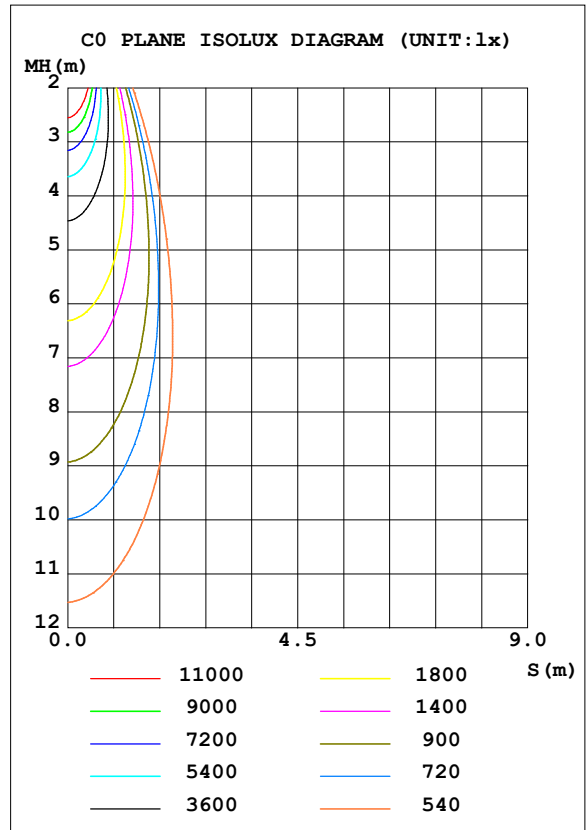
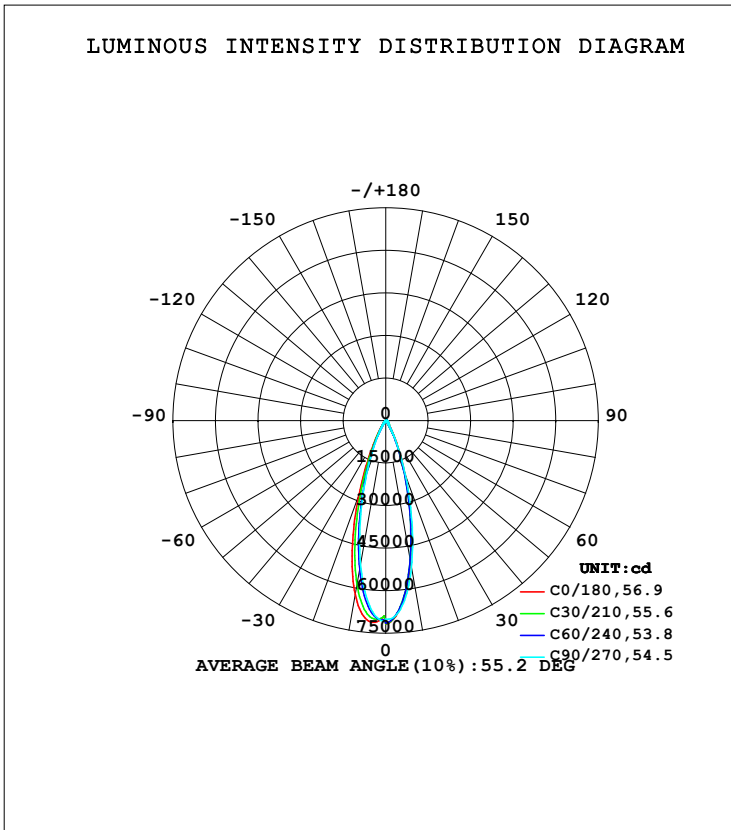




LUMINAIRE PHOTOMETRIC TEST REPORT

NAME:		
MFR.: CLF		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 39.31 lm/W			
MODEL	SERA + 20filter	I _{max} (cd)	71748	S/MH (C0/180)	0.57
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	0.49
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	24611	η UP, DN (C0-180)	0.0, 49.7
NOMINAL FLUX (lm)	615.28	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 50.3
LAMPS INSIDE	40	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	220.0	η down (%)	100.0	CIBSE SHR MAX	0.50



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Danny
 Test Date: 2023-12-08

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-HD5 SYSTEM V2.0.407.13
 Humidity: 65.0%
 Test Distance: 9.400m [K=1.0000]
 Remarks:



ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	5064	4983	5239	5993	6224	5587	5147	5076	0- 10	5965	5965	24.2,24.2
20	1984	1863	2019	2613	2766	2239	1947	1983	10- 20	10117	16082	65.3,65.3
30	507.8	451.9	468.9	612.9	644.4	508.0	460.4	498.3	20- 30	5261	21343	86.7,86.7
40	140.0	129.6	132.5	154.2	159.8	138.8	132.8	137.7	30- 40	1696	23039	93.6,93.6
50	60.95	61.18	63.95	69.14	69.31	65.35	63.91	61.91	40- 50	724.6	23764	96.6,96.6
60	32.87	34.72	37.32	38.10	37.75	36.73	36.87	34.11	50- 60	433.5	24197	98.3,98.3
70	16.61	18.11	20.51	19.96	19.91	19.33	19.88	17.27	60- 70	266.4	24464	99.4,99.4
80	4.425	5.454	7.007	6.315	6.265	6.095	6.435	4.779	70- 80	126.6	24590	99.9,99.9
90	0.1031	0.1064	0.1119	0.1086	0.1086	0.1031	0.1042	0.1026	80- 90	20.80	24611	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:×10cd									UNIT:lm		

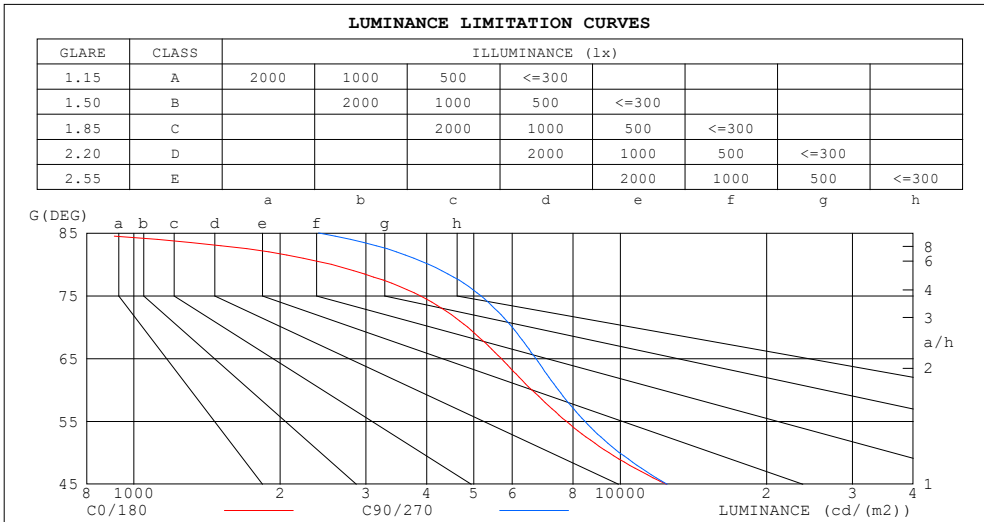
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators: Danny
Test Date:2023-12-08

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-HD5 SYSTEM V2.0.407.13
Humidity:65.0%
Test Distance:9.400m [K=1.0000]
Remarks:



LUMINANCE LIMITATION CURVES

NAME :		
MFR. : CLF		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	709	2399
80	2549	4035
75	3879	5166
70	4855	5996
65	5695	6704
60	6573	7464
55	7750	8458
50	9481	9949
45	12450	12482

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Danny
 Test Date: 2023-12-08

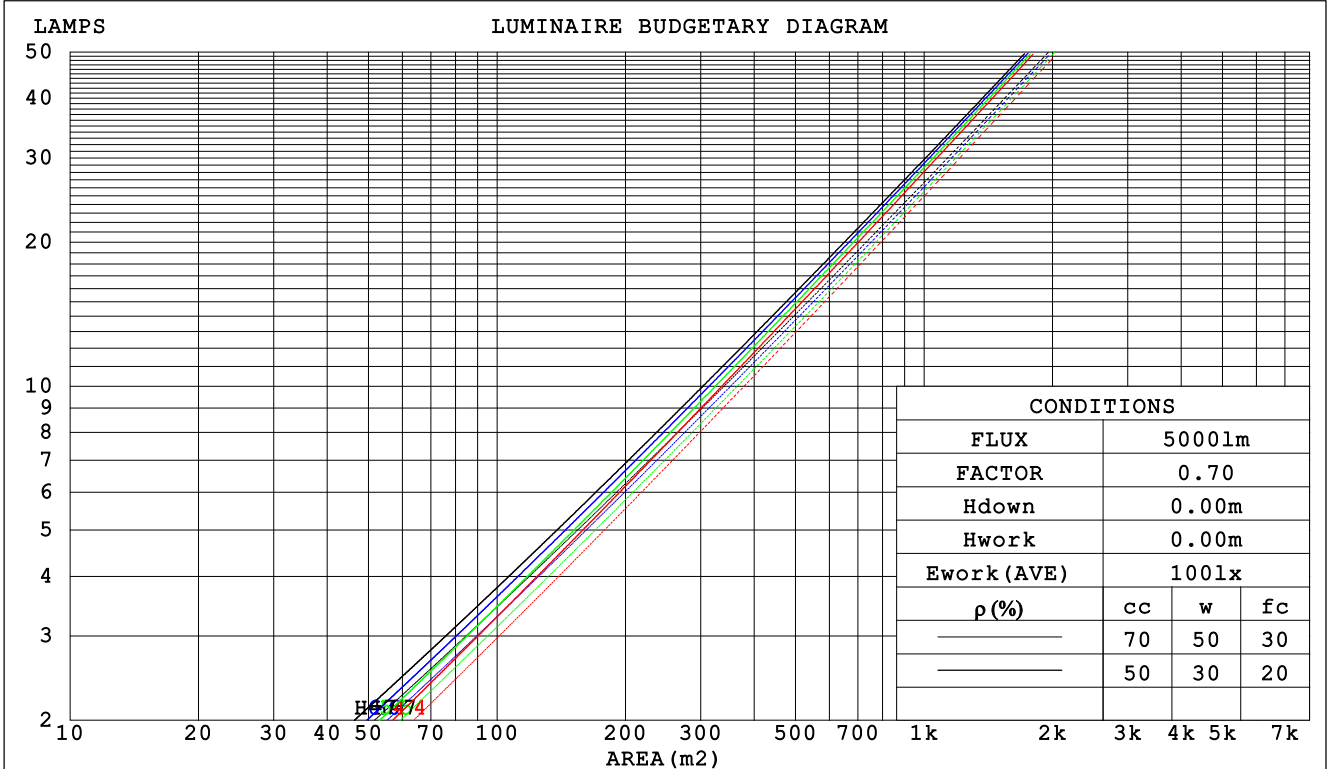
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-HD5 SYSTEM V2.0.407.13
 Humidity: 65.0%
 Test Distance: 9.400m [K=1.0000]
 Remarks:



CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME:	
MFR.: CLF	

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{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	.00
1.0	1.12	1.10	1.08	1.10	1.08	1.06	1.06	1.04	1.03	1.02	1.01	.00	.99	.98	.97	.95
2.0	1.05	1.02	.99	1.04	1.00	.98	1.00	.98	.96	.98	.95	.94	.95	.93	.92	.90
3.0	.00	.95	.92	.98	.94	.91	.96	.93	.90	.93	.91	.88	.91	.89	.87	.86
4.0	.95	.90	.86	.94	.89	.86	.92	.88	.85	.90	.87	.84	.88	.85	.83	.82
5.0	.90	.85	.82	.89	.85	.81	.88	.84	.81	.86	.83	.80	.85	.82	.79	.78
6.0	.86	.81	.78	.86	.81	.77	.84	.80	.77	.83	.79	.76	.82	.78	.76	.75
7.0	.83	.78	.74	.82	.77	.74	.81	.77	.74	.80	.76	.73	.79	.75	.73	.72
8.0	.79	.74	.71	.79	.74	.71	.78	.74	.71	.77	.73	.70	.76	.73	.70	.69
9.0	.76	.72	.68	.76	.71	.68	.75	.71	.68	.74	.70	.68	.74	.70	.68	.66
10.0	.74	.69	.66	.73	.69	.66	.72	.68	.65	.72	.68	.65	.71	.68	.65	.64



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators: Danny
 Test Date:2023-12-08

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-HD5 SYSTEM V2.0.407.13
 Humidity:65.0%
 Test Distance:9.400m [K=1.0000]
 Remarks:



WEC AND CCEC

NAME:		
MFR.: CLF		

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.159	.090	.029	.152	.087	.028	.140	.080	.026	.128	.074	.024	.118	.068	.022	
2.0	.149	.082	.025	.144	.079	.024	.133	.074	.023	.124	.069	.022	.115	.065	.020	
3.0	.140	.074	.022	.135	.072	.022	.126	.069	.021	.118	.065	.020	.111	.061	.019	
4.0	.132	.068	.020	.128	.067	.020	.120	.064	.019	.113	.061	.018	.107	.058	.018	
5.0	.124	.063	.018	.121	.062	.018	.114	.060	.018	.108	.057	.017	.103	.055	.017	
6.0	.118	.059	.017	.115	.058	.017	.109	.056	.016	.104	.054	.016	.099	.052	.015	
7.0	.112	.055	.016	.109	.054	.016	.104	.053	.015	.100	.051	.015	.095	.050	.015	
8.0	.107	.052	.015	.104	.051	.015	.100	.050	.014	.096	.049	.014	.092	.047	.014	
9.0	.102	.049	.014	.100	.049	.014	.096	.047	.013	.092	.046	.013	.089	.045	.013	
10.0	.097	.047	.013	.096	.046	.013	.092	.045	.013	.089	.044	.013	.086	.043	.012	

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{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	.170	.157	.146	.145	.135	.126	.099	.093	.087	.057	.054	.051	.018	.017	.016	
2.0	.153	.133	.115	.131	.114	.100	.090	.079	.070	.052	.046	.041	.017	.015	.013	
3.0	.139	.113	.093	.120	.098	.080	.082	.068	.056	.047	.040	.033	.015	.013	.011	
4.0	.128	.098	.076	.110	.085	.066	.075	.059	.046	.044	.035	.027	.014	.011	.009	
5.0	.118	.086	.063	.101	.075	.055	.070	.052	.039	.040	.031	.023	.013	.010	.008	
6.0	.110	.077	.053	.094	.066	.046	.065	.046	.033	.038	.027	.019	.012	.009	.006	
7.0	.103	.069	.045	.088	.060	.039	.061	.042	.028	.035	.025	.017	.011	.008	.005	
8.0	.096	.062	.039	.083	.054	.034	.057	.038	.024	.033	.022	.014	.011	.007	.005	
9.0	.091	.057	.034	.078	.049	.029	.054	.035	.021	.032	.020	.012	.010	.007	.004	
10.0	.086	.052	.030	.074	.045	.026	.051	.032	.018	.030	.019	.011	.010	.006	.004	

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Danny
 Test Date: 2023-12-08

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-HD5 SYSTEM V2.0.407.13
 Humidity: 65.0%
 Test Distance: 9.400m [K=1.0000]
 Remarks:



UGR(Unified Glare Rating) Table

NAME:											
MFR.: CLF											
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	2.9	3.7	3.2	3.9	4.0	3.0	3.8	3.2	3.9	4.1
	3H	3.4	4.2	3.7	4.3	4.5	3.7	4.4	3.9	4.6	4.8
	4H	3.6	4.3	3.9	4.5	4.7	4.0	4.7	4.2	4.9	5.1
	6H	3.6	4.3	3.9	4.5	4.8	4.1	4.8	4.4	5.0	5.3
	8H	3.6	4.2	3.9	4.5	4.8	4.2	4.8	4.5	5.0	5.3
	12H	3.6	4.2	3.9	4.4	4.7	4.1	4.7	4.5	5.0	5.3
4H	2H	3.1	3.8	3.4	4.1	4.3	3.2	3.9	3.5	4.1	4.3
	3H	3.8	4.4	4.1	4.6	4.9	4.1	4.7	4.4	4.9	5.2
	4H	4.0	4.6	4.3	4.8	5.1	4.4	5.0	4.8	5.3	5.6
	6H	4.1	4.6	4.5	4.9	5.3	4.7	5.1	5.0	5.5	5.8
	8H	4.1	4.5	4.5	4.9	5.2	4.7	5.1	5.1	5.5	5.9
	12H	4.0	4.5	4.4	4.8	5.2	4.7	5.1	5.1	5.5	5.9
8H	4H	4.1	4.5	4.4	4.9	5.2	4.5	4.9	4.8	5.3	5.6
	6H	4.2	4.6	4.6	5.0	5.4	4.7	5.1	5.2	5.5	5.9
	8H	4.2	4.5	4.6	4.9	5.4	4.8	5.1	5.3	5.6	6.0
	12H	4.2	4.4	4.6	4.9	5.3	4.8	5.1	5.3	5.5	6.0
12H	4H	4.0	4.4	4.4	4.8	5.2	4.4	4.8	4.8	5.2	5.6
	6H	4.2	4.5	4.6	4.9	5.4	4.7	5.0	5.2	5.5	5.9
	8H	4.2	4.5	4.6	4.9	5.4	4.8	5.1	5.3	5.5	6.0
Variations with the observer position at spacings:											
S = 1.0H		+ 1.1 / - 1.2					+ 0.7 / - 0.8				
1.5H		+ 1.9 / - 0.8					+ 1.4 / - 0.6				
2.0H		+ 1.3 / - 0.9					+ 1.0 / - 0.7				

CIE Pub.117, 24611 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 11.1)
 Area: 0.1 m2

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Danny
 Test Date:2023-12-08

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-HD5 SYSTEM V2.0.407.13
 Humidity:65.0%
 Test Distance:9.400m [K=1.0000]
 Remarks:



UTILIZATION FACTORS TABLE

NAME:		
MFR.: CLF		

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	88	81	78	87	81	77	86	81	77	74
0.80	95	89	85	94	89	85	93	88	85	81
1.00	99	94	90	98	93	90	97	93	89	85
1.25	103	98	94	102	97	94	100	96	93	89
1.50	106	101	98	105	100	97	102	99	96	92
2.00	108	104	101	107	103	100	104	101	99	94
2.50	110	106	103	109	105	102	105	103	101	95
3.00	112	108	106	110	107	104	107	104	102	96
4.00	114	111	109	112	109	107	108	106	105	98
5.00	115	113	111	113	111	109	109	108	106	99
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

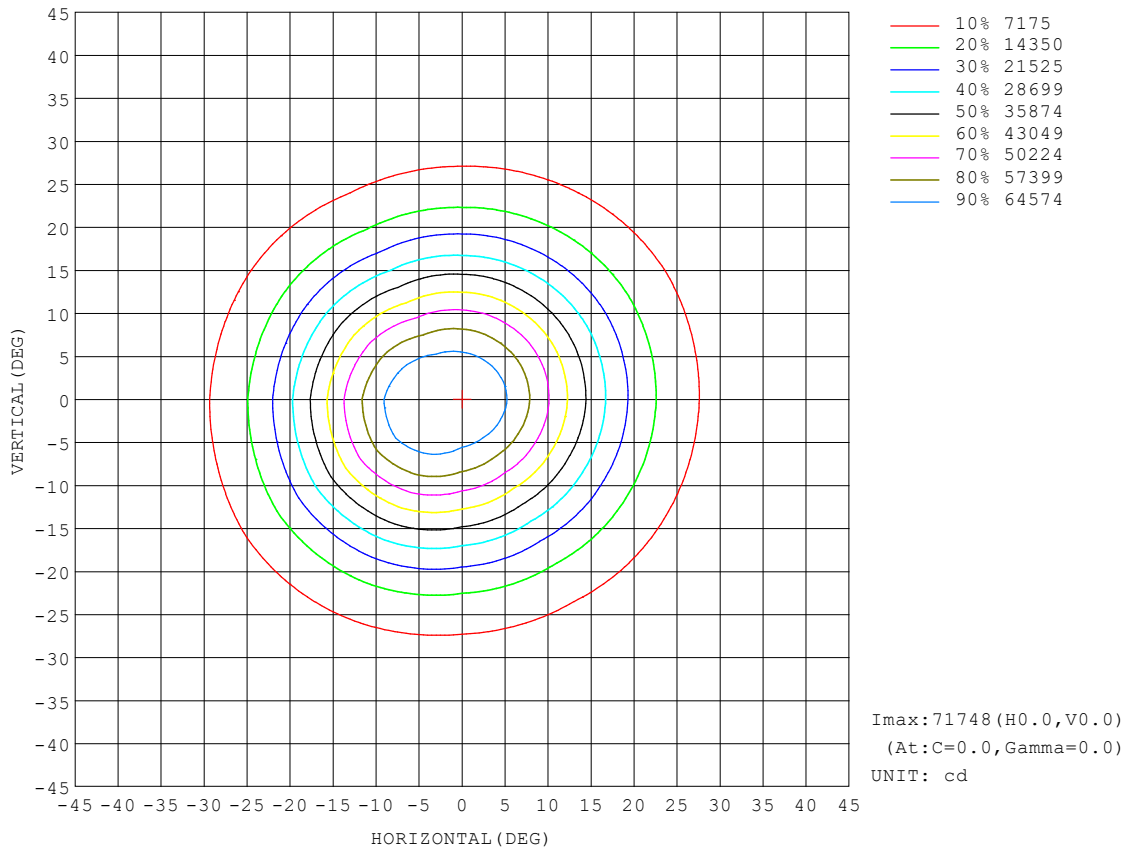
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Danny
 Test Date: 2023-12-08

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-HD5 SYSTEM V2.0.407.13
 Humidity: 65.0%
 Test Distance: 9.400m [K=1.0000]
 Remarks:



ISOCANDELA DIAGRAM

NAME :		
MFR. : CLF		



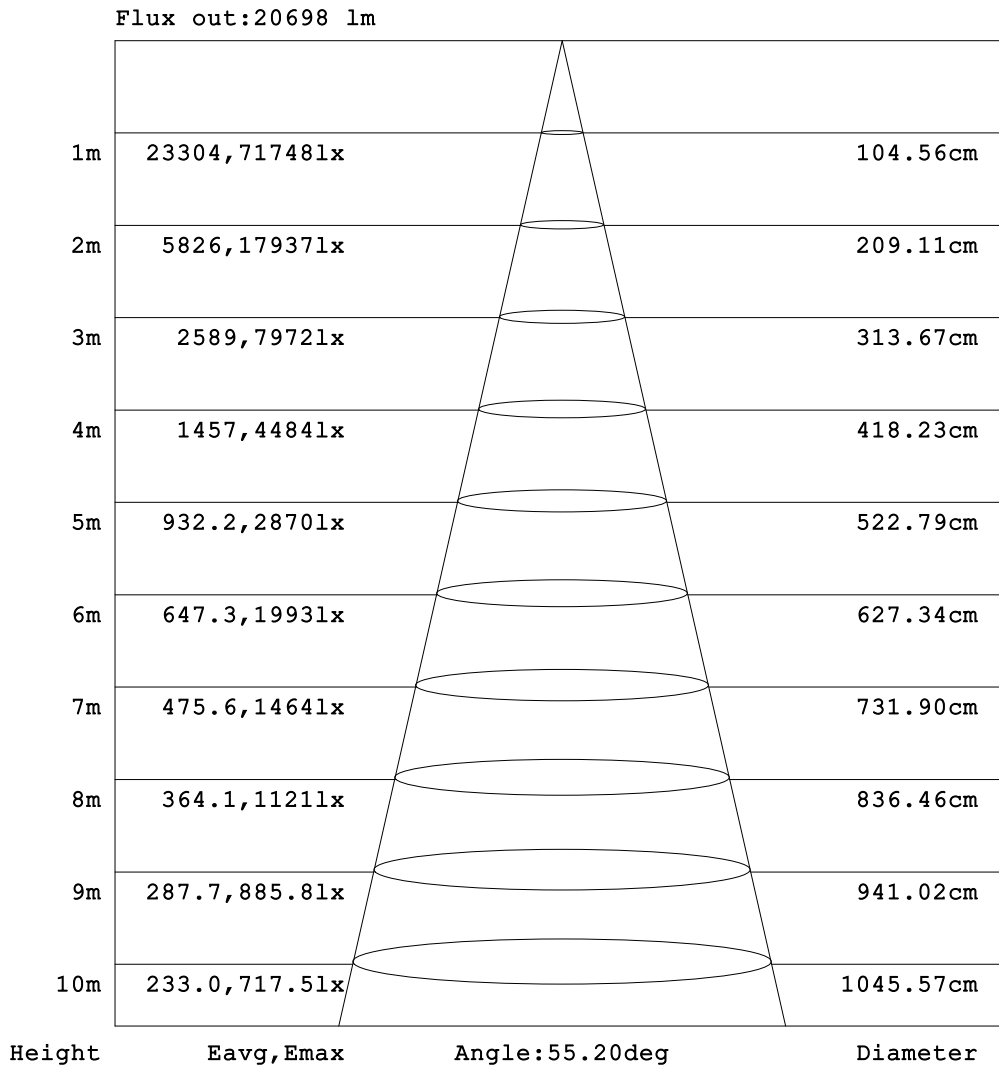
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Danny
Test Date: 2023-12-08

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-HD5 SYSTEM V2.0.407.13
Humidity: 65.0%
Test Distance: 9.400m [K=1.0000]
Remarks:



AAI Figure

NAME:		
MFR.: CLF		



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

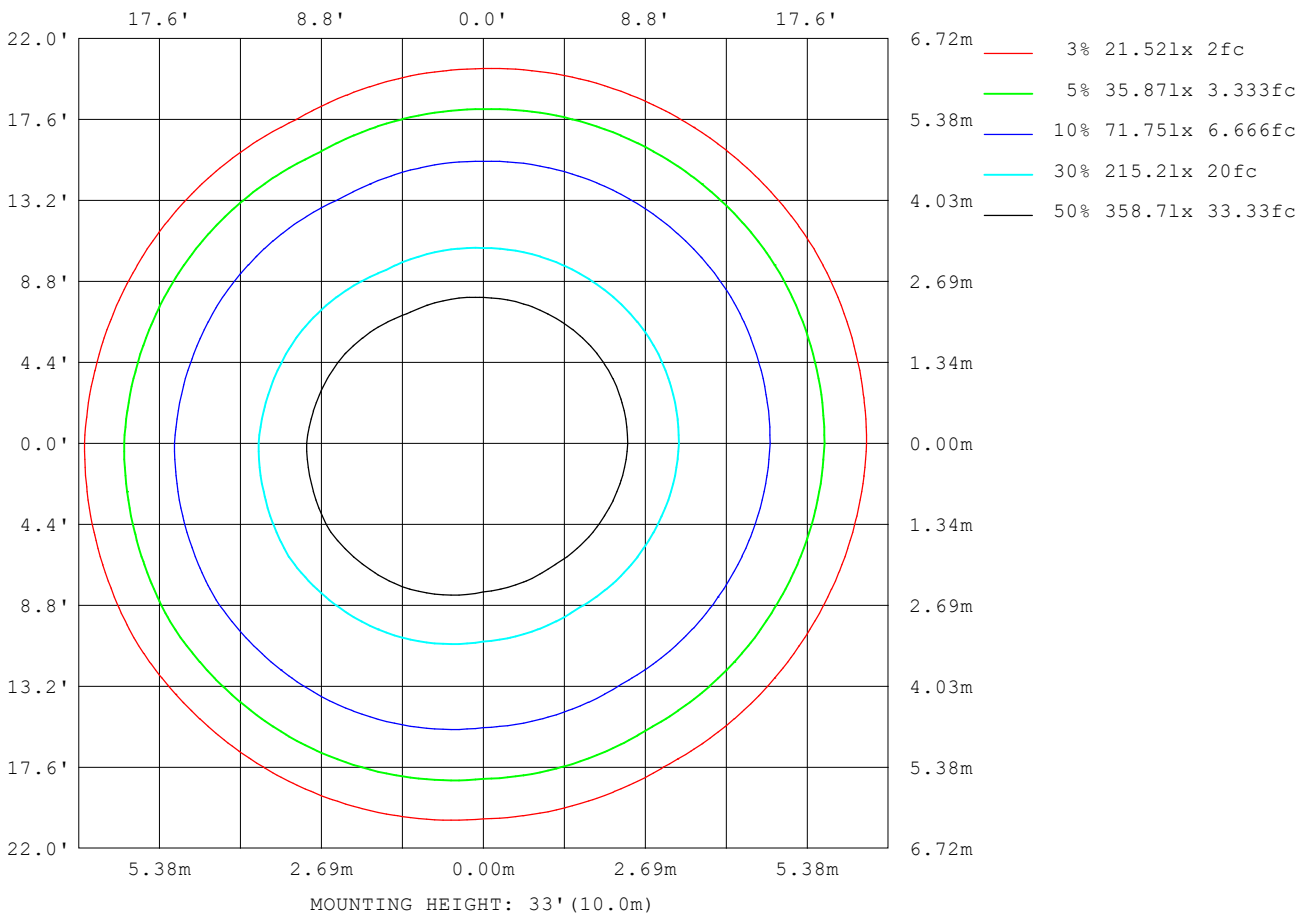
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Danny
 Test Date: 2023-12-08

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-HD5 SYSTEM V2.0.407.13
 Humidity: 65.0%
 Test Distance: 9.400m [K=1.0000]
 Remarks:



ISOLUX DIAGRAM

NAME :		
MFR. : CLF		



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Danny
Test Date: 2023-12-08

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-HD5 SYSTEM V2.0.407.13
Humidity: 65.0%
Test Distance: 9.400m [K=1.0000]
Remarks:



LED Avg.L Report

NAME :		
MFR. : CLF		

AvgL	cd/m2
L_0~180 (65) av	6159
L_0~180 (75) av	4397
L_0~180 (85) av	1196
L_90~270 (65) av	6638
L_90~270 (75) av	5044
L_90~270 (85) av	2168
L_45 (65) av	6270
L_45 (75) av	4492
L_45 (85) av	1448

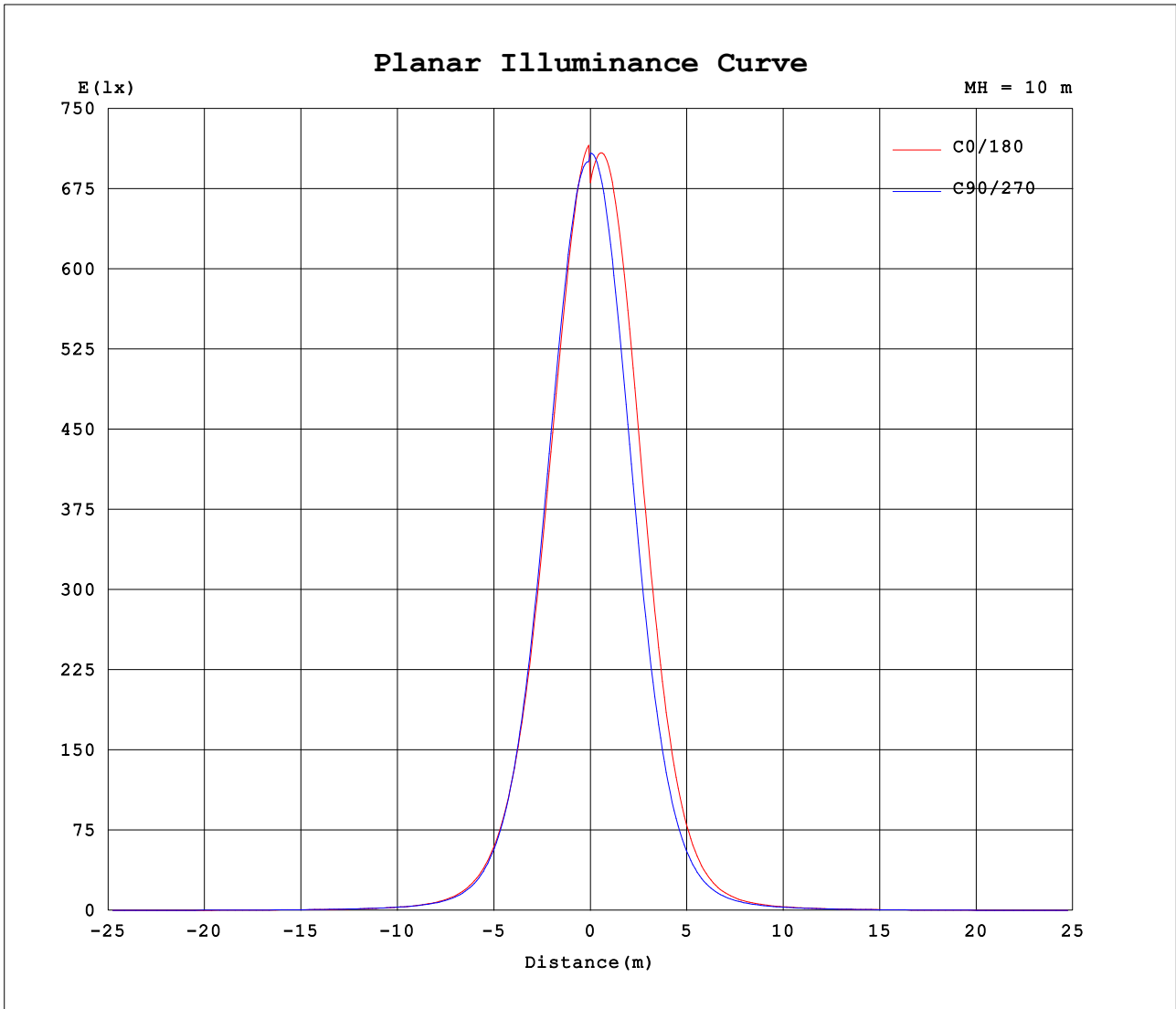
Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Danny
Test Date:2023-12-08

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-HD5 SYSTEM V2.0.407.13
Humidity:65.0%
Test Distance:9.400m [K=1.0000]
Remarks:



Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Danny
Test Date: 2023-12-08

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-HD5 SYSTEM V2.0.407.13
Humidity: 65.0%
Test Distance: 9.400m [K=1.0000]
Remarks:

