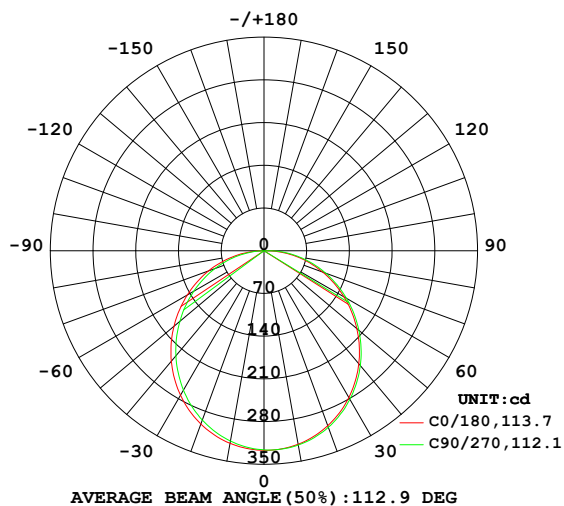


LUMINAIRE PHOTOMETRIC TEST REPORT

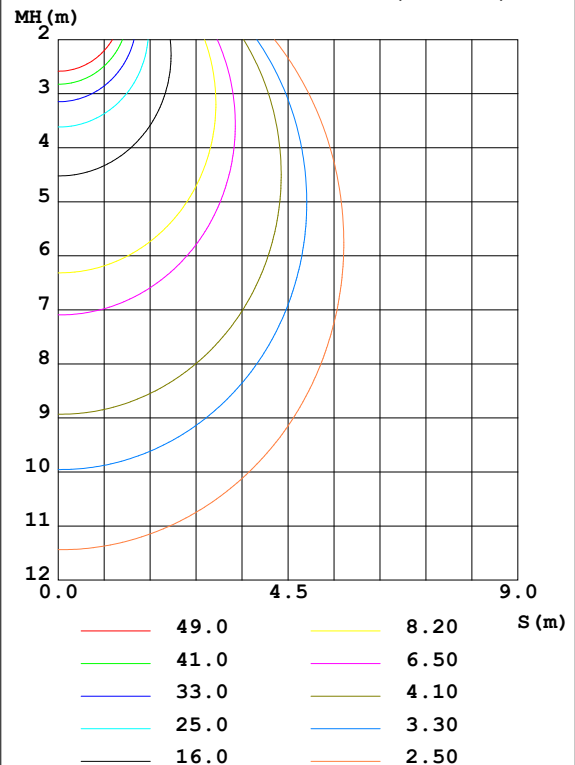
Test:U:24.001V I:0.5705A P:13.693W PF:1.0000 Freq:0Hz Lamp Flux:966.737x1 lm		
NAME: PM0200986 NS-156	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.01*1	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 70.60 lm/W			
MODEL		I _{max} (cd)	327.0	S/MH (C0/180)	1.24
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	1.21
RATED VOLTAGE (V)		TOTAL FLUX (lm)	966.76	η UP, DN (C0-180)	0.4, 51.7
NOMINAL FLUX (lm)	966.737	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.4, 47.5
LAMPS INSIDE	1	η up (%)	0.8	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)		η down (%)	99.2	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: JZ
Test Date: 2024-03-06

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:

