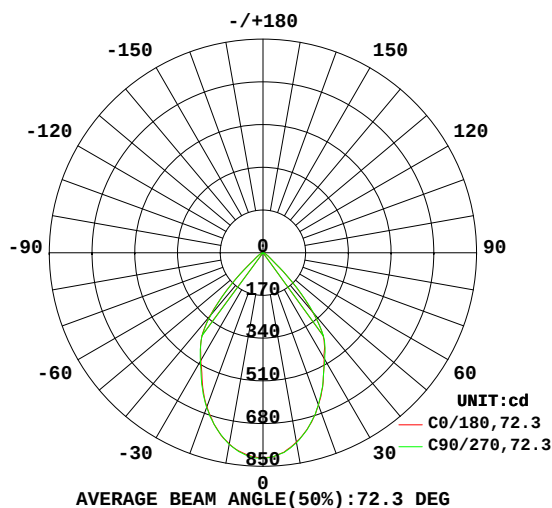


LUMINAIRE PHOTOMETRIC TEST REPORT

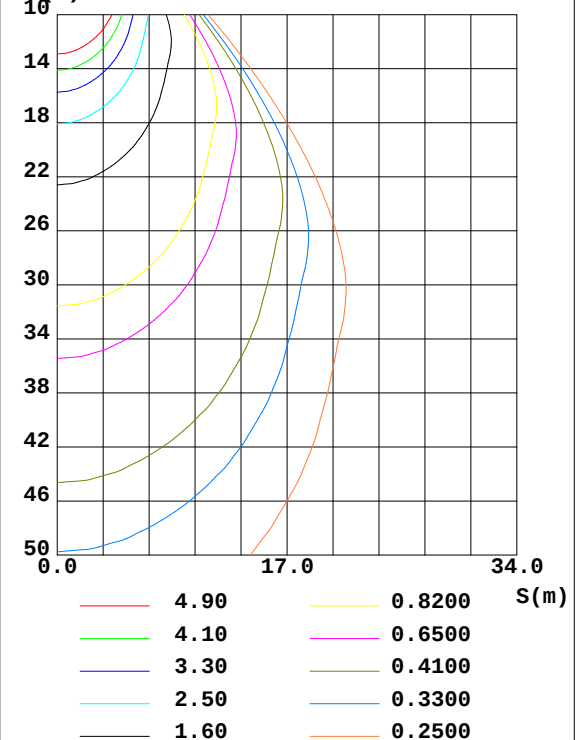
Test:U:230.92V I:0.0468A P:9.5536W PF:0.8841 Freq:49.99Hz Lamp Flux:977.79x1 lm		
NAME: DL1753-WHTC12C02	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 70mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 102.35 lm/W			
MODEL	TB8-1911A 4000K	I _{max} (cd)	818.1	S/MH(C0/180)	0.97
NOMINAL POWER(W)	10	LOR(%)	100.0	S/MH(C90/270)	0.98
RATED VOLTAGE(V)	220-240	TOTAL FLUX(lm)	977.79	η UP, DN(C0-180)	0.0, 49.6
NOMINAL FLUX(lm)	977.79	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 50.4
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	220	η down(%)	100.0	CIBSE SHR MAX	1.15

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:2025-03-31

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:

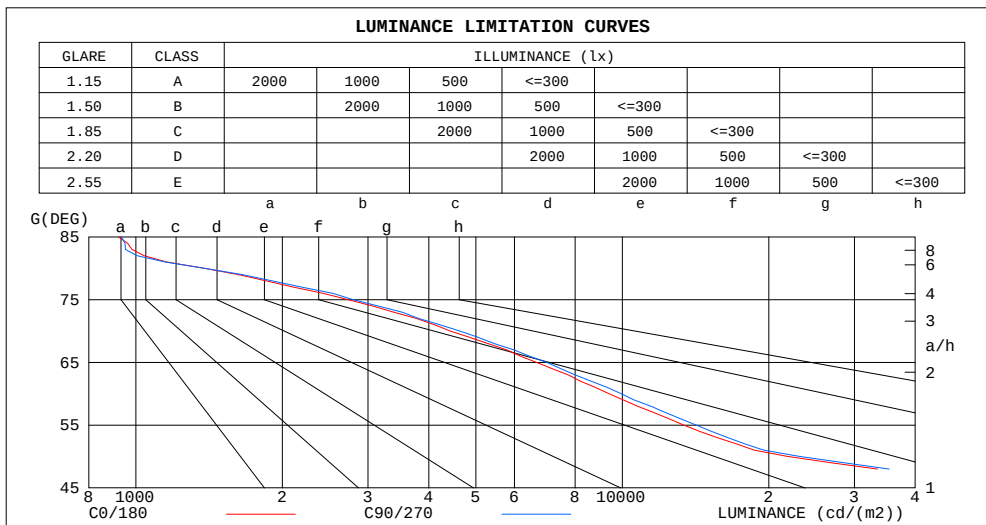
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	765.2	765.4	767.8	770.4	772.8	772.8	774.1	772.1	0- 10	75.72	75.72	7.74, 7.74
20	644.8	643.0	645.1	648.2	652.5	654.6	655.5	653.0	10- 20	200.8	276.5	28.3, 28.3
30	486.5	487.6	491.7	493.3	494.1	499.6	498.6	495.9	20- 30	261.7	538.2	55, 55
40	307.6	301.8	311.6	314.7	327.2	326.6	322.7	315.1	30- 40	261.1	799.3	81.7, 81.7
50	54.10	53.55	57.26	58.18	63.20	61.24	62.79	58.80	40- 50	133.7	933.0	95.4, 95.4
60	18.06	18.44	19.13	19.42	19.96	19.48	19.49	19.28	50- 60	29.56	962.5	98.4, 98.4
70	5.825	6.035	6.096	6.160	6.216	6.220	6.344	6.349	60- 70	11.63	974.2	99.6, 99.6
80	0.9216	0.8848	0.9219	0.8990	0.9570	0.9529	1.030	1.022	70- 80	3.261	977.4	100, 100
90	0	0	0	0	0	0	0	0	80- 90	0.3578	977.8	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: 2025-03-31

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:230.92V I:0.0468A P:9.5536W PF:0.8841 Freq:49.99Hz Lamp Flux:977.79x1 lm		
NAME: DL1753-WHTC12C02	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 70mm	Shielding Angle:



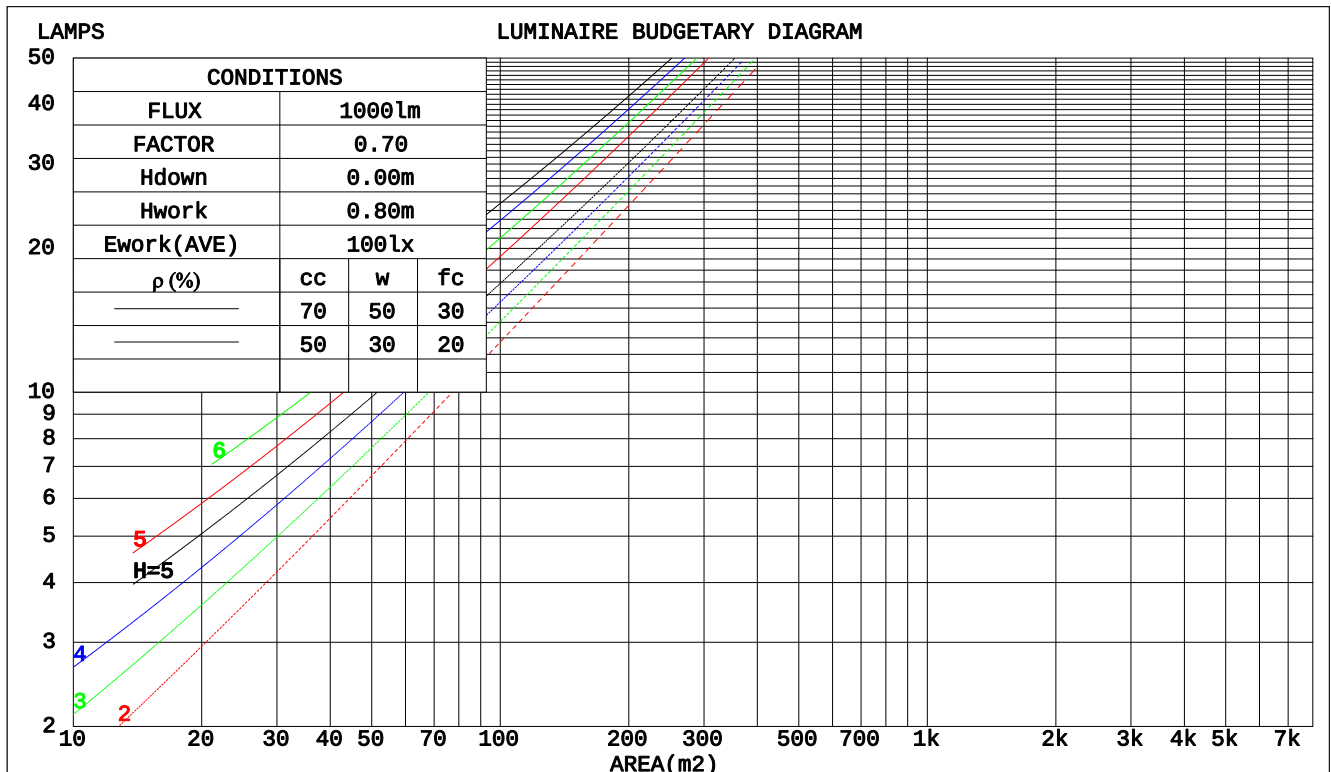
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2025-03-31

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:230.92V I:0.0468A P:9.5536W PF:0.8841 Freq:49.99Hz Lamp Flux:977.79x1 lm		
NAME: DL1753-WHTC12C02	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 70mm	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	1.10	1.07	1.05	1.08	1.05	1.03	1.03	1.01	.00	.00	.98	.97	.96	.95	.94	.92
2.0	1.01	.96	.93	.99	.95	.92	.96	.92	.89	.93	.90	.88	.90	.88	.86	.84
3.0	.93	.87	.83	.91	.86	.82	.89	.84	.81	.86	.83	.79	.84	.81	.78	.77
4.0	.86	.79	.75	.84	.79	.74	.82	.77	.73	.80	.76	.72	.78	.75	.72	.70
5.0	.79	.73	.68	.78	.72	.67	.76	.71	.67	.75	.70	.66	.73	.69	.66	.64
6.0	.73	.67	.62	.73	.66	.62	.71	.65	.61	.69	.65	.61	.68	.64	.60	.59
7.0	.68	.61	.57	.67	.61	.57	.66	.60	.56	.65	.60	.56	.64	.59	.56	.54
8.0	.64	.57	.52	.63	.57	.52	.62	.56	.52	.61	.55	.52	.60	.55	.51	.50
9.0	.59	.53	.48	.59	.53	.48	.58	.52	.48	.57	.52	.48	.56	.51	.48	.46
10.0	.56	.49	.45	.55	.49	.45	.54	.49	.45	.53	.48	.45	.53	.48	.44	.43



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2025-03-31

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:230.92V I:0.0468A P:9.5536W PF:0.8841 Freq:49.99Hz Lamp Flux:977.79x1 lm									
NAME: DL1753-WHTC12C02					TYPE:			WEIGHT:	
SPEC.: white RA90 3000K+5000K					DIM.:			SERIAL No.:	
MFR.:					SUR.: 70mm			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	.197	.112	.036	.191	.109	.035	.178	.102	.033	.166	.096	.031	.156	.090	.029	
2.0	.192	.105	.032	.186	.102	.032	.175	.097	.030	.165	.093	.029	.156	.088	.028	
3.0	.184	.098	.029	.179	.096	.029	.169	.092	.028	.161	.088	.027	.153	.085	.026	
4.0	.175	.091	.027	.171	.089	.026	.163	.086	.026	.155	.083	.025	.148	.081	.025	
5.0	.167	.085	.025	.163	.084	.024	.156	.081	.024	.149	.079	.023	.143	.077	.023	
6.0	.159	.080	.023	.156	.079	.023	.150	.077	.022	.144	.075	.022	.138	.073	.022	
7.0	.152	.075	.021	.149	.074	.021	.143	.072	.021	.138	.071	.021	.133	.069	.020	
8.0	.145	.071	.020	.142	.070	.020	.137	.069	.020	.132	.067	.019	.128	.066	.019	
9.0	.138	.067	.019	.136	.066	.019	.131	.065	.018	.127	.064	.018	.123	.063	.018	
10.0	.132	.063	.018	.130	.063	.018	.126	.062	.017	.122	.061	.017	.119	.060	.017	

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	.173	.157	.143	.148	.135	.123	.101	.093	.085	.058	.054	.050	.019	.017	.016	
2.0	.159	.132	.110	.136	.114	.095	.093	.079	.066	.054	.046	.039	.017	.015	.013	
3.0	.148	.114	.087	.127	.098	.075	.087	.068	.053	.050	.040	.031	.016	.013	.010	
4.0	.139	.099	.069	.119	.086	.060	.082	.060	.042	.047	.035	.025	.015	.011	.008	
5.0	.131	.088	.057	.112	.076	.049	.077	.053	.035	.045	.031	.021	.014	.010	.007	
6.0	.124	.079	.047	.106	.068	.041	.073	.048	.029	.043	.028	.017	.014	.009	.006	
7.0	.118	.072	.040	.101	.062	.035	.070	.044	.024	.041	.026	.015	.013	.008	.005	
8.0	.112	.066	.034	.097	.057	.030	.067	.040	.021	.039	.024	.012	.013	.008	.004	
9.0	.107	.061	.029	.092	.053	.026	.064	.037	.018	.037	.022	.011	.012	.007	.004	
10.0	.102	.056	.026	.088	.049	.023	.061	.034	.016	.036	.020	.010	.012	.007	.003	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-03-31

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:230.92V I:0.0468A P:9.5536W PF:0.8841 Freq:49.99Hz Lamp Flux:977.79x1 lm											
NAME: DL1753-WHTC12C02					TYPE:			WEIGHT:			
SPEC.: white RA90 3000K+5000K					DIM.:			SERIAL No.:			
MFR.:					SUR.: 70mm			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	22.9	24.0	23.2	24.2	24.4	23.0	24.1	23.2	24.3	24.4
	3H	22.8	23.8	23.1	24.0	24.2	22.9	23.9	23.1	24.1	24.3
	4H	22.7	23.6	23.0	23.9	24.1	22.8	23.7	23.1	23.9	24.2
	6H	22.6	23.5	22.9	23.7	24.0	22.7	23.6	23.0	23.8	24.1
	8H	22.6	23.4	22.9	23.7	23.9	22.6	23.5	23.0	23.8	24.0
	12H	22.5	23.3	22.9	23.6	23.9	22.6	23.4	22.9	23.7	24.0
4H	2H	22.7	23.6	23.0	23.9	24.1	22.8	23.7	23.1	23.9	24.2
	3H	22.6	23.4	22.9	23.7	24.0	22.7	23.5	23.0	23.7	24.0
	4H	22.5	23.2	22.9	23.5	23.9	22.6	23.3	22.9	23.6	23.9
	6H	22.4	23.1	22.8	23.4	23.7	22.5	23.1	22.9	23.5	23.8
	8H	22.4	23.0	22.8	23.3	23.7	22.5	23.0	22.8	23.4	23.8
	12H	22.3	22.9	22.7	23.2	23.6	22.4	22.9	22.8	23.3	23.7
8H	4H	22.4	23.0	22.8	23.3	23.7	22.5	23.0	22.8	23.4	23.8
	6H	22.3	22.8	22.7	23.2	23.6	22.4	22.8	22.8	23.2	23.7
	8H	22.2	22.7	22.7	23.1	23.5	22.3	22.7	22.8	23.2	23.6
	12H	22.2	22.6	22.7	23.0	23.5	22.3	22.6	22.7	23.1	23.5
12H	4H	22.3	22.9	22.7	23.2	23.6	22.4	22.9	22.8	23.3	23.7
	6H	22.2	22.7	22.7	23.1	23.5	22.3	22.7	22.8	23.2	23.6
	8H	22.2	22.6	22.7	23.0	23.5	22.3	22.6	22.7	23.1	23.5
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H	+ 2.4 / - 8.1					+ 2.4 / - 7.9					
1.5H	+ 4.0 / - 6.9					+ 4.0 / - 6.7					
2.0H	+ 6.3 / - 5.2					+ 6.3 / - 5.1					

CIE Pub.117, 977.8 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.1)
Area: 0.00385 m2

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-03-31

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:230.92V I:0.0468A P:9.5536W PF:0.8841 Freq:49.99Hz Lamp Flux:977.79x1 lm		
NAME: DL1753-WHTC12C02	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 70mm	Shielding Angle:

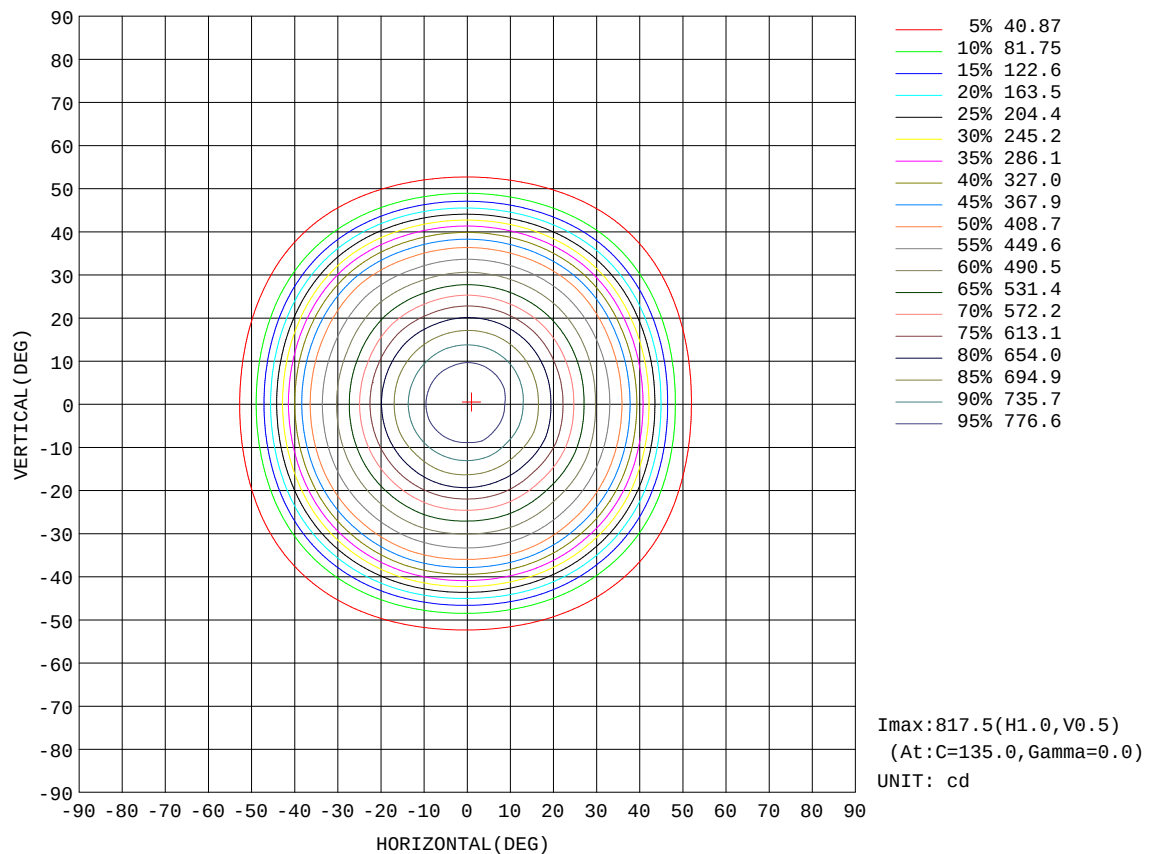
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	80	72	68	79	72	68	79	72	68	63
0.80	89	81	77	88	81	77	87	80	76	72
1.00	95	88	84	94	87	83	92	88	83	78
1.25	99	93	89	98	93	89	96	92	88	83
1.50	103	97	93	101	96	93	99	95	92	87
2.00	106	102	98	105	101	97	102	98	96	90
2.50	108	104	101	107	103	100	104	100	98	91
3.00	110	106	103	108	105	102	105	102	100	93
4.00	113	109	107	110	108	105	107	104	103	95
5.00	114	111	109	112	109	107	108	106	104	96
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:2025-03-31

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:230.92V I:0.0468A P:9.5536W PF:0.8841 Freq:49.99Hz Lamp Flux:977.79x1 lm		
NAME: DL1753-WHTC12C02	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 70mm	Shielding Angle:

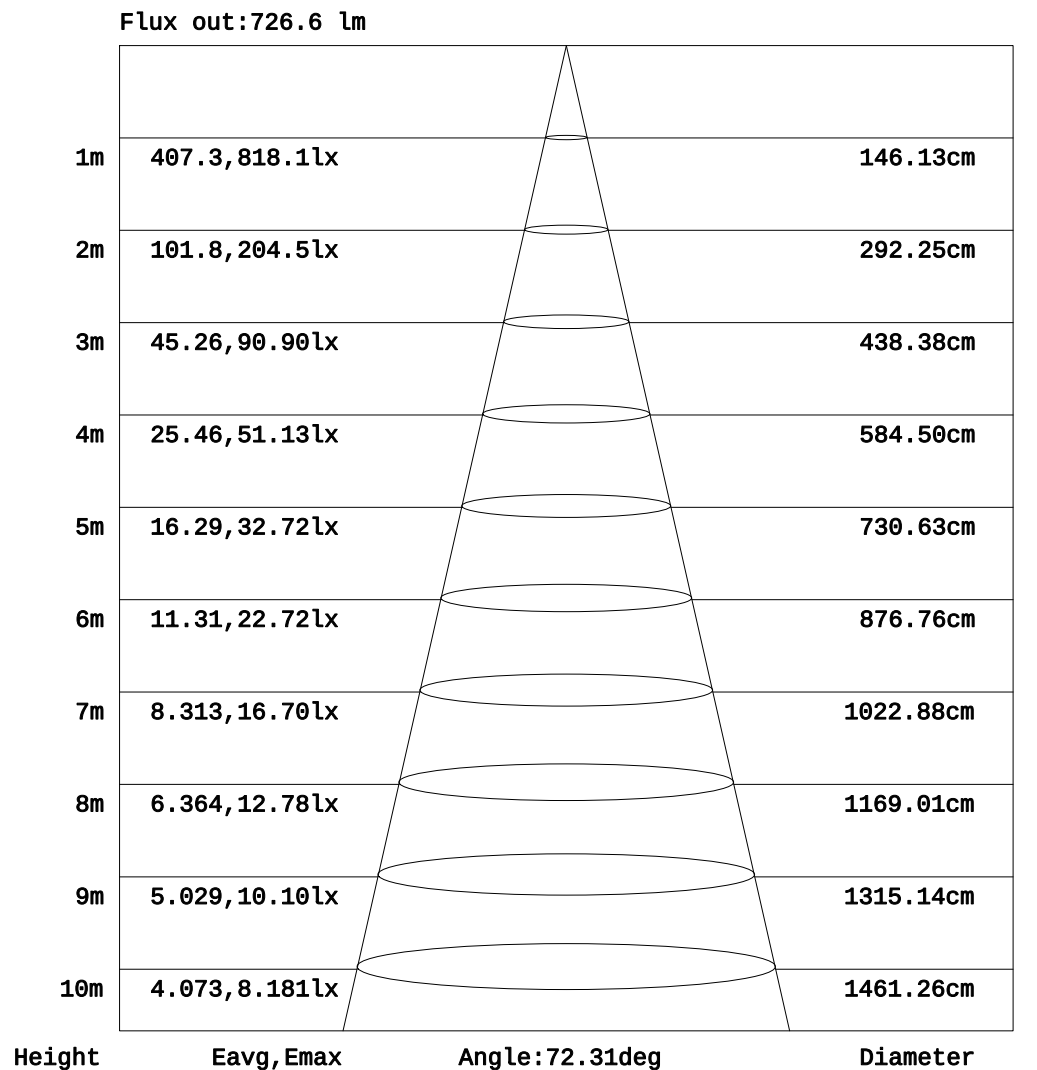


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-03-31

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:230.92V I:0.0468A P:9.5536W PF:0.8841 Freq:49.99Hz Lamp Flux:977.79x1 lm		
NAME: DL1753-WHTC12C02	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 70mm	Shielding Angle:



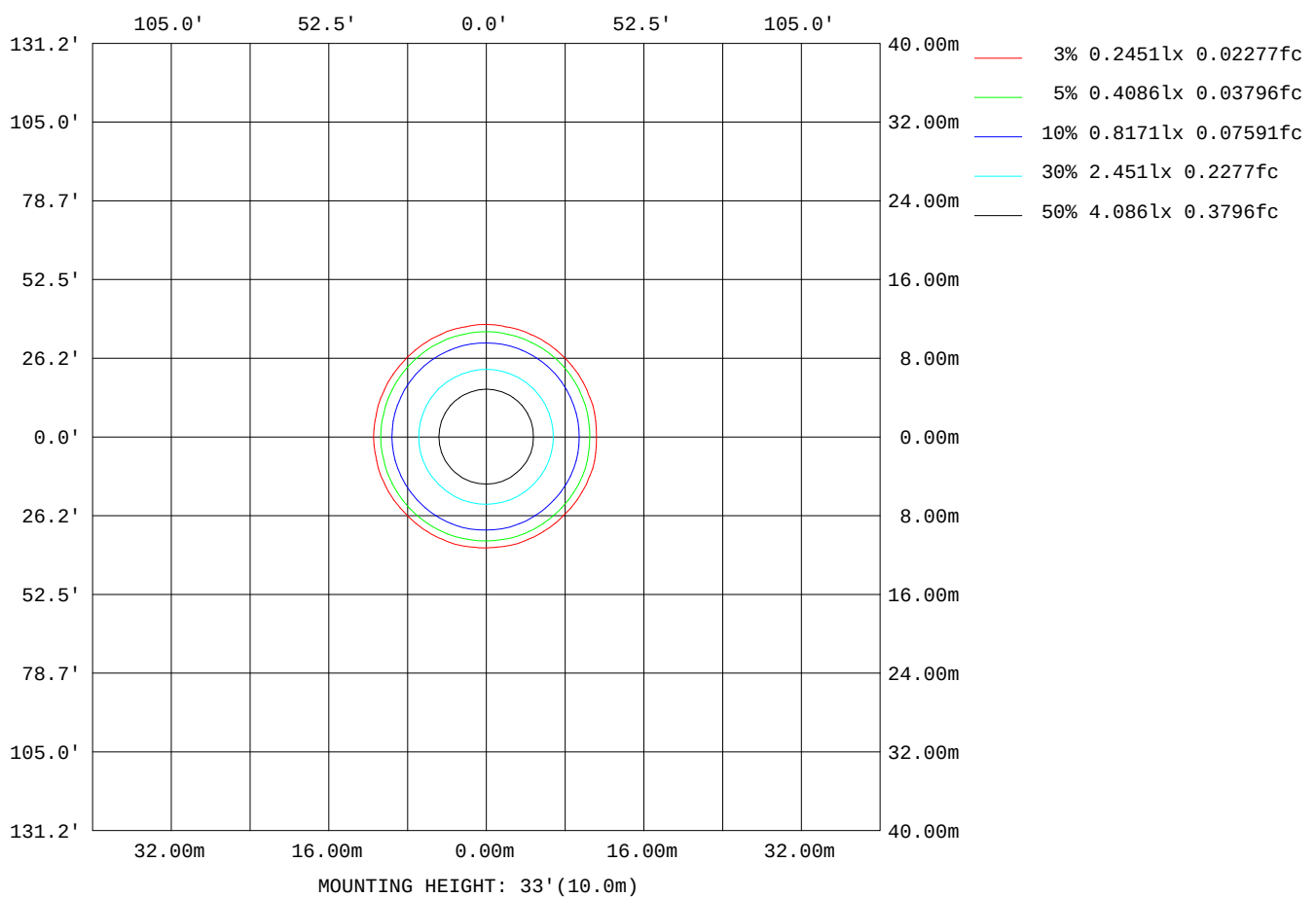
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-03-31

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:230.92V I:0.0468A P:9.5536W PF:0.8841 Freq:49.99Hz Lamp Flux:977.79x1 lm		
NAME: DL1753-WHTC12C02	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 70mm	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2025-03-31

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:230.92V I:0.0468A P:9.5536W PF:0.8841 Freq:49.99Hz Lamp Flux:977.79x1 lm		
NAME: DL1753-WHTC12C02	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 70mm	Shielding Angle:

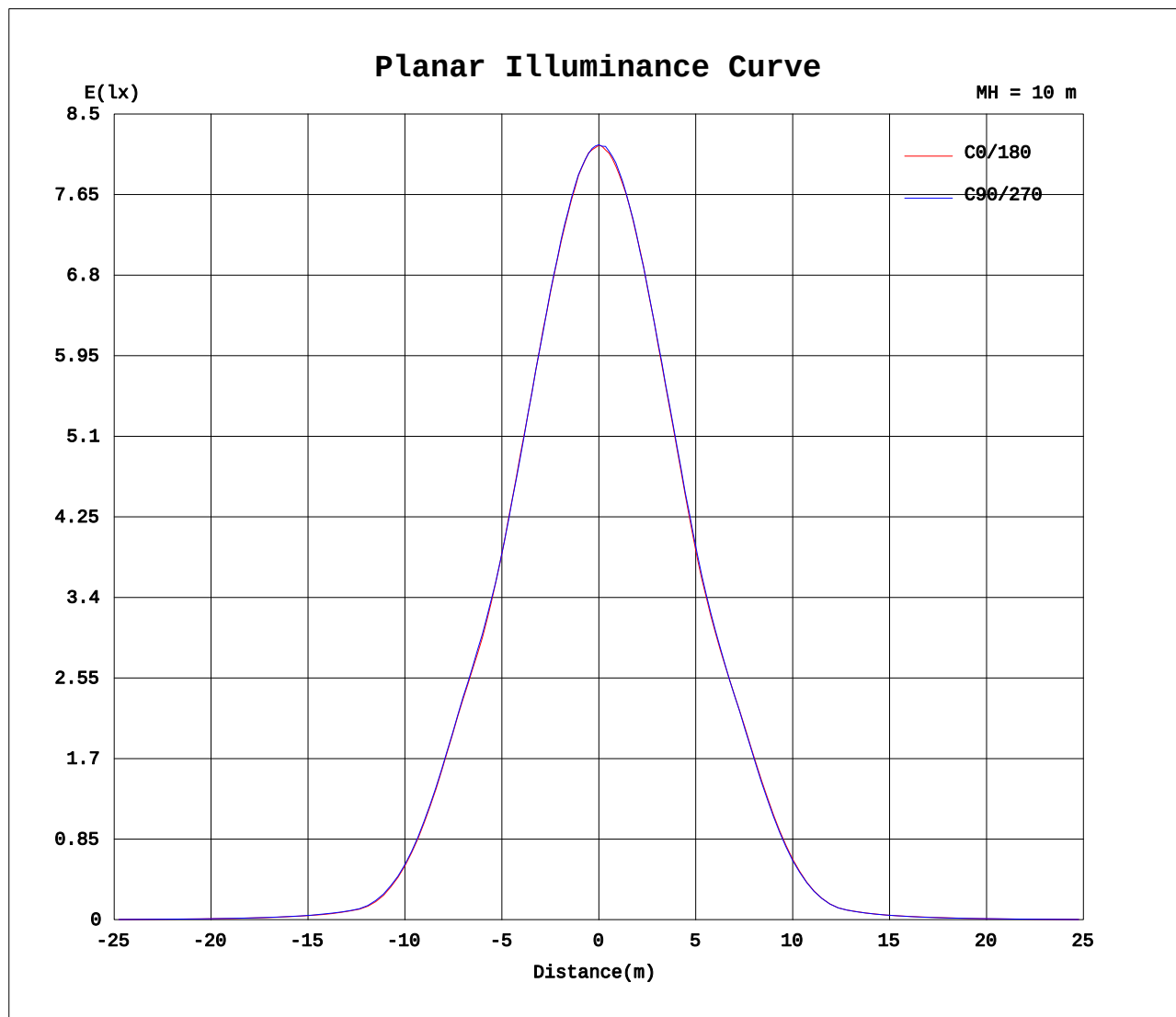
AvgL	cd/m2
L_0~180(65)av	6861
L_0~180(75)av	2813
L_0~180(85)av	849
L_90~270(65)av	7056
L_90~270(75)av	2899
L_90~270(85)av	863
L_45(65)av	7007
L_45(75)av	2881
L_45(85)av	845

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2025-03-31

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: 2025-03-31

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:

```