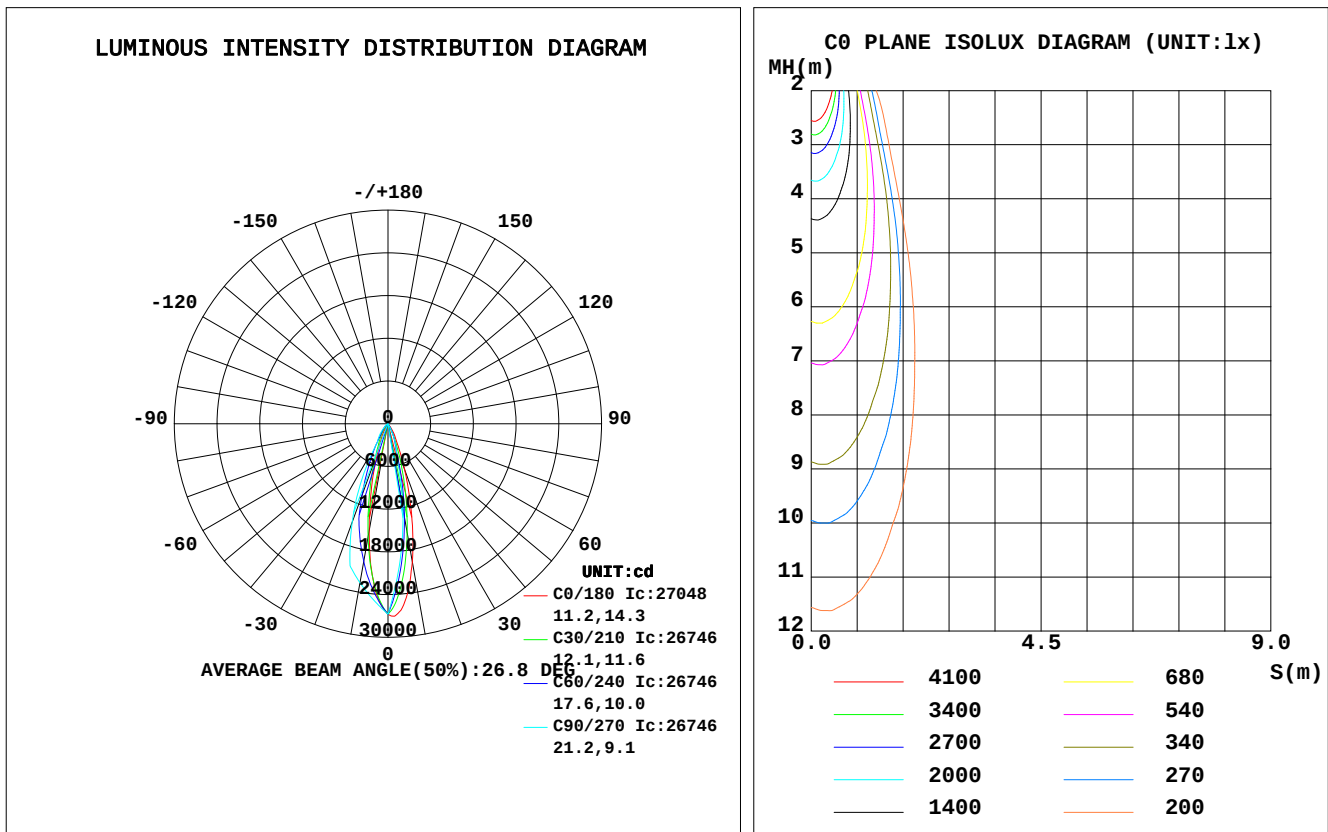


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:11.57V I:1.510A P:13.11W PF:0.7502 Lamp Flux:235x1 lm		
NAME: 490226 BODACIOUS	TYPE:490226 BODACIOUS	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 90.36 lm/W			
MODEL	490226 BODACIOUS	I _{max} (cd)	27048	S/MH(C0/180)	0.38
NOMINAL POWER(W)	12	LOR(%)	503.9	S/MH(C90/270)	0.66
RATED VOLTAGE(V)	12	TOTAL FLUX(lm)	7558.7	η UP, DN(C0-180)	0.0,155.6
NOMINAL FLUX(lm)	1500	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,348.3
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	12	η down(%)	503.9	CIBSE SHR MAX	1.00



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:20DEG
Operators:Y
Test Date:2025-04-18

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	2552	2129	1941	1960	2264	2299	2471	2499	0- 5	576.6	576.6	7.63,38.4
10	1972	1431	1207	1224	1530	1775	2268	2089	5- 10	1382	1959	25.9,131
15	1259	787.1	472.6	626.0	870.3	1238	2064	1588	10- 15	1608	3566	47.2,238
20	684.1	314.3	317.0	238.7	416.9	797.3	1476	1105	15- 20	1410	4977	65.8,332
25	323.0	155.1	161.3	95.22	212.6	437.0	886.8	651.0	20- 25	1036	6012	79.5,401
30	182.9	66.23	5.659	25.38	91.86	243.2	297.9	356.4	25- 30	639.0	6651	88,443
35	79.99	16.14	3.772	4.966	16.71	147.6	222.9	203.8	30- 35	342.2	6994	92.5,466
40	11.80	0.4815	1.886	0.2221	4.721	92.12	147.9	126.4	35- 40	221.0	7215	95.4,481
45	3.972	0.2466	0	0.1354	2.117	60.04	72.91	84.46	40- 45	140.8	7355	97.3,490
50	1.929	0.1222	0.0000	0.0679	1.123	32.27	52.52	53.23	45- 50	84.22	7440	98.4,496
55	1.131	0.0346	0.0000	0	0.6971	10.36	32.13	28.38	50- 55	53.56	7493	99.1,500
60	0.7283	0.0217	0.0000	0	0.5097	5.004	11.73	14.51	55- 60	31.20	7524	99.5,502
65	0.5524	0.0090	0.0768	0	0.3904	2.368	8.765	5.329	60- 65	15.66	7540	99.8,503
70	0.4088	0.0245	0.1536	0.0225	0.2712	1.303	5.797	1.948	65- 70	9.570	7550	99.9,503
75	0.2734	0.0818	0.2303	0.0752	0.1547	1.017	2.829	1.397	70- 75	5.826	7555	100,504
80	0.1460	0.1063	0	0.0976	0.0517	0.6531	0	0.8154	75- 80	2.588	7558	100,504
85	0.0323	0	0	0	0	0	0	0	80- 85	0.5730	7559	100,504
90	0	0	0	0	0	0	0	0	85- 90	0.0657	7559	100,504
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			

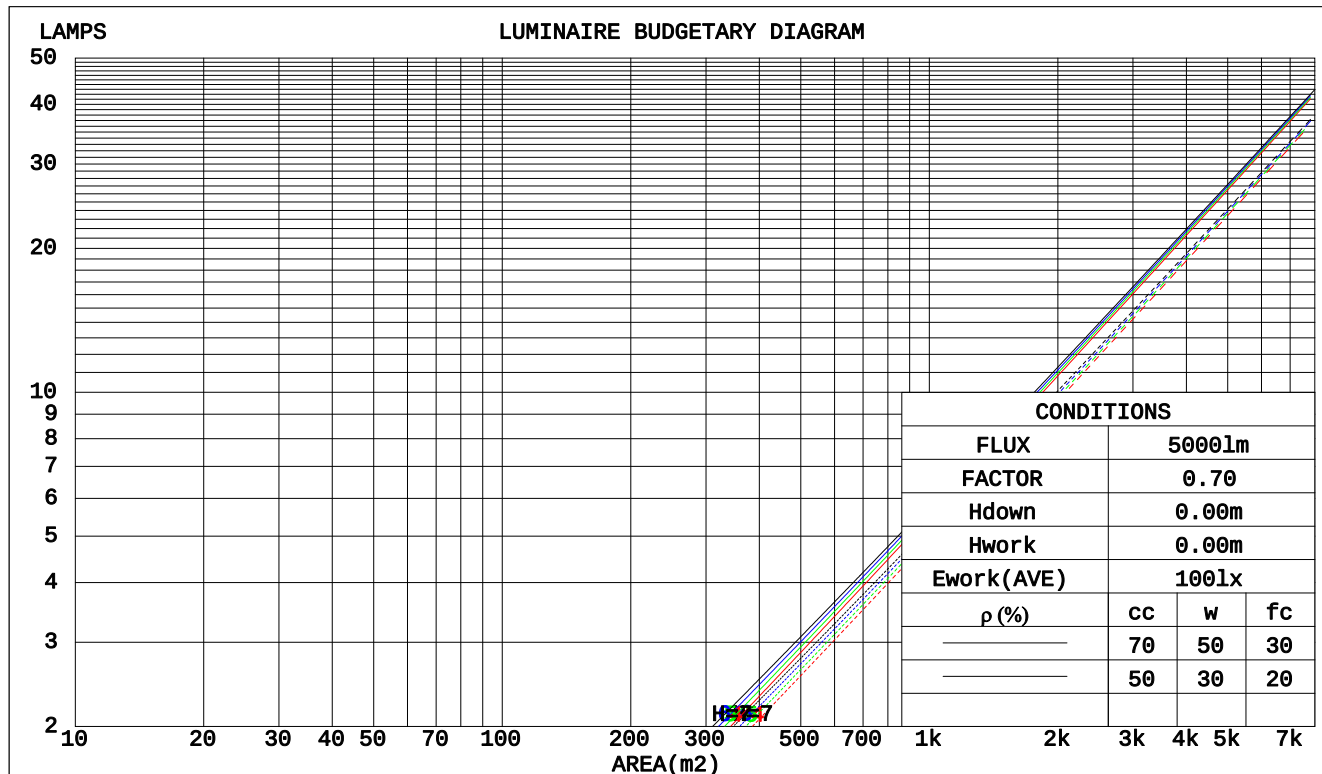
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:20DEG
Operators:Y
Test Date:2025-04-18

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
γ 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:11.57V I:1.510A P:13.11W PF:0.7502 Lamp Flux:235x1 lm		
NAME: 490226 BODACIOUS	TYPE:490226 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						Coefficients of Utilization(CU)									
0.0	6.00	6.00	6.00	5.86	5.86	5.86	5.60	5.60	5.60	5.36	5.36	5.36	5.14	5.14	5.14	5.04
1.0	5.65	5.54	5.45	5.54	5.45	5.36	5.34	5.26	5.20	5.15	5.10	5.04	4.98	4.94	4.90	4.81
2.0	5.34	5.17	5.03	5.25	5.10	4.97	5.09	4.97	4.86	4.95	4.85	4.76	4.81	4.73	4.66	4.59
3.0	5.06	4.86	4.69	5.00	4.81	4.66	4.87	4.71	4.58	4.75	4.62	4.51	4.64	4.54	4.45	4.37
4.0	4.82	4.59	4.42	4.77	4.56	4.39	4.66	4.48	4.34	4.57	4.42	4.29	4.48	4.35	4.25	4.18
5.0	4.60	4.36	4.19	4.56	4.33	4.17	4.47	4.28	4.13	4.39	4.23	4.10	4.32	4.18	4.06	4.00
6.0	4.40	4.16	3.99	4.37	4.14	3.97	4.30	4.10	3.95	4.23	4.06	3.92	4.17	4.02	3.90	3.84
7.0	4.22	3.98	3.81	4.19	3.96	3.80	4.13	3.93	3.78	4.08	3.90	3.76	4.03	3.87	3.74	3.69
8.0	4.06	3.82	3.65	4.03	3.80	3.64	3.98	3.78	3.63	3.94	3.75	3.62	3.89	3.73	3.60	3.55
9.0	3.91	3.67	3.51	3.88	3.66	3.50	3.84	3.64	3.49	3.80	3.62	3.48	3.76	3.60	3.47	3.42
10.0	3.77	3.53	3.38	3.75	3.53	3.38	3.71	3.51	3.37	3.68	3.49	3.36	3.64	3.47	3.35	3.30



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:20DEG
Operators:Y
Test Date:2025-04-18

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:11.57V I:1.510A P:13.11W PF:0.7502 Lamp Flux:235x1 lm									
NAME: 490226 BODACIOUS					TYPE:490226 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	.766	.436	.138	.733	.418	.133	.670	.384	.123	.612	.353	.113	.559	.324	.104	
2.0	.720	.395	.121	.693	.382	.118	.641	.356	.111	.592	.332	.104	.548	.310	.098	
3.0	.678	.361	.108	.655	.351	.106	.611	.331	.101	.570	.312	.096	.532	.295	.091	
4.0	.640	.332	.098	.620	.324	.096	.583	.309	.092	.548	.294	.089	.516	.280	.085	
5.0	.606	.309	.089	.589	.302	.088	.557	.290	.085	.527	.278	.083	.499	.266	.080	
6.0	.575	.288	.083	.560	.283	.081	.533	.273	.079	.506	.263	.077	.482	.254	.075	
7.0	.548	.271	.077	.535	.266	.076	.510	.258	.074	.487	.250	.073	.466	.242	.071	
8.0	.523	.255	.072	.512	.252	.071	.490	.245	.070	.470	.238	.069	.451	.231	.067	
9.0	.500	.242	.068	.490	.239	.067	.471	.233	.066	.453	.227	.065	.436	.221	.064	
10.0	.480	.230	.064	.471	.227	.063	.453	.222	.063	.437	.217	.062	.422	.212	.061	

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	.960	.960	.960	.820	.820	.820	.560	.560	.560	.322	.322	.322	.103	.103	.103	
1.0	.854	.794	.740	.730	.681	.637	.500	.469	.440	.288	.271	.256	.092	.087	.083	
2.0	.768	.668	.585	.658	.575	.505	.451	.398	.352	.260	.232	.207	.083	.075	.067	
3.0	.697	.571	.471	.598	.493	.408	.410	.342	.286	.237	.200	.169	.076	.065	.055	
4.0	.639	.495	.386	.548	.428	.335	.377	.298	.236	.218	.175	.140	.070	.057	.046	
5.0	.589	.434	.320	.506	.376	.279	.348	.263	.197	.202	.154	.117	.065	.050	.038	
6.0	.547	.385	.269	.470	.334	.235	.324	.234	.166	.188	.137	.099	.061	.045	.033	
7.0	.511	.345	.229	.439	.299	.200	.304	.210	.142	.176	.124	.084	.057	.040	.028	
8.0	.480	.312	.197	.413	.271	.172	.286	.190	.122	.166	.112	.073	.054	.037	.024	
9.0	.452	.285	.171	.390	.247	.150	.270	.174	.106	.157	.103	.063	.051	.034	.021	
10.0	.428	.261	.150	.369	.227	.131	.256	.160	.093	.149	.094	.056	.048	.031	.018	

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:20DEG
Operators:Y
Test Date:2025-04-18

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:11.57V I:1.510A P:13.11W PF:0.7502 Lamp Flux:235x1 lm										
NAME: 490226 BODACIOUS						TYPE:490226 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	1.2	1.9	1.4	2.1	2.3	-17.7	-17.0	-17.5	-16.8	-16.6
	3H	1.0	1.7	1.3	1.9	2.1	-17.5	-16.8	-17.2	-16.6
	4H	1.0	1.6	1.2	1.8	2.1	-16.4	-15.7	-16.1	-15.5
	6H	0.9	1.5	1.2	1.7	2.0	-16.1	-15.5	-15.8	-15.3
	8H	0.8	1.4	1.1	1.7	1.9	-16.2	-15.6	-15.9	-15.3
	12H	0.8	1.4	1.1	1.6	1.9	-16.2	-15.6	-15.9	-15.4
4H	2H	0.9	1.6	1.2	1.8	2.0	-17.9	-17.3	-17.7	-17.0
	3H	0.8	1.4	1.1	1.6	1.9	-17.6	-17.0	-17.3	-16.7
	4H	0.7	1.2	1.0	1.5	1.8	-16.2	-15.7	-15.8	-15.4
	6H	0.6	1.1	1.0	1.4	1.7	-15.8	-15.4	-15.5	-15.0
	8H	0.5	1.0	0.9	1.3	1.7	-15.9	-15.4	-15.5	-15.1
	12H	0.5	0.9	0.9	1.3	1.6	-15.9	-15.5	-15.5	-15.2
8H	4H	0.5	1.0	0.9	1.3	1.7	-16.1	-15.6	-15.7	-15.3
	6H	0.4	0.8	0.9	1.2	1.6	-15.7	-15.3	-15.2	-14.9
	8H	0.4	0.7	0.8	1.1	1.6	-15.7	-15.4	-15.3	-15.0
	12H	0.3	0.6	0.8	1.0	1.5	-15.8	-15.5	-15.3	-15.1
12H	4H	0.5	0.9	0.9	1.3	1.6	-16.0	-15.6	-15.6	-15.3
	6H	0.4	0.7	0.8	1.1	1.6	-15.6	-15.3	-15.2	-14.9
	8H	0.3	0.6	0.8	1.0	1.5	-15.7	-15.4	-15.2	-15.0
Variations with the observer position at spacings:										
S = 1.0H	+ 7.0 / -14.1					+ 2.7 / - 2.4				
1.5H	+ 9.7 / -16.7					+ 5.0 / - 2.9				
2.0H	+ 8.0 / - 7.5					+ 0.9 / - 1.2				

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:2025-04-18

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:11.57V I:1.510A P:13.11W PF:0.7502 Lamp Flux:235x1 lm		
NAME: 490226 BODACIOUS	TYPE:490226 BODACIOUS	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

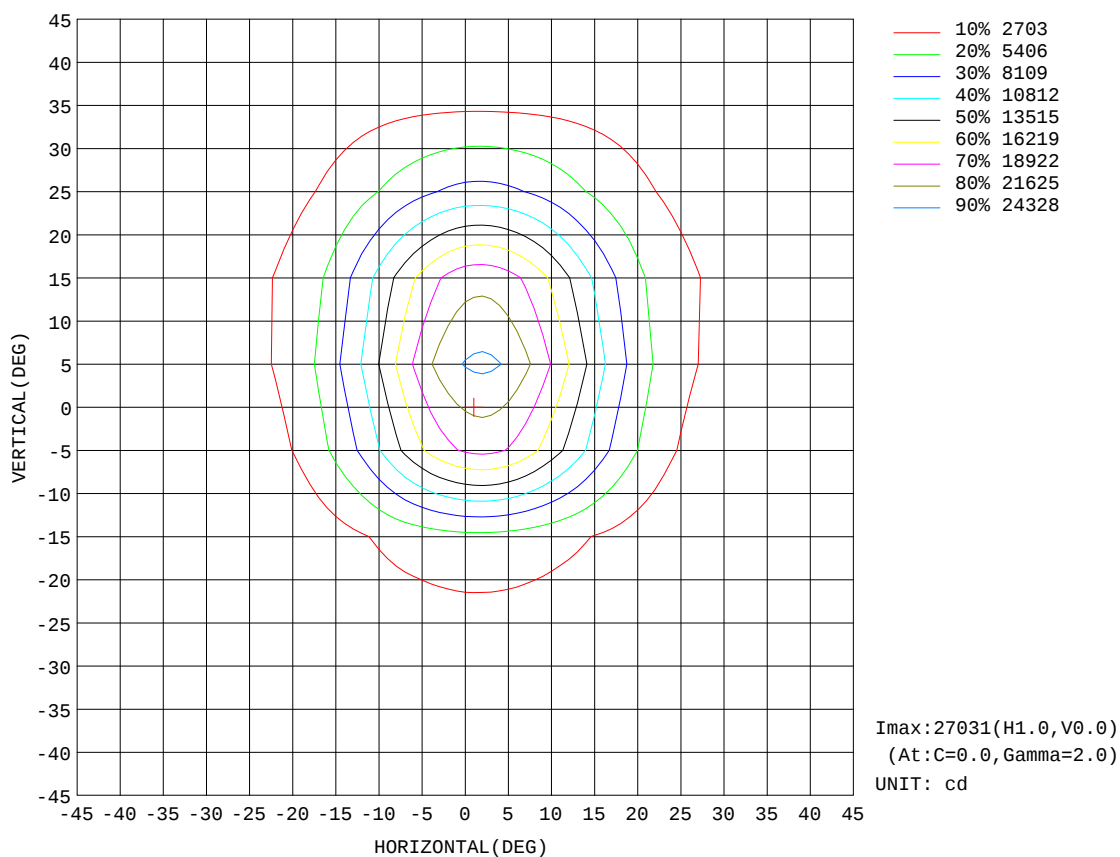
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	447	416	398	444	415	397	440	413	397	379
0.80	484	455	437	480	454	437	474	451	435	417
1.00	505	478	460	501	476	459	493	474	456	437
1.25	524	499	483	519	496	480	509	490	476	456
1.50	537	514	498	531	511	496	520	503	490	469
2.00	550	530	514	543	524	510	529	515	503	477
2.50	558	539	525	550	533	520	534	521	511	482
3.00	565	549	536	556	542	530	539	528	519	487
4.00	575	562	551	565	553	544	547	538	530	495
5.00	581	570	561	570	561	553	551	544	538	500
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:2025-04-18

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 γ 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:11.57V I:1.510A P:13.11W PF:0.7502 Lamp Flux:235x1 lm		
NAME: 490226 BODACIOUS	TYPE:490226 BODACIOUS	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

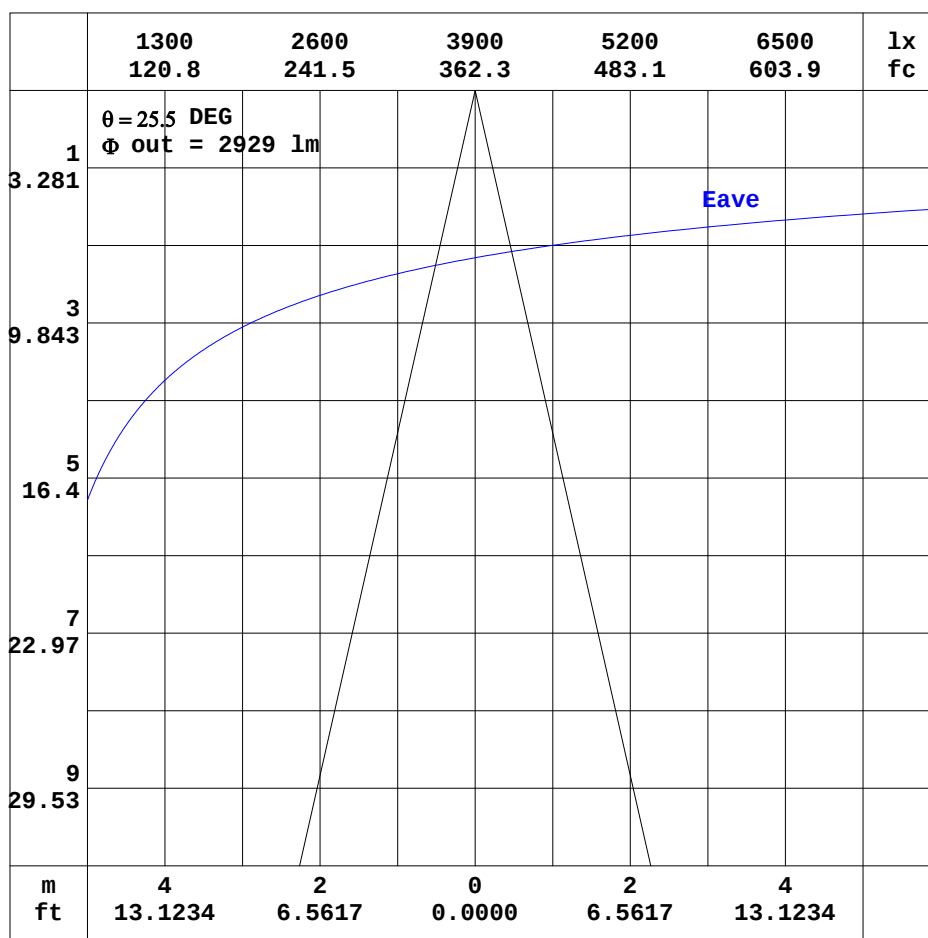


C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:20DEG
Operators:Y
Test Date:2025-04-18

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:11.57V I:1.510A P:13.11W PF:0.7502 Lamp Flux:235x1 lm		
NAME: 490226 BODACIOUS	TYPE:490226 BODACIOUS	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:



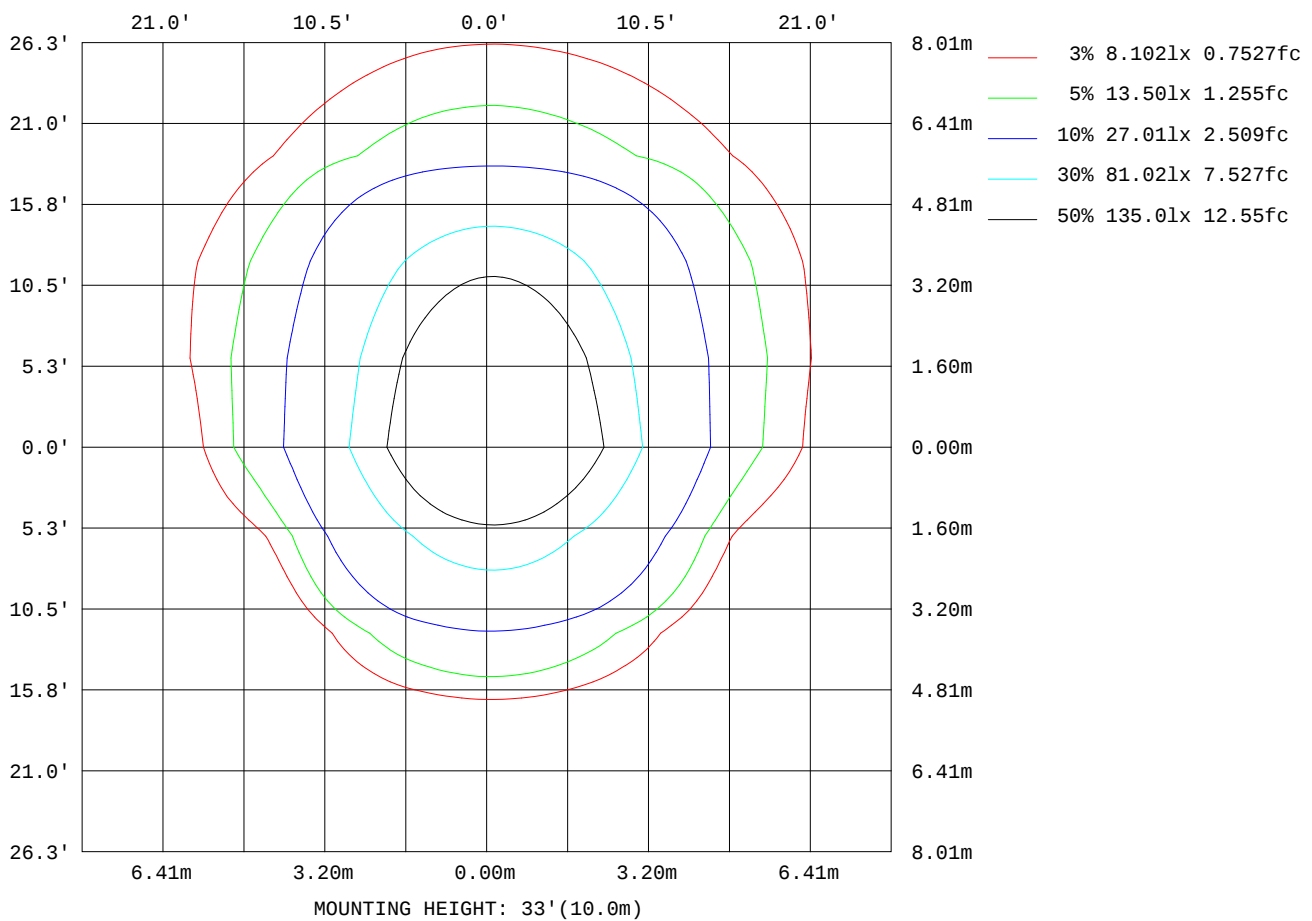
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:20DEG
Operators:Y
Test Date:2025-04-18

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:11.57V I:1.510A P:13.11W PF:0.7502 Lamp Flux:235x1 lm		
NAME: 490226 BODACIOUS	TYPE:490226 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:2025-04-18

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:11.57V I:1.510A P:13.11W PF:0.7502 Lamp Flux:235x1 lm		
NAME: 490226 BODACIOUS	TYPE:490226 BODACIOUS	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

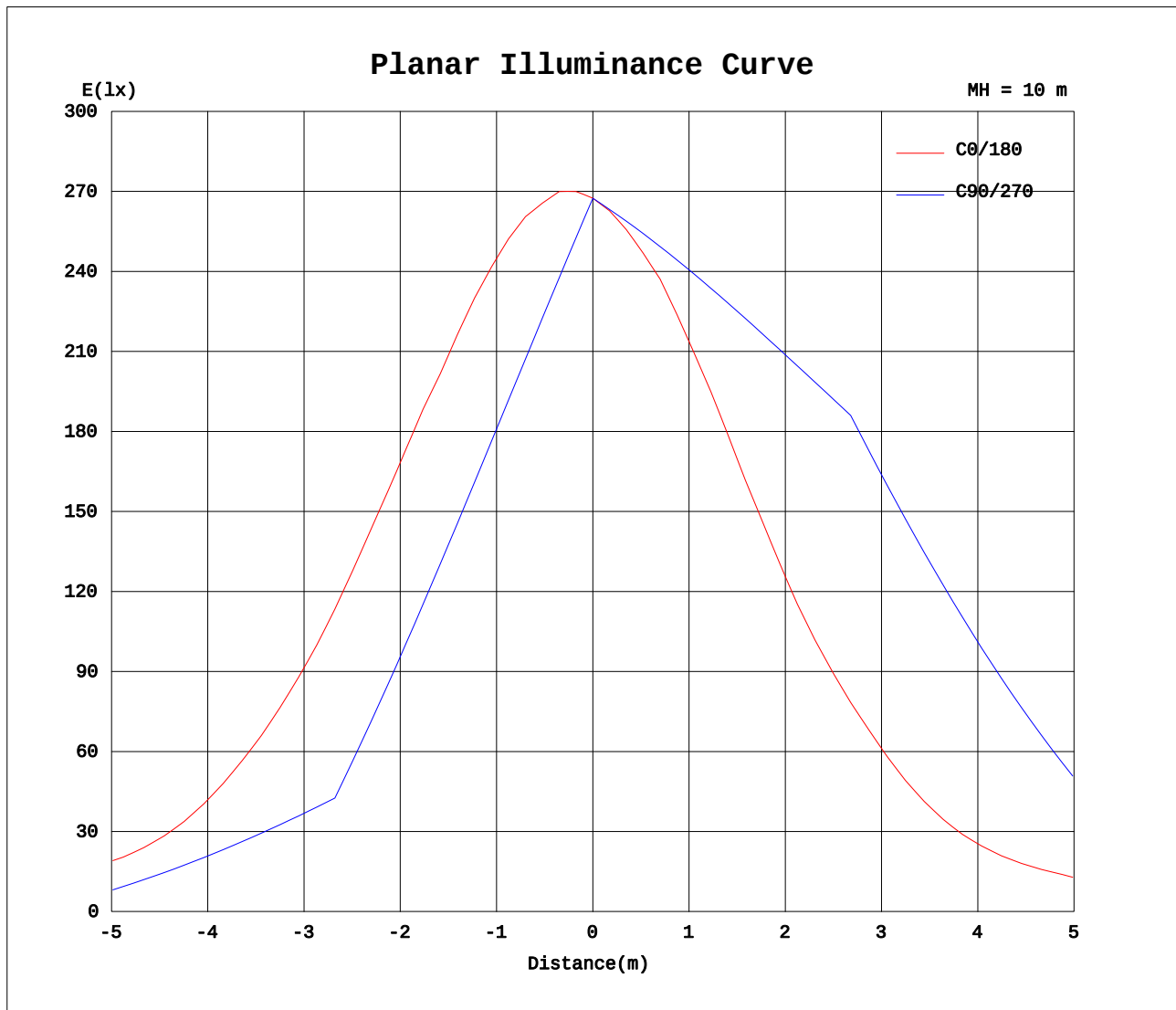
AvgL	cd/m2
L_0~180(65)av	56
L_0~180(75)av	41
L_0~180(85)av	9
L_90~270(65)av	523
L_90~270(75)av	295
L_90~270(85)av	0
L_45(65)av	228
L_45(75)av	124
L_45(85)av	0

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:20DEG
Operators:Y
Test Date:2025-04-18

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: 2025-04-18

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:11.57V I:1.510A P:13.11W PF:0.7502 Lamp Flux:235x1 lm		
NAME: 490226 BODACIOUS	TYPE:490226 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: 2025-04-18

```

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

```

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:11.57V I:1.510A P:13.11W PF:0.7502 Lamp Flux:235x1 lm		
NAME: 490226 BODACIOUS	TYPE:490226 BODACIOUS	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

Table - -2

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

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 20DEG
Operators: Y
Test Date: 2025-04-18

```

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:11.57V I:1.510A P:13.11W PF:0.7502 Lamp Flux:235x1 lm		
NAME: 490226 BODACIOUS	TYPE:490226 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: 2025-04-18

```

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

```

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:11.57V I:1.510A P:13.11W PF:0.7502 Lamp Flux:235x1 lm		
NAME: 490226 BODACIOUS	TYPE:490226 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:

```