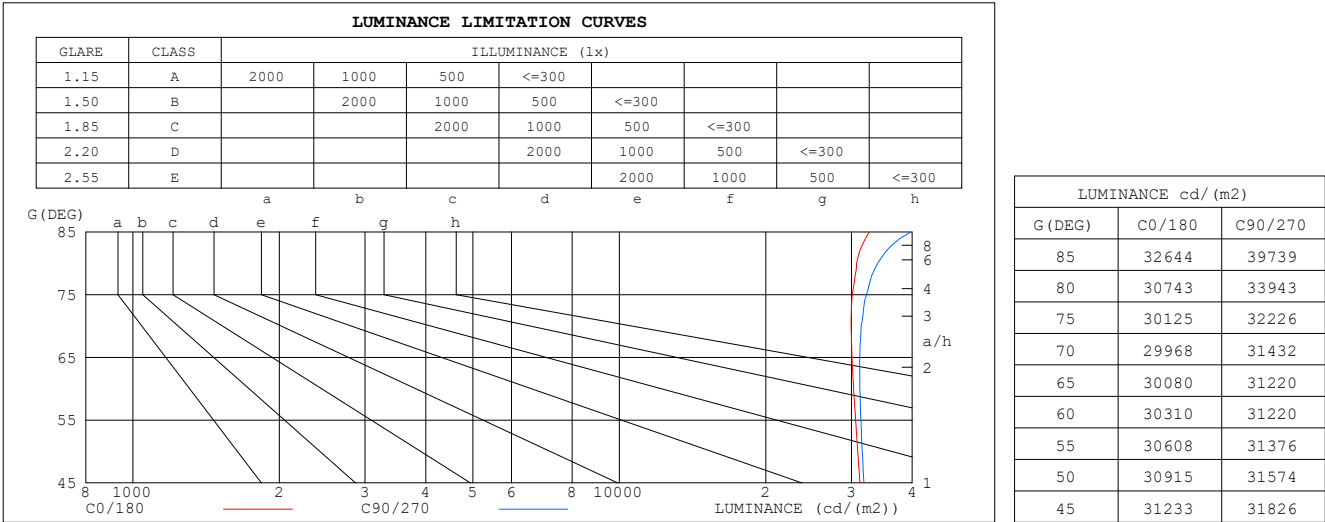
γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum, lamp
10	321.9	323.3	320.5	316.7					0- 10	30.89	30.89	3.2,3.2
20	305.2	307.9	302.3	295.4					10- 20	88.34	119.2	12.3,12.3
30	278.0	281.4	273.6	263.9					20- 30	133.5	252.7	26.1,26.1
40	241.7	245.6	236.3	224.6					30- 40	160.5	413.2	42.7,42.7
50	198.7	203.0	192.6	179.9					40- 50	166.6	579.8	60,60
60	151.6	156.1	145.2	133.0					50- 60	152.3	732.1	75.7,75.7
70	102.5	107.5	96.96	85.67					60- 70	121.1	853.2	88.3,88.3
80	53.38	58.94	47.56	38.37					70- 80	77.96	931.1	96.3,96.3
90	4.614	10.90	3.177	1.471					80- 90	28.00	959.1	99.2,99.2
100	1.467	1.317	0.9703	0.7171					90-100	2.173	961.3	99.4,99.4
110	0.8011	1.126	0.7020	0.7511					100-110	0.9524	962.3	99.5,99.5
120	0.7550	1.110	0.8623	0.8242					110-120	0.8414	963.1	99.6,99.6
130	0.9605	1.132	1.072	0.9778					120-130	0.8573	964.0	99.7,99.7
140	1.096	1.202	1.207	1.128					130-140	0.8444	964.8	99.8,99.8
150	1.207	1.269	1.379	1.268					140-150	0.7611	965.6	99.9,99.9
160	1.376	1.426	1.478	1.380					150-160	0.6306	966.2	99.9,99.9
170	1.429	1.527	1.550	1.478					160-170	0.4111	966.6	100,100
180	1.552	1.576	1.552	1.564					170-180	0.1464	966.8	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:2024-03-06

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:0.5705A P:13.693W PF:1.0000 Freq:0Hz Lamp Flux:966.737x1 lm		
NAME: PM0200986 NS-156	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.01*1	Shielding Angle:



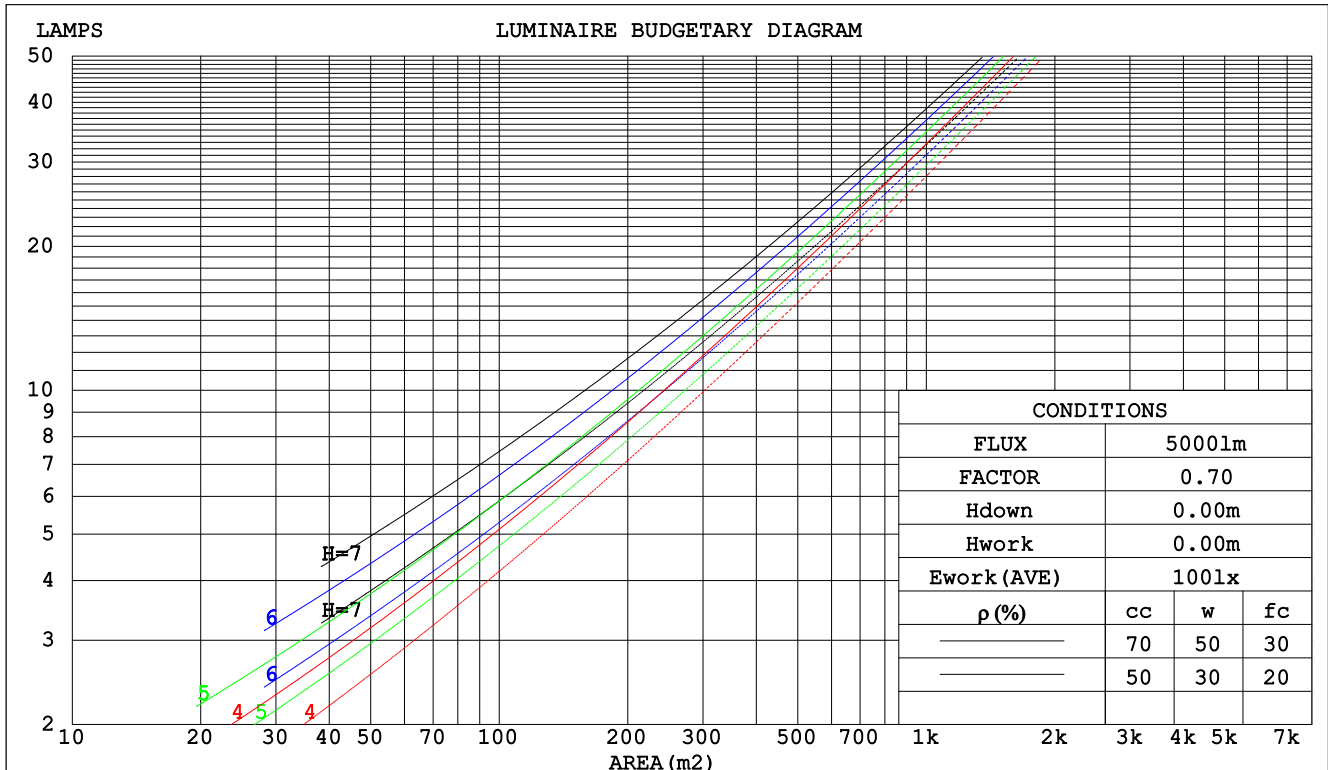
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2024-03-06

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:0.5705A P:13.693W PF:1.0000 Freq:0Hz Lamp Flux:966.737x1 lm		
NAME: PM0200986 NS-156	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.01*1	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	1.03	.98	.94	1.00	.96	.93	.96	.93	.89	.92	.89	.87	.88	.86	.84	.82
2.0	.89	.82	.76	.87	.81	.75	.83	.78	.73	.80	.75	.71	.77	.73	.70	.67
3.0	.78	.70	.63	.76	.69	.62	.73	.67	.61	.70	.65	.60	.68	.63	.59	.56
4.0	.69	.60	.53	.68	.59	.53	.65	.58	.52	.63	.56	.51	.60	.55	.50	.48
5.0	.62	.52	.46	.60	.52	.45	.58	.51	.45	.56	.49	.44	.54	.48	.44	.41
6.0	.55	.46	.40	.54	.46	.40	.52	.45	.39	.51	.44	.39	.49	.43	.38	.36
7.0	.50	.41	.35	.49	.41	.35	.48	.40	.35	.46	.39	.34	.45	.39	.34	.32
8.0	.46	.37	.31	.45	.37	.31	.44	.36	.31	.42	.36	.31	.41	.35	.30	.28
9.0	.42	.34	.28	.41	.33	.28	.40	.33	.28	.39	.32	.28	.38	.32	.27	.26
10.0	.39	.31	.25	.38	.31	.25	.37	.30	.25	.36	.30	.25	.35	.29	.25	.23



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2024-03-06

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:0.5705A P:13.693W PF:1.0000 Freq:0Hz		
Lamp Flux:966.737x1 lm		
NAME: PM0200986 NS-156	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.01*1	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	.326	.186	.059	.319	.182	.058	.305	.175	.056	.292	.169	.054	.281	.163	.052		
2.0	.302	.165	.051	.295	.163	.050	.283	.158	.049	.272	.153	.048	.262	.148	.047		
3.0	.277	.147	.044	.271	.145	.044	.260	.141	.043	.250	.137	.042	.241	.134	.041		
4.0	.254	.132	.039	.249	.130	.039	.239	.127	.038	.231	.124	.037	.222	.121	.037		
5.0	.234	.119	.035	.230	.118	.034	.221	.115	.034	.213	.112	.033	.206	.110	.033		
6.0	.216	.109	.031	.212	.107	.031	.205	.105	.031	.198	.103	.030	.191	.101	.030		
7.0	.201	.099	.028	.197	.098	.028	.191	.096	.028	.184	.094	.027	.178	.093	.027		
8.0	.187	.092	.026	.184	.091	.026	.178	.089	.025	.172	.087	.025	.167	.086	.025		
9.0	.175	.085	.024	.173	.084	.024	.167	.083	.023	.162	.081	.023	.157	.080	.023		
10.0	.165	.079	.022	.162	.078	.022	.157	.077	.022	.153	.076	.022	.148	.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	.196	.196	.196	.168	.168	.168	.115	.115	.115	.066	.066	.066	.021	.021	.021		
1.0	.188	.162	.139	.160	.139	.120	.110	.096	.083	.063	.055	.048	.020	.018	.016		
2.0	.180	.138	.103	.154	.119	.089	.105	.082	.062	.061	.048	.036	.020	.015	.012		
3.0	.172	.120	.079	.147	.104	.069	.101	.072	.048	.058	.042	.028	.019	.014	.009		
4.0	.164	.107	.064	.141	.093	.055	.097	.065	.039	.056	.038	.023	.018	.012	.008		
5.0	.157	.097	.053	.135	.084	.046	.093	.059	.032	.054	.034	.019	.017	.011	.006		
6.0	.149	.089	.045	.128	.077	.039	.089	.054	.028	.051	.032	.016	.017	.010	.005		
7.0	.142	.082	.039	.123	.071	.034	.085	.050	.024	.049	.029	.014	.016	.010	.005		
8.0	.136	.076	.035	.117	.066	.030	.081	.046	.021	.047	.027	.013	.015	.009	.004		
9.0	.130	.071	.031	.112	.062	.027	.077	.043	.019	.045	.026	.012	.015	.008	.004		
10.0	.124	.067	.029	.107	.058	.025	.074	.041	.018	.043	.024	.011	.014	.008	.004		

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2024-03-06

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:0.5705A P:13.693W PF:1.0000 Freq:0Hz Lamp Flux:966.737x1 lm											
NAME: PM0200986 NS-156					TYPE:			WEIGHT:			
SPEC.:					DIM.:			SERIAL No.:			
MFR.:					SUR.: 0.01*1			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		25.0	26.5	25.2	26.7	26.9	25.1	26.6	25.3	26.8	27.0
3H		26.7	28.1	27.0	28.4	28.6	26.8	28.3	27.2	28.5	28.8
4H		27.5	28.8	27.8	29.1	29.4	27.7	29.0	28.0	29.3	29.6
6H		28.1	29.4	28.5	29.7	30.0	28.4	29.7	28.7	30.0	30.3
8H		28.4	29.6	28.8	29.9	30.2	28.7	30.0	29.1	30.2	30.6
12H		28.6	29.8	29.0	30.1	30.4	29.0	30.2	29.4	30.5	30.8
4H	2H	25.6	27.0	26.0	27.3	27.5	25.7	27.1	26.0	27.3	27.6
	3H	27.6	28.8	27.9	29.1	29.4	27.7	28.9	28.1	29.2	29.5
	4H	28.5	29.6	28.9	29.9	30.3	28.7	29.8	29.1	30.1	30.5
	6H	29.3	30.3	29.7	30.7	31.0	29.6	30.5	30.0	30.9	31.3
	8H	29.7	30.6	30.1	31.0	31.4	30.0	30.9	30.4	31.3	31.7
	12H	29.9	30.8	30.4	31.2	31.6	30.3	31.2	30.8	31.6	32.0
8H	4H	28.9	29.8	29.3	30.2	30.6	29.0	29.9	29.5	30.3	30.7
	6H	29.9	30.7	30.4	31.1	31.5	30.1	30.9	30.6	31.3	31.8
	8H	30.4	31.0	30.8	31.5	32.0	30.7	31.3	31.1	31.8	32.2
	12H	30.8	31.4	31.3	31.8	32.3	31.1	31.7	31.6	32.2	32.7
12H	4H	28.9	29.8	29.4	30.2	30.6	29.1	29.9	29.5	30.3	30.7
	6H	30.0	30.7	30.5	31.1	31.6	30.2	30.9	30.7	31.4	31.8
	8H	30.6	31.1	31.1	31.6	32.1	30.8	31.4	31.3	31.9	32.4
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				+ 0.1 / - 0.3					

