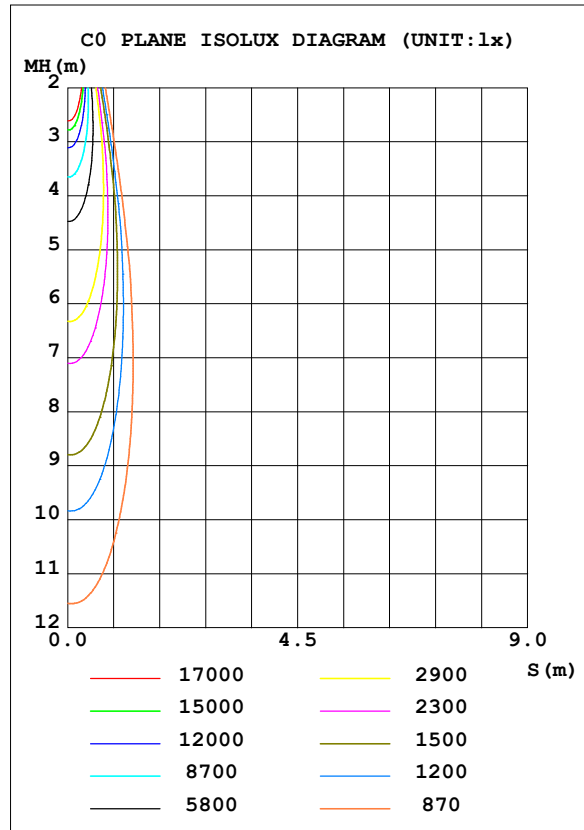
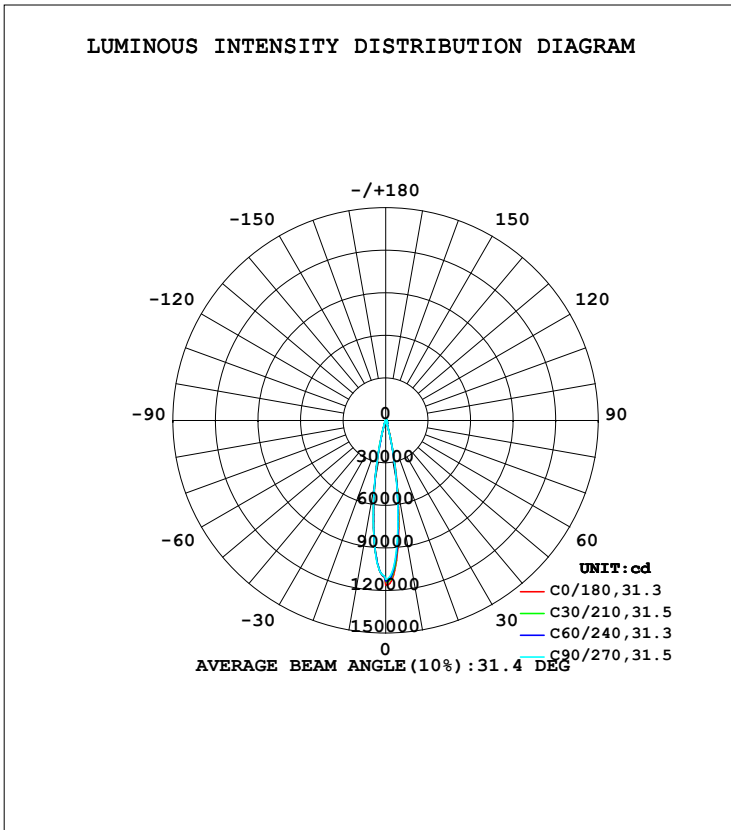




LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.15V I:1.7640A P:240.00W PF:0.9740 Freq:50.01Hz Lamp Flux:635.103x21 lm		
NAME:		
MFR.: CLF		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 55.57 lm/W			
MODEL	CLF SEAR XS	I _{max} (cd)	116118	S/MH (C0/180)	0.30
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	0.31
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	13337	η UP, DN (C0-180)	0.0, 50.7
NOMINAL FLUX (lm)	635.103	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 49.3
LAMPS INSIDE	21	η up (%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE (V)	220.0	η down (%)	100.0	CIBSE SHR MAX	1.00



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Danny
 Test Date: 2023-05-08

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	480.4	465.4	449.2	440.8	445.0	452.5	456.3	450.0	0- 10	7090	7090	53.2,53.2
20	43.94	43.78	42.30	40.09	38.99	39.23	40.13	39.82	10- 20	4376	11466	86,86
30	10.85	10.66	10.48	10.07	10.13	9.966	10.12	9.864	20- 30	922.1	12388	92.9,92.9
40	4.199	4.154	4.242	4.026	3.936	3.872	3.975	3.896	30- 40	397.1	12785	95.9,95.9
50	2.039	2.121	2.278	2.152	1.993	2.059	2.177	2.082	40- 50	226.4	13012	97.6,97.6
60	1.235	1.279	1.525	1.367	1.224	1.277	1.460	1.300	50- 60	145.8	13157	98.7,98.7
70	0.9039	0.9040	1.227	1.019	0.9013	0.8856	1.176	0.9770	60- 70	115.3	13273	99.5,99.5
80	0.1251	0.1523	0.2615	0.1722	0.1240	0.1508	0.2448	0.1640	70- 80	59.05	13332	100,100
90	0.0055	0.0054	0.0054	0.0052	0.0048	0.0050	0.0052	0.0052	80- 90	5.351	13337	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: *100cd									UNIT: lm		

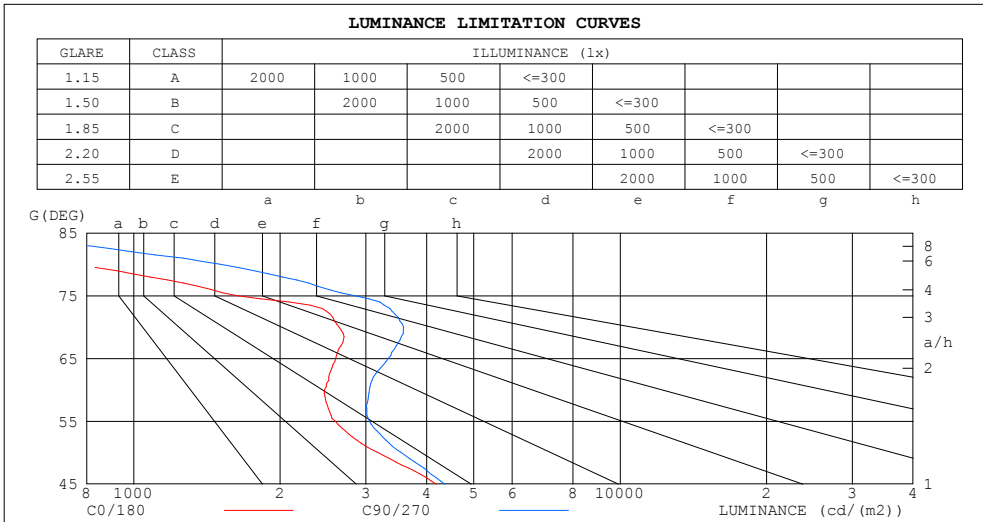
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Danny
 Test Date: 2023-05-08

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

Test:U:220.15V I:1.7640A P:240.00W PF:0.9740 Freq:50.01Hz Lamp Flux:635.103x21 lm		
NAME:		
MFR.: CLF		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	294	561
80	720	1506
75	1626	2839
70	2643	3589
65	2603	3336
60	2469	3050
55	2595	3052
50	3172	3544
45	4189	4361

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Danny
 Test Date:2023-05-08

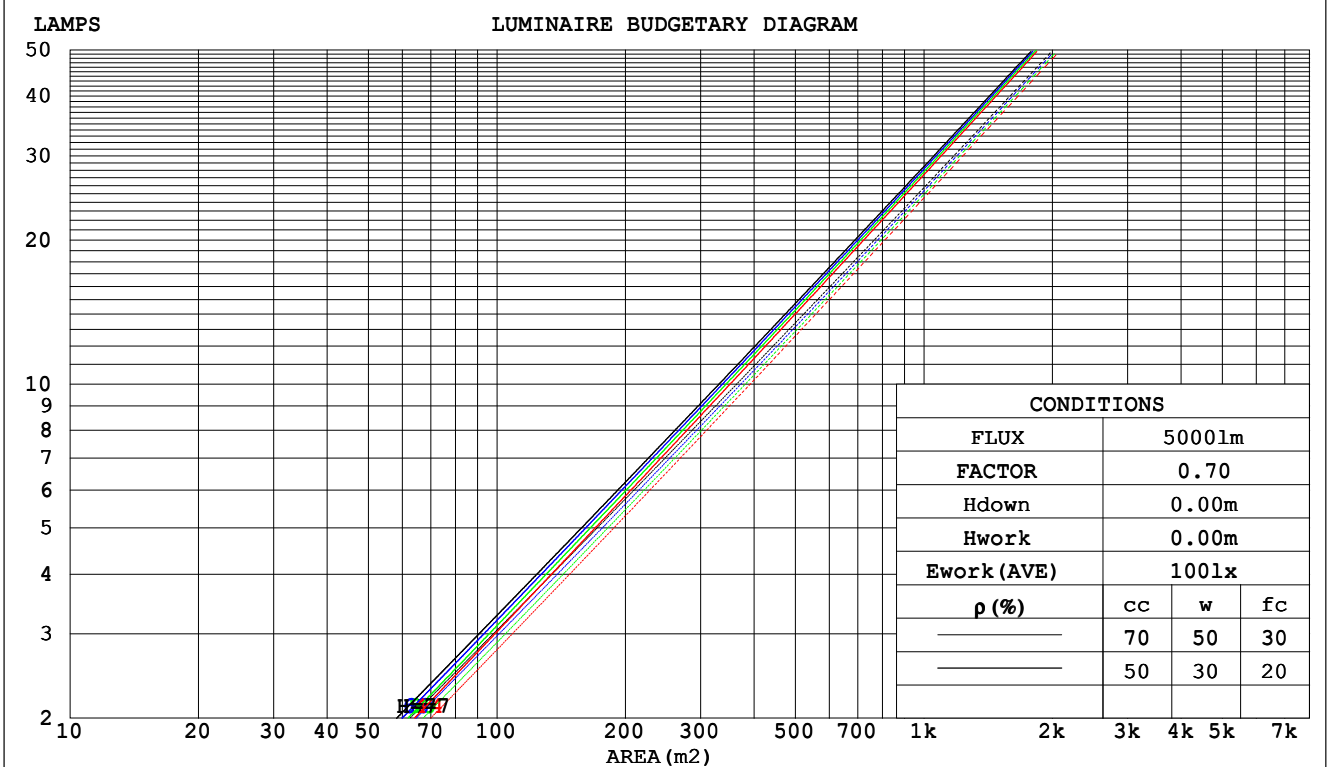
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-HD5 SYSTEM V2.0.407.13
 Humidity:65.0%
 Test Distance:9.400m [K=1.0000]
 Remarks:



CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.15V I:1.7640A P:240.00W PF:0.9740 Freq:50.01Hz Lamp Flux:635.103x21 lm		
NAME:		
MFR.: CLF		

pcc	80%			70%			50%			30%			10%			0
	pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%
pfc	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	1.13	1.11	1.10	1.11	1.09	1.08	1.07	1.06	1.05	1.03	1.03	1.02	1.00	.99	.99	.97
2.0	1.08	1.05	1.03	1.07	1.04	1.02	1.04	1.02	.00	1.01	.99	.98	.98	.97	.96	.94
3.0	1.04	1.01	.98	1.03	.00	.97	1.00	.98	.96	.98	.96	.94	.96	.94	.93	.92
4.0	1.01	.97	.94	.00	.96	.94	.98	.95	.93	.96	.94	.92	.94	.92	.91	.90
5.0	.98	.94	.91	.97	.93	.91	.95	.92	.90	.94	.91	.89	.92	.90	.89	.87
6.0	.95	.91	.88	.94	.91	.88	.93	.90	.88	.92	.89	.87	.91	.88	.87	.86
7.0	.93	.89	.86	.92	.89	.86	.91	.88	.86	.90	.87	.85	.89	.87	.85	.84
8.0	.90	.87	.84	.90	.87	.84	.89	.86	.84	.88	.86	.84	.88	.85	.83	.82
9.0	.89	.85	.83	.88	.85	.82	.87	.84	.82	.87	.84	.82	.86	.84	.82	.81
10.0	.87	.83	.81	.86	.83	.81	.86	.83	.81	.85	.82	.81	.85	.82	.80	.80



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators: Danny
 Test Date:2023-05-08

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

Test:U:220.15V I:1.7640A P:240.00W PF:0.9740 Freq:50.01Hz Lamp Flux:635.103x21 lm															
NAME:															
MFR.: CLF															

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.131	.074	.024	.124	.071	.023	.112	.064	.021	.101	.058	.019	.090	.052	.017	
2.0	.120	.066	.020	.115	.063	.020	.105	.058	.018	.095	.054	.017	.087	.049	.015	
3.0	.111	.059	.018	.107	.057	.017	.098	.053	.016	.090	.049	.015	.083	.046	.014	
4.0	.103	.053	.016	.099	.052	.015	.092	.049	.015	.085	.046	.014	.079	.043	.013	
5.0	.096	.049	.014	.093	.048	.014	.087	.045	.013	.081	.043	.013	.076	.041	.012	
6.0	.090	.045	.013	.087	.044	.013	.082	.042	.012	.077	.040	.012	.073	.038	.011	
7.0	.084	.042	.012	.082	.041	.012	.078	.039	.011	.073	.038	.011	.070	.036	.011	
8.0	.080	.039	.011	.078	.038	.011	.074	.037	.011	.070	.036	.010	.067	.034	.010	
9.0	.075	.037	.010	.074	.036	.010	.070	.035	.010	.067	.034	.010	.064	.033	.009	
10.0	.072	.034	.010	.070	.034	.009	.067	.033	.009	.064	.032	.009	.062	.031	.009	

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	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	.168	.158	.149	.144	.135	.128	.098	.093	.088	.057	.054	.051	.018	.017	.017	
2.0	.149	.133	.119	.128	.114	.103	.088	.079	.072	.051	.046	.042	.016	.015	.014	
3.0	.134	.113	.097	.115	.098	.084	.079	.068	.059	.046	.040	.035	.015	.013	.011	
4.0	.121	.098	.080	.104	.084	.070	.071	.059	.049	.041	.034	.029	.013	.011	.010	
5.0	.110	.085	.067	.094	.074	.058	.065	.052	.041	.038	.030	.024	.012	.010	.008	
6.0	.100	.075	.057	.086	.065	.050	.059	.046	.035	.034	.027	.021	.011	.009	.007	
7.0	.092	.067	.049	.079	.058	.043	.055	.041	.030	.032	.024	.018	.010	.008	.006	
8.0	.085	.060	.042	.073	.052	.037	.051	.036	.026	.030	.021	.016	.010	.007	.005	
9.0	.079	.054	.037	.068	.047	.032	.047	.033	.023	.028	.019	.014	.009	.006	.005	
10.0	.074	.049	.032	.064	.043	.028	.044	.030	.020	.026	.018	.012	.008	.006	.004	

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Danny
 Test Date:2023-05-08

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

Test:U:220.15V I:1.7640A P:240.00W PF:0.9740 Freq:50.01Hz Lamp Flux:635.103x21 lm										
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	-0.7	-0.1	-0.5	0.0	0.2	-0.2	0.4	0.0	0.5	0.7
3H	0.6	1.2	0.8	1.3	1.5	1.4	1.9	1.6	2.1	2.3
4H	1.0	1.5	1.3	1.7	1.9	2.0	2.5	2.2	2.7	2.9
6H	1.0	1.5	1.3	1.8	2.0	2.2	2.7	2.5	2.9	3.1
8H	1.0	1.5	1.3	1.7	2.0	2.2	2.7	2.5	2.9	3.1
12H	1.0	1.4	1.3	1.7	1.9	2.1	2.6	2.4	2.9	3.1
4H 2H	-0.2	0.3	0.0	0.5	0.7	0.2	0.7	0.4	0.9	1.1
3H	1.3	1.8	1.6	2.0	2.3	1.9	2.4	2.2	2.6	2.9
4H	1.7	2.2	2.1	2.5	2.8	2.6	3.0	2.9	3.3	3.6
6H	1.8	2.2	2.1	2.5	2.8	2.8	3.2	3.2	3.5	3.8
8H	1.7	2.1	2.1	2.4	2.8	2.8	3.1	3.2	3.5	3.8
12H	1.7	2.0	2.1	2.4	2.8	2.7	3.1	3.1	3.4	3.8
8H 4H	1.8	2.2	2.2	2.6	2.9	2.6	3.0	3.0	3.3	3.7
6H	1.9	2.2	2.3	2.6	3.0	2.9	3.2	3.3	3.5	4.0
8H	1.8	2.1	2.3	2.5	3.0	2.8	3.1	3.3	3.5	4.0
12H	1.8	2.0	2.3	2.5	2.9	2.8	3.0	3.3	3.5	3.9
12H 4H	1.8	2.1	2.2	2.5	2.9	2.6	2.9	3.0	3.3	3.7
6H	1.8	2.1	2.3	2.5	3.0	2.8	3.1	3.2	3.5	3.9
8H	1.8	2.0	2.3	2.5	2.9	2.8	3.0	3.3	3.5	3.9
Variations with the observer position at spacings:										
S = 1.0H	+ 0.5 / - 0.7					+ 0.4 / - 0.4				
1.5H	+ 0.8 / - 0.6					+ 0.6 / - 0.3				
2.0H	+ 1.3 / - 0.9					+ 1.0 / - 0.8				

CIE Pub.117, 13337 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 9.0)
 Area: 0.1 m2

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Danny
 Test Date:2023-05-08

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

Test:U:220.15V I:1.7640A P:240.00W PF:0.9740 Freq:50.01Hz Lamp Flux:635.103x21 lm		
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) $k(RI) \times RCR = 5$									
$k = 0.60$	89	83	79	89	83	79	88	82	79	76
0.80	96	91	87	95	90	87	94	90	87	83
1.00	100	95	91	99	94	91	98	94	91	87
1.25	104	99	96	103	98	95	101	97	94	90
1.50	107	102	99	105	101	98	103	100	97	93
2.00	109	105	102	108	104	101	105	102	100	94
2.50	111	107	104	109	106	103	106	103	101	95
3.00	112	109	106	110	107	105	107	105	103	97
4.00	114	111	109	112	110	108	108	107	105	98
5.00	115	113	111	113	111	110	109	108	107	99
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

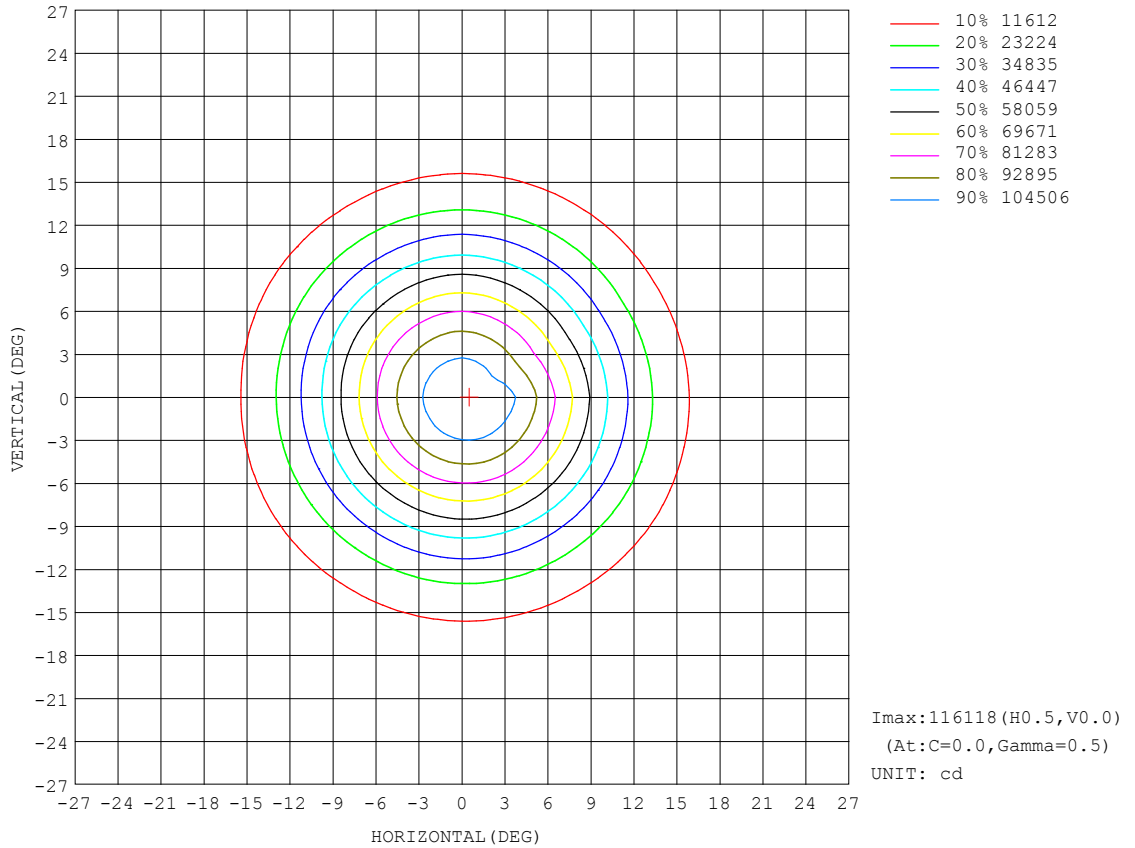
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Danny
 Test Date:2023-05-08

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

Test:U:220.15V I:1.7640A P:240.00W PF:0.9740 Freq:50.01Hz Lamp Flux:635.103x21 lm		
NAME:		
MFR.: CLF		



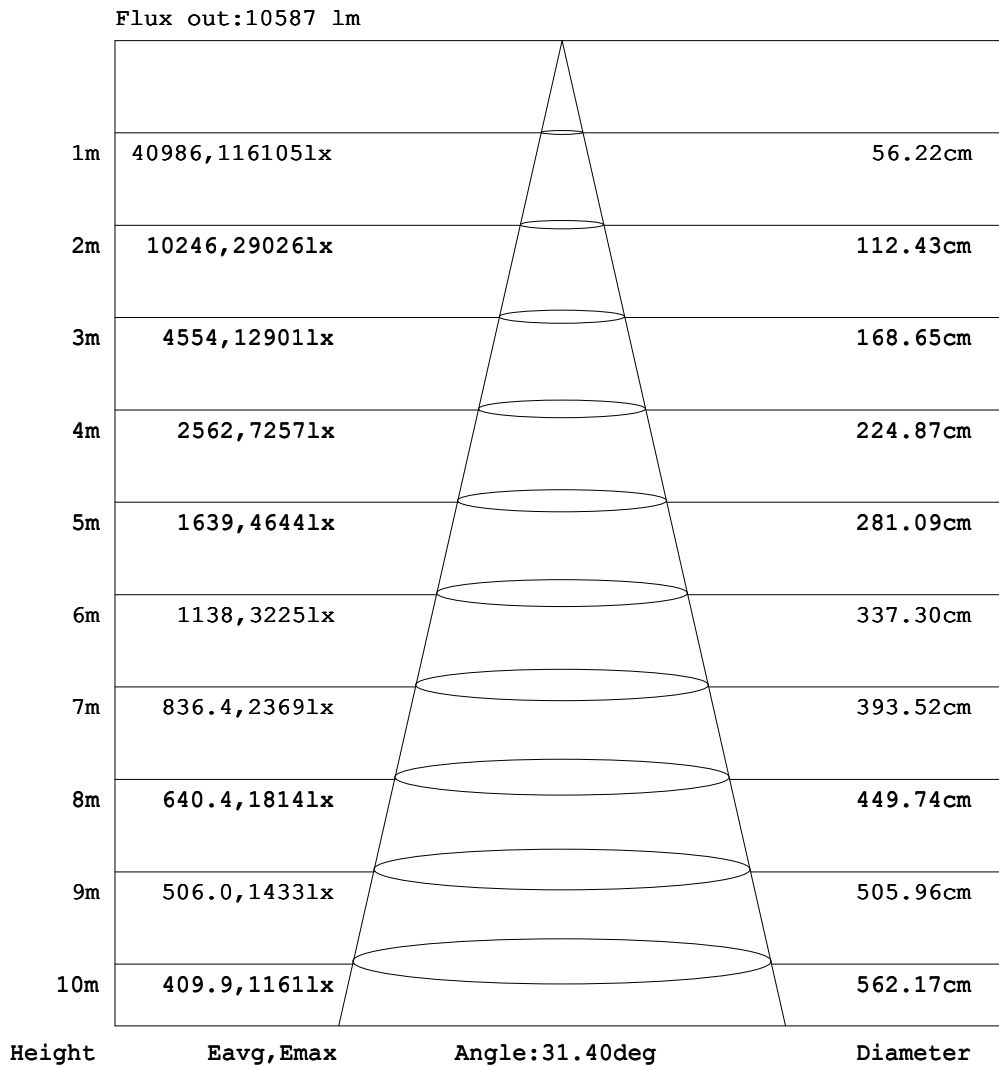
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Danny
Test Date:2023-05-08

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

Test:U:220.15V I:1.7640A P:240.00W PF:0.9740 Freq:50.01Hz Lamp Flux:635.103x21 lm		
NAME:		
MFR.: CLF		



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

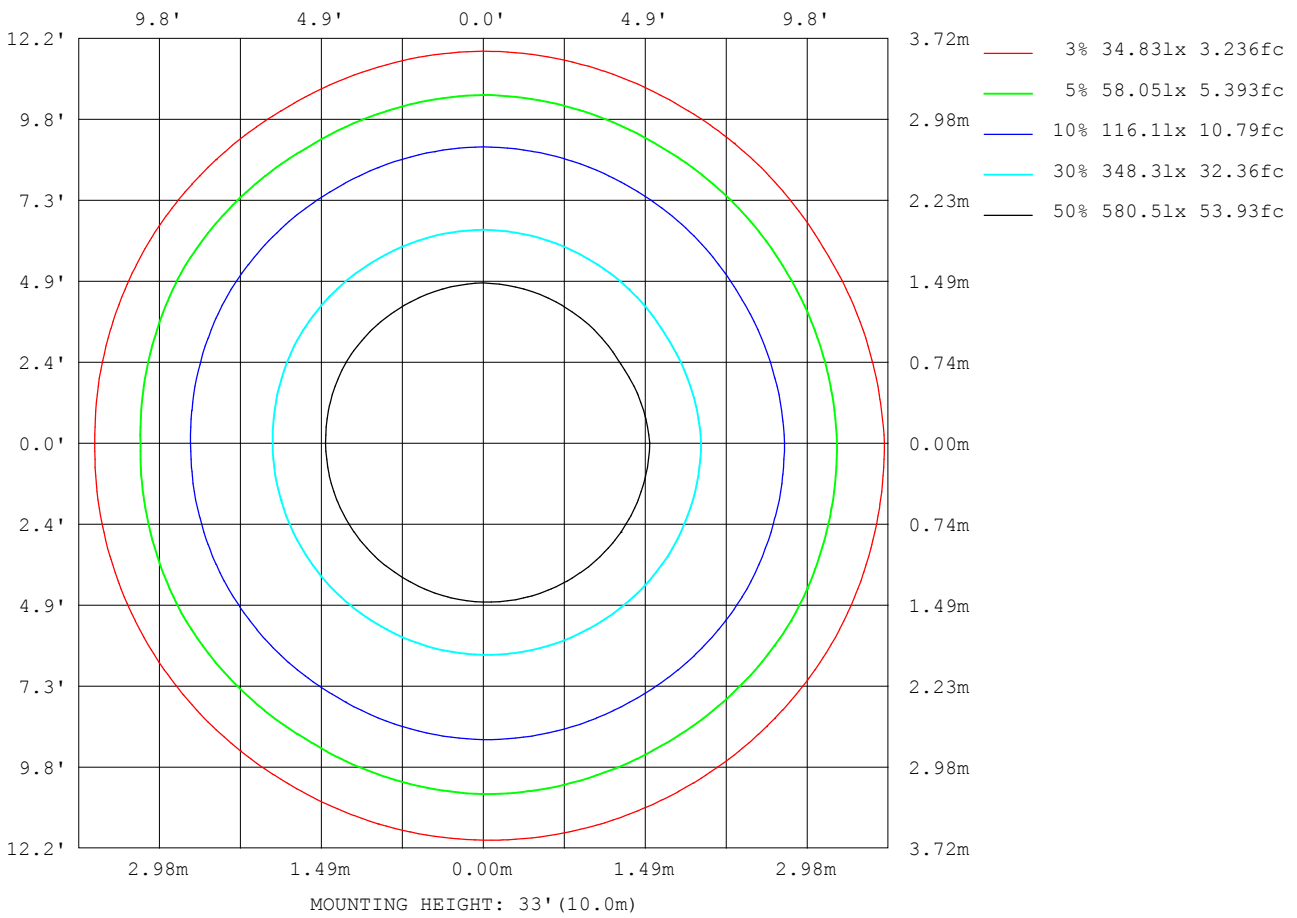
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Danny
 Test Date:2023-05-08

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

Test:U:220.15V I:1.7640A P:240.00W PF:0.9740 Freq:50.01Hz Lamp Flux:635.103x21 lm		
NAME:		
MFR.: CLF		



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Danny
Test Date:2023-05-08

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

Test:U:220.15V I:1.7640A P:240.00W PF:0.9740 Freq:50.01Hz Lamp Flux:635.103x21 lm		
NAME:		
MFR.: CLF		

AvgL	cd/m2
L_0~180 (65) av	2593
L_0~180 (75) av	1626
L_0~180 (85) av	294
L_90~270 (65) av	3277
L_90~270 (75) av	2778
L_90~270 (85) av	563
L_45 (65) av	2641
L_45 (75) av	2060
L_45 (85) av	343

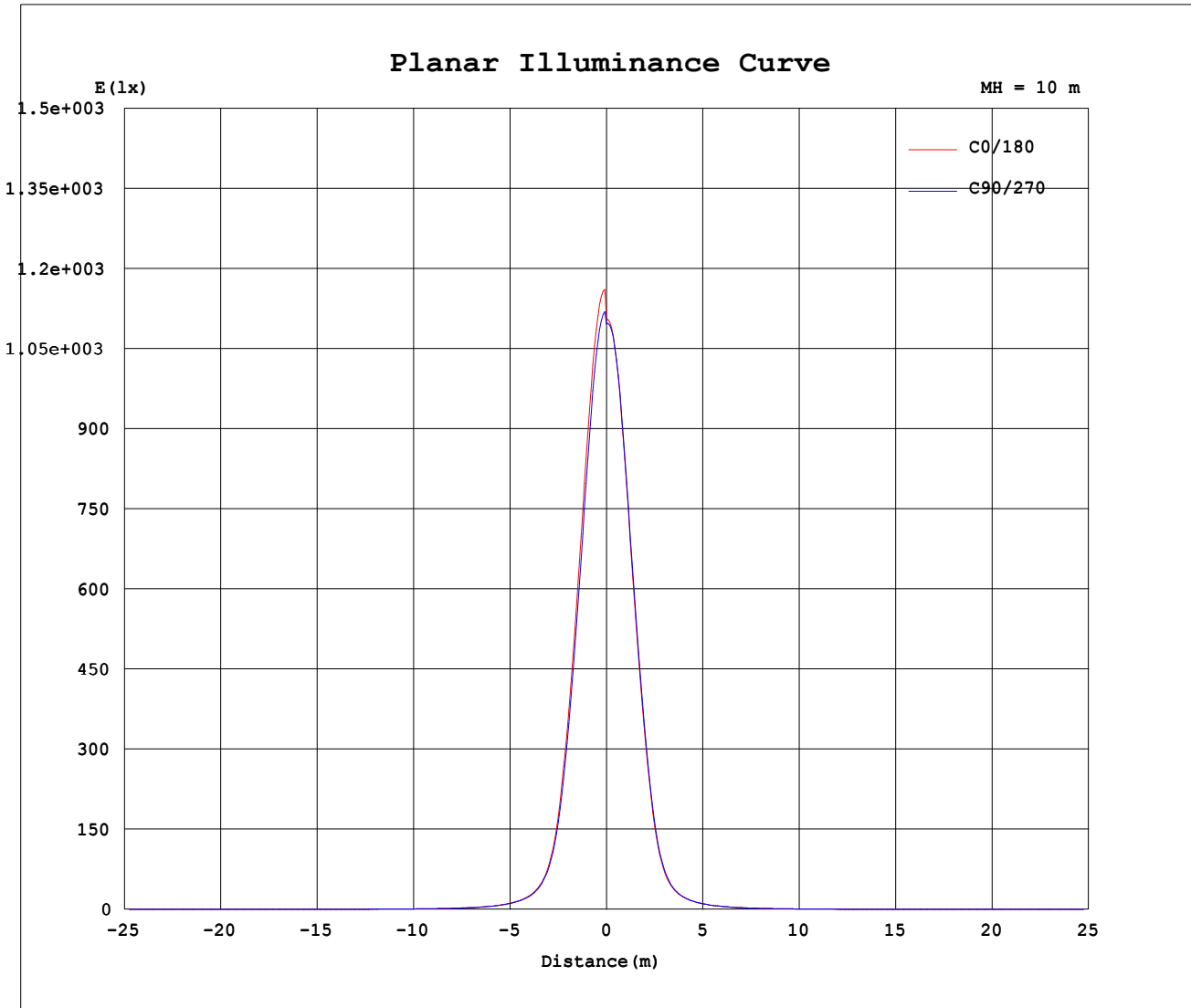
Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Danny
Test Date:2023-05-08

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: 2023-05-08

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

Test:U:220.15V I:1.7640A P:240.00W PF:0.9740 Freq:50.01Hz Lamp Flux:635.103x21 lm		
NAME:		
MFR.: CLF		

Table--1

UNIT: ×100cd

C (DEG) γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330						
0	1160	1137	1132	1121	1118	1108	1105	1098	1098	1096	1095	1090						
5	949	931	916	899	891	889	891	894	894	898	891	887						
10	480	472	459	449	440	441	445	454	451	456	450	450						
15	147	147	139	137	131	132	131	136	133	137	135	136						
20	43.9	44.4	43.2	42.3	40.4	39.8	39.0	39.5	38.9	40.1	39.5	40.2						
25	19.9	19.7	19.5	19.1	18.4	18.1	18.1	18.1	17.8	18.3	18.0	17.9						
30	10.8	10.7	10.6	10.5	10.1	10.0	10.1	10.0	9.90	10.1	9.90	9.83						
35	6.43	6.40	6.32	6.36	6.15	6.02	5.98	5.98	5.89	6.00	5.94	5.87						
40	4.20	4.12	4.19	4.24	4.09	3.96	3.94	3.86	3.88	3.97	3.95	3.84						
45	2.96	2.91	2.98	3.08	3.01	2.84	2.82	2.78	2.82	2.91	2.88	2.73						
50	2.04	2.05	2.19	2.28	2.23	2.07	1.99	2.01	2.10	2.18	2.16	2.00						
55	1.49	1.48	1.66	1.75	1.72	1.57	1.47	1.46	1.63	1.69	1.67	1.49						
60	1.23	1.21	1.35	1.52	1.49	1.25	1.22	1.21	1.34	1.46	1.42	1.18						
65	1.10	1.09	1.08	1.41	1.36	1.05	1.09	1.07	1.07	1.36	1.30	1.01						
70	0.90	0.92	0.89	1.23	1.17	0.86	0.90	0.90	0.87	1.18	1.13	0.83						
75	0.42	0.49	0.53	0.73	0.65	0.51	0.42	0.52	0.50	0.70	0.61	0.48						
80	0.13	0.13	0.17	0.26	0.20	0.14	0.12	0.13	0.17	0.24	0.19	0.14						
85	0.03	0.02	0.03	0.05	0.04	0.03	0.03	0.02	0.03	0.05	0.04	0.02						
90	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.01	0.00						

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Danny
 Test Date:2023-05-08

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: