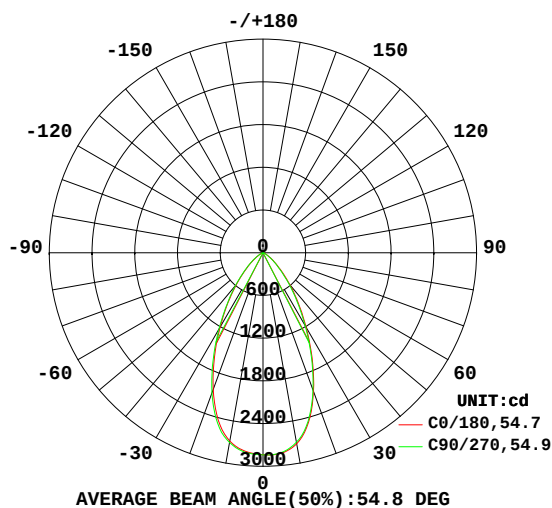


LUMINAIRE PHOTOMETRIC TEST REPORT

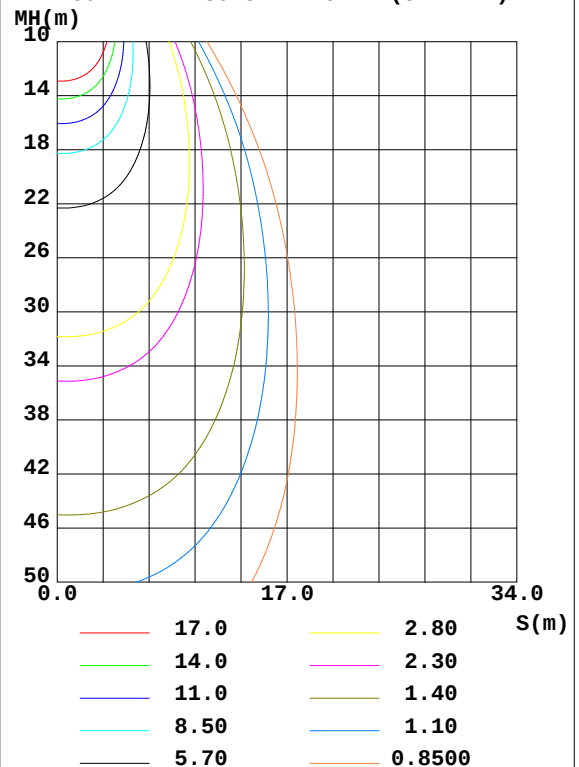
Test:U:230.45V I:0.0893A P:19.614W PF:0.9533 Freq:49.99Hz Lamp Flux:2702.6x1 lm		
NAME: DL2008-WHTC20S03	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 130mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 137.79 lm/W			
MODEL	2835 48 4000K	I _{max} (cd)	2845	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)	2702.6	η UP, DN(C0-180)	0.0, 49.4
NOMINAL FLUX(lm)	2702.6	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:

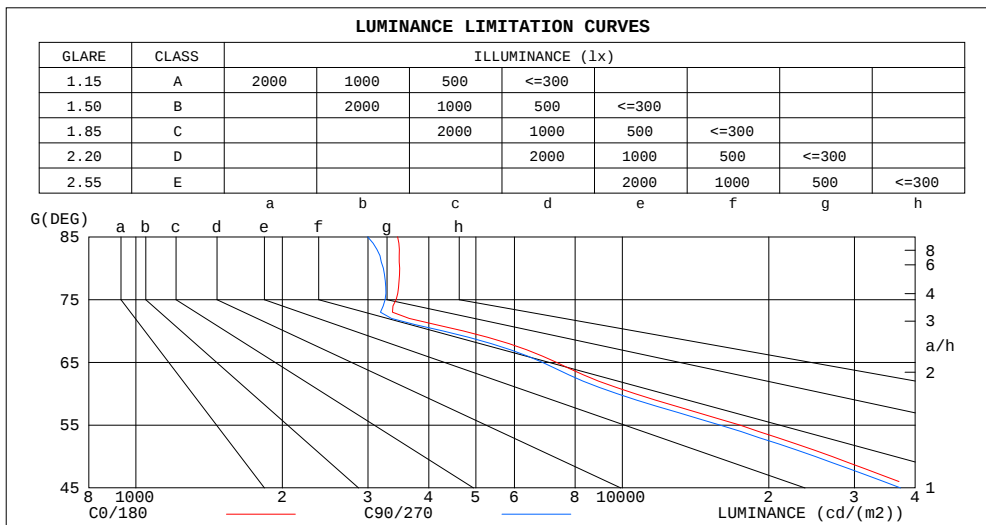
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	2725	2721	2704	2696	2686	2690	2706	2726	0- 10	265.4	265.4	9.82, 9.82
20	2074	2055	2053	2040	2045	2068	2096	2106	10- 20	679.7	945.1	35, 35
30	1218	1195	1188	1181	1205	1231	1237	1248	20- 30	743.5	1689	62.5, 62.5
40	589.4	572.8	559.8	557.6	580.9	595.1	601.4	608.5	30- 40	541.6	2230	82.5, 82.5
50	229.9	220.8	212.5	215.2	227.2	231.0	238.1	240.7	40- 50	292.4	2523	93.3, 93.3
60	70.44	67.69	64.70	65.93	69.82	70.51	74.50	74.90	50- 60	121.1	2644	97.8, 97.8
70	21.37	20.31	19.41	19.19	20.84	22.01	22.95	22.94	60- 70	41.50	2685	99.4, 99.4
80	8.034	7.671	7.436	7.491	7.957	8.283	8.475	8.430	70- 80	13.04	2698	99.8, 99.8
90	0.1700	0.1700	0.1746	0.1700	0.1929	0.1883	0.2205	0.2343	80- 90	4.289	2703	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:0.0893A P:19.614W PF:0.9533 Freq:49.99Hz Lamp Flux:2702.6x1 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	3452	2995
80	3486	3227
75	3429	3254
70	4709	4276
65	7317	6849
60	10617	9752
55	17442	15866
50	26957	24911
45	40024	37324

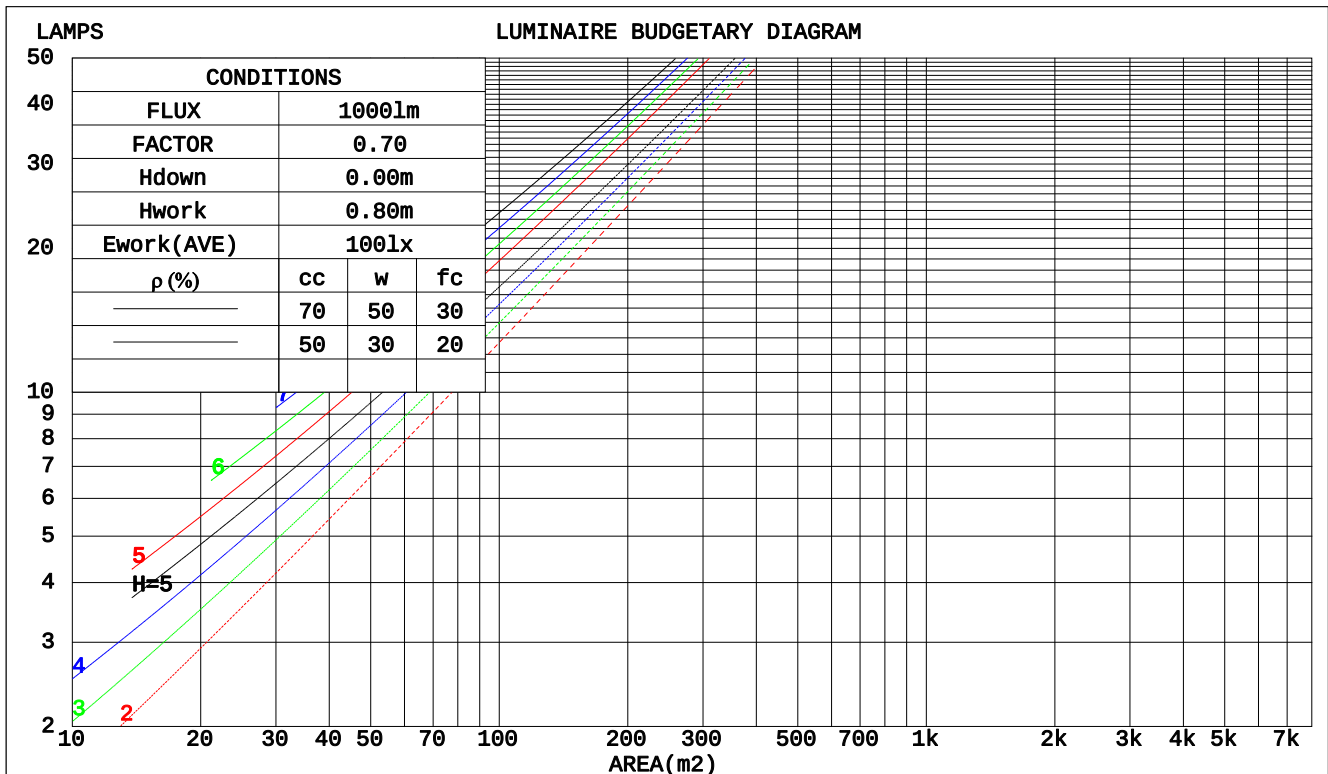
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2025-03-11

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:0.0893A P:19.614W PF:0.9533 Freq:49.99Hz Lamp Flux:2702.6x1 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	.91	.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:0.0893A P:19.614W PF:0.9533 Freq:49.99Hz Lamp Flux:2702.6x1 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	.110	.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	.173	.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	.016	.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:0.0893A P:19.614W PF:0.9533 Freq:49.99Hz Lamp Flux:2702.6x1 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	19.1	17.4	18.5	17.7	18.7	18.8
	3H	17.6	18.6	17.9	18.8	19.0	17.4	18.3	17.6	18.5	18.7
	4H	17.6	18.5	17.8	18.7	18.9	17.3	18.2	17.6	18.4	18.7
	6H	17.5	18.3	17.8	18.6	18.8	17.3	18.1	17.6	18.3	18.6
	8H	17.5	18.3	17.8	18.5	18.8	17.2	18.0	17.5	18.3	18.6
	12H	17.4	18.2	17.8	18.5	18.8	17.2	18.0	17.5	18.2	18.5
4H	2H	17.5	18.4	17.8	18.7	18.9	17.3	18.2	17.6	18.4	18.7
	3H	17.5	18.3	17.8	18.6	18.8	17.3	18.1	17.6	18.3	18.6
	4H	17.5	18.2	17.8	18.5	18.8	17.2	17.9	17.6	18.2	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	17.7	17.6	18.1	18.5
	12H	17.4	17.9	17.8	18.3	18.7	17.1	17.7	17.6	18.0	18.4
8H	4H	17.4	17.9	17.7	18.3	18.7	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	17.5	18.0	18.4
	8H	17.3	17.7	17.8	18.2	18.6	17.1	17.5	17.5	17.9	18.4
	12H	17.3	17.7	17.8	18.1	18.6	17.1	17.4	17.5	17.9	18.3
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	18.3
	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 / - 3.8					+ 1.9 / - 4.0					
1.5H	+ 2.6 / - 2.9					+ 2.6 / - 2.9					
2.0H	+ 3.9 / - 3.9					+ 3.7 / - 3.8					

CIE Pub.117, 2703 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.5)
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:0.0893A P:19.614W PF:0.9533 Freq:49.99Hz Lamp Flux:2702.6x1 lm		
NAME: DL2008-WHTC20S03	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 130mm	Shielding Angle:

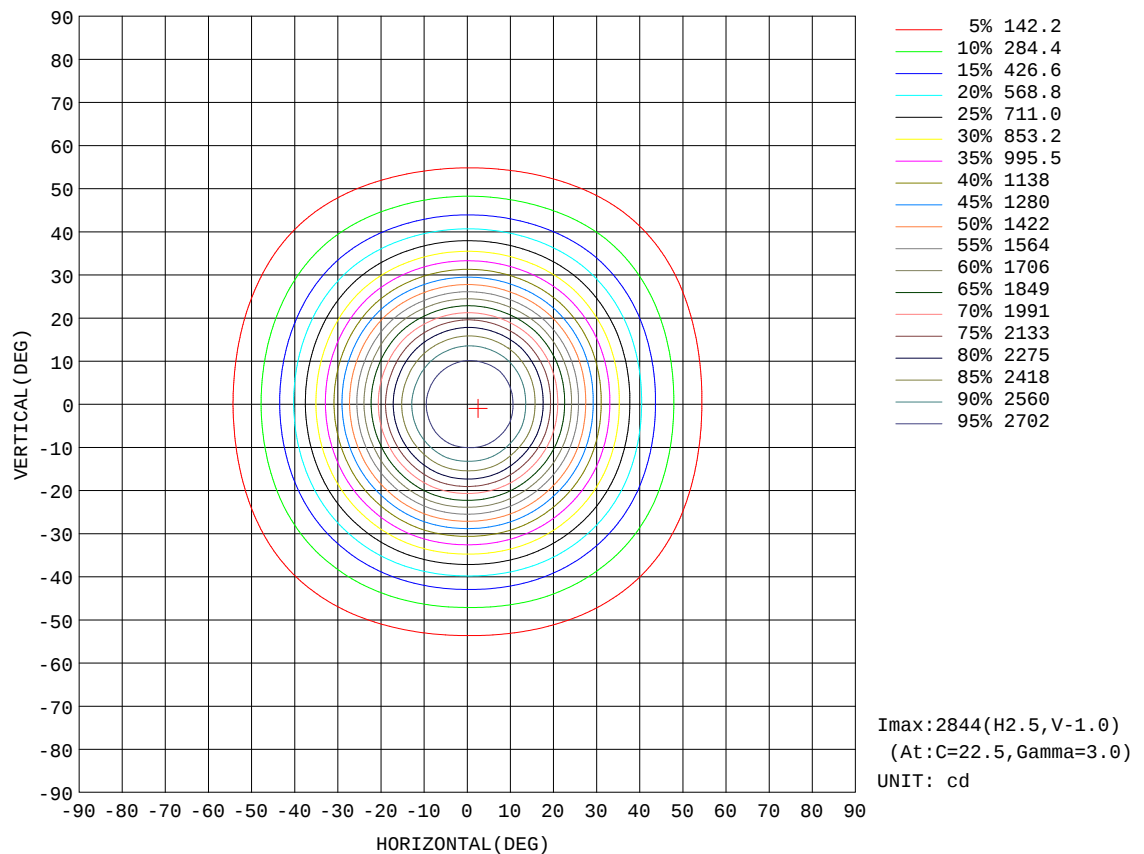
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	80	73	68	80	73	68	79	72	68	64
0.80	89	82	77	88	81	77	87	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:0.0893A P:19.614W PF:0.9533 Freq:49.99Hz Lamp Flux:2702.6x1 lm		
NAME: DL2008-WHTC20S03	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 130mm	Shielding Angle:

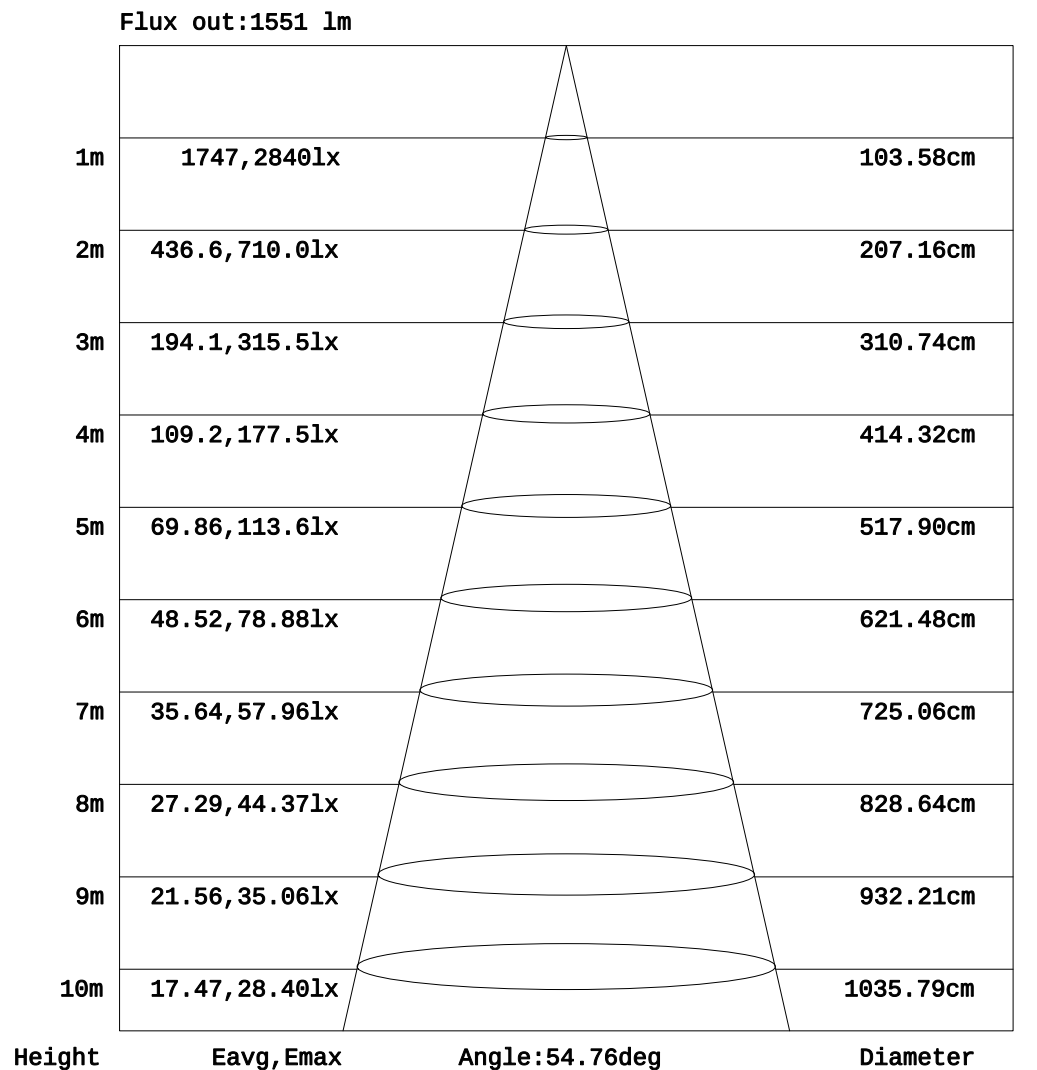


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-03-11

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:0.0893A P:19.614W PF:0.9533 Freq:49.99Hz Lamp Flux:2702.6x1 lm		
NAME: DL2008-WHTC20S03	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 130mm	Shielding Angle:



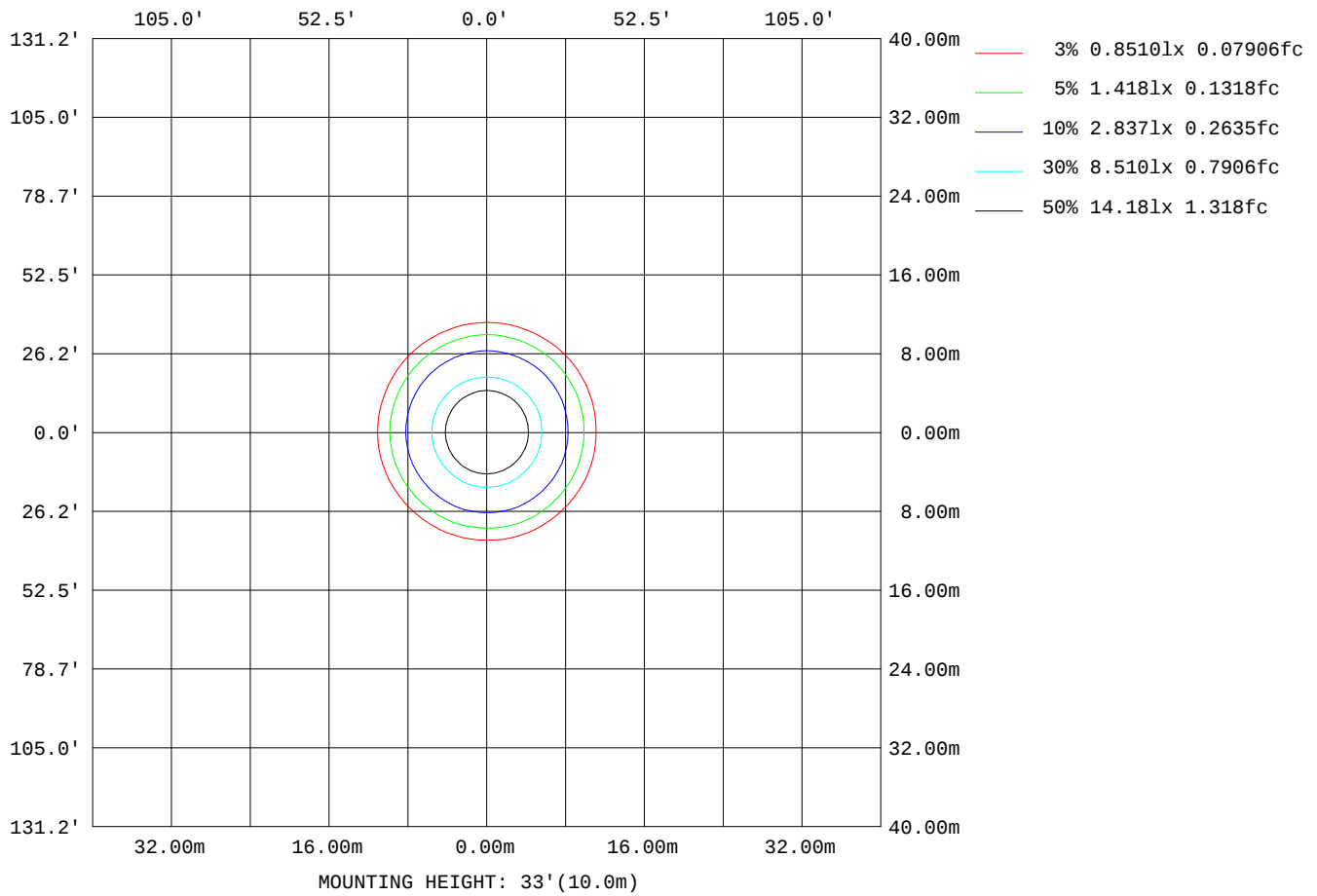
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.0893A P:19.614W PF:0.9533 Freq:49.99Hz Lamp Flux:2702.6x1 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:0.0893A P:19.614W PF:0.9533 Freq:49.99Hz Lamp Flux:2702.6x1 lm		
NAME: DL2008-WHTC20S03	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 130mm	Shielding Angle:

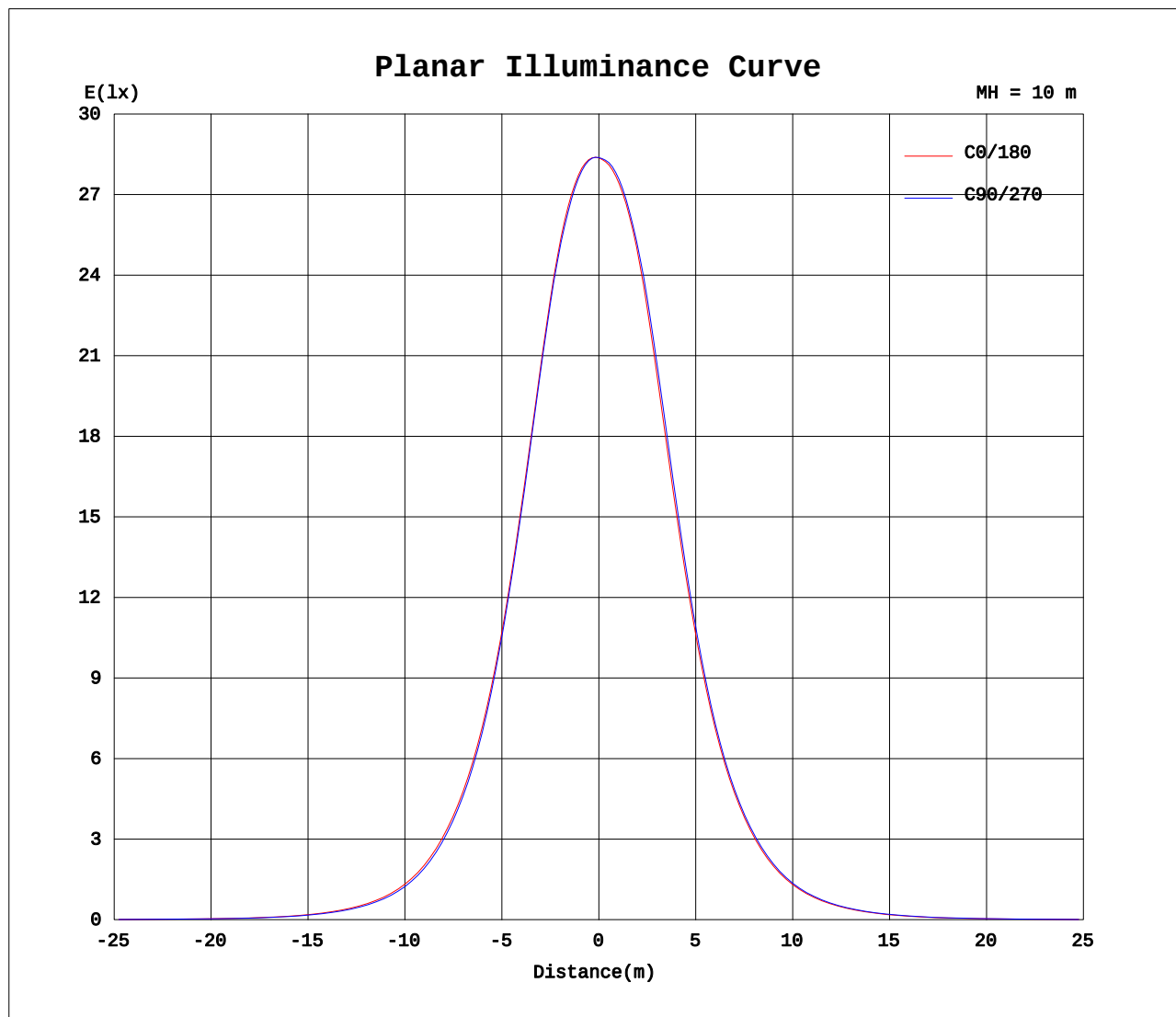
AvgL	cd/m2
L_0~180(65)av	7292
L_0~180(75)av	3412
L_0~180(85)av	3410
L_90~270(65)av	7257
L_90~270(75)av	3400
L_90~270(85)av	3390
L_45(65)av	7255
L_45(75)av	3402
L_45(85)av	3398

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:

```