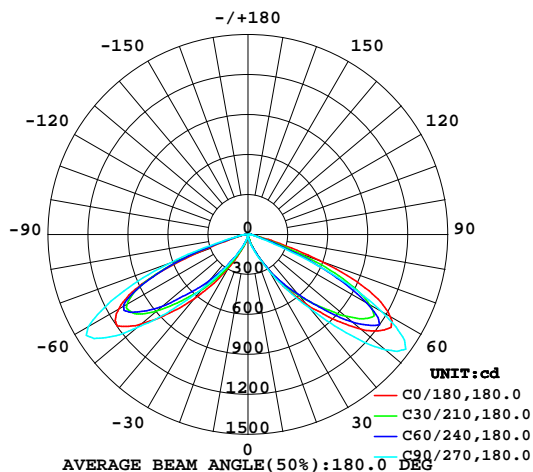


LUMINAIRE PHOTOMETRIC TEST REPORT

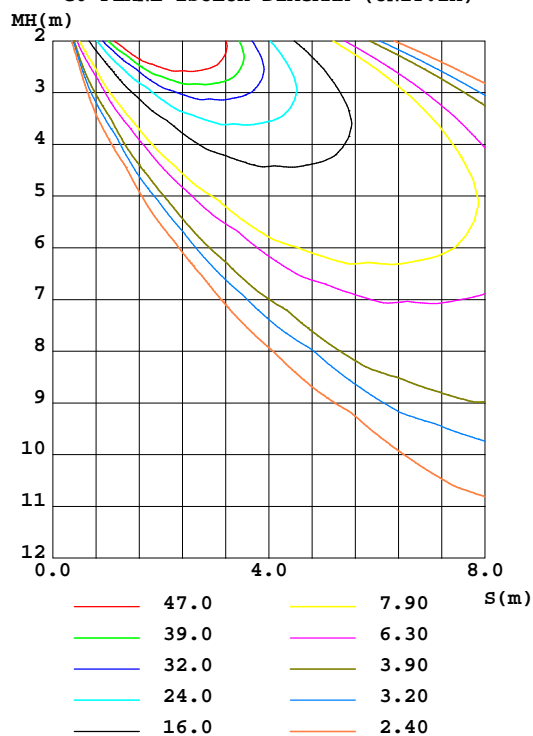
Test:U:120.02V I:0.2027A P:24.323W PF:0.9945 Freq:59.98Hz Lamp Flux:2986.04x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 4000K	DIM.: 42in	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 122.77 lm/W			
MODEL		I _{max} (cd)	1463	S/MH(C0/180)	8.10
NOMINAL POWER(W)	24	LOR(%)	100.0	S/MH(C90/270)	8.93
RATED VOLTAGE(V)	120-277	TOTAL FLUX(lm)	2986.0	h UP,DN(C0-180)	0.0,49.1
NOMINAL FLUX(lm)	2986.04	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.0,50.9
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:2025-08-07

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:

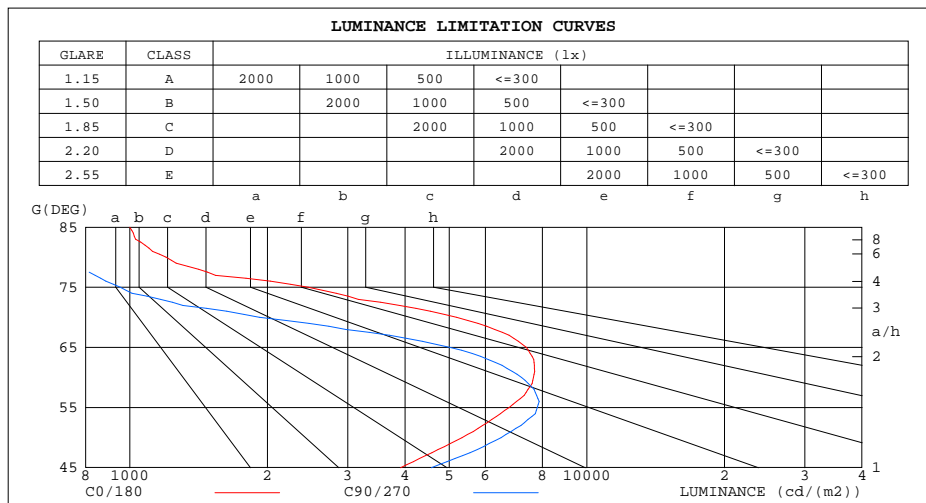
g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
10	10.20	21.81	30.03	28.03	21.55	10.98	4.815	4.739	0- 10	0.6706	0.6706	0.02,0.02
20	91.09	88.02	110.8	93.34	94.87	71.63	63.44	57.66	10- 20	13.97	14.64	0.49,0.49
30	297.2	275.6	308.4	241.2	282.4	205.0	195.5	184.4	20- 30	73.57	88.21	2.95,2.95
40	685.9	545.7	722.8	522.8	630.6	472.3	518.5	466.7	30- 40	255.6	343.8	11.5,11.5
50	1105	890.0	1345	989.9	1044	820.3	1084	857.6	40- 50	614.3	958.0	32.1,32.1
60	1232	999.5	1161	933.3	1121	1033	1384	1119	50- 60	1026	1984	66.4,66.4
70	572.4	292.1	211.9	192.6	408.3	437.3	611.0	483.6	60- 70	786.8	2771	92.8,92.8
80	67.13	48.13	39.58	38.08	51.52	61.48	76.57	72.25	70- 80	181.2	2952	98.9,98.9
90	9.490	13.57	12.36	13.78	11.24	14.49	11.89	18.66	80- 90	34.15	2986	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:2025-08-07

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:120.02V I:0.2027A P:24.323W PF:0.9945 Freq:59.98Hz Lamp Flux:2986.04x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 4000K	DIM.: 42in	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



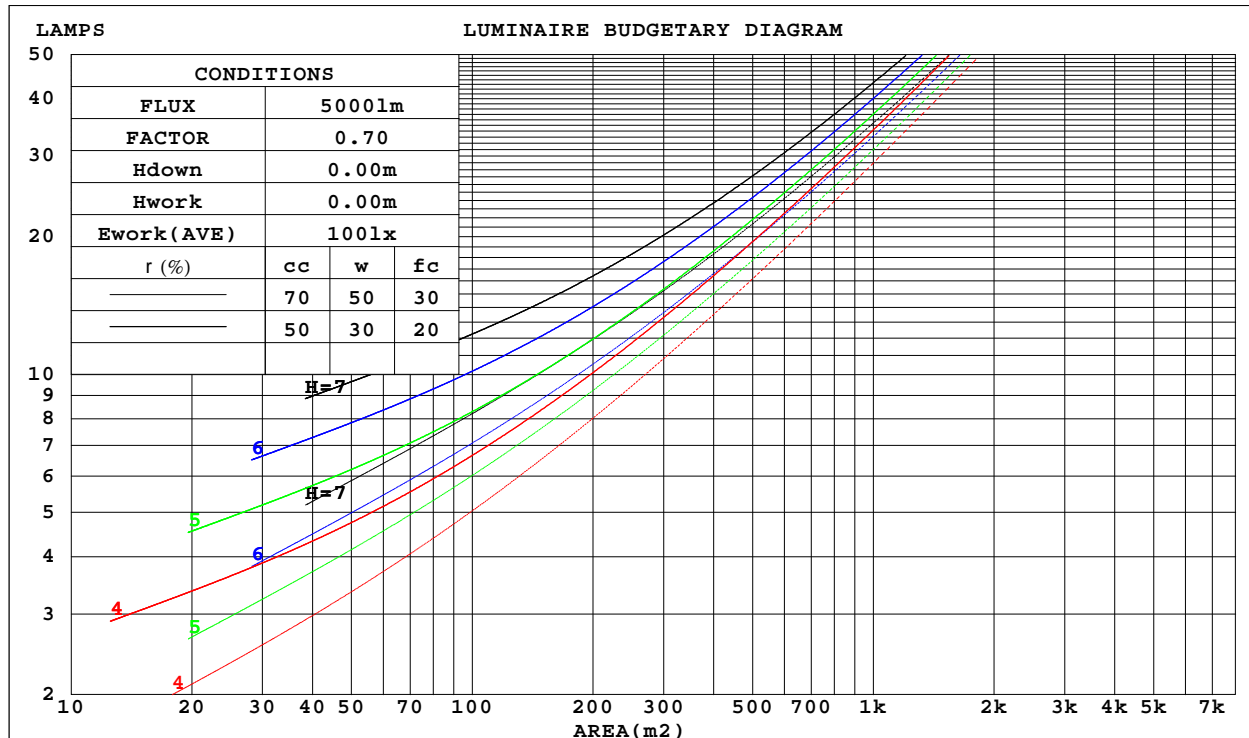
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Richard
Test Date: 2025-08-07

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:120.02V I:0.2027A P:24.323W PF:0.9945 Freq:59.98Hz Lamp Flux:2986.04x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 4000K	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	.99	.94	.90	.94	.90	.87	.90	.87	.84	.87	.84	.82	.79
2.0	.84	.75	.68	.82	.74	.68	.78	.72	.66	.75	.69	.64	.71	.67	.63	.60
3.0	.70	.60	.51	.68	.59	.51	.65	.57	.50	.62	.55	.49	.59	.53	.48	.45
4.0	.58	.47	.39	.57	.47	.39	.54	.45	.38	.52	.44	.38	.49	.43	.37	.34
5.0	.49	.38	.30	.48	.38	.30	.46	.37	.30	.44	.36	.29	.42	.34	.29	.26
6.0	.42	.31	.24	.41	.31	.24	.39	.30	.23	.37	.29	.23	.36	.28	.23	.20
7.0	.37	.26	.19	.36	.26	.19	.34	.25	.18	.33	.24	.18	.31	.24	.18	.16
8.0	.32	.22	.15	.32	.22	.15	.30	.21	.15	.29	.21	.15	.27	.20	.15	.12
9.0	.29	.19	.12	.28	.19	.12	.27	.18	.12	.26	.18	.12	.24	.17	.12	.10
10.0	.26	.16	.10	.25	.16	.10	.24	.16	.10	.23	.15	.10	.22	.15	.10	.08



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Richard
Test Date: 2025-08-07

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:120.02V I:0.2027A P:24.323W PF:0.9945 Freq:59.98Hz Lamp Flux:2986.04x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 4000K	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	.365	.208	.066	.358	.204	.065	.344	.198	.063	.332	.191	.061	.320	.186	.060	
2.0	.355	.195	.060	.349	.192	.059	.337	.187	.058	.325	.182	.057	.315	.178	.056	
3.0	.332	.177	.053	.326	.175	.053	.315	.171	.052	.305	.167	.051	.295	.164	.051	
4.0	.306	.159	.047	.301	.158	.047	.291	.154	.046	.282	.151	.046	.273	.148	.045	
5.0	.282	.144	.042	.277	.142	.041	.268	.140	.041	.260	.137	.041	.252	.135	.040	
6.0	.259	.130	.037	.255	.129	.037	.247	.126	.037	.239	.124	.037	.232	.122	.036	
7.0	.239	.118	.033	.235	.117	.033	.228	.115	.033	.221	.113	.033	.215	.111	.033	
8.0	.221	.108	.030	.217	.107	.030	.211	.105	.030	.205	.104	.030	.199	.102	.030	
9.0	.205	.099	.028	.202	.098	.028	.196	.097	.027	.190	.095	.027	.185	.094	.027	
10.0	.190	.091	.025	.188	.091	.025	.183	.089	.025	.178	.088	.025	.173	.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	.176	.115	.066	.151	.099	.057	.104	.069	.040	.060	.040	.023	.019	.013	.008	
4.0	.171	.102	.050	.147	.088	.043	.101	.062	.030	.058	.036	.018	.019	.012	.006	
5.0	.165	.093	.040	.141	.080	.034	.097	.056	.024	.056	.033	.014	.018	.011	.005	
6.0	.158	.085	.033	.135	.073	.028	.093	.051	.020	.054	.030	.012	.017	.010	.004	
7.0	.150	.078	.028	.129	.068	.024	.089	.048	.017	.052	.028	.010	.017	.009	.003	
8.0	.143	.073	.024	.123	.063	.021	.085	.044	.015	.050	.026	.009	.016	.009	.003	
9.0	.136	.068	.022	.118	.059	.019	.081	.041	.013	.047	.024	.008	.015	.008	.003	
10.0	.130	.064	.020	.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:2025-08-07

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:120.02V I:0.2027A P:24.323W PF:0.9945 Freq:59.98Hz Lamp Flux:2986.04x1 lm											
NAME: XBLA(24/15/12)W(30/40/50)K					TYPE: T5			WEIGHT:			
SPEC.: 4000K					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	20.3	17.9	19.8	18.2	20.0	20.3	
	3H	19.5	21.2	19.8	21.5	21.8	18.4	20.2	18.7	20.4	
	4H	19.6	21.2	19.9	21.5	21.8	18.4	20.0	18.7	20.3	
	6H	19.5	21.1	19.8	21.3	21.7	18.3	19.8	18.6	20.1	
	8H	19.4	21.0	19.8	21.3	21.6	18.2	19.7	18.6	20.0	
	12H	19.4	20.9	19.8	21.2	21.5	18.2	19.6	18.5	19.9	
4H	2H	18.4	20.1	18.7	20.4	20.6	18.3	20.0	18.7	20.3	
	3H	19.9	21.3	20.2	21.6	21.9	18.9	20.3	19.2	20.6	
	4H	20.0	21.3	20.3	21.6	22.0	18.8	20.1	19.2	20.5	
	6H	19.9	21.1	20.3	21.5	21.8	18.8	19.9	19.2	20.3	
	8H	19.9	21.0	20.3	21.4	21.8	18.7	19.8	19.2	20.2	
	12H	19.9	20.9	20.3	21.3	21.7	18.7	19.7	19.2	20.1	
8H	4H	19.9	20.9	20.3	21.3	21.7	18.8	19.9	19.2	20.2	
	6H	19.9	20.8	20.3	21.2	21.6	18.8	19.7	19.2	20.1	
	8H	19.9	20.7	20.3	21.1	21.6	18.8	19.5	19.2	20.0	
	12H	19.9	20.6	20.4	21.0	21.5	18.8	19.4	19.2	19.9	
12H	4H	19.8	20.8	20.3	21.2	21.6	18.7	19.7	19.2	20.1	
	6H	19.9	20.6	20.3	21.1	21.5	18.7	19.5	19.2	20.0	
	8H	19.9	20.5	20.4	21.0	21.5	18.8	19.4	19.2	19.9	
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H	+ 0.1 / - 0.2					+ 0.3 / - 0.4					
1.5H	+ 0.4 / - 0.5					+ 1.2 / - 1.2					
2.0H	+ 1.1 / - 2.1					+ 1.3 / - 2.7					

CIE Pub.117, 2986 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.8)
Area: 0.3224 m2

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Richard
Test Date:2025-08-07

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:120.02V I:0.2027A P:24.323W PF:0.9945 Freq:59.98Hz Lamp Flux:2986.04x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 4000K	DIM.: 42in	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

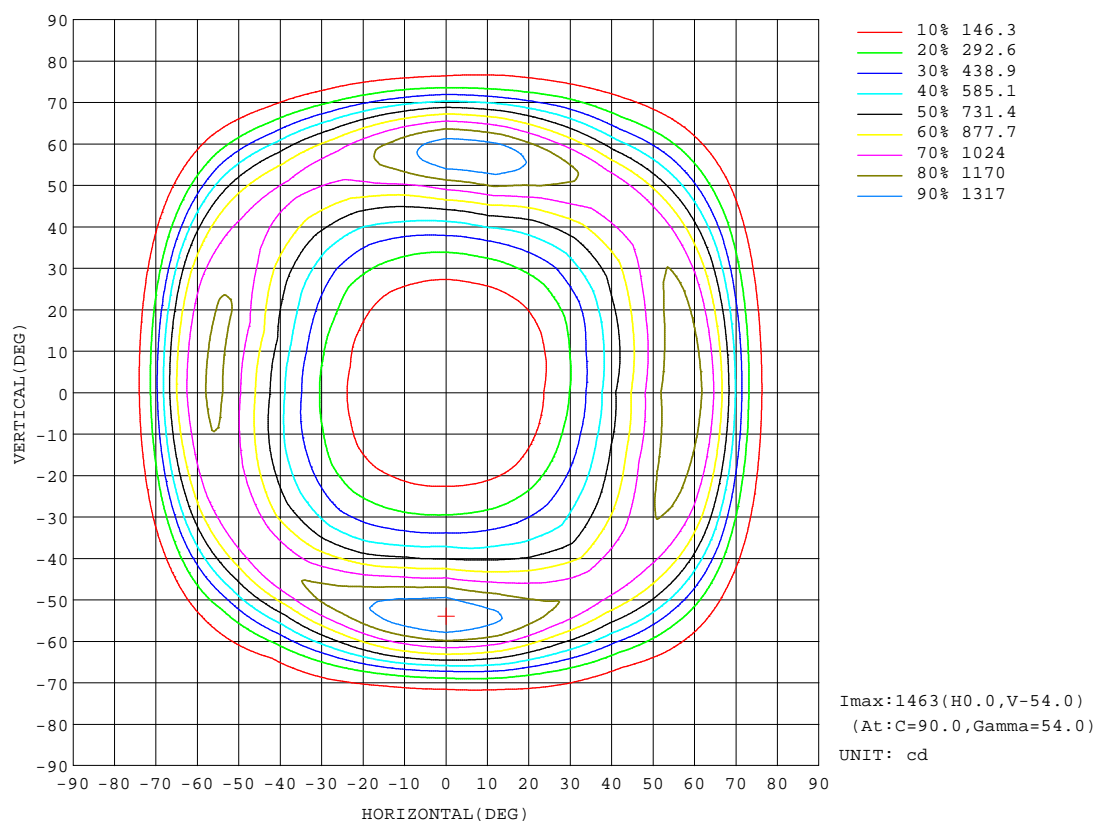
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	37	21	12	36	21	12	34	20	12	3
0.80	49	33	23	47	33	23	45	32	23	13
1.00	60	45	35	59	44	35	56	47	34	25
1.25	70	56	46	68	55	45	65	53	45	35
1.50	76	63	54	74	62	53	71	60	52	43
2.00	87	75	67	84	74	66	80	72	65	55
2.50	92	82	74	90	81	73	86	78	72	62
3.00	97	88	81	95	87	80	90	84	78	68
4.00	103	95	90	100	94	88	95	90	86	76
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:2025-08-07

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:120.02V I:0.2027A P:24.323W PF:0.9945 Freq:59.98Hz Lamp Flux:2986.04x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 4000K	DIM.: 42in	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

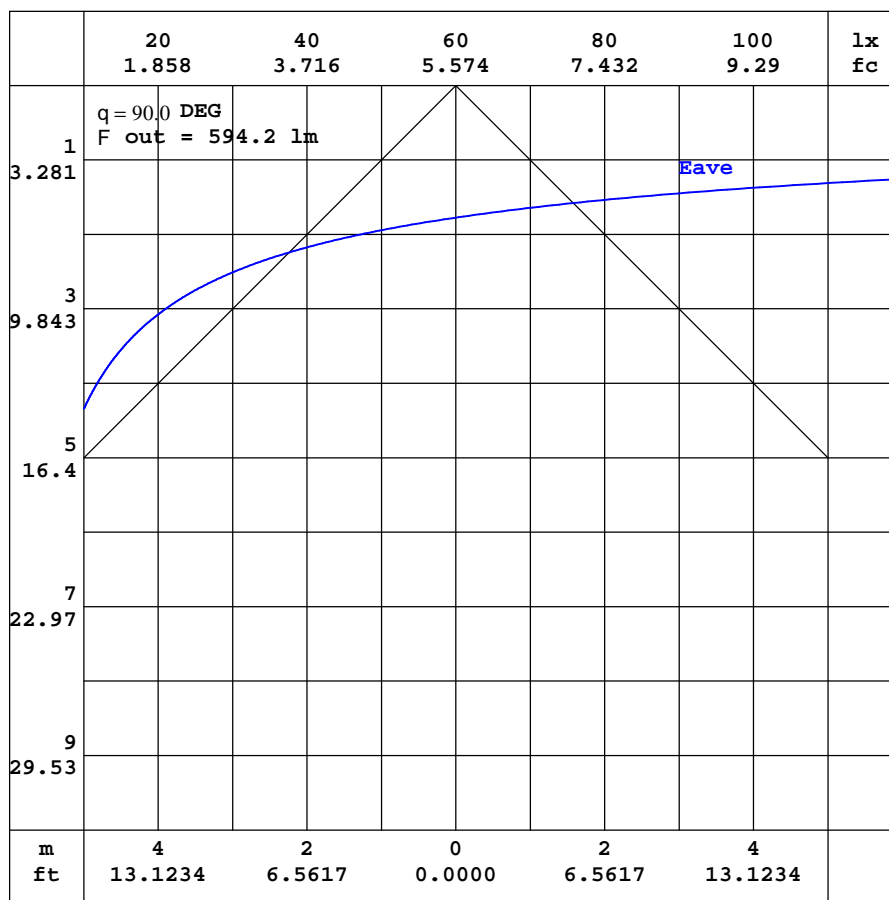


C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Richard
Test Date: 2025-08-07

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:120.02V I:0.2027A P:24.323W PF:0.9945 Freq:59.98Hz Lamp Flux:2986.04x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 4000K	DIM.: 42in	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



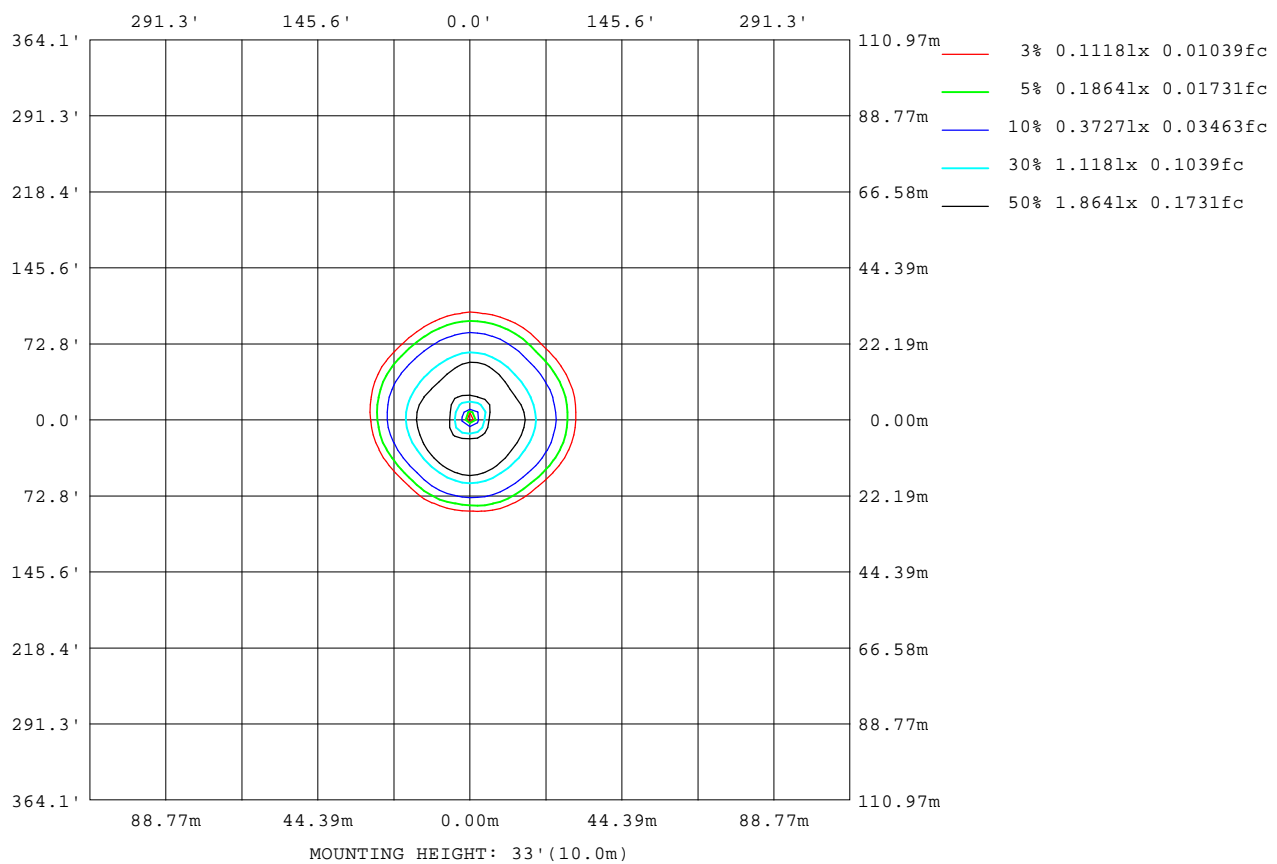
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Richard
Test Date: 2025-08-07

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:120.02V I:0.2027A P:24.323W PF:0.9945 Freq:59.98Hz Lamp Flux:2986.04x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 4000K	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: 2025-08-07

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:120.02V I:0.2027A P:24.323W PF:0.9945 Freq:59.98Hz Lamp Flux:2986.04x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 4000K	DIM.: 42in	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

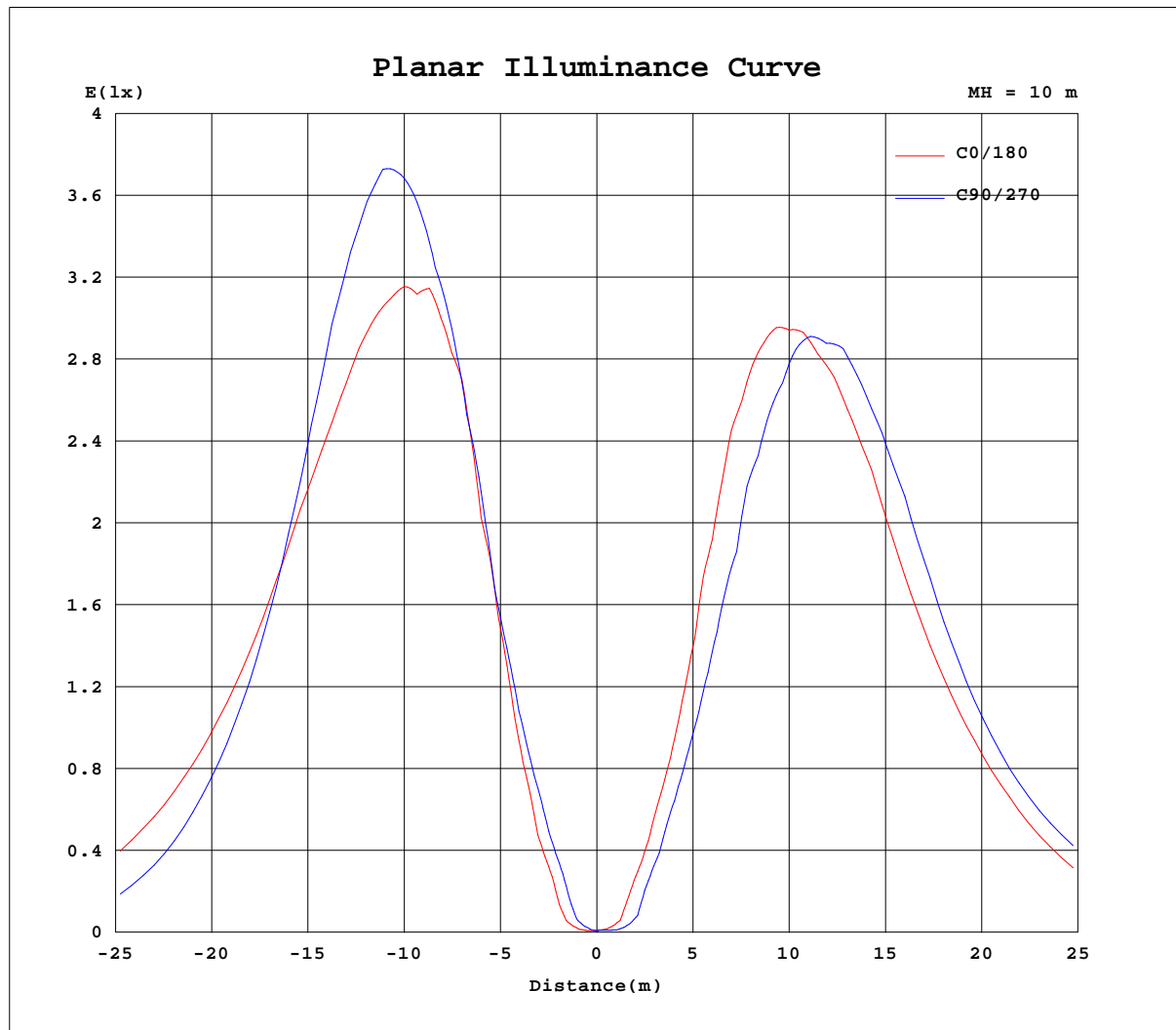
AvgL	cd/m2
L_0~180(65)av	6908
L_0~180(75)av	1902
L_0~180(85)av	880
L_90~270(65)av	6407
L_90~270(75)av	1700
L_90~270(85)av	920
L_45(65)av	5268
L_45(75)av	1488
L_45(85)av	987

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Richard
Test Date:2025-08-07

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: 2025-08-07

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:120.02V I:0.2027A P:24.323W PF:0.9945 Freq:59.98Hz Lamp Flux:2986.04x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 4000K	DIM.: 42in	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--1

UNIT: cd

[illegible]

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Richard
Test Date: 2025-08-07

```
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:120.02V I:0.2027A P:24.323W PF:0.9945 Freq:59.98Hz Lamp Flux:2986.04x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 4000K	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:120.02V I:0.2027A P:24.323W PF:0.9945 Freq:59.98Hz Lamp Flux:2986.04x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 4000K	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:120.02V I:0.2027A P:24.323W PF:0.9945 Freq:59.98Hz Lamp Flux:2986.04x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 4000K	DIM.: 42in	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

UNIT: cd

[illegible]

```

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

```