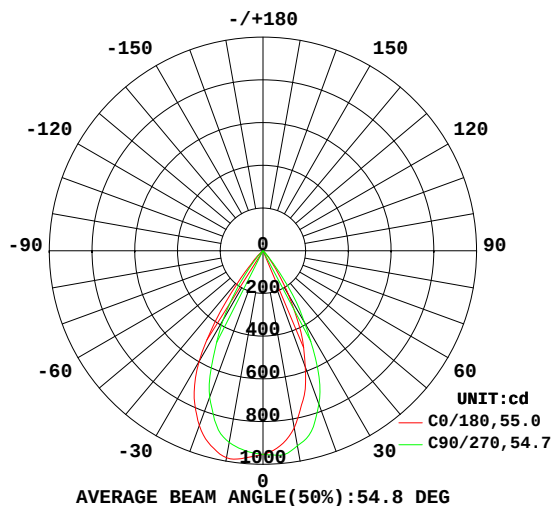


LUMINAIRE PHOTOMETRIC TEST REPORT

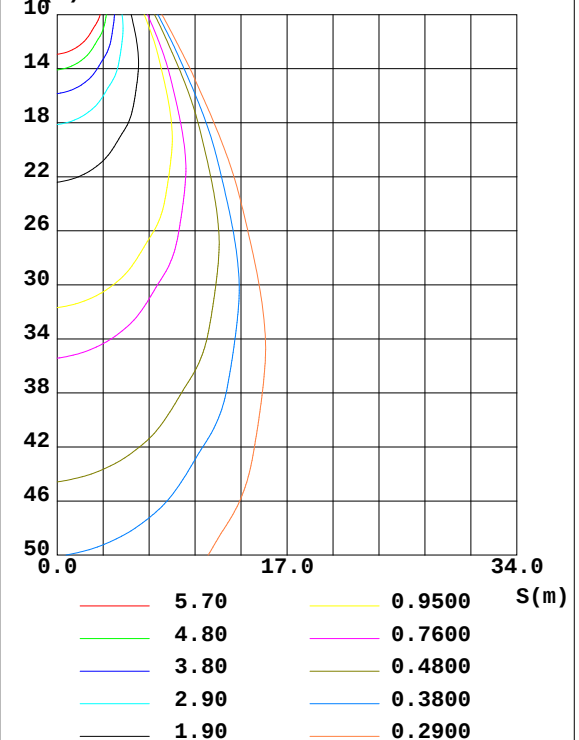
Test:U:220.65V I:0.0474A P:9.5963W PF:0.9167 Freq:50.01Hz Lamp Flux:749.88x1 lm		
NAME: DL9415-WHTC10C03	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 85mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 78.14 lm/W			
MODEL	2835 16 3000K	I _{max} (cd)	987.1	S/MH(C0/180)	0.95
NOMINAL POWER(W)	9	LOR(%)	100.0	S/MH(C90/270)	0.82
RATED VOLTAGE(V)	220-240	TOTAL FLUX(lm)	749.88	η UP, DN(C0-180)	0.0, 49.1
NOMINAL FLUX(lm)	749.88	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 50.9
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	220	η down(%)	100.0	CIBSE SHR MAX	0.85

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: 2024-01-24

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:

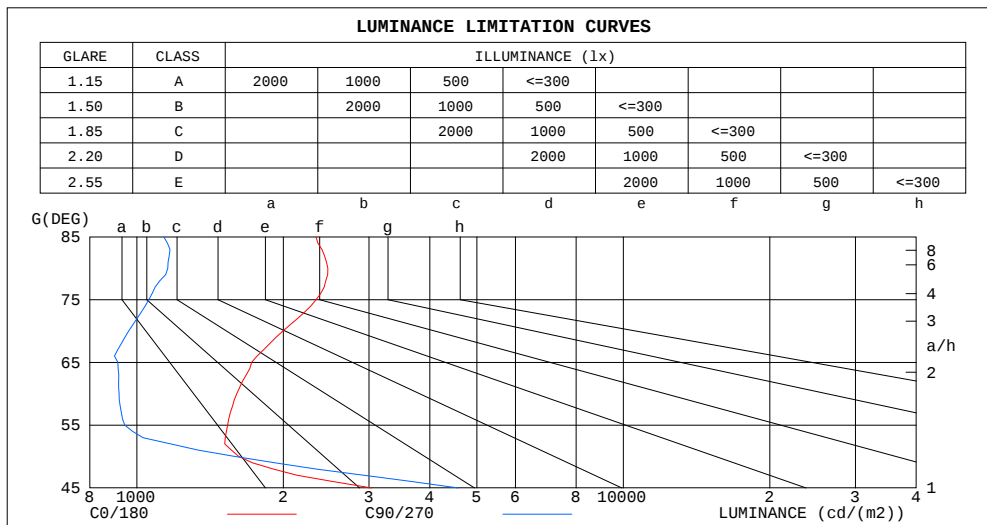
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	842.3	892.2	927.3	979.3	983.8	938.4	910.9	872.2	0- 10	89.62	89.62	12,12
20	578.2	658.8	764.4	818.5	871.6	794.6	730.4	623.2	10- 20	234.0	323.6	43.2,43.2
30	241.8	281.5	390.3	535.1	599.2	493.7	373.3	269.8	20- 30	260.5	584.1	77.9,77.9
40	36.95	39.79	58.91	99.95	131.0	107.5	70.90	48.16	30- 40	134.7	718.8	95.9,95.9
50	5.901	5.370	5.792	8.840	12.71	9.240	6.287	5.950	40- 50	22.06	740.8	98.8,98.8
60	4.548	3.753	2.607	1.897	1.771	2.172	3.161	4.246	50- 60	3.703	744.5	99.3,99.3
70	3.873	3.023	1.865	1.170	0.9996	1.370	2.366	3.508	60- 70	2.582	747.1	99.6,99.6
80	2.431	1.866	1.140	0.6763	0.5476	0.8176	1.504	2.283	70- 80	2.020	749.1	99.9,99.9
90	0.0116	0.0039	0.0039	0	0	0	0	0	80- 90	0.7365	749.9	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:2024-01-24

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:220.65V I:0.0474A P:9.5963W PF:0.9167 Freq:50.01Hz Lamp Flux:749.88x1 lm		
NAME: DL9415-WHTC10C03	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 85mm	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	2334	1136
80	2469	1158
75	2337	1058
70	1997	962
65	1721	914
60	1604	919
55	1536	944
50	1619	1589
45	3035	4572

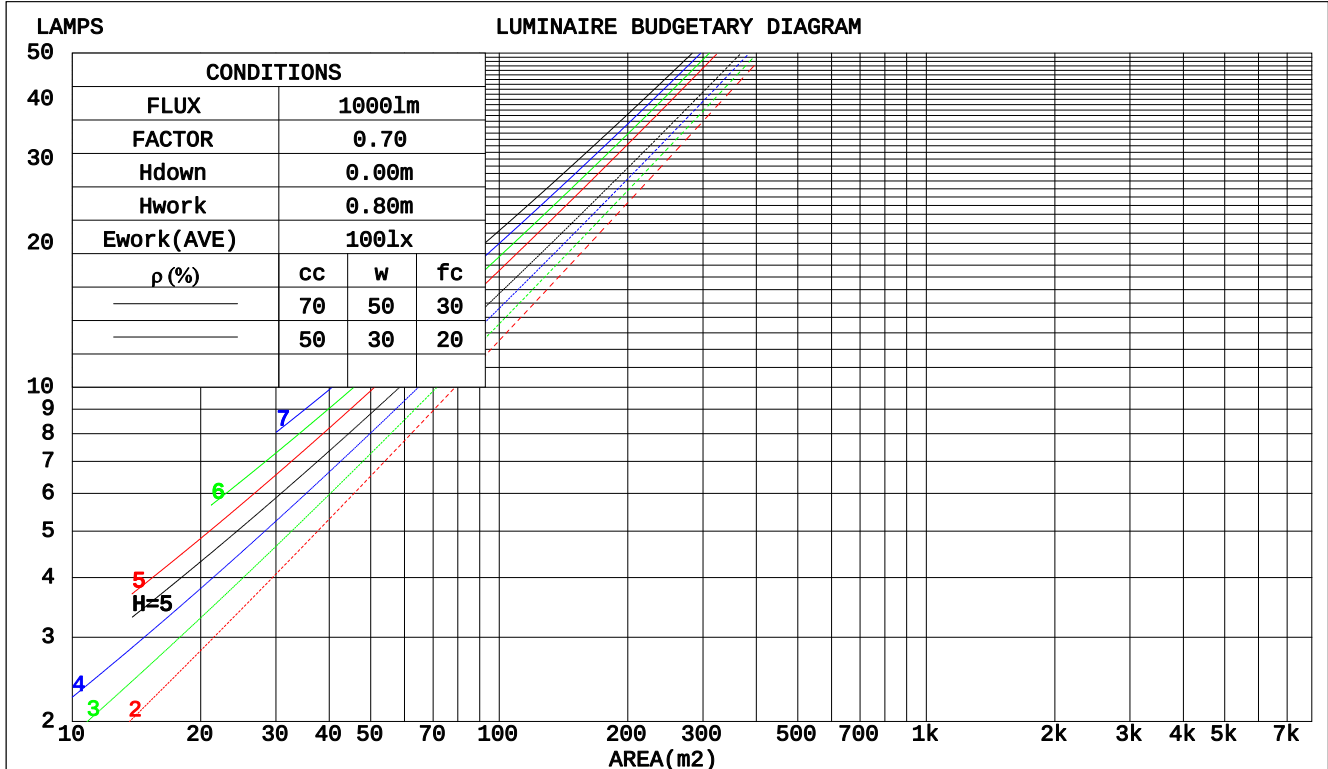
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2024-01-24

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:220.65V I:0.0474A P:9.5963W PF:0.9167 Freq:50.01Hz Lamp Flux:749.88x1 lm		
NAME: DL9415-WHTC10C03	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	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)															
	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	1.11	1.09	1.06	1.09	1.07	1.05	1.05	1.03	1.02	1.01	.99	.99	.98	.97	.96	.94
2.0	1.04	.99	.97	1.02	.99	.96	.99	.96	.93	.96	.94	.91	.93	.91	.90	.88
3.0	.97	.92	.89	.96	.91	.88	.93	.90	.87	.91	.88	.85	.89	.86	.84	.82
4.0	.91	.86	.82	.90	.85	.81	.88	.84	.81	.86	.82	.80	.84	.81	.79	.77
5.0	.86	.80	.76	.85	.80	.76	.83	.79	.75	.82	.78	.75	.80	.77	.74	.72
6.0	.81	.75	.71	.80	.75	.71	.79	.74	.70	.77	.73	.70	.76	.72	.70	.68
7.0	.76	.71	.67	.76	.70	.67	.75	.70	.66	.73	.69	.66	.72	.68	.65	.64
8.0	.72	.67	.63	.72	.66	.63	.71	.66	.62	.70	.65	.62	.69	.65	.62	.61
9.0	.69	.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: 2024-01-24

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:220.65V I:0.0474A P:9.5963W PF:0.9167 Freq:50.01Hz Lamp Flux:749.88x1 lm					
NAME: DL9415-WHTC10C03			TYPE:		WEIGHT:
SPEC.: white RA80 3000K+5700K			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	.173	.098	.031	.166	.095	.030	.153	.088	.028	.142	.082	.026	.131	.076	.024	
2.0	.164	.090	.028	.158	.087	.027	.148	.082	.026	.138	.078	.024	.129	.073	.023	
3.0	.156	.083	.025	.151	.081	.024	.142	.077	.023	.134	.073	.022	.126	.070	.022	
4.0	.148	.077	.023	.144	.075	.022	.136	.072	.022	.129	.069	.021	.123	.067	.020	
5.0	.141	.072	.021	.138	.071	.021	.131	.068	.020	.125	.066	.020	.119	.064	.019	
6.0	.135	.068	.019	.132	.067	.019	.126	.065	.019	.120	.063	.018	.115	.061	.018	
7.0	.129	.064	.018	.126	.063	.018	.121	.061	.018	.116	.060	.017	.112	.058	.017	
8.0	.124	.060	.017	.121	.060	.017	.117	.058	.017	.112	.057	.016	.108	.055	.016	
9.0	.119	.057	.016	.116	.057	.016	.112	.055	.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	.142	.114	.090	.122	.098	.078	.084	.068	.055	.048	.040	.032	.016	.013	.011	
4.0	.132	.099	.073	.113	.085	.064	.078	.059	.045	.045	.035	.027	.014	.011	.009	
5.0	.123	.087	.060	.106	.075	.053	.073	.053	.037	.042	.031	.022	.014	.010	.007	
6.0	.116	.078	.050	.099	.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	.103	.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:2024-01-24

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:220.65V I:0.0474A P:9.5963W PF:0.9167 Freq:50.01Hz Lamp Flux:749.88x1 lm										
NAME: DL9415-WHTC10C03					TYPE:			WEIGHT:		
SPEC.: white RA80 3000K+5700K					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	13.1	14.0	13.3	14.2	14.3	15.8	16.7	16.1	16.9	17.1
3H	13.2	14.0	13.4	14.2	14.4	15.7	16.5	16.0	16.7	16.9
4H	13.4	14.1	13.6	14.4	14.6	15.7	16.4	15.9	16.7	16.9
6H	13.6	14.3	13.9	14.5	14.8	15.6	16.3	15.9	16.6	16.8
8H	13.6	14.4	14.0	14.6	14.9	15.6	16.3	15.9	16.5	16.8
12H	13.7	14.4	14.0	14.6	14.9	15.6	16.2	15.9	16.5	16.8
4H 2H	12.9	13.7	13.2	13.9	14.1	15.6	16.4	15.9	16.6	16.8
3H	13.1	13.8	13.4	14.1	14.3	15.5	16.2	15.8	16.5	16.7
4H	13.4	14.0	13.7	14.3	14.6	15.5	16.1	15.8	16.4	16.7
6H	13.8	14.3	14.1	14.6	15.0	15.5	16.0	15.8	16.3	16.7
8H	13.9	14.4	14.3	14.8	15.1	15.5	16.0	15.8	16.3	16.7
12H	14.0	14.5	14.4	14.9	15.2	15.4	15.9	15.8	16.3	16.7
8H 4H	13.4	13.9	13.8	14.2	14.6	15.4	15.9	15.8	16.3	16.6
6H	13.9	14.3	14.3	14.7	15.1	15.4	15.9	15.9	16.2	16.7
8H	14.1	14.5	14.5	14.9	15.3	15.5	15.8	15.9	16.2	16.7
12H	14.3	14.6	14.7	15.0	15.5	15.5	15.8	15.9	16.2	16.7
12H 4H	13.4	13.8	13.8	14.2	14.6	15.4	15.8	15.8	16.2	16.6
6H	13.9	14.2	14.3	14.6	15.1	15.4	15.8	15.9	16.2	16.6
8H	14.1	14.4	14.6	14.9	15.3	15.4	15.8	15.9	16.2	16.7
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 2.0 / - 1.6					+ 4.4 / - 5.0				
1.5H	+ 3.9 / - 1.6					+ 6.9 / - 4.9				
2.0H	+ 0.7 / - 0.2					+ 3.0 / - 0.8				

CIE Pub.117, 749.9 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -1.0)
Area: 0.00567 m2

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2024-01-24

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:220.65V I:0.0474A P:9.5963W PF:0.9167 Freq:50.01Hz Lamp Flux:749.88x1 lm		
NAME: DL9415-WHTC10C03	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 85mm	Shielding Angle:

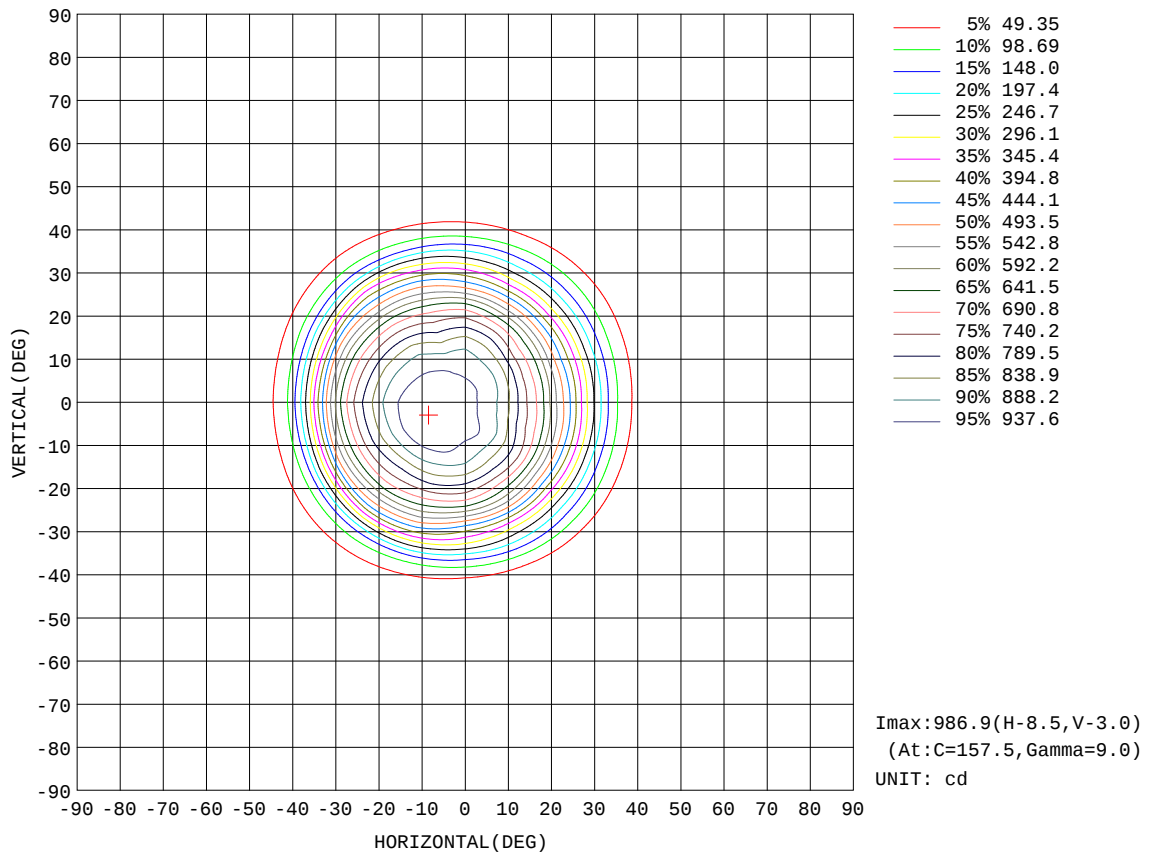
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	89	83	79	89	83	79	88	82	79	76
0.80	96	91	87	96	90	87	94	90	87	83
1.00	100	95	92	100	95	91	98	94	91	87
1.25	104	99	96	103	99	95	101	97	95	91
1.50	107	102	99	105	101	99	103	100	97	93
2.00	109	105	102	108	104	101	105	102	100	95
2.50	111	107	104	109	106	103	106	103	101	96
3.00	112	109	106	110	107	105	107	105	103	97
4.00	114	111	109	112	110	108	108	107	105	98
5.00	115	113	111	113	111	110	109	108	107	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:2024-01-24

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:220.65V I:0.0474A P:9.5963W PF:0.9167 Freq:50.01Hz Lamp Flux:749.88x1 lm		
NAME: DL9415-WHTC10C03	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 85mm	Shielding Angle:



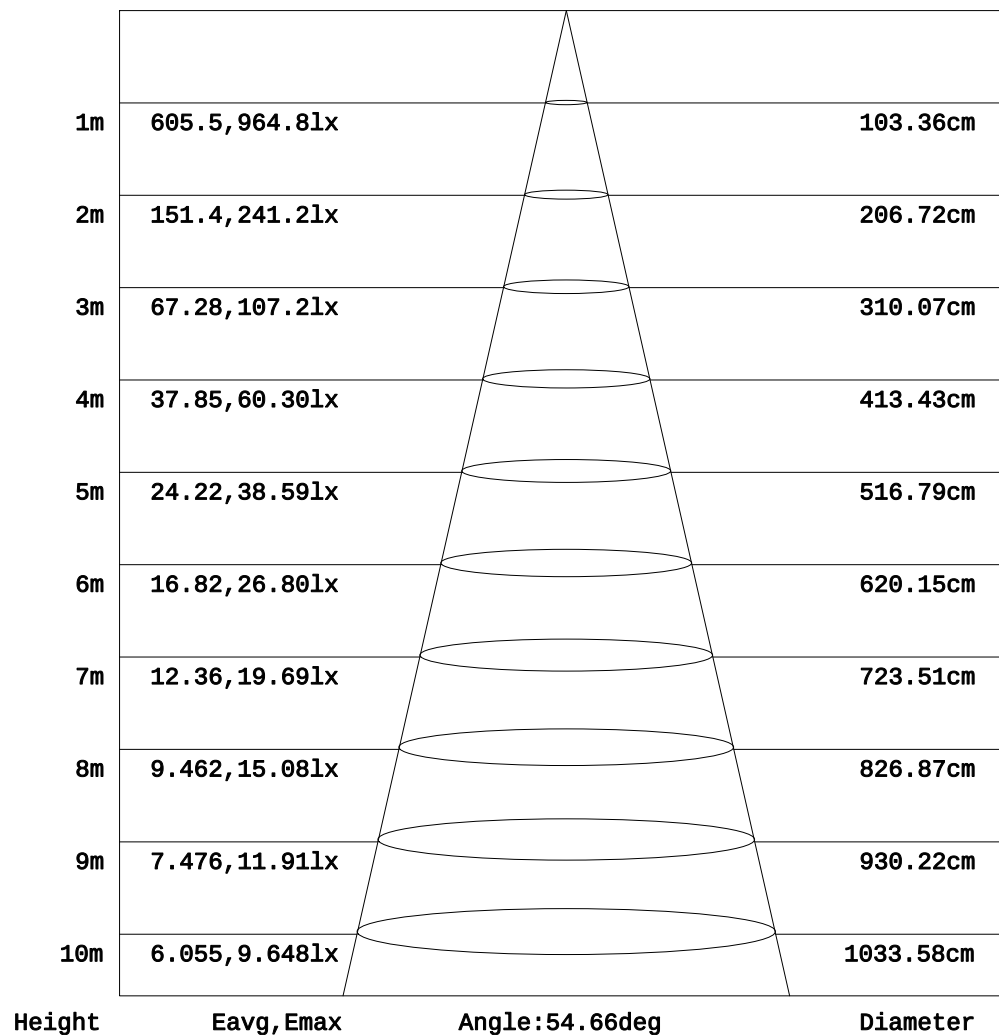
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2024-01-24

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:220.65V I:0.0474A P:9.5963W PF:0.9167 Freq:50.01Hz Lamp Flux:749.88x1 lm		
NAME: DL9415-WHTC10C03	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 85mm	Shielding Angle:

Flux out:537.8 lm



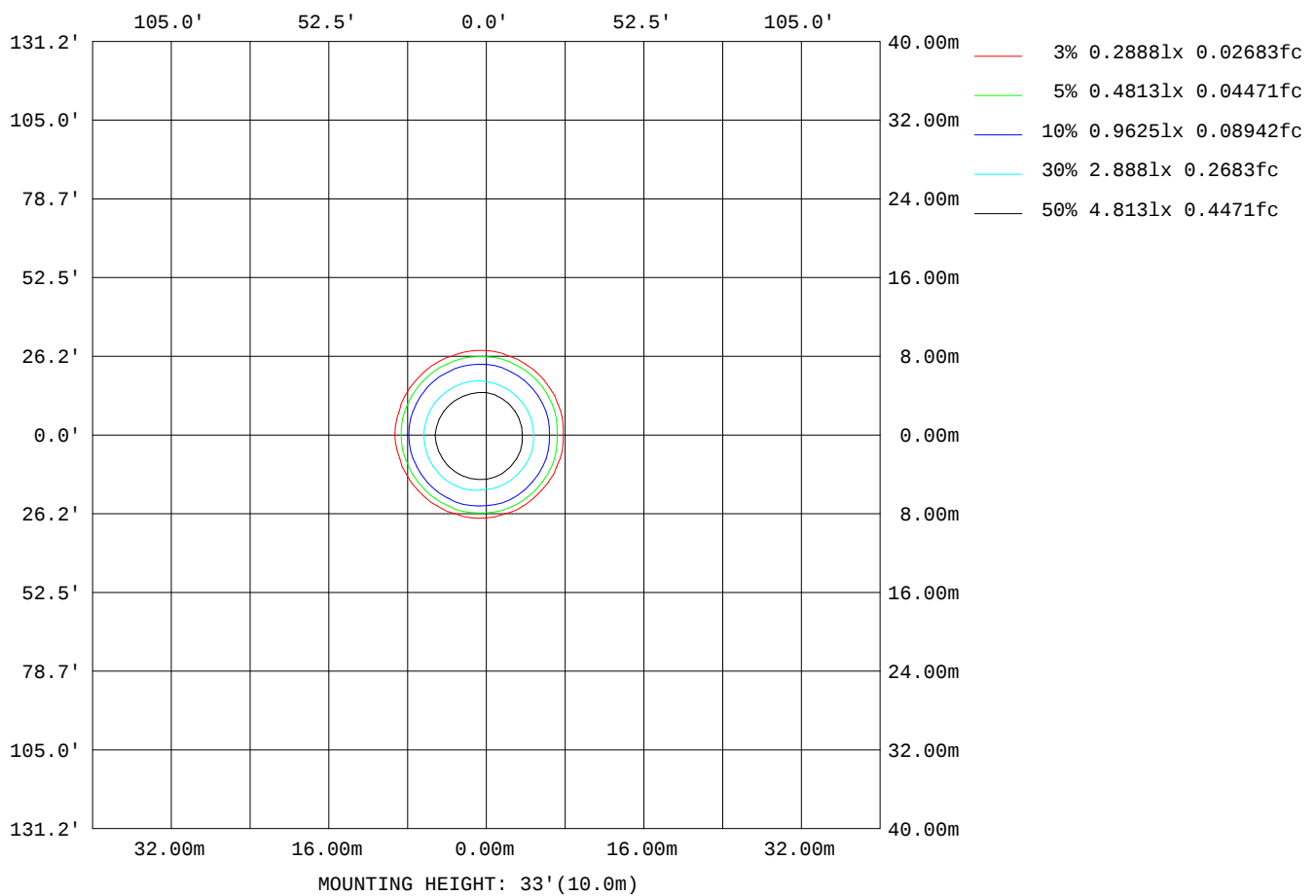
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 2024-01-24

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:220.65V I:0.0474A P:9.5963W PF:0.9167 Freq:50.01Hz Lamp Flux:749.88x1 lm		
NAME: DL9415-WHTC10C03	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 85mm	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2024-01-24

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:220.65V I:0.0474A P:9.5963W PF:0.9167 Freq:50.01Hz Lamp Flux:749.88x1 lm		
NAME: DL9415-WHTC10C03	TYPE:	WEIGHT:
SPEC.: white RA80 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 85mm	Shielding Angle:

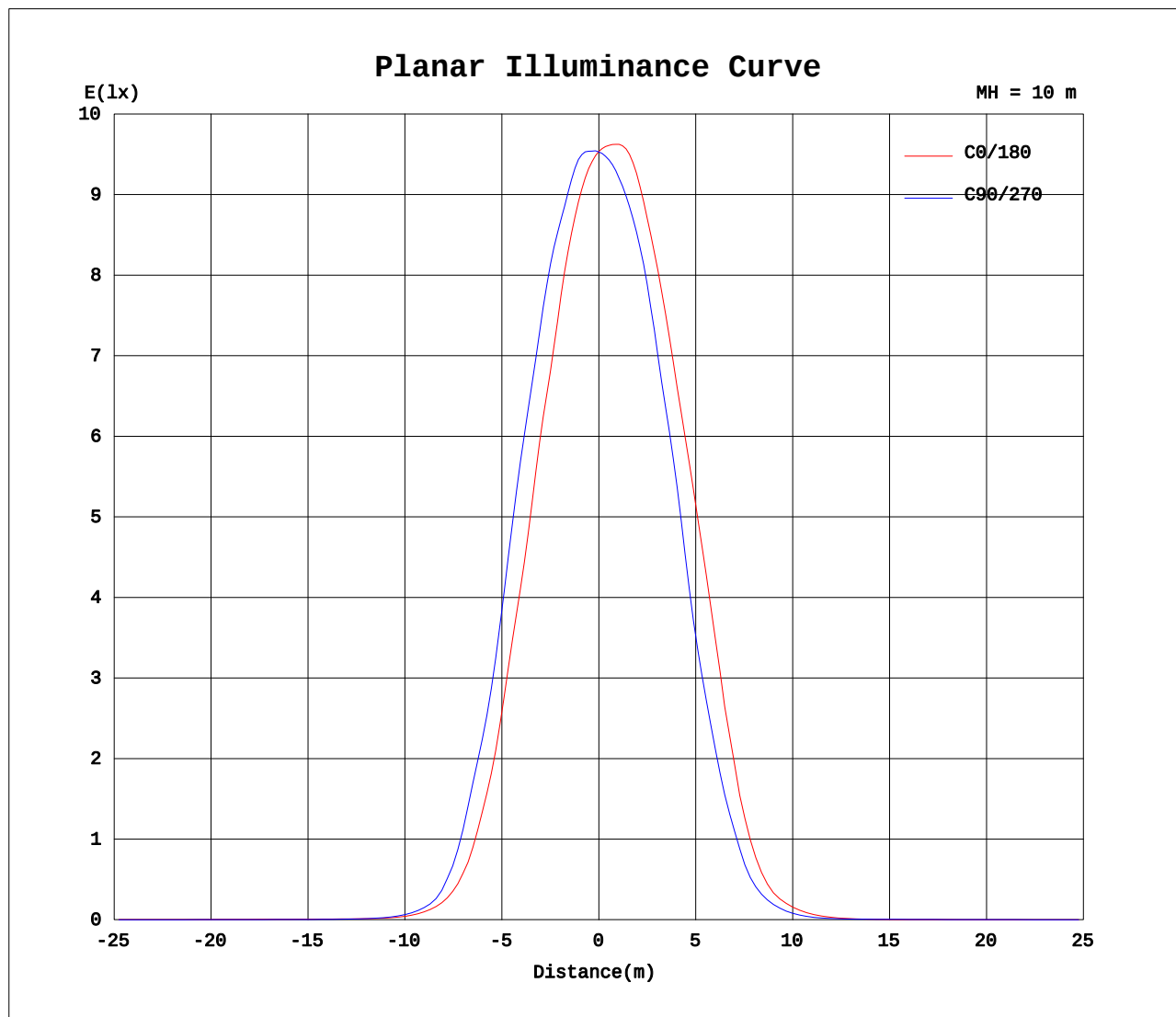
AvgL	cd/m2
L_0~180(65)av	1131
L_0~180(75)av	1441
L_0~180(85)av	1424
L_90~270(65)av	1030
L_90~270(75)av	1218
L_90~270(85)av	1343
L_45(65)av	1076
L_45(75)av	1331
L_45(85)av	1400

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2024-01-24

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: 2024-01-24

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:

```