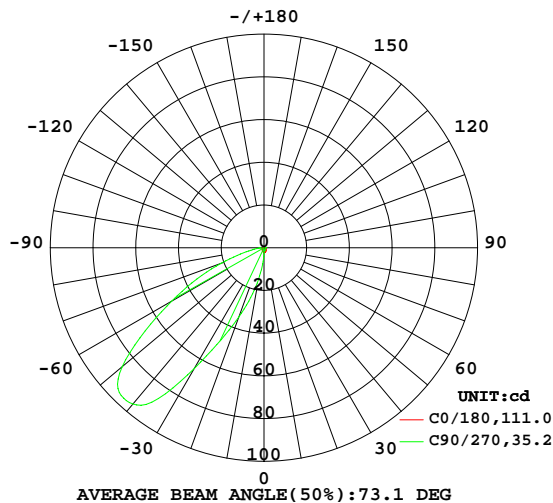


LUMINAIRE PHOTOMETRIC TEST REPORT

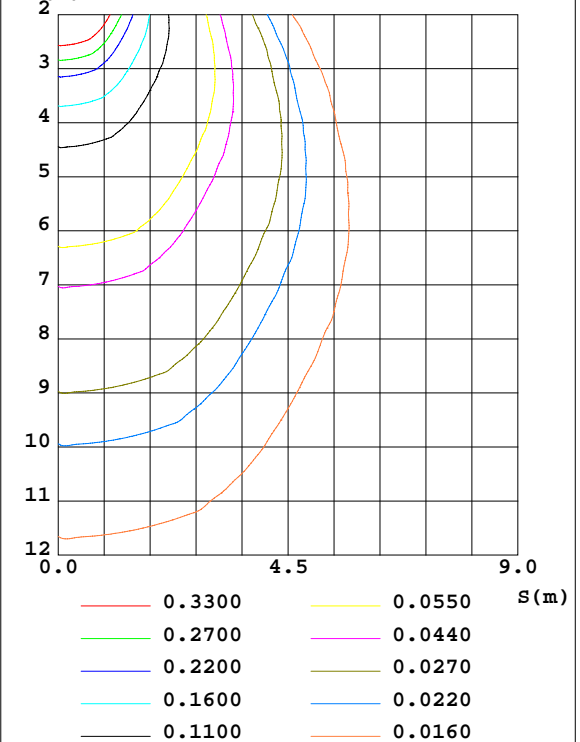
Test:U:229.72V I:0.0309A P:3.8566W PF:0.5439 Freq:49.99Hz Lamp Flux:78.8314x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 75*75*40	SERIAL No.:
MFR.:	SUR.:0.025*0.018	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 20.44 lm/W			
MODEL		Imax(cd)	96.30	S/MH(C0/180)	1.09
NOMINAL POWER(W)	4	LOR(%)	100.0	S/MH(C90/270)	4.25
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	78.846	η UP,DN(C0-180)	0.0,5.9
NOMINAL FLUX(lm)	78.8314	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,94.1
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	230.0	η down(%)	100.0	CIBSE SHR MAX	1.00

