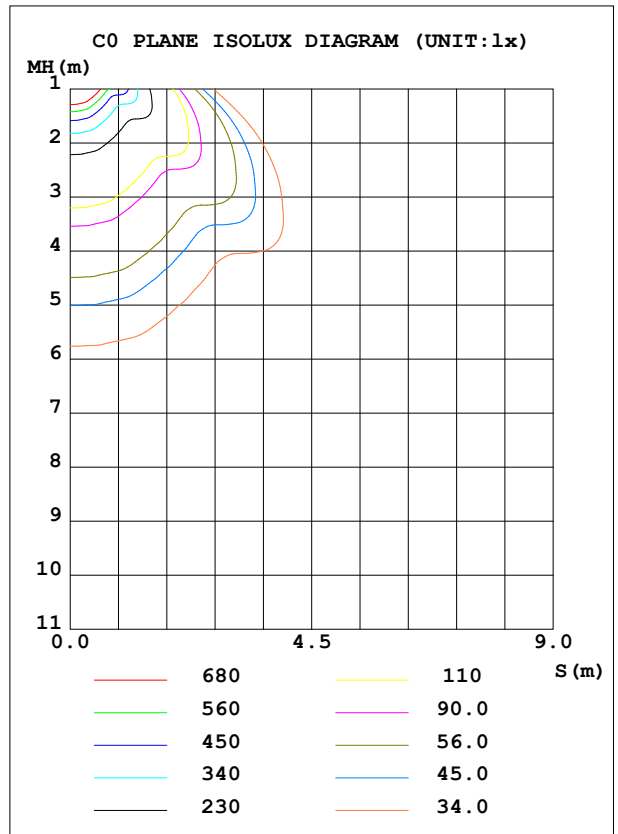
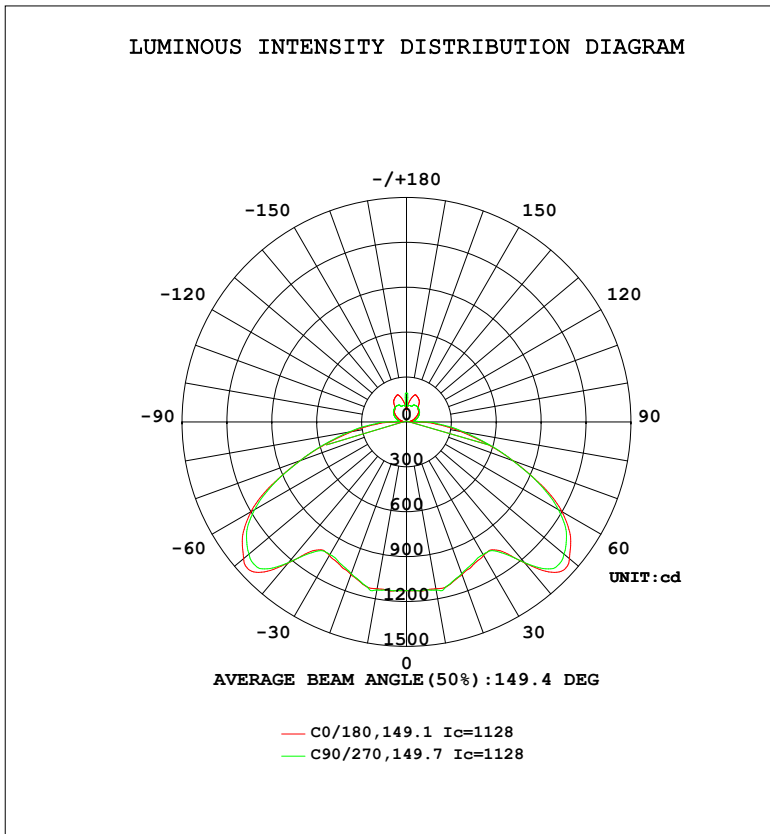


EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.0V I:0.335A P:40.0W PF:0.994 Freq:50.00Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:6125.62x1 lm		
NAME: CP10-040-5070-A00C09	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 153.14 lm/W			
MODEL	/	I <sub>max</sub> (cd)	1445	S/MH (C0/180)	1.45
NOMINAL POWER (W)	/	LOR (%)	100.0	S/MH (C90/270)	1.52
RATED VOLTAGE (V)	/	TOTAL FLUX (lm)	6125.6	η UP, DN (C0-180)	4.4, 45.6
NOMINAL FLUX (lm)	6125.62	CIE CLASS	DIRECT	η UP, DN (C180-360)	4.4, 45.6
LAMPS INSIDE	1	η up (%)	8.9	CIBSE SHR NOM	1.75
TEST VOLTAGE (V)	/	η down (%)	91.1	CIBSE SHR MAX	1.75



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators: ZZX  
 Test Date: 2023-08-10

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.465  
 Humidity: 65.0%  
 Test Distance: 26.000m [K=0.4559]  
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum,lamp
10	1132	1142	1140	1142	1132	1142	1140	1142	0- 10	108.2	108.2	1.77,1.77
20	1086	1082	1080	1082	1086	1082	1080	1082	10- 20	315.0	423.2	6.91,6.91
30	1030	1038	1024	1038	1030	1038	1024	1038	20- 30	486.4	909.6	14.8,14.8
40	1230	1228	1227	1228	1230	1228	1227	1228	30- 40	679.9	1589	25.9,25.9
50	1421	1343	1374	1343	1421	1343	1374	1343	40- 50	1049	2638	43.1,43.1
60	1200	1123	1172	1123	1200	1123	1172	1123	50- 60	1144	3782	61.7,61.7
70	758.5	742.8	755.1	742.8	758.5	742.8	755.1	742.8	60- 70	945.4	4728	77.2,77.2
80	368.5	385.6	390.5	385.6	368.5	385.6	390.5	385.6	70- 80	587.7	5316	86.8,86.8
90	97.43	115.4	108.3	115.4	97.43	115.4	108.3	115.4	80- 90	266.7	5582	91.1,91.1
100	25.73	42.98	55.32	42.98	25.73	42.98	55.32	42.98	90-100	58.73	5641	92.1,92.1
110	53.90	63.99	77.44	63.99	53.90	63.99	77.44	63.99	100-110	56.58	5698	93,93
120	81.34	82.56	97.88	82.56	81.34	82.56	97.88	82.56	110-120	74.69	5772	94.2,94.2
130	105.7	96.65	113.2	96.65	105.7	96.65	113.2	96.65	120-130	81.90	5854	95.6,95.6
140	119.7	106.6	121.8	106.6	119.7	106.6	121.8	106.6	130-140	82.74	5937	96.9,96.9
150	168.6	113.4	125.6	113.4	168.6	113.4	125.6	113.4	140-150	76.82	6014	98.2,98.2
160	189.7	118.6	113.1	118.6	189.7	118.6	113.1	118.6	150-160	62.27	6076	99.2,99.2
170	151.6	117.8	112.0	117.8	151.6	117.8	112.0	117.8	160-170	38.37	6114	99.8,99.8
180	77.60	154.2	191.9	154.2	77.60	154.2	191.9	154.2	170-180	11.31	6126	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 2077.1 lm

%lum = 33.9%

%lamp = 33.9%

Conical surface Flux(120deg): 3782.5 lm

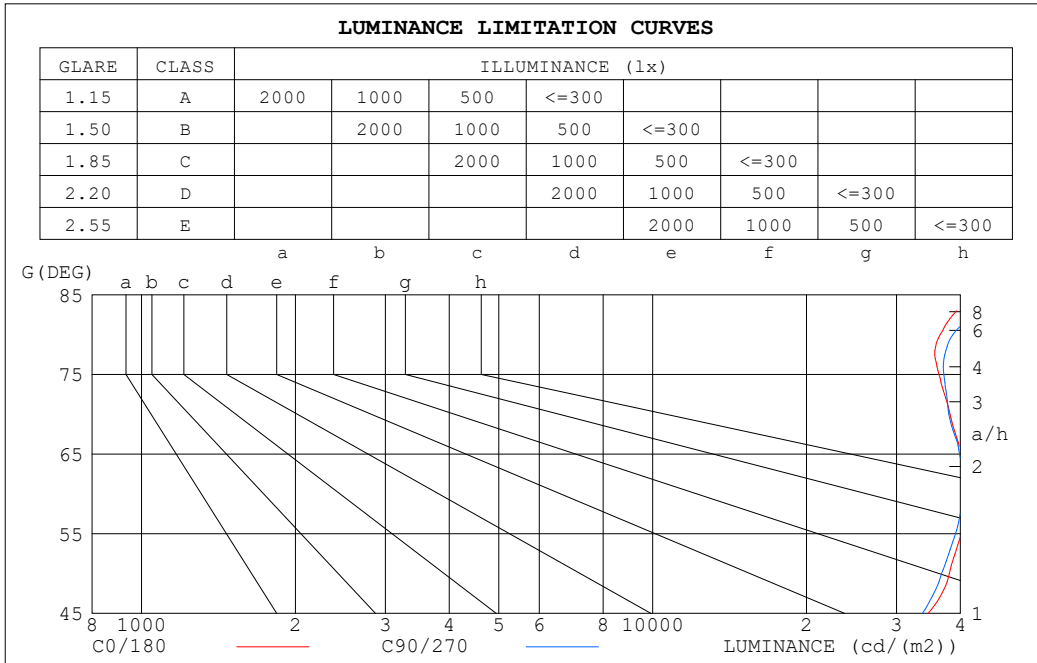
%lum = 61.7%

%lamp = 61.7%

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:ZZX  
 Test Date:2023-08-10

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.465  
 Humidity:65.0%  
 Test Distance:26.000m [K=0.4559]  
 Remarks:

LUMINANCE LIMITATION CURVES



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	43215	49250
80	36526	38683
75	36324	37129
70	38175	37975
65	40394	39852
60	41304	40308
55	40168	39121
50	38066	36763
45	34581	33709

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators: ZZK  
 Test Date: 2023-08-10

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.465  
 Humidity: 65.0%  
 Test Distance: 26.000m [K=0.4559]  
 Remarks:



EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

WEC AND CCEC

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.369	.210	.066	.359	.205	.065	.340	.195	.062	.323	.187	.060	.308	.178	.057	
2.0	.335	.184	.056	.326	.180	.055	.310	.172	.053	.294	.165	.052	.280	.158	.050	
3.0	.304	.162	.048	.296	.159	.048	.281	.152	.046	.267	.146	.045	.254	.141	.044	
4.0	.277	.144	.042	.269	.141	.042	.256	.136	.041	.243	.131	.039	.231	.126	.038	
5.0	.253	.129	.037	.246	.126	.037	.234	.122	.036	.222	.117	.035	.212	.113	.034	
6.0	.232	.116	.033	.226	.114	.033	.215	.110	.032	.205	.106	.031	.195	.103	.030	
7.0	.214	.106	.030	.209	.104	.030	.199	.100	.029	.189	.097	.028	.180	.094	.028	
8.0	.199	.097	.027	.194	.095	.027	.185	.092	.026	.176	.089	.026	.168	.086	.025	
9.0	.185	.089	.025	.180	.088	.025	.172	.085	.024	.164	.082	.024	.157	.080	.023	
10.0	.173	.083	.023	.169	.082	.023	.161	.079	.022	.154	.076	.022	.147	.074	.021	

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.258	.258	.258	.221	.221	.221	.151	.151	.151	.086	.086	.086	.028	.028	.028	
1.0	.253	.224	.198	.216	.192	.170	.148	.132	.118	.085	.076	.068	.027	.025	.022	
2.0	.247	.200	.161	.211	.172	.139	.145	.119	.097	.083	.069	.057	.027	.022	.019	
3.0	.240	.184	.138	.206	.158	.120	.141	.110	.084	.082	.064	.050	.026	.021	.016	
4.0	.233	.171	.124	.200	.148	.107	.137	.103	.076	.079	.060	.045	.026	.020	.015	
5.0	.226	.161	.113	.194	.139	.099	.133	.097	.070	.077	.057	.041	.025	.019	.014	
6.0	.218	.153	.106	.188	.133	.092	.129	.093	.065	.075	.055	.039	.024	.018	.013	
7.0	.211	.146	.101	.182	.127	.088	.125	.089	.062	.073	.052	.037	.024	.017	.012	
8.0	.204	.141	.097	.176	.122	.085	.122	.086	.060	.071	.051	.036	.023	.017	.012	
9.0	.198	.136	.094	.170	.118	.082	.118	.083	.058	.069	.049	.035	.022	.016	.012	
10.0	.192	.132	.092	.165	.114	.080	.115	.080	.057	.067	.048	.034	.022	.016	.011	

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:ZZX  
 Test Date:2023-08-10

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.465  
 Humidity:65.0%  
 Test Distance:26.000m [K=0.4559]  
 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		25.0	26.6	25.5	27.1	27.6	25.0	26.6	25.5	27.1	27.6
	3H	27.0	28.4	27.5	28.9	29.5	27.0	28.4	27.5	28.9	29.5
	4H	27.8	29.1	28.3	29.7	30.2	27.8	29.2	28.3	29.7	30.3
	6H	28.4	29.7	28.9	30.2	30.8	28.5	29.8	29.0	30.3	30.9
	8H	28.7	29.9	29.2	30.5	31.1	28.8	30.1	29.4	30.6	31.2
	12H	29.0	30.2	29.5	30.7	31.3	29.1	30.3	29.7	30.9	31.5
	4H 2H	25.7	27.1	26.2	27.6	28.2	25.7	27.1	26.2	27.6	28.2
	3H	27.9	29.1	28.4	29.6	30.2	27.9	29.1	28.5	29.7	30.3
	4H	28.8	29.9	29.4	30.5	31.1	28.9	30.0	29.4	30.5	31.2
	6H	29.7	30.6	30.2	31.2	31.8	29.7	30.7	30.3	31.3	31.9
	8H	30.0	30.9	30.6	31.5	32.2	30.2	31.1	30.7	31.6	32.3
	12H	30.4	31.2	31.0	31.8	32.5	30.6	31.4	31.2	32.0	32.7
	8H 4H	29.2	30.1	29.8	30.7	31.4	29.3	30.2	29.9	30.8	31.4
	6H	30.2	31.0	30.9	31.6	32.3	30.3	31.1	30.9	31.7	32.4
	8H	30.7	31.4	31.4	32.1	32.7	30.9	31.5	31.5	32.2	32.9
	12H	31.2	31.8	31.8	32.5	33.2	31.4	32.0	32.0	32.7	33.4
	12H 4H	29.3	30.1	29.9	30.7	31.4	29.3	30.2	30.0	30.8	31.4
	6H	30.4	31.1	31.0	31.7	32.4	30.5	31.1	31.1	31.8	32.5
	8H	30.9	31.5	31.6	32.2	32.9	31.1	31.7	31.7	32.3	33.0
CIE190: 2010											

CIE190: 2010  
 Area: 0.0581 m2

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:ZZX  
 Test Date:2023-08-10

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.465  
 Humidity:65.0%  
 Test Distance:26.000m [K=0.4559]  
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

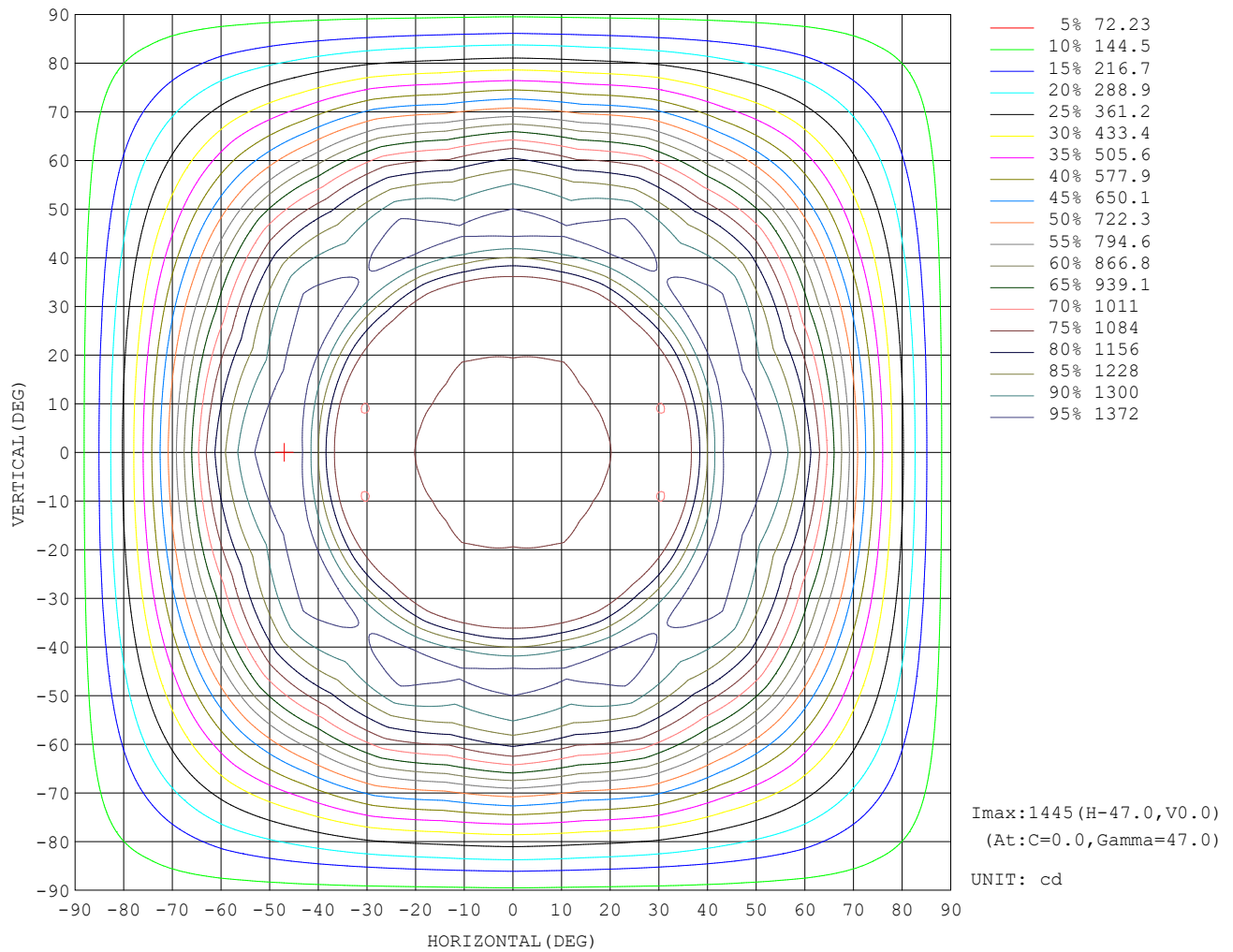
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	46	33	25	45	33	25	43	32	25	17
0.80	57	43	35	55	42	34	52	41	33	25
1.00	65	52	44	64	51	43	60	53	42	33
1.25	73	61	52	71	59	51	67	57	50	40
1.50	79	67	58	76	65	58	72	63	56	46
2.00	87	76	68	84	75	67	79	71	65	54
2.50	92	82	75	89	80	73	83	76	70	59
3.00	96	87	80	93	85	79	87	81	75	64
4.00	100	93	87	97	91	85	91	86	81	69
5.00	103	97	92	100	95	90	94	89	85	73
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: ZZX  
 Test Date: 2023-08-10

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.465  
 Humidity: 65.0%  
 Test Distance: 26.000m [K=0.4559]  
 Remarks:

ISOCANDELA DIAGRAM

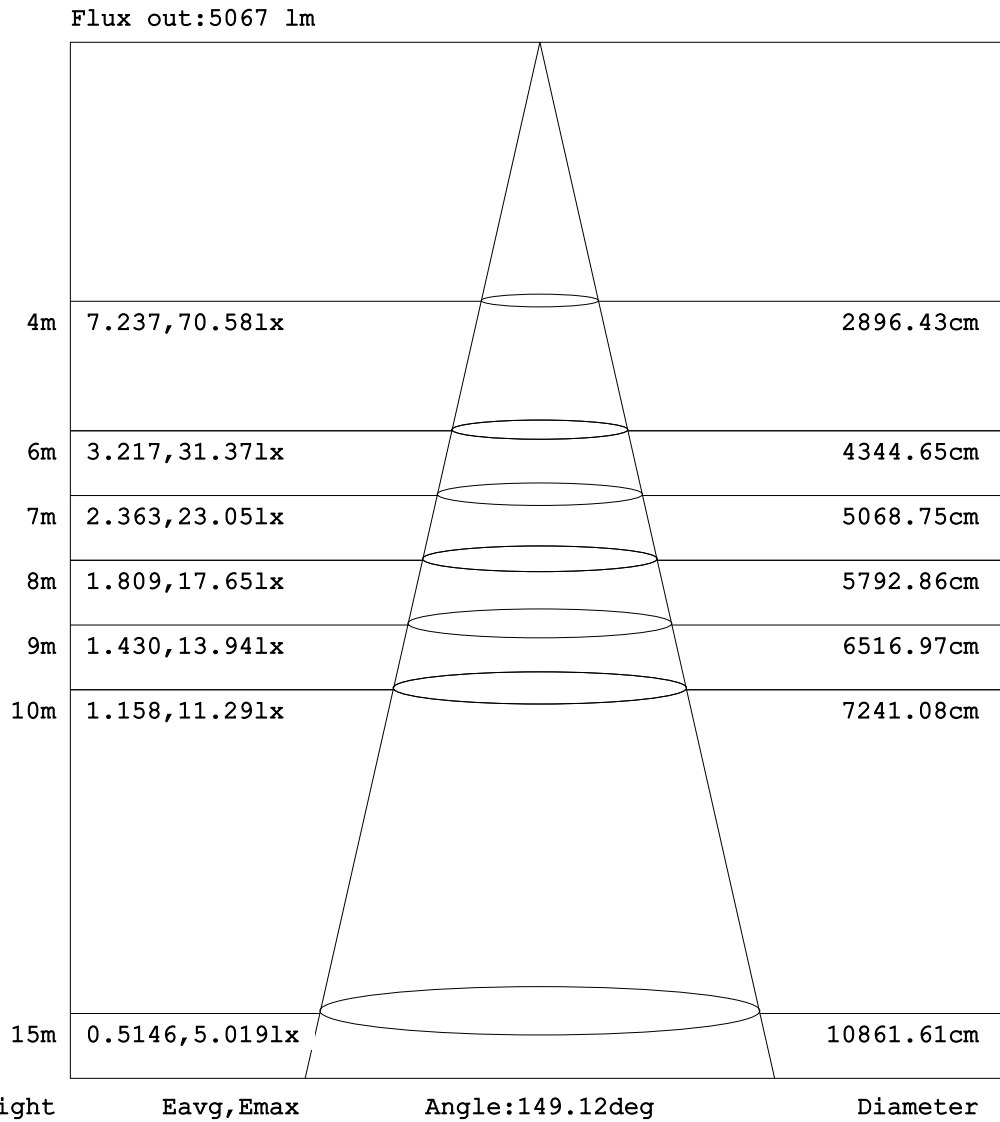


C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:ZZX  
 Test Date:2023-08-10

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.465  
 Humidity:65.0%  
 Test Distance:26.000m [K=0.4559]  
 Remarks:



AAI Figure

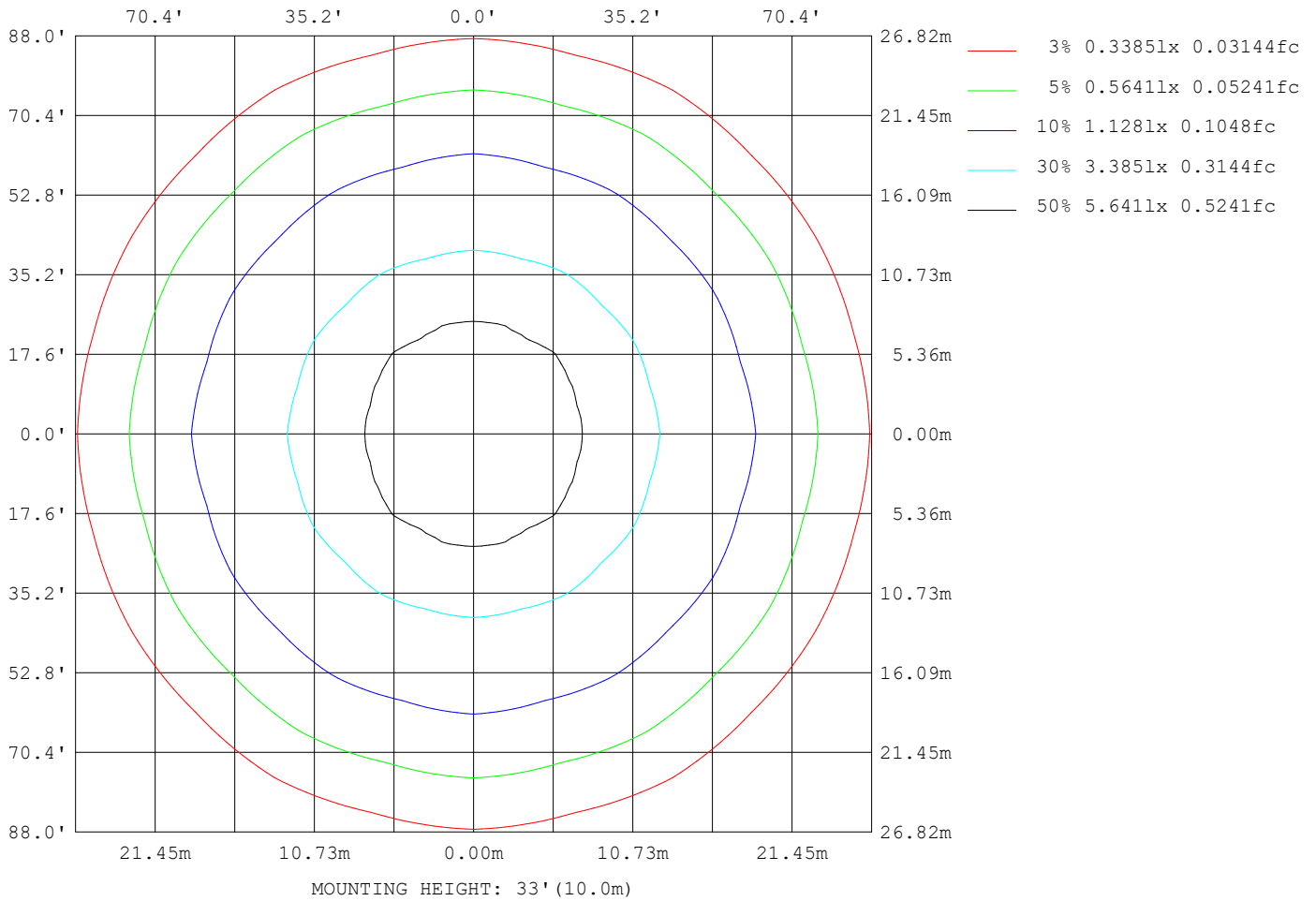


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:ZZX  
 Test Date:2023-08-10

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.465  
 Humidity:65.0%  
 Test Distance:26.000m [K=0.4559]  
 Remarks:

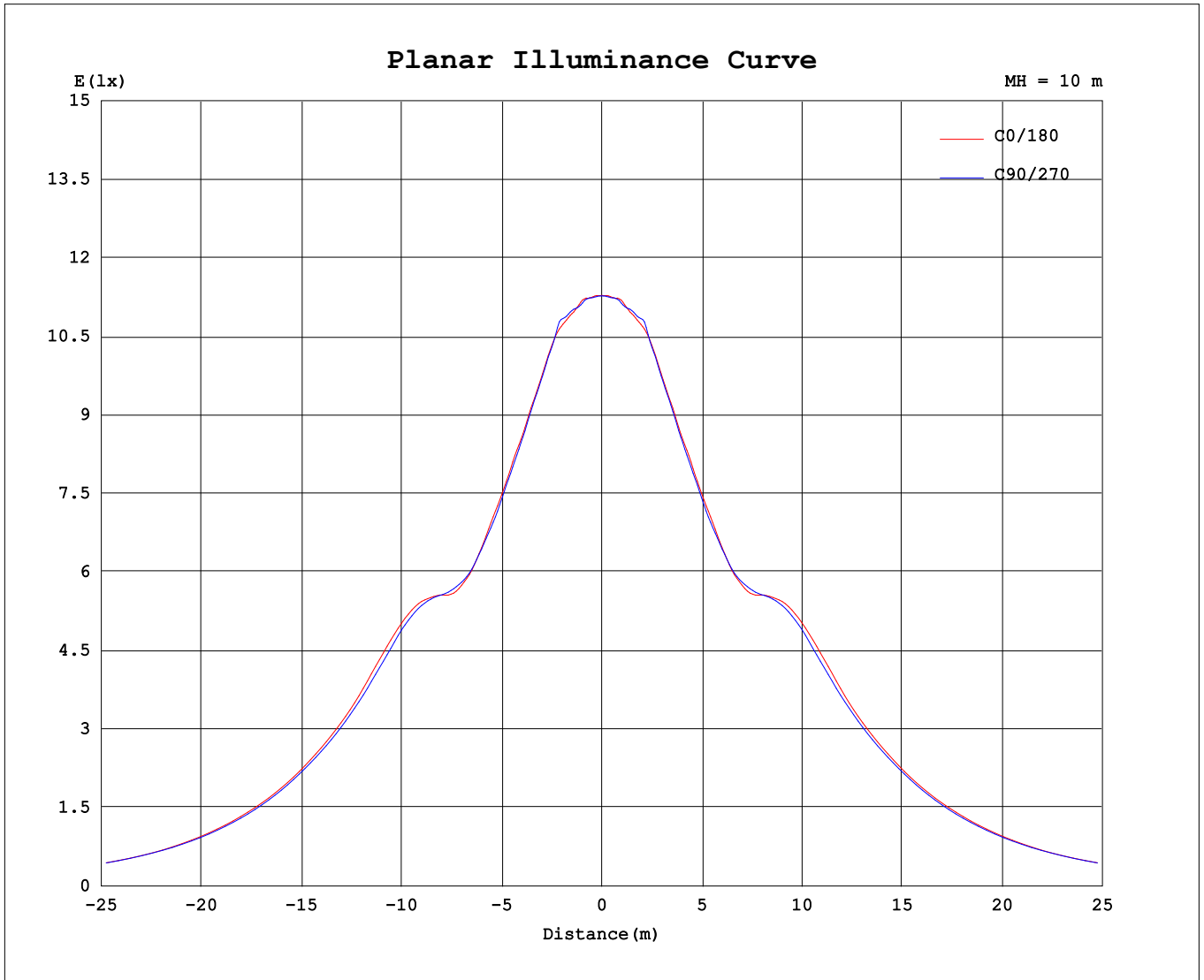
ISOLUX DIAGRAM



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators: ZZX  
 Test Date: 2023-08-10

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.465  
 Humidity: 65.0%  
 Test Distance: 26.000m [K=0.4559]  
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators: ZZX  
Test Date: 2023-08-10

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.465  
Humidity: 65.0%  
Test Distance: 26.000m [K=0.4559]  
Remarks: