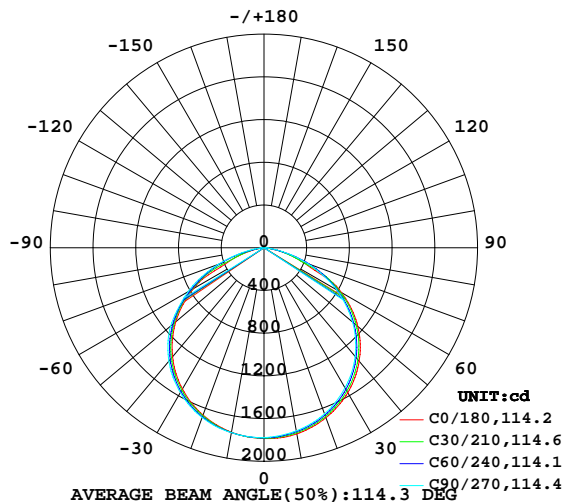


LUMINAIRE PHOTOMETRIC TEST REPORT

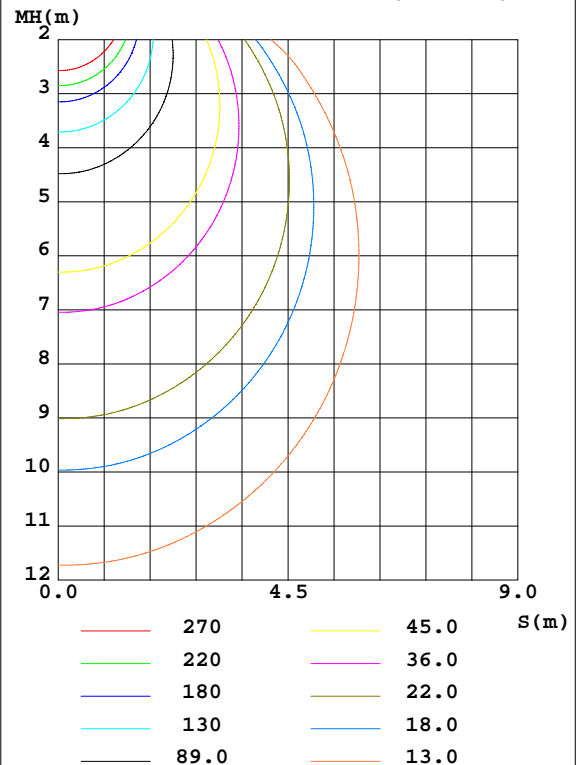
Test:U:229.75V I:0.2715A P:61.055W PF:0.9786 Freq:49.99Hz Lamp Flux:4988.82x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.503*0.09	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 81.71 lm/W			
MODEL		Imax(cd)	1788	S/MH(C0/180)	1.27
NOMINAL POWER(W)	60	LOR(%)	100.0	S/MH(C90/270)	1.31
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	4988.8	η UP,DN(C0-180)	0.0,49.5
NOMINAL FLUX(lm)	4988.82	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.5
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: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-04-15

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:

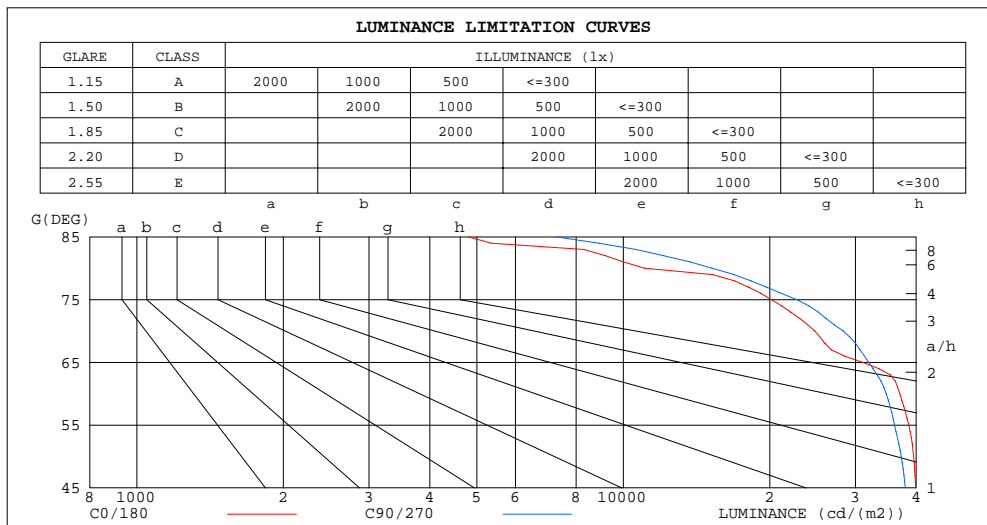
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	$\%lum, lamp$
10	1770	1755	1741	1736	1754	1756	1758	1758	0- 10	168.5	168.5	3.38,3.38
20	1694	1676	1656	1648	1668	1679	1692	1690	10- 20	485.8	654.3	13.1,13.1
30	1568	1544	1516	1508	1528	1545	1566	1566	20- 30	744.5	1399	28,28
40	1387	1359	1328	1312	1332	1356	1386	1388	30- 40	910.4	2309	46.3,46.3
50	1148	1121	1083	1065	1079	1107	1141	1149	40- 50	954.3	3263	65.4,65.4
60	836.4	821.4	784.5	762.9	758.9	791.7	818.4	845.7	50- 60	853.6	4117	82.5,82.5
70	382.4	457.5	437.7	409.3	313.1	416.2	457.7	478.8	60- 70	592.1	4709	94.4,94.4
80	86.81	106.9	119.4	78.55	58.07	81.89	125.9	111.4	70- 80	246.7	4956	99.3,99.3
90	3.239	3.058	2.869	2.852	3.707	3.625	3.660	4.407	80- 90	32.93	4989	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: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-04-15

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:0.2715A P:61.055W PF:0.9786 Freq:49.99Hz Lamp Flux:4988.82x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.503*0.09	Shielding Angle:



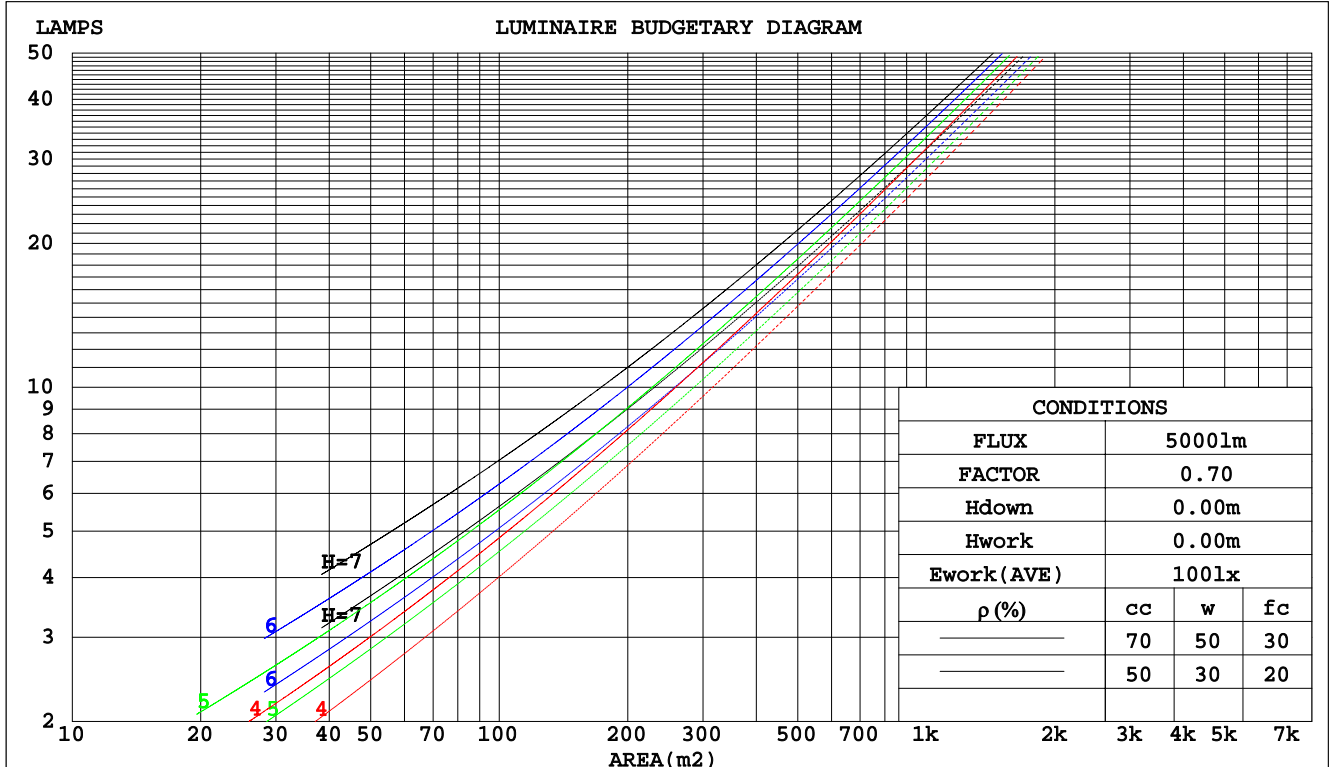
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-04-15

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:0.2715A P:61.055W PF:0.9786 Freq:49.99Hz Lamp Flux:4988.82x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.503*0.09	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	1.05	1.01	.98	1.03	.99	.96	.99	.96	.93	.95	.92	.90	.91	.89	.87	.85
2.0	.92	.85	.80	.90	.84	.79	.87	.82	.77	.83	.79	.75	.80	.77	.74	.72
3.0	.81	.73	.67	.79	.72	.66	.76	.70	.65	.74	.68	.64	.71	.67	.63	.61
4.0	.72	.63	.57	.70	.62	.56	.68	.61	.55	.66	.60	.55	.63	.58	.54	.52
5.0	.64	.55	.49	.63	.55	.48	.61	.54	.48	.59	.52	.47	.57	.51	.47	.45
6.0	.58	.49	.42	.57	.48	.42	.55	.47	.42	.53	.47	.42	.52	.46	.41	.39
7.0	.52	.44	.37	.51	.43	.37	.50	.42	.37	.48	.42	.37	.47	.41	.36	.35
8.0	.48	.39	.33	.47	.39	.33	.46	.38	.33	.44	.38	.33	.43	.37	.33	.31
9.0	.44	.35	.30	.43	.35	.30	.42	.35	.30	.41	.34	.30	.40	.34	.29	.28
10.0	.40	.32	.27	.40	.32	.27	.39	.32	.27	.38	.31	.27	.37	.31	.27	.25



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-04-15

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:0.2715A P:61.055W PF:0.9786 Freq:49.99Hz Lamp Flux:4988.82x1 lm								
NAME:			TYPE:			WEIGHT:		
SPEC.:			DIM.: 610*280*42			SERIAL No.:		
MFR.:			SUR.:0.503*0.09			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	.287	.163	.052	.280	.160	.051	.266	.153	.049	.254	.147	.047	.243	.141	.045	
2.0	.277	.152	.047	.271	.149	.046	.259	.144	.045	.248	.139	.044	.239	.135	.043	
3.0	.260	.138	.041	.254	.136	.041	.244	.132	.040	.235	.129	.039	.226	.125	.039	
4.0	.242	.126	.037	.237	.124	.037	.228	.121	.036	.220	.118	.036	.212	.115	.035	
5.0	.225	.115	.033	.221	.113	.033	.213	.111	.033	.205	.108	.032	.198	.106	.032	
6.0	.210	.105	.030	.206	.104	.030	.199	.102	.030	.192	.100	.029	.186	.098	.029	
7.0	.196	.097	.027	.193	.096	.027	.186	.094	.027	.180	.092	.027	.174	.091	.027	
8.0	.183	.090	.025	.180	.089	.025	.175	.087	.025	.169	.086	.025	.164	.084	.025	
9.0	.172	.083	.023	.170	.083	.023	.164	.081	.023	.160	.080	.023	.155	.079	.023	
10.0	.162	.078	.022	.160	.077	.022	.155	.076	.021	.151	.075	.021	.147	.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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.179	.156	.136	.153	.134	.117	.105	.092	.081	.060	.053	.047	.019	.017	.015	
2.0	.170	.132	.100	.146	.114	.086	.100	.079	.060	.058	.046	.035	.018	.015	.011	
3.0	.163	.114	.076	.139	.099	.066	.096	.068	.046	.055	.040	.027	.018	.013	.009	
4.0	.155	.101	.059	.133	.087	.052	.092	.061	.036	.053	.036	.021	.017	.012	.007	
5.0	.148	.090	.048	.127	.078	.042	.087	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.141	.082	.040	.121	.071	.035	.084	.050	.024	.048	.029	.015	.016	.010	.005	
7.0	.134	.075	.034	.116	.065	.029	.080	.046	.021	.046	.027	.012	.015	.009	.004	
8.0	.128	.069	.029	.110	.060	.025	.076	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.122	.064	.025	.105	.056	.022	.073	.039	.016	.042	.023	.009	.014	.008	.003	
10.0	.117	.060	.023	.100	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2024-04-15

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:0.2715A P:61.055W PF:0.9786 Freq:49.99Hz Lamp Flux:4988.82x1 lm										
NAME:			TYPE:			WEIGHT:				
SPEC.:			DIM.: 610*280*42			SERIAL No.:				
MFR.:			SUR.:0.503*0.09			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	25.8	27.3	26.1	27.5	27.7	25.4	26.9	25.7	27.1	27.3
3H	26.7	28.1	27.0	28.3	28.6	26.6	28.0	26.9	28.2	28.5
4H	27.0	28.3	27.3	28.6	28.8	27.0	28.3	27.3	28.5	28.8
6H	27.1	28.4	27.5	28.6	28.9	27.1	28.4	27.5	28.6	28.9
8H	27.1	28.3	27.5	28.6	28.9	27.1	28.3	27.5	28.6	28.9
12H	27.1	28.2	27.4	28.5	28.8	27.1	28.3	27.5	28.5	28.8
4H 2H	26.3	27.6	26.7	27.9	28.1	26.0	27.4	26.4	27.6	27.9
3H	27.4	28.5	27.7	28.8	29.1	27.4	28.6	27.8	28.8	29.1
4H	27.8	28.8	28.1	29.1	29.4	27.9	28.9	28.2	29.2	29.5
6H	27.9	28.8	28.3	29.2	29.6	28.1	29.0	28.5	29.3	29.7
8H	27.9	28.8	28.3	29.1	29.5	28.1	28.9	28.5	29.3	29.7
12H	27.9	28.7	28.3	29.1	29.5	28.1	28.8	28.5	29.2	29.6
8H 4H	27.9	28.7	28.3	29.1	29.5	28.0	28.8	28.4	29.2	29.6
6H	28.1	28.8	28.5	29.2	29.6	28.2	28.9	28.7	29.3	29.8
8H	28.1	28.7	28.6	29.2	29.6	28.3	28.9	28.7	29.3	29.8
12H	28.1	28.6	28.6	29.1	29.6	28.3	28.8	28.8	29.2	29.7
12H 4H	27.8	28.6	28.3	29.0	29.4	27.9	28.7	28.4	29.1	29.5
6H	28.1	28.7	28.6	29.1	29.6	28.2	28.8	28.7	29.3	29.7
8H	28.1	28.7	28.6	29.1	29.6	28.3	28.8	28.7	29.2	29.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.3 / - 0.4					+ 0.2 / - 0.2				
1.5H	+ 0.4 / - 0.6					+ 0.2 / - 0.3				
2.0H	+ 0.3 / - 0.6					+ 0.3 / - 0.3				

CIE Pub.117, 4989 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 5.6$)

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2024-04-15

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:0.2715A P:61.055W PF:0.9786 Freq:49.99Hz Lamp Flux:4988.82x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.503*0.09	Shielding Angle:

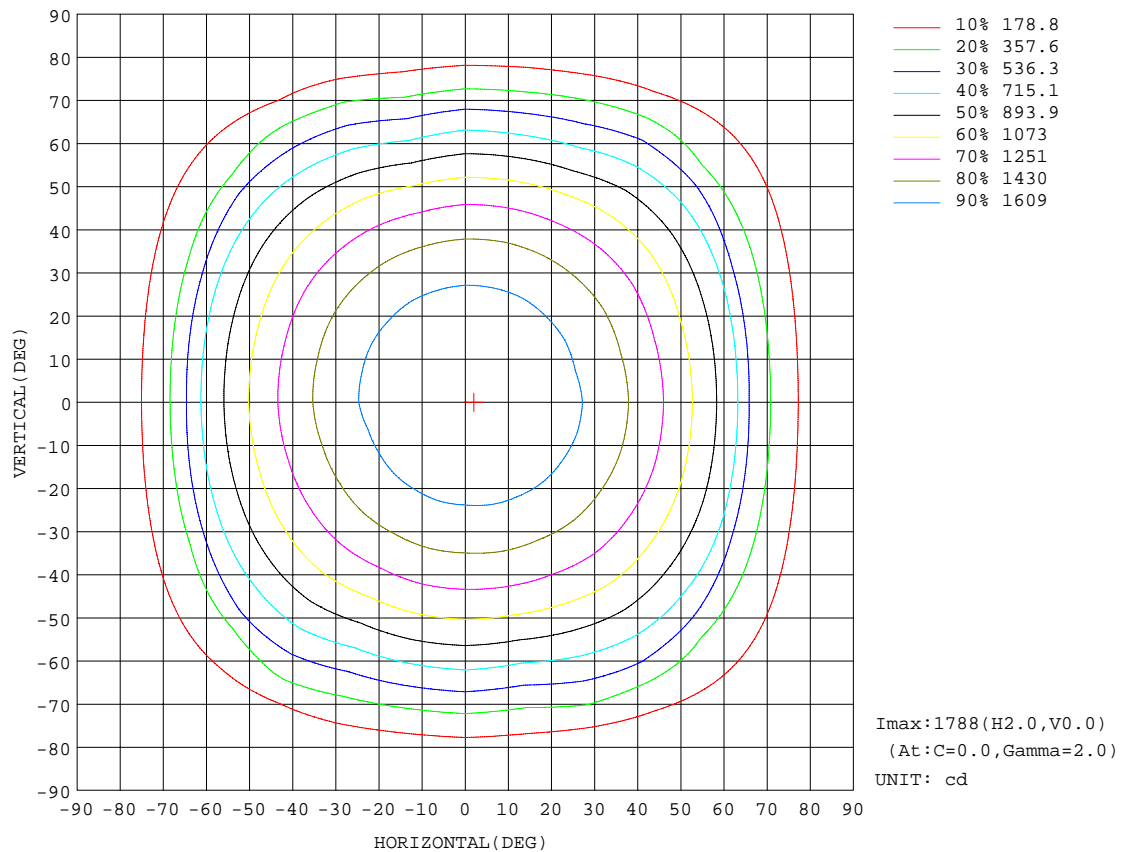
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	58	47	40	57	46	40	56	46	39	33
0.80	69	57	50	68	57	50	66	56	49	42
1.00	77	66	59	76	66	59	74	67	59	52
1.25	84	74	67	83	74	67	80	72	66	59
1.50	89	80	73	88	79	73	85	77	72	64
2.00	96	88	82	95	87	81	91	85	80	72
2.50	100	93	87	98	91	86	94	89	84	76
3.00	103	97	92	101	95	91	97	93	89	80
4.00	107	102	98	105	100	96	101	97	94	85
5.00	110	105	101	107	103	100	103	99	97	88
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-04-15

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:0.2715A P:61.055W PF:0.9786 Freq:49.99Hz Lamp Flux:4988.82x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.503*0.09	Shielding Angle:

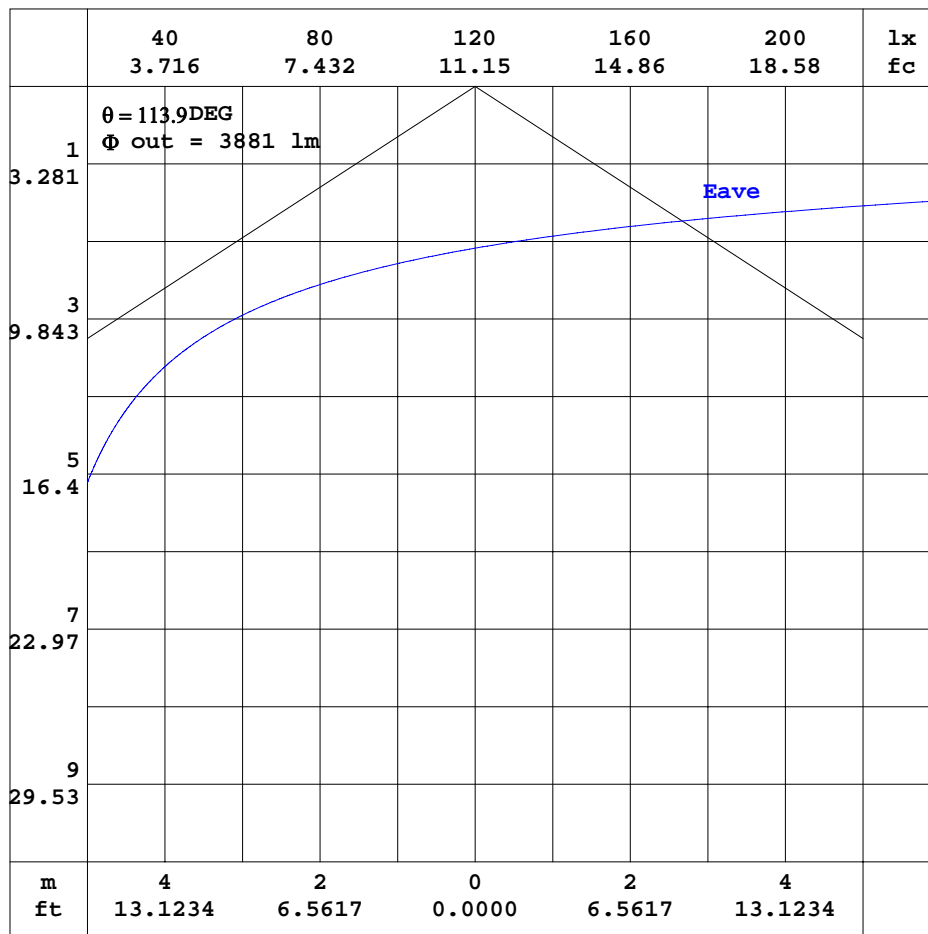


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-04-15

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:0.2715A P:61.055W PF:0.9786 Freq:49.99Hz Lamp Flux:4988.82x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.503*0.09	Shielding Angle:



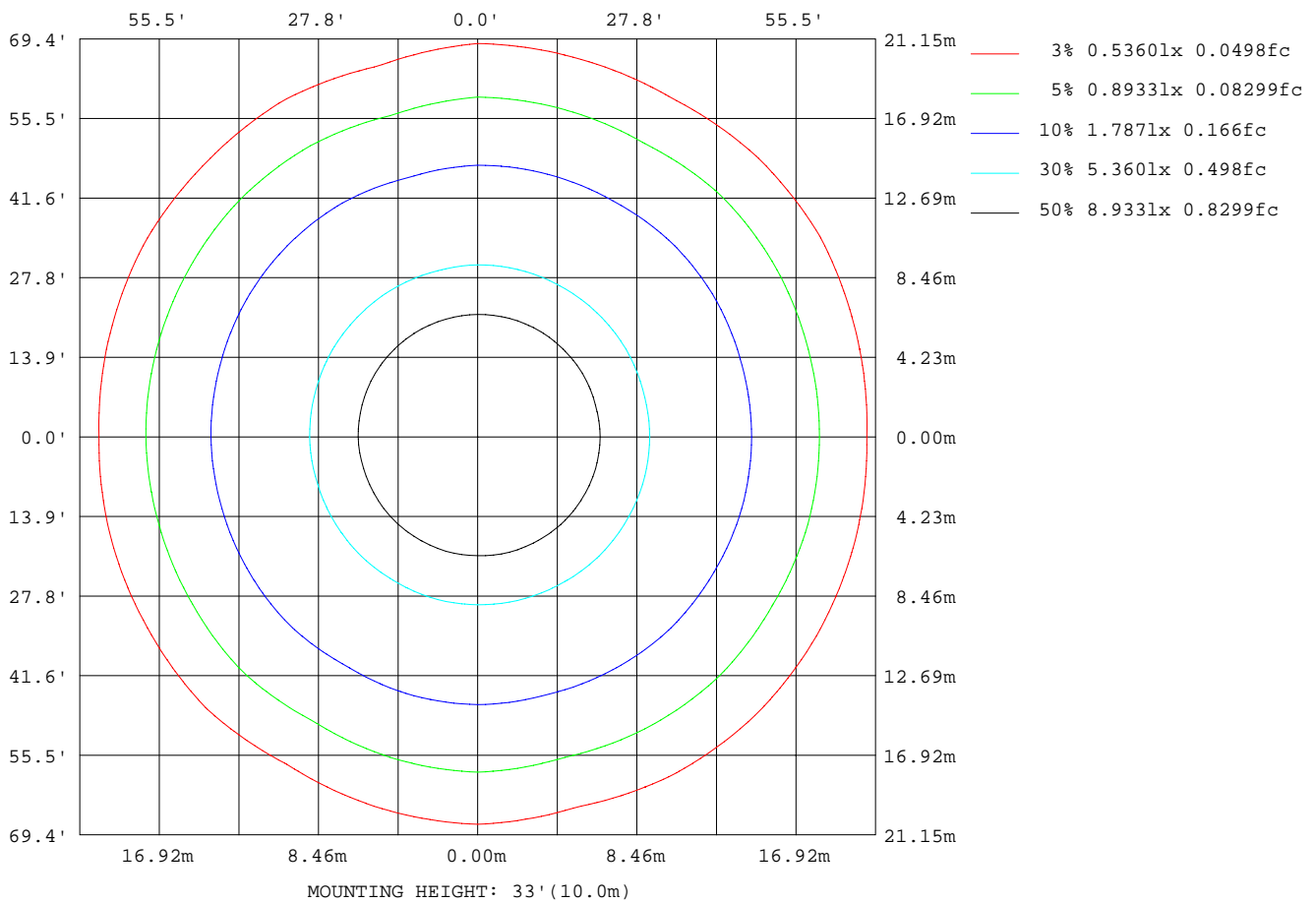
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-04-15

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:0.2715A P:61.055W PF:0.9786 Freq:49.99Hz Lamp Flux:4988.82x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.503*0.09	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-04-15

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:0.2715A P:61.055W PF:0.9786 Freq:49.99Hz Lamp Flux:4988.82x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*280*42	SERIAL No.:
MFR.:	SUR.:0.503*0.09	Shielding Angle:

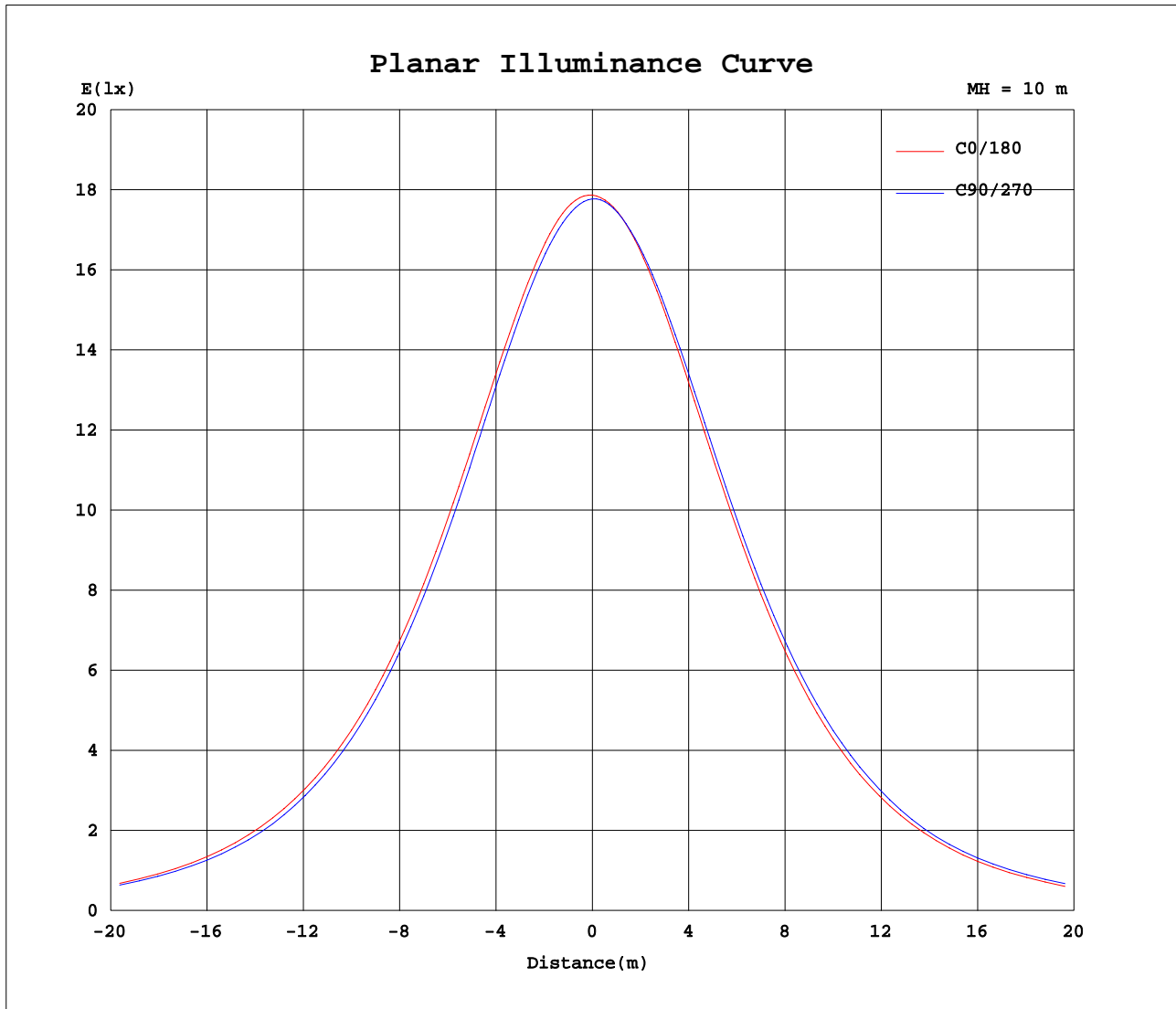
AvgL	cd/m2
L_0~180(65)av	28895
L_0~180(75)av	17767
L_0~180(85)av	3821
L_90~270(65)av	32869
L_90~270(75)av	23299
L_90~270(85)av	7495
L_45(65)av	32624
L_45(75)av	18175
L_45(85)av	4966

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-04-15

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: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-04-15

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:

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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:

```