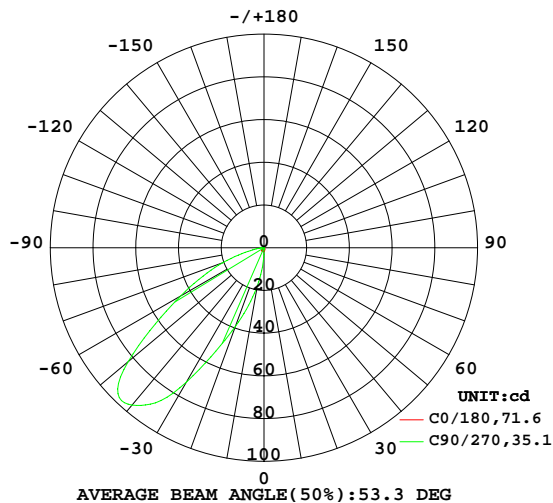


LUMINAIRE PHOTOMETRIC TEST REPORT

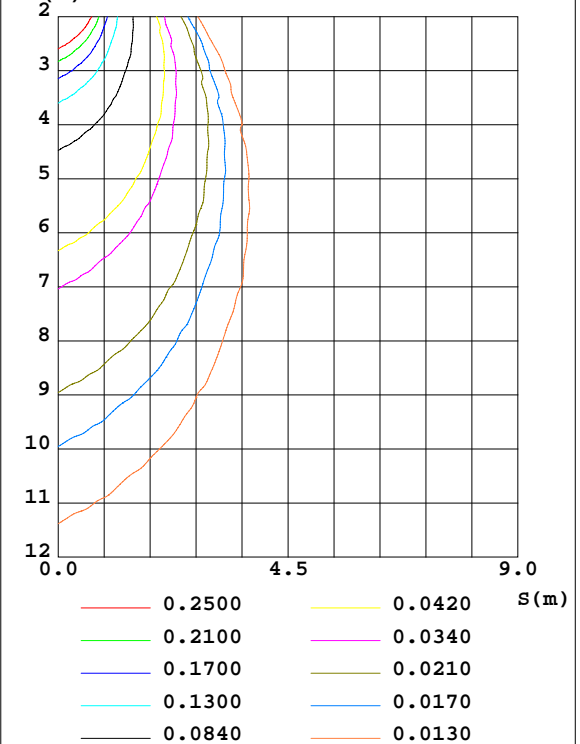
Test:U:229.75V I:0.0303A P:3.7797W PF:0.5425 Freq:49.99Hz Lamp Flux:72.416x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 75*75*40	SERIAL No.:
MFR.:	SUR.:0.025*0.018	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 19.16 lm/W			
MODEL		Imax(cd)	97.83	S/MH(C0/180)	1.38
NOMINAL POWER(W)	4	LOR(%)	100.0	S/MH(C90/270)	4.57
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	72.415	η UP,DN(C0-180)	0.0,0.5
NOMINAL FLUX(lm)	72.416	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,99.5
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:2024-10-11

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:

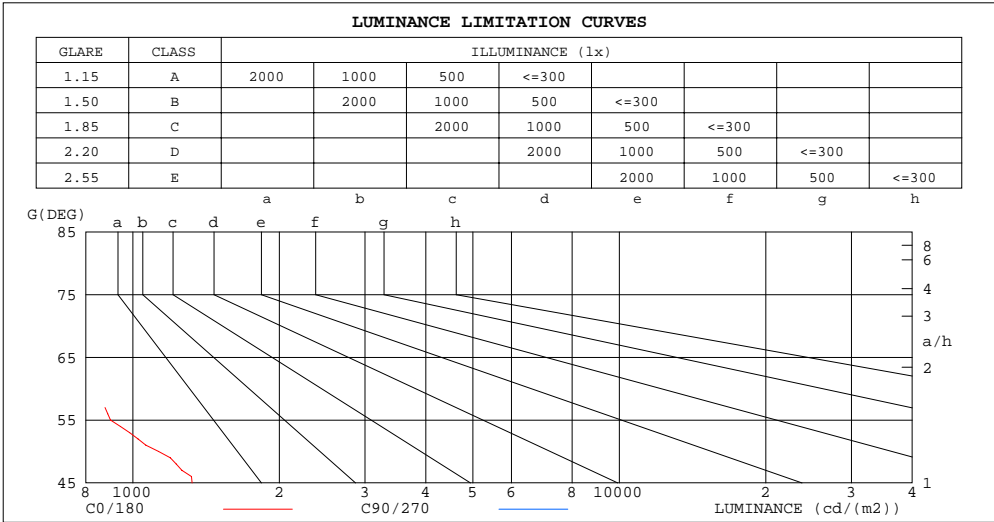
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	$\%lum, lamp$
10	1.410	0.7392	0.6448	0.8333	1.899	12.83	17.97	12.23	0- 10	0.4359	0.4359	0.60,0.60
20	1.109	0.4390	0.3180	0.5071	1.912	24.94	39.13	24.01	10- 20	2.620	3.056	4.22,4.22
30	0.8077	0.2405	0.1289	0.2669	1.847	37.37	72.62	35.79	20- 30	7.132	10.19	14.1,14.1
40	0.5504	0.0945	0.0346	0.1119	1.434	48.84	96.16	45.50	30- 40	14.14	24.32	33.6,33.6
50	0.3266	0.0087	0	0.0172	0.7386	50.14	82.93	46.43	40- 50	19.35	43.67	60.3,60.3
60	0.1554	0	0	0	0.2834	27.74	44.95	27.24	50- 60	16.47	60.14	83.1,83.1
70	0.0174	0	0	0	0.0857	9.373	20.53	9.788	60- 70	8.508	68.65	94.8,94.8
80	0	0	0	0	0	2.559	4.513	2.650	70- 80	3.099	71.75	99.1,99.1
90	0	0	0	0	0	0.3523	0.4381	0.4725	80- 90	0.6661	72.42	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:2024-10-11

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:229.75V I:0.0303A P:3.7797W PF:0.5425 Freq:49.99Hz Lamp Flux:72.416x1 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	0	0
80	0	0
75	0	0
70	113	0
65	409	0
60	691	0
55	899	0
50	1129	0
45	1324	1

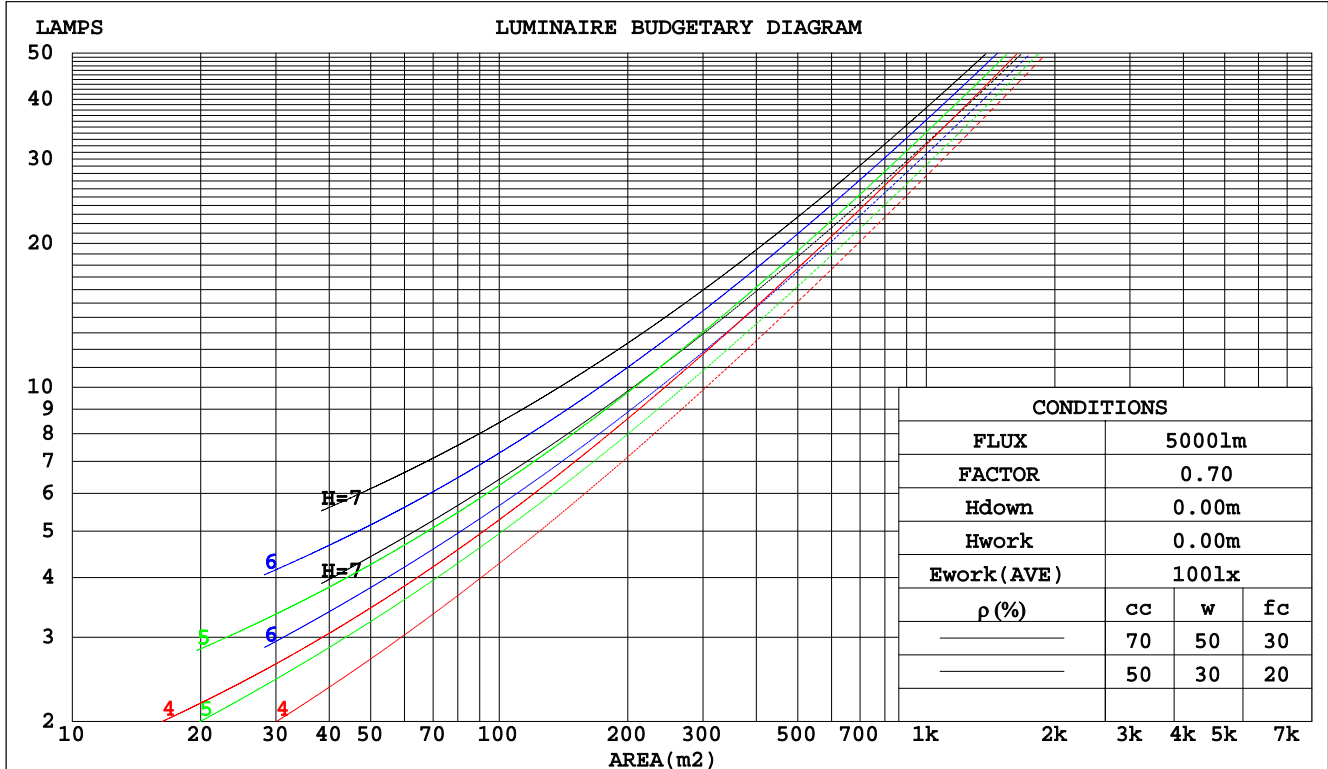
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-10-11

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:229.75V I:0.0303A P:3.7797W PF:0.5425 Freq:49.99Hz Lamp Flux:72.416x1 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	.00
1.0	1.04	.00	.96	1.02	.98	.95	.98	.94	.92	.94	.91	.89	.90	.88	.86	.84
2.0	.90	.83	.77	.88	.82	.76	.84	.79	.74	.81	.77	.73	.78	.74	.71	.69
3.0	.78	.69	.63	.76	.68	.62	.73	.66	.61	.70	.65	.60	.68	.63	.59	.56
4.0	.68	.58	.51	.66	.58	.51	.64	.56	.50	.61	.55	.50	.59	.54	.49	.47
5.0	.59	.50	.43	.58	.49	.42	.56	.48	.42	.54	.47	.41	.52	.46	.41	.39
6.0	.52	.43	.36	.51	.42	.36	.49	.41	.35	.48	.40	.35	.46	.40	.35	.32
7.0	.46	.37	.30	.46	.37	.30	.44	.36	.30	.42	.35	.30	.41	.34	.30	.27
8.0	.41	.32	.26	.41	.32	.26	.39	.31	.26	.38	.31	.26	.37	.30	.25	.23
9.0	.37	.28	.23	.37	.28	.22	.35	.28	.22	.34	.27	.22	.33	.27	.22	.20
10.0	.34	.25	.20	.33	.25	.20	.32	.25	.19	.31	.24	.19	.30	.24	.19	.17