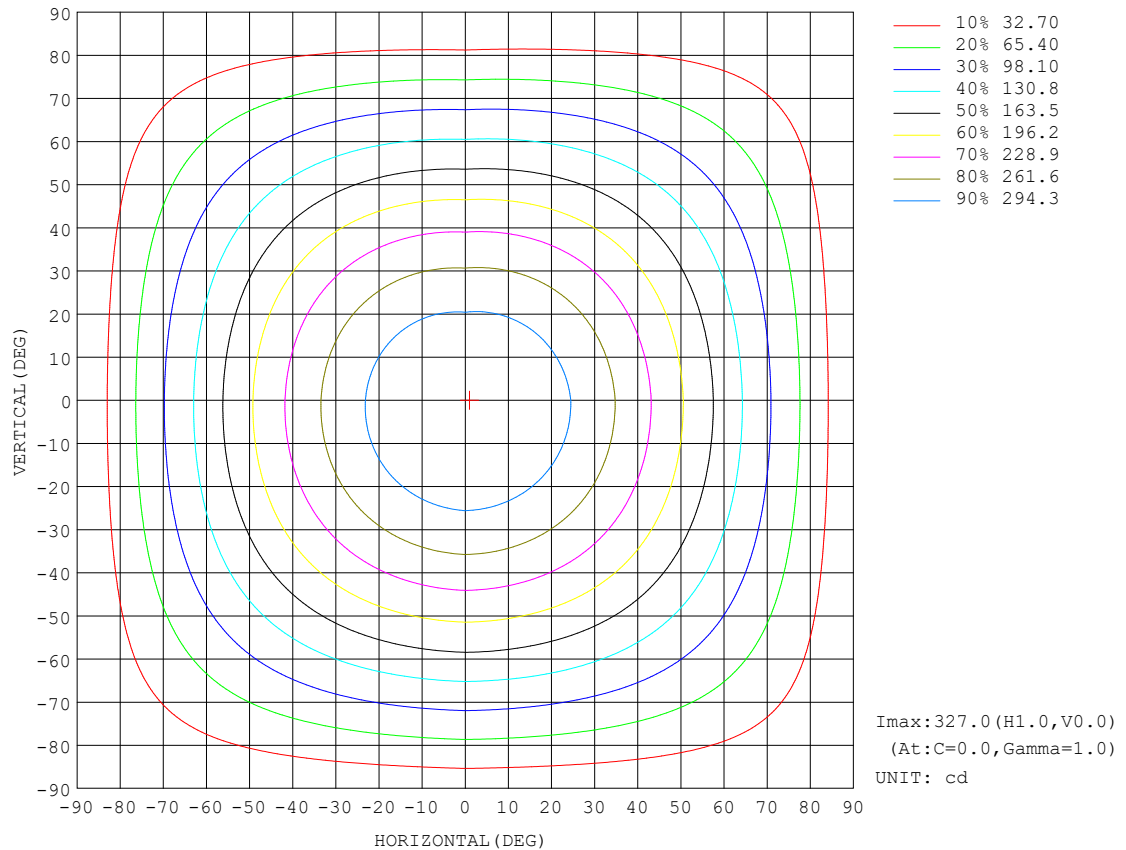
CIE Pub.117, 966.7 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = -0.1$)
Area: 0.01 m²

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2024-03-06

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:0.5705A P:13.693W PF:1.0000 Freq:0Hz Lamp Flux:966.737x1 lm		
NAME: PM0200986 NS-156	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.01*1	Shielding Angle:

