

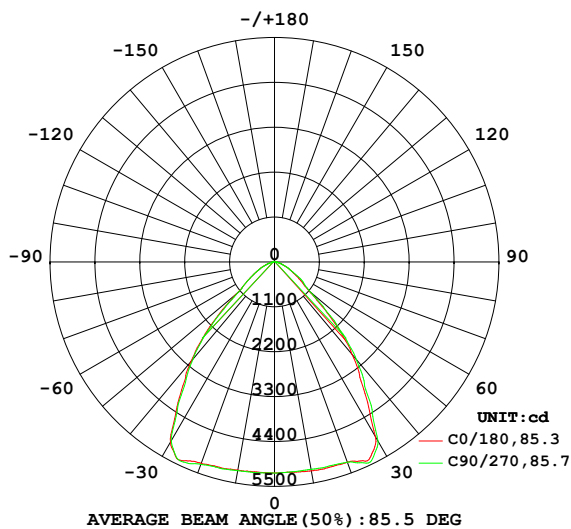
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

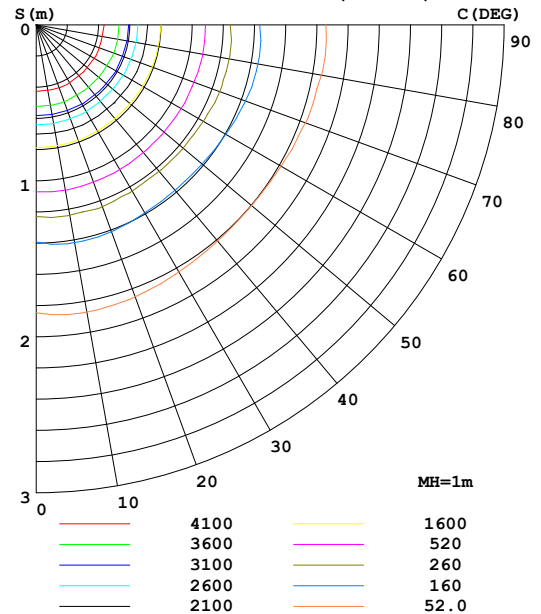
Test:U:230.0V I:0.391A P:90.7W PF:0.972 Freq:50.00Hz UTHDi:0.00% ITHDi:0.00% KDisp:0Lamp Flux:9837.28x1 lm		
NAME: P301-B3K (90W with PC transparent reflector)	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 108.41 lm/W
MODEL	/	Imax (cd)	5480	S/MH (C0/180)	1.23	
NOMINAL POWER (W)	/	LOR (%)	100.0	S/MH (C90/270)	1.23	
RATED VOLTAGE (V)	/	TOTAL FLUX (lm)	9837.3	η UP,DN (C0-180)	0.0,50.0	
NOMINAL FLUX (lm)	9837.28	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)	/	η down (%)	100.0	CIBSE SHR MAX	1.25	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



PLANAR ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:ZZX
Test Date:2024-06-14

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.465
Humidity:65.0%
Test Distance:26.000m [K=0.4593]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	5198	5168	5162	5168	5179	5178	5193	5205	0- 10	494.1	494.1	5.02,5.02
20	5220	5187	5224	5234	5249	5267	5278	5245	10- 20	1476	1971	20,20
30	4948	4915	5077	5078	5098	5037	5062	4965	20- 30	2442	4413	44.9,44.9
40	2947	2923	3116	3103	3185	3042	3107	2973	30- 40	2489	6901	70.2,70.2
50	1086	1112	1156	1239	1226	1216	1183	1148	40- 50	1604	8506	86.5,86.5
60	526.5	492.5	564.3	563.0	556.7	549.5	568.7	521.3	50- 60	724.8	9231	93.8,93.8
70	240.9	228.7	243.8	236.3	245.1	235.4	241.8	220.9	60- 70	375.8	9606	97.7,97.7
80	94.79	96.84	99.27	101.9	104.4	94.43	95.52	84.74	70- 80	166.6	9773	99.3,99.3
90	30.68	30.84	34.44	28.17	33.49	30.00	31.45	27.87	80- 90	64.20	9837	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): 7859.3 lm

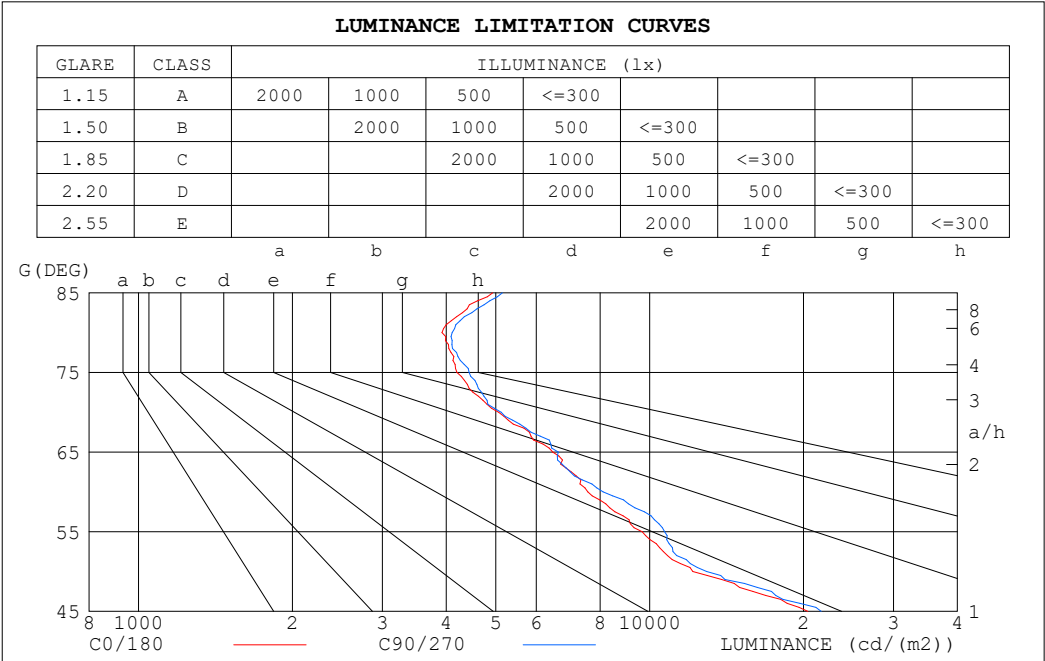
%lum = 79.9%
%lamp = 79.9%

Conical surface Flux(120deg): 9230.7 lm

%lum = 93.8%
%lamp = 93.8%

C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 22.5DEG	γ Interval: 0.5DEG
Test Speed: HIGH	Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.465
Temperature:25.3℃	Humidity:65.0%
Operators:ZZX	Test Distance:26.000m [K=0.4593]
Test Date:2024-06-14	Remarks:

LUMINANCE LIMITATION CURVES



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	4930	5150
80	3924	4108
75	4198	4434
70	5063	5122
65	6464	6627
60	7570	8110
55	9668	10697
50	12148	12927
45	20391	21659

C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: HIGH

Temperature:25.3℃

Operators:ZZX

Test Date:2024-06-14

γ Range: 0 - 90DEG

γ Interval: 0.5DEG

Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.465

Humidity:65.0%

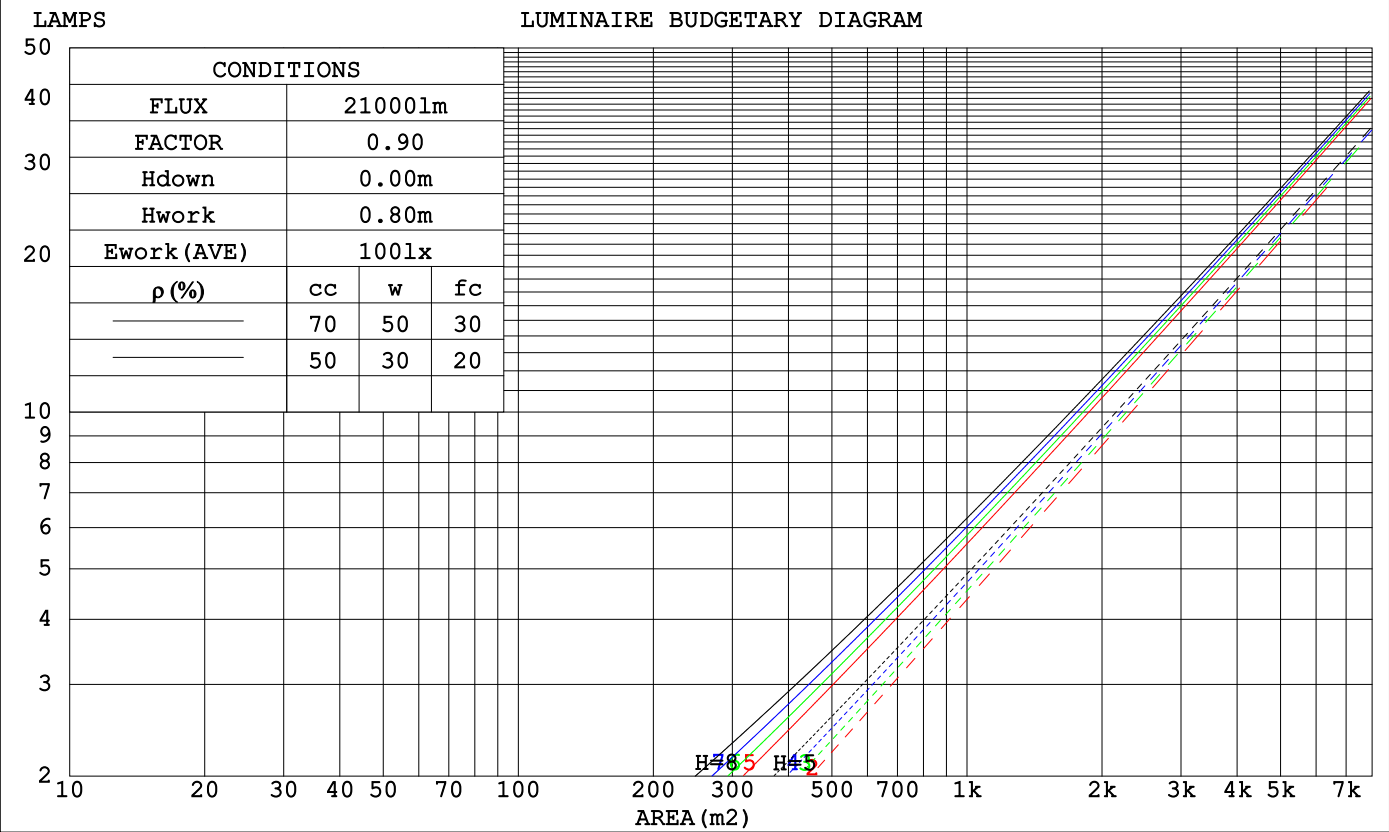
Test Distance:26.000m [K=0.4593]

Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

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	1.08	1.05	1.02	1.06	1.03	1.00	1.02	.99	.97	.98	.96	.94	.94	.93	.91	.90
2.0	.98	.93	.88	.96	.91	.87	.93	.89	.85	.89	.86	.83	.87	.84	.81	.80
3.0	.89	.82	.77	.87	.81	.76	.84	.79	.75	.82	.78	.74	.79	.76	.73	.71
4.0	.81	.74	.68	.79	.73	.68	.77	.71	.67	.75	.70	.66	.73	.69	.65	.63
5.0	.74	.66	.61	.73	.66	.61	.71	.65	.60	.69	.64	.59	.67	.63	.59	.57
6.0	.68	.60	.55	.67	.60	.55	.65	.59	.54	.64	.58	.54	.62	.57	.53	.52
7.0	.62	.55	.50	.61	.54	.49	.60	.54	.49	.59	.53	.49	.57	.52	.48	.47
8.0	.57	.50	.45	.57	.50	.45	.56	.49	.45	.54	.49	.44	.53	.48	.44	.43
9.0	.53	.46	.41	.53	.46	.41	.52	.45	.41	.51	.45	.41	.50	.44	.41	.39
10.0	.49	.42	.38	.49	.42	.38	.48	.42	.38	.47	.42	.37	.46	.41	.37	.36



C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: HIGH

Temperature:25.3℃

Operators:ZZX

Test Date:2024-06-14

γ Range: 0 - 90DEG

γ Interval: 0.5DEG

Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.465

Humidity:65.0%

Test Distance:26.000m [K=0.4593]

Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

WEC AND CCEC

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.231	.131	.042	.224	.128	.041	.211	.121	.039	.199	.115	.037	.188	.109	.035	
2.0	.222	.122	.037	.216	.119	.037	.205	.114	.035	.195	.109	.034	.185	.105	.033	
3.0	.210	.112	.034	.205	.110	.033	.196	.106	.032	.187	.102	.031	.179	.099	.031	
4.0	.199	.103	.030	.194	.102	.030	.186	.099	.029	.178	.096	.029	.171	.093	.028	
5.0	.188	.096	.028	.184	.094	.028	.177	.092	.027	.170	.090	.027	.163	.087	.026	
6.0	.178	.089	.026	.174	.088	.025	.168	.086	.025	.161	.084	.025	.156	.082	.024	
7.0	.168	.083	.024	.165	.082	.023	.159	.081	.023	.154	.079	.023	.149	.077	.023	
8.0	.160	.078	.022	.157	.077	.022	.152	.076	.022	.147	.074	.021	.142	.073	.021	
9.0	.152	.073	.020	.149	.073	.020	.144	.071	.020	.140	.070	.020	.136	.069	.020	
10.0	.144	.069	.019	.142	.069	.019	.138	.067	.019	.134	.066	.019	.130	.065	.019	

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{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	.175	.157	.141	.150	.135	.121	.102	.093	.084	.059	.054	.049	.019	.017	.016	
2.0	.163	.132	.106	.140	.114	.092	.096	.079	.064	.055	.046	.038	.018	.015	.012	
3.0	.153	.114	.083	.131	.098	.072	.090	.068	.050	.052	.040	.030	.017	.013	.010	
4.0	.144	.100	.066	.124	.086	.057	.085	.060	.040	.049	.035	.024	.016	.011	.008	
5.0	.137	.089	.053	.118	.077	.047	.081	.054	.033	.047	.032	.019	.015	.010	.006	
6.0	.130	.080	.044	.112	.069	.039	.077	.049	.027	.045	.029	.016	.014	.009	.005	
7.0	.124	.073	.037	.107	.063	.033	.074	.044	.023	.043	.026	.014	.014	.009	.005	
8.0	.118	.067	.032	.102	.058	.028	.070	.041	.020	.041	.024	.012	.013	.008	.004	
9.0	.113	.062	.028	.097	.054	.024	.067	.038	.017	.039	.022	.010	.013	.007	.003	
10.0	.108	.058	.025	.093	.050	.021	.065	.035	.015	.038	.021	.009	.012	.007	.003	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:ZZX
 Test Date:2024-06-14

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.465
 Humidity:65.0%
 Test Distance:26.000m [K=0.4593]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UGR(Unified Glare Rating) Table

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	17.1	18.4	17.4	18.7	19.0	17.4	18.7	17.8	19.0	19.3
3H	17.9	19.0	18.3	19.4	19.7	18.2	19.4	18.6	19.7	20.0
4H	18.2	19.2	18.6	19.6	20.0	18.5	19.5	18.9	19.9	20.3
6H	18.4	19.4	18.8	19.7	20.1	18.7	19.6	19.1	20.0	20.4
8H	18.5	19.4	18.9	19.8	20.2	18.8	19.7	19.2	20.1	20.5
12H	18.6	19.5	19.0	19.8	20.3	18.8	19.7	19.3	20.1	20.5
4H 2H	17.3	18.3	17.7	18.7	19.1	17.7	18.8	18.1	19.1	19.5
3H	18.3	19.2	18.7	19.6	20.0	18.6	19.5	19.0	19.9	20.3
4H	18.7	19.4	19.1	19.9	20.3	19.0	19.8	19.4	20.2	20.6
6H	19.0	19.7	19.5	20.1	20.6	19.3	20.0	19.7	20.4	20.9
8H	19.1	19.8	19.6	20.2	20.7	19.4	20.0	19.9	20.5	21.0
12H	19.3	19.8	19.8	20.3	20.8	19.6	20.1	20.1	20.6	21.1
8H 4H	18.8	19.4	19.2	19.8	20.3	19.1	19.7	19.5	20.1	20.6
6H	19.2	19.7	19.7	20.2	20.7	19.5	20.0	20.0	20.5	21.0
8H	19.4	19.9	19.9	20.4	20.9	19.7	20.1	20.2	20.6	21.1
12H	19.6	20.0	20.2	20.5	21.1	19.9	20.3	20.4	20.8	21.4
12H 4H	18.7	19.3	19.2	19.8	20.3	19.0	19.6	19.5	20.1	20.6
6H	19.2	19.7	19.7	20.1	20.7	19.5	19.9	20.0	20.4	21.0
8H	19.5	19.9	20.0	20.4	20.9	19.7	20.1	20.3	20.6	21.2
CIE190: 2010										

CIE190: 2010
Area: 0.1392 m2

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:ZZX
Test Date:2024-06-14

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.465
Humidity:65.0%
Test Distance:26.000m [K=0.4593]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

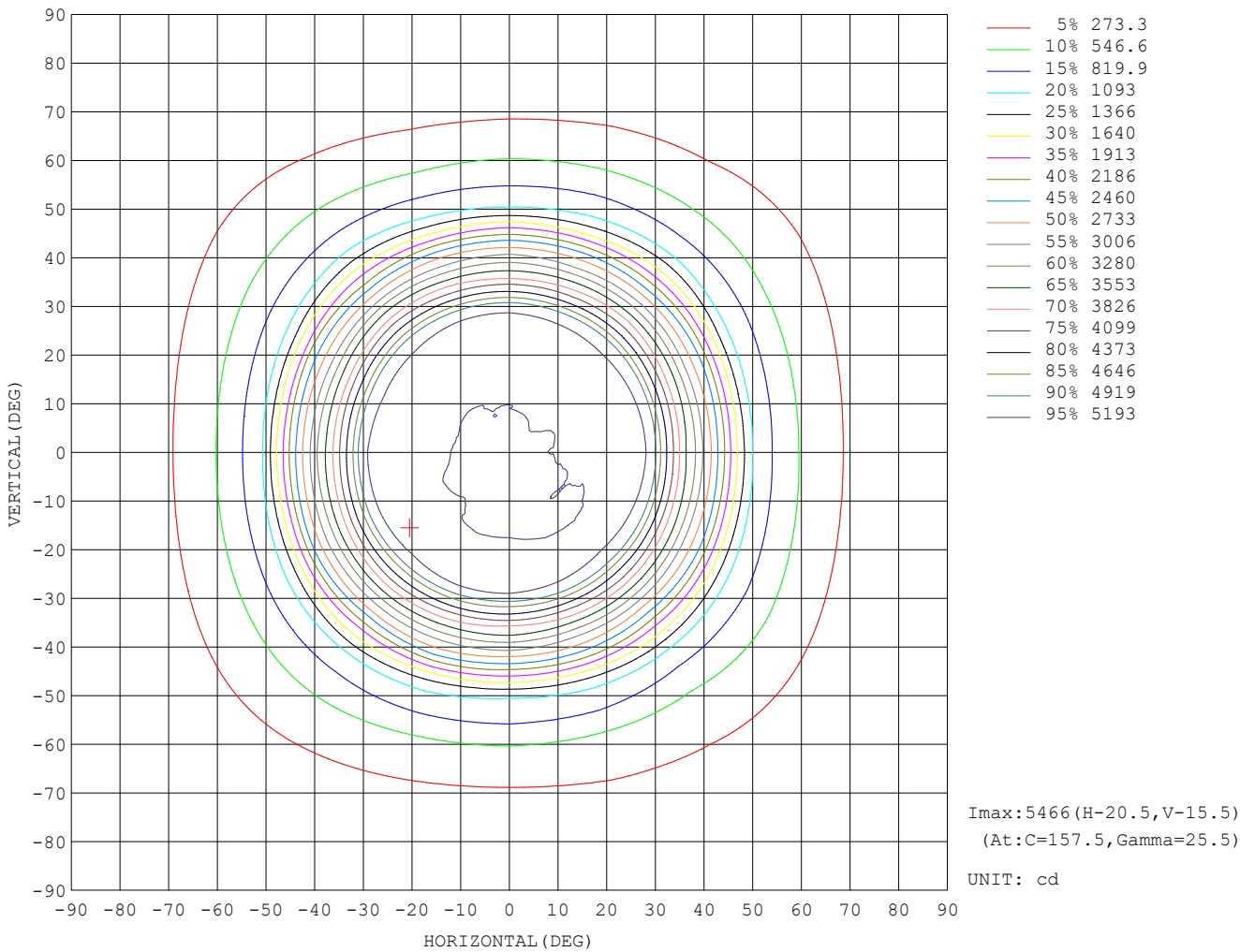
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	73	64	58	72	64	58	71	63	58	53
0.80	82	73	68	81	73	68	80	72	68	62
1.00	89	81	76	88	80	75	86	81	75	70
1.25	95	87	82	93	87	82	91	85	81	76
1.50	99	92	87	97	91	86	95	89	85	80
2.00	103	97	93	102	96	92	99	94	91	84
2.50	106	100	96	104	99	95	101	97	93	86
3.00	108	103	99	106	102	98	102	99	96	89
4.00	111	107	104	109	105	102	105	102	99	92
5.00	112	109	106	110	107	105	106	104	101	93
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004						Suspended			SHRNOM = 1.25	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators: ZZX
 Test Date: 2024-06-14

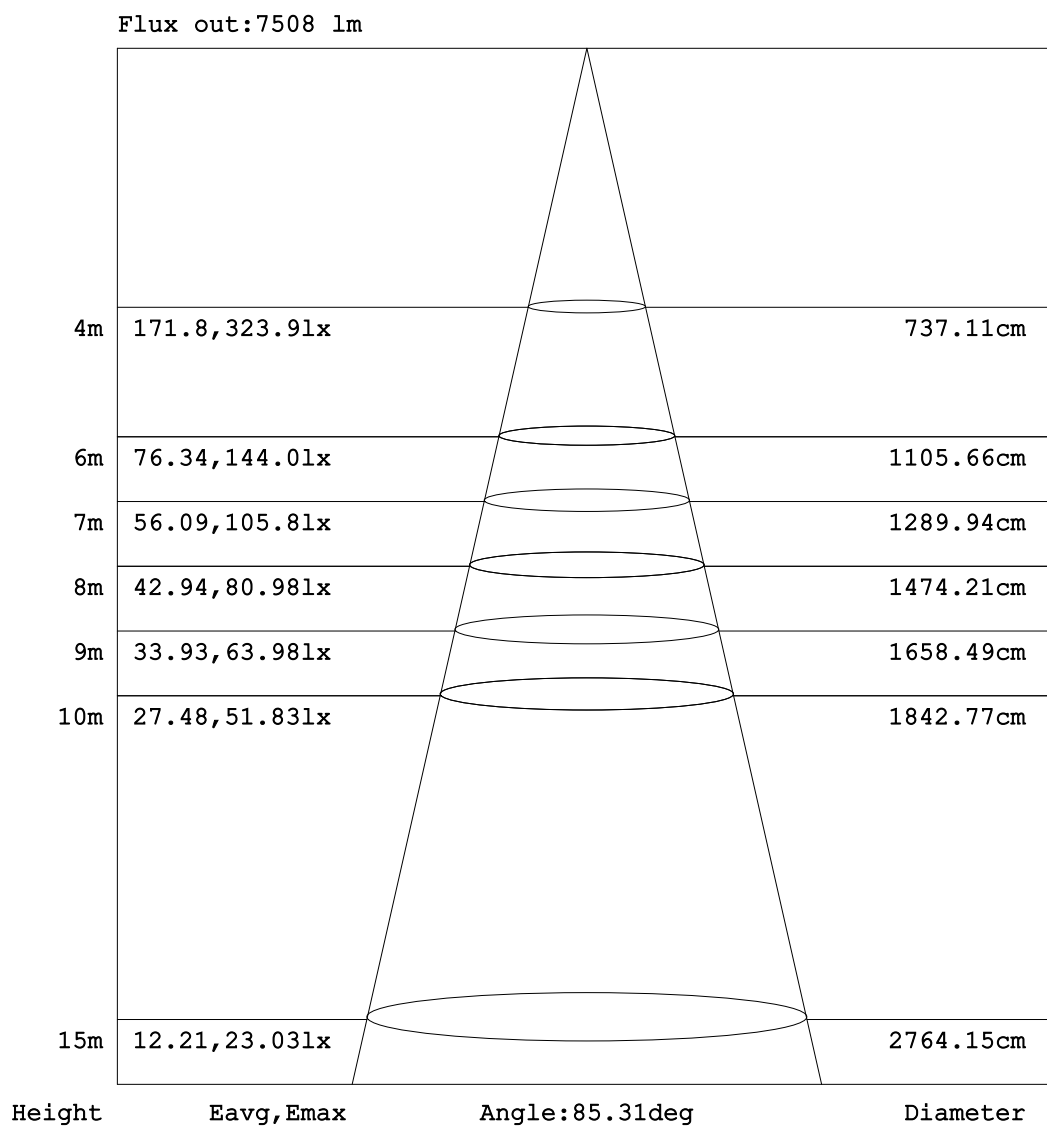
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.465
 Humidity: 65.0%
 Test Distance: 26.000m [K=0.4593]
 Remarks:

ISOCANDELA DIAGRAM



C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 22.5DEG	γ Interval: 0.5DEG
Test Speed: HIGH	Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.465
Temperature:25.3°C	Humidity:65.0%
Operators:ZZX	Test Distance:26.000m [K=0.4593]
Test Date:2024-06-14	Remarks:

AAI Figure

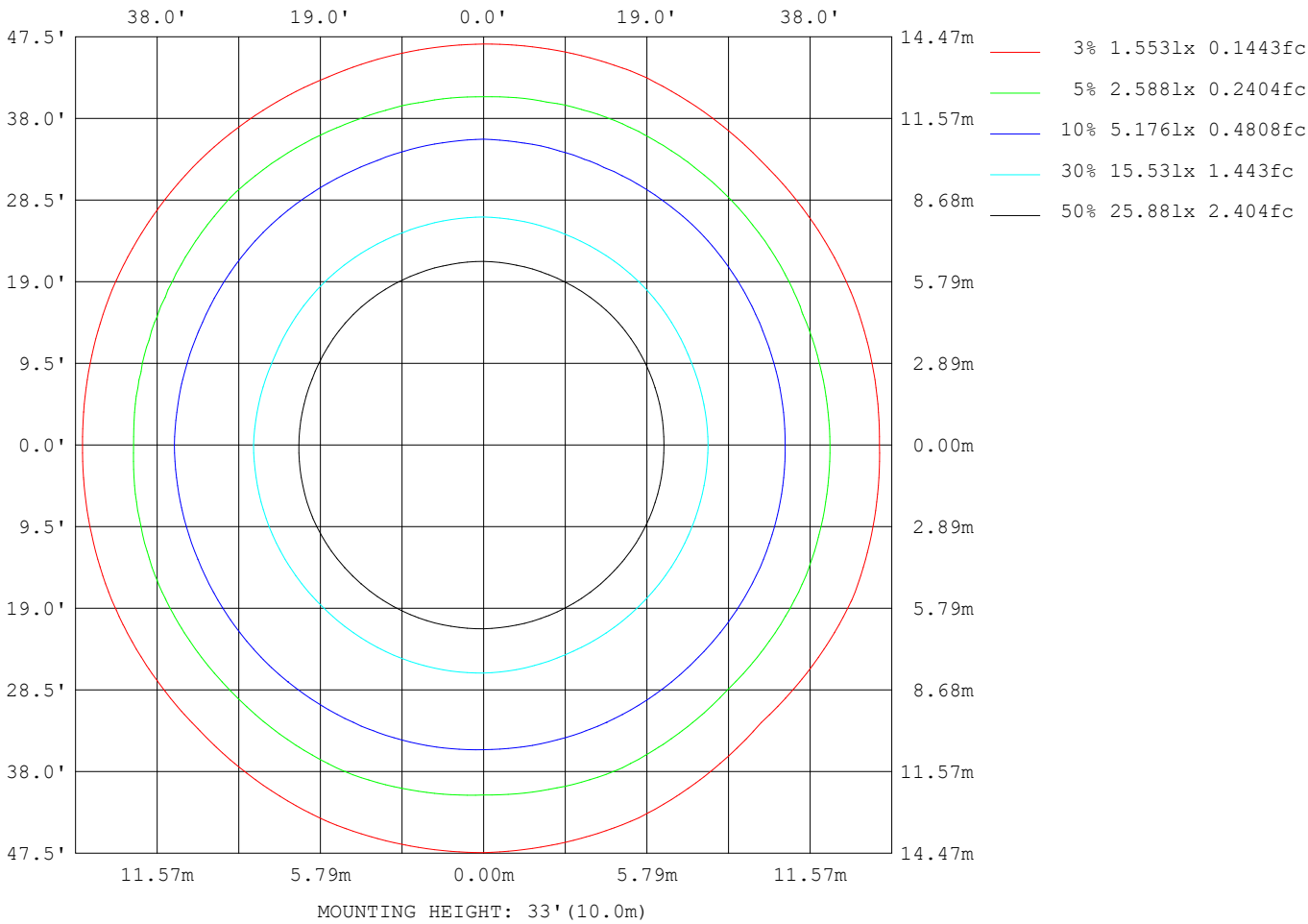


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:ZZX
Test Date:2024-06-14

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.465
Humidity:65.0%
Test Distance:26.000m [K=0.4593]
Remarks:

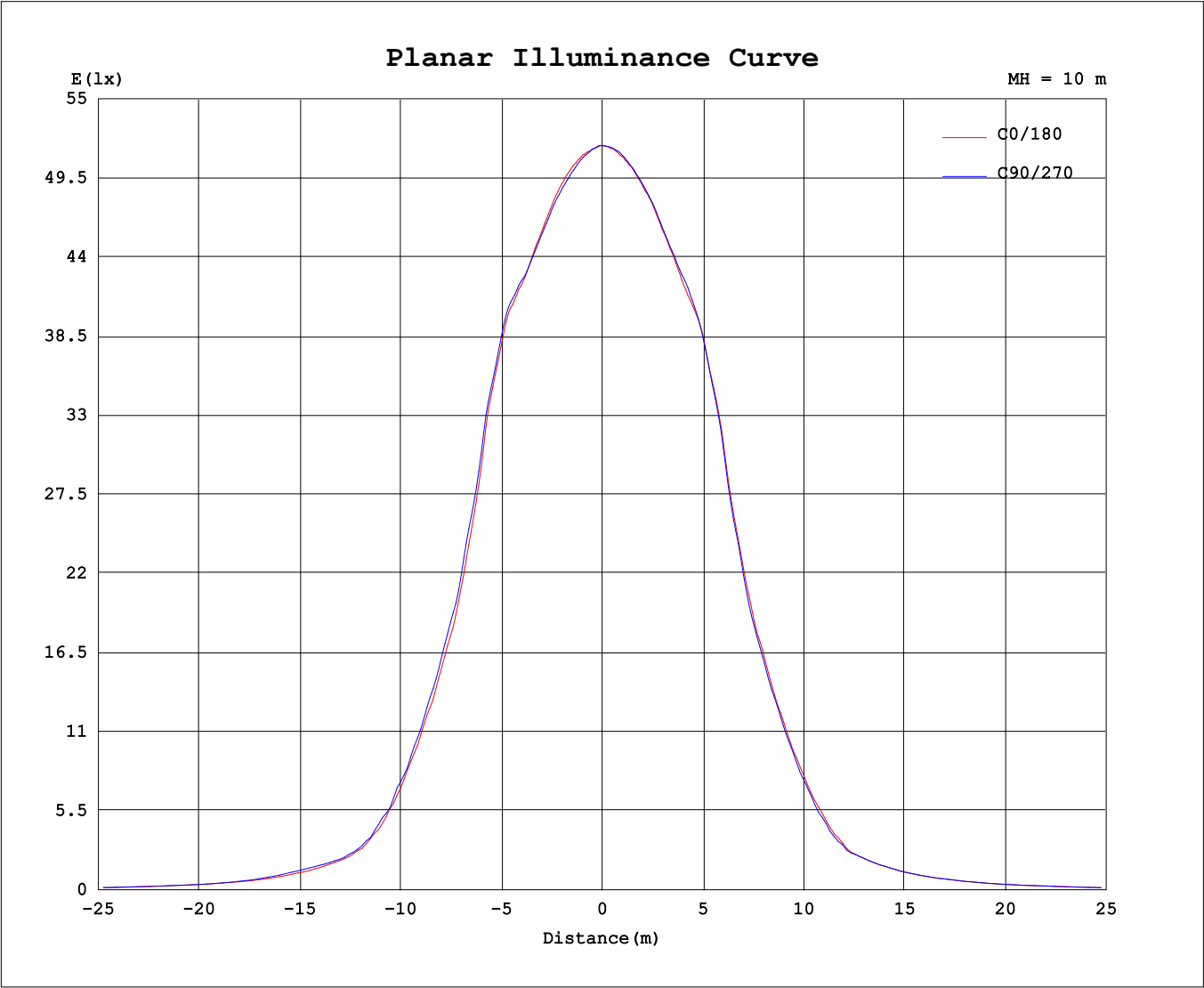
ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: ZZX
Test Date: 2024-06-14

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.465
Humidity: 65.0%
Test Distance: 26.000m [K=0.4593]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 22.5DEG	γ Interval: 0.5DEG
Test Speed: HIGH	Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.465
Temperature:25.3℃	Humidity:65.0%
Operators:ZZX	Test Distance:26.000m [K=0.4593]
Test Date:2024-06-14	Remarks:

UNIT: cd

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3℃
Operators: ZZX
Test Date: 2024-06-14

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γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.465
Humidity:65.0%
Test Distance:26.000m [K=0.4593]
Remarks:

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