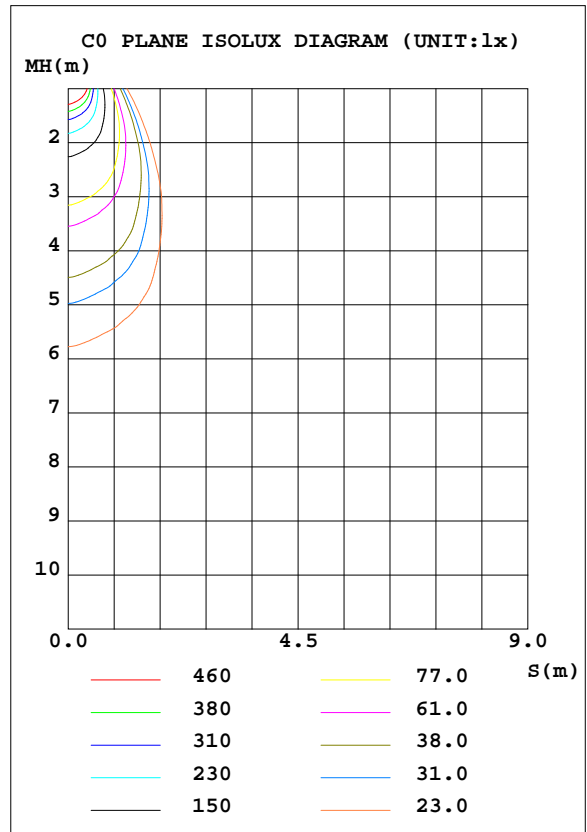
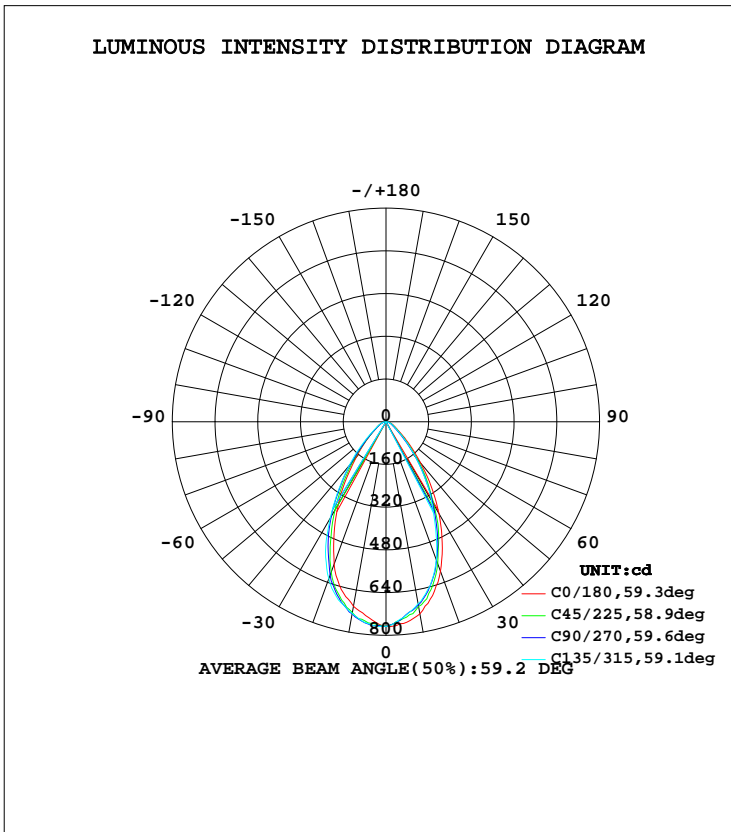


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:240.2V I:0.0470A P:10.80W PF:0.9450 Lamp Flux:832.236x1 lm		
NAME: ID10WCOB-CC	TYPE:10W	WEIGHT:
DIM.:	SPEC.:3000K	SERIAL No.:1
MFR.:	SUR.:0.0405	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 77.06 lm/W			
MODEL	ID10WCOB-CC	I _{max} (cd)	767.6	S/MH(C0/180)	0.87
NOMINAL POWER(W)	10	LOR(%)	100.0	S/MH(C90/270)	0.93
RATED VOLTAGE(V)	240	TOTAL FLUX(lm)	832.24	η UP, DN(C0-180)	0.0, 51.5
NOMINAL FLUX(lm)	832.236	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 48.5
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	240.1	η down(%)	100.0	CIBSE SHR MAX	0.95



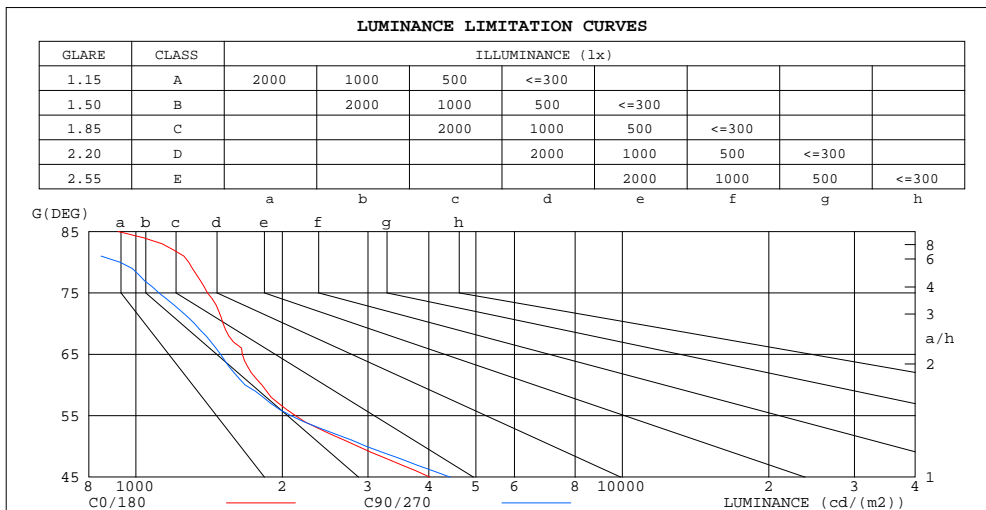
C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-11-04

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:65.0%
 Test Distance:10.237m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM
AND LUMINANCE LIMITATION CURVES

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum,lamp
10	702.0	726.5	730.3	729.6	731.4	702.7	697.1	691.9	0- 10	70.34	70.34	8.45,8.45
20	568.6	599.8	611.8	625.6	596.7	566.6	553.2	550.7	10- 20	184.5	254.8	30.6,30.6
30	356.9	383.4	409.9	418.7	396.8	358.6	350.7	340.5	20- 30	220.0	474.8	57.1,57.1
40	174.3	190.3	207.5	215.9	201.6	181.4	171.8	171.7	30- 40	172.9	647.7	77.8,77.8
50	74.49	75.51	77.51	88.22	84.99	73.20	63.02	67.95	40- 50	95.44	743.1	89.3,89.3
60	36.75	36.86	33.94	38.70	40.18	35.17	28.76	33.48	50- 60	45.69	788.8	94.8,94.8
70	20.92	19.46	18.29	20.29	22.52	18.87	16.34	17.75	60- 70	26.46	815.3	98,98
80	9.030	7.598	6.520	7.676	9.341	7.243	6.009	7.058	70- 80	13.98	829.3	99.6,99.6
90	0.1336	0.1966	0.0914	0.1761	0.1054	0.1615	0.0703	0.2537	80- 90	2.975	832.2	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		



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	919	234
80	1284	927
75	1403	1115
70	1511	1321
65	1655	1493
60	1816	1677
55	2130	2084
50	2862	2978
45	4018	4428

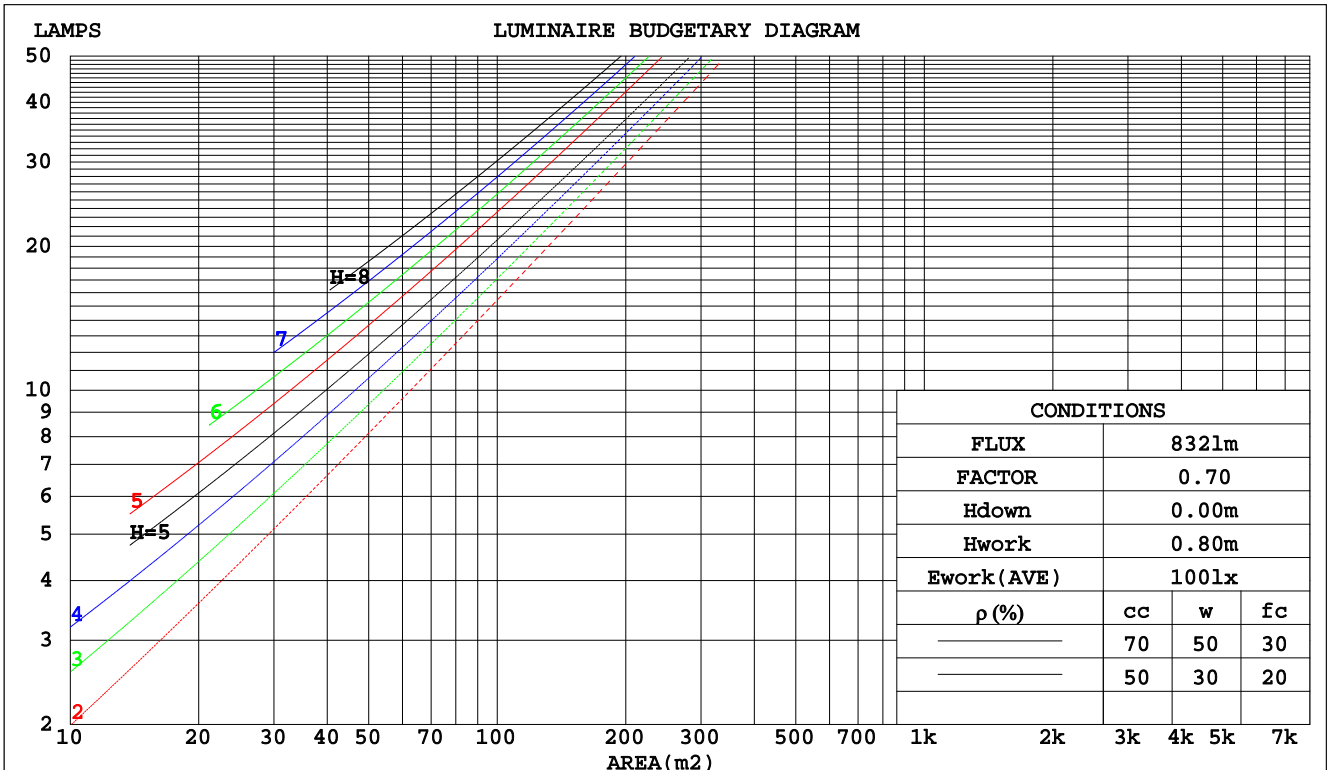
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-11-04

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
Humidity:65.0%
Test Distance:10.237m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:240.2V I:0.0470A P:10.80W PF:0.9450 Lamp Flux:832.236x1 lm		
NAME: ID10WCOB-CC	TYPE:10W	WEIGHT:
DIM.:	SPEC.:3000K	SERIAL No.:1
MFR.:	SUR.:0.0405	PROTECTION 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																0
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	.00
1.0	1.09	1.06	1.03	1.07	1.04	1.02	1.03	1.01	.99	.99	.97	.96	.95	.94	.93	.91
2.0	.00	.95	.91	.98	.94	.90	.95	.91	.88	.92	.89	.86	.89	.86	.84	.82
3.0	.91	.86	.81	.90	.85	.80	.87	.83	.79	.85	.81	.78	.82	.79	.76	.75
4.0	.84	.78	.73	.83	.77	.72	.81	.76	.72	.79	.74	.71	.77	.73	.70	.68
5.0	.78	.71	.66	.77	.71	.66	.75	.70	.65	.73	.68	.65	.72	.67	.64	.62
6.0	.72	.66	.61	.72	.65	.60	.70	.64	.60	.68	.63	.60	.67	.63	.59	.57
7.0	.67	.61	.56	.67	.60	.56	.65	.60	.55	.64	.59	.55	.63	.58	.55	.53
8.0	.63	.56	.52	.62	.56	.52	.61	.55	.51	.60	.55	.51	.59	.54	.51	.49
9.0	.59	.52	.48	.59	.52	.48	.58	.52	.48	.57	.51	.48	.56	.51	.47	.46
10.0	.56	.49	.45	.55	.49	.45	.54	.48	.45	.53	.48	.44	.53	.48	.44	.43



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-11-04

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:65.0%
 Test Distance:10.237m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:240.2V I:0.0470A P:10.80W PF:0.9450 Lamp Flux:832.236x1 lm		
NAME: ID10WCOB-CC	TYPE:10W	WEIGHT:
DIM.:	SPEC.:3000K	SERIAL No.:1
MFR.:	SUR.:0.0405	PROTECTION 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	.212	.120	.038	.205	.117	.037	.192	.110	.035	.181	.104	.033	.170	.098	.032	
2.0	.203	.111	.034	.197	.109	.033	.186	.104	.032	.176	.099	.031	.167	.094	.030	
3.0	.192	.102	.031	.187	.100	.030	.178	.096	.029	.169	.093	.028	.161	.089	.028	
4.0	.182	.094	.028	.177	.093	.027	.169	.090	.027	.161	.087	.026	.154	.084	.026	
5.0	.172	.087	.025	.168	.086	.025	.161	.084	.025	.154	.081	.024	.148	.079	.024	
6.0	.162	.081	.023	.159	.080	.023	.153	.078	.023	.147	.076	.022	.141	.074	.022	
7.0	.154	.076	.022	.151	.075	.021	.145	.073	.021	.140	.072	.021	.135	.070	.021	
8.0	.146	.071	.020	.144	.071	.020	.138	.069	.020	.134	.068	.020	.129	.066	.019	
9.0	.139	.067	.019	.137	.067	.019	.132	.065	.019	.128	.064	.018	.124	.063	.018	
10.0	.133	.064	.018	.130	.063	.018	.126	.062	.017	.122	.061	.017	.119	.060	.017	

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	.174	.157	.142	.148	.135	.122	.102	.093	.085	.058	.054	.049	.019	.017	.016	
2.0	.160	.132	.109	.137	.114	.094	.094	.079	.066	.054	.046	.038	.017	.015	.013	
3.0	.150	.114	.085	.128	.098	.074	.088	.068	.052	.051	.040	.031	.016	.013	.010	
4.0	.140	.099	.068	.120	.086	.059	.083	.060	.042	.048	.035	.025	.015	.011	.008	
5.0	.132	.088	.056	.113	.076	.049	.078	.053	.034	.045	.031	.020	.015	.010	.007	
6.0	.125	.079	.047	.107	.069	.041	.074	.048	.029	.043	.028	.017	.014	.009	.006	
7.0	.118	.072	.039	.102	.062	.034	.070	.044	.024	.041	.026	.014	.013	.008	.005	
8.0	.113	.066	.034	.097	.057	.029	.067	.040	.021	.039	.024	.012	.013	.008	.004	
9.0	.107	.061	.029	.093	.053	.026	.064	.037	.018	.037	.022	.011	.012	.007	.004	
10.0	.103	.056	.026	.088	.049	.023	.061	.035	.016	.036	.020	.010	.012	.007	.003	

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-11-04

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:65.0%
 Test Distance:10.237m [K=1.0000]
 Remarks:

Uncorrected UGR Table

Test:U:240.2V I:0.0470A P:10.80W PF:0.9450 Lamp Flux:832.236x1 lm										
NAME: ID10WCOB-CC					TYPE:10W			WEIGHT:		
DIM.:					SPEC.:3000K			SERIAL No.:1		
MFR.:					SUR.:0.0405			PROTECTION 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	13.9	15.0	14.1	15.2	15.4	14.2	15.3	14.4	15.5	15.6
3H	14.4	15.4	14.7	15.6	15.8	14.5	15.5	14.8	15.8	16.0
4H	14.6	15.6	14.9	15.8	16.1	14.7	15.6	15.0	15.9	16.1
6H	14.8	15.8	15.1	16.0	16.3	14.7	15.7	15.1	15.9	16.2
8H	14.9	15.8	15.2	16.0	16.3	14.7	15.6	15.1	15.9	16.2
12H	14.9	15.8	15.2	16.0	16.3	14.7	15.6	15.0	15.8	16.1
4H 2H	14.0	15.0	14.3	15.2	15.4	14.2	15.2	14.5	15.4	15.7
3H	14.7	15.5	15.0	15.8	16.1	14.8	15.6	15.1	15.9	16.2
4H	15.0	15.8	15.4	16.1	16.4	15.0	15.8	15.4	16.1	16.4
6H	15.3	16.0	15.7	16.4	16.7	15.2	15.8	15.6	16.2	16.5
8H	15.4	16.1	15.8	16.4	16.8	15.2	15.8	15.6	16.2	16.5
12H	15.5	16.1	15.9	16.4	16.8	15.2	15.7	15.6	16.1	16.5
8H 4H	15.1	15.7	15.5	16.1	16.5	15.1	15.7	15.5	16.0	16.4
6H	15.5	16.0	15.9	16.4	16.8	15.3	15.8	15.8	16.2	16.6
8H	15.7	16.1	16.1	16.5	17.0	15.4	15.8	15.8	16.3	16.7
12H	15.7	16.1	16.2	16.6	17.0	15.4	15.8	15.8	16.2	16.7
12H 4H	15.1	15.7	15.5	16.0	16.4	15.1	15.6	15.5	16.0	16.4
6H	15.5	16.0	16.0	16.4	16.8	15.3	15.8	15.8	16.2	16.6
8H	15.7	16.1	16.1	16.5	17.0	15.4	15.8	15.9	16.2	16.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.9 / - 1.2					+ 1.2 / - 1.6				
1.5H	+ 1.4 / - 1.0					+ 2.1 / - 1.4				
2.0H	+ 1.8 / - 0.9					+ 2.3 / - 1.3				

CIE Pub.117 Corrected 832.2 lm Total Lamp Luminous Flux. (8log(F/F0) = -0.6)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-11-04

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:65.0%
 Test Distance:10.237m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:240.2V I:0.0470A P:10.80W PF:0.9450 Lamp Flux:832.236x1 lm		
NAME: ID10WCOB-CC	TYPE:10W	WEIGHT:
DIM.:	SPEC.:3000K	SERIAL No.:1
MFR.:	SUR.:0.0405	PROTECTION ANGLE:

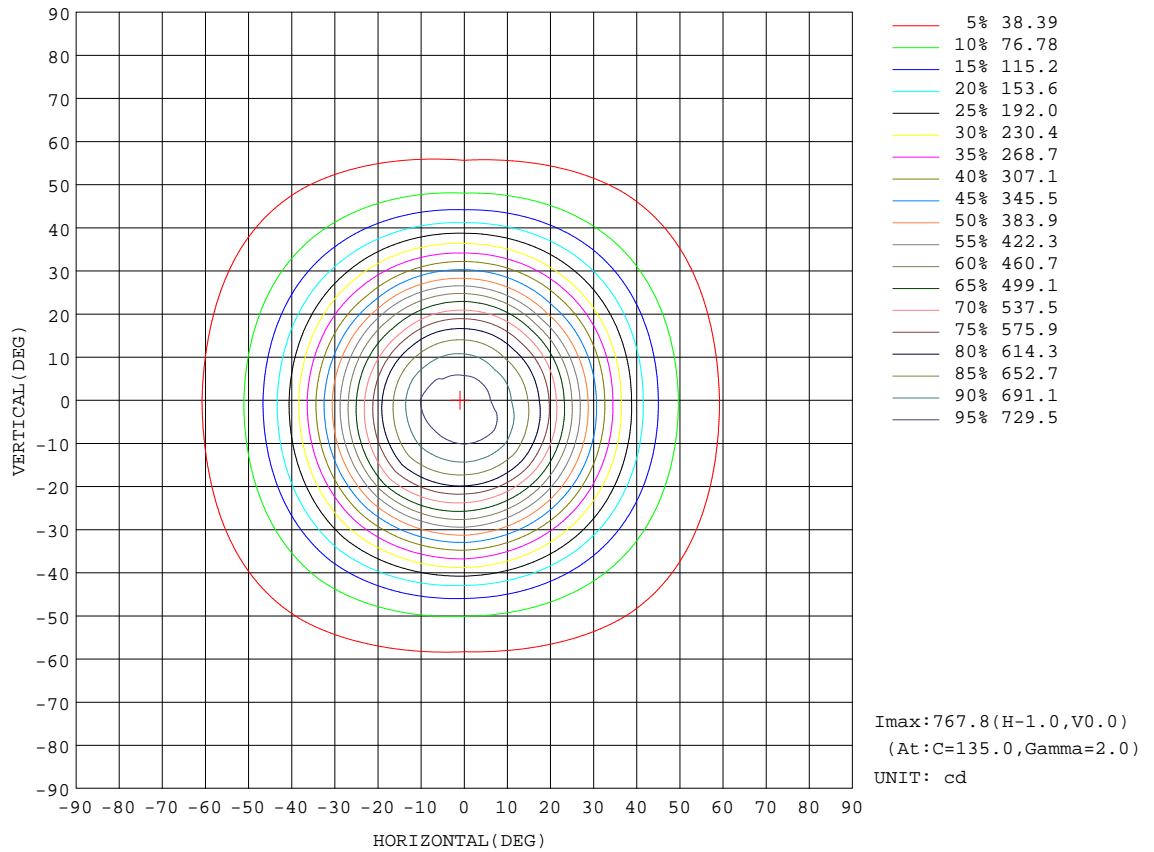
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	78	70	65	77	69	65	76	69	65	60
0.80	86	79	74	85	78	74	84	78	73	69
1.00	92	85	80	91	85	80	90	85	79	75
1.25	97	91	86	96	90	86	94	89	85	80
1.50	101	95	90	99	94	90	97	92	89	83
2.00	105	99	95	103	98	95	100	96	93	87
2.50	107	102	98	105	101	97	102	98	96	89
3.00	109	105	101	107	103	100	104	101	98	91
4.00	112	108	105	110	106	104	106	103	101	94
5.00	113	110	108	111	108	106	107	105	103	95
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:DAMIN
 Test Date:2021-11-04

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:65.0%
 Test Distance:10.237m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:240.2V I:0.0470A P:10.80W PF:0.9450 Lamp Flux:832.236x1 lm		
NAME: ID10WCOB-CC	TYPE:10W	WEIGHT:
DIM.:	SPEC.:3000K	SERIAL No.:1
MFR.:	SUR.:0.0405	PROTECTION ANGLE:

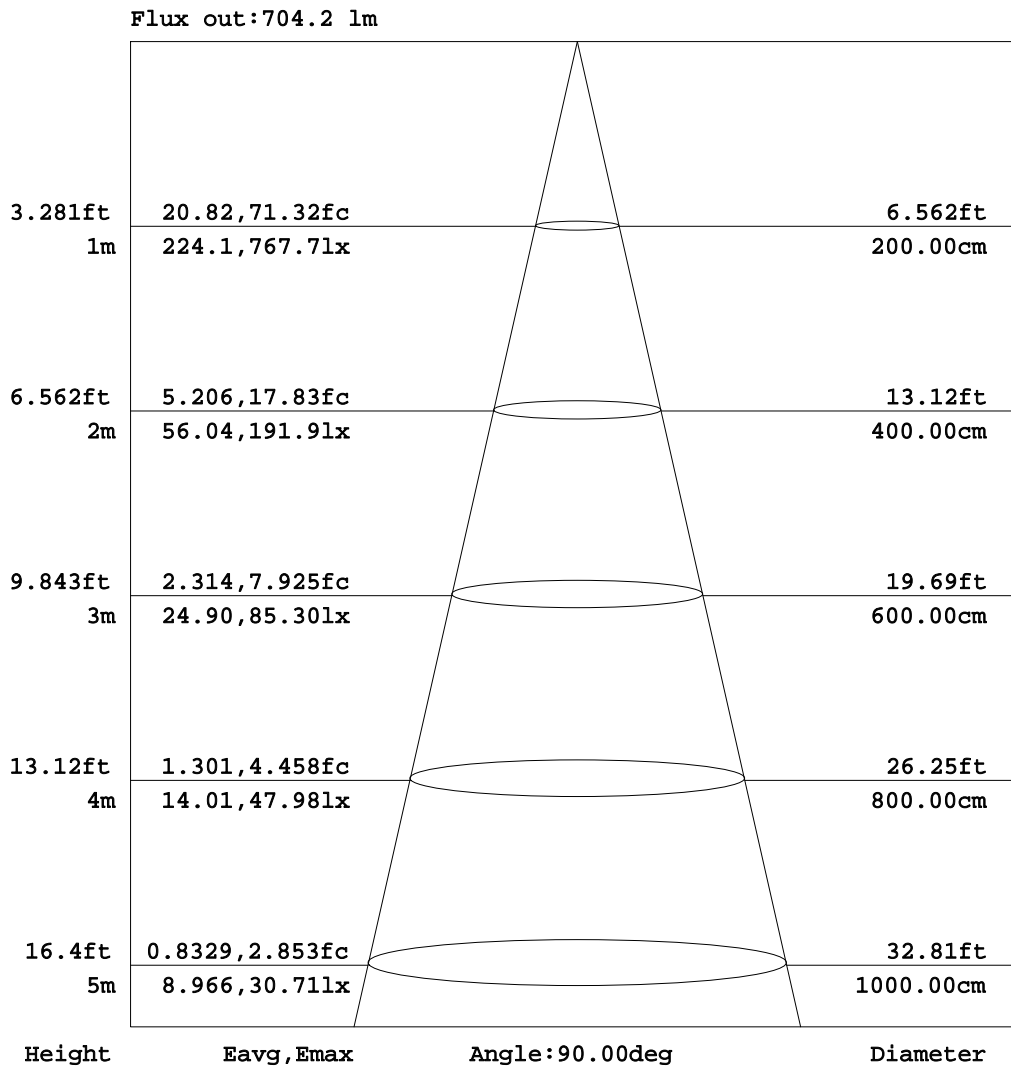


C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2021-11-04

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity: 65.0%
 Test Distance: 10.237m [K=1.0000]
 Remarks:

AAI Figure

Test:U:240.2V I:0.0470A P:10.80W PF:0.9450 Lamp Flux:832.236x1 lm		
NAME: ID10WCOB-CC	TYPE:10W	WEIGHT:
DIM.:	SPEC.:3000K	SERIAL No.:1
MFR.:	SUR.:0.0405	PROTECTION ANGLE:



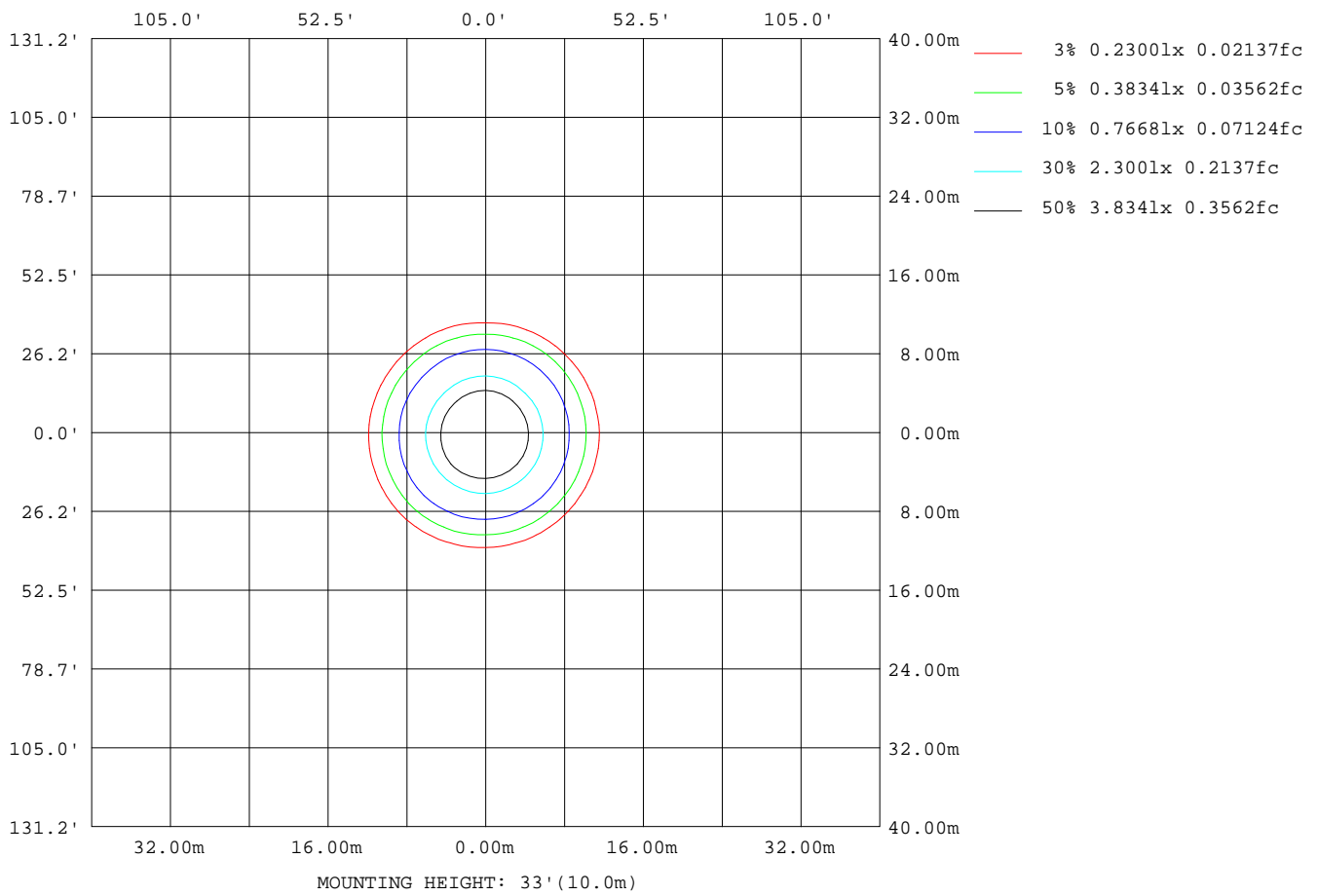
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-11-04

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:65.0%
 Test Distance:10.237m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

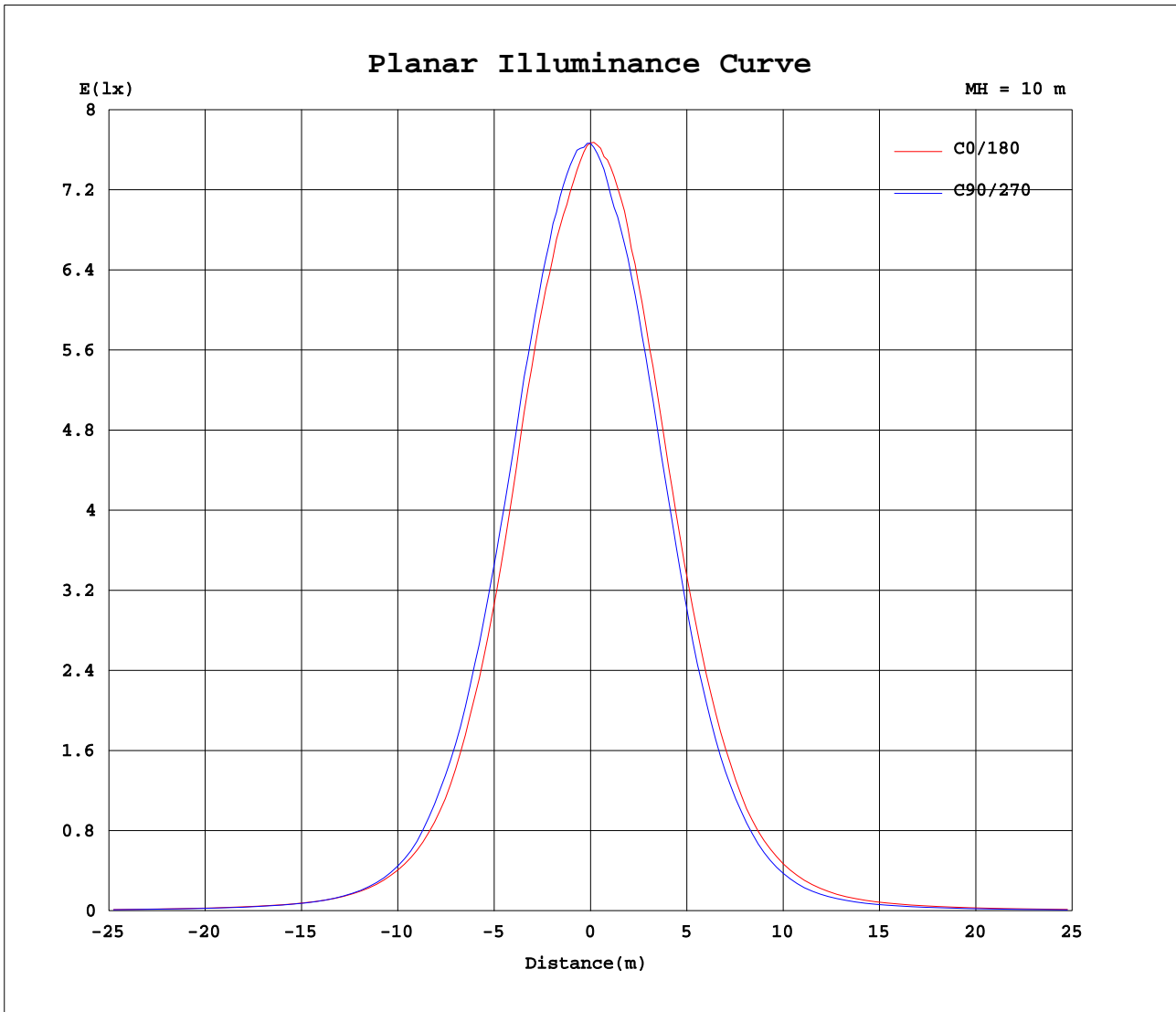
Test:U:240.2V I:0.0470A P:10.80W PF:0.9450 Lamp Flux:832.236x1 lm		
NAME: ID10WCOB-CC	TYPE:10W	WEIGHT:
DIM.:	SPEC.:3000K	SERIAL No.:1
MFR.:	SUR.:0.0405	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-11-04

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:65.0%
 Test Distance:10.237m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2021-11-04

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity: 65.0%
 Test Distance: 10.237m [K=1.0000]
 Remarks:

