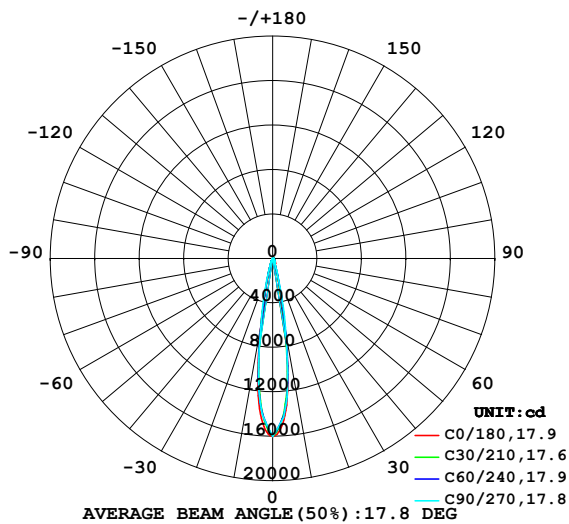


LUMINAIRE PHOTOMETRIC TEST REPORT

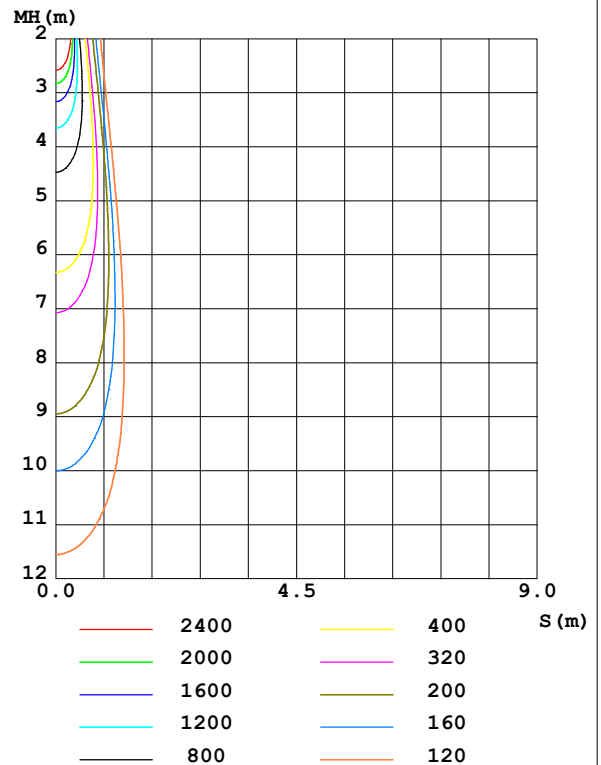
NAME: BL7069-C20-3-15-NS	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 101.80 lm/W
MODEL		Imax (cd)	16012	S/MH (C0/180)		0.29
NOMINAL POWER(W)	20	LOR (%)	67.5	S/MH (C90/270)		0.30
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	2025.8	η UP,DN (C0-180)		0.0,34.9
NOMINAL FLUX(lm)	3000	CIE CLASS	DIRECT	η UP,DN (C180-360)		0.0,32.6
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM		0.00
TEST VOLTAGE (V)	220.1	η down (%)	67.5	CIBSE SHR MAX		0.30

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



H(β) Range:-90 - 90DEG
H(β) Interval: 0.5DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:ZT
Test Date:2024-01-22

V(B) Range:-85 - 85DEG
V(B) Interval: 2.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:10.722m [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	650.0	681.0	679.4	666.9	625.4	627.2	602.5	624.6	0- 10	1030	1030	50.8, 34.3
20	83.10	82.31	83.37	79.82	73.94	75.03	73.09	74.93	10- 20	638.9	1668	82.4, 55.6
30	31.70	22.55	22.79	21.98	21.58	20.30	19.56	20.13	20- 30	193.1	1861	91.9, 62
40	14.35	8.606	8.523	8.404	9.244	7.268	7.259	7.357	30- 40	86.46	1948	96.2, 64.9
50	5.987	3.528	3.497	3.467	3.859	2.758	2.868	2.848	40- 50	43.13	1991	98.3, 66.4
60	2.101	1.358	1.437	1.362	1.982	0.8649	0.8331	0.9327	50- 60	19.51	2011	99.2, 67
70	0.7609	0.6841	0.7630	0.6912	1.435	0.2553	0.2430	0.3797	60- 70	8.280	2019	99.7, 67.3
80	0.3142	0.4679	0.5233	0.5164	1.108	0.1138	0.1212	0.1945	70- 80	4.678	2024	99.9, 67.5
90	0.1919	0	0	0	0.3518	0	0	0	80- 90	2.258	2026	100, 67.5
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:X10cd									UNIT: 1m		

Conical surface Flux(90deg): 1973.4 lm

%lum = 97.4%

%lamp = 65.8%

Conical surface Flux(120deg): 2010.6 lm

%lum = 99.2%

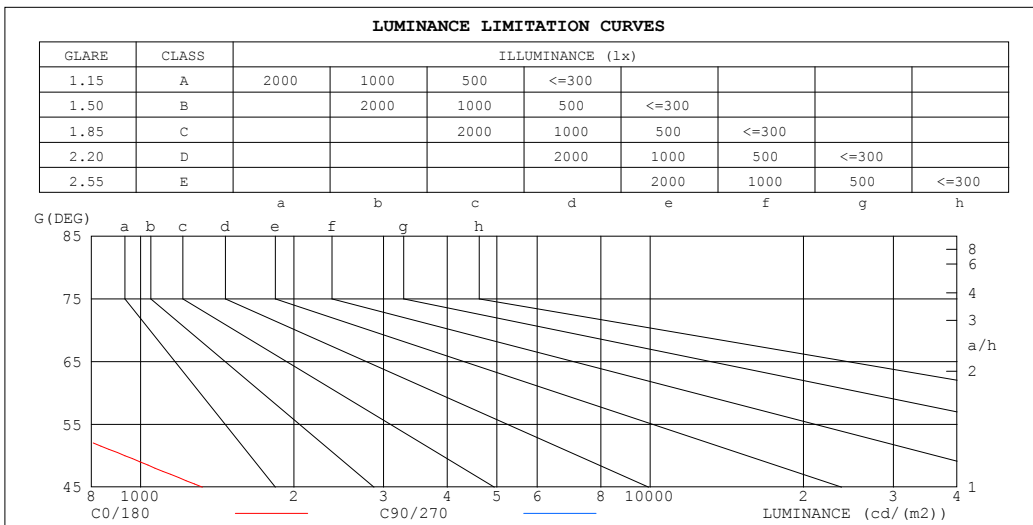
%lamp = 67.0%

H(β) Range:-90 - 90DEG
 H(β) Interval: 0.5DEG
 Test Speed: MEDIUM
 Temperature:25.3°C
 Operators:ZT
 Test Date:2024-01-22

V(B) Range:-85 - 85DEG
 V(B) Interval: 2.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
 Humidity:65.0%
 Test Distance:10.722m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

NAME: BL7069-C20-3-15-NS	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	275	242
80	181	301
75	185	253
70	222	223
65	290	238
60	420	287
55	643	395
50	931	544
45	1323	791

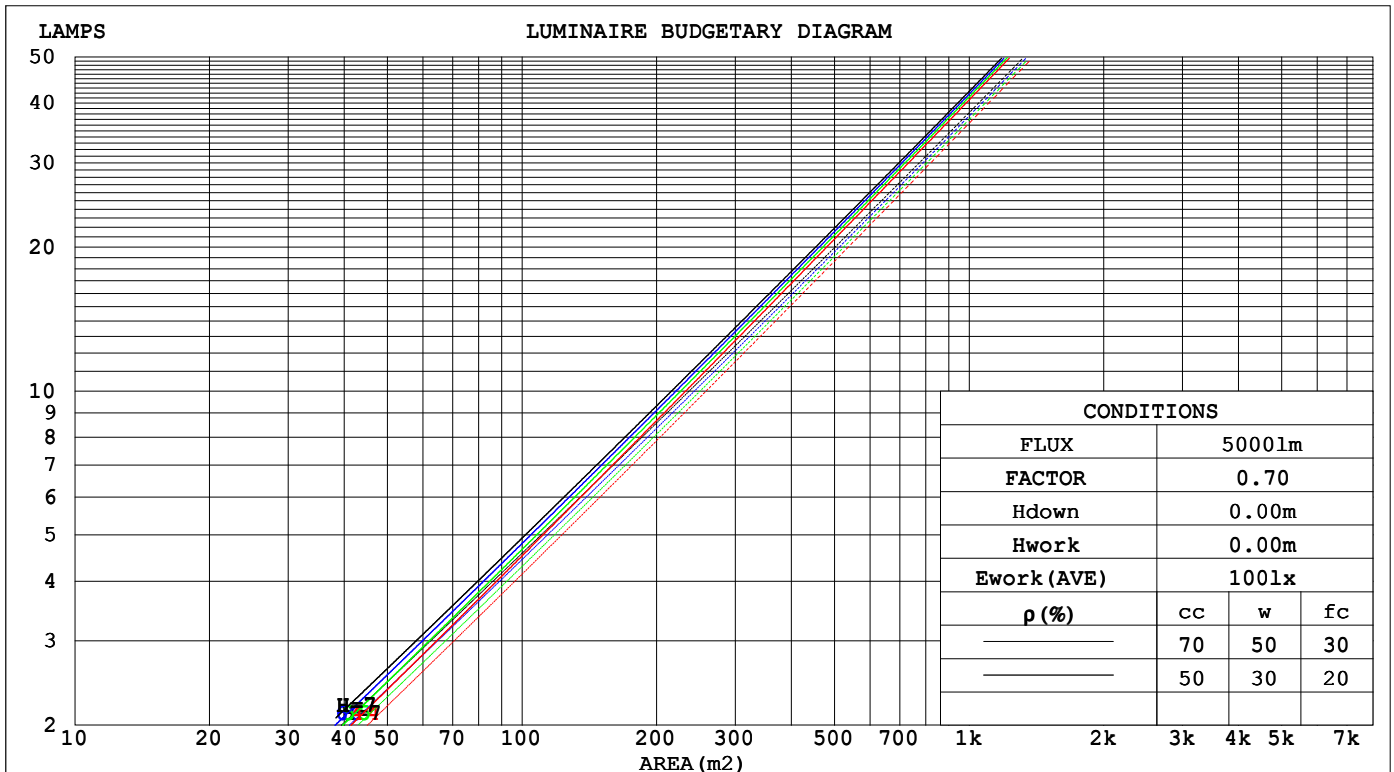
H(β) Range:-90 - 90DEG
H(β) Interval: 0.5DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:ZT
Test Date:2024-01-22

V(B) Range:-85 - 85DEG
V(B) Interval: 2.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:10.722m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: BL7069-C20-3-15-NS	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

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			Coefficients of Utilization(CU)												
0.0	.80	.80	.80	.79	.79	.79	.75	.75	.75	.72	.72	.72	.69	.69	.69	.68
1.0	.76	.75	.74	.75	.74	.73	.72	.71	.71	.70	.69	.69	.68	.67	.67	.65
2.0	.73	.71	.69	.72	.70	.69	.70	.68	.67	.68	.67	.66	.66	.65	.64	.63
3.0	.70	.68	.66	.69	.67	.65	.68	.66	.64	.66	.65	.63	.65	.64	.63	.62
4.0	.68	.65	.63	.67	.65	.63	.66	.64	.62	.64	.63	.61	.63	.62	.61	.60
5.0	.66	.63	.61	.65	.63	.61	.64	.62	.60	.63	.61	.60	.62	.60	.59	.59
6.0	.64	.61	.59	.63	.61	.59	.62	.60	.59	.61	.60	.58	.61	.59	.58	.57
7.0	.62	.59	.57	.62	.59	.57	.61	.59	.57	.60	.58	.57	.59	.58	.57	.56
8.0	.60	.58	.56	.60	.58	.56	.59	.57	.56	.59	.57	.56	.58	.57	.55	.55
9.0	.59	.56	.55	.59	.56	.55	.58	.56	.55	.58	.56	.54	.57	.56	.54	.54
10.0	.58	.55	.54	.57	.55	.54	.57	.55	.53	.57	.55	.53	.56	.54	.53	.53



H(β) Range:-90 - 90DEG
H(β) Interval: 0.5DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:ZT
Test Date:2024-01-22

V(B) Range:-85 - 85DEG
V(B) Interval: 2.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:10.722m [K=1.0000]
Remarks:

WEC AND CCEC

NAME: BL7069-C20-3-15-NS	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	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	.090	.051	.016	.085	.049	.015	.077	.044	.014	.069	.040	.013	.062	.036	.012		
2.0	.082	.045	.014	.079	.043	.013	.072	.040	.012	.066	.037	.012	.060	.034	.011		
3.0	.076	.041	.012	.073	.039	.012	.067	.037	.011	.062	.034	.010	.057	.032	.010		
4.0	.071	.037	.011	.068	.036	.011	.064	.034	.010	.059	.032	.010	.055	.030	.009		
5.0	.066	.034	.010	.064	.033	.010	.060	.031	.009	.056	.030	.009	.053	.028	.008		
6.0	.062	.031	.009	.060	.031	.009	.057	.029	.008	.054	.028	.008	.051	.027	.008		
7.0	.059	.029	.008	.057	.028	.008	.054	.027	.008	.051	.026	.008	.049	.025	.007		
8.0	.056	.027	.008	.054	.027	.008	.052	.026	.007	.049	.025	.007	.047	.024	.007		
9.0	.053	.026	.007	.052	.025	.007	.049	.024	.007	.047	.024	.007	.045	.023	.007		
10.0	.050	.024	.007	.049	.024	.007	.047	.023	.007	.045	.022	.006	.043	.022	.006		

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	.129	.129	.129	.110	.110	.110	.075	.075	.075	.043	.043	.043	.014	.014	.014	
1.0	.113	.106	.100	.097	.091	.086	.066	.063	.060	.038	.036	.035	.012	.012	.011	
2.0	.101	.090	.080	.087	.077	.069	.059	.053	.048	.034	.031	.028	.011	.010	.009	
3.0	.091	.076	.065	.078	.066	.057	.053	.046	.040	.031	.027	.023	.010	.009	.008	
4.0	.082	.066	.054	.070	.057	.047	.048	.040	.033	.028	.023	.020	.009	.008	.006	
5.0	.075	.058	.045	.064	.050	.039	.044	.035	.028	.026	.020	.016	.008	.007	.005	
6.0	.068	.051	.038	.059	.044	.033	.040	.031	.024	.023	.018	.014	.008	.006	.005	
7.0	.063	.045	.033	.054	.039	.029	.037	.027	.020	.022	.016	.012	.007	.005	.004	
8.0	.058	.041	.028	.050	.035	.025	.035	.025	.017	.020	.015	.010	.007	.005	.003	
9.0	.054	.037	.025	.047	.032	.022	.032	.022	.015	.019	.013	.009	.006	.004	.003	
10.0	.051	.033	.022	.044	.029	.019	.030	.020	.013	.018	.012	.008	.006	.004	.003	

H(β) Range:-90 - 90DEG
H(β) Interval: 0.5DEG
Test Speed: MEDIUM
Temperature:25.3℃
Operators:ZT
Test Date:2024-01-22

V(B) Range:-85 - 85DEG
V(B) Interval: 2.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:10.722m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

NAME: BL7069-C20-3-15-NS					TYPE:					WEIGHT:				
SPEC.:					DIM.:					SERIAL No.:				
MFR.:					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					-0.0	0.6	0.2	0.7	0.9	-1.2	-0.6	-1.0	-0.4	-0.3
3H					0.1	0.6	0.3	0.8	1.0	-0.9	-0.3	-0.7	-0.1	0.0
4H					0.1	0.7	0.4	0.9	1.1	-0.7	-0.1	-0.4	0.1	0.3
6H					0.2	0.7	0.4	0.9	1.1	-0.4	0.1	-0.1	0.4	0.6
8H					0.2	0.7	0.5	1.0	1.2	-0.2	0.3	0.1	0.5	0.8
12H					0.3	0.8	0.6	1.1	1.3	-0.0	0.5	0.3	0.7	1.0
4H 2H					-0.1	0.5	0.2	0.7	0.9	-1.2	-0.6	-0.9	-0.4	-0.2
3H					0.1	0.5	0.4	0.8	1.1	-0.8	-0.3	-0.5	-0.0	0.2
4H					0.2	0.6	0.5	0.9	1.2	-0.4	-0.0	-0.1	0.3	0.6
6H					0.3	0.7	0.7	1.0	1.4	0.0	0.4	0.4	0.7	1.1
8H					0.4	0.8	0.8	1.2	1.5	0.3	0.7	0.7	1.0	1.4
12H					0.7	1.0	1.1	1.4	1.7	0.5	0.9	1.0	1.3	1.6
8H 4H					0.2	0.5	0.6	0.9	1.3	-0.4	-0.0	-0.0	0.3	0.7
6H					0.5	0.8	0.9	1.2	1.6	0.2	0.5	0.6	0.9	1.3
8H					0.7	1.0	1.2	1.4	1.8	0.6	0.9	1.1	1.3	1.7
12H					1.1	1.4	1.6	1.8	2.3	1.0	1.2	1.5	1.7	2.1
12H 4H					0.2	0.5	0.6	0.9	1.3	-0.4	-0.1	-0.0	0.3	0.7
6H					0.5	0.8	1.0	1.2	1.6	0.3	0.5	0.7	0.9	1.4
8H					0.8	1.1	1.3	1.5	2.0	0.7	1.0	1.2	1.4	1.9
Variations with the observer position at spacings(CIE Pub.117):														
S = 1.0H					+ 2.5 / - 2.1					+ 0.9 / - 1.2				
1.5H					+ 3.7 / - 2.0					+ 1.6 / - 1.0				
2.0H					+ 4.3 / - 2.0					+ 1.8 / - 1.1				

CIE Pub.117, 3000 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.8)
Area: 0.1 m2

H(β) Range:-90 - 90DEG
H(β) Interval: 0.5DEG
Test Speed: MEDIUM
Temperature:25.3℃
Operators:ZT
Test Date:2024-01-22

V(B) Range:-85 - 85DEG
V(B) Interval: 2.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:10.722m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

NAME: BL7069-C20-3-15-NS	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

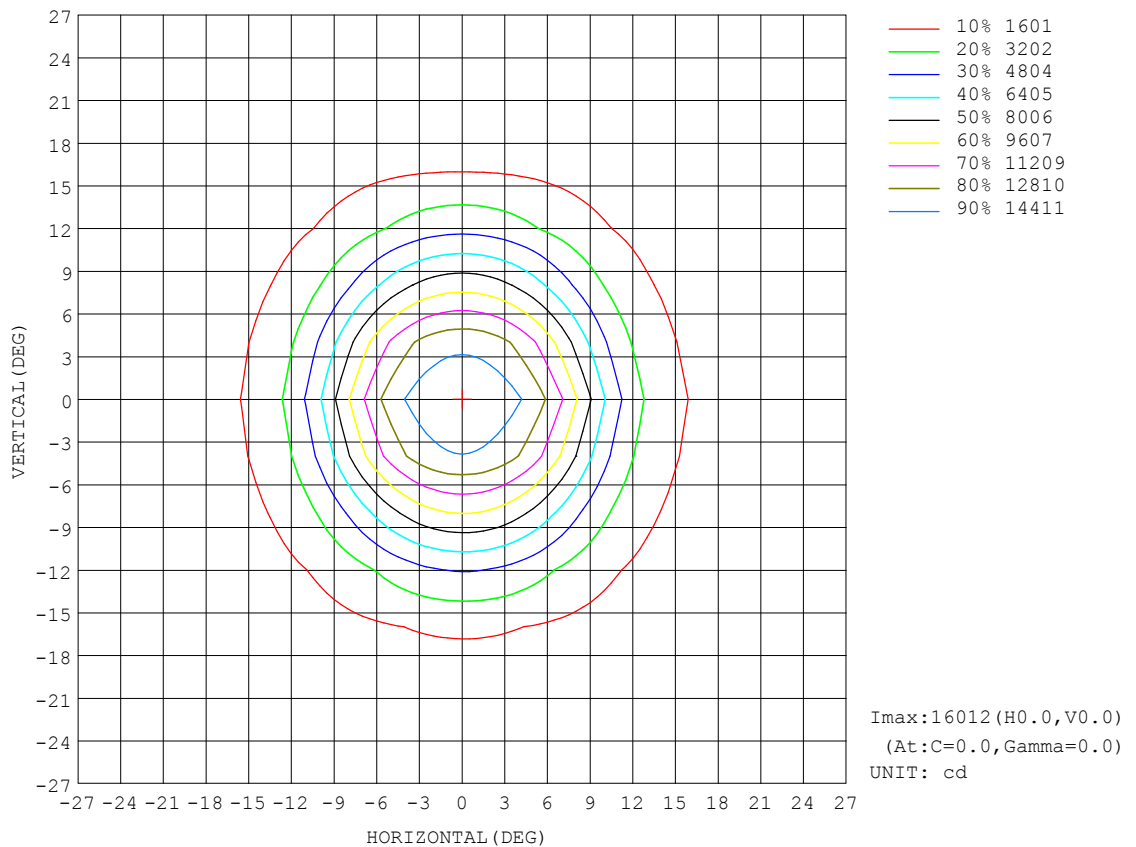
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	60	56	54	60	56	54	59	56	54	51
0.80	65	61	59	65	61	59	64	61	59	56
1.00	68	64	62	67	64	62	66	64	61	59
1.25	70	67	65	70	67	65	68	66	64	61
1.50	72	69	67	71	69	67	70	68	66	63
2.00	74	71	69	73	70	68	71	69	67	64
2.50	75	72	70	74	71	70	72	70	68	65
3.00	76	74	72	75	73	71	72	71	70	65
4.00	77	75	74	76	74	73	73	72	71	66
5.00	78	76	75	76	75	74	74	73	72	67
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004				Suspended				SHRNOM = 1.25		

H(β) Range: -90 - 90DEG
H(β) Interval: 0.5DEG
Test Speed: MEDIUM
Temperature: 25.3°C
Operators: ZT
Test Date: 2024-01-22

V(B) Range: -85 - 85DEG
V(B) Interval: 2.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity: 65.0%
Test Distance: 10.722m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

NAME: BL7069-C20-3-15-NS	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

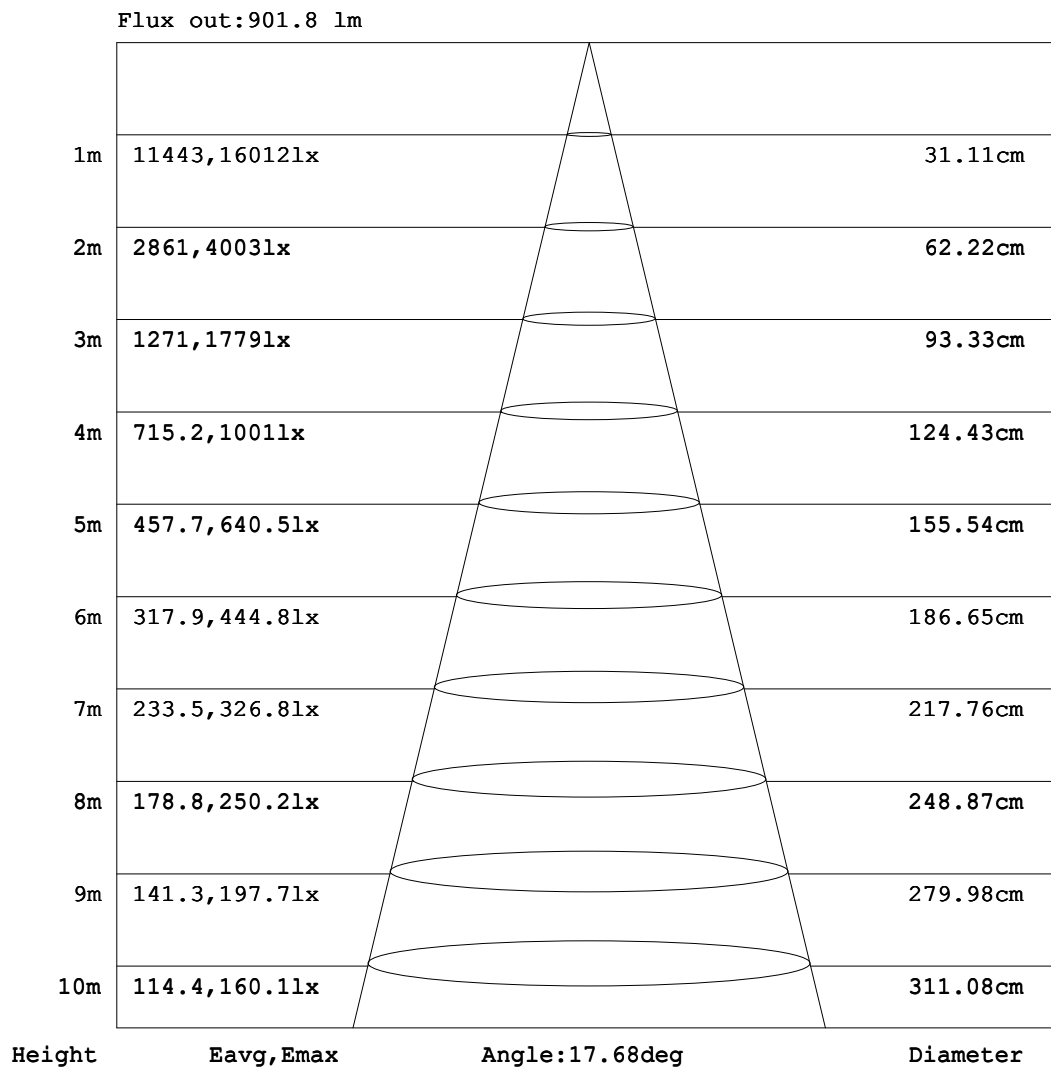


H(β) Range:-90 - 90DEG
H(β) Interval: 0.5DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:ZT
Test Date:2024-01-22

V(B) Range:-85 - 85DEG
V(B) Interval: 2.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:10.722m [K=1.0000]
Remarks:

AAI Figure

NAME: BL7069-C20-3-15-NS	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



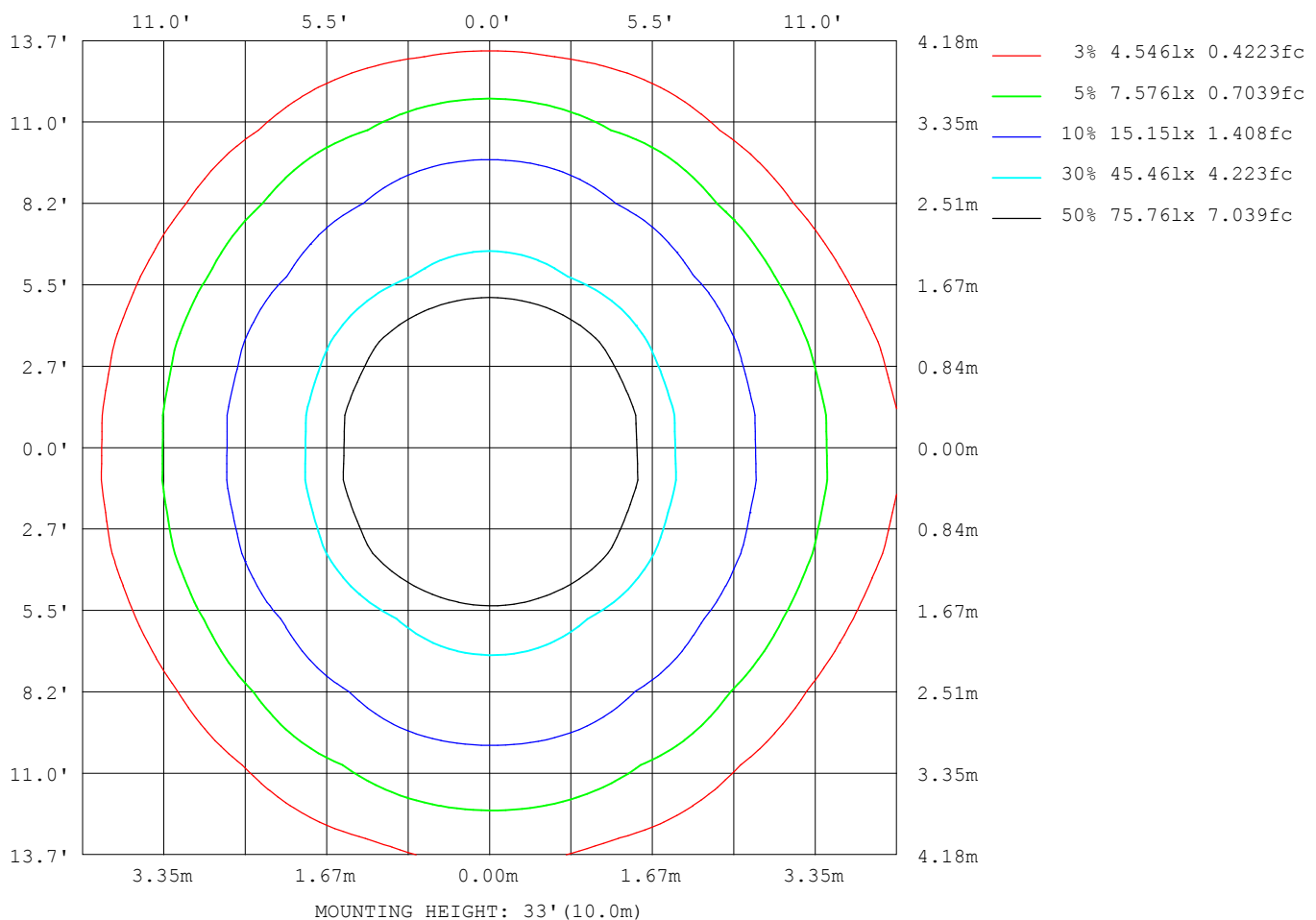
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(β) Range:-90 - 90DEG
H(β) Interval: 0.5DEG
Test Speed: MEDIUM
Temperature:25.3℃
Operators:ZT
Test Date:2024-01-22

V(B) Range:-85 - 85DEG
V(B) Interval: 2.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:10.722m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

NAME: BL7069-C20-3-15-NS	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



H(β) Range:-90 - 90DEG
H(β) Interval: 0.5DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:ZT
Test Date:2024-01-22

V(B) Range:-85 - 85DEG
V(B) Interval: 2.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:10.722m [K=1.0000]
Remarks:

LED Avg.L Report

NAME: BL7069-C20-3-15-NS	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

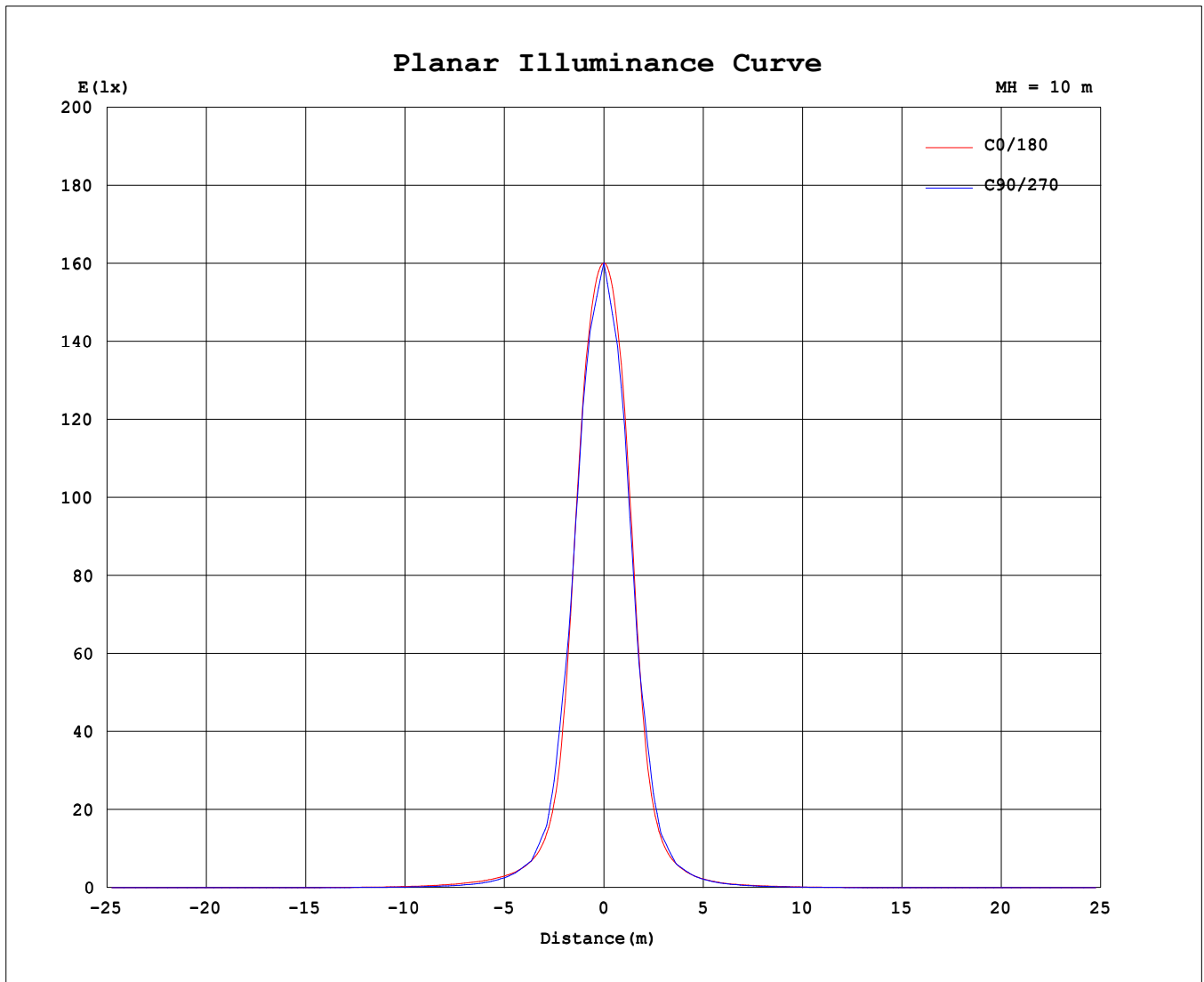
AvgL	cd/m2
L_0~180 (65) av	344
L_0~180 (75) av	334
L_0~180 (85) av	713
L_90~270 (65) av	173
L_90~270 (75) av	157
L_90~270 (85) av	155
L_45 (65) av	163
L_45 (75) av	156
L_45 (85) av	286

Standard: GB/T 29293-2012

H(β) Range:-90 - 90DEG
H(β) Interval: 0.5DEG
Test Speed: MEDIUM
Temperature:25.3℃
Operators:ZT
Test Date:2024-01-22

V(B) Range:-85 - 85DEG
V(B) Interval: 2.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:10.722m [K=1.0000]
Remarks:

Planar Illuminance Curve



H(β) Range:-90 - 90DEG
H(β) Interval: 0.5DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:ZT
Test Date:2024-01-22

V(B) Range:-85 - 85DEG
V(B) Interval: 2.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:10.722m [K=1.0000]
Remarks:

V(B) Range:-85 - 85DEG
V(B) Interval: 2.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:10.722m [K=1.0000]
Remarks:

V(B) Range:-85 - 85DEG
V(B) Interval: 2.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:10.722m [K=1.0000]
Remarks:

V(B) Range:-85 - 85DEG
V(B) Interval: 2.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:10.722m [K=1.0000]
Remarks:

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