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-09-27

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

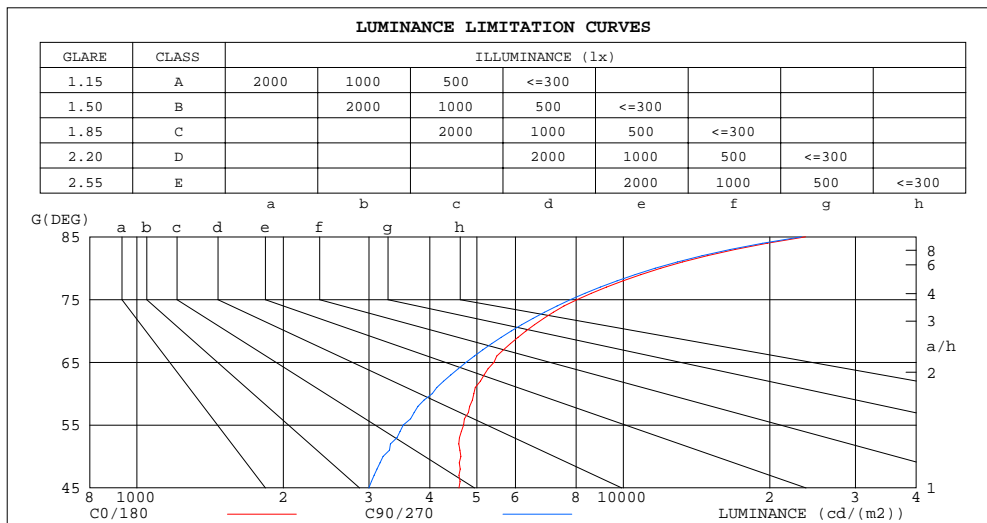
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	$\%lum, lamp$
10	2.182	1.675	1.624	1.856	2.036	10.26	15.08	10.67	0- 10	0.4171	0.4171	0.53,0.53
20	2.054	1.392	1.298	1.820	1.829	20.56	34.49	21.99	10- 20	2.411	2.828	3.59,3.59
30	1.796	1.212	1.100	1.984	1.554	31.60	65.15	34.17	20- 30	6.579	9.407	11.9,11.9
40	1.581	1.100	0.9881	2.542	1.314	42.80	95.46	46.97	30- 40	13.76	23.16	29.4,29.4
50	1.340	1.067	0.9278	3.356	1.099	46.04	86.73	49.89	40- 50	19.65	42.81	54.3,54.3
60	1.109	1.071	0.9106	4.132	0.9532	31.45	49.58	32.99	50- 60	18.14	60.95	77.3,77.3
70	0.9709	1.096	0.9053	4.665	0.9287	15.44	21.38	11.40	60- 70	10.40	71.36	90.5,90.5
80	0.9328	1.185	0.9088	4.931	0.9207	11.01	5.464	3.763	70- 80	4.792	76.15	96.6,96.6
90	0.9278	1.074	0.9622	3.926	0.9192	8.943	1.392	1.383	80- 90	2.696	78.85	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-09-27

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:229.72V I:0.0309A P:3.8566W PF:0.5439 Freq:49.99Hz Lamp Flux:78.8314x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 75*75*40	SERIAL No.:
MFR.:	SUR.:0.025*0.018	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	23694	23217
80	11938	11631
75	8040	7788
70	6308	5882
65	5421	4751
60	4928	4047
55	4694	3528
50	4633	3208
45	4592	2997

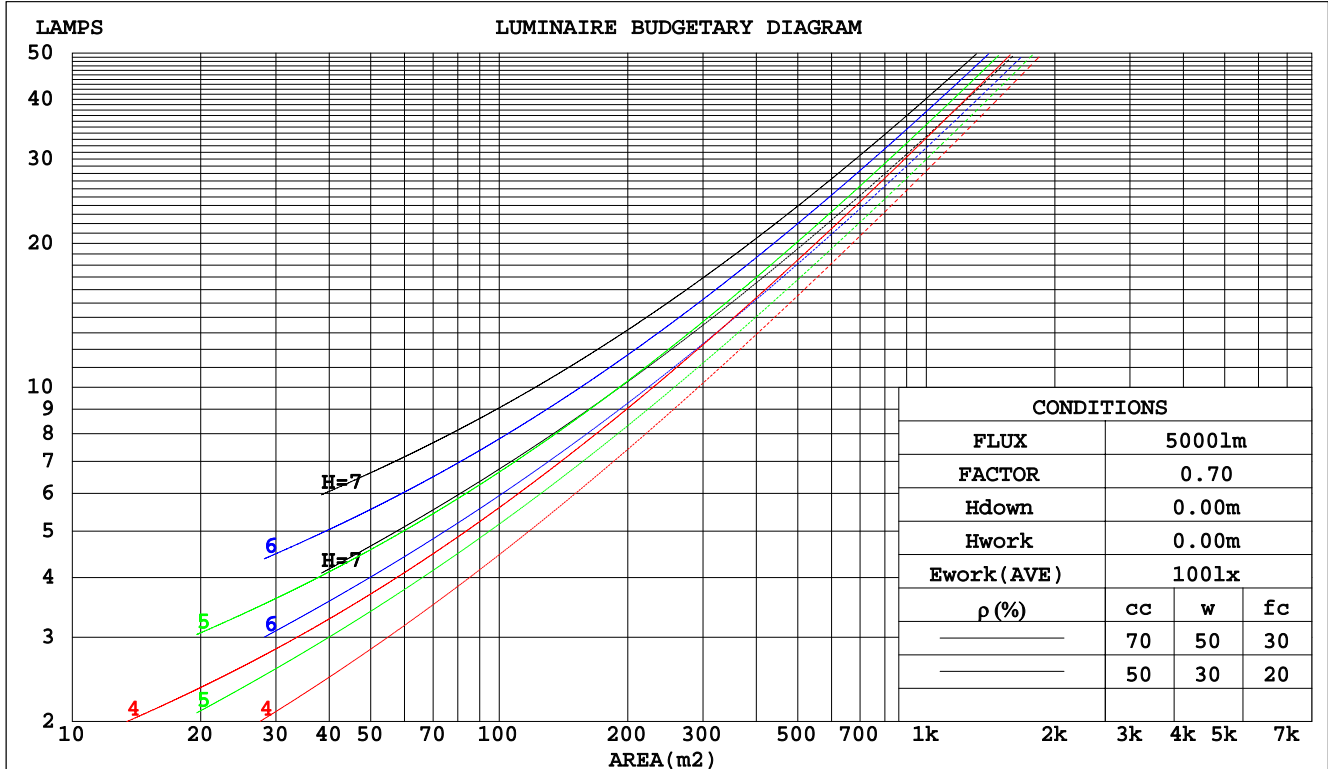
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-09-27

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:229.72V I:0.0309A P:3.8566W PF:0.5439 Freq:49.99Hz Lamp Flux:78.8314x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 75*75*40	SERIAL No.:
MFR.:	SUR.:0.025*0.018	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	1.00
1.0	1.02	.97	.93	.90	.95	.92	.96	.92	.89	.92	.89	.86	.88	.85	.83	.81
2.0	.87	.80	.73	.85	.79	.73	.82	.76	.71	.78	.74	.69	.75	.71	.68	.65
3.0	.75	.66	.59	.74	.65	.58	.70	.63	.57	.68	.61	.56	.65	.60	.55	.53
4.0	.65	.55	.48	.64	.55	.48	.61	.53	.47	.59	.52	.46	.56	.50	.45	.43
5.0	.57	.47	.39	.56	.46	.39	.53	.45	.39	.51	.44	.38	.49	.43	.38	.35
6.0	.50	.40	.33	.49	.40	.33	.47	.39	.32	.45	.38	.32	.44	.37	.32	.29
7.0	.44	.35	.28	.43	.34	.28	.42	.33	.27	.40	.33	.27	.39	.32	.27	.25
8.0	.39	.30	.24	.39	.30	.24	.37	.29	.23	.36	.29	.23	.35	.28	.23	.21
9.0	.35	.26	.20	.35	.26	.20	.34	.26	.20	.32	.25	.20	.31	.25	.20	.18
10.0	.32	.23	.18	.32	.23	.18	.30	.23	.18	.29	.22	.17	.29	.22	.17	.15



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-09-27

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:229.72V I:0.0309A P:3.8566W PF:0.5439 Freq:49.99Hz Lamp Flux:78.8314x1 lm								
NAME:			TYPE:			WEIGHT:		
SPEC.:			DIM.: 75*75*40			SERIAL No.:		
MFR.:			SUR.:0.025*0.018			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	.344	.195	.062	.337	.192	.061	.323	.185	.059	.311	.179	.058	.299	.174	.056	
2.0	.321	.176	.054	.315	.173	.053	.303	.168	.052	.292	.164	.051	.281	.159	.050	
3.0	.297	.158	.047	.291	.156	.047	.281	.152	.046	.271	.148	.046	.262	.145	.045	
4.0	.274	.143	.042	.269	.141	.042	.260	.138	.041	.251	.135	.041	.243	.132	.040	
5.0	.253	.129	.037	.249	.128	.037	.240	.125	.037	.232	.123	.036	.225	.120	.036	
6.0	.235	.118	.034	.231	.117	.034	.223	.114	.033	.216	.112	.033	.209	.110	.033	
7.0	.218	.108	.031	.215	.107	.030	.208	.105	.030	.201	.103	.030	.195	.101	.030	
8.0	.203	.099	.028	.200	.098	.028	.194	.097	.028	.188	.095	.027	.183	.094	.027	
9.0	.190	.092	.026	.187	.091	.026	.182	.090	.025	.176	.088	.025	.171	.087	.025	
10.0	.178	.085	.024	.175	.085	.024	.171	.084	.024	.166	.082	.023	.161	.081	.023	

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	.191	.191	.191	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.183	.156	.132	.156	.134	.113	.107	.092	.078	.062	.053	.046	.020	.017	.015	
2.0	.176	.132	.094	.151	.113	.082	.103	.078	.057	.060	.046	.033	.019	.015	.011	
3.0	.170	.114	.070	.146	.099	.061	.100	.069	.043	.058	.040	.025	.019	.013	.008	
4.0	.163	.102	.055	.140	.088	.047	.096	.061	.033	.056	.036	.020	.018	.012	.006	
5.0	.156	.092	.044	.134	.079	.038	.092	.055	.027	.054	.032	.016	.017	.011	.005	
6.0	.149	.083	.036	.128	.072	.031	.089	.051	.022	.051	.030	.013	.017	.010	.004	
7.0	.143	.077	.031	.123	.067	.027	.085	.047	.019	.049	.027	.011	.016	.009	.004	
8.0	.136	.071	.026	.117	.062	.023	.081	.043	.016	.047	.026	.010	.015	.008	.003	
9.0	.130	.066	.023	.112	.058	.020	.078	.040	.014	.045	.024	.009	.015	.008	.003	
10.0	.124	.062	.021	.107	.054	.018	.074	.038	.013	.043	.022	.008	.014	.007	.003	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2024-09-27

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
 Humidity:65.0%
 Test Distance:11.700m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:229.72V I:0.0309A P:3.8566W PF:0.5439 Freq:49.99Hz Lamp Flux:78.8314x1 lm											
NAME:					TYPE:			WEIGHT:			
SPEC.:					DIM.: 75*75*40			SERIAL No.:			
MFR.:					SUR.:0.025*0.018			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	9.1	10.8	9.4	11.1	11.3	8.3	10.0	8.6	10.2	10.4	
	3H	12.1	13.7	12.4	13.9	14.2	11.5	13.0	11.8	13.3	13.5
	4H	13.8	15.3	14.2	15.6	15.9	13.3	14.8	13.6	15.1	15.3
	6H	15.8	17.2	16.1	17.5	17.8	15.4	16.8	15.7	17.1	17.4
	8H	16.9	18.3	17.3	18.6	18.9	16.6	17.9	16.9	18.2	18.5
	12H	18.2	19.5	18.6	19.8	20.1	17.9	19.2	18.3	19.5	19.8
4H	2H	10.2	11.7	10.6	12.0	12.3	9.7	11.2	10.0	11.4	11.7
	3H	13.5	14.8	13.8	15.1	15.4	13.0	14.3	13.4	14.6	14.9
	4H	15.4	16.6	15.8	16.9	17.2	14.9	16.1	15.3	16.5	16.8
	6H	17.6	18.6	18.0	19.0	19.3	17.2	18.2	17.6	18.6	18.9
	8H	18.8	19.8	19.2	20.1	20.5	18.4	19.4	18.8	19.8	20.1
	12H	20.2	21.1	20.6	21.5	21.9	19.8	20.7	20.3	21.1	21.5
8H	4H	16.4	17.4	16.8	17.7	18.1	16.1	17.0	16.5	17.4	17.8
	6H	18.9	19.7	19.3	20.1	20.5	18.6	19.4	19.0	19.8	20.2
	8H	20.3	21.0	20.8	21.5	21.9	20.0	20.7	20.4	21.1	21.6
	12H	21.9	22.6	22.4	23.0	23.5	21.6	22.2	22.1	22.7	23.1
12H	4H	16.6	17.5	17.1	17.9	18.3	16.4	17.3	16.8	17.7	18.1
	6H	19.4	20.1	19.8	20.5	21.0	19.1	19.8	19.5	20.2	20.7
	8H	20.9	21.6	21.4	22.0	22.5	20.6	21.3	21.1	21.7	22.2
Variations with the observer position at spacings:											
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
2.0H	+ 0.3 / - 0.4					+ 0.3 / - 0.4					

CIE Pub.117, 78.83 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = -8.8$)

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2024-09-27

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
 Humidity:65.0%
 Test Distance:11.700m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:229.72V I:0.0309A P:3.8566W PF:0.5439 Freq:49.99Hz Lamp Flux:78.8314x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 75*75*40	SERIAL No.:
MFR.:	SUR.:0.025*0.018	Shielding Angle:

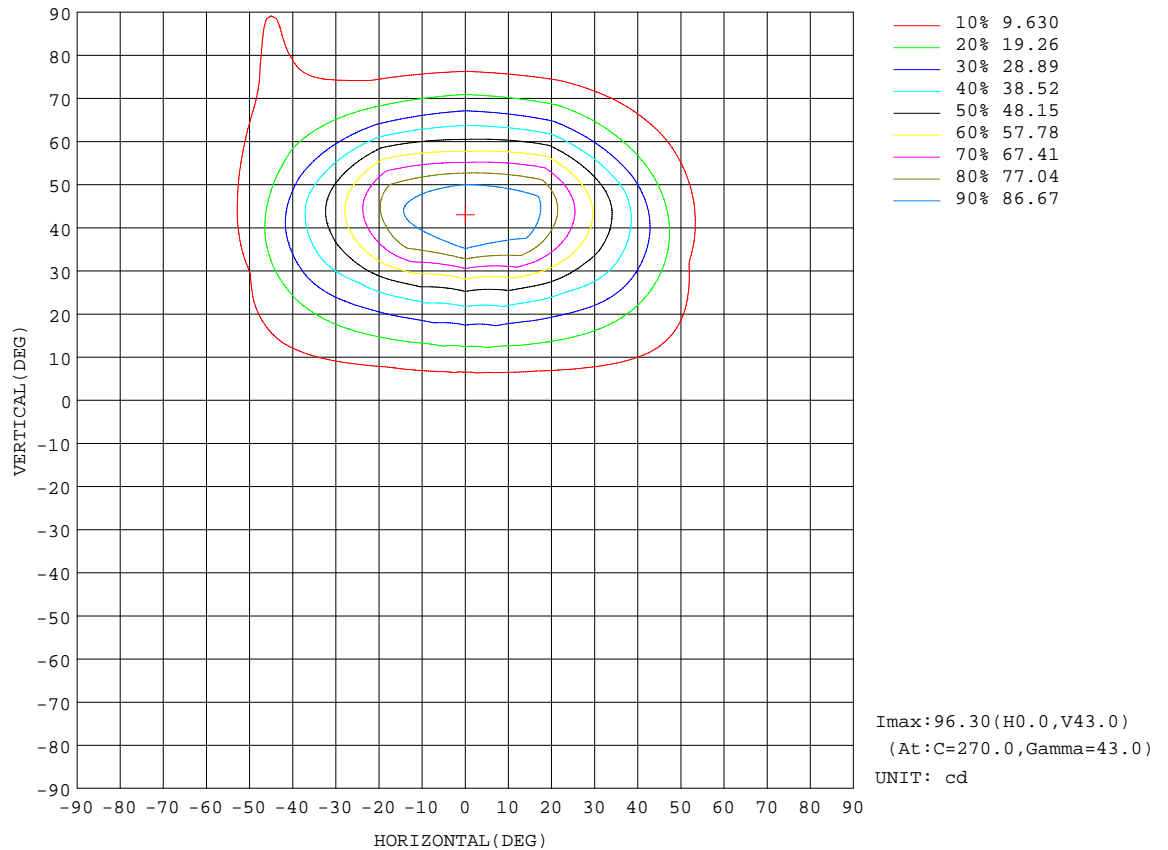
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	47	34	26	46	34	26	45	33	26	18
0.80	59	45	37	58	45	37	56	44	36	28
1.00	69	57	48	68	56	48	66	58	47	39
1.25	78	66	58	76	65	57	73	64	56	48
1.50	83	72	64	82	71	64	78	69	63	54
2.00	92	82	75	90	81	74	86	78	72	64
2.50	96	87	80	94	86	79	90	83	78	69
3.00	100	92	86	98	90	85	93	87	82	73
4.00	104	98	92	102	96	91	97	92	88	79
5.00	107	101	96	104	99	95	99	95	92	82
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2024-09-27

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
 Humidity:65.0%
 Test Distance:11.700m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:229.72V I:0.0309A P:3.8566W PF:0.5439 Freq:49.99Hz Lamp Flux:78.8314x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 75*75*40	SERIAL No.:
MFR.:	SUR.:0.025*0.018	Shielding Angle:

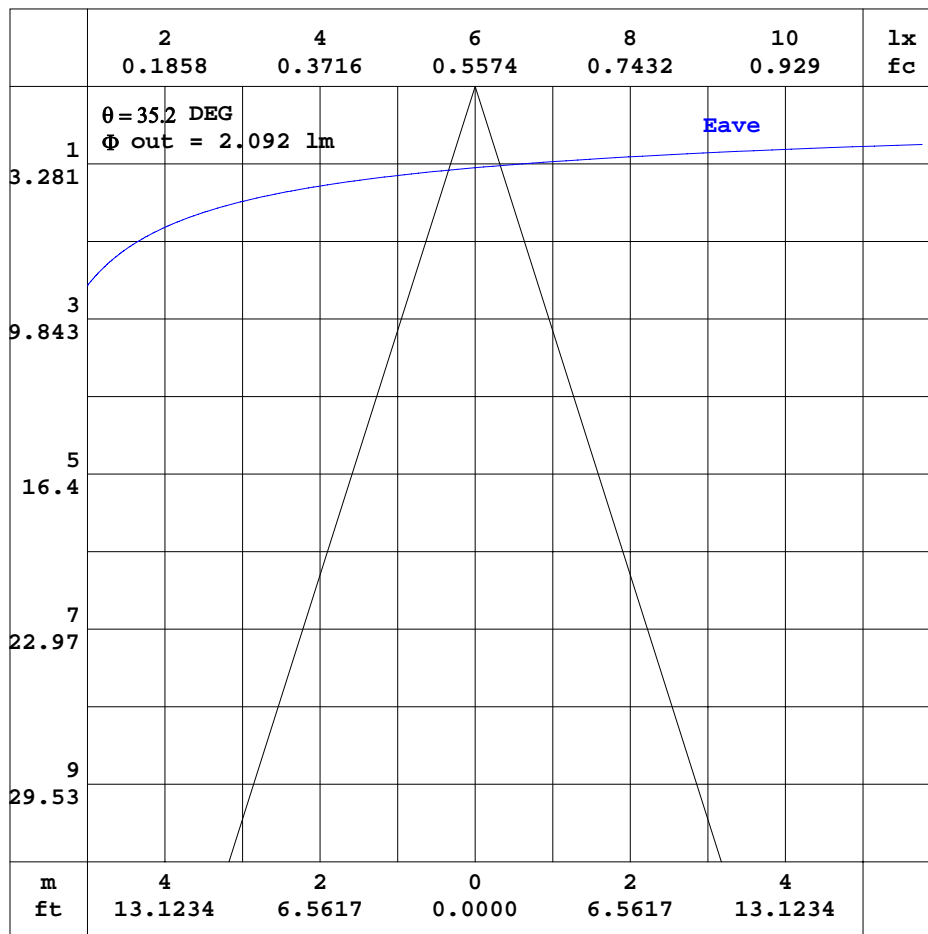


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-09-27

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

AAI CURVES

Test:U:229.72V I:0.0309A P:3.8566W PF:0.5439 Freq:49.99Hz Lamp Flux:78.8314x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 75*75*40	SERIAL No.:
MFR.:	SUR.:0.025*0.018	Shielding Angle:



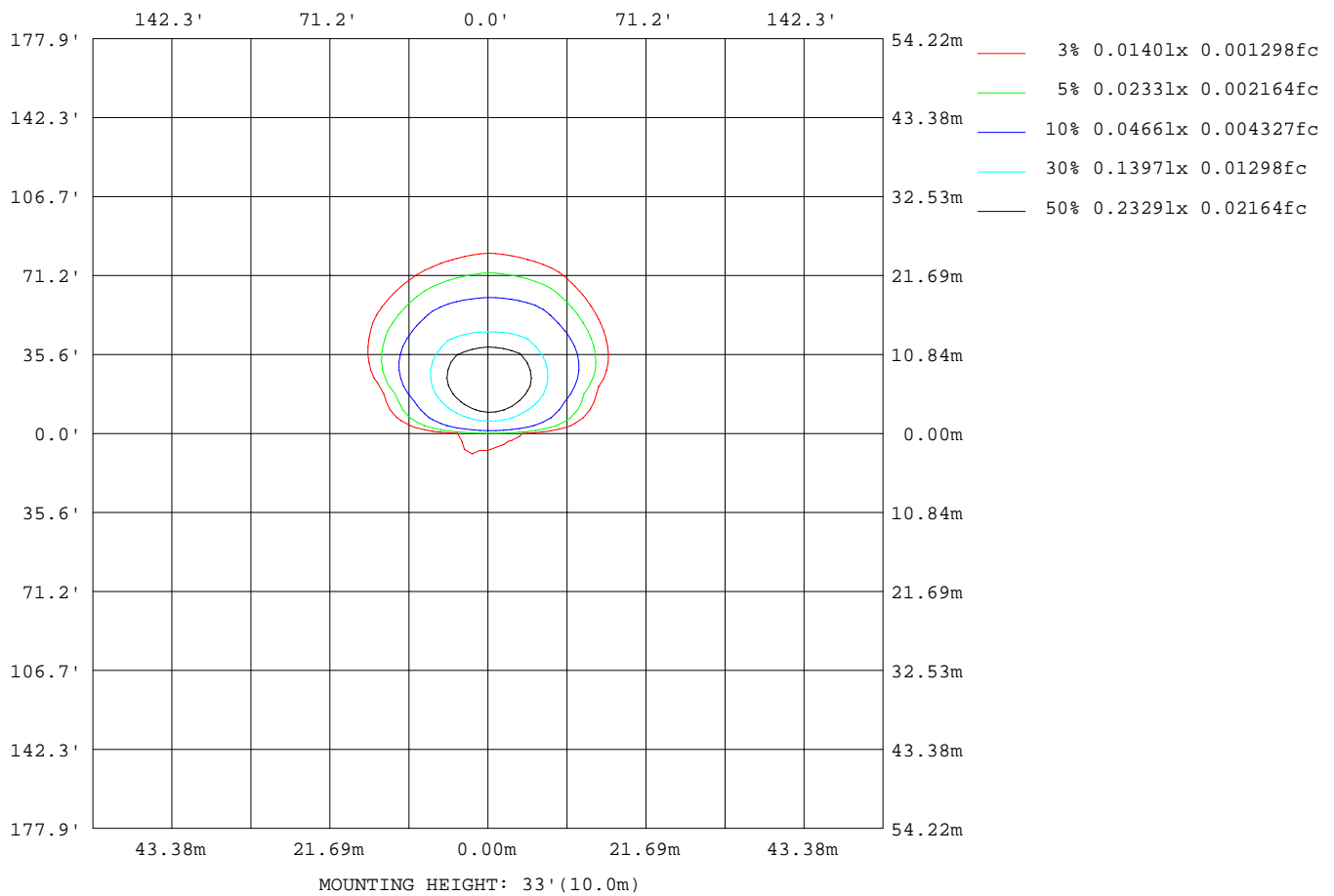
Note:The Curves indicate the illuminated area and the average illuminance when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-09-27

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 γ Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:229.72V I:0.0309A P:3.8566W PF:0.5439 Freq:49.99Hz Lamp Flux:78.8314x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 75*75*40	SERIAL No.:
MFR.:	SUR.:0.025*0.018	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-09-27

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity: 65.0%
Test Distance: 11.700m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:229.72V I:0.0309A P:3.8566W PF:0.5439 Freq:49.99Hz Lamp Flux:78.8314x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 75*75*40	SERIAL No.:
MFR.:	SUR.:0.025*0.018	Shielding Angle:

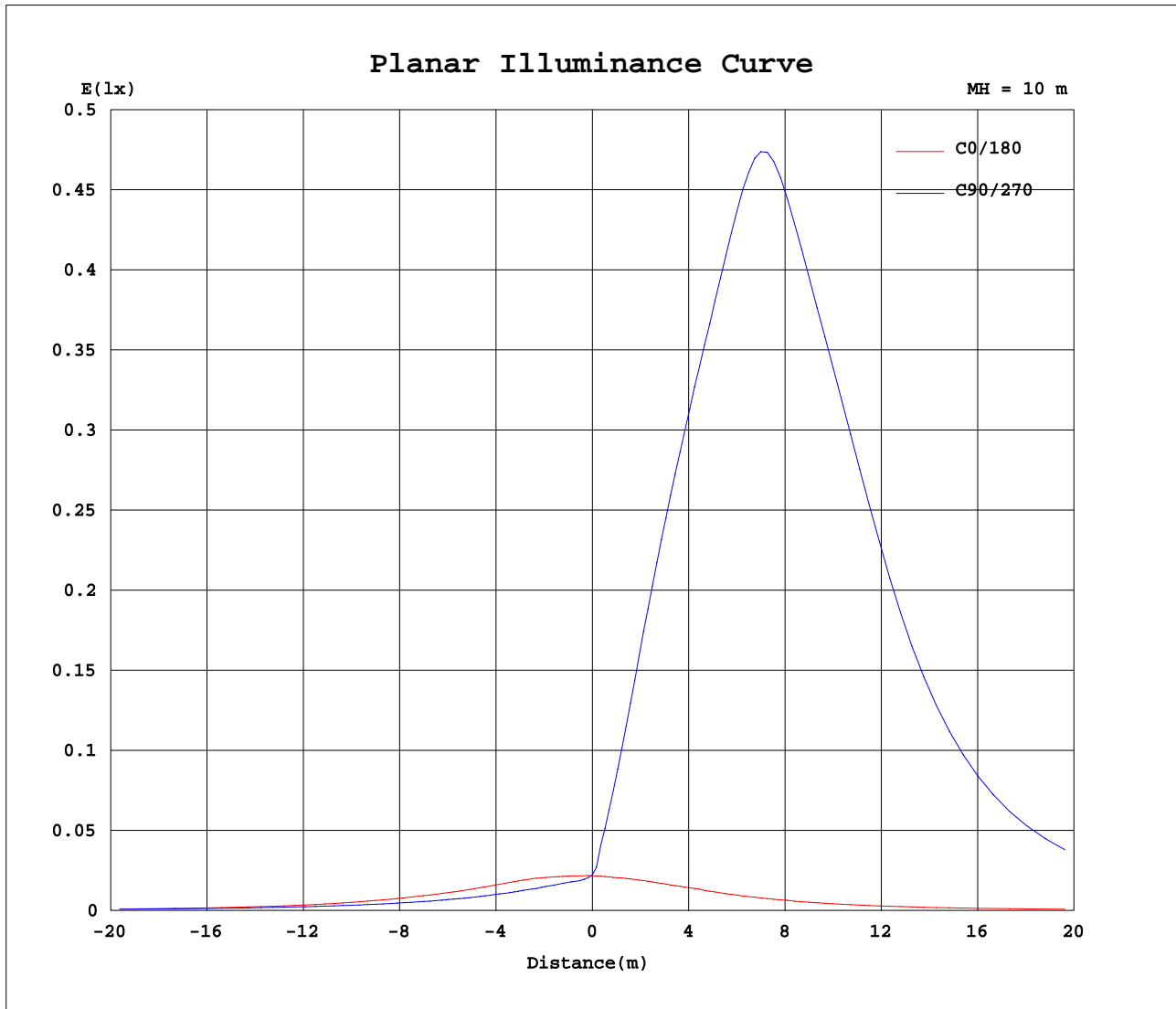
AvgL	cd/m2
L_0~180(65)av	5165
L_0~180(75)av	7987
L_0~180(85)av	23571
L_90~270(65)av	93613
L_90~270(75)av	53056
L_90~270(85)av	44193
L_45(65)av	60541
L_45(75)av	53033
L_45(85)av	122620

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-09-27

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-09-27

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity: 65.0%
Test Distance: 11.700m [K=1.0000]
Remarks:

```

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Remarks:

```