29.8	30.4	30.3	30.9	31.3	29.6	30.3	30.1	30.7	31.2
8H	30.1	30.7	30.6	31.2	31.6	30.0	30.6	30.5	31.0	31.5
Variations with the observer position at spacings(CIE Pub.117):										
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, 1048 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.2)
 Area: 0.0091 m2

C Range: 0 - 360DEG	γ Range: 0 - 180DEG
C Interval: 90.0DEG	γ Interval: 1.0DEG
Test Speed: HIGH	Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Temperature:25.3DEG	Humidity:65.0%
Operators:JZ	Test Distance:8.700m [K=1.0000]
Test Date:2024-01-25	Remarks:

UTILIZATION FACTORS TABLE

Test:U:24.001V I:0.3939A P:9.4540W PF:1.0000 Freq:0Hz Lamp Flux:1047.77x1 lm		
NAME: PM1202039	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.01*0.91	Shielding Angle:

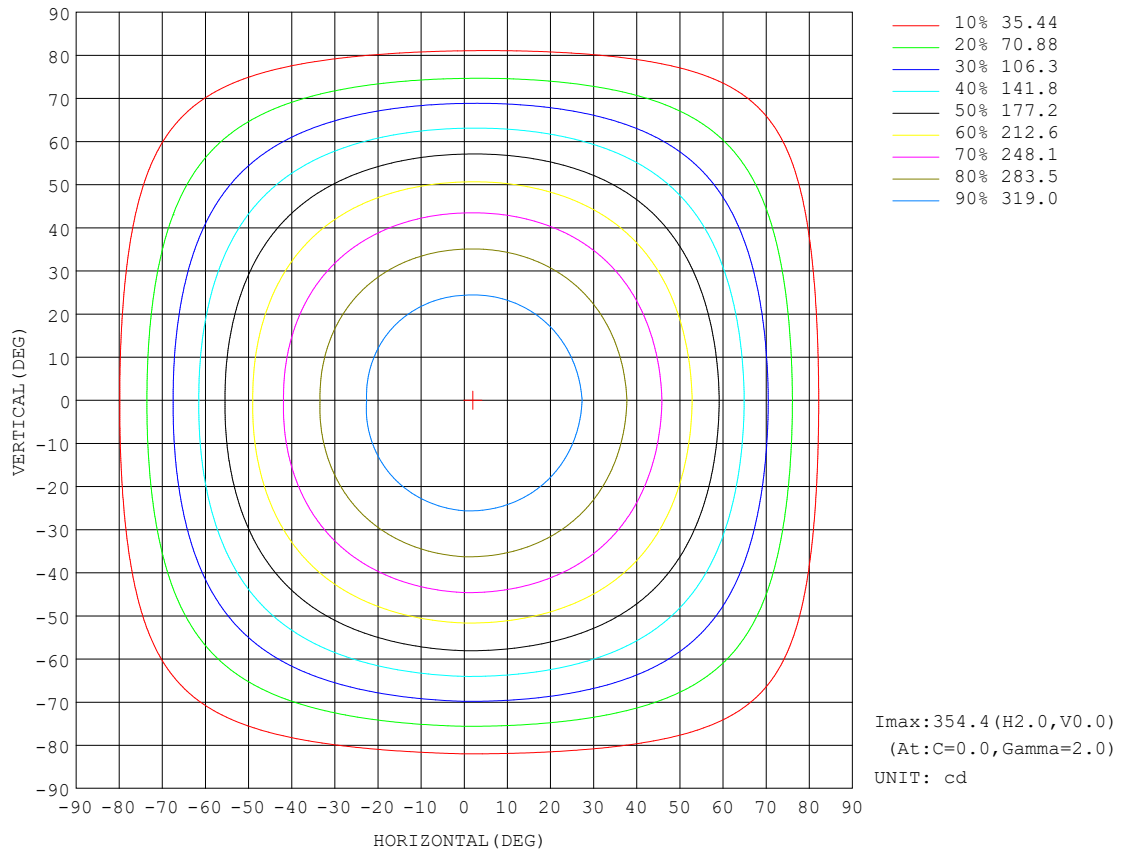
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) k(RI) x RCR = 5									
k = 0.60	57	45	38	56	45	38	55	44	38	31
0.80	67	55	48	66	55	48	64	54	47	40
1.00	75	64	57	74	63	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:JZ
 Test Date:2024-01-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
 Humidity:65.0%
 Test Distance:8.700m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:24.001V I:0.3939A P:9.4540W PF:1.0000 Freq:0Hz Lamp Flux:1047.77x1 lm		
NAME: PM1202039	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.01*0.91	Shielding Angle:

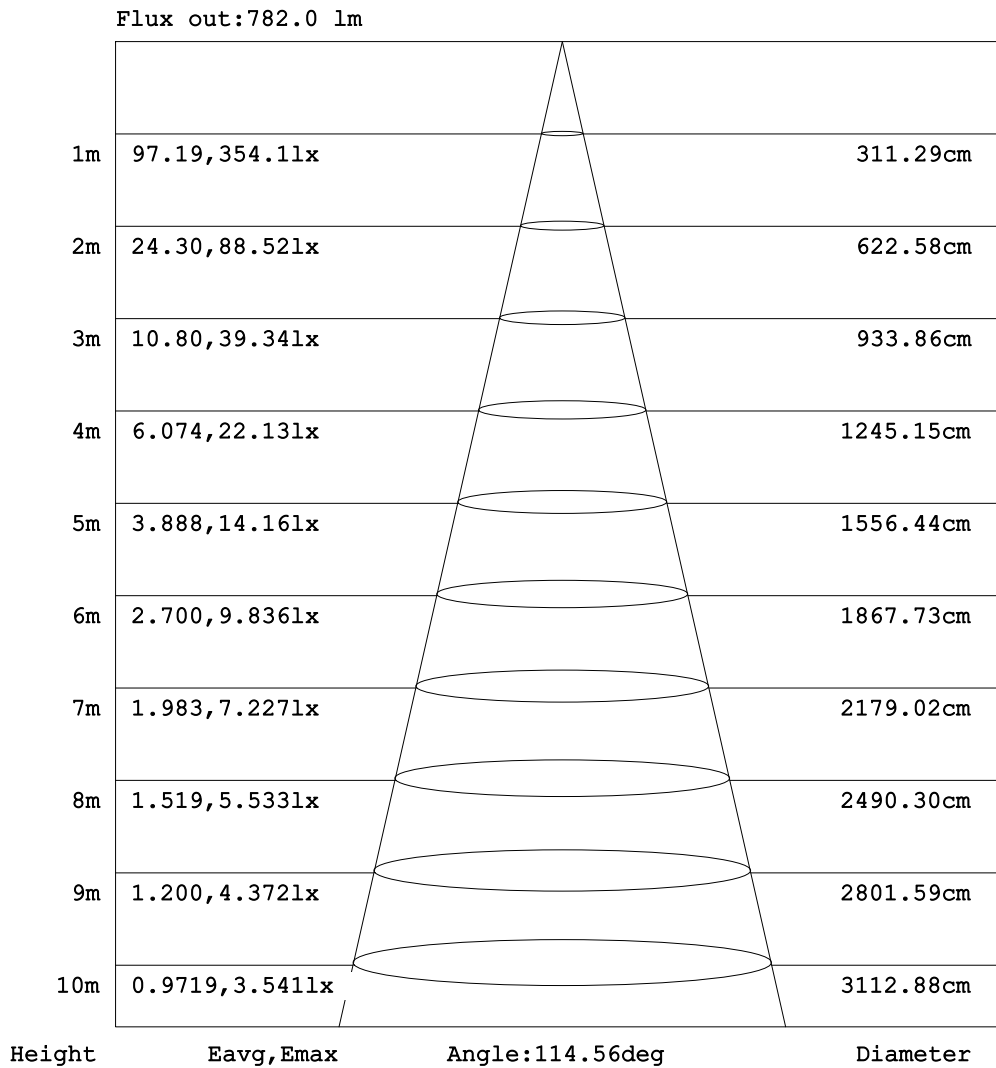


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JZ
Test Date: 2024-01-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity: 65.0%
Test Distance: 8.700m [K=1.0000]
Remarks:

AAI Figure

Test:U:24.001V I:0.3939A P:9.4540W PF:1.0000 Freq:0Hz Lamp Flux:1047.77x1 lm		
NAME: PM1202039	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.01*0.91	Shielding Angle:



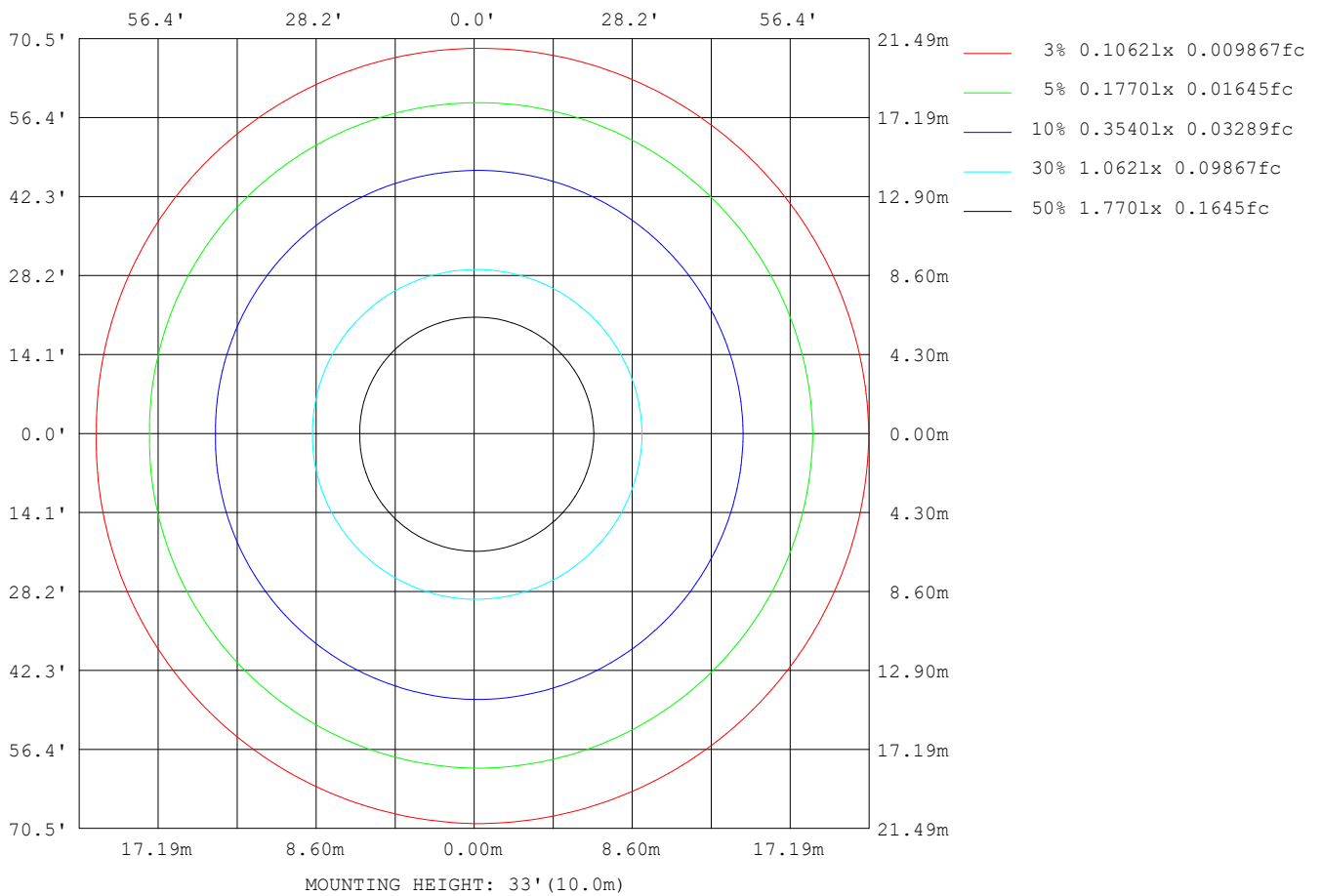
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2024-01-25

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:8.700m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:24.001V I:0.3939A P:9.4540W PF:1.0000 Freq:0Hz Lamp Flux:1047.77x1 lm		
NAME: PM1202039	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.01*0.91	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2024-01-25

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:8.700m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:24.001V I:0.3939A P:9.4540W PF:1.0000 Freq:0Hz		
Lamp Flux:1047.77x1 lm		
NAME: PM1202039	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.01*0.91	Shielding Angle:

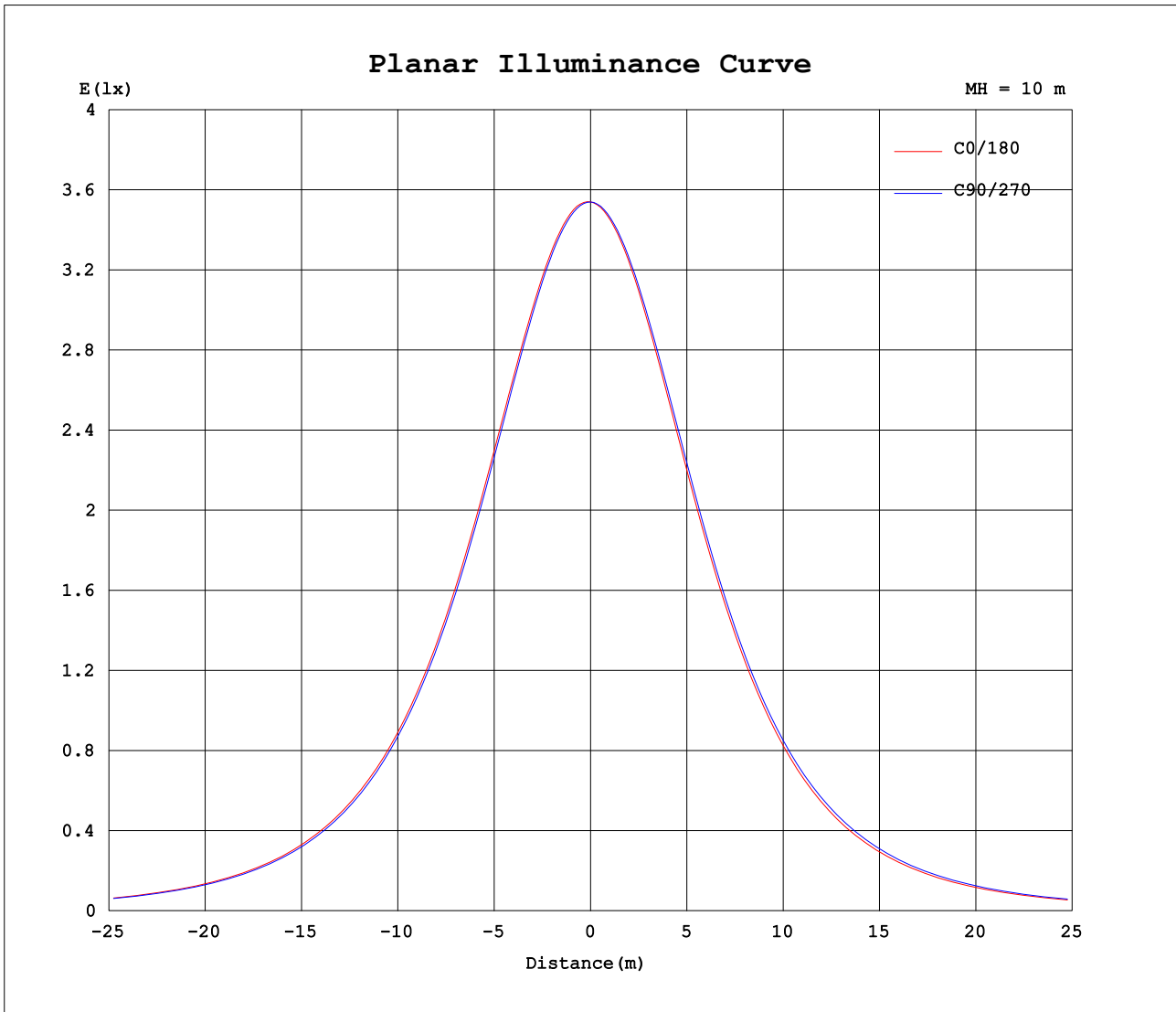
AvgL	cd/m2
L_0~180 (65) av	34105
L_0~180 (75) av	29742
L_0~180 (85) av	20997
L_90~270 (65) av	34546
L_90~270 (75) av	30387
L_90~270 (85) av	25699
L_45 (65) av	34217
L_45 (75) av	29947
L_45 (85) av	23597

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JZ
 Test Date:2024-01-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
 Humidity:65.0%
 Test Distance:8.700m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: JZ
 Test Date: 2024-01-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.444
 Humidity: 65.0%
 Test Distance: 8.700m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.001V I:0.3939A P:9.4540W PF:1.0000 Freq:0Hz		
Lamp Flux:1047.77x1 lm		
NAME: PM1202039	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.01*0.91	Shielding Angle:

Table--1

UNIT: cd

C (DEG) \ γ (DEG)	0	90	180	270															
0	354	354	354	354															
5	354	353	351	352															
10	351	349	346	347															
15	345	343	337	340															
20	337	333	326	330															
25	325	321	312	317															
30	311	306	296	302															
35	294	288	277	284															
40	274	269	257	263															
45	252	246	233	241															
50	228	221	207	216															
55	201	195	180	189															
60	172	166	151	160															
65	141	136	121	130															
70	109	105	91.5	99.1															
75	77.5	74.6	62.6	68.6															
80	47.5	45.5	34.7	40.5															
85	20.9	21.9	12.4	18.8															
90	2.94	7.19	0.84	6.33															
95	0.36	1.42	0.46	2.00															
100	0.37	0.55	0.54	0.74															
105	0.41	0.55	0.65	0.63															
110	0.53	0.62	0.76	0.64															
115	0.60	0.71	0.89	0.65															
120	0.74	0.83	0.99	0.75															
125	0.83	0.95	1.11	0.90															
130	0.94	1.06	1.21	0.96															
135	1.05	1.17	1.32	1.10															
140	1.12	1.24	1.40	1.18															
145	1.23	1.34	1.49	1.26															
150	1.33	1.43	1.54	1.35															
155	1.38	1.49	1.60	1.40															
160	1.50	1.58	1.66	1.51															
165	1.56	1.64	1.69	1.55															
170	1.56	1.68	1.69	1.59															
175	1.61	1.71	1.70	1.68															
180	1.66	1.71	1.70	1.69															

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JZ
 Test Date:2024-01-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
 Humidity:65.0%
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 Remarks: