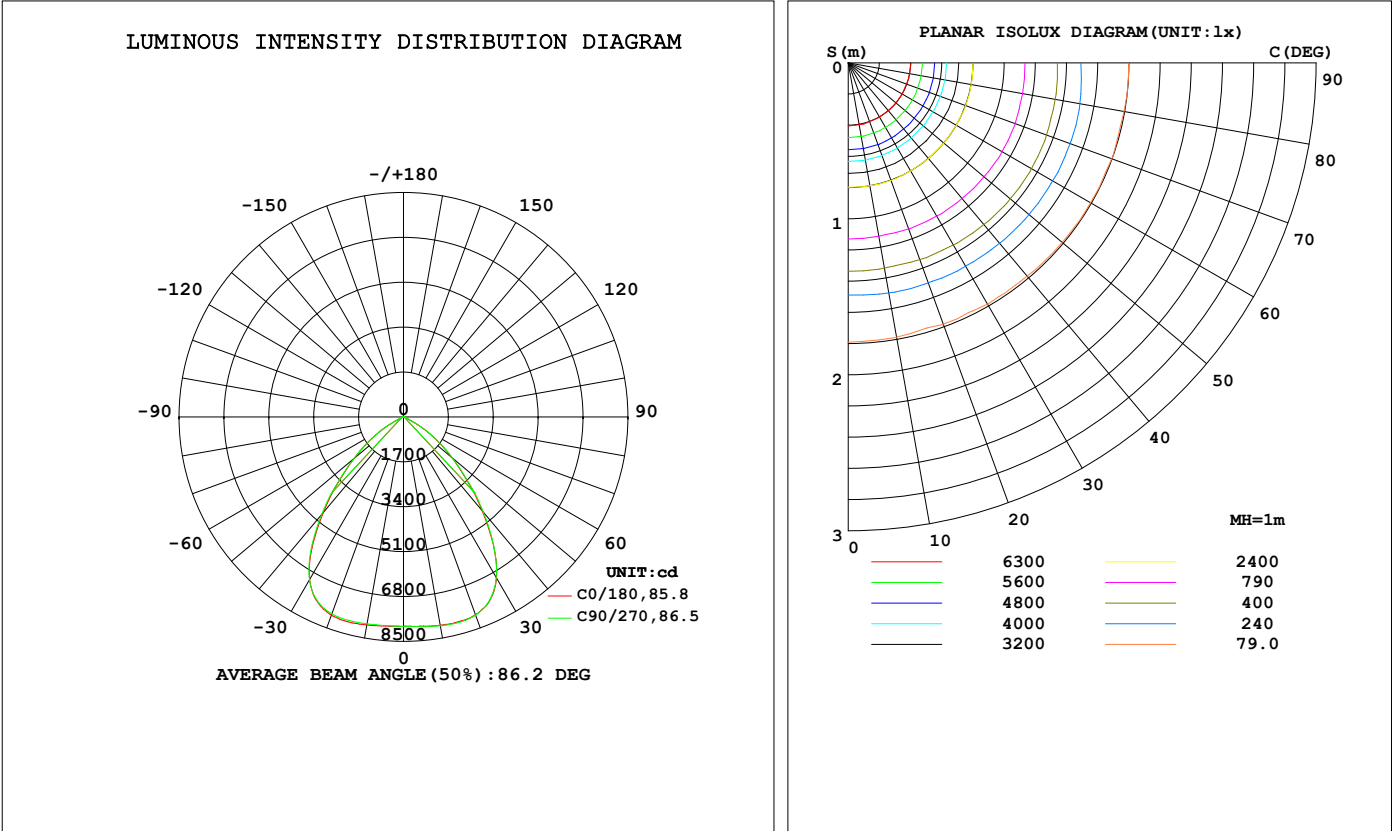


EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.1V I:0.652A P:150.0W PF:0.972 Freq:50.01Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0Lamp Flux:14730.9x1 lm		
NAME: P301-B3K (150W with Aluminium reflector)	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 98.20 lm/W
MODEL	/	Imax (cd)	8076	S/MH (C0/180)	1.22	
NOMINAL POWER (W)	/	LOR (%)	100.0	S/MH (C90/270)	1.23	
RATED VOLTAGE (V)	/	TOTAL FLUX (lm)	14731	η UP, DN (C0-180)	0.0,49.9	
NOMINAL FLUX (lm)	14730.9	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	



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

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	8011	8025	8029	8031	7994	7963	7955	7985	0- 10	760.7	760.7	5.16,5.16
20	7966	7977	7985	7975	7985	7928	7930	7948	10- 20	2271	3032	20.6,20.6
30	7037	7016	7022	7005	7103	7083	7123	7053	20- 30	3519	6551	44.5,44.5
40	4634	4706	4703	4608	4728	4811	4824	4680	30- 40	3704	10256	69.6,69.6
50	2385	2494	2418	2491	2439	2553	2446	2507	40- 50	2709	12965	88,88
60	806.0	838.7	832.4	881.3	832.3	865.8	803.4	874.7	50- 60	1457	14422	97.9,97.9
70	57.12	58.01	56.56	52.35	52.46	55.54	57.94	57.21	60- 70	265.7	14688	99.7,99.7
80	18.00	17.83	17.03	15.29	15.65	17.00	18.51	18.28	70- 80	35.31	14723	99.9,99.9
90	0	0	0	0	0	0	0	0	80- 90	7.663	14731	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): 11772 lm

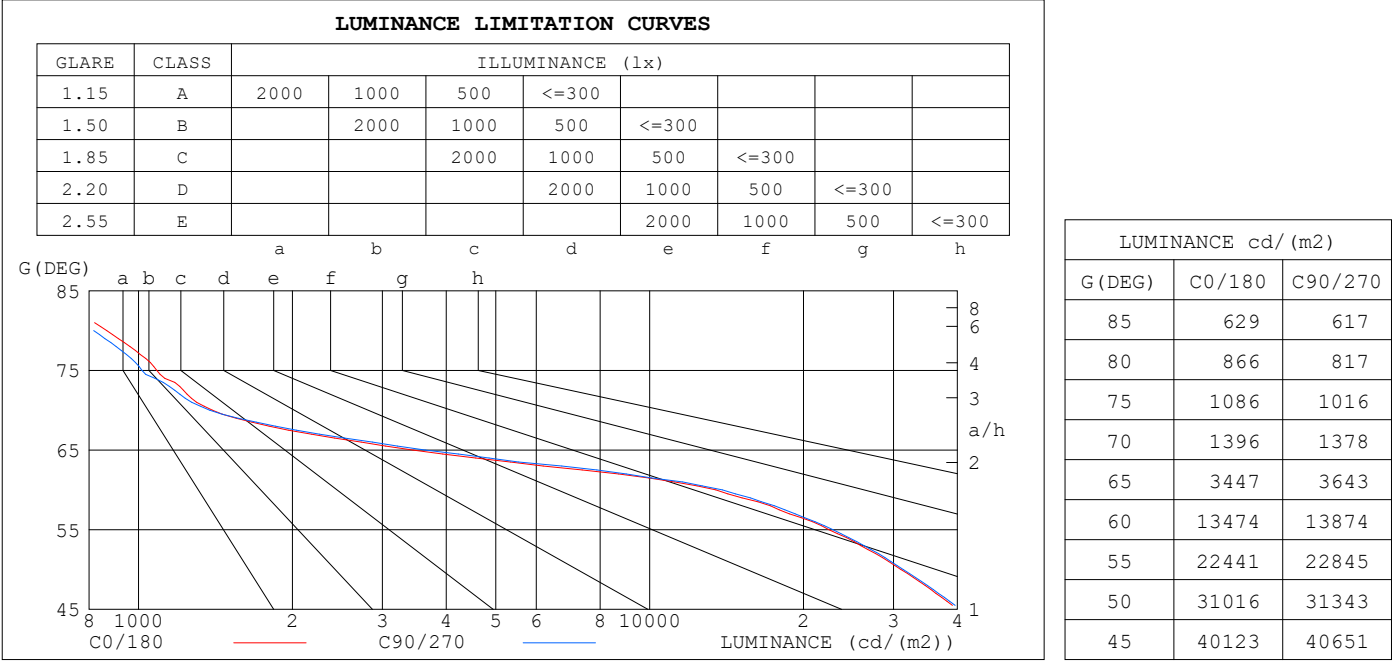
%lum = 79.9%
%lamp = 79.9%

Conical surface Flux(120deg): 14422 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



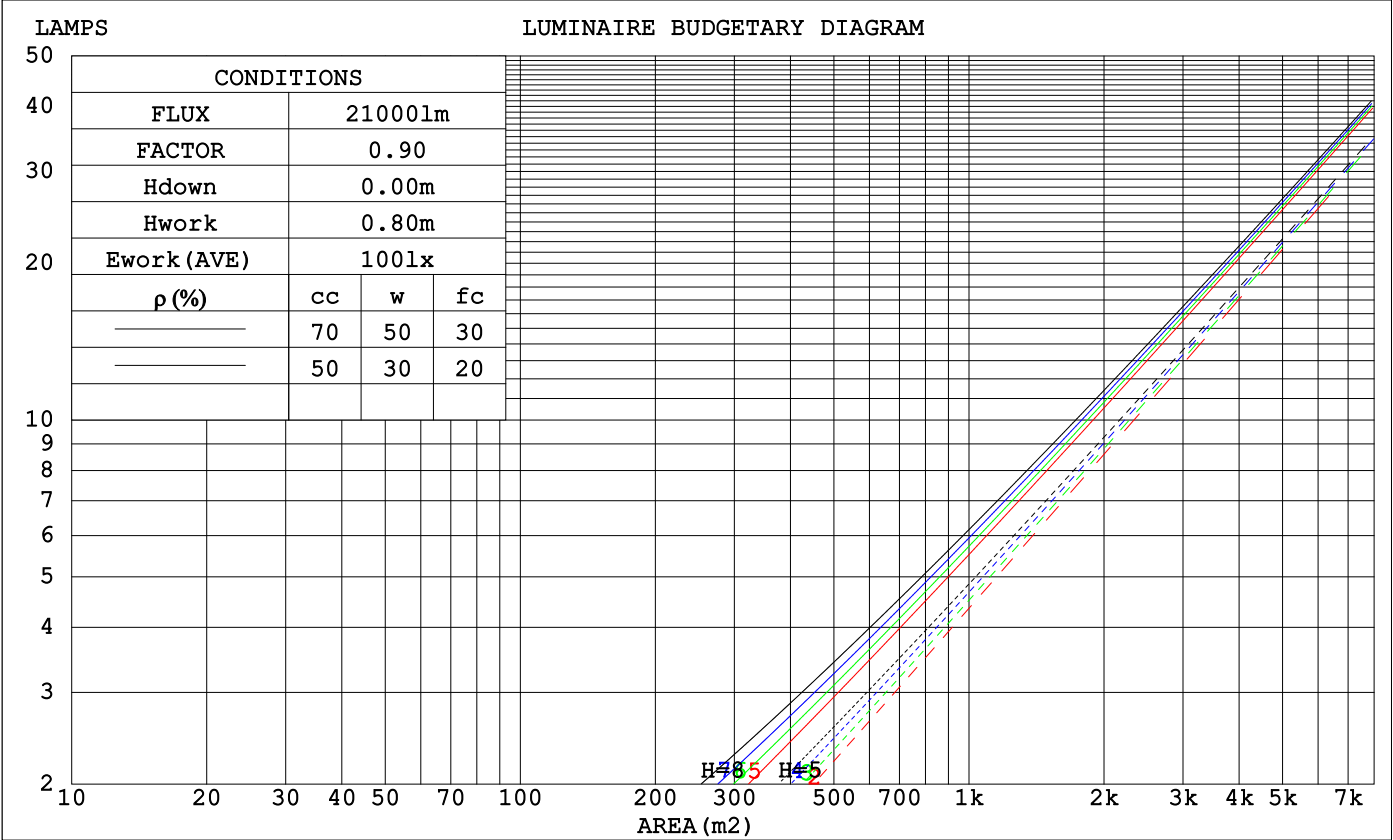
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:ZZX
Test Date:2024-06-14

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		20.3	21.6	20.7	21.9	22.2	20.5	21.8	20.8	22.1	22.4	
	3H	20.2	21.3	20.6	21.6	22.0	20.3	21.5	20.7	21.8	22.2	
	4H	20.1	21.2	20.5	21.5	21.9	20.3	21.3	20.7	21.7	22.1	
	6H	20.0	21.0	20.4	21.4	21.8	20.2	21.2	20.6	21.5	21.9	
	8H	20.0	20.9	20.4	21.3	21.7	20.2	21.1	20.6	21.4	21.9	
	12H	19.9	20.8	20.4	21.2	21.6	20.1	21.0	20.5	21.4	21.8	
	4H	2H	20.1	21.2	20.5	21.5	21.9	20.3	21.3	20.7	21.7	22.1
		3H	20.0	20.8	20.4	21.3	21.7	20.2	21.0	20.6	21.4	21.8
		4H	19.9	20.7	20.4	21.1	21.5	20.1	20.8	20.5	21.3	21.7
		6H	19.8	20.5	20.3	20.9	21.4	20.0	20.6	20.5	21.1	21.6
		8H	19.8	20.4	20.3	20.8	21.3	19.9	20.5	20.4	21.0	21.5
		12H	19.7	20.3	20.2	20.8	21.2	19.9	20.4	20.4	20.9	21.4
	8H	4H	19.8	20.4	20.3	20.8	21.3	19.9	20.5	20.4	21.0	21.5
		6H	19.7	20.2	20.2	20.7	21.2	19.8	20.3	20.3	20.8	21.3
		8H	19.6	20.1	20.1	20.6	21.1	19.8	20.2	20.3	20.7	21.2
		12H	19.6	20.0	20.1	20.5	21.0	19.7	20.1	20.2	20.6	21.2
	12H	4H	19.7	20.3	20.2	20.7	21.2	19.9	20.4	20.4	20.9	21.4
		6H	19.6	20.1	20.2	20.5	21.1	19.8	20.2	20.3	20.7	21.2
		8H	19.6	20.0	20.1	20.5	21.0	19.7	20.1	20.2	20.6	21.2
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

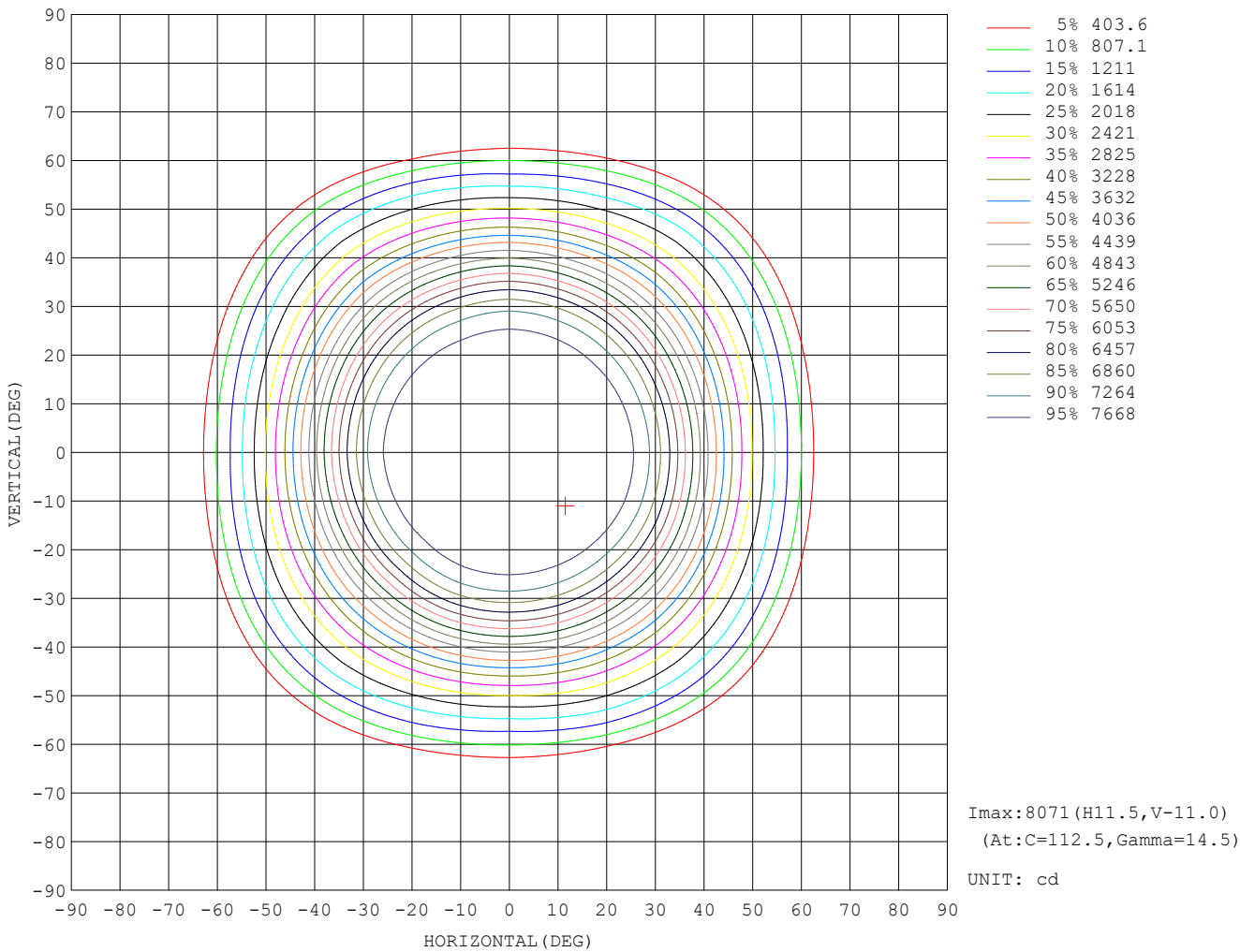
UTILIZATION FACTORS TABLE

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

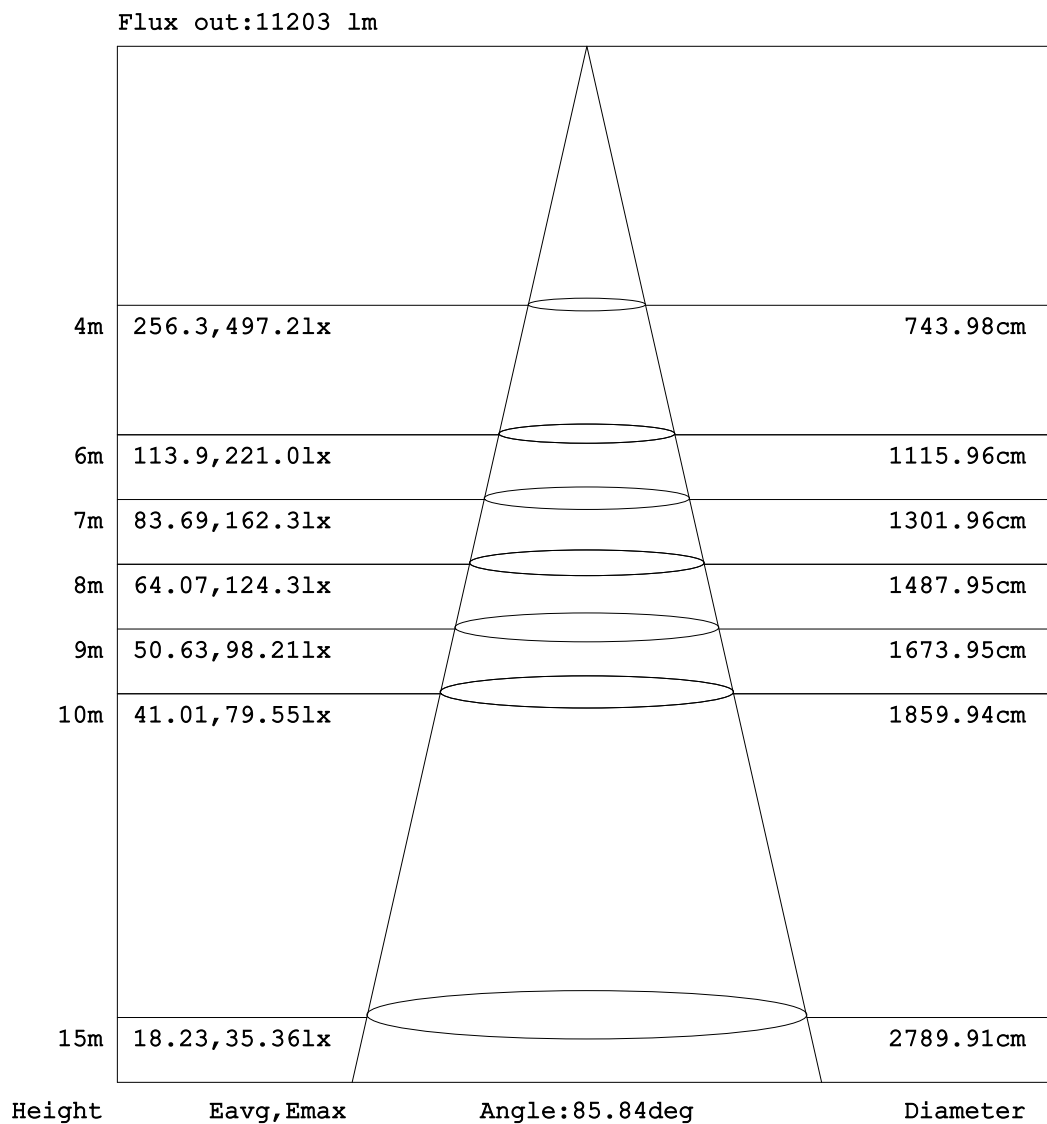
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.465
 Humidity: 65.0%
 Test Distance: 26.000m [K=0.4593]
 Remarks:

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



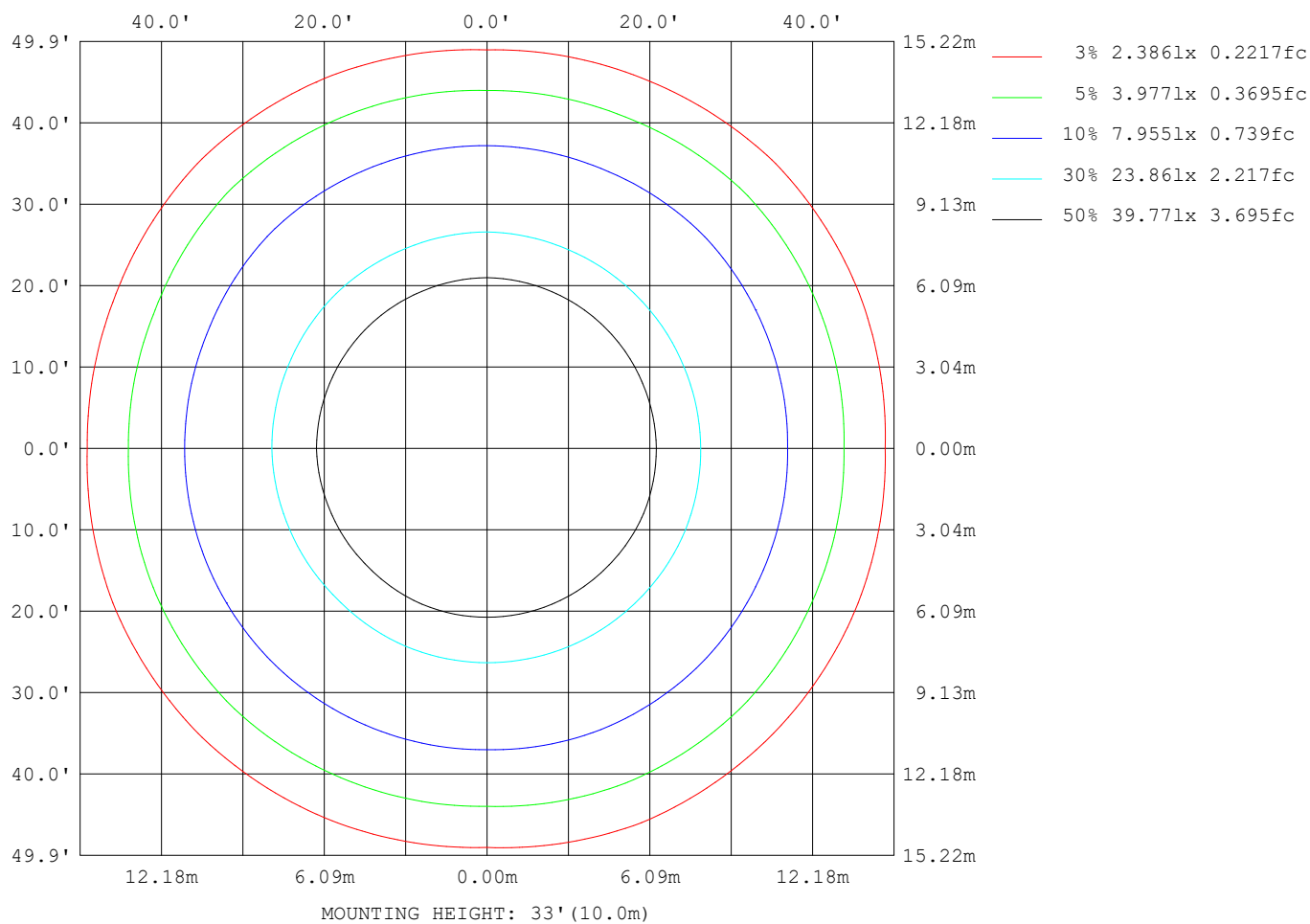
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

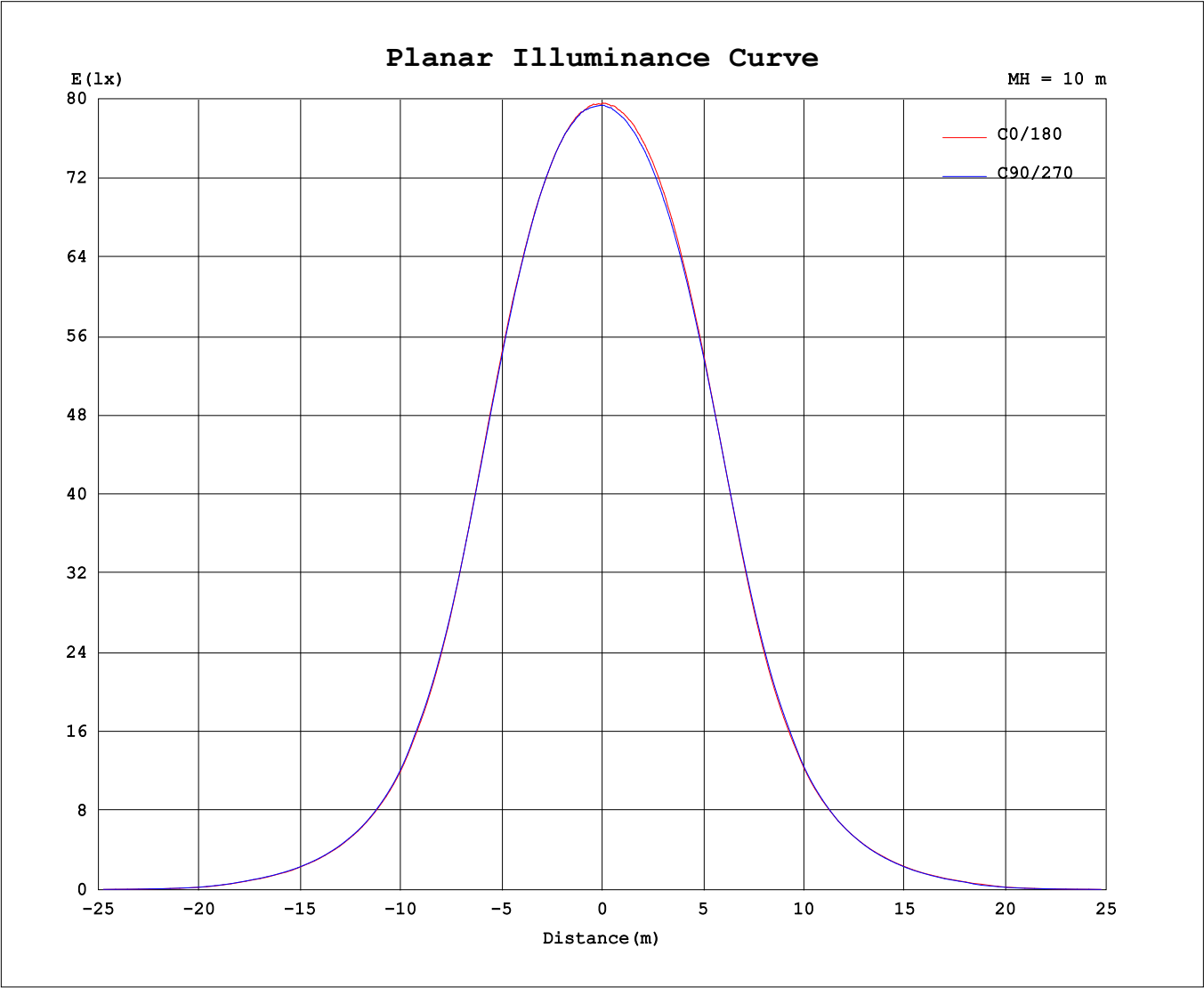
ISOLUX DIAGRAM



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

```

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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