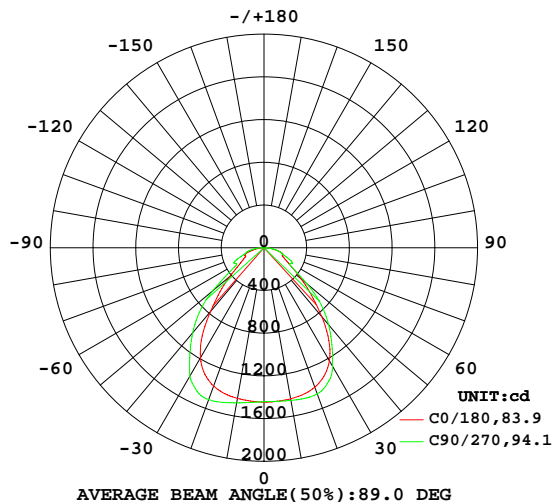


LUMINAIRE PHOTOMETRIC TEST REPORT

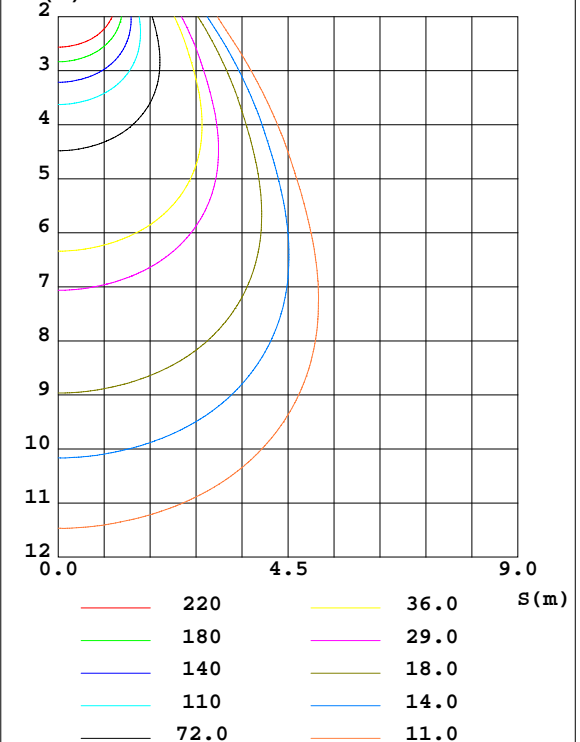
Test:U:229.75V I:0.2744A P:60.961W PF:0.9668 Freq:49.99Hz Lamp Flux:3172x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.6*0.184	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 52.03 lm/W			
MODEL		Imax(cd)	1514	S/MH(C0/180)	1.17
NOMINAL POWER(W)	60	LOR(%)	100.0	S/MH(C90/270)	1.33
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	3172.0	η UP,DN(C0-180)	0.0,49.4
NOMINAL FLUX(lm)	3172	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.6
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	230.0	η down(%)	100.0	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:
Test Date:2024-07-05

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:

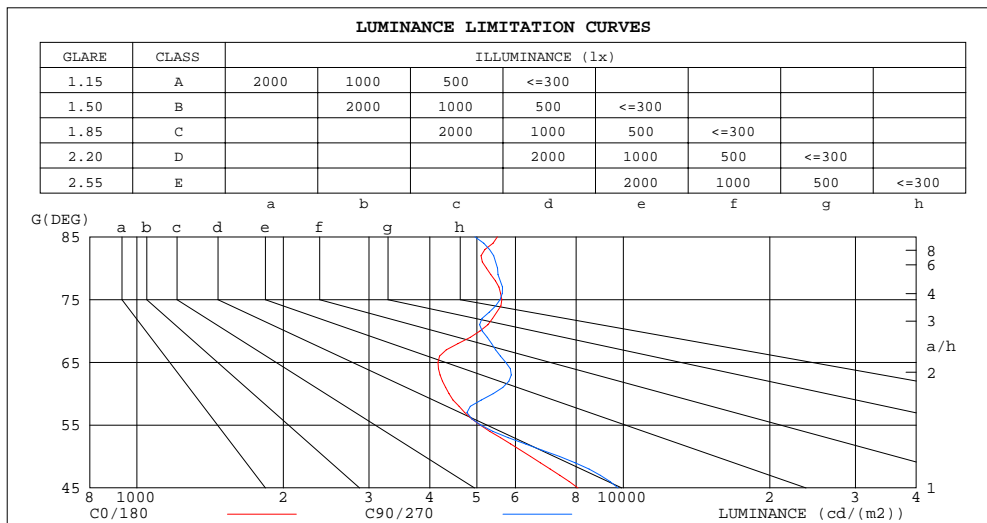
γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum, lamp
10	1436	1452	1433	1475					0- 10	138.1	138.1	4.35,4.35
20	1390	1456	1378	1514					10- 20	409.9	548.0	17.3,17.3
30	1225	1285	1190	1388					20- 30	632.9	1181	37.2,37.2
40	839.9	941.9	778.9	1039					30- 40	681.9	1863	58.7,58.7
50	457.4	524.5	418.1	628.3					40- 50	542.5	2405	75.8,75.8
60	242.0	298.0	228.2	299.8					50- 60	312.3	2718	85.7,85.7
70	191.6	193.5	188.1	216.9					60- 70	234.7	2952	93.1,93.1
80	100.3	105.7	85.23	124.1					70- 80	164.1	3116	98.2,98.2
90	3.204	1.280	1.943	9.175					80- 90	55.61	3172	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: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-07-05

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:0.2744A P:60.961W PF:0.9668 Freq:49.99Hz Lamp Flux:3172x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.6*0.184	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	5510	4955
80	5231	5515
75	5628	5581
70	5075	5125
65	4160	5731
60	4383	5399
55	5079	5091
50	6446	7391
45	8063	9752

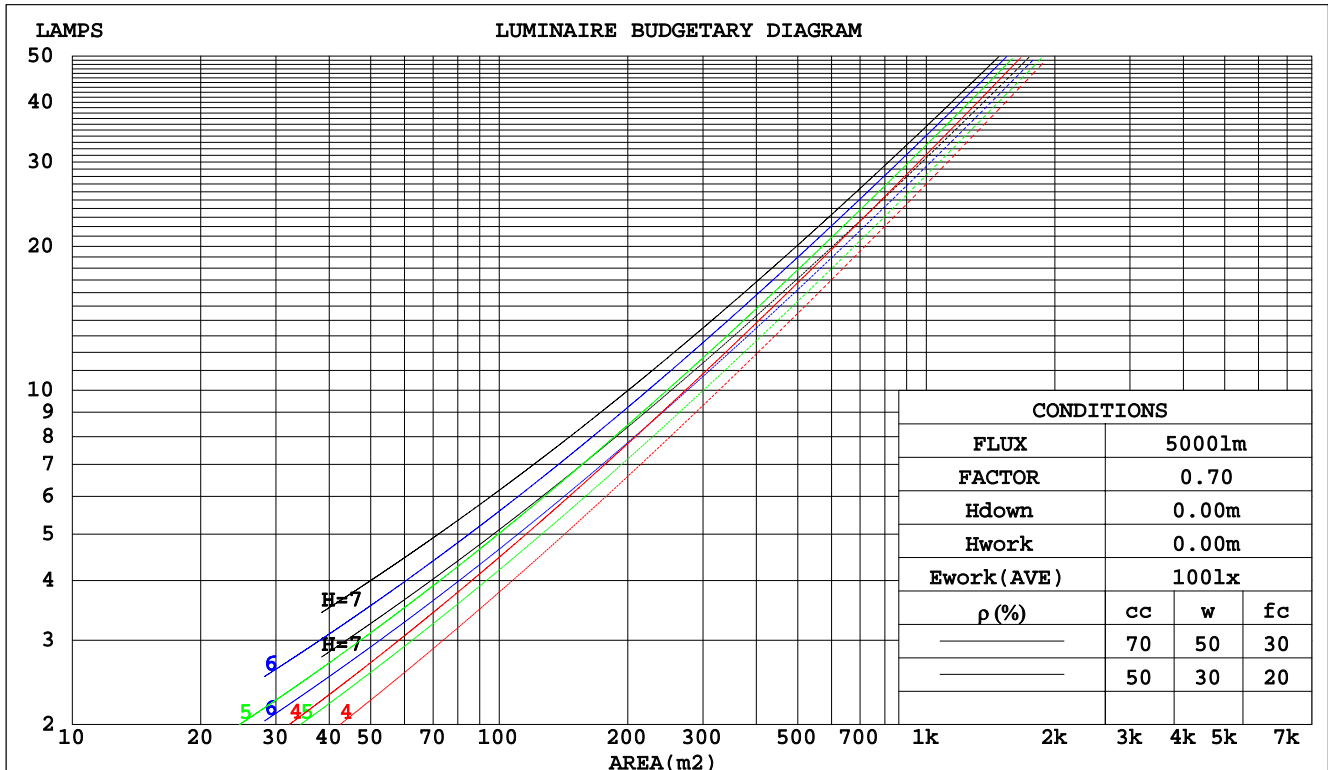
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-07-05

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:0.2744A P:60.961W PF:0.9668 Freq:49.99Hz Lamp Flux:3172x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.6*0.184	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	1.06	1.02	.98	1.03	.90	.97	.99	.96	.94	.95	.93	.91	.92	.90	.88	.86
2.0	.94	.88	.83	.92	.87	.82	.89	.84	.80	.85	.82	.78	.82	.79	.76	.74
3.0	.84	.77	.71	.83	.76	.70	.80	.74	.69	.77	.72	.68	.74	.70	.67	.65
4.0	.76	.68	.62	.74	.67	.61	.72	.66	.61	.70	.64	.60	.68	.63	.59	.57
5.0	.69	.60	.54	.68	.60	.54	.65	.59	.54	.64	.58	.53	.62	.57	.53	.51
6.0	.63	.54	.48	.62	.54	.48	.60	.53	.48	.58	.52	.47	.57	.51	.47	.45
7.0	.57	.49	.44	.56	.49	.43	.55	.48	.43	.54	.47	.43	.52	.47	.43	.41
8.0	.53	.45	.39	.52	.44	.39	.51	.44	.39	.50	.43	.39	.48	.43	.39	.37
9.0	.49	.41	.36	.48	.41	.36	.47	.40	.36	.46	.40	.35	.45	.39	.35	.34
10.0	.45	.38	.33	.45	.38	.33	.44	.37	.33	.43	.37	.32	.42	.36	.32	.31



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-07-05

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:0.2744A P:60.961W PF:0.9668 Freq:49.99Hz Lamp Flux:3172x1 lm								
NAME:			TYPE:			WEIGHT:		
SPEC.:			DIM.: 610*280*42			SERIAL No.:		
MFR.:			SUR.:0.6*0.184			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	.275	.156	.050	.268	.153	.049	.255	.146	.047	.243	.140	.045	.232	.134	.043	
2.0	.258	.141	.043	.252	.139	.043	.240	.134	.042	.230	.129	.040	.220	.125	.039	
3.0	.240	.128	.038	.235	.126	.038	.225	.122	.037	.215	.118	.036	.207	.114	.035	
4.0	.223	.116	.034	.218	.114	.034	.209	.111	.033	.201	.108	.033	.194	.105	.032	
5.0	.208	.106	.031	.204	.105	.030	.196	.102	.030	.189	.099	.030	.182	.097	.029	
6.0	.194	.097	.028	.190	.096	.028	.184	.094	.027	.177	.092	.027	.171	.090	.027	
7.0	.182	.090	.026	.179	.089	.025	.173	.087	.025	.167	.086	.025	.161	.084	.025	
8.0	.171	.084	.024	.168	.083	.023	.163	.081	.023	.158	.080	.023	.153	.078	.023	
9.0	.161	.078	.022	.159	.077	.022	.154	.076	.022	.149	.075	.021	.145	.074	.021	
10.0	.153	.073	.020	.150	.073	.020	.146	.071	.020	.142	.070	.020	.138	.069	.020	

