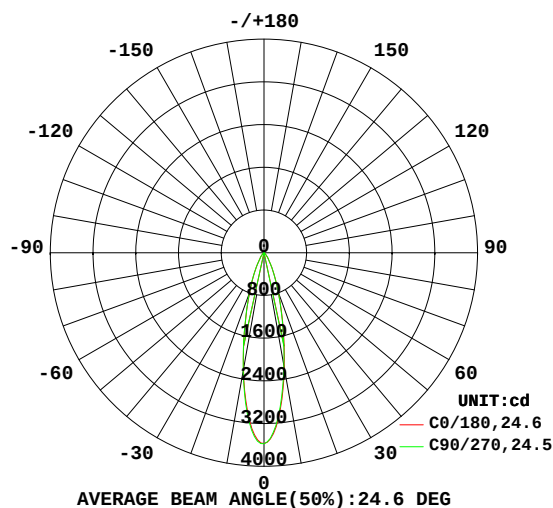


LUMINAIRE PHOTOMETRIC TEST REPORT

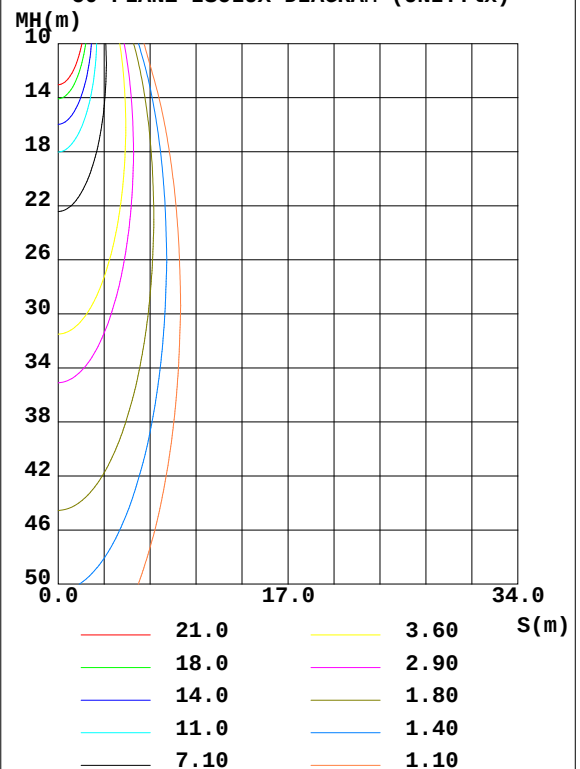
Test:U:220.56V I:0.0585A P:12.530W PF:0.9716 Freq:50.01Hz Lamp Flux:1019.8x1 lm		
NAME: DL3017-WHTC12C02	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 60mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 81.39 lm/W			
MODEL	4000K	I _{max} (cd)	3582	S/MH(C0/180)	0.42
NOMINAL POWER(W)	12	LOR(%)	100.0	S/MH(C90/270)	0.42
RATED VOLTAGE(V)	220-240	TOTAL FLUX(lm)	1019.8	η UP, DN(C0-180)	0.0, 49.7
NOMINAL FLUX(lm)	1019.8	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 50.3
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:

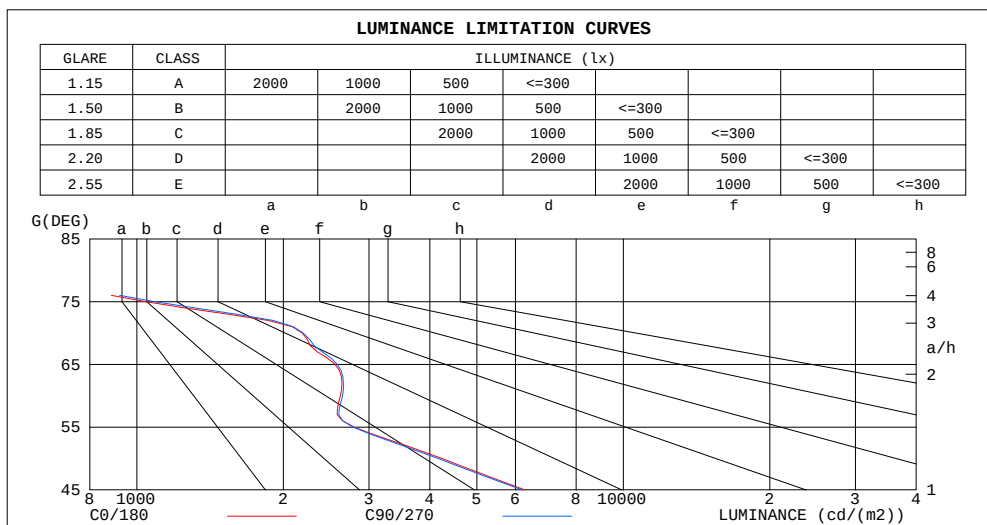
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	2190	2159	2152	2164	2222	2241	2248	2261	0- 10	268.4	268.4	26.3, 26.3
20	792.7	780.6	780.3	773.5	787.6	787.3	800.6	813.7	10- 20	377.0	645.4	63.3, 63.3
30	241.6	243.1	242.1	235.6	240.4	236.6	242.9	249.5	20- 30	210.9	856.3	84, 84
40	87.76	86.95	88.39	85.97	85.09	84.01	86.16	89.05	30- 40	90.13	946.5	92.8, 92.8
50	30.79	30.47	30.25	29.95	29.59	29.88	29.99	30.82	40- 50	39.35	985.8	96.7, 96.7
60	14.82	14.62	14.97	15.13	14.47	14.51	13.88	14.14	50- 60	17.63	1003	98.4, 98.4
70	8.457	8.441	8.492	8.534	8.455	8.490	8.251	8.266	60- 70	11.73	1015	99.5, 99.5
80	0.9910	0.9638	1.026	1.130	1.198	1.217	1.144	1.051	70- 80	4.260	1019	100, 100
90	0.0386	0.0386	0.0386	0.0425	0	0	0	0	80- 90	0.3489	1020	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:220.56V I:0.0585A P:12.530W PF:0.9716 Freq:50.01Hz Lamp Flux:1019.8x1 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	166	209
80	505	522
75	1040	1084
70	2186	2195
65	2556	2581
60	2621	2647
55	2796	2781
50	4235	4161
45	6275	6200

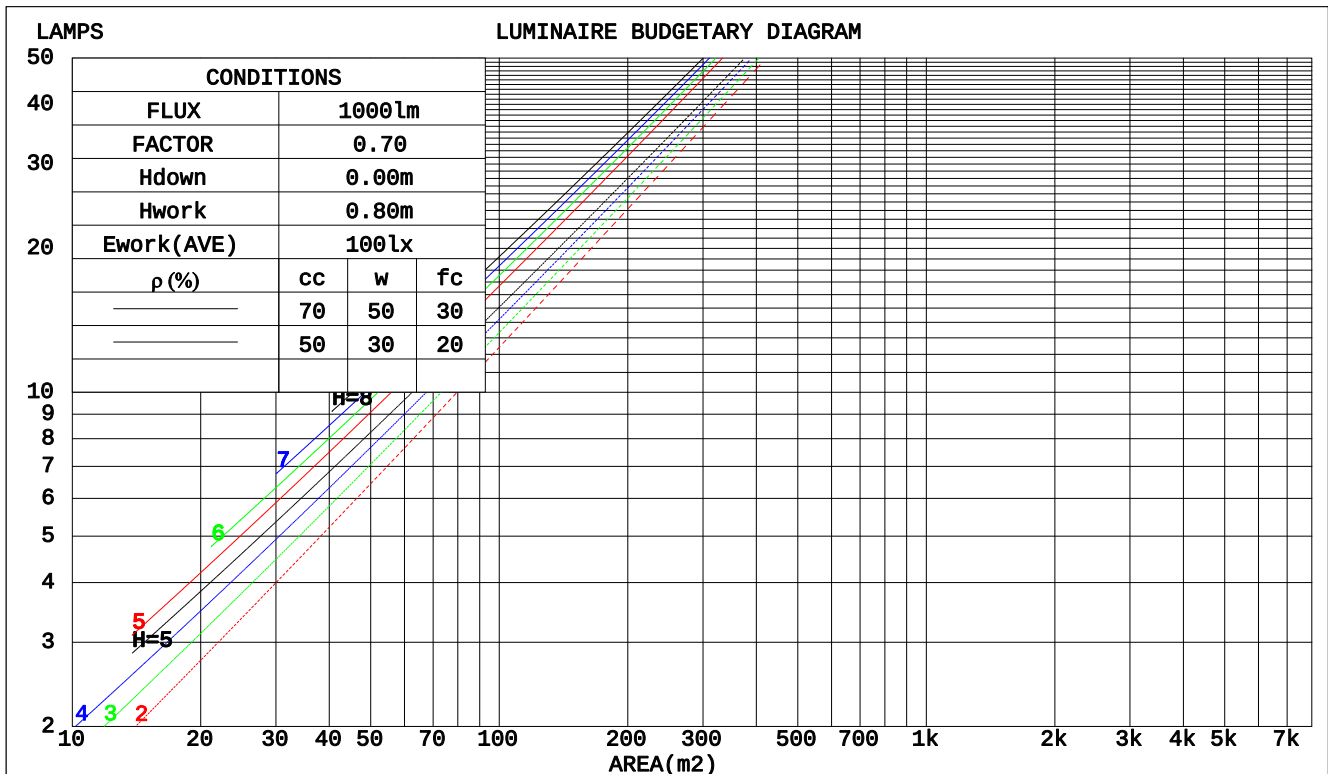
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2023-12-5

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:220.56V I:0.0585A P:12.530W PF:0.9716 Freq:50.01Hz Lamp Flux:1019.8x1 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						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	1.12	1.10	1.08	1.10	1.08	1.06	1.06	1.04	1.03	1.02	1.01	.00	.98	.98	.97	.95
2.0	1.05	1.02	.99	1.04	1.00	.98	1.00	.98	.96	.97	.95	.93	.95	.93	.92	.90
3.0	.00	.95	.92	.98	.94	.91	.96	.92	.90	.93	.91	.88	.91	.89	.87	.85
4.0	.94	.90	.86	.93	.89	.86	.91	.88	.85	.89	.86	.84	.88	.85	.83	.81
5.0	.90	.85	.81	.89	.84	.81	.87	.83	.80	.86	.82	.80	.84	.81	.79	.78
6.0	.86	.81	.77	.85	.81	.77	.84	.80	.77	.82	.79	.76	.81	.78	.76	.74
7.0	.82	.77	.74	.82	.77	.74	.81	.76	.73	.79	.76	.73	.78	.75	.73	.71
8.0	.79	.74	.71	.79	.74	.71	.78	.73	.70	.77	.73	.70	.76	.72	.70	.69
9.0	.76	.71	.68	.76	.71	.68	.75	.71	.68	.74	.70	.67	.73	.70	.67	.66
10.0	.73	.69	.65	.73	.68	.65	.72	.68	.65	.71	.68	.65	.71	.67	.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:220.56V I:0.0585A P:12.530W PF:0.9716 Freq:50.01Hz Lamp Flux:1019.8x1 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	.159	.090	.029	.152	.087	.028	.140	.080	.026	.128	.074	.024	.118	.068	.022	
2.0	.150	.082	.025	.144	.079	.024	.134	.074	.023	.124	.070	.022	.115	.065	.021	
3.0	.141	.075	.022	.136	.073	.022	.127	.069	.021	.119	.065	.020	.112	.062	.019	
4.0	.133	.069	.020	.129	.067	.020	.121	.064	.019	.114	.061	.019	.108	.059	.018	
5.0	.125	.064	.018	.122	.063	.018	.115	.060	.018	.109	.058	.017	.104	.055	.017	
6.0	.119	.059	.017	.116	.058	.017	.110	.056	.016	.105	.054	.016	.100	.053	.016	
7.0	.113	.056	.016	.110	.055	.016	.105	.053	.015	.101	.052	.015	.096	.050	.015	
8.0	.107	.052	.015	.105	.052	.015	.101	.050	.014	.097	.049	.014	.093	.048	.014	
9.0	.102	.050	.014	.100	.049	.014	.097	.048	.014	.093	.047	.013	.090	.045	.013	
10.0	.098	.047	.013	.096	.046	.013	.093	.045	.013	.090	.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	.069	.052	.046	.041	.017	.015	.013	
3.0	.140	.113	.093	.120	.098	.080	.082	.068	.056	.047	.040	.033	.015	.013	.011	
4.0	.128	.098	.076	.110	.085	.066	.076	.059	.046	.044	.035	.027	.014	.011	.009	
5.0	.118	.086	.063	.102	.075	.055	.070	.052	.039	.041	.031	.023	.013	.010	.008	
6.0	.110	.077	.053	.095	.066	.046	.065	.047	.033	.038	.027	.019	.012	.009	.006	
7.0	.103	.069	.045	.089	.060	.039	.061	.042	.028	.036	.025	.017	.011	.008	.005	
8.0	.097	.062	.039	.083	.054	.034	.058	.038	.024	.033	.022	.014	.011	.007	.005	
9.0	.091	.057	.034	.079	.049	.029	.054	.035	.021	.032	.020	.012	.010	.007	.004	
10.0	.086	.052	.030	.074	.045	.026	.052	.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:220.56V I:0.0585A P:12.530W PF:0.9716 Freq:50.01Hz Lamp Flux:1019.8x1 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	12.2	13.0	12.4	13.1	13.3	12.2	13.0	12.4	13.1	13.3
3H	12.6	13.4	12.9	13.6	13.7	12.6	13.3	12.9	13.5	13.7
4H	12.7	13.4	12.9	13.6	13.8	12.7	13.4	12.9	13.6	13.8
6H	12.6	13.3	12.9	13.5	13.7	12.6	13.3	12.9	13.5	13.7
8H	12.6	13.2	12.9	13.4	13.7	12.6	13.2	12.9	13.4	13.7
12H	12.5	13.1	12.8	13.4	13.7	12.5	13.1	12.8	13.4	13.7
4H 2H	12.3	13.0	12.5	13.2	13.4	12.3	13.0	12.5	13.2	13.4
3H	12.8	13.4	13.1	13.7	14.0	12.8	13.4	13.1	13.7	14.0
4H	12.9	13.4	13.2	13.7	14.0	12.9	13.4	13.2	13.7	14.0
6H	12.8	13.3	13.2	13.6	14.0	12.8	13.3	13.2	13.6	14.0
8H	12.8	13.2	13.2	13.6	14.0	12.8	13.2	13.2	13.6	13.9
12H	12.7	13.1	13.1	13.5	13.9	12.7	13.1	13.1	13.5	13.9
8H 4H	12.8	13.3	13.2	13.6	14.0	12.8	13.3	13.2	13.6	14.0
6H	12.8	13.1	13.2	13.5	13.9	12.8	13.1	13.2	13.5	13.9
8H	12.7	13.0	13.2	13.5	13.9	12.7	13.0	13.2	13.5	13.9
12H	12.7	12.9	13.1	13.4	13.9	12.7	12.9	13.1	13.4	13.9
12H 4H	12.8	13.2	13.2	13.6	13.9	12.8	13.2	13.2	13.5	13.9
6H	12.7	13.0	13.2	13.5	13.9	12.7	13.0	13.1	13.5	13.9
8H	12.7	12.9	13.1	13.4	13.9	12.7	12.9	13.1	13.4	13.9
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 1.6 / - 2.6					+ 1.6 / - 2.5				
1.5H	+ 2.8 / - 2.4					+ 2.8 / - 2.3				
2.0H	+ 2.7 / - 1.4					+ 2.7 / - 1.3				

CIE Pub.117, 1020 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:220.56V I:0.0585A P:12.530W PF:0.9716 Freq:50.01Hz Lamp Flux:1019.8x1 lm		
NAME: DL3017-WHTC12C02	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 60mm	Shielding Angle:

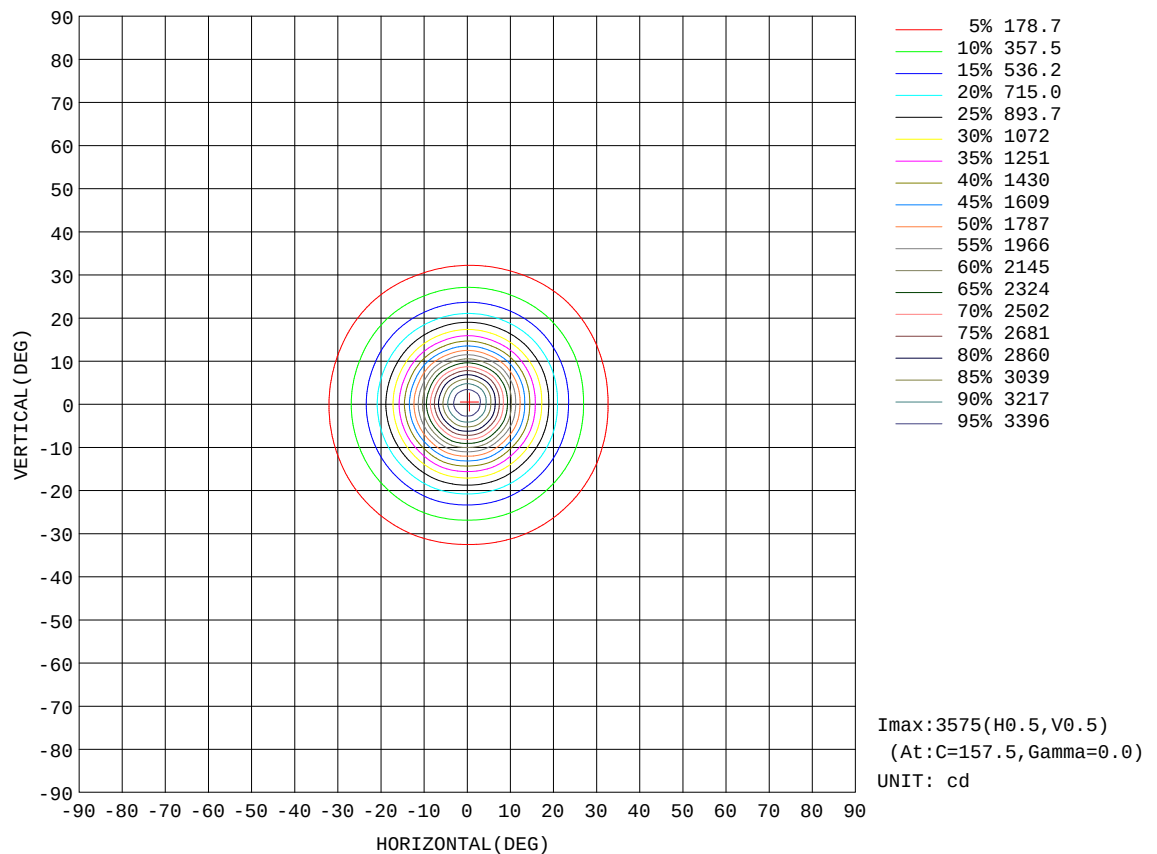
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	87	81	77	87	81	77	86	80	77	73
0.80	95	89	85	94	88	85	93	88	84	81
1.00	99	93	90	98	93	89	96	93	89	85
1.25	103	98	94	102	97	94	100	96	93	89
1.50	106	101	97	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	94
3.00	112	108	105	110	107	104	106	104	102	96
4.00	114	111	109	112	109	107	108	106	105	98
5.00	115	113	111	113	111	109	109	107	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:220.56V I:0.0585A P:12.530W PF:0.9716 Freq:50.01Hz Lamp Flux:1019.8x1 lm		
NAME: DL3017-WHTC12C02	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 60mm	Shielding Angle:

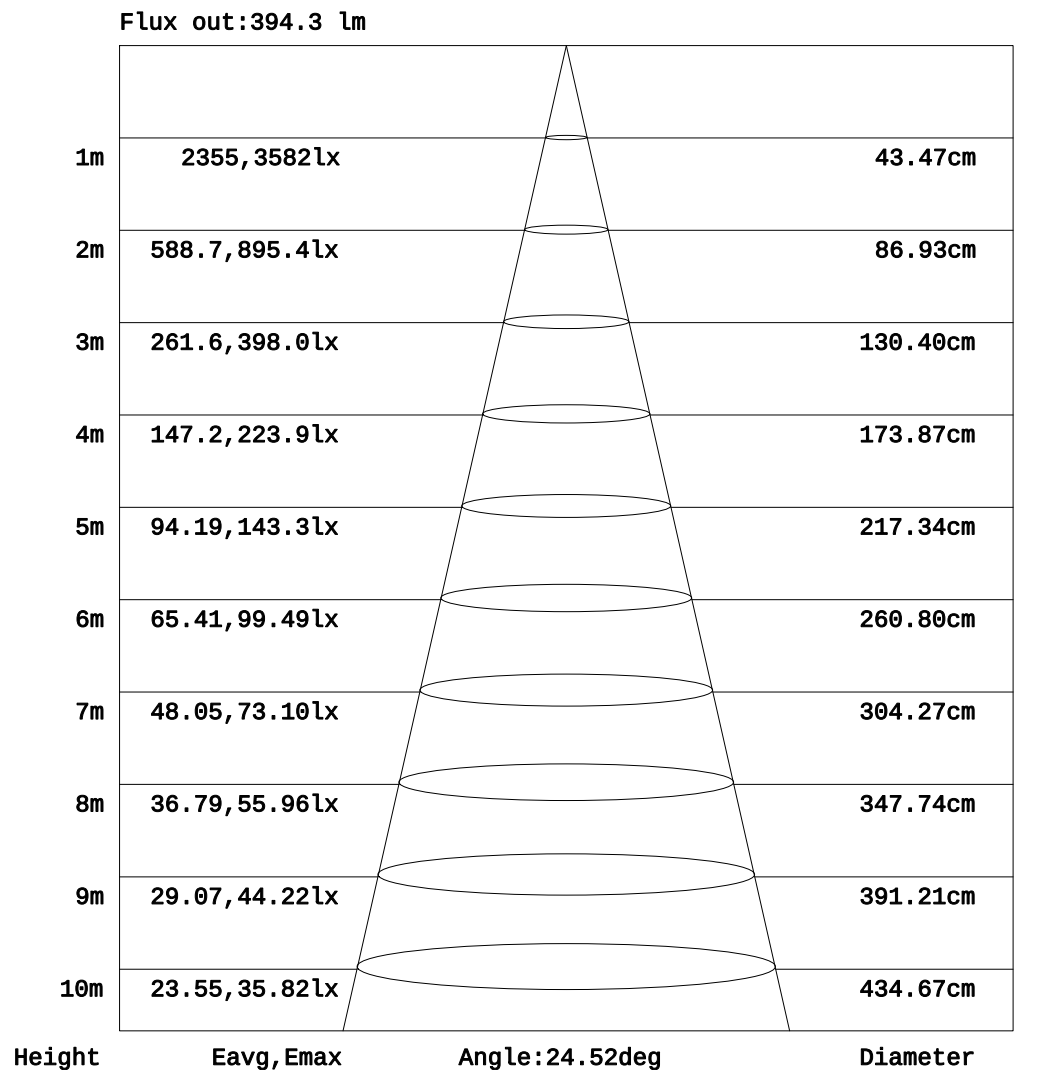


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2023-12-5

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:220.56V I:0.0585A P:12.530W PF:0.9716 Freq:50.01Hz Lamp Flux:1019.8x1 lm		
NAME: DL3017-WHTC12C02	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 60mm	Shielding Angle:



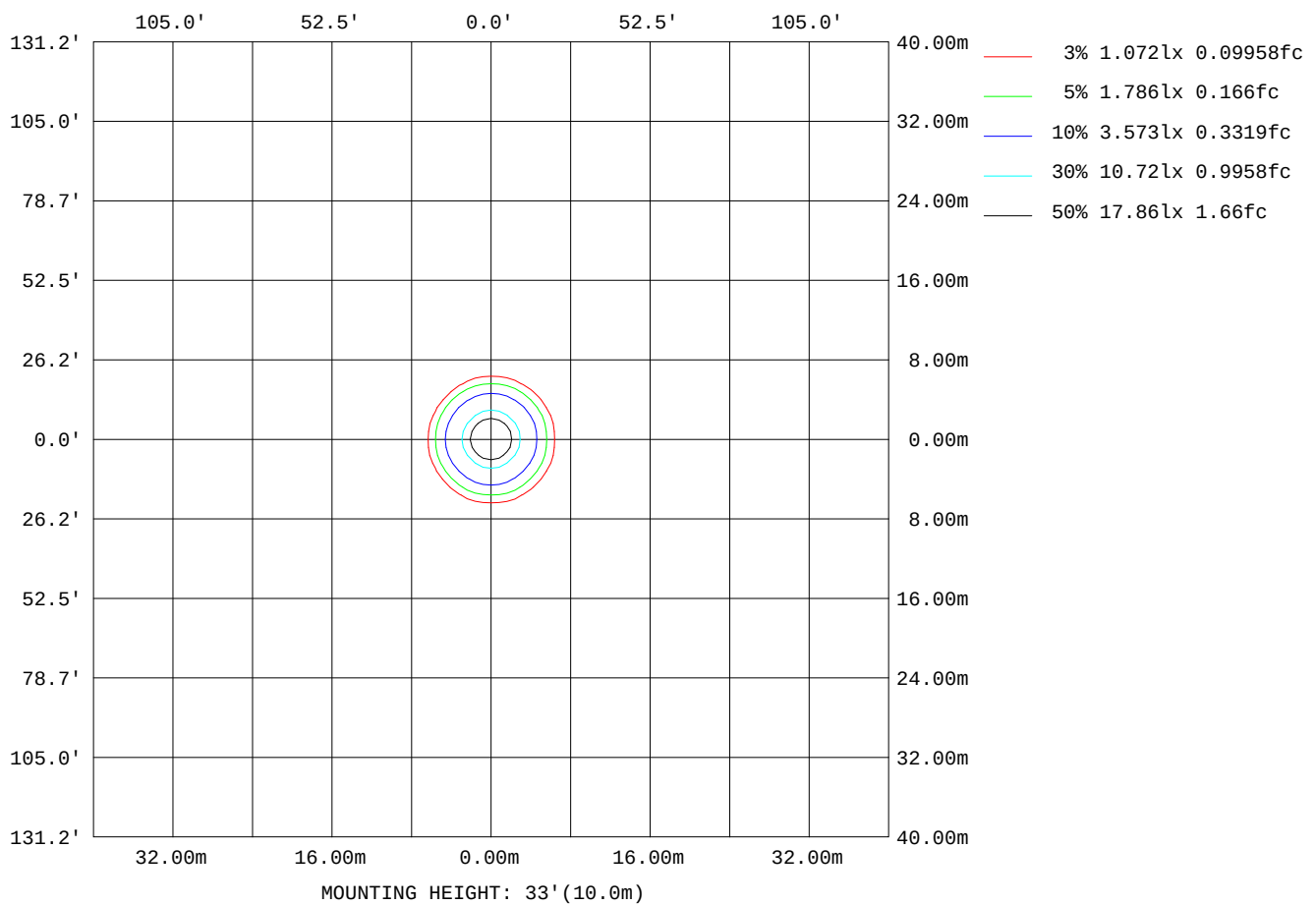
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:220.56V I:0.0585A P:12.530W PF:0.9716 Freq:50.01Hz Lamp Flux:1019.8x1 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:220.56V I:0.0585A P:12.530W PF:0.9716 Freq:50.01Hz Lamp Flux:1019.8x1 lm		
NAME: DL3017-WHTC12C02	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 60mm	Shielding Angle:

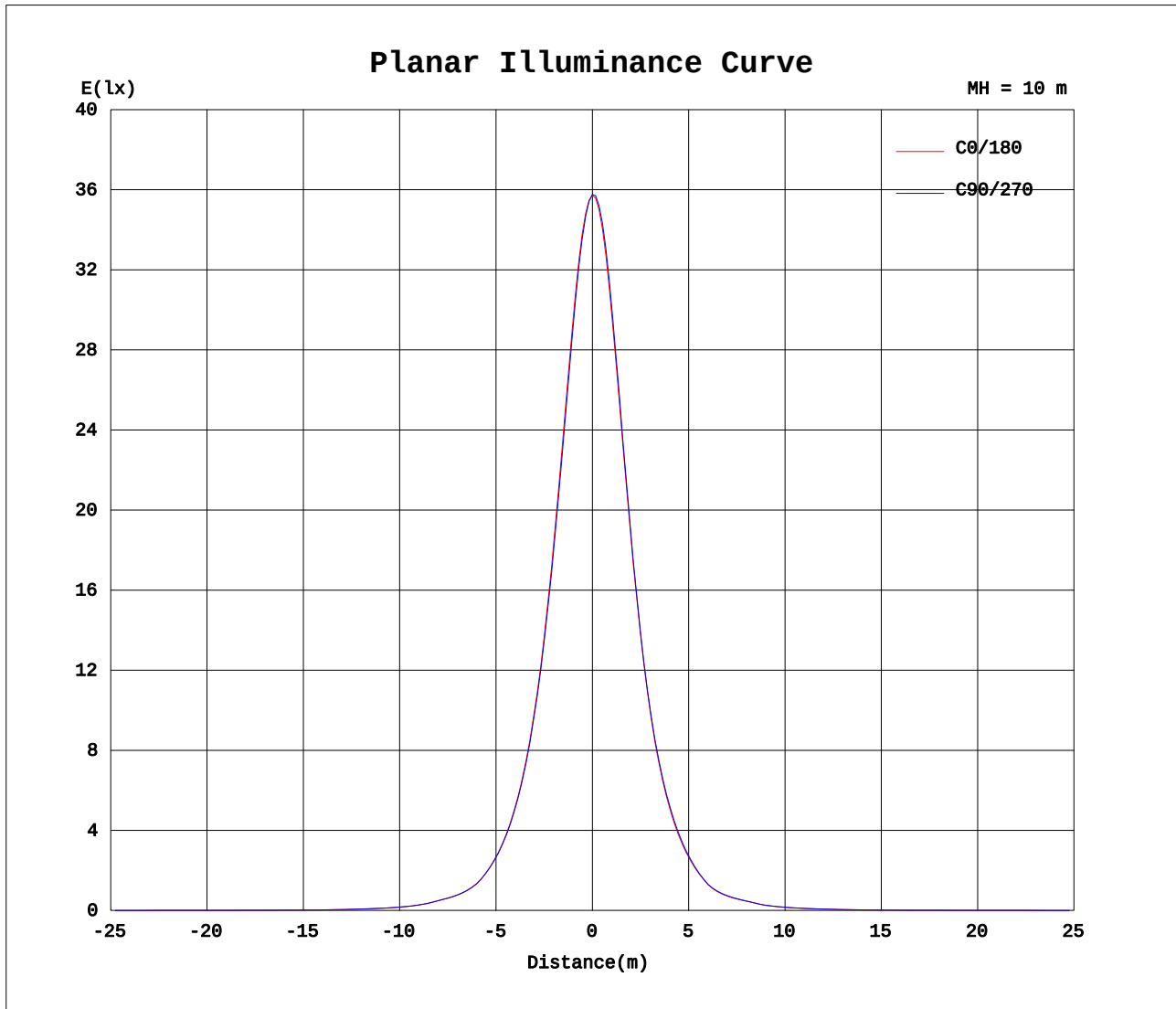
AvgL	cd/m2
L_0~180(65)av	2563
L_0~180(75)av	1161
L_0~180(85)av	198
L_90~270(65)av	2531
L_90~270(75)av	1161
L_90~270(85)av	194
L_45(65)av	2559
L_45(75)av	1165
L_45(85)av	194

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:

```