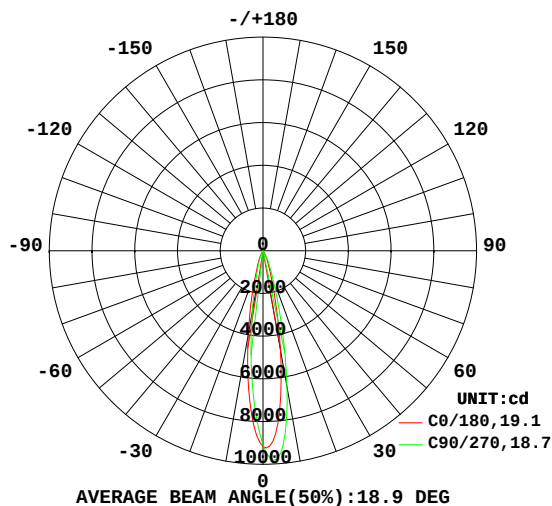


LUMINAIRE PHOTOMETRIC TEST REPORT

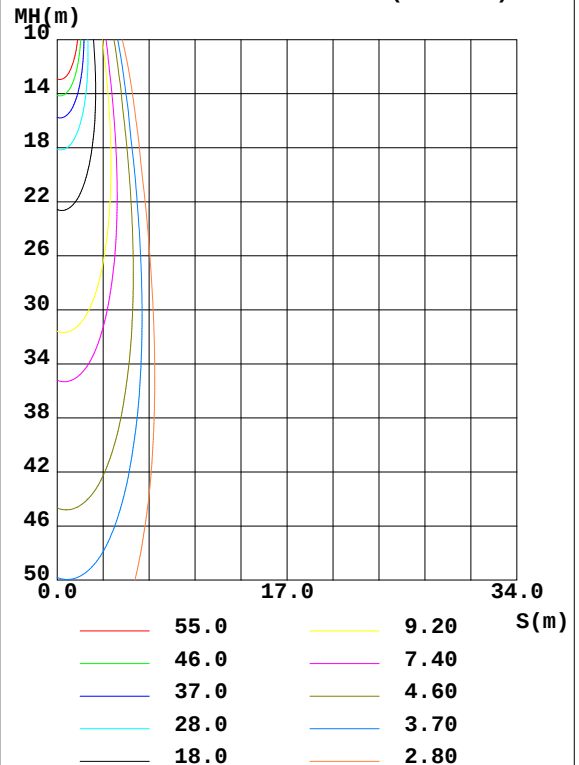
Test:U:220.44V I:0.1592A P:19.197W PF:0.5470 Freq:50.01Hz Lamp Flux:1484.9x1 lm		
NAME: DL6940010-4KWH	TYPE:	WEIGHT:
SPEC.: white RA90	DIM.:	SERIAL No.:
MFR.:	SUR.: 26*26mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 77.35 lm/W			
MODEL	4000K	I _{max} (cd)	9894	S/MH(C0/180)	0.31
NOMINAL POWER(W)	20	LOR(%)	100.0	S/MH(C90/270)	0.25
RATED VOLTAGE(V)	220-240	TOTAL FLUX(lm)	1484.9	η UP, DN(C0-180)	0.0, 61.7
NOMINAL FLUX(lm)	1484.9	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 38.3
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	220	η down(%)	100.0	CIBSE SHR MAX	1.00

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:2023-11-07

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:

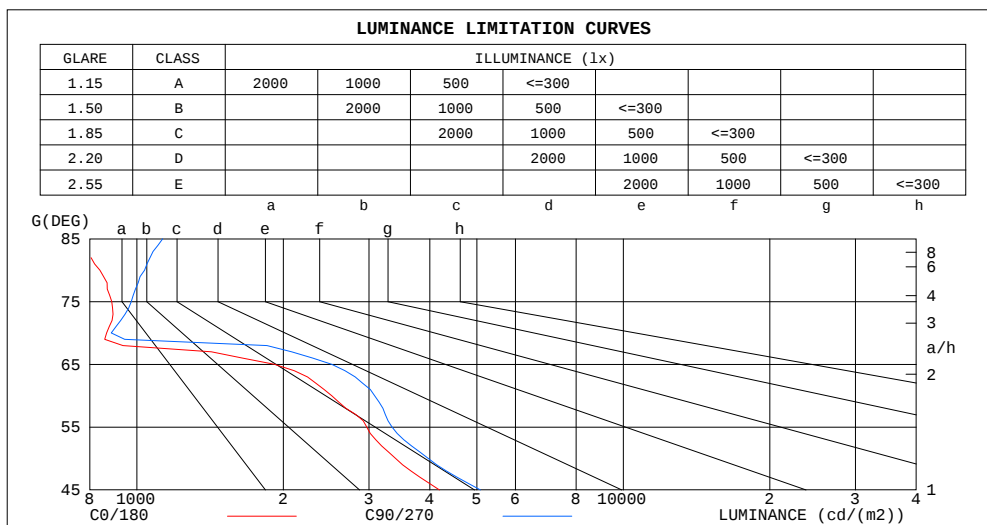
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	4724	6065	6491	5343	3995	3056	2914	3528	0- 10	624.6	624.6	42.1, 42.1
20	867.2	1123	1272	1084	777.1	590.8	567.5	674.7	10- 20	580.1	1205	81.1, 81.1
30	167.5	243.8	294.2	239.1	142.9	77.96	77.89	114.9	20- 30	201.5	1406	94.7, 94.7
40	28.52	33.33	38.43	36.23	26.77	24.66	24.29	28.92	30- 40	42.68	1449	97.6, 97.6
50	14.79	17.51	17.26	18.71	14.21	14.49	13.78	16.53	40- 50	16.60	1466	98.7, 98.7
60	8.498	11.10	10.41	11.44	8.100	9.687	8.193	10.34	50- 60	11.18	1477	99.4, 99.4
70	2.004	4.686	2.048	4.605	1.937	1.886	1.748	2.020	60- 70	6.049	1483	99.9, 99.9
80	0.9856	1.179	1.217	1.132	0.9020	0.7591	0.6860	0.7900	70- 80	1.656	1484	100, 100
90	0.0270	0.0965	0.1235	0.0733	0	0	0	0	80- 90	0.4693	1485	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: 2023-11-07

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:220.44V I:0.1592A P:19.197W PF:0.5470 Freq:50.01Hz Lamp Flux:1484.9x1 lm		
NAME: DL6940010-4KWH	TYPE:	WEIGHT:
SPEC.: white RA90	DIM.:	SERIAL No.:
MFR.:	SUR.: 26*26mm	Shielding Angle:



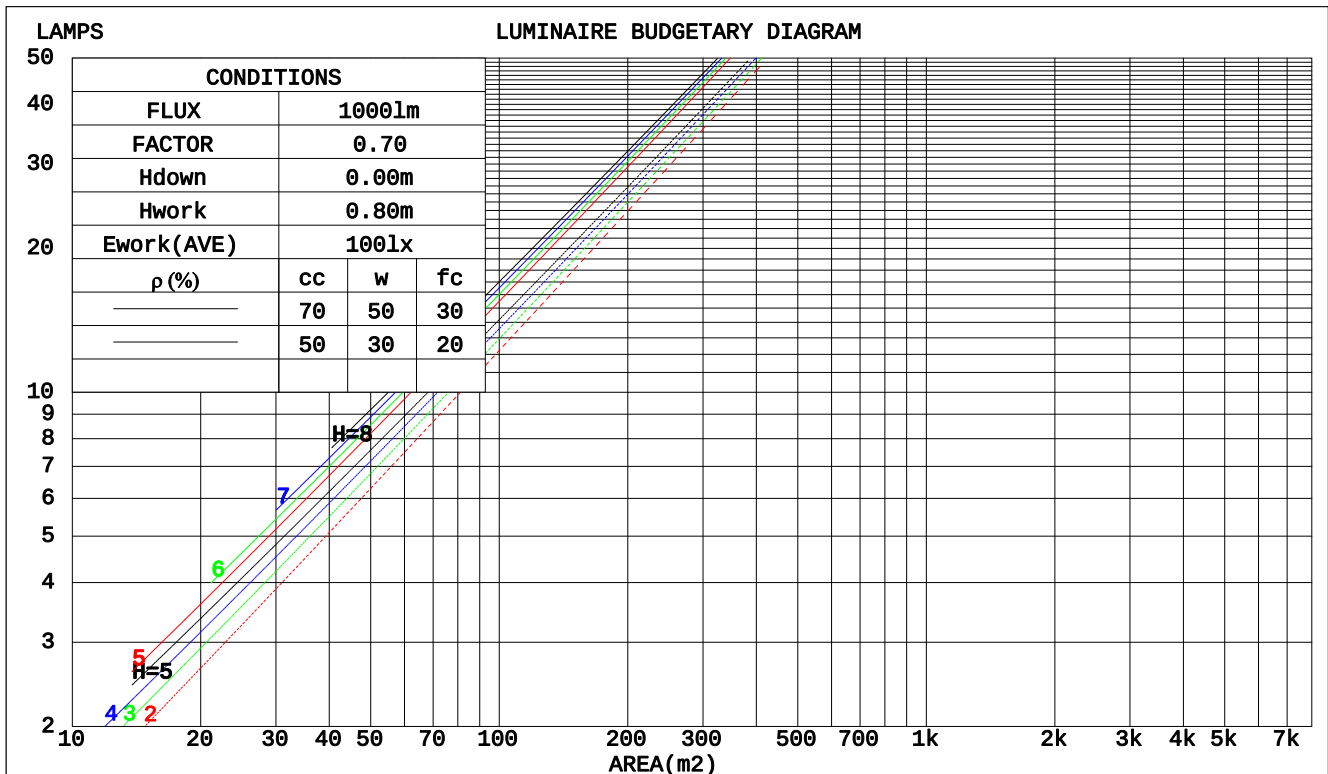
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2023-11-07

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:220.44V I:0.1592A P:19.197W PF:0.5470 Freq:50.01Hz Lamp Flux:1484.9x1 lm		
NAME: DL6940010-4KWH	TYPE:	WEIGHT:
SPEC.: white RA90	DIM.:	SERIAL No.:
MFR.:	SUR.: 26*26mm	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	.00
1.0	1.13	1.11	1.09	1.11	1.09	1.08	1.07	1.06	1.04	1.03	1.02	1.01	.00	.99	.98	.97
2.0	1.08	1.05	1.02	1.06	1.04	1.01	1.03	1.01	.99	1.00	.99	.97	.98	.96	.95	.94
3.0	1.03	.00	.97	1.02	.99	.96	.00	.97	.95	.97	.95	.93	.95	.94	.92	.91
4.0	.00	.96	.93	.99	.95	.92	.97	.94	.91	.95	.92	.90	.93	.91	.89	.88
5.0	.96	.92	.89	.95	.92	.89	.94	.91	.88	.92	.90	.87	.91	.89	.87	.86
6.0	.93	.89	.86	.92	.89	.86	.91	.88	.85	.90	.87	.85	.89	.86	.84	.83
7.0	.90	.86	.84	.90	.86	.83	.89	.85	.83	.88	.85	.83	.87	.84	.82	.81
8.0	.88	.84	.81	.87	.84	.81	.86	.83	.81	.86	.83	.80	.85	.82	.80	.79
9.0	.86	.82	.79	.85	.81	.79	.84	.81	.79	.84	.81	.78	.83	.80	.78	.77
10.0	.83	.80	.77	.83	.79	.77	.82	.79	.77	.82	.79	.77	.81	.78	.76	.76



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2023-11-07

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:220.44V I:0.1592A P:19.197W PF:0.5470 Freq:50.01Hz Lamp Flux:1484.9x1 lm								
NAME: DL6940010-4KWH				TYPE:			WEIGHT:	
SPEC.: white RA90				DIM.:			SERIAL No.:	
MFR.:				SUR.: 26*26mm			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	.135	.077	.024	.128	.073	.023	.116	.066	.021	.104	.060	.019	.094	.054	.018	
2.0	.124	.068	.021	.119	.066	.020	.109	.061	.019	.099	.056	.017	.091	.051	.016	
3.0	.116	.062	.018	.111	.059	.018	.103	.056	.017	.095	.052	.016	.087	.048	.015	
4.0	.108	.056	.016	.104	.055	.016	.097	.051	.015	.090	.049	.015	.084	.046	.014	
5.0	.101	.052	.015	.098	.050	.015	.092	.048	.014	.086	.046	.014	.081	.043	.013	
6.0	.096	.048	.014	.093	.047	.013	.088	.045	.013	.083	.043	.013	.078	.041	.012	
7.0	.090	.045	.013	.088	.044	.013	.084	.042	.012	.079	.041	.012	.075	.039	.012	
8.0	.086	.042	.012	.084	.041	.012	.080	.040	.011	.076	.039	.011	.073	.037	.011	
9.0	.082	.040	.011	.080	.039	.011	.077	.038	.011	.073	.037	.011	.070	.036	.010	
10.0	.078	.038	.010	.077	.037	.010	.074	.036	.010	.071	.035	.010	.068	.034	.010	

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	.168	.158	.148	.144	.135	.128	.098	.093	.088	.057	.054	.051	.018	.017	.017	
2.0	.150	.133	.118	.128	.114	.102	.088	.079	.071	.051	.046	.042	.016	.015	.014	
3.0	.135	.113	.096	.116	.098	.083	.079	.068	.058	.046	.040	.034	.015	.013	.011	
4.0	.122	.098	.079	.105	.085	.069	.072	.059	.049	.042	.035	.029	.013	.011	.009	
5.0	.111	.085	.066	.096	.074	.058	.066	.052	.041	.038	.030	.024	.012	.010	.008	
6.0	.102	.075	.056	.088	.065	.049	.061	.046	.035	.035	.027	.021	.011	.009	.007	
7.0	.095	.067	.048	.081	.058	.042	.056	.041	.030	.033	.024	.018	.011	.008	.006	
8.0	.088	.060	.041	.076	.052	.036	.052	.037	.026	.030	.022	.015	.010	.007	.005	
9.0	.082	.055	.036	.071	.047	.031	.049	.033	.022	.029	.020	.013	.009	.006	.004	
10.0	.077	.050	.032	.066	.043	.028	.046	.030	.020	.027	.018	.012	.009	.006	.004	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2023-11-07

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:220.44V I:0.1592A P:19.197W PF:0.5470 Freq:50.01Hz Lamp Flux:1484.9x1 lm											
NAME: DL6940010-4KWH					TYPE:			WEIGHT:			
SPEC.: white RA90					DIM.:			SERIAL No.:			
MFR.:					SUR.: 26*26mm			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	2H	6.7	7.3	6.9	7.4	7.6	8.5	9.1	8.7	9.3	9.4
	3H	6.9	7.5	7.1	7.6	7.8	8.7	9.3	8.9	9.5	9.7
	4H	6.9	7.4	7.1	7.6	7.9	8.7	9.2	8.9	9.4	9.7
	6H	6.9	7.4	7.2	7.6	7.9	8.7	9.2	8.9	9.4	9.7
	8H	6.9	7.4	7.2	7.6	7.9	8.7	9.2	8.9	9.4	9.7
	12H	6.8	7.3	7.2	7.6	7.9	8.6	9.1	8.9	9.4	9.7
4H	2H	7.0	7.6	7.3	7.8	8.0	8.6	9.2	8.9	9.4	9.6
	3H	7.3	7.8	7.6	8.0	8.3	8.9	9.4	9.2	9.6	9.9
	4H	7.3	7.8	7.6	8.0	8.3	8.8	9.3	9.2	9.6	9.9
	6H	7.3	7.7	7.7	8.0	8.4	8.8	9.3	9.2	9.6	9.9
	8H	7.3	7.7	7.7	8.0	8.4	8.8	9.2	9.2	9.6	9.9
	12H	7.3	7.6	7.7	8.0	8.4	8.8	9.2	9.2	9.6	9.9
8H	4H	7.2	7.6	7.6	8.0	8.3	8.8	9.1	9.1	9.5	9.8
	6H	7.3	7.6	7.7	8.0	8.4	8.8	9.1	9.2	9.5	9.9
	8H	7.3	7.6	7.8	8.0	8.5	8.8	9.1	9.2	9.5	9.9
	12H	7.3	7.6	7.8	8.0	8.5	8.8	9.1	9.3	9.5	10.0
12H	4H	7.2	7.5	7.6	7.9	8.3	8.7	9.1	9.1	9.4	9.8
	6H	7.3	7.6	7.7	8.0	8.4	8.7	9.0	9.2	9.4	9.9
	8H	7.3	7.6	7.8	8.0	8.5	8.8	9.0	9.2	9.5	9.9
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H	+ 0.9 / - 1.2					+ 1.4 / - 1.6					
1.5H	+ 1.2 / - 0.8					+ 2.4 / - 1.0					
2.0H	+ 0.7 / - 1.2					+ 1.0 / - 1.1					

CIE Pub.117, 1485 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 1.4)
Area: 0.00676 m2

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2023-11-07

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:220.44V I:0.1592A P:19.197W PF:0.5470 Freq:50.01Hz Lamp Flux:1484.9x1 lm		
NAME: DL6940010-4KWH	TYPE:	WEIGHT:
SPEC.: white RA90	DIM.:	SERIAL No.:
MFR.:	SUR.: 26*26mm	Shielding Angle:

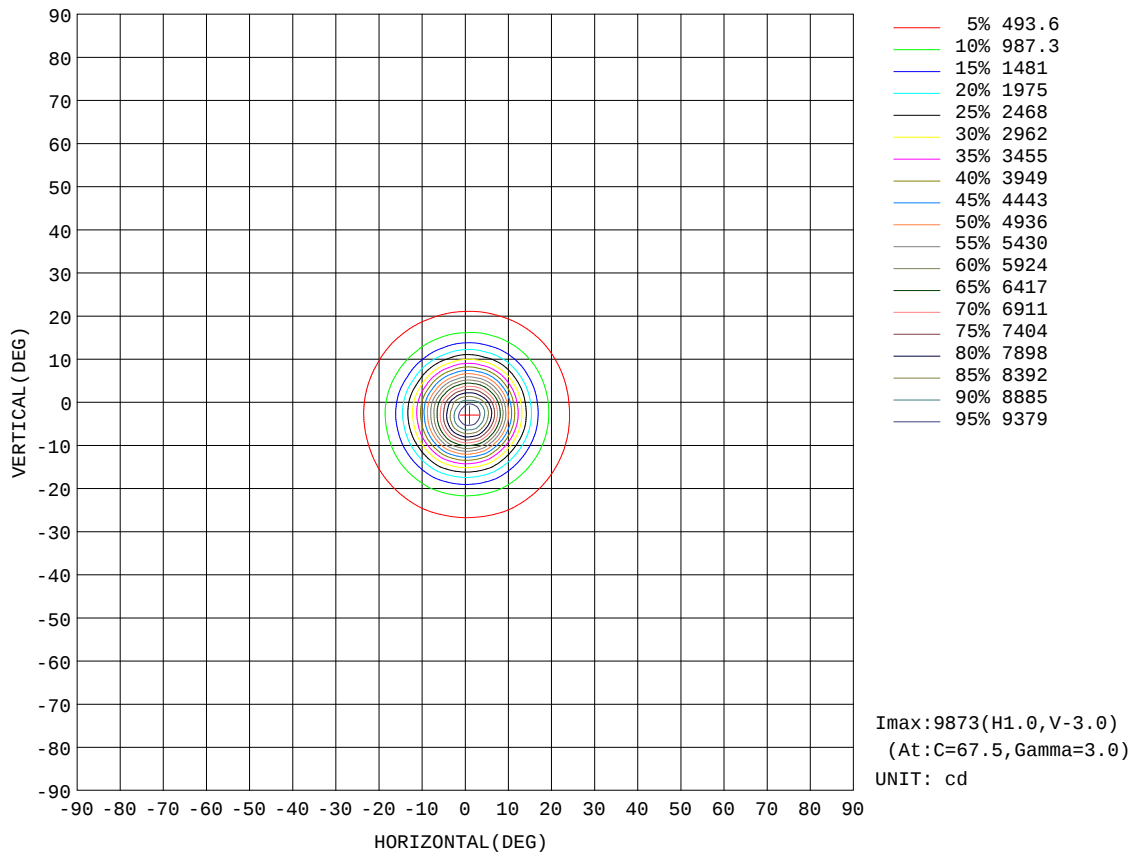
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	90	84	81	90	84	81	89	84	80	77
0.80	97	92	88	96	91	88	95	91	88	84
1.00	101	96	93	100	95	92	99	95	92	88
1.25	105	100	97	104	99	96	102	98	95	92
1.50	107	103	100	106	102	99	104	101	98	94
2.00	109	106	103	108	105	102	105	103	100	95
2.50	111	107	105	109	106	104	106	104	102	96
3.00	112	109	107	111	108	106	107	105	103	97
4.00	114	112	110	112	110	108	109	107	106	99
5.00	116	113	112	113	112	110	110	108	107	100
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:2023-11-07

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:220.44V I:0.1592A P:19.197W PF:0.5470 Freq:50.01Hz Lamp Flux:1484.9x1 lm		
NAME: DL6940010-4KWH	TYPE:	WEIGHT:
SPEC.: white RA90	DIM.:	SERIAL No.:
MFR.:	SUR.: 26*26mm	Shielding Angle:

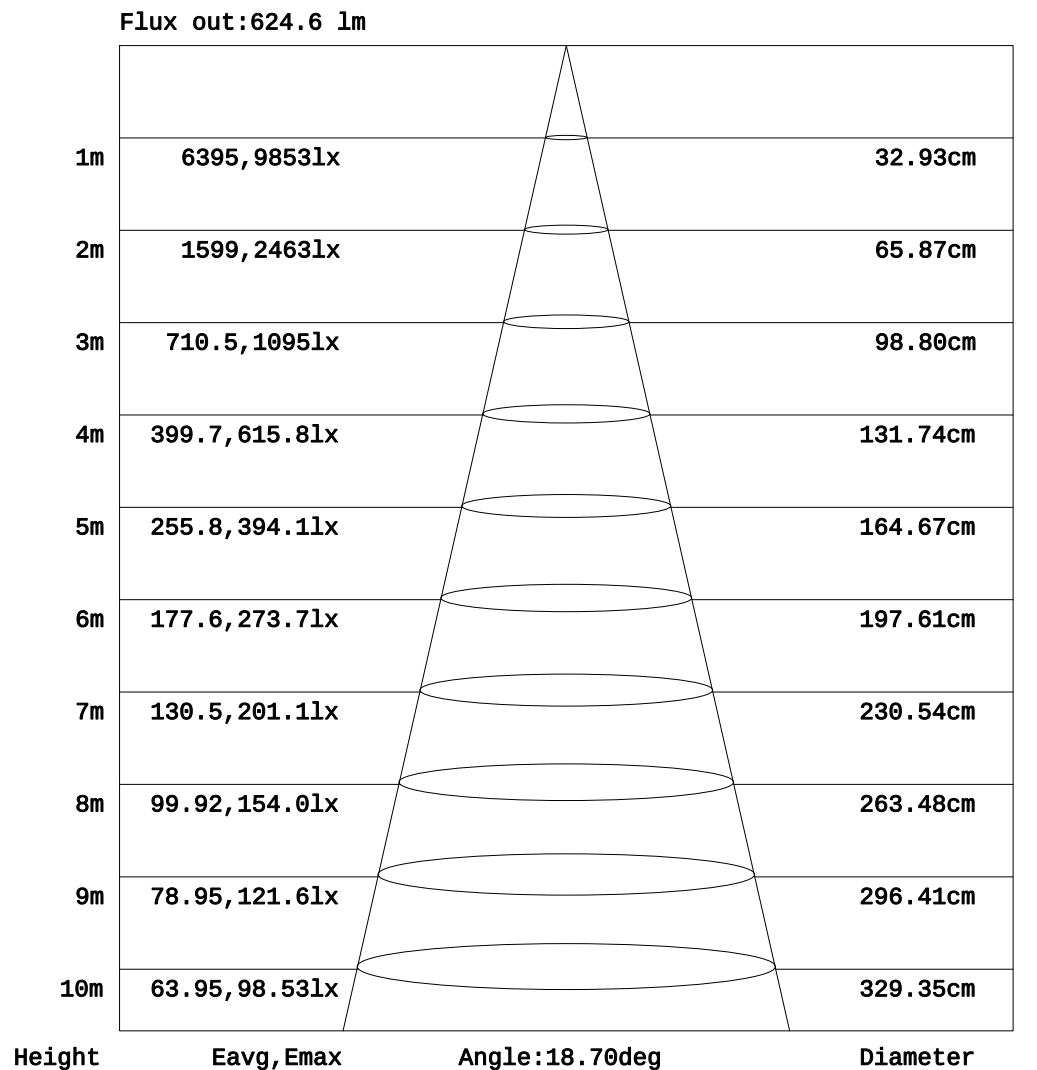


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2023-11-07

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:220.44V I:0.1592A P:19.197W PF:0.5470 Freq:50.01Hz Lamp Flux:1484.9x1 lm		
NAME: DL6940010-4KWH	TYPE:	WEIGHT:
SPEC.: white RA90	DIM.:	SERIAL No.:
MFR.:	SUR.: 26*26mm	Shielding Angle:



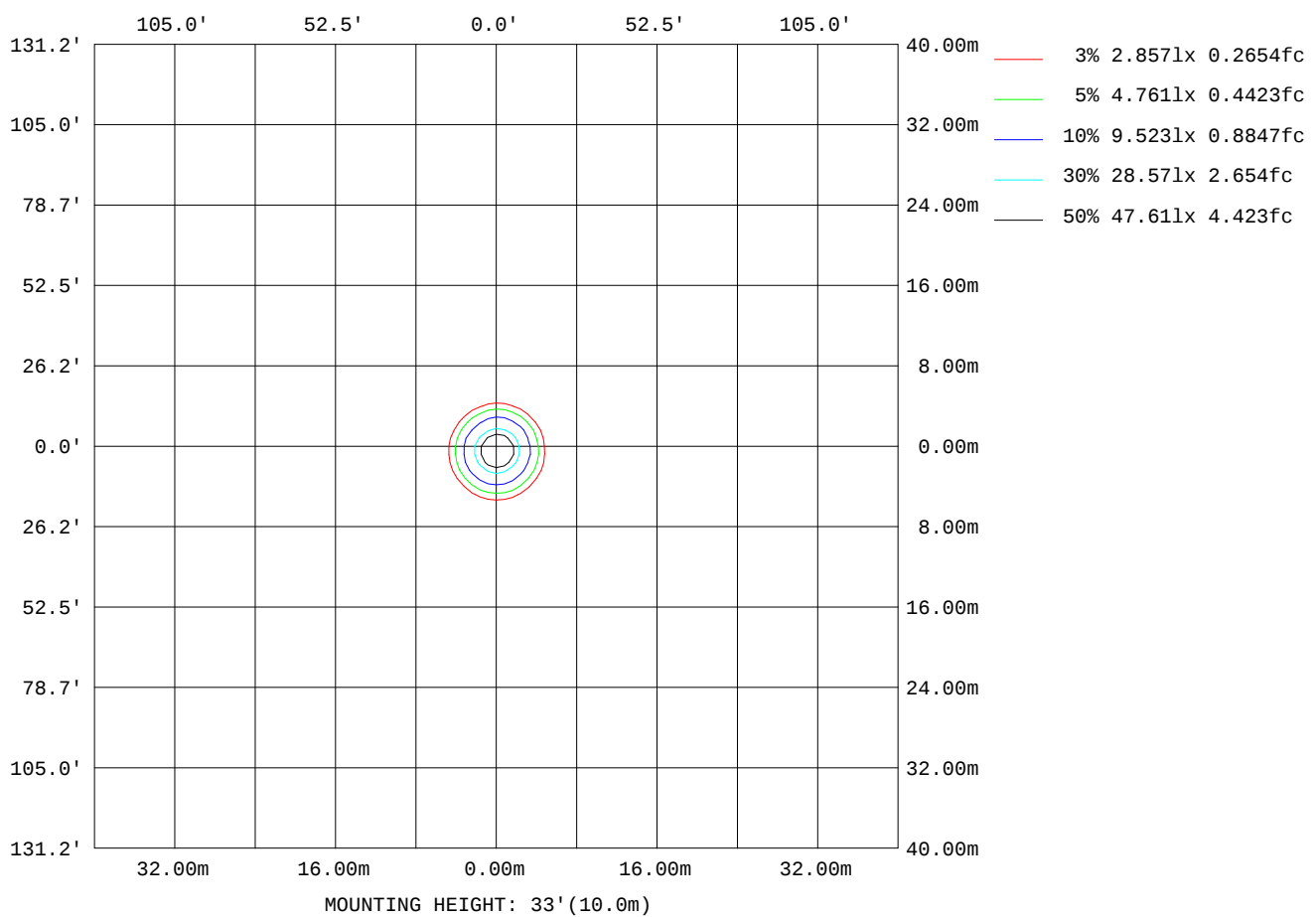
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2023-11-07

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:220.44V I:0.1592A P:19.197W PF:0.5470 Freq:50.01Hz Lamp Flux:1484.9x1 lm		
NAME: DL6940010-4KWH	TYPE:	WEIGHT:
SPEC.: white RA90	DIM.:	SERIAL No.:
MFR.:	SUR.: 26*26mm	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2023-11-07

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:220.44V I:0.1592A P:19.197W PF:0.5470 Freq:50.01Hz Lamp Flux:1484.9x1 lm		
NAME: DL6940010-4KWH	TYPE:	WEIGHT:
SPEC.: white RA90	DIM.:	SERIAL No.:
MFR.:	SUR.: 26*26mm	Shielding Angle:

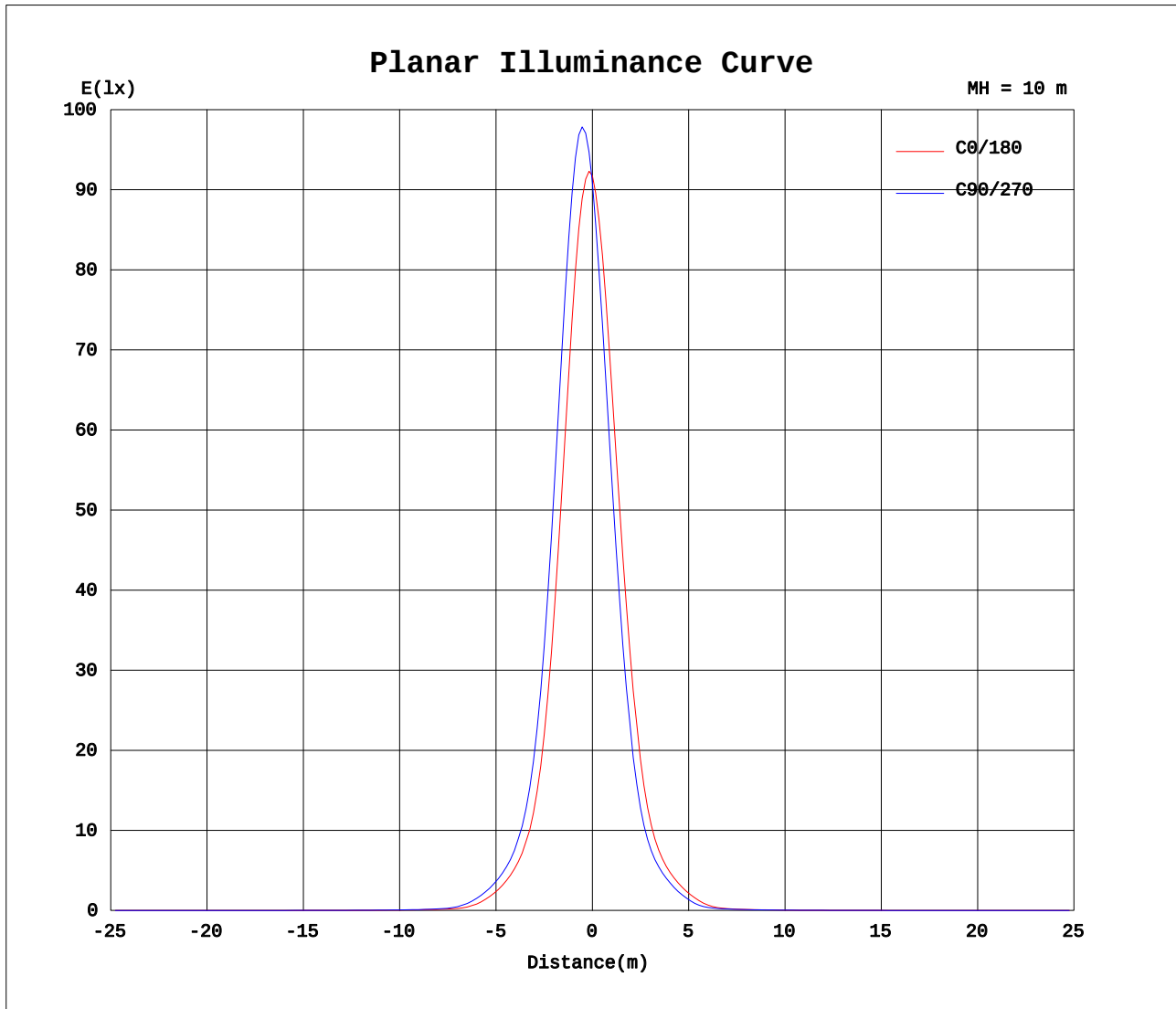
AvgL	cd/m2
L_0~180(65)av	1842
L_0~180(75)av	863
L_0~180(85)av	652
L_90~270(65)av	1626
L_90~270(75)av	842
L_90~270(85)av	672
L_45(65)av	2567
L_45(75)av	860
L_45(85)av	670

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2023-11-07

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: 2023-11-07

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:

```