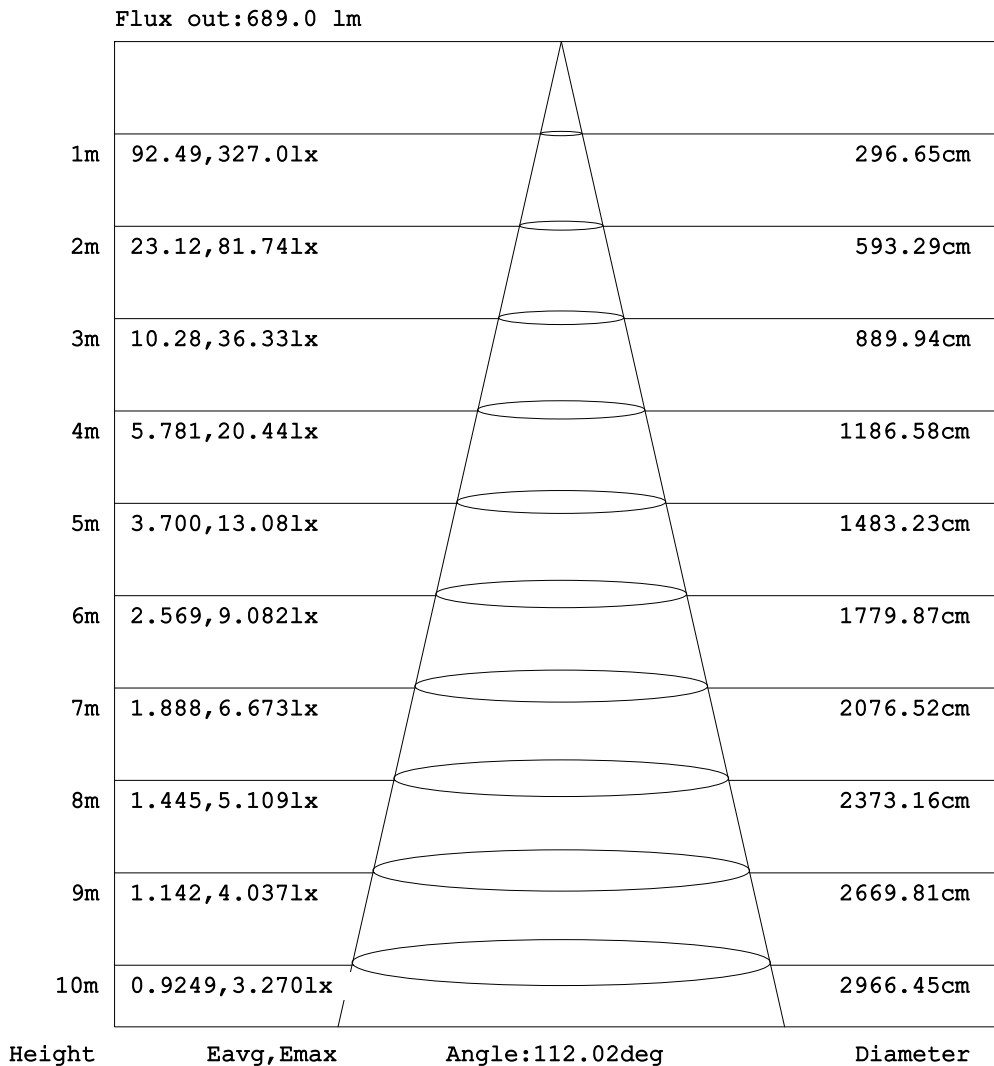


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2024-03-06

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:0.5705A P:13.693W PF:1.0000 Freq:0Hz Lamp Flux:966.737x1 lm		
NAME: PM0200986 NS-156	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.01*1	Shielding Angle:



