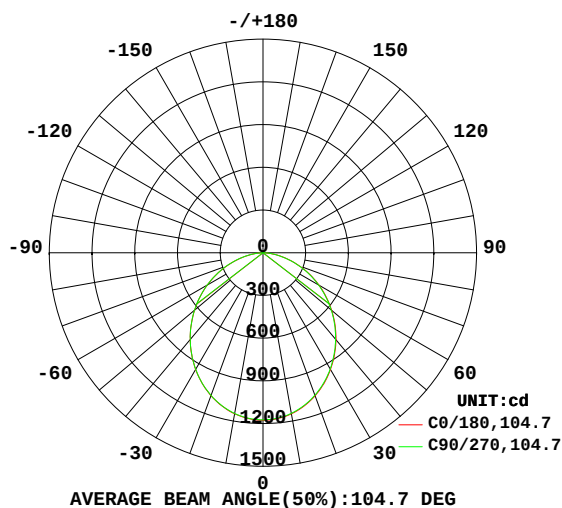


LUMINAIRE PHOTOMETRIC TEST REPORT

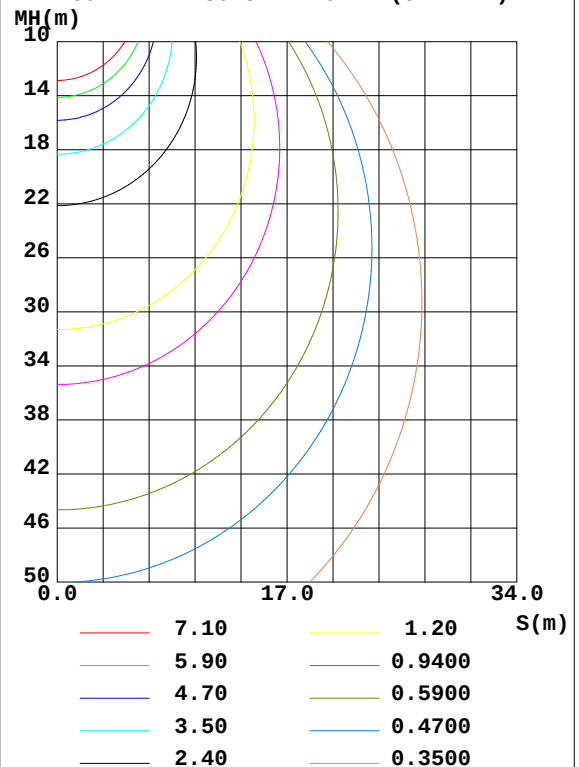
Test:U:231.82V I:0.1335A P:29.771W PF:0.9620 Freq:49.99Hz Lamp Flux:3067.88x1 lm		
NAME: DL3009-WHTC30S01	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 160mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 103.05 lm/W			
MODEL	2835 144 5700K	I _{max} (cd)	1176	S/MH(C0/180)	1.20
NOMINAL POWER(W)	30	LOR(%)	100.0	S/MH(C90/270)	1.21
RATED VOLTAGE(V)	220-240	TOTAL FLUX(lm)	3067.9	η UP, DN(C0-180)	0.0, 50.0
NOMINAL FLUX(lm)	3067.88	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:

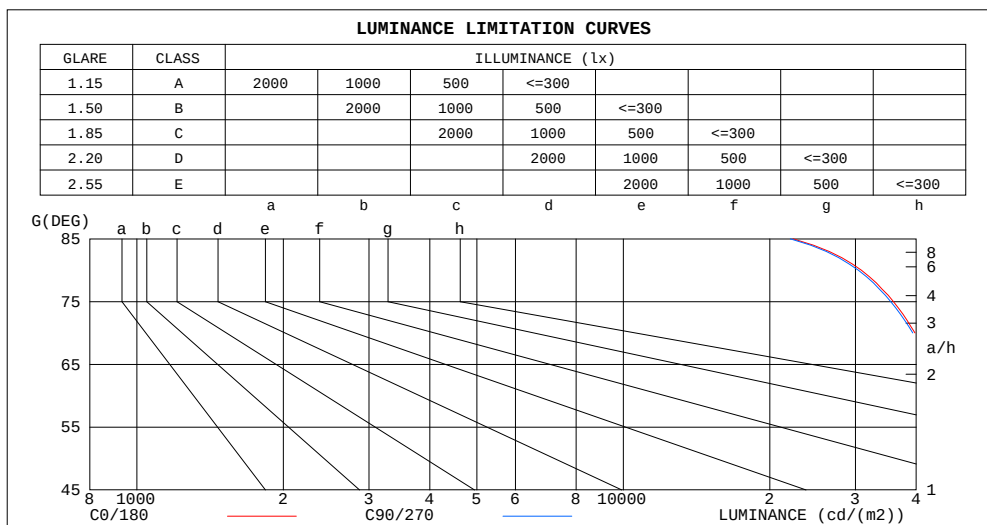
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1149	1147	1145	1144	1148	1147	1146	1146	0- 10	110.7	110.7	3.61,3.61
20	1069	1067	1065	1063	1068	1067	1067	1067	10- 20	313.5	424.2	13.8,13.8
30	947.6	946.3	943.7	941.3	946.2	945.2	945.6	946.7	20- 30	465.2	889.4	29,29
40	797.2	796.0	793.2	790.6	795.3	794.3	795.2	796.7	30- 40	545.6	1435	46.8,46.8
50	630.2	629.2	626.3	623.3	627.7	626.7	628.0	630.0	40- 50	549.6	1985	64.7,64.7
60	453.6	452.8	450.1	447.0	450.6	449.9	451.7	454.0	50- 60	482.8	2467	80.4,80.4
70	273.5	272.8	270.6	267.9	270.7	270.2	272.4	275.0	60- 70	357.3	2825	92.1,92.1
80	107.8	107.4	106.2	104.2	104.3	104.2	106.8	109.3	70- 80	196.5	3021	98.5,98.5
90	1.465	1.461	1.456	1.456	1.548	1.543	1.548	1.548	80- 90	46.61	3068	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:0.1335A P:29.771W PF:0.9620 Freq:49.99Hz Lamp Flux:3067.88x1 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	22321	22050
80	30857	30423
75	35914	35444
70	39766	39345
65	42745	42368
60	45111	44768
55	47046	46730
50	48754	48449
45	50309	50027

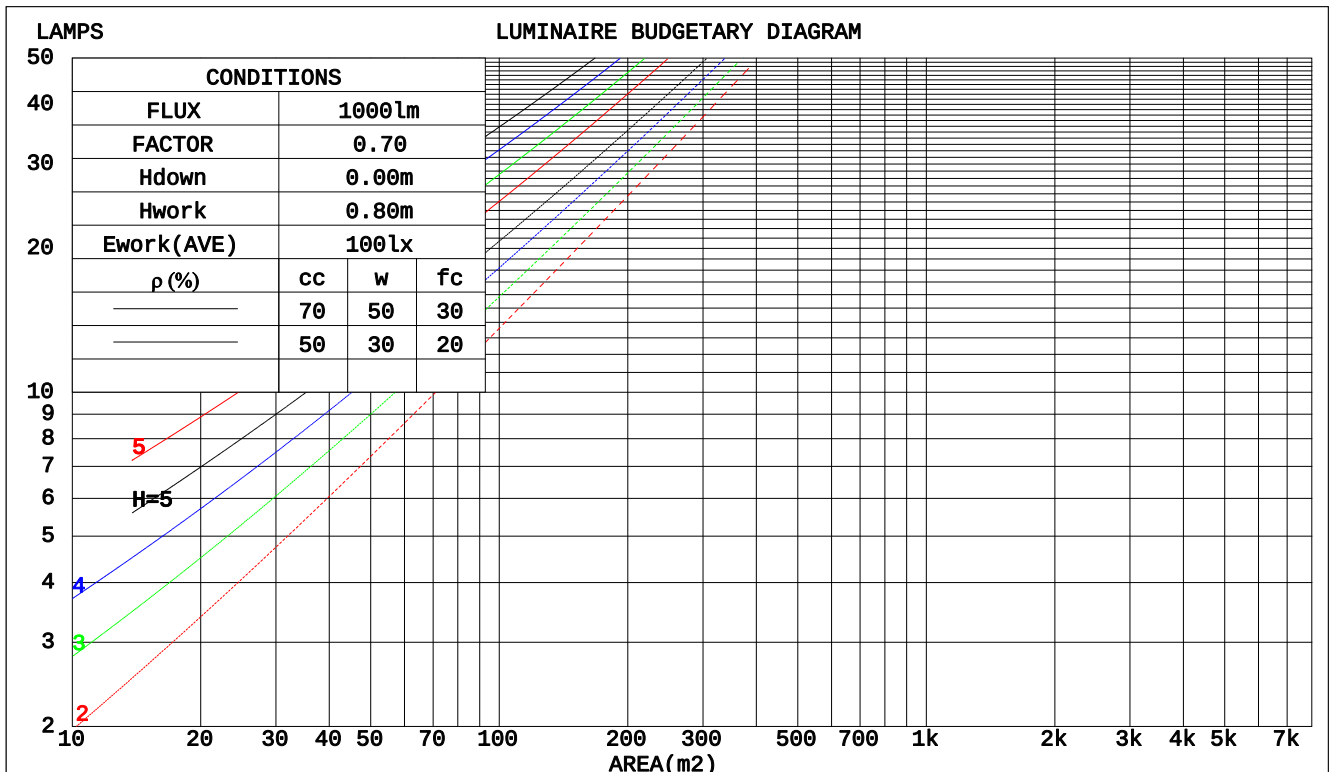
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2025-07-18

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:0.1335A P:29.771W PF:0.9620 Freq:49.99Hz Lamp Flux:3067.88x1 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	Coefficients of Utilization(CU)															
RCR:Room Cavity Ratio																
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	.67	.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	.46	.41	.52	.46	.41	.39
7.0	.52	.44	.37	.51	.43	.37	.50	.42	.37	.48	.42	.37	.47	.41	.37	.35
8.0	.48	.39	.34	.47	.39	.33	.46	.38	.33	.44	.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:0.1335A P:29.771W PF:0.9620 Freq:49.99Hz Lamp Flux:3067.88x1 lm					
NAME: DL3009-WHTC30S01			TYPE:		WEIGHT:
SPEC.: white RA80 3000K+5700K			DIM.:		SERIAL No.:
MFR.:			SUR.: 160mm		Shielding Angle:

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						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	.239	.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	.025	
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	.056	.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	.116	.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:0.1335A P:29.771W PF:0.9620 Freq:49.99Hz Lamp Flux:3067.88x1 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	22.6	24.0	24.2	22.3	23.8	22.5	24.0	24.2	
	3H	23.7	25.1	24.0	25.3	25.6	23.7	25.1	24.0	25.3	25.5
	4H	24.3	25.6	24.6	25.8	26.1	24.2	25.5	24.5	25.8	26.0
	6H	24.6	25.9	24.9	26.1	26.4	24.6	25.8	24.9	26.1	26.4
	8H	24.7	25.9	25.1	26.2	26.5	24.7	25.9	25.0	26.1	26.4
	12H	24.8	25.9	25.1	26.2	26.5	24.7	25.8	25.1	26.1	26.4
4H	2H	22.9	24.2	23.2	24.4	24.7	22.8	24.2	23.2	24.4	24.7
	3H	24.5	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	27.3	25.6	26.5	26.0	26.8	27.2
	8H	25.8	26.6	26.2	27.0	27.4	25.7	26.6	26.1	26.9	27.3
	12H	25.8	26.6	26.3	27.0	27.4	25.8	26.6	26.2	27.0	27.4
8H	4H	25.4	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	26.7	26.4	27.1	27.5
	8H	26.2	26.8	26.7	27.3	27.7	26.2	26.8	26.6	27.2	27.7
	12H	26.3	26.9	26.8	27.3	27.8	26.3	26.8	26.8	27.3	27.8
12H	4H	25.4	26.2	25.8	26.5	27.0	25.3	26.1	25.8	26.5	26.9
	6H	26.0	26.7	26.5	27.1	27.5	26.0	26.6	26.4	27.0	27.5
	8H	26.3	26.8	26.7	27.3	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, 3068 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.9)
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:0.1335A P:29.771W PF:0.9620 Freq:49.99Hz Lamp Flux:3067.88x1 lm		
NAME: DL3009-WHTC30S01	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 160mm	Shielding Angle:

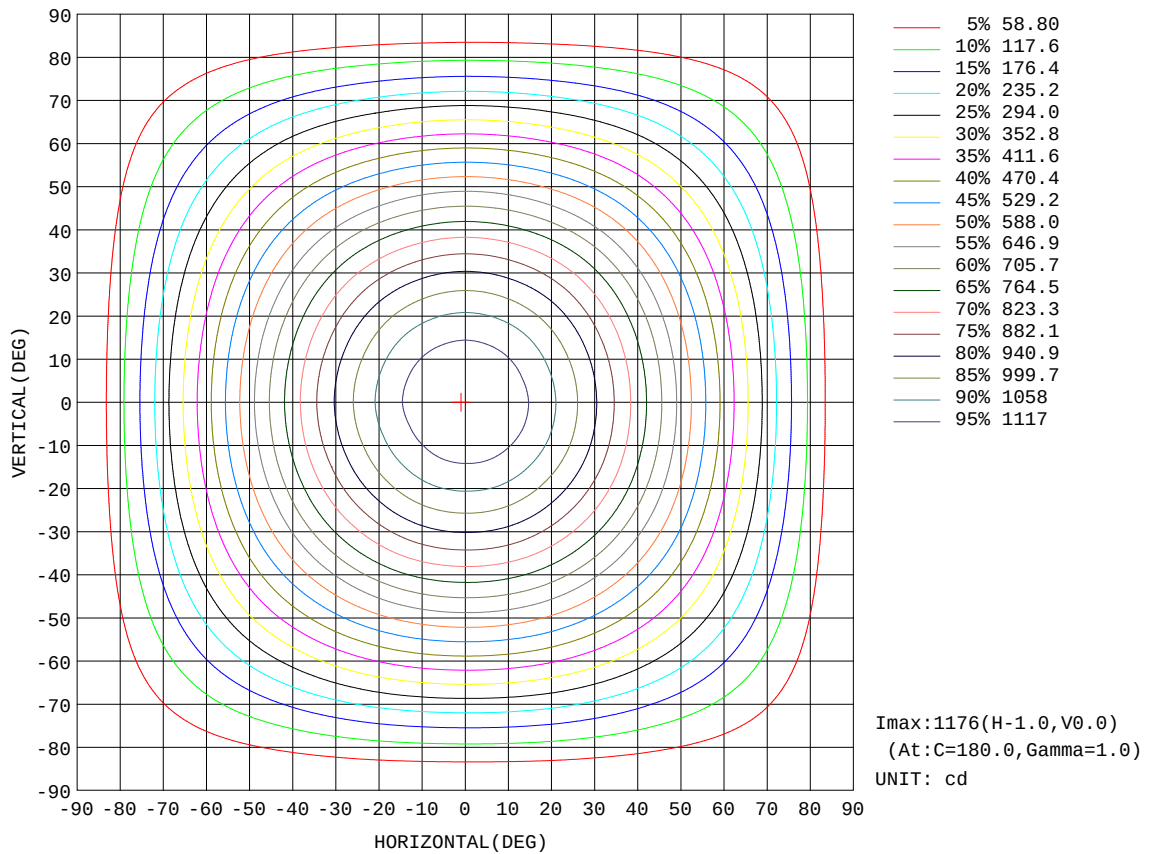
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	59	47	40	58	47	40	57	47	40	34
0.80	69	57	50	68	57	50	66	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:0.1335A P:29.771W PF:0.9620 Freq:49.99Hz Lamp Flux:3067.88x1 lm		
NAME: DL3009-WHTC30S01	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 160mm	Shielding Angle:

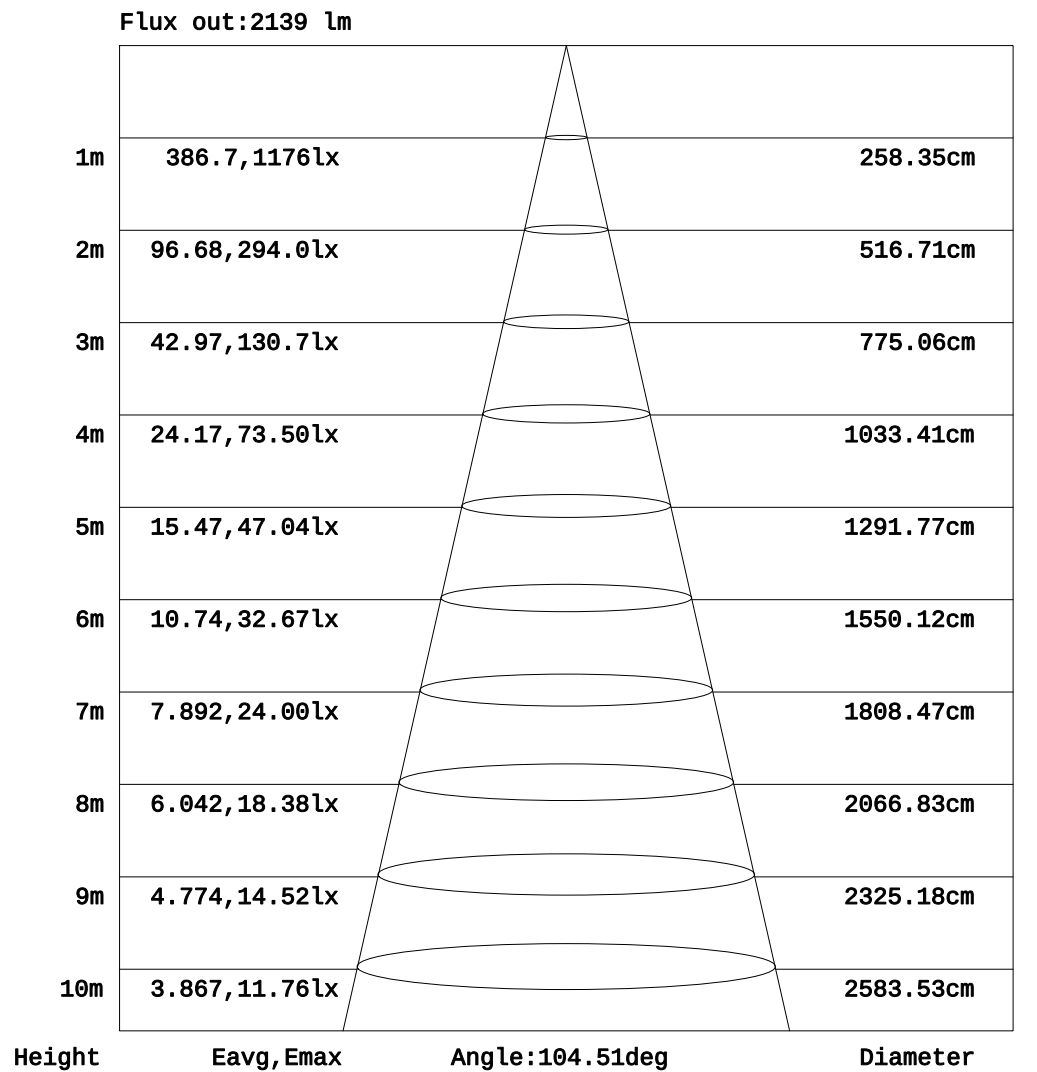


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-07-18

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:0.1335A P:29.771W PF:0.9620 Freq:49.99Hz Lamp Flux:3067.88x1 lm		
NAME: DL3009-WHTC30S01	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 160mm	Shielding Angle:



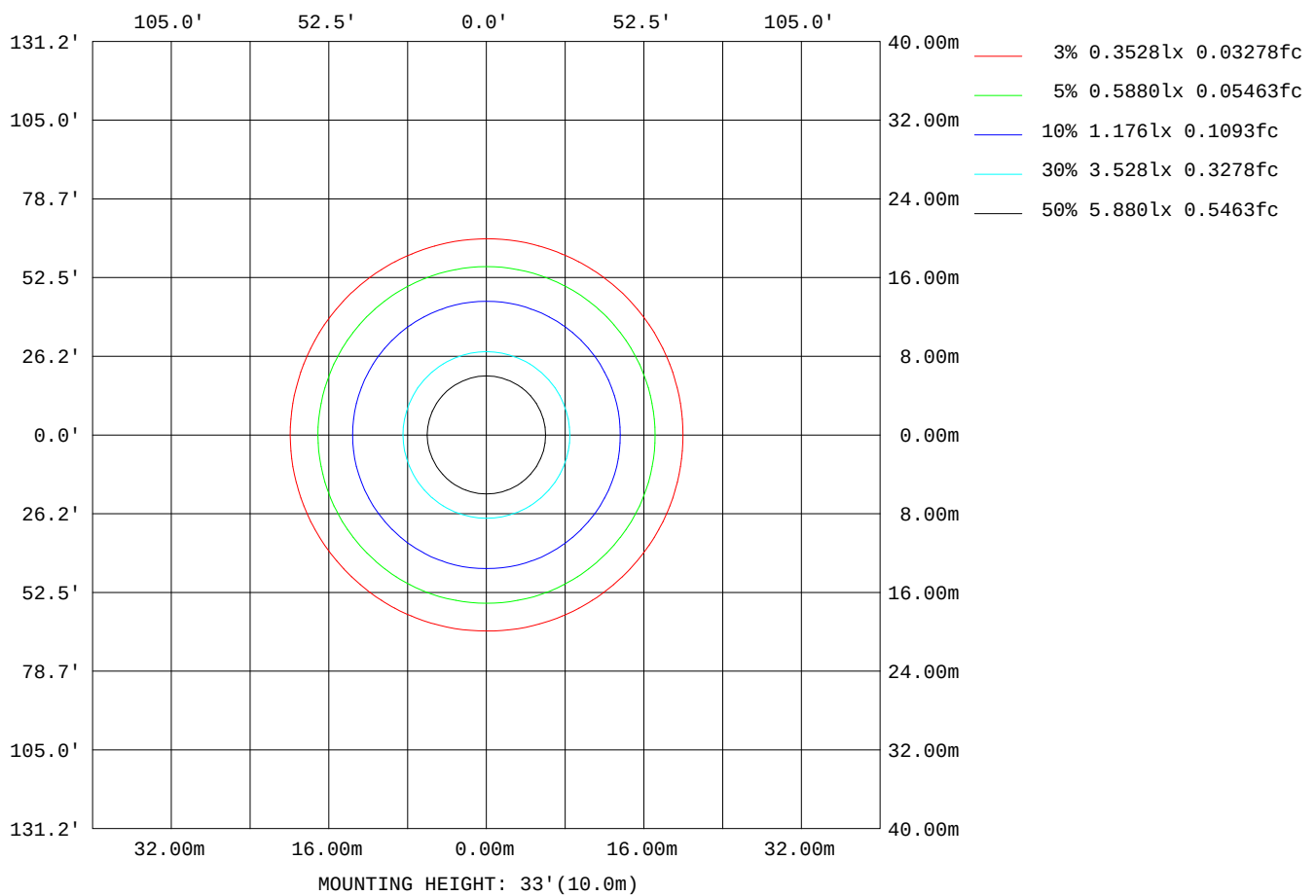
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.1335A P:29.771W PF:0.9620 Freq:49.99Hz Lamp Flux:3067.88x1 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:0.1335A P:29.771W PF:0.9620 Freq:49.99Hz Lamp Flux:3067.88x1 lm		
NAME: DL3009-WHTC30S01	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 160mm	Shielding Angle:

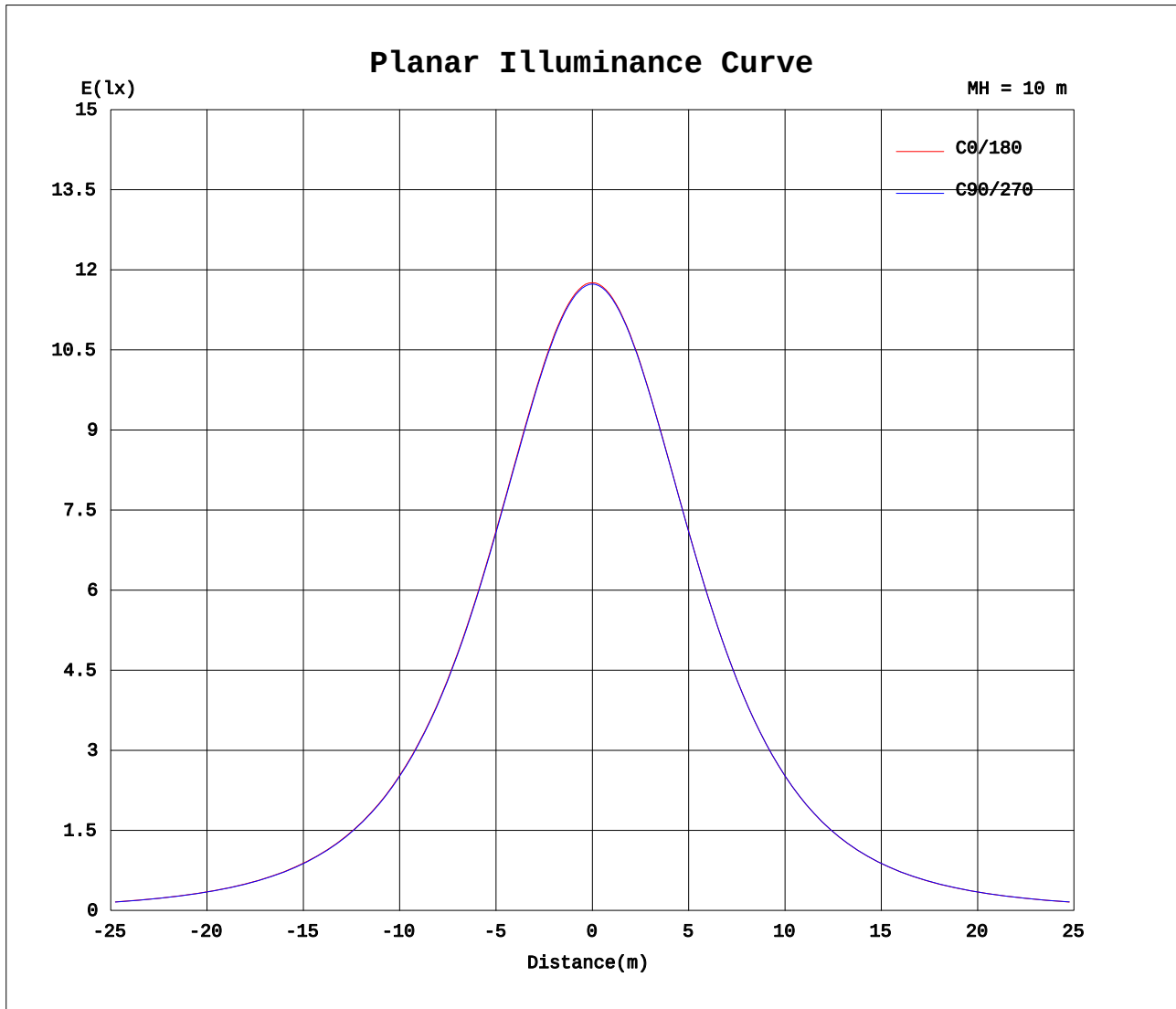
AvgL	cd/m2
L_0~180(65)av	42565
L_0~180(75)av	35602
L_0~180(85)av	21388
L_90~270(65)av	42468
L_90~270(75)av	35568
L_90~270(85)av	22213
L_45(65)av	42449
L_45(75)av	35536
L_45(85)av	22014

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:

```