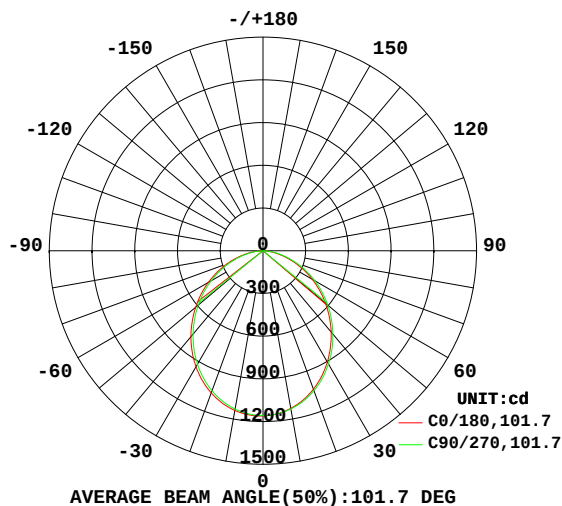


LUMINAIRE PHOTOMETRIC TEST REPORT

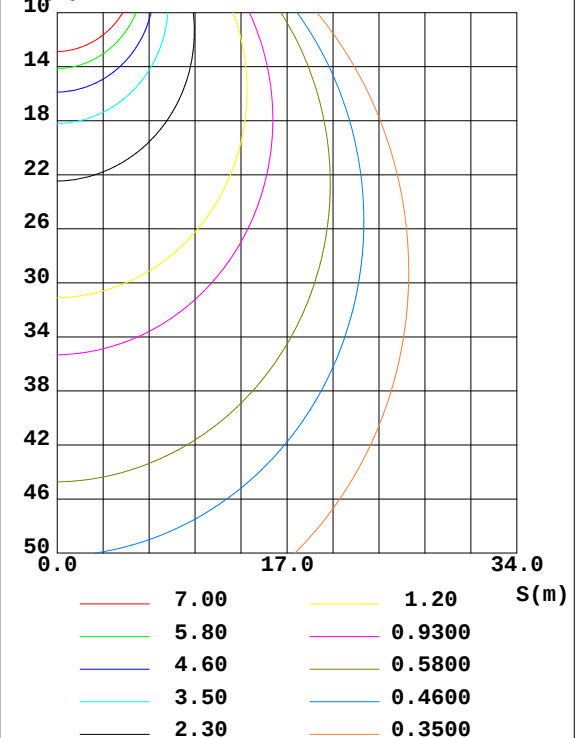
Test:U:230.60V I:0.1302A P:28.413W PF:0.9462 Freq:49.99Hz Lamp Flux:2928.43x1 lm		
NAME: DL30096-WHTC30S01S	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 160mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 103.07 lm/W			
MODEL	2835 144 5700K	I _{max} (cd)	1161	S/MH(C0/180)	1.21
NOMINAL POWER(W)	30	LOR(%)	100.0	S/MH(C90/270)	1.19
RATED VOLTAGE(V)	220-240	TOTAL FLUX(lm)	2928.4	η UP, DN(C0-180)	0.0, 49.8
NOMINAL FLUX(lm)	2928.43	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 50.2
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	220	η down(%)	100.0	CIBSE SHR MAX	1.35

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: 2024-05-22

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity: 65.0%
Test Distance: 7.450m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

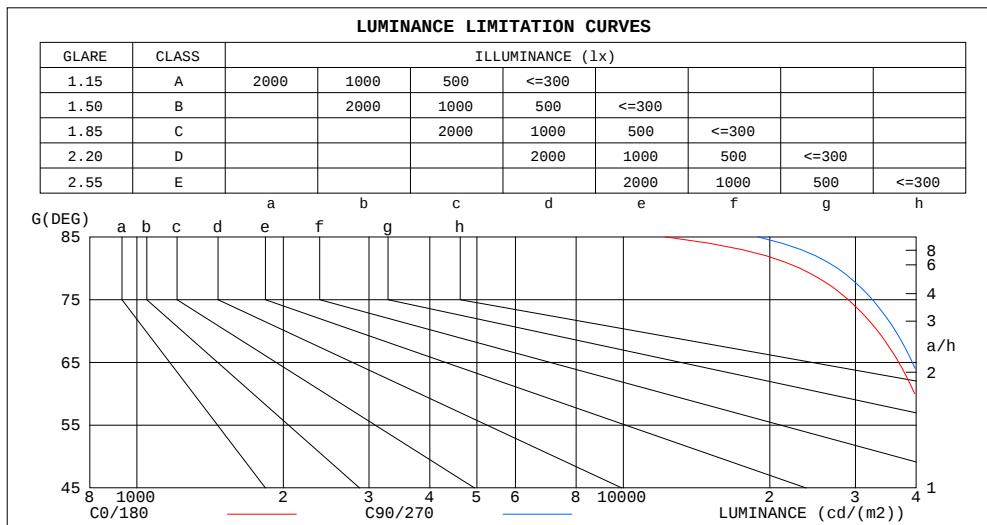
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1124	1125	1129	1132	1139	1135	1129	1123	0- 10	109.1	109.1	3.73, 3.73
20	1035	1038	1046	1053	1063	1057	1047	1037	10- 20	308.3	417.5	14.3, 14.3
30	903.5	908.3	919.5	929.5	941.0	933.4	920.1	908.1	20- 30	454.8	872.3	29.8, 29.8
40	744.8	750.8	763.8	775.6	787.3	778.9	764.1	750.7	30- 40	528.2	1400	47.8, 47.8
50	573.5	580.0	593.9	606.2	617.3	608.8	593.5	579.8	40- 50	524.5	1925	65.7, 65.7
60	399.4	406.5	420.3	432.3	442.2	433.7	418.9	405.8	50- 60	453.2	2378	81.2, 81.2
70	229.3	236.5	249.3	260.4	269.1	261.4	248.1	235.5	60- 70	329.9	2708	92.5, 92.5
80	80.54	86.17	96.28	105.5	111.7	105.7	94.27	84.65	70- 80	178.9	2887	98.6, 98.6
90	1.714	1.679	1.664	1.911	2.081	1.247	0.9844	0.9844	80- 90	41.42	2928	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: 2024-05-22

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-2000B_V1 SYSTEM V2.00.428
 Humidity: 65.0%
 Test Distance: 7.450m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.60V I:0.1302A P:28.413W PF:0.9462 Freq:49.99Hz Lamp Flux:2928.43x1 lm		
NAME: DL30096-WHTC30S01S	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 160mm	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	12176	18881
80	23063	27570
75	28966	32514
70	33340	36252
65	36827	39277
60	39719	41802
55	42168	43969
50	44363	45948
45	46406	47819

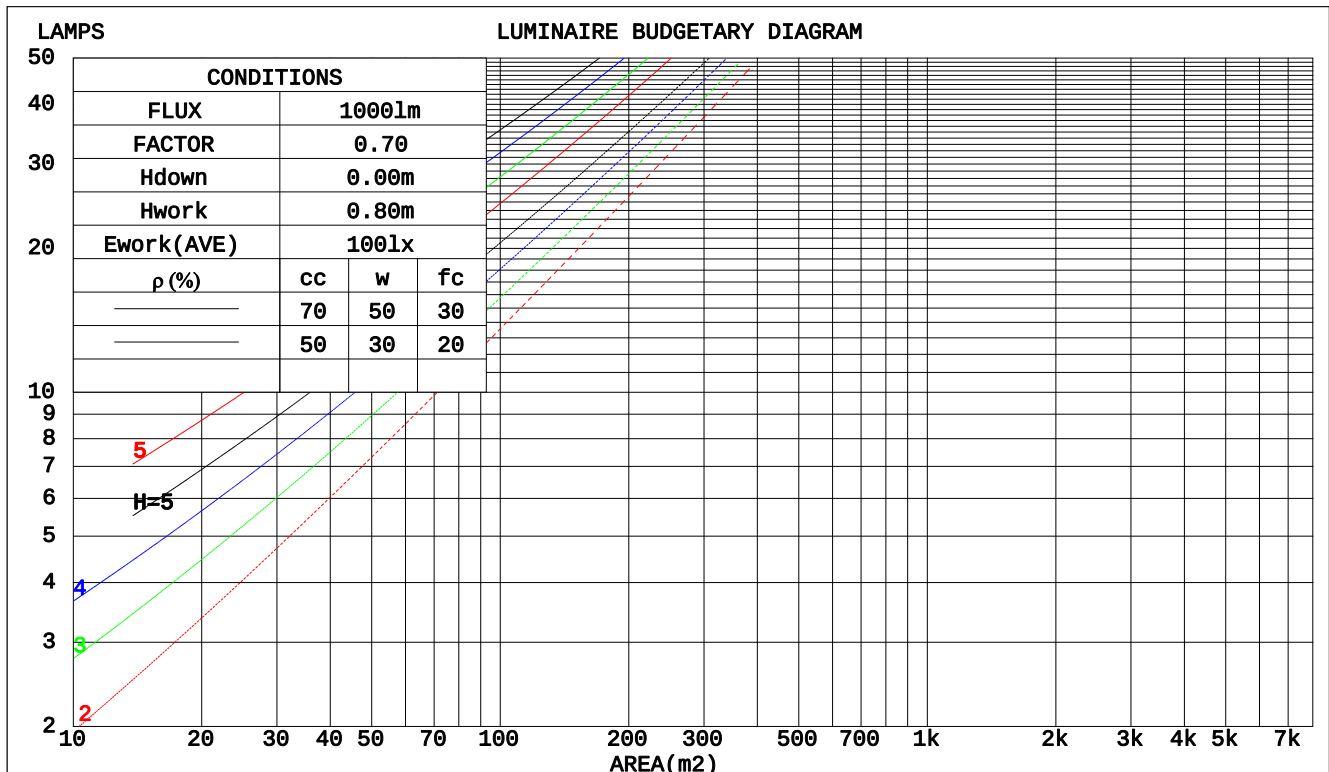
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2024-05-22

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity: 65.0%
Test Distance: 7.450m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.60V I:0.1302A P:28.413W PF:0.9462 Freq:49.99Hz Lamp Flux:2928.43x1 lm		
NAME: DL30096-WHTC30S01S	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 160mm	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	1.05	1.01	.97	1.02	.99	.95	.98	.95	.92	.94	.92	.89	.91	.89	.87	.85
2.0	.92	.85	.79	.90	.84	.79	.86	.81	.77	.83	.79	.75	.80	.76	.73	.71
3.0	.81	.73	.67	.79	.72	.66	.76	.70	.65	.74	.68	.64	.71	.66	.63	.60
4.0	.72	.63	.57	.70	.62	.56	.68	.61	.56	.66	.60	.55	.64	.58	.54	.52
5.0	.64	.56	.49	.63	.55	.49	.61	.54	.48	.59	.53	.48	.57	.52	.47	.45
6.0	.58	.49	.43	.57	.49	.43	.55	.48	.42	.54	.47	.42	.52	.46	.42	.40
7.0	.53	.44	.38	.52	.44	.38	.50	.43	.38	.49	.42	.37	.48	.42	.37	.35
8.0	.48	.40	.34	.48	.40	.34	.46	.39	.34	.45	.38	.34	.44	.38	.33	.32
9.0	.44	.36	.31	.44	.36	.31	.43	.36	.31	.42	.35	.30	.41	.35	.30	.28
10.0	.41	.33	.28	.40	.33	.28	.39	.33	.28	.39	.32	.28	.38	.32	.28	.26



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2024-05-22

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.450m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:230.60V I:0.1302A P:28.413W PF:0.9462 Freq:49.99Hz Lamp Flux:2928.43x1 lm					
NAME: DL30096-WHTC30S01S			TYPE:		WEIGHT:
SPEC.: white RA80 3000K+5700K			DIM.:		SERIAL No.:
MFR.:			SUR.: 160mm		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	.296	.168	.053	.288	.165	.052	.275	.158	.050	.263	.152	.049	.252	.146	.047	
2.0	.280	.154	.047	.274	.151	.047	.263	.146	.045	.252	.141	.044	.242	.137	.043	
3.0	.261	.139	.042	.255	.137	.041	.245	.133	.040	.236	.129	.040	.227	.126	.039	
4.0	.242	.126	.037	.237	.124	.037	.228	.121	.036	.219	.118	.036	.212	.115	.035	
5.0	.224	.114	.033	.220	.113	.033	.212	.110	.032	.204	.108	.032	.197	.105	.032	
6.0	.208	.104	.030	.205	.103	.030	.197	.101	.029	.191	.099	.029	.185	.097	.029	
7.0	.194	.096	.027	.191	.095	.027	.185	.093	.027	.179	.092	.027	.173	.090	.026	
8.0	.182	.089	.025	.179	.088	.025	.173	.087	.025	.168	.085	.025	.163	.084	.024	
9.0	.171	.083	.023	.168	.082	.023	.163	.081	.023	.158	.079	.023	.153	.078	.023	
10.0	.161	.077	.021	.158	.076	.021	.154	.075	.021	.149	.074	.021	.145	.073	.021	

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	.179	.156	.135	.153	.134	.117	.105	.092	.081	.060	.053	.047	.019	.017	.015	
2.0	.171	.132	.099	.146	.114	.086	.100	.079	.060	.058	.046	.035	.019	.015	.011	
3.0	.163	.114	.076	.140	.099	.066	.096	.068	.046	.055	.040	.027	.018	.013	.009	
4.0	.155	.101	.059	.133	.087	.052	.091	.061	.036	.053	.036	.022	.017	.012	.007	
5.0	.148	.090	.048	.127	.078	.042	.087	.055	.030	.051	.032	.018	.016	.010	.006	
6.0	.140	.082	.040	.121	.071	.035	.083	.050	.025	.048	.029	.015	.016	.010	.005	
7.0	.134	.075	.034	.115	.065	.029	.079	.046	.021	.046	.027	.012	.015	.009	.004	
8.0	.127	.069	.029	.110	.060	.025	.076	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.121	.064	.026	.105	.056	.022	.072	.039	.016	.042	.023	.009	.014	.008	.003	
10.0	.116	.060	.023	.100	.052	.020	.069	.037	.014	.040	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2024-05-22

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.450m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.60V I:0.1302A P:28.413W PF:0.9462 Freq:49.99Hz Lamp Flux:2928.43x1 lm											
NAME: DL30096-WHTC30S01S						TYPE:			WEIGHT:		
SPEC.: white RA80 3000K+5700K						DIM.:			SERIAL No.:		
MFR.:						SUR.: 160mm			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	21.9	23.4	22.2	23.6	23.8	22.1	23.6	22.3	23.8	24.0	
	3H	23.2	24.5	23.5	24.8	25.0	23.4	24.8	23.7	25.0	25.3
	4H	23.6	24.9	23.9	25.2	25.4	24.0	25.3	24.3	25.5	25.8
	6H	23.9	25.1	24.2	25.4	25.7	24.3	25.5	24.6	25.8	26.1
	8H	24.0	25.1	24.3	25.4	25.7	24.4	25.6	24.7	25.8	26.1
	12H	23.9	25.1	24.3	25.4	25.7	24.4	25.5	24.8	25.8	26.1
4H	2H	22.4	23.7	22.8	24.0	24.3	22.6	23.9	22.9	24.1	24.4
	3H	23.9	25.0	24.3	25.3	25.6	24.1	25.3	24.5	25.6	25.9
	4H	24.5	25.5	24.9	25.8	26.2	24.8	25.8	25.1	26.1	26.5
	6H	24.9	25.8	25.3	26.1	26.5	25.2	26.1	25.6	26.5	26.8
	8H	24.9	25.8	25.4	26.2	26.5	25.3	26.2	25.8	26.6	26.9
	12H	25.0	25.7	25.4	26.1	26.5	25.4	26.2	25.8	26.6	27.0
8H	4H	24.7	25.5	25.1	25.9	26.3	25.0	25.8	25.4	26.2	26.6
	6H	25.2	25.9	25.6	26.3	26.7	25.5	26.2	26.0	26.6	27.1
	8H	25.3	26.0	25.8	26.4	26.8	25.7	26.3	26.2	26.8	27.2
	12H	25.4	25.9	25.9	26.4	26.8	25.8	26.4	26.3	26.8	27.3
12H	4H	24.7	25.5	25.1	25.9	26.3	24.9	25.7	25.4	26.1	26.5
	6H	25.2	25.8	25.7	26.3	26.7	25.5	26.2	26.0	26.6	27.0
	8H	25.4	25.9	25.9	26.4	26.8	25.8	26.3	26.2	26.7	27.2
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.2					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
2.0H	+ 0.3 / - 0.3					+ 0.3 / - 0.3					

CIE Pub.117, 2928 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.7)
Area: 0.02011 m2

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2024-05-22

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.450m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.60V I:0.1302A P:28.413W PF:0.9462 Freq:49.99Hz Lamp Flux:2928.43x1 lm		
NAME: DL30096-WHTC30S01S	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 160mm	Shielding Angle:

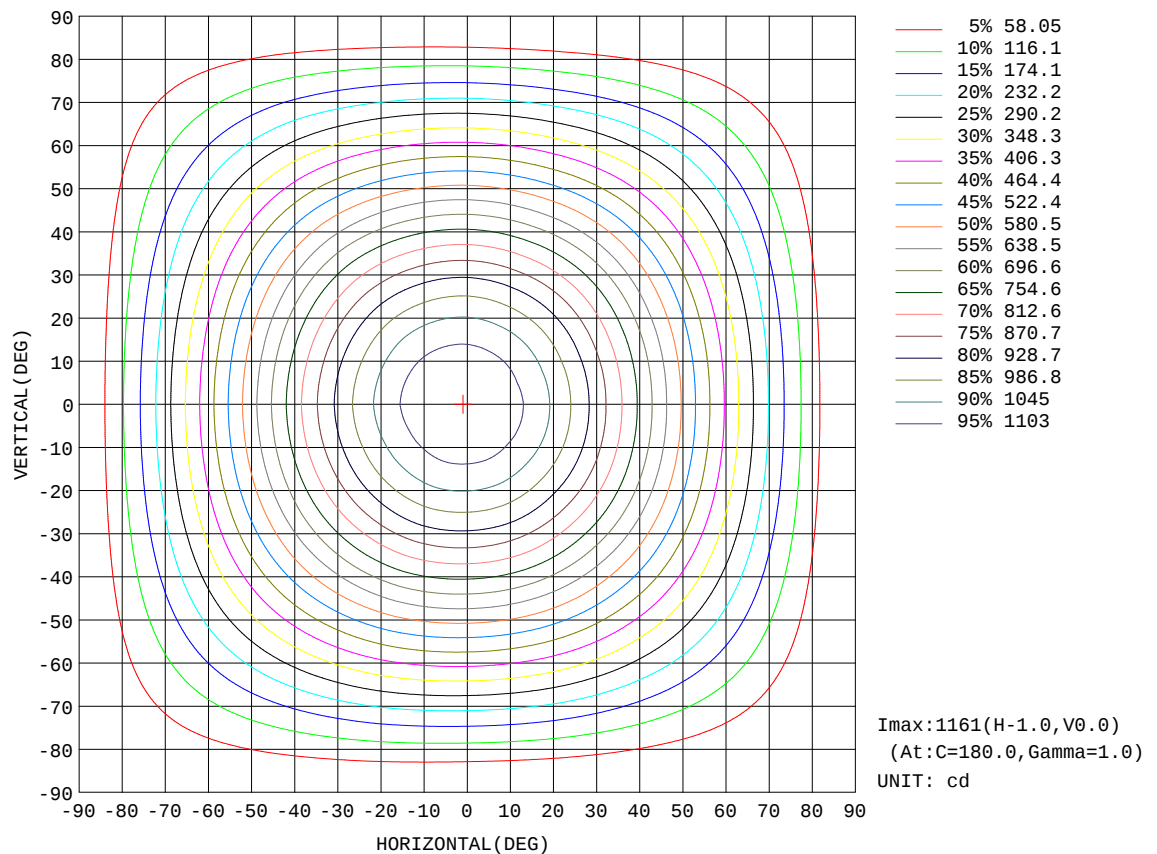
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	59	48	41	59	48	41	57	47	41	35
0.80	69	58	51	68	58	51	67	57	50	44
1.00	78	67	60	77	66	60	74	68	59	52
1.25	85	75	68	83	74	67	81	72	67	59
1.50	90	80	73	88	79	73	85	77	72	64
2.00	96	88	82	94	87	81	91	85	80	72
2.50	100	92	87	98	91	86	94	88	84	76
3.00	103	97	91	101	95	90	97	92	88	80
4.00	107	102	97	105	100	96	100	96	93	84
5.00	109	105	101	107	103	99	102	99	96	87
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:2024-05-22

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.450m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:230.60V I:0.1302A P:28.413W PF:0.9462 Freq:49.99Hz Lamp Flux:2928.43x1 lm		
NAME: DL30096-WHTC30S01S	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 160mm	Shielding Angle:



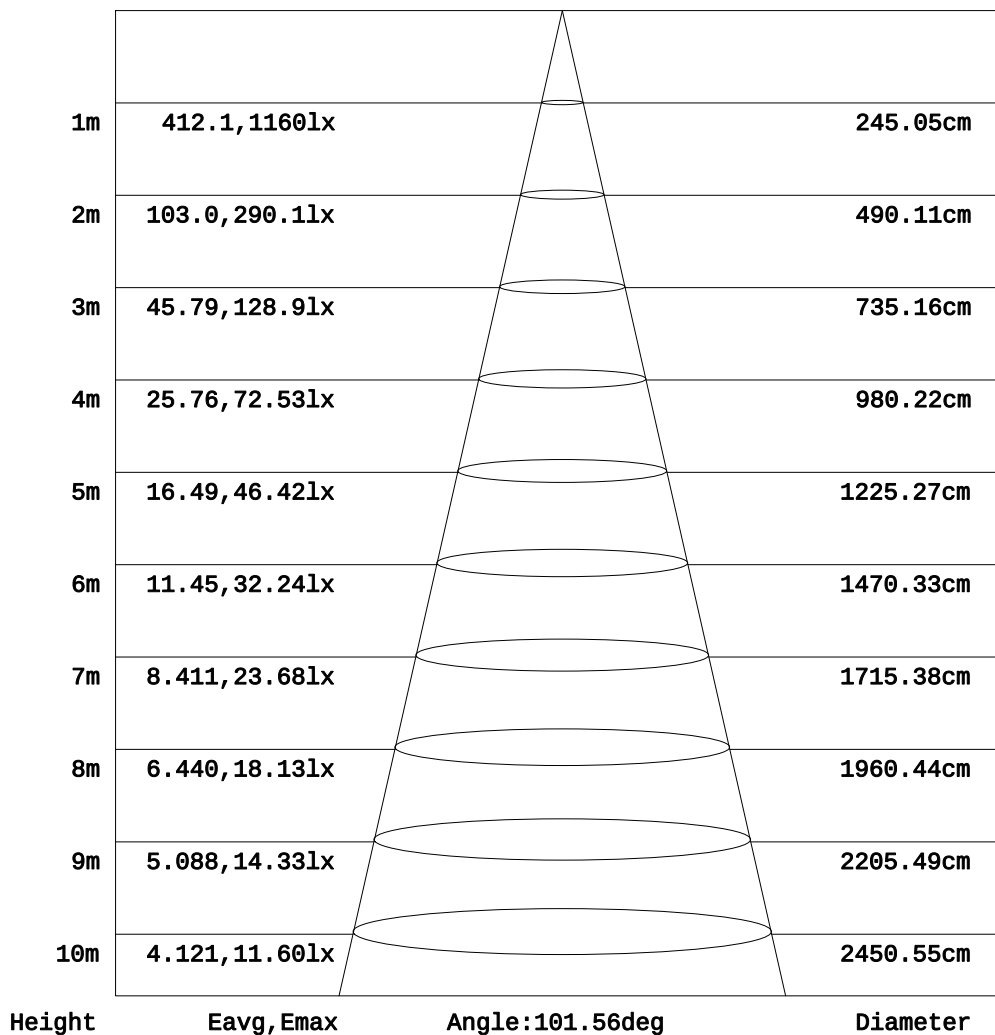
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2024-05-22

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.450m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.60V I:0.1302A P:28.413W PF:0.9462 Freq:49.99Hz Lamp Flux:2928.43x1 lm		
NAME: DL30096-WHTC30S01S	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 160mm	Shielding Angle:

Flux out:1975 lm



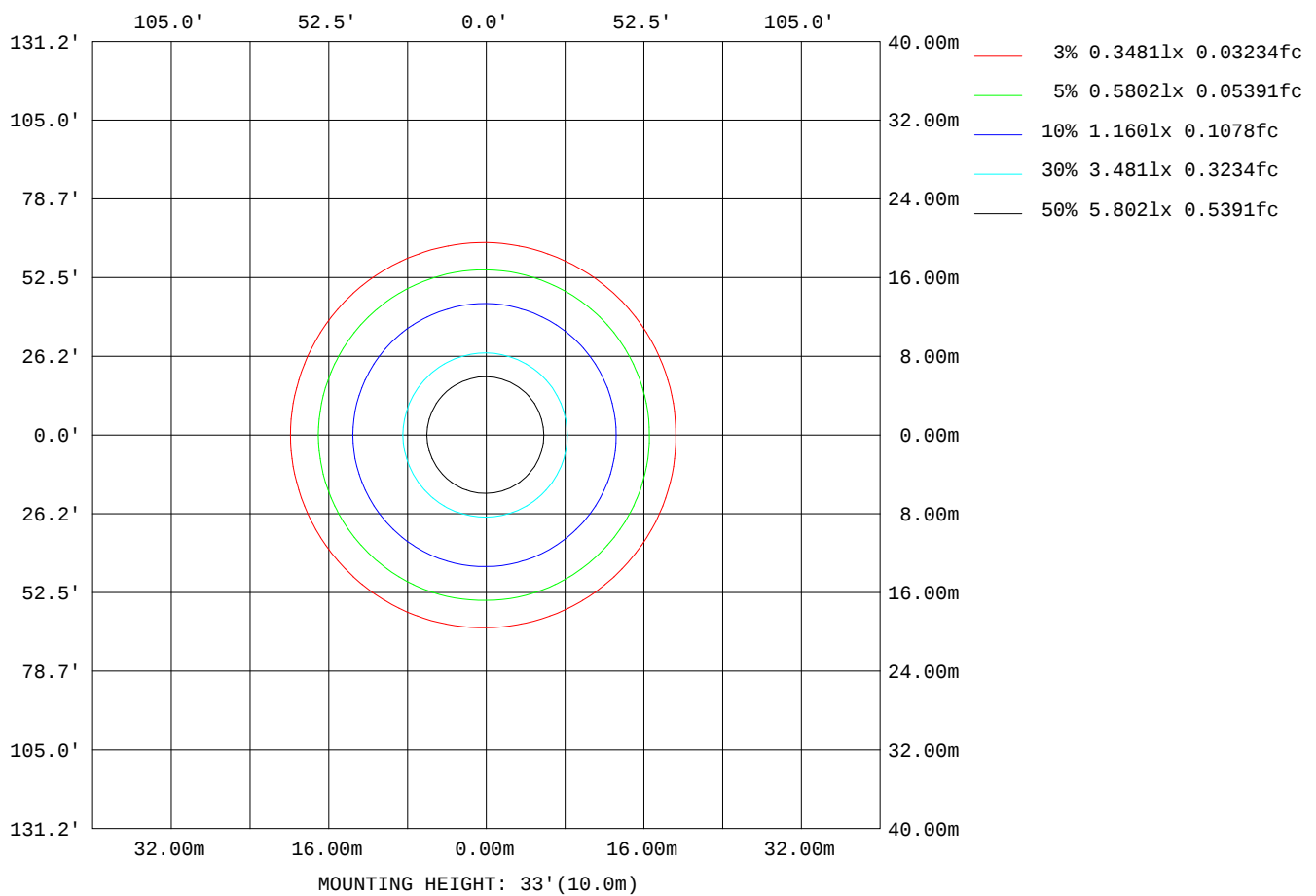
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 2024-05-22

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-2000B_V1 SYSTEM V2.00.428
 Humidity: 65.0%
 Test Distance: 7.450m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:230.60V I:0.1302A P:28.413W PF:0.9462 Freq:49.99Hz Lamp Flux:2928.43x1 lm		
NAME: DL30096-WHTC30S01S	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 160mm	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2024-05-22

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.450m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:230.60V I:0.1302A P:28.413W PF:0.9462 Freq:49.99Hz Lamp Flux:2928.43x1 lm		
NAME: DL30096-WHTC30S01S	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 160mm	Shielding Angle:

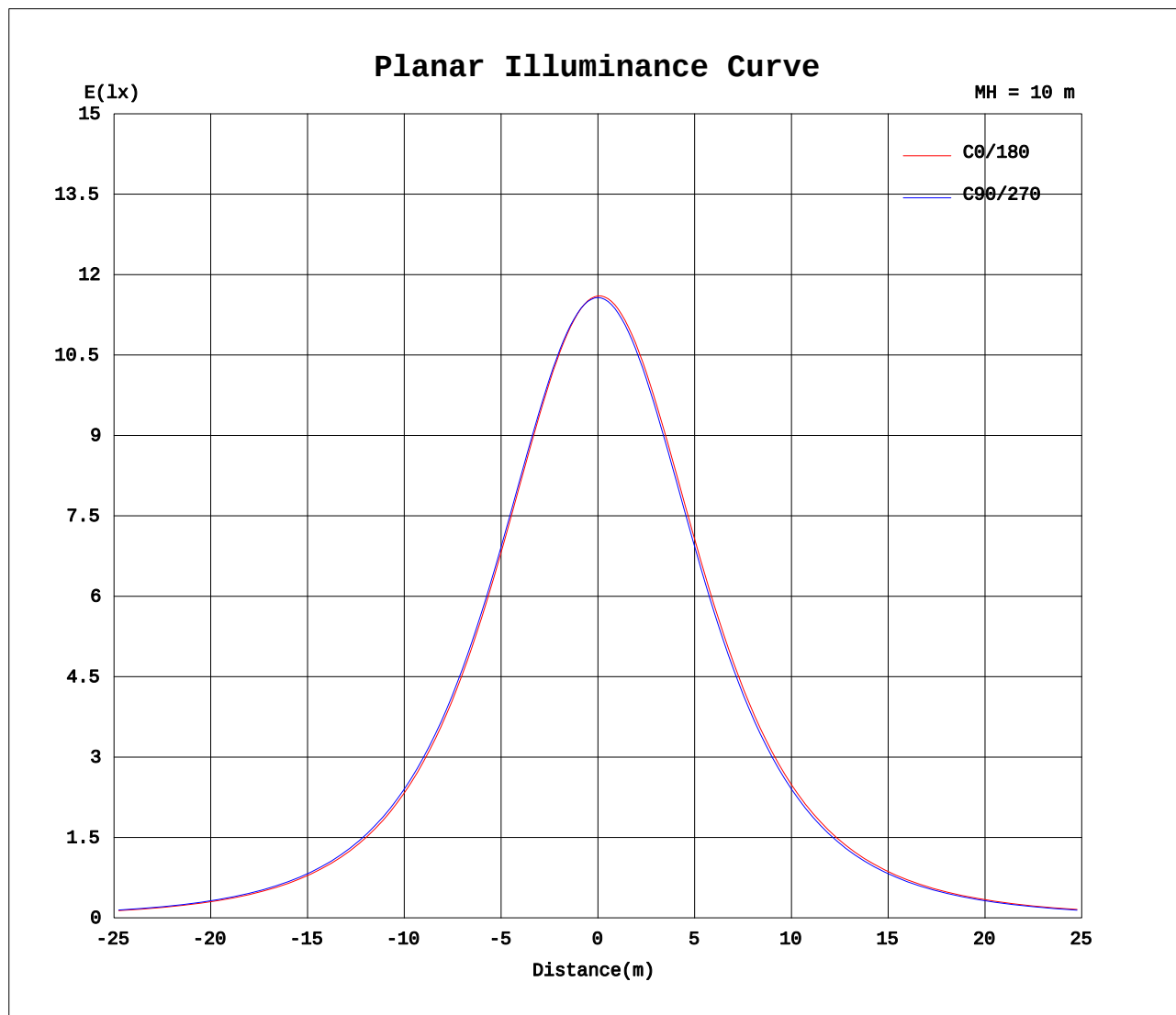
AvgL	cd/m2
L_0~180(65)av	39274
L_0~180(75)av	32449
L_0~180(85)av	19161
L_90~270(65)av	39183
L_90~270(75)av	32320
L_90~270(85)av	18466
L_45(65)av	39179
L_45(75)av	32338
L_45(85)av	18743

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 2024-05-22

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-2000B_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: 2024-05-22

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-2000B_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-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.450m [K=1.0000]
Remarks:

```