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-10-11

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:229.75V I:0.0303A P:3.7797W PF:0.5425 Freq:49.99Hz Lamp Flux:72.416x1 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	.305	.173	.055	.298	.170	.054	.284	.163	.052	.272	.157	.050	.261	.151	.049	
2.0	.296	.162	.050	.290	.160	.049	.278	.155	.048	.267	.150	.047	.257	.146	.046	
3.0	.280	.149	.045	.274	.147	.044	.264	.143	.043	.254	.139	.043	.245	.136	.042	
4.0	.261	.136	.040	.256	.134	.040	.247	.131	.039	.238	.128	.039	.230	.125	.038	
5.0	.244	.124	.036	.239	.123	.036	.231	.120	.035	.223	.118	.035	.216	.115	.035	
6.0	.227	.114	.033	.223	.113	.032	.216	.111	.032	.209	.108	.032	.202	.106	.032	
7.0	.212	.105	.030	.209	.104	.030	.202	.102	.029	.196	.100	.029	.190	.099	.029	
8.0	.198	.097	.027	.195	.096	.027	.189	.095	.027	.184	.093	.027	.178	.091	.027	
9.0	.186	.090	.025	.183	.089	.025	.178	.088	.025	.173	.087	.025	.168	.085	.025	
10.0	.175	.084	.023	.172	.083	.023	.167	.082	.023	.163	.081	.023	.158	.080	.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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.180	.156	.135	.154	.134	.116	.105	.092	.080	.061	.053	.047	.019	.017	.015	
2.0	.173	.132	.097	.148	.114	.084	.101	.079	.059	.058	.046	.034	.019	.015	.011	
3.0	.166	.114	.073	.143	.099	.063	.098	.069	.044	.057	.040	.026	.018	.013	.009	
4.0	.160	.101	.056	.137	.087	.049	.094	.061	.035	.055	.036	.020	.018	.012	.007	
5.0	.153	.091	.045	.132	.079	.039	.091	.055	.028	.053	.032	.016	.017	.011	.005	
6.0	.147	.083	.037	.126	.072	.032	.087	.050	.023	.051	.030	.014	.016	.010	.004	
7.0	.140	.076	.031	.121	.066	.027	.083	.046	.019	.048	.027	.012	.016	.009	.004	
8.0	.134	.071	.027	.116	.061	.024	.080	.043	.017	.046	.025	.010	.015	.008	.003	
9.0	.128	.066	.024	.110	.057	.021	.077	.040	.015	.045	.024	.009	.014	.008	.003	
10.0	.122	.062	.021	.106	.054	.019	.073	.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:2024-10-11

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:229.75V I:0.0303A P:3.7797W PF:0.5425 Freq:49.99Hz Lamp Flux:72.416x1 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	2H	-6.4	-4.8	-6.2	-4.6	-4.4	-23.1	-21.5	-22.8	-21.3	-21.0	
	3H	-6.3	-4.8	-6.0	-4.6	-4.3	-23.3	-21.8	-23.0	-21.6	-21.4	
	4H	-6.4	-5.0	-6.1	-4.8	-4.5	-23.5	-22.0	-23.1	-21.8	-21.5	
	6H	-6.5	-5.2	-6.2	-4.9	-4.7	-23.6	-22.2	-23.2	-22.0	-21.7	
	8H	-6.6	-5.3	-6.3	-5.0	-4.7	-23.6	-22.3	-23.3	-22.0	-21.8	
	12H	-6.7	-5.4	-6.3	-5.1	-4.8	-23.7	-22.4	-23.3	-22.1	-21.8	
	4H	2H	-6.8	-5.4	-6.5	-5.1	-4.8	-23.4	-22.0	-23.0	-21.7	-21.4
		3H	-6.7	-5.4	-6.3	-5.1	-4.8	-23.6	-22.4	-23.2	-22.1	-21.8
		4H	-6.8	-5.6	-6.4	-5.3	-5.0	-23.7	-22.6	-23.3	-22.3	-21.9
		6H	-6.8	-5.9	-6.4	-5.5	-5.1	-23.8	-22.8	-23.4	-22.4	-22.1
		8H	-6.9	-6.0	-6.5	-5.6	-5.2	-23.8	-22.9	-23.4	-22.5	-22.2
		12H	-6.9	-6.1	-6.5	-5.7	-5.3	-23.9	-23.0	-23.4	-22.6	-22.2
8H	4H	-6.9	-6.0	-6.5	-5.6	-5.2	-23.8	-22.9	-23.4	-22.5	-22.2	
	6H	-7.0	-6.2	-6.5	-5.8	-5.4	-23.9	-23.2	-23.5	-22.7	-22.3	
	8H	-7.0	-6.3	-6.5	-5.9	-5.5	-23.9	-23.3	-23.5	-22.9	-22.4	
	12H	-7.0	-6.5	-6.6	-6.0	-5.6	-24.0	-23.4	-23.5	-23.0	-22.5	
12H	4H	-6.9	-6.1	-6.5	-5.7	-5.3	-23.9	-23.0	-23.4	-22.6	-22.2	
	6H	-7.0	-6.3	-6.5	-5.9	-5.5	-23.9	-23.3	-23.5	-22.9	-22.4	
	8H	-7.0	-6.5	-6.6	-6.0	-5.6	-24.0	-23.4	-23.5	-23.0	-22.5	
Variations with the observer position at spacings:												
S = 1.0H		+ 4.1 / - 7.6				+ 4.3 / - 1.\$						
1.5H		+ 5.4 / -43.9				+ 6.4 / - 1.\$						
2.0H		+ 6.6 / - 1.\$				+ 9.6 / - 1.\$						

CIE Pub.117, 72.42 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = -9.1)

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2024-10-11

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:229.75V I:0.0303A P:3.7797W PF:0.5425 Freq:49.99Hz Lamp Flux:72.416x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 75*75*40	SERIAL No.:
MFR.:	SUR.:0.025*0.018	Shielding Angle:

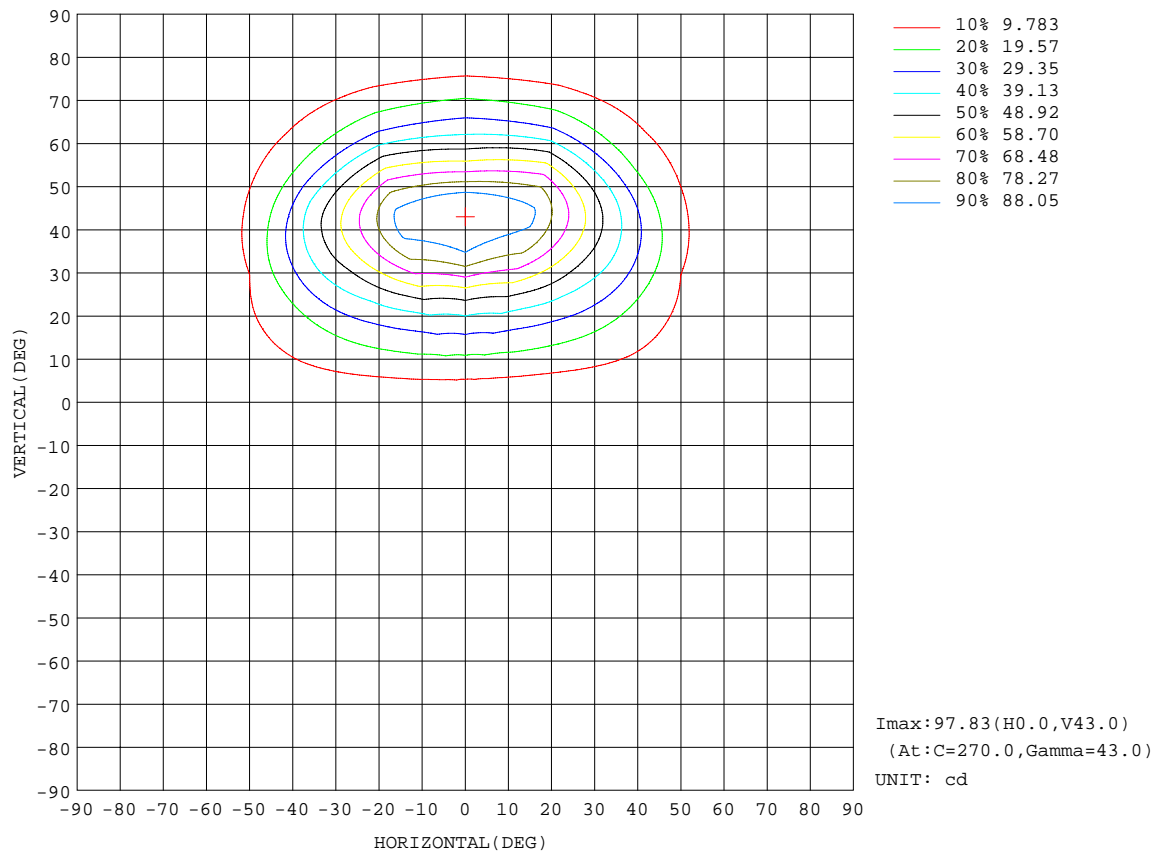
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	49	36	29	49	36	29	47	36	28	21
0.80	61	48	40	60	48	40	58	47	40	32
1.00	72	60	52	71	59	52	68	61	51	44
1.25	80	69	62	79	69	61	76	67	60	53
1.50	86	76	68	84	75	68	81	73	67	59
2.00	94	85	79	92	84	78	89	82	76	68
2.50	98	90	84	96	89	83	92	86	81	73
3.00	102	95	89	100	93	88	96	90	86	77
4.00	106	100	95	103	98	94	99	95	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										
SHRNM = 1.25										

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-10-11

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:

ISOCANDELA DIAGRAM

Test:U:229.75V I:0.0303A P:3.7797W PF:0.5425 Freq:49.99Hz Lamp Flux:72.416x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 75*75*40	SERIAL No.:
MFR.:	SUR.:0.025*0.018	Shielding Angle:

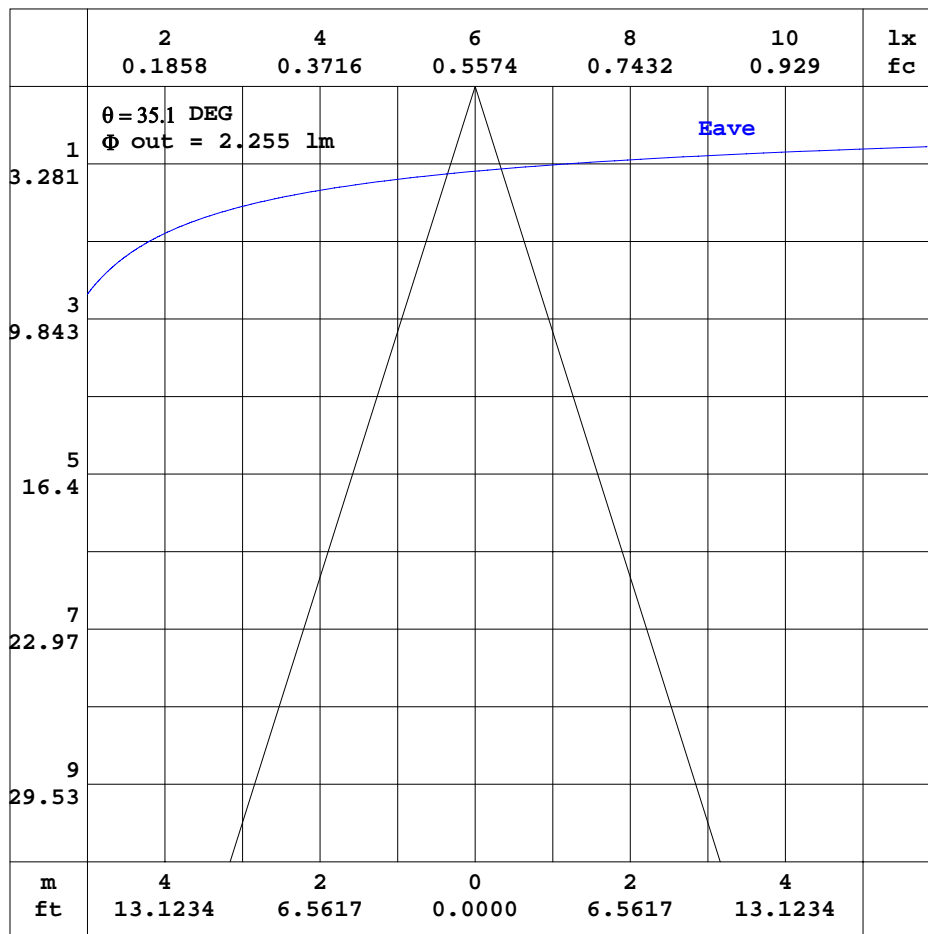


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-10-11

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:229.75V I:0.0303A P:3.7797W PF:0.5425 Freq:49.99Hz Lamp Flux:72.416x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 75*75*40	SERIAL No.:
MFR.:	SUR.:0.025*0.018	Shielding Angle:



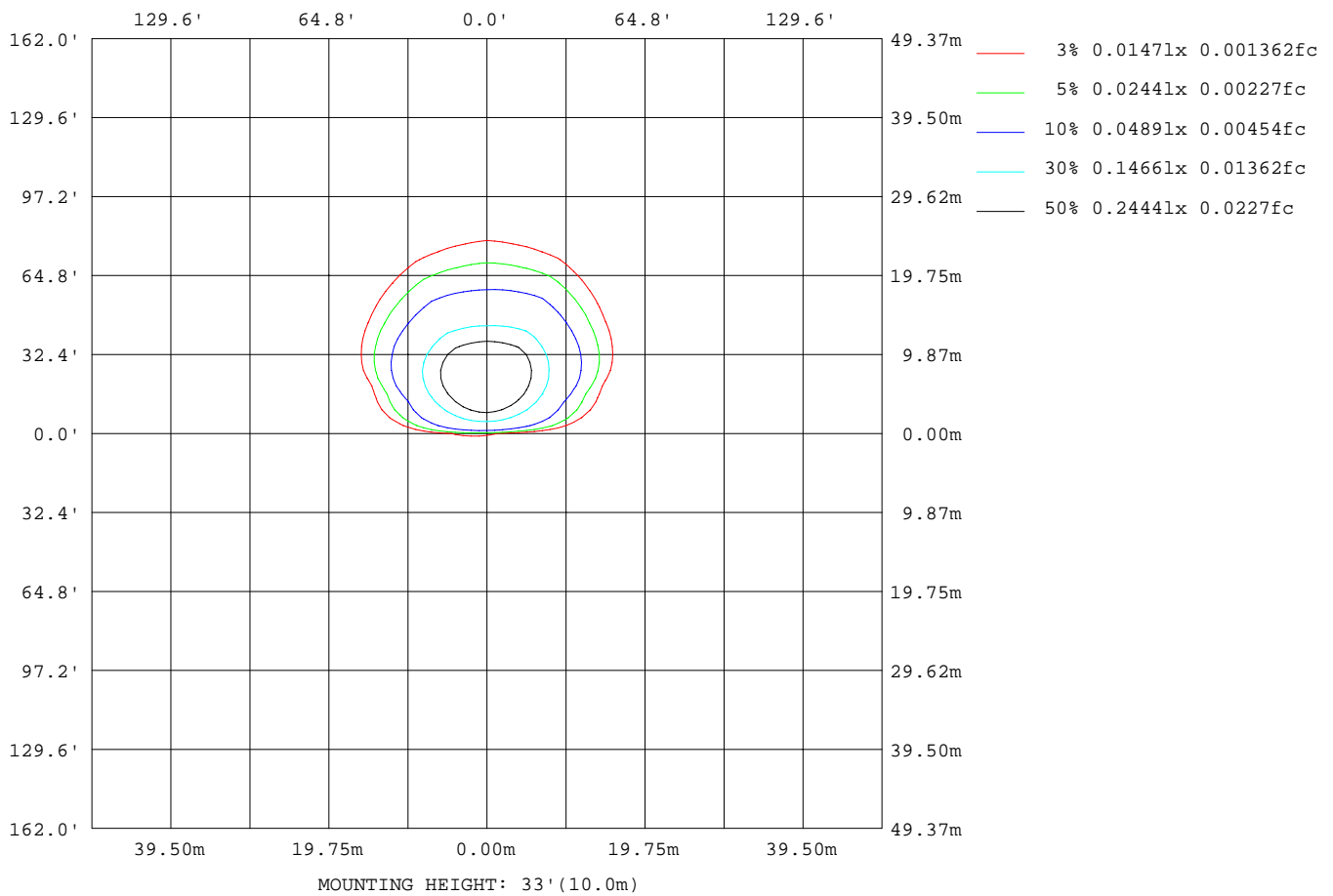
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-10-11

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:

ISOLUX DIAGRAM

Test:U:229.75V I:0.0303A P:3.7797W PF:0.5425 Freq:49.99Hz Lamp Flux:72.416x1 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: 2024-10-11

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:229.75V I:0.0303A P:3.7797W PF:0.5425 Freq:49.99Hz Lamp Flux:72.416x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 75*75*40	SERIAL No.:
MFR.:	SUR.:0.025*0.018	Shielding Angle:

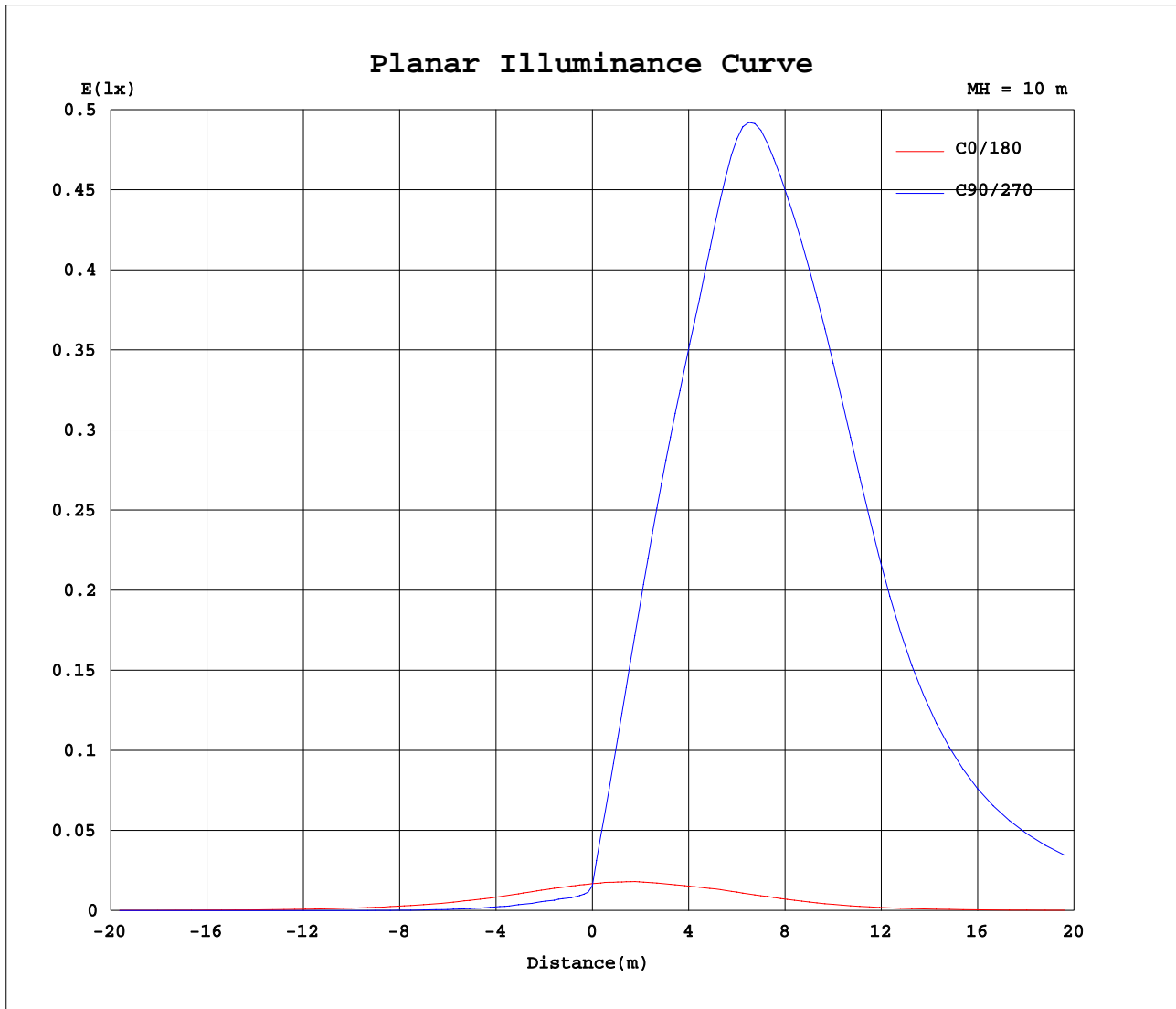
AvgL	cd/m2
L_0~180(65)av	633
L_0~180(75)av	36
L_0~180(85)av	0
L_90~270(65)av	82752
L_90~270(75)av	46403
L_90~270(85)av	19268
L_45(65)av	41676
L_45(75)av	22687
L_45(85)av	14496

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-10-11

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: 2024-10-11

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:

```

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:

```