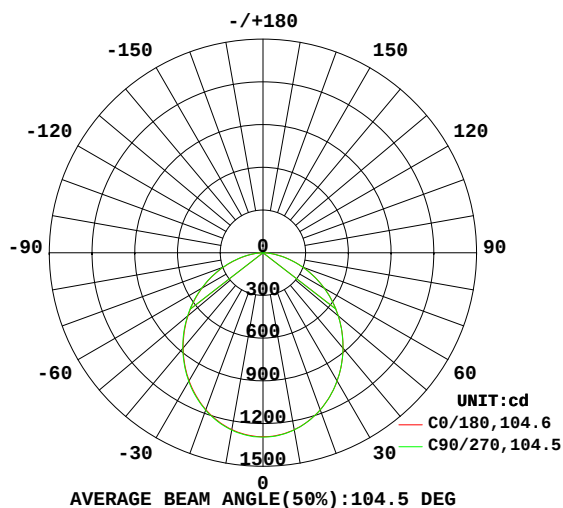


LUMINAIRE PHOTOMETRIC TEST REPORT

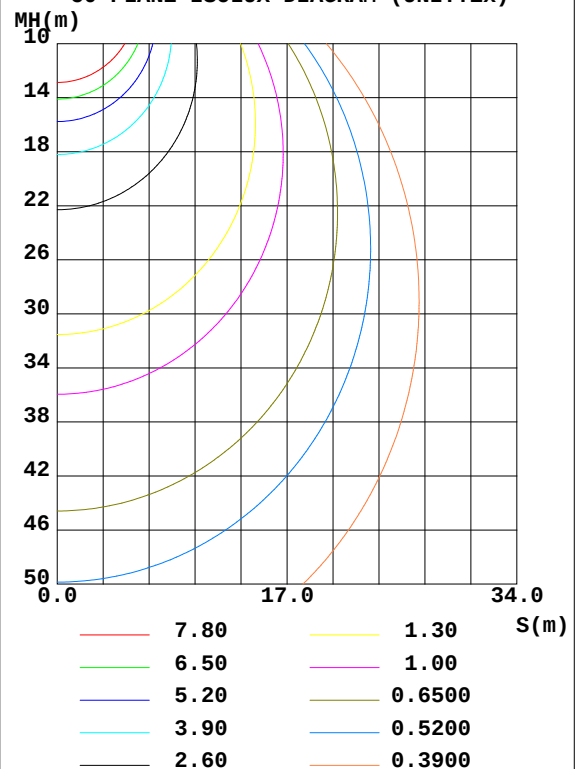
Test:U:231.82V I:0.1270A P:28.227W PF:0.9588 Freq:49.99Hz Lamp Flux:3377.8x1 lm		
NAME: DL3009-WHTC30S01	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 160mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 119.66 lm/W			
MODEL	2835 144 4000K	I _{max} (cd)	1295	S/MH(C0/180)	1.20
NOMINAL POWER(W)	30	LOR(%)	100.0	S/MH(C90/270)	1.20
RATED VOLTAGE(V)	220-240	TOTAL FLUX(lm)	3377.8	η UP, DN(C0-180)	0.0, 50.0
NOMINAL FLUX(lm)	3377.8	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 50.0
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: 2025-07-18

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:

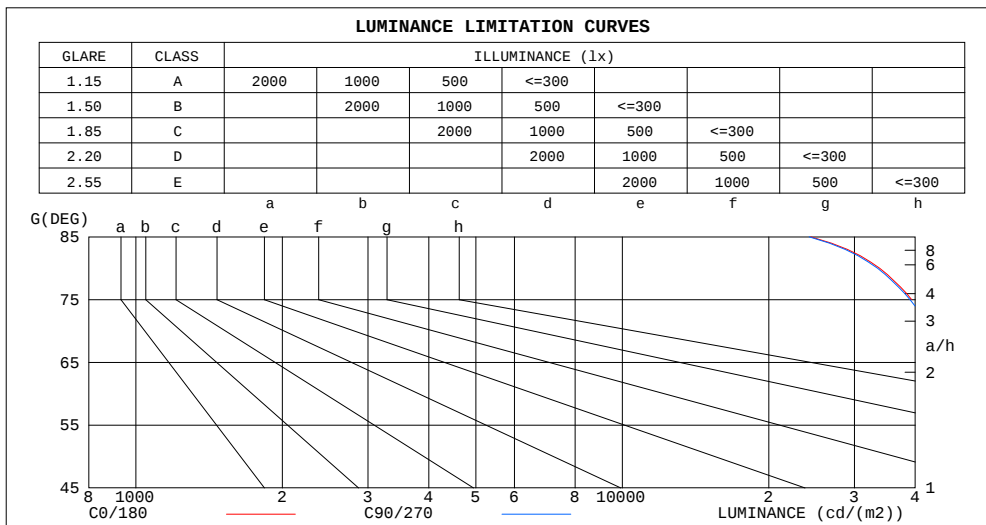
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1262	1264	1264	1263	1261	1263	1265	1265	0- 10	122.1	122.1	3.61, 3.61
20	1174	1176	1175	1174	1173	1175	1177	1178	10- 20	345.6	467.7	13.8, 13.8
30	1041	1042	1040	1039	1039	1041	1043	1045	20- 30	512.6	980.2	29, 29
40	875.1	875.8	874.3	872.0	872.7	874.1	877.1	879.1	30- 40	601.0	1581	46.8, 46.8
50	691.3	691.7	690.0	687.4	687.9	689.2	691.9	694.7	40- 50	605.1	2186	64.7, 64.7
60	497.6	497.7	495.7	492.8	493.6	494.4	497.2	500.6	50- 60	531.2	2718	80.5, 80.5
70	299.7	299.6	297.9	295.2	296.3	296.7	299.8	302.9	60- 70	393.0	3111	92.1, 92.1
80	118.0	118.0	116.9	114.9	114.2	114.4	117.6	120.2	70- 80	216.0	3327	98.5, 98.5
90	1.608	1.594	1.594	1.599	1.700	1.709	1.713	1.713	80- 90	51.22	3378	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:2025-07-18

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:231.82V I:0.1270A P:28.227W PF:0.9588 Freq:49.99Hz Lamp Flux:3377.8x1 lm		
NAME: DL3009-WHTC30S01	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	24403	24216
80	33802	33462
75	39324	39036
70	43566	43305
65	46854	46643
60	49483	49300
55	51606	51464
50	53477	53376
45	55202	55118

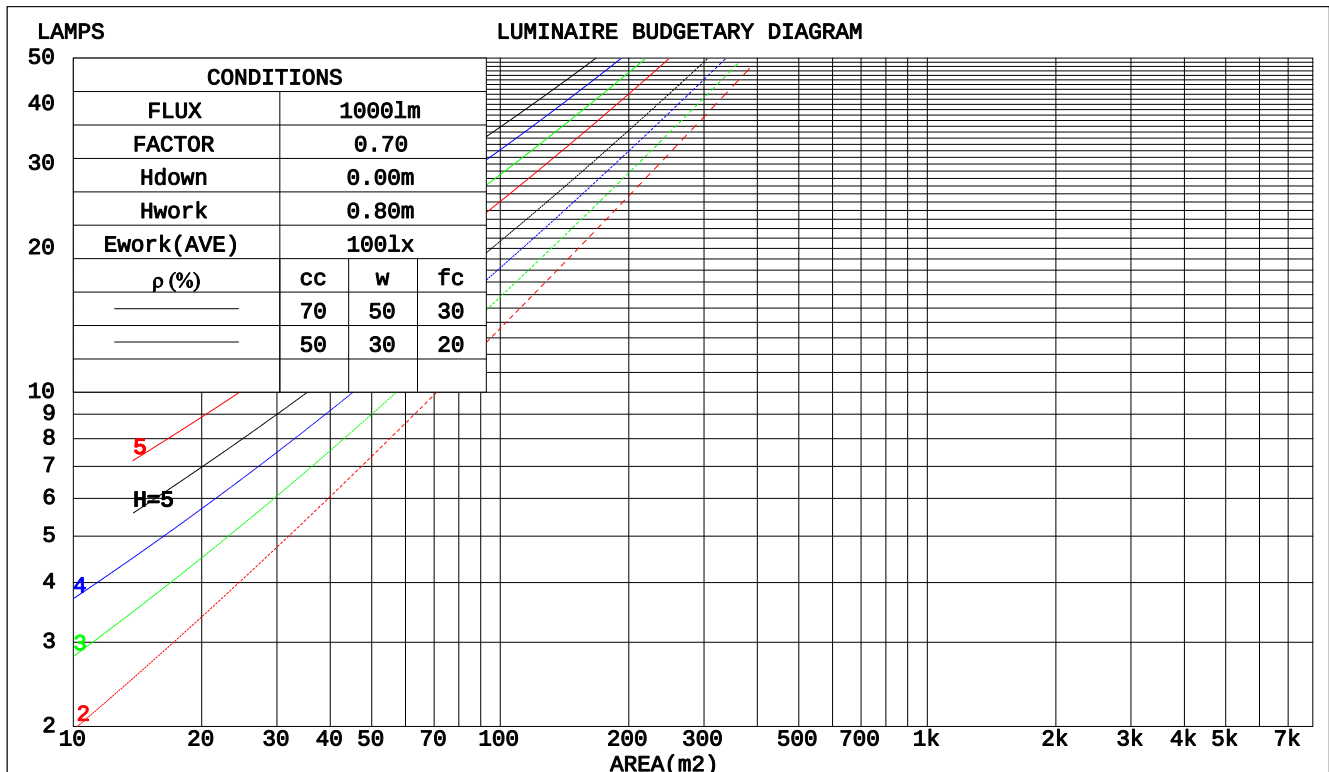
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2025-07-18

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:231.82V I:0.1270A P:28.227W PF:0.9588 Freq:49.99Hz Lamp Flux:3377.8x1 lm		
NAME: DL3009-WHTC30S01	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	1.04	1.00	.96	1.02	.98	.95	.98	.95	.92	.94	.91	.89	.90	.88	.86	.84
2.0	.91	.85	.79	.89	.83	.78	.86	.81	.76	.83	.78	.74	.80	.76	.73	.71
3.0	.80	.72	.66	.79	.71	.65	.76	.69	.64	.73	.68	.63	.70	.66	.62	.60
4.0	.71	.63	.56	.70	.62	.56	.68	.60	.55	.65	.59	.54	.63	.58	.53	.51
5.0	.64	.55	.48	.63	.54	.48	.61	.53	.48	.59	.52	.47	.57	.51	.47	.44
6.0	.58	.49	.42	.57	.48	.42	.55	.47	.42	.53	.47	.41	.52	.46	.41	.39
7.0	.52	.44	.38	.51	.43	.37	.50	.43	.37	.48	.42	.37	.47	.41	.37	.35
8.0	.48	.39	.34	.47	.39	.33	.46	.38	.33	.45	.38	.33	.43	.37	.33	.31
9.0	.44	.36	.30	.43	.35	.30	.42	.35	.30	.41	.35	.30	.40	.34	.30	.28
10.0	.41	.33	.27	.40	.32	.27	.39	.32	.27	.38	.32	.27	.37	.31	.27	.25



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2025-07-18

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:231.82V I:0.1270A P:28.227W PF:0.9588 Freq:49.99Hz Lamp Flux:3377.8x1 lm					
NAME: DL3009-WHTC30S01			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	.300	.170	.054	.293	.167	.053	.279	.160	.051	.267	.154	.049	.256	.148	.048	
2.0	.284	.156	.048	.278	.153	.047	.266	.148	.046	.255	.143	.045	.245	.139	.044	
3.0	.264	.140	.042	.258	.138	.042	.248	.134	.041	.238	.131	.040	.230	.127	.039	
4.0	.244	.127	.037	.239	.125	.037	.230	.122	.036	.222	.119	.036	.214	.116	.035	
5.0	.226	.115	.033	.222	.114	.033	.214	.111	.033	.206	.109	.032	.199	.106	.032	
6.0	.210	.105	.030	.206	.104	.030	.199	.102	.030	.192	.100	.029	.186	.098	.029	
7.0	.196	.097	.027	.192	.096	.027	.186	.094	.027	.180	.092	.027	.174	.091	.027	
8.0	.183	.089	.025	.180	.089	.025	.174	.087	.025	.169	.086	.025	.164	.084	.024	
9.0	.172	.083	.023	.169	.082	.023	.164	.081	.023	.159	.080	.023	.154	.078	.023	
10.0	.162	.078	.022	.159	.077	.021	.155	.076	.021	.150	.075	.021	.146	.073	.021	

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	.180	.156	.135	.154	.134	.116	.105	.092	.080	.061	.053	.047	.019	.017	.015	
2.0	.171	.132	.099	.147	.114	.086	.100	.079	.060	.058	.046	.035	.019	.015	.011	
3.0	.163	.114	.075	.140	.099	.065	.096	.068	.046	.055	.040	.027	.018	.013	.009	
4.0	.156	.101	.059	.134	.087	.051	.092	.061	.036	.053	.036	.021	.017	.012	.007	
5.0	.148	.090	.048	.127	.078	.042	.088	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.141	.082	.040	.121	.071	.035	.084	.050	.024	.049	.029	.015	.016	.010	.005	
7.0	.134	.075	.034	.115	.065	.029	.080	.046	.021	.046	.027	.012	.015	.009	.004	
8.0	.128	.069	.029	.110	.060	.025	.076	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.122	.064	.025	.105	.056	.022	.073	.039	.016	.042	.023	.009	.014	.008	.003	
10.0	.116	.060	.023	.100	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-07-18

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:231.82V I:0.1270A P:28.227W PF:0.9588 Freq:49.99Hz Lamp Flux:3377.8x1 lm											
NAME: DL3009-WHTC30S01						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		22.3	23.8	22.5	24.0	24.2	22.3	23.8	22.5	24.0	24.2
	3H	23.7	25.1	24.0	25.3	25.5	23.7	25.0	24.0	25.3	25.5
	4H	24.2	25.5	24.5	25.8	26.0	24.2	25.5	24.5	25.8	26.0
	6H	24.6	25.8	24.9	26.1	26.4	24.6	25.8	24.9	26.1	26.3
	8H	24.7	25.9	25.0	26.2	26.4	24.7	25.8	25.0	26.1	26.4
	12H	24.7	25.9	25.1	26.2	26.5	24.7	25.8	25.0	26.1	26.4
4H	2H	22.8	24.2	23.2	24.4	24.7	22.8	24.2	23.2	24.4	24.7
	3H	24.4	25.6	24.8	25.9	26.2	24.4	25.6	24.8	25.9	26.2
	4H	25.1	26.2	25.5	26.5	26.8	25.1	26.1	25.5	26.5	26.8
	6H	25.6	26.5	26.0	26.9	27.2	25.6	26.5	26.0	26.8	27.2
	8H	25.7	26.6	26.1	27.0	27.3	25.7	26.6	26.1	26.9	27.3
	12H	25.8	26.6	26.2	27.0	27.4	25.8	26.6	26.2	27.0	27.4
8H	4H	25.3	26.2	25.8	26.6	27.0	25.3	26.2	25.7	26.6	26.9
	6H	26.0	26.7	26.4	27.1	27.5	25.9	26.6	26.4	27.1	27.5
	8H	26.2	26.8	26.6	27.2	27.7	26.1	26.8	26.6	27.2	27.7
	12H	26.3	26.8	26.8	27.3	27.8	26.3	26.8	26.8	27.3	27.7
12H	4H	25.3	26.1	25.8	26.5	26.9	25.3	26.1	25.8	26.5	26.9
	6H	26.0	26.6	26.5	27.1	27.5	26.0	26.6	26.4	27.0	27.5
	8H	26.2	26.8	26.7	27.2	27.7	26.2	26.8	26.7	27.2	27.7
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.2					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					

CIE Pub.117, 3378 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 4.2)
Area: 0.02011 m2

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-07-18

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:231.82V I:0.1270A P:28.227W PF:0.9588 Freq:49.99Hz Lamp Flux:3377.8x1 lm		
NAME: DL3009-WHTC30S01	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 160mm	Shielding Angle:

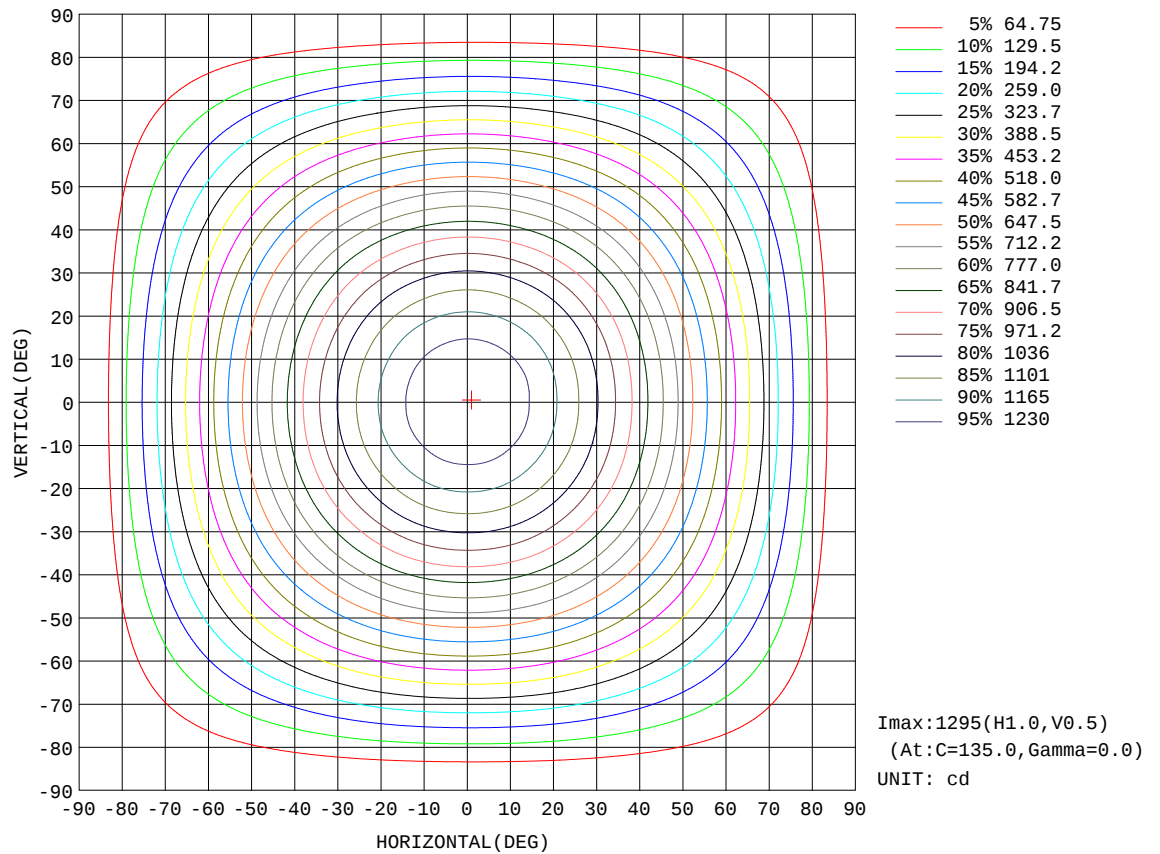
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	59	47	41	58	47	40	57	47	40	34
0.80	69	57	50	68	57	50	66	56	50	43
1.00	77	66	59	76	66	59	74	67	58	51
1.25	84	74	67	83	73	67	80	72	66	59
1.50	89	79	73	87	79	72	84	77	71	64
2.00	96	87	81	94	86	80	91	84	79	71
2.50	100	92	86	98	91	85	94	88	83	75
3.00	103	96	91	101	95	90	97	92	88	79
4.00	107	101	97	104	99	95	100	96	93	84
5.00	109	104	101	107	102	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:2025-07-18

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:231.82V I:0.1270A P:28.227W PF:0.9588 Freq:49.99Hz Lamp Flux:3377.8x1 lm		
NAME: DL3009-WHTC30S01	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 160mm	Shielding Angle:

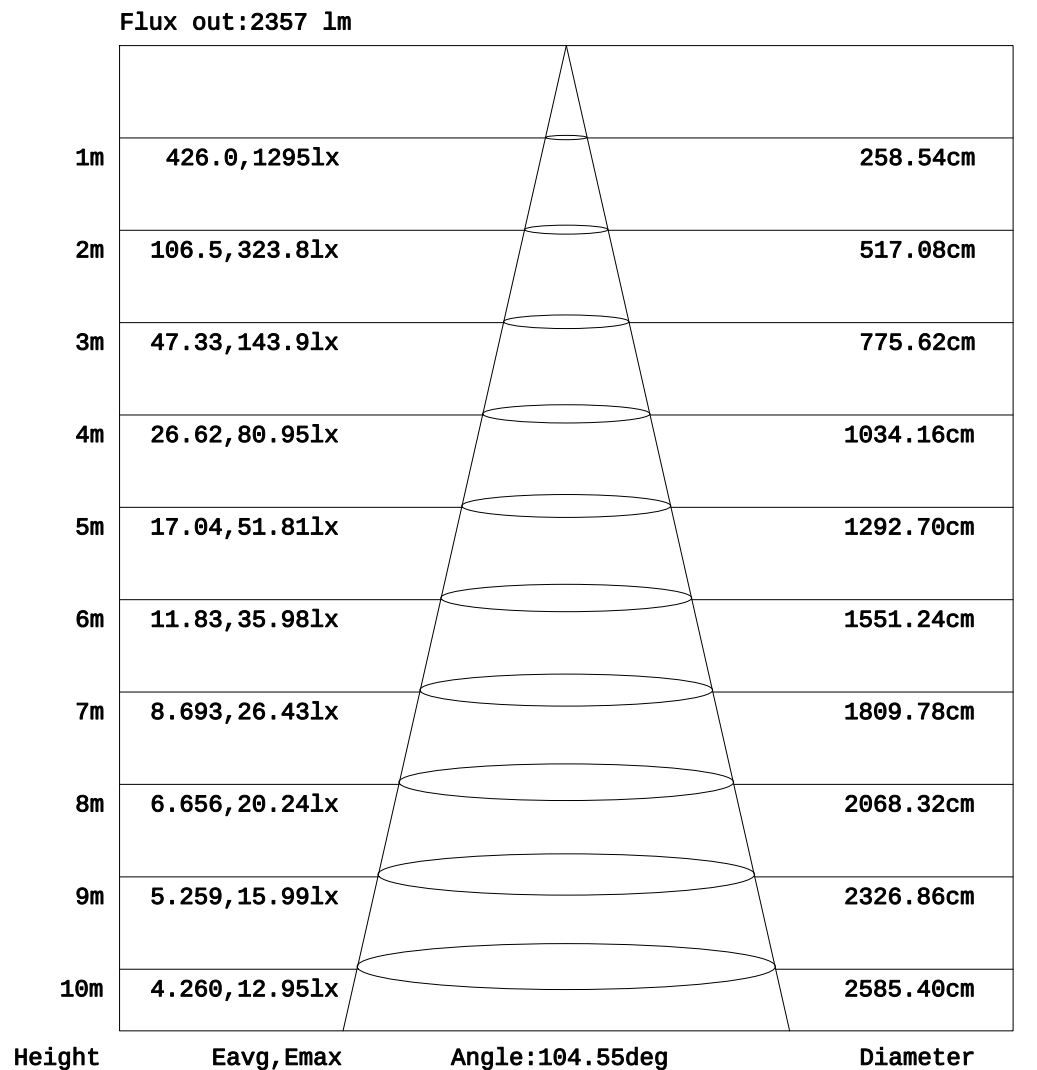


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-07-18

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:231.82V I:0.1270A P:28.227W PF:0.9588 Freq:49.99Hz Lamp Flux:3377.8x1 lm		
NAME: DL3009-WHTC30S01	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 160mm	Shielding Angle:



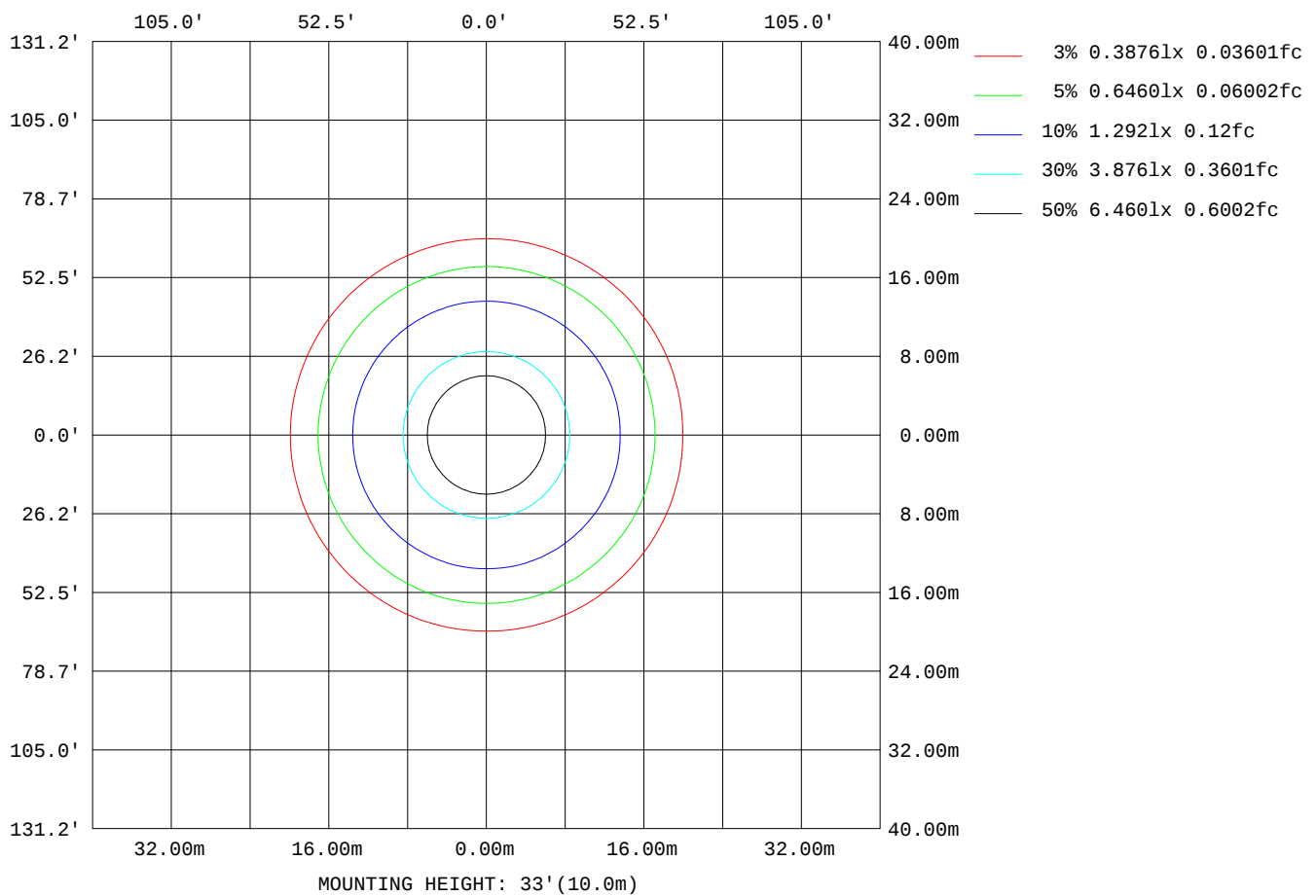
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-07-18

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:231.82V I:0.1270A P:28.227W PF:0.9588 Freq:49.99Hz Lamp Flux:3377.8x1 lm		
NAME: DL3009-WHTC30S01	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: 2025-07-18

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:231.82V I:0.1270A P:28.227W PF:0.9588 Freq:49.99Hz Lamp Flux:3377.8x1 lm		
NAME: DL3009-WHTC30S01	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 160mm	Shielding Angle:

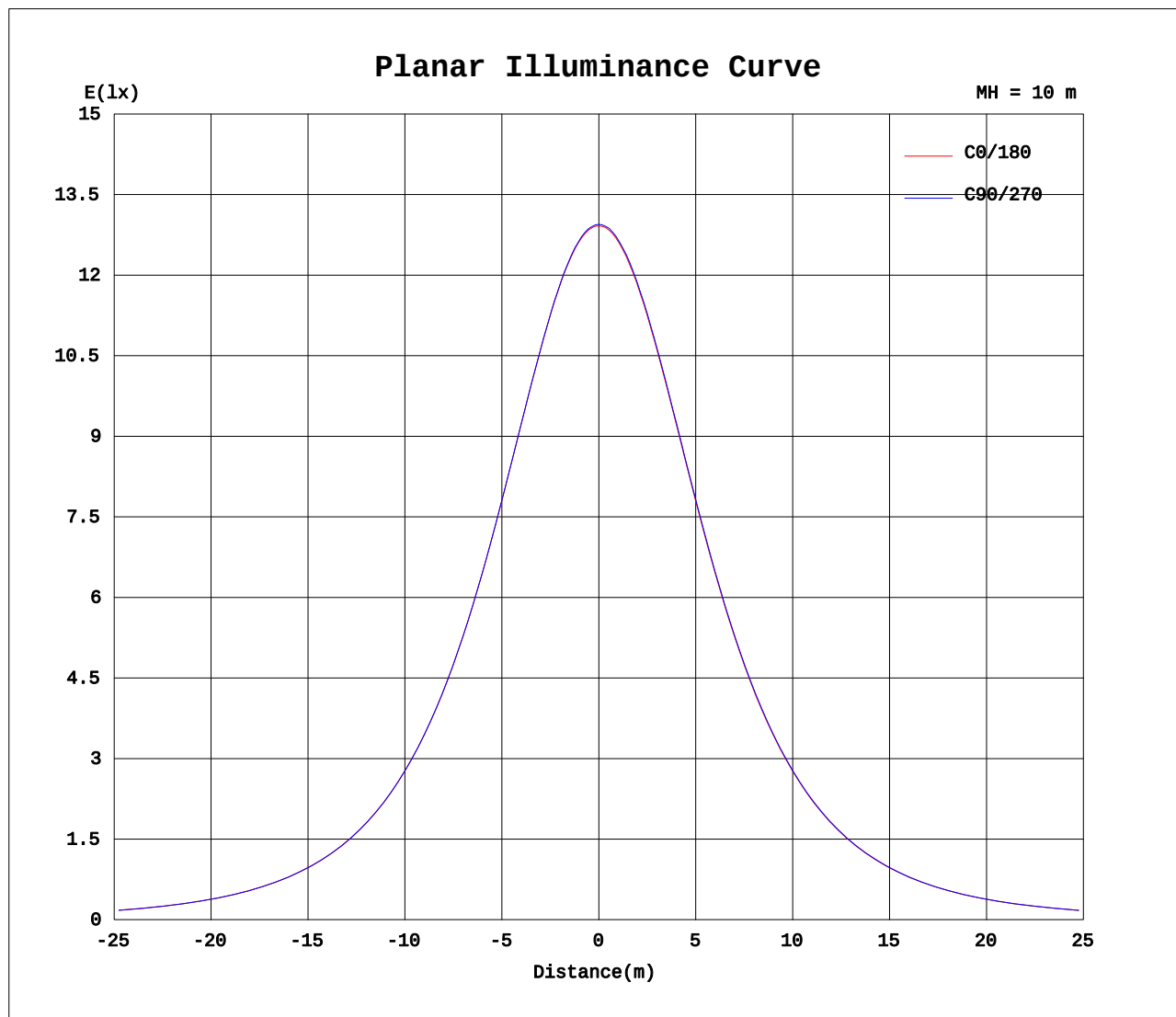
AvgL	cd/m2
L_0~180(65)av	46644
L_0~180(75)av	38984
L_0~180(85)av	23391
L_90~270(65)av	46741
L_90~270(75)av	39161
L_90~270(85)av	24432
L_45(65)av	46736
L_45(75)av	39103
L_45(85)av	24170

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-07-18

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: 2025-07-18

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:

```