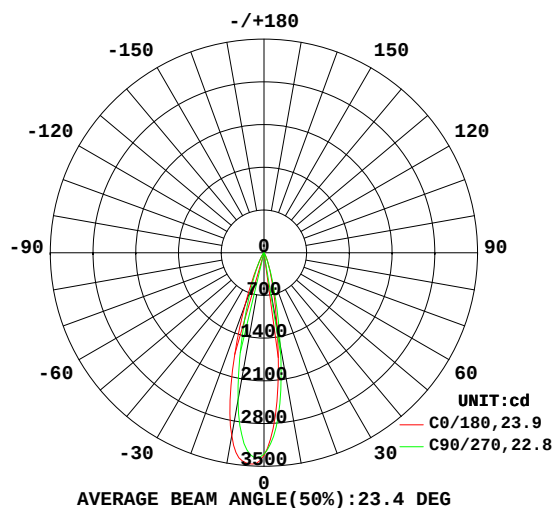


LUMINAIRE PHOTOMETRIC TEST REPORT

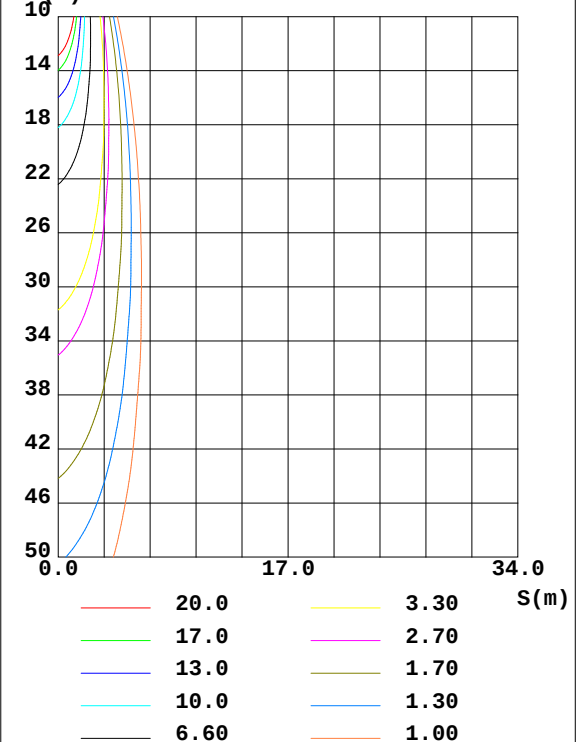
Test:U:230.79V I:0.1055A P:11.281W PF:0.4634 Freq:49.99Hz Lamp Flux:701.093x1 lm		
NAME: CD75C02C-BK3K12C01	TYPE:	WEIGHT:
SPEC.: black RA80	DIM.:	SERIAL No.:
MFR.:	SUR.: 65mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 62.15 lm/W			
MODEL	3000K	I _{max} (cd)	3512	S/MH(C0/180)	0.50
NOMINAL POWER(W)	12	LOR(%)	100.0	S/MH(C90/270)	0.44
RATED VOLTAGE(V)	220-240	TOTAL FLUX(lm)	701.09	η UP, DN(C0-180)	0.0, 37.9
NOMINAL FLUX(lm)	701.093	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 62.1
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	220	η down(%)	100.0	CIBSE SHR MAX	1.00

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-03-30

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.880m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

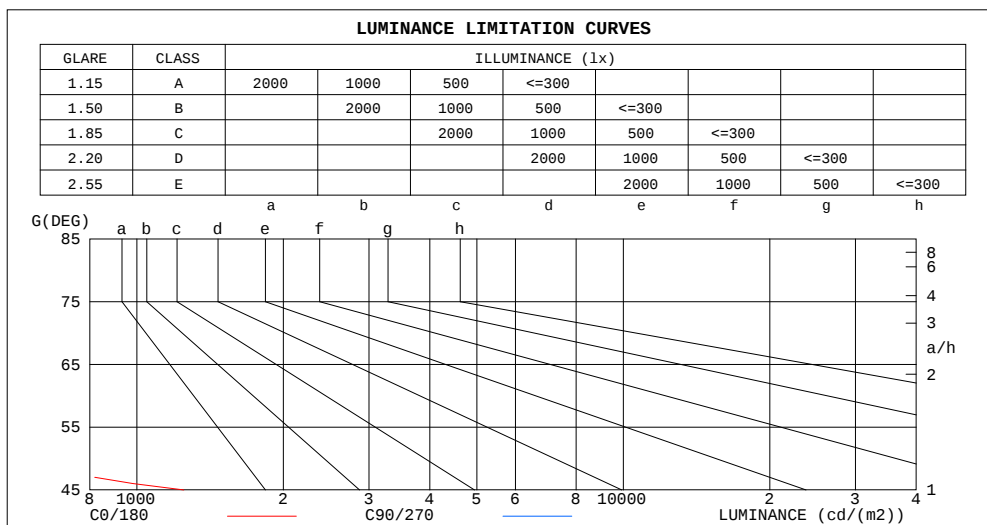
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1254	1204	1537	2295	3043	3044	2458	1723	0- 10	253.1	253.1	36.1, 36.1
20	236.9	201.8	260.4	463.7	900.7	915.9	625.1	386.3	10- 20	310.6	563.7	80.4, 80.4
30	47.17	28.91	34.67	65.84	118.7	139.5	128.1	92.11	20- 30	100.3	664.0	94.7, 94.7
40	11.03	3.538	4.514	10.10	26.43	34.83	33.29	23.02	30- 40	25.16	689.2	98.3, 98.3
50	1.128	0.5840	0.5749	1.083	7.472	13.63	13.68	7.454	40- 50	8.137	697.3	99.5, 99.5
60	0.4646	0.0967	0.0646	0.3863	0.9041	4.163	4.533	1.179	50- 60	2.852	700.2	99.9, 99.9
70	0.0690	0	0	0.0460	0.3440	0.8582	0.9685	0.4401	60- 70	0.6665	700.8	100, 100
80	0	0	0	0	0.0734	0.2201	0.2153	0.0735	70- 80	0.2055	701.0	100, 100
90	0	0	0	0	0	0.0735	0.1011	0	80- 90	0.0455	701.1	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		

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 2025-03-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-2000B_V1 SYSTEM V2.00.428
 Humidity: 65.0%
 Test Distance: 7.880m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.79V I:0.1055A P:11.281W PF:0.4634 Freq:49.99Hz Lamp Flux:701.093x1 lm		
NAME: CD75C02C-BK3K12C01	TYPE:	WEIGHT:
SPEC.: black RA80	DIM.:	SERIAL No.:
MFR.:	SUR.: 65mm	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	0	0
80	0	0
75	21	0
70	61	0
65	125	13
60	280	39
55	394	181
50	529	269
45	1249	455

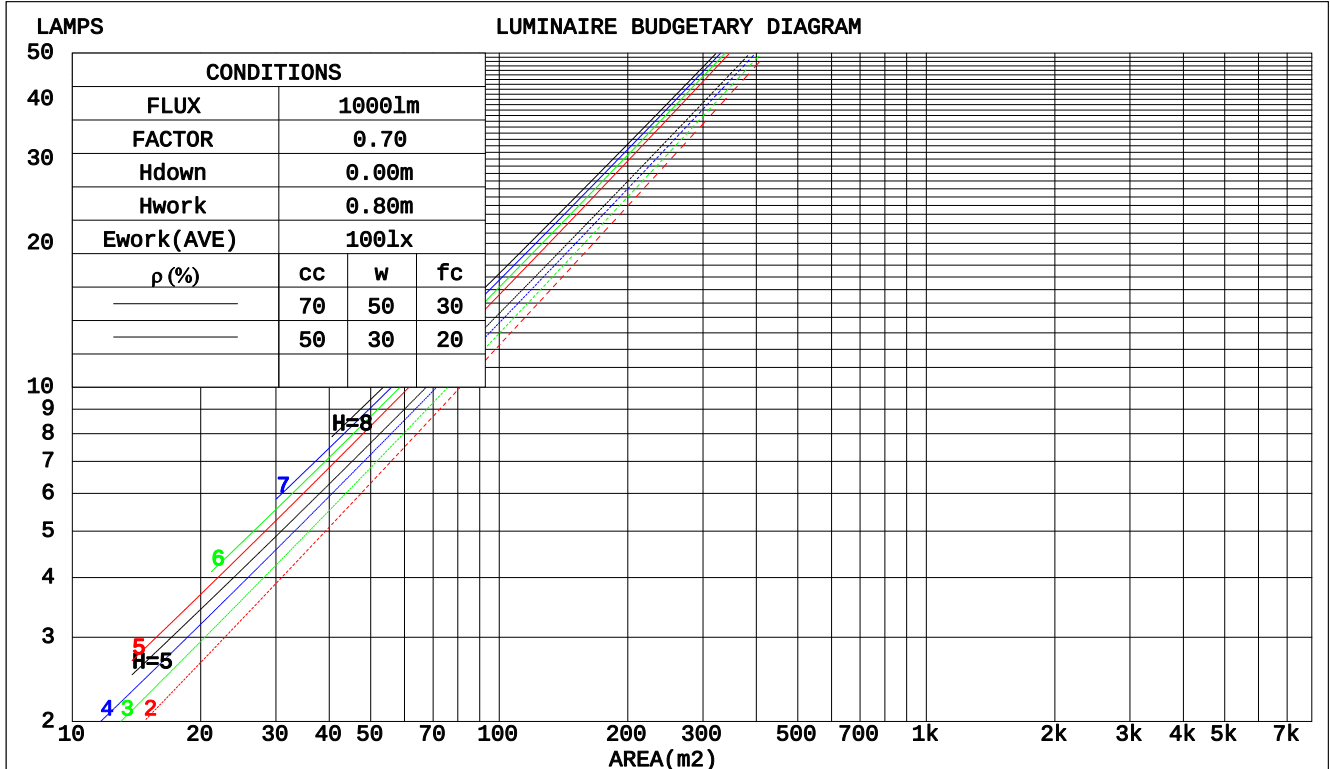
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2025-03-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity: 65.0%
Test Distance: 7.880m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.79V I:0.1055A P:11.281W PF:0.4634 Freq:49.99Hz Lamp Flux:701.093x1 lm		
NAME: CD75C02C-BK3K12C01	TYPE:	WEIGHT:
SPEC.: black RA80	DIM.:	SERIAL No.:
MFR.:	SUR.: 65mm	Shielding Angle:

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	Coefficients of Utilization(CU)															
	RCR:Room Cavity Ratio															
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	1.09	1.11	1.09	1.08	1.07	1.06	1.04	1.03	1.02	1.01	.99	.99	.98	.97
2.0	1.08	1.05	1.02	1.06	1.03	1.01	1.03	1.01	.99	1.00	.98	.97	.97	.96	.95	.93
3.0	1.03	.99	.97	1.02	.99	.96	.99	.97	.94	.97	.95	.93	.95	.93	.92	.90
4.0	.99	.95	.92	.98	.94	.92	.96	.93	.91	.94	.92	.90	.93	.90	.89	.87
5.0	.96	.91	.88	.95	.91	.88	.93	.90	.87	.92	.89	.87	.90	.88	.86	.85
6.0	.92	.88	.85	.92	.88	.85	.90	.87	.84	.89	.86	.84	.88	.85	.83	.82
7.0	.89	.85	.82	.89	.85	.82	.88	.84	.82	.87	.84	.81	.86	.83	.81	.80
8.0	.87	.83	.80	.86	.82	.80	.85	.82	.79	.84	.81	.79	.84	.81	.79	.78
9.0	.84	.80	.77	.84	.80	.77	.83	.79	.77	.82	.79	.77	.81	.79	.77	.76
10.0	.82	.78	.75	.81	.78	.75	.81	.77	.75	.80	.77	.75	.80	.77	.75	.74



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2025-03-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity: 65.0%
Test Distance: 7.880m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:230.79V I:0.1055A P:11.281W PF:0.4634 Freq:49.99Hz Lamp Flux:701.093x1 lm					
NAME: CD75C02C-BK3K12C01			TYPE:		WEIGHT:
SPEC.: black RA80			DIM.:		SERIAL No.:
MFR.:			SUR.: 65mm		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	.136	.078	.025	.130	.074	.023	.117	.067	.021	.106	.061	.020	.095	.055	.018	
2.0	.126	.069	.021	.121	.067	.021	.111	.062	.019	.101	.057	.018	.093	.052	.017	
3.0	.118	.063	.019	.113	.061	.018	.105	.057	.017	.097	.053	.016	.090	.050	.015	
4.0	.110	.057	.017	.107	.056	.016	.099	.053	.016	.093	.050	.015	.087	.047	.014	
5.0	.104	.053	.015	.101	.052	.015	.095	.049	.015	.089	.047	.014	.084	.045	.013	
6.0	.098	.049	.014	.096	.048	.014	.090	.046	.013	.085	.044	.013	.081	.043	.013	
7.0	.093	.046	.013	.091	.045	.013	.086	.044	.013	.082	.042	.012	.078	.041	.012	
8.0	.089	.043	.012	.087	.043	.012	.083	.041	.012	.079	.040	.012	.076	.039	.011	
9.0	.085	.041	.011	.083	.041	.011	.080	.039	.011	.076	.038	.011	.073	.037	.011	
10.0	.081	.039	.011	.080	.039	.011	.077	.038	.011	.074	.037	.010	.071	.036	.010	

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	.168	.158	.148	.144	.135	.127	.099	.093	.088	.057	.054	.051	.018	.017	.017	
2.0	.150	.133	.118	.129	.114	.102	.088	.079	.071	.051	.046	.042	.016	.015	.014	
3.0	.135	.113	.096	.116	.098	.083	.080	.068	.058	.046	.040	.034	.015	.013	.011	
4.0	.123	.098	.079	.105	.085	.069	.072	.059	.048	.042	.035	.029	.013	.011	.009	
5.0	.112	.086	.066	.096	.074	.057	.066	.052	.041	.038	.030	.024	.012	.010	.008	
6.0	.103	.076	.056	.089	.065	.049	.061	.046	.034	.036	.027	.020	.011	.009	.007	
7.0	.096	.067	.048	.082	.058	.041	.057	.041	.029	.033	.024	.017	.011	.008	.006	
8.0	.089	.061	.041	.077	.053	.036	.053	.037	.025	.031	.022	.015	.010	.007	.005	
9.0	.083	.055	.036	.072	.048	.031	.050	.034	.022	.029	.020	.013	.009	.006	.004	
10.0	.079	.050	.031	.068	.044	.027	.047	.031	.019	.027	.018	.012	.009	.006	.004	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-03-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.880m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.79V I:0.1055A P:11.281W PF:0.4634 Freq:49.99Hz Lamp Flux:701.093x1 lm											
NAME: CD75C02C-BK3K12C01					TYPE:			WEIGHT:			
SPEC.: black RA80					DIM.:			SERIAL No.:			
MFR.:					SUR.: 65mm			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	2H	2.5	3.1	2.7	3.3	3.4	0.6	1.3	0.8	1.4	1.6
	3H	2.3	2.9	2.6	3.1	3.3	0.5	1.1	0.7	1.3	1.5
	4H	2.2	2.8	2.5	3.0	3.2	0.4	1.0	0.7	1.2	1.4
	6H	2.2	2.7	2.4	2.9	3.2	0.3	0.9	0.6	1.1	1.3
	8H	2.1	2.6	2.4	2.9	3.1	0.3	0.8	0.6	1.1	1.3
	12H	2.1	2.6	2.4	2.8	3.1	0.2	0.8	0.6	1.0	1.3
4H	2H	2.2	2.8	2.5	3.0	3.2	0.4	1.0	0.7	1.2	1.4
	3H	2.1	2.6	2.4	2.8	3.1	0.3	0.8	0.6	1.0	1.3
	4H	2.0	2.4	2.3	2.7	3.0	0.2	0.6	0.5	0.9	1.2
	6H	1.9	2.3	2.2	2.6	3.0	0.1	0.5	0.4	0.8	1.1
	8H	1.8	2.2	2.2	2.6	2.9	-0.0	0.4	0.4	0.7	1.1
	12H	1.8	2.1	2.2	2.5	2.9	-0.1	0.3	0.3	0.7	1.0
8H	4H	1.8	2.2	2.2	2.6	2.9	-0.0	0.4	0.4	0.7	1.1
	6H	1.7	2.0	2.1	2.4	2.8	-0.1	0.2	0.3	0.6	1.0
	8H	1.6	1.9	2.1	2.3	2.8	-0.2	0.1	0.3	0.5	1.0
	12H	1.6	1.8	2.0	2.3	2.7	-0.2	0.0	0.2	0.4	0.9
12H	4H	1.8	2.1	2.2	2.5	2.9	-0.1	0.3	0.3	0.7	1.0
	6H	1.6	1.9	2.1	2.3	2.8	-0.2	0.1	0.3	0.5	1.0
	8H	1.6	1.8	2.0	2.3	2.7	-0.2	0.0	0.2	0.4	0.9
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H	+ 5.0 / -13.6					+ 5.0 / -18.2					
1.5H	+ 7.6 / -12.0					+ 7.6 / -10.5					
2.0H	+ 7.8 / -14.2					+ 5.8 / -20.9					

CIE Pub.117, 701.1 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -1.2)
Area: 0.00332 m2

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-03-30

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.880m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.79V I:0.1055A P:11.281W PF:0.4634 Freq:49.99Hz Lamp Flux:701.093x1 lm		
NAME: CD75C02C-BK3K12C01	TYPE:	WEIGHT:
SPEC.: black RA80	DIM.:	SERIAL No.:
MFR.:	SUR.: 65mm	Shielding Angle:

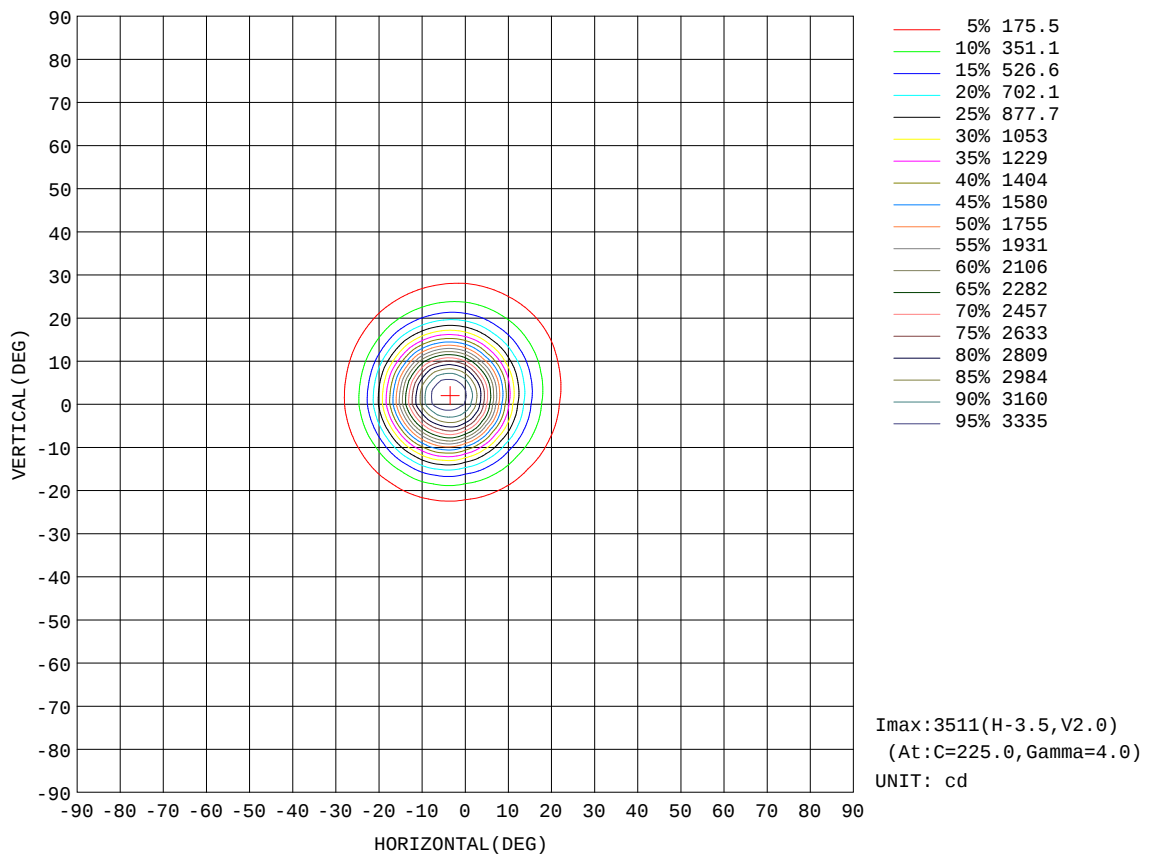
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	91	85	81	90	85	81	89	84	81	78
0.80	98	92	89	97	92	89	96	91	88	85
1.00	101	96	93	101	96	93	99	96	92	89
1.25	105	100	97	104	100	97	102	99	96	92
1.50	107	103	100	106	102	100	104	101	99	94
2.00	110	106	103	108	105	102	106	103	101	96
2.50	111	108	105	110	106	104	107	104	102	96
3.00	113	109	107	111	108	106	107	105	104	97
4.00	114	112	110	112	110	109	109	107	106	99
5.00	116	114	112	114	112	110	110	108	107	100
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-03-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.880m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:230.79V I:0.1055A P:11.281W PF:0.4634 Freq:49.99Hz Lamp Flux:701.093x1 lm		
NAME: CD75C02C-BK3K12C01	TYPE:	WEIGHT:
SPEC.: black RA80	DIM.:	SERIAL No.:
MFR.:	SUR.: 65mm	Shielding Angle:

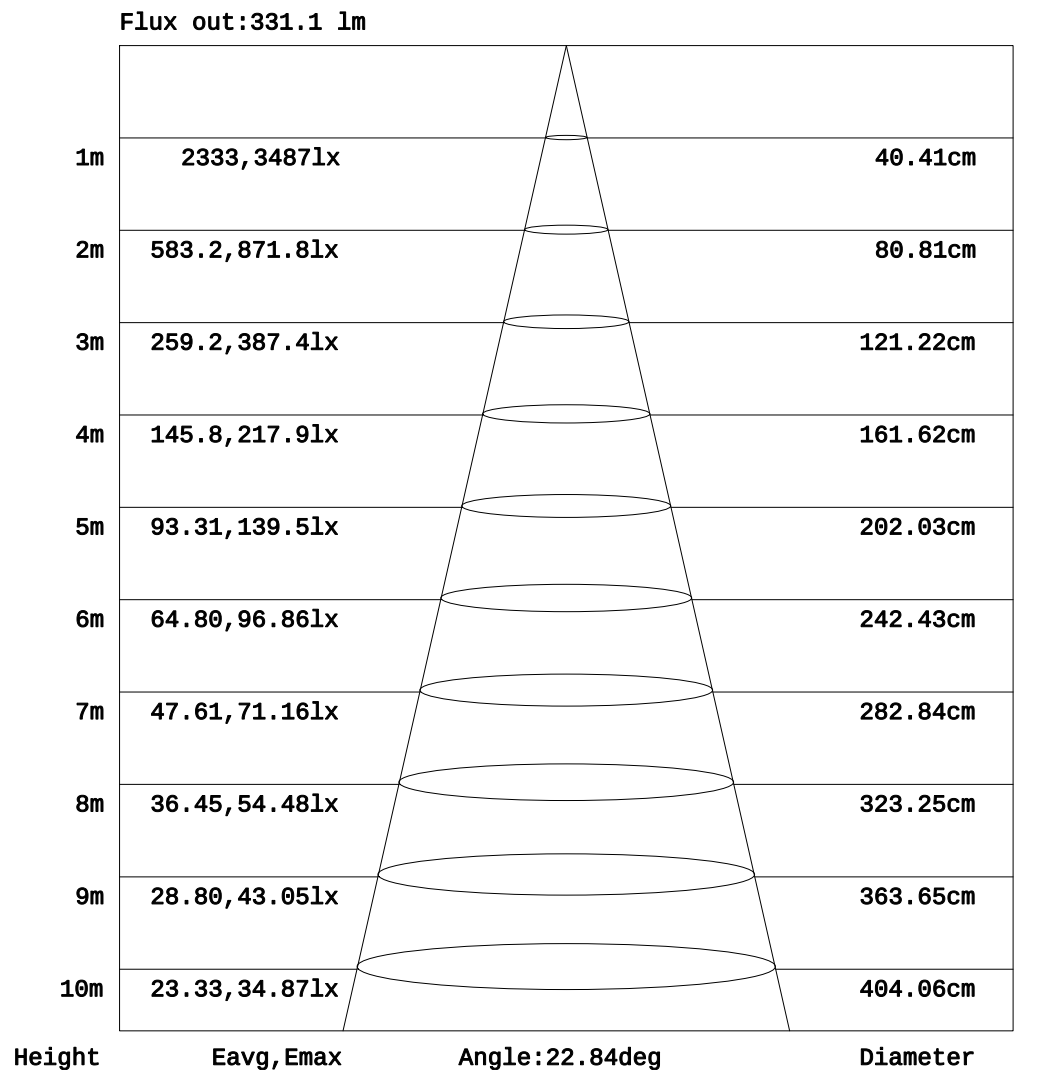


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2025-03-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity: 65.0%
Test Distance: 7.880m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.79V I:0.1055A P:11.281W PF:0.4634 Freq:49.99Hz Lamp Flux:701.093x1 lm		
NAME: CD75C02C-BK3K12C01	TYPE:	WEIGHT:
SPEC.: black RA80	DIM.:	SERIAL No.:
MFR.:	SUR.: 65mm	Shielding Angle:



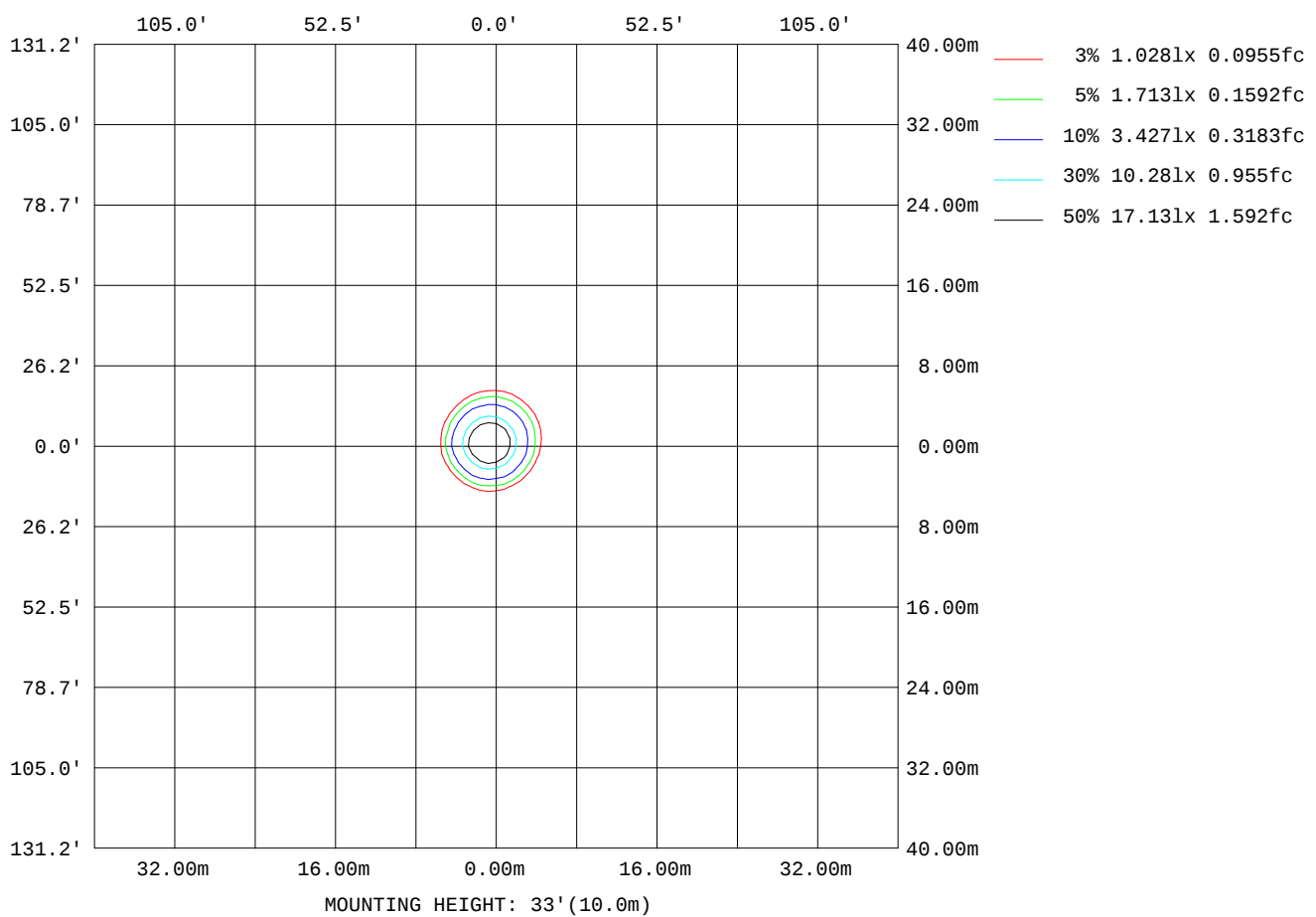
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-03-30

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.880m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:230.79V I:0.1055A P:11.281W PF:0.4634 Freq:49.99Hz Lamp Flux:701.093x1 lm		
NAME: CD75C02C-BK3K12C01	TYPE:	WEIGHT:
SPEC.: black RA80	DIM.:	SERIAL No.:
MFR.:	SUR.: 65mm	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-03-30

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.880m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:230.79V I:0.1055A P:11.281W PF:0.4634 Freq:49.99Hz Lamp Flux:701.093x1 lm		
NAME: CD75C02C-BK3K12C01	TYPE:	WEIGHT:
SPEC.: black RA80	DIM.:	SERIAL No.:
MFR.:	SUR.: 65mm	Shielding Angle:

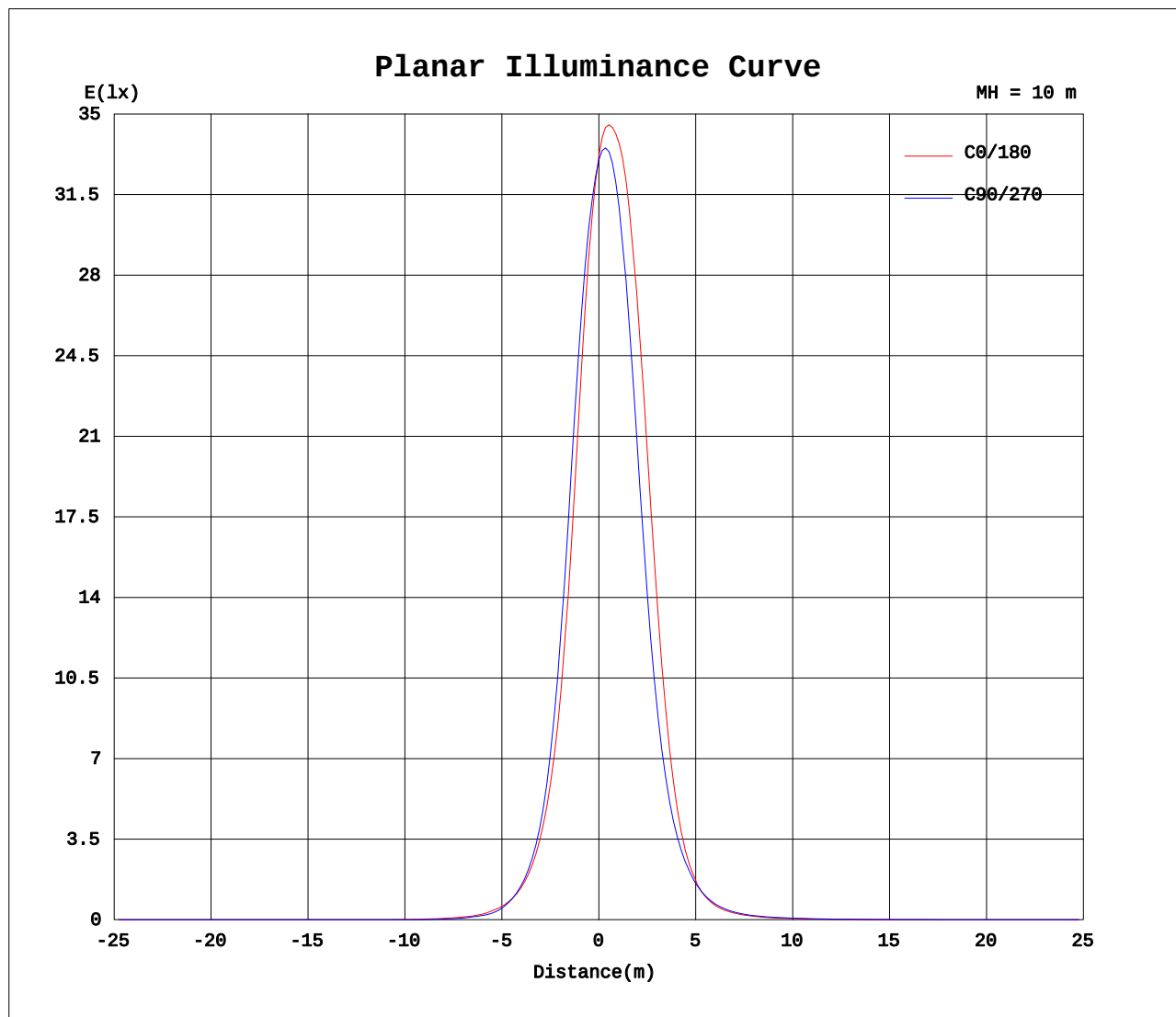
AvgL	cd/m2
L_0~180(65)av	277
L_0~180(75)av	85
L_0~180(85)av	0
L_90~270(65)av	623
L_90~270(75)av	379
L_90~270(85)av	214
L_45(65)av	419
L_45(75)av	187
L_45(85)av	95

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2025-03-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
 Humidity:65.0%
 Test Distance:7.880m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2025-03-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity: 65.0%
Test Distance: 7.880m [K=1.0000]
Remarks:

```

Range: 0 - 90DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.880m [K=1.0000]
Remarks:

```