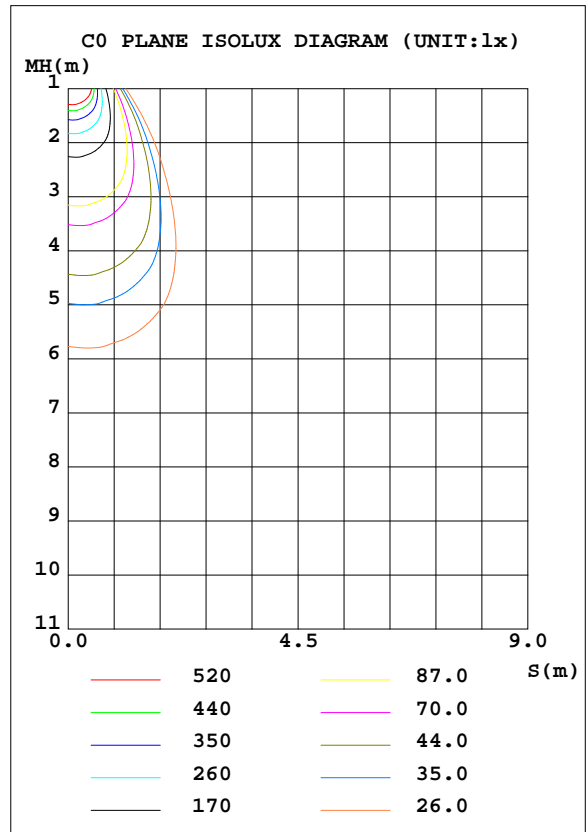
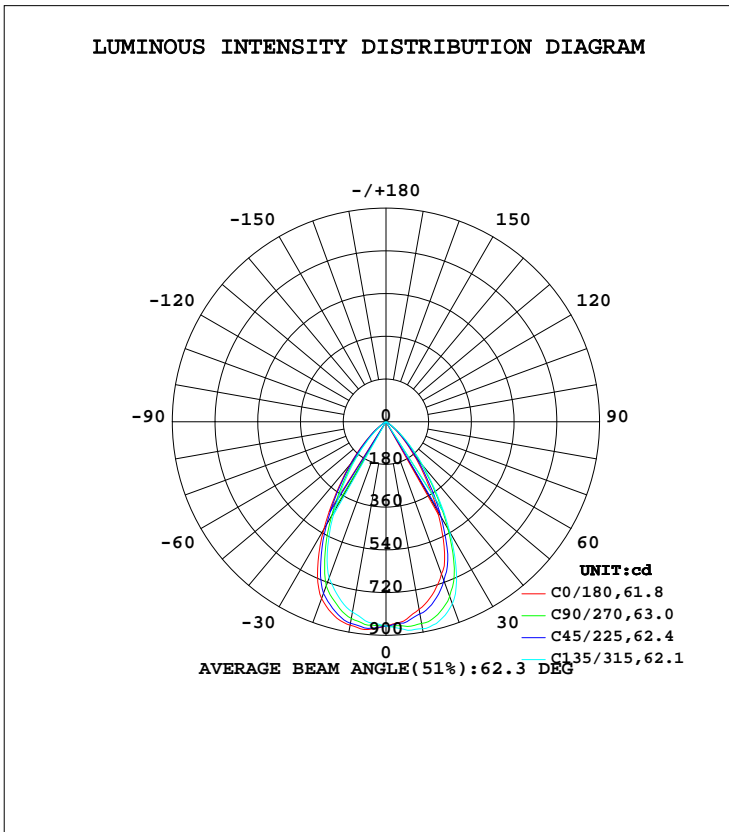


**LUMINAIRE PHOTOMETRIC TEST REPORT**

Test:U:240.10V I:0.0440A P:9.3600W PF:0.8830 Freq:49.99Hz Lamp Flux:940.704x1 lm		
NAME: CD10W-CC-W-IP65 4000K	TYPE: 10W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.00636	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 100.50 lm/W			
MODEL	CD10W-CC-W-IP65 4000K	I <sub>max</sub> (cd)	886.7	S/MH(C0/180)	0.90
NOMINAL POWER(W)	10	LOR(%)	100.0	S/MH(C90/270)	0.97
RATED VOLTAGE(V)	240	TOTAL FLUX(lm)	940.70	η UP, DN(C0-180)	0.0,49.7
NOMINAL FLUX(lm)	940.704	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,50.3
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	240	η down(%)	100.0	CIBSE SHR MAX	0.95



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2023-02-15

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.446  
 Humidity:65.0%  
 Test Distance:10.450m [K=1.0000]  
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	870.5	862.0	841.6	814.2	802.8	822.0	863.2	885.4	0- 10	81.64	81.64	8.68,8.68
20	793.4	770.3	736.0	701.3	683.6	713.3	784.4	816.6	10- 20	227.2	308.8	32.8,32.8
30	525.5	502.5	458.4	435.8	433.6	463.9	522.7	540.4	20- 30	288.1	596.9	63.4,63.4
40	236.9	226.8	203.3	189.2	185.4	203.3	234.6	244.3	30- 40	210.6	807.4	85.8,85.8
50	71.98	67.10	57.89	52.72	54.18	60.89	73.01	76.05	40- 50	98.46	905.9	96.3,96.3
60	12.23	10.99	9.696	9.036	8.798	10.32	12.67	13.47	50- 60	26.05	931.9	99.1,99.1
70	3.485	3.893	3.935	3.986	3.423	3.698	4.026	3.803	60- 70	5.556	937.5	99.7,99.7
80	1.110	1.041	1.079	1.014	1.063	1.203	1.391	1.309	70- 80	2.558	940.1	99.9,99.9
90	0.0073	0.0073	0.0147	0	0.0146	0.0147	0	0.0294	80- 90	0.6457	940.7	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:cd									UNIT:lm		

Conical surface Flux(90deg): 869.04 lm

%lum = 92.4%  
 %lamp = 92.4%

Conical surface Flux(120deg): 931.94 lm

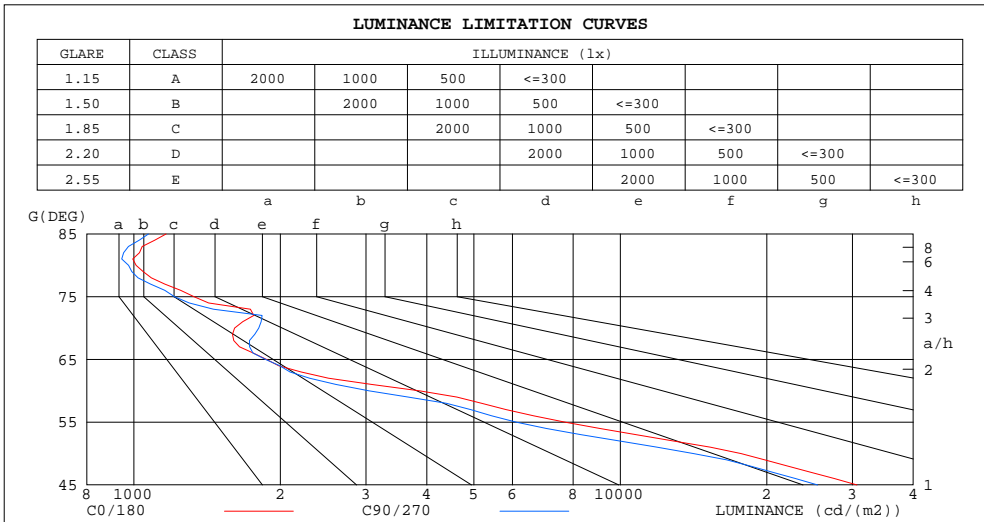
%lum = 99.1%  
 %lamp = 99.1%

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2023-02-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.446  
 Humidity:65.0%  
 Test Distance:10.450m [K=1.0000]  
 Remarks:

**LUMINANCE LIMITATION CURVES**

Test:U:240.10V I:0.0440A P:9.3600W PF:0.8830 Freq:49.99Hz Lamp Flux:940.704x1 lm		
NAME: CD10W-CC-W-IP65 4000K	TYPE: 10W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.00636	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	1164	1072
80	1010	976
75	1329	1212
70	1611	1806
65	1874	1866
60	3868	3045
55	7708	6117
50	17705	14141
45	30655	25429

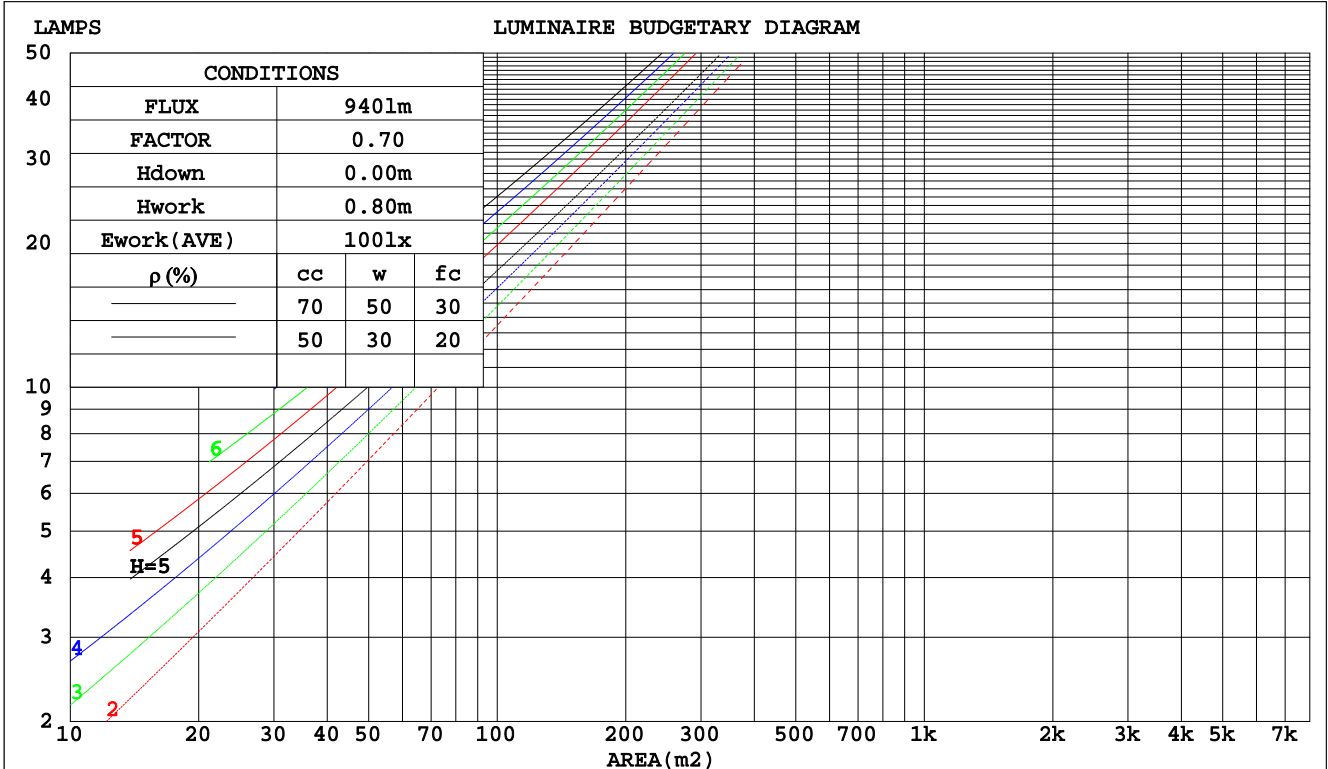
C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2023-02-15

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.446  
 Humidity: 65.0%  
 Test Distance: 10.450m [K=1.0000]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:240.10V I:0.0440A P:9.3600W PF:0.8830 Freq:49.99Hz Lamp Flux:940.704x1 lm		
NAME: CD10W-CC-W-IP65 4000K	TYPE: 10W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.00636	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																
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	1.10	1.08	1.05	1.08	1.06	1.03	1.04	1.02	1.00	1.00	.99	.97	.97	.96	.94	.93
2.0	1.02	.98	.94	1.00	.96	.93	.97	.94	.91	.94	.91	.89	.91	.89	.87	.85
3.0	.94	.89	.85	.93	.88	.84	.90	.86	.83	.88	.84	.81	.85	.83	.80	.78
4.0	.87	.82	.77	.86	.81	.77	.84	.79	.76	.82	.78	.75	.80	.77	.74	.72
5.0	.81	.75	.70	.80	.75	.70	.79	.73	.70	.77	.72	.69	.75	.71	.68	.67
6.0	.76	.69	.65	.75	.69	.65	.73	.68	.64	.72	.67	.64	.71	.66	.63	.62
7.0	.71	.64	.60	.70	.64	.60	.69	.63	.59	.68	.63	.59	.66	.62	.59	.57
8.0	.66	.60	.56	.66	.60	.55	.65	.59	.55	.64	.59	.55	.63	.58	.55	.53
9.0	.62	.56	.52	.62	.56	.52	.61	.55	.52	.60	.55	.51	.59	.54	.51	.50
10.0	.59	.52	.48	.58	.52	.48	.57	.52	.48	.57	.52	.48	.56	.51	.48	.47



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2023-02-15

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.446  
 Humidity: 65.0%  
 Test Distance: 10.450m [K=1.0000]  
 Remarks:

WEC AND CCEC

Test:U:240.10V I:0.0440A P:9.3600W PF:0.8830 Freq:49.99Hz Lamp Flux:940.704x1 lm		
NAME: CD10W-CC-W-IP65 4000K	TYPE: 10W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.00636	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.189	.108	.034	.182	.104	.033	.170	.097	.031	.158	.091	.029	.147	.085	.028	
2.0	.183	.100	.031	.177	.097	.030	.166	.092	.029	.156	.088	.027	.147	.083	.026	
3.0	.175	.093	.028	.170	.091	.027	.160	.087	.026	.152	.083	.026	.144	.080	.025	
4.0	.166	.087	.025	.162	.085	.025	.154	.082	.024	.147	.079	.024	.140	.076	.023	
5.0	.159	.081	.023	.155	.080	.023	.148	.077	.023	.141	.075	.022	.135	.072	.022	
6.0	.151	.076	.022	.148	.075	.022	.142	.073	.021	.136	.071	.021	.131	.069	.020	
7.0	.145	.071	.020	.142	.071	.020	.136	.069	.020	.131	.067	.020	.126	.066	.019	
8.0	.138	.067	.019	.136	.067	.019	.131	.065	.019	.126	.064	.018	.122	.062	.018	
9.0	.132	.064	.018	.130	.063	.018	.125	.062	.018	.121	.061	.017	.117	.060	.017	
10.0	.127	.061	.017	.124	.060	.017	.120	.059	.017	.117	.058	.016	.113	.057	.016	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	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	.158	.132	.111	.135	.114	.096	.093	.079	.067	.053	.046	.039	.017	.015	.013	
3.0	.146	.114	.088	.125	.098	.076	.086	.068	.053	.050	.040	.031	.016	.013	.010	
4.0	.136	.099	.071	.117	.086	.061	.081	.060	.043	.047	.035	.026	.015	.011	.008	
5.0	.128	.088	.058	.110	.076	.050	.076	.053	.036	.044	.031	.021	.014	.010	.007	
6.0	.121	.079	.048	.104	.068	.042	.072	.048	.030	.042	.028	.018	.013	.009	.006	
7.0	.115	.071	.041	.099	.062	.035	.068	.043	.025	.040	.026	.015	.013	.008	.005	
8.0	.109	.065	.035	.094	.056	.030	.065	.040	.022	.038	.023	.013	.012	.008	.004	
9.0	.104	.060	.030	.090	.052	.026	.062	.037	.019	.036	.022	.011	.012	.007	.004	
10.0	.100	.056	.026	.086	.048	.023	.060	.034	.016	.035	.020	.010	.011	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2023-02-15

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.446  
 Humidity:65.0%  
 Test Distance:10.450m [K=1.0000]  
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:240.10V I:0.0440A P:9.3600W PF:0.8830 Freq:49.99Hz Lamp Flux:940.704x1 lm		
NAME: CD10W-CC-W-IP65 4000K	TYPE: 10W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.00636	Shielding Angle:

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	20.2	21.2	20.4	21.4	21.6	19.6	20.6	19.8	20.8	21.0
3H	20.0	21.0	20.3	21.2	21.4	19.4	20.4	19.7	20.6	20.8
4H	20.0	20.9	20.2	21.1	21.3	19.3	20.2	19.6	20.5	20.7
6H	19.9	20.7	20.2	21.0	21.2	19.3	20.1	19.6	20.3	20.6
8H	19.8	20.6	20.1	20.9	21.2	19.2	20.0	19.5	20.3	20.5
12H	19.8	20.6	20.1	20.8	21.1	19.2	19.9	19.5	20.2	20.5
4H 2H	20.0	20.9	20.2	21.1	21.3	19.3	20.2	19.6	20.5	20.7
3H	19.8	20.6	20.1	20.8	21.1	19.2	20.0	19.5	20.2	20.5
4H	19.7	20.4	20.1	20.7	21.0	19.1	19.8	19.5	20.1	20.4
6H	19.6	20.3	20.0	20.6	20.9	19.0	19.7	19.4	20.0	20.3
8H	19.6	20.2	20.0	20.5	20.9	19.0	19.6	19.4	19.9	20.3
12H	19.6	20.1	20.0	20.4	20.8	19.0	19.5	19.4	19.8	20.2
8H 4H	19.6	20.2	20.0	20.5	20.9	19.0	19.6	19.4	19.9	20.3
6H	19.5	20.0	19.9	20.4	20.8	18.9	19.4	19.3	19.8	20.2
8H	19.5	19.9	19.9	20.3	20.7	18.9	19.3	19.3	19.7	20.1
12H	19.4	19.8	19.9	20.2	20.7	18.8	19.2	19.3	19.6	20.1
12H 4H	19.5	20.1	20.0	20.4	20.8	18.9	19.5	19.4	19.8	20.2
6H	19.5	19.9	19.9	20.3	20.7	18.9	19.3	19.3	19.7	20.1
8H	19.4	19.8	19.9	20.2	20.7	18.8	19.2	19.3	19.6	20.1
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 2.6 / - 8.5					+ 2.4 / - 8.6				
1.5H	+ 3.8 / - 6.8					+ 3.5 / - 6.5				
2.0H	+ 5.9 / - 9.1					+ 5.4 / - 8.4				

CIE Pub.117, 940.7 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = -0.2)  
Area: 0.00636 m2

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2023-02-15

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.446  
Humidity:65.0%  
Test Distance:10.450m [K=1.0000]  
Remarks:

UTILIZATION FACTORS TABLE

Test:U:240.10V I:0.0440A P:9.3600W PF:0.8830 Freq:49.99Hz Lamp Flux:940.704x1 lm		
NAME: CD10W-CC-W-IP65 4000K	TYPE: 10W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.00636	Shielding Angle:

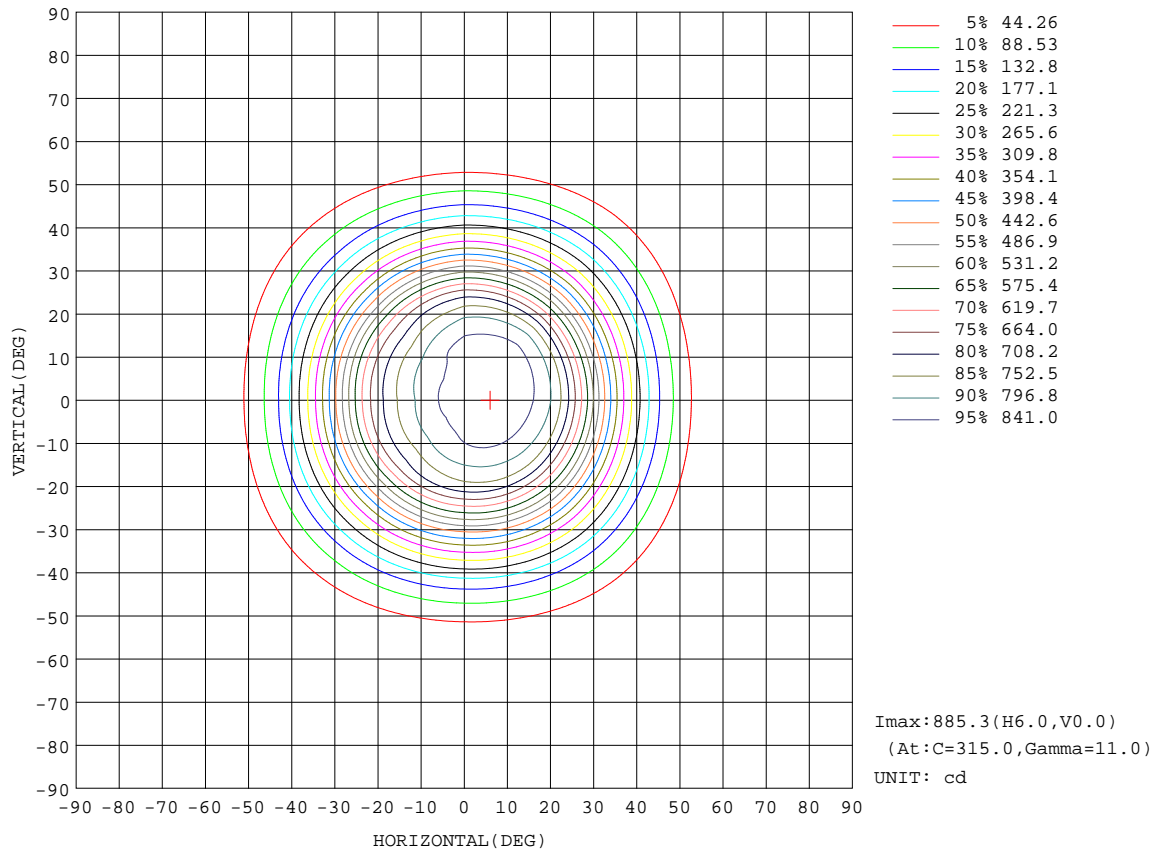
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	83	75	71	82	75	71	81	75	71	67
0.80	91	84	80	90	84	80	89	83	79	75
1.00	96	90	86	95	90	86	94	90	85	81
1.25	101	95	91	100	95	91	98	93	90	86
1.50	104	99	95	103	98	94	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	107	111	108	106	107	105	103	96
5.00	114	112	110	112	110	108	108	106	105	97
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2023-02-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.446  
 Humidity:65.0%  
 Test Distance:10.450m [K=1.0000]  
 Remarks:

**ISOCANDELA DIAGRAM**

Test:U:240.10V I:0.0440A P:9.3600W PF:0.8830 Freq:49.99Hz Lamp Flux:940.704x1 lm		
NAME: CD10W-CC-W-IP65 4000K	TYPE: 10W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.00636	Shielding Angle:



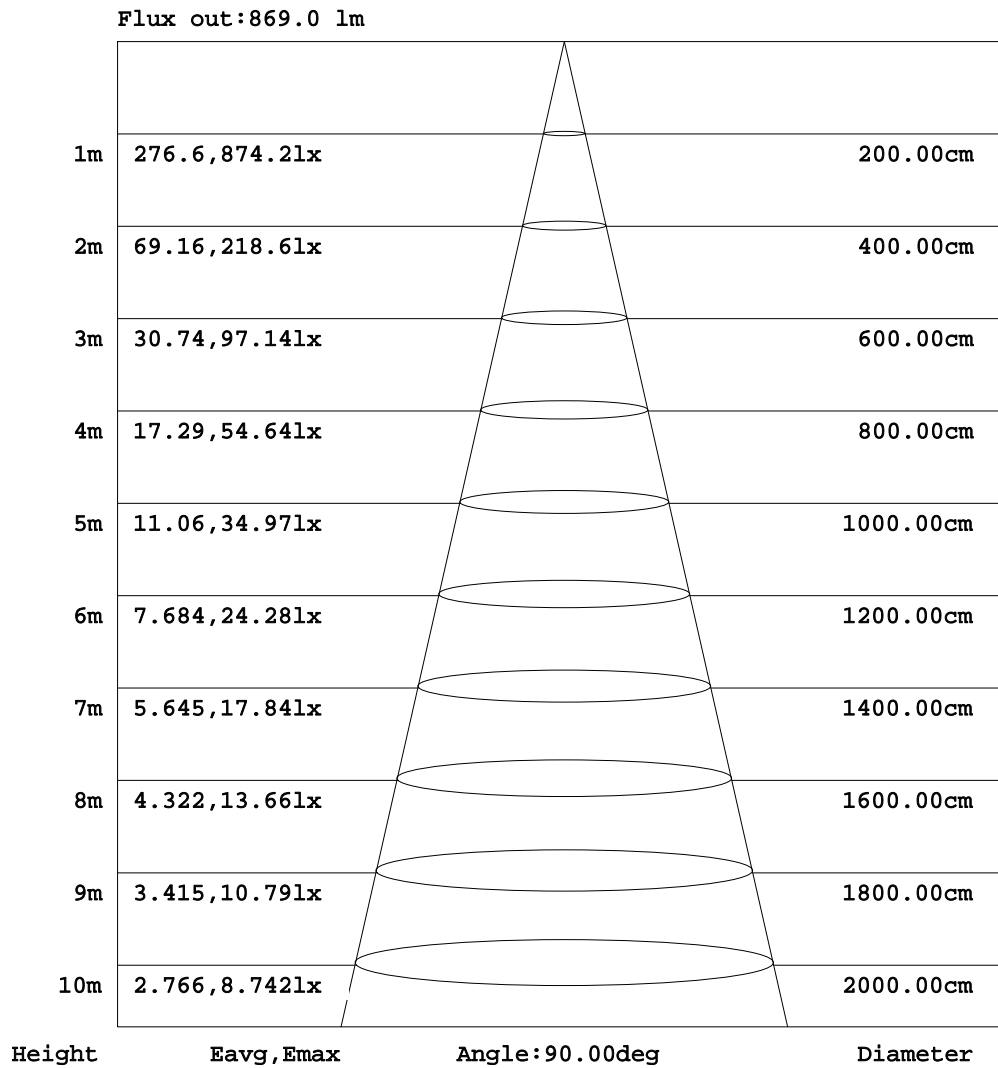
C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2023-02-15

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.446  
Humidity:65.0%  
Test Distance:10.450m [K=1.0000]  
Remarks:



**AAI Figure**

Test:U:240.10V I:0.0440A P:9.3600W PF:0.8830 Freq:49.99Hz Lamp Flux:940.704x1 lm		
NAME: CD10W-CC-W-IP65 4000K	TYPE: 10W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.00636	Shielding Angle:



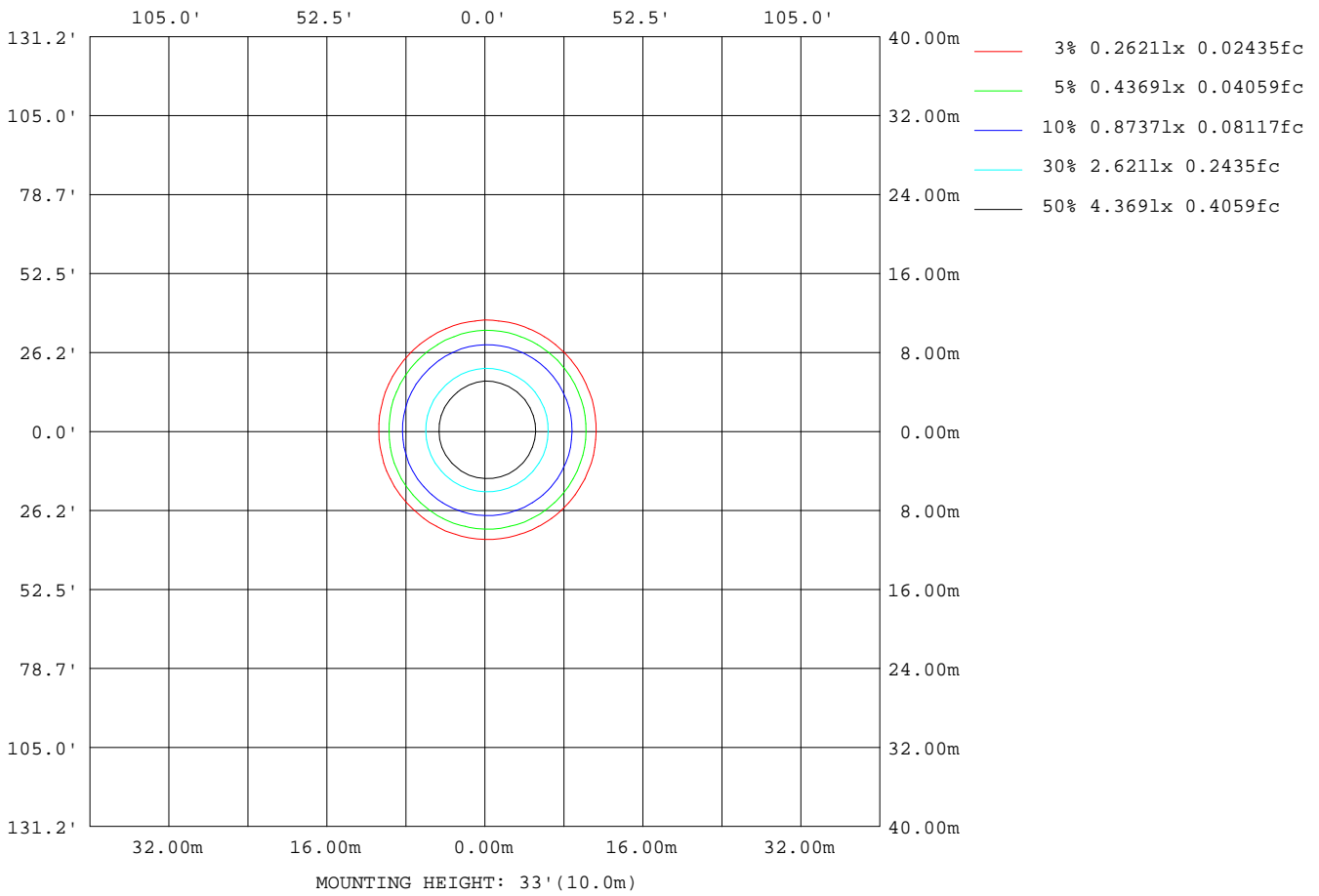
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2023-02-15

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.446  
 Humidity:65.0%  
 Test Distance:10.450m [K=1.0000]  
 Remarks:

**ISOLUX DIAGRAM**

Test:U:240.10V I:0.0440A P:9.3600W PF:0.8830 Freq:49.99Hz Lamp Flux:940.704x1 lm		
NAME: CD10W-CC-W-IP65 4000K	TYPE: 10W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.00636	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2023-02-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.446  
 Humidity: 65.0%  
 Test Distance: 10.450m [K=1.0000]  
 Remarks:

LED Avg.L Report

Test:U:240.10V I:0.0440A P:9.3600W PF:0.8830 Freq:49.99Hz Lamp Flux:940.704x1 lm		
NAME: CD10W-CC-W-IP65 4000K	TYPE: 10W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.00636	Shielding Angle:

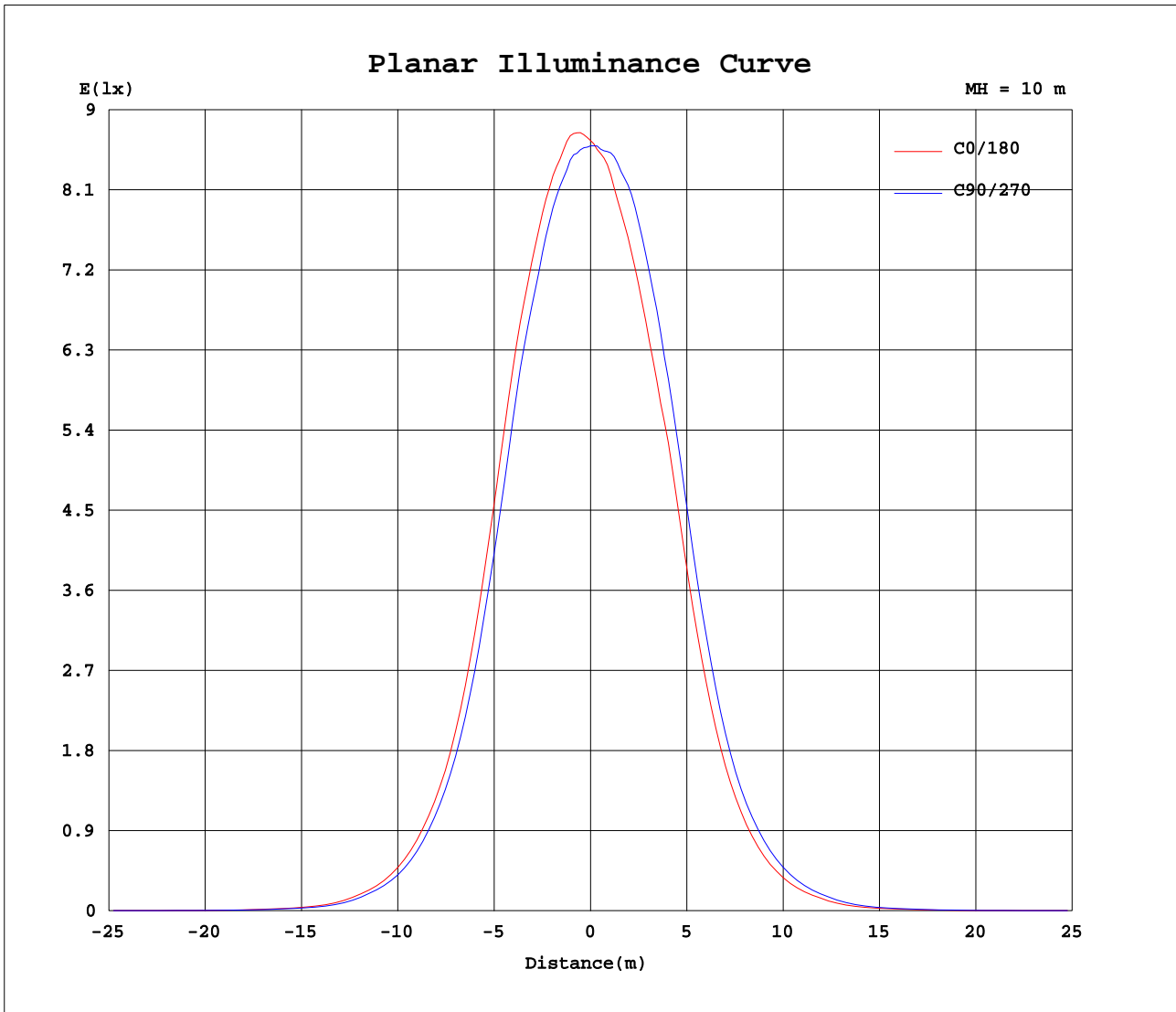
AvgL	cd/m2
L_0~180(65)av	1748
L_0~180(75)av	1340
L_0~180(85)av	1157
L_90~270(65)av	1899
L_90~270(75)av	1450
L_90~270(85)av	1171
L_45(65)av	1856
L_45(75)av	1375
L_45(85)av	1179

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2023-02-15

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.446  
 Humidity:65.0%  
 Test Distance:10.450m [K=1.0000]  
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2023-02-15

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.446  
 Humidity: 65.0%  
 Test Distance: 10.450m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:240.10V I:0.0440A P:9.3600W PF:0.8830 Freq:49.99Hz Lamp Flux:940.704x1 lm		
NAME: CD10W-CC-W-IP65 4000K	TYPE: 10W	WEIGHT:
SPEC.: 4000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.00636	Shielding Angle:

Table--1

UNIT: cd

C(DEG)\ γ (DEG)	0	45	90	135	180	225	270	315											
0	861	861	861	861	861	861	861	861											
5	878	874	860	848	843	851	864	878											
10	870	862	842	814	803	822	863	885											
15	845	827	798	766	755	783	841	869											
20	793	770	736	701	684	713	784	817											
25	683	650	607	581	580	616	682	702											
30	525	502	458	436	434	464	523	540											
35	365	351	316	298	294	320	363	376											
40	237	227	203	189	185	203	235	244											
45	137	128	115	106	105	117	138	143											
50	72.0	67.1	57.9	52.7	54.2	60.9	73.0	76.1											
55	28.0	26.1	22.3	20.6	20.3	23.2	28.5	29.9											
60	12.2	11.0	9.70	9.04	8.80	10.3	12.7	13.5											
65	5.01	4.89	5.02	4.88	4.39	4.74	5.18	5.45											
70	3.48	3.89	3.94	3.99	3.42	3.70	4.03	3.80											
75	2.18	1.97	2.00	2.04	2.24	2.48	2.78	2.57											
80	1.11	1.04	1.08	1.01	1.06	1.20	1.39	1.31											
85	0.64	0.57	0.59	0.58	0.64	0.73	0.70	0.73											
90	0.01	0.01	0.01	0.00	0.01	0.01	0.00	0.03											

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2023-02-15

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.446  
 Humidity:65.0%  
 Test Distance:10.450m [K=1.0000]  
 Remarks: