

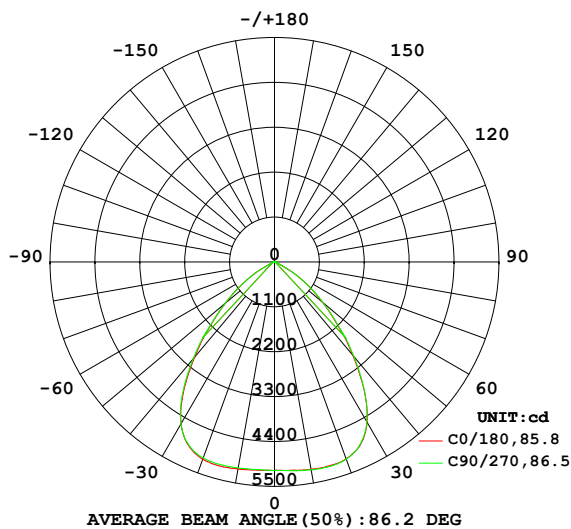
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

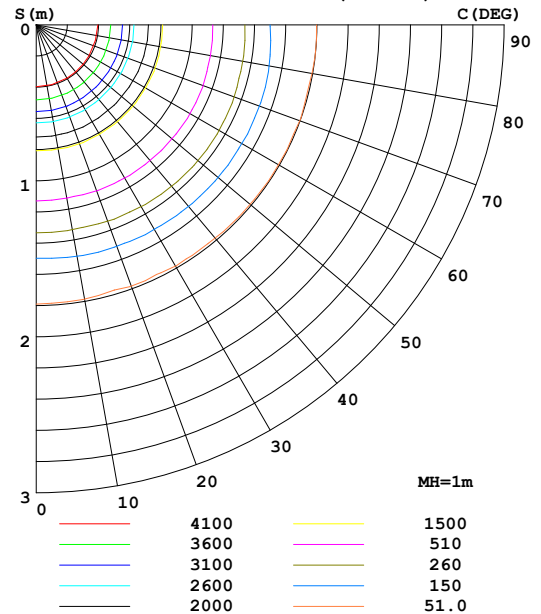
Test:U:230.1V I:0.391A P:90.0W PF:0.972 Freq:50.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:9488.2x1 lm		
NAME: P301-B3K (90W with Aluminium reflector)	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 105.41 lm/W			
MODEL	/	Imax (cd)	5202	S/MH (C0/180)	1.22
NOMINAL POWER (W)	/	LOR (%)	100.0	S/MH (C90/270)	1.23
RATED VOLTAGE (V)	/	TOTAL FLUX (lm)	9488.2	η UP, DN (C0-180)	0.0, 49.9
NOMINAL FLUX (lm)	9488.2	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 50.1
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: ZZK
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	5160	5169	5172	5173	5149	5129	5124	5143	0- 10	490.0	490.0	5.16,5.16
20	5131	5138	5143	5137	5143	5107	5108	5120	10- 20	1463	1953	20.6,20.6
30	4533	4519	4523	4512	4575	4562	4588	4543	20- 30	2267	4220	44.5,44.5
40	2985	3031	3029	2968	3045	3099	3107	3014	30- 40	2386	6606	69.6,69.6
50	1536	1606	1557	1605	1571	1644	1576	1615	40- 50	1745	8351	88,88
60	519.1	540.2	536.2	567.6	536.1	557.6	517.5	563.4	50- 60	938.8	9289	97.9,97.9
70	36.79	37.36	36.43	33.72	33.79	35.77	37.32	36.85	60- 70	171.1	9461	99.7,99.7
80	11.59	11.48	10.97	9.850	10.08	10.95	11.92	11.78	70- 80	22.74	9483	99.9,99.9
90	0	0	0	0	0	0	0	0	80- 90	4.936	9488	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): 7582.4 lm

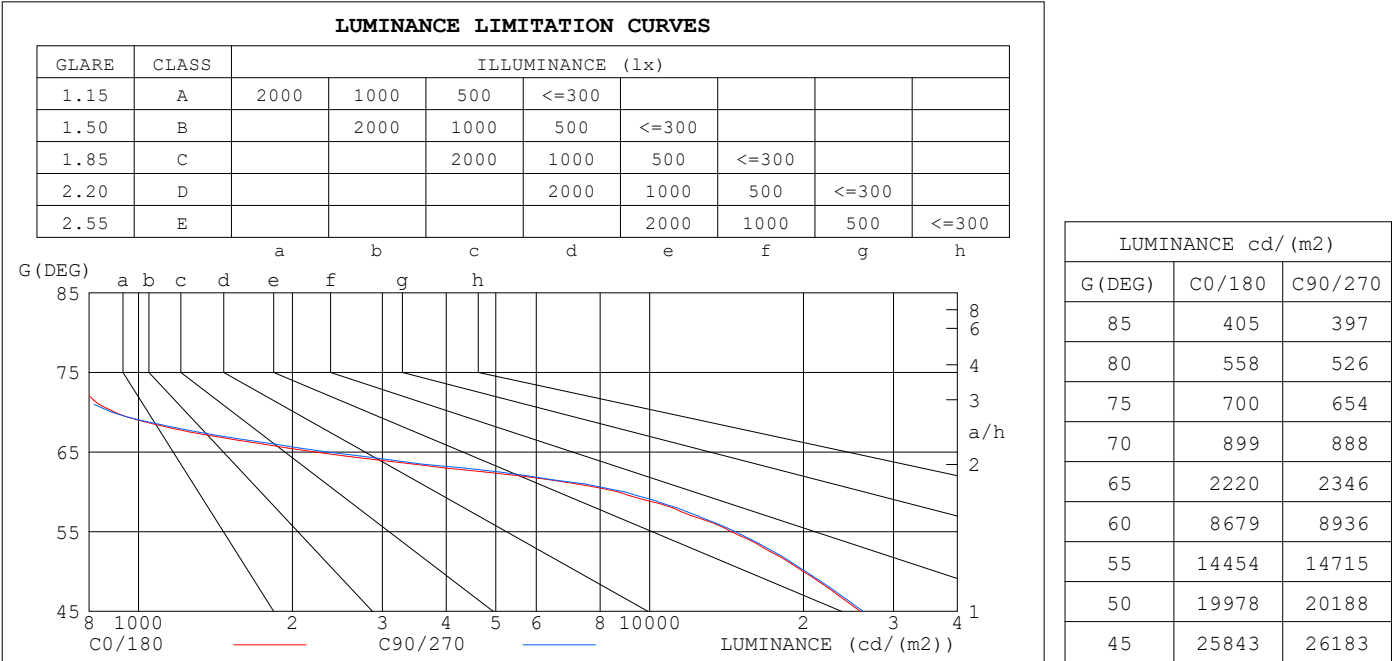
%lum = 79.9%
%lamp = 79.9%

Conical surface Flux(120deg): 9289.4 lm

%lum = 97.9%
%lamp = 97.9%

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



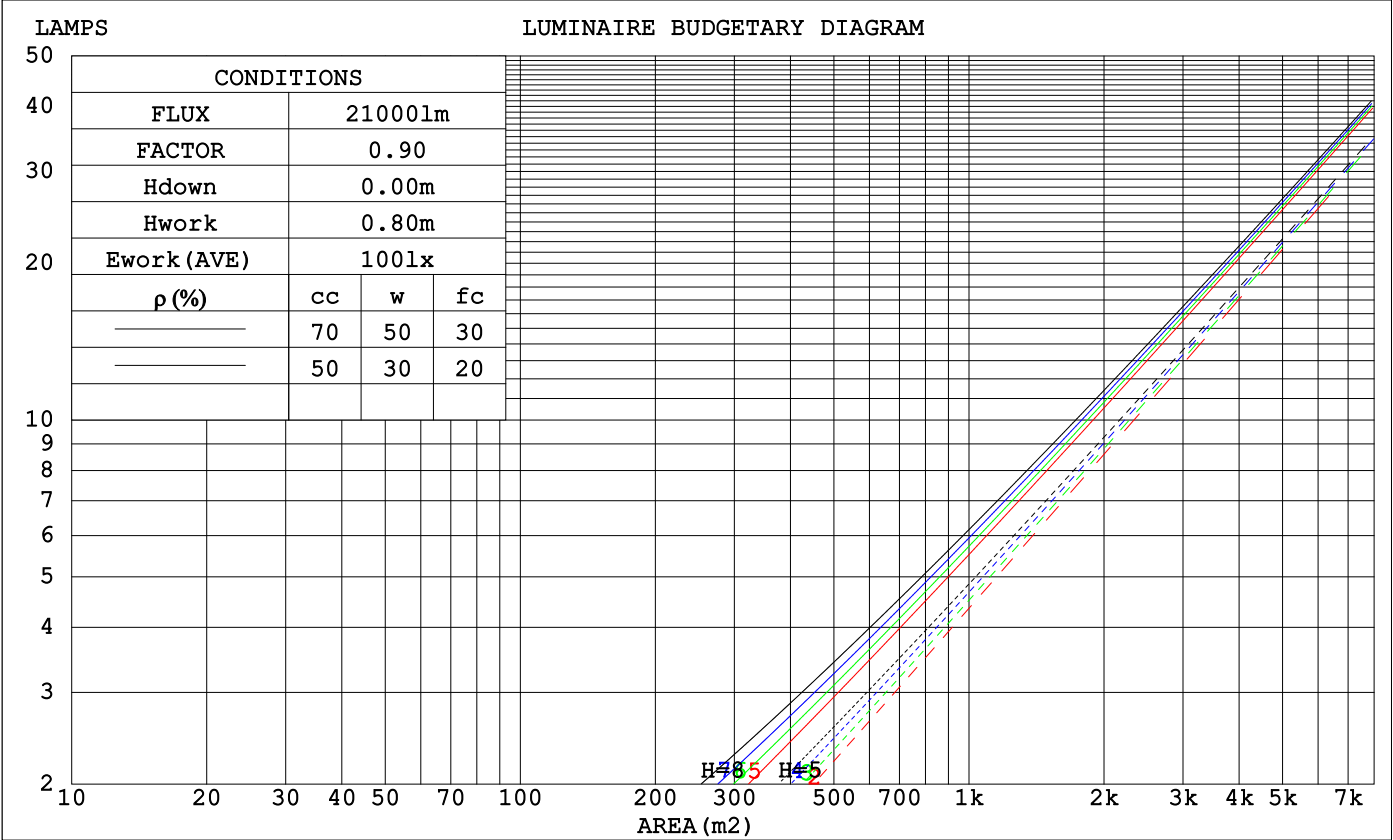
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:ZZX
Test Date:2024-06-14

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

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	1.09	1.06	1.03	1.07	1.04	1.01	1.02	1.00	.98	.99	.97	.95	.95	.94	.93	.91	
2.0	.99	.94	.90	.97	.92	.89	.94	.90	.87	.91	.87	.85	.88	.85	.83	.81	
3.0	.90	.84	.79	.88	.83	.78	.85	.81	.77	.83	.79	.75	.81	.77	.74	.72	
4.0	.82	.75	.69	.80	.74	.69	.78	.73	.68	.76	.71	.67	.74	.70	.66	.65	
5.0	.75	.67	.62	.73	.67	.62	.72	.66	.61	.70	.65	.60	.68	.63	.60	.58	
6.0	.68	.61	.56	.67	.60	.55	.66	.60	.55	.64	.59	.54	.63	.58	.54	.52	
7.0	.63	.55	.50	.62	.55	.50	.61	.54	.50	.59	.54	.49	.58	.53	.49	.47	
8.0	.58	.51	.46	.57	.50	.45	.56	.50	.45	.55	.49	.45	.54	.49	.45	.43	
9.0	.54	.46	.42	.53	.46	.41	.52	.46	.41	.51	.45	.41	.50	.45	.41	.39	
10.0	.50	.43	.38	.49	.43	.38	.48	.42	.38	.47	.42	.38	.47	.41	.38	.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	.216	.123	.039	.209	.119	.038	.196	.113	.036	.184	.106	.034	.174	.101	.032	
2.0	.212	.116	.036	.206	.113	.035	.195	.108	.034	.185	.104	.032	.175	.099	.031	
3.0	.204	.108	.032	.199	.106	.032	.189	.102	.031	.180	.099	.030	.172	.095	.029	
4.0	.194	.101	.030	.190	.099	.029	.182	.096	.029	.174	.093	.028	.167	.090	.028	
5.0	.185	.094	.027	.181	.093	.027	.174	.090	.027	.167	.088	.026	.160	.086	.026	
6.0	.176	.088	.025	.172	.087	.025	.166	.085	.025	.159	.083	.024	.154	.081	.024	
7.0	.167	.083	.023	.164	.082	.023	.158	.080	.023	.152	.078	.023	.147	.076	.022	
8.0	.159	.078	.022	.156	.077	.022	.151	.075	.021	.146	.074	.021	.141	.072	.021	
9.0	.151	.073	.020	.148	.072	.020	.144	.071	.020	.139	.070	.020	.135	.069	.020	
10.0	.144	.069	.019	.141	.068	.019	.137	.067	.019	.133	.066	.019	.129	.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	.174	.157	.142	.149	.135	.122	.102	.093	.084	.059	.054	.049	.019	.017	.016	
2.0	.162	.132	.108	.138	.114	.093	.095	.079	.065	.055	.046	.038	.018	.015	.012	
3.0	.152	.114	.084	.130	.098	.073	.089	.068	.051	.052	.040	.030	.017	.013	.010	
4.0	.143	.100	.066	.123	.086	.058	.085	.060	.041	.049	.035	.024	.016	.011	.008	
5.0	.136	.089	.054	.117	.077	.047	.080	.054	.033	.047	.032	.020	.015	.010	.006	
6.0	.129	.080	.045	.111	.069	.039	.077	.049	.027	.045	.029	.016	.014	.009	.005	
7.0	.123	.073	.038	.106	.063	.033	.073	.044	.023	.043	.026	.014	.014	.009	.005	
8.0	.118	.067	.032	.101	.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	.064	.035	.015	.038	.021	.009	.012	.007	.003	

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

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	18.8	20.1	19.1	20.4	20.7	18.9	20.2	19.3	20.5	20.9
3H	18.7	19.8	19.0	20.1	20.5	18.8	19.9	19.2	20.3	20.6
4H	18.6	19.6	19.0	20.0	20.4	18.7	19.8	19.1	20.1	20.5
6H	18.5	19.5	18.9	19.8	20.2	18.7	19.6	19.1	20.0	20.4
8H	18.5	19.4	18.9	19.8	20.2	18.6	19.5	19.1	19.9	20.3
12H	18.4	19.3	18.8	19.7	20.1	18.6	19.4	19.0	19.8	20.3
4H 2H	18.6	19.6	19.0	20.0	20.4	18.8	19.8	19.2	20.2	20.5
3H	18.5	19.3	18.9	19.7	20.1	18.6	19.5	19.1	19.9	20.3
4H	18.4	19.1	18.8	19.6	20.0	18.6	19.3	19.0	19.7	20.2
6H	18.3	19.0	18.8	19.4	19.9	18.5	19.1	18.9	19.6	20.0
8H	18.3	18.9	18.7	19.3	19.8	18.4	19.0	18.9	19.5	19.9
12H	18.2	18.7	18.7	19.2	19.7	18.4	18.9	18.9	19.4	19.9
8H 4H	18.3	18.9	18.7	19.3	19.8	18.4	19.0	18.9	19.5	19.9
6H	18.2	18.6	18.7	19.1	19.6	18.3	18.8	18.8	19.3	19.8
8H	18.1	18.5	18.6	19.0	19.5	18.2	18.7	18.8	19.2	19.7
12H	18.0	18.4	18.6	18.9	19.5	18.2	18.6	18.7	19.1	19.7
12H 4H	18.2	18.7	18.7	19.2	19.7	18.4	18.9	18.8	19.4	19.8
6H	18.1	18.5	18.6	19.0	19.6	18.3	18.7	18.8	19.2	19.7
8H	18.0	18.4	18.6	18.9	19.5	18.2	18.6	18.7	19.1	19.7
CIE190: 2010										

CIE190: 2010
Area: 0.12 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

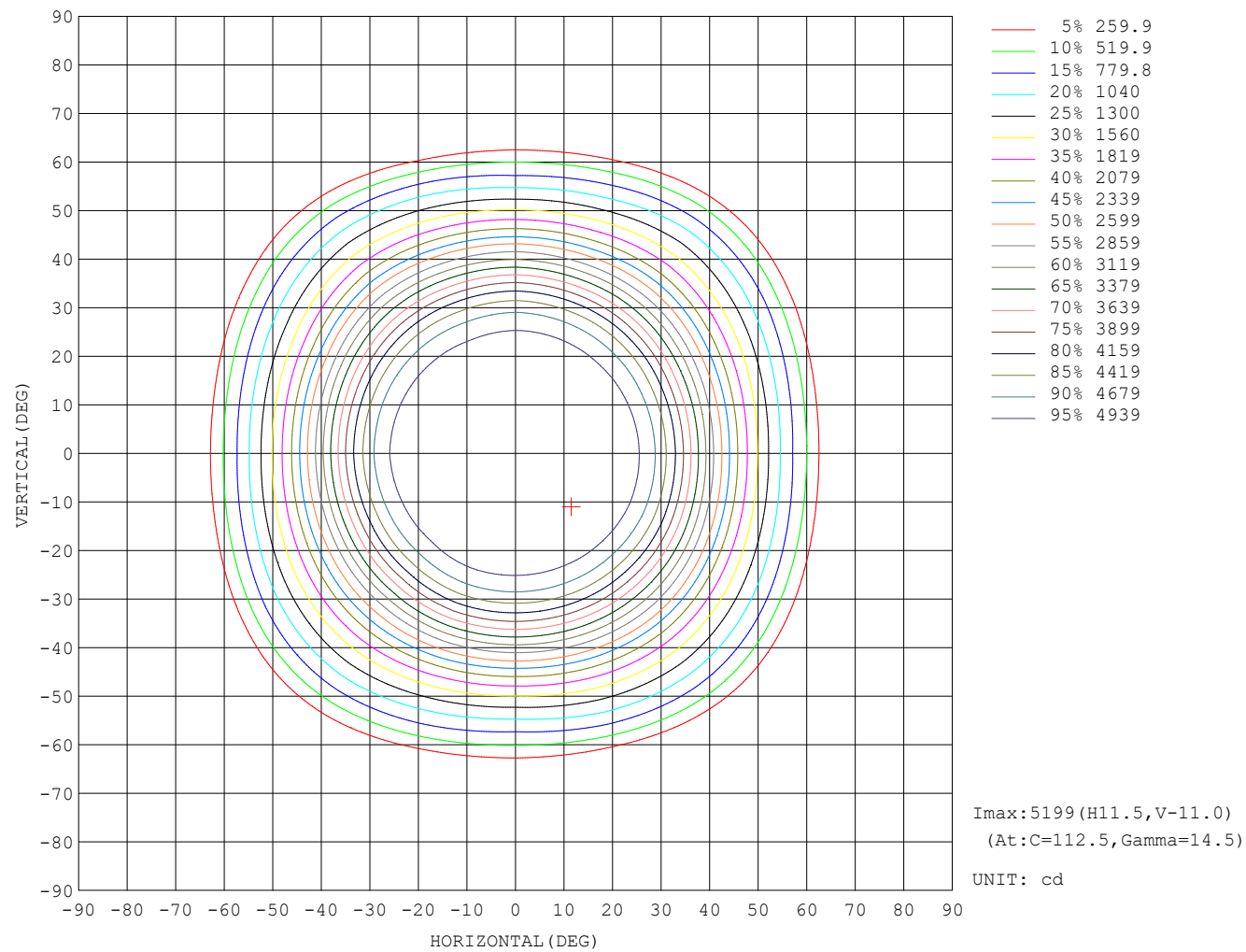
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	72	63	57	71	62	57	70	62	57	52
0.80	82	73	68	81	73	67	79	72	67	62
1.00	89	81	76	88	81	76	86	81	75	70
1.25	95	88	83	94	87	83	92	86	82	77
1.50	99	93	88	98	92	87	95	90	86	81
2.00	104	98	94	102	97	93	99	95	92	86
2.50	106	101	97	105	100	96	101	97	94	88
3.00	109	104	100	107	103	99	103	100	97	90
4.00	111	107	104	109	106	103	105	102	100	92
5.00	113	109	107	110	107	105	106	104	102	94
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

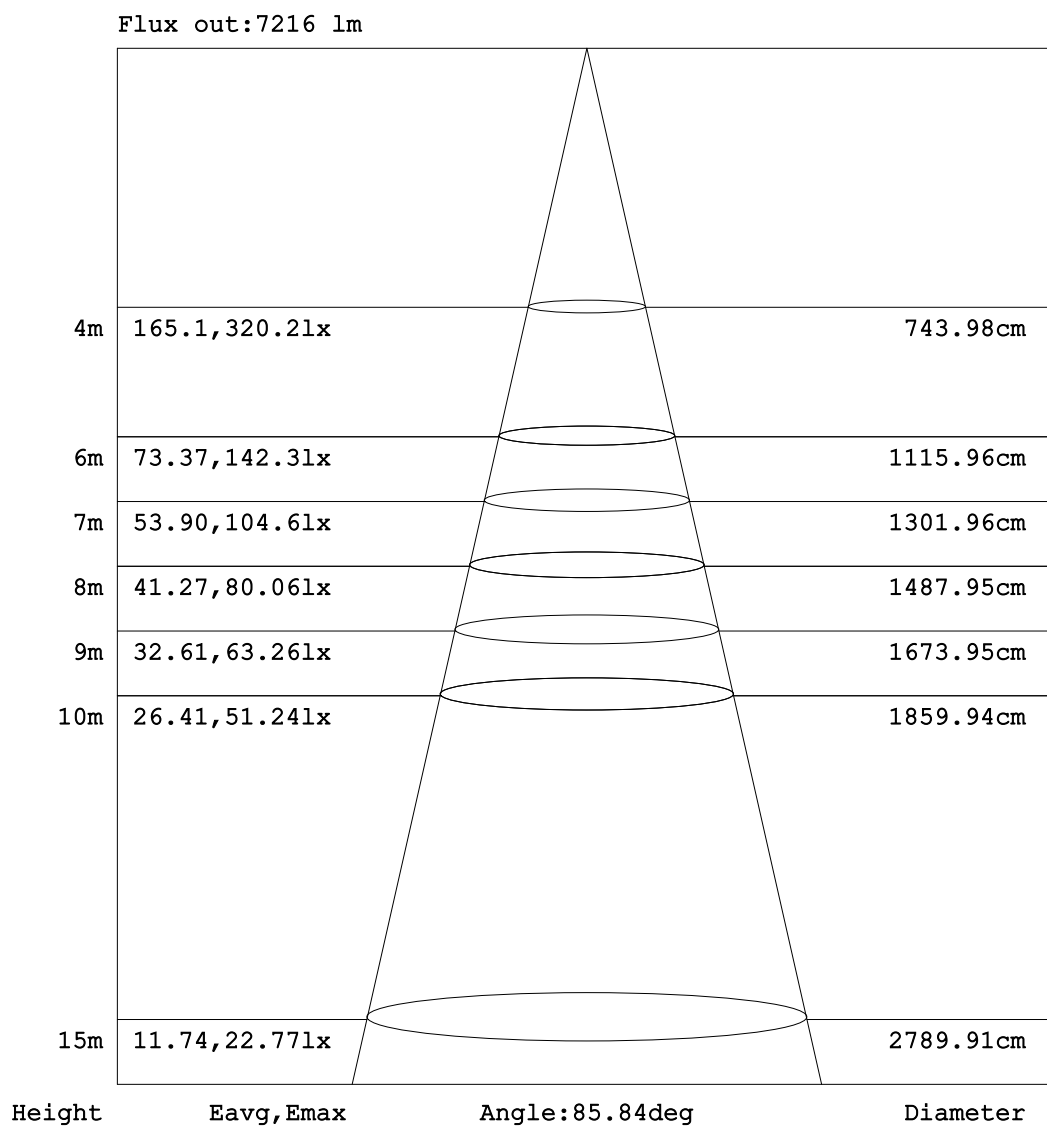
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.465
 Humidity: 65.0%
 Test Distance: 26.000m [K=0.4593]
 Remarks:

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

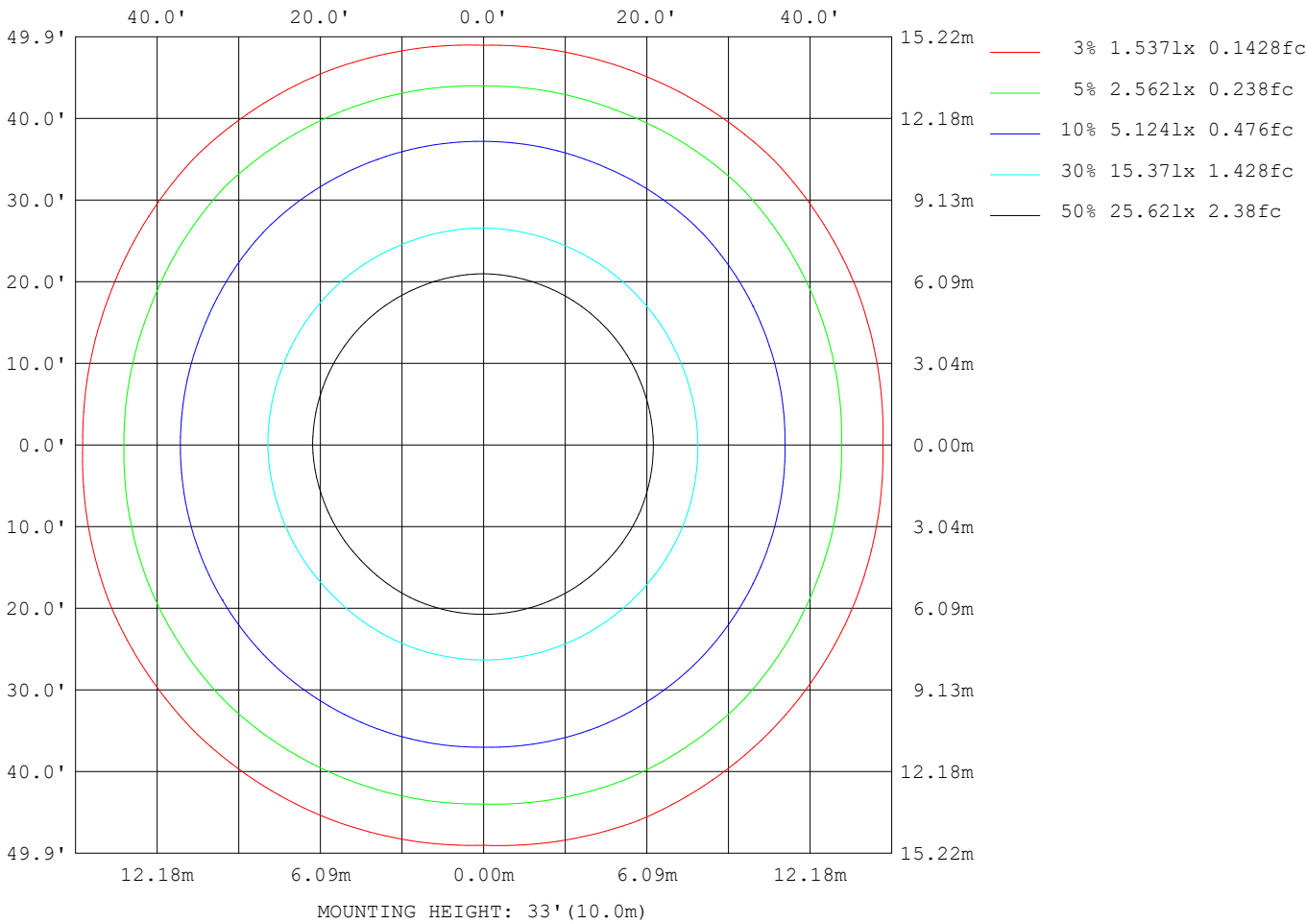


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:

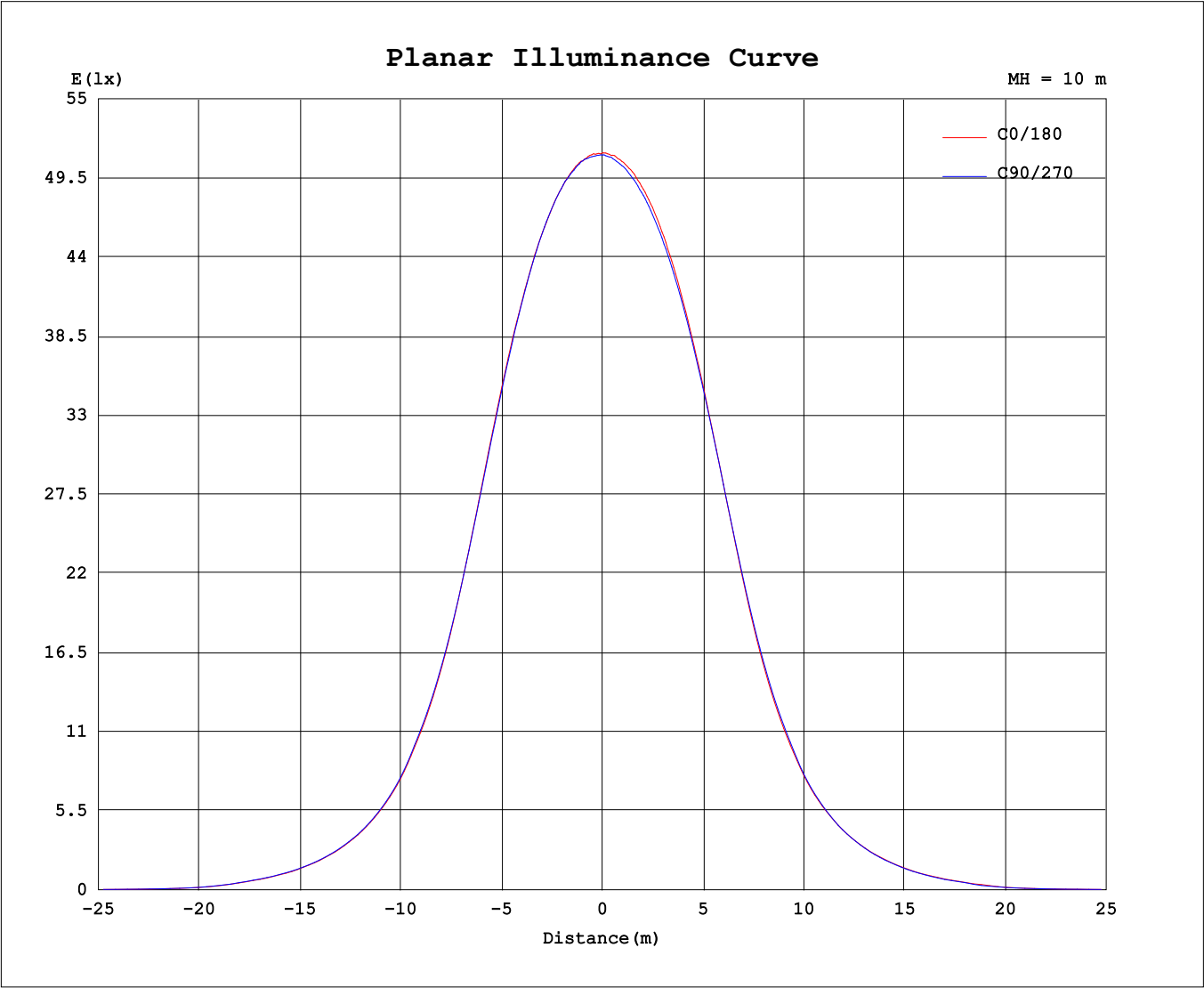
ISOLUX DIAGRAM



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°C	Humidity:65.0%
Operators:ZZX	Test Distance:26.000m [K=0.4593]
Test Date:2024-06-14	Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Table--1

UNIT: cd

[illegible]

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3°C
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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