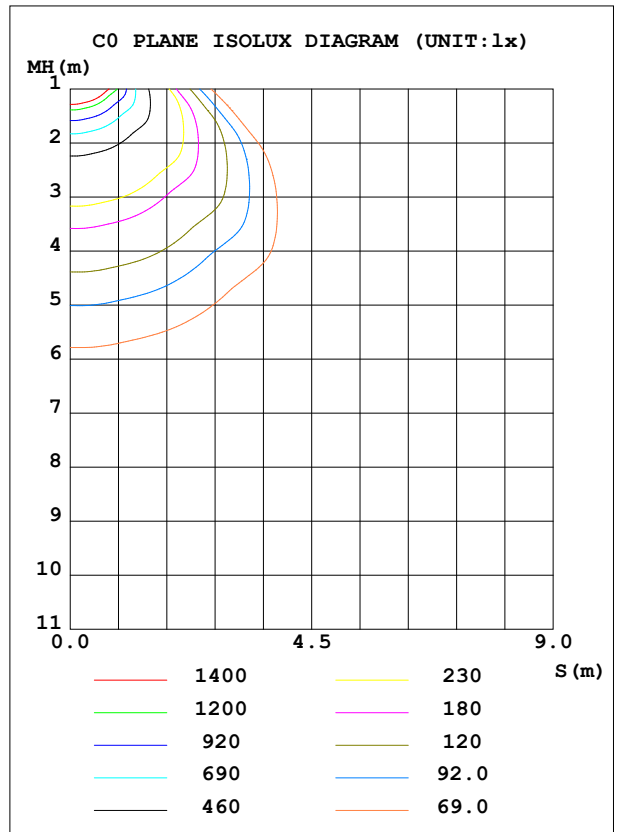
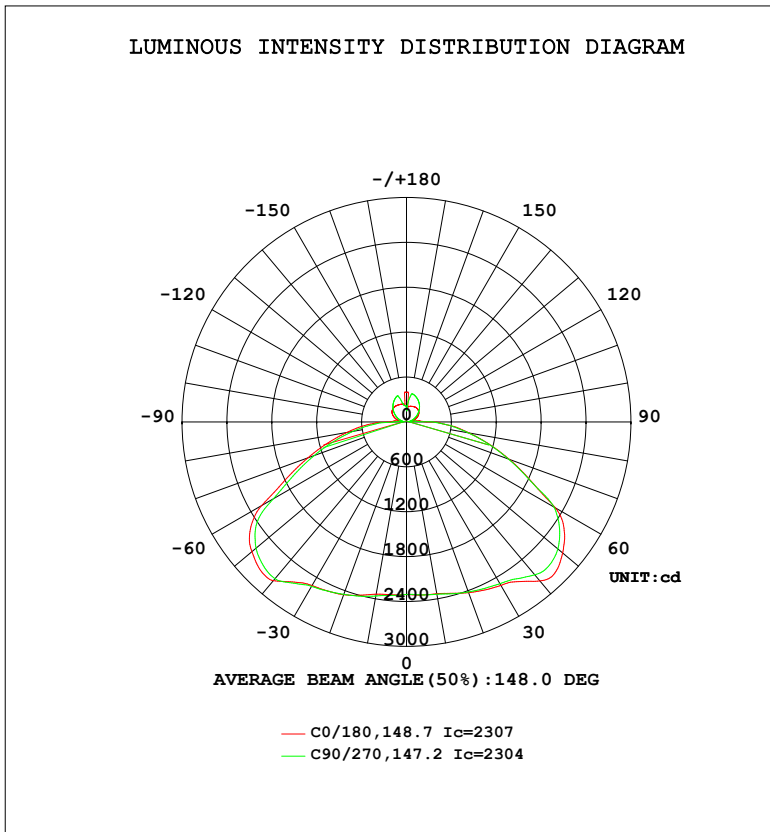


EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.0V I:0.670A P:80.0W PF:0.995 Freq:50.00Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:12672.2x1 lm		
NAME: CP10-080-5070-A00C07	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 158.40 lm/W			
MODEL	/	I <sub>max</sub> (cd)	2836	S/MH (C0/180)	1.79
NOMINAL POWER (W)	/	LOR (%)	100.0	S/MH (C90/270)	1.77
RATED VOLTAGE (V)	/	TOTAL FLUX (lm)	12672	η UP, DN (C0-180)	4.6, 46.0
NOMINAL FLUX (lm)	12672.2	CIE CLASS	DIRECT	η UP, DN (C180-360)	4.7, 44.8
LAMPS INSIDE	1	η up (%)	9.3	CIBSE SHR NOM	1.75
TEST VOLTAGE (V)	/	η down (%)	90.7	CIBSE SHR MAX	1.75



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	2332	2328	2339	2337	2339	2347	2362	2347	0- 10	222.1	222.1	1.75,1.75
20	2428	2418	2418	2431	2457	2440	2452	2422	10- 20	677.7	899.8	7.1,7.1
30	2522	2497	2496	2503	2525	2550	2538	2502	20- 30	1146	2046	16.1,16.1
40	2773	2726	2667	2727	2769	2800	2735	2729	30- 40	1642	3687	29.1,29.1
50	2724	2701	2640	2624	2697	2685	2624	2611	40- 50	2114	5801	45.8,45.8
60	2299	2281	2277	2201	2235	2084	2054	2045	50- 60	2215	8016	63.3,63.3
70	1462	1472	1449	1392	1402	1325	1311	1324	60- 70	1736	9753	77,77
80	847.8	857.7	838.2	794.5	807.9	749.5	728.2	751.3	70- 80	1144	10897	86,86
90	271.3	387.4	348.1	340.8	224.0	238.4	176.6	230.5	80- 90	601.4	11498	90.7,90.7
100	89.43	74.49	37.23	75.65	111.6	100.2	51.56	72.05	90-100	158.0	11656	92,92
110	136.6	117.3	92.14	119.0	170.4	150.0	108.0	111.7	100-110	107.0	11763	92.8,92.8
120	183.0	156.8	152.9	155.9	220.6	189.3	167.4	145.9	110-120	148.1	11911	94,94
130	213.3	183.8	213.6	180.6	247.9	213.6	226.8	169.1	120-130	169.9	12081	95.3,95.3
140	228.5	207.4	271.3	264.2	256.7	236.1	282.3	209.1	130-140	176.4	12258	96.7,96.7
150	230.2	337.8	322.1	338.0	255.5	325.3	331.2	348.3	140-150	173.8	12431	98.1,98.1
160	221.3	267.2	361.9	248.0	249.5	234.0	368.7	344.1	150-160	139.0	12570	99.2,99.2
170	210.2	210.5	374.8	227.5	241.7	232.3	243.0	260.1	160-170	78.00	12648	99.8,99.8
180	395.4	398.0	156.5	347.0	395.8	398.4	156.4	347.2	170-180	23.85	12672	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 4705.9 lm

%lum = 37.1%  
 %lamp = 37.1%

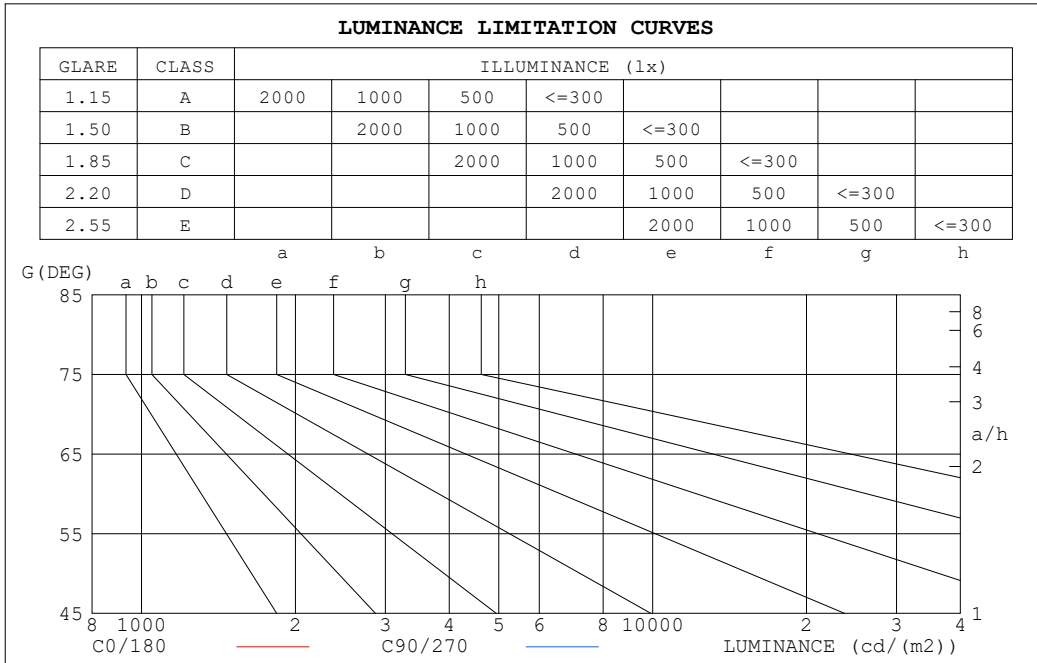
Conical surface Flux(120deg): 8016.4 lm

%lum = 63.3%  
 %lamp = 63.3%

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	97728	97099
80	69127	68260
75	62368	61819
70	60544	59908
65	60767	60315
60	65104	64386
55	63622	61611
50	60011	58083
45	56551	54083

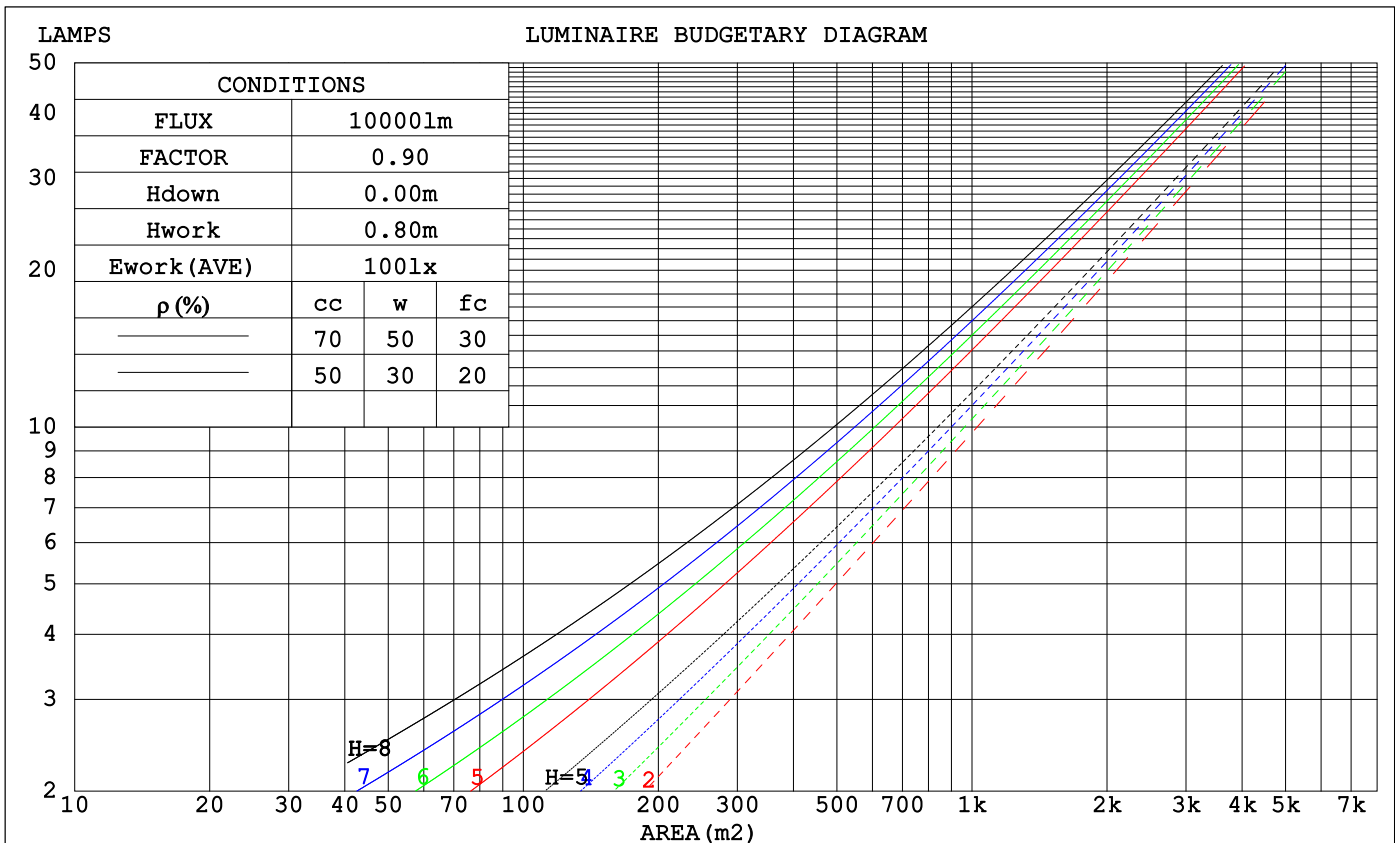
C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators: LYJ  
 Test Date: 2023-08-09

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

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	1.17	1.17	1.17	1.13	1.13	1.13	1.06	1.06	1.06	.99	.99	.99	.94	.94	.94	.91
1.0	.99	.94	.89	.96	.91	.87	.90	.86	.82	.84	.81	.78	.79	.76	.74	.71
2.0	.84	.77	.70	.82	.74	.68	.76	.71	.65	.72	.67	.63	.67	.63	.60	.57
3.0	.73	.64	.56	.70	.62	.55	.66	.59	.53	.62	.56	.51	.58	.53	.49	.46
4.0	.63	.54	.46	.61	.52	.46	.58	.50	.44	.54	.48	.42	.51	.45	.41	.38
5.0	.56	.46	.39	.54	.45	.38	.51	.43	.37	.48	.41	.36	.45	.39	.34	.32
6.0	.50	.40	.33	.48	.39	.33	.45	.37	.32	.43	.36	.31	.40	.34	.30	.27
7.0	.45	.35	.29	.43	.34	.28	.41	.33	.27	.39	.32	.26	.36	.30	.26	.23
8.0	.40	.31	.25	.39	.31	.25	.37	.29	.24	.35	.28	.23	.33	.27	.23	.20
9.0	.37	.28	.22	.36	.27	.22	.34	.26	.21	.32	.25	.21	.30	.24	.20	.18
10.0	.33	.25	.20	.33	.25	.19	.31	.24	.19	.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	.364	.207	.066	.354	.202	.064	.336	.193	.061	.318	.184	.059	.302	.175	.057	
2.0	.329	.180	.055	.320	.176	.054	.303	.169	.052	.288	.161	.050	.273	.155	.049	
3.0	.298	.159	.048	.290	.155	.047	.275	.149	.045	.261	.143	.044	.248	.137	.042	
4.0	.271	.141	.041	.264	.138	.041	.250	.133	.040	.238	.128	.038	.226	.123	.037	
5.0	.248	.126	.037	.242	.124	.036	.229	.119	.035	.218	.115	.034	.207	.111	.033	
6.0	.228	.114	.033	.222	.112	.032	.211	.108	.031	.201	.104	.031	.191	.100	.030	
7.0	.211	.104	.030	.206	.102	.029	.195	.099	.028	.186	.095	.028	.177	.092	.027	
8.0	.196	.096	.027	.191	.094	.027	.182	.091	.026	.173	.088	.025	.165	.085	.025	
9.0	.183	.088	.025	.178	.087	.024	.170	.084	.024	.162	.081	.023	.154	.078	.023	
10.0	.171	.082	.023	.167	.081	.022	.159	.078	.022	.152	.075	.021	.145	.073	.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	.261	.261	.261	.223	.223	.223	.152	.152	.152	.087	.087	.087	.028	.028	.028	
1.0	.255	.227	.201	.218	.195	.173	.149	.134	.120	.086	.078	.070	.028	.025	.023	
2.0	.249	.203	.165	.213	.175	.143	.146	.121	.100	.084	.070	.058	.027	.023	.019	
3.0	.242	.187	.142	.207	.161	.123	.142	.112	.087	.082	.065	.051	.026	.021	.017	
4.0	.235	.174	.127	.201	.150	.111	.138	.105	.078	.080	.061	.046	.026	.020	.015	
5.0	.227	.164	.117	.195	.142	.102	.134	.099	.072	.078	.058	.043	.025	.019	.014	
6.0	.220	.156	.110	.189	.135	.096	.130	.094	.068	.076	.056	.040	.024	.018	.013	
7.0	.213	.149	.105	.183	.129	.091	.127	.091	.065	.074	.053	.038	.024	.017	.013	
8.0	.206	.144	.101	.178	.125	.088	.123	.087	.062	.071	.052	.037	.023	.017	.012	
9.0	.200	.139	.097	.172	.120	.085	.119	.085	.060	.070	.050	.036	.023	.016	.012	
10.0	.194	.135	.095	.167	.117	.083	.116	.082	.059	.068	.049	.035	.022	.016	.012	

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	26.8	28.4	27.3	28.9	29.4	26.5	28.0	27.0	28.5	29.1
3H	28.7	30.1	29.2	30.6	31.2	28.4	29.8	28.9	30.3	30.9
4H	29.5	30.9	30.1	31.4	32.0	29.3	30.6	29.8	31.1	31.7
6H	30.4	31.6	30.9	32.1	32.8	30.1	31.4	30.6	31.9	32.5
8H	30.7	31.9	31.3	32.5	33.1	30.5	31.7	31.0	32.2	32.9
12H	31.2	32.3	31.7	32.9	33.5	30.9	32.1	31.5	32.6	33.2
4H 2H	27.4	28.8	28.0	29.3	29.9	27.1	28.4	27.6	28.9	29.5
3H	29.6	30.7	30.1	31.3	31.9	29.3	30.4	29.8	31.0	31.6
4H	30.6	31.7	31.2	32.2	32.9	30.3	31.3	30.9	31.9	32.6
6H	31.6	32.5	32.2	33.1	33.8	31.3	32.2	31.9	32.8	33.5
8H	32.1	33.0	32.7	33.6	34.2	31.8	32.7	32.4	33.3	33.9
12H	32.6	33.4	33.2	34.0	34.7	32.3	33.1	32.9	33.7	34.4
8H 4H	31.0	31.9	31.6	32.5	33.2	30.7	31.6	31.3	32.2	32.8
6H	32.2	33.0	32.8	33.6	34.3	31.9	32.6	32.5	33.3	33.9
8H	32.9	33.5	33.5	34.2	34.9	32.5	33.2	33.2	33.8	34.5
12H	33.6	34.2	34.2	34.8	35.6	33.2	33.8	33.9	34.5	35.2
12H 4H	31.1	31.9	31.7	32.5	33.2	30.8	31.6	31.4	32.2	32.9
6H	32.4	33.1	33.0	33.7	34.4	32.0	32.7	32.7	33.3	34.0
8H	33.1	33.7	33.7	34.3	35.1	32.7	33.3	33.4	34.0	34.7
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

$\gamma$  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

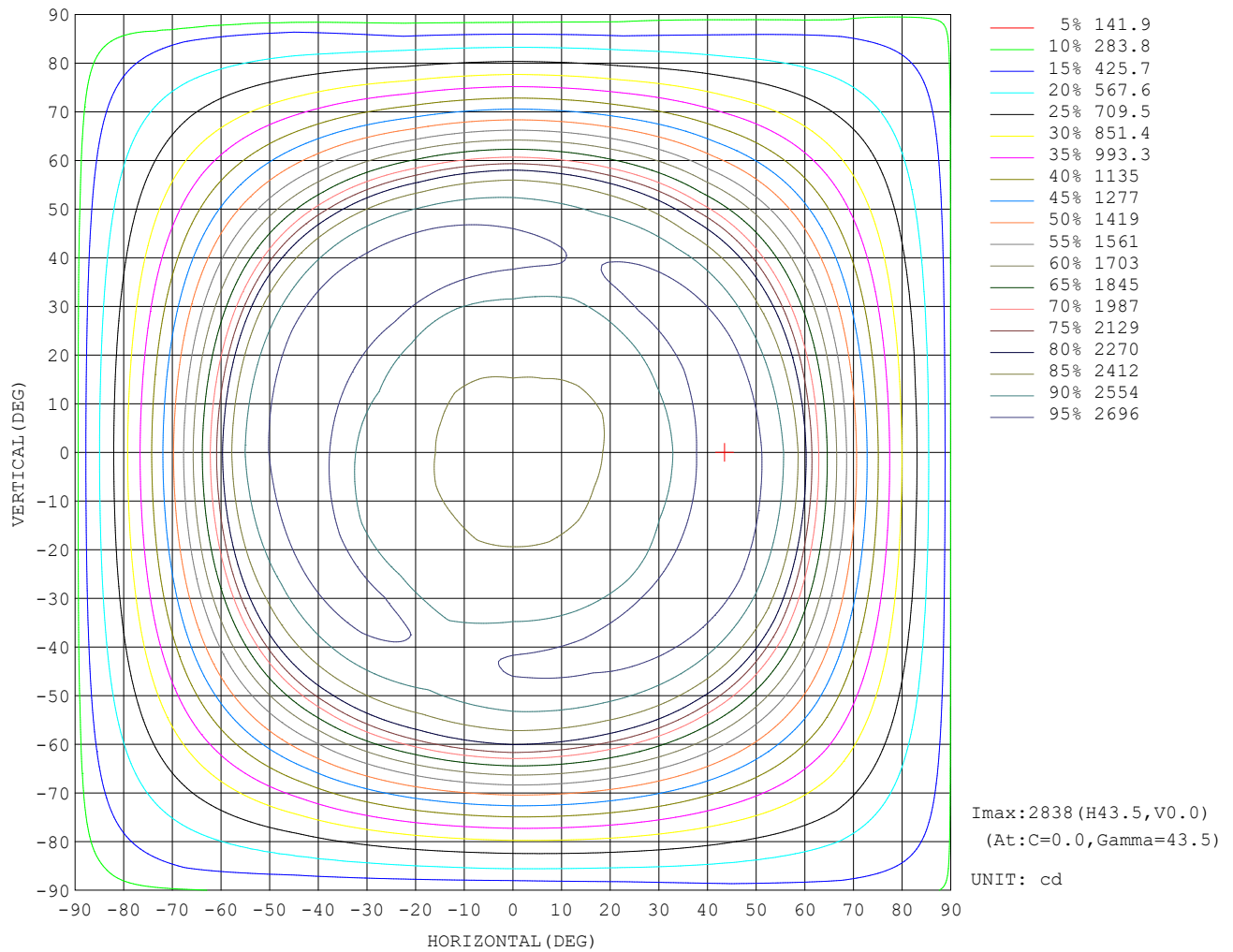
UTILIZATION FACTORS TABLE

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	28	47	35	28	45	34	27	20
0.80	58	45	37	57	44	37	54	43	36	28
1.00	67	54	46	65	53	45	62	54	44	36
1.25	75	62	54	72	61	53	69	59	52	43
1.50	80	68	60	78	67	59	73	64	57	48
2.00	88	77	70	85	76	68	80	72	66	56
2.50	92	83	76	89	81	74	84	77	71	60
3.00	96	88	81	93	85	79	87	81	76	64
4.00	101	94	88	97	91	86	91	86	82	70
5.00	104	97	92	100	95	90	94	89	86	73
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

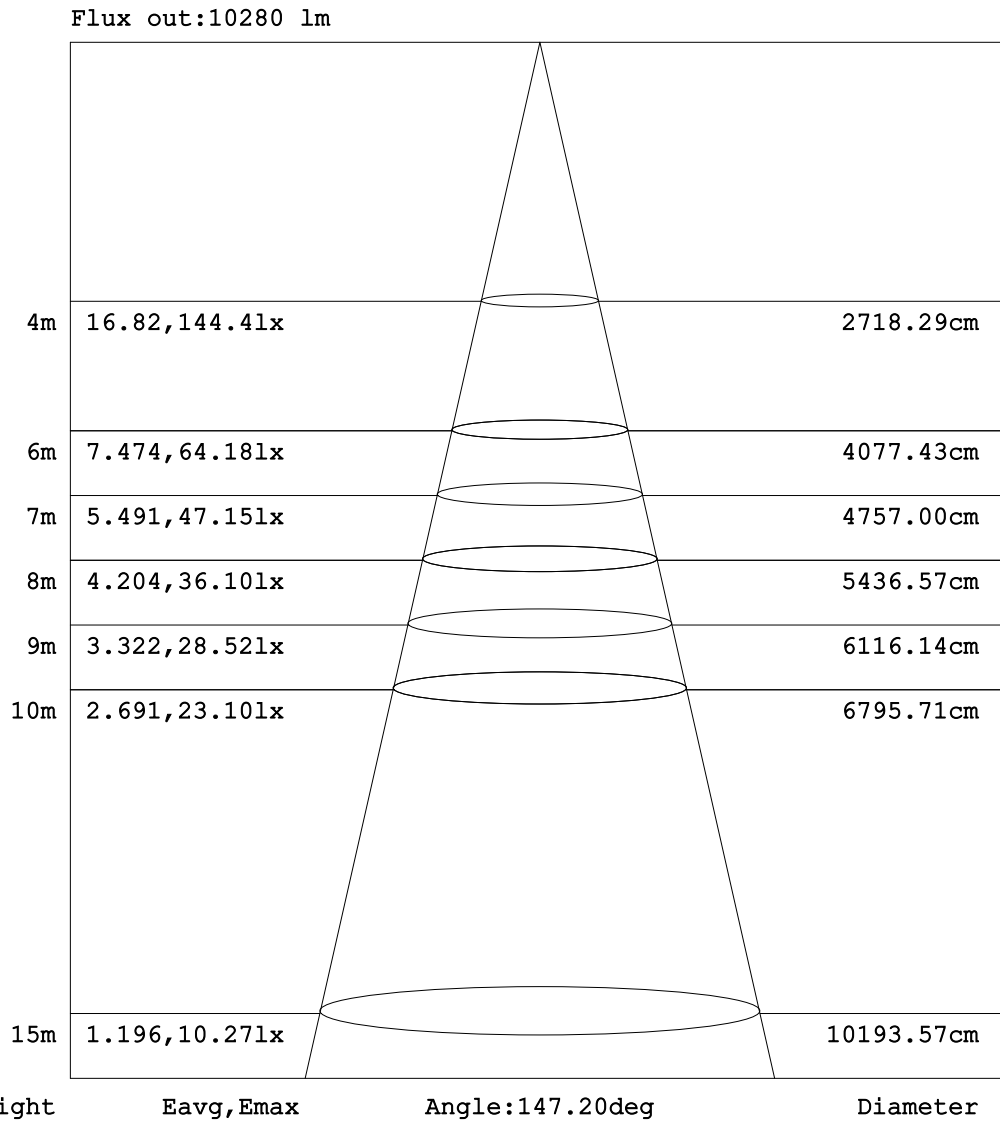


C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:LYJ  
 Test Date:2023-08-09

$\gamma$  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

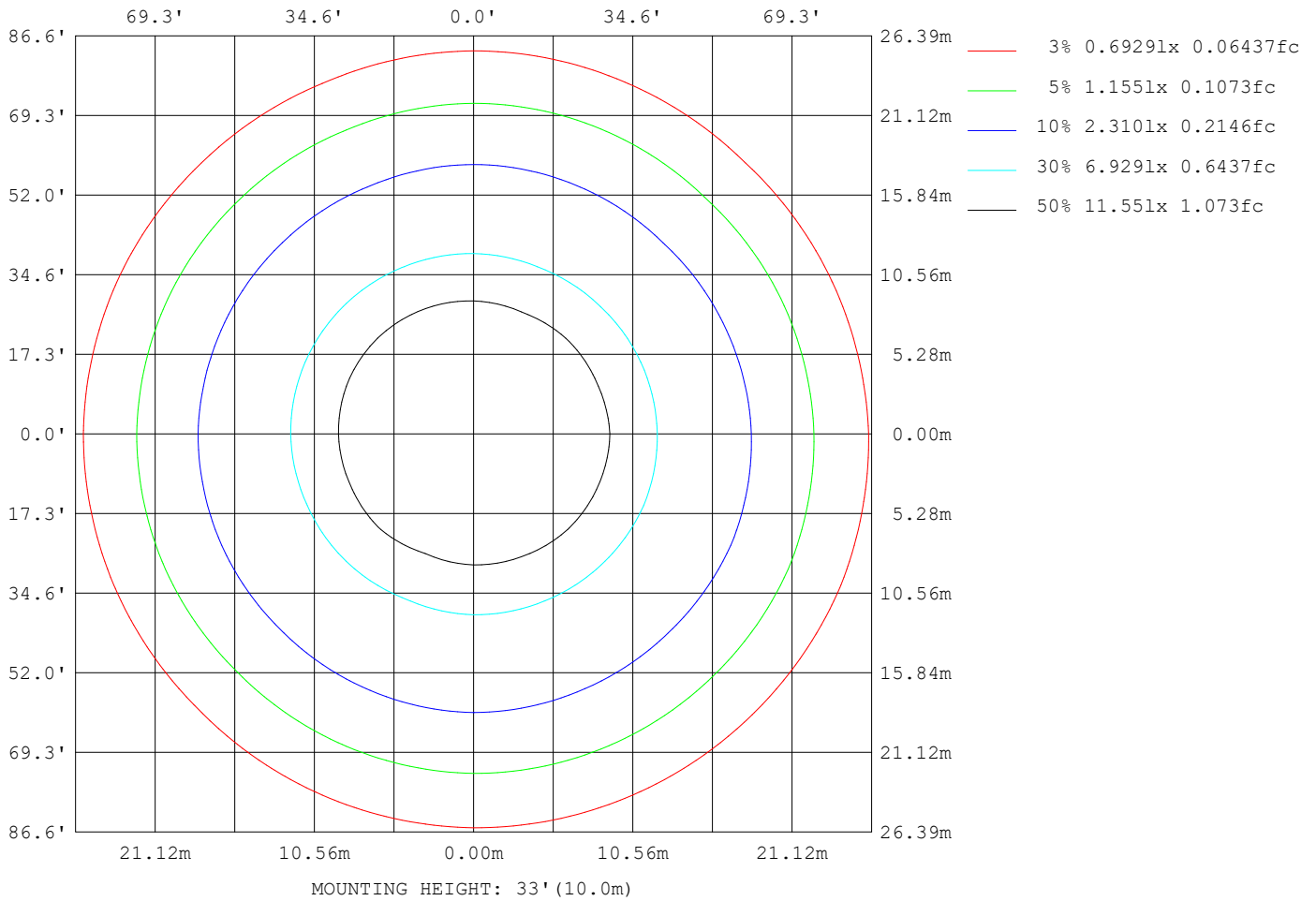


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:

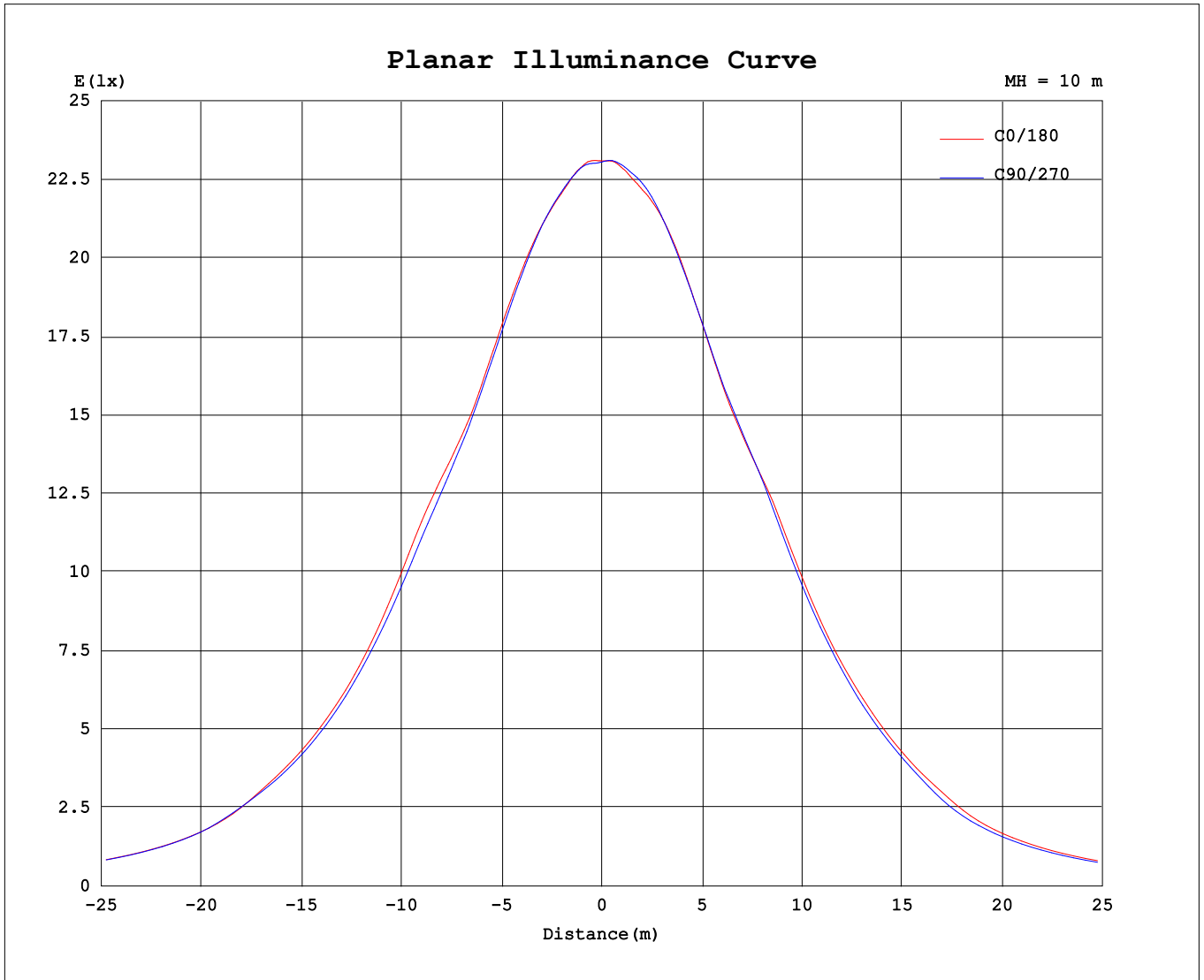
ISOLUX DIAGRAM



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: