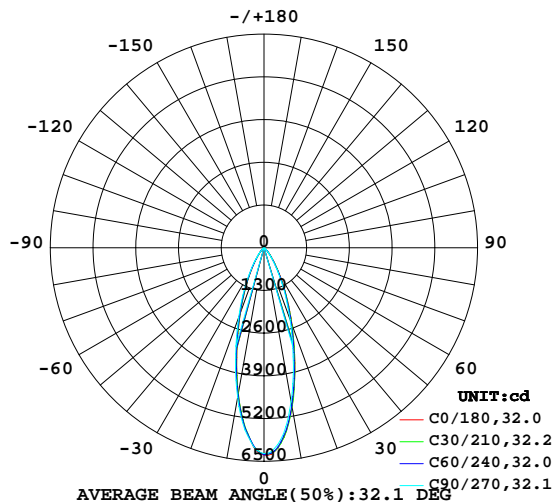


LUMINAIRE PHOTOMETRIC TEST REPORT

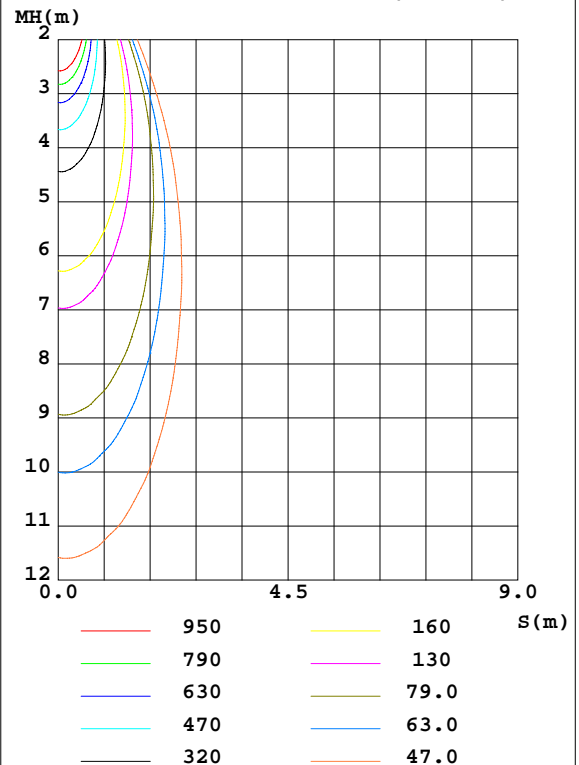
Test:U:229.89V I:0.1721A P:38.664W PF:0.9771 Freq:49.99Hz Lamp Flux:2574.52x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 228*48	SERIAL No.:
MFR.:	SUR.:3.14*0.0.103*0.103	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 66.59 lm/W			
MODEL		Imax(cd)	6322	S/MH(C0/180)	0.55
NOMINAL POWER(W)	39	LOR(%)	100.0	S/MH(C90/270)	0.53
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	2574.5	η UP,DN(C0-180)	0.0,50.9
NOMINAL FLUX(lm)	2574.52	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.1
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	230.0	η down(%)	100.0	CIBSE SHR MAX	0.55

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:2022-07-20

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:

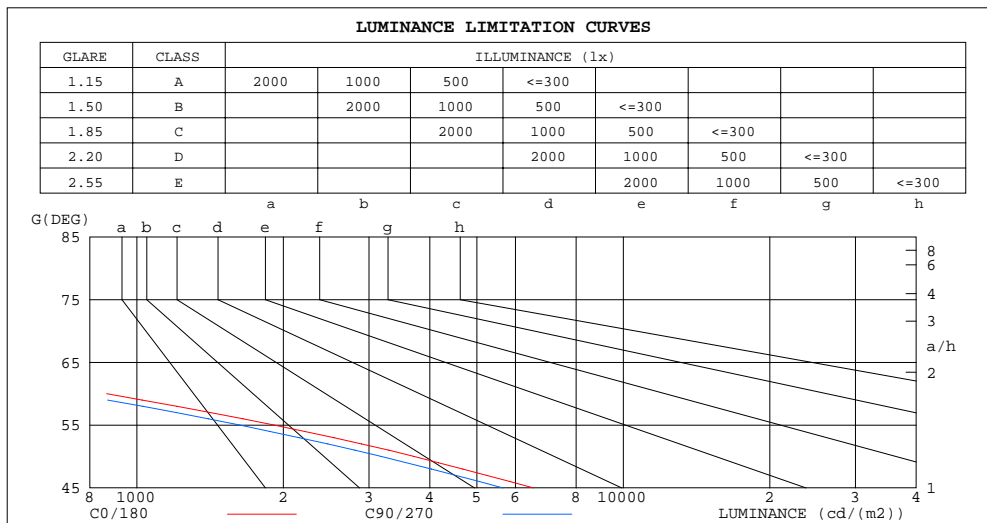
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	$\%lum, lamp$
10	4927	4948	4761	4606	4522	4479	4626	4745	0- 10	518.5	518.5	20.1,20.1
20	2495	2480	2328	2181	2106	2109	2255	2375	10- 20	935.3	1454	56.5,56.5
30	971.0	948.6	866.5	797.3	759.0	761.3	845.9	916.3	20- 30	671.7	2125	82.6,82.6
40	288.1	277.9	255.7	229.1	218.3	223.9	250.1	272.9	30- 40	305.6	2431	94.4,94.4
50	79.49	76.77	68.06	61.22	56.80	56.36	66.29	73.60	40- 50	107.7	2539	98.6,98.6
60	14.43	14.28	12.17	10.53	9.149	8.519	10.59	12.81	50- 60	29.37	2568	99.8,99.8
70	2.047	1.930	1.848	1.683	1.640	1.668	1.716	1.909	60- 70	4.718	2573	99.9,99.9
80	0.8775	0.7468	0.7648	0.6438	0.6610	0.7306	0.7035	0.8431	70- 80	1.269	2574	100,100
90	0.1546	0.1375	0.1031	0.1031	0.2062	0.2148	0.2062	0.2062	80- 90	0.4356	2575	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:2022-07-20

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:229.89V I:0.1721A P:38.664W PF:0.9771 Freq:49.99Hz Lamp Flux:2574.52x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 228*48	SERIAL No.:
MFR.:	SUR.:3.14*0.0.103*0.103	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	166	139
80	152	132
75	154	142
70	180	162
65	343	282
60	866	731
55	1915	1628
50	3713	3179
45	6538	5654

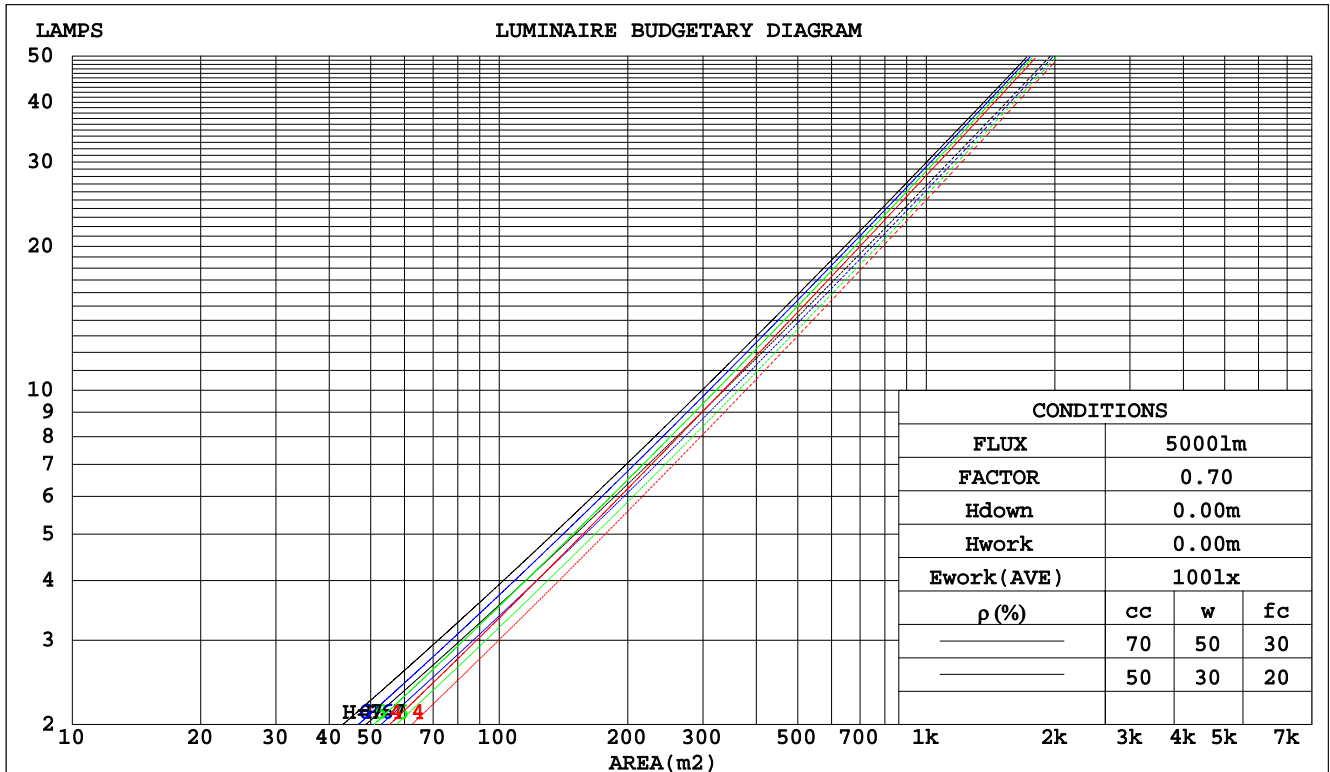
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2022-07-20

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:229.89V I:0.1721A P:38.664W PF:0.9771 Freq:49.99Hz Lamp Flux:2574.52x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 228*48	SERIAL No.:
MFR.:	SUR.:3.14*0.0.103*0.103	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	1.12	1.09	1.07	1.10	1.08	1.06	1.06	1.04	1.02	1.02	1.01	.99	.98	.97	.97	.95
2.0	1.05	1.01	.98	1.03	1.00	.97	1.00	.97	.95	.97	.95	.93	.94	.93	.91	.90
3.0	.99	.95	.91	.98	.94	.90	.95	.92	.89	.93	.90	.88	.91	.88	.86	.85
4.0	.94	.89	.85	.93	.88	.85	.90	.87	.84	.89	.85	.83	.87	.84	.82	.80
5.0	.89	.84	.80	.88	.83	.80	.86	.82	.79	.85	.81	.78	.83	.80	.78	.76
6.0	.84	.79	.76	.84	.79	.75	.82	.78	.75	.81	.77	.74	.80	.76	.74	.73
7.0	.80	.75	.72	.80	.75	.71	.79	.74	.71	.78	.74	.71	.76	.73	.70	.69
8.0	.77	.72	.68	.76	.71	.68	.75	.71	.68	.74	.70	.67	.73	.70	.67	.66
9.0	.74	.68	.65	.73	.68	.65	.72	.68	.65	.71	.67	.64	.71	.67	.64	.63
10.0	.70	.65	.62	.70	.65	.62	.69	.65	.62	.69	.65	.62	.68	.64	.62	.60



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2022-07-20

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:229.89V I:0.1721A P:38.664W PF:0.9771 Freq:49.99Hz Lamp Flux:2574.52x1 lm					
NAME:		TYPE:		WEIGHT:	
SPEC.:		DIM.: 228*48		SERIAL No.:	
MFR.:		SUR.:3.14*0.0.103*0.103		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	.160	.091	.029	.154	.088	.028	.141	.081	.026	.130	.075	.024	.119	.069	.022	
2.0	.152	.083	.026	.147	.081	.025	.136	.076	.024	.126	.071	.022	.118	.067	.021	
3.0	.144	.077	.023	.139	.075	.022	.130	.071	.021	.122	.067	.021	.115	.064	.020	
4.0	.136	.071	.021	.132	.069	.020	.125	.066	.020	.118	.063	.019	.111	.061	.018	
5.0	.130	.066	.019	.126	.065	.019	.120	.062	.018	.114	.060	.018	.108	.058	.017	
6.0	.124	.062	.018	.121	.061	.018	.115	.059	.017	.109	.057	.017	.104	.055	.016	
7.0	.118	.058	.017	.115	.057	.016	.110	.056	.016	.106	.054	.016	.101	.053	.015	
8.0	.113	.055	.015	.110	.054	.015	.106	.053	.015	.102	.052	.015	.098	.050	.015	
9.0	.108	.052	.015	.106	.052	.014	.102	.050	.014	.098	.049	.014	.095	.048	.014	
10.0	.104	.050	.014	.102	.049	.014	.098	.048	.014	.095	.047	.013	.092	.046	.013	

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	.170	.157	.146	.145	.135	.126	.099	.093	.087	.057	.054	.051	.018	.017	.016	
2.0	.154	.133	.115	.132	.114	.099	.090	.079	.069	.052	.046	.041	.017	.015	.013	
3.0	.140	.113	.092	.120	.098	.080	.083	.068	.056	.048	.040	.033	.015	.013	.011	
4.0	.129	.098	.075	.111	.085	.065	.076	.059	.046	.044	.035	.027	.014	.011	.009	
5.0	.120	.087	.062	.103	.075	.054	.071	.052	.038	.041	.031	.023	.013	.010	.007	
6.0	.112	.077	.052	.096	.067	.045	.066	.047	.032	.038	.027	.019	.012	.009	.006	
7.0	.105	.069	.044	.090	.060	.039	.062	.042	.027	.036	.025	.016	.012	.008	.005	
8.0	.099	.063	.038	.085	.054	.033	.059	.038	.024	.034	.023	.014	.011	.007	.005	
9.0	.094	.057	.033	.081	.050	.029	.056	.035	.020	.033	.021	.012	.011	.007	.004	
10.0	.089	.053	.029	.077	.046	.025	.053	.032	.018	.031	.019	.011	.010	.006	.004	

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2022-07-20

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:229.89V I:0.1721A P:38.664W PF:0.9771 Freq:49.99Hz Lamp Flux:2574.52x1 lm											
NAME:					TYPE:			WEIGHT:			
SPEC.:					DIM.: 228*48			SERIAL No.:			
MFR.:					SUR.:3.14*0.0.103*0.103			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	13.2	14.0	13.4	14.2	14.3	12.6	13.4	12.8	13.6	13.8	
	3H	13.0	13.8	13.3	14.0	14.2	12.5	13.2	12.7	13.4	13.6
	4H	12.9	13.7	13.2	13.9	14.1	12.4	13.1	12.6	13.3	13.5
	6H	12.9	13.5	13.1	13.8	14.0	12.3	13.0	12.6	13.2	13.4
	8H	12.8	13.5	13.1	13.7	14.0	12.2	12.9	12.5	13.1	13.4
	12H	12.8	13.4	13.1	13.7	13.9	12.2	12.8	12.5	13.1	13.4
4H	2H	13.0	13.7	13.2	13.9	14.1	12.4	13.1	12.7	13.3	13.6
	3H	12.8	13.4	13.1	13.7	13.9	12.2	12.9	12.5	13.1	13.4
	4H	12.7	13.3	13.0	13.6	13.9	12.1	12.7	12.5	13.0	13.3
	6H	12.6	13.1	13.0	13.4	13.8	12.0	12.5	12.4	12.9	13.2
	8H	12.5	13.0	12.9	13.4	13.7	12.0	12.5	12.4	12.8	13.2
	12H	12.5	12.9	12.9	13.3	13.7	11.9	12.4	12.3	12.7	13.1
8H	4H	12.5	13.0	12.9	13.4	13.7	12.0	12.5	12.4	12.8	13.2
	6H	12.4	12.8	12.9	13.2	13.6	11.9	12.3	12.3	12.7	13.1
	8H	12.4	12.7	12.8	13.1	13.6	11.8	12.2	12.3	12.6	13.0
	12H	12.3	12.6	12.8	13.1	13.5	11.8	12.1	12.2	12.5	13.0
12H	4H	12.5	12.9	12.9	13.3	13.7	11.9	12.4	12.3	12.7	13.1
	6H	12.4	12.7	12.8	13.1	13.6	11.8	12.2	12.3	12.6	13.0
	8H	12.3	12.6	12.8	13.1	13.5	11.8	12.1	12.2	12.5	13.0
Variations with the observer position at spacings:											
S = 1.0H	+ 3.0 / - 9.1					+ 2.7 / - 9.4					
1.5H	+ 4.5 / - 6.4					+ 4.2 / - 6.3					
2.0H	+ 5.6 / -10.0					+ 5.3 / - 9.9					

CIE Pub.117, 2575 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 3.3$)

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2022-07-20

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:229.89V I:0.1721A P:38.664W PF:0.9771 Freq:49.99Hz Lamp Flux:2574.52x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 228*48	SERIAL No.:
MFR.:	SUR.:3.14*0.0.103*0.103	Shielding Angle:

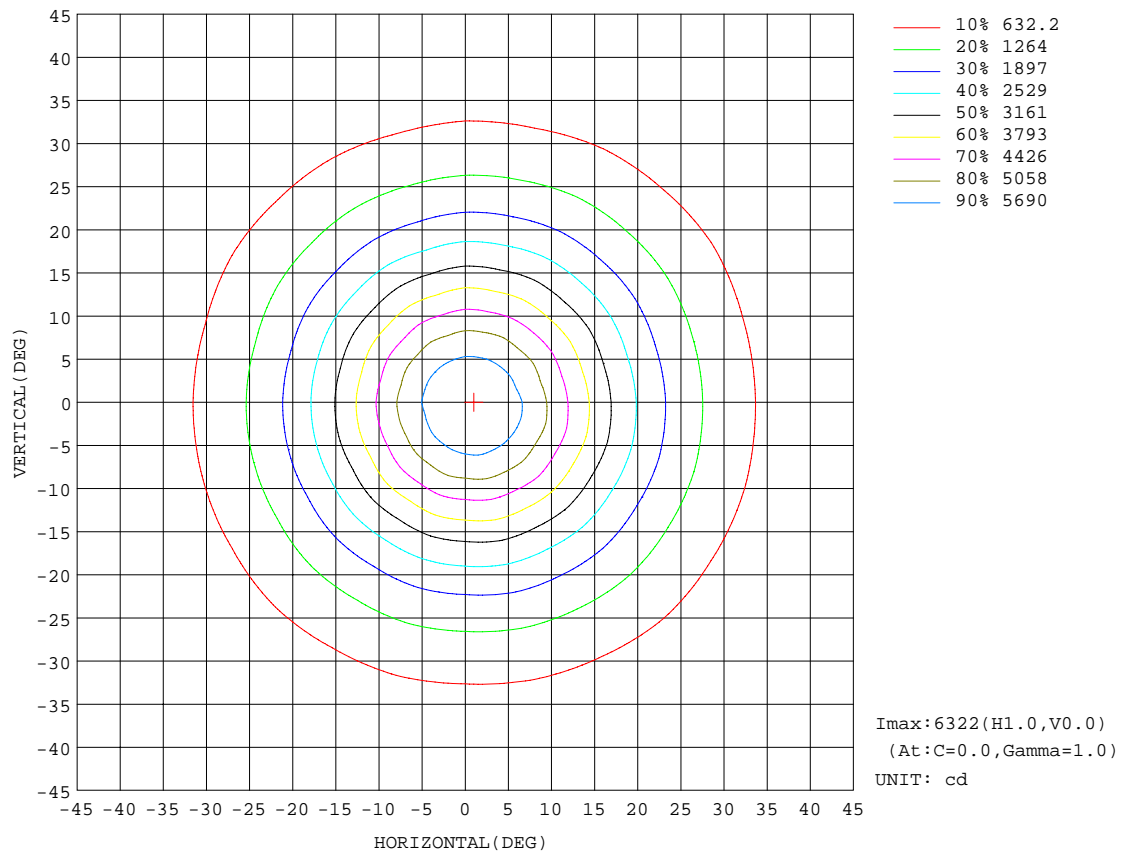
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	88	82	78	87	82	78	87	81	78	74
0.80	95	90	86	95	89	86	94	89	86	82
1.00	100	94	91	99	94	91	97	94	90	86
1.25	104	99	95	103	98	95	101	97	94	90
1.50	106	102	99	105	101	98	103	100	97	93
2.00	109	105	102	108	104	101	105	102	100	94
2.50	111	107	104	109	106	103	106	103	101	95
3.00	112	109	106	110	107	105	107	105	103	97
4.00	114	111	109	112	110	108	108	107	105	98
5.00	115	113	111	113	111	110	109	108	107	99
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:2022-07-20

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:229.89V I:0.1721A P:38.664W PF:0.9771 Freq:49.99Hz Lamp Flux:2574.52x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 228*48	SERIAL No.:
MFR.:	SUR.:3.14*0.0.103*0.103	Shielding Angle:

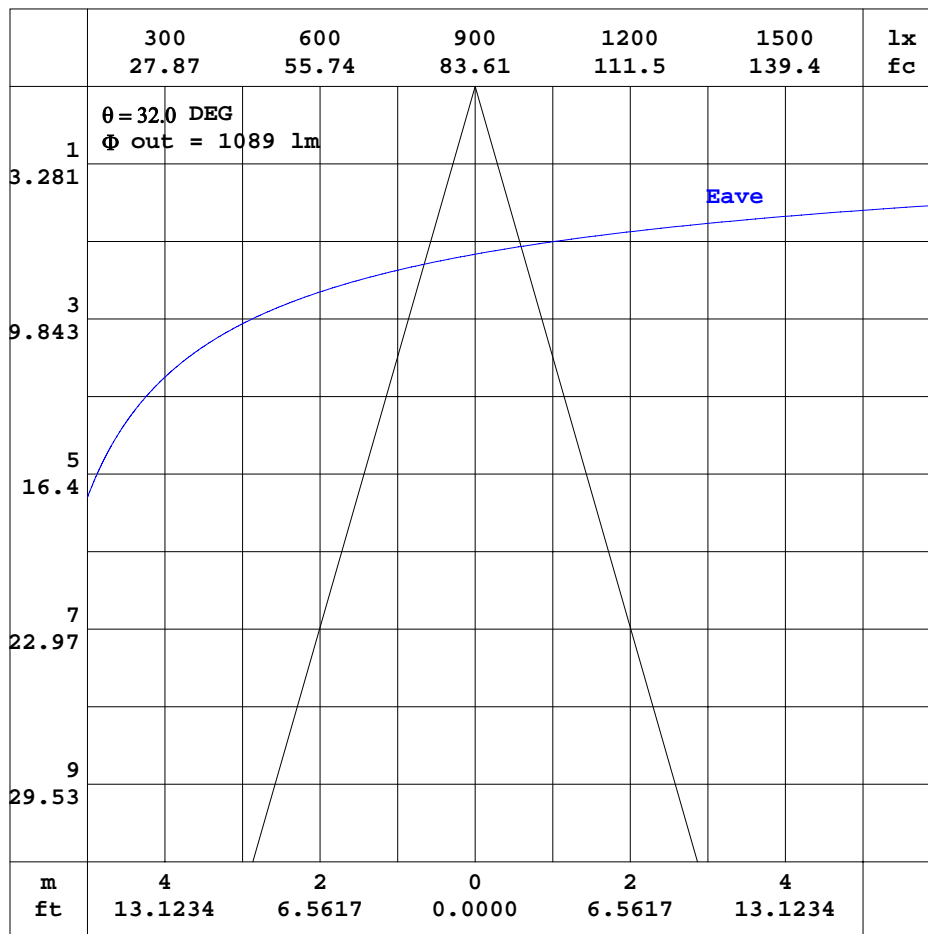


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2022-07-20

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:229.89V I:0.1721A P:38.664W PF:0.9771 Freq:49.99Hz Lamp Flux:2574.52x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 228*48	SERIAL No.:
MFR.:	SUR.:3.14*0.0.103*0.103	Shielding Angle:



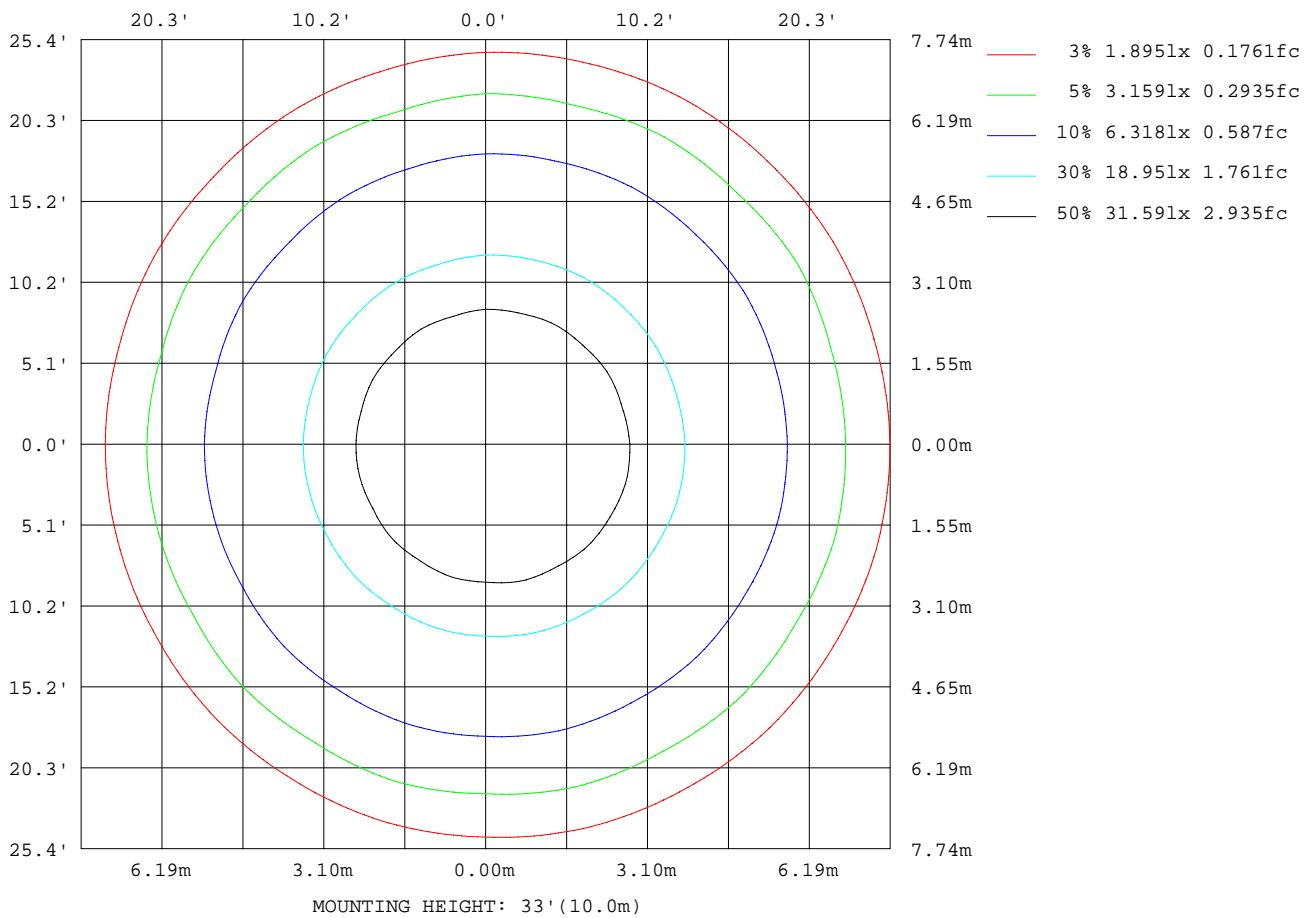
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2022-07-20

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:229.89V I:0.1721A P:38.664W PF:0.9771 Freq:49.99Hz Lamp Flux:2574.52x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 228*48	SERIAL No.:
MFR.:	SUR.:3.14*0.0.103*0.103	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2022-07-20

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:229.89V I:0.1721A P:38.664W PF:0.9771 Freq:49.99Hz Lamp Flux:2574.52x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 228*48	SERIAL No.:
MFR.:	SUR.:3.14*0.0.103*0.103	Shielding Angle:

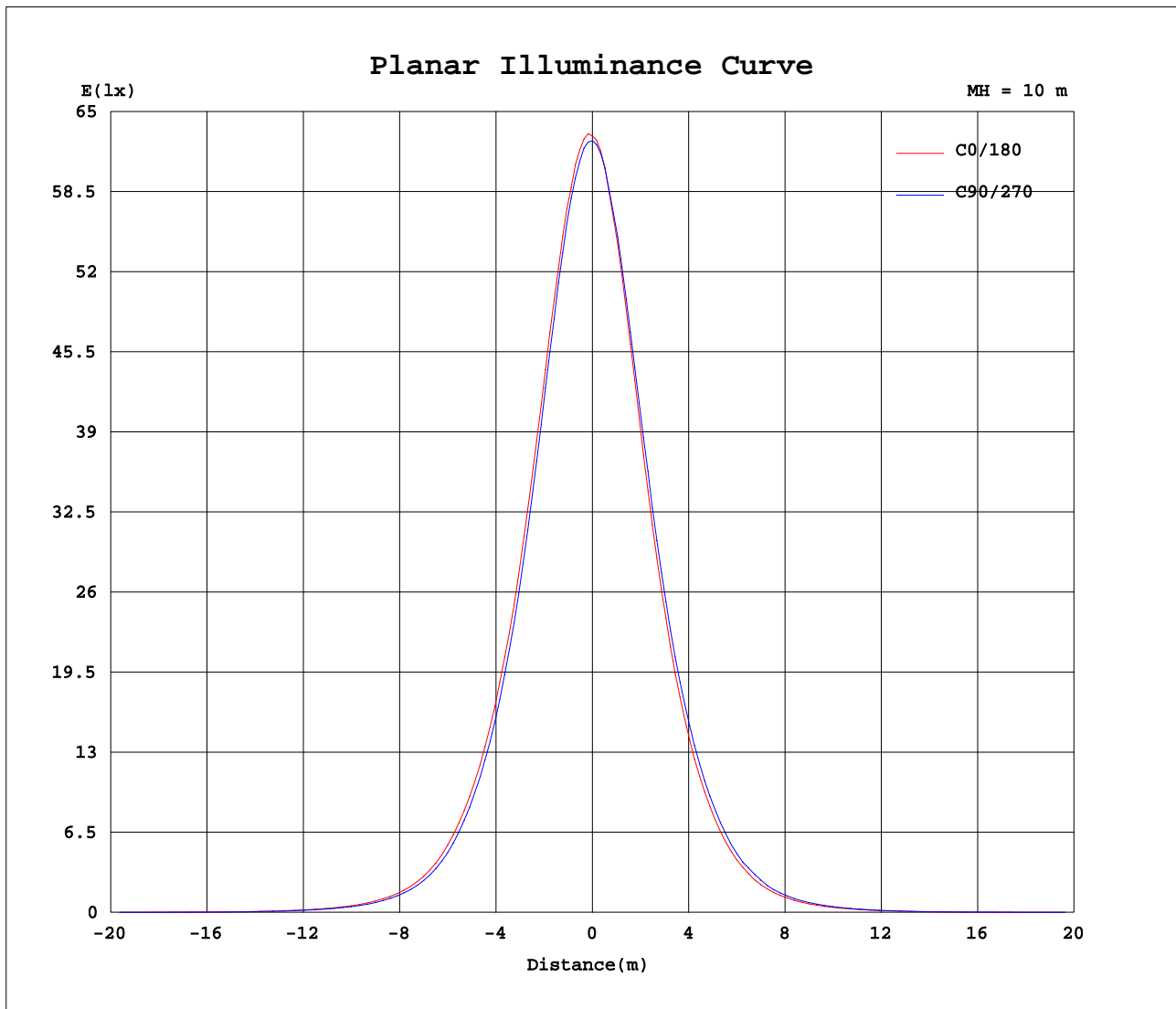
AvgL	cd/m2
L_0~180(65)av	283
L_0~180(75)av	139
L_0~180(85)av	138
L_90~270(65)av	263
L_90~270(75)av	136
L_90~270(85)av	123
L_45(65)av	274
L_45(75)av	136
L_45(85)av	124

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2022-07-20

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: 2022-07-20

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:

```