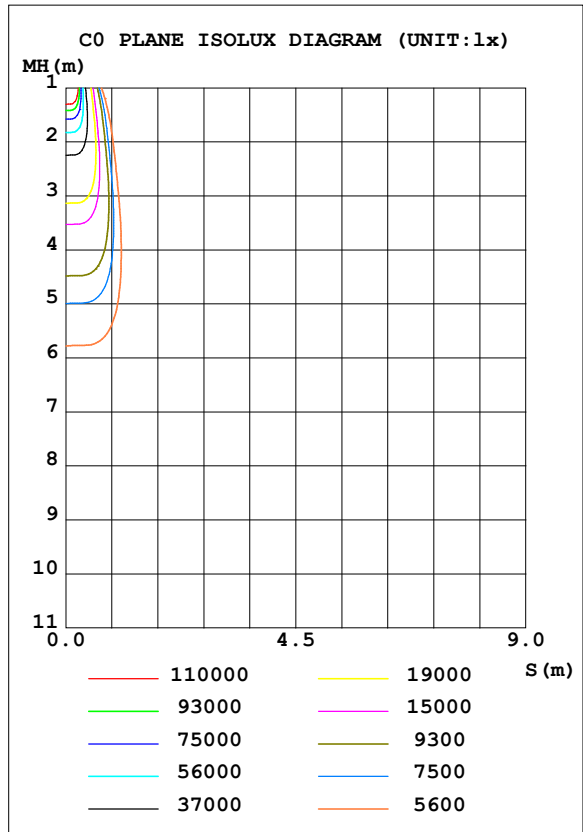
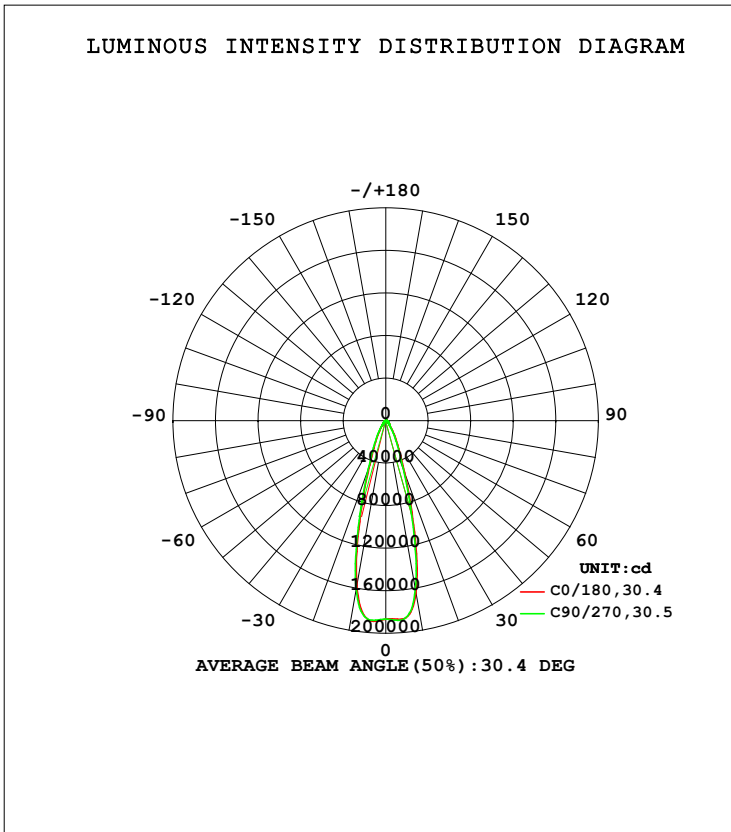


EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:229.1V I:2.0475A P:459.22W PF:0.9787 Freq:50.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:69823.6x1 lm		
NAME: FL05-480-5070-S32701 (30deg)+VISOR	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 152.05 lm/W			
MODEL	/	I <sub>max</sub> (cd)	188936	S/MH (C0/180)	0.48
NOMINAL POWER (W)	/	LOR (%)	100.0	S/MH (C90/270)	0.49
RATED VOLTAGE (V)	/	TOTAL FLUX (lm)	69824	η UP, DN (C0-180)	0.0, 50.3
NOMINAL FLUX (lm)	69823.6	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 49.7
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	230	η down (%)	100.0	CIBSE SHR MAX	0.50



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: LYJ  
 Test Date: 2021-12-29

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.446  
 Humidity: 65.0%  
 Test Distance: 26.000m [K=0.4536]  
 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	1643	1639	1610	1583	1573	1583	1610	1639	0- 10	17134	17134	24.5,24.5
20	519.5	508.8	485.0	457.7	447.6	457.7	485.0	508.8	10- 20	26605	43739	62.6,62.6
30	176.1	170.9	159.5	147.1	142.1	147.1	159.5	170.9	20- 30	12739	56478	80.9,80.9
40	57.08	56.99	54.25	51.66	51.75	51.66	54.25	56.99	30- 40	5887	62365	89.3,89.3
50	27.07	27.13	26.74	26.39	25.94	26.39	26.74	27.13	40- 50	2879	65245	93.4,93.4
60	18.52	18.41	18.21	17.93	17.68	17.93	18.21	18.41	50- 60	1960	67204	96.2,96.2
70	12.16	12.11	11.92	11.65	11.46	11.65	11.92	12.11	60- 70	1495	68700	98.4,98.4
80	5.109	5.087	4.920	4.770	4.665	4.770	4.920	5.087	70- 80	897.2	69597	99.7,99.7
90	0.2216	0.2043	0.2165	0.2364	0.2521	0.2364	0.2165	0.2043	80- 90	226.5	69824	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:X100cd									UNIT:lm		

Conical surface Flux(90deg): 64006 lm

%lum = 91.7%

%lamp = 91.7%

Conical surface Flux(120deg): 67204 lm

%lum = 96.2%

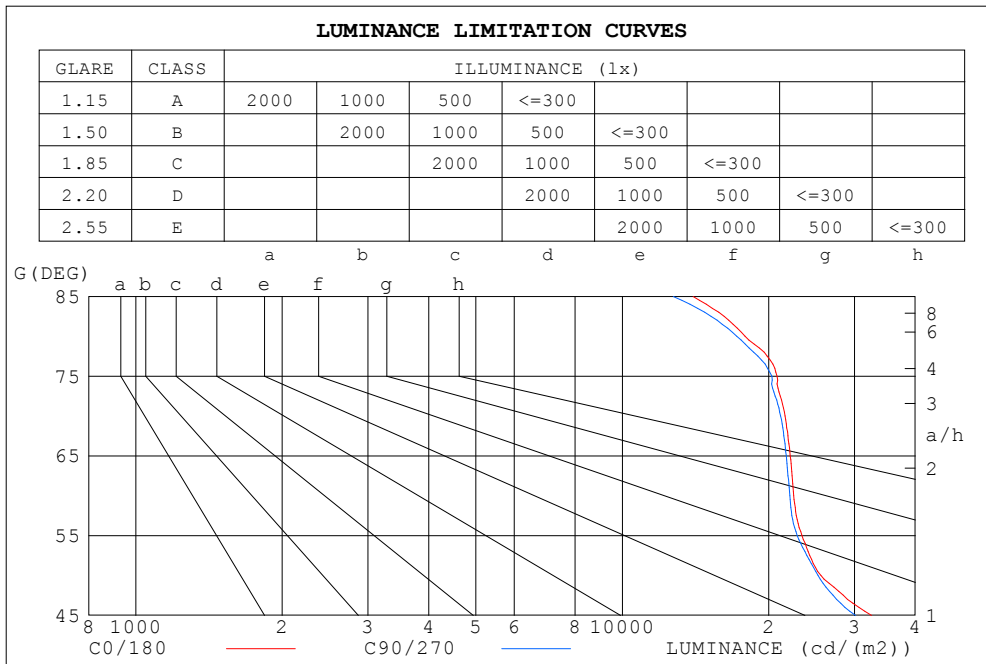
%lamp = 96.2%

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:LYJ  
 Test Date:2021-12-29

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 $\gamma$  Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.446  
 Humidity:65.0%  
 Test Distance:26.000m [K=0.4536]  
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINANCE LIMITATION CURVES



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	13978	12726
80	17883	17194
75	20794	20307
70	21611	21151
65	22148	21726
60	22518	22098
55	23412	22884
50	25597	25245
45	32533	30138

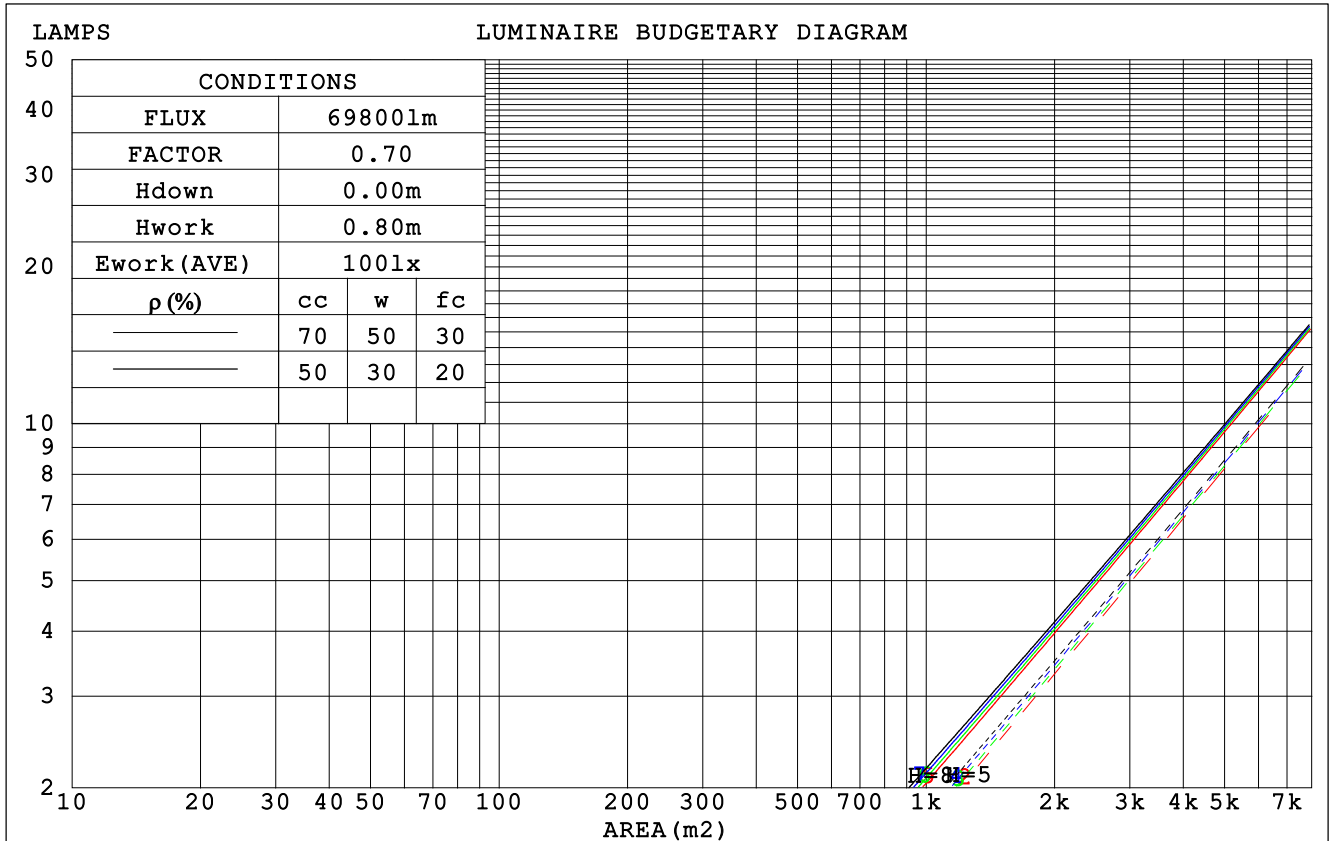
C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: LYJ  
 Test Date: 2021-12-29

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.446  
 Humidity: 65.0%  
 Test Distance: 26.000m [K=0.4536]  
 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	1.19	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	1.11	1.09	1.07	1.09	1.07	1.05	1.05	1.03	1.02	1.01	.00	.99	.98	.97	.96	.94
2.0	1.04	1.00	.97	1.02	.99	.96	.99	.96	.94	.96	.94	.92	.93	.92	.90	.88
3.0	.98	.93	.90	.97	.92	.89	.94	.91	.88	.92	.89	.86	.89	.87	.85	.84
4.0	.93	.88	.84	.92	.87	.83	.90	.86	.83	.88	.84	.82	.86	.83	.81	.79
5.0	.88	.83	.79	.87	.82	.79	.86	.81	.78	.84	.80	.77	.82	.79	.77	.75
6.0	.84	.79	.75	.83	.78	.75	.82	.78	.74	.81	.77	.74	.79	.76	.73	.72
7.0	.80	.75	.72	.80	.75	.71	.79	.74	.71	.78	.74	.71	.76	.73	.70	.69
8.0	.77	.72	.68	.77	.72	.68	.76	.71	.68	.75	.71	.68	.74	.70	.68	.66
9.0	.74	.69	.66	.74	.69	.66	.73	.68	.65	.72	.68	.65	.71	.68	.65	.64
10.0	.71	.67	.63	.71	.66	.63	.70	.66	.63	.70	.66	.63	.69	.65	.63	.62



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:LYJ  
 Test Date:2021-12-29

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.446  
 Humidity:65.0%  
 Test Distance:26.000m [K=0.4536]  
 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	.172	.098	.031	.165	.094	.030	.153	.088	.028	.141	.082	.026	.131	.076	.024	
2.0	.161	.088	.027	.155	.086	.026	.145	.081	.025	.135	.076	.024	.126	.071	.023	
3.0	.150	.080	.024	.146	.078	.023	.137	.074	.023	.128	.070	.022	.121	.067	.021	
4.0	.141	.073	.021	.137	.072	.021	.129	.068	.020	.122	.066	.020	.115	.063	.019	
5.0	.132	.067	.020	.129	.066	.019	.122	.064	.019	.116	.061	.018	.110	.059	.018	
6.0	.125	.062	.018	.122	.061	.018	.116	.059	.017	.111	.057	.017	.106	.056	.016	
7.0	.118	.058	.017	.115	.057	.016	.110	.056	.016	.106	.054	.016	.101	.053	.015	
8.0	.112	.055	.015	.110	.054	.015	.105	.053	.015	.101	.051	.015	.097	.050	.015	
9.0	.106	.052	.014	.104	.051	.014	.100	.050	.014	.097	.049	.014	.093	.047	.014	
10.0	.102	.049	.014	.100	.048	.013	.096	.047	.013	.093	.046	.013	.090	.045	.013	

$\rho_{cc}$	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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.171	.157	.145	.146	.135	.125	.100	.093	.086	.058	.054	.050	.018	.017	.016	
2.0	.155	.133	.114	.133	.114	.098	.091	.079	.069	.052	.046	.040	.017	.015	.013	
3.0	.141	.113	.091	.121	.098	.079	.083	.068	.055	.048	.040	.033	.015	.013	.011	
4.0	.130	.099	.074	.112	.085	.065	.077	.059	.046	.044	.035	.027	.014	.011	.009	
5.0	.120	.087	.062	.103	.075	.054	.071	.052	.038	.041	.031	.023	.013	.010	.007	
6.0	.112	.077	.052	.096	.067	.045	.066	.047	.032	.039	.027	.019	.012	.009	.006	
7.0	.105	.069	.044	.090	.060	.039	.062	.042	.027	.036	.025	.016	.012	.008	.005	
8.0	.099	.063	.038	.085	.054	.033	.059	.038	.024	.034	.023	.014	.011	.007	.005	
9.0	.093	.057	.033	.080	.050	.029	.055	.035	.021	.032	.021	.012	.010	.007	.004	
10.0	.088	.053	.029	.076	.046	.025	.053	.032	.018	.031	.019	.011	.010	.006	.004	

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: LYJ  
 Test Date: 2021-12-29

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.446  
 Humidity: 65.0%  
 Test Distance: 26.000m [K=0.4536]  
 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	17.8	18.8	18.1	19.1	19.4	17.6	18.6	17.9	18.9	19.2
3H	19.7	20.6	20.1	20.9	21.3	19.5	20.4	19.8	20.7	21.1
4H	20.4	21.3	20.8	21.6	22.0	20.2	21.0	20.6	21.4	21.8
6H	20.9	21.7	21.3	22.1	22.4	20.7	21.4	21.1	21.8	22.2
8H	21.0	21.8	21.5	22.2	22.6	20.8	21.5	21.2	21.9	22.3
12H	21.1	21.8	21.5	22.2	22.6	20.8	21.5	21.3	21.9	22.3
4H 2H	18.3	19.2	18.7	19.5	19.9	18.1	19.0	18.5	19.3	19.7
3H	20.4	21.1	20.9	21.6	22.0	20.2	20.9	20.6	21.3	21.7
4H	21.3	21.9	21.7	22.3	22.8	21.1	21.7	21.5	22.1	22.6
6H	21.9	22.4	22.4	22.9	23.4	21.6	22.2	22.1	22.6	23.1
8H	22.1	22.6	22.6	23.0	23.5	21.8	22.3	22.3	22.7	23.2
12H	22.2	22.6	22.7	23.1	23.6	21.9	22.3	22.4	22.8	23.3
8H 4H	21.5	22.0	22.0	22.5	23.0	21.3	21.8	21.8	22.2	22.7
6H	22.3	22.7	22.8	23.2	23.7	22.0	22.4	22.5	22.9	23.4
8H	22.5	22.9	23.1	23.4	23.9	22.2	22.6	22.7	23.1	23.6
12H	22.7	23.0	23.2	23.5	24.1	22.4	22.7	22.9	23.2	23.7
12H 4H	21.5	22.0	22.0	22.5	22.9	21.3	21.7	21.8	22.2	22.7
6H	22.3	22.7	22.8	23.1	23.7	22.0	22.4	22.6	22.8	23.4
8H	22.6	22.9	23.1	23.4	24.0	22.3	22.6	22.8	23.1	23.7
CIE190: 2010										

CIE190: 2010  
 Area: 0.16475 m2

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:LYJ  
 Test Date:2021-12-29

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.446  
 Humidity:65.0%  
 Test Distance:26.000m [K=0.4536]  
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UTILIZATION FACTORS TABLE

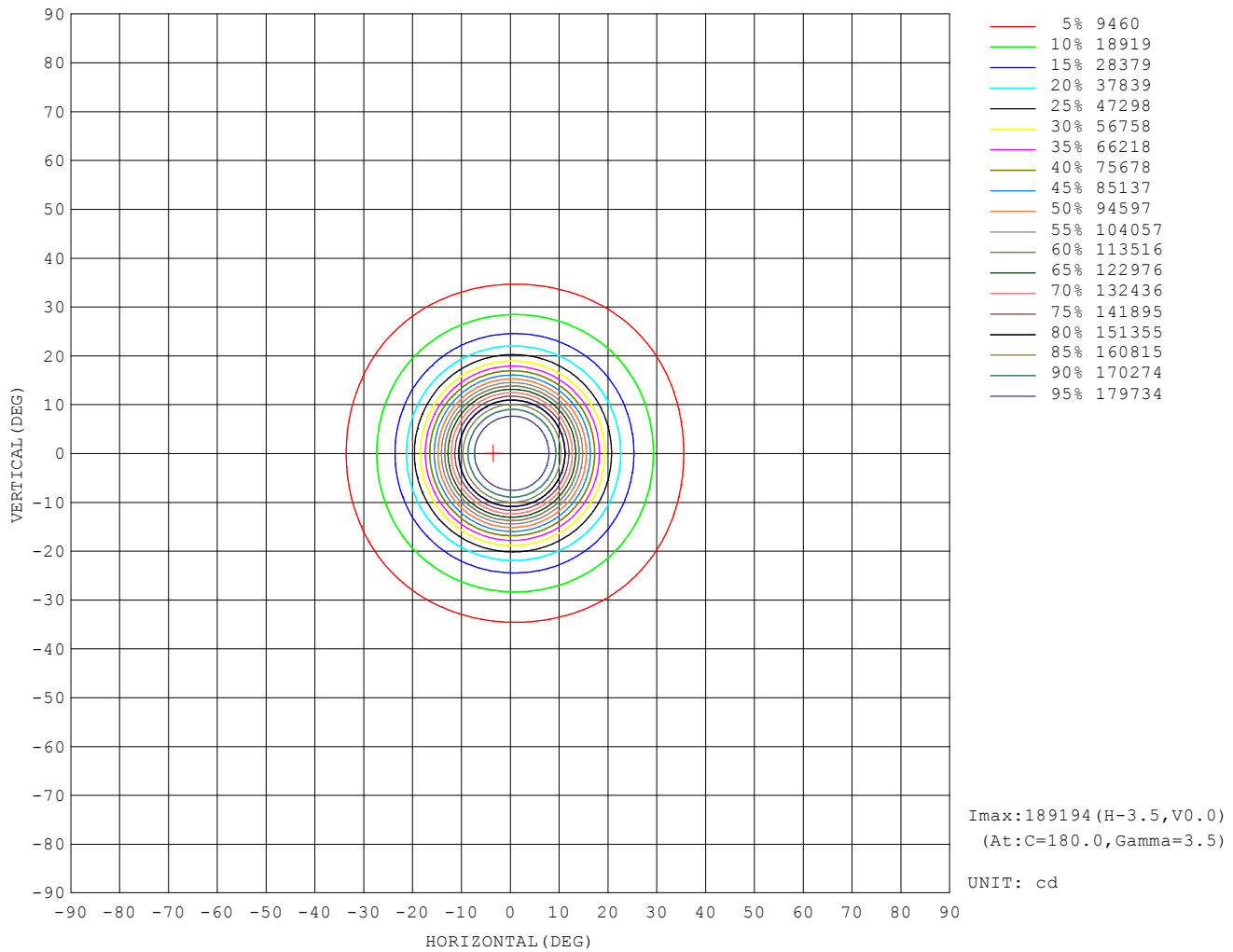
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	85	78	74	84	78	74	84	78	74	70
0.80	93	86	82	92	86	82	91	85	82	78
1.00	97	91	87	96	91	87	95	91	86	82
1.25	101	96	92	100	95	91	98	94	91	86
1.50	104	99	95	103	98	95	101	97	94	89
2.00	107	103	99	106	102	98	103	100	97	91
2.50	109	105	102	107	104	101	104	101	99	93
3.00	111	107	104	109	106	103	106	103	101	94
4.00	113	110	108	111	108	106	107	105	103	96
5.00	114	112	110	112	110	108	108	107	105	97
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: 25.3DEG  
 Operators: LYJ  
 Test Date: 2021-12-29

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.446  
 Humidity: 65.0%  
 Test Distance: 26.000m [K=0.4536]  
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

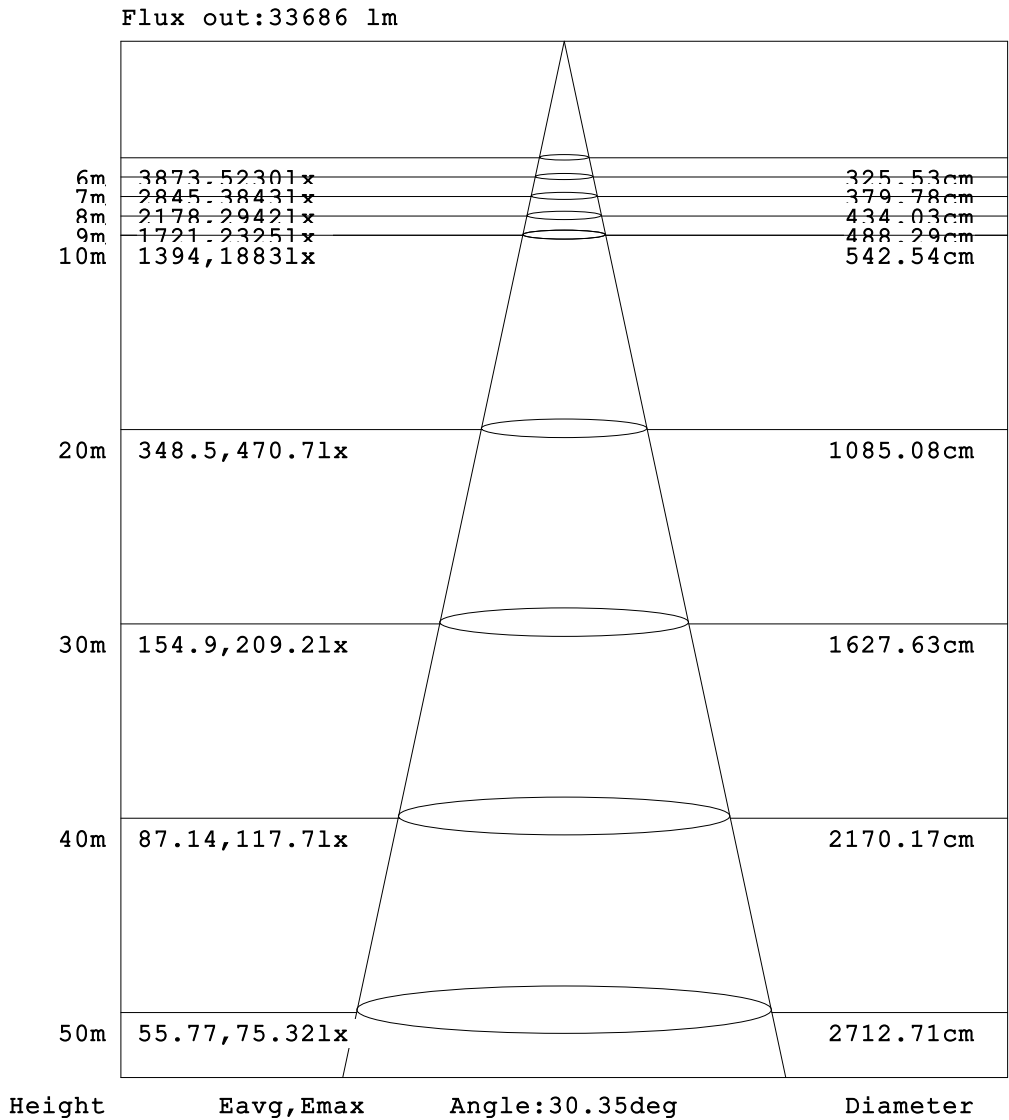


C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:LYJ  
 Test Date:2021-12-29

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.00.446  
 Humidity:65.0%  
 Test Distance:26.000m [K=0.4536]  
 Remarks:



AAI Figure



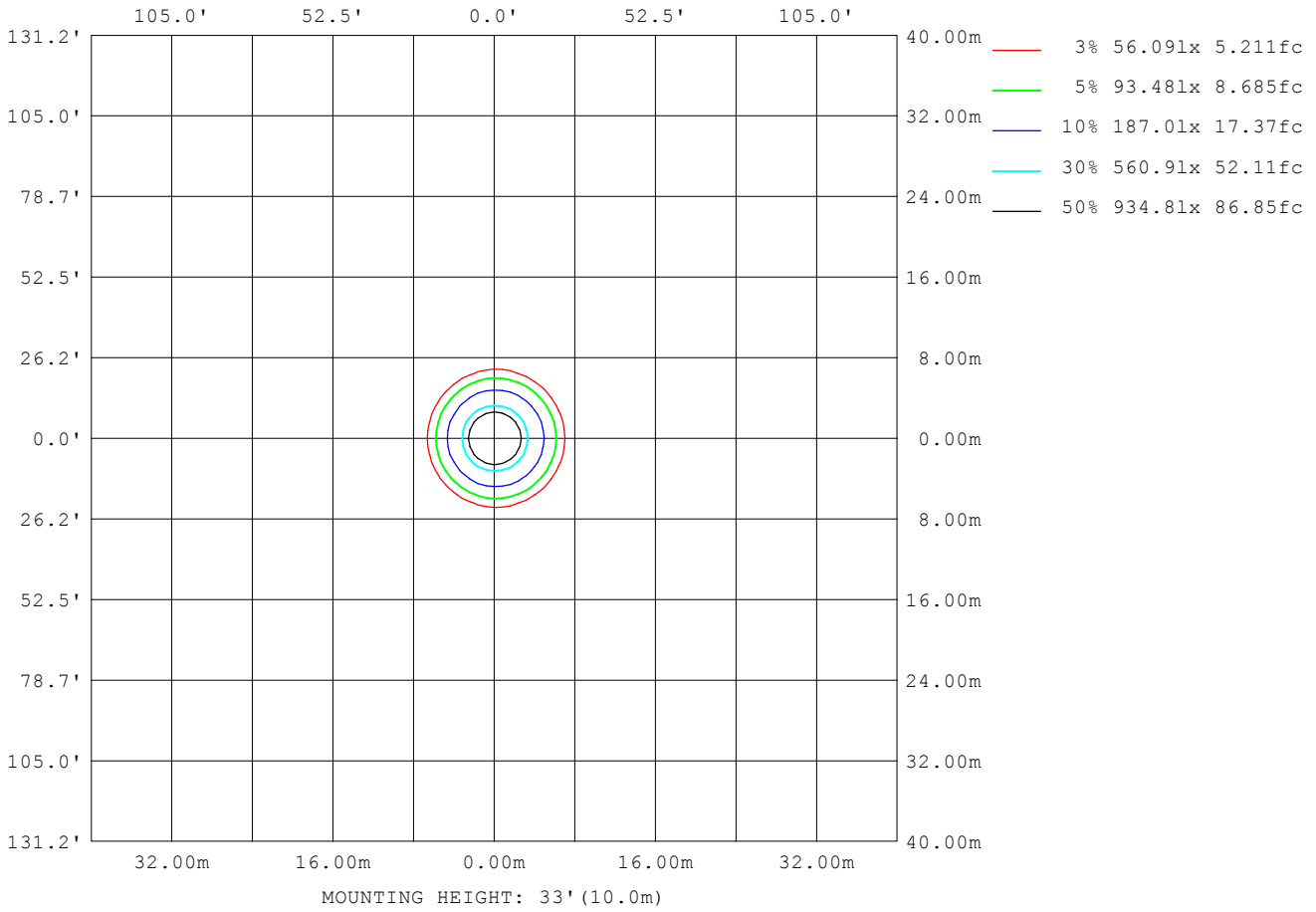
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: LYJ  
 Test Date: 2021-12-29

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.446  
 Humidity: 65.0%  
 Test Distance: 26.000m [K=0.4536]  
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

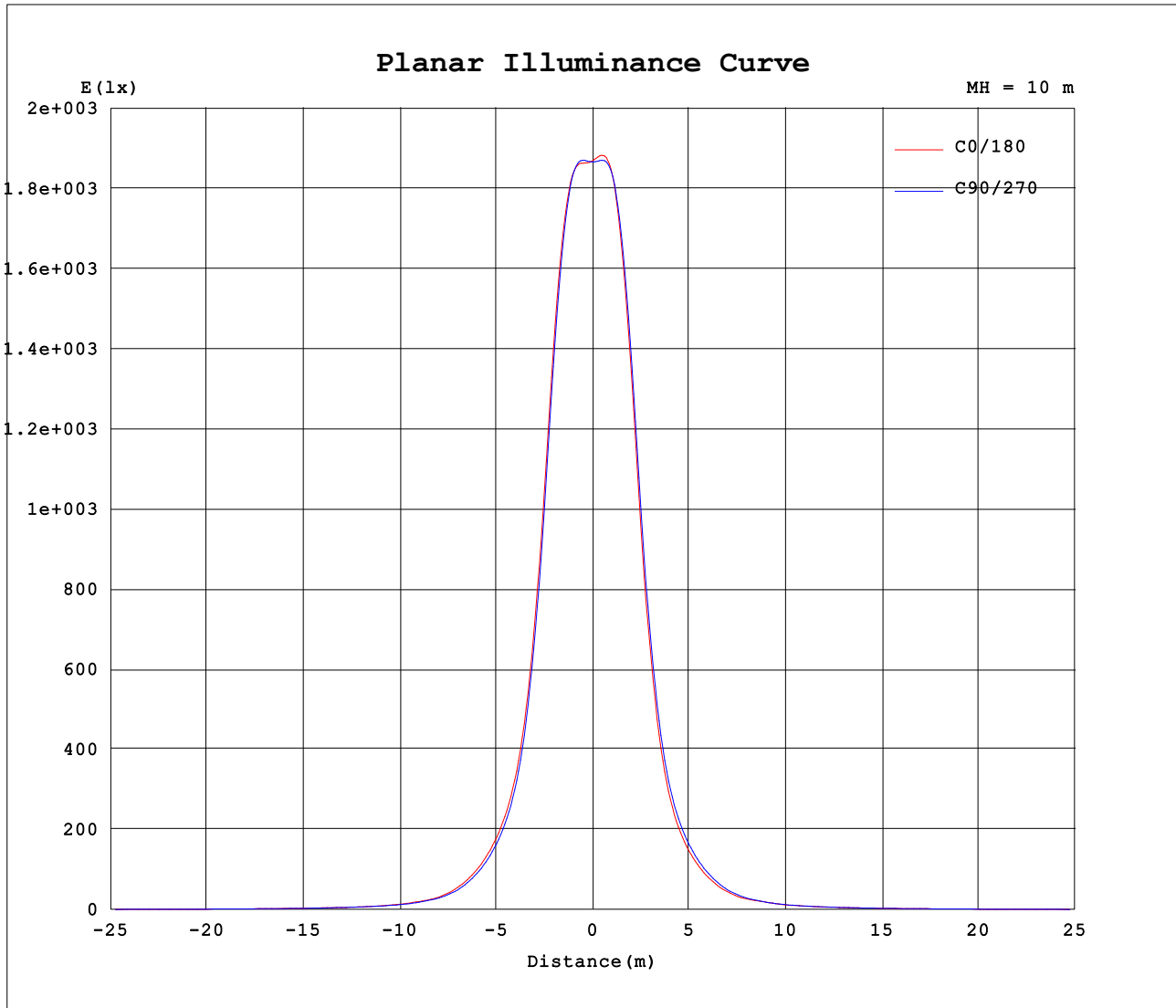
ISOLUX DIAGRAM



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: LYJ  
 Test Date: 2021-12-29

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.446  
 Humidity: 65.0%  
 Test Distance: 26.000m [K=0.4536]  
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: LYJ  
Test Date: 2021-12-29

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.00.446  
Humidity: 65.0%  
Test Distance: 26.000m [K=0.4536]  
Remarks: