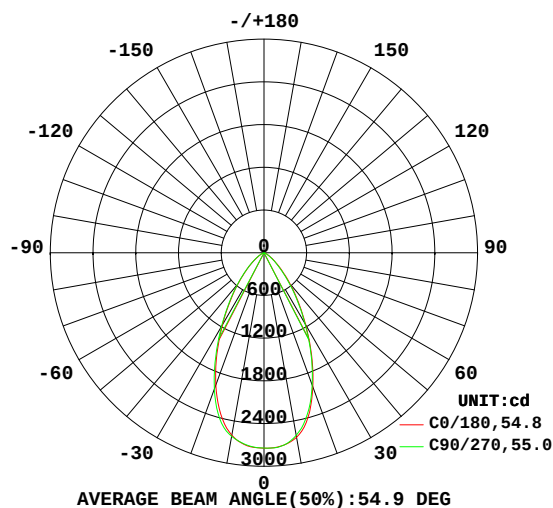


LUMINAIRE PHOTOMETRIC TEST REPORT

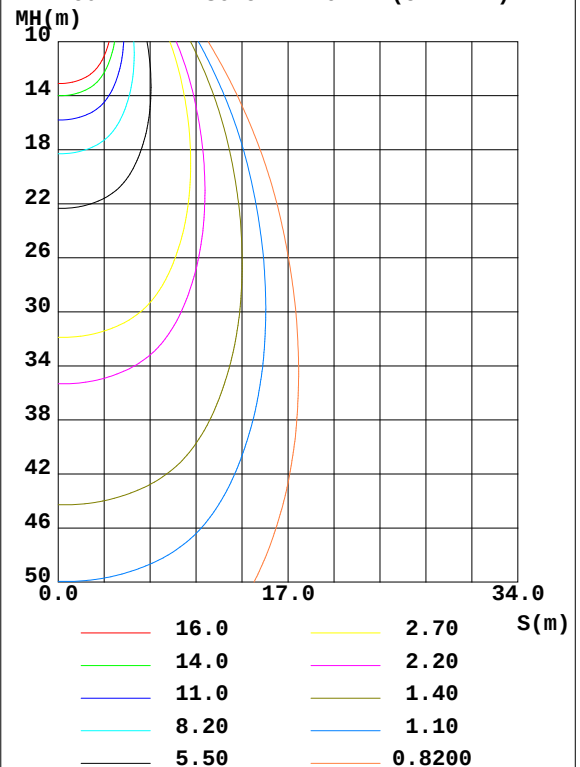
Test:U:230.45V I:0.0919A P:20.197W PF:0.9539 Freq:49.99Hz Lamp Flux:2614.86x1 lm		
NAME: DL2008-WHTC20S03	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 130mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 129.47 lm/W			
MODEL	2835 48 5700K	I _{max} (cd)	2748	S/MH(C0/180)	0.84
NOMINAL POWER(W)	20	LOR(%)	100.0	S/MH(C90/270)	0.86
RATED VOLTAGE(V)	220-240	TOTAL FLUX(lm)	2614.9	η UP, DN(C0-180)	0.0, 49.4
NOMINAL FLUX(lm)	2614.86	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 50.6
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: 2025-03-11

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:

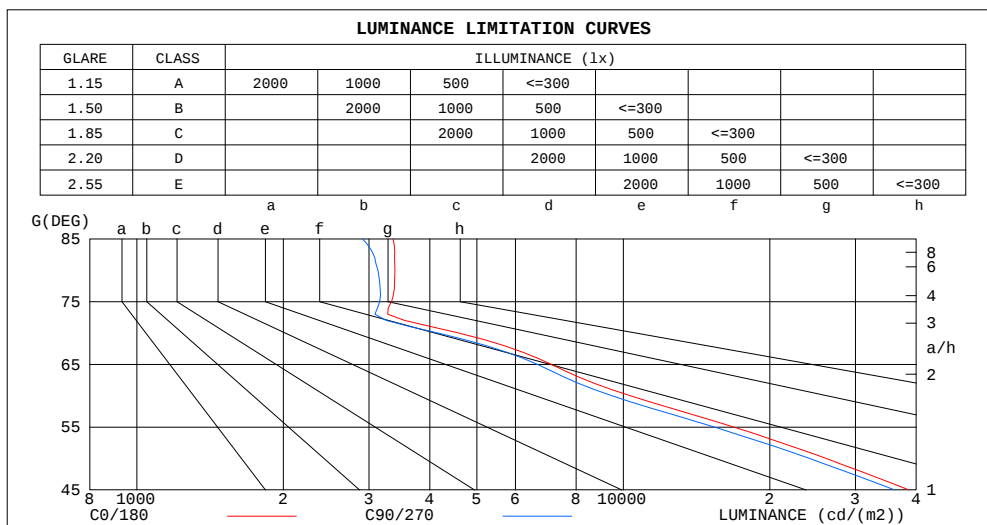
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	2632	2632	2605	2611	2603	2604	2618	2633	0- 10	256.6	256.6	9.81,9.81
20	2006	1983	1979	1984	1979	2001	2038	2024	10- 20	657.2	913.8	34.9,34.9
30	1176	1157	1156	1146	1168	1190	1193	1206	20- 30	719.3	1633	62.5,62.5
40	567.7	554.9	541.5	543.4	565.1	579.4	579.2	587.1	30- 40	524.2	2157	82.5,82.5
50	222.8	214.0	206.0	208.8	221.7	223.7	230.5	230.8	40- 50	283.2	2441	93.3,93.3
60	68.49	65.75	62.84	63.99	67.99	68.17	72.00	71.92	50- 60	117.3	2558	97.8,97.8
70	20.80	19.76	18.84	18.63	20.18	21.27	22.19	22.19	60- 70	40.22	2598	99.4,99.4
80	7.818	7.464	7.211	7.252	7.686	8.012	8.205	8.182	70- 80	12.65	2611	99.8,99.8
90	0.1654	0.1654	0.1700	0.1654	0.1883	0.1792	0.2205	0.2205	80- 90	4.157	2615	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:2025-03-11

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:230.45V I:0.0919A P:20.197W PF:0.9539 Freq:49.99Hz Lamp Flux:2614.86x1 lm		
NAME: DL2008-WHTC20S03	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 130mm	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	3365	2912
80	3393	3129
75	3338	3157
70	4582	4152
65	7110	6653
60	10323	9471
55	16860	15387
50	26118	24149
45	38644	36126

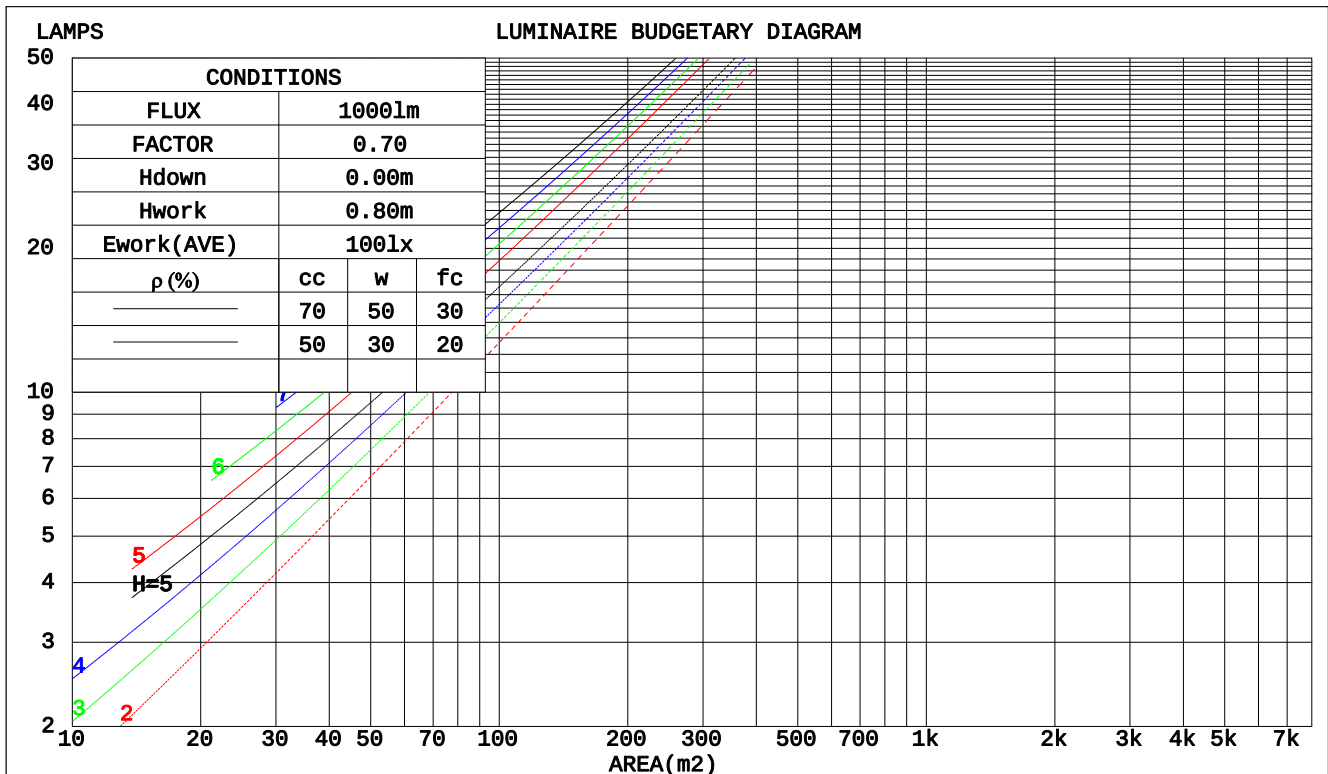
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2025-03-11

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:230.45V I:0.0919A P:20.197W PF:0.9539 Freq:49.99Hz Lamp Flux:2614.86x1 lm		
NAME: DL2008-WHTC20S03	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 130mm	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	1.07	1.05	1.08	1.05	1.03	1.04	1.02	.00	.00	.98	.97	.96	.95	.94	.92
2.0	1.01	.97	.93	.00	.96	.92	.96	.93	.90	.93	.91	.88	.90	.88	.86	.85
3.0	.94	.88	.84	.92	.87	.83	.90	.85	.82	.87	.84	.81	.85	.82	.79	.78
4.0	.87	.81	.76	.86	.80	.76	.83	.79	.75	.81	.77	.74	.79	.76	.73	.71
5.0	.81	.74	.70	.80	.74	.69	.78	.73	.69	.76	.72	.68	.75	.71	.67	.66
6.0	.75	.69	.64	.74	.68	.64	.73	.67	.63	.71	.67	.63	.70	.66	.63	.61
7.0	.70	.64	.59	.70	.64	.59	.68	.63	.59	.67	.62	.59	.66	.62	.58	.57
8.0	.66	.60	.55	.65	.59	.55	.64	.59	.55	.63	.58	.55	.62	.58	.54	.53
9.0	.62	.56	.52	.62	.56	.51	.61	.55	.51	.60	.55	.51	.59	.54	.51	.49
10.0	.59	.52	.48	.58	.52	.48	.57	.52	.48	.56	.51	.48	.56	.51	.48	.46



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2025-03-11

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:230.45V I:0.0919A P:20.197W PF:0.9539 Freq:49.99Hz Lamp Flux:2614.86x1 lm					
NAME: DL2008-WHTC20S03			TYPE:		WEIGHT:
SPEC.: white RA90 3000K+5700K			DIM.:		SERIAL No.:
MFR.:			SUR.: 130mm		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	.194	.111	.035	.188	.107	.034	.175	.100	.032	.163	.094	.030	.152	.088	.028	
2.0	.187	.103	.031	.181	.100	.031	.171	.095	.029	.161	.090	.028	.152	.086	.027	
3.0	.178	.095	.028	.174	.093	.028	.164	.089	.027	.156	.085	.026	.148	.082	.025	
4.0	.170	.088	.026	.165	.087	.026	.157	.083	.025	.150	.080	.024	.143	.078	.024	
5.0	.161	.082	.024	.157	.081	.024	.150	.078	.023	.144	.076	.023	.138	.074	.022	
6.0	.153	.077	.022	.150	.076	.022	.144	.074	.021	.138	.072	.021	.132	.070	.021	
7.0	.146	.072	.020	.143	.071	.020	.137	.069	.020	.132	.068	.020	.127	.066	.019	
8.0	.139	.068	.019	.136	.067	.019	.131	.066	.019	.127	.064	.019	.122	.063	.018	
9.0	.133	.064	.018	.130	.063	.018	.126	.062	.018	.122	.061	.017	.118	.060	.017	
10.0	.127	.061	.017	.125	.060	.017	.121	.059	.017	.117	.058	.017	.113	.057	.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	.172	.157	.144	.147	.135	.124	.101	.093	.085	.058	.054	.050	.019	.017	.016	
2.0	.158	.132	.111	.136	.114	.096	.093	.079	.067	.054	.046	.039	.017	.015	.013	
3.0	.147	.114	.087	.126	.098	.076	.086	.068	.053	.050	.040	.031	.016	.013	.010	
4.0	.137	.099	.070	.118	.086	.061	.081	.060	.043	.047	.035	.025	.015	.011	.008	
5.0	.129	.088	.057	.111	.076	.050	.076	.053	.035	.044	.031	.021	.014	.010	.007	
6.0	.122	.079	.048	.105	.068	.042	.072	.048	.029	.042	.028	.018	.014	.009	.006	
7.0	.115	.071	.040	.099	.062	.035	.069	.043	.025	.040	.026	.015	.013	.008	.005	
8.0	.110	.065	.035	.094	.057	.030	.065	.040	.021	.038	.023	.013	.012	.008	.004	
9.0	.105	.060	.030	.090	.052	.026	.062	.037	.019	.036	.022	.011	.012	.007	.004	
10.0	.100	.056	.026	.086	.048	.023	.060	.034	.016	.035	.020	.010	.011	.007	.003	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-03-11

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:230.45V I:0.0919A P:20.197W PF:0.9539 Freq:49.99Hz Lamp Flux:2614.86x1 lm											
NAME: DL2008-WHTC20S03						TYPE:			WEIGHT:		
SPEC.: white RA90 3000K+5700K						DIM.:			SERIAL No.:		
MFR.:						SUR.: 130mm			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	17.7	18.7	17.9	18.9	19.0	17.4	18.5	17.7	18.7	18.8
	3H	17.6	18.6	17.9	18.8	19.0	17.4	18.4	17.7	18.6	18.8
	4H	17.5	18.5	17.8	18.7	18.9	17.3	18.2	17.6	18.5	18.7
	6H	17.5	18.3	17.8	18.6	18.8	17.3	18.1	17.6	18.4	18.6
	8H	17.5	18.3	17.8	18.5	18.8	17.2	18.1	17.6	18.3	18.6
	12H	17.4	18.2	17.7	18.5	18.8	17.2	18.0	17.5	18.3	18.5
4H	2H	17.5	18.4	17.8	18.7	18.9	17.3	18.2	17.6	18.5	18.7
	3H	17.5	18.3	17.8	18.6	18.8	17.3	18.1	17.6	18.4	18.6
	4H	17.5	18.2	17.8	18.5	18.8	17.3	18.0	17.6	18.3	18.6
	6H	17.4	18.0	17.8	18.4	18.7	17.2	17.8	17.6	18.2	18.5
	8H	17.4	18.0	17.8	18.3	18.7	17.2	17.8	17.6	18.1	18.5
	12H	17.4	17.9	17.8	18.3	18.7	17.2	17.7	17.6	18.1	18.5
8H	4H	17.3	17.9	17.7	18.3	18.6	17.1	17.7	17.5	18.1	18.4
	6H	17.3	17.8	17.8	18.2	18.6	17.1	17.6	17.6	18.0	18.4
	8H	17.3	17.7	17.8	18.2	18.6	17.1	17.5	17.6	17.9	18.4
	12H	17.3	17.7	17.8	18.1	18.6	17.1	17.4	17.6	17.9	18.4
12H	4H	17.3	17.8	17.7	18.2	18.6	17.1	17.6	17.5	18.0	18.4
	6H	17.3	17.7	17.7	18.1	18.6	17.1	17.5	17.5	17.9	18.4
	8H	17.3	17.6	17.8	18.1	18.6	17.1	17.4	17.5	17.9	18.3
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H	+ 1.8 / - 3.7					+ 1.9 / - 4.0					
1.5H	+ 2.6 / - 2.9					+ 2.6 / - 2.9					
2.0H	+ 3.8 / - 3.9					+ 3.8 / - 3.8					

CIE Pub.117, 2615 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.3)
Area: 0.01327 m2

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-03-11

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:230.45V I:0.0919A P:20.197W PF:0.9539 Freq:49.99Hz Lamp Flux:2614.86x1 lm		
NAME: DL2008-WHTC20S03	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 130mm	Shielding Angle:

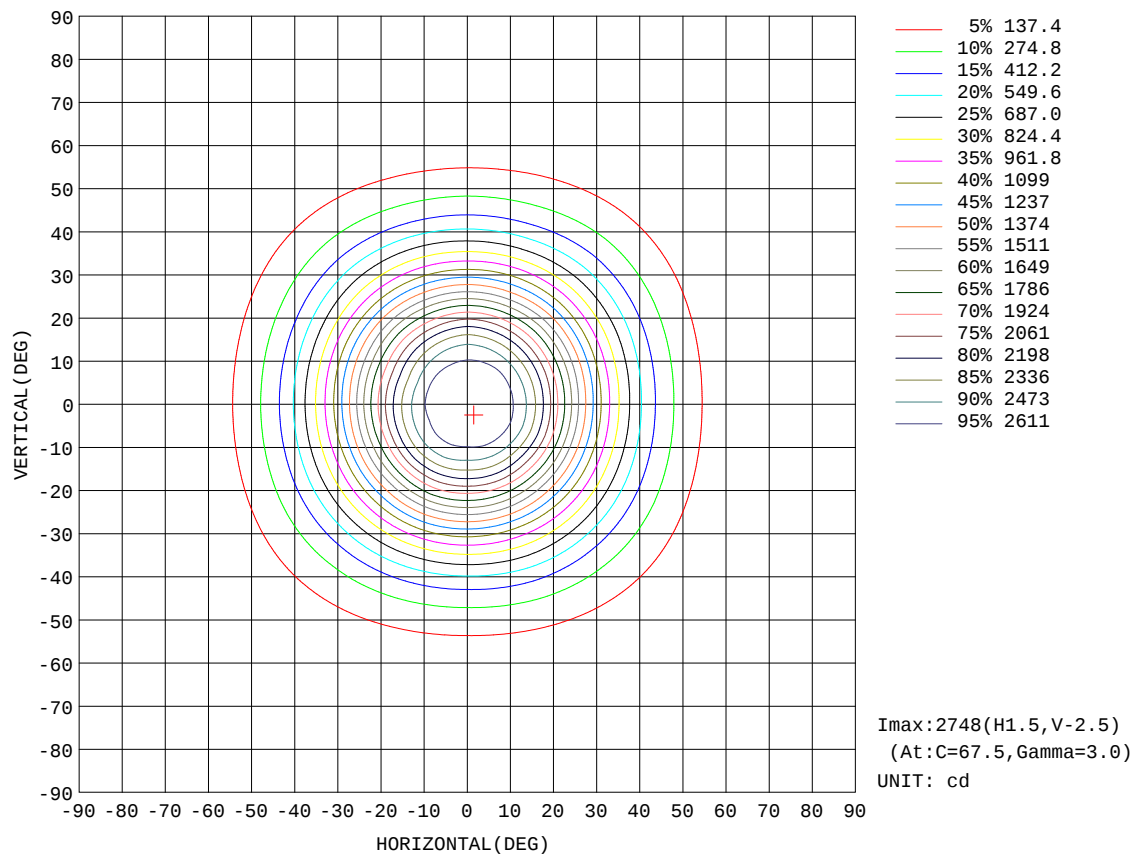
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	80	73	68	80	73	68	79	72	68	64
0.80	89	82	77	88	81	77	87	81	77	72
1.00	95	88	84	94	88	83	92	88	83	78
1.25	100	93	89	98	93	89	96	92	88	83
1.50	103	97	93	101	96	93	99	95	92	87
2.00	106	101	98	105	100	97	102	98	96	90
2.50	108	104	100	107	103	100	103	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:2025-03-11

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:230.45V I:0.0919A P:20.197W PF:0.9539 Freq:49.99Hz Lamp Flux:2614.86x1 lm		
NAME: DL2008-WHTC20S03	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 130mm	Shielding Angle:

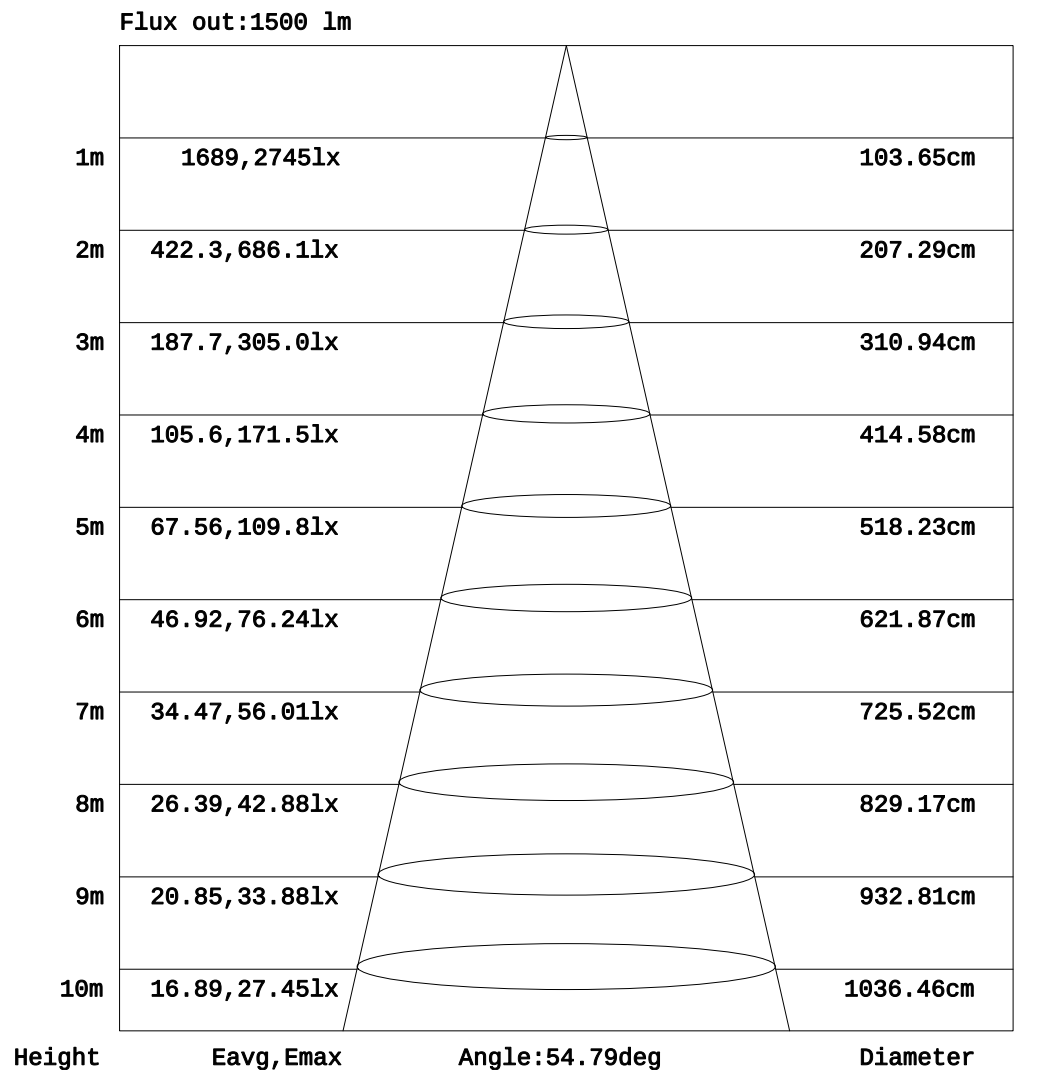


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-03-11

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:230.45V I:0.0919A P:20.197W PF:0.9539 Freq:49.99Hz Lamp Flux:2614.86x1 lm		
NAME: DL2008-WHTC20S03	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 130mm	Shielding Angle:



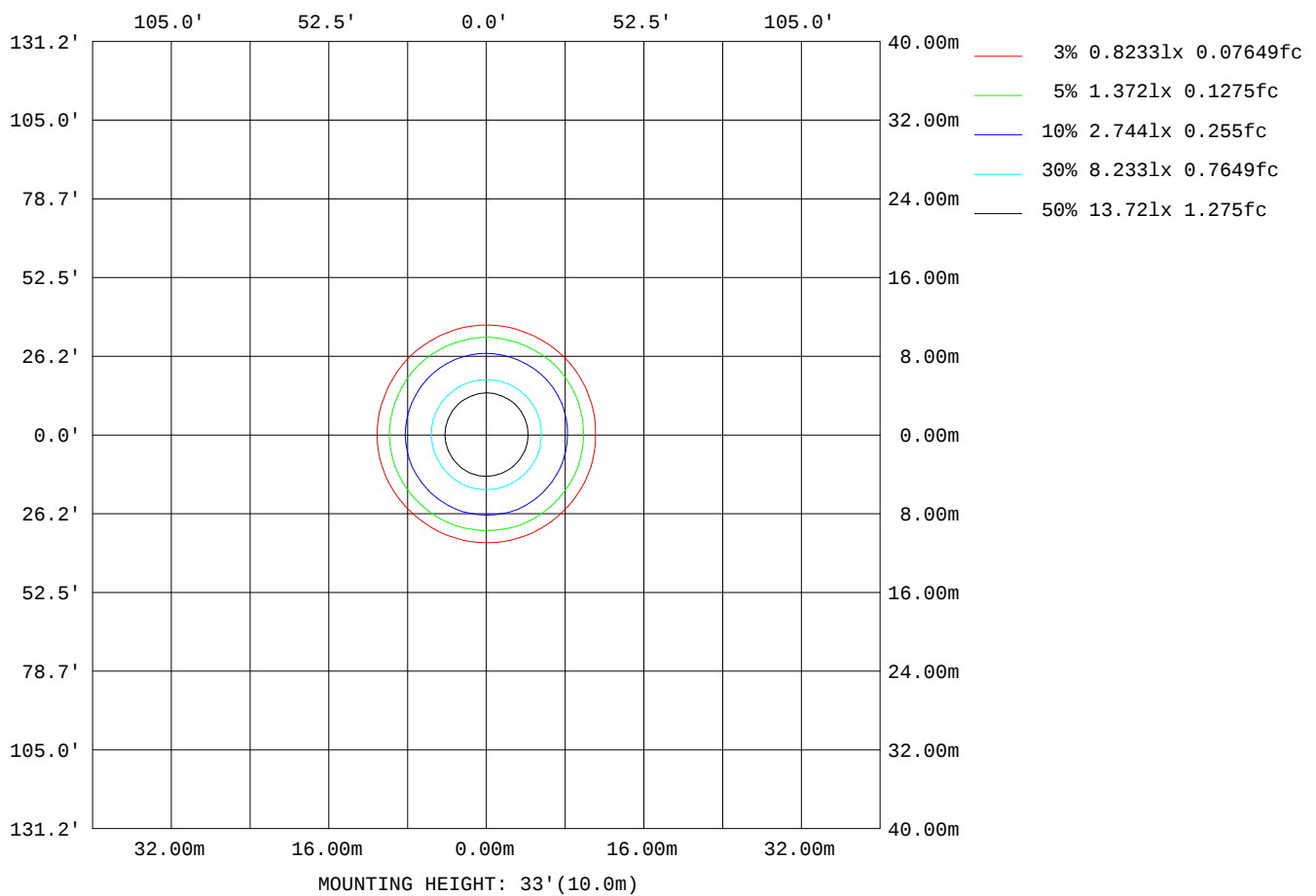
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-03-11

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:230.45V I:0.0919A P:20.197W PF:0.9539 Freq:49.99Hz Lamp Flux:2614.86x1 lm		
NAME: DL2008-WHTC20S03	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 130mm	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-03-11

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:230.45V I:0.0919A P:20.197W PF:0.9539 Freq:49.99Hz Lamp Flux:2614.86x1 lm		
NAME: DL2008-WHTC20S03	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 130mm	Shielding Angle:

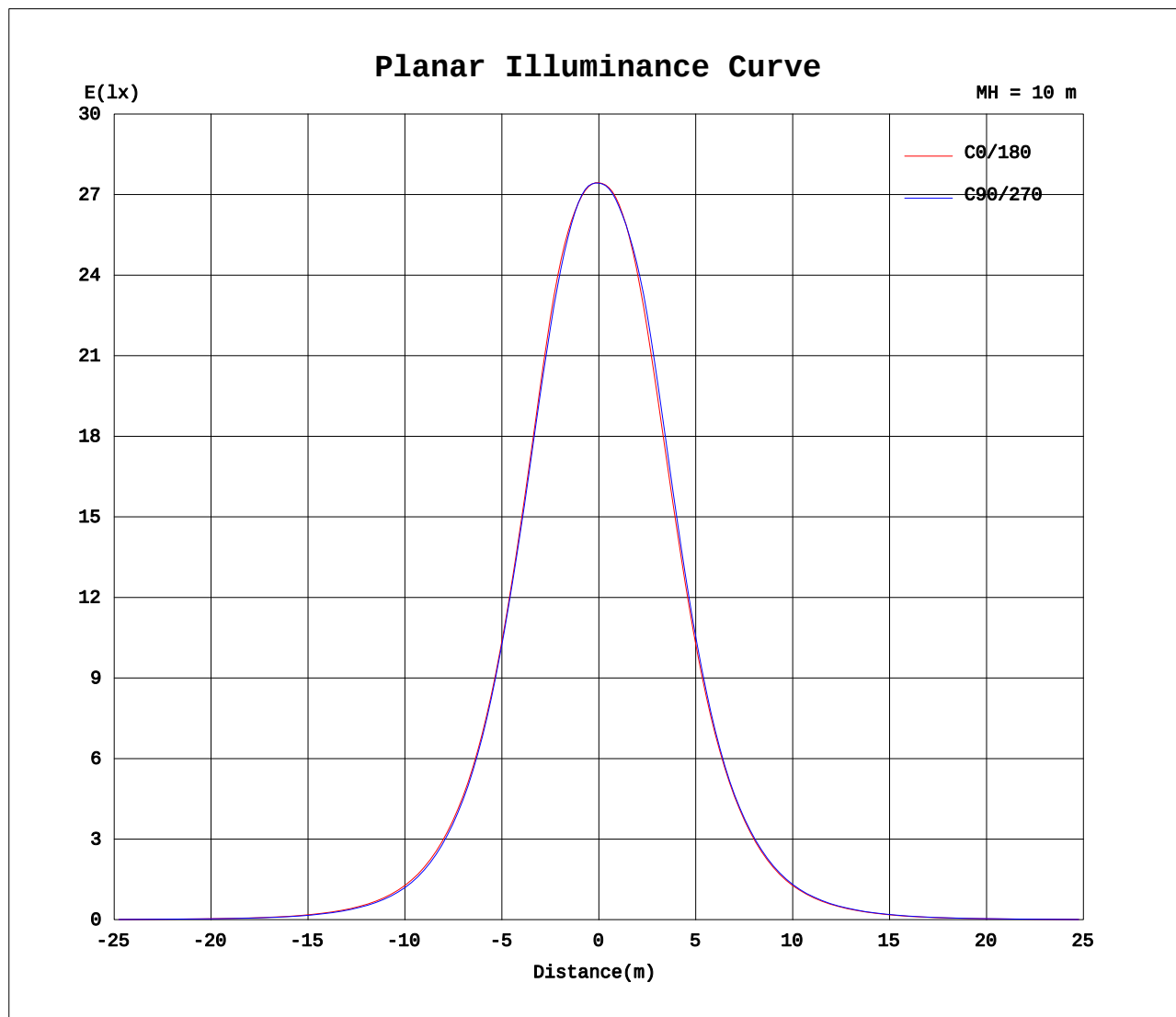
AvgL	cd/m2
L_0~180(65)av	7086
L_0~180(75)av	3312
L_0~180(85)av	3312
L_90~270(65)av	7032
L_90~270(75)av	3296
L_90~270(85)av	3288
L_45(65)av	7027
L_45(75)av	3301
L_45(85)av	3292

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 2025-03-11

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: 2025-03-11

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:

```