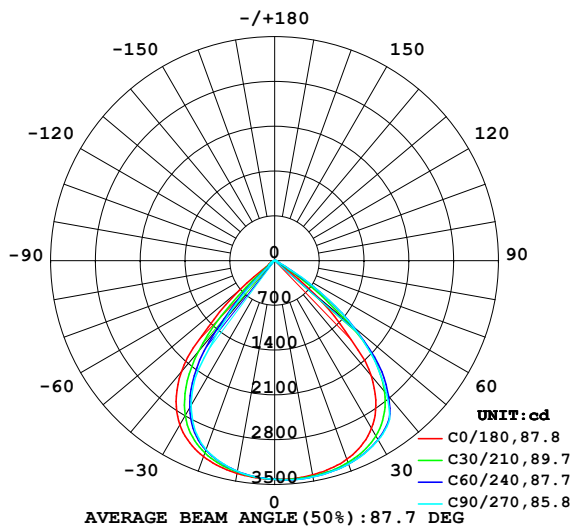


LUMINAIRE PHOTOMETRIC TEST REPORT

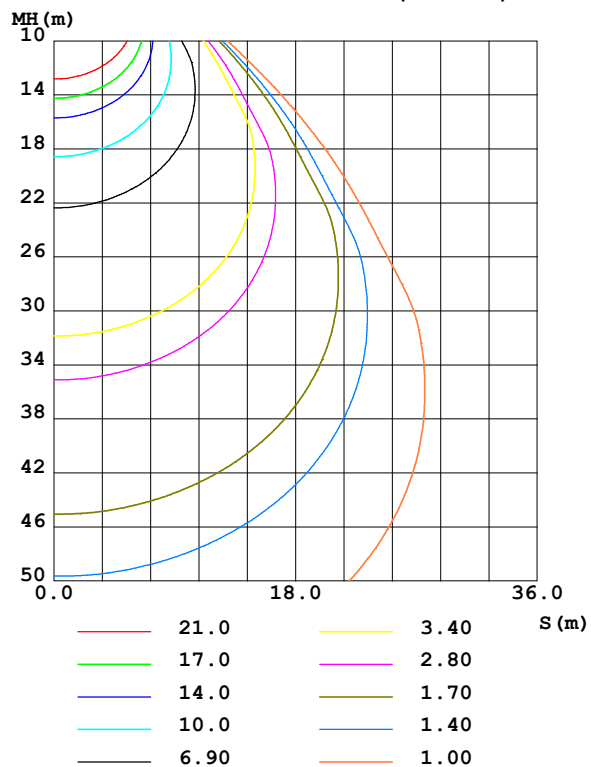
Test:U:220.37V I:0.2245A P:48.453W PF:0.9793 Freq:50.00Hz Lamp Flux:5940.11x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 122.60 lm/W			
MODEL	415	I _{max} (cd)	3439	S/MH(C0/180)	1.27
NOMINAL POWER(W)	50	LOR(%)	100.0	S/MH(C90/270)	1.07
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	5940.1	η UP,DN(C0-180)	0.0,58.8
NOMINAL FLUX(lm)	5940.11	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,41.2
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	219.5	η down(%)	100.0	CIBSE SHR MAX	1.30

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2024-03-16

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [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
10	3401	3428	3432	3414	3377	3347	3345	3362	0- 10	325.0	325.0	5.47,5.47
20	3303	3375	3384	3339	3258	3168	3141	3196	10- 20	944.7	1270	21.4,21.4
30	3028	3211	3235	3164	2965	2715	2610	2757	20- 30	1449	2718	45.8,45.8
40	2350	2789	2725	2711	2271	1642	1221	1707	30- 40	1640	4358	73.4,73.4
50	820.7	1649	1589	1551	723.2	131.6	116.1	133.5	40- 50	1135	5493	92.5,92.5
60	88.40	149.1	271.0	128.6	91.15	67.63	60.94	64.48	50- 60	362.7	5856	98.6,98.6
70	42.23	38.12	34.61	38.42	45.63	29.20	24.43	27.19	60- 70	59.72	5916	99.6,99.6
80	10.51	8.319	5.675	8.293	11.37	6.715	8.375	6.636	70- 80	20.76	5936	99.9,99.9
90	0.4236	0.6250	0.3922	0.5564	0.6264	1.959	1.515	1.536	80- 90	3.832	5940	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		

Conical surface Flux(90deg): 5037.9 lm

%lum = 84.8%

%lamp = 84.8%

Conical surface Flux(130deg): 5893 lm

%lum = 99.2%

%lamp = 99.2%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:DAMIN
 Test Date:2024-03-16

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
 Humidity:65.0%
 Test Distance:9.401m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

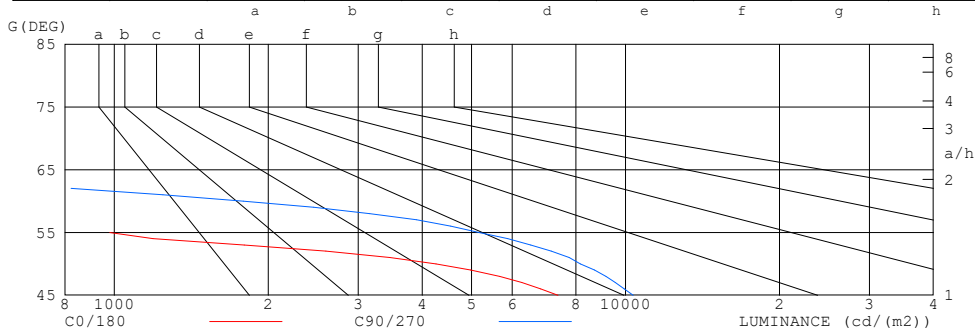
Test:U:220.37V I:0.2245A P:48.453W PF:0.9793 Freq:50.00Hz

Lamp Flux:5940.11x1 lm

NAME:	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

LUMINANCE LIMITATION CURVES

GLARE	CLASS	ILLUMINANCE (lx)							
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	66	25
80	202	108
75	317	222
70	412	334
65	496	444
60	590	1788
55	979	5173
50	4260	8157
45	7378	10350

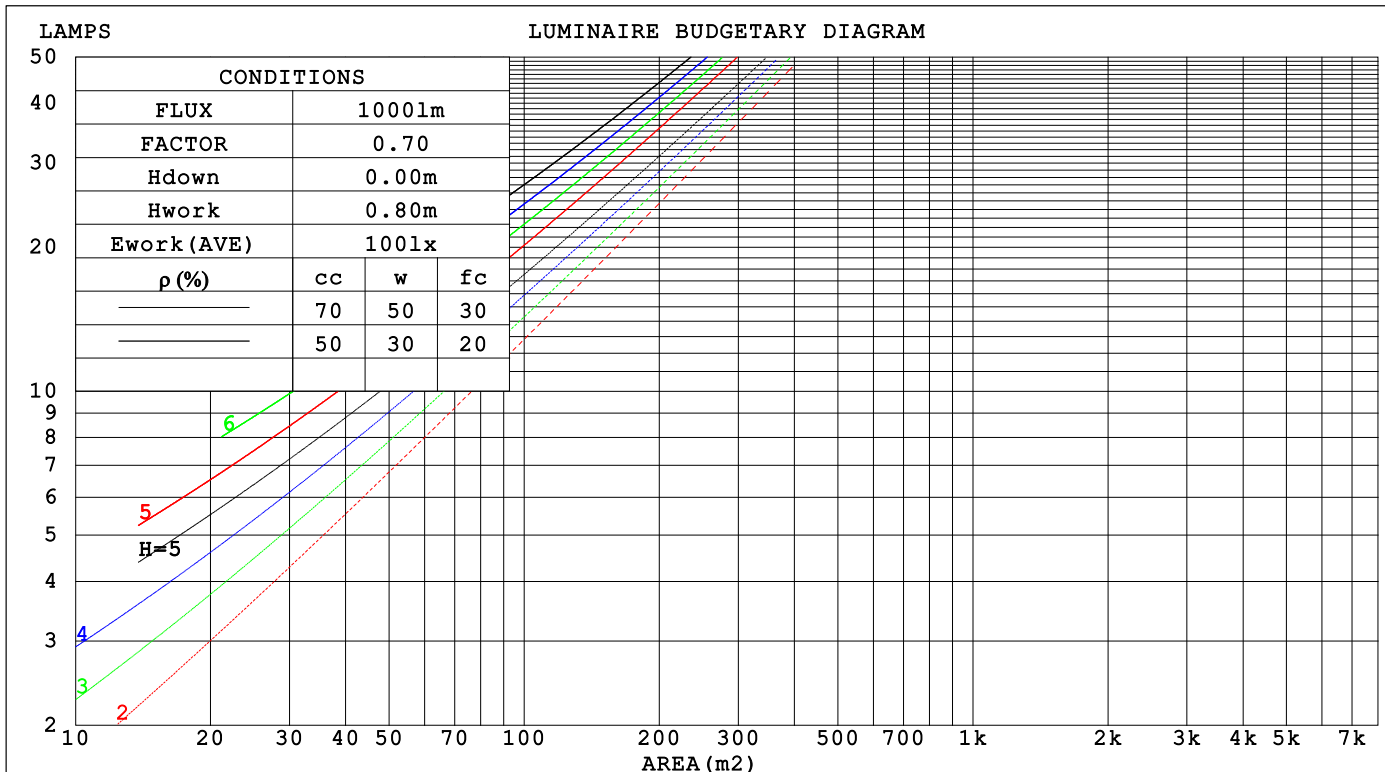
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:2024-03-16

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.37V I:0.2245A P:48.453W PF:0.9793 Freq:50.00Hz Lamp Flux:5940.11x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	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	1.09	1.06	1.04	1.07	1.04	1.02	1.03	1.01	.99	.99	.97	.96	.96	.94	.93	.91
2.0	.99	.95	.91	.98	.93	.90	.94	.91	.88	.91	.88	.86	.88	.86	.84	.82
3.0	.91	.85	.80	.89	.84	.79	.86	.82	.78	.84	.80	.77	.82	.78	.75	.74
4.0	.83	.76	.71	.82	.75	.71	.79	.74	.70	.77	.73	.69	.75	.71	.68	.66
5.0	.76	.69	.64	.75	.68	.63	.73	.67	.63	.71	.66	.62	.69	.65	.61	.60
6.0	.70	.62	.57	.69	.62	.57	.67	.61	.57	.66	.60	.56	.64	.59	.56	.54
7.0	.64	.57	.52	.63	.57	.52	.62	.56	.51	.61	.55	.51	.59	.55	.51	.49
8.0	.59	.52	.47	.59	.52	.47	.57	.51	.47	.56	.51	.47	.55	.50	.46	.45
9.0	.55	.48	.43	.54	.48	.43	.53	.47	.43	.52	.47	.43	.51	.46	.43	.41
10.0	.51	.44	.40	.51	.44	.40	.50	.44	.39	.49	.43	.39	.48	.43	.39	.38



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:2024-03-16

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:220.37V I:0.2245A P:48.453W PF:0.9793 Freq:50.00Hz Lamp Flux:5940.11x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0	
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
pfc	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.210	.119	.038	.203	.116	.037	.190	.109	.035	.179	.103	.033	.168	.097	.031		
2.0	.205	.113	.035	.200	.110	.034	.189	.105	.033	.179	.100	.031	.169	.096	.030		
3.0	.197	.105	.031	.192	.103	.031	.183	.099	.030	.174	.095	.029	.166	.092	.028		
4.0	.189	.098	.029	.184	.096	.028	.176	.093	.028	.168	.090	.027	.161	.088	.027		
5.0	.180	.092	.027	.176	.090	.026	.169	.088	.026	.162	.085	.025	.155	.083	.025		
6.0	.171	.086	.025	.168	.085	.024	.161	.083	.024	.155	.081	.024	.149	.079	.023		
7.0	.163	.081	.023	.160	.080	.023	.154	.078	.022	.149	.076	.022	.144	.075	.022		
8.0	.155	.076	.021	.153	.075	.021	.147	.074	.021	.142	.072	.021	.138	.071	.021		
9.0	.148	.072	.020	.146	.071	.020	.141	.070	.020	.136	.068	.020	.132	.067	.019		
10.0	.141	.068	.019	.139	.067	.019	.135	.066	.019	.131	.065	.018	.127	.064	.018		

pcc	80%			70%			50%			30%			10%			0	
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
pfc	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	.173	.157	.142	.148	.135	.122	.101	.093	.085	.058	.054	.049	.019	.017	.016		
2.0	.161	.132	.108	.138	.114	.094	.094	.079	.065	.054	.046	.038	.017	.015	.012		
3.0	.151	.114	.085	.129	.098	.073	.089	.068	.051	.051	.040	.030	.016	.013	.010		
4.0	.142	.100	.067	.122	.086	.058	.084	.060	.041	.048	.035	.024	.016	.011	.008		
5.0	.134	.089	.055	.116	.077	.048	.080	.054	.034	.046	.031	.020	.015	.010	.007		
6.0	.128	.080	.045	.110	.069	.039	.076	.048	.028	.044	.028	.017	.014	.009	.005		
7.0	.122	.073	.038	.105	.063	.033	.072	.044	.024	.042	.026	.014	.014	.009	.005		
8.0	.116	.067	.033	.100	.058	.028	.069	.041	.020	.040	.024	.012	.013	.008	.004		
9.0	.111	.062	.028	.096	.054	.025	.066	.038	.018	.039	.022	.010	.013	.007	.003		
10.0	.107	.058	.025	.092	.050	.022	.064	.035	.015	.037	.021	.009	.012	.007	.003		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2024-03-16

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.37V I:0.2245A P:48.453W PF:0.9793 Freq:50.00Hz Lamp Flux:5940.11x1 lm										
NAME:			TYPE:			WEIGHT:				
SPEC.: 3000K			DIM.:			SERIAL No.:				
MFR.: EVERFINE			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	11.6	12.8	11.8	12.9	13.1	12.9	14.1	13.1	14.3	14.4
3H	11.4	12.5	11.7	12.7	12.9	12.7	13.8	13.0	14.0	14.2
4H	11.3	12.3	11.6	12.6	12.8	12.6	13.6	12.9	13.9	14.1
6H	11.2	12.2	11.5	12.4	12.7	12.5	13.5	12.8	13.7	14.0
8H	11.2	12.1	11.5	12.4	12.6	12.5	13.4	12.8	13.7	13.9
12H	11.1	12.0	11.5	12.3	12.6	12.4	13.3	12.8	13.6	13.9
4H 2H	11.4	12.4	11.7	12.7	12.9	12.7	13.7	13.0	13.9	14.1
3H	11.3	12.1	11.6	12.4	12.7	12.5	13.4	12.8	13.6	13.9
4H	11.2	12.0	11.5	12.3	12.6	12.4	13.2	12.8	13.5	13.8
6H	11.1	11.8	11.5	12.1	12.5	12.3	13.0	12.7	13.3	13.7
8H	11.1	11.7	11.5	12.0	12.4	12.3	12.9	12.7	13.3	13.6
12H	11.0	11.6	11.4	12.0	12.4	12.2	12.8	12.6	13.2	13.6
8H 4H	11.1	11.7	11.5	12.0	12.4	12.3	12.9	12.7	13.3	13.6
6H	11.0	11.5	11.4	11.9	12.3	12.2	12.7	12.6	13.1	13.5
8H	10.9	11.4	11.4	11.8	12.2	12.1	12.6	12.6	13.0	13.4
12H	10.9	11.3	11.3	11.7	12.2	12.1	12.5	12.6	12.9	13.4
12H 4H	11.0	11.6	11.4	12.0	12.4	12.2	12.8	12.6	13.2	13.6
6H	10.9	11.4	11.4	11.8	12.2	12.1	12.6	12.6	13.0	13.4
8H	10.9	11.3	11.3	11.7	12.2	12.1	12.5	12.6	12.9	13.4
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 2.7 / -10.9					+ 2.0 / - 3.7				
1.5H	+ 1.4 / - 5.3					+ 0.9 / - 2.3				
2.0H	+ 4.8 / -11.3					+ 3.9 / -14.1				

CIE Pub.117, 5940 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 6.2)
Area: 0.3025 m2

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2024-03-16

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.37V I:0.2245A P:48.453W PF:0.9793 Freq:50.00Hz Lamp Flux:5940.11x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

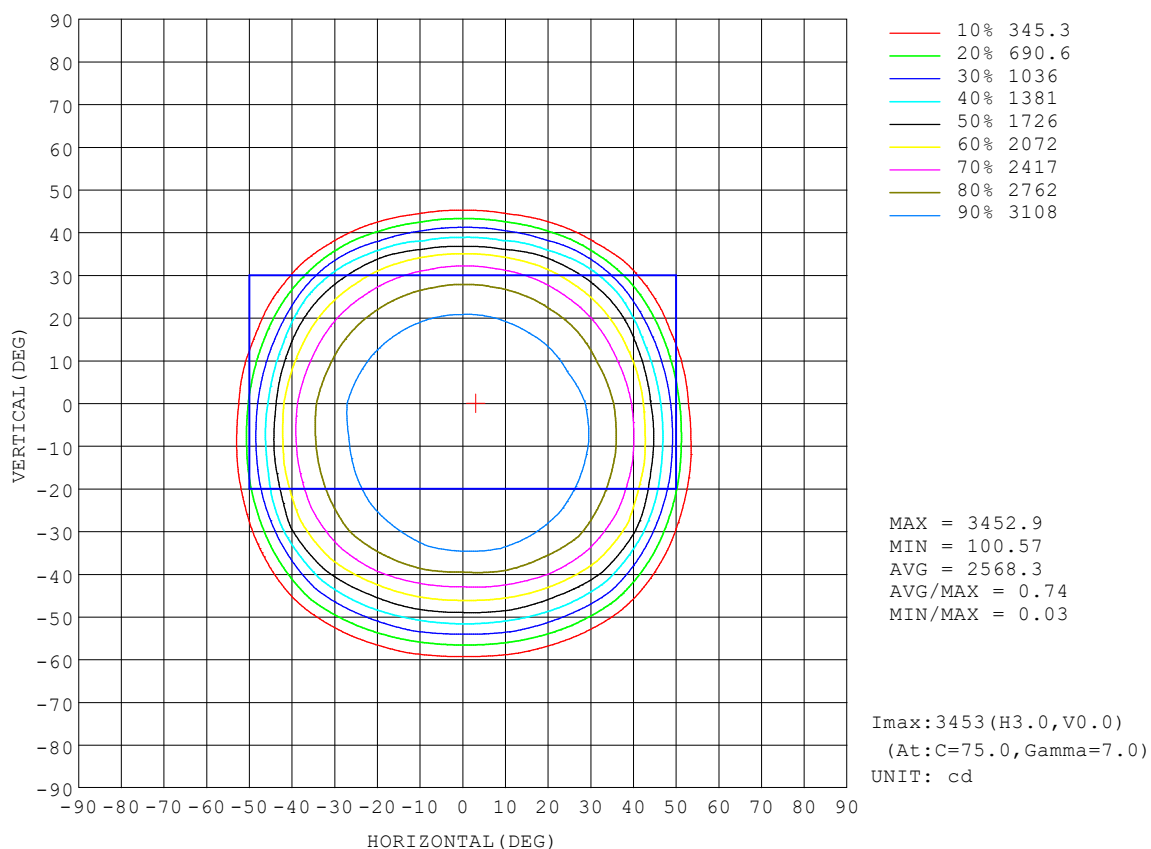
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	74	66	61	74	66	60	73	65	60	55
0.80	84	76	71	83	75	71	82	75	70	65
1.00	91	84	79	90	83	78	88	84	78	73
1.25	97	90	85	96	89	85	93	88	84	79
1.50	101	94	90	99	93	89	97	92	88	83
2.00	105	100	96	103	98	95	100	96	93	87
2.50	107	102	98	105	101	97	102	98	96	89
3.00	109	105	101	107	103	100	104	101	98	91
4.00	112	108	105	109	106	104	106	103	101	93
5.00	113	110	107	111	108	106	107	105	103	95
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: DAMIN
Test Date: 2024-03-16

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity: 65.0%
Test Distance: 9.401m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:220.37V I:0.2245A P:48.453W PF:0.9793 Freq:50.00Hz Lamp Flux:5940.11x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

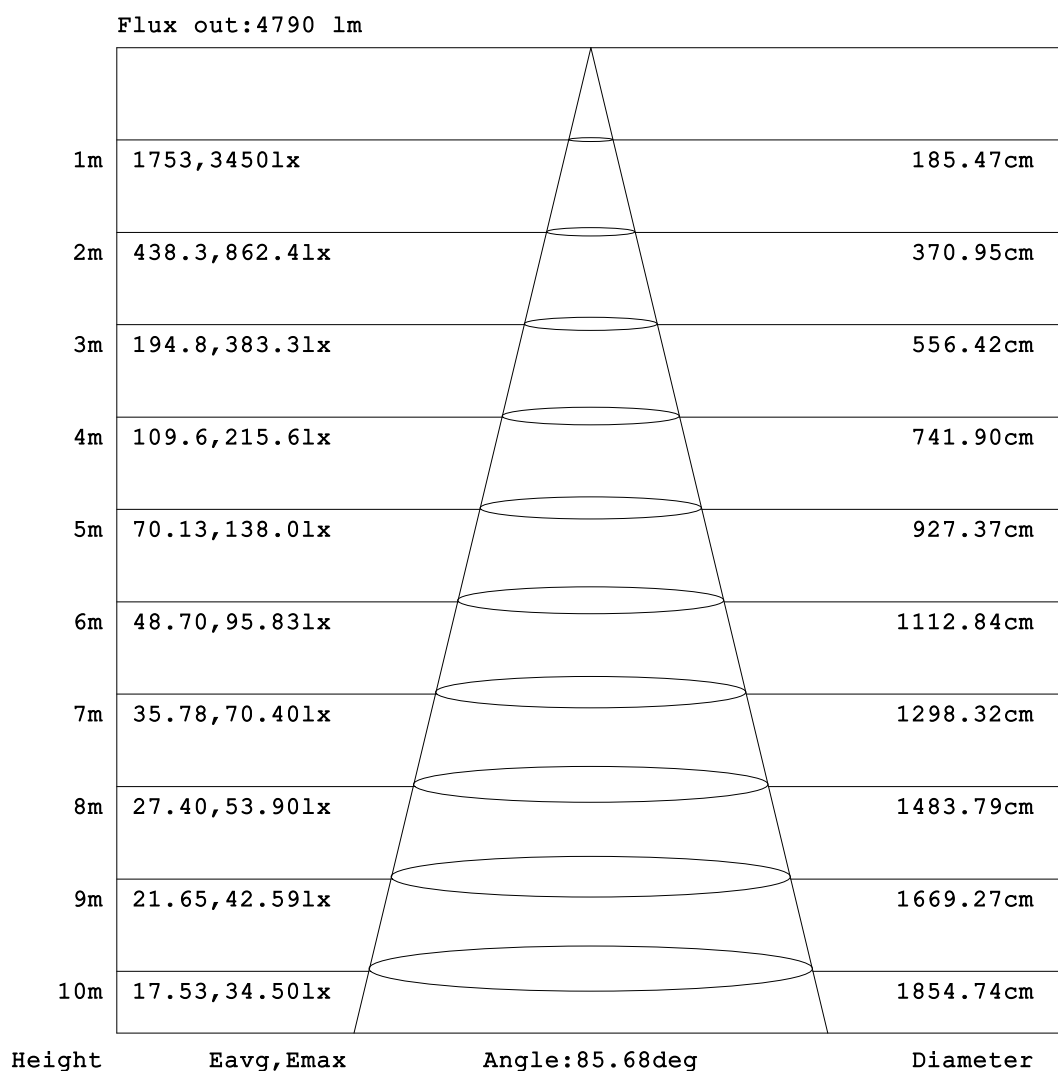


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:2024-03-16

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks:

AAI Figure

Test:U:220.37V I:0.2245A P:48.453W PF:0.9793 Freq:50.00Hz Lamp Flux:5940.11x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



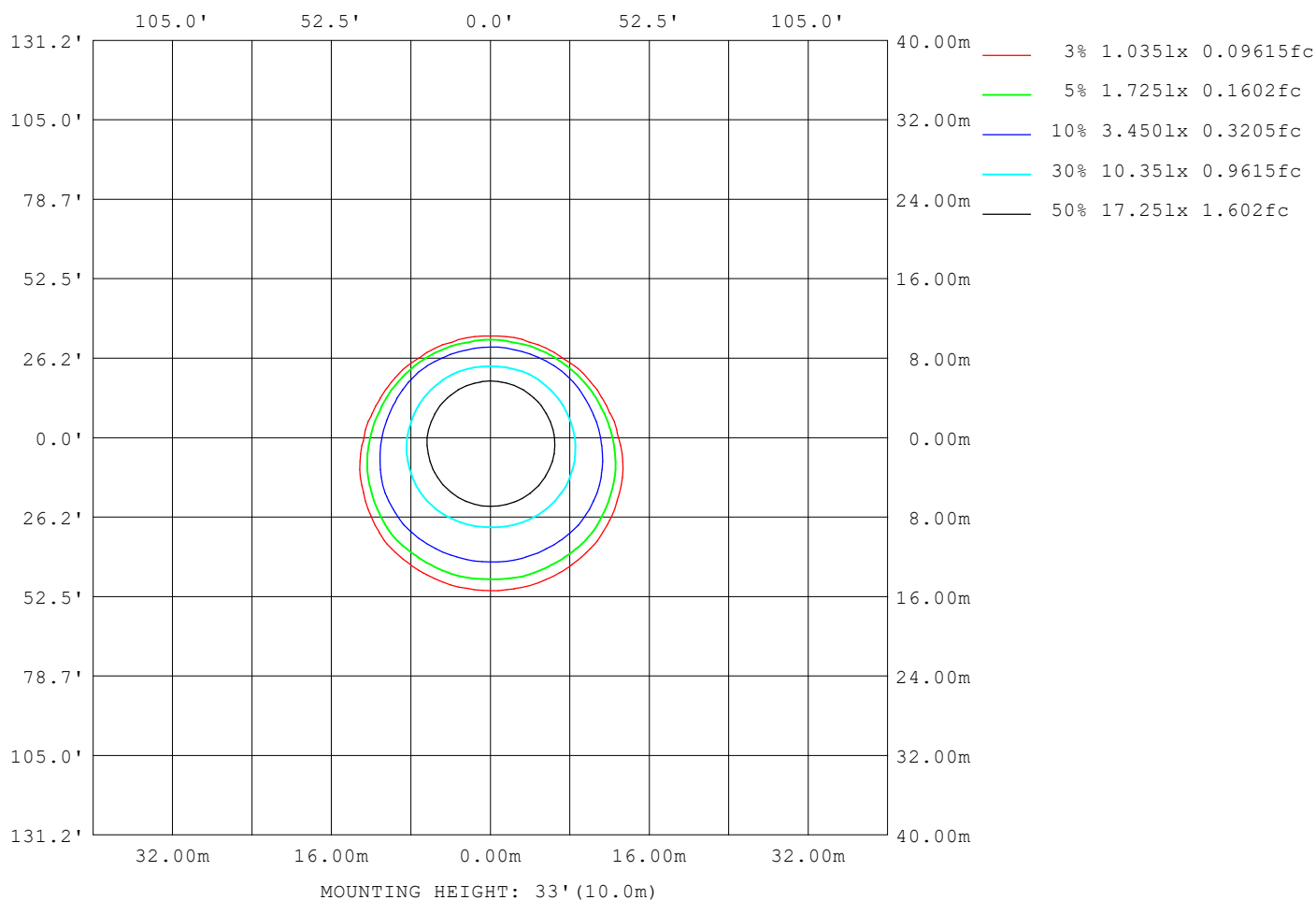
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:2024-03-16

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:220.37V I:0.2245A P:48.453W PF:0.9793 Freq:50.00Hz Lamp Flux:5940.11x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:2024-03-16

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:220.37V I:0.2245A P:48.453W PF:0.9793 Freq:50.00Hz Lamp Flux:5940.11x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

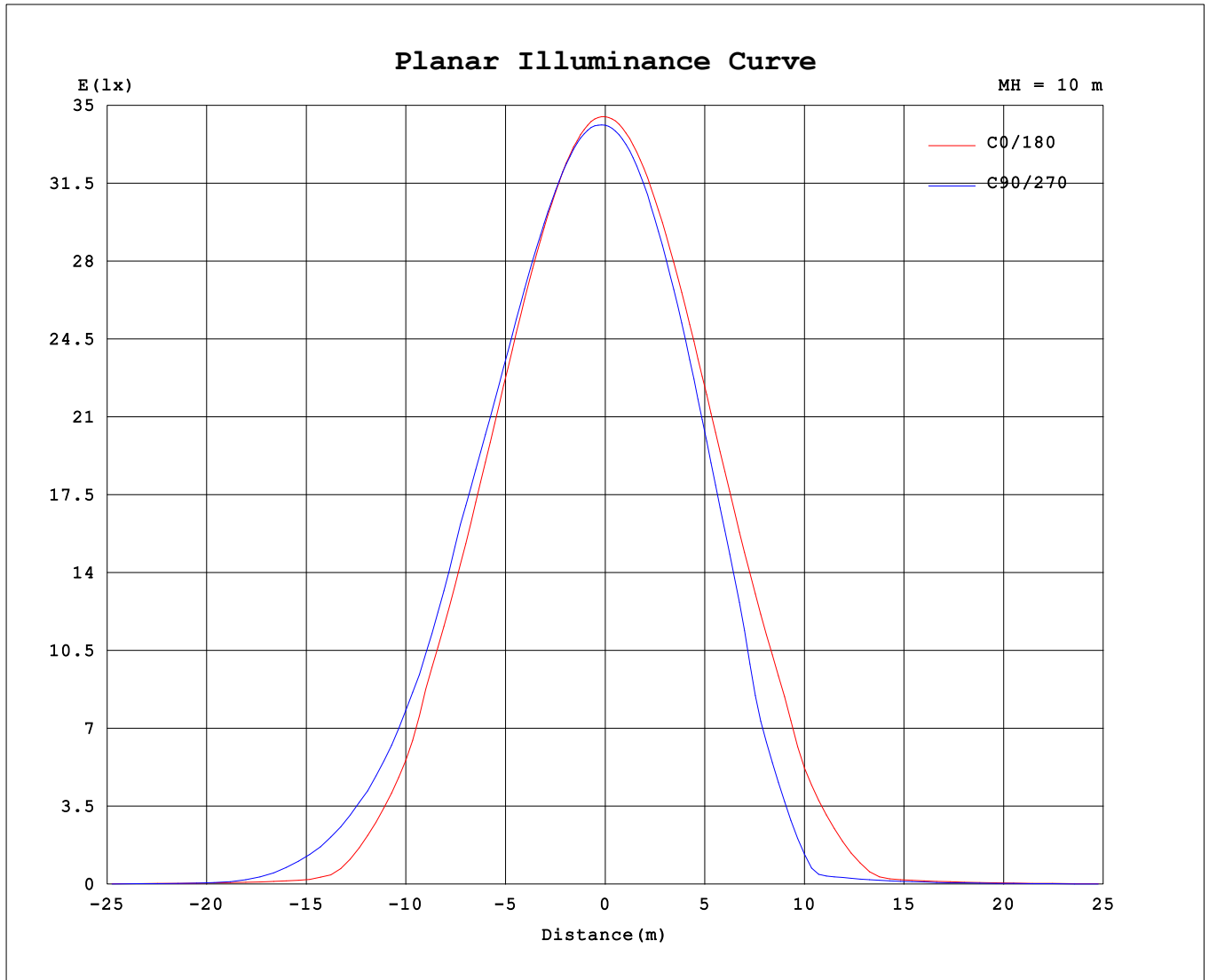
AvgL	cd/m2
L_0~180 (65) av	504
L_0~180 (75) av	329
L_0~180 (85) av	66
L_90~270 (65) av	389
L_90~270 (75) av	190
L_90~270 (85) av	138
L_45 (65) av	424
L_45 (75) av	227
L_45 (85) av	116

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:DAMIN
 Test Date:2024-03-16

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
 Humidity:65.0%
 Test Distance:9.401m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators: DAMIN
 Test Date: 2024-03-16

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.473
 Humidity: 65.0%
 Test Distance: 9.401m [K=1.0000]
 Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks:

```