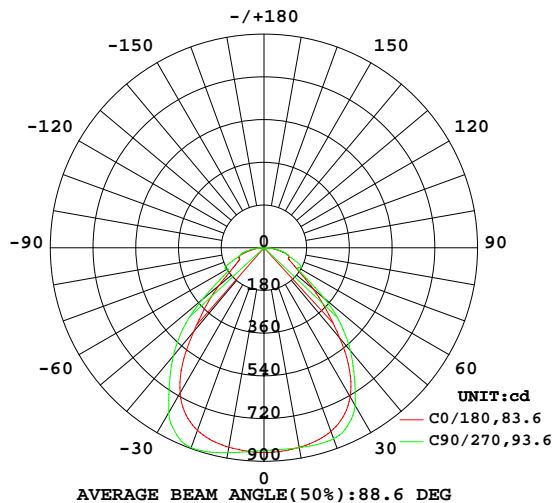


LUMINAIRE PHOTOMETRIC TEST REPORT

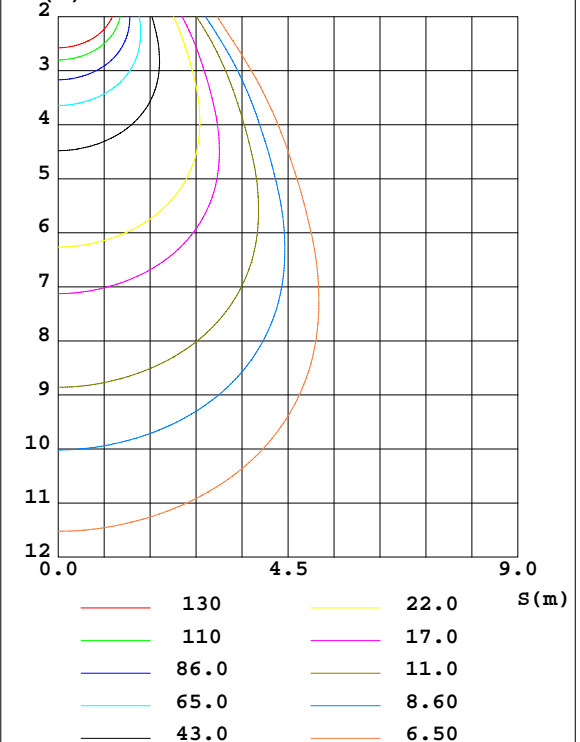
Test:U:229.71V I:0.3517A P:79.114W PF:0.9792 Freq:49.99Hz Lamp Flux:1870.21x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.6*0.184	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 23.64 lm/W			
MODEL		Imax(cd)	896.9	S/MH(C0/180)	1.17
NOMINAL POWER(W)	80	LOR(%)	100.0	S/MH(C90/270)	1.30
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	1870.2	η UP,DN(C0-180)	0.0,50.1
NOMINAL FLUX(lm)	1870.21	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.9
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:2024-06-25

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:

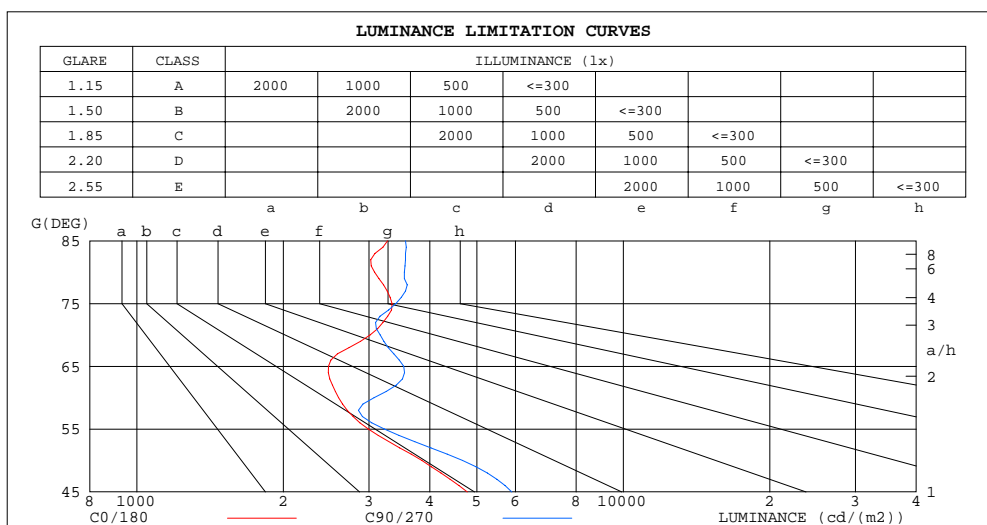
γ	C0	C90	C180	C270					γ	Φ zone	Φ total	Φ lum, lamp
10	854.3	855.3	853.5	876.5					0- 10	82.03	82.03	4.39,4.39
20	823.8	856.6	819.0	896.6					10- 20	242.9	324.9	17.4,17.4
30	726.2	768.1	707.2	802.6					20- 30	374.1	699.0	37.4,37.4
40	497.1	566.1	460.2	593.6					30- 40	401.8	1101	58.9,58.9
50	273.4	331.4	248.4	339.4					40- 50	318.7	1419	75.9,75.9
60	143.4	169.7	135.3	180.4					50- 60	183.4	1603	85.7,85.7
70	113.9	119.4	111.3	118.6					60- 70	138.0	1741	93.1,93.1
80	59.07	68.01	50.18	66.61					70- 80	96.70	1838	98.3,98.3
90	1.985	3.162	0.9870	1.134					80- 90	32.64	1870	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:2024-06-25

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:229.71V I:0.3517A P:79.114W PF:0.9792 Freq:49.99Hz Lamp Flux:1870.21x1 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	3276	3566
80	3081	3548
75	3345	3408
70	3016	3163
65	2477	3537
60	2598	3075
55	2992	3227
50	3852	4670
45	4778	5899

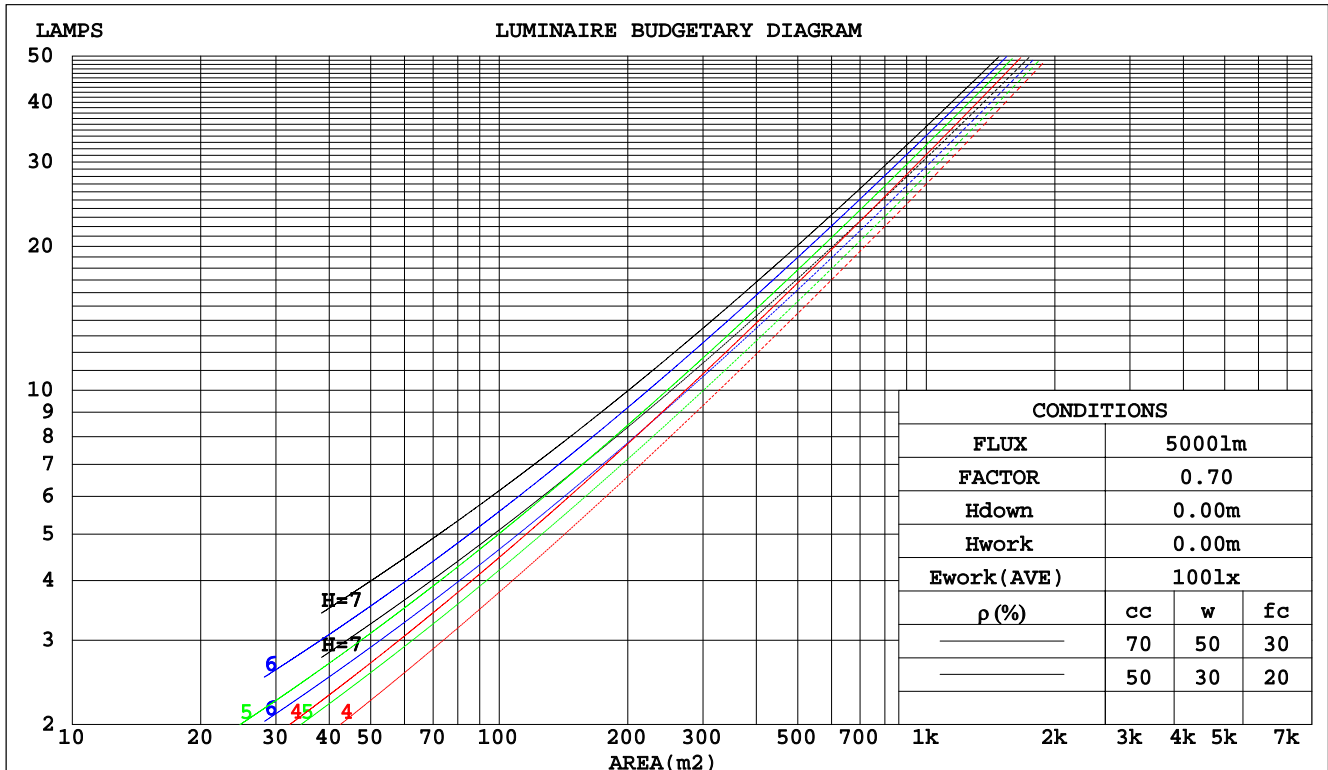
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-06-25

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:229.71V I:0.3517A P:79.114W PF:0.9792 Freq:49.99Hz Lamp Flux:1870.21x1 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	.00	.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	.83	.79	.76	.74
3.0	.84	.77	.71	.83	.76	.70	.80	.74	.69	.77	.72	.68	.75	.70	.67	.65
4.0	.76	.68	.62	.74	.67	.61	.72	.66	.61	.70	.64	.60	.68	.63	.59	.57
5.0	.69	.61	.55	.68	.60	.54	.66	.59	.54	.64	.58	.53	.62	.57	.53	.51
6.0	.63	.54	.49	.62	.54	.48	.60	.53	.48	.58	.52	.48	.57	.51	.47	.45
7.0	.57	.49	.44	.57	.49	.43	.55	.48	.43	.54	.47	.43	.52	.47	.43	.41
8.0	.53	.45	.39	.52	.45	.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	.33	.42	.36	.32	.31



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-06-25

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:229.71V I:0.3517A P:79.114W PF:0.9792 Freq:49.99Hz Lamp Flux:1870.21x1 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	.049	.268	.153	.049	.255	.146	.047	.243	.140	.045	.231	.134	.043	
2.0	.258	.141	.043	.252	.139	.043	.240	.134	.041	.230	.129	.040	.220	.124	.039	
3.0	.240	.127	.038	.234	.125	.038	.224	.122	.037	.215	.118	.036	.206	.114	.035	
4.0	.223	.116	.034	.218	.114	.034	.209	.111	.033	.201	.108	.033	.193	.105	.032	
5.0	.207	.106	.031	.203	.104	.030	.196	.102	.030	.188	.099	.030	.182	.097	.029	
6.0	.194	.097	.028	.190	.096	.028	.183	.094	.027	.177	.092	.027	.171	.090	.027	
7.0	.182	.090	.025	.179	.089	.025	.172	.087	.025	.167	.085	.025	.161	.084	.025	
8.0	.171	.084	.023	.168	.083	.023	.163	.081	.023	.157	.080	.023	.153	.078	.023	
9.0	.161	.078	.022	.159	.077	.022	.154	.076	.022	.149	.075	.021	.145	.073	.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	.036	.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:2024-06-25

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:229.71V I:0.3517A P:79.114W PF:0.9792 Freq:49.99Hz Lamp Flux:1870.21x1 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		16.0	17.3	16.2	17.5	17.7	16.6	18.0	16.9	18.2	18.4
3H		17.2	18.5	17.5	18.7	18.9	17.9	19.2	18.2	19.4	19.6
4H		18.0	19.2	18.3	19.4	19.7	18.6	19.8	18.9	20.0	20.3
6H		18.6	19.8	19.0	20.0	20.3	19.2	20.3	19.5	20.6	20.9
8H		18.9	19.9	19.2	20.2	20.5	19.5	20.6	19.8	20.8	21.1
12H		19.0	20.1	19.4	20.4	20.7	19.7	20.7	20.0	21.0	21.3
4H	2H	16.4	17.6	16.7	17.8	18.1	17.0	18.2	17.3	18.4	18.7
	3H	18.0	19.0	18.3	19.3	19.6	18.5	19.6	18.9	19.8	20.1
	4H	19.0	19.9	19.3	20.2	20.6	19.4	20.3	19.7	20.6	21.0
	6H	19.8	20.6	20.1	20.9	21.3	20.2	21.1	20.6	21.4	21.8
	8H	20.0	20.8	20.4	21.2	21.6	20.5	21.3	21.0	21.7	22.1
	12H	20.3	21.0	20.7	21.4	21.8	20.8	21.5	21.2	21.9	22.3
8H	4H	19.4	20.1	19.8	20.5	20.9	19.7	20.5	20.1	20.9	21.2
	6H	20.3	21.0	20.8	21.4	21.8	20.7	21.4	21.2	21.8	22.2
	8H	20.7	21.3	21.2	21.7	22.2	21.2	21.7	21.6	22.2	22.6
	12H	21.1	21.6	21.6	22.0	22.5	21.5	22.0	22.0	22.5	23.0
	12H	4H	19.4	20.1	19.8	20.5	20.9	19.7	20.5	20.2	20.8
6H		20.4	21.0	20.9	21.4	21.9	20.8	21.4	21.3	21.8	22.3
8H		20.9	21.4	21.4	21.8	22.3	21.3	21.8	21.8	22.3	22.7
Variations with the observer position at spacings:											
S = 1.0H		+ 0.3 / - 0.4				+ 0.3 / - 0.4					
1.5H		+ 0.2 / - 0.2				+ 0.2 / - 0.4					
2.0H		+ 0.6 / - 0.5				+ 0.8 / - 0.4					

CIE Pub.117, 1870 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 2.2$)

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2024-06-25

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:229.71V I:0.3517A P:79.114W PF:0.9792 Freq:49.99Hz Lamp Flux:1870.21x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.6*0.184	Shielding Angle:

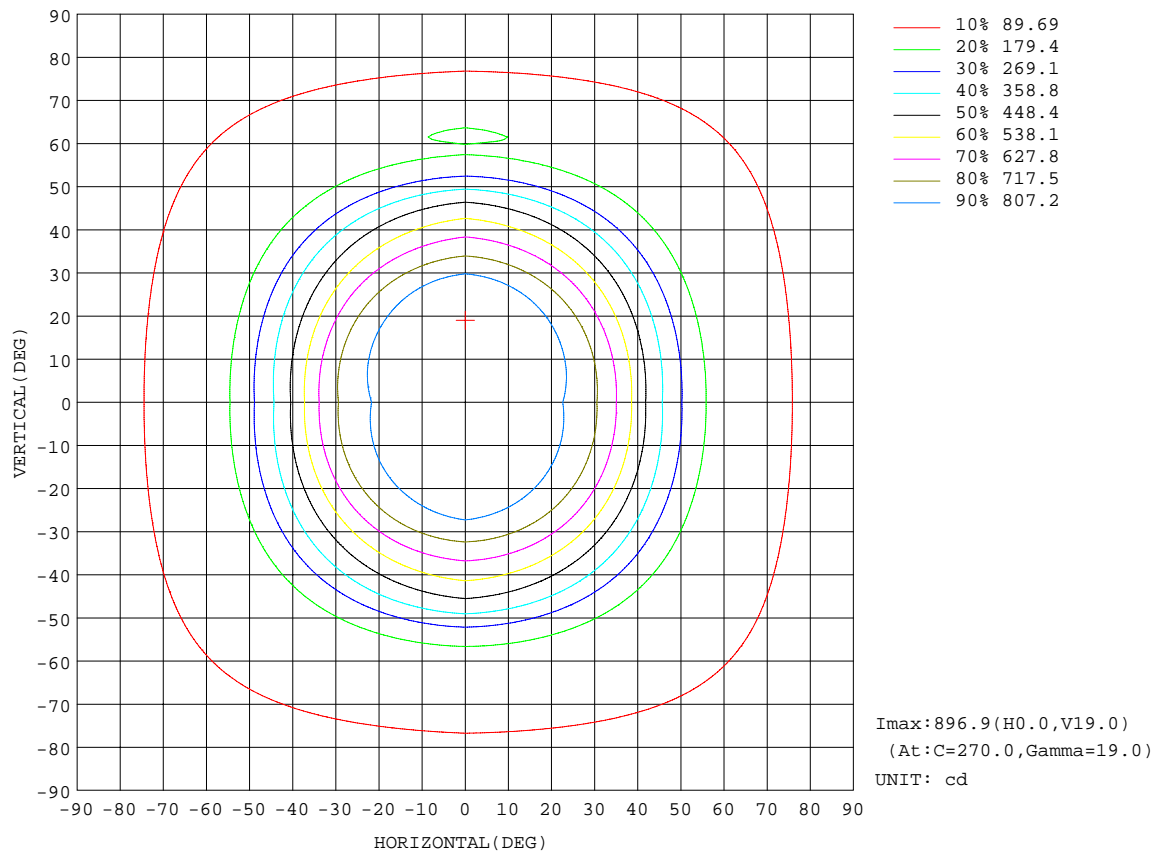
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	66	56	50	66	56	50	65	56	50	44
0.80	76	66	59	75	65	59	73	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	94	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	91	100	94	90	97	92	88	80
3.00	105	99	94	103	98	93	99	95	91	83
4.00	108	103	100	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:2024-06-25

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:229.71V I:0.3517A P:79.114W PF:0.9792 Freq:49.99Hz Lamp Flux:1870.21x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.6*0.184	Shielding Angle:

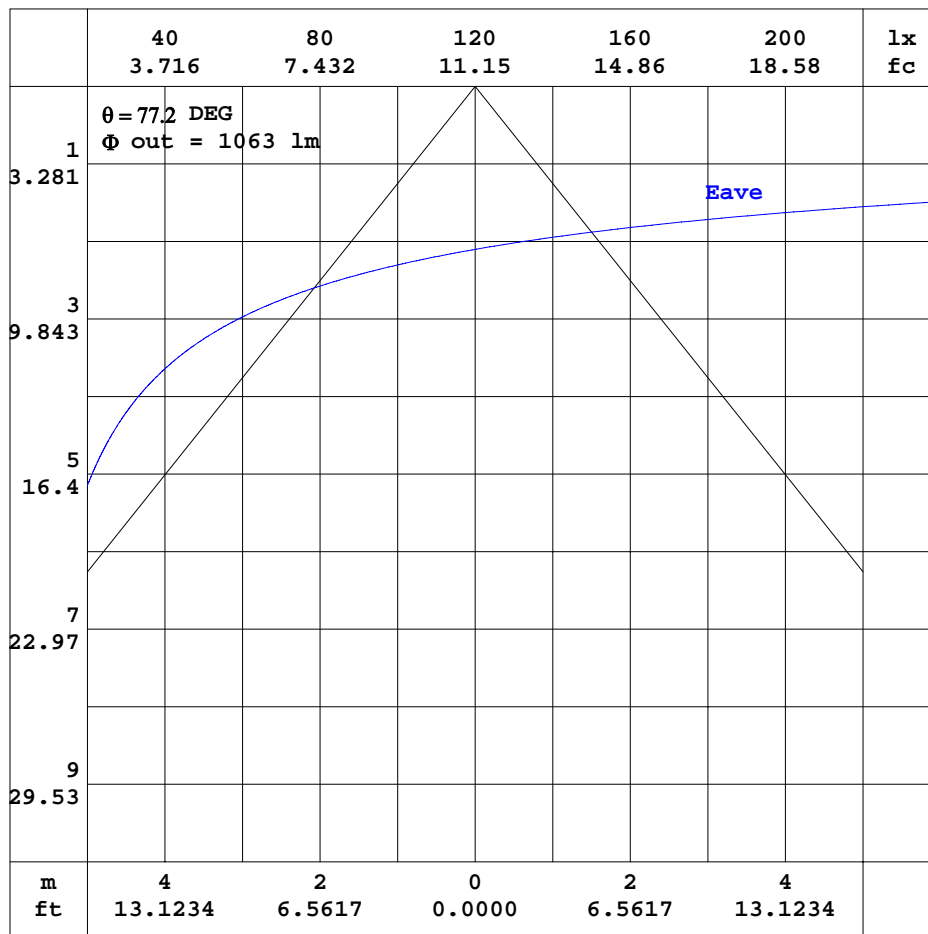


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-06-25

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:229.71V I:0.3517A P:79.114W PF:0.9792 Freq:49.99Hz Lamp Flux:1870.21x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.6*0.184	Shielding Angle:



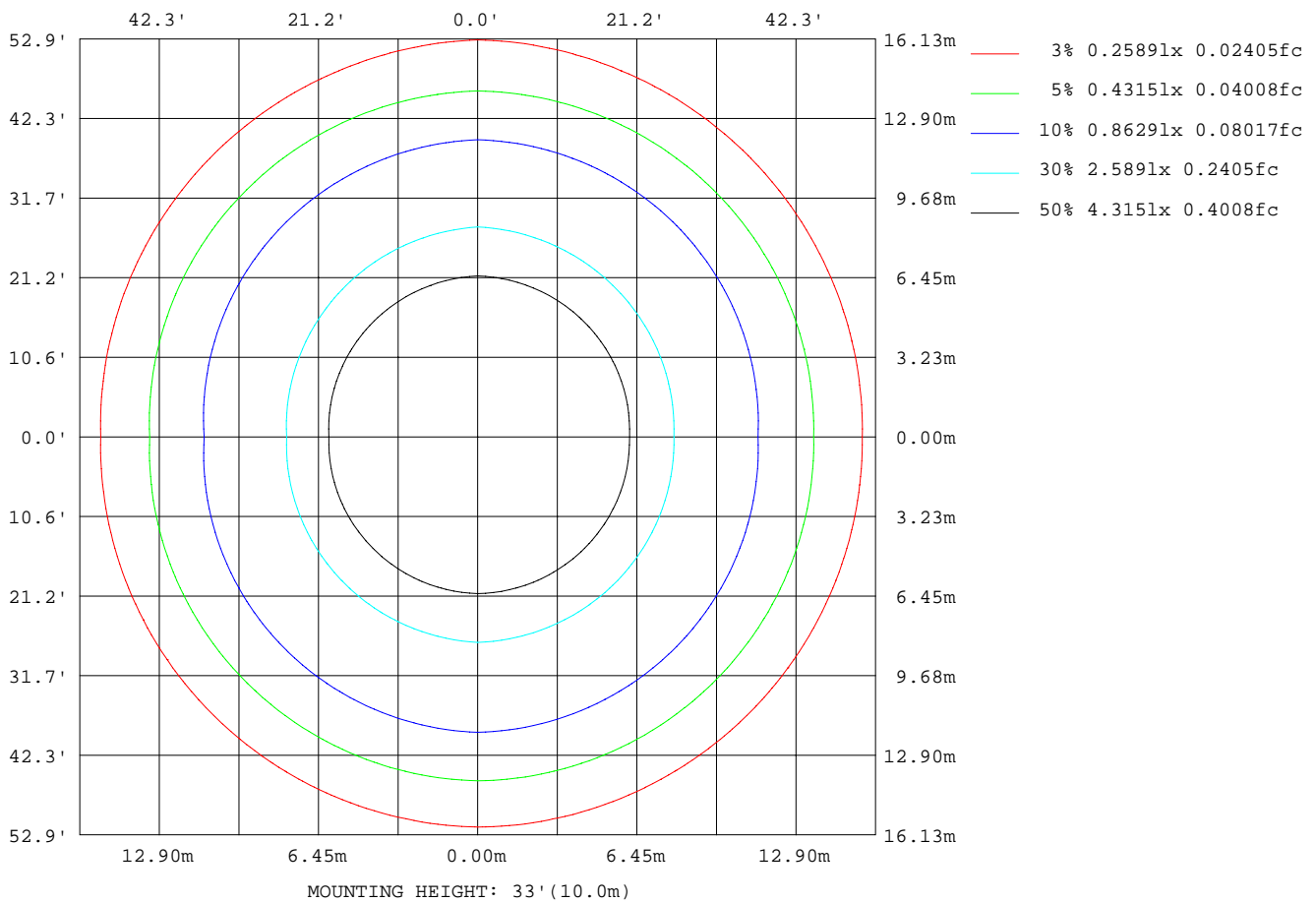
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-06-25

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:229.71V I:0.3517A P:79.114W PF:0.9792 Freq:49.99Hz Lamp Flux:1870.21x1 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: 2024-06-25

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:229.71V I:0.3517A P:79.114W PF:0.9792 Freq:49.99Hz Lamp Flux:1870.21x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.6*0.184	Shielding Angle:

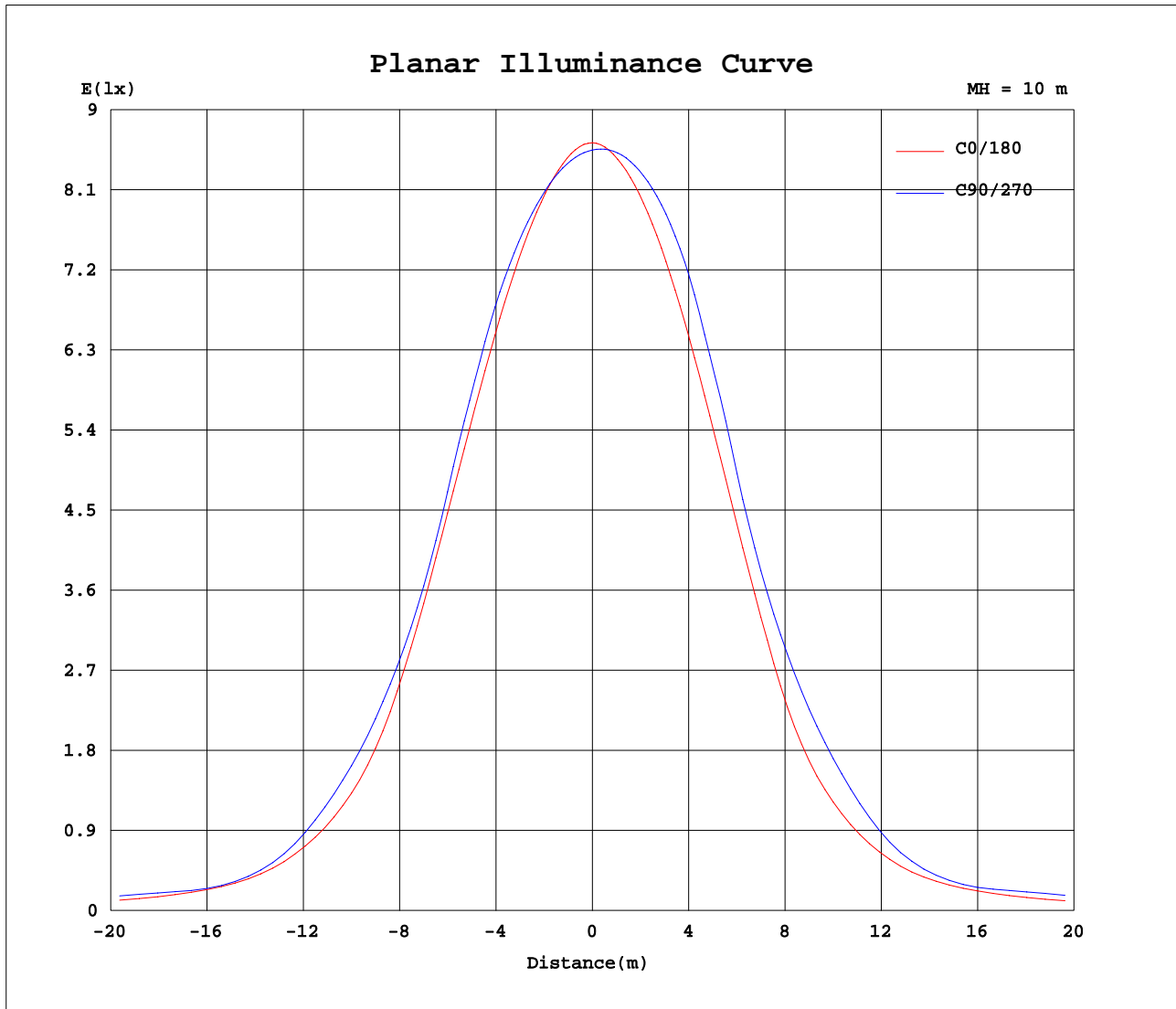
AvgL	cd/m2
L_0~180(65)av	2447
L_0~180(75)av	3176
L_0~180(85)av	2810
L_90~270(65)av	3573
L_90~270(75)av	3423
L_90~270(85)av	3437
L_45(65)av	3149
L_45(75)av	3320
L_45(85)av	3173

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-06-25

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: 2024-06-25

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:

```