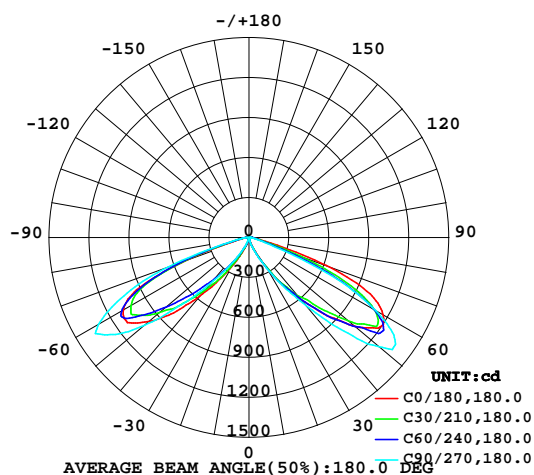


LUMINAIRE PHOTOMETRIC TEST REPORT

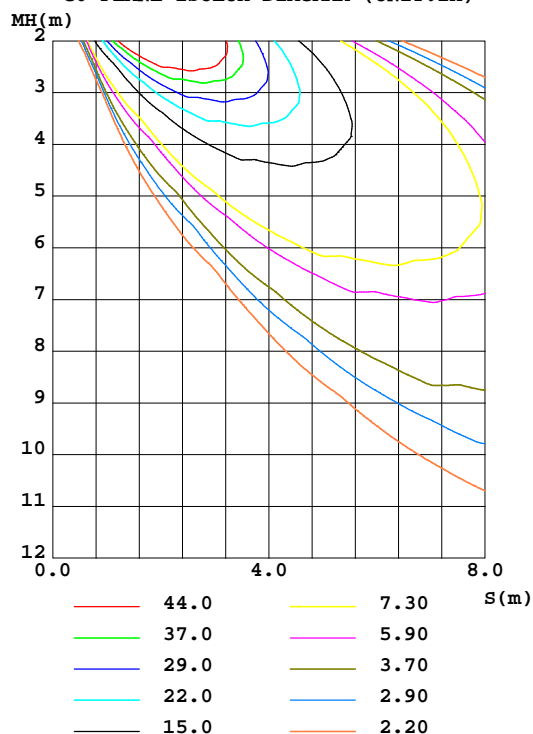
Test:U:120.01V I:0.2045A P:24.533W PF:0.9948 Freq:59.98Hz Lamp Flux:2908.75x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 3000K	DIM.: 42in	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 118.56 lm/W			
MODEL		I _{max} (cd)	1365	S/MH(C0/180)	8.19
NOMINAL POWER(W)	24	LOR(%)	100.0	S/MH(C90/270)	9.03
RATED VOLTAGE(V)	120-277	TOTAL FLUX(lm)	2908.8	h UP,DN(C0-180)	0.0,49.4
NOMINAL FLUX(lm)	2908.75	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.0,50.6
LAMPS INSIDE	1	h up(%)	0.0	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	120	h down(%)	100.0	CIBSE SHR MAX	1.55

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Richard
Test Date:2025-08-08

g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.442
Humidity:65.0%
Test Distance:8.930m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

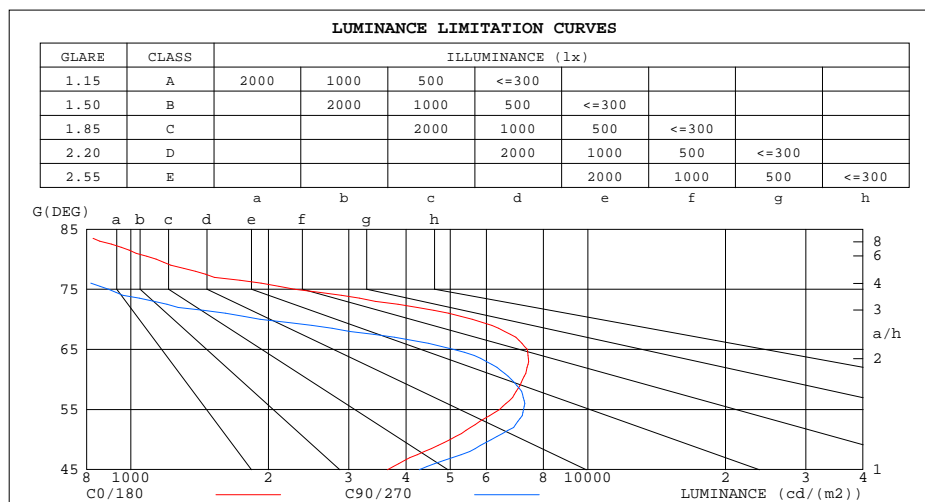
g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
10	4.577	6.885	9.102	8.795	6.431	4.203	2.962	2.994	0- 10	0.3055	0.3055	0.01,0.01
20	59.42	72.76	79.56	74.15	66.80	54.08	33.80	40.26	10- 20	7.949	8.254	0.28,0.28
30	249.9	229.8	263.5	220.0	234.9	173.9	150.7	164.6	20- 30	59.50	67.76	2.33,2.33
40	617.1	524.6	665.5	520.4	572.5	433.9	446.8	435.2	30- 40	232.5	300.3	10.3,10.3
50	1034	906.0	1274	988.8	980.2	805.9	1024	838.3	40- 50	591.7	892.0	30.7,30.7
60	1161	1021	1097	940.0	1087	1023	1304	1112	50- 60	998.8	1891	65,65
70	616.5	355.7	211.7	213.9	495.4	481.2	645.7	519.3	60- 70	795.7	2686	92.4,92.4
80	63.58	47.00	31.97	35.35	48.40	63.26	72.77	76.22	70- 80	190.0	2877	98.9,98.9
90	6.820	10.19	8.879	10.69	7.205	11.97	7.417	16.63	80- 90	32.25	2909	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: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Richard
Test Date:2025-08-08

g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.442
Humidity:65.0%
Test Distance:8.930m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.01V I:0.2045A P:24.533W PF:0.9948 Freq:59.98Hz Lamp Flux:2908.75x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 3000K	DIM.: 42in	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	706	391
80	1136	571
75	2281	893
70	5591	1920
65	7371	5085
60	7204	6808
55	6413	7230
50	4992	6147
45	3646	4276

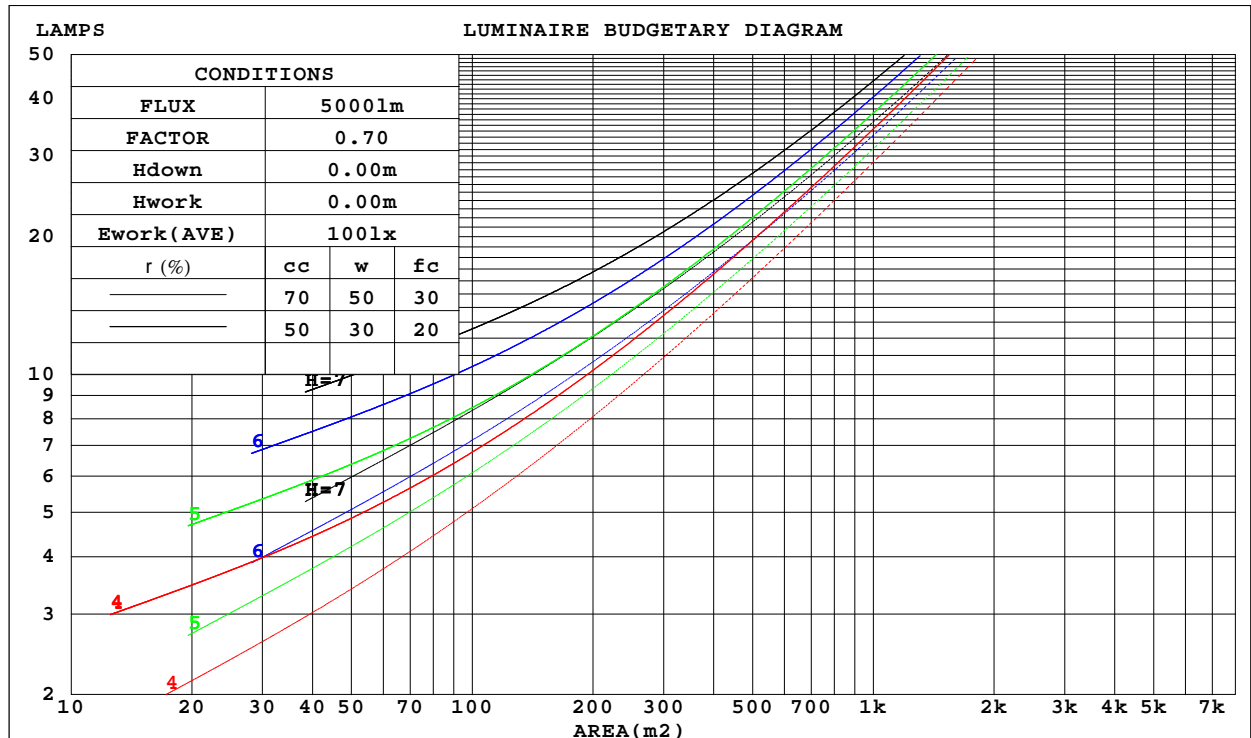
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Richard
Test Date:2025-08-08

g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.442
Humidity:65.0%
Test Distance:8.930m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.01V I:0.2045A P:24.533W PF:0.9948 Freq:59.98Hz Lamp Flux:2908.75x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 3000K	DIM.: 42in	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

r cc	80%			70%			50%			30%			10%			0
r w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
r fc	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	1.01	.96	.91	.98	.94	.89	.94	.90	.87	.90	.87	.84	.86	.84	.81	.79
2.0	.83	.75	.68	.81	.74	.67	.78	.71	.65	.74	.69	.64	.71	.66	.62	.60
3.0	.69	.59	.51	.67	.58	.50	.64	.56	.49	.61	.54	.48	.58	.52	.47	.45
4.0	.58	.47	.38	.56	.46	.38	.54	.45	.37	.51	.43	.37	.49	.42	.36	.34
5.0	.49	.38	.29	.48	.37	.29	.45	.36	.29	.43	.35	.28	.41	.34	.28	.25
6.0	.42	.31	.23	.41	.30	.23	.39	.29	.22	.37	.29	.22	.35	.28	.22	.19
7.0	.36	.26	.18	.35	.25	.18	.34	.24	.18	.32	.24	.18	.30	.23	.17	.15
8.0	.32	.22	.15	.31	.21	.14	.30	.21	.14	.28	.20	.14	.27	.19	.14	.12
9.0	.28	.18	.12	.28	.18	.12	.26	.18	.12	.25	.17	.12	.24	.17	.11	.09
10.0	.25	.16	.10	.25	.16	.10	.24	.15	.10	.23	.15	.10	.22	.15	.09	.07



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Richard
Test Date: 2025-08-08

g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.442
Humidity: 65.0%
Test Distance: 8.930m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:120.01V I:0.2045A P:24.533W PF:0.9948 Freq:59.98Hz Lamp Flux:2908.75x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 3000K	DIM.: 42in	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

r cc	80%			70%			50%			30%			10%			0
r w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
r fc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.370	.210	.067	.362	.207	.066	.349	.200	.064	.336	.194	.062	.325	.188	.061	
2.0	.360	.197	.060	.353	.194	.060	.341	.189	.059	.329	.185	.058	.319	.180	.057	
3.0	.336	.179	.054	.330	.177	.053	.319	.173	.052	.308	.169	.052	.299	.165	.051	
4.0	.309	.161	.047	.304	.159	.047	.294	.156	.047	.285	.153	.046	.276	.150	.046	
5.0	.284	.145	.042	.279	.143	.042	.270	.141	.041	.262	.138	.041	.254	.136	.041	
6.0	.261	.131	.037	.257	.130	.037	.248	.127	.037	.241	.125	.037	.234	.123	.037	
7.0	.240	.119	.034	.236	.118	.034	.229	.116	.033	.222	.114	.033	.216	.112	.033	
8.0	.222	.108	.030	.218	.108	.030	.212	.106	.030	.206	.104	.030	.200	.103	.030	
9.0	.206	.099	.028	.203	.099	.028	.197	.097	.028	.191	.096	.027	.186	.095	.027	
10.0	.191	.092	.025	.189	.091	.025	.183	.090	.025	.178	.089	.025	.174	.087	.025	

r cc	80%			70%			50%			30%			10%			0
r w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
r fc	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	.184	.156	.130	.158	.134	.112	.108	.092	.077	.062	.053	.045	.020	.017	.015	
2.0	.181	.132	.090	.155	.113	.078	.106	.078	.054	.061	.046	.032	.020	.015	.010	
3.0	.177	.115	.065	.152	.099	.056	.104	.069	.040	.060	.040	.023	.019	.013	.008	
4.0	.172	.102	.049	.147	.088	.043	.101	.062	.030	.059	.036	.018	.019	.012	.006	
5.0	.165	.093	.039	.142	.080	.034	.098	.056	.024	.057	.033	.014	.018	.011	.005	
6.0	.158	.085	.032	.136	.074	.028	.094	.051	.020	.054	.030	.012	.018	.010	.004	
7.0	.151	.078	.028	.130	.068	.024	.090	.048	.017	.052	.028	.010	.017	.009	.003	
8.0	.144	.073	.024	.124	.063	.021	.086	.044	.015	.050	.026	.009	.016	.009	.003	
9.0	.137	.068	.021	.118	.059	.019	.082	.041	.013	.048	.024	.008	.015	.008	.003	
10.0	.130	.064	.019	.112	.055	.017	.078	.039	.012	.045	.023	.007	.015	.008	.002	

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Richard
 Test Date:2025-08-08

g Range: 0 - 90DEG
 g Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.442
 Humidity:65.0%
 Test Distance:8.930m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.01V I:0.2045A P:24.533W PF:0.9948 Freq:59.98Hz Lamp Flux:2908.75x1 lm										
NAME: XBLA(24/15/12)W(30/40/50)K					TYPE: T5			WEIGHT:		
SPEC.: 3000K					DIM.: 42in			SERIAL No.:		
MFR.:					SUR.:			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	18.0	19.9	18.3	20.1	20.4	18.0	19.9	18.3	20.2	20.4
3H	19.6	21.4	19.9	21.6	21.9	18.6	20.4	18.9	20.6	20.9
4H	19.7	21.4	20.0	21.6	21.9	18.5	20.2	18.8	20.5	20.8
6H	19.6	21.2	20.0	21.5	21.8	18.4	20.0	18.8	20.3	20.6
8H	19.6	21.1	19.9	21.4	21.7	18.4	19.9	18.7	20.2	20.5
12H	19.5	21.0	19.9	21.3	21.6	18.3	19.8	18.7	20.1	20.4
4H 2H	18.5	20.2	18.9	20.5	20.8	18.5	20.2	18.9	20.5	20.8
3H	20.1	21.5	20.4	21.8	22.2	19.1	20.6	19.5	20.9	21.2
4H	20.2	21.5	20.5	21.8	22.2	19.1	20.4	19.5	20.7	21.1
6H	20.1	21.3	20.5	21.7	22.1	19.0	20.2	19.4	20.6	20.9
8H	20.1	21.2	20.5	21.6	22.0	19.0	20.1	19.4	20.5	20.9
12H	20.1	21.1	20.5	21.5	21.9	19.0	20.0	19.4	20.4	20.8
8H 4H	20.1	21.2	20.5	21.6	21.9	19.0	20.1	19.5	20.5	20.9
6H	20.1	21.0	20.5	21.4	21.8	19.0	19.9	19.5	20.3	20.8
8H	20.1	20.9	20.6	21.3	21.8	19.0	19.8	19.5	20.2	20.7
12H	20.1	20.8	20.6	21.2	21.7	19.0	19.7	19.5	20.1	20.6
12H 4H	20.0	21.0	20.5	21.4	21.9	19.0	20.0	19.4	20.4	20.8
6H	20.1	20.9	20.5	21.3	21.7	19.0	19.8	19.5	20.2	20.7
8H	20.1	20.8	20.6	21.2	21.7	19.0	19.7	19.5	20.1	20.6
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.1 / - 0.1					+ 0.2 / - 0.3				
1.5H	+ 0.6 / - 0.4					+ 1.3 / - 1.1				
2.0H	+ 0.9 / - 1.9					+ 1.1 / - 3.0				

CIE Pub.117, 2909 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.7)
Area: 0.3224 m2

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Richard
Test Date:2025-08-08

g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.442
Humidity:65.0%
Test Distance:8.930m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.01V I:0.2045A P:24.533W PF:0.9948 Freq:59.98Hz Lamp Flux:2908.75x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 3000K	DIM.: 42in	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

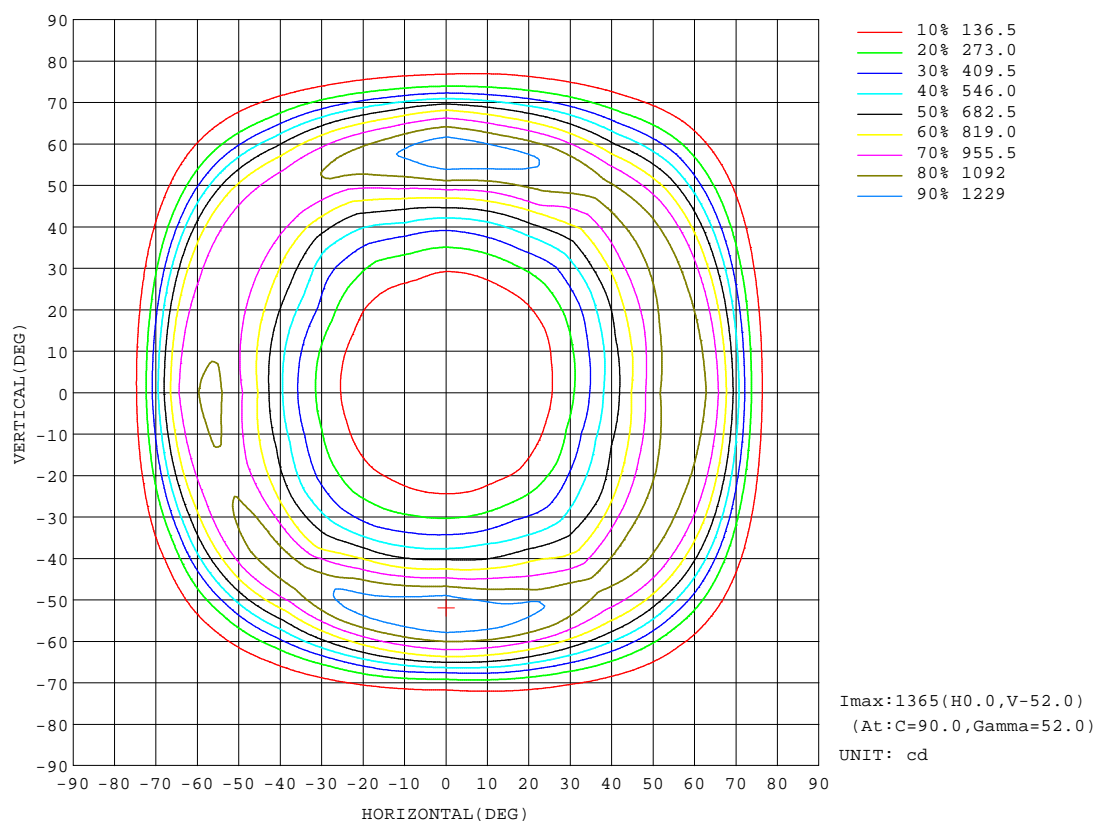
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	36	21	11	35	20	11	34	20	11	3
0.80	48	32	22	47	32	22	45	31	22	12
1.00	59	44	34	58	44	34	55	46	34	24
1.25	69	55	45	67	54	45	64	52	44	34
1.50	76	62	53	74	61	52	70	59	51	42
2.00	86	75	66	84	73	65	80	71	64	54
2.50	92	82	74	90	80	73	85	77	71	61
3.00	97	88	81	94	86	80	90	83	77	68
4.00	102	95	89	100	93	88	95	90	85	75
5.00	106	100	95	103	98	93	98	94	90	80
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:25.3DEG
 Operators:Richard
 Test Date:2025-08-08

g Range: 0 - 90DEG
 g Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.442
 Humidity:65.0%
 Test Distance:8.930m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.01V I:0.2045A P:24.533W PF:0.9948 Freq:59.98Hz Lamp Flux:2908.75x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 3000K	DIM.: 42in	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

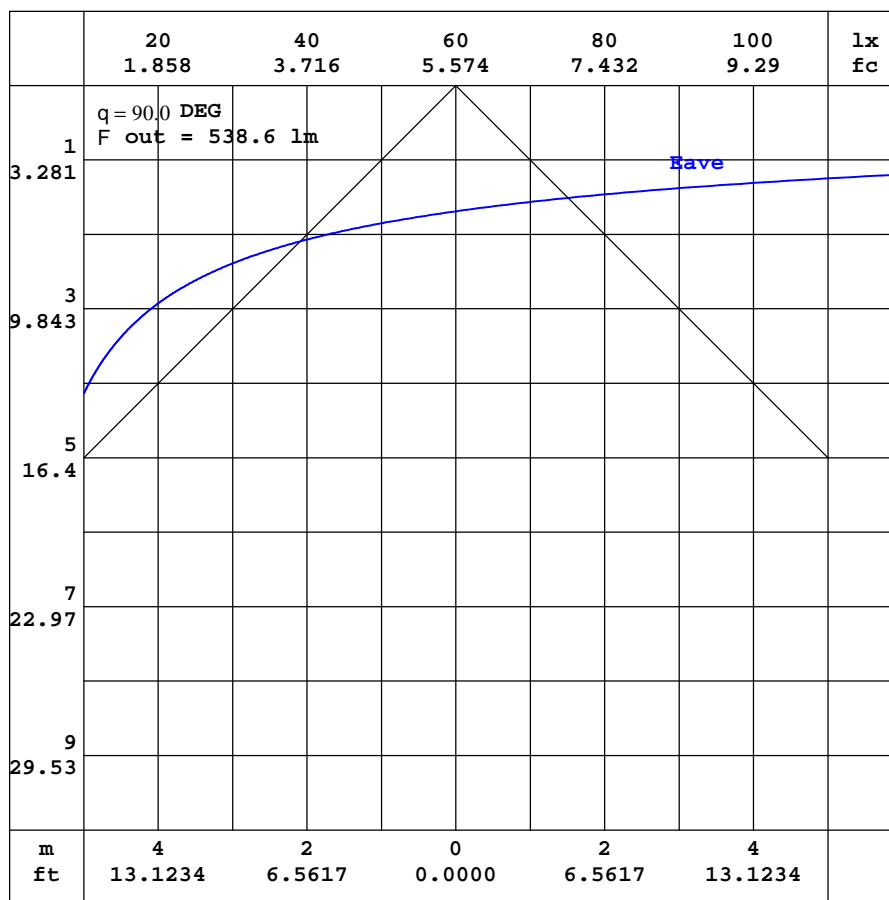


C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Richard
Test Date:2025-08-08

g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.442
Humidity:65.0%
Test Distance:8.930m [K=1.0000]
Remarks:

AAI CURVES

Test:U:120.01V I:0.2045A P:24.533W PF:0.9948 Freq:59.98Hz Lamp Flux:2908.75x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 3000K	DIM.: 42in	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



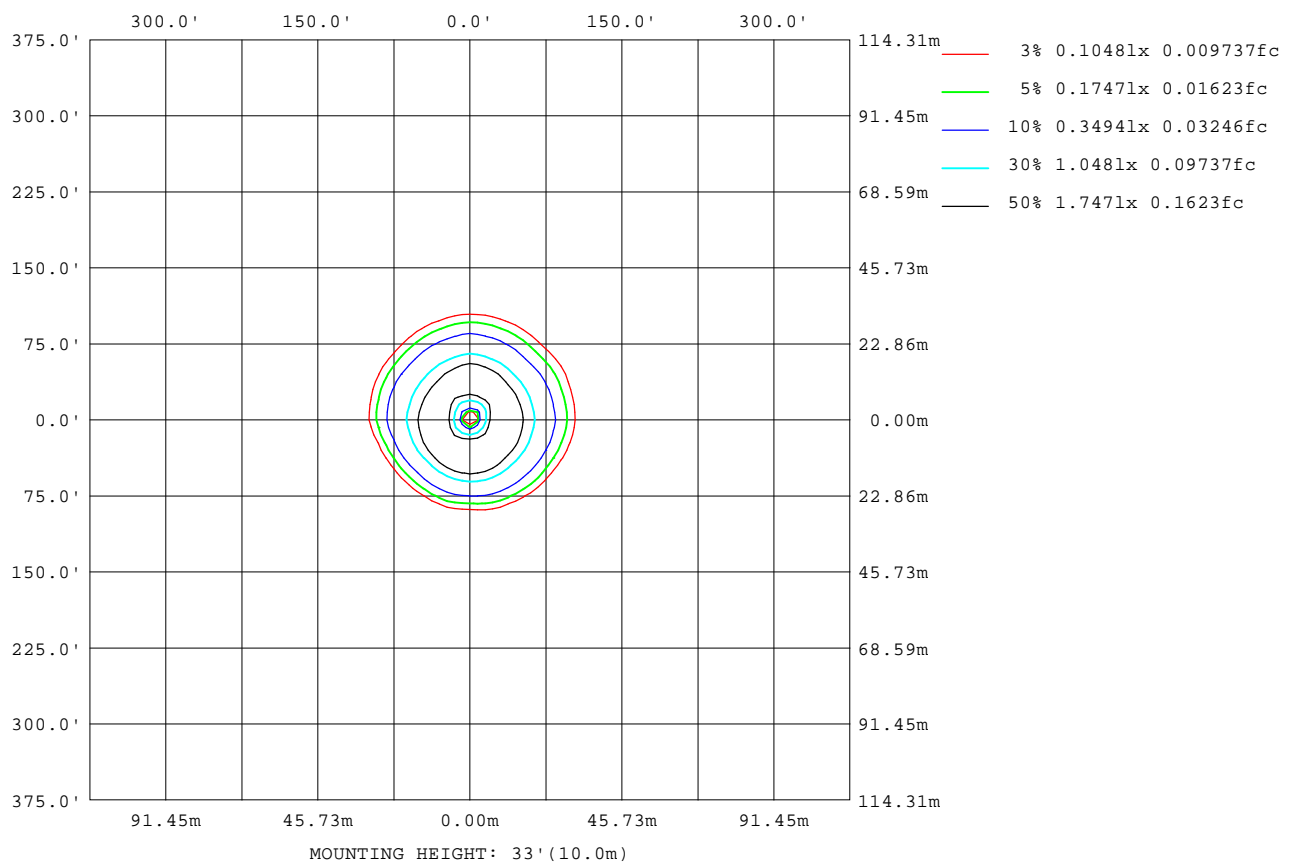
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Richard
Test Date: 2025-08-08

g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.442
Humidity: 65.0%
Test Distance: 8.930m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:120.01V I:0.2045A P:24.533W PF:0.9948 Freq:59.98Hz Lamp Flux:2908.75x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 3000K	DIM.: 42in	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Richard
Test Date: 2025-08-08

g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.442
Humidity: 65.0%
Test Distance: 8.930m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:120.01V I:0.2045A P:24.533W PF:0.9948 Freq:59.98Hz Lamp Flux:2908.75x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 3000K	DIM.: 42in	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

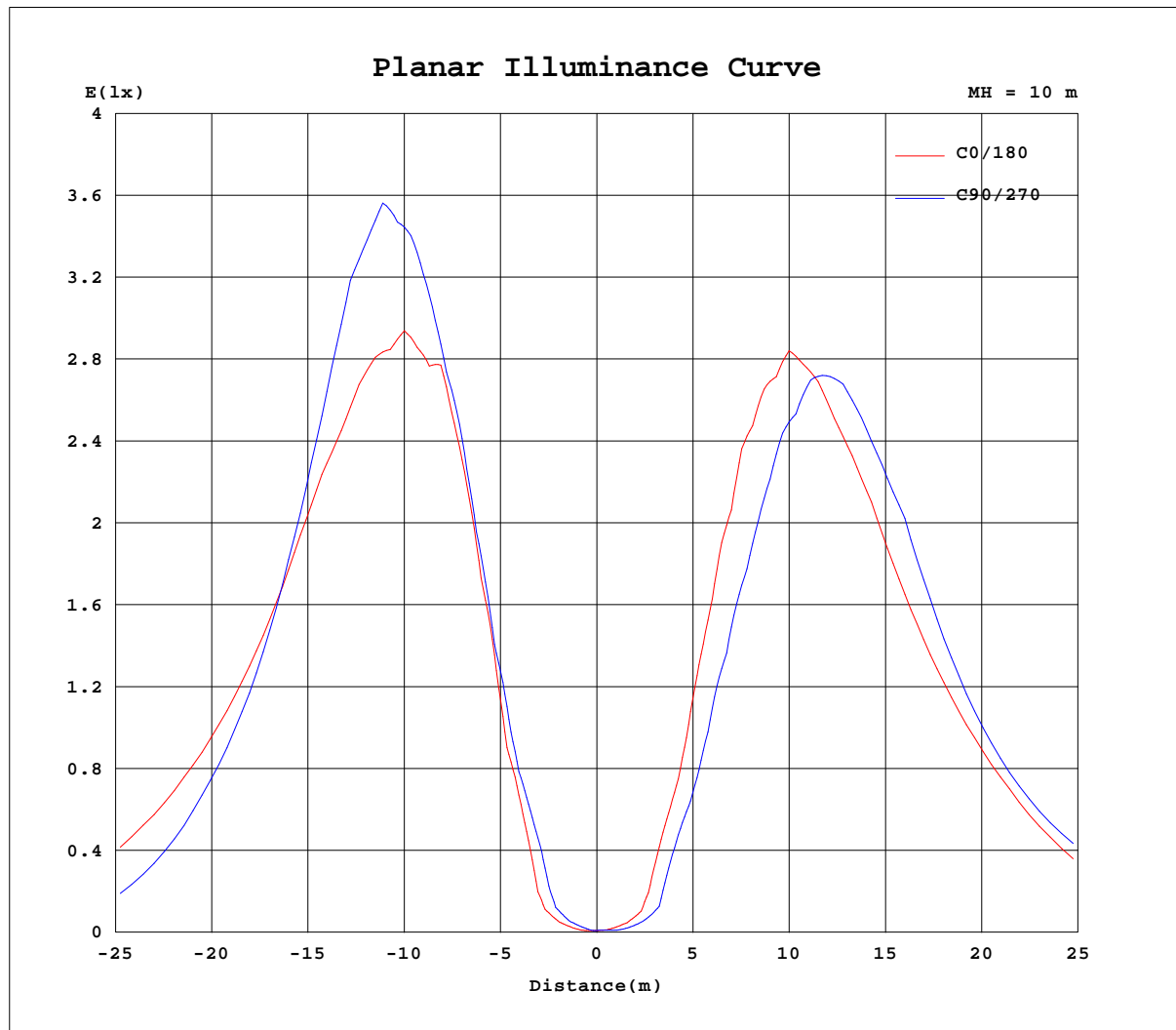
AvgL	cd/m2
L_0~180(65)av	7102
L_0~180(75)av	1876
L_0~180(85)av	631
L_90~270(65)av	6341
L_90~270(75)av	1710
L_90~270(85)av	699
L_45(65)av	5553
L_45(75)av	1658
L_45(85)av	908

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Richard
Test Date:2025-08-08

g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.442
Humidity:65.0%
Test Distance:8.930m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Richard
Test Date: 2025-08-08

g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.442
Humidity: 65.0%
Test Distance: 8.930m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.01V I:0.2045A P:24.533W PF:0.9948 Freq:59.98Hz Lamp Flux:2908.75x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 3000K	DIM.: 42in	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

UNIT: cd

[illegible]

```
g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.442
Humidity:65.0%
Test Distance:8.930m [K=1.0000]
Remarks:
```


LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.01V I:0.2045A P:24.533W PF:0.9948 Freq:59.98Hz Lamp Flux:2908.75x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 3000K	DIM.: 42in	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

UNIT: cd

[illegible]

```
g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.442
Humidity:65.0%
Test Distance:8.930m [K=1.0000]
Remarks:
```

