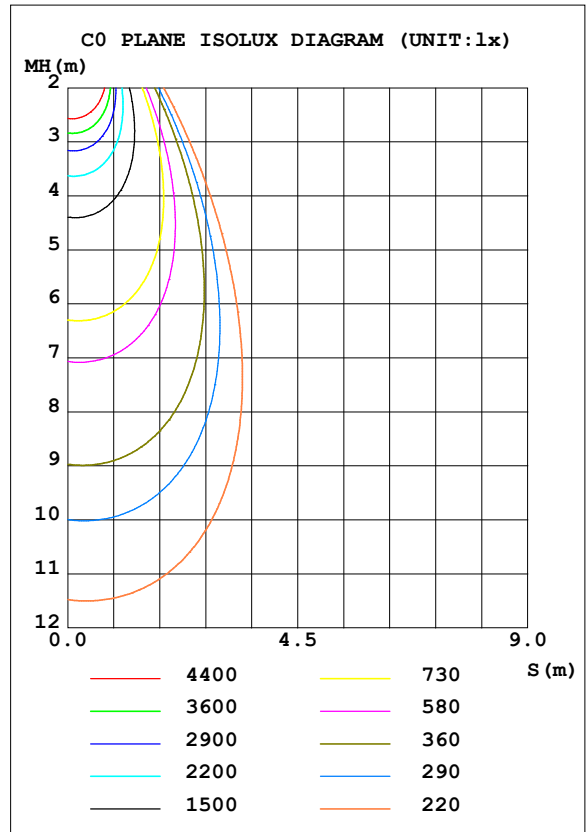
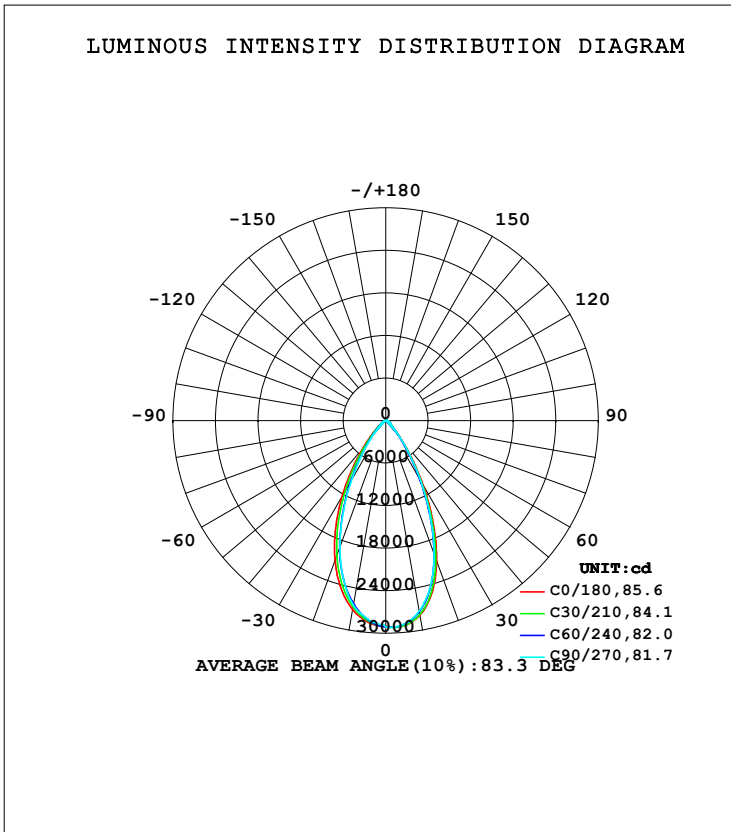




LUMINAIRE PHOTOMETRIC TEST REPORT

NAME:		
MFR.: CLF		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 37.66 lm/W			
MODEL	SEAR + 40 filter	I _{max} (cd)	29200	S/MH(C0/180)	0.85
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	0.78
RATED VOLTAGE(V)	220.0	TOTAL FLUX(lm)	23458	η UP, DN(C0-180)	0.0,50.3
NOMINAL FLUX(lm)	586.444	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,49.7
LAMPS INSIDE	40	η up(%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	220.0	η down(%)	100.0	CIBSE SHR MAX	0.85



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	2786	2758	2726	2732	2703	2645	2643	2707	0- 10	2687	2687	11.5,11.5
20	2104	2032	1999	2089	2095	1962	1893	2002	10- 20	6714	9401	40.1,40.1
30	1064	992.3	992.8	1162	1231	1068	962.0	1007	20- 30	6992	16393	69.9,69.9
40	341.1	312.3	322.3	429.3	486.2	392.5	326.4	328.3	30- 40	4134	20527	87.5,87.5
50	106.3	102.0	105.7	133.6	150.5	126.1	108.0	105.3	40- 50	1634	22161	94.5,94.5
60	48.92	50.29	52.26	57.99	61.02	56.18	52.38	49.89	50- 60	705.1	22866	97.5,97.5
70	23.65	25.39	27.49	28.49	29.08	27.77	27.12	24.42	60- 70	385.4	23251	99.1,99.1
80	6.419	7.592	9.285	8.928	9.261	8.574	8.627	6.721	70- 80	177.6	23429	99.9,99.9
90	0.1174	0.1218	0.1251	0.1284	0.1295	0.1218	0.1207	0.1169	80- 90	28.88	23458	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		

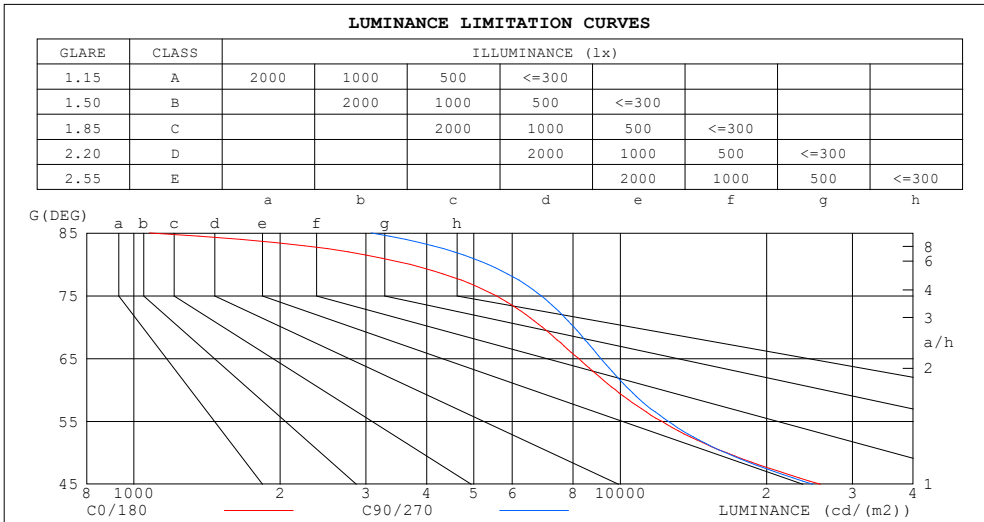
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators: Danny
Test Date:2023-12-08

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	1077	3077
80	3696	5347
75	5556	6876
70	6915	8039
65	8218	9130
60	9784	10453
55	12160	12546
50	16533	16448
45	25798	24876

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

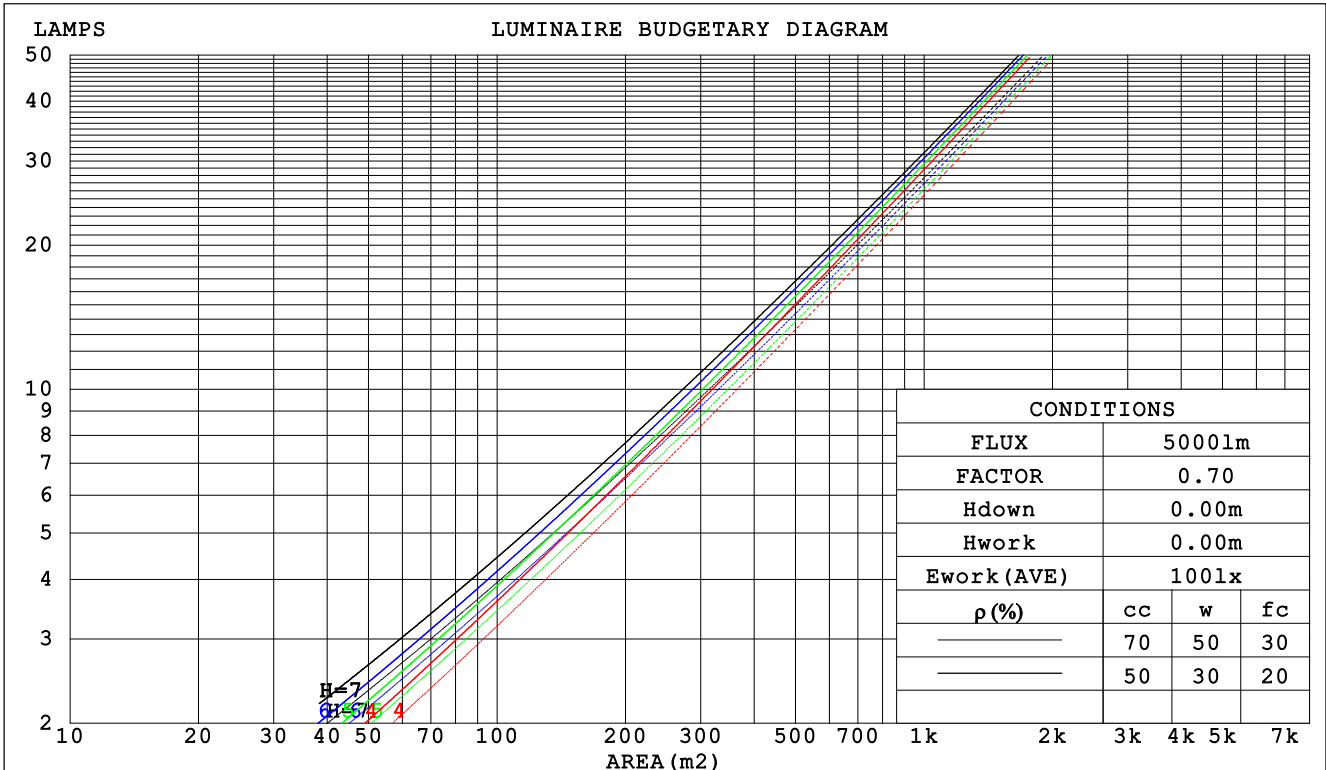
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-HD5 SYSTEM V2.0.407.13
 Humidity: 65.0%
 Test Distance: 9.400m [K=1.0000]
 Remarks:



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	1.10	1.08	1.05	1.08	1.06	1.04	1.04	1.02	1.00	1.00	.99	.97	.97	.96	.95	.93
2.0	1.02	.98	.94	1.00	.97	.93	.97	.94	.91	.94	.92	.89	.91	.89	.87	.86
3.0	.95	.90	.86	.94	.89	.85	.91	.87	.84	.89	.85	.82	.86	.83	.81	.79
4.0	.89	.83	.79	.87	.82	.78	.85	.81	.77	.83	.79	.76	.81	.78	.75	.74
5.0	.83	.77	.72	.82	.76	.72	.80	.75	.71	.78	.74	.71	.77	.73	.70	.69
6.0	.78	.72	.67	.77	.71	.67	.75	.70	.67	.74	.70	.66	.73	.69	.66	.64
7.0	.73	.67	.63	.72	.67	.63	.71	.66	.62	.70	.65	.62	.69	.65	.62	.60
8.0	.69	.63	.59	.68	.63	.59	.67	.62	.58	.66	.62	.58	.65	.61	.58	.56
9.0	.65	.59	.55	.65	.59	.55	.64	.59	.55	.63	.58	.55	.62	.58	.55	.53
10.0	.62	.56	.52	.61	.56	.52	.60	.55	.52	.60	.55	.52	.59	.55	.51	.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:



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	.187	.106	.034	.180	.103	.033	.168	.096	.031	.156	.090	.029	.145	.084	.027	
2.0	.179	.098	.030	.173	.095	.029	.162	.090	.028	.153	.086	.027	.144	.081	.026	
3.0	.170	.090	.027	.165	.088	.027	.156	.084	.026	.147	.081	.025	.139	.077	.024	
4.0	.161	.084	.025	.157	.082	.024	.149	.079	.024	.141	.076	.023	.135	.073	.022	
5.0	.153	.078	.023	.149	.076	.022	.142	.074	.022	.136	.072	.021	.130	.069	.021	
6.0	.145	.073	.021	.142	.072	.021	.136	.070	.020	.130	.068	.020	.125	.066	.020	
7.0	.138	.068	.019	.135	.067	.019	.130	.066	.019	.125	.064	.019	.120	.062	.018	
8.0	.132	.064	.018	.129	.064	.018	.124	.062	.018	.120	.061	.018	.116	.059	.017	
9.0	.126	.061	.017	.124	.060	.017	.119	.059	.017	.115	.058	.017	.111	.057	.016	
10.0	.120	.058	.016	.118	.057	.016	.115	.056	.016	.111	.055	.016	.107	.054	.016	

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	.172	.157	.144	.147	.135	.124	.101	.093	.086	.058	.054	.050	.019	.017	.016	
2.0	.157	.132	.112	.135	.114	.097	.092	.079	.067	.053	.046	.039	.017	.015	.013	
3.0	.145	.114	.088	.124	.098	.077	.085	.068	.054	.049	.040	.032	.016	.013	.010	
4.0	.135	.099	.071	.116	.086	.062	.080	.060	.044	.046	.035	.026	.015	.011	.009	
5.0	.126	.087	.059	.109	.076	.051	.075	.053	.036	.043	.031	.021	.014	.010	.007	
6.0	.119	.078	.049	.102	.068	.043	.071	.047	.030	.041	.028	.018	.013	.009	.006	
7.0	.113	.071	.041	.097	.061	.036	.067	.043	.026	.039	.025	.015	.013	.008	.005	
8.0	.107	.065	.036	.092	.056	.031	.064	.039	.022	.037	.023	.013	.012	.008	.004	
9.0	.102	.059	.031	.087	.052	.027	.061	.036	.019	.035	.021	.011	.011	.007	.004	
10.0	.097	.055	.027	.083	.048	.024	.058	.034	.017	.034	.020	.010	.011	.007	.003	

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	8.2	9.2	8.4	9.3	9.5	8.0	9.0	8.2	9.1	9.3
3H	8.4	9.3	8.6	9.5	9.7	8.2	9.1	8.5	9.3	9.5
4H	8.4	9.3	8.7	9.5	9.7	8.3	9.2	8.6	9.4	9.6
6H	8.4	9.2	8.7	9.4	9.7	8.4	9.2	8.7	9.4	9.7
8H	8.4	9.1	8.7	9.4	9.6	8.4	9.1	8.7	9.4	9.7
12H	8.3	9.1	8.6	9.3	9.6	8.3	9.1	8.7	9.4	9.6
4H 2H	8.2	9.0	8.4	9.2	9.5	8.0	8.8	8.2	9.0	9.3
3H	8.4	9.2	8.7	9.4	9.7	8.3	9.1	8.7	9.4	9.6
4H	8.5	9.2	8.9	9.5	9.8	8.5	9.2	8.9	9.5	9.8
6H	8.5	9.1	8.9	9.5	9.8	8.6	9.2	9.0	9.5	9.9
8H	8.5	9.1	8.9	9.4	9.8	8.6	9.2	9.0	9.5	9.9
12H	8.5	9.0	8.9	9.3	9.7	8.6	9.1	9.0	9.5	9.9
8H 4H	8.5	9.0	8.9	9.4	9.8	8.5	9.0	8.9	9.4	9.8
6H	8.5	9.0	9.0	9.4	9.8	8.6	9.1	9.1	9.5	9.9
8H	8.5	8.9	9.0	9.3	9.8	8.7	9.1	9.1	9.5	9.9
12H	8.5	8.8	9.0	9.3	9.7	8.7	9.0	9.1	9.4	9.9
12H 4H	8.5	9.0	8.9	9.3	9.7	8.4	8.9	8.9	9.3	9.7
6H	8.5	8.9	9.0	9.3	9.8	8.6	9.0	9.0	9.4	9.9
8H	8.5	8.8	9.0	9.3	9.8	8.6	9.0	9.1	9.4	9.9
Variations with the observer position at spacings:										
S = 1.0H	+ 2.0 / - 2.6					+ 1.8 / - 2.1				
1.5H	+ 3.5 / - 2.2					+ 3.2 / - 1.8				
2.0H	+ 2.7 / - 1.4					+ 2.3 / - 1.1				

CIE Pub.117, 23458 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 11.0)
 Area: 0.1 m2

C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 30.0DEG	γ Interval: 0.5DEG
Test Speed: HIGH	Test System:EVERFINE GO-HD5 SYSTEM V2.0.407.13
Temperature:25.3DEG	Humidity:65.0%
Operators:Danny	Test Distance:9.400m [K=1.0000]
Test Date:2023-12-08	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) $k(RI) \times RCR = 5$									
$k = 0.60$	84	77	73	83	77	72	82	76	72	68
0.80	92	85	81	91	85	81	90	84	80	76
1.00	97	90	86	96	90	86	94	90	86	81
1.25	101	95	91	100	95	91	98	93	90	86
1.50	104	99	95	103	98	95	100	96	93	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			

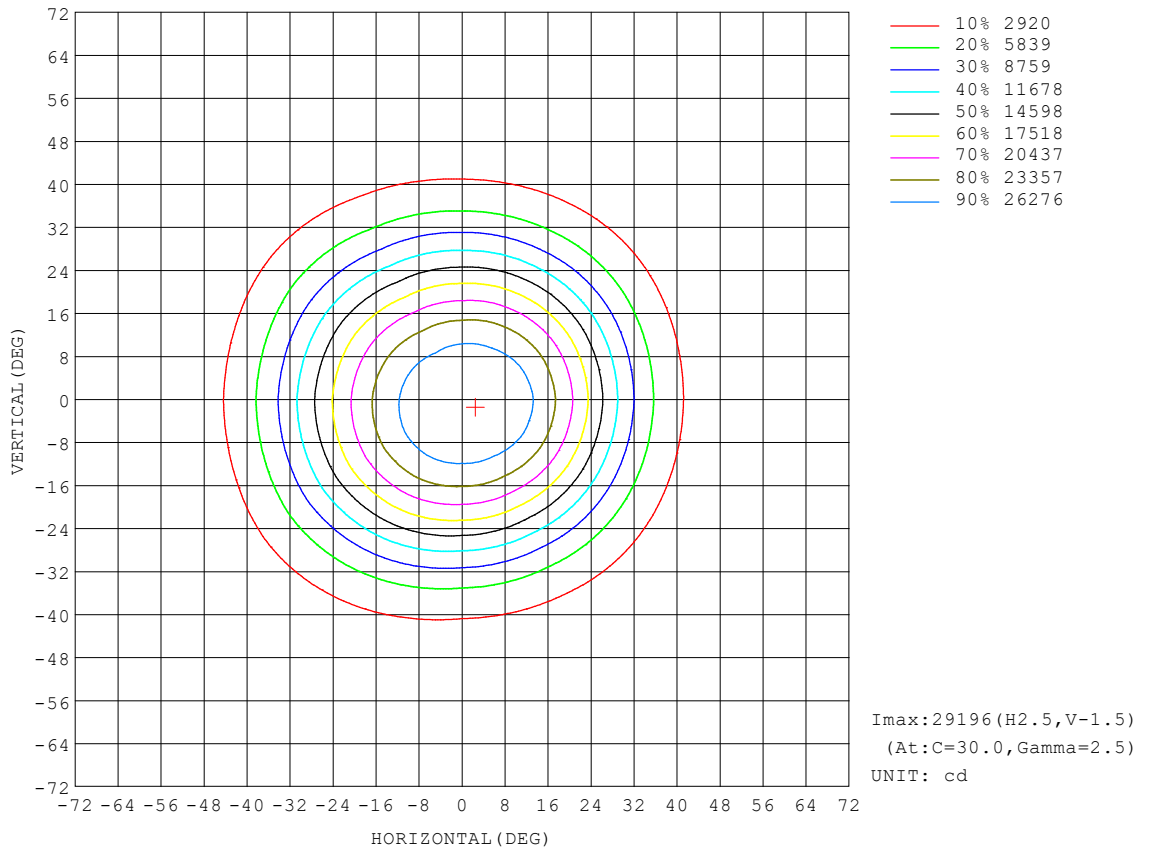
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Danny
 Test Date: 2023-12-08

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		



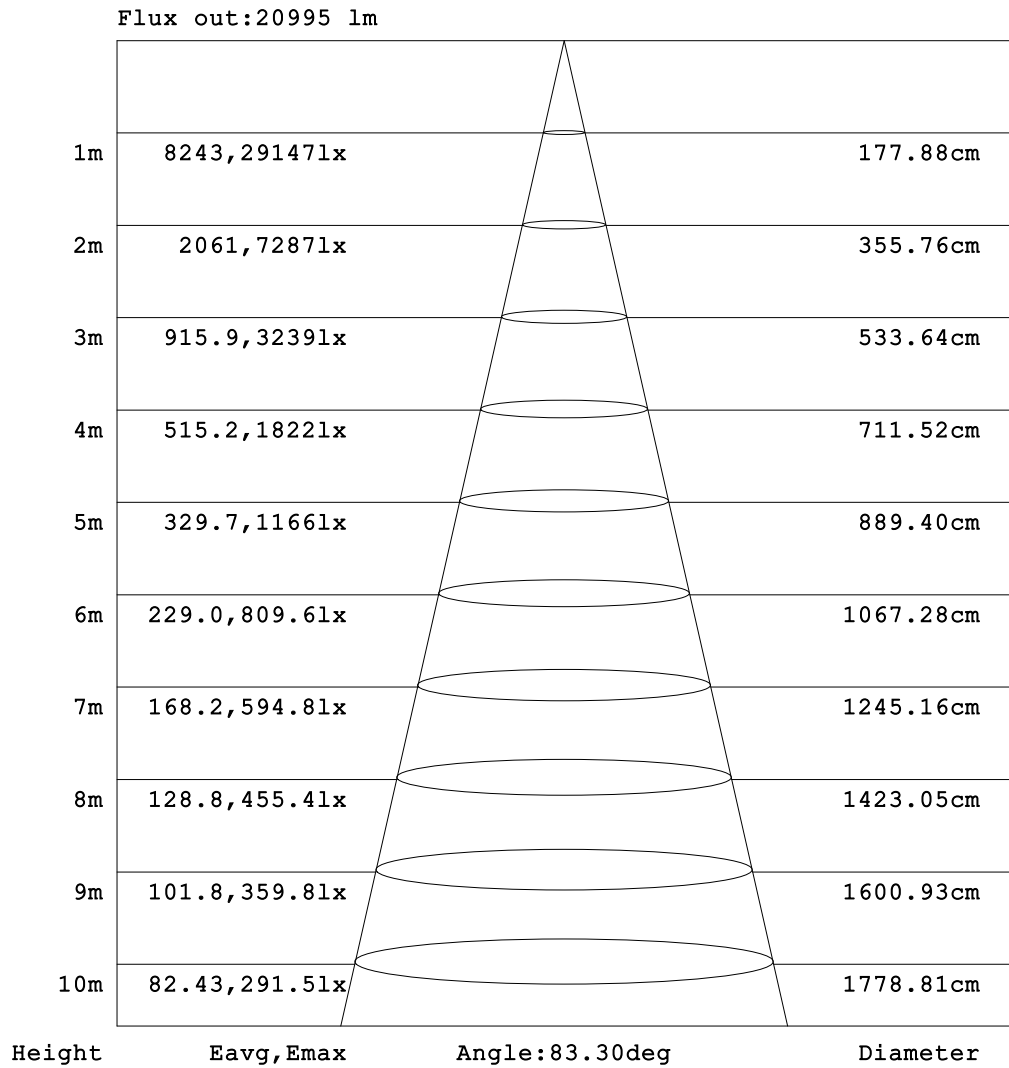
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Danny
Test Date:2023-12-08

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.

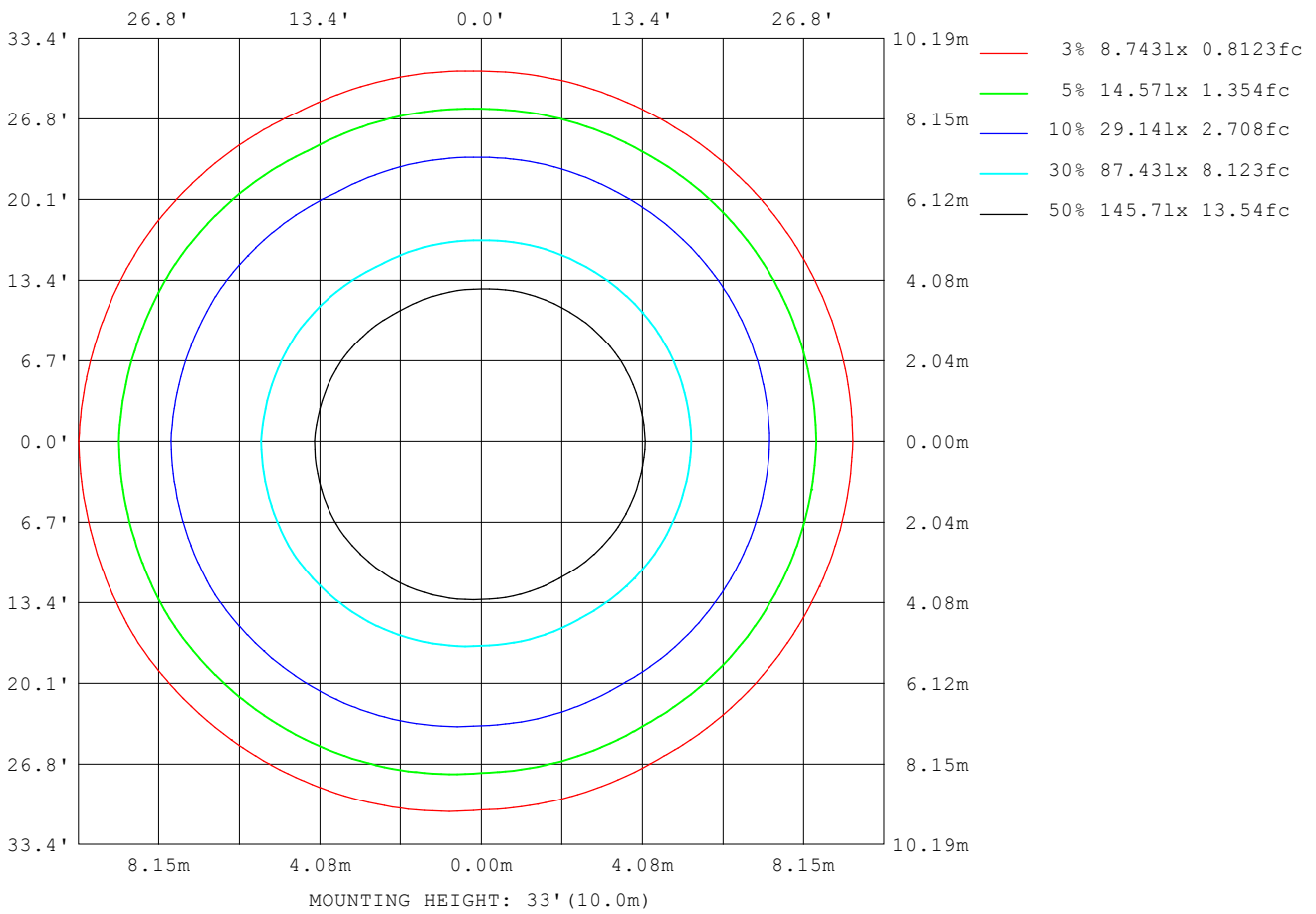
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Danny
Test Date:2023-12-08

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	9135
L_0~180 (75) av	6334
L_0~180 (85) av	1834
L_90~270 (65) av	9089
L_90~270 (75) av	6744
L_90~270 (85) av	2810
L_45 (65) av	9101
L_45 (75) av	6338
L_45 (85) av	2015

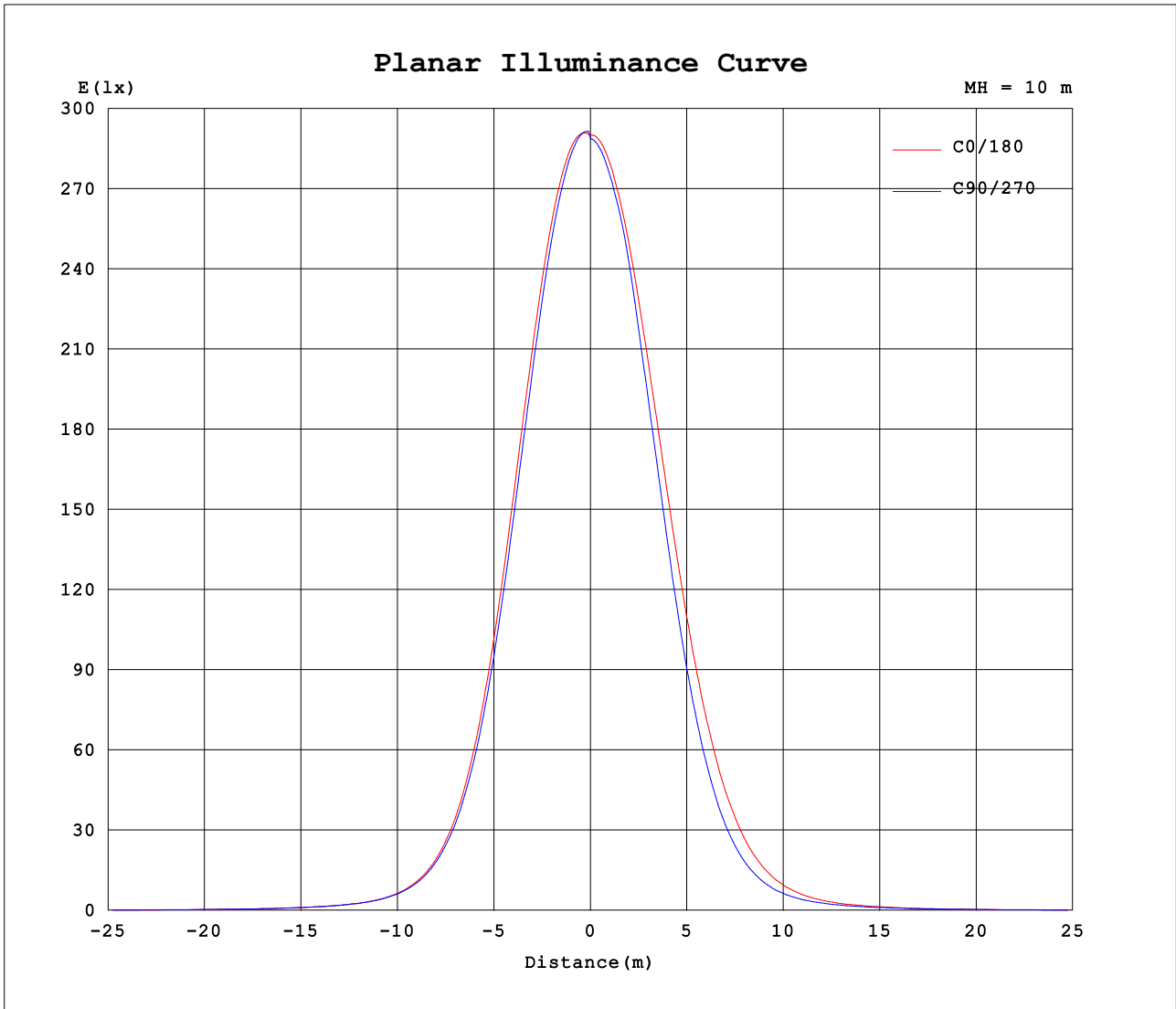
Standard: GB/T 29293-2012

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:



LUMINOUS DISTRIBUTION INTENSITY DATA

NAME :		
MFR. : CLF		

Table--1

UNIT: ×10cd

C (DEG)\ γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330							
0	2897	2904	2906	2911	2906	2901	2901	2903	2890	2888	2886	2883							
5	2905	2906	2889	2885	2883	2872	2856	2839	2825	2816	2843	2874							
10	2786	2778	2737	2726	2735	2729	2703	2666	2623	2643	2675	2739							
15	2518	2498	2436	2428	2460	2473	2446	2389	2312	2312	2376	2463							
20	2104	2068	1996	1999	2067	2111	2095	2020	1905	1893	1955	2049							
25	1589	1543	1474	1493	1595	1675	1676	1588	1438	1417	1463	1544							
30	1064	1019	965	993	1111	1213	1231	1141	995	962	979	1035							
35	631	597	562	590	694	793	816	743	614	584	585	616							
40	341	320	305	322	393	465	486	434	351	326	322	334							
45	182	173	166	176	215	256	270	240	197	181	176	180							
50	106	103	101	106	124	143	150	136	116	108	106	105							
55	69.7	69.6	69.6	72.0	80.3	88.2	91.3	85.0	76.7	72.8	70.9	69.6							
60	48.9	49.6	50.9	52.3	56.6	59.3	61.0	57.9	54.4	52.4	50.9	48.8							
65	34.7	35.7	37.5	38.6	41.0	41.4	42.5	40.9	39.8	38.2	36.8	34.7							
70	23.7	24.4	26.4	27.5	28.6	28.4	29.1	27.9	27.6	27.1	25.2	23.7							
75	14.4	14.7	16.8	17.8	18.0	17.8	18.4	17.1	17.6	17.1	15.2	14.4							
80	6.42	6.85	8.34	9.29	9.06	8.80	9.26	8.34	8.81	8.63	7.03	6.41							
85	0.94	1.30	2.02	2.68	2.49	2.04	2.26	1.96	2.19	2.22	1.38	0.92							
90	0.12	0.12	0.13	0.13	0.13	0.13	0.13	0.12	0.12	0.12	0.12	0.12							

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: