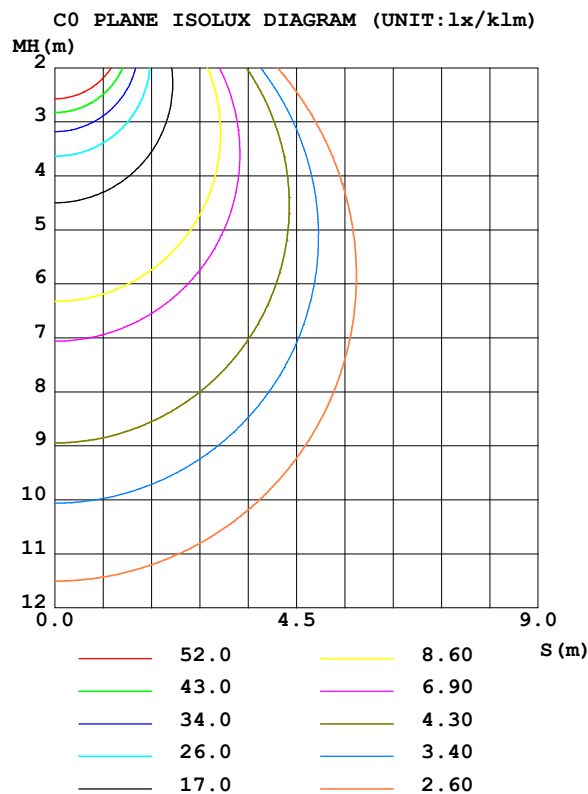
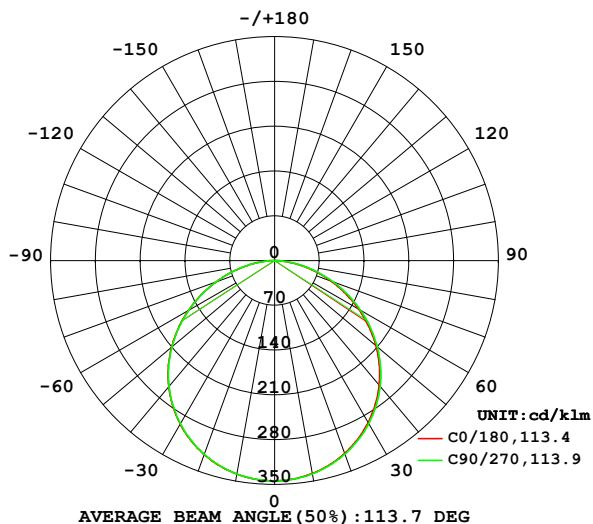


## LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.74V I:0.0848A P:9.8506W PF:0.9622 Freq:59.98Hz Lamp Flux:645.923x1 lm		
NAME: LB76348	TYPE:	WEIGHT:
SPEC.: 5000K	DIM.:	SERIAL No.:
MFR.: LB	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 65.57 lm/W
MODEL	LB76348	I <sub>max</sub> (cd/klm)	344.4	S/MH (C0/180)	1.27	
NOMINAL POWER (W)	10	LOR (%)	100.0	S/MH (C90/270)	1.27	
RATED VOLTAGE (V)	120.0	TOTAL FLUX (lm/klm)	1000.0	η UP, DN (C0-180)	0.0, 50.0	
NOMINAL FLUX (lm)	645.923	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)	120	η down (%)	100.0	CIBSE SHR MAX	1.35	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.3 °C  
Operators:  
Test Date: 2024-03-15

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.479  
Humidity: 65.0%  
Test Distance: 10.000m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

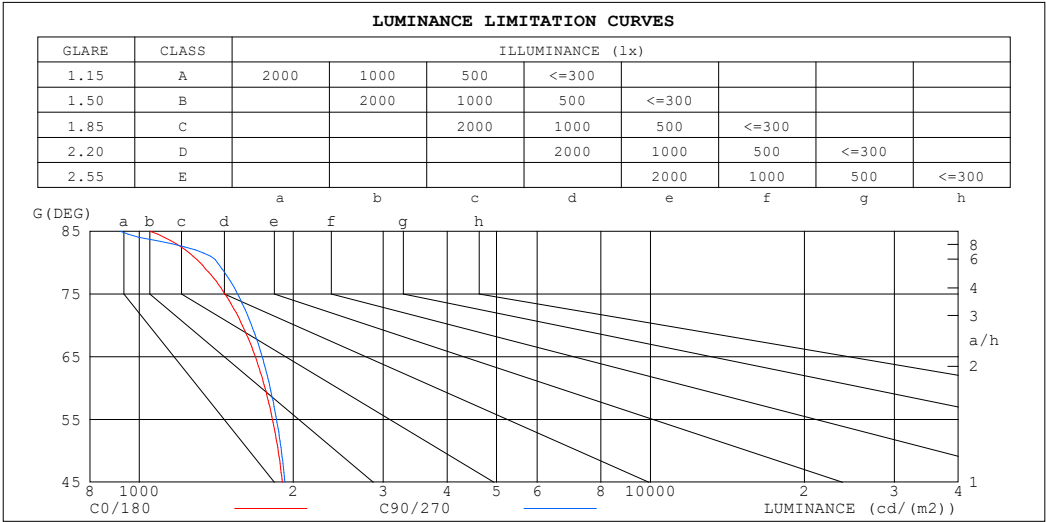
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	338.0	338.1	338.7	339.0	339.0	338.8	338.8	338.6	0- 10	32.59	32.59	3.26,3.26
20	320.7	320.9	321.8	322.5	322.5	322.3	322.1	321.7	10- 20	93.61	126.2	12.6,12.6
30	292.4	293.0	294.4	295.2	295.2	294.8	294.6	294.0	20- 30	142.6	268.8	26.9,26.9
40	254.3	254.8	256.8	257.8	257.5	257.0	256.9	256.1	30- 40	173.0	441.7	44.2,44.2
50	206.7	207.1	209.6	210.7	210.4	209.5	209.5	208.7	40- 50	180.3	622.0	62.2,62.2
60	151.6	152.2	155.2	156.3	155.4	154.5	154.8	154.0	50- 60	162.9	784.9	78.5,78.5
70	93.55	94.26	97.54	98.46	97.01	96.20	96.93	96.21	60- 70	124.0	908.9	90.9,90.9
80	39.24	39.85	42.45	43.17	41.64	40.87	41.54	41.02	70- 80	71.93	980.9	98.1,98.1
90	0.8169	0.8814	0.9352	0.9674	0.7847	0.7094	0.6019	0.6234	80- 90	19.14	1000	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/klm									UNIT:lm/klm		

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:  
Test Date:2024-03-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.479  
Humidity:65.0%  
Test Distance:10.000m [K=1.0000]  
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.74V I:0.0848A P:9.8506W PF:0.9622 Freq:59.98Hz Lamp Flux:645.923x1 lm		
NAME: LB76348	TYPE:	WEIGHT:
SPEC.: 5000K	DIM.:	SERIAL No.:
MFR.: LB	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1048	918
80	1314	1421
75	1469	1555
70	1590	1658
65	1686	1739
60	1762	1804
55	1822	1855
50	1869	1896
45	1904	1927

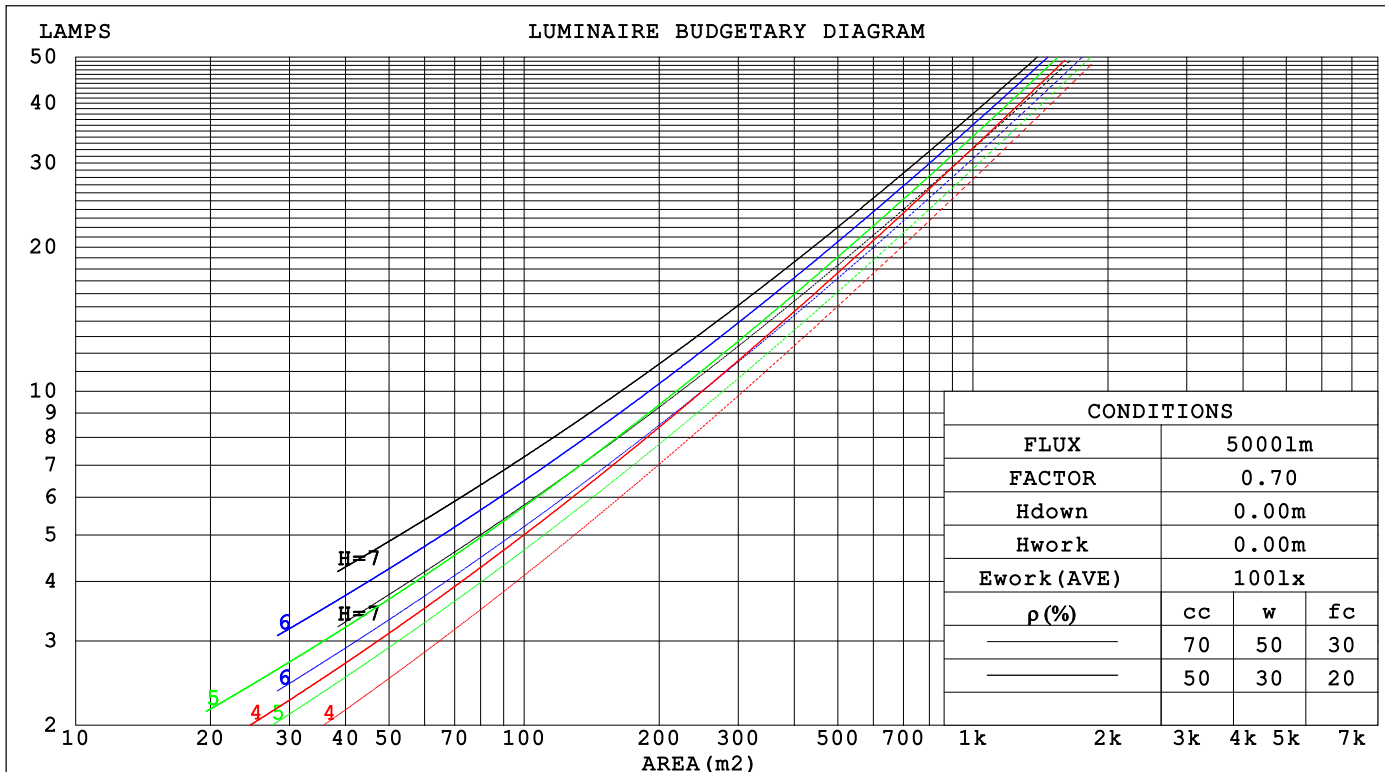
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:  
Test Date:2024-03-15

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.479  
Humidity:65.0%  
Test Distance:10.000m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.74V I:0.0848A P:9.8506W PF:0.9622 Freq:59.98Hz Lamp Flux:645.923x1 lm		
NAME: LB76348	TYPE:	WEIGHT:
SPEC.: 5000K	DIM.:	SERIAL No.:
MFR.: LB	SUR.:	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0														
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0														
pfc	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	1.00														
1.0	1.04	.99	.96	1.02	.98	.94	.97	.94	.91	.93	.91	.88	.90	.88	.86	.83														
2.0	.90	.83	.78	.88	.82	.77	.85	.79	.75	.82	.77	.73	.78	.75	.71	.69														
3.0	.79	.71	.64	.78	.70	.64	.75	.68	.63	.72	.66	.61	.69	.64	.60	.58														
4.0	.70	.61	.54	.69	.60	.54	.66	.59	.53	.64	.58	.52	.62	.56	.52	.50														
5.0	.63	.53	.47	.61	.53	.46	.59	.52	.46	.57	.51	.45	.55	.50	.45	.43														
6.0	.56	.47	.41	.55	.47	.41	.53	.46	.40	.52	.45	.40	.50	.44	.39	.37														
7.0	.51	.42	.36	.50	.42	.36	.49	.41	.35	.47	.40	.35	.46	.40	.35	.33														
8.0	.46	.38	.32	.46	.38	.32	.44	.37	.32	.43	.36	.31	.42	.36	.31	.29														
9.0	.43	.34	.29	.42	.34	.29	.41	.34	.29	.40	.33	.28	.39	.33	.28	.26														
10.0	.39	.31	.26	.39	.31	.26	.38	.31	.26	.37	.30	.26	.36	.30	.26	.24														



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:  
Test Date:2024-03-15

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.479  
Humidity:65.0%  
Test Distance:10.000m [K=1.0000]  
Remarks:

## WEC AND CCEC

Test:U:120.74V I:0.0848A P:9.8506W PF:0.9622 Freq:59.98Hz Lamp Flux:645.923x1 lm		
NAME: LB76348	TYPE:	WEIGHT:
SPEC.: 5000K	DIM.:	SERIAL No.:
MFR.: LB	SUR.:	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0	
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
pfc	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.312	.177	.056	.305	.174	.055	.291	.167	.053	.279	.161	.052	.268	.155	.050		
2.0	.293	.161	.049	.287	.158	.049	.275	.153	.048	.264	.148	.046	.254	.144	.045		
3.0	.271	.144	.043	.266	.142	.043	.255	.138	.042	.246	.135	.041	.237	.131	.041		
4.0	.250	.130	.038	.245	.128	.038	.236	.125	.037	.228	.122	.037	.220	.119	.036		
5.0	.231	.118	.034	.227	.116	.034	.219	.114	.034	.211	.111	.033	.204	.109	.033		
6.0	.214	.107	.031	.211	.106	.031	.203	.104	.030	.196	.102	.030	.190	.100	.030		
7.0	.199	.099	.028	.196	.098	.028	.190	.096	.028	.183	.094	.027	.178	.092	.027		
8.0	.186	.091	.026	.183	.090	.025	.177	.089	.025	.172	.087	.025	.167	.086	.025		
9.0	.175	.084	.024	.172	.084	.023	.167	.082	.023	.162	.081	.023	.157	.080	.023		
10.0	.164	.079	.022	.162	.078	.022	.157	.077	.022	.152	.076	.022	.148	.075	.021		

pcc	80%			70%			50%			30%			10%			0	
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
pfc	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	.134	.154	.134	.116	.106	.092	.080	.061	.053	.046	.019	.017	.015		
2.0	.172	.132	.098	.148	.114	.085	.101	.079	.059	.058	.046	.035	.019	.015	.011		
3.0	.165	.114	.074	.141	.099	.064	.097	.069	.045	.056	.040	.027	.018	.013	.009		
4.0	.157	.101	.058	.135	.087	.051	.093	.061	.036	.054	.036	.021	.017	.012	.007		
5.0	.150	.091	.047	.129	.078	.041	.089	.055	.029	.051	.032	.017	.017	.010	.006		
6.0	.143	.082	.039	.122	.071	.034	.085	.050	.024	.049	.029	.014	.016	.010	.005		
7.0	.136	.075	.033	.117	.065	.029	.081	.046	.020	.047	.027	.012	.015	.009	.004		
8.0	.129	.070	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.014	.008	.003		
9.0	.123	.065	.025	.106	.056	.022	.073	.039	.016	.043	.023	.009	.014	.008	.003		
10.0	.117	.060	.022	.101	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003		

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:  
Test Date:2024-03-15

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.479  
Humidity:65.0%  
Test Distance:10.000m [K=1.0000]  
Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.74V I:0.0848A P:9.8506W PF:0.9622 Freq:59.98Hz Lamp Flux:645.923x1 lm										
NAME: LB76348					TYPE:			WEIGHT:		
SPEC.: 5000K					DIM.:			SERIAL No.:		
MFR.: LB					SUR.:			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	16.4	18.0	16.7	18.2	18.4	16.5	18.1	16.8	18.3	18.5
3H	17.9	19.3	18.2	19.6	19.8	18.1	19.5	18.4	19.7	20.0
4H	18.5	19.9	18.8	20.1	20.4	18.7	20.0	19.0	20.3	20.5
6H	18.9	20.2	19.3	20.5	20.8	19.2	20.4	19.5	20.7	21.0
8H	19.1	20.3	19.4	20.6	20.9	19.3	20.5	19.6	20.8	21.1
12H	19.1	20.3	19.5	20.6	20.9	19.3	20.5	19.7	20.8	21.1
4H 2H	17.1	18.4	17.4	18.7	18.9	17.1	18.5	17.4	18.7	19.0
3H	18.7	19.9	19.1	20.2	20.5	18.8	20.0	19.2	20.3	20.6
4H	19.4	20.5	19.8	20.8	21.2	19.6	20.7	20.0	21.0	21.3
6H	20.0	20.9	20.4	21.3	21.7	20.2	21.1	20.6	21.5	21.9
8H	20.2	21.1	20.6	21.4	21.8	20.4	21.3	20.8	21.6	22.0
12H	20.3	21.1	20.7	21.5	21.9	20.5	21.3	20.9	21.7	22.1
8H 4H	19.7	20.6	20.1	21.0	21.4	19.8	20.7	20.3	21.1	21.5
6H	20.4	21.1	20.8	21.6	22.0	20.6	21.3	21.0	21.7	22.2
8H	20.7	21.3	21.1	21.8	22.2	20.9	21.5	21.3	21.9	22.4
12H	20.9	21.4	21.3	21.9	22.3	21.0	21.6	21.5	22.0	22.5
12H 4H	19.7	20.5	20.2	20.9	21.3	19.9	20.7	20.3	21.1	21.5
6H	20.5	21.1	20.9	21.5	22.0	20.6	21.3	21.1	21.7	22.2
8H	20.8	21.3	21.2	21.8	22.3	21.0	21.5	21.4	22.0	22.4
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.2 / - 0.2					+ 0.1 / - 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, 645.9 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -1.5)  
Area: 0.111111 m2

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:  
Test Date:2024-03-15

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.479  
Humidity:65.0%  
Test Distance:10.000m [K=1.0000]  
Remarks:

## UTILIZATION FACTORS TABLE

Test:U:120.74V I:0.0848A P:9.8506W PF:0.9622 Freq:59.98Hz Lamp Flux:645.923x1 lm		
NAME: LB76348	TYPE:	WEIGHT:
SPEC.: 5000K	DIM.:	SERIAL No.:
MFR.: LB	SUR.:	Shielding Angle:

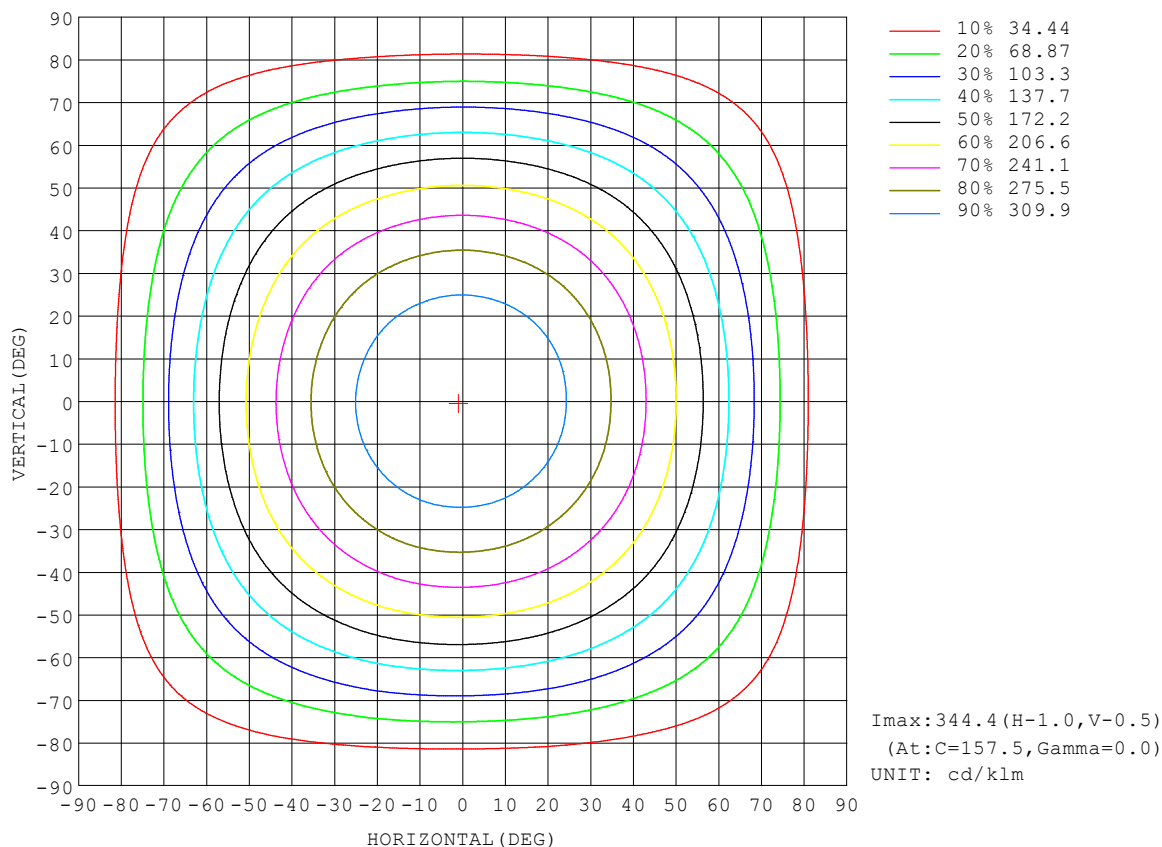
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	57	46	39	57	45	38	55	45	38	32
0.80	67	56	48	66	55	48	64	54	48	41
1.00	76	65	57	75	64	57	72	65	56	49
1.25	83	72	65	81	72	65	79	70	64	57
1.50	88	78	71	86	77	70	83	75	69	62
2.00	95	86	80	93	85	79	89	83	77	70
2.50	99	91	85	97	90	84	93	87	82	74
3.00	102	95	90	100	94	89	96	91	86	78
4.00	106	100	96	104	99	94	100	95	92	83
5.00	109	104	100	106	102	98	102	98	95	86
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: 25.3°C  
 Operators:  
 Test Date: 2024-03-15

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.479  
 Humidity: 65.0%  
 Test Distance: 10.000m [K=1.0000]  
 Remarks:

## ISOCANDELA DIAGRAM

Test:U:120.74V I:0.0848A P:9.8506W PF:0.9622 Freq:59.98Hz Lamp Flux:645.923x1 lm		
NAME: LB76348	TYPE:	WEIGHT:
SPEC.: 5000K	DIM.:	SERIAL No.:
MFR.: LB	SUR.:	Shielding Angle:



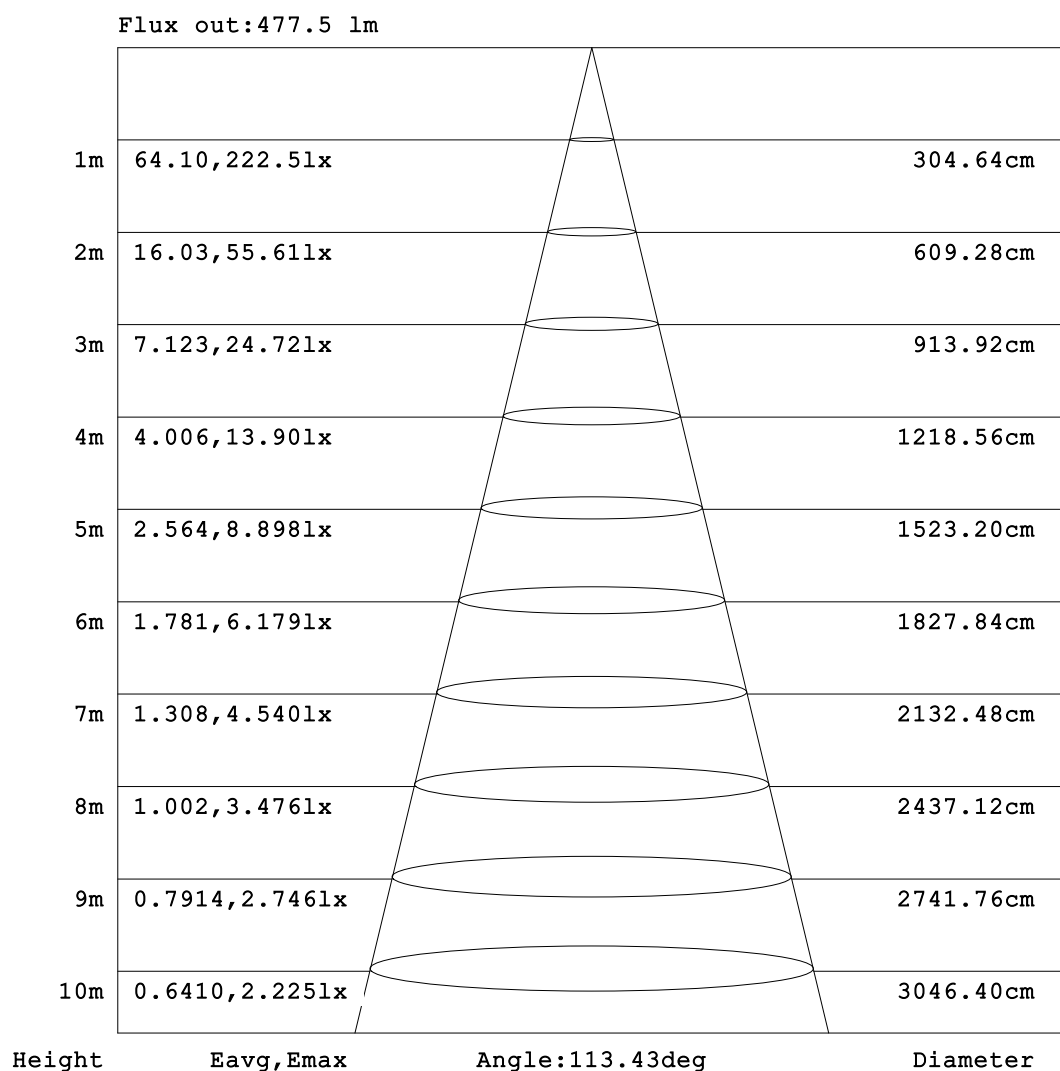
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:  
Test Date:2024-03-15

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.479  
Humidity:65.0%  
Test Distance:10.000m [K=1.0000]  
Remarks:



## AAI Figure

Test:U:120.74V I:0.0848A P:9.8506W PF:0.9622 Freq:59.98Hz Lamp Flux:645.923x1 lm		
NAME: LB76348	TYPE:	WEIGHT:
SPEC.: 5000K	DIM.:	SERIAL No.:
MFR.: LB	SUR.:	Shielding Angle:



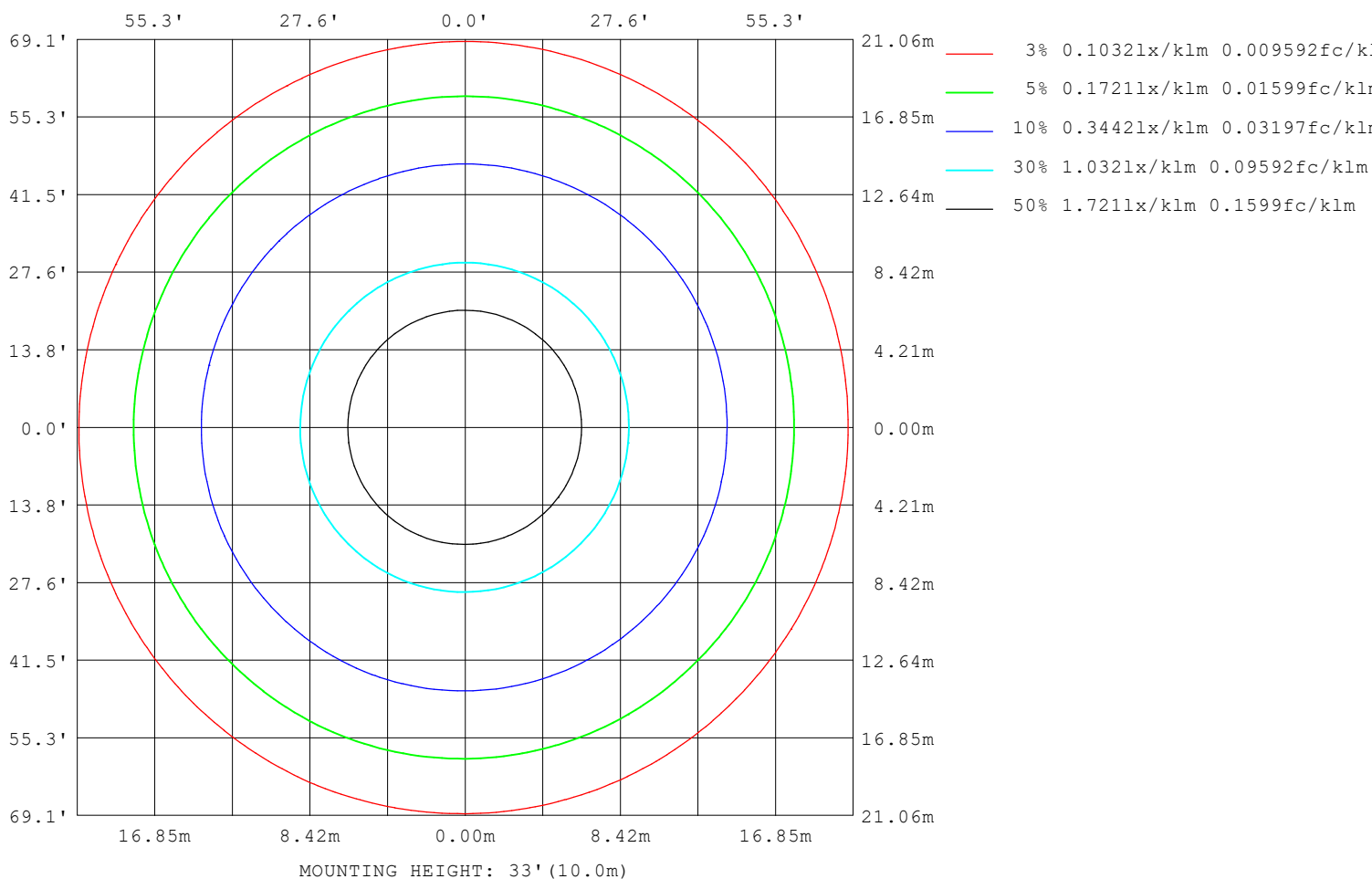
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:  
Test Date:2024-03-15

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.479  
Humidity:65.0%  
Test Distance:10.000m [K=1.0000]  
Remarks:

## ISOLUX DIAGRAM

Test:U:120.74V I:0.0848A P:9.8506W PF:0.9622 Freq:59.98Hz Lamp Flux:645.923x1 lm		
NAME: LB76348	TYPE:	WEIGHT:
SPEC.: 5000K	DIM.:	SERIAL No.:
MFR.: LB	SUR.:	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators:  
Test Date: 2024-03-15

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.479  
Humidity: 65.0%  
Test Distance: 10.000m [K=1.0000]  
Remarks:

## LED Avg.L Report

Test:U:120.74V I:0.0848A P:9.8506W PF:0.9622 Freq:59.98Hz Lamp Flux:645.923x1 lm		
NAME: LB76348	TYPE:	WEIGHT:
SPEC.: 5000K	DIM.:	SERIAL No.:
MFR.: LB	SUR.:	Shielding Angle:

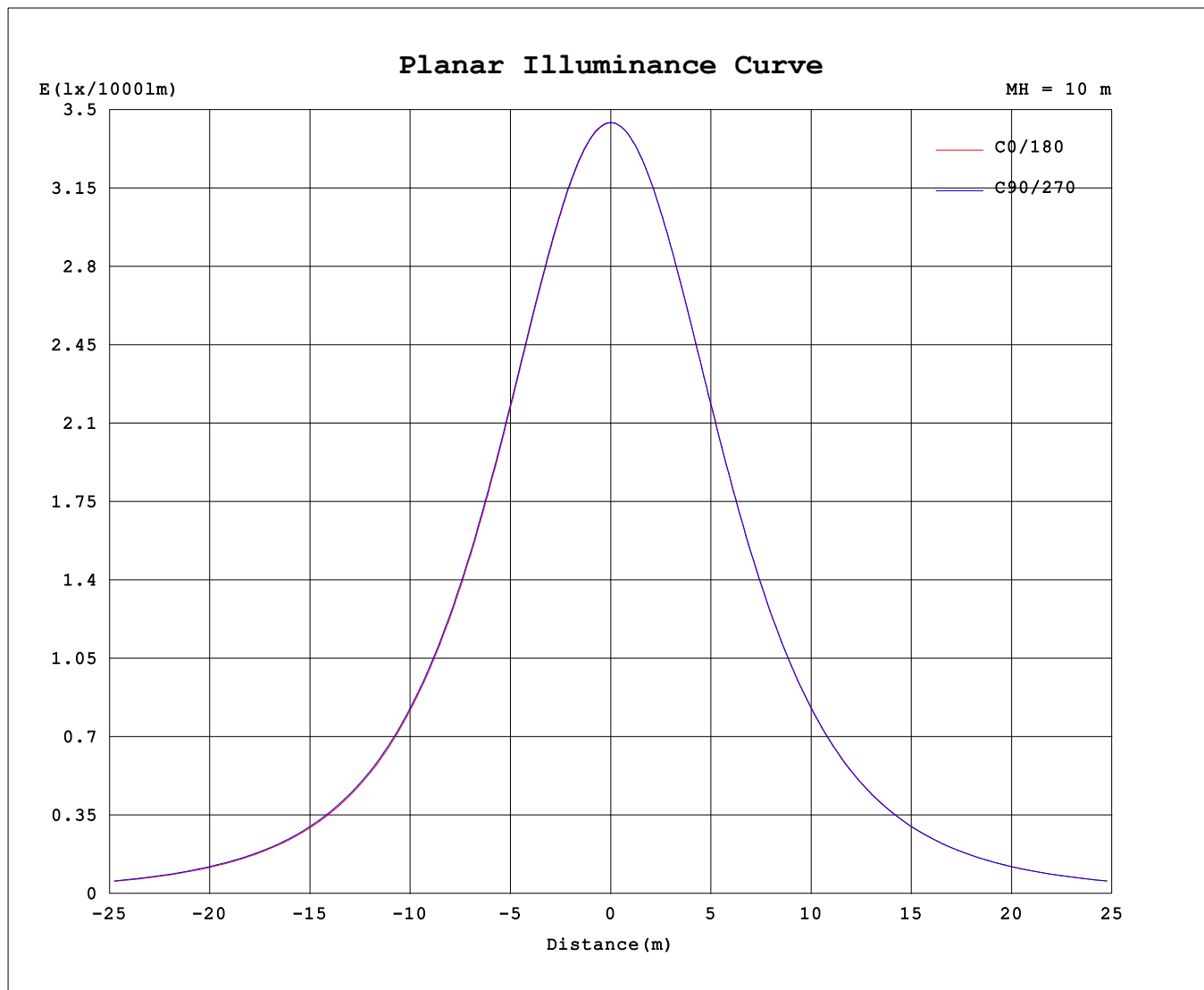
AvgL	cd/m2
L_0~180 (65) av	1712
L_0~180 (75) av	1503
L_0~180 (85) av	1114
L_90~270 (65) av	1736
L_90~270 (75) av	1547
L_90~270 (85) av	908
L_45 (65) av	1724
L_45 (75) av	1526
L_45 (85) av	1139

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:  
Test Date:2024-03-15

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.479  
Humidity:65.0%  
Test Distance:10.000m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.3 °C  
Operators:  
Test Date: 2024-03-15

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.479  
Humidity: 65.0%  
Test Distance: 10.000m [K=1.0000]  
Remarks:

Test:U:120.74V I:0.0848A P:9.8506W PF:0.9622 Freq:59.98Hz Lamp Flux:645.923x1 lm		
NAME: LB76348	TYPE:	WEIGHT:
SPEC.: 5000K	DIM.:	SERIAL No.:
MFR.: LB	SUR.:	Shielding Angle:

UNIT: cd/klm

[illegible]

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.479
Humidity:65.0%
Test Distance:10.000m [K=1.0000]
Remarks:

```