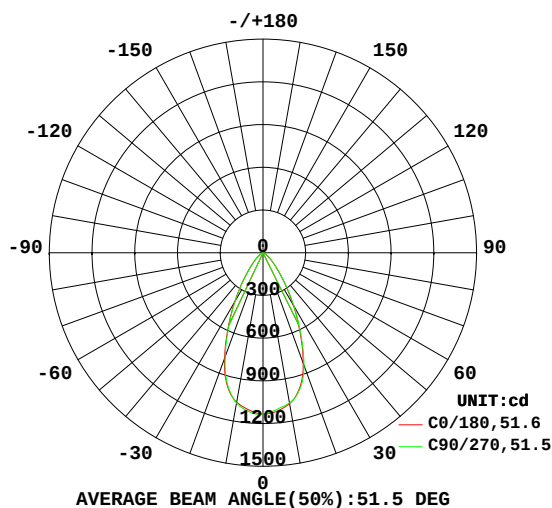


LUMINAIRE PHOTOMETRIC TEST REPORT

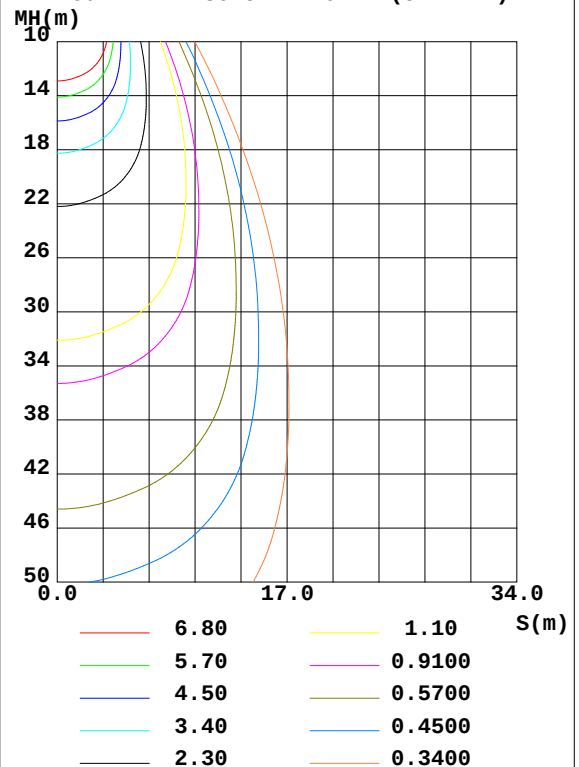
Test:U:230.53V I:0.0354A P:7.3456W PF:0.8992 Freq:49.99Hz Lamp Flux:947.304x1 lm		
NAME: DL108-WHTC7S03	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 90mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 128.96 lm/W			
MODEL	2835 24 4000K	I _{max} (cd)	1136	S/MH(C0/180)	0.79
NOMINAL POWER(W)	7	LOR(%)	100.0	S/MH(C90/270)	0.78
RATED VOLTAGE(V)	220-240	TOTAL FLUX(lm)	947.30	η UP, DN(C0-180)	0.0, 51.5
NOMINAL FLUX(lm)	947.304	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 48.5
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	220	η down(%)	100.0	CIBSE SHR MAX	0.80

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: 2025-03-12

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:

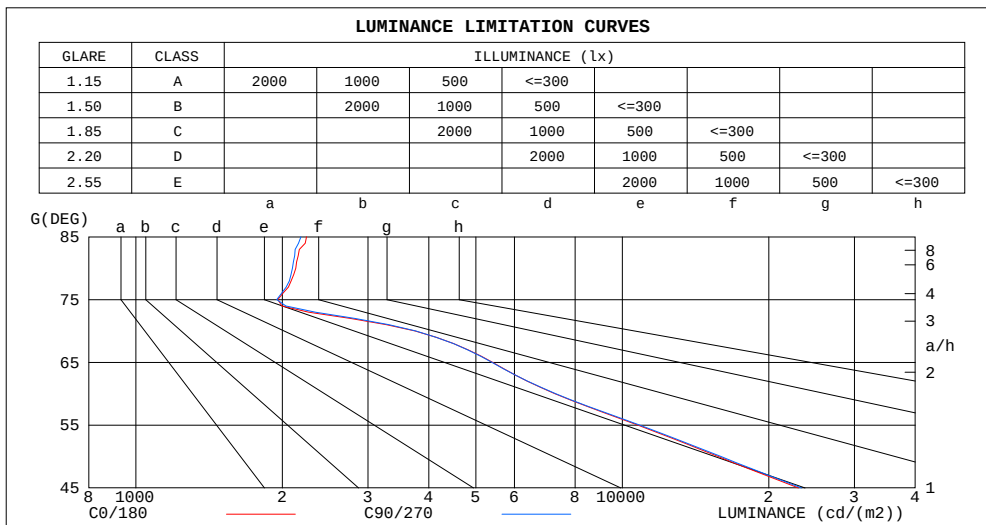
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1076	1081	1071	1061	1066	1070	1073	1074	0- 10	105.0	105.0	11.1,11.1
20	827.0	843.9	841.0	813.3	791.0	765.0	778.5	802.6	10- 20	269.5	374.5	39.5,39.5
30	428.8	447.5	438.9	410.9	397.4	383.8	389.4	405.7	20- 30	273.2	647.7	68.4,68.4
40	168.4	176.5	171.5	161.0	153.3	147.1	149.7	159.8	30- 40	167.7	815.5	86.1,86.1
50	64.34	67.41	65.13	60.39	58.67	56.93	57.36	59.54	40- 50	78.57	894.1	94.4,94.4
60	23.10	23.81	23.19	22.23	20.86	20.19	20.29	21.67	50- 60	34.34	928.4	98,98
70	8.149	8.521	8.176	7.410	6.691	6.283	6.586	7.408	60- 70	13.85	942.2	99.5,99.5
80	2.354	2.400	2.317	2.175	2.088	2.051	2.106	2.212	70- 80	3.903	946.1	99.9,99.9
90	0.0505	0.0643	0.0230	0	0.0092	0.0046	0.0046	0.0046	80- 90	1.167	947.3	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:2025-03-12

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:230.53V I:0.0354A P:7.3456W PF:0.8992 Freq:49.99Hz Lamp Flux:947.304x1 lm		
NAME: DL108-WHTC7S03	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 90mm	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	2243	2185
80	2132	2098
75	1958	1948
70	3746	3759
65	5410	5395
60	7263	7292
55	10755	10848
50	15739	15932
45	23011	23349

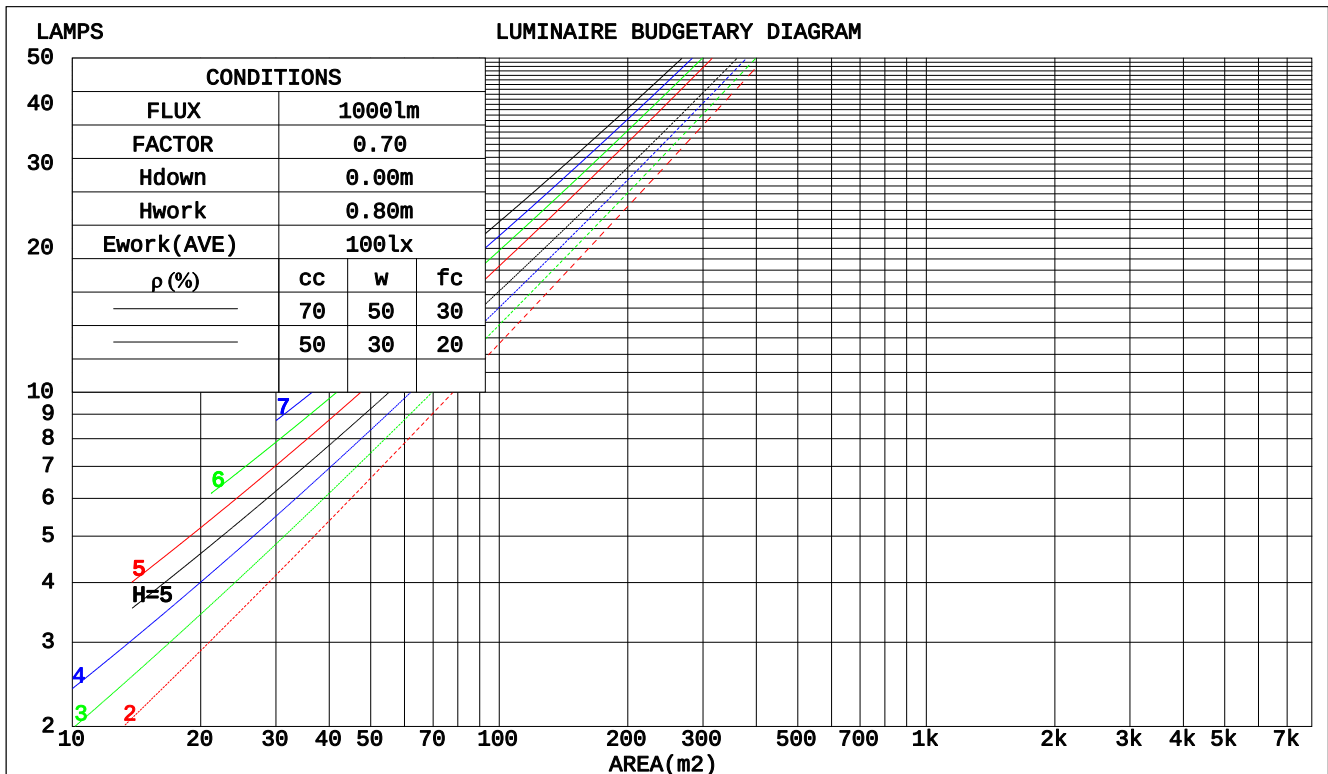
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2025-03-12

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:230.53V I:0.0354A P:7.3456W PF:0.8992 Freq:49.99Hz Lamp Flux:947.304x1 lm		
NAME: DL108-WHTC7S03	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 90mm	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	1.00
1.0	1.10	1.08	1.05	1.08	1.06	1.04	1.04	1.02	1.00	1.00	.99	.97	.97	.96	.95	.93
2.0	1.02	.98	.94	1.00	.97	.93	.97	.94	.91	.94	.92	.89	.91	.89	.87	.86
3.0	.95	.90	.86	.93	.89	.85	.91	.87	.83	.88	.85	.82	.86	.83	.81	.79
4.0	.88	.83	.78	.87	.82	.78	.85	.80	.77	.83	.79	.76	.81	.78	.75	.73
5.0	.83	.76	.72	.82	.76	.72	.80	.75	.71	.78	.74	.70	.76	.73	.70	.68
6.0	.77	.71	.67	.77	.71	.66	.75	.70	.66	.74	.69	.66	.72	.68	.65	.64
7.0	.73	.66	.62	.72	.66	.62	.71	.65	.62	.69	.65	.61	.68	.64	.61	.60
8.0	.68	.62	.58	.68	.62	.58	.67	.61	.58	.66	.61	.57	.65	.60	.57	.56
9.0	.65	.59	.55	.64	.58	.54	.63	.58	.54	.62	.57	.54	.61	.57	.54	.52
10.0	.61	.55	.51	.61	.55	.51	.60	.55	.51	.59	.54	.51	.58	.54	.51	.49



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2025-03-12

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:230.53V I:0.0354A P:7.3456W PF:0.8992 Freq:49.99Hz Lamp Flux:947.304x1 lm					
NAME: DL108-WHTC7S03			TYPE:		WEIGHT:
SPEC.: white RA90 3000K+5700K			DIM.:		SERIAL No.:
MFR.:			SUR.: 90mm		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	.187	.106	.034	.180	.103	.033	.168	.096	.031	.156	.090	.029	.145	.084	.027		
2.0	.179	.098	.030	.174	.096	.029	.163	.091	.028	.153	.086	.027	.144	.081	.026		
3.0	.171	.091	.027	.166	.089	.027	.157	.085	.026	.148	.081	.025	.140	.078	.024		
4.0	.162	.084	.025	.158	.083	.024	.150	.080	.024	.143	.077	.023	.136	.074	.022		
5.0	.154	.078	.023	.150	.077	.022	.143	.075	.022	.137	.072	.021	.131	.070	.021		
6.0	.146	.073	.021	.143	.072	.021	.137	.070	.020	.131	.068	.020	.126	.066	.020		
7.0	.139	.069	.020	.137	.068	.019	.131	.066	.019	.126	.065	.019	.121	.063	.019		
8.0	.133	.065	.018	.131	.064	.018	.126	.063	.018	.121	.061	.018	.117	.060	.017		
9.0	.127	.061	.017	.125	.061	.017	.120	.060	.017	.116	.058	.017	.113	.057	.017		
10.0	.122	.058	.016	.120	.058	.016	.116	.057	.016	.112	.056	.016	.108	.055	.016		

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	.172	.157	.144	.147	.135	.124	.101	.093	.086	.058	.054	.050	.019	.017	.016	
2.0	.157	.132	.112	.135	.114	.096	.092	.079	.067	.053	.046	.039	.017	.015	.013	
3.0	.145	.114	.088	.125	.098	.077	.086	.068	.054	.049	.040	.032	.016	.013	.010	
4.0	.135	.099	.071	.116	.086	.062	.080	.060	.044	.046	.035	.026	.015	.011	.008	
5.0	.127	.088	.059	.109	.076	.051	.075	.053	.036	.043	.031	.021	.014	.010	.007	
6.0	.119	.078	.049	.103	.068	.043	.071	.047	.030	.041	.028	.018	.013	.009	.006	
7.0	.113	.071	.041	.097	.061	.036	.067	.043	.026	.039	.025	.015	.013	.008	.005	
8.0	.107	.065	.035	.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:2025-03-12

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:230.53V I:0.0354A P:7.3456W PF:0.8992 Freq:49.99Hz Lamp Flux:947.304x1 lm											
NAME: DL108-WHTC7S03						TYPE:			WEIGHT:		
SPEC.: white RA90 3000K+5700K						DIM.:			SERIAL No.:		
MFR.:						SUR.: 90mm			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		19.4	20.4	19.7	20.6	20.8	19.5	20.5	19.7	20.7	20.8
	3H	19.4	20.4	19.7	20.6	20.8	19.5	20.4	19.8	20.6	20.8
	4H	19.4	20.2	19.7	20.5	20.7	19.4	20.3	19.7	20.5	20.8
	6H	19.3	20.1	19.6	20.4	20.6	19.4	20.2	19.7	20.4	20.7
	8H	19.3	20.1	19.6	20.3	20.6	19.3	20.1	19.7	20.4	20.6
	12H	19.2	20.0	19.6	20.3	20.5	19.3	20.1	19.6	20.3	20.6
4H	2H	19.3	20.2	19.6	20.4	20.7	19.4	20.3	19.7	20.5	20.7
	3H	19.4	20.1	19.7	20.4	20.7	19.5	20.2	19.8	20.5	20.8
	4H	19.3	20.0	19.7	20.3	20.6	19.4	20.1	19.8	20.4	20.7
	6H	19.3	19.9	19.7	20.2	20.6	19.4	19.9	19.7	20.3	20.6
	8H	19.3	19.8	19.7	20.2	20.5	19.3	19.9	19.7	20.2	20.6
	12H	19.2	19.7	19.7	20.1	20.5	19.3	19.8	19.7	20.2	20.6
8H	4H	19.2	19.8	19.6	20.1	20.5	19.3	19.8	19.7	20.2	20.6
	6H	19.2	19.6	19.6	20.0	20.5	19.3	19.7	19.7	20.1	20.5
	8H	19.2	19.6	19.6	20.0	20.4	19.2	19.6	19.7	20.1	20.5
	12H	19.2	19.5	19.6	20.0	20.4	19.2	19.6	19.7	20.0	20.5
12H	4H	19.2	19.7	19.6	20.1	20.5	19.2	19.7	19.7	20.1	20.5
	6H	19.2	19.6	19.6	20.0	20.4	19.2	19.6	19.7	20.0	20.5
	8H	19.1	19.5	19.6	19.9	20.4	19.2	19.5	19.7	20.0	20.5
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H	+ 1.8 / - 3.5					+ 1.8 / - 3.5					
1.5H	+ 2.7 / - 2.5					+ 2.8 / - 2.5					
2.0H	+ 3.3 / - 3.1					+ 3.3 / - 3.1					

CIE Pub.117, 947.3 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.2)
Area: 0.00636 m2

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-03-12

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:230.53V I:0.0354A P:7.3456W PF:0.8992 Freq:49.99Hz Lamp Flux:947.304x1 lm		
NAME: DL108-WHTC7S03	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 90mm	Shielding Angle:

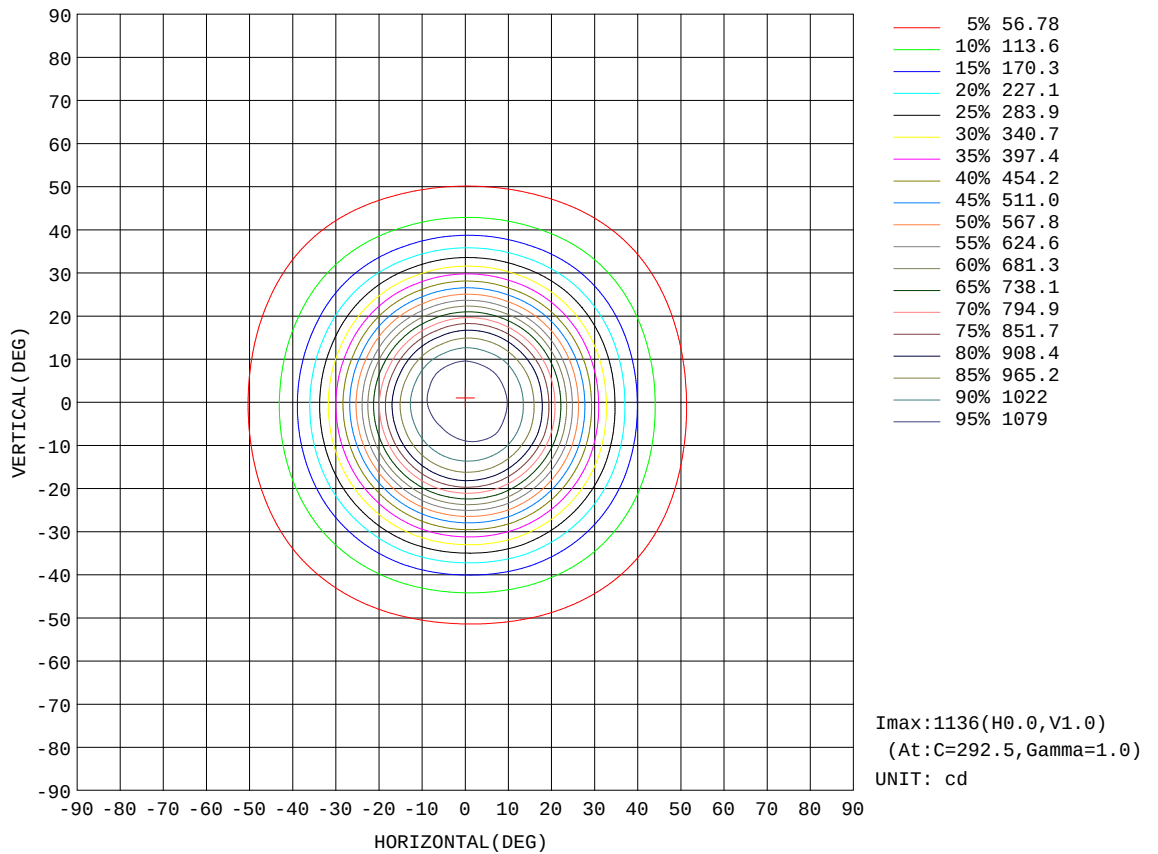
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	83	76	71	82	75	71	81	75	71	67
0.80	91	84	80	90	84	80	89	83	79	75
1.00	96	90	86	95	89	85	94	89	85	81
1.25	101	95	91	100	94	91	98	93	90	85
1.50	104	98	95	102	98	94	100	96	93	88
2.00	107	102	99	106	101	98	103	99	97	91
2.50	109	105	101	107	103	101	104	101	99	92
3.00	111	107	104	109	106	103	105	103	101	94
4.00	113	110	107	111	108	106	107	105	103	96
5.00	114	112	110	112	110	108	108	106	105	97
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:2025-03-12

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:230.53V I:0.0354A P:7.3456W PF:0.8992 Freq:49.99Hz Lamp Flux:947.304x1 lm		
NAME: DL108-WHTC7S03	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 90mm	Shielding Angle:

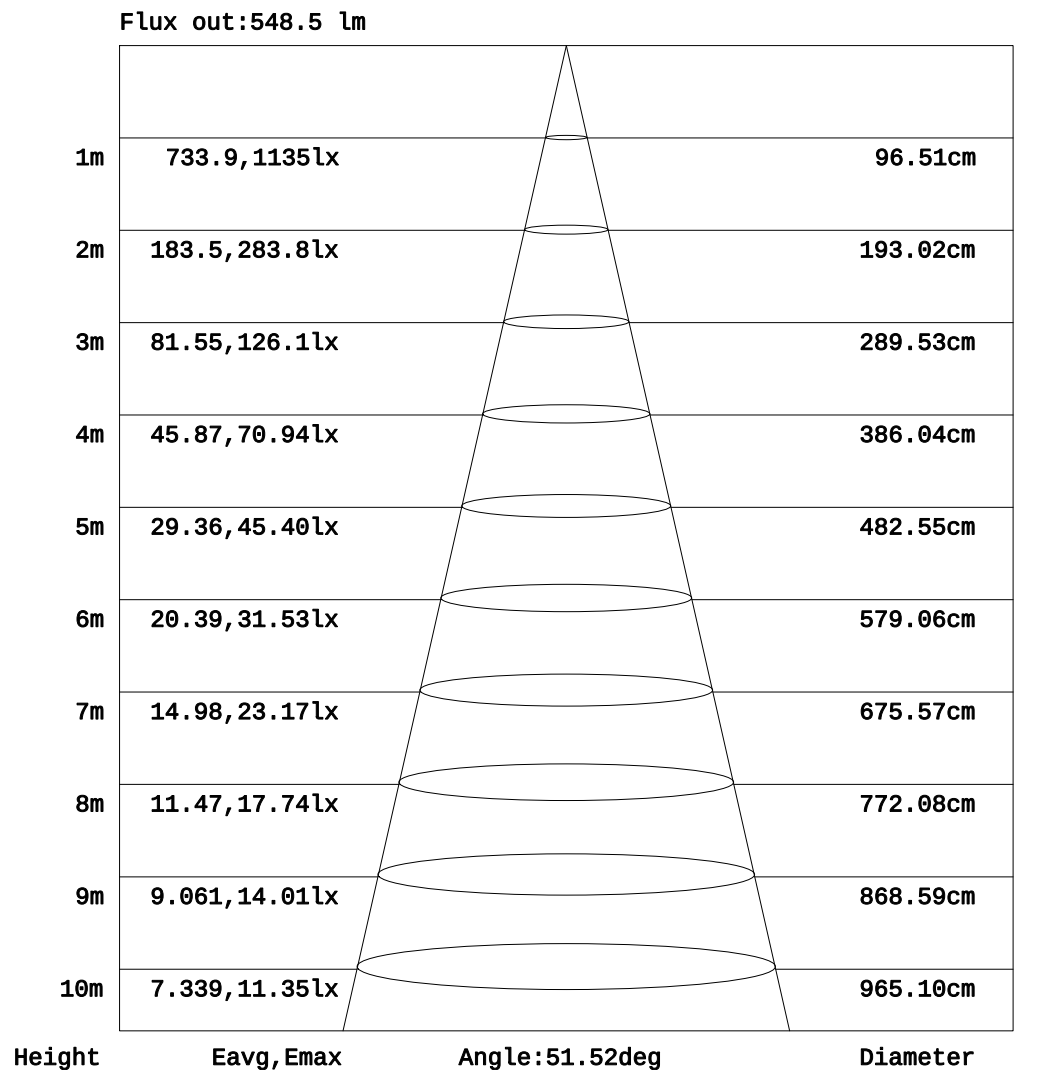


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-03-12

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:230.53V I:0.0354A P:7.3456W PF:0.8992 Freq:49.99Hz Lamp Flux:947.304x1 lm		
NAME: DL108-WHTC7S03	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 90mm	Shielding Angle:



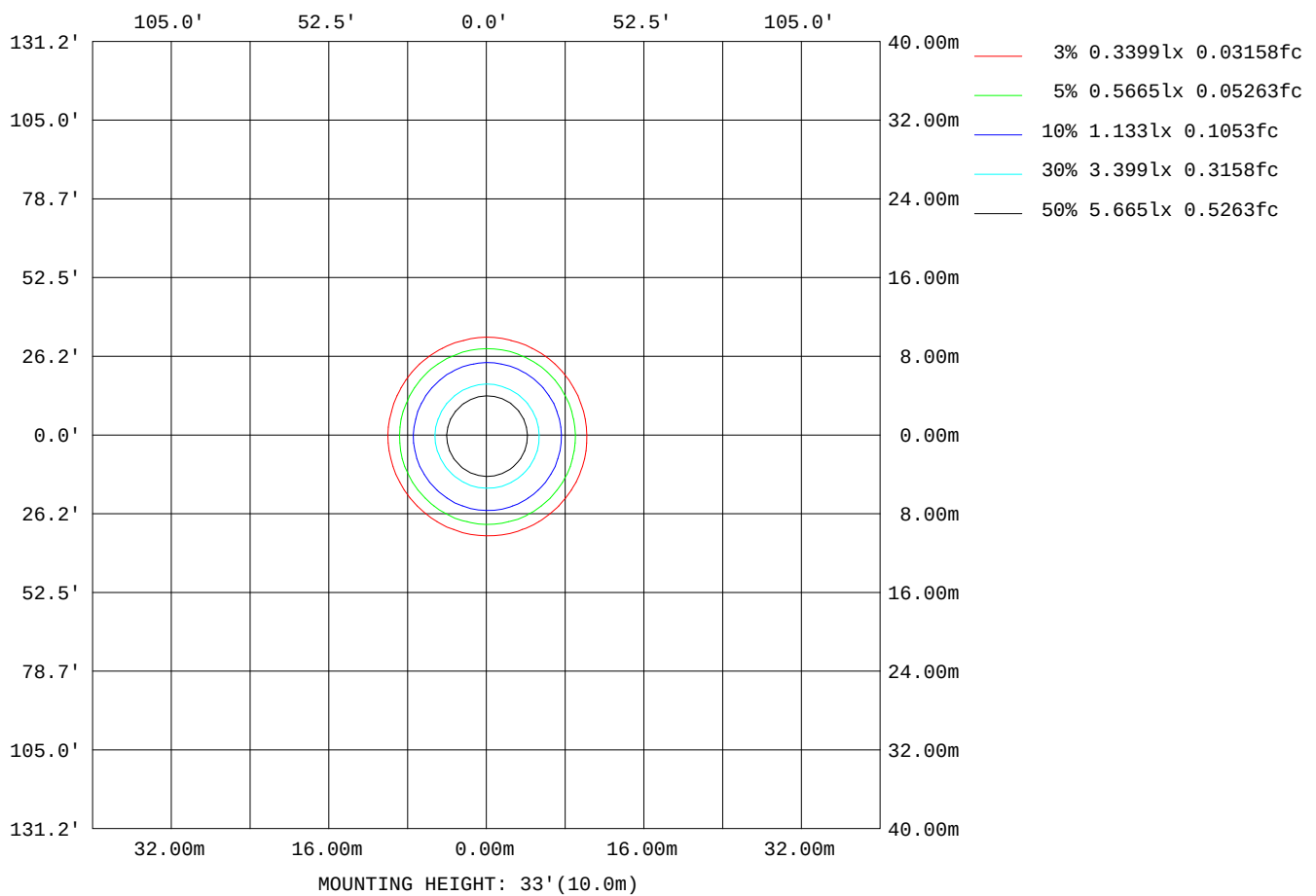
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2025-03-12

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:230.53V I:0.0354A P:7.3456W PF:0.8992 Freq:49.99Hz Lamp Flux:947.304x1 lm		
NAME: DL108-WHTC7S03	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 90mm	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-03-12

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:230.53V I:0.0354A P:7.3456W PF:0.8992 Freq:49.99Hz Lamp Flux:947.304x1 lm		
NAME: DL108-WHTC7S03	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 90mm	Shielding Angle:

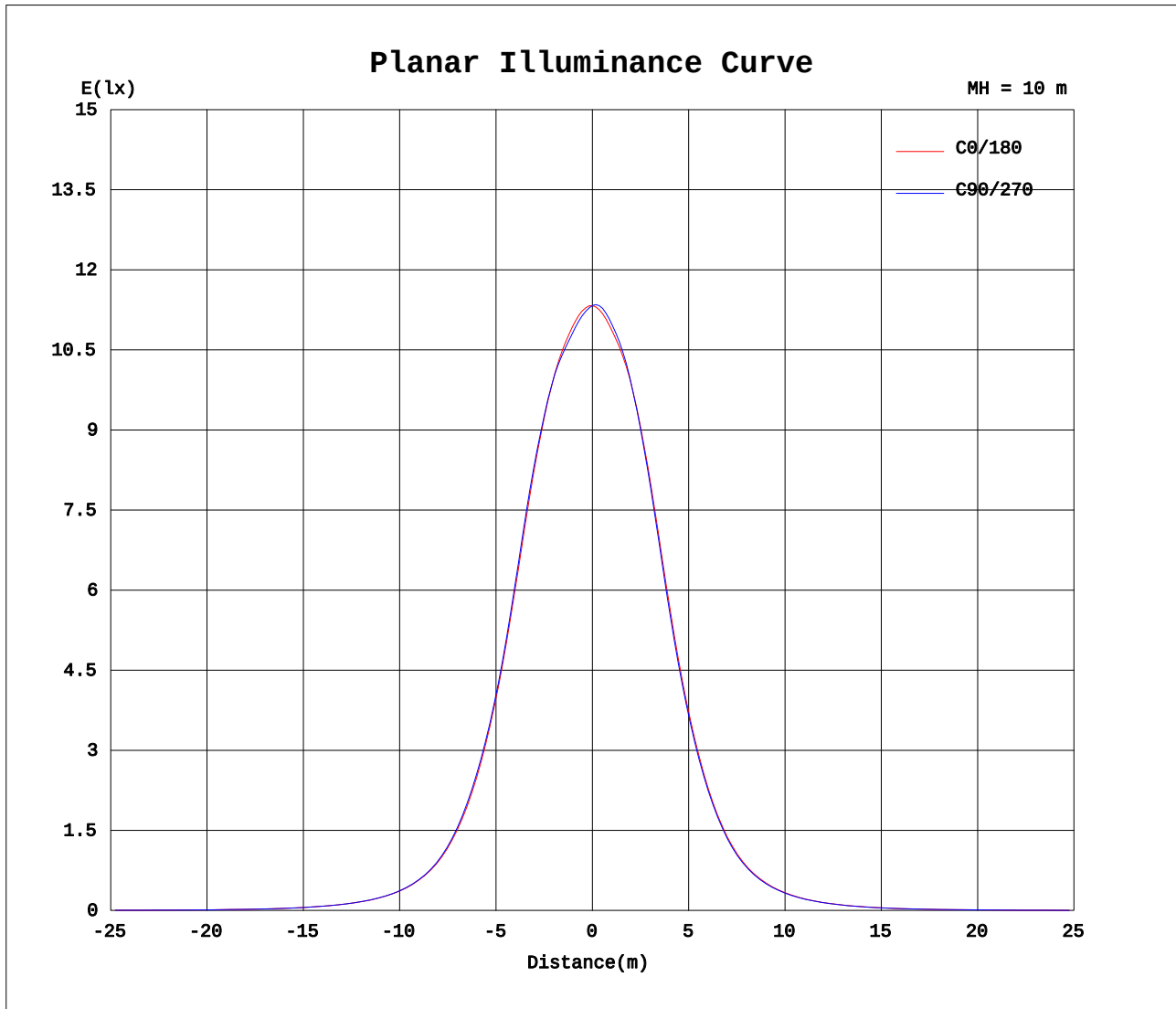
AvgL	cd/m2
L_0~180(65)av	5141
L_0~180(75)av	1920
L_0~180(85)av	1952
L_90~270(65)av	5071
L_90~270(75)av	1910
L_90~270(85)av	1943
L_45(65)av	5128
L_45(75)av	1914
L_45(85)av	1941

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-03-12

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: 2025-03-12

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:

```