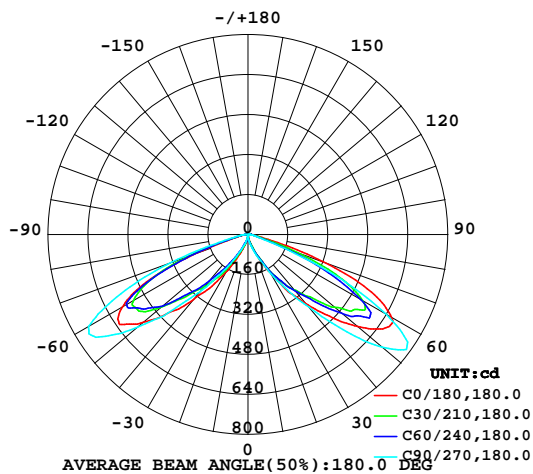


LUMINAIRE PHOTOMETRIC TEST REPORT

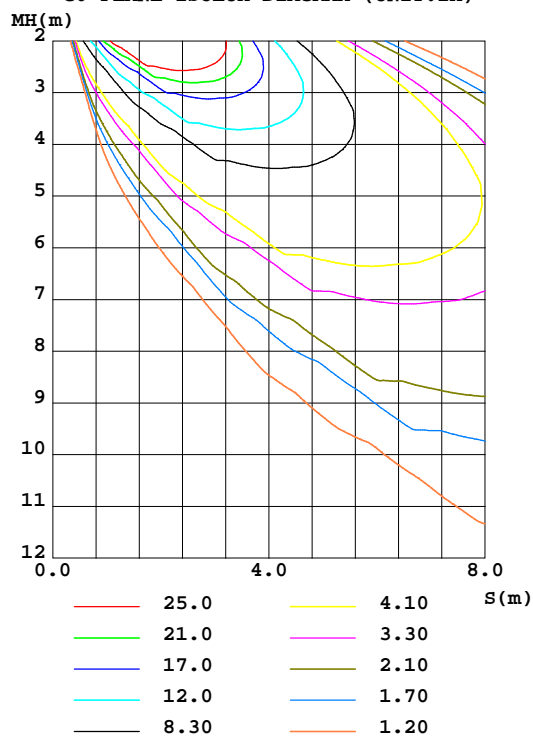
Test:U:120.01V I:0.1047A P:12.559W PF:0.9851 Freq:59.98Hz Lamp Flux:1558.73x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 5000K	DIM.: 42in	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 124.11 lm/W			
MODEL		I _{max} (cd)	783.4	S/MH(C0/180)	8.27
NOMINAL POWER(W)	12	LOR(%)	100.0	S/MH(C90/270)	9.13
RATED VOLTAGE(V)	120-277	TOTAL FLUX(lm)	1558.7	h UP,DN(C0-180)	0.0,48.9
NOMINAL FLUX(lm)	1558.73	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.0,51.1
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:

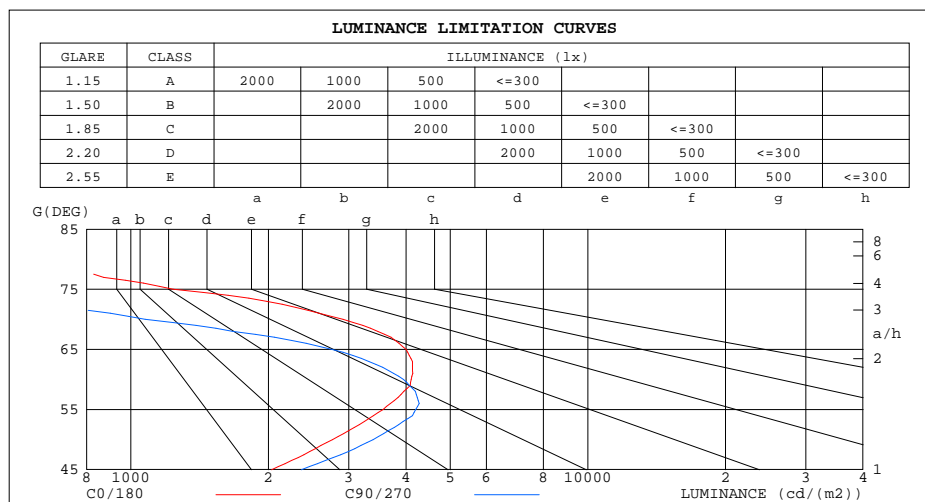
g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
10	6.697	17.17	24.78	23.17	18.00	8.931	3.202	3.080	0- 10	0.4948	0.4948	0.03,0.03
20	61.39	51.18	70.64	55.30	62.74	44.66	46.15	37.25	10- 20	9.880	10.37	0.67,0.67
30	171.7	152.1	174.0	130.9	168.6	114.5	122.7	106.9	20- 30	43.81	54.18	3.48,3.48
40	361.7	269.7	378.6	268.4	339.4	243.4	299.3	251.6	30- 40	138.2	192.4	12.3,12.3
50	572.5	425.3	702.7	476.0	547.5	418.2	576.3	435.7	40- 50	315.6	508.0	32.6,32.6
60	662.5	495.1	637.1	466.4	579.9	516.3	736.2	556.6	50- 60	527.6	1036	66.4,66.4
70	321.3	142.0	118.6	92.10	212.7	214.9	324.8	240.4	60- 70	411.0	1447	92.8,92.8
80	36.10	23.41	21.22	18.56	26.46	28.16	39.73	33.66	70- 80	94.65	1541	98.9,98.9
90	4.374	6.943	6.419	7.162	5.763	7.105	6.512	8.594	80- 90	17.53	1559	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:0.1047A P:12.559W PF:0.9851 Freq:59.98Hz Lamp Flux:1558.73x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 5000K	DIM.: 42in	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	575	306
80	645	379
75	1237	500
70	2914	1076
65	4003	2755
60	4110	3952
55	3561	4204
50	2763	3391
45	2033	2361

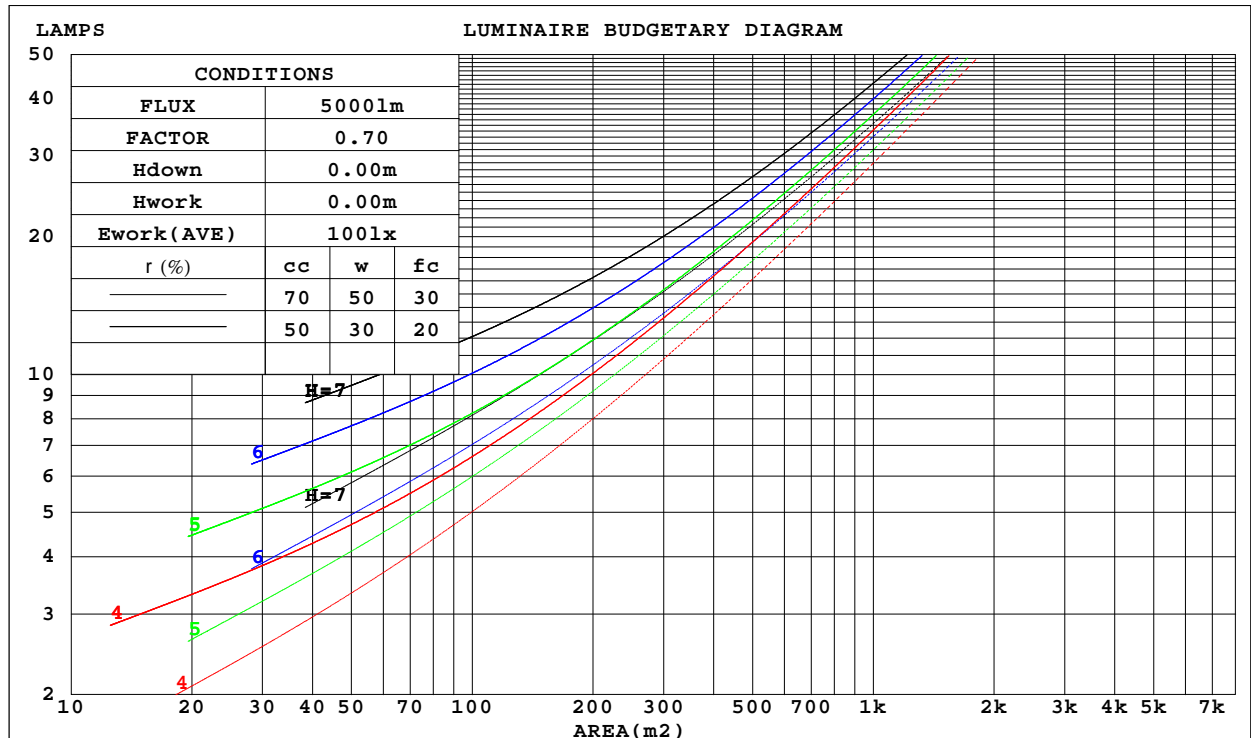
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Richard
Test Date:2025-08-08

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:0.1047A P:12.559W PF:0.9851 Freq:59.98Hz Lamp Flux:1558.73x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 5000K	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	.91	.87	.90	.87	.84	.87	.84	.82	.80
2.0	.84	.76	.69	.82	.74	.68	.78	.72	.66	.75	.69	.64	.72	.67	.63	.60
3.0	.70	.60	.52	.68	.59	.51	.65	.57	.50	.62	.55	.49	.59	.53	.48	.46
4.0	.59	.48	.39	.57	.47	.39	.54	.45	.38	.52	.44	.38	.49	.43	.37	.35
5.0	.50	.39	.31	.48	.38	.30	.46	.37	.30	.44	.36	.29	.42	.35	.29	.26
6.0	.43	.32	.24	.42	.31	.24	.40	.30	.23	.38	.29	.23	.36	.29	.23	.20
7.0	.37	.27	.19	.36	.26	.19	.34	.25	.19	.33	.25	.19	.31	.24	.18	.16
8.0	.33	.22	.15	.32	.22	.15	.30	.22	.15	.29	.21	.15	.28	.20	.15	.13
9.0	.29	.19	.13	.28	.19	.13	.27	.18	.13	.26	.18	.12	.25	.18	.12	.10
10.0	.26	.17	.11	.25	.17	.11	.24	.16	.10	.23	.16	.10	.22	.15	.10	.08



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

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:0.1047A P:12.559W PF:0.9851 Freq:59.98Hz Lamp Flux:1558.73x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 5000K	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	.364	.207	.066	.357	.204	.065	.343	.197	.063	.331	.191	.061	.319	.185	.060	
2.0	.354	.194	.060	.348	.192	.059	.335	.187	.058	.324	.182	.057	.314	.177	.056	
3.0	.331	.176	.053	.325	.174	.052	.314	.170	.052	.304	.167	.051	.294	.163	.050	
4.0	.305	.159	.047	.300	.157	.046	.290	.154	.046	.281	.151	.046	.272	.148	.045	
5.0	.281	.143	.041	.276	.142	.041	.267	.139	.041	.259	.137	.041	.251	.134	.040	
6.0	.258	.129	.037	.254	.128	.037	.246	.126	.037	.238	.124	.036	.231	.122	.036	
7.0	.238	.118	.033	.234	.117	.033	.227	.115	.033	.220	.113	.033	.214	.111	.033	
8.0	.220	.107	.030	.217	.107	.030	.210	.105	.030	.204	.103	.030	.198	.102	.030	
9.0	.204	.099	.028	.201	.098	.027	.195	.097	.027	.190	.095	.027	.185	.094	.027	
10.0	.190	.091	.025	.187	.090	.025	.182	.089	.025	.177	.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	.157	.134	.112	.108	.092	.077	.062	.053	.045	.020	.017	.015	
2.0	.181	.132	.090	.155	.113	.078	.106	.078	.055	.061	.046	.032	.020	.015	.010	
3.0	.176	.115	.066	.151	.099	.057	.104	.069	.040	.060	.040	.024	.019	.013	.008	
4.0	.171	.102	.050	.147	.088	.043	.101	.062	.031	.058	.036	.018	.019	.012	.006	
5.0	.164	.093	.040	.141	.080	.035	.097	.056	.024	.056	.033	.014	.018	.011	.005	
6.0	.157	.085	.033	.135	.073	.029	.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	.117	.059	.019	.081	.041	.013	.047	.024	.008	.015	.008	.003	
10.0	.130	.064	.020	.112	.055	.017	.077	.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:0.1047A P:12.559W PF:0.9851 Freq:59.98Hz Lamp Flux:1558.73x1 lm											
NAME: XBLA(24/15/12)W(30/40/50)K						TYPE: T5		WEIGHT:			
SPEC.: 5000K						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	20.1	20.3	
	3H	19.6	21.4	19.9	21.6	21.9	18.5	20.3	18.9	20.6	20.8
	4H	19.7	21.4	20.1	21.7	22.0	18.5	20.1	18.8	20.4	20.7
	6H	19.7	21.2	20.0	21.5	21.8	18.4	19.9	18.7	20.2	20.5
	8H	19.6	21.1	20.0	21.4	21.7	18.3	19.8	18.7	20.1	20.5
	12H	19.6	21.0	20.0	21.3	21.7	18.3	19.7	18.7	20.0	20.4
4H	2H	18.3	20.0	18.7	20.3	20.6	18.3	20.0	18.6	20.2	20.5
	3H	19.9	21.4	20.3	21.7	22.0	18.9	20.4	19.3	20.7	21.0
	4H	20.1	21.4	20.5	21.7	22.1	18.9	20.2	19.3	20.5	20.9
	6H	20.1	21.2	20.5	21.6	22.0	18.8	20.0	19.2	20.3	20.7
	8H	20.0	21.1	20.5	21.5	21.9	18.8	19.9	19.2	20.2	20.6
	12H	20.0	21.0	20.5	21.4	21.8	18.8	19.7	19.2	20.1	20.5
8H	4H	20.0	21.1	20.4	21.4	21.8	18.8	19.9	19.2	20.3	20.7
	6H	20.0	20.9	20.5	21.3	21.7	18.8	19.7	19.2	20.1	20.5
	8H	20.0	20.8	20.5	21.2	21.7	18.8	19.6	19.3	20.0	20.5
	12H	20.0	20.7	20.5	21.1	21.6	18.8	19.5	19.3	19.9	20.4
12H	4H	20.0	20.9	20.4	21.3	21.7	18.8	19.8	19.2	20.2	20.6
	6H	20.0	20.8	20.4	21.2	21.7	18.8	19.6	19.2	20.0	20.4
	8H	20.0	20.7	20.5	21.1	21.6	18.8	19.5	19.3	19.9	20.4
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H	+ 0.1 / - 0.2					+ 0.3 / - 0.4					
1.5H	+ 0.3 / - 0.4					+ 1.1 / - 1.0					
2.0H	+ 1.2 / - 1.8					+ 1.6 / - 2.7					

CIE Pub.117, 1559 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 1.5)
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:0.1047A P:12.559W PF:0.9851 Freq:59.98Hz Lamp Flux:1558.73x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 5000K	DIM.: 42in	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

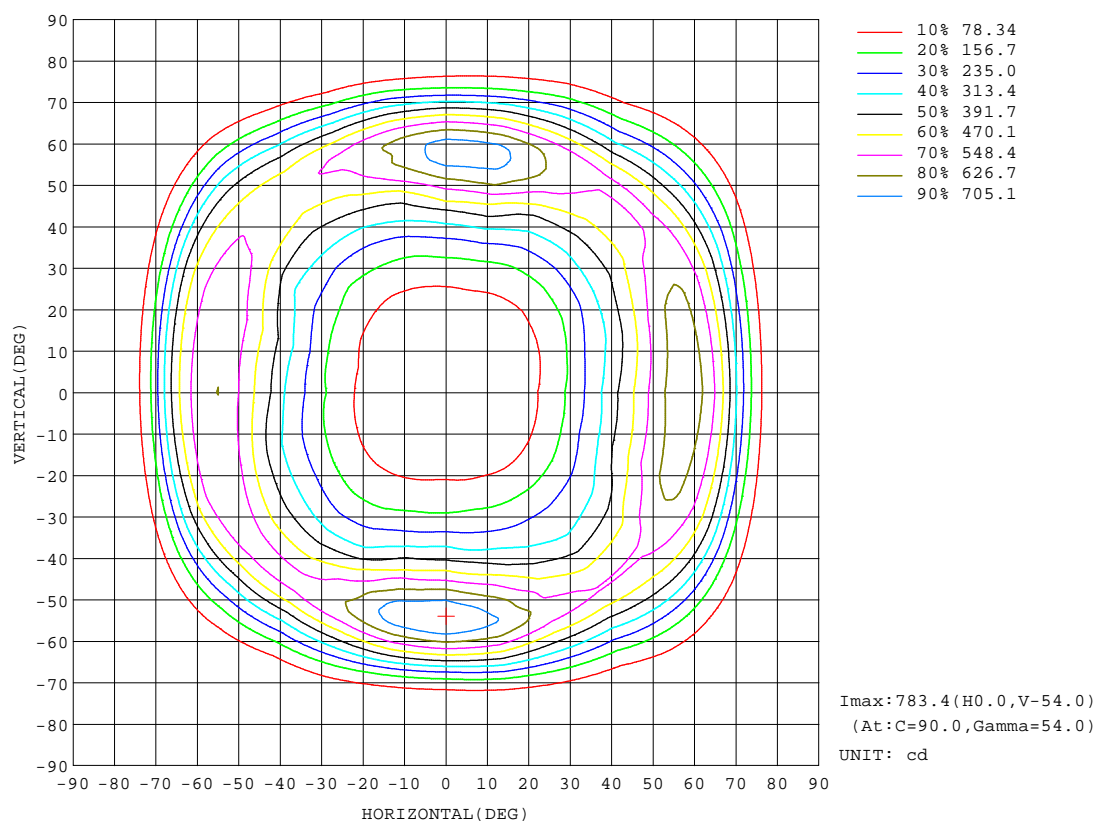
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	37	22	13	36	22	13	35	21	13	4
0.80	49	34	24	48	33	24	46	32	23	14
1.00	60	46	36	59	45	36	56	47	35	26
1.25	70	56	46	68	55	46	65	53	45	36
1.50	77	63	54	75	62	54	71	60	53	43
2.00	87	76	67	85	74	66	81	72	65	55
2.50	92	82	75	90	81	74	86	78	72	62
3.00	97	88	81	95	87	80	90	84	78	69
4.00	103	96	90	100	94	88	96	90	86	76
5.00	106	100	95	103	98	93	99	94	90	81
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:0.1047A P:12.559W PF:0.9851 Freq:59.98Hz Lamp Flux:1558.73x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 5000K	DIM.: 42in	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

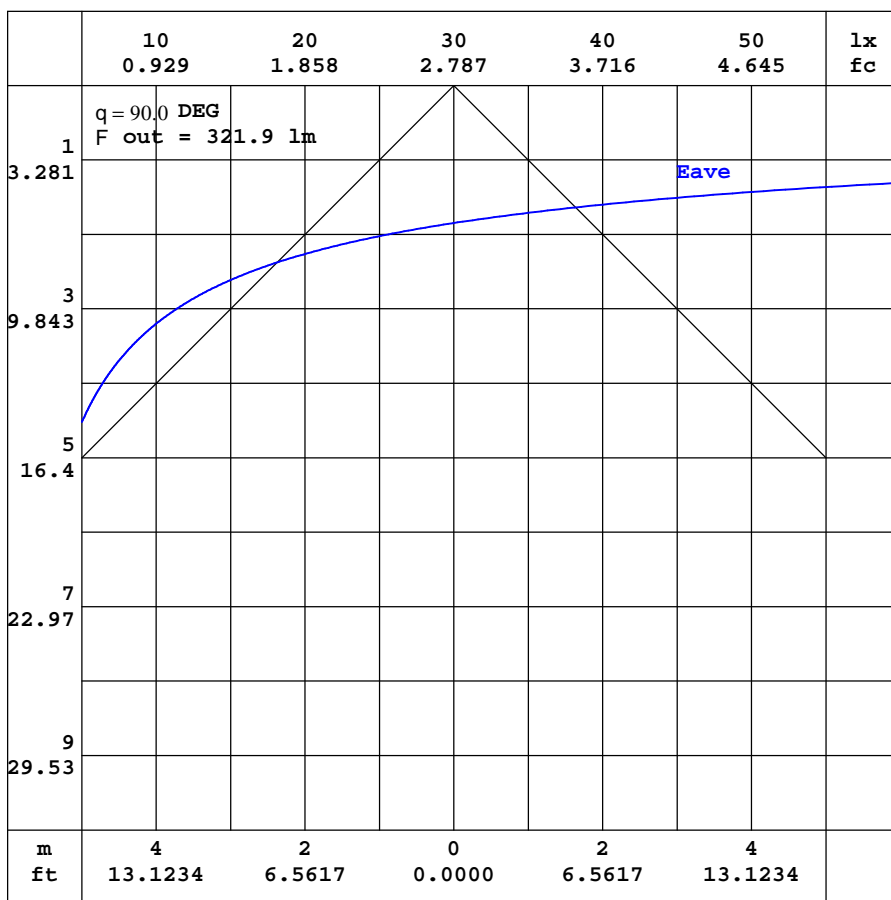


C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Richard
Test Date:2025-08-08

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:0.1047A P:12.559W PF:0.9851 Freq:59.98Hz Lamp Flux:1558.73x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 5000K	DIM.: 42in	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



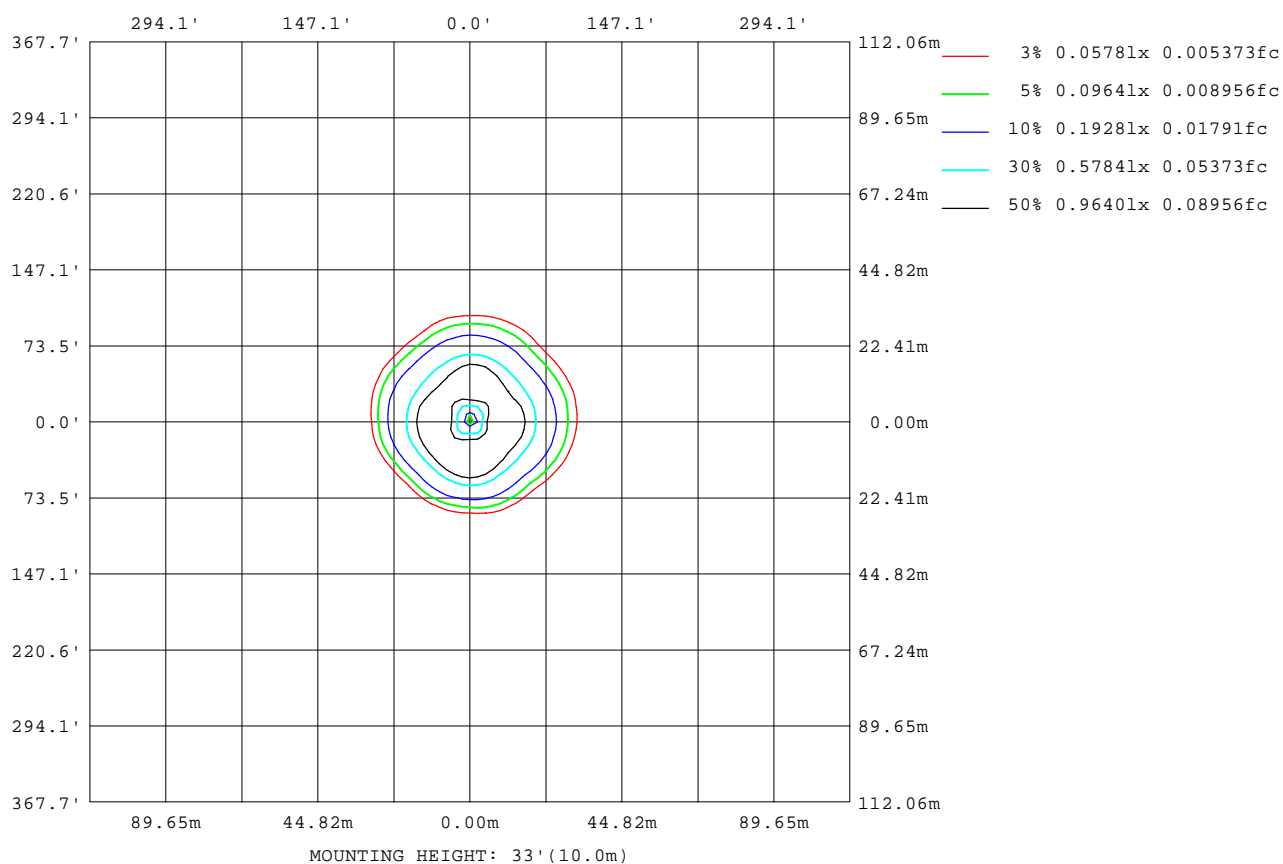
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.1047A P:12.559W PF:0.9851 Freq:59.98Hz Lamp Flux:1558.73x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 5000K	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:0.1047A P:12.559W PF:0.9851 Freq:59.98Hz Lamp Flux:1558.73x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 5000K	DIM.: 42in	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

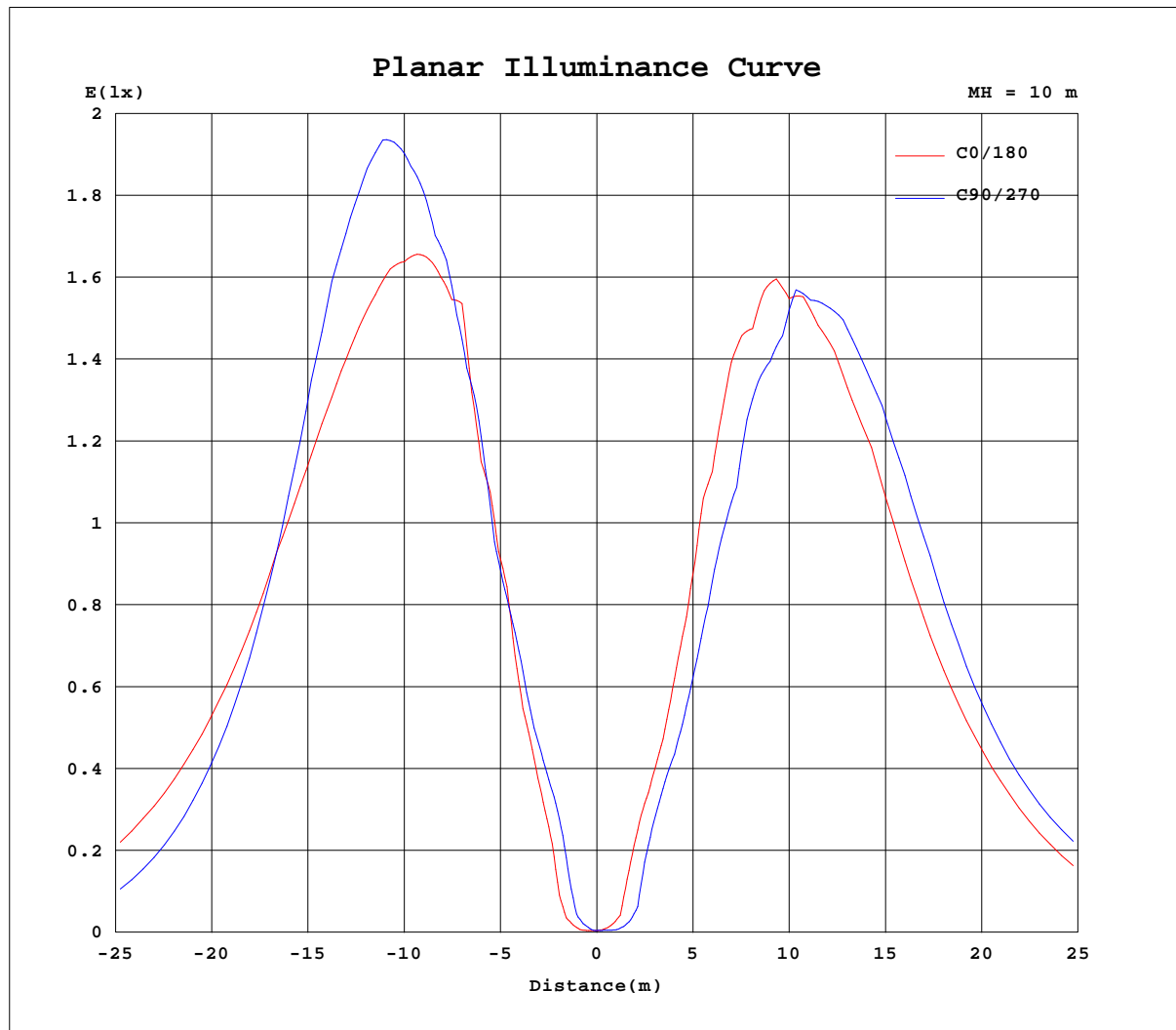
AvgL	cd/m2
L_0~180(65)av	3647
L_0~180(75)av	972
L_0~180(85)av	485
L_90~270(65)av	3438
L_90~270(75)av	903
L_90~270(85)av	500
L_45(65)av	2601
L_45(75)av	681
L_45(85)av	471

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:0.1047A P:12.559W PF:0.9851 Freq:59.98Hz Lamp Flux:1558.73x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 5000K	DIM.: 42in	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--3

UNIT: cd

[illegible]

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:0.1047A P:12.559W PF:0.9851 Freq:59.98Hz Lamp Flux:1558.73x1 lm		
NAME: XBLA(24/15/12)W(30/40/50)K	TYPE: T5	WEIGHT:
SPEC.: 5000K	DIM.: 42in	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--4

UNIT: cd

[illegible]

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:
```