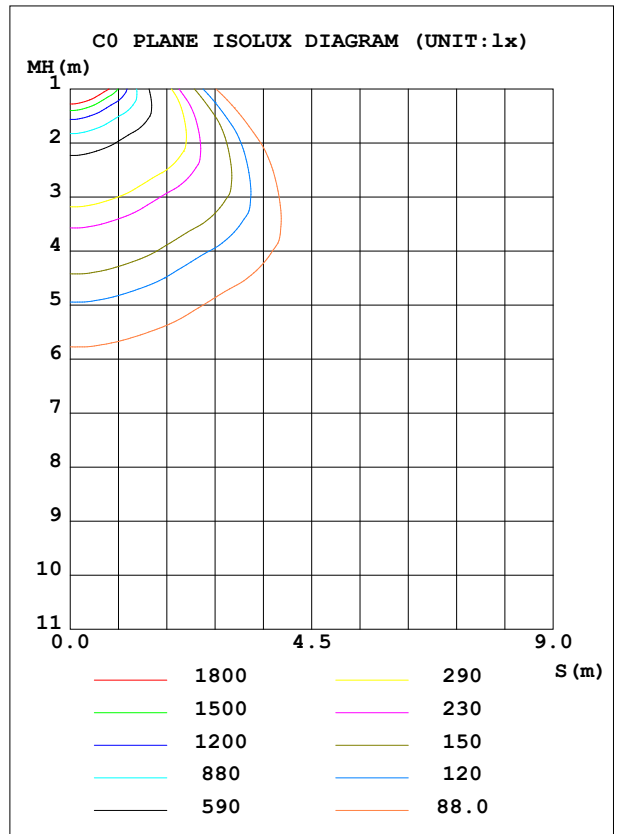
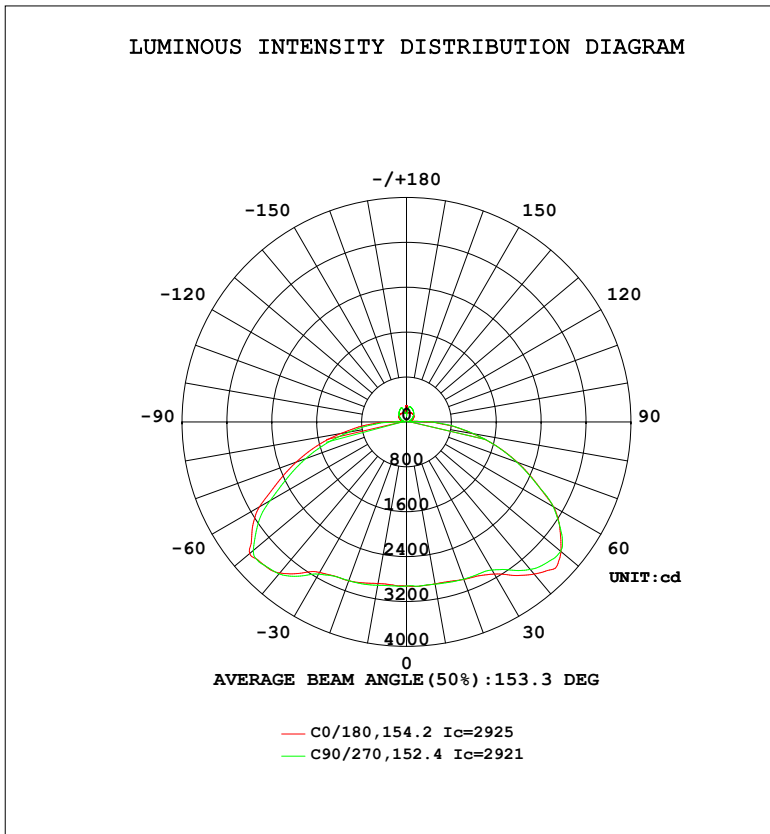


EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.0V I:0.828A P:99.0W PF:0.996 Freq:50.00Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:16160.1x1 lm		
NAME: CP10-100-4070-A00C07	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 163.23 lm/W			
MODEL	/	I <sub>max</sub> (cd)	3762	S/MH (C0/180)	1.81
NOMINAL POWER (W)	/	LOR (%)	100.0	S/MH (C90/270)	1.80
RATED VOLTAGE (V)	/	TOTAL FLUX (lm)	16160	η UP, DN (C0-180)	2.8, 47.8
NOMINAL FLUX (lm)	16160.1	CIE CLASS	DIRECT	η UP, DN (C180-360)	2.8, 46.5
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: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators: LYJ  
 Test Date: 2023-08-09

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=0.4556]  
 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	2930	2930	2935	2929	2925	2938	2957	2937	0- 10	279.6	279.6	1.73,1.73
20	2987	2974	2981	2993	3012	2994	3011	2963	10- 20	840.1	1120	6.93,6.93
30	3130	3054	3047	3071	3097	3121	3133	3091	20- 30	1399	2519	15.6,15.6
40	3539	3568	3430	3514	3514	3636	3534	3549	30- 40	2081	4600	28.5,28.5
50	3592	3696	3586	3585	3647	3569	3563	3487	40- 50	2796	7396	45.8,45.8
60	3030	3047	3019	2923	3025	2840	2805	2775	50- 60	2940	10336	64,64
70	2106	2126	2090	1998	2092	1931	1910	1902	60- 70	2437	12773	79,79
80	1199	1239	1218	1130	1189	1064	1039	1035	70- 80	1667	14440	89.4,89.4
90	360.3	469.3	445.9	423.4	277.4	284.9	226.8	264.3	80- 90	812.0	15252	94.4,94.4
100	72.18	60.32	29.80	53.22	77.92	70.34	39.34	58.57	90-100	154.7	15407	95.3,95.3
110	109.6	94.61	70.93	83.57	118.8	105.1	81.55	90.50	100-110	80.47	15488	95.8,95.8
120	146.2	125.8	115.5	109.3	153.0	132.0	125.0	117.5	110-120	110.9	15598	96.5,96.5
130	169.6	146.7	159.4	125.9	171.2	148.0	167.7	135.3	120-130	126.5	15725	97.3,97.3
140	180.9	164.1	200.8	188.9	177.0	164.4	207.6	163.6	130-140	130.6	15856	98.1,98.1
150	182.0	252.5	237.0	244.9	175.9	231.6	242.5	257.8	140-150	128.0	15984	98.9,98.9
160	175.4	205.0	265.7	173.6	172.4	162.1	270.0	256.0	150-160	102.0	16086	99.5,99.5
170	167.6	167.2	274.9	158.0	168.0	161.8	170.2	197.9	160-170	57.08	16143	99.9,99.9
180	290.6	292.6	110.7	250.0	291.3	293.0	110.7	250.5	170-180	17.46	16160	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 5927.1 lm

%lum = 36.7%

%lamp = 36.7%

Conical surface Flux(120deg): 10336 lm

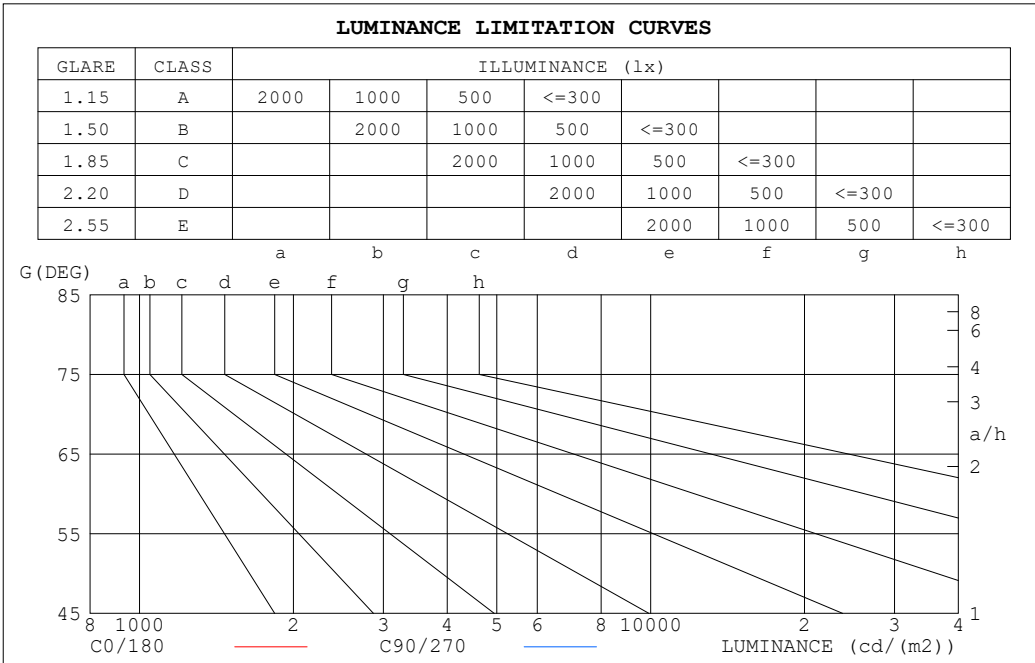
%lum = 64.0%

%lamp = 64.0%

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:LYJ  
 Test Date:2023-08-09

$\gamma$  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=0.4556]  
 Remarks:

LUMINANCE LIMITATION CURVES



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	129509	133637
80	97892	99220
75	90955	90503
70	87341	86399
65	85086	84488
60	85932	85368
55	82540	82729
50	79242	78882
45	74362	70869

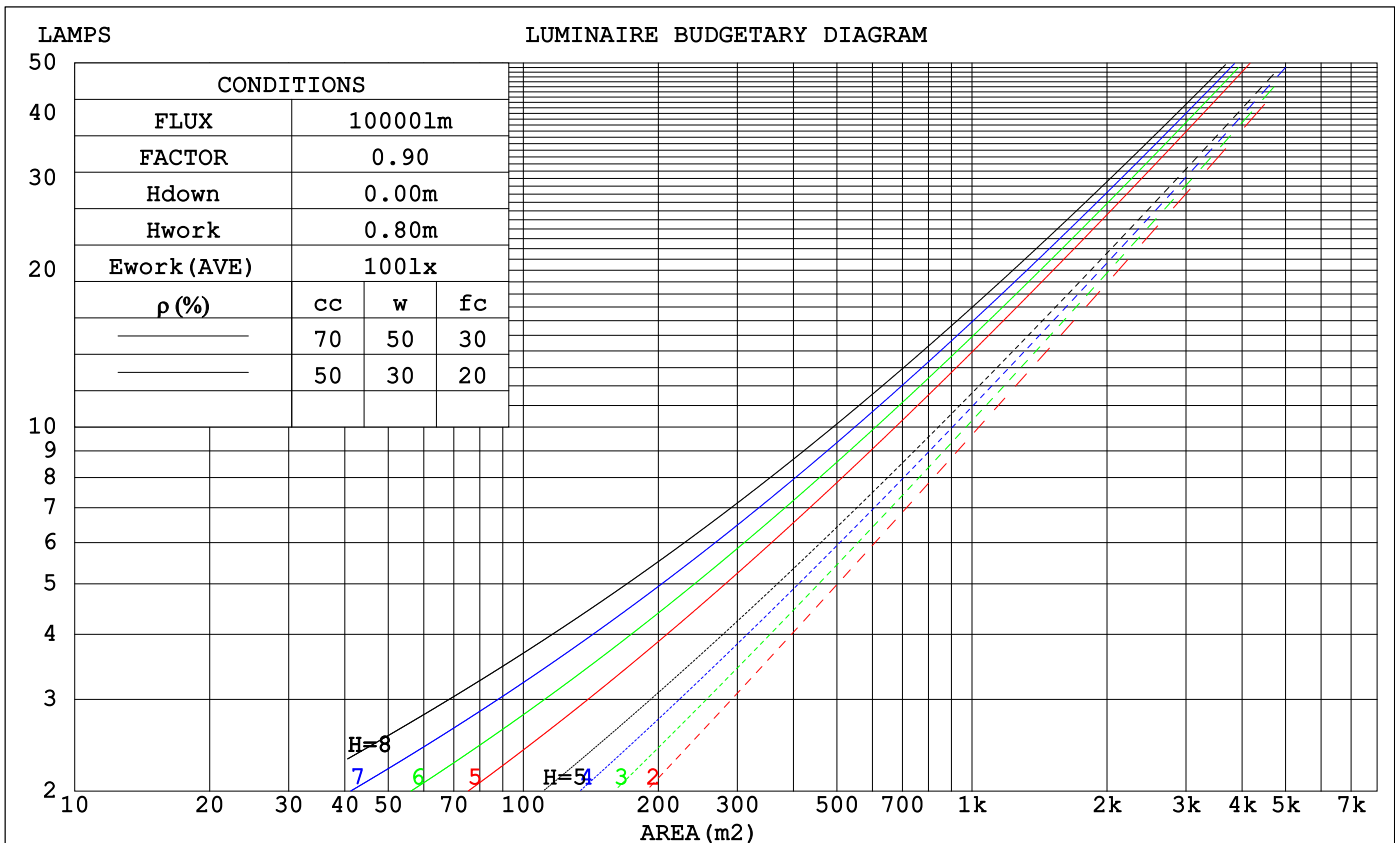
C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators: LYJ  
 Test Date: 2023-08-09

$\gamma$  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=0.4556]  
 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	.89	.96	.91	.87	.91	.87	.83	.86	.83	.80	.81	.79	.76	.74
2.0	.84	.76	.69	.82	.74	.68	.77	.71	.66	.73	.68	.63	.69	.65	.61	.58
3.0	.72	.63	.55	.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	.43	.36	.48	.41	.35	.46	.39	.35	.32
6.0	.49	.39	.32	.48	.38	.32	.45	.37	.31	.43	.36	.30	.41	.34	.29	.27
7.0	.44	.34	.28	.43	.34	.27	.41	.33	.27	.39	.31	.26	.37	.30	.26	.23
8.0	.40	.30	.24	.39	.30	.24	.37	.29	.23	.35	.28	.23	.33	.27	.22	.20
9.0	.36	.27	.21	.35	.27	.21	.34	.26	.21	.32	.25	.20	.31	.24	.20	.18
10.0	.33	.25	.19	.32	.24	.19	.31	.23	.18	.29	.23	.18	.28	.22	.18	.16



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:LYJ  
 Test Date:2023-08-09

$\gamma$  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=0.4556]  
 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	.377	.214	.068	.368	.210	.067	.351	.201	.064	.336	.194	.062	.321	.186	.060	
2.0	.340	.186	.057	.332	.183	.056	.317	.176	.055	.303	.170	.053	.290	.164	.052	
3.0	.307	.163	.049	.300	.160	.048	.286	.155	.047	.274	.150	.046	.262	.145	.045	
4.0	.278	.145	.043	.272	.142	.042	.260	.138	.041	.249	.133	.040	.238	.129	.039	
5.0	.254	.129	.038	.248	.127	.037	.237	.124	.036	.227	.120	.036	.218	.116	.035	
6.0	.233	.117	.033	.228	.115	.033	.218	.112	.033	.209	.109	.032	.200	.105	.031	
7.0	.215	.106	.030	.210	.105	.030	.202	.102	.029	.193	.099	.029	.185	.096	.028	
8.0	.199	.097	.027	.195	.096	.027	.187	.094	.027	.180	.091	.026	.173	.089	.026	
9.0	.186	.090	.025	.182	.089	.025	.175	.086	.024	.168	.084	.024	.161	.082	.024	
10.0	.174	.083	.023	.170	.082	.023	.164	.080	.023	.157	.078	.022	.151	.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	.228	.199	.172	.195	.171	.148	.133	.117	.103	.077	.068	.060	.025	.022	.019	
2.0	.222	.175	.136	.190	.151	.117	.130	.104	.082	.075	.061	.048	.024	.020	.016	
3.0	.215	.158	.113	.185	.136	.098	.127	.095	.069	.073	.055	.040	.024	.018	.013	
4.0	.208	.146	.098	.178	.126	.085	.123	.088	.060	.071	.051	.035	.023	.017	.012	
5.0	.200	.136	.088	.172	.117	.076	.119	.082	.054	.069	.048	.032	.022	.016	.011	
6.0	.193	.127	.080	.166	.110	.070	.114	.077	.050	.066	.045	.029	.021	.015	.010	
7.0	.186	.121	.075	.160	.105	.066	.110	.073	.046	.064	.043	.028	.021	.014	.009	
8.0	.179	.115	.071	.154	.100	.062	.107	.070	.044	.062	.041	.026	.020	.014	.009	
9.0	.172	.110	.068	.149	.096	.060	.103	.067	.042	.060	.040	.025	.019	.013	.008	
10.0	.166	.106	.066	.143	.092	.057	.100	.065	.041	.058	.038	.024	.019	.013	.008	

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:LYJ  
 Test Date:2023-08-09

$\gamma$  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=0.4556]  
 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		27.9	29.6	28.4	30.0	30.5	27.7	29.4	28.1	29.8	30.2
	3H	30.1	31.6	30.6	32.1	32.6	29.9	31.4	30.3	31.8	32.3
	4H	31.1	32.5	31.6	33.0	33.5	30.8	32.3	31.3	32.7	33.3
	6H	31.9	33.3	32.4	33.8	34.3	31.7	33.1	32.2	33.6	34.1
	8H	32.3	33.6	32.8	34.1	34.6	32.1	33.4	32.6	33.9	34.5
	12H	32.7	34.0	33.2	34.4	35.0	32.5	33.8	33.1	34.3	34.8
	4H 2H	28.6	30.1	29.1	30.6	31.1	28.4	29.8	28.8	30.3	30.8
	3H	31.1	32.3	31.6	32.8	33.4	30.8	32.0	31.3	32.5	33.1
	4H	32.2	33.4	32.7	33.9	34.4	31.9	33.1	32.4	33.6	34.1
	6H	33.3	34.3	33.8	34.8	35.4	33.0	34.0	33.5	34.5	35.1
	8H	33.7	34.7	34.3	35.2	35.8	33.5	34.4	34.0	35.0	35.6
	12H	34.2	35.1	34.8	35.7	36.3	34.0	34.9	34.6	35.4	36.0
	8H 4H	32.7	33.6	33.2	34.2	34.8	32.4	33.3	32.9	33.9	34.4
	6H	33.9	34.7	34.5	35.3	35.9	33.6	34.4	34.2	35.0	35.6
	8H	34.6	35.3	35.1	35.9	36.5	34.3	35.0	34.8	35.6	36.2
	12H	35.2	35.9	35.8	36.5	37.1	34.9	35.6	35.5	36.2	36.8
	12H 4H	32.8	33.6	33.3	34.2	34.8	32.5	33.3	33.0	33.9	34.5
	6H	34.1	34.8	34.7	35.4	36.0	33.8	34.5	34.4	35.1	35.7
	8H	34.8	35.4	35.4	36.0	36.7	34.5	35.1	35.1	35.7	36.4
CIE190: 2010											

CIE190: 2010  
 Area: 0.070686 m2

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:LYJ  
 Test Date:2023-08-09

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=0.4556]  
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

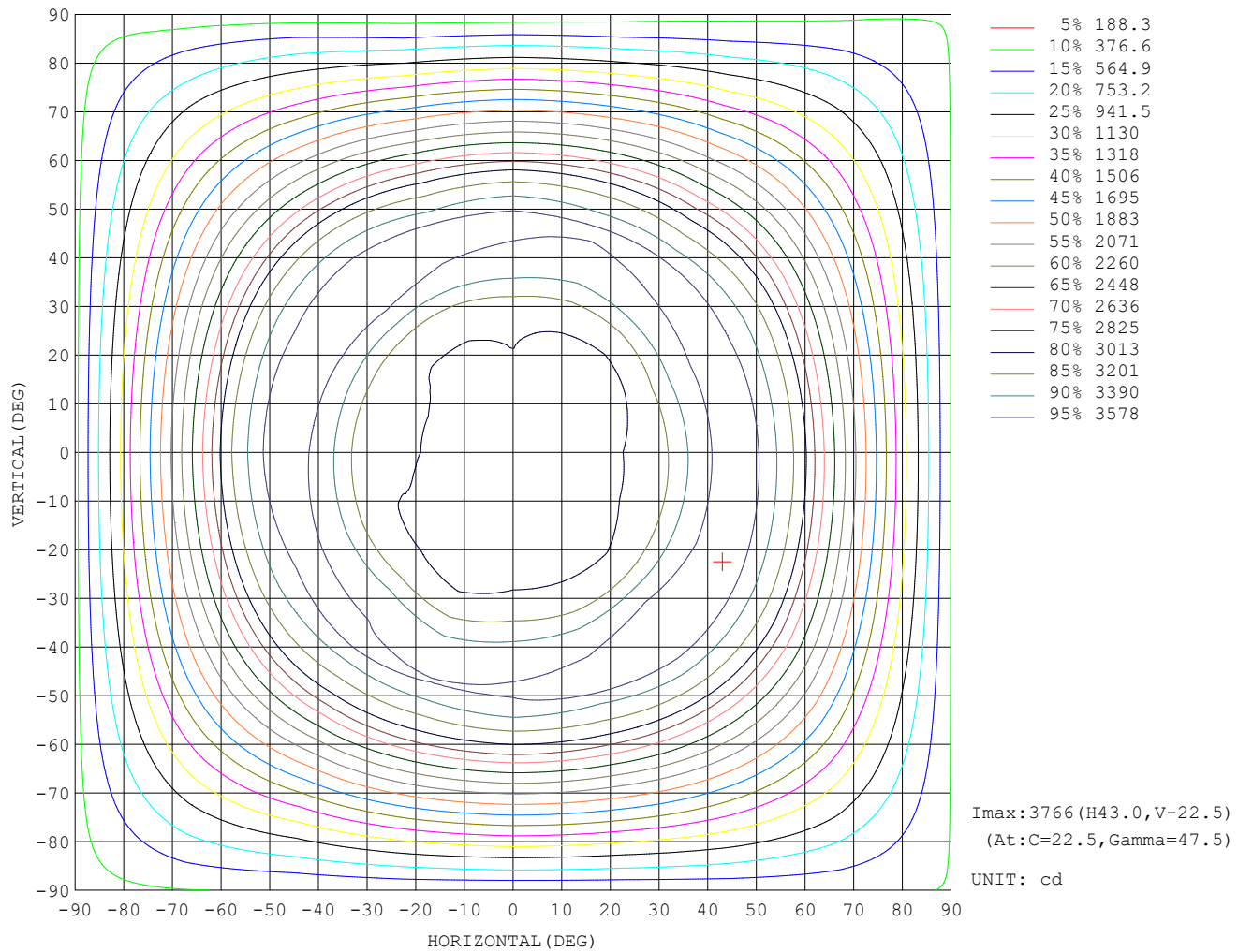
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	48	35	27	47	35	27	45	34	27	19
0.80	58	45	36	57	44	36	54	43	35	27
1.00	67	54	45	65	53	45	62	54	44	36
1.25	74	62	54	73	61	53	69	59	52	43
1.50	80	68	60	78	67	59	74	64	57	48
2.00	88	77	69	85	76	68	81	73	66	56
2.50	92	83	75	90	81	74	85	78	72	61
3.00	96	88	81	94	86	80	88	82	77	66
4.00	101	94	88	98	92	86	93	87	83	72
5.00	104	98	93	101	95	91	95	91	87	75
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: LYJ  
 Test Date: 2023-08-09

$\gamma$  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=0.4556]  
 Remarks:

ISOCANDELA DIAGRAM

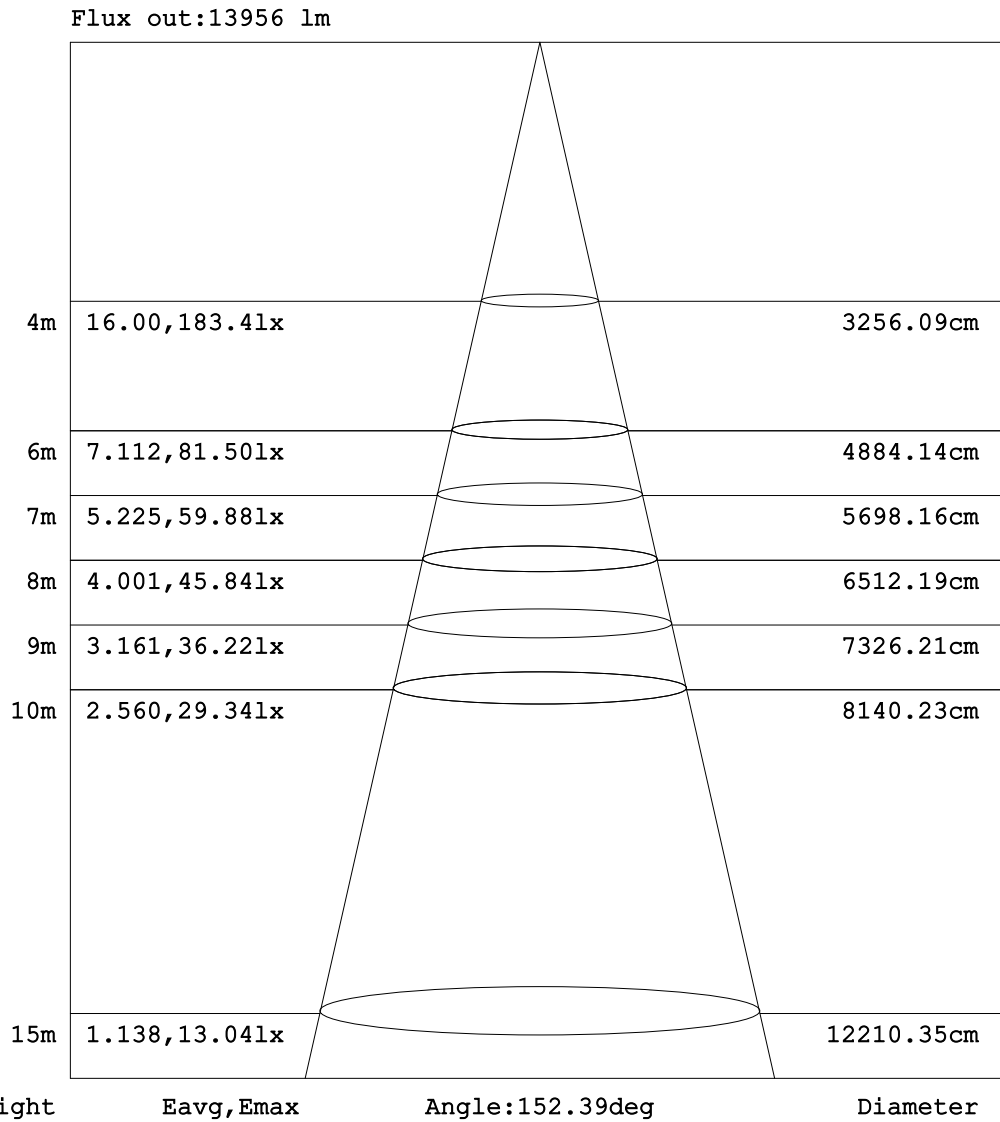


C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators: LYJ  
 Test Date: 2023-08-09

$\gamma$  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=0.4556]  
 Remarks:



AAI Figure

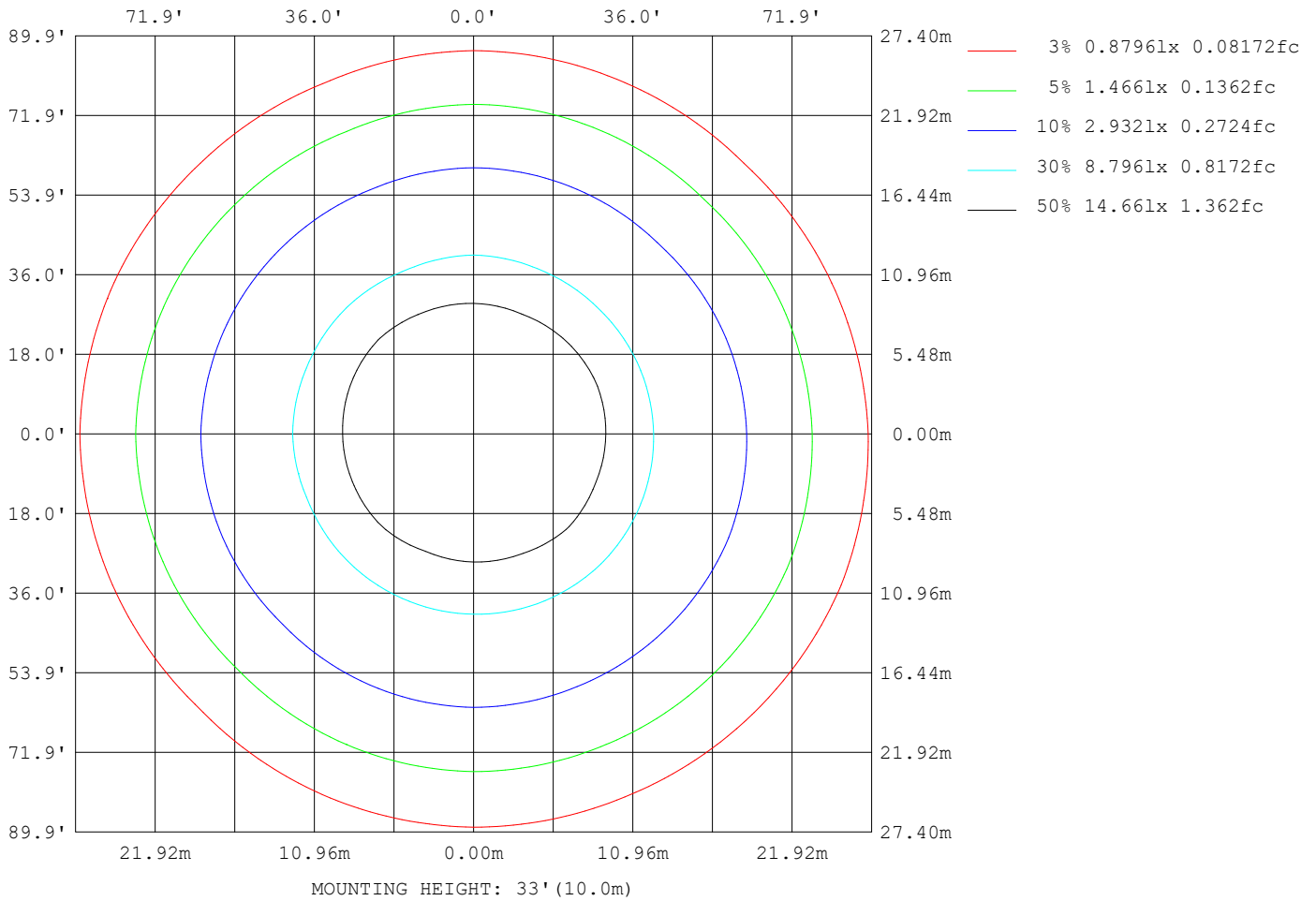


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:LYJ  
 Test Date:2023-08-09

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=0.4556]  
 Remarks:

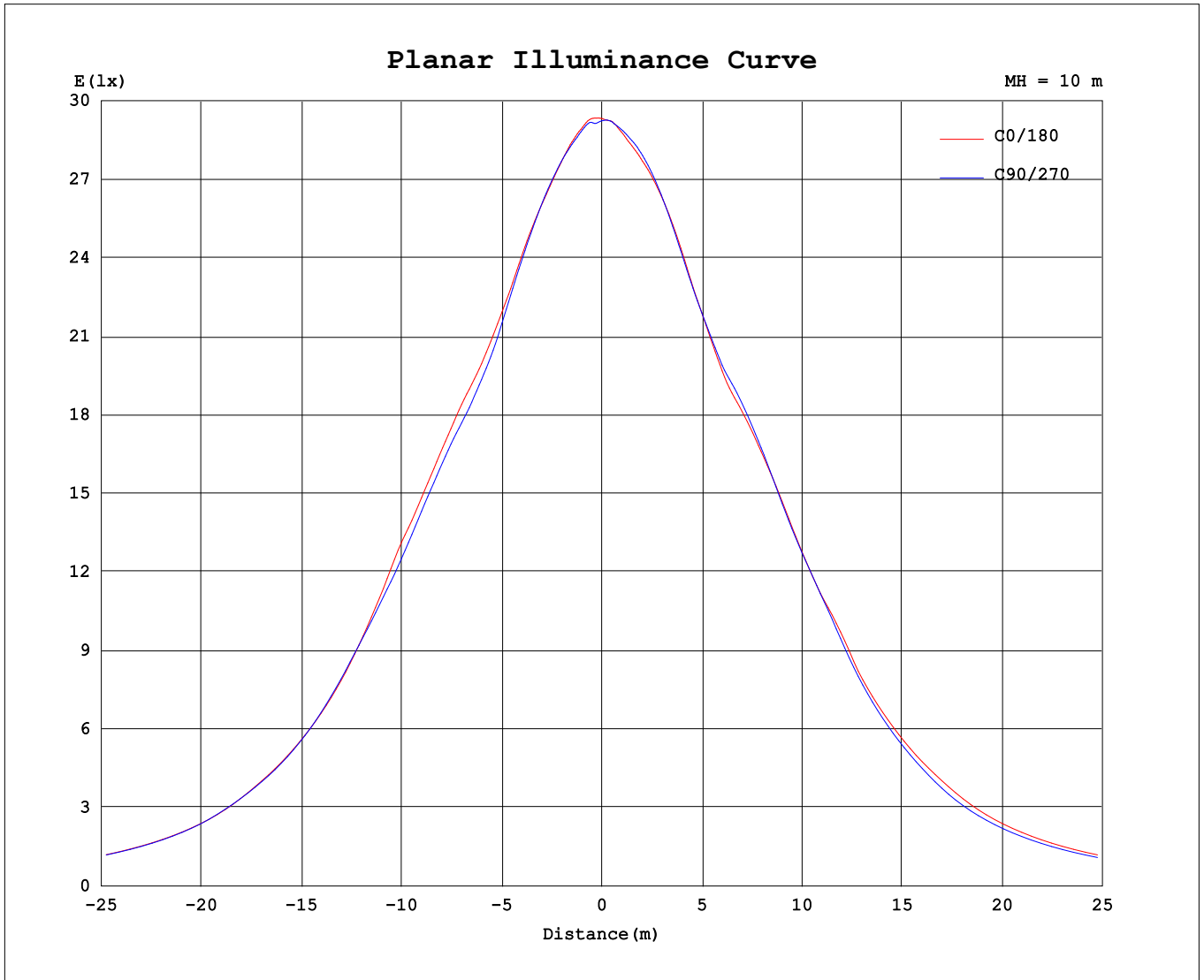
ISOLUX DIAGRAM



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators: LYJ  
 Test Date: 2023-08-09

$\gamma$  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=0.4556]  
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators: LYJ  
Test Date: 2023-08-09

$\gamma$  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=0.4556]  
Remarks: