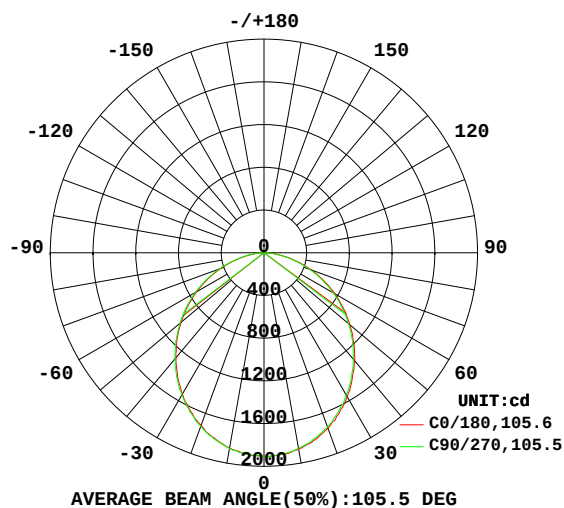


LUMINAIRE PHOTOMETRIC TEST REPORT

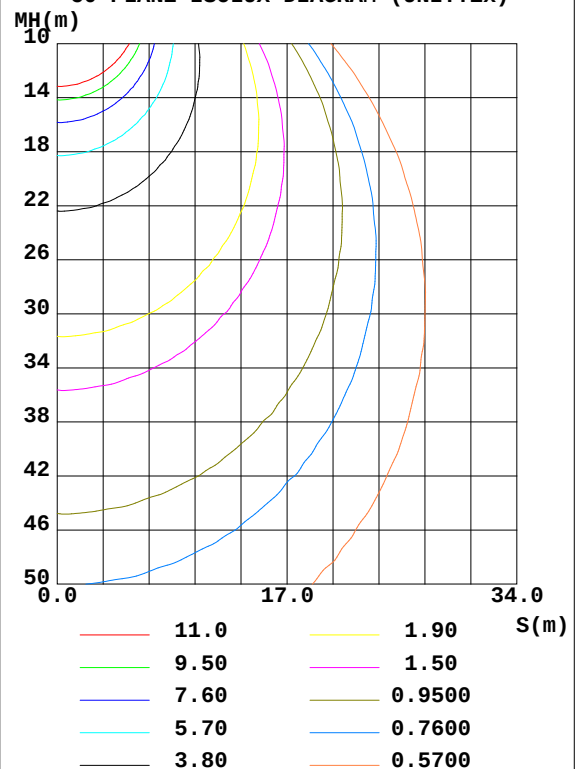
Test:U:230.35V I:0.1734A P:38.195W PF:0.9564 Freq:49.99Hz Lamp Flux:5029.31x1 lm		
NAME: DL4009-WHTC40S01	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 195mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 131.68 lm/W			
MODEL	2835 192 5700K	I _{max} (cd)	1910	S/MH(C0/180)	1.20
NOMINAL POWER(W)	40	LOR(%)	100.0	S/MH(C90/270)	1.21
RATED VOLTAGE(V)	220-240	TOTAL FLUX(lm)	5029.3	η UP, DN(C0-180)	0.0, 50.3
NOMINAL FLUX(lm)	5029.31	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 49.7
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:2025-03-27

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:

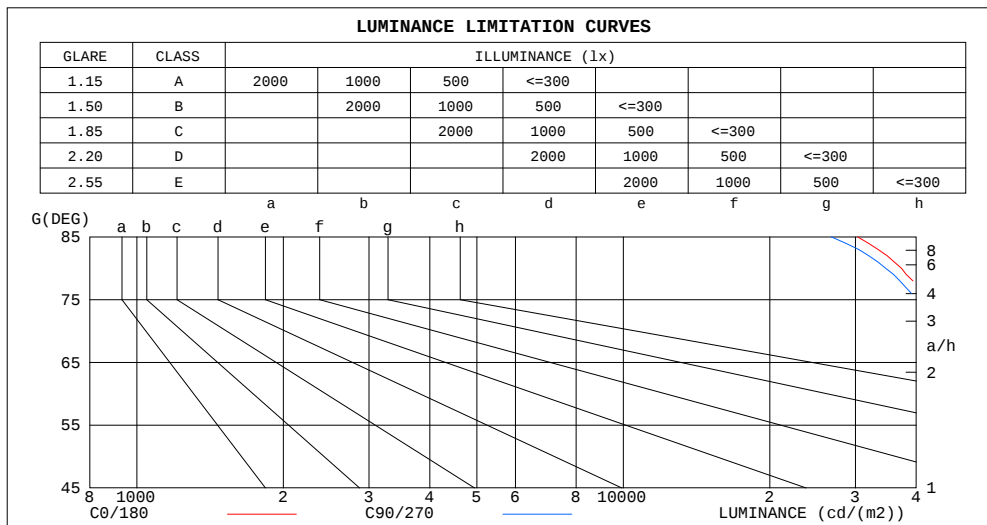
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1870	1871	1859	1859	1854	1862	1860	1861	0- 10	179.7	179.7	3.57, 3.57
20	1750	1743	1739	1728	1720	1726	1731	1744	10- 20	509.4	689.1	13.7, 13.7
30	1558	1555	1538	1530	1528	1524	1539	1552	20- 30	757.5	1447	28.8, 28.8
40	1323	1312	1302	1287	1281	1283	1298	1315	30- 40	891.3	2338	46.5, 46.5
50	1050	1047	1033	1016	1013	1013	1027	1046	40- 50	901.0	3239	64.4, 64.4
60	763.4	762.3	747.1	729.8	726.7	726.9	739.2	758.0	50- 60	794.5	4033	80.2, 80.2
70	470.5	468.3	453.6	434.4	431.4	431.9	444.7	462.9	60- 70	590.6	4624	91.9, 91.9
80	193.4	193.6	179.4	163.7	160.1	162.2	172.5	186.5	70- 80	325.9	4950	98.4, 98.4
90	2.715	2.674	2.412	2.462	2.733	2.747	2.637	2.563	80- 90	79.31	5029	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: 2025-03-27

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:230.35V I:0.1734A P:38.195W PF:0.9564 Freq:49.99Hz Lamp Flux:5029.31x1 lm		
NAME: DL4009-WHTC40S01	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 195mm	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	30299	26767
80	37295	34601
75	42234	40191
70	46070	44411
65	48954	47606
60	51132	50041
55	53048	52035
50	54718	53825
45	56220	55604

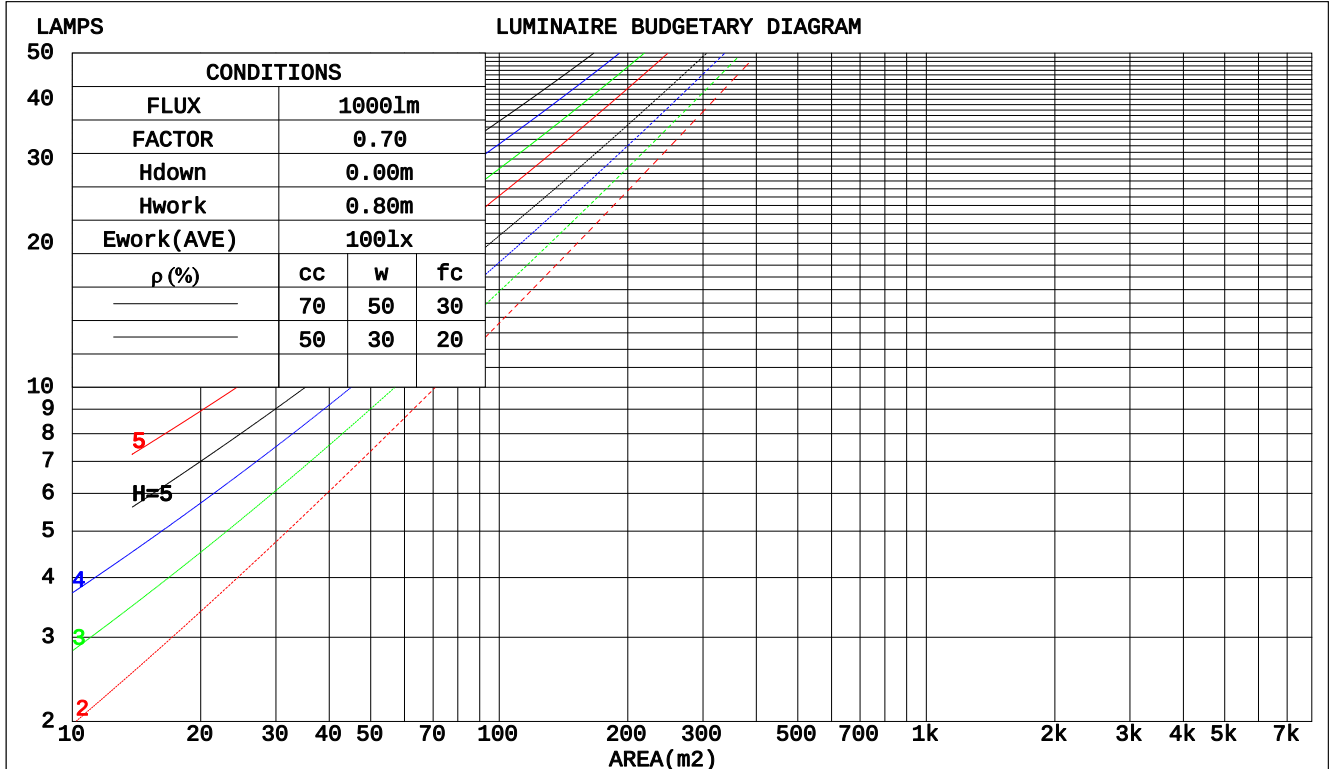
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2025-03-27

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:230.35V I:0.1734A P:38.195W PF:0.9564 Freq:49.99Hz Lamp Flux:5029.31x1 lm		
NAME: DL4009-WHTC40S01	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 195mm	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	.84	.79	.89	.83	.78	.86	.81	.76	.82	.78	.74	.79	.76	.73	.70
3.0	.80	.72	.66	.79	.71	.65	.76	.69	.64	.73	.67	.63	.70	.66	.62	.60
4.0	.71	.62	.56	.70	.62	.55	.67	.60	.55	.65	.59	.54	.63	.58	.53	.51
5.0	.64	.55	.48	.63	.54	.48	.60	.53	.47	.58	.52	.47	.57	.51	.46	.44
6.0	.57	.49	.42	.56	.48	.42	.55	.47	.42	.53	.46	.41	.51	.45	.41	.39
7.0	.52	.43	.37	.51	.43	.37	.50	.42	.37	.48	.42	.37	.47	.41	.36	.34
8.0	.48	.39	.33	.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	.34	.30	.40	.34	.30	.28
10.0	.40	.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:2025-03-27

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:230.35V I:0.1734A P:38.195W PF:0.9564 Freq:49.99Hz Lamp Flux:5029.31x1 lm					
NAME: DL4009-WHTC40S01			TYPE:		WEIGHT:
SPEC.: white RA80 3000K+5700K			DIM.:		SERIAL No.:
MFR.:			SUR.: 195mm		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	.301	.171	.054	.294	.168	.053	.281	.161	.051	.269	.155	.050	.258	.149	.048		
2.0	.285	.156	.048	.279	.154	.047	.267	.149	.046	.256	.144	.045	.246	.139	.044		
3.0	.265	.141	.042	.259	.139	.042	.249	.135	.041	.239	.131	.040	.231	.128	.039		
4.0	.245	.127	.037	.240	.126	.037	.231	.122	.037	.222	.119	.036	.215	.117	.036		
5.0	.227	.116	.033	.222	.114	.033	.214	.112	.033	.207	.109	.032	.200	.107	.032		
6.0	.211	.106	.030	.207	.104	.030	.200	.102	.030	.193	.100	.029	.187	.098	.029		
7.0	.196	.097	.028	.193	.096	.027	.186	.094	.027	.180	.092	.027	.175	.091	.027		
8.0	.183	.090	.025	.180	.089	.025	.175	.087	.025	.169	.086	.025	.164	.084	.025		
9.0	.172	.083	.023	.169	.083	.023	.164	.081	.023	.159	.080	.023	.155	.079	.023		
10.0	.162	.078	.022	.160	.077	.021	.155	.076	.021	.150	.075	.021	.146	.074	.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	.085	.101	.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	.041	.088	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.141	.082	.040	.121	.071	.034	.084	.050	.024	.049	.029	.014	.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:2025-03-27

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:230.35V I:0.1734A P:38.195W PF:0.9564 Freq:49.99Hz Lamp Flux:5029.31x1 lm											
NAME: DL4009-WHTC40S01					TYPE:			WEIGHT:			
SPEC.: white RA80 3000K+5700K					DIM.:			SERIAL No.:			
MFR.:					SUR.: 195mm			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	21.1	22.6	21.3	22.8	23.0	21.0	22.5	21.3	22.7	22.9	
	3H	22.6	23.9	22.8	24.2	24.4	22.4	23.8	22.7	24.0	24.3
	4H	23.1	24.4	23.4	24.7	25.0	23.0	24.3	23.3	24.5	24.8
	6H	23.5	24.8	23.9	25.0	25.3	23.4	24.6	23.7	24.9	25.1
	8H	23.7	24.9	24.0	25.1	25.4	23.5	24.7	23.8	24.9	25.2
	12H	23.7	24.9	24.1	25.2	25.5	23.5	24.7	23.9	24.9	25.3
4H	2H	21.7	23.0	22.0	23.2	23.5	21.6	22.9	21.9	23.2	23.4
	3H	23.3	24.5	23.7	24.8	25.1	23.2	24.4	23.6	24.7	25.0
	4H	24.0	25.1	24.4	25.4	25.7	23.9	25.0	24.3	25.3	25.6
	6H	24.6	25.5	25.0	25.8	26.2	24.4	25.3	24.8	25.7	26.0
	8H	24.7	25.6	25.1	26.0	26.4	24.6	25.4	25.0	25.8	26.2
	12H	24.8	25.6	25.3	26.0	26.4	24.6	25.4	25.1	25.8	26.2
8H	4H	24.3	25.2	24.7	25.5	25.9	24.2	25.0	24.6	25.4	25.8
	6H	25.0	25.7	25.4	26.1	26.5	24.8	25.5	25.2	25.9	26.4
	8H	25.2	25.9	25.7	26.3	26.7	25.0	25.7	25.5	26.1	26.6
	12H	25.4	25.9	25.9	26.4	26.9	25.2	25.7	25.7	26.2	26.7
12H	4H	24.3	25.1	24.7	25.5	25.9	24.2	25.0	24.6	25.4	25.8
	6H	25.0	25.6	25.5	26.1	26.5	24.9	25.5	25.3	25.9	26.4
	8H	25.3	25.9	25.8	26.3	26.8	25.1	25.7	25.6	26.1	26.6
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, 5029 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 5.6)
Area: 0.02986 m2

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-03-27

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:230.35V I:0.1734A P:38.195W PF:0.9564 Freq:49.99Hz Lamp Flux:5029.31x1 lm		
NAME: DL4009-WHTC40S01	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 195mm	Shielding Angle:

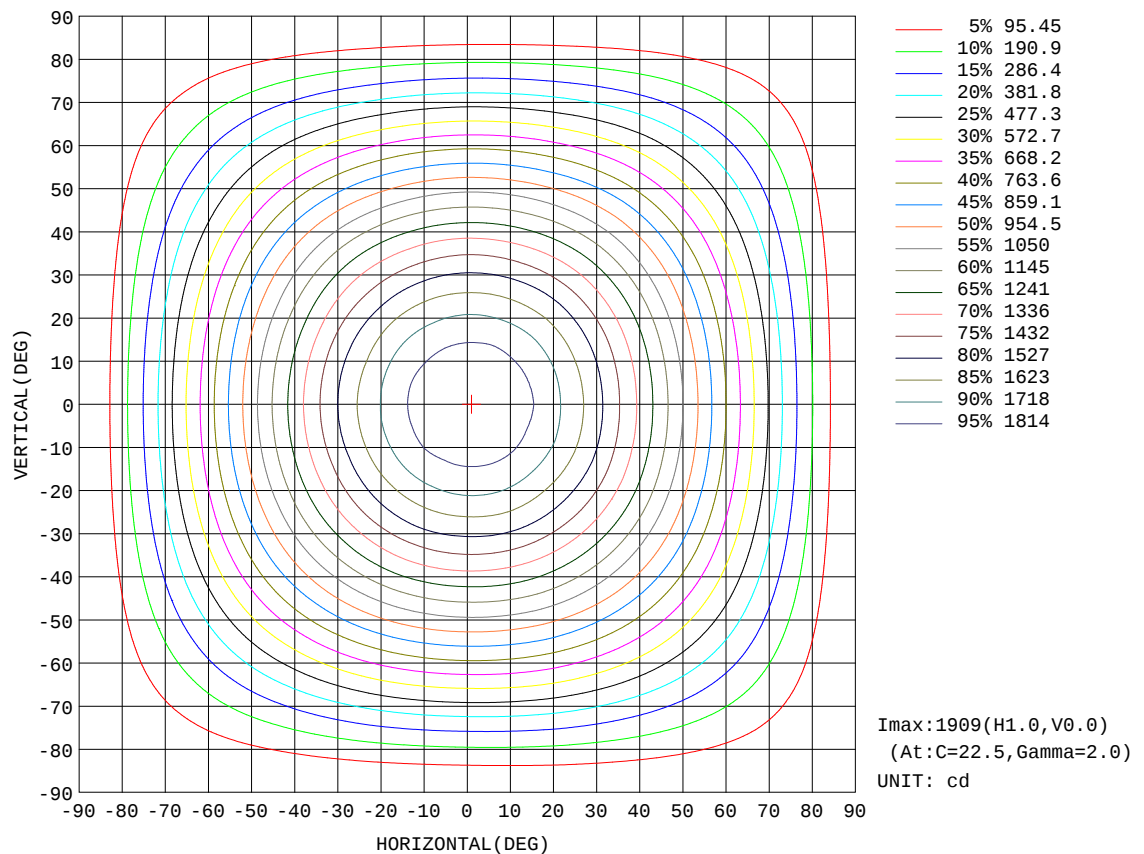
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	59	47	40	58	47	40	57	46	40	34
0.80	69	57	50	68	57	50	66	56	49	43
1.00	77	66	59	76	66	59	74	67	58	51
1.25	84	74	67	83	73	66	80	72	66	58
1.50	89	79	72	87	78	72	84	77	71	63
2.00	96	87	81	94	86	80	90	84	79	71
2.50	99	92	86	97	91	85	94	88	83	75
3.00	103	96	91	101	95	90	97	92	87	79
4.00	107	101	97	104	99	95	100	96	93	84
5.00	109	104	100	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:2025-03-27

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:230.35V I:0.1734A P:38.195W PF:0.9564 Freq:49.99Hz Lamp Flux:5029.31x1 lm		
NAME: DL4009-WHTC40S01	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 195mm	Shielding Angle:

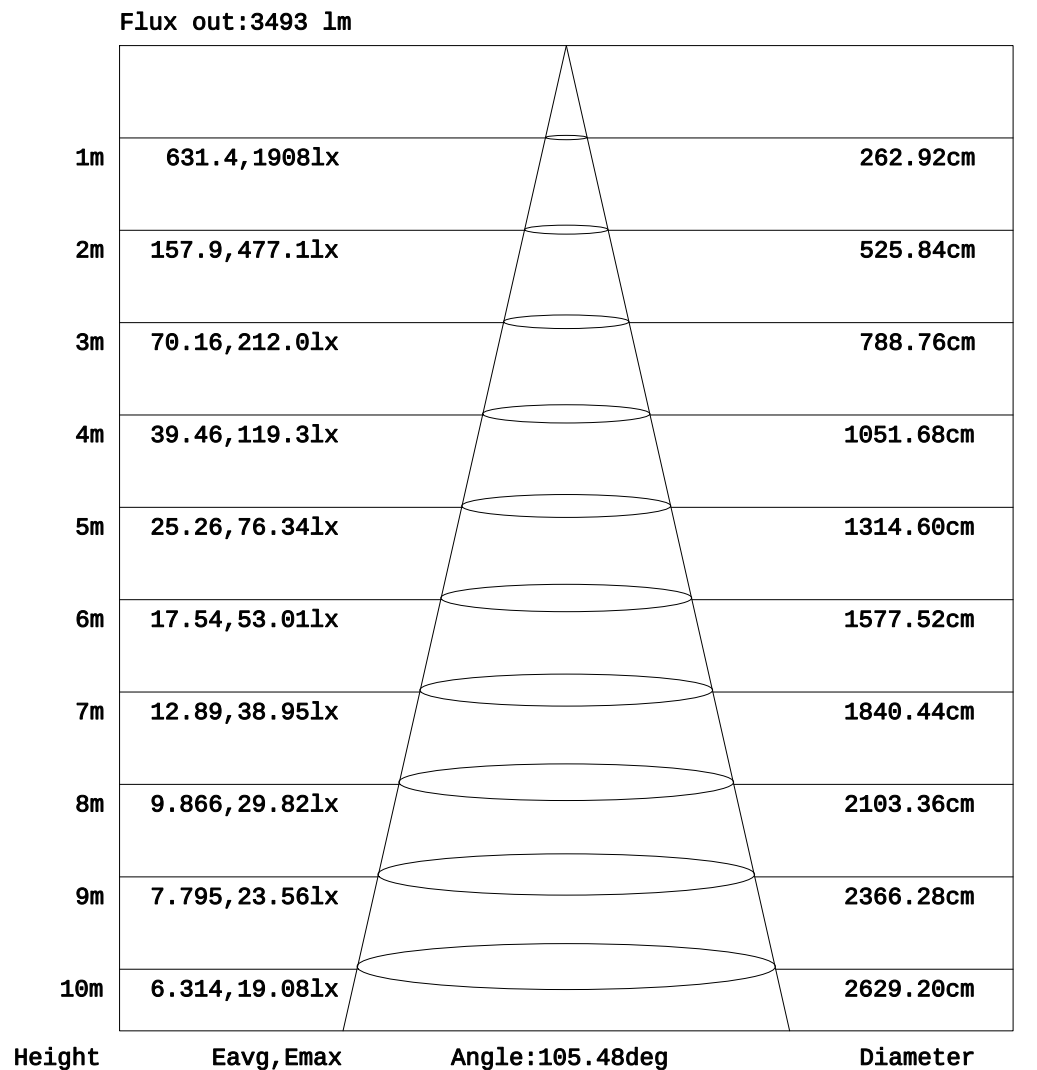


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-03-27

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:230.35V I:0.1734A P:38.195W PF:0.9564 Freq:49.99Hz Lamp Flux:5029.31x1 lm		
NAME: DL4009-WHTC40S01	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 195mm	Shielding Angle:



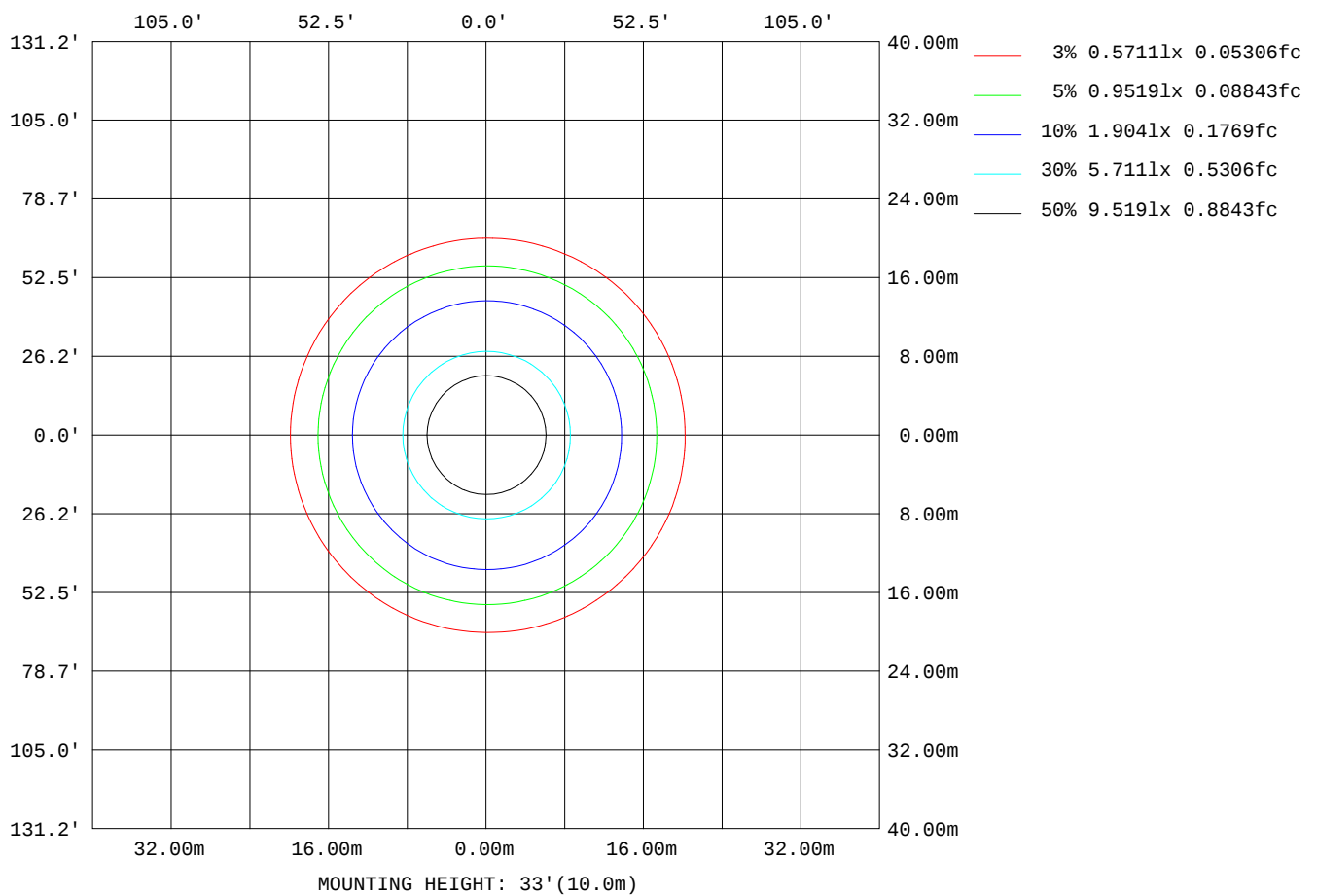
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-03-27

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:230.35V I:0.1734A P:38.195W PF:0.9564 Freq:49.99Hz Lamp Flux:5029.31x1 lm		
NAME: DL4009-WHTC40S01	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 195mm	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-03-27

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:230.35V I:0.1734A P:38.195W PF:0.9564 Freq:49.99Hz Lamp Flux:5029.31x1 lm		
NAME: DL4009-WHTC40S01	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 195mm	Shielding Angle:

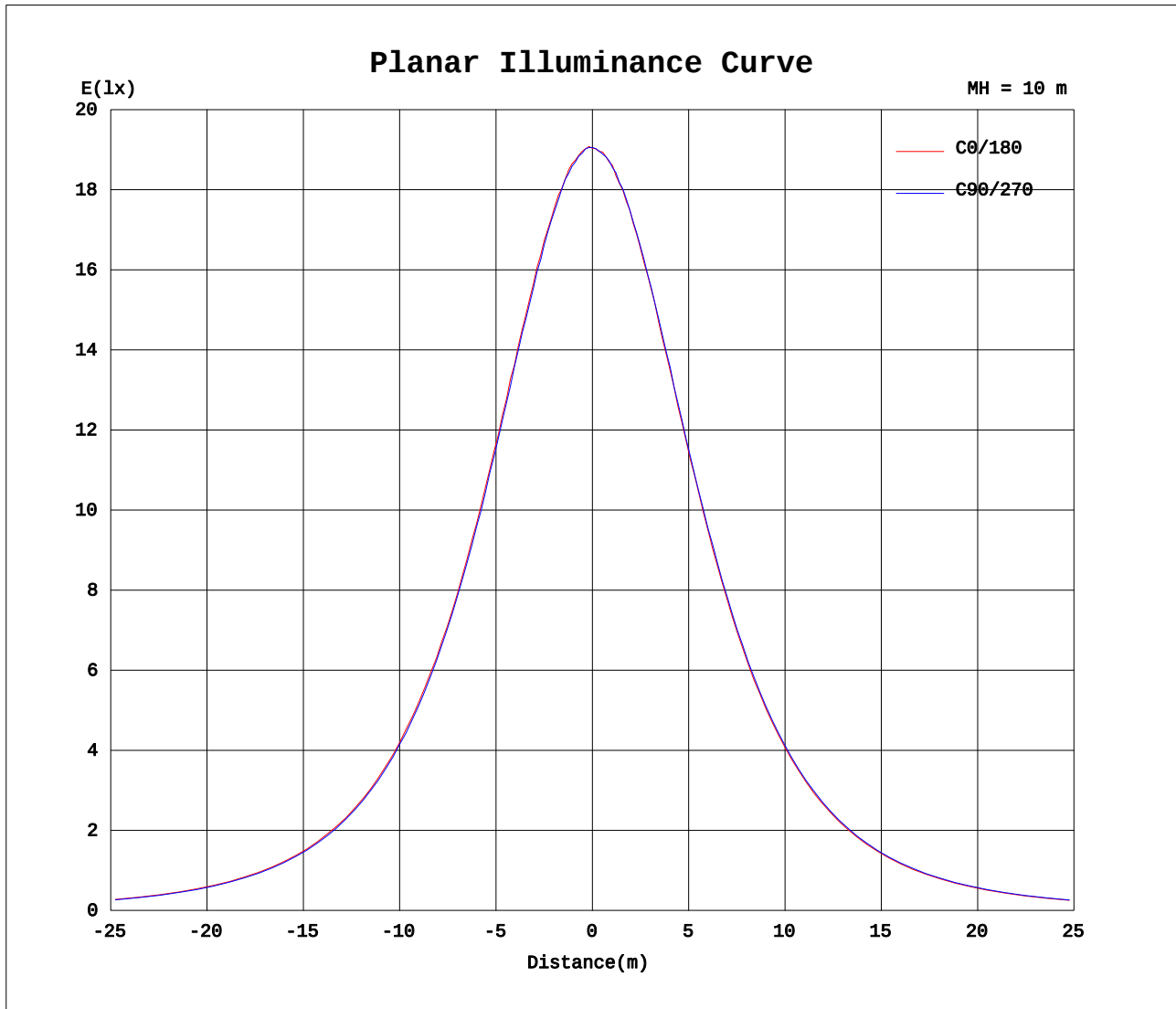
AvgL	cd/m2
L_0~180(65)av	47411
L_0~180(75)av	39887
L_0~180(85)av	25210
L_90~270(65)av	47278
L_90~270(75)av	39700
L_90~270(85)av	25466
L_45(65)av	47311
L_45(75)av	39772
L_45(85)av	25329

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2025-03-27

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: 2025-03-27

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:

```