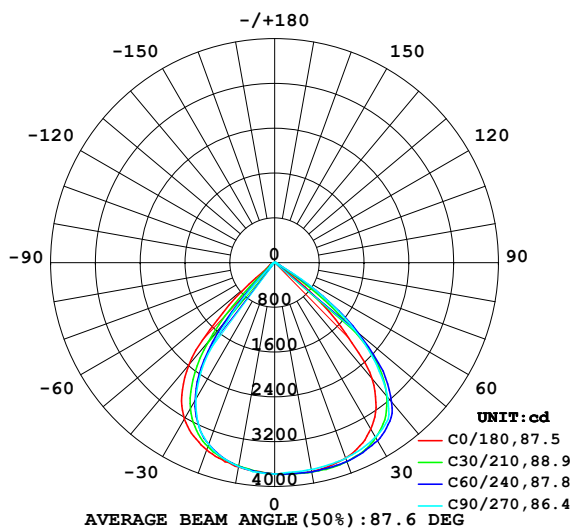


LUMINAIRE PHOTOMETRIC TEST REPORT

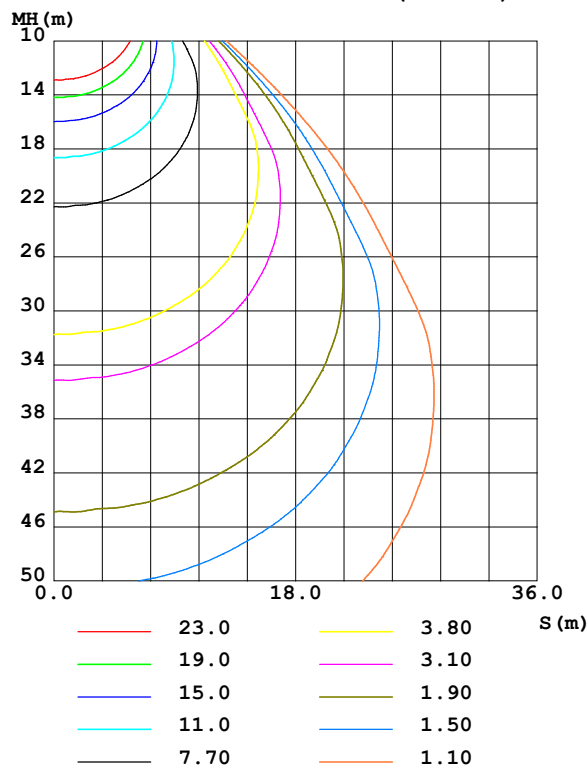
Test:U:220.39V I:0.2369A P:50.004W PF:0.9577 Freq:50.00Hz Lamp Flux:6549.23x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 6000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 130.97 lm/W			
MODEL	415	Imax (cd)	3818	S/MH(C0/180)	1.24
NOMINAL POWER(W)	50	LOR(%)	100.0	S/MH(C90/270)	1.06
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	6549.2	η UP,DN(C0-180)	0.0,59.8
NOMINAL FLUX(lm)	6549.23	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,40.2
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	3789	3811	3750	3749	3708	3695	3697	3750	0- 10	358.9	358.9	5.48,5.48
20	3715	3797	3718	3663	3558	3479	3454	3571	10- 20	1045	1404	21.4,21.4
30	3436	3674	3599	3476	3227	2913	2815	3065	20- 30	1604	3008	45.9,45.9
40	2707	3258	3146	3016	2388	1591	1186	1859	30- 40	1814	4822	73.6,73.6
50	921.3	2011	1851	1676	592.5	134.9	118.5	134.6	40- 50	1236	6058	92.5,92.5
60	92.76	150.8	275.2	132.2	112.1	74.45	66.91	67.74	50- 60	397.0	6455	98.6,98.6
70	47.37	40.83	36.85	45.17	56.98	32.92	27.42	31.04	60- 70	66.90	6522	99.6,99.6
80	12.29	8.924	5.594	8.656	12.39	7.149	9.049	7.172	70- 80	23.13	6545	99.9,99.9
90	0.4692	0.7832	0.4573	0.6235	0.6770	2.440	1.709	1.895	80- 90	4.166	6549	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): 5562.2 lm

%lum = 84.9%

%lamp = 84.9%

Conical surface Flux(130deg): 6496.3 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

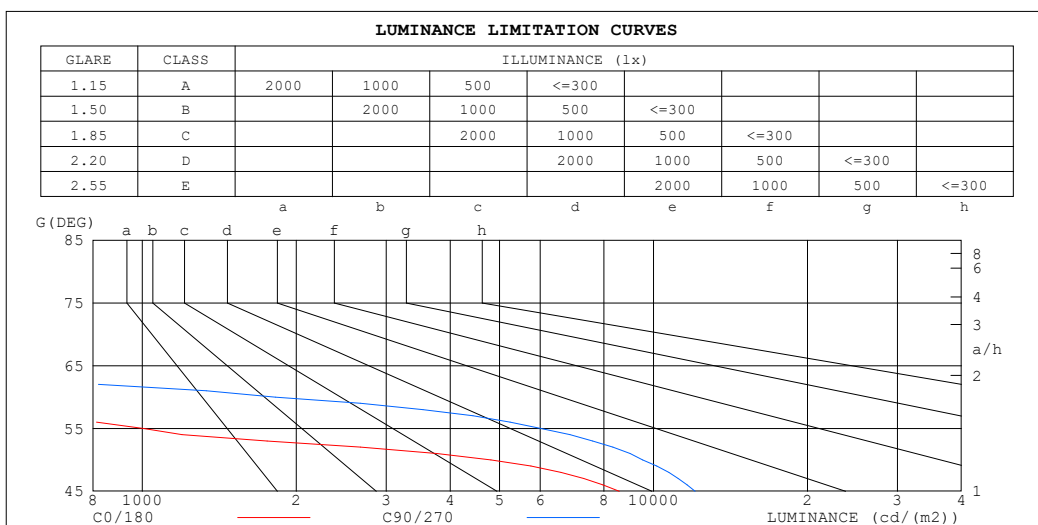
γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
 Humidity:65.0%
 Test Distance:9.401m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.39V I:0.2369A P:50.004W PF:0.9577 Freq:50.00Hz

Lamp Flux:6549.23x1 lm

NAME:	TYPE:	WEIGHT:
SPEC.: 6000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/ (m2)		
G (DEG)	C0/180	C90/270
85	84	29
80	237	107
75	364	231
70	464	356
65	544	493
60	622	1821
55	1006	6029
50	4804	9525
45	8572	12052

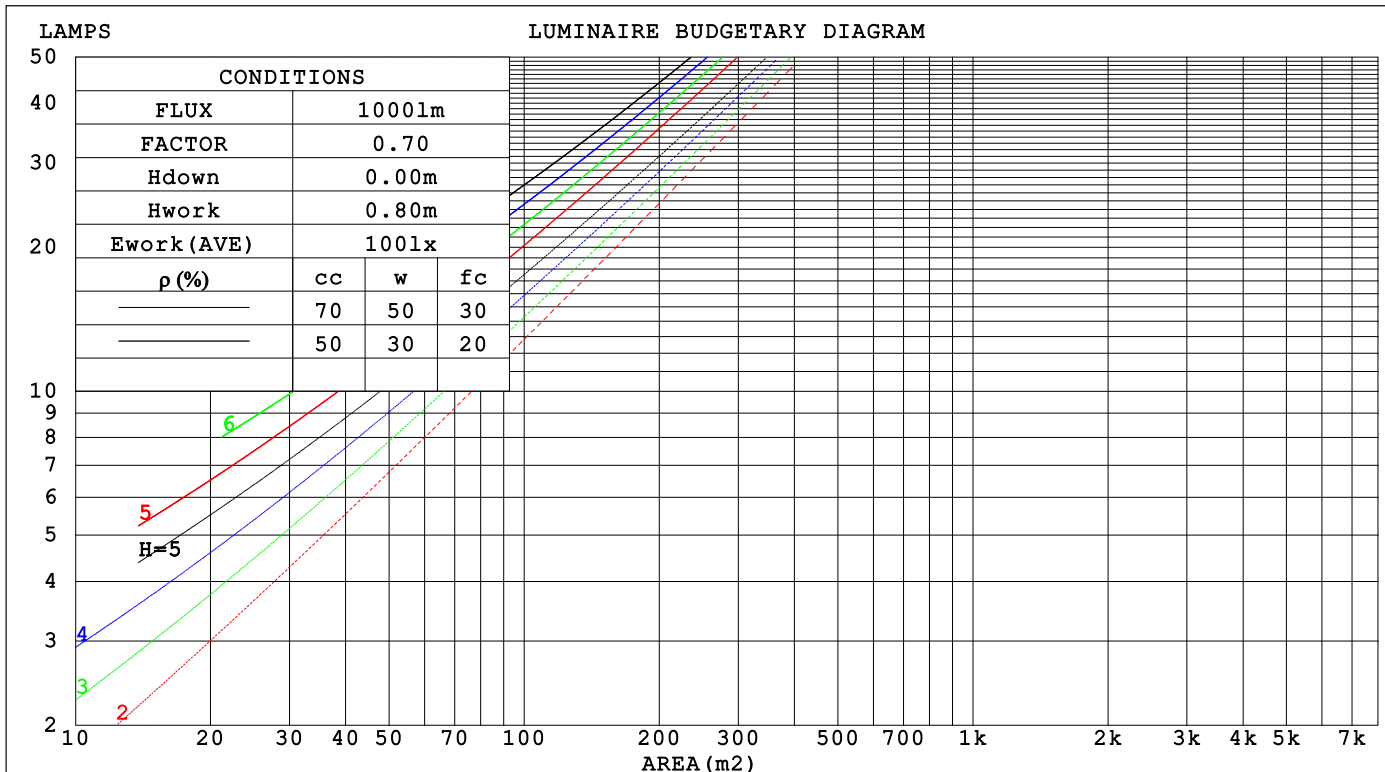
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:2024-03-16

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 γ 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:220.39V I:0.2369A P:50.004W PF:0.9577 Freq:50.00Hz Lamp Flux:6549.23x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 6000K	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	.87	.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	.70	.65	.62	.60														
6.0	.70	.62	.57	.69	.62	.57	.67	.61	.57	.66	.60	.56	.64	.60	.56	.54														
7.0	.64	.57	.52	.63	.57	.52	.62	.56	.51	.61	.55	.51	.60	.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:220.39V I:0.2369A P:50.004W PF:0.9577 Freq:50.00Hz Lamp Flux:6549.23x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 6000K	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	.112	.034	.199	.110	.034	.188	.105	.033	.178	.100	.031	.169	.096	.030		
3.0	.197	.105	.031	.192	.103	.031	.183	.099	.030	.174	.095	.029	.166	.092	.028		
4.0	.188	.098	.029	.184	.096	.028	.176	.093	.028	.168	.090	.027	.161	.087	.027		
5.0	.180	.092	.027	.176	.090	.026	.168	.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	.148	.076	.022	.143	.074	.022		
8.0	.155	.076	.021	.152	.075	.021	.147	.074	.021	.142	.072	.021	.138	.071	.021		
9.0	.148	.072	.020	.145	.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	.150	.114	.085	.129	.098	.073	.089	.068	.051	.051	.040	.030	.016	.013	.010		
4.0	.142	.100	.067	.122	.086	.059	.084	.060	.041	.048	.035	.024	.016	.011	.008		
5.0	.134	.089	.055	.115	.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:220.39V I:0.2369A P:50.004W PF:0.9577 Freq:50.00Hz Lamp Flux:6549.23x1 lm										
NAME:					TYPE:			WEIGHT:		
SPEC.: 6000K					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	12.0	13.2	12.2	13.3	13.5	13.3	14.5	13.6	14.7	14.9
3H	11.8	12.9	12.1	13.1	13.3	13.1	14.2	13.4	14.4	14.7
4H	11.7	12.7	12.0	13.0	13.2	13.1	14.1	13.3	14.3	14.5
6H	11.6	12.6	11.9	12.8	13.1	13.0	13.9	13.3	14.2	14.4
8H	11.6	12.5	11.9	12.8	13.0	12.9	13.8	13.2	14.1	14.4
12H	11.5	12.4	11.9	12.7	13.0	12.9	13.7	13.2	14.0	14.3
4H 2H	11.8	12.8	12.1	13.1	13.3	13.1	14.1	13.4	14.4	14.6
3H	11.7	12.5	12.0	12.8	13.1	12.9	13.8	13.3	14.1	14.4
4H	11.6	12.4	11.9	12.7	13.0	12.8	13.6	13.2	13.9	14.2
6H	11.5	12.2	11.9	12.5	12.9	12.7	13.4	13.1	13.8	14.1
8H	11.5	12.1	11.9	12.4	12.8	12.7	13.3	13.1	13.7	14.1
12H	11.4	12.0	11.8	12.4	12.8	12.7	13.2	13.1	13.6	14.0
8H 4H	11.5	12.1	11.9	12.4	12.8	12.7	13.3	13.1	13.7	14.1
6H	11.4	11.9	11.8	12.3	12.7	12.6	13.1	13.0	13.5	13.9
8H	11.3	11.8	11.8	12.2	12.6	12.6	13.0	13.0	13.4	13.9
12H	11.3	11.7	11.7	12.1	12.6	12.5	12.9	13.0	13.3	13.8
12H 4H	11.4	12.0	11.8	12.4	12.8	12.7	13.2	13.1	13.6	14.0
6H	11.3	11.8	11.8	12.2	12.6	12.6	13.0	13.0	13.4	13.9
8H	11.3	11.7	11.7	12.1	12.6	12.5	12.9	13.0	13.3	13.8
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 2.8 / -11.3					+ 2.1 / - 3.8				
1.5H	+ 1.4 / - 6.0					+ 0.8 / - 2.1				
2.0H	+ 4.8 / -11.8					+ 3.9 / -14.5				

CIE Pub.117, 6549 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 6.5)
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:220.39V I:0.2369A P:50.004W PF:0.9577 Freq:50.00Hz Lamp Flux:6549.23x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 6000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

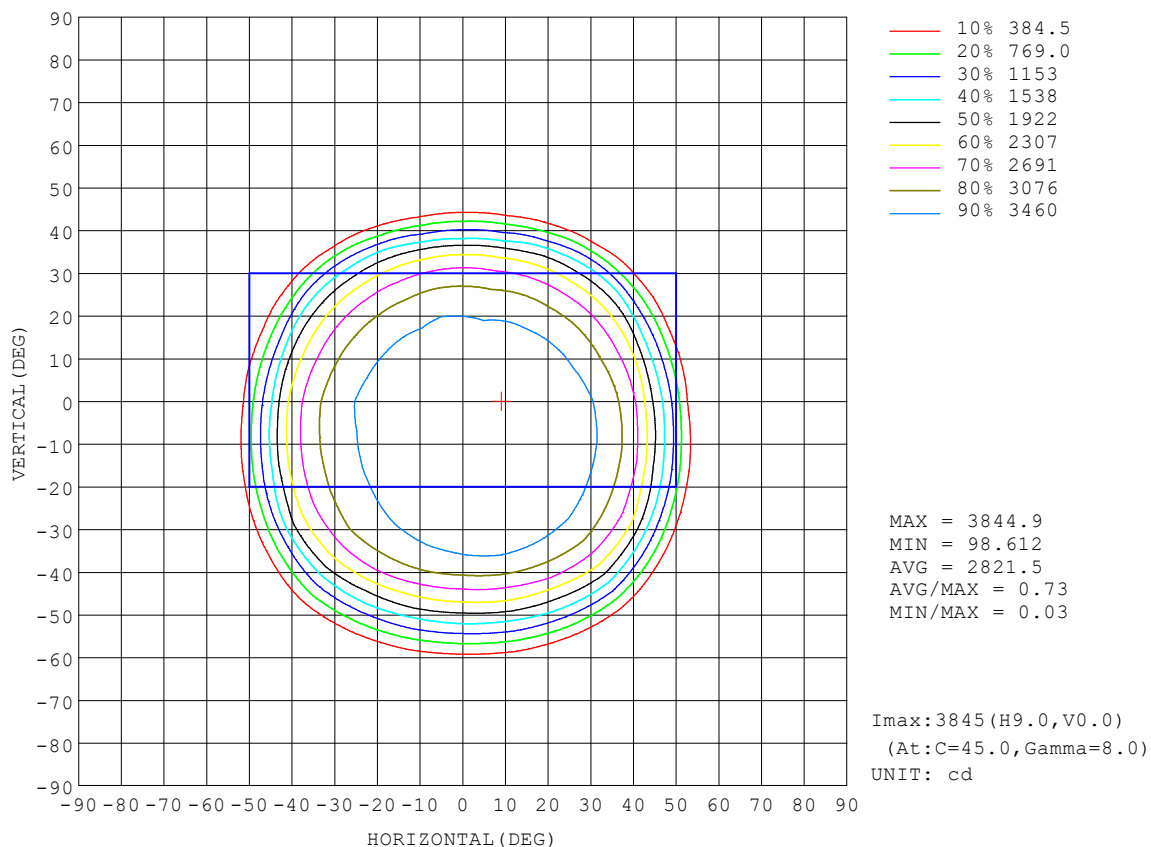
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	75	66	61	74	66	61	73	65	61	56
0.80	84	76	71	83	76	71	82	75	70	65
1.00	91	84	79	90	83	79	88	84	78	73
1.25	97	90	85	96	89	85	94	88	84	79
1.50	101	94	90	99	94	89	97	92	88	83
2.00	105	100	96	103	99	95	100	96	93	87
2.50	107	102	98	105	101	98	102	99	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:220.39V I:0.2369A P:50.004W PF:0.9577 Freq:50.00Hz Lamp Flux:6549.23x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 6000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

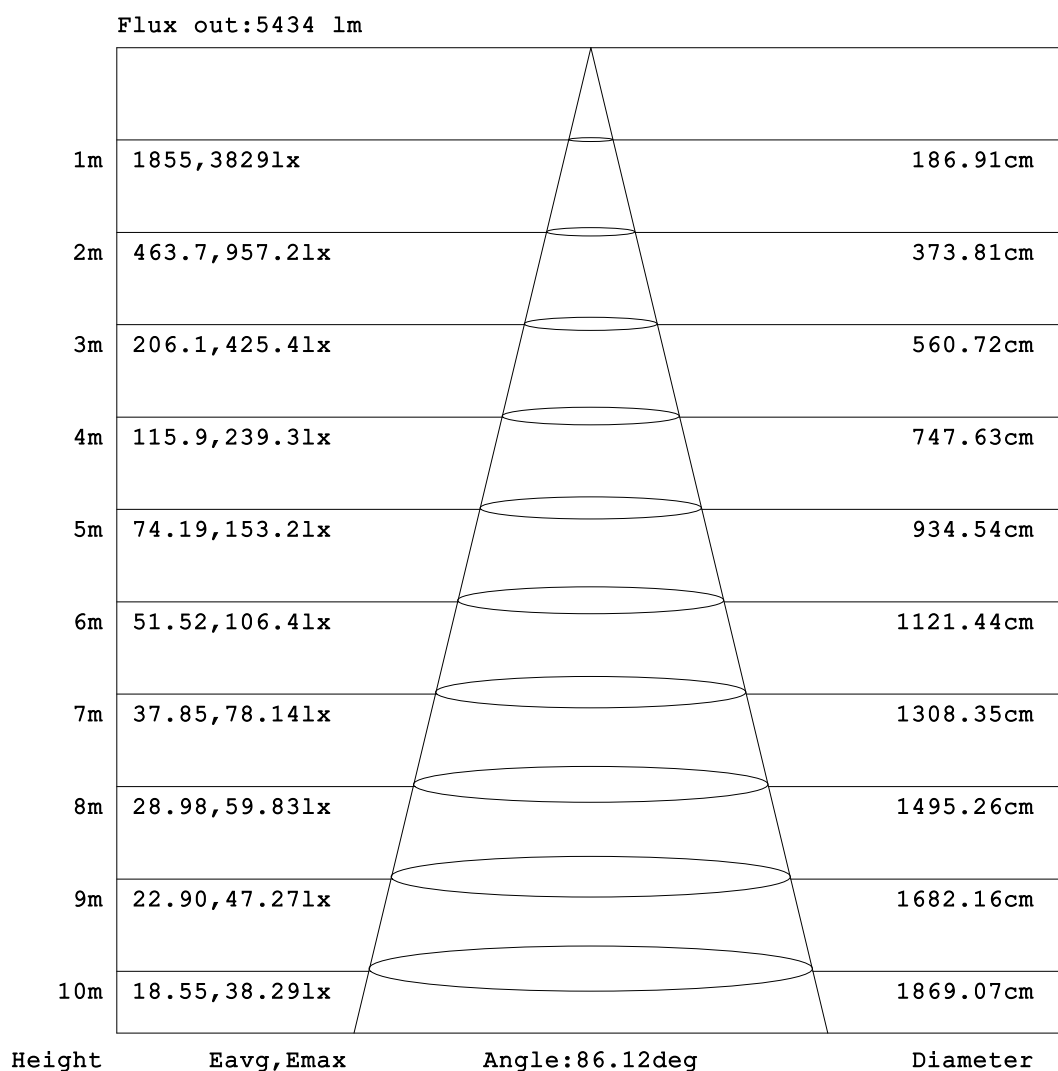


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: DAMIN
Test Date: 2024-03-16

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:220.39V I:0.2369A P:50.004W PF:0.9577 Freq:50.00Hz Lamp Flux:6549.23x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 6000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



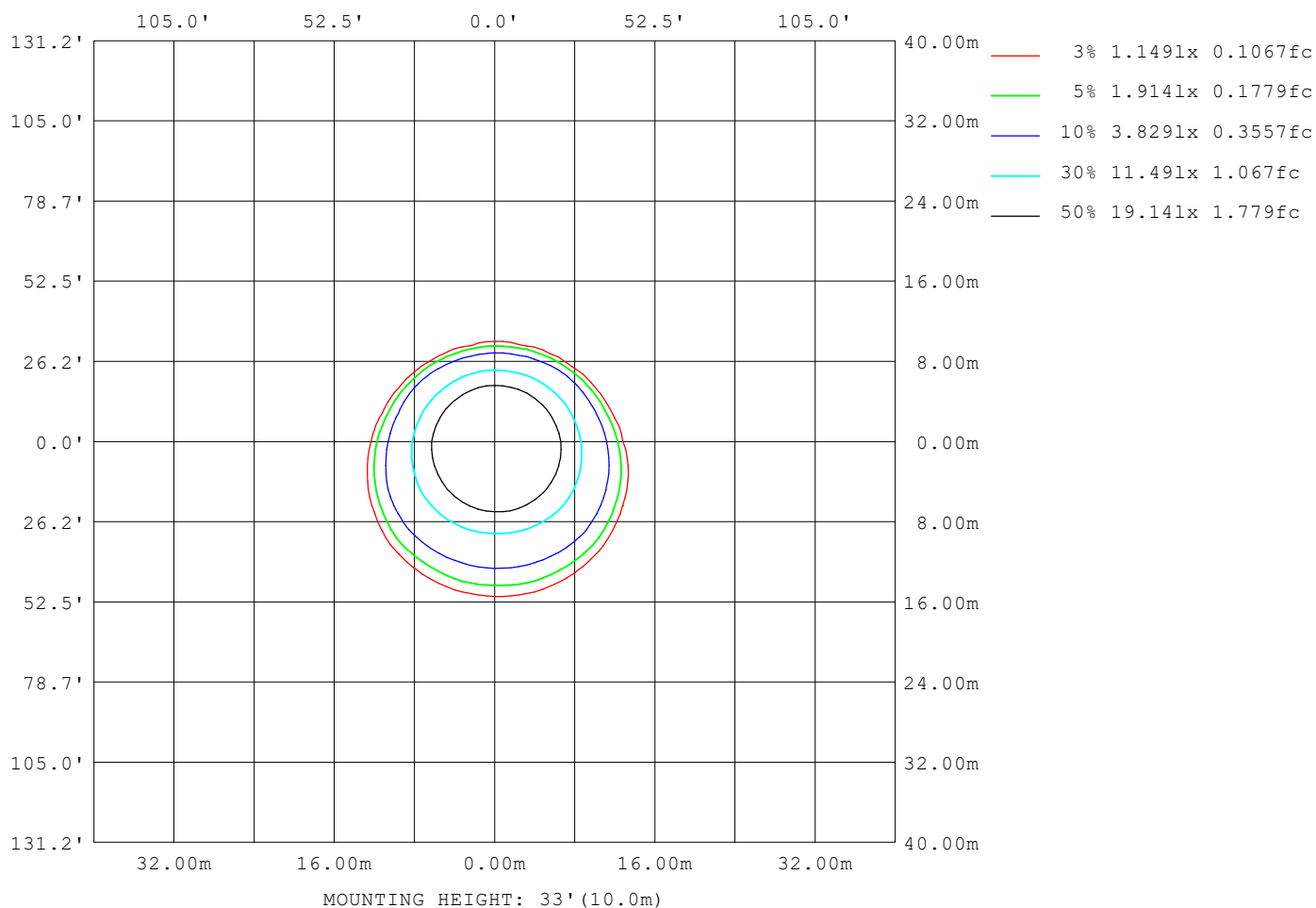
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:220.39V I:0.2369A P:50.004W PF:0.9577 Freq:50.00Hz Lamp Flux:6549.23x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 6000K	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:220.39V I:0.2369A P:50.004W PF:0.9577 Freq:50.00Hz Lamp Flux:6549.23x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 6000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

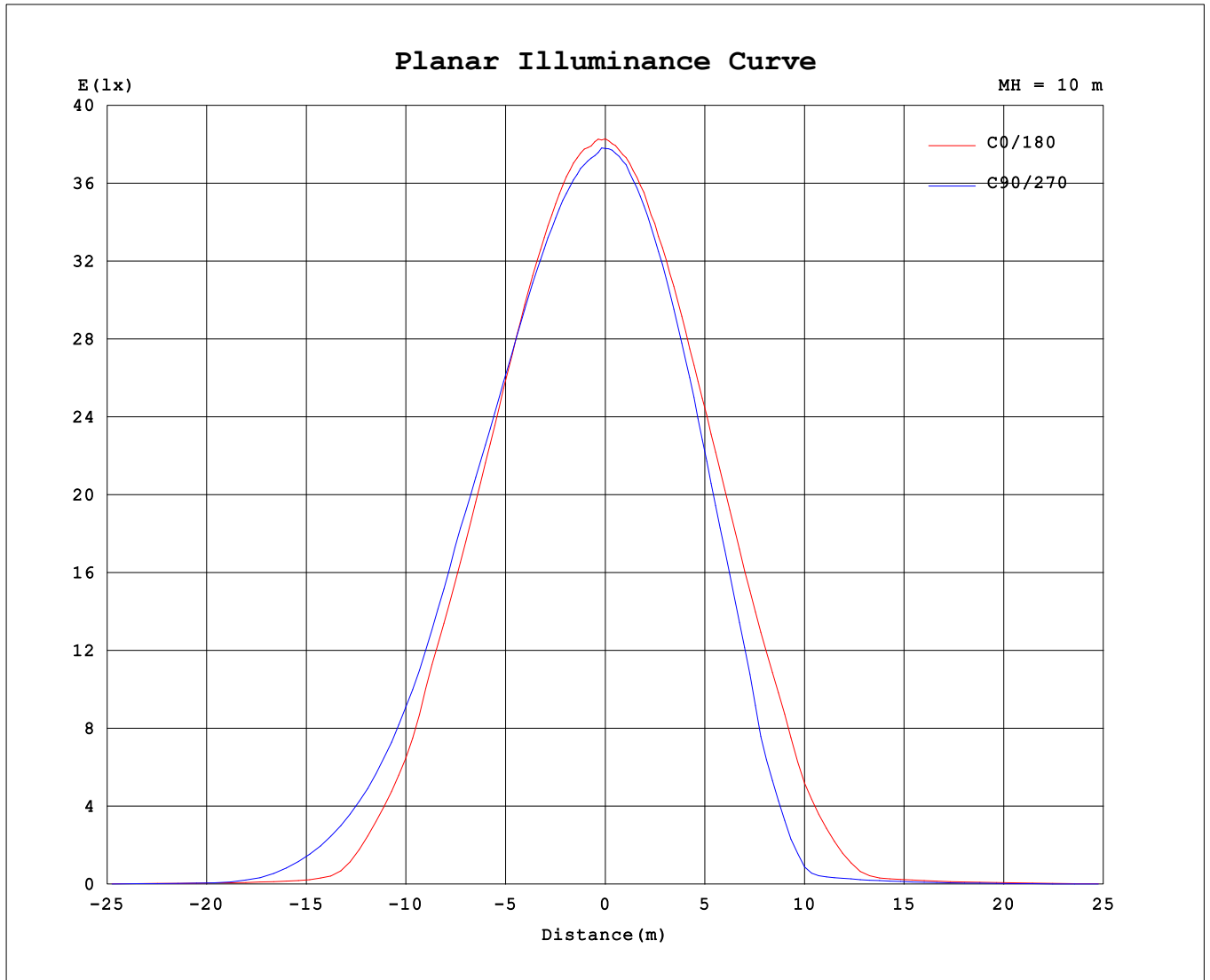
AvgL	cd/m2
L_0~180 (65) av	591
L_0~180 (75) av	388
L_0~180 (85) av	77
L_90~270 (65) av	429
L_90~270 (75) av	204
L_90~270 (85) av	150
L_45 (65) av	483
L_45 (75) av	248
L_45 (85) av	128

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:

```

Test:U:220.39V I:0.2369A P:50.004W PF:0.9577 Freq:50.00Hz Lamp Flux:6549.23x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.: 6000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

UNIT: cd

[illegible]

```

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:

```