

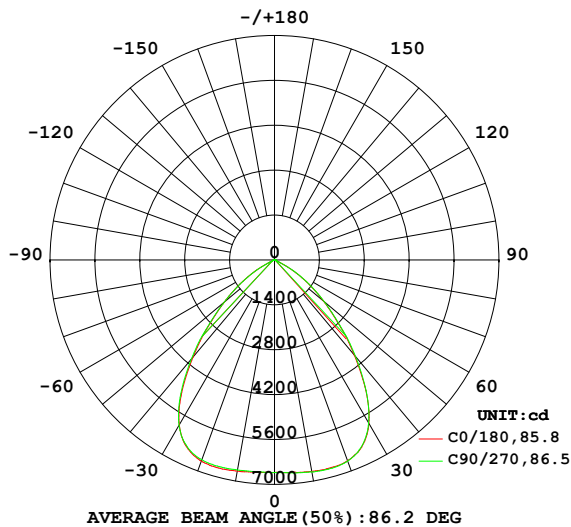
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

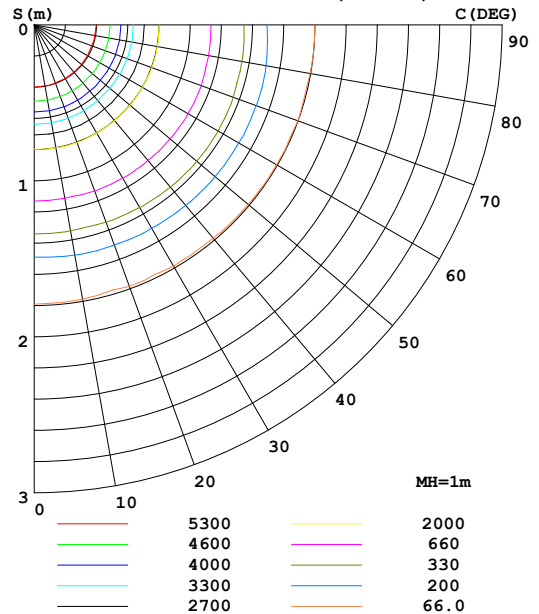
Test:U:230.1V I:0.521A P:120.0W PF:0.972 Freq:50.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:12315.1x1 lm		
NAME: P301-B3K (120W with Aluminium reflector)	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 102.62 lm/W			
MODEL	/	Imax (cd)	6751	S/MH (C0/180)	1.22
NOMINAL POWER (W)	/	LOR (%)	100.0	S/MH (C90/270)	1.23
RATED VOLTAGE (V)	/	TOTAL FLUX (lm)	12315	η UP, DN (C0-180)	0.0, 49.9
NOMINAL FLUX (lm)	12315.1	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: 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	6697	6709	6713	6714	6683	6657	6651	6675	0- 10	636.0	636.0	5.16,5.16
20	6660	6669	6675	6667	6676	6628	6630	6645	10- 20	1899	2535	20.6,20.6
30	5883	5866	5870	5856	5938	5921	5955	5896	20- 30	2942	5477	44.5,44.5
40	3874	3934	3932	3853	3953	4022	4033	3912	30- 40	3097	8574	69.6,69.6
50	1994	2085	2021	2083	2039	2134	2045	2096	40- 50	2265	10839	88,88
60	673.8	701.2	695.9	736.8	695.8	723.8	671.7	731.3	50- 60	1218	12057	97.9,97.9
70	47.75	48.50	47.28	43.76	43.86	46.43	48.44	47.83	60- 70	222.1	12279	99.7,99.7
80	15.05	14.91	14.23	12.79	13.08	14.21	15.48	15.28	70- 80	29.52	12309	99.9,99.9
90	0	0	0	0	0	0	0	0	80- 90	6.406	12315	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): 9841.5 lm

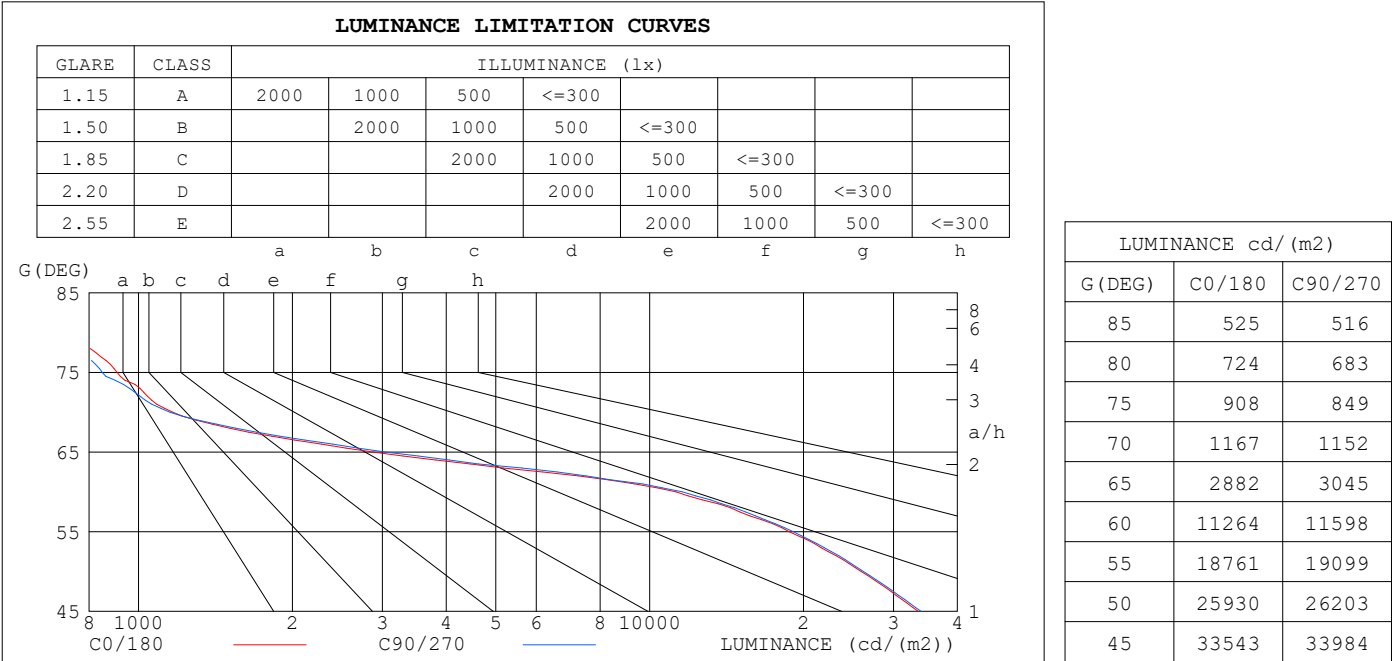
%lum = 79.9%
%lamp = 79.9%

Conical surface Flux(120deg): 12057 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

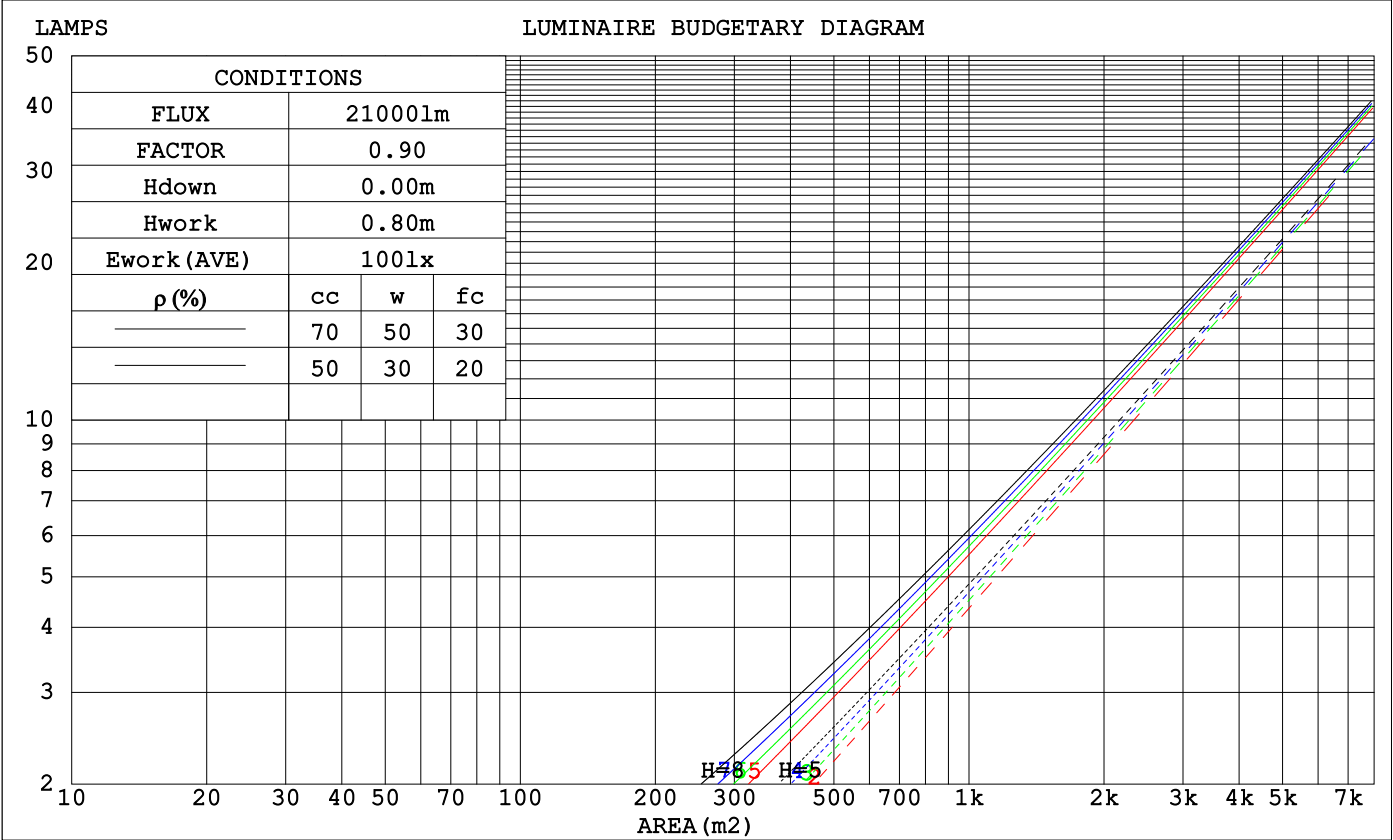


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:ZZX
Test Date:2024-06-14

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:

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	19.7	21.0	20.0	21.3	21.6	19.8	21.1	20.2	21.4	21.8
3H	19.6	20.7	19.9	21.0	21.4	19.7	20.9	20.1	21.2	21.5
4H	19.5	20.5	19.9	20.9	21.3	19.7	20.7	20.1	21.1	21.4
6H	19.4	20.4	19.8	20.7	21.1	19.6	20.5	20.0	20.9	21.3
8H	19.4	20.3	19.8	20.7	21.1	19.5	20.4	20.0	20.8	21.2
12H	19.3	20.2	19.8	20.6	21.0	19.5	20.4	19.9	20.7	21.2
4H 2H	19.5	20.5	19.9	20.9	21.3	19.7	20.7	20.1	21.1	21.4
3H	19.4	20.2	19.8	20.6	21.0	19.5	20.4	20.0	20.8	21.2
4H	19.3	20.0	19.7	20.5	20.9	19.5	20.2	19.9	20.6	21.1
6H	19.2	19.9	19.7	20.3	20.8	19.4	20.0	19.8	20.5	20.9
8H	19.2	19.8	19.6	20.2	20.7	19.3	19.9	19.8	20.4	20.8
12H	19.1	19.6	19.6	20.1	20.6	19.3	19.8	19.8	20.3	20.8
8H 4H	19.2	19.8	19.6	20.2	20.7	19.3	19.9	19.8	20.4	20.8
6H	19.1	19.6	19.6	20.0	20.5	19.2	19.7	19.7	20.2	20.7
8H	19.0	19.4	19.5	20.0	20.4	19.2	19.6	19.7	20.1	20.6
12H	18.9	19.3	19.5	19.8	20.4	19.1	19.5	19.6	20.0	20.6
12H 4H	19.1	19.6	19.6	20.1	20.6	19.3	19.8	19.8	20.3	20.8
6H	19.0	19.4	19.5	19.9	20.5	19.2	19.6	19.7	20.1	20.6
8H	18.9	19.3	19.5	19.8	20.4	19.1	19.5	19.6	20.0	20.6
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

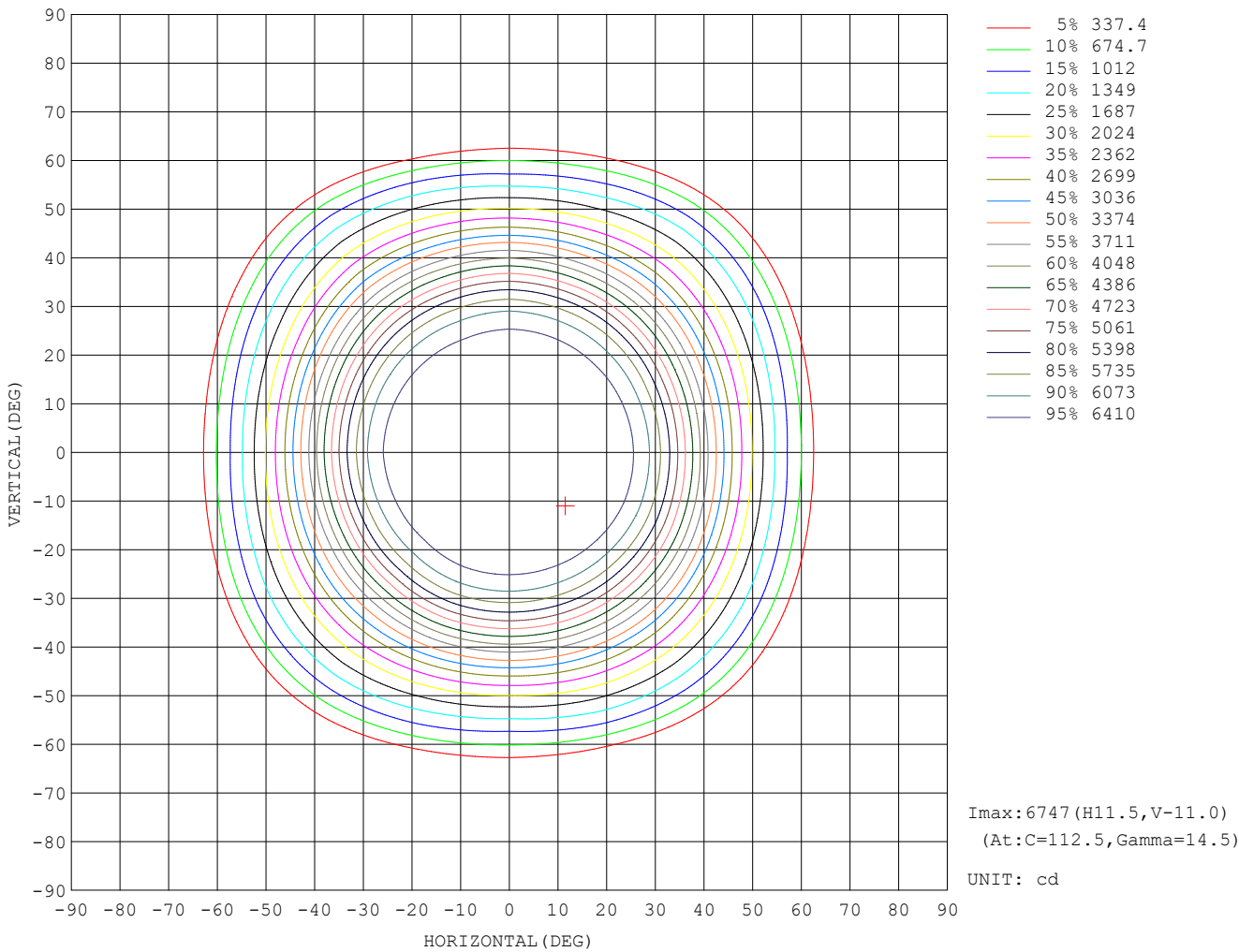
UTILIZATION FACTORS TABLE

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

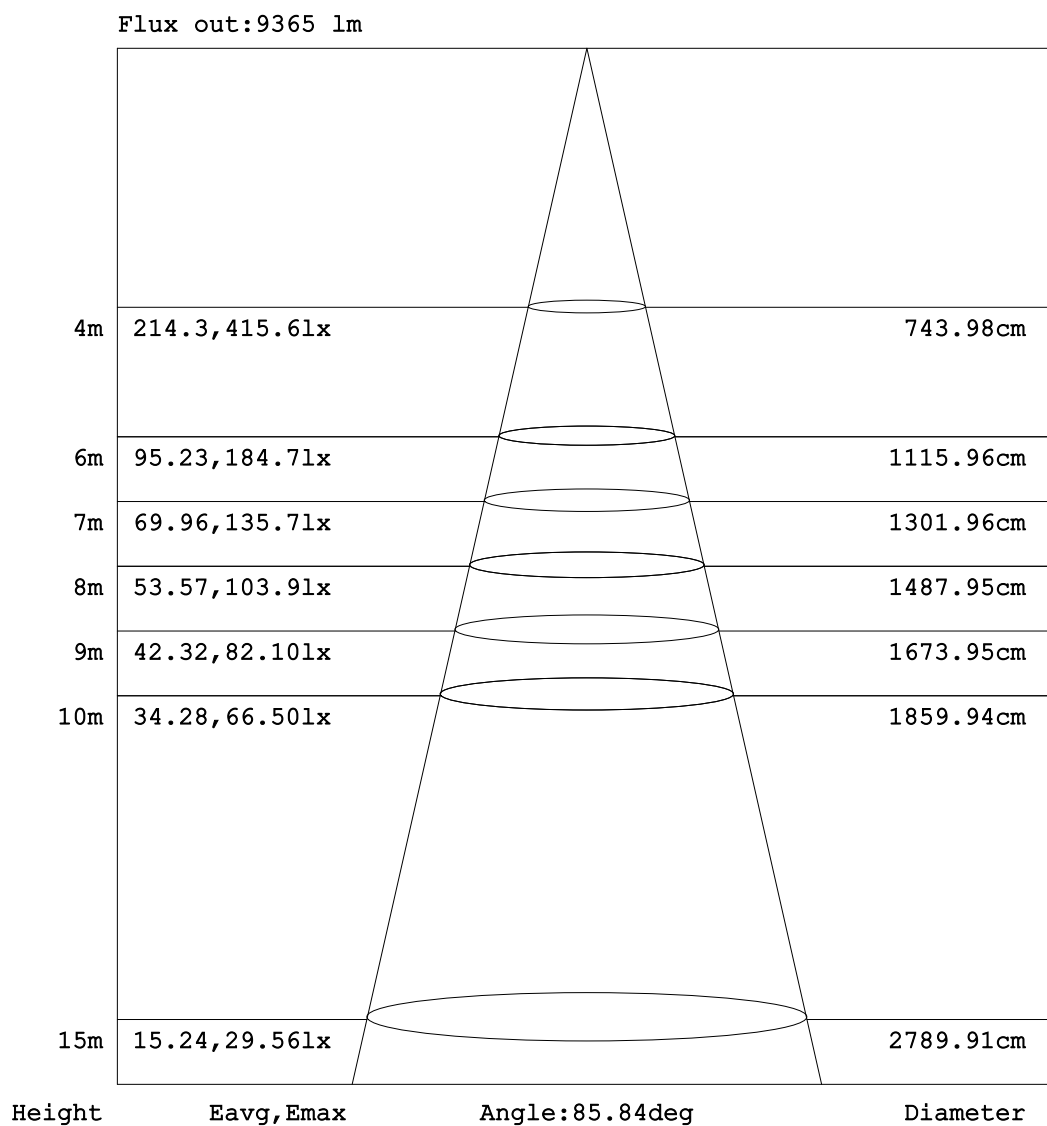
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.465
 Humidity: 65.0%
 Test Distance: 26.000m [K=0.4593]
 Remarks:

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

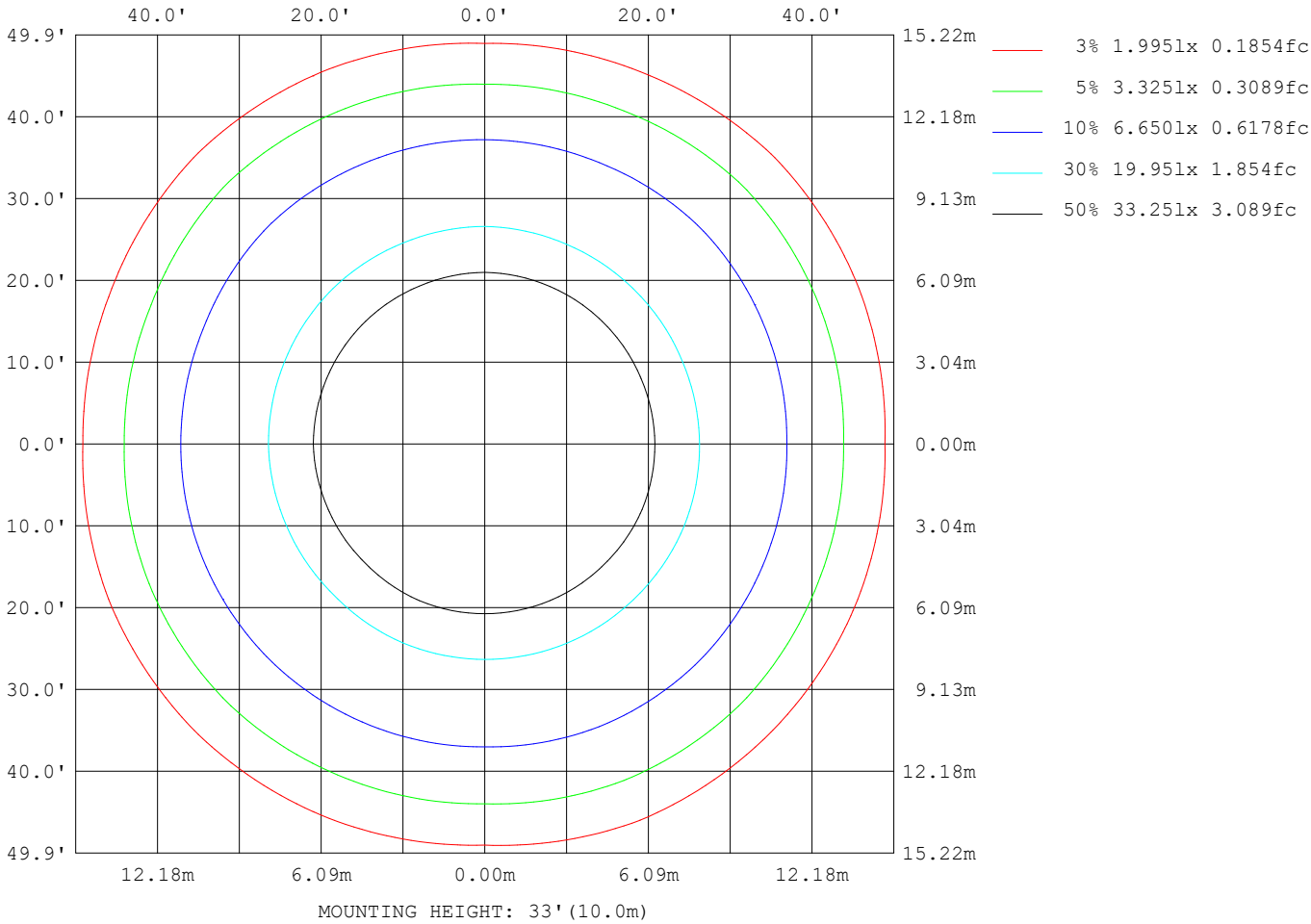


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:

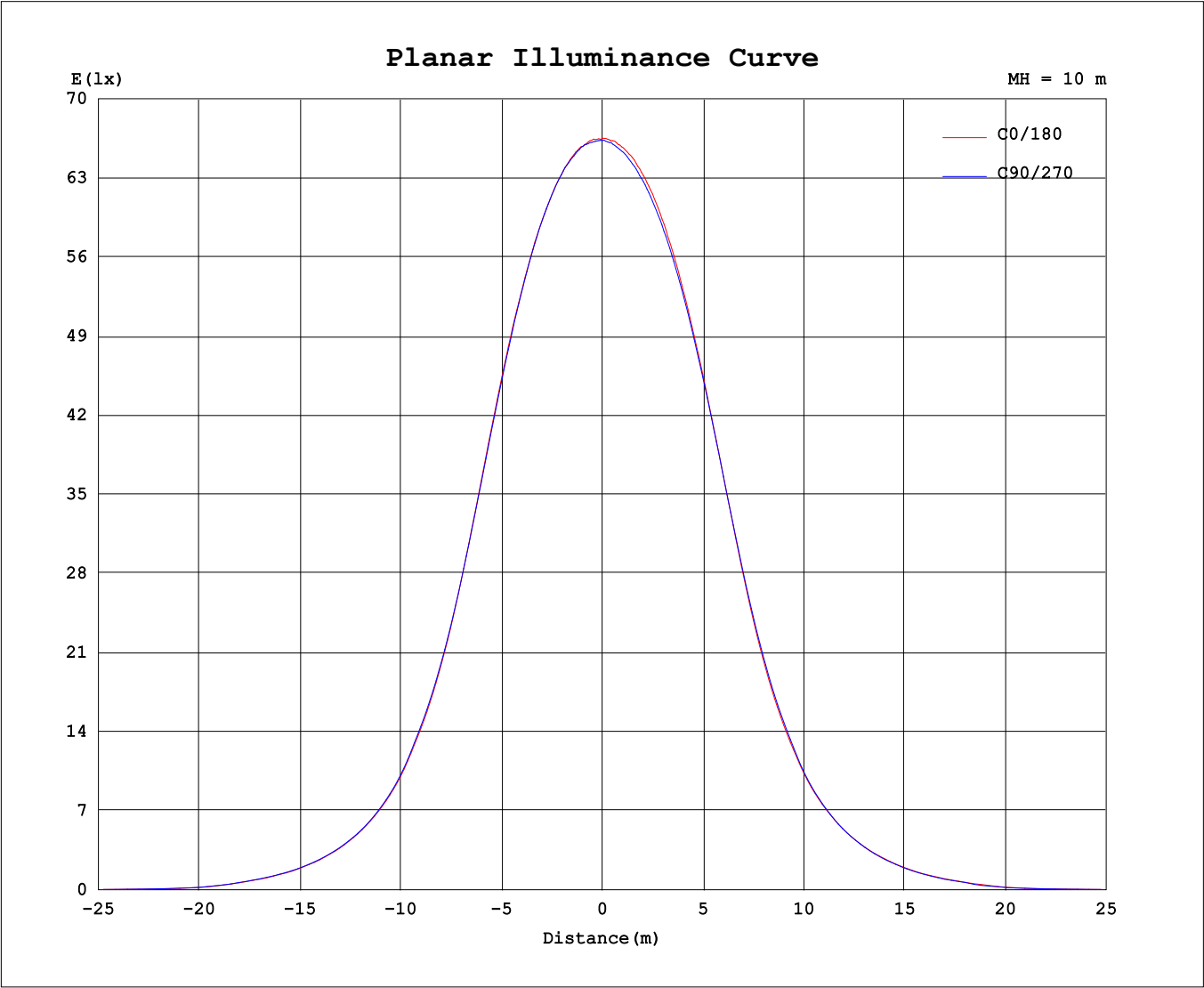
ISOLUX DIAGRAM



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

UNIT: cd

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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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