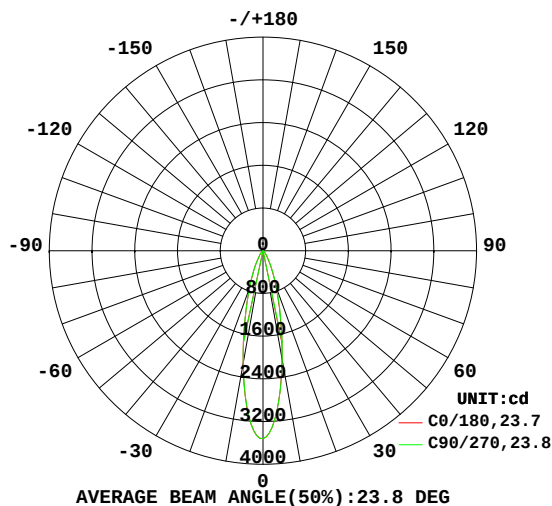


LUMINAIRE PHOTOMETRIC TEST REPORT

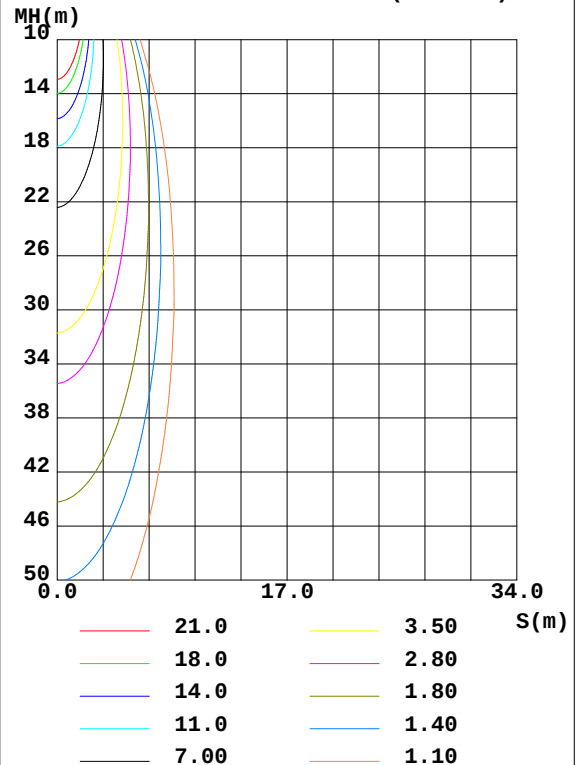
Test:U:220.55V I:0.0608A P:13.101W PF:0.9766 Freq:50.01Hz Lamp Flux:960.91x1 lm		
NAME: DL3017-WHTC12C02	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 60mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 73.35 lm/W			
MODEL	5000K	I _{max} (cd)	3520	S/MH(C0/180)	0.41
NOMINAL POWER(W)	12	LOR(%)	100.0	S/MH(C90/270)	0.41
RATED VOLTAGE(V)	220-240	TOTAL FLUX(lm)	960.91	η UP, DN(C0-180)	0.0, 49.9
NOMINAL FLUX(lm)	960.91	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 50.1
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: 2023-12-5

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity: 65.0%
Test Distance: 7.450m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

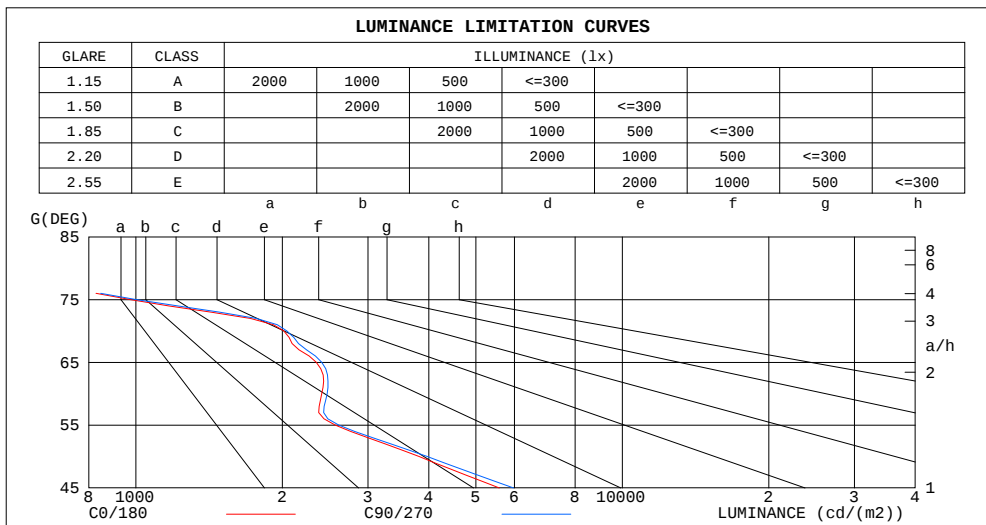
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	2058	2065	2078	2083	2152	2165	2139	2112	0- 10	260.0	260.0	27.1, 27.1
20	716.9	734.1	739.8	716.9	739.8	746.7	742.5	725.1	10- 20	354.5	614.5	63.9, 63.9
30	214.4	228.8	232.1	219.2	228.0	224.2	222.3	213.0	20- 30	194.9	809.4	84.2, 84.2
40	77.63	83.08	85.65	79.50	81.07	80.91	79.50	76.21	30- 40	83.55	892.9	92.9, 92.9
50	27.75	28.79	28.84	27.73	27.92	28.48	27.70	27.07	40- 50	36.50	929.4	96.7, 96.7
60	13.63	13.63	13.98	14.04	13.48	13.54	12.85	12.91	50- 60	16.36	945.8	98.4, 98.4
70	7.789	7.862	7.901	7.874	7.846	7.915	7.626	7.556	60- 70	10.87	956.6	99.6, 99.6
80	0.9290	0.8980	0.9445	1.018	1.090	1.132	1.067	0.9703	70- 80	3.943	960.6	100, 100
90	0.0309	0.0270	0.0309	0.0309	0	0	0	0	80- 90	0.3186	960.9	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:2023-12-5

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.450m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.55V I:0.0608A P:13.101W PF:0.9766 Freq:50.01Hz Lamp Flux:960.91x1 lm		
NAME: DL3017-WHTC12C02	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 60mm	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	154	189
80	473	481
75	974	1001
70	2013	2043
65	2349	2410
60	2410	2472
55	2568	2612
50	3817	3968
45	5585	5975

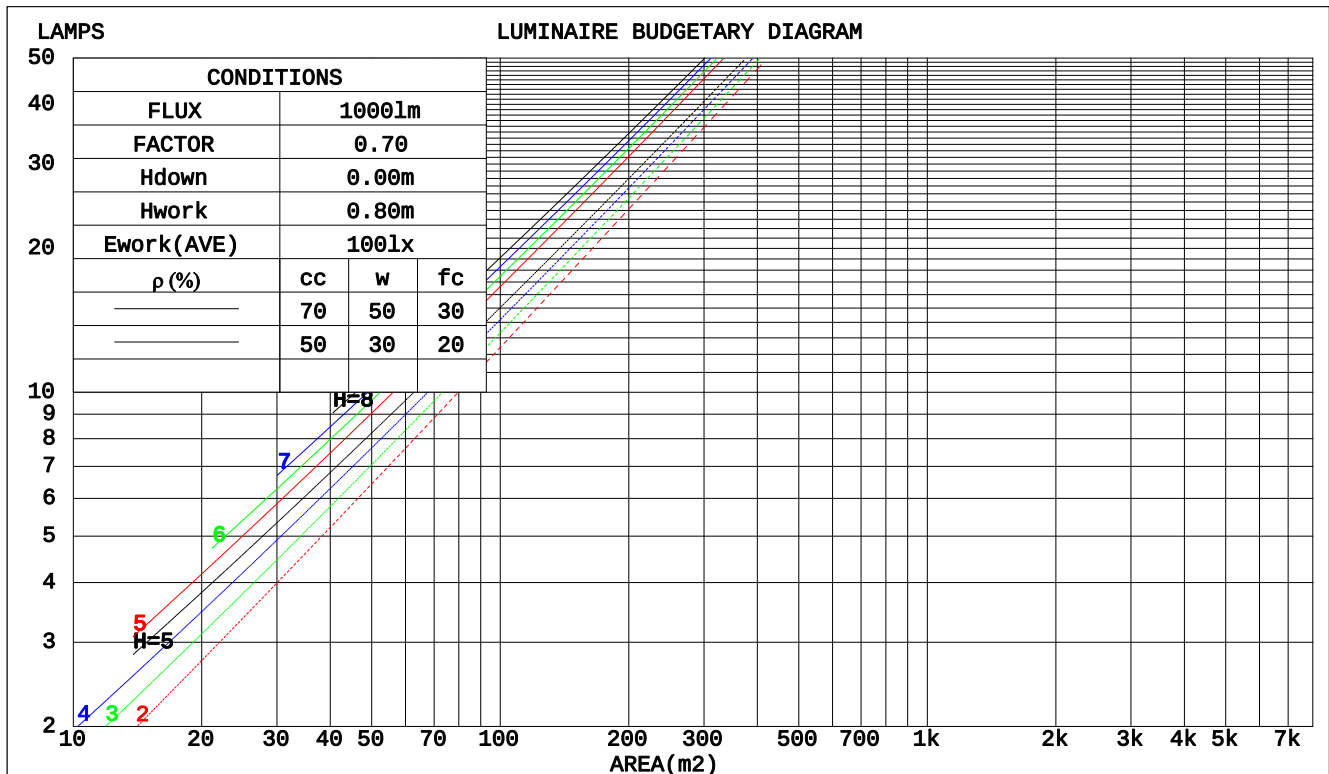
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2023-12-5

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity: 65.0%
Test Distance: 7.450m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.55V I:0.0608A P:13.101W PF:0.9766 Freq:50.01Hz Lamp Flux:960.91x1 lm		
NAME: DL3017-WHTC12C02	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 60mm	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)															
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	1.12	1.10	1.08	1.10	1.08	1.06	1.06	1.04	1.03	1.02	1.01	.00	.99	.98	.97	.95
2.0	1.05	1.02	.99	1.04	1.00	.98	1.00	.98	.96	.98	.95	.94	.95	.93	.92	.90
3.0	.00	.95	.92	.98	.94	.91	.96	.93	.90	.93	.91	.88	.91	.89	.87	.86
4.0	.95	.90	.86	.94	.89	.86	.92	.88	.85	.90	.86	.84	.88	.85	.83	.82
5.0	.90	.85	.82	.89	.85	.81	.88	.84	.81	.86	.83	.80	.85	.82	.79	.78
6.0	.86	.81	.78	.85	.81	.77	.84	.80	.77	.83	.79	.76	.82	.78	.76	.75
7.0	.83	.78	.74	.82	.77	.74	.81	.77	.74	.80	.76	.73	.79	.75	.73	.72
8.0	.79	.74	.71	.79	.74	.71	.78	.74	.71	.77	.73	.70	.76	.73	.70	.69
9.0	.76	.72	.68	.76	.71	.68	.75	.71	.68	.74	.70	.68	.74	.70	.68	.66
10.0	.74	.69	.66	.73	.69	.66	.73	.68	.66	.72	.68	.65	.71	.68	.65	.64



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2023-12-5

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 γ Test System: EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity: 65.0%
Test Distance: 7.450m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:220.55V I:0.0608A P:13.101W PF:0.9766 Freq:50.01Hz Lamp Flux:960.91x1 lm					
NAME: DL3017-WHTC12C02			TYPE:		WEIGHT:
SPEC.: white RA90 3000K+5000K			DIM.:		SERIAL No.:
MFR.:			SUR.: 60mm		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	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.158	.090	.028	.151	.086	.027	.139	.080	.025	.127	.073	.024	.117	.068	.022	
2.0	.149	.082	.025	.143	.079	.024	.133	.074	.023	.123	.069	.022	.115	.065	.020	
3.0	.140	.074	.022	.135	.072	.022	.127	.069	.021	.118	.065	.020	.111	.061	.019	
4.0	.132	.068	.020	.128	.067	.020	.120	.064	.019	.113	.061	.018	.107	.058	.018	
5.0	.124	.063	.018	.121	.062	.018	.115	.060	.018	.109	.057	.017	.103	.055	.017	
6.0	.118	.059	.017	.115	.058	.017	.109	.056	.016	.104	.054	.016	.099	.052	.015	
7.0	.112	.055	.016	.109	.054	.016	.104	.053	.015	.100	.051	.015	.096	.050	.015	
8.0	.107	.052	.015	.104	.051	.015	.100	.050	.014	.096	.049	.014	.092	.047	.014	
9.0	.102	.049	.014	.100	.049	.014	.096	.047	.013	.092	.046	.013	.089	.045	.013	
10.0	.097	.047	.013	.096	.046	.013	.092	.045	.013	.089	.044	.013	.086	.043	.012	

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	.170	.157	.146	.145	.135	.126	.099	.093	.087	.057	.054	.051	.018	.017	.016	
2.0	.153	.133	.115	.131	.114	.100	.090	.079	.070	.052	.046	.041	.017	.015	.013	
3.0	.139	.113	.093	.120	.098	.080	.082	.068	.056	.047	.040	.033	.015	.013	.011	
4.0	.128	.098	.076	.110	.085	.066	.075	.059	.046	.044	.035	.027	.014	.011	.009	
5.0	.118	.086	.063	.101	.075	.055	.070	.052	.039	.040	.031	.023	.013	.010	.008	
6.0	.110	.077	.053	.094	.066	.046	.065	.046	.033	.038	.027	.019	.012	.009	.006	
7.0	.103	.069	.045	.088	.060	.039	.061	.042	.028	.035	.025	.017	.011	.008	.005	
8.0	.096	.062	.039	.083	.054	.034	.057	.038	.024	.033	.022	.014	.011	.007	.005	
9.0	.091	.057	.034	.078	.049	.029	.054	.035	.021	.032	.020	.012	.010	.007	.004	
10.0	.086	.052	.030	.074	.045	.026	.051	.032	.018	.030	.019	.011	.010	.006	.004	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2023-12-5

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.450m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.55V I:0.0608A P:13.101W PF:0.9766 Freq:50.01Hz Lamp Flux:960.91x1 lm										
NAME: DL3017-WHTC12C02					TYPE:			WEIGHT:		
SPEC.: white RA90 3000K+5000K					DIM.:			SERIAL No.:		
MFR.:					SUR.: 60mm			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	12.0	12.8	12.2	13.0	13.1	12.3	13.1	12.5	13.2	13.4
3H	12.5	13.2	12.7	13.4	13.6	12.7	13.4	13.0	13.6	13.8
4H	12.5	13.2	12.8	13.4	13.6	12.7	13.4	13.0	13.6	13.9
6H	12.4	13.1	12.7	13.3	13.6	12.7	13.3	13.0	13.6	13.8
8H	12.4	13.0	12.7	13.3	13.5	12.6	13.3	12.9	13.5	13.8
12H	12.4	13.0	12.7	13.2	13.5	12.6	13.2	12.9	13.5	13.7
4H 2H	12.1	12.8	12.4	13.0	13.2	12.4	13.1	12.6	13.3	13.5
3H	12.7	13.3	13.0	13.6	13.8	12.9	13.5	13.2	13.8	14.0
4H	12.7	13.3	13.1	13.6	13.9	12.9	13.5	13.3	13.8	14.1
6H	12.7	13.2	13.1	13.5	13.8	12.9	13.4	13.3	13.7	14.0
8H	12.6	13.1	13.0	13.4	13.8	12.8	13.3	13.2	13.6	14.0
12H	12.6	13.0	13.0	13.4	13.8	12.8	13.2	13.2	13.6	14.0
8H 4H	12.7	13.1	13.1	13.5	13.8	12.9	13.3	13.3	13.7	14.0
6H	12.6	13.0	13.0	13.4	13.8	12.8	13.2	13.2	13.6	14.0
8H	12.6	12.9	13.0	13.3	13.8	12.8	13.1	13.2	13.5	14.0
12H	12.5	12.8	13.0	13.2	13.7	12.7	13.0	13.2	13.4	13.9
12H 4H	12.6	13.0	13.0	13.4	13.8	12.8	13.2	13.2	13.6	14.0
6H	12.6	12.9	13.0	13.3	13.8	12.8	13.1	13.2	13.5	13.9
8H	12.5	12.8	13.0	13.2	13.7	12.7	13.0	13.2	13.4	13.9
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 1.6 / - 2.5					+ 1.6 / - 2.6				
1.5H	+ 2.6 / - 2.4					+ 2.8 / - 2.5				
2.0H	+ 2.7 / - 1.3					+ 2.8 / - 1.4				

CIE Pub.117, 960.9 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.1)
Area: 0.01131 m2

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2023-12-5

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.450m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.55V I:0.0608A P:13.101W PF:0.9766 Freq:50.01Hz Lamp Flux:960.91x1 lm		
NAME: DL3017-WHTC12C02	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 60mm	Shielding Angle:

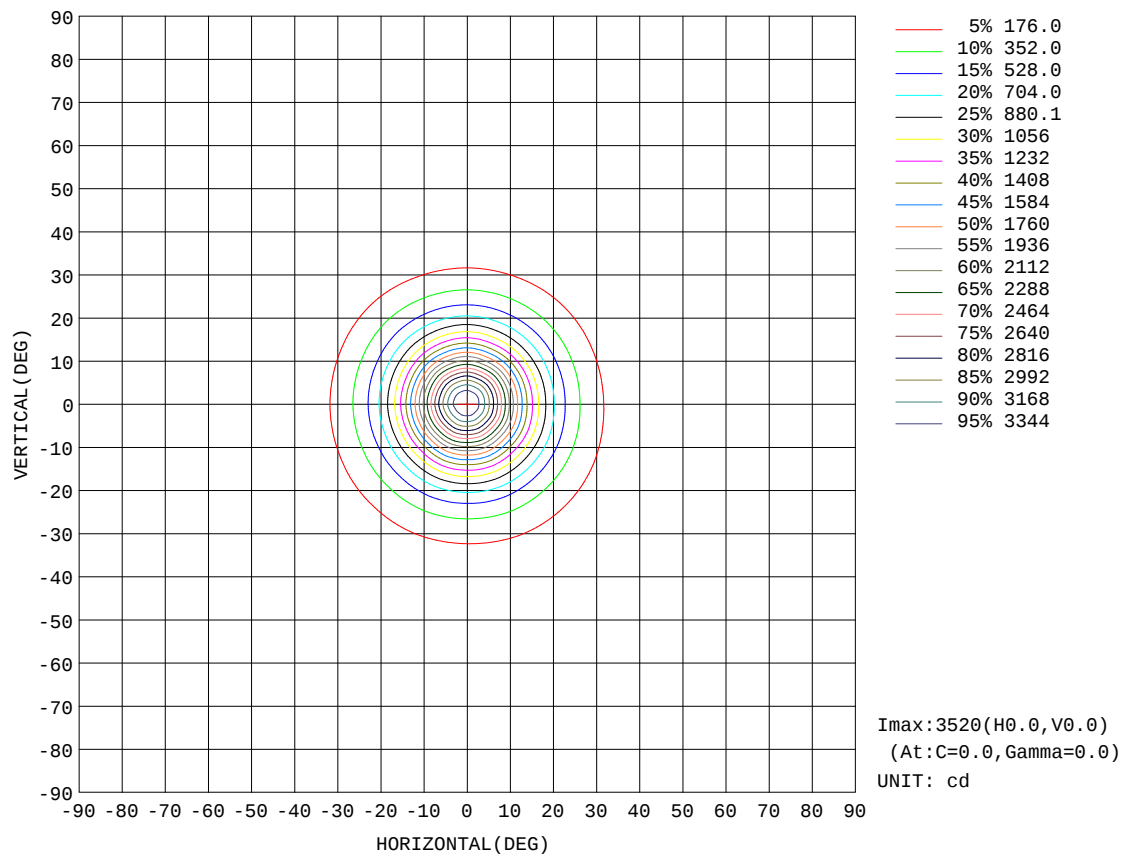
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	87	81	77	87	81	77	86	80	77	73
0.80	95	89	85	94	88	85	93	88	84	81
1.00	99	93	90	98	93	89	97	93	89	85
1.25	103	98	94	102	97	94	100	96	93	89
1.50	106	101	98	104	100	97	102	99	96	91
2.00	108	104	101	107	103	100	104	101	99	93
2.50	110	106	103	108	105	102	105	103	100	95
3.00	112	108	106	110	107	104	107	104	102	96
4.00	114	111	109	112	109	107	108	106	105	98
5.00	115	113	111	113	111	109	109	108	106	99
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:2023-12-5

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.450m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:220.55V I:0.0608A P:13.101W PF:0.9766 Freq:50.01Hz Lamp Flux:960.91x1 lm		
NAME: DL3017-WHTC12C02	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 60mm	Shielding Angle:

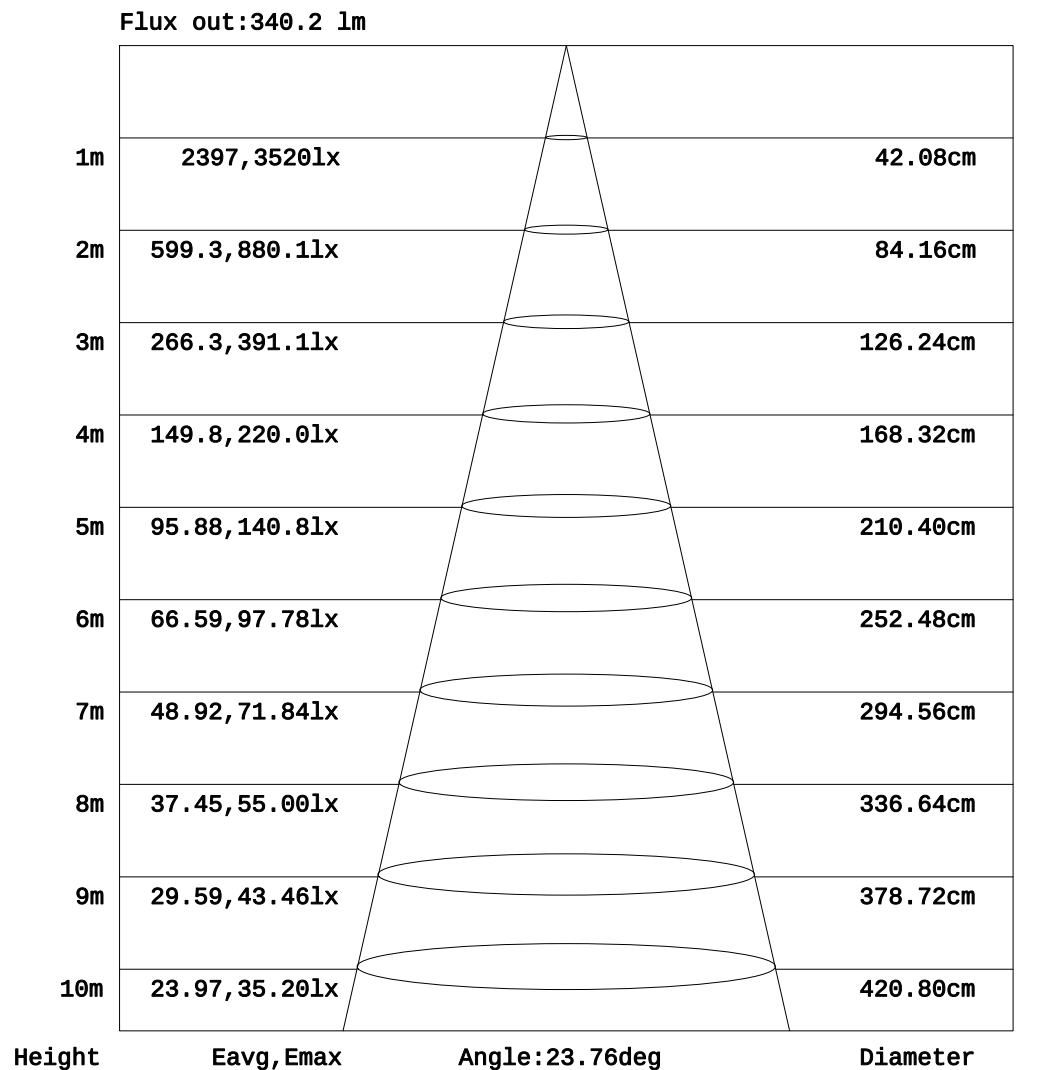


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2023-12-5

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity: 65.0%
Test Distance: 7.450m [K=1.0000]
Remarks:

AAI Figure

Test:U:220.55V I:0.0608A P:13.101W PF:0.9766 Freq:50.01Hz Lamp Flux:960.91x1 lm		
NAME: DL3017-WHTC12C02	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 60mm	Shielding Angle:



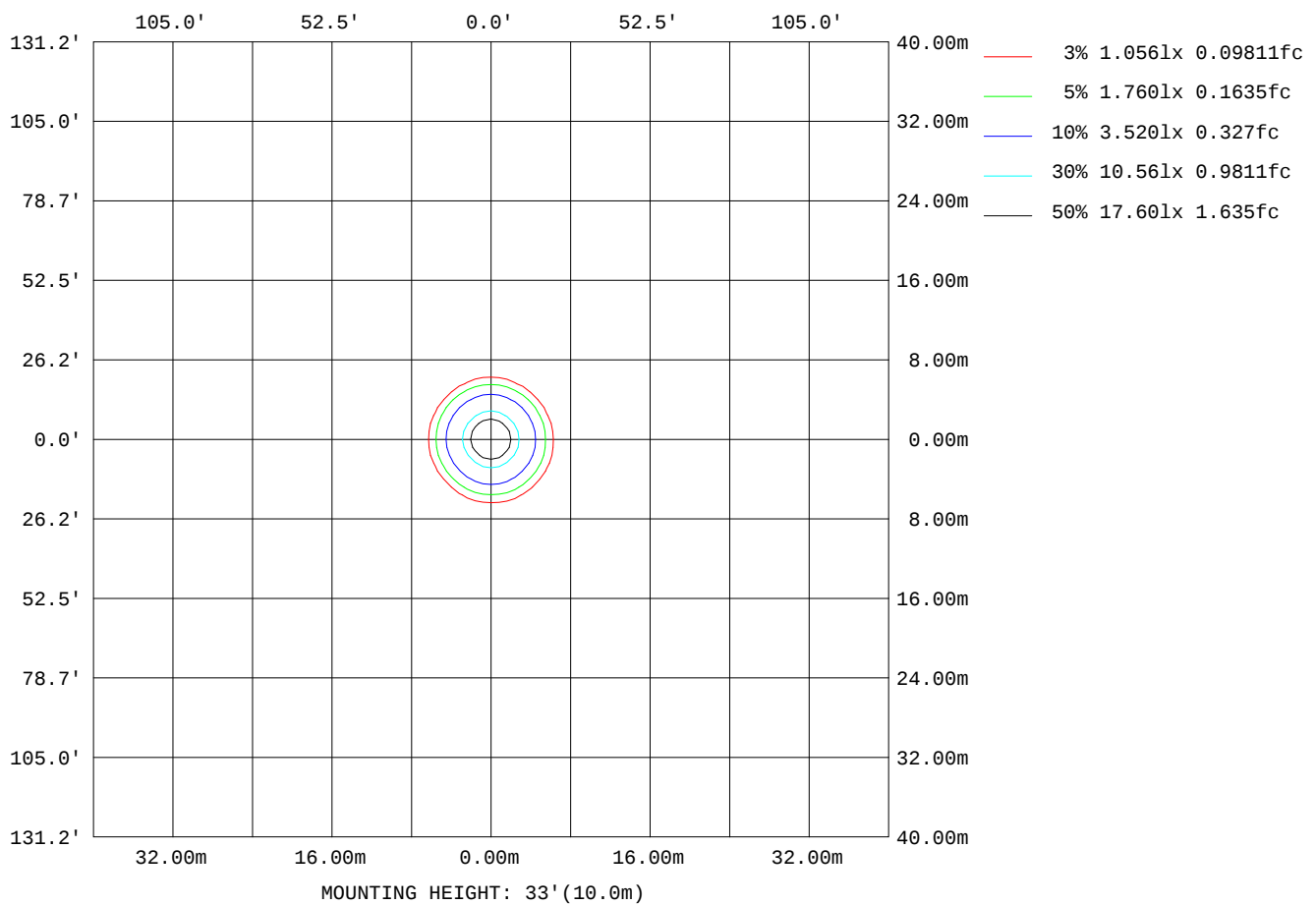
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2023-12-5

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.450m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:220.55V I:0.0608A P:13.101W PF:0.9766 Freq:50.01Hz Lamp Flux:960.91x1 lm		
NAME: DL3017-WHTC12C02	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 60mm	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2023-12-5

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity: 65.0%
Test Distance: 7.450m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:220.55V I:0.0608A P:13.101W PF:0.9766 Freq:50.01Hz Lamp Flux:960.91x1 lm		
NAME: DL3017-WHTC12C02	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 60mm	Shielding Angle:

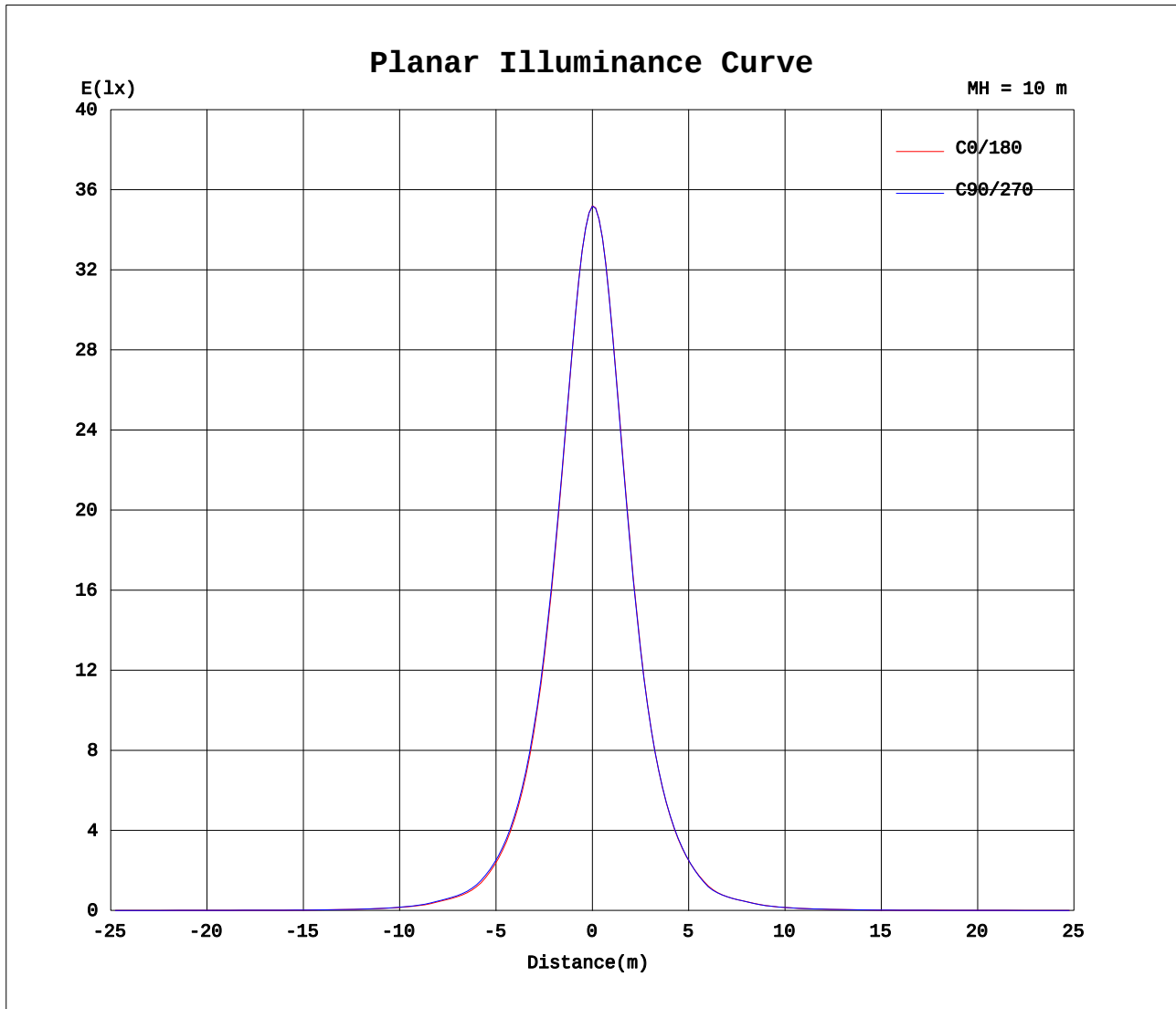
AvgL	cd/m2
L_0~180(65)av	2372
L_0~180(75)av	1079
L_0~180(85)av	180
L_90~270(65)av	2352
L_90~270(75)av	1077
L_90~270(85)av	178
L_45(65)av	2370
L_45(75)av	1077
L_45(85)av	170

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2023-12-5

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.450m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2023-12-5

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity: 65.0%
Test Distance: 7.450m [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:7.450m [K=1.0000]
Remarks:

```