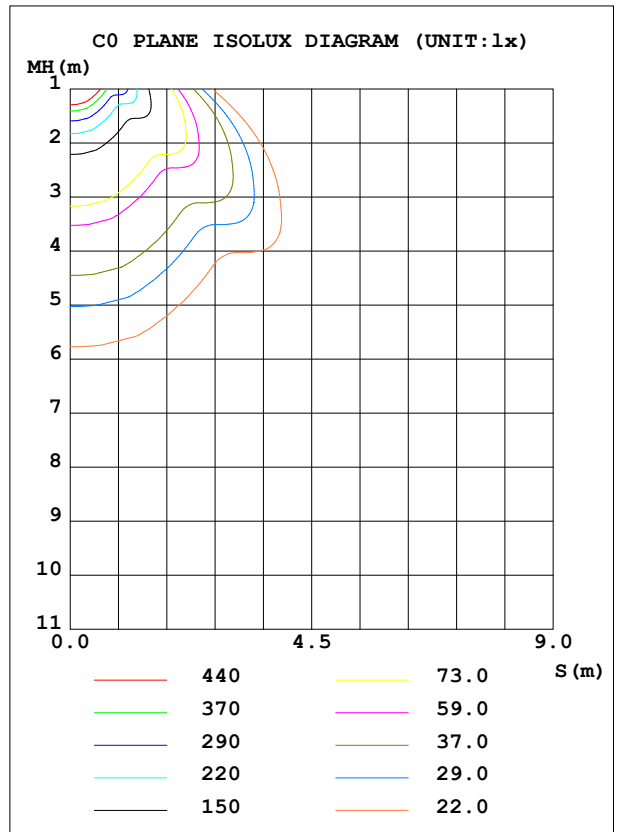
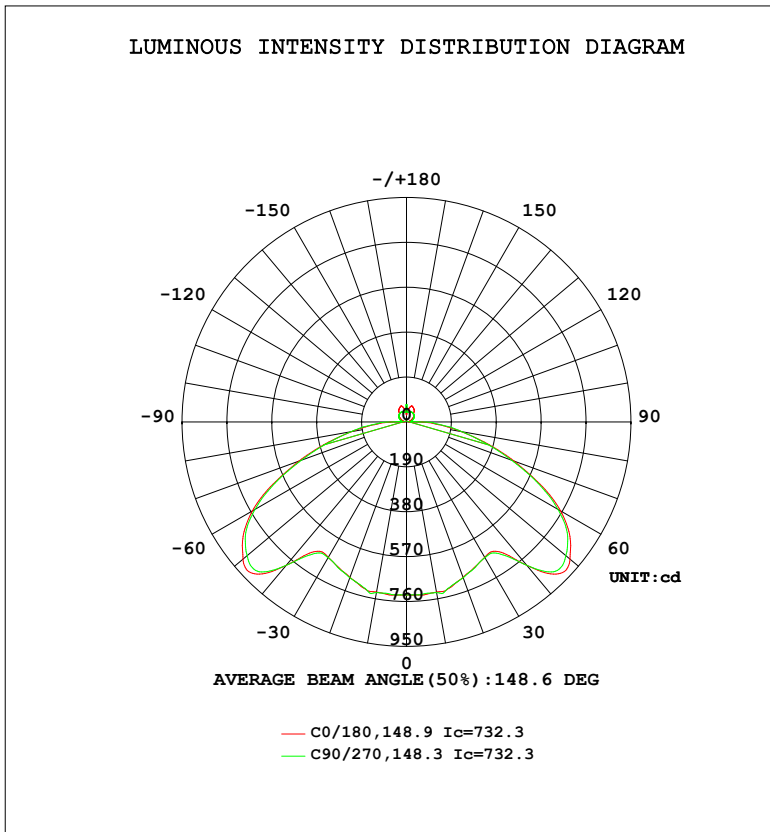


EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.0V I:0.202A P:24.0W PF:0.992 Freq:50.00Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:3816.65x1 lm		
NAME: CP10-025-4070-A00C09	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 159.03 lm/W			
MODEL	/	I <sub>max</sub> (cd)	929.7	S/MH (C0/180)	1.42
NOMINAL POWER (W)	/	LOR (%)	100.0	S/MH (C90/270)	1.48
RATED VOLTAGE (V)	/	TOTAL FLUX (lm)	3816.7	η UP, DN (C0-180)	2.8,47.2
NOMINAL FLUX (lm)	3816.65	CIE CLASS	DIRECT	η UP, DN (C180-360)	2.8,47.2
LAMPS INSIDE	1	η up (%)	5.6	CIBSE SHR NOM	2.00
TEST VOLTAGE (V)	/	η down (%)	94.4	CIBSE SHR MAX	2.00



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	731.2	737.8	733.4	737.8	731.2	737.8	733.4	737.8	0- 10	70.03	70.03	1.83,1.83
20	699.9	700.3	701.4	700.3	699.9	700.3	701.4	700.3	10- 20	203.4	273.5	7.17,7.17
30	661.7	667.1	663.7	667.1	661.7	667.1	663.7	667.1	20- 30	314.8	588.3	15.4,15.4
40	791.9	789.7	792.1	789.7	791.9	789.7	792.1	789.7	30- 40	439.2	1027	26.9,26.9
50	903.3	895.8	880.6	895.8	903.3	895.8	880.6	895.8	40- 50	681.7	1709	44.8,44.8
60	753.0	744.0	740.0	744.0	753.0	744.0	740.0	744.0	50- 60	746.4	2456	64.3,64.3
70	483.7	481.1	473.2	481.1	483.7	481.1	473.2	481.1	60- 70	610.0	3066	80.3,80.3
80	235.8	249.3	238.6	249.3	235.8	249.3	238.6	249.3	70- 80	373.1	3439	90.1,90.1
90	60.74	67.45	59.52	67.45	60.74	67.45	59.52	67.45	80- 90	166.0	3605	94.4,94.4
100	10.11	16.42	20.96	16.42	10.11	16.42	20.96	16.42	90-100	28.64	3633	95.2,95.2
110	20.62	24.32	29.27	24.32	20.62	24.32	29.27	24.32	100-110	21.57	3655	95.8,95.8
120	30.94	31.27	36.93	31.27	30.94	31.27	36.93	31.27	110-120	28.35	3683	96.5,96.5
130	39.75	36.43	42.66	36.43	39.75	36.43	42.66	36.43	120-130	31.00	3714	97.3,97.3
140	46.54	40.17	45.70	40.17	46.54	40.17	45.70	40.17	130-140	31.19	3745	98.1,98.1
150	63.19	43.10	47.09	43.10	63.19	43.10	47.09	43.10	140-150	29.07	3775	98.9,98.9
160	70.91	44.48	41.51	44.48	70.91	44.48	41.51	44.48	150-160	23.46	3798	99.5,99.5
170	57.00	44.81	42.40	44.81	57.00	44.81	42.40	44.81	160-170	14.38	3812	99.9,99.9
180	29.69	58.05	72.44	58.05	29.69	58.05	72.44	58.05	170-180	4.277	3817	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 1343.8 lm

%lum = 35.2%

%lamp = 35.2%

Conical surface Flux(120deg): 2455.6 lm

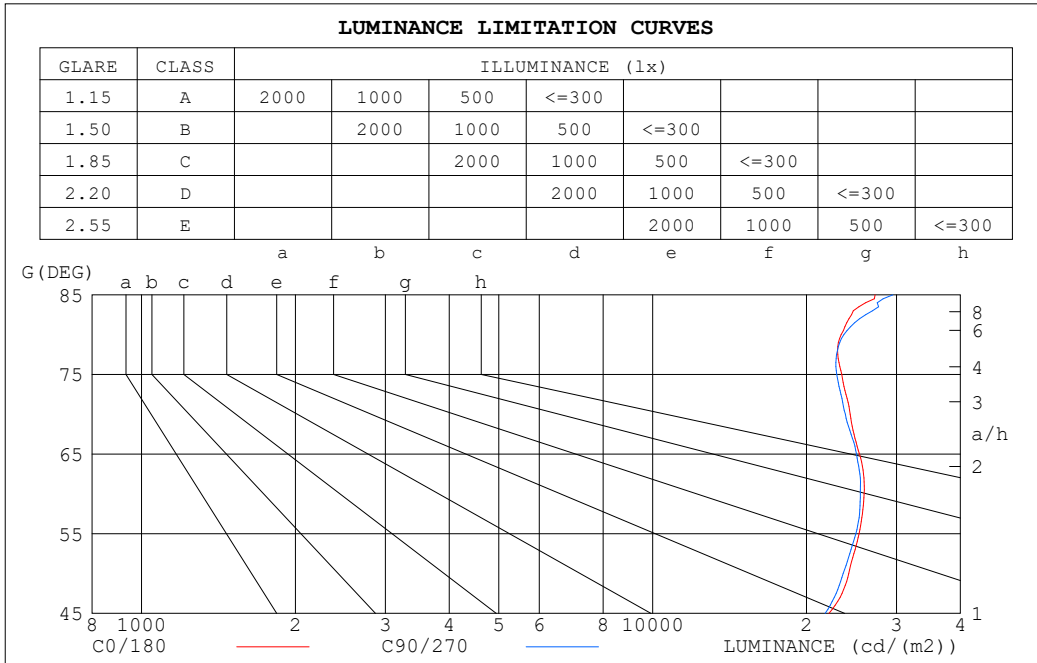
%lum = 64.3%

%lamp = 64.3%

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	27238	29513
80	23383	23664
75	23442	22920
70	24351	23828
65	25394	25052
60	25928	25488
55	25344	24984
50	24195	23594
45	22128	21755

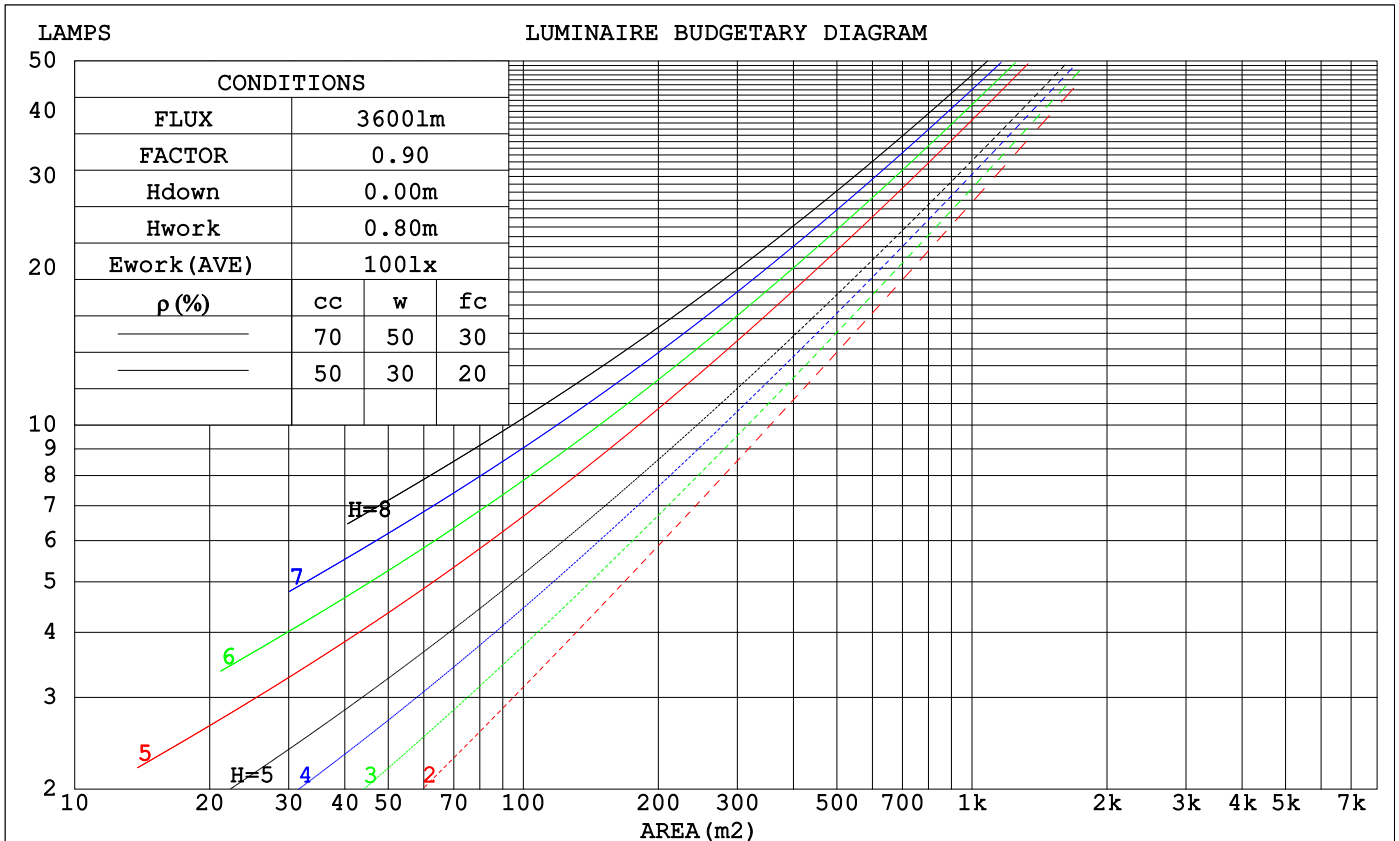
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators: ZZK  
 Test Date: 2023-08-10

$\gamma$  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

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

$\rho_{cc}$	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						Coefficients of Utilization(CU)									
0.0	1.18	1.18	1.18	1.14	1.14	1.14	1.08	1.08	1.08	1.02	1.02	1.02	.97	.97	.97	.94
1.0	.99	.94	.90	.96	.92	.88	.91	.87	.84	.86	.83	.80	.82	.79	.77	.74
2.0	.84	.76	.70	.82	.75	.68	.77	.71	.66	.73	.68	.64	.69	.65	.61	.59
3.0	.72	.63	.56	.70	.62	.55	.66	.59	.53	.63	.56	.51	.59	.54	.50	.47
4.0	.63	.53	.45	.61	.52	.45	.58	.50	.43	.55	.48	.42	.52	.46	.41	.38
5.0	.55	.45	.38	.54	.44	.37	.51	.42	.36	.48	.41	.35	.46	.39	.34	.32
6.0	.49	.39	.32	.48	.38	.31	.45	.37	.31	.43	.36	.30	.41	.34	.29	.27
7.0	.44	.34	.27	.43	.33	.27	.40	.32	.26	.38	.31	.26	.37	.30	.25	.23
8.0	.39	.30	.24	.38	.30	.24	.37	.29	.23	.35	.28	.23	.33	.27	.22	.20
9.0	.36	.27	.21	.35	.27	.21	.33	.26	.20	.32	.25	.20	.30	.24	.20	.17
10.0	.33	.24	.19	.32	.24	.18	.31	.23	.18	.29	.23	.18	.28	.22	.17	.16



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	.371	.211	.067	.362	.206	.066	.345	.198	.063	.330	.190	.061	.316	.183	.059	
2.0	.338	.185	.057	.330	.182	.056	.315	.175	.054	.301	.169	.053	.288	.163	.051	
3.0	.307	.163	.049	.299	.160	.048	.286	.155	.047	.273	.150	.046	.262	.145	.045	
4.0	.279	.145	.043	.272	.143	.042	.260	.138	.041	.249	.134	.040	.238	.130	.039	
5.0	.255	.130	.038	.249	.128	.037	.238	.124	.036	.228	.120	.036	.218	.117	.035	
6.0	.234	.117	.034	.229	.116	.033	.219	.112	.033	.210	.109	.032	.201	.106	.031	
7.0	.216	.107	.030	.211	.105	.030	.202	.102	.029	.194	.099	.029	.186	.097	.028	
8.0	.200	.098	.027	.196	.096	.027	.188	.094	.027	.180	.091	.026	.173	.089	.026	
9.0	.186	.090	.025	.182	.089	.025	.175	.087	.025	.168	.084	.024	.162	.082	.024	
10.0	.174	.083	.023	.171	.082	.023	.164	.080	.023	.158	.078	.022	.152	.076	.022	

$\rho_{cc}$	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	.233	.233	.233	.199	.199	.199	.136	.136	.136	.078	.078	.078	.025	.025	.025	
1.0	.227	.198	.172	.194	.170	.148	.133	.117	.102	.077	.068	.060	.025	.022	.019	
2.0	.221	.175	.135	.190	.150	.117	.130	.104	.082	.075	.060	.048	.024	.020	.016	
3.0	.215	.158	.112	.184	.136	.097	.126	.095	.068	.073	.055	.040	.023	.018	.013	
4.0	.208	.145	.097	.178	.125	.084	.122	.087	.060	.071	.051	.035	.023	.017	.012	
5.0	.200	.135	.087	.172	.117	.076	.118	.082	.053	.069	.048	.032	.022	.016	.010	
6.0	.193	.127	.080	.166	.110	.070	.114	.077	.049	.066	.045	.029	.021	.015	.010	
7.0	.186	.120	.075	.160	.104	.065	.110	.073	.046	.064	.043	.027	.021	.014	.009	
8.0	.179	.115	.071	.154	.099	.062	.106	.070	.044	.062	.041	.026	.020	.014	.009	
9.0	.172	.110	.068	.148	.095	.059	.103	.067	.042	.060	.040	.025	.019	.013	.008	
10.0	.166	.106	.065	.143	.092	.057	.099	.064	.040	.058	.038	.024	.019	.013	.008	

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		23.9	25.6	24.3	26.0	26.4	23.8	25.5	24.3	26.0	26.4	
	3H	25.8	27.3	26.3	27.8	28.3	25.8	27.3	26.2	27.7	28.2	
	4H	26.6	28.0	27.0	28.5	29.0	26.5	28.0	27.0	28.4	28.9	
	6H	27.2	28.6	27.7	29.0	29.6	27.2	28.5	27.7	29.0	29.5	
	8H	27.5	28.8	28.0	29.3	29.8	27.5	28.8	28.0	29.3	29.8	
	12H	27.7	29.0	28.2	29.5	30.0	27.8	29.0	28.3	29.5	30.1	
	4H	2H	24.6	26.0	25.0	26.5	27.0	24.5	26.0	25.0	26.5	27.0
		3H	26.7	27.9	27.2	28.4	29.0	26.7	27.9	27.2	28.4	29.0
		4H	27.6	28.7	28.1	29.2	29.8	27.6	28.7	28.1	29.3	29.8
		6H	28.4	29.4	28.9	29.9	30.5	28.4	29.4	29.0	30.0	30.5
		8H	28.7	29.7	29.3	30.2	30.8	28.8	29.7	29.3	30.3	30.9
		12H	29.1	29.9	29.6	30.5	31.1	29.2	30.0	29.7	30.6	31.2
	8H	4H	28.0	28.9	28.5	29.5	30.1	28.0	28.9	28.5	29.5	30.1
		6H	29.0	29.8	29.5	30.3	30.9	29.0	29.8	29.6	30.4	31.0
		8H	29.4	30.1	30.0	30.7	31.3	29.5	30.2	30.1	30.8	31.4
		12H	29.9	30.5	30.5	31.1	31.8	30.0	30.7	30.6	31.2	31.9
	12H	4H	28.1	28.9	28.6	29.5	30.1	28.1	28.9	28.6	29.5	30.1
		6H	29.1	29.8	29.7	30.4	31.0	29.1	29.9	29.7	30.4	31.1
		8H	29.6	30.3	30.2	30.9	31.5	29.7	30.3	30.3	30.9	31.6
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

$\gamma$  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

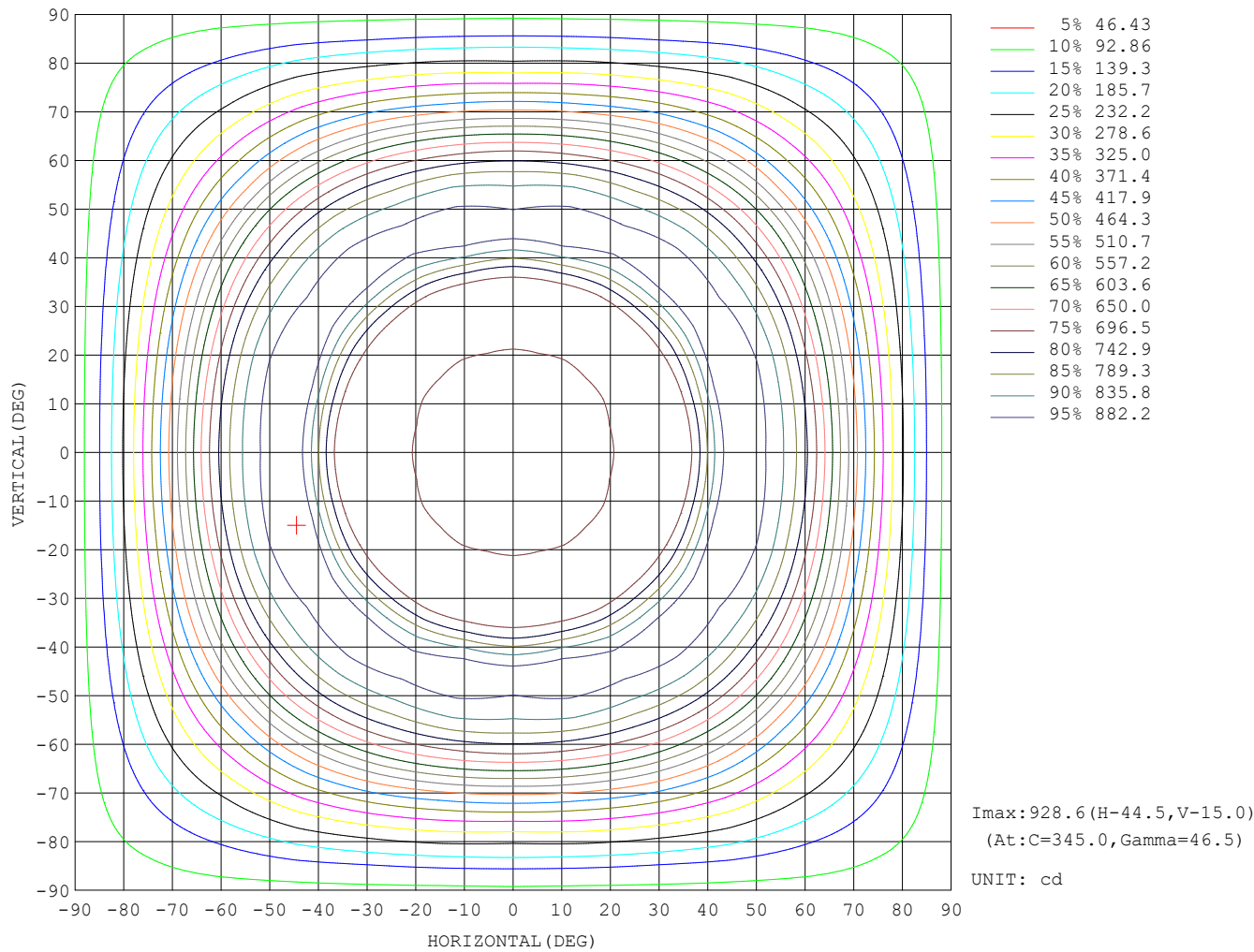
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	47	34	26	46	33	26	44	33	25	18
0.80	57	44	35	56	43	35	53	42	34	26
1.00	66	53	45	65	52	44	62	54	43	35
1.25	74	62	53	72	61	52	69	59	51	42
1.50	80	68	59	78	67	59	74	64	57	48
2.00	88	77	69	85	76	68	81	73	66	56
2.50	93	83	76	90	81	74	85	78	72	61
3.00	97	88	81	94	86	80	89	82	77	66
4.00	101	94	88	98	92	87	93	88	83	72
5.00	104	98	93	101	96	91	96	91	87	76
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

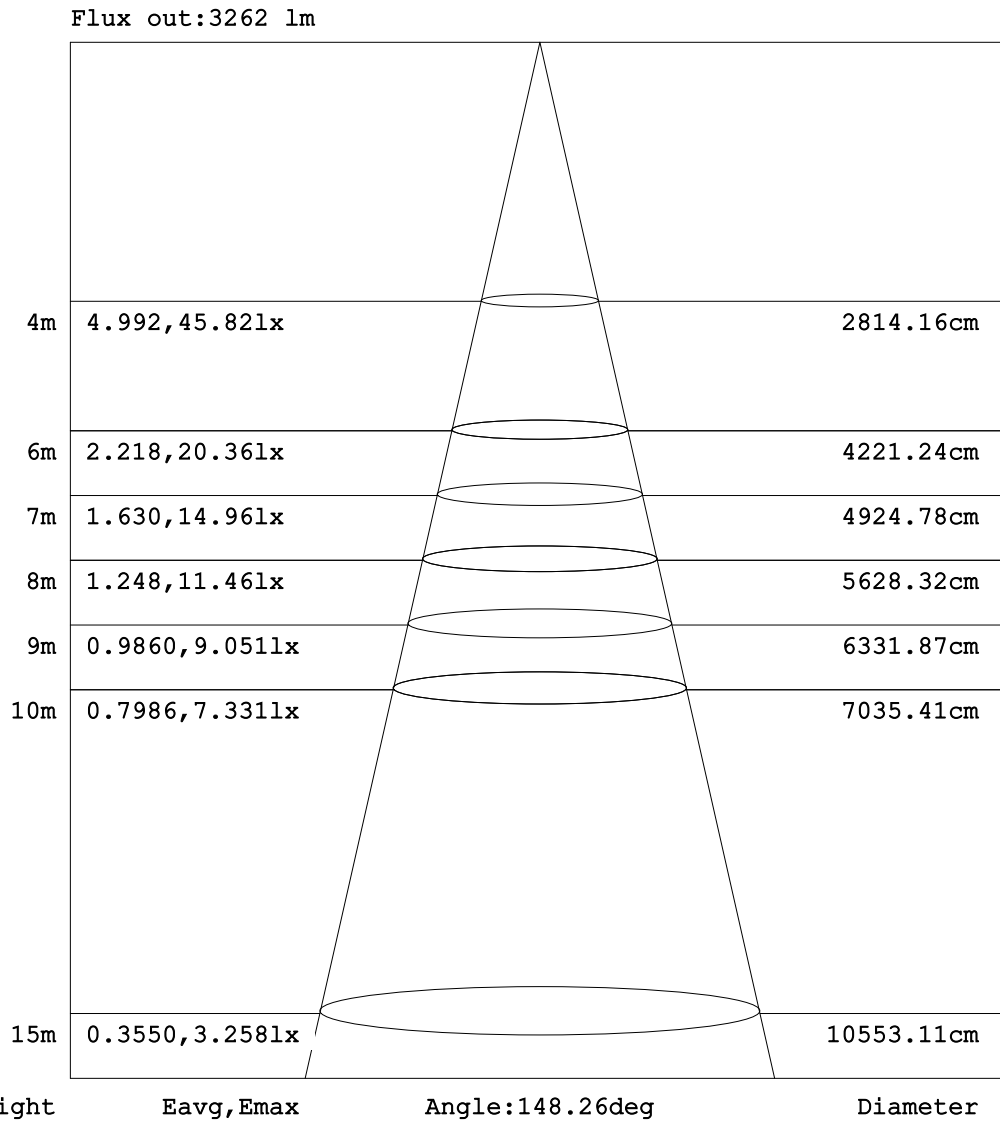


C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators: ZZK  
 Test Date: 2023-08-10

$\gamma$  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:



AAI Figure

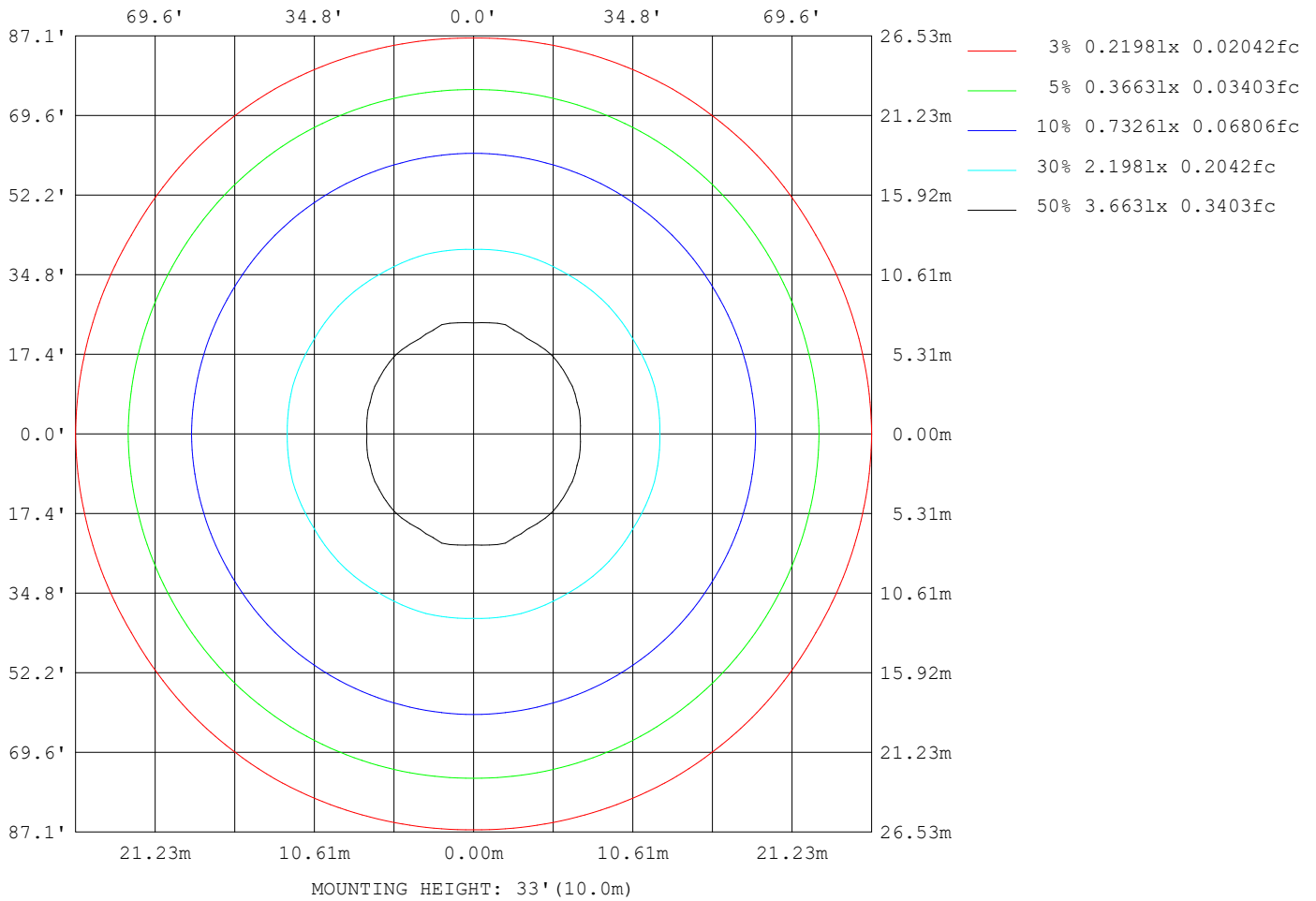


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:

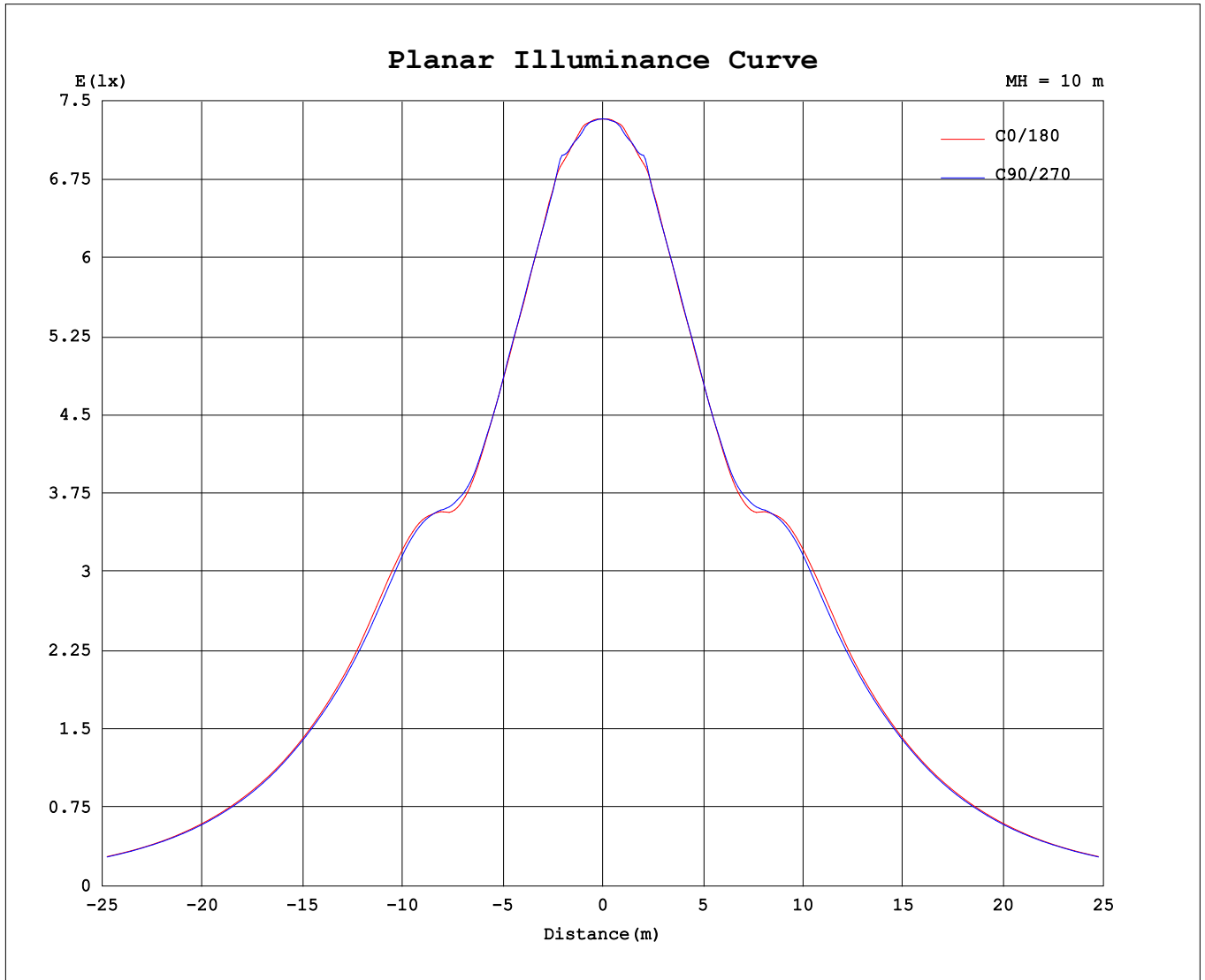
ISOLUX DIAGRAM



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operator: 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: