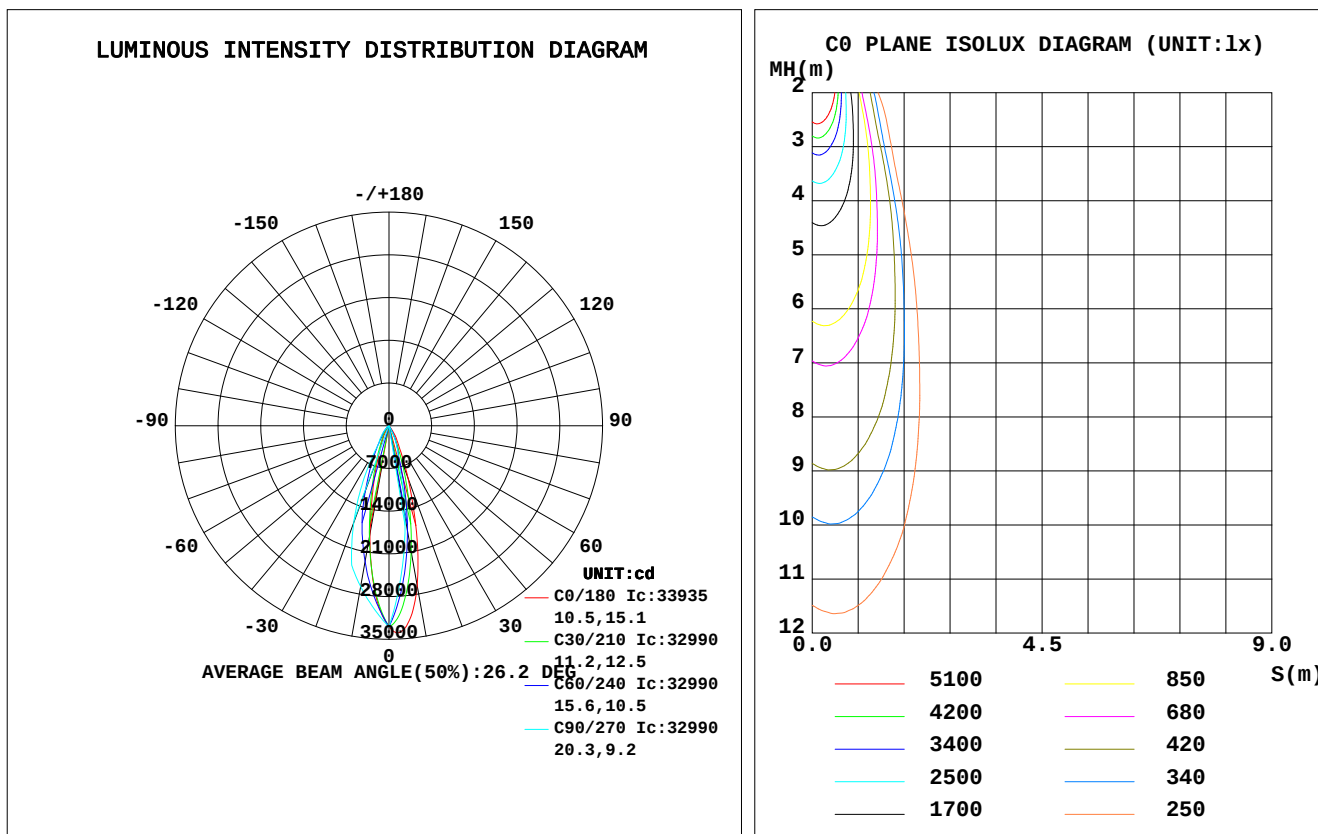


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:11.43V I:1.917A P:16.76W PF:0.7648 Lamp Flux:235x1 lm		
NAME: 490236 BODACIOUS	TYPE:490236 BODACIOUS	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 84.66 lm/W			
MODEL	490236 BODACIOUS	I _{max} (cd)	33935	S/MH(C0/180)	0.37
NOMINAL POWER(W)	16	LOR(%)	603.7	S/MH(C90/270)	0.64
RATED VOLTAGE(V)	12	TOTAL FLUX(lm)	9055.2	η UP, DN(C0-180)	0.0,197.7
NOMINAL FLUX(lm)	1500	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,406.0
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	12	η down(%)	603.7	CIBSE SHR MAX	1.00



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:20DEG
Operators:Y
Test Date:2025-04-16

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:8.750m [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
5	3297	2726	2403	2361	2703	2730	2988	3144	0- 5	710.7	710.7	7.85,47.4
10	2668	1905	1506	1445	1797	2032	2677	2654	5- 10	1707	2418	26.7,161
15	1709	1080	609.9	725.2	968.7	1347	2366	2006	10- 15	1973	4391	48.5,293
20	916.8	442.1	408.8	267.2	470.8	828.5	1689	1341	15- 20	1691	6082	67.2,405
25	425.8	220.2	207.8	120.2	245.5	454.9	1013	769.4	20- 25	1230	7312	80.8,487
30	244.7	98.12	6.758	37.92	122.5	258.1	336.4	408.9	25- 30	748.2	8060	89,537
35	98.08	23.61	4.509	5.382	22.68	162.9	246.5	225.0	30- 35	393.0	8453	93.4,564
40	10.21	0.4169	2.260	0.3987	5.479	107.0	156.7	134.5	35- 40	245.4	8699	96.1,580
45	3.970	0.2594	0.0108	0.2422	2.698	71.20	66.86	84.91	40- 45	150.6	8849	97.7,590
50	1.889	0.1428	0.0099	0.1153	1.470	41.11	49.11	47.99	45- 50	84.15	8934	98.7,596
55	1.210	0.0425	0.0090	0	0.9953	17.05	31.37	19.89	50- 55	52.21	8986	99.2,599
60	0.9045	0.0238	0.0081	0	0.7265	7.425	13.63	10.00	55- 60	31.03	9017	99.6,601
65	0.7177	0.0070	0.1066	0	0.5666	3.531	10.18	4.326	60- 65	16.61	9033	99.8,602
70	0.5279	0.0320	0.2050	0.0280	0.4067	1.955	6.720	2.306	65- 70	10.67	9044	99.9,603
75	0.3410	0.1069	0.3035	0.0935	0.2523	1.508	3.265	1.677	70- 75	6.844	9051	100,603
80	0.1703	0.1388	0	0.1214	0.1249	0.9554	0	1.002	75- 80	3.333	9054	100,604
85	0.0187	0	0	0	0.0057	0	0	0	80- 85	0.7750	9055	100,604
90	0	0	0	0	0	0	0	0	85- 90	0.0881	9055	100,604
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

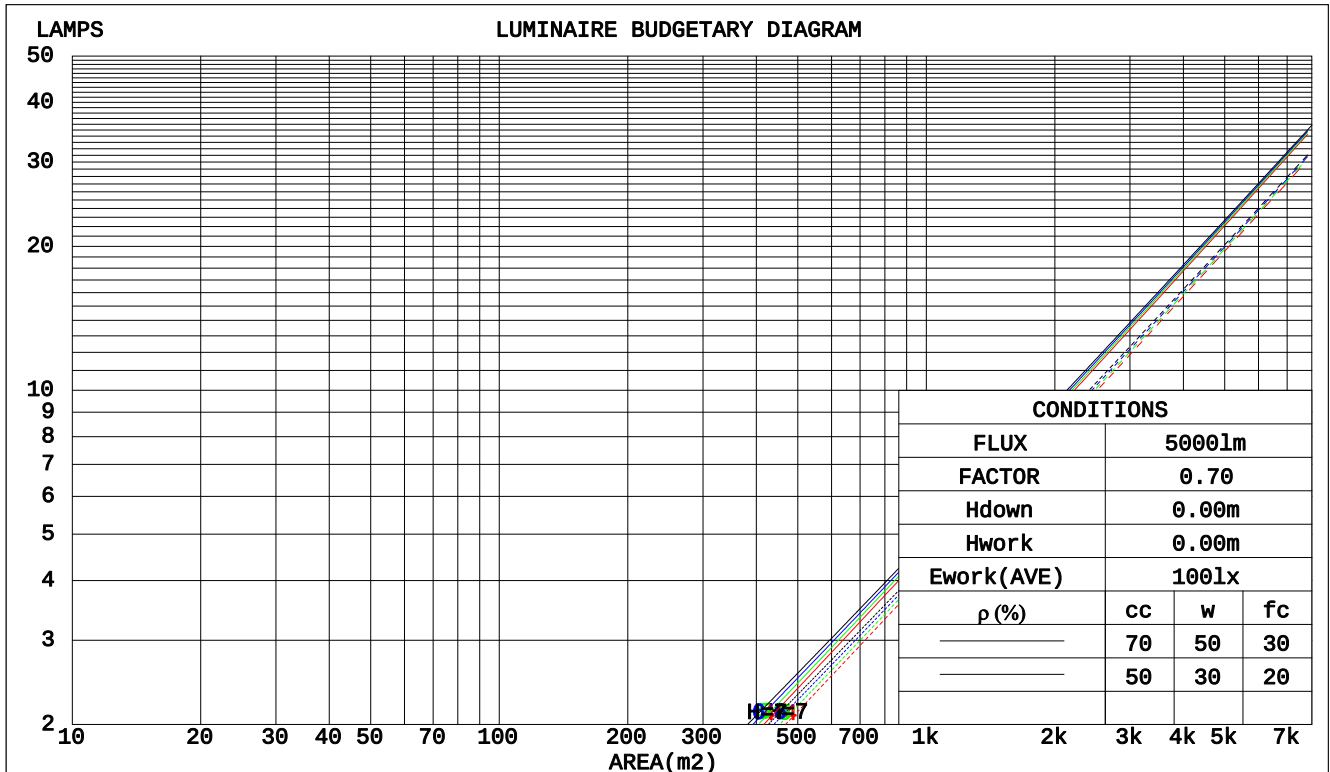
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:20DEG
Operators:Y
Test Date:2025-04-16

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:8.750m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:11.43V I:1.917A P:16.76W PF:0.7648 Lamp Flux:235x1 lm		
NAME: 490236 BODACIOUS	TYPE:490236 BODACIOUS	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

ρ_{CC}	80%			70%			50%			30%			10%			0
ρ_W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:20DEG
Operators:Y
Test Date:2025-04-16

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:8.750m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:11.43V I:1.917A P:16.76W PF:0.7648 Lamp Flux:235x1 lm								
NAME: 490236 BODACIOUS				TYPE:490236 BODACIOUS			WEIGHT:	
SPEC.:				DIM.:			SERIAL No.:	
MFR.:				SUR.:			PROTECTION ANGLE:	

ρ _{cc}	80%			70%			50%			30%			10%			0	
ρ _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ _{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.907	.516	.163	.867	.495	.157	.792	.454	.145	.723	.417	.134	.659	.382	.123		
2.0	.852	.467	.143	.819	.451	.139	.756	.421	.131	.699	.392	.123	.646	.365	.115		
3.0	.801	.426	.128	.773	.414	.125	.721	.390	.119	.672	.368	.113	.627	.347	.107		
4.0	.755	.393	.115	.732	.383	.113	.687	.364	.109	.646	.347	.105	.607	.330	.100		
5.0	.715	.364	.106	.695	.357	.104	.656	.342	.101	.621	.327	.097	.587	.314	.094		
6.0	.679	.340	.097	.661	.334	.096	.628	.322	.094	.597	.310	.091	.568	.299	.089		
7.0	.646	.320	.091	.631	.314	.090	.602	.304	.088	.575	.295	.086	.549	.285	.084		
8.0	.617	.301	.085	.603	.297	.084	.578	.289	.082	.554	.281	.081	.531	.273	.079		
9.0	.590	.286	.080	.578	.282	.079	.556	.275	.078	.534	.268	.077	.514	.261	.075		
10.0	.566	.271	.075	.555	.268	.075	.535	.262	.074	.516	.256	.073	.498	.250	.072		

ρ _{CC}	80%			70%			50%			30%			10%			0	
ρ _W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ _{fC}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)										
0.0	1.150	1.150	1.150	.983	.983	.983	.671	.671	.671	.385	.385	.385	.123	.123	.123		
1.0	1.022	.951	.887	.874	.816	.764	.598	.562	.528	.344	.325	.307	.110	.105	.099		
2.0	.918	.801	.702	.787	.689	.607	.539	.477	.423	.311	.277	.248	.100	.090	.081		
3.0	.833	.684	.566	.714	.590	.491	.490	.410	.344	.283	.240	.203	.091	.078	.066		
4.0	.762	.593	.464	.654	.512	.403	.450	.357	.284	.260	.209	.168	.084	.068	.055		
5.0	.703	.520	.385	.603	.450	.335	.416	.314	.237	.241	.185	.140	.078	.060	.046		
6.0	.652	.461	.324	.560	.399	.282	.386	.280	.200	.224	.164	.119	.072	.054	.039		
7.0	.608	.413	.276	.523	.358	.241	.362	.251	.170	.210	.148	.101	.068	.048	.034		
8.0	.571	.373	.238	.491	.324	.207	.340	.227	.147	.198	.134	.088	.064	.044	.029		
9.0	.538	.340	.206	.463	.295	.180	.321	.207	.128	.187	.122	.076	.061	.040	.025		
10.0	.509	.312	.181	.439	.271	.158	.304	.191	.112	.177	.113	.067	.058	.037	.022		

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:20DEG
Operators:Y
Test Date:2025-04-16

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:8.750m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:11.43V I:1.917A P:16.76W PF:0.7648 Lamp Flux:235x1 lm										
NAME: 490236 BODACIOUS					TYPE:490236 BODACIOUS			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.:					SUR.:			PROTECTION 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	2.5	3.2	2.7	3.4	3.6	-17.0	-16.3	-16.8	-16.1	-15.9
3H	2.3	3.0	2.6	3.2	3.4	-16.7	-16.0	-16.4	-15.8	-15.6
4H	2.3	2.9	2.5	3.1	3.3	-15.5	-14.9	-15.3	-14.7	-14.4
6H	2.2	2.8	2.5	3.0	3.3	-15.2	-14.6	-14.9	-14.4	-14.1
8H	2.1	2.7	2.4	3.0	3.2	-15.3	-14.7	-15.0	-14.4	-14.2
12H	2.1	2.7	2.4	2.9	3.2	-15.3	-14.7	-15.0	-14.5	-14.2
4H 2H	2.3	2.9	2.5	3.1	3.3	-17.2	-16.6	-16.9	-16.3	-16.1
3H	2.1	2.7	2.4	2.9	3.2	-16.8	-16.2	-16.5	-15.9	-15.7
4H	2.0	2.5	2.3	2.8	3.1	-15.3	-14.8	-14.9	-14.5	-14.2
6H	1.9	2.4	2.3	2.7	3.0	-14.9	-14.4	-14.5	-14.1	-13.8
8H	1.8	2.3	2.2	2.6	3.0	-14.9	-14.5	-14.6	-14.2	-13.8
12H	1.8	2.2	2.2	2.6	2.9	-15.0	-14.6	-14.6	-14.2	-13.8
8H 4H	1.8	2.3	2.2	2.6	3.0	-15.1	-14.7	-14.8	-14.4	-14.0
6H	1.7	2.1	2.2	2.5	2.9	-14.7	-14.4	-14.3	-14.0	-13.5
8H	1.7	2.0	2.1	2.4	2.9	-14.8	-14.4	-14.3	-14.0	-13.6
12H	1.6	1.9	2.1	2.3	2.8	-14.8	-14.6	-14.4	-14.1	-13.6
12H 4H	1.8	2.2	2.2	2.6	2.9	-15.1	-14.7	-14.7	-14.3	-14.0
6H	1.7	2.0	2.1	2.4	2.8	-14.7	-14.3	-14.2	-13.9	-13.5
8H	1.6	1.9	2.1	2.3	2.8	-14.7	-14.4	-14.2	-14.0	-13.5
Variations with the observer position at spacings:										
S = 1.0H	+ 6.9 / -12.0					+ 2.4 / - 2.3				
1.5H	+ 9.6 / -14.6					+ 4.7 / - 2.7				
2.0H	+ 7.3 / - 6.5					+ 0.9 / - 1.3				

CIE Pub.117 Corrected 1500 lm Total Lamp Luminous Flux.(8log(F/F0) = 1.4)

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:20DEG
Operators:Y
Test Date:2025-04-16

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:8.750m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:11.43V I:1.917A P:16.76W PF:0.7648 Lamp Flux:235x1 lm		
NAME: 490236 BODACIOUS	TYPE:490236 BODACIOUS	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

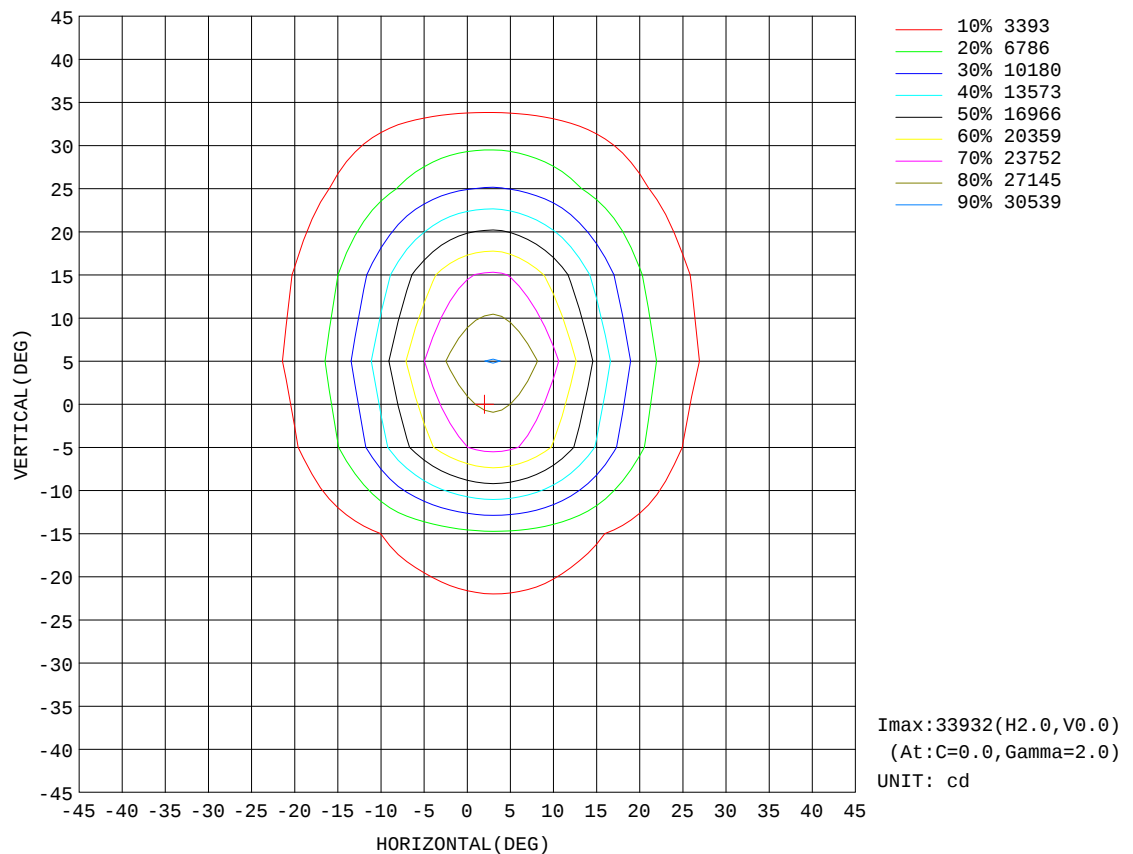
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	538	501	480	535	500	479	530	498	478	458
0.80	581	548	527	577	546	526	570	542	524	503
1.00	606	574	554	601	572	552	592	570	549	526
1.25	629	599	580	623	596	577	611	589	573	548
1.50	645	618	599	637	613	596	624	604	589	563
2.00	659	635	617	651	629	612	635	617	603	573
2.50	669	647	630	659	640	624	641	625	613	578
3.00	677	658	642	667	649	636	647	633	623	585
4.00	689	673	661	677	664	652	655	645	636	594
5.00	697	684	673	684	673	664	660	652	645	600
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:20DEG
 Operators:Y
 Test Date:2025-04-16

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.291
 Humidity:65.0%
 Test Distance:8.750m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:11.43V I:1.917A P:16.76W PF:0.7648 Lamp Flux:235x1 lm		
NAME: 490236 BODACIOUS	TYPE:490236 BODACIOUS	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

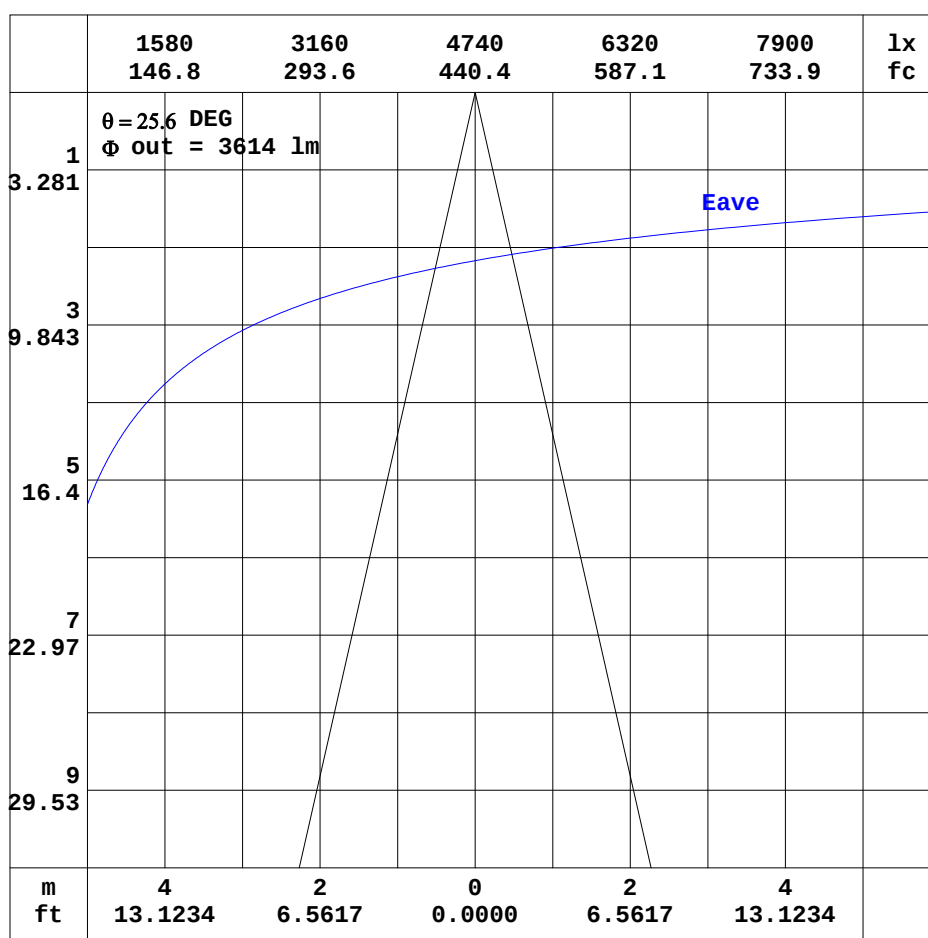


C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 20DEG
Operators: Y
Test Date: 2025-04-16

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.291
Humidity: 65.0%
Test Distance: 8.750m [K=1.0000]
Remarks:

AAI CURVES

Test:U:11.43V I:1.917A P:16.76W PF:0.7648 Lamp Flux:235x1 lm		
NAME: 490236 BODACIOUS	TYPE:490236 BODACIOUS	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:



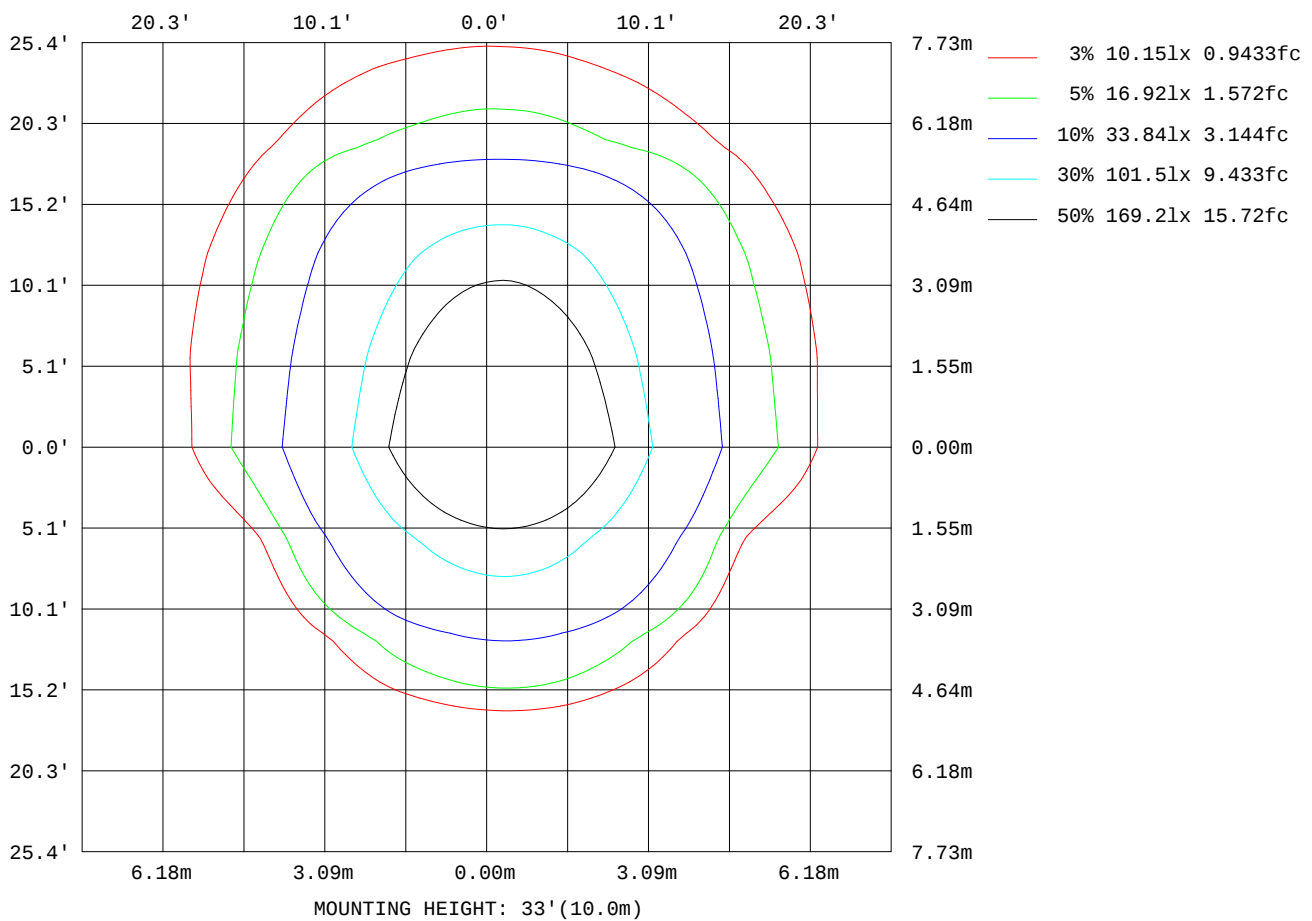
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:20DEG
Operators:Y
Test Date:2025-04-16

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:8.750m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:11.43V I:1.917A P:16.76W PF:0.7648 Lamp Flux:235x1 lm		
NAME: 490236 BODACIOUS	TYPE:490236 BODACIOUS	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:20DEG
Operators:Y
Test Date:2025-04-16

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:8.750m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:11.43V I:1.917A P:16.76W PF:0.7648 Lamp Flux:235x1 lm		
NAME: 490236 BODACIOUS	TYPE:490236 BODACIOUS	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

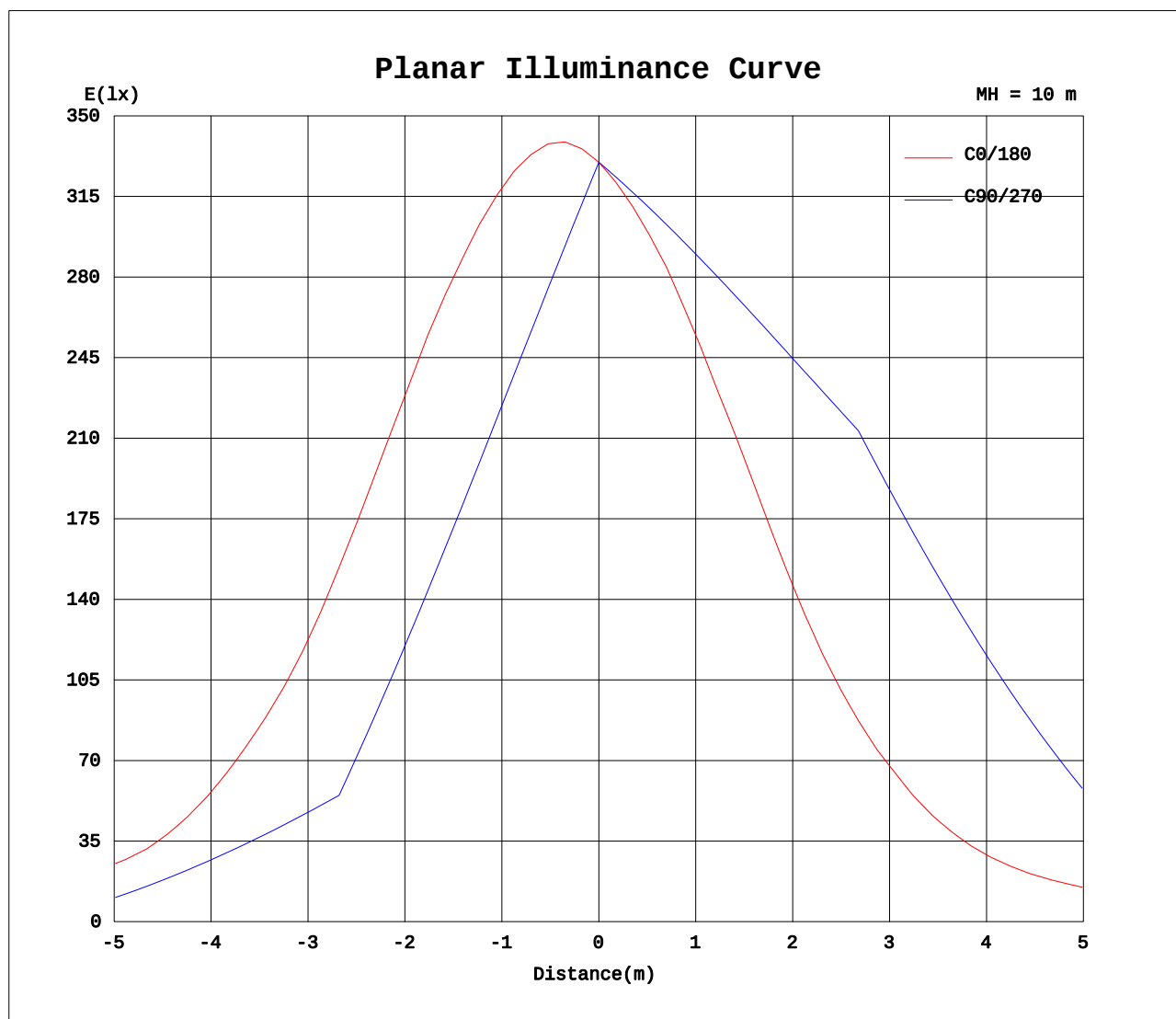
AvgL	cd/m2
L_0~180(65)av	76
L_0~180(75)av	57
L_0~180(85)av	7
L_90~270(65)av	608
L_90~270(75)av	345
L_90~270(85)av	0
L_45(65)av	233
L_45(75)av	164
L_45(85)av	0

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:20DEG
Operators:Y
Test Date:2025-04-16

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:8.750m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 20DEG
Operators: Y
Test Date: 2025-04-16

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.291
Humidity: 65.0%
Test Distance: 8.750m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:11.43V I:1.917A P:16.76W PF:0.7648 Lamp Flux:235x1 lm		
NAME: 490236 BODACIOUS	TYPE:490236 BODACIOUS	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

Table- -1

UNIT: $\times 10 \text{cd}$ [illegible]

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 20DEG
Operators: Y
Test Date: 2025-04-16

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:8.750m [K=1.0000]
Remarks:

```

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:11.43V I:1.917A P:16.76W PF:0.7648 Lamp Flux:235x1 lm		
NAME: 490236 BODACIOUS	TYPE:490236 BODACIOUS	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

UNIT: $\times 10 \text{cd}$ [illegible]

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:8.750m [K=1.0000]
Remarks:

```

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:11.43V I:1.917A P:16.76W PF:0.7648 Lamp Flux:235x1 lm		
NAME: 490236 BODACIOUS	TYPE:490236 BODACIOUS	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

Table - - 3

UNIT: $\times 10 \text{cd}$ [illegible]

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 20DEG
Operators: Y
Test Date: 2025-04-16

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:8.750m [K=1.0000]
Remarks:

```

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:11.43V I:1.917A P:16.76W PF:0.7648 Lamp Flux:235x1 lm		
NAME: 490236 BODACIOUS	TYPE:490236 BODACIOUS	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

UNIT: $\times 10 \text{cd}$ [illegible]

```

Range: 0 - 90DEG
Interval: 0.5DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:8.750m [K=1.0000]
Remarks:

```