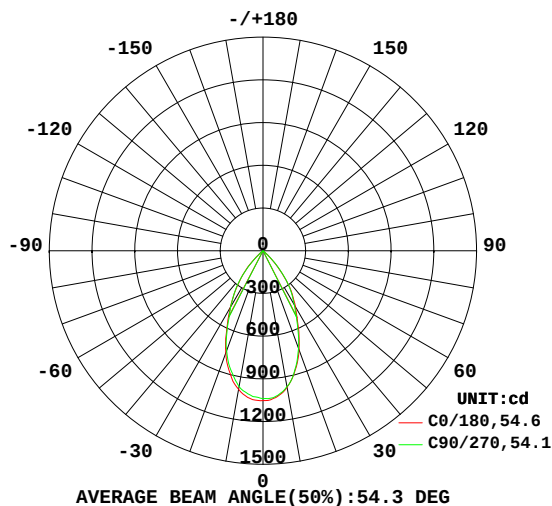


LUMINAIRE PHOTOMETRIC TEST REPORT

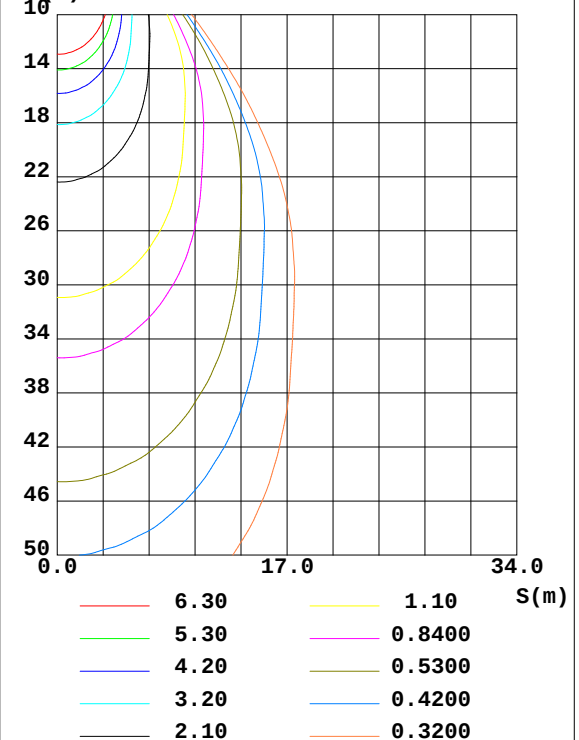
Test:U:230.82V I:0.0486A P:10.007W PF:0.8930 Freq:49.99Hz Lamp Flux:903.65x1 lm		
NAME: DL1757-WHTC13C01	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 82mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 90.30 lm/W			
MODEL	TB8-1911A 3000K	I _{max} (cd)	1054	S/MH(C0/180)	0.85
NOMINAL POWER(W)	10	LOR(%)	100.0	S/MH(C90/270)	0.84
RATED VOLTAGE(V)	220-240	TOTAL FLUX(lm)	903.65	η UP, DN(C0-180)	0.0, 49.8
NOMINAL FLUX(lm)	903.65	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 50.2
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	220	η down(%)	100.0	CIBSE SHR MAX	0.90

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: 2024-12-03

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000A_V1 SYSTEM V2.00.428
Humidity: 65.0%
Test Distance: 7.450m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

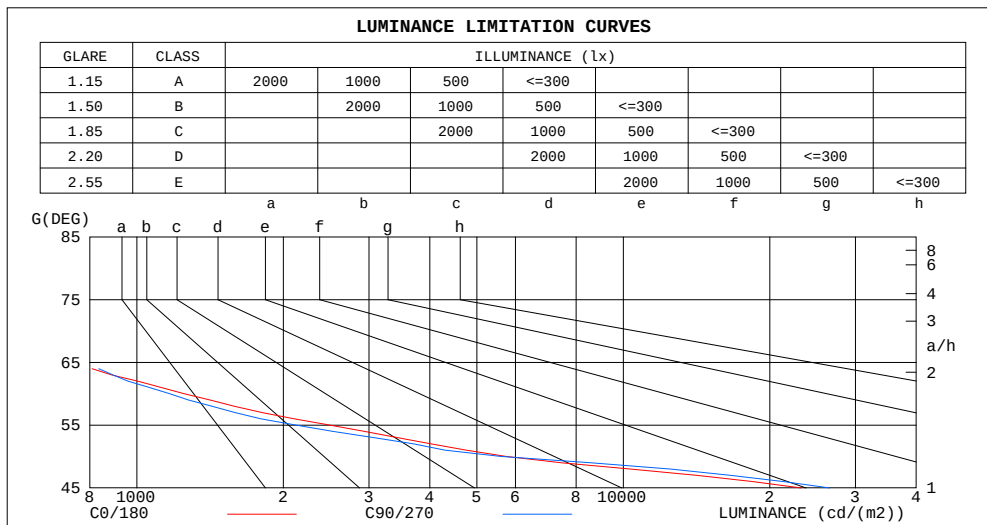
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	973.6	971.8	969.6	969.4	988.9	973.0	970.0	962.2	0- 10	96.20	96.20	10.6,10.6
20	739.6	737.6	730.2	732.2	764.4	750.2	747.5	741.2	10- 20	242.3	338.5	37.5,37.5
30	454.5	450.7	442.3	435.8	460.2	460.9	453.9	447.4	20- 30	268.7	607.3	67.2,67.2
40	212.3	216.9	217.5	213.0	221.0	213.4	219.2	215.3	30- 40	208.1	815.4	90.2,90.2
50	19.47	20.88	18.99	19.01	22.59	24.07	20.26	19.22	40- 50	78.43	893.8	98.9,98.9
60	3.298	3.189	3.081	3.162	3.334	3.230	3.246	3.296	50- 60	7.439	901.2	99.7,99.7
70	0.8892	0.9585	0.9778	1.013	0.9018	0.9212	0.9443	1.010	60- 70	1.802	903.0	99.9,99.9
80	0.2203	0.2127	0.2127	0.2204	0.1655	0.1694	0.1889	0.2234	70- 80	0.5041	903.6	100,100
90	0.0502	0.0425	0.0425	0.0347	0	0	0	0	80- 90	0.0973	903.6	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:2024-12-03

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-2000A_V1 SYSTEM V2.00.428
 Humidity:65.0%
 Test Distance:7.450m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.82V I:0.0486A P:10.007W PF:0.8930 Freq:49.99Hz Lamp Flux:903.65x1 lm		
NAME: DL1757-WHTC13C01	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 82mm	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	202	244
80	240	232
75	289	306
70	492	541
65	730	761
60	1249	1167
55	2488	2120
50	5738	5596
45	23176	26545

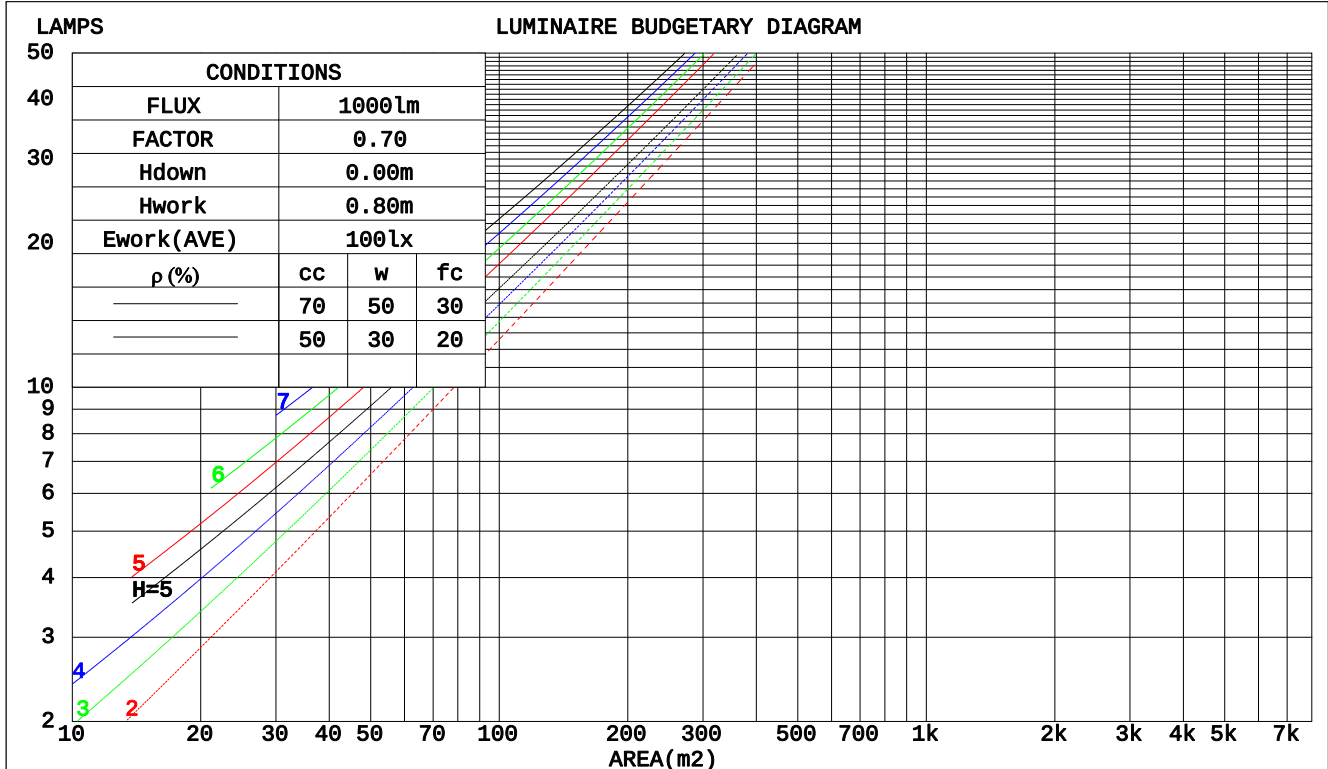
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2024-12-03

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000A_V1 SYSTEM V2.00.428
Humidity: 65.0%
Test Distance: 7.450m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.82V I:0.0486A P:10.007W PF:0.8930 Freq:49.99Hz Lamp Flux:903.65x1 lm		
NAME: DL1757-WHTC13C01	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 82mm	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	1.11	1.08	1.06	1.08	1.06	1.04	1.04	1.03	1.01	1.01	.99	.98	.97	.96	.95	.93
2.0	1.03	.99	.95	1.01	.97	.94	.98	.95	.92	.95	.92	.90	.92	.90	.88	.87
3.0	.96	.91	.87	.94	.90	.86	.92	.88	.85	.89	.86	.83	.87	.84	.82	.80
4.0	.89	.84	.79	.88	.83	.79	.86	.81	.78	.84	.80	.77	.82	.79	.76	.75
5.0	.83	.77	.73	.82	.77	.73	.81	.76	.72	.79	.75	.71	.77	.74	.71	.69
6.0	.78	.72	.68	.77	.72	.67	.76	.71	.67	.74	.70	.67	.73	.69	.66	.65
7.0	.73	.67	.63	.73	.67	.63	.71	.66	.62	.70	.66	.62	.69	.65	.62	.60
8.0	.69	.63	.59	.68	.63	.59	.67	.62	.58	.66	.61	.58	.65	.61	.58	.56
9.0	.65	.59	.55	.64	.59	.55	.64	.58	.55	.63	.58	.54	.62	.57	.54	.53
10.0	.61	.55	.52	.61	.55	.51	.60	.55	.51	.59	.55	.51	.59	.54	.51	.50



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2024-12-03

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-2000A_V1 SYSTEM V2.00.428
Humidity: 65.0%
Test Distance: 7.450m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:230.82V I:0.0486A P:10.007W PF:0.8930 Freq:49.99Hz Lamp Flux:903.65x1 lm					
NAME: DL1757-WHTC13C01			TYPE:		WEIGHT:
SPEC.: white RA90 3000K+5000K			DIM.:		SERIAL No.:
MFR.:			SUR.: 82mm		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	.180	.102	.032	.173	.099	.031	.160	.092	.029	.149	.086	.028	.138	.080	.026	
2.0	.173	.095	.029	.167	.092	.028	.157	.087	.027	.147	.082	.026	.138	.078	.025	
3.0	.165	.088	.026	.160	.086	.026	.151	.082	.025	.143	.078	.024	.135	.075	.023	
4.0	.158	.082	.024	.154	.080	.024	.146	.077	.023	.138	.074	.022	.132	.072	.022	
5.0	.151	.077	.022	.147	.075	.022	.140	.073	.021	.134	.071	.021	.128	.068	.021	
6.0	.144	.072	.021	.141	.071	.020	.135	.069	.020	.129	.067	.020	.124	.065	.019	
7.0	.138	.068	.019	.135	.067	.019	.129	.065	.019	.124	.064	.019	.120	.062	.018	
8.0	.132	.064	.018	.129	.064	.018	.125	.062	.018	.120	.061	.018	.116	.059	.017	
9.0	.126	.061	.017	.124	.060	.017	.120	.059	.017	.116	.058	.017	.112	.057	.016	
10.0	.121	.058	.016	.119	.058	.016	.115	.056	.016	.112	.055	.016	.108	.054	.016	

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	.171	.157	.145	.147	.135	.124	.100	.093	.086	.058	.054	.050	.018	.017	.016	
2.0	.156	.132	.112	.134	.114	.097	.092	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.144	.114	.089	.124	.098	.077	.085	.068	.054	.049	.040	.032	.016	.013	.010	
4.0	.134	.099	.072	.115	.086	.062	.079	.060	.044	.046	.035	.026	.015	.011	.009	
5.0	.126	.087	.059	.108	.076	.051	.074	.053	.036	.043	.031	.022	.014	.010	.007	
6.0	.119	.078	.049	.102	.068	.043	.070	.047	.030	.041	.028	.018	.013	.009	.006	
7.0	.112	.071	.042	.097	.061	.036	.067	.043	.026	.039	.025	.015	.013	.008	.005	
8.0	.107	.065	.036	.092	.056	.031	.064	.039	.022	.037	.023	.013	.012	.008	.004	
9.0	.102	.059	.031	.088	.052	.027	.061	.036	.019	.035	.021	.011	.011	.007	.004	
10.0	.097	.055	.027	.084	.048	.024	.058	.034	.017	.034	.020	.010	.011	.007	.003	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2024-12-03

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-2000A_V1 SYSTEM V2.00.428
 Humidity:65.0%
 Test Distance:7.450m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.82V I:0.0486A P:10.007W PF:0.8930 Freq:49.99Hz Lamp Flux:903.65x1 lm											
NAME: DL1757-WHTC13C01					TYPE:			WEIGHT:			
SPEC.: white RA90 3000K+5000K					DIM.:			SERIAL No.:			
MFR.:					SUR.: 82mm			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		20.0	21.0	20.2	21.1	21.3	20.0	21.0	20.2	21.2	21.3
3H		19.8	20.7	20.1	20.9	21.1	19.8	20.7	20.1	20.9	21.1
4H		19.7	20.6	20.0	20.8	21.0	19.8	20.6	20.0	20.8	21.0
6H		19.6	20.4	19.9	20.7	20.9	19.7	20.4	20.0	20.7	20.9
8H		19.6	20.3	19.9	20.6	20.9	19.6	20.4	19.9	20.6	20.9
12H		19.5	20.3	19.9	20.5	20.8	19.6	20.3	19.9	20.6	20.8
4H 2H		19.7	20.6	20.0	20.8	21.0	19.8	20.6	20.0	20.8	21.0
3H		19.5	20.3	19.9	20.5	20.8	19.6	20.3	19.9	20.6	20.8
4H		19.5	20.1	19.8	20.4	20.7	19.5	20.1	19.8	20.4	20.7
6H		19.4	19.9	19.7	20.3	20.6	19.4	20.0	19.8	20.3	20.6
8H		19.3	19.8	19.7	20.2	20.6	19.3	19.9	19.7	20.2	20.6
12H		19.3	19.7	19.7	20.1	20.5	19.3	19.8	19.7	20.1	20.5
8H 4H		19.3	19.8	19.7	20.2	20.6	19.3	19.9	19.7	20.2	20.6
6H		19.2	19.6	19.6	20.0	20.5	19.2	19.7	19.7	20.1	20.5
8H		19.2	19.5	19.6	20.0	20.4	19.2	19.6	19.6	20.0	20.4
12H		19.1	19.4	19.6	19.9	20.3	19.1	19.5	19.6	19.9	20.4
12H 4H		19.3	19.7	19.7	20.1	20.5	19.3	19.8	19.7	20.1	20.5
6H		19.2	19.5	19.6	20.0	20.4	19.2	19.6	19.6	20.0	20.4
8H		19.1	19.4	19.6	19.9	20.3	19.1	19.5	19.6	19.9	20.4
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H		+ 2.8 / -17.1					+ 2.8 / -17.5				
1.5H		+ 5.1 / -14.5					+ 4.9 / -14.9				
2.0H		+ 7.8 / -12.3					+ 8.1 / -12.5				

CIE Pub.117, 903.6 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.4)
Area: 0.00528 m2

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2024-12-03

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.450m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.82V I:0.0486A P:10.007W PF:0.8930 Freq:49.99Hz Lamp Flux:903.65x1 lm		
NAME: DL1757-WHTC13C01	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 82mm	Shielding Angle:

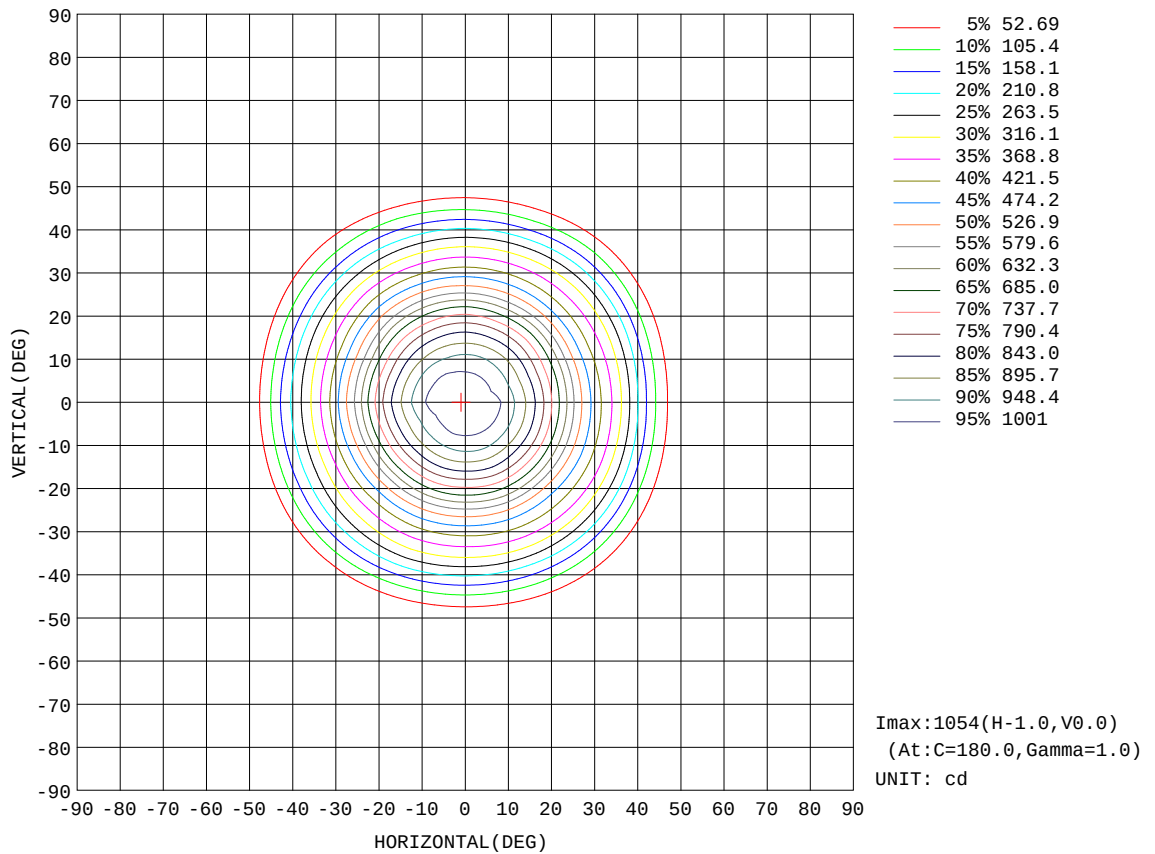
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	85	79	75	85	79	75	84	78	74	71
0.80	93	87	83	93	87	83	91	86	83	79
1.00	98	92	89	97	92	88	96	92	88	84
1.25	102	97	94	101	97	93	99	95	92	88
1.50	105	100	97	104	100	97	102	98	95	91
2.00	108	104	101	107	103	100	104	101	98	93
2.50	110	106	103	108	105	102	105	102	100	94
3.00	112	108	105	110	107	104	106	104	102	96
4.00	114	111	108	112	109	107	108	106	104	97
5.00	115	112	111	113	111	109	109	107	106	98
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:2024-12-03

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.450m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:230.82V I:0.0486A P:10.007W PF:0.8930 Freq:49.99Hz Lamp Flux:903.65x1 lm		
NAME: DL1757-WHTC13C01	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 82mm	Shielding Angle:



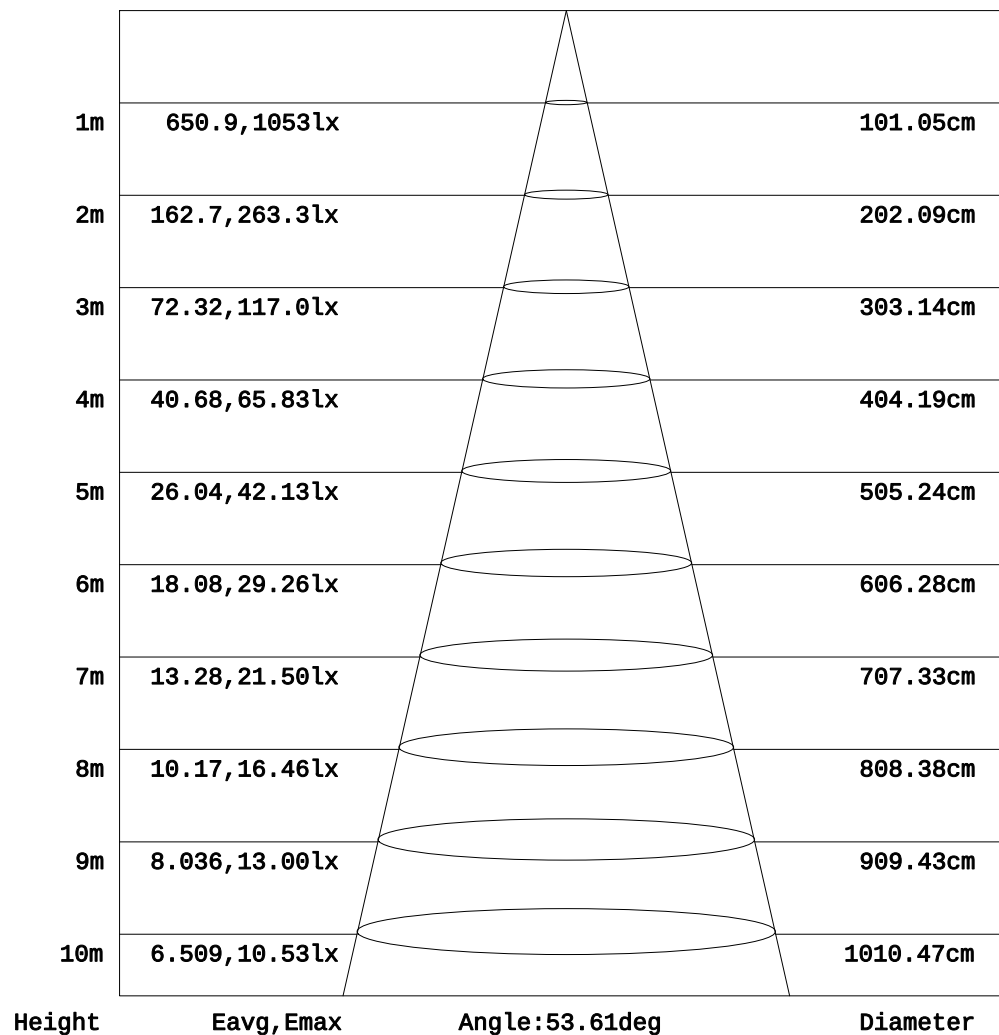
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2024-12-03

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.450m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.82V I:0.0486A P:10.007W PF:0.8930 Freq:49.99Hz Lamp Flux:903.65x1 lm		
NAME: DL1757-WHTC13C01	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 82mm	Shielding Angle:

Flux out:530.9 lm



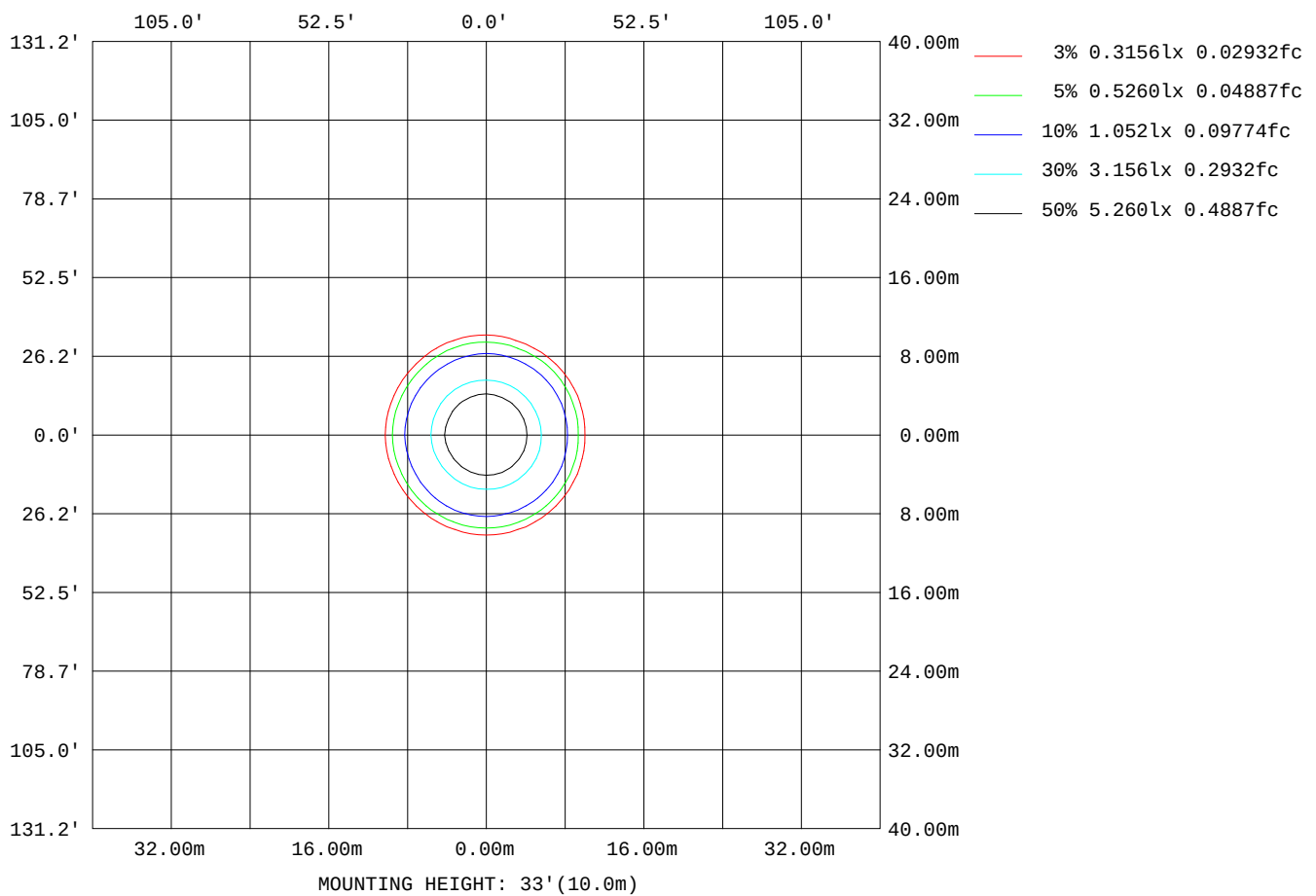
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 2024-12-03

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-2000A_V1 SYSTEM V2.00.428
 Humidity: 65.0%
 Test Distance: 7.450m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:230.82V I:0.0486A P:10.007W PF:0.8930 Freq:49.99Hz Lamp Flux:903.65x1 lm		
NAME: DL1757-WHTC13C01	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 82mm	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2024-12-03

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000A_V1 SYSTEM V2.00.428
Humidity: 65.0%
Test Distance: 7.450m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:230.82V I:0.0486A P:10.007W PF:0.8930 Freq:49.99Hz Lamp Flux:903.65x1 lm		
NAME: DL1757-WHTC13C01	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 82mm	Shielding Angle:

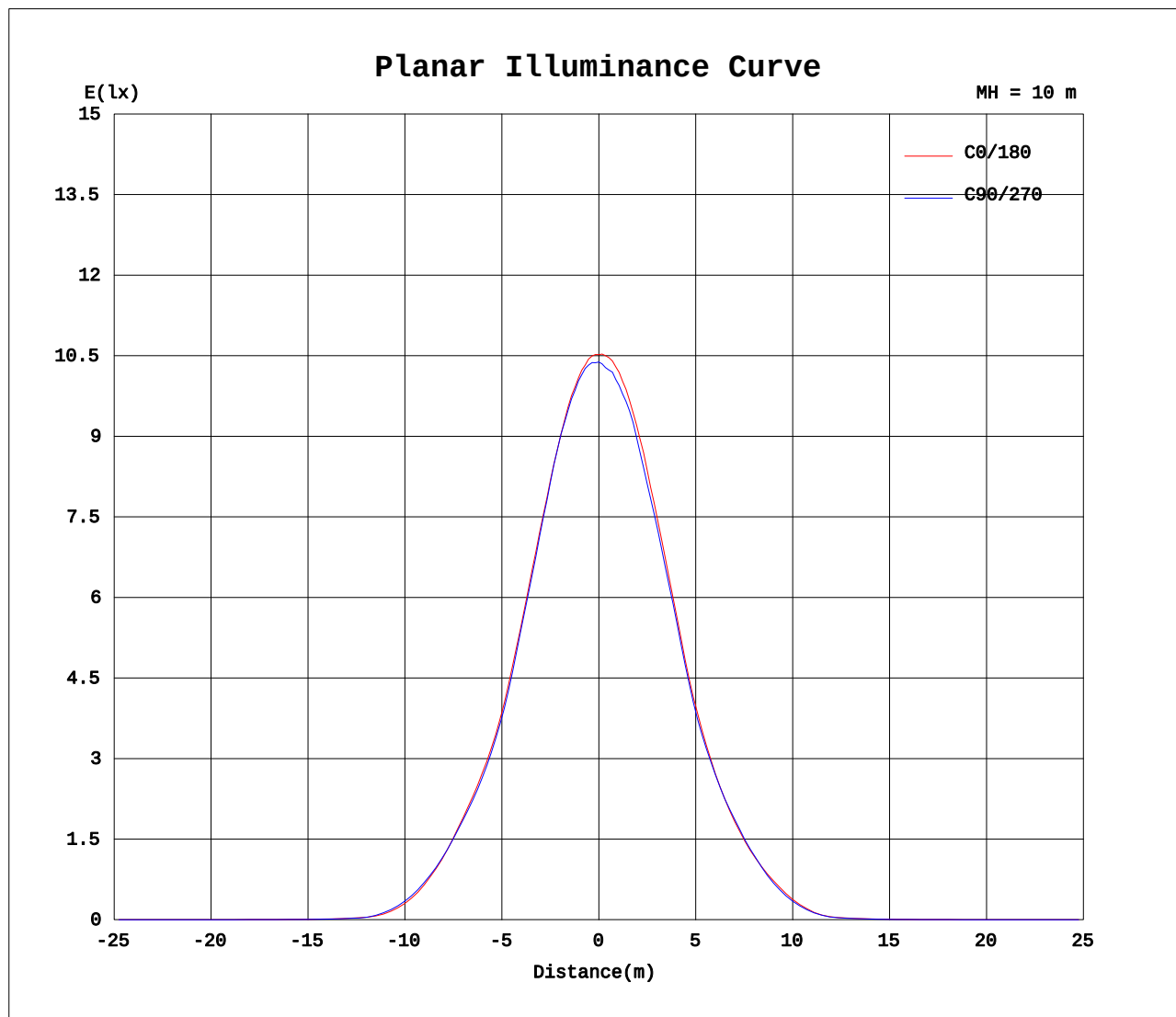
AvgL	cd/m2
L_0~180(65)av	736
L_0~180(75)av	260
L_0~180(85)av	147
L_90~270(65)av	774
L_90~270(75)av	304
L_90~270(85)av	189
L_45(65)av	774
L_45(75)av	300
L_45(85)av	186

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2024-12-03

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_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: 2024-12-03

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-2000A_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-2000A_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.450m [K=1.0000]
Remarks:

```