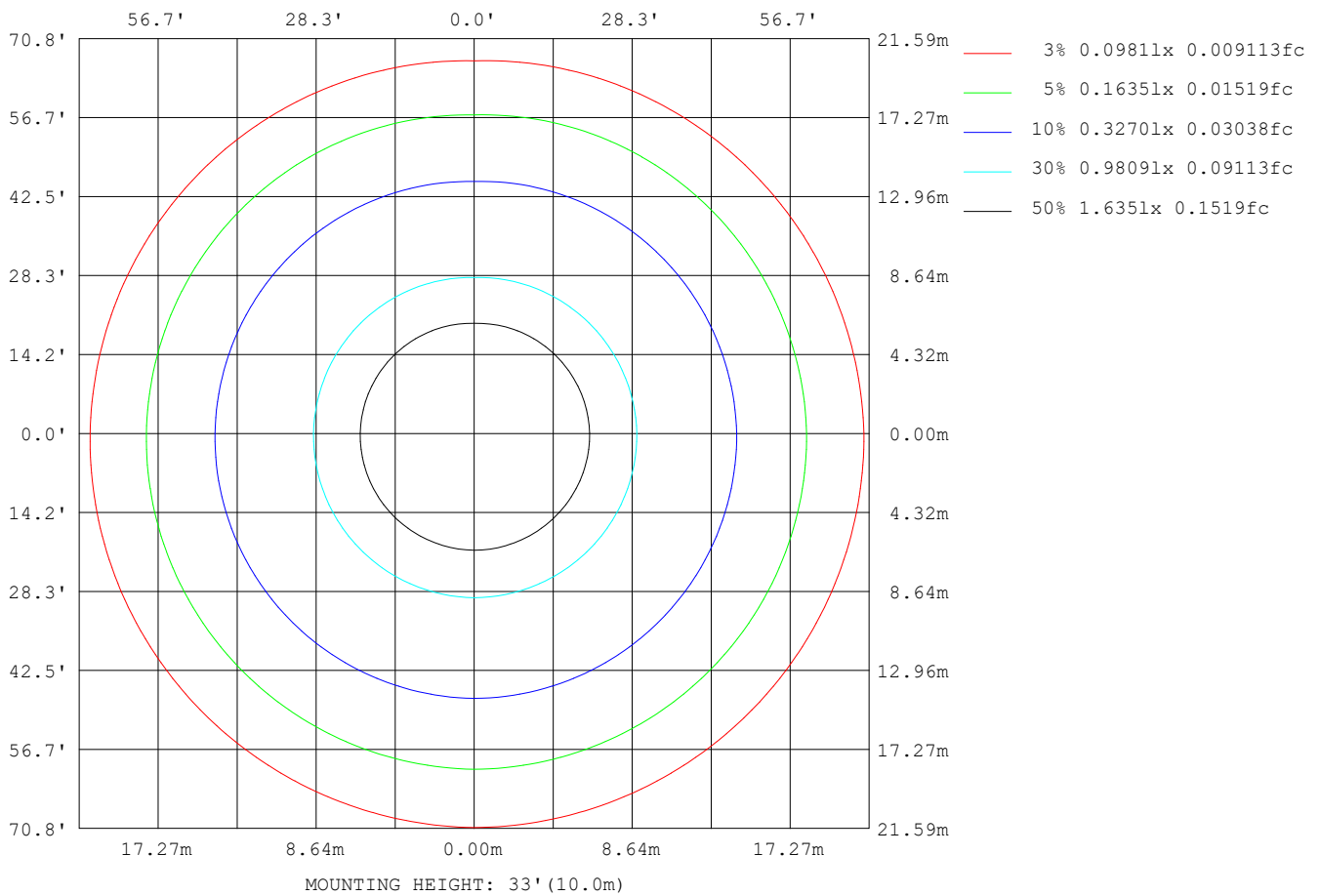
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2024-03-06

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:0.5705A P:13.693W PF:1.0000 Freq:0Hz Lamp Flux:966.737x1 lm		
NAME: PM0200986 NS-156	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.01*1	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JZ
Test Date: 2024-03-06

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:0.5705A P:13.693W PF:1.0000 Freq:0Hz Lamp Flux:966.737x1 lm		
NAME: PM0200986 NS-156	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.01*1	Shielding Angle:

