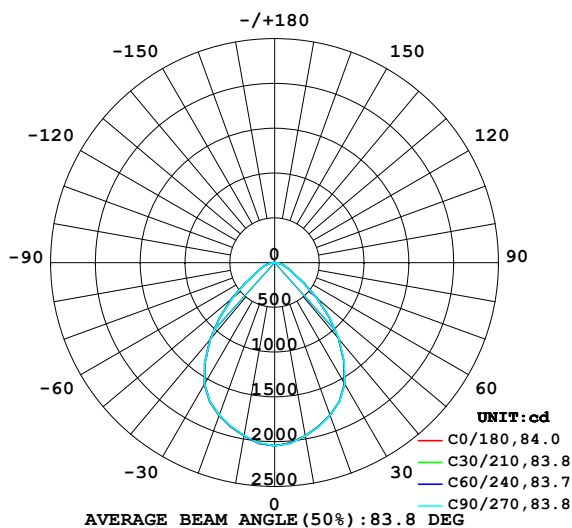


LUMINAIRE PHOTOMETRIC TEST REPORT

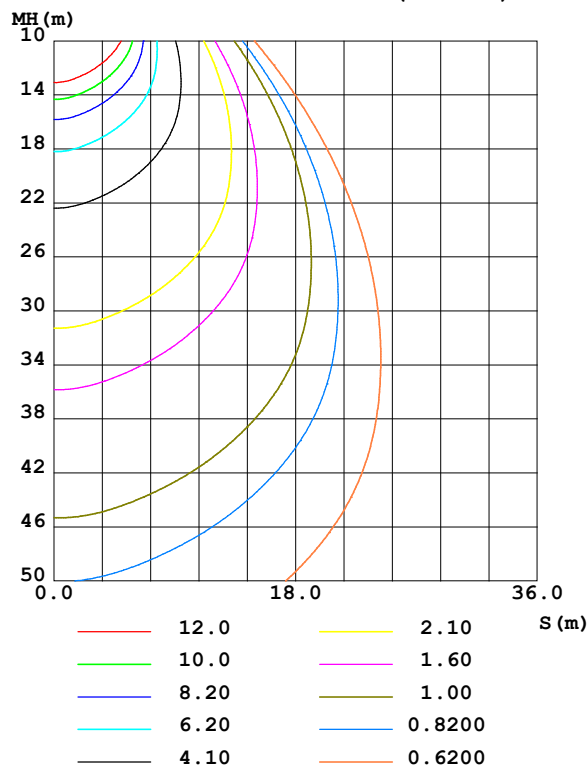
Test:U:220.36V I:0.1336A P:27.818W PF:0.9450 Freq:50.00Hz Lamp Flux:3709.36x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 133.35 lm/W			
MODEL	219C	Imax (cd)	2045	S/MH(C0/180)	1.15
NOMINAL POWER(W)	30	LOR(%)	100.0	S/MH(C90/270)	1.15
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	3709.4	η UP,DN(C0-180)	0.0,50.0
NOMINAL FLUX(lm)	3709.36	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.0
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	219.5	η down (%)	100.0	CIBSE SHR MAX	1.25

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:2024-01-20

γ Range: 0 - 90DEG
 γ Interval: 5.0DEG
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	1959	1966	1965	1969	1965	1962	1959	1958	0- 10	191.2	191.2	5.16,5.16
20	1812	1815	1816	1818	1817	1811	1812	1808	10- 20	534.4	725.6	19.6,19.6
30	1566	1566	1564	1572	1572	1563	1568	1568	20- 30	785.2	1511	40.7,40.7
40	1118	1119	1118	1133	1129	1114	1119	1117	30- 40	844.7	2356	63.5,63.5
50	616.0	623.2	613.0	624.3	627.4	618.9	614.7	608.9	40- 50	668.3	3024	81.5,81.5
60	250.7	252.7	243.9	249.6	254.9	252.7	253.8	249.2	50- 60	372.6	3396	91.6,91.6
70	140.5	140.0	134.6	139.9	142.3	140.8	138.6	139.6	60- 70	188.9	3585	96.7,96.7
80	54.52	51.10	47.20	53.09	56.31	52.53	50.34	53.34	70- 80	99.36	3685	99.3,99.3
90	0.8635	0.8542	0.8256	0.8326	1.031	1.029	1.006	1.038	80- 90	24.74	3709	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): 2723.6 lm

%lum = 73.4%

%lamp = 73.4%

Conical surface Flux(130deg): 3502.7 lm

%lum = 94.4%

%lamp = 94.4%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:DAMIN
 Test Date:2024-01-20

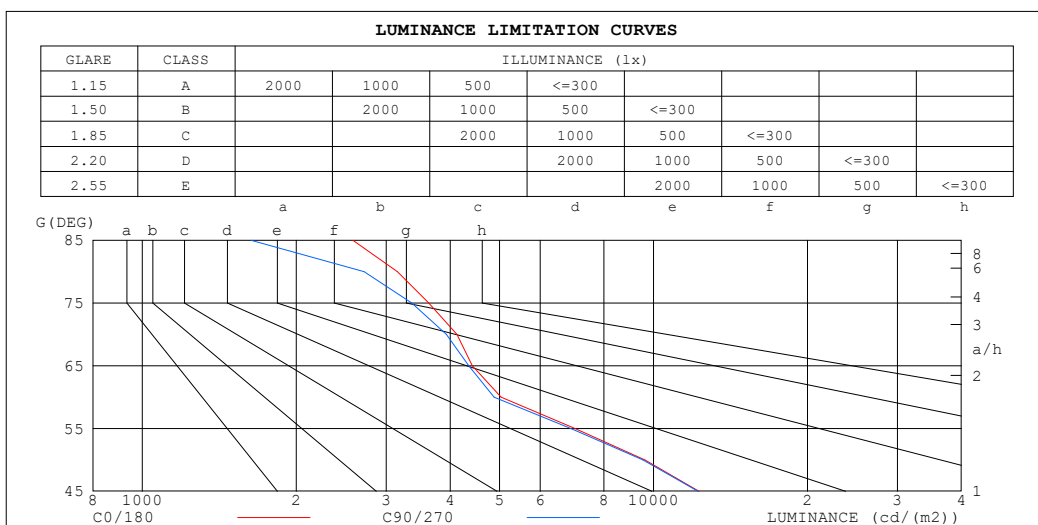
γ Range: 0 - 90DEG
 γ Interval: 5.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
 Humidity:65.0%
 Test Distance:9.401m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.36V I:0.1336A P:27.818W PF:0.9450 Freq:50.00Hz

Lamp Flux:3709.36x1 lm

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



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	2583	1633
80	3153	2716
75	3631	3366
70	4124	3933
65	4422	4348
60	5035	4874
55	7023	6897
50	9623	9529
45	12275	12209

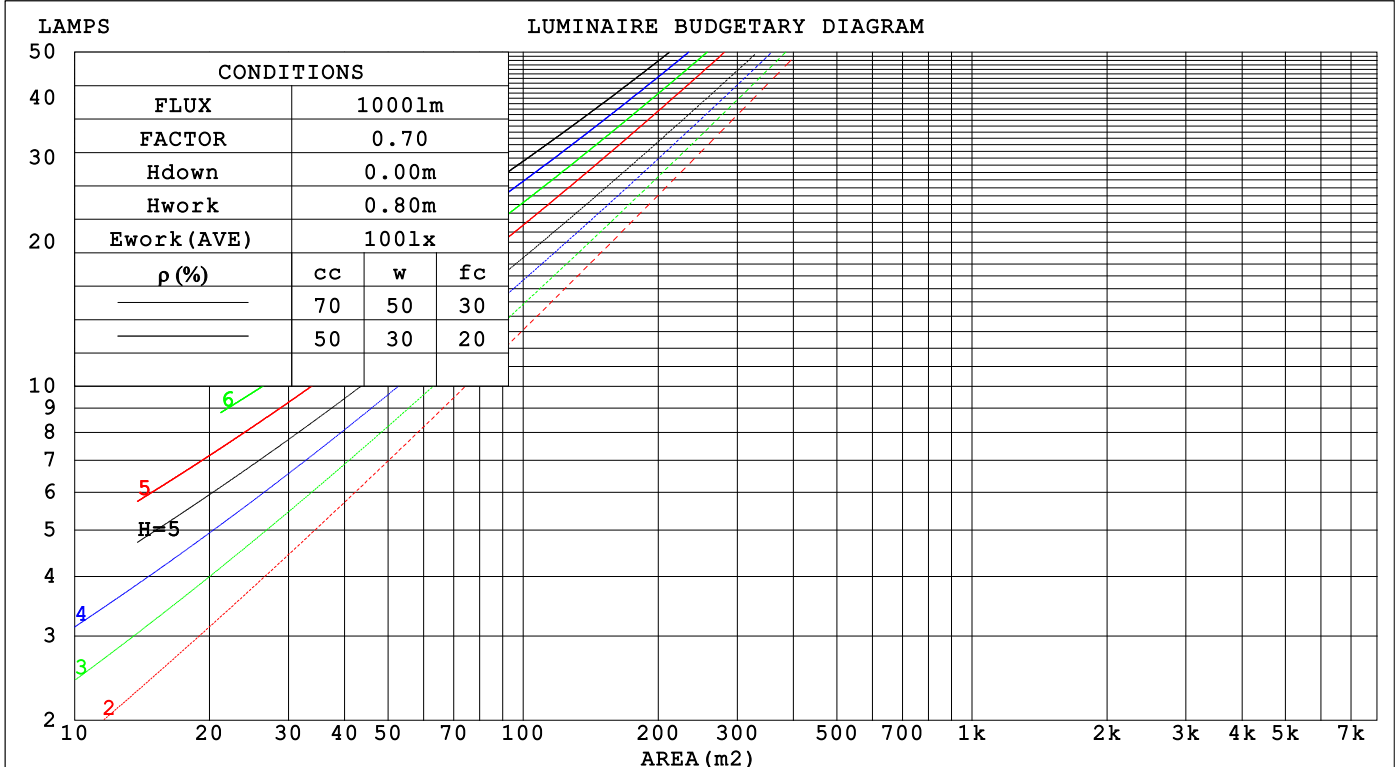
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:2024-01-20

γ Range: 0 - 90DEG
 γ Interval: 5.0DEG
 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:220.36V I:0.1336A P:27.818W PF:0.9450 Freq:50.00Hz Lamp Flux:3709.36x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	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	1.07	1.04	1.01	1.05	1.02	.99	1.01	.98	.96	.97	.95	.93	.94	.92	.91	.89
2.0	.96	.91	.86	.95	.90	.85	.91	.87	.83	.88	.85	.81	.85	.82	.80	.78
3.0	.87	.80	.75	.85	.79	.74	.83	.77	.73	.80	.75	.72	.78	.74	.70	.69
4.0	.79	.71	.66	.77	.71	.65	.75	.69	.64	.73	.68	.64	.71	.66	.63	.61
5.0	.72	.64	.58	.70	.63	.58	.69	.62	.57	.67	.61	.57	.65	.60	.56	.54
6.0	.65	.58	.52	.64	.57	.52	.63	.56	.51	.61	.55	.51	.60	.55	.51	.49
7.0	.60	.52	.47	.59	.52	.47	.58	.51	.46	.56	.51	.46	.55	.50	.46	.44
8.0	.55	.48	.43	.55	.47	.42	.53	.47	.42	.52	.46	.42	.51	.46	.42	.40
9.0	.51	.44	.39	.51	.44	.39	.50	.43	.39	.49	.43	.38	.48	.42	.38	.37
10.0	.48	.40	.36	.47	.40	.36	.46	.40	.35	.45	.39	.35	.44	.39	.35	.34



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:2024-01-20

γ Range: 0 - 90DEG
γ Interval: 5.0DEG
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:220.36V I:0.1336A P:27.818W PF:0.9450 Freq:50.00Hz Lamp Flux:3709.36x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	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	.244	.139	.044	.237	.135	.043	.224	.128	.041	.212	.122	.039	.201	.117	.038		
2.0	.235	.129	.039	.229	.126	.039	.217	.121	.038	.207	.116	.036	.198	.112	.035		
3.0	.222	.118	.035	.217	.116	.035	.207	.112	.034	.198	.108	.033	.189	.105	.032		
4.0	.209	.108	.032	.204	.107	.032	.196	.104	.031	.188	.101	.030	.180	.098	.030		
5.0	.196	.100	.029	.192	.099	.029	.185	.096	.028	.178	.094	.028	.171	.091	.027		
6.0	.185	.093	.027	.181	.092	.026	.175	.089	.026	.168	.087	.026	.162	.085	.025		
7.0	.174	.086	.024	.171	.085	.024	.165	.084	.024	.160	.082	.024	.154	.080	.024		
8.0	.165	.081	.023	.162	.080	.023	.157	.078	.022	.151	.077	.022	.147	.075	.022		
9.0	.156	.075	.021	.154	.075	.021	.149	.073	.021	.144	.072	.021	.140	.071	.021		
10.0	.148	.071	.020	.146	.070	.020	.141	.069	.019	.137	.068	.019	.133	.067	.019		

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	.176	.157	.140	.150	.135	.120	.103	.093	.083	.059	.054	.048	.019	.017	.016		
2.0	.165	.132	.105	.141	.114	.091	.097	.079	.063	.056	.046	.037	.018	.015	.012		
3.0	.155	.114	.081	.133	.098	.070	.091	.068	.049	.053	.040	.029	.017	.013	.010		
4.0	.147	.100	.064	.126	.086	.056	.087	.060	.039	.050	.035	.023	.016	.011	.008		
5.0	.139	.089	.052	.120	.077	.045	.082	.054	.032	.048	.032	.019	.015	.010	.006		
6.0	.133	.081	.043	.114	.070	.038	.079	.049	.027	.046	.029	.016	.015	.009	.005		
7.0	.126	.073	.037	.109	.064	.032	.075	.045	.023	.044	.026	.013	.014	.009	.004		
8.0	.120	.068	.031	.104	.059	.027	.072	.041	.019	.042	.024	.012	.013	.008	.004		
9.0	.115	.063	.027	.099	.054	.024	.069	.038	.017	.040	.023	.010	.013	.007	.003		
10.0	.110	.058	.024	.095	.051	.021	.066	.036	.015	.038	.021	.009	.012	.007	.003		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2024-01-20

γ Range: 0 - 90DEG
γ Interval: 5.0DEG
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:220.36V I:0.1336A P:27.818W PF:0.9450 Freq:50.00Hz Lamp Flux:3709.36x1 lm										
NAME:			TYPE:			WEIGHT:				
SPEC.:			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	14.2	15.5	14.5	15.7	15.9	14.2	15.5	14.4	15.6	15.8
3H	14.7	15.9	15.0	16.1	16.3	14.6	15.8	14.9	16.0	16.3
4H	14.9	16.0	15.2	16.3	16.5	14.8	15.9	15.1	16.2	16.4
6H	15.1	16.1	15.4	16.4	16.6	14.9	15.9	15.2	16.2	16.5
8H	15.1	16.1	15.4	16.4	16.6	14.9	15.9	15.2	16.2	16.4
12H	15.1	16.0	15.4	16.3	16.6	14.8	15.8	15.2	16.1	16.4
4H 2H	14.3	15.4	14.6	15.7	15.9	14.3	15.4	14.6	15.6	15.9
3H	15.0	16.0	15.3	16.3	16.5	14.9	15.9	15.3	16.2	16.5
4H	15.3	16.2	15.7	16.5	16.8	15.2	16.1	15.6	16.4	16.7
6H	15.5	16.3	15.9	16.7	17.0	15.4	16.1	15.8	16.5	16.8
8H	15.6	16.3	16.0	16.7	17.0	15.4	16.1	15.8	16.4	16.8
12H	15.6	16.3	16.0	16.7	17.1	15.4	16.0	15.8	16.4	16.8
8H 4H	15.4	16.1	15.8	16.5	16.8	15.3	16.0	15.7	16.3	16.7
6H	15.7	16.3	16.1	16.7	17.1	15.5	16.1	15.9	16.5	16.9
8H	15.8	16.3	16.2	16.7	17.2	15.5	16.0	16.0	16.5	16.9
12H	15.8	16.3	16.3	16.7	17.2	15.5	16.0	16.0	16.4	16.9
12H 4H	15.4	16.0	15.8	16.4	16.8	15.2	15.9	15.7	16.3	16.7
6H	15.7	16.2	16.1	16.6	17.1	15.5	16.0	15.9	16.4	16.9
8H	15.8	16.2	16.2	16.7	17.1	15.5	16.0	16.0	16.4	16.9
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.8 / - 1.1					+ 0.9 / - 1.2				
1.5H	+ 0.7 / - 1.4					+ 0.7 / - 1.5				
2.0H	+ 2.1 / - 1.5					+ 2.2 / - 1.6				

CIE Pub.117, 3709 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 4.6)
Area: 0.1 m2

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2024-01-20

γ Range: 0 - 90DEG
γ Interval: 5.0DEG
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:220.36V I:0.1336A P:27.818W PF:0.9450 Freq:50.00Hz Lamp Flux:3709.36x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

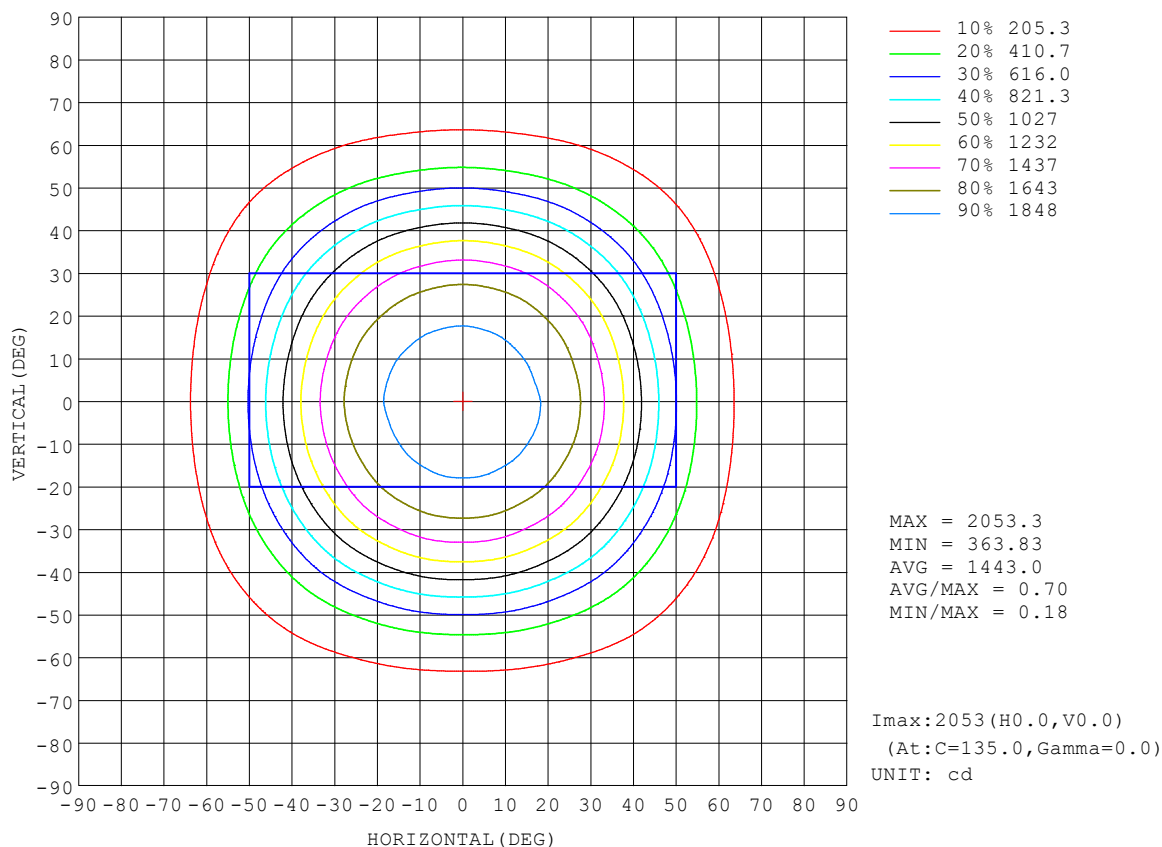
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	69	59	53	68	59	53	67	58	53	47
0.80	78	69	63	77	69	63	76	68	62	57
1.00	86	77	71	85	77	71	83	77	71	65
1.25	92	84	78	91	83	78	88	82	77	71
1.50	96	89	83	95	88	83	92	86	82	76
2.00	101	95	90	100	94	89	97	92	88	81
2.50	104	98	94	102	97	93	99	95	91	84
3.00	107	102	97	105	100	96	101	97	94	87
4.00	110	105	102	108	104	100	104	100	98	90
5.00	111	108	105	109	106	103	105	102	100	92
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: 2024-01-20

γ Range: 0 - 90DEG
 γ Interval: 5.0DEG
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:220.36V I:0.1336A P:27.818W PF:0.9450 Freq:50.00Hz Lamp Flux:3709.36x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

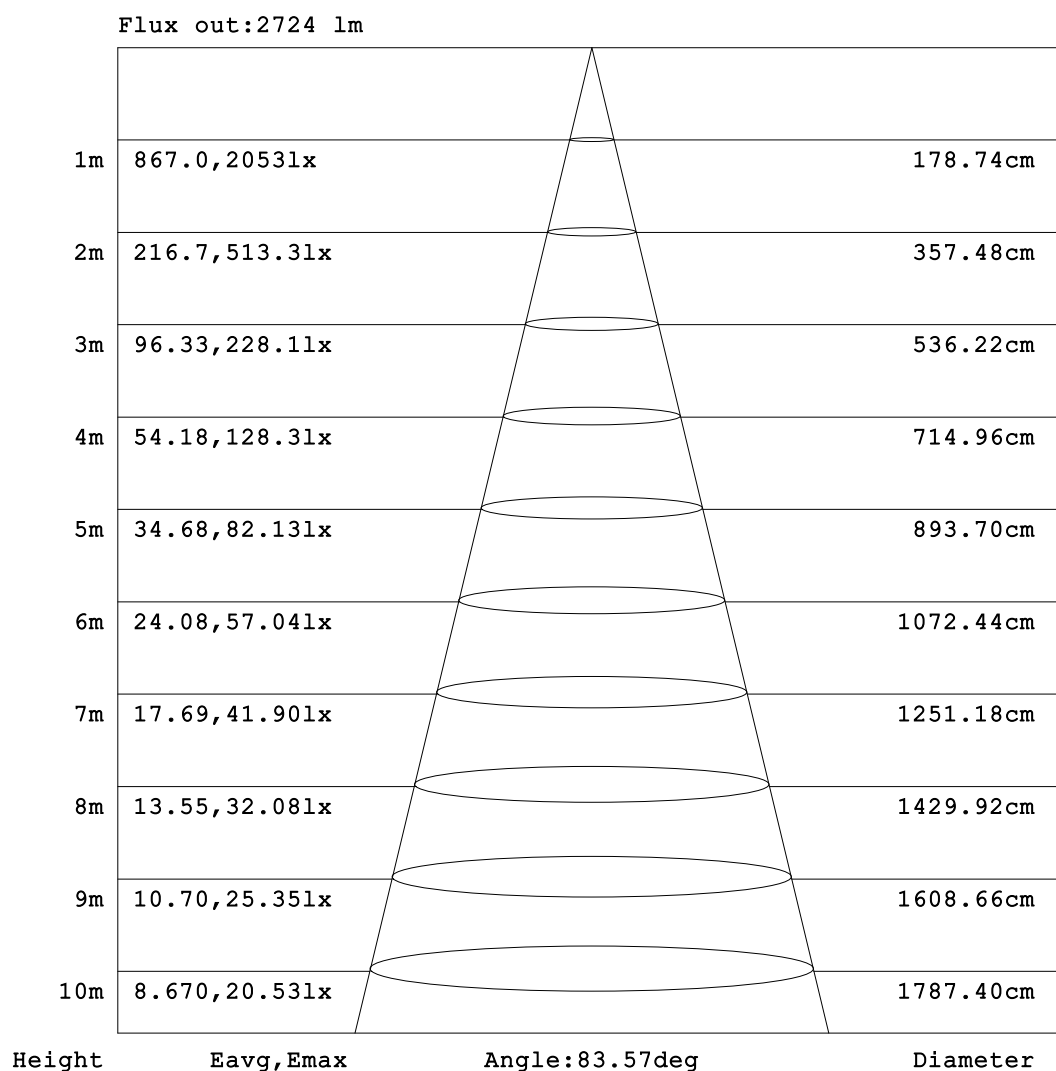


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:2024-01-20

γ Range: 0 - 90DEG
γ Interval: 5.0DEG
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:220.36V I:0.1336A P:27.818W PF:0.9450 Freq:50.00Hz Lamp Flux:3709.36x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



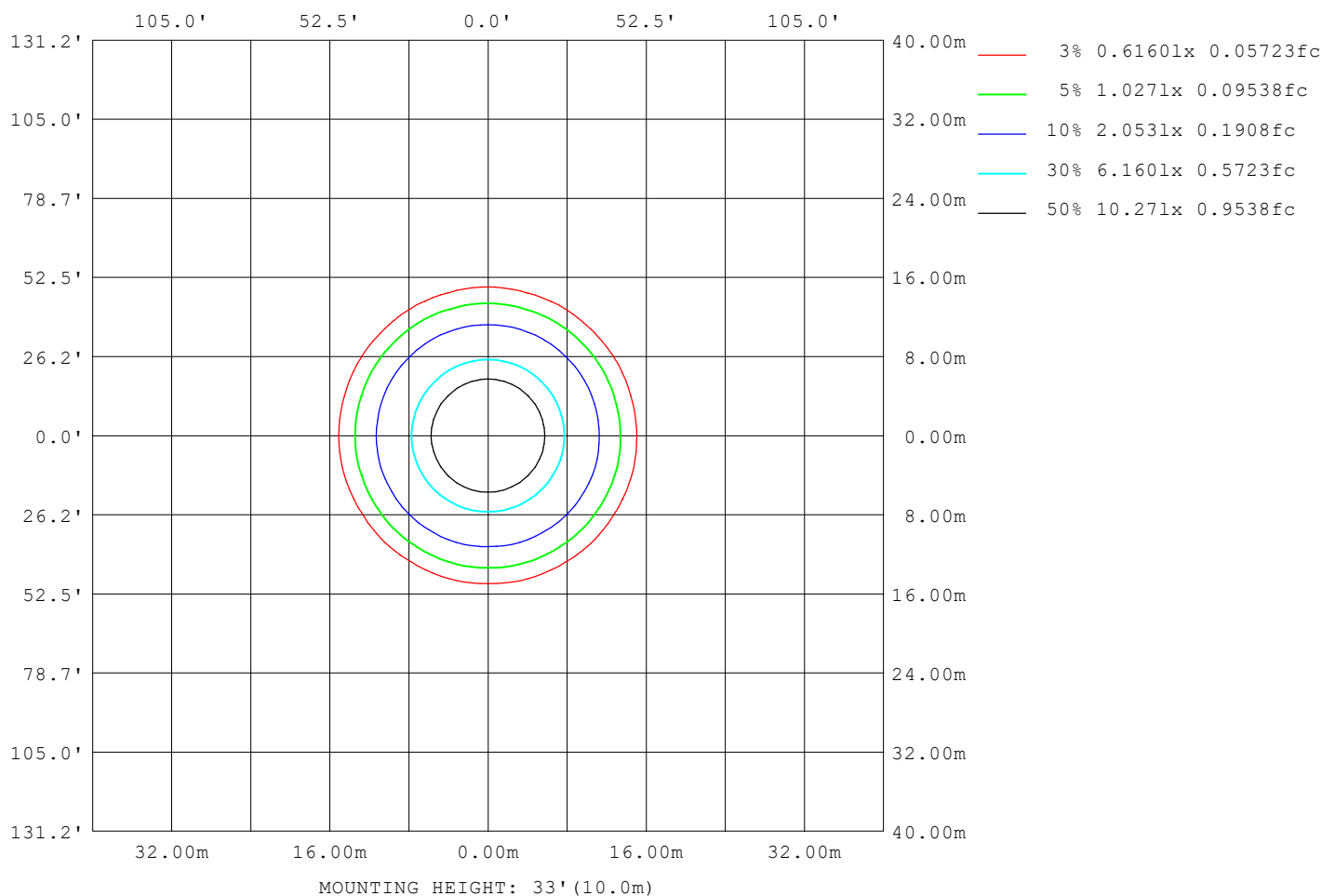
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2024-01-20

γ Range: 0 - 90DEG
γ Interval: 5.0DEG
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:220.36V I:0.1336A P:27.818W PF:0.9450 Freq:50.00Hz Lamp Flux:3709.36x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	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:2024-01-20

γ Range: 0 - 90DEG
γ Interval: 5.0DEG
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:220.36V I:0.1336A P:27.818W PF:0.9450 Freq:50.00Hz Lamp Flux:3709.36x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

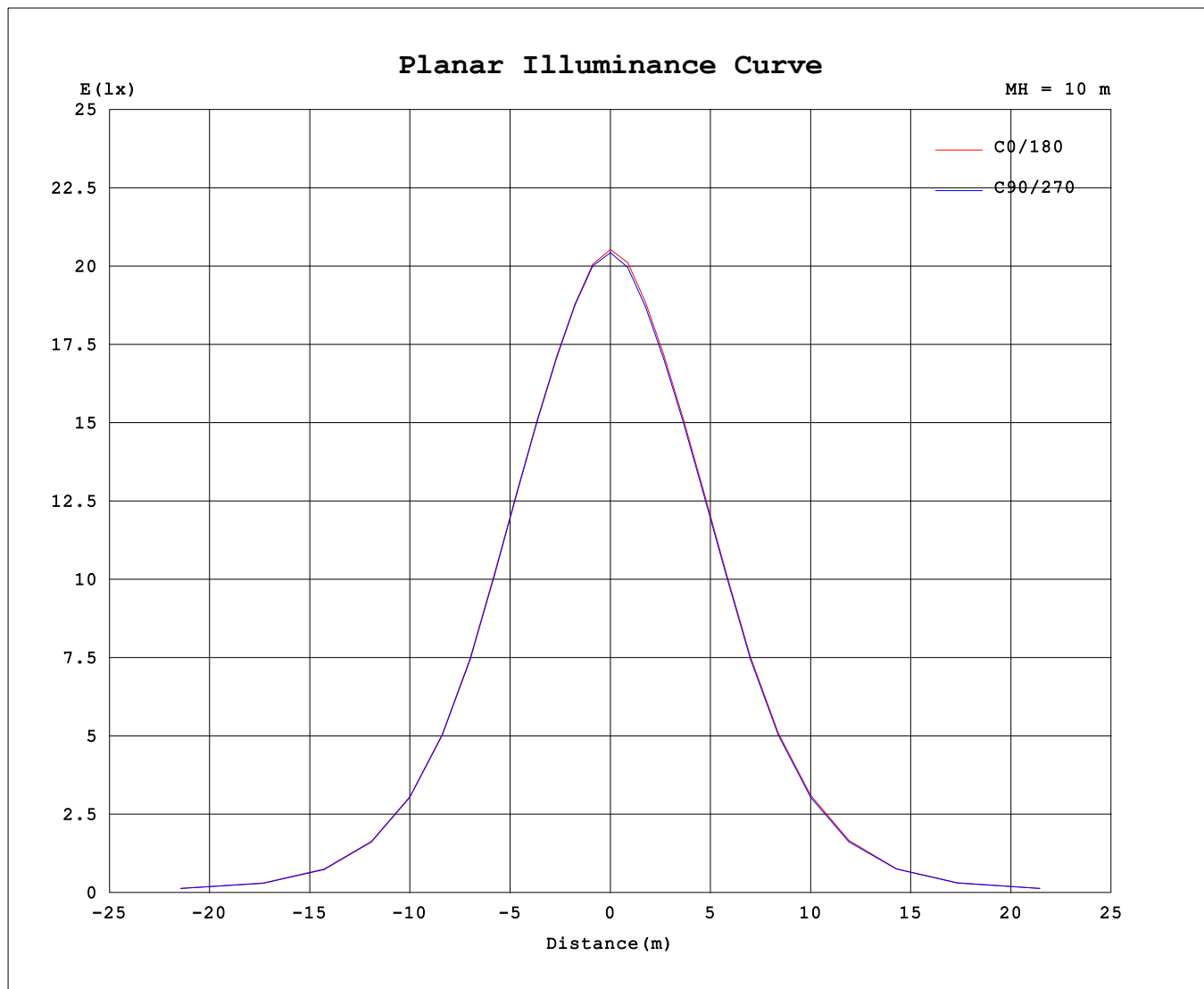
AvgL	cd/m2
L_0~180 (65) av	4428
L_0~180 (75) av	3657
L_0~180 (85) av	2649
L_90~270 (65) av	4386
L_90~270 (75) av	3440
L_90~270 (85) av	1774
L_45 (65) av	4412
L_45 (75) av	3591
L_45 (85) av	2132

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2024-01-20

γ Range: 0 - 90DEG
γ Interval: 5.0DEG
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: 2024-01-20

γ Range: 0 - 90DEG
 γ Interval: 5.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.473
 Humidity: 65.0%
 Test Distance: 9.401m [K=1.0000]
 Remarks:

Test:U:220.36V I:0.1336A P:27.818W PF:0.9450 Freq:50.00Hz Lamp Flux:3709.36x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

UNIT: cd

[illegible]

```

γ Range: 0 - 90DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks:

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