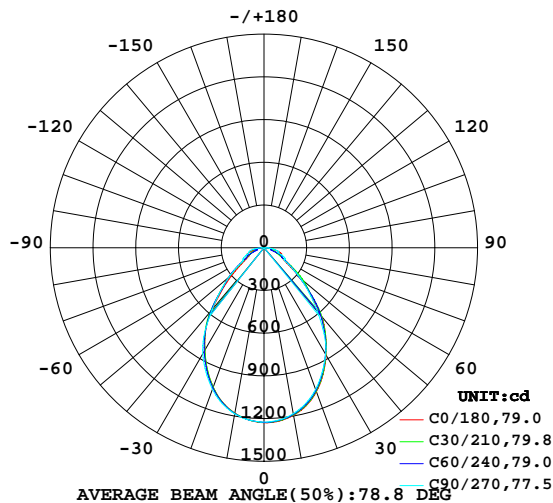


LUMINAIRE PHOTOMETRIC TEST REPORT

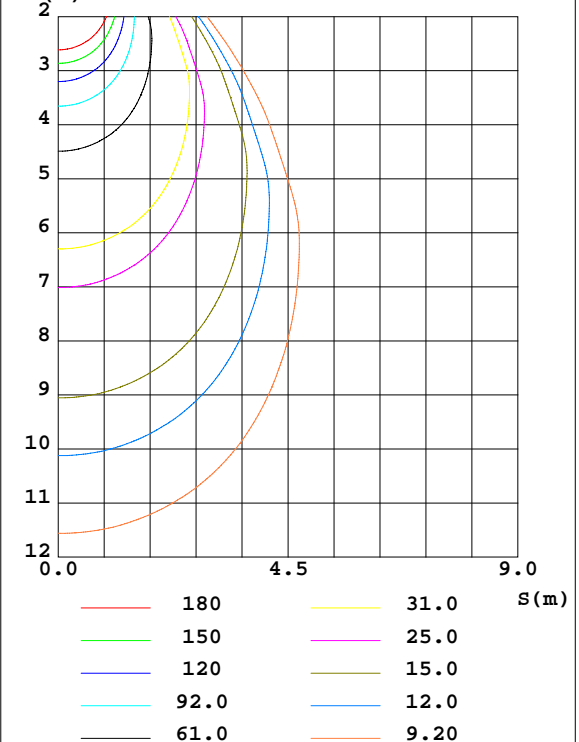
Test:U:229.77V I:0.4412A P:100.08W PF:0.9872 Freq:49.99Hz Lamp Flux:2135.97x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 760*240*31	SERIAL No.:
MFR.: A2384114-01	SUR.:0.710*0.191	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 21.34 lm/W			
MODEL		Imax(cd)	1229	S/MH(C0/180)	1.05
NOMINAL POWER(W)	100	LOR(%)	100.0	S/MH(C90/270)	1.08
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	2136.0	η UP,DN(C0-180)	0.0,50.3
NOMINAL FLUX(lm)	2135.97	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.7
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	230.0	η down(%)	100.0	CIBSE SHR MAX	1.15

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:2024-04-07

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:

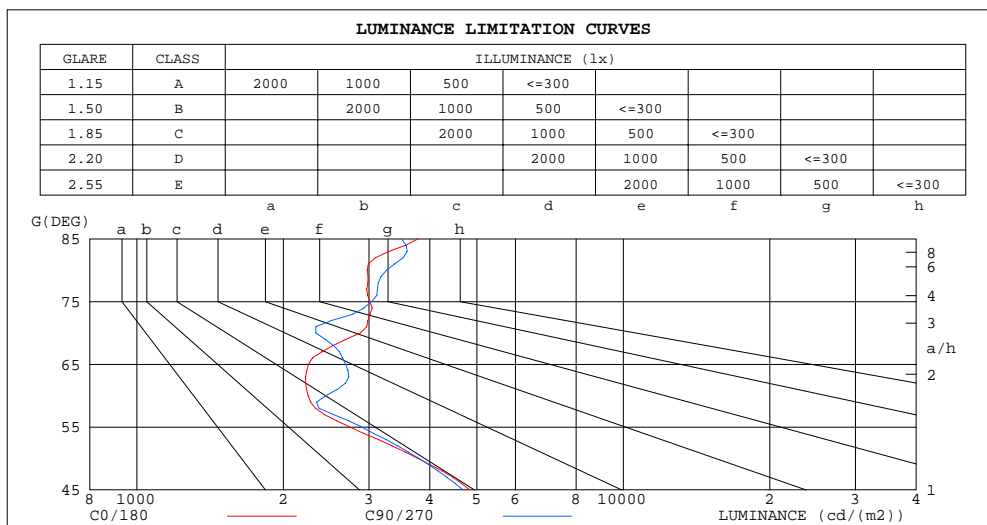
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	$\%lum, lamp$
10	1195	1192	1184	1177	1180	1180	1185	1187	0- 10	115.0	115.0	5.38,5.38
20	1077	1072	1059	1046	1043	1042	1058	1065	10- 20	318.0	433.0	20.3,20.3
30	871.5	866.8	866.6	835.7	830.5	829.1	859.6	860.4	20- 30	440.9	873.9	40.9,40.9
40	629.5	626.7	583.3	598.1	566.5	585.1	567.2	619.9	30- 40	456.0	1330	62.3,62.3
50	329.9	353.5	331.5	333.7	283.5	313.3	321.8	345.7	40- 50	350.3	1680	78.7,78.7
60	152.6	122.5	165.8	114.8	129.2	96.66	169.5	133.3	50- 60	207.5	1888	88.4,88.4
70	133.5	60.63	108.2	71.70	121.9	64.85	118.5	74.95	60- 70	121.3	2009	94.1,94.1
80	70.08	63.00	76.76	60.09	59.73	59.63	86.62	70.46	70- 80	85.30	2094	98.1,98.1
90	6.074	4.699	2.474	0.8849	1.271	1.289	1.649	4.708	80- 90	41.65	2136	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:2024-04-07

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:

LUMINANCE LIMITATION CURVES

Test:U:229.77V I:0.4412A P:100.08W PF:0.9872 Freq:49.99Hz Lamp Flux:2135.97x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 760*240*31	SERIAL No.:
MFR.: A2384114-01	SUR.:0.710*0.191	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	3786	3498
80	2976	3260
75	3014	3039
70	2879	2332
65	2253	2688
60	2250	2445
55	2741	2900
50	3784	3804
45	4836	4686

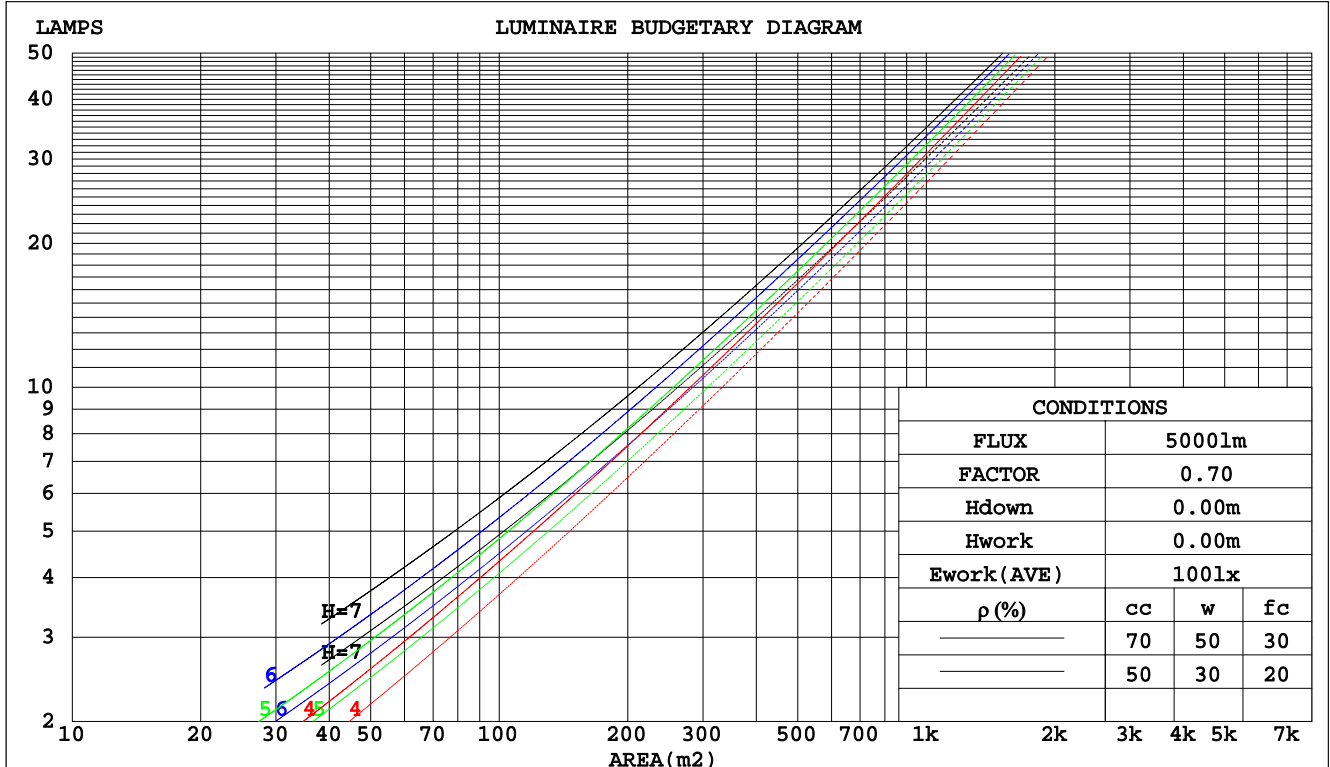
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-04-07

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:229.77V I:0.4412A P:100.08W PF:0.9872 Freq:49.99Hz Lamp Flux:2135.97x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 760*240*31	SERIAL No.:
MFR.: A2384114-01	SUR.:0.710*0.191	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	1.03	.99	1.04	1.01	.98	.90	.97	.95	.96	.94	.92	.92	.91	.89	.87
2.0	.95	.89	.84	.93	.88	.83	.90	.85	.82	.87	.83	.80	.84	.81	.78	.76
3.0	.86	.79	.73	.84	.78	.72	.81	.76	.71	.79	.74	.70	.76	.72	.69	.67
4.0	.78	.70	.64	.76	.69	.64	.74	.68	.63	.72	.66	.62	.70	.65	.61	.59
5.0	.71	.63	.57	.70	.62	.57	.68	.61	.56	.66	.60	.56	.64	.59	.55	.53
6.0	.65	.57	.51	.64	.56	.51	.62	.55	.50	.60	.55	.50	.59	.54	.50	.48
7.0	.59	.52	.46	.59	.51	.46	.57	.50	.46	.56	.50	.45	.55	.49	.45	.43
8.0	.55	.47	.42	.54	.47	.42	.53	.46	.42	.52	.46	.41	.51	.45	.41	.39
9.0	.51	.43	.38	.50	.43	.38	.49	.43	.38	.48	.42	.38	.47	.42	.38	.36
10.0	.47	.40	.35	.47	.40	.35	.46	.39	.35	.45	.39	.35	.44	.39	.35	.33



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-04-07

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:229.77V I:0.4412A P:100.08W PF:0.9872 Freq:49.99Hz Lamp Flux:2135.97x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 760*240*31	SERIAL No.:
MFR.: A2384114-01	SUR.:0.710*0.191	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	.264	.150	.047	.257	.146	.047	.244	.140	.045	.232	.134	.043	.221	.128	.041		
2.0	.247	.135	.041	.240	.132	.041	.229	.127	.040	.219	.123	.038	.209	.118	.037		
3.0	.230	.122	.037	.224	.120	.036	.215	.116	.035	.205	.113	.035	.197	.109	.034		
4.0	.214	.111	.033	.209	.110	.032	.201	.106	.032	.193	.103	.031	.185	.101	.031		
5.0	.200	.102	.030	.196	.101	.029	.188	.098	.029	.181	.096	.028	.175	.093	.028		
6.0	.187	.094	.027	.184	.093	.027	.177	.091	.026	.171	.089	.026	.165	.087	.026		
7.0	.176	.087	.025	.173	.086	.025	.167	.084	.024	.161	.083	.024	.156	.081	.024		
8.0	.166	.081	.023	.163	.080	.023	.158	.079	.023	.153	.077	.022	.148	.076	.022		
9.0	.157	.076	.021	.154	.075	.021	.149	.074	.021	.145	.073	.021	.140	.071	.021		
10.0	.149	.071	.020	.146	.071	.020	.142	.069	.020	.138	.068	.019	.134	.067	.019		

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	.177	.157	.138	.152	.134	.119	.104	.092	.082	.060	.053	.048	.019	.017	.015	
2.0	.166	.132	.103	.142	.114	.089	.098	.079	.062	.056	.046	.037	.018	.015	.012	
3.0	.157	.114	.080	.134	.098	.069	.092	.068	.049	.053	.040	.029	.017	.013	.009	
4.0	.148	.100	.064	.127	.087	.055	.087	.060	.039	.051	.035	.023	.016	.012	.008	
5.0	.140	.089	.052	.121	.077	.045	.083	.054	.032	.048	.032	.019	.016	.010	.006	
6.0	.133	.081	.043	.115	.070	.037	.079	.049	.026	.046	.029	.016	.015	.009	.005	
7.0	.127	.074	.036	.109	.064	.032	.075	.045	.022	.044	.026	.013	.014	.009	.004	
8.0	.121	.068	.031	.104	.059	.027	.072	.041	.019	.042	.024	.012	.014	.008	.004	
9.0	.115	.063	.027	.099	.054	.024	.069	.038	.017	.040	.023	.010	.013	.007	.003	
10.0	.110	.058	.024	.095	.051	.021	.066	.036	.015	.038	.021	.009	.012	.007	.003	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2024-04-07

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:229.77V I:0.4412A P:100.08W PF:0.9872 Freq:49.99Hz Lamp Flux:2135.97x1 lm											
NAME:					TYPE:			WEIGHT:			
SPEC.:					DIM.: 760*240*31			SERIAL No.:			
MFR.: A2384114-01					SUR.:0.710*0.191			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	16.3	17.5	17.7	15.9	17.2	16.2	17.4	17.6
	3H	17.0	18.2	17.3	18.5	18.7	17.0	18.2	17.3	18.4	18.7
	4H	17.7	18.9	18.0	19.1	19.3	17.6	18.8	17.9	19.0	19.3
	6H	18.3	19.4	18.7	19.7	19.9	18.3	19.4	18.7	19.7	19.9
	8H	18.6	19.6	18.9	19.9	20.2	18.7	19.7	19.0	20.0	20.3
	12H	18.9	19.9	19.2	20.2	20.5	19.0	20.0	19.3	20.3	20.6
4H	2H	16.0	17.2	16.3	17.4	17.7	16.0	17.1	16.3	17.4	17.6
	3H	17.2	18.2	17.6	18.5	18.8	17.2	18.2	17.5	18.5	18.8
	4H	18.1	19.0	18.5	19.3	19.7	17.9	18.9	18.3	19.2	19.5
	6H	19.0	19.8	19.4	20.1	20.5	18.9	19.7	19.3	20.1	20.4
	8H	19.4	20.1	19.8	20.5	20.9	19.4	20.2	19.8	20.5	20.9
	12H	19.8	20.5	20.3	20.9	21.3	19.9	20.6	20.3	20.9	21.3
8H	4H	18.2	19.0	18.6	19.4	19.7	18.1	18.8	18.5	19.2	19.6
	6H	19.3	19.9	19.7	20.3	20.7	19.2	19.9	19.7	20.3	20.7
	8H	19.9	20.4	20.3	20.9	21.3	19.9	20.5	20.4	20.9	21.3
	12H	20.6	21.1	21.1	21.5	22.0	20.6	21.1	21.1	21.5	22.0
12H	4H	18.3	19.0	18.7	19.3	19.7	18.1	18.8	18.5	19.2	19.6
	6H	19.4	19.9	19.8	20.4	20.8	19.3	19.9	19.8	20.3	20.8
	8H	20.1	20.5	20.5	21.0	21.4	20.1	20.5	20.5	21.0	21.5
Variations with the observer position at spacings:											
S = 1.0H	+ 0.5 / - 0.6					+ 0.4 / - 0.5					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.6					
2.0H	+ 0.8 / - 0.7					+ 0.8 / - 0.4					

CIE Pub.117, 2136 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 2.6$)

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2024-04-07

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:229.77V I:0.4412A P:100.08W PF:0.9872 Freq:49.99Hz Lamp Flux:2135.97x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 760*240*31	SERIAL No.:
MFR.: A2384114-01	SUR.:0.710*0.191	Shielding Angle:

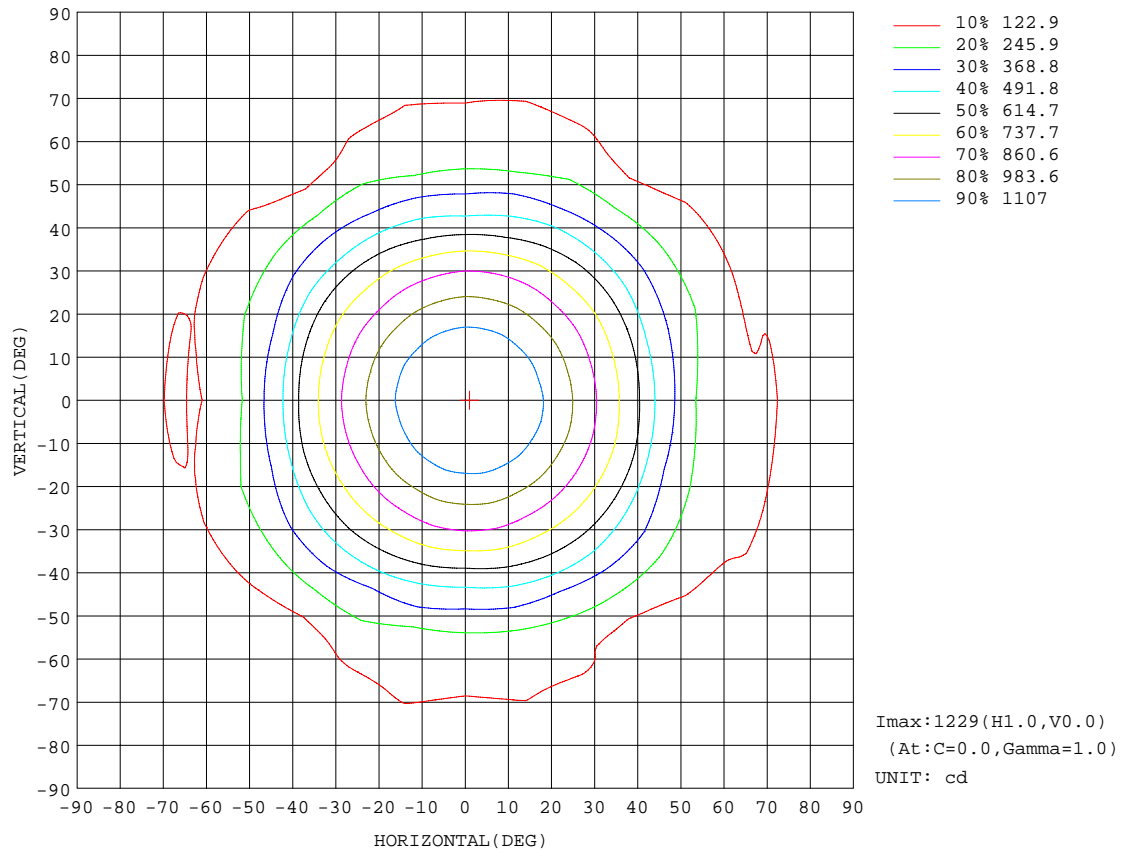
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	68	58	52	67	58	52	66	58	52	47
0.80	78	68	62	77	68	62	75	67	61	56
1.00	85	76	70	84	75	70	82	76	69	63
1.25	91	82	77	90	82	76	87	80	76	69
1.50	95	87	82	94	86	81	91	85	80	74
2.00	100	93	88	99	92	87	95	90	86	79
2.50	103	97	92	101	96	91	98	93	89	82
3.00	106	100	96	104	99	95	100	96	92	85
4.00	109	104	100	107	102	99	103	99	96	88
5.00	111	107	103	108	105	102	104	101	99	90
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:2024-04-07

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:229.77V I:0.4412A P:100.08W PF:0.9872 Freq:49.99Hz Lamp Flux:2135.97x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 760*240*31	SERIAL No.:
MFR.: A2384114-01	SUR.:0.710*0.191	Shielding Angle:

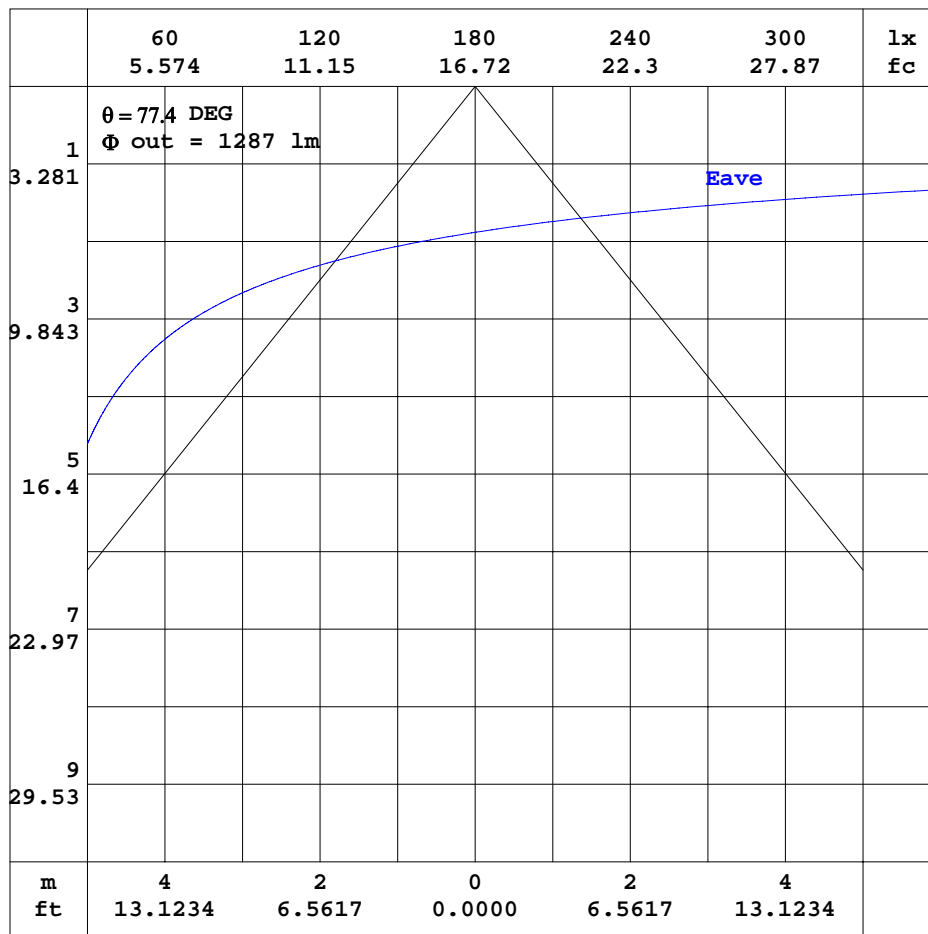


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-04-07

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:229.77V I:0.4412A P:100.08W PF:0.9872 Freq:49.99Hz Lamp Flux:2135.97x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 760*240*31	SERIAL No.:
MFR.: A2384114-01	SUR.:0.710*0.191	Shielding Angle:



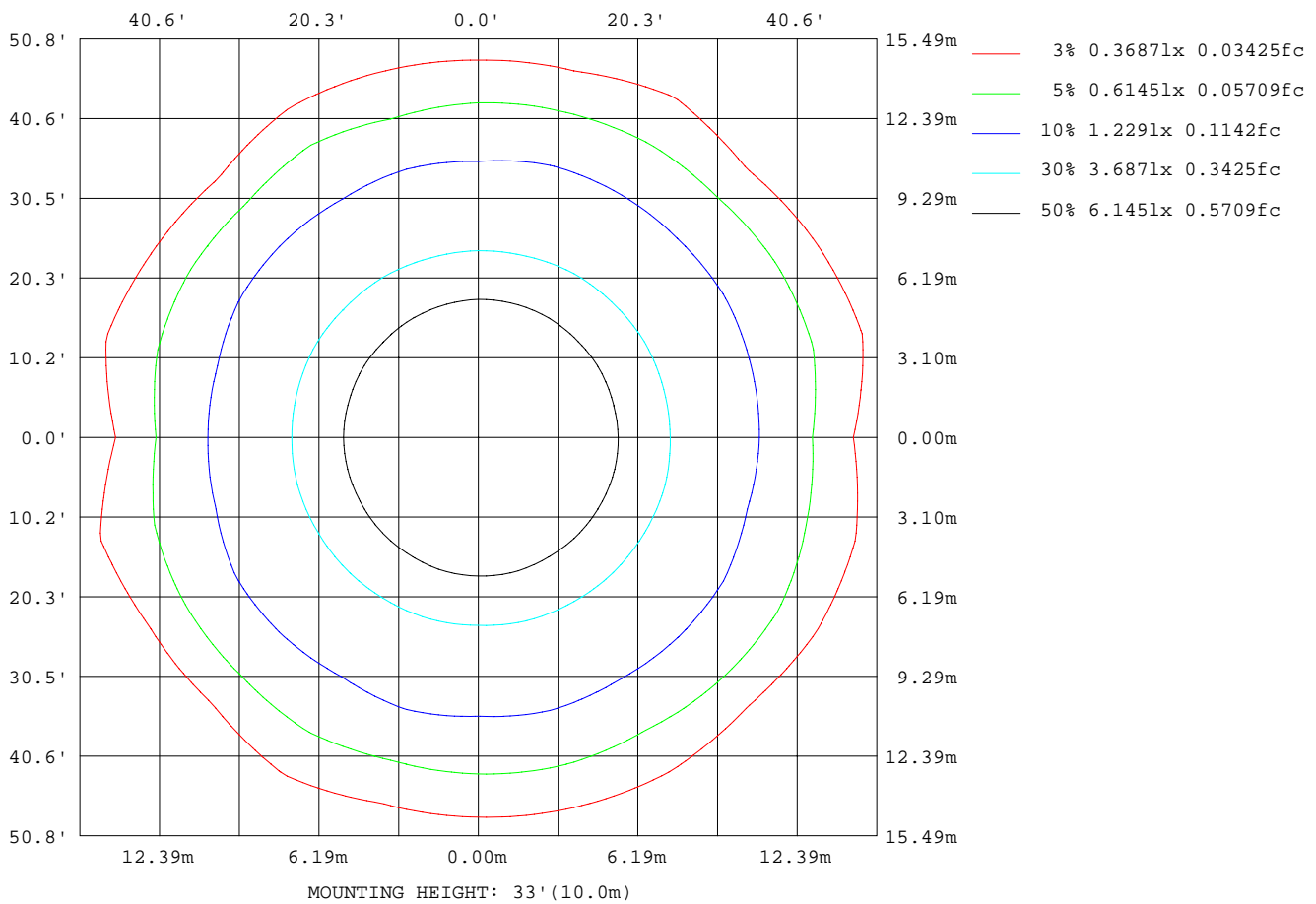
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-04-07

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:229.77V I:0.4412A P:100.08W PF:0.9872 Freq:49.99Hz Lamp Flux:2135.97x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 760*240*31	SERIAL No.:
MFR.: A2384114-01	SUR.:0.710*0.191	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-04-07

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:229.77V I:0.4412A P:100.08W PF:0.9872 Freq:49.99Hz Lamp Flux:2135.97x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 760*240*31	SERIAL No.:
MFR.: A2384114-01	SUR.:0.710*0.191	Shielding Angle:

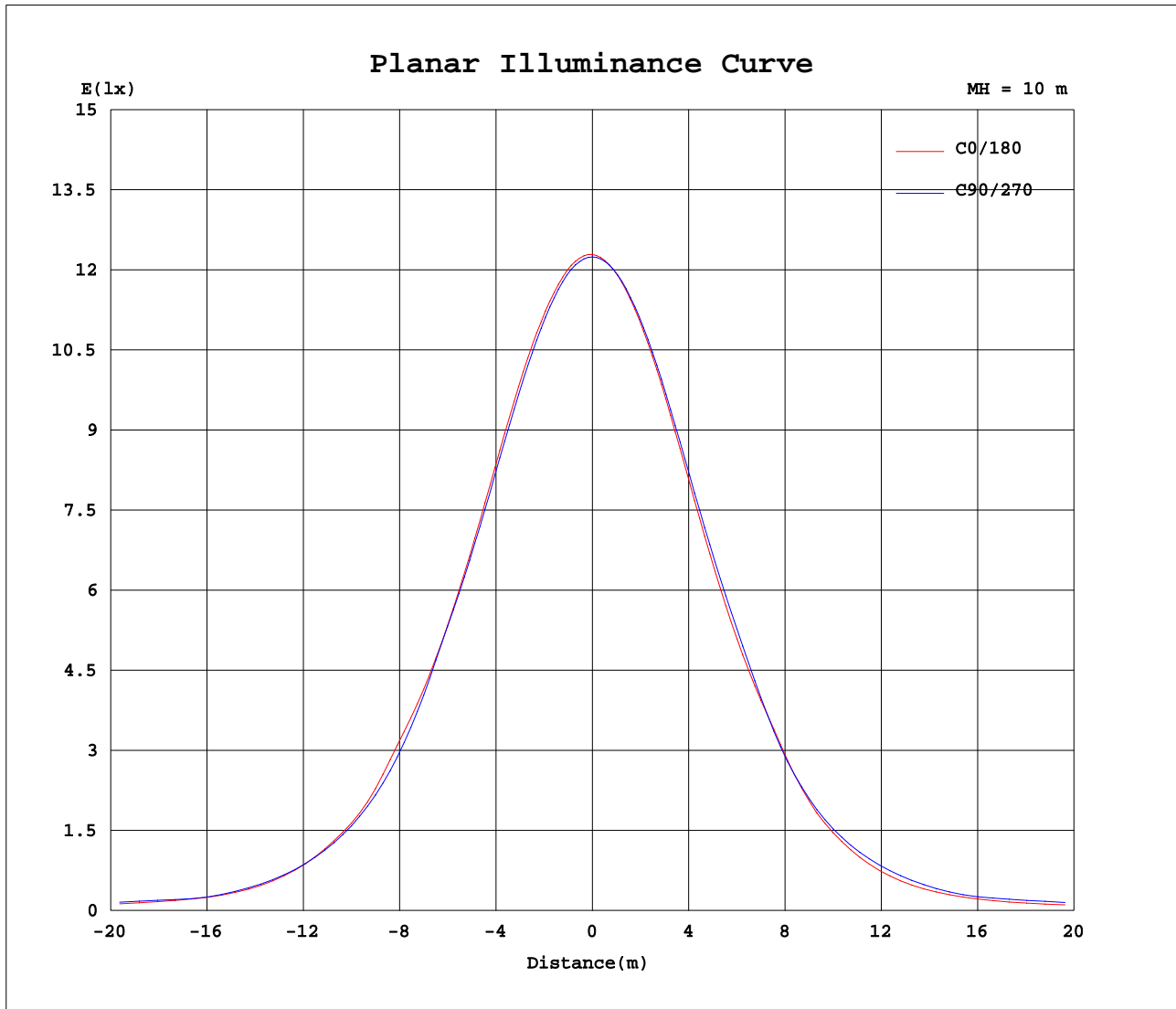
AvgL	cd/m2
L_0~180(65)av	2228
L_0~180(75)av	2804
L_0~180(85)av	3108
L_90~270(65)av	2673
L_90~270(75)av	3058
L_90~270(85)av	3526
L_45(65)av	1106
L_45(75)av	2128
L_45(85)av	2813

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-04-07

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: 2024-04-07

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:

```

```

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:

```