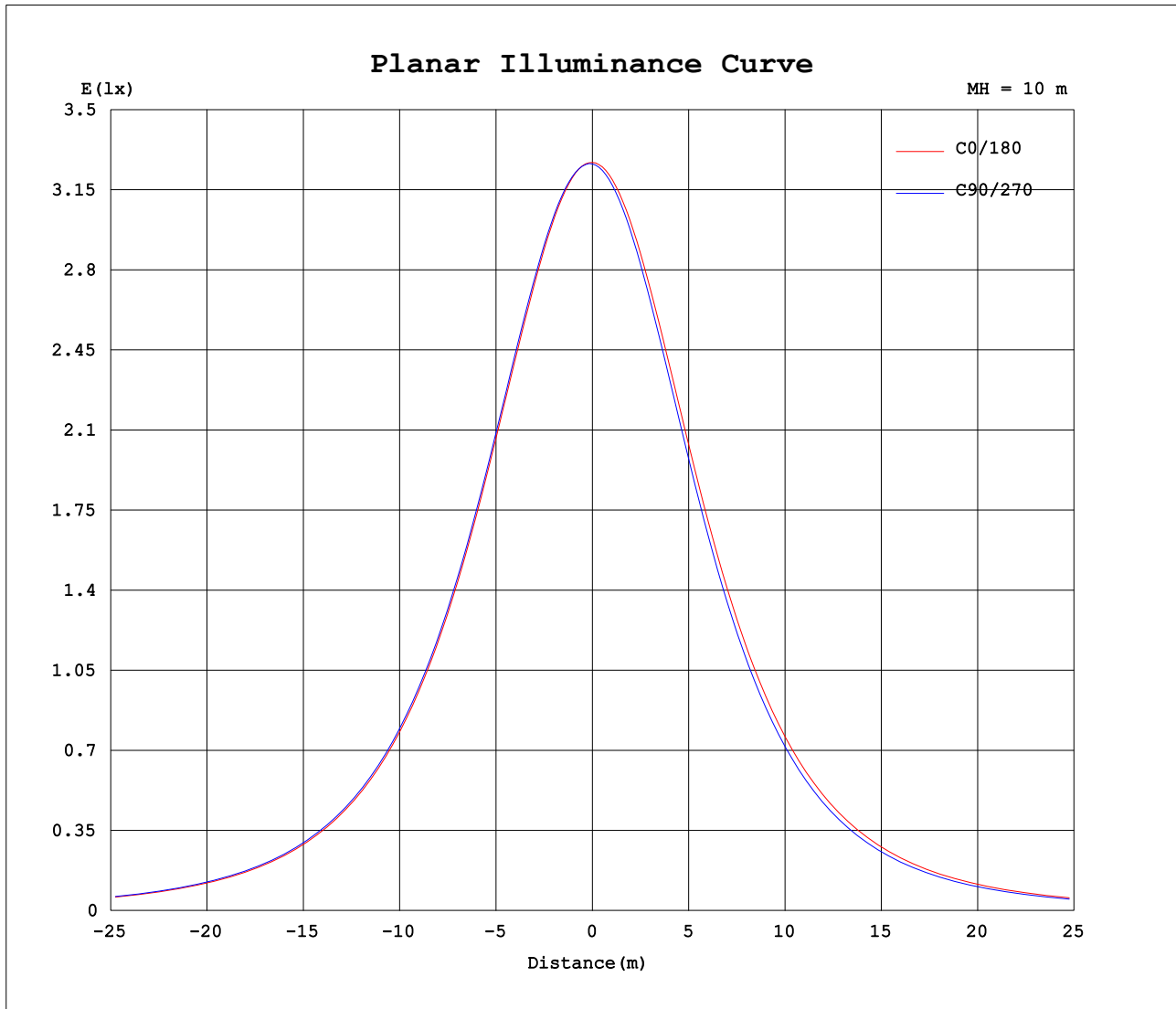
AvgL	cd/m2
L_0~180 (65) av	29342
L_0~180 (75) av	29010
L_0~180 (85) av	29363
L_90~270 (65) av	28543
L_90~270 (75) av	28077
L_90~270 (85) av	28338
L_45 (65) av	28796
L_45 (75) av	28357
L_45 (85) av	28518

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2024-03-06

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: 2024-03-06

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:0.5705A P:13.693W PF:1.0000 Freq:0Hz Lamp Flux:966.737x1 lm		
NAME: PM0200986 NS-156	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.01*1	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	90	180	270															
0	327	326	327	326															
5	326	326	325	323															
10	322	323	320	317															
15	315	317	313	307															
20	305	308	302	295															
25	293	296	289	281															
30	278	281	274	264															
35	261	264	256	245															
40	242	246	236	225															
45	221	225	215	203															
50	199	203	193	180															
55	176	180	169	157															
60	152	156	145	133															
65	127	132	121	109															
70	102	108	97.0	85.7															
75	78.0	83.4	72.2	61.9															
80	53.4	58.9	47.6	38.4															
85	28.5	34.6	22.7	14.8															
90	4.61	10.9	3.18	1.47															
95	1.77	1.54	2.58	0.75															
100	1.47	1.32	0.97	0.72															
105	1.02	1.17	0.58	0.72															
110	0.80	1.13	0.70	0.75															
115	0.71	1.11	0.80	0.77															
120	0.75	1.11	0.86	0.82															
125	0.80	1.11	0.99	0.92															
130	0.96	1.13	1.07	0.98															
135	1.01	1.17	1.15	1.02															
140	1.10	1.20	1.21	1.13															
145	1.16	1.24	1.28	1.15															
150	1.21	1.27	1.38	1.27															
155	1.35	1.35	1.43	1.35															
160	1.38	1.43	1.48	1.38															
165	1.40	1.49	1.52	1.40															
170	1.43	1.53	1.55	1.48															
175	1.51	1.57	1.57	1.54															
180	1.55	1.58	1.55	1.56															

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2024-03-06

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