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	.178	.156	.137	.152	.134	.118	.104	.092	.082	.060	.053	.047	.019	.017	.015	
2.0	.168	.132	.102	.144	.114	.088	.098	.079	.062	.057	.046	.036	.018	.015	.012	
3.0	.159	.114	.079	.136	.098	.068	.093	.068	.048	.054	.040	.028	.017	.013	.009	
4.0	.150	.100	.062	.129	.087	.054	.089	.060	.038	.051	.035	.023	.017	.012	.007	
5.0	.143	.090	.051	.123	.078	.044	.084	.054	.031	.049	.032	.018	.016	.010	.006	
6.0	.136	.081	.042	.117	.070	.037	.080	.049	.026	.047	.029	.015	.015	.009	.005	
7.0	.129	.074	.035	.111	.064	.031	.077	.045	.022	.045	.027	.013	.014	.009	.004	
8.0	.123	.068	.031	.106	.059	.027	.073	.042	.019	.043	.024	.011	.014	.008	.004	
9.0	.117	.063	.027	.101	.055	.023	.070	.039	.017	.041	.023	.010	.013	.007	.003	
10.0	.112	.059	.024	.097	.051	.021	.067	.036	.015	.039	.021	.009	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2024-07-05

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:0.2744A P:60.961W PF:0.9668 Freq:49.99Hz Lamp Flux:3172x1 lm											
NAME:					TYPE:			WEIGHT:			
SPEC.:					DIM.: 610*280*42			SERIAL No.:			
MFR.:					SUR.:0.6*0.184			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	17.7	19.1	18.0	19.3	19.5	18.3	19.7	18.6	19.9	20.1
	3H	18.9	20.2	19.2	20.4	20.7	19.6	20.8	19.8	21.0	21.3
	4H	19.8	21.0	20.1	21.2	21.4	20.2	21.4	20.5	21.6	21.9
	6H	20.4	21.5	20.7	21.8	22.1	20.8	21.9	21.1	22.2	22.5
	8H	20.6	21.7	20.9	22.0	22.3	21.0	22.1	21.4	22.4	22.7
	12H	20.8	21.8	21.1	22.1	22.4	21.2	22.2	21.5	22.5	22.8
4H	2H	18.2	19.4	18.5	19.6	19.8	18.7	19.9	19.0	20.1	20.3
	3H	19.7	20.7	20.0	21.0	21.3	20.2	21.2	20.5	21.5	21.8
	4H	20.7	21.7	21.1	22.0	22.3	21.0	22.0	21.4	22.3	22.6
	6H	21.5	22.3	21.9	22.7	23.1	21.8	22.6	22.2	23.0	23.3
	8H	21.8	22.6	22.2	22.9	23.3	22.1	22.9	22.5	23.2	23.6
	12H	22.0	22.8	22.5	23.1	23.5	22.3	23.0	22.7	23.4	23.8
8H	4H	21.1	21.9	21.5	22.2	22.6	21.4	22.1	21.8	22.5	22.9
	6H	22.0	22.7	22.5	23.1	23.5	22.3	22.9	22.7	23.4	23.8
	8H	22.4	23.0	22.9	23.4	23.9	22.7	23.3	23.1	23.7	24.1
	12H	22.8	23.3	23.3	23.7	24.2	23.0	23.5	23.5	23.9	24.4
12H	4H	21.1	21.8	21.5	22.2	22.6	21.4	22.1	21.8	22.5	22.9
	6H	22.1	22.7	22.6	23.1	23.6	22.4	23.0	22.8	23.4	23.8
	8H	22.6	23.1	23.1	23.5	24.0	22.8	23.3	23.3	23.8	24.2
Variations with the observer position at spacings:											
S = 1.0H	+ 0.3 / - 0.4					+ 0.4 / - 0.4					
1.5H	+ 0.2 / - 0.2					+ 0.3 / - 0.4					
2.0H	+ 0.6 / - 0.5					+ 0.8 / - 0.5					

CIE Pub.117, 3172 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 4.0$)

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2024-07-05

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:0.2744A P:60.961W PF:0.9668 Freq:49.99Hz Lamp Flux:3172x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.6*0.184	Shielding Angle:

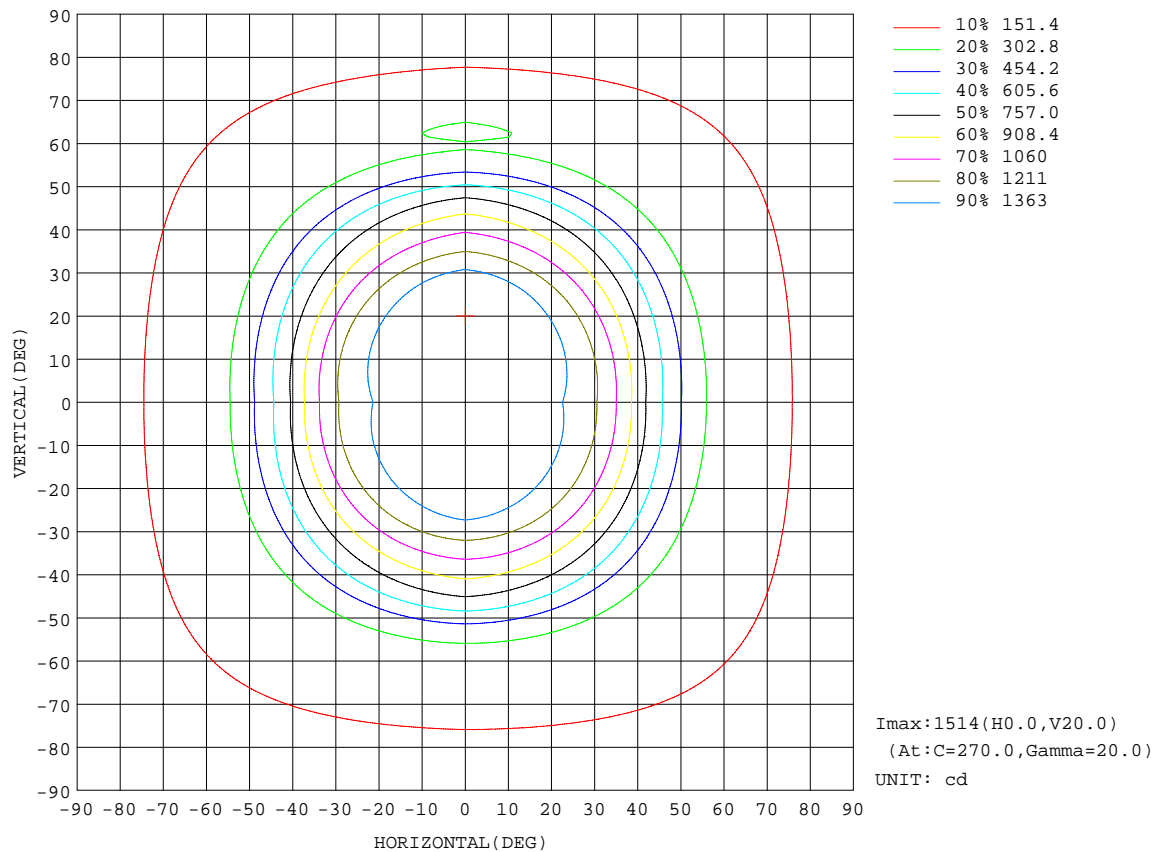
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	66	56	50	65	56	50	64	55	50	44
0.80	76	66	59	75	65	59	73	65	59	53
1.00	83	74	67	82	73	67	80	74	67	60
1.25	89	80	74	88	80	74	85	78	73	67
1.50	93	85	79	92	84	79	89	83	78	71
2.00	99	92	86	97	91	86	94	89	84	77
2.50	102	96	90	100	94	90	97	92	88	80
3.00	105	99	94	103	98	93	99	95	91	83
4.00	108	103	99	106	102	98	102	98	95	87
5.00	110	106	103	108	104	101	104	101	98	89
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:
 Test Date:2024-07-05

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:229.75V I:0.2744A P:60.961W PF:0.9668 Freq:49.99Hz Lamp Flux:3172x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.6*0.184	Shielding Angle:

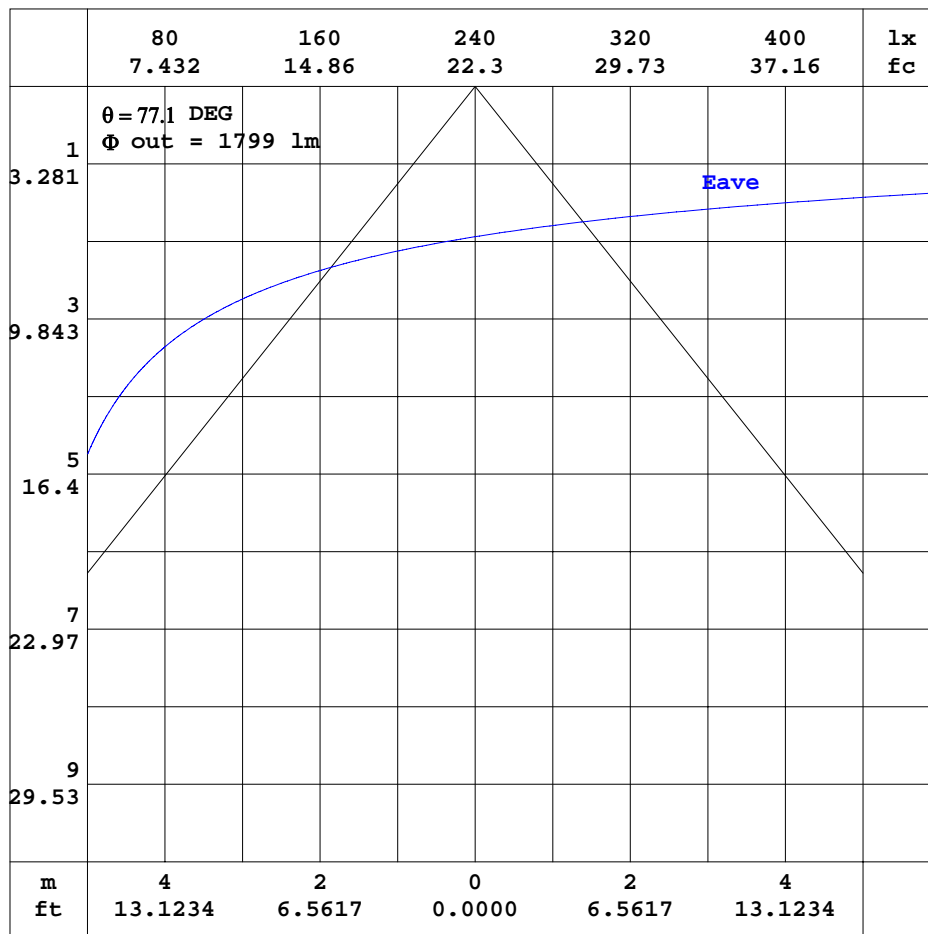


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-07-05

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:0.2744A P:60.961W PF:0.9668 Freq:49.99Hz Lamp Flux:3172x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.6*0.184	Shielding Angle:



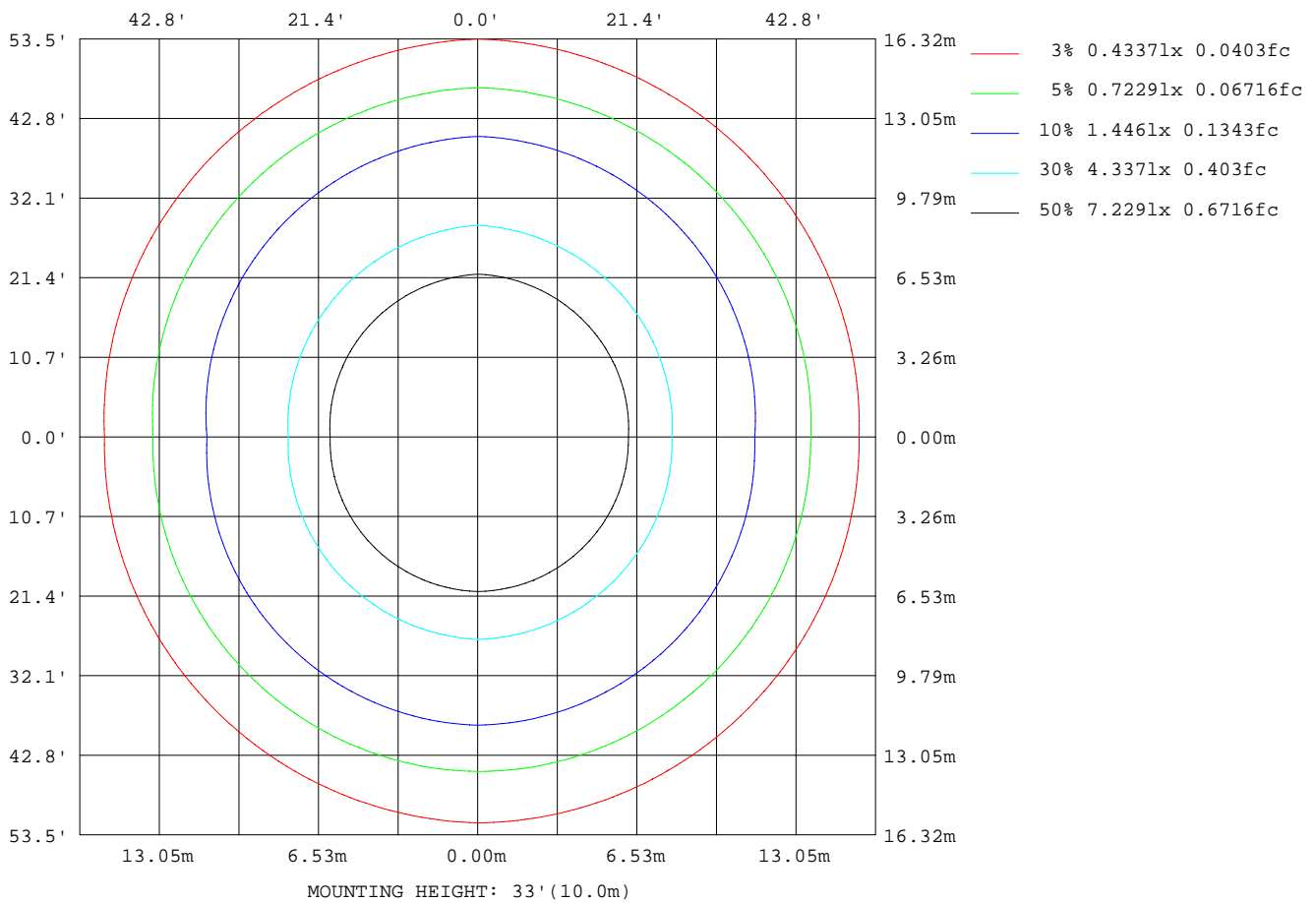
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-07-05

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:0.2744A P:60.961W PF:0.9668 Freq:49.99Hz Lamp Flux:3172x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.6*0.184	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-07-05

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:0.2744A P:60.961W PF:0.9668 Freq:49.99Hz Lamp Flux:3172x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.6*0.184	Shielding Angle:

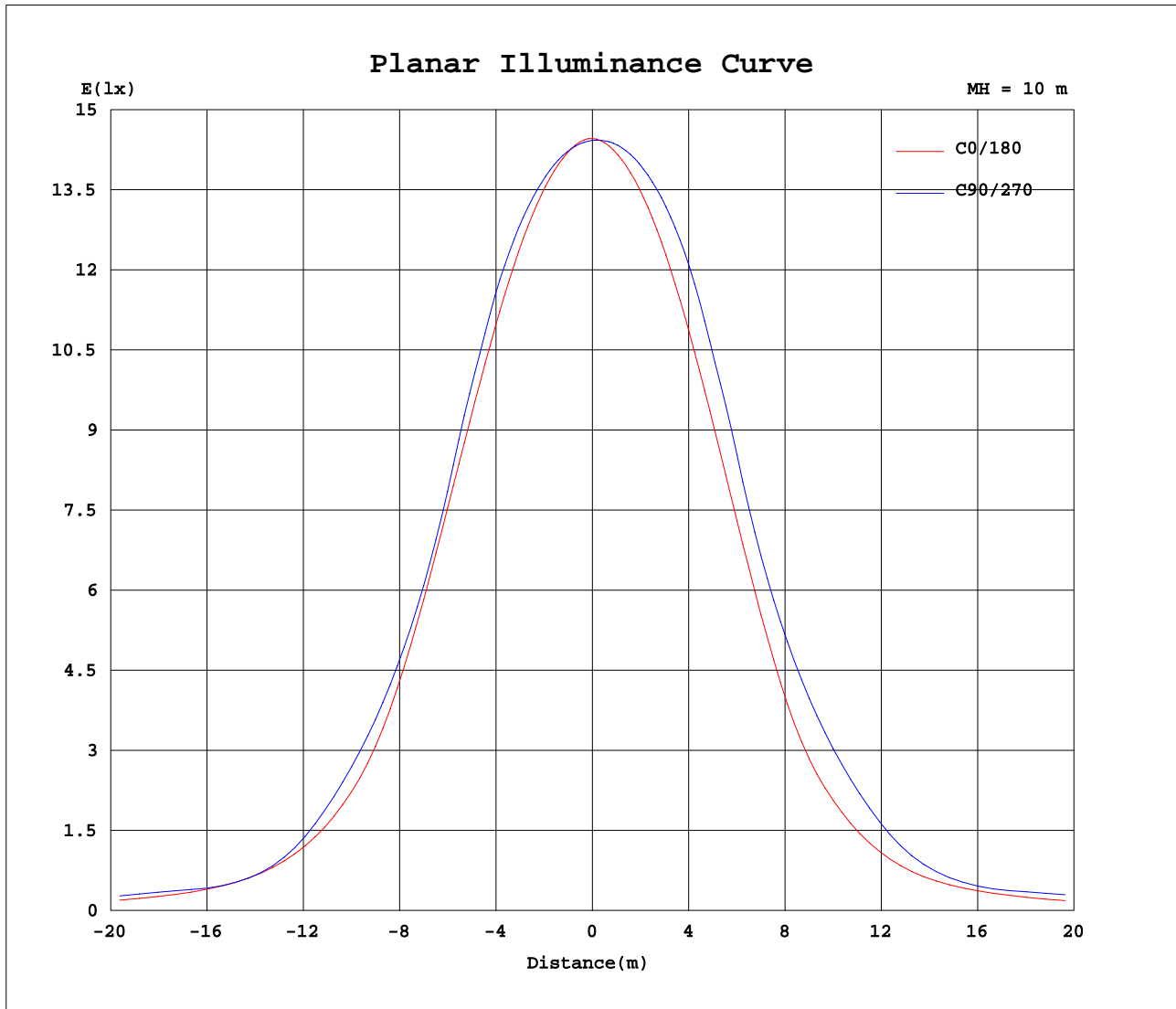
AvgL	cd/m2
L_0~180(65)av	4116
L_0~180(75)av	5362
L_0~180(85)av	4731
L_90~270(65)av	6103
L_90~270(75)av	5800
L_90~270(85)av	5932
L_45(65)av	5355
L_45(75)av	5620
L_45(85)av	5433

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-07-05

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: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-07-05

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:

```