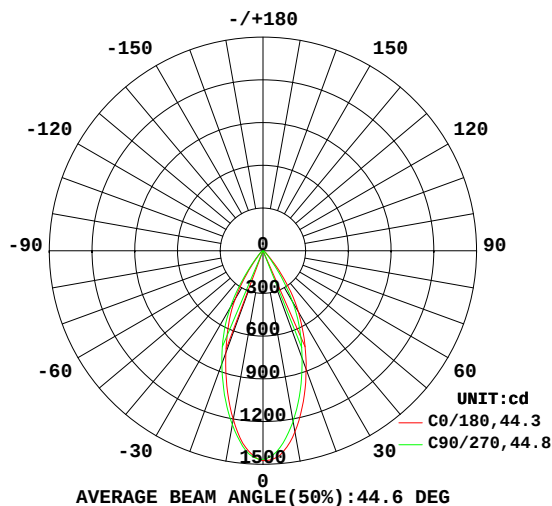


LUMINAIRE PHOTOMETRIC TEST REPORT

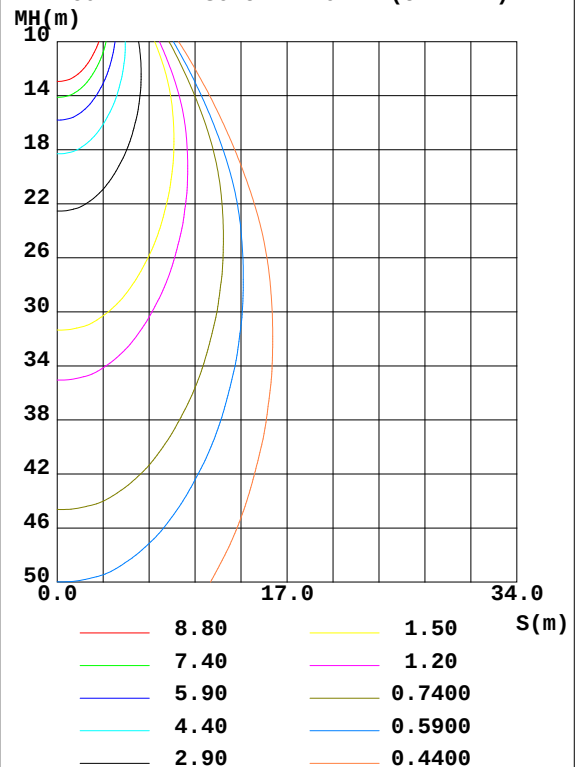
Test:U:231.93V I:0.0494A P:10.330W PF:0.9012 Freq:49.99Hz Lamp Flux:924.779x1 lm		
NAME: DL9452-WHTC10C03	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 85mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 89.53 lm/W			
MODEL	TB8-1911A 3000K	I _{max} (cd)	1474	S/MH(C0/180)	0.65
NOMINAL POWER(W)	10	LOR(%)	100.0	S/MH(C90/270)	0.70
RATED VOLTAGE(V)	220-240	TOTAL FLUX(lm)	924.78	η UP, DN(C0-180)	0.0, 49.6
NOMINAL FLUX(lm)	924.779	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 50.4
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	220	η down(%)	100.0	CIBSE SHR MAX	0.80

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: 2025-07-15

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:

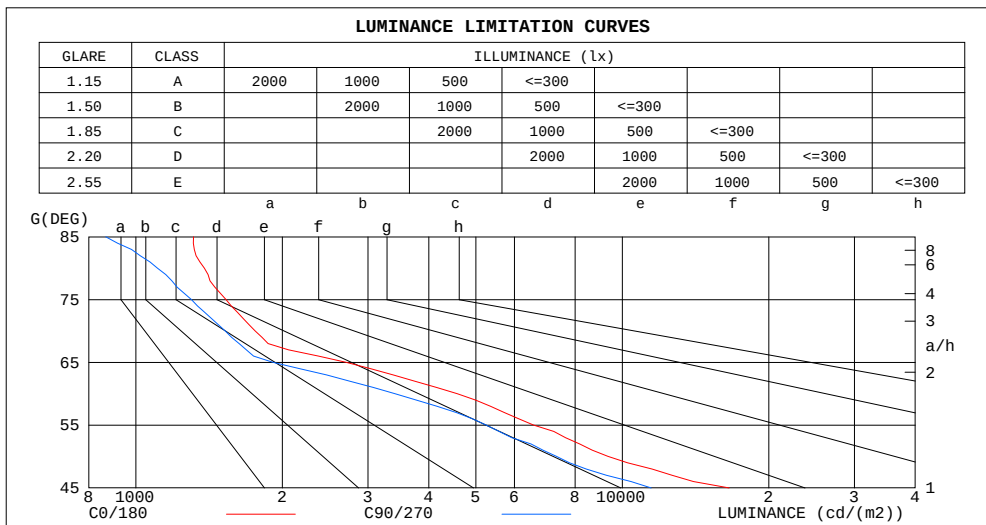
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1293	1262	1219	1181	1203	1225	1241	1272	0- 10	128.4	128.4	13.9,13.9
20	886.1	855.9	802.4	749.0	762.9	814.5	846.4	870.7	10- 20	285.9	414.2	44.8,44.8
30	499.5	468.7	419.3	373.0	390.7	430.2	460.5	484.0	20- 30	286.4	700.7	75.8,75.8
40	151.0	122.8	92.82	76.74	77.55	90.99	107.2	132.9	30- 40	156.3	857.0	92.7,92.7
50	34.08	30.19	26.70	24.87	25.81	27.33	29.32	32.76	40- 50	42.59	899.6	97.3,97.3
60	12.98	11.23	9.660	8.654	8.889	9.788	11.39	12.87	50- 60	16.80	916.4	99.1,99.1
70	3.411	3.195	2.961	2.800	2.809	2.988	3.199	3.355	60- 70	5.707	922.1	99.7,99.7
80	1.361	1.228	1.090	0.9754	0.9310	1.055	1.197	1.294	70- 80	2.144	924.2	99.9,99.9
90	0.0965	0.0046	0	0	0	0	0	0.0643	80- 90	0.5425	924.8	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:2025-07-15

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:231.93V I:0.0494A P:10.330W PF:0.9012 Freq:49.99Hz Lamp Flux:924.779x1 lm		
NAME: DL9452-WHTC10C03	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 85mm	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	1314	867
80	1383	1107
75	1532	1301
70	1759	1527
65	2704	1913
60	4577	3408
55	6565	5250
50	9351	7325
45	16575	11463

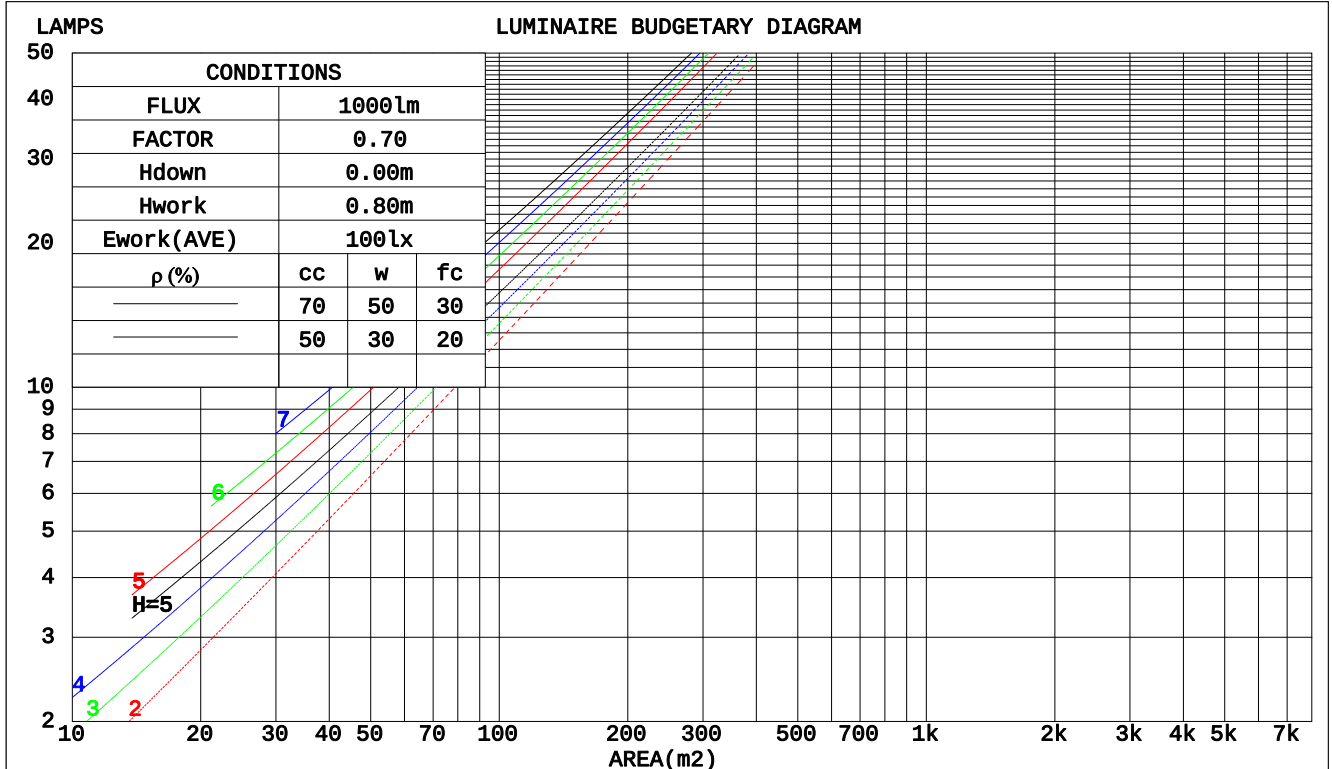
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2025-07-15

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:231.93V I:0.0494A P:10.330W PF:0.9012 Freq:49.99Hz Lamp Flux:924.779x1 lm		
NAME: DL9452-WHTC10C03	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 85mm	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)															
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	1.11	1.09	1.06	1.09	1.07	1.05	1.05	1.03	1.01	1.01	.99	.98	.98	.97	.96	.94
2.0	1.04	.99	.96	1.02	.98	.95	.99	.96	.93	.96	.93	.91	.93	.91	.89	.88
3.0	.97	.92	.88	.96	.91	.88	.93	.89	.86	.91	.87	.85	.88	.86	.84	.82
4.0	.91	.86	.82	.90	.85	.81	.88	.83	.80	.86	.82	.79	.84	.81	.78	.77
5.0	.86	.80	.76	.85	.79	.75	.83	.78	.75	.81	.77	.74	.80	.76	.73	.72
6.0	.81	.75	.71	.80	.74	.71	.78	.74	.70	.77	.73	.70	.76	.72	.69	.68
7.0	.76	.70	.66	.76	.70	.66	.74	.69	.66	.73	.69	.66	.72	.68	.65	.64
8.0	.72	.66	.63	.72	.66	.62	.71	.66	.62	.70	.65	.62	.69	.65	.62	.60
9.0	.68	.63	.59	.68	.63	.59	.67	.62	.59	.66	.62	.59	.65	.61	.58	.57
10.0	.65	.60	.56	.65	.59	.56	.64	.59	.56	.63	.59	.56	.62	.58	.55	.54



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-07-15

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 γ 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:231.93V I:0.0494A P:10.330W PF:0.9012 Freq:49.99Hz Lamp Flux:924.779x1 lm					
NAME: DL9452-WHTC10C03			TYPE:		WEIGHT:
SPEC.: white RA90 3000K+5000K			DIM.:		SERIAL No.:
MFR.:			SUR.: 85mm		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	.174	.099	.031	.167	.095	.030	.155	.089	.028	.143	.082	.026	.132	.077	.025	
2.0	.166	.091	.028	.160	.088	.027	.150	.083	.026	.140	.079	.025	.131	.074	.023	
3.0	.158	.084	.025	.153	.082	.025	.144	.078	.024	.136	.074	.023	.128	.071	.022	
4.0	.150	.078	.023	.146	.076	.023	.138	.073	.022	.131	.070	.021	.124	.067	.021	
5.0	.143	.073	.021	.139	.071	.021	.132	.069	.020	.126	.066	.020	.120	.064	.019	
6.0	.136	.068	.019	.133	.067	.019	.127	.065	.019	.121	.063	.019	.116	.061	.018	
7.0	.130	.064	.018	.127	.063	.018	.122	.062	.018	.117	.060	.017	.112	.058	.017	
8.0	.124	.061	.017	.122	.060	.017	.117	.058	.017	.113	.057	.016	.108	.056	.016	
9.0	.119	.057	.016	.117	.057	.016	.112	.056	.016	.108	.054	.016	.105	.053	.015	
10.0	.114	.055	.015	.112	.054	.015	.108	.053	.015	.105	.052	.015	.101	.051	.015	

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	.171	.157	.145	.146	.135	.125	.100	.093	.086	.058	.054	.050	.018	.017	.016	
2.0	.155	.133	.113	.133	.114	.098	.091	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.143	.114	.090	.122	.098	.078	.084	.068	.055	.049	.040	.032	.016	.013	.011	
4.0	.132	.099	.073	.114	.085	.064	.078	.059	.045	.045	.035	.026	.015	.011	.009	
5.0	.123	.087	.060	.106	.075	.052	.073	.053	.037	.042	.031	.022	.014	.010	.007	
6.0	.116	.078	.050	.100	.067	.044	.069	.047	.031	.040	.028	.018	.013	.009	.006	
7.0	.109	.070	.043	.094	.061	.037	.065	.043	.026	.038	.025	.016	.012	.008	.005	
8.0	.104	.064	.037	.089	.055	.032	.062	.039	.023	.036	.023	.013	.012	.008	.004	
9.0	.098	.059	.032	.085	.051	.028	.059	.036	.020	.034	.021	.012	.011	.007	.004	
10.0	.094	.054	.028	.081	.047	.024	.056	.033	.017	.033	.020	.010	.011	.006	.003	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-07-15

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:231.93V I:0.0494A P:10.330W PF:0.9012 Freq:49.99Hz Lamp Flux:924.779x1 lm										
NAME: DL9452-WHTC10C03					TYPE:			WEIGHT:		
SPEC.: white RA90 3000K+5000K					DIM.:			SERIAL No.:		
MFR.:					SUR.: 85mm			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	18.6	19.5	18.8	19.6	19.8	17.3	18.3	17.6	18.4	18.6
3H	18.4	19.3	18.7	19.5	19.7	17.2	18.1	17.5	18.3	18.5
4H	18.4	19.2	18.6	19.4	19.6	17.1	17.9	17.4	18.2	18.4
6H	18.3	19.0	18.6	19.3	19.5	17.1	17.8	17.4	18.1	18.3
8H	18.3	19.0	18.6	19.2	19.5	17.0	17.8	17.3	18.0	18.3
12H	18.2	18.9	18.5	19.2	19.5	17.0	17.7	17.3	17.9	18.2
4H 2H	18.4	19.2	18.6	19.4	19.6	17.2	17.9	17.4	18.2	18.4
3H	18.2	18.9	18.6	19.2	19.5	17.0	17.7	17.4	18.0	18.3
4H	18.2	18.8	18.5	19.1	19.4	17.0	17.6	17.3	17.9	18.2
6H	18.1	18.7	18.5	19.0	19.3	16.9	17.5	17.3	17.8	18.1
8H	18.1	18.6	18.5	18.9	19.3	16.9	17.4	17.3	17.7	18.1
12H	18.0	18.5	18.4	18.9	19.3	16.8	17.3	17.2	17.7	18.0
8H 4H	18.0	18.6	18.4	18.9	19.3	16.8	17.4	17.2	17.7	18.1
6H	18.0	18.4	18.4	18.8	19.2	16.8	17.2	17.2	17.6	18.0
8H	17.9	18.3	18.4	18.7	19.2	16.7	17.1	17.2	17.5	18.0
12H	17.9	18.2	18.4	18.7	19.1	16.7	17.0	17.2	17.5	17.9
12H 4H	18.0	18.5	18.4	18.8	19.2	16.8	17.3	17.2	17.6	18.0
6H	17.9	18.3	18.4	18.7	19.2	16.7	17.1	17.2	17.5	18.0
8H	17.9	18.2	18.4	18.6	19.1	16.7	17.0	17.2	17.5	17.9
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 3.3 / - 6.3					+ 2.6 / - 5.5				
1.5H	+ 5.4 / - 5.0					+ 4.4 / - 3.8				
2.0H	+ 4.6 / - 4.1					+ 3.5 / - 3.6				

CIE Pub.117, 924.8 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.3)
Area: 0.00567 m2

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-07-15

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:231.93V I:0.0494A P:10.330W PF:0.9012 Freq:49.99Hz Lamp Flux:924.779x1 lm		
NAME: DL9452-WHTC10C03	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 85mm	Shielding Angle:

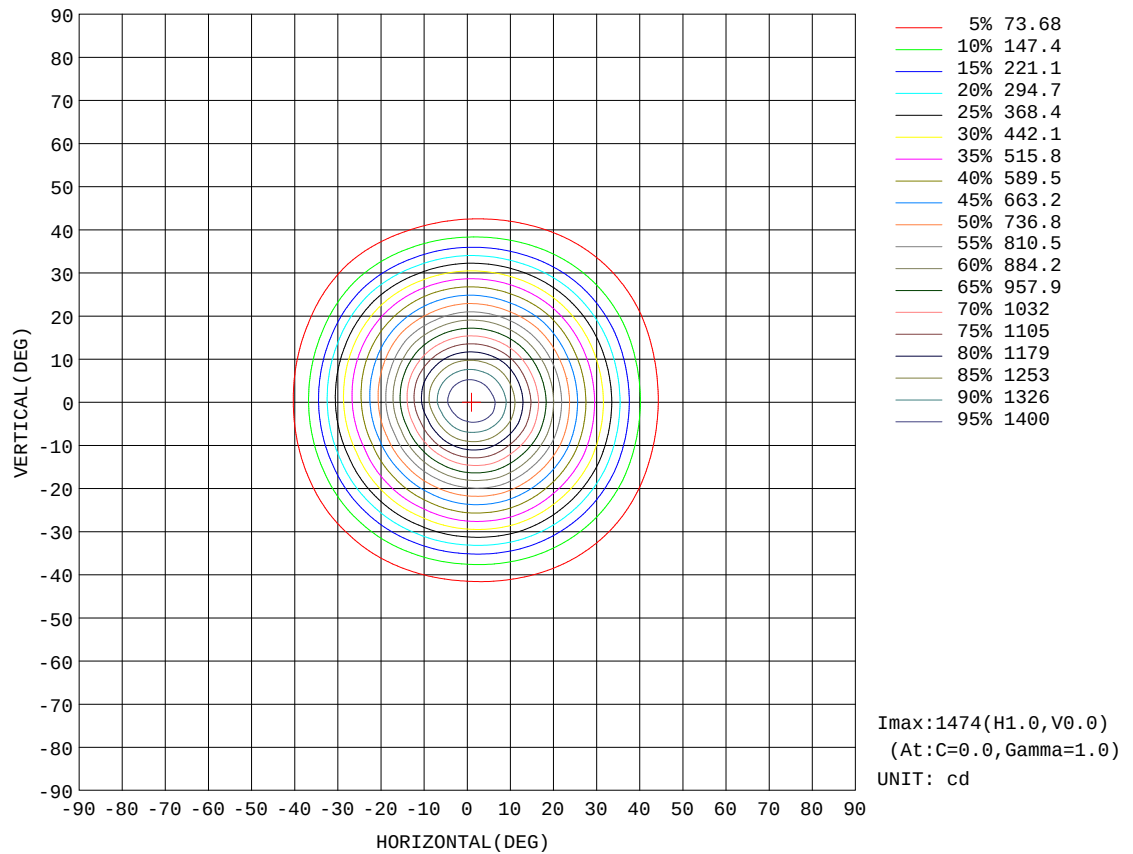
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	87	80	77	86	80	77	86	80	76	73
0.80	94	89	85	94	88	85	93	88	84	81
1.00	99	93	90	98	93	89	97	93	89	85
1.25	103	98	94	102	97	94	100	96	93	89
1.50	106	101	98	105	100	97	102	99	96	92
2.00	108	104	101	107	103	100	104	101	99	94
2.50	110	106	103	109	105	102	105	103	101	95
3.00	112	108	106	110	107	104	107	104	102	96
4.00	114	111	109	112	109	107	108	106	105	98
5.00	115	113	111	113	111	109	109	107	106	99
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:2025-07-15

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:231.93V I:0.0494A P:10.330W PF:0.9012 Freq:49.99Hz Lamp Flux:924.779x1 lm		
NAME: DL9452-WHTC10C03	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 85mm	Shielding Angle:

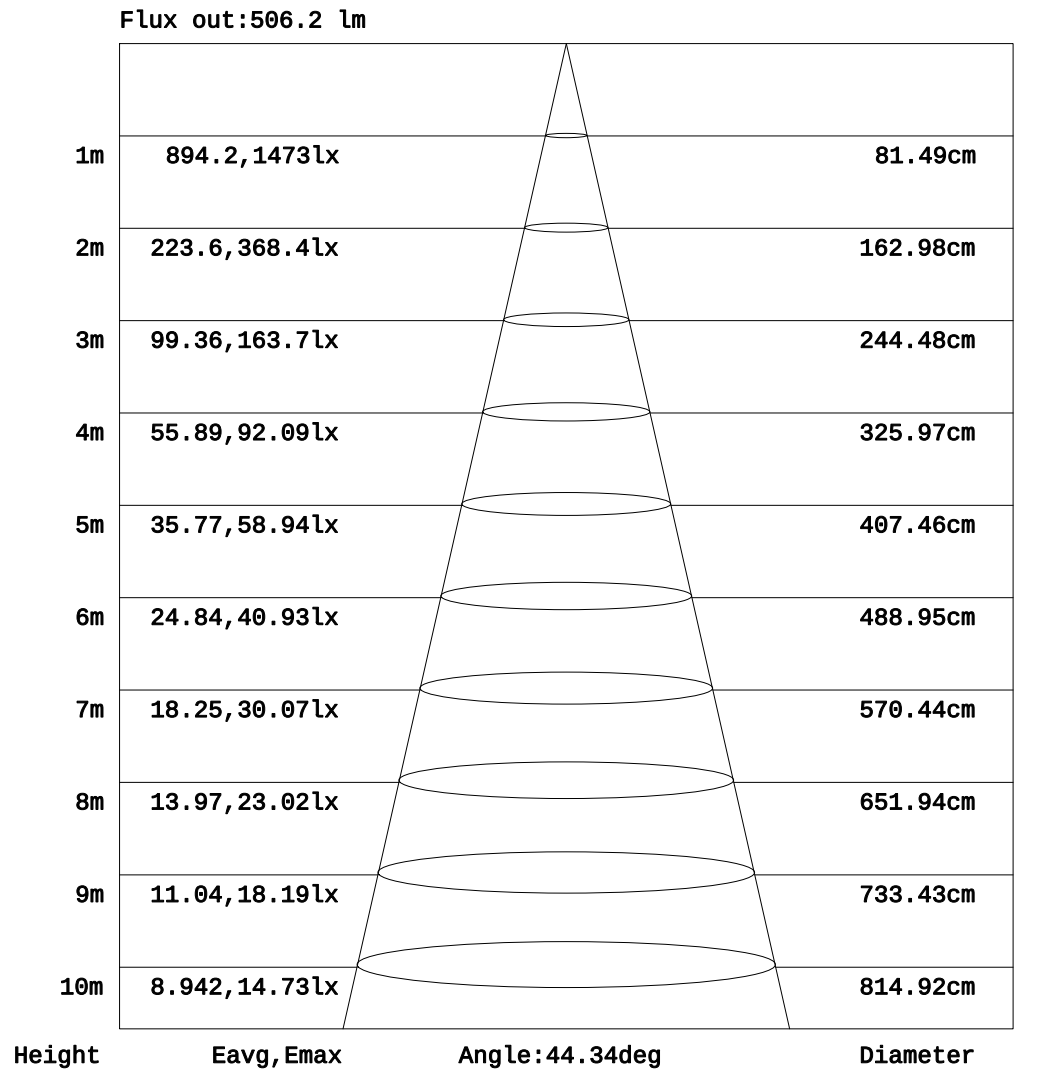


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-07-15

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:231.93V I:0.0494A P:10.330W PF:0.9012 Freq:49.99Hz Lamp Flux:924.779x1 lm		
NAME: DL9452-WHTC10C03	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 85mm	Shielding Angle:



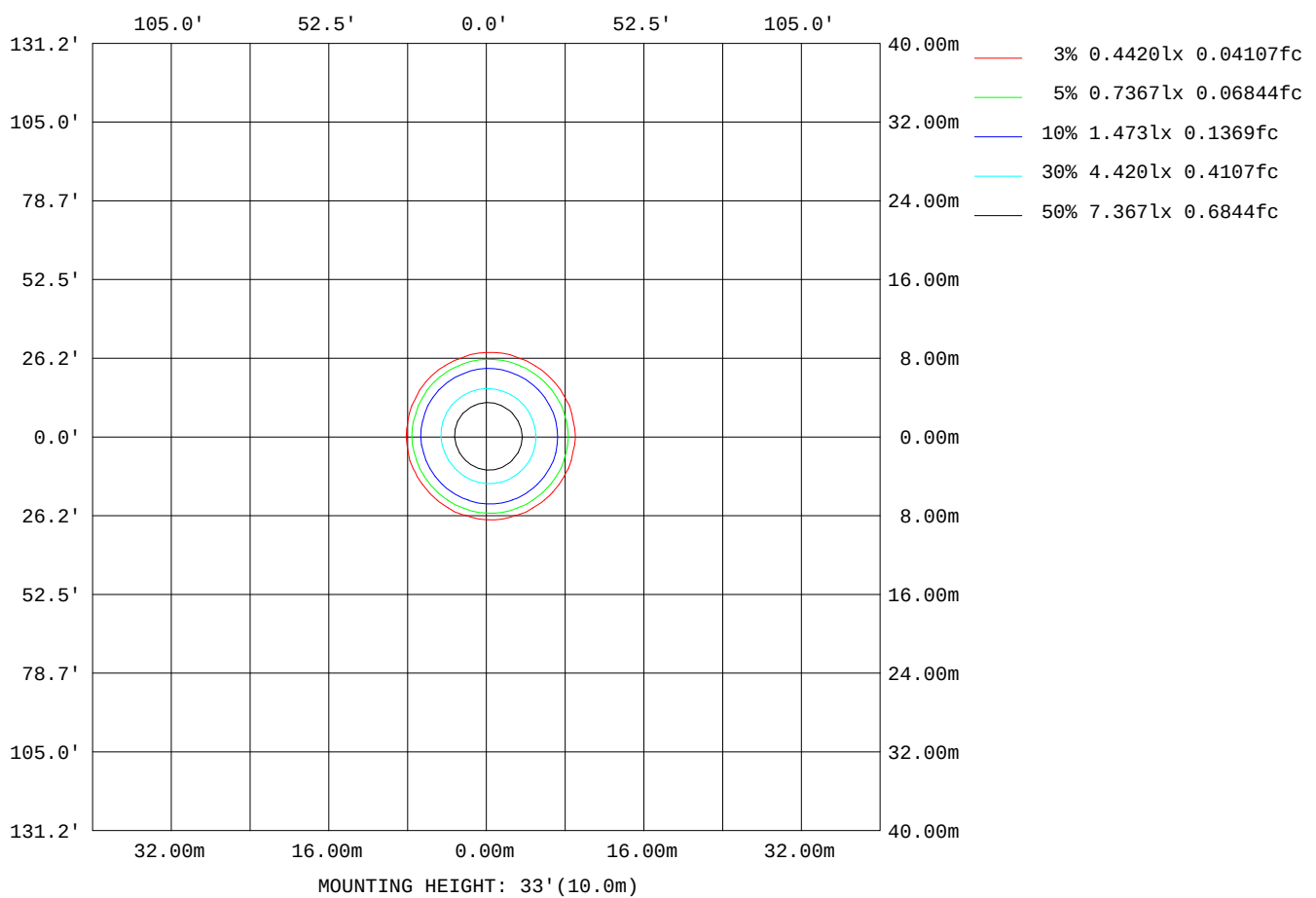
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-07-15

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:231.93V I:0.0494A P:10.330W PF:0.9012 Freq:49.99Hz Lamp Flux:924.779x1 lm		
NAME: DL9452-WHTC10C03	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 85mm	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-07-15

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:231.93V I:0.0494A P:10.330W PF:0.9012 Freq:49.99Hz Lamp Flux:924.779x1 lm		
NAME: DL9452-WHTC10C03	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 85mm	Shielding Angle:

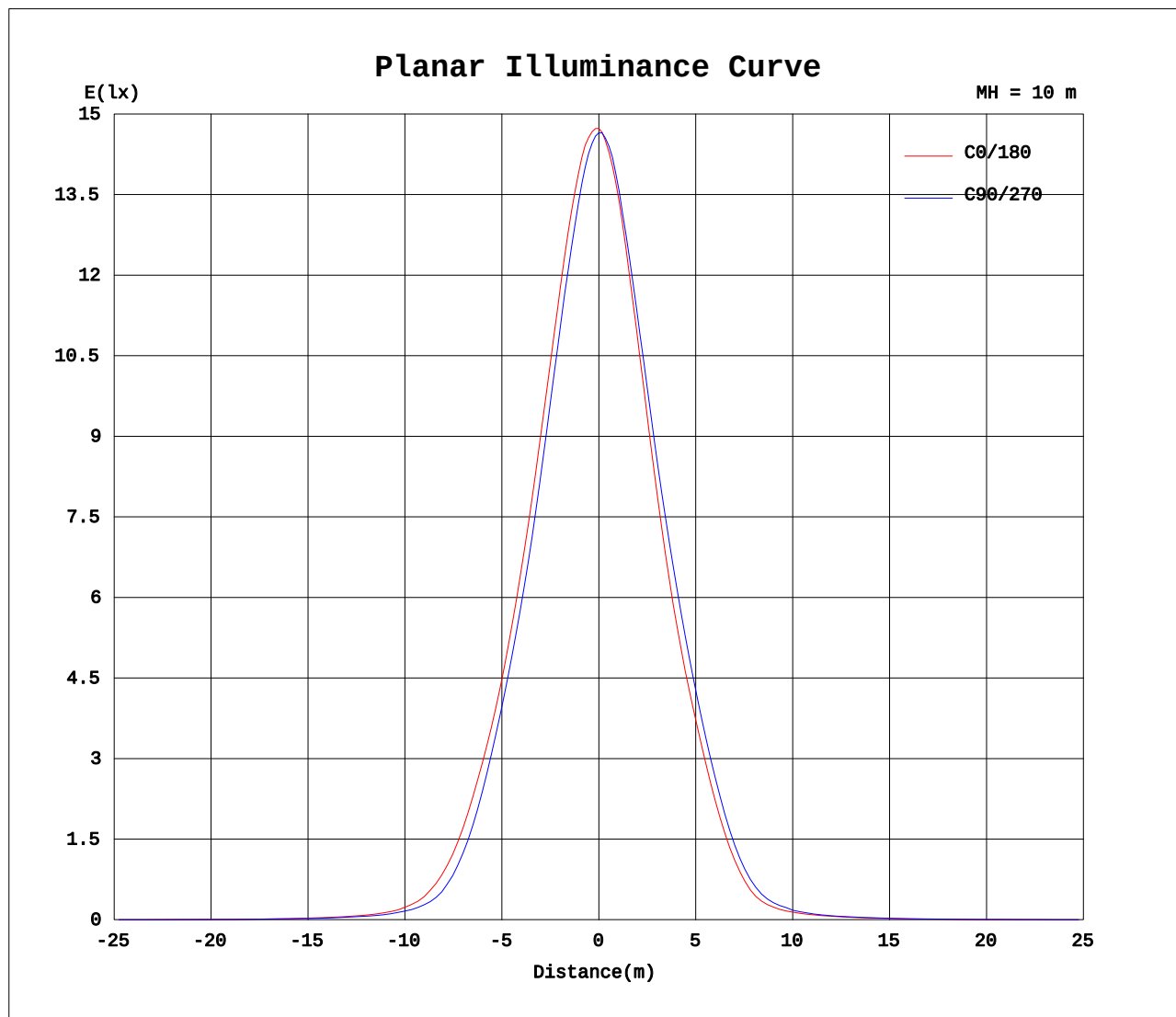
AvgL	cd/m2
L_0~180(65)av	2235
L_0~180(75)av	1365
L_0~180(85)av	948
L_90~270(65)av	2128
L_90~270(75)av	1357
L_90~270(85)av	939
L_45(65)av	2157
L_45(75)av	1356
L_45(85)av	934

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 2025-07-15

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: 2025-07-15

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:

```