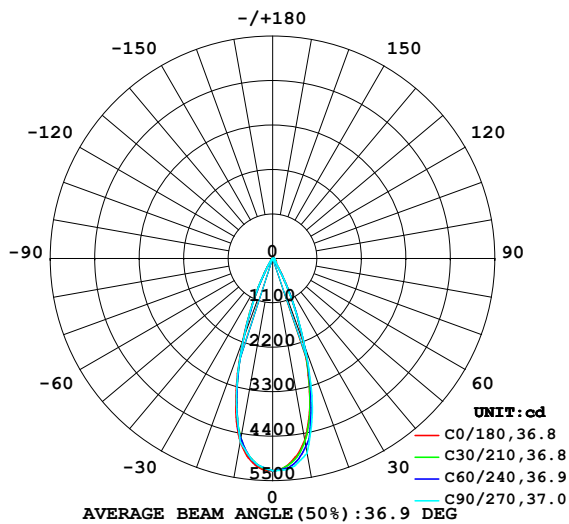


LUMINAIRE PHOTOMETRIC TEST REPORT

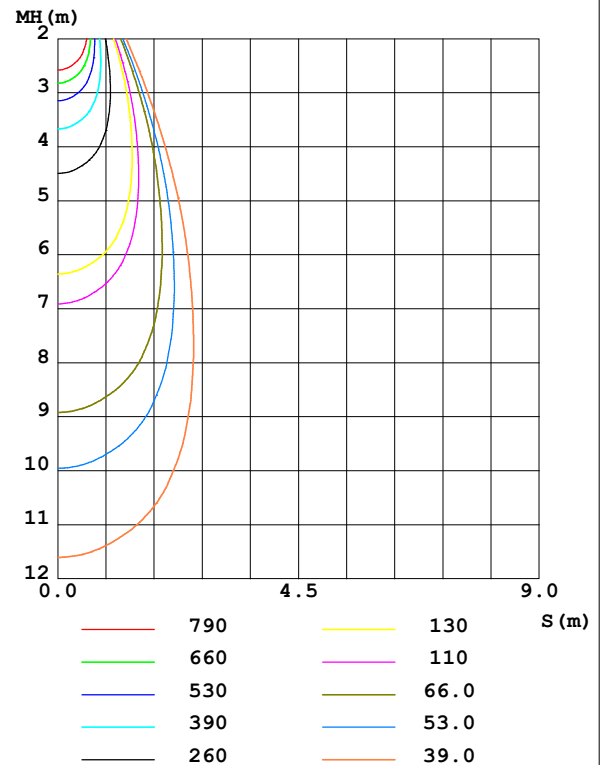
NAME: BL7069-C20-3-36-NS	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 106.27 lm/W
MODEL		Imax (cd)	5254	S/MH (C0/180)		0.58
NOMINAL POWER(W)	20	LOR (%)	70.5	S/MH (C90/270)		0.57
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	2114.7	η UP,DN (C0-180)		0.0,36.3
NOMINAL FLUX(lm)	3000	CIE CLASS	DIRECT	η UP,DN (C180-360)		0.0,34.2
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM		0.50
TEST VOLTAGE (V)	220.2	η down (%)	70.5	CIBSE SHR MAX		0.60

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
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	4565	4640	4901	4677	4608	4497	4612	4441	0- 10	471.4	471.4	22.3, 15.7
20	2247	2297	2314	2238	2162	2109	2090	2115	10- 20	952.4	1424	67.3, 47.5
30	455.7	437.3	387.4	389.6	368.9	369.2	335.5	395.7	20- 30	510.1	1934	91.5, 64.5
40	106.4	73.92	72.38	68.34	68.48	60.26	58.11	62.31	30- 40	102.3	2036	96.3, 67.9
50	59.84	38.22	37.89	37.29	42.48	30.02	29.32	29.76	40- 50	39.03	2075	98.1, 69.2
60	25.07	16.99	16.83	16.46	22.40	11.00	10.73	11.46	50- 60	23.52	2099	99.2, 70
70	7.853	6.315	6.563	6.580	13.14	2.264	2.319	2.831	60- 70	9.044	2108	99.7, 70.3
80	3.757	4.459	4.794	4.724	11.61	1.416	1.690	2.042	70- 80	4.515	2112	99.9, 70.4
90	2.174	0	0	0	3.986	0	0	0	80- 90	2.388	2115	100, 70.5
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:cd									UNIT:lm		

Conical surface Flux(90deg): 2057.9 lm

%lum = 97.3%

%lamp = 68.6%

Conical surface Flux(120deg): 2098.8 lm

%lum = 99.2%

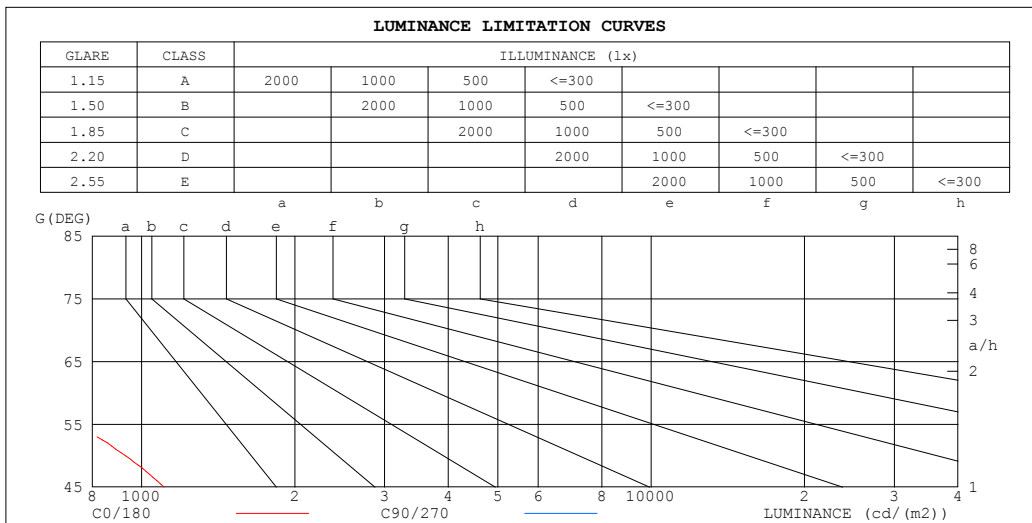
%lamp = 70.0%

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
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-C20-3-36-NS	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	329	242
80	216	276
75	205	220
70	230	192
65	330	241
60	501	337
55	734	486
50	931	589
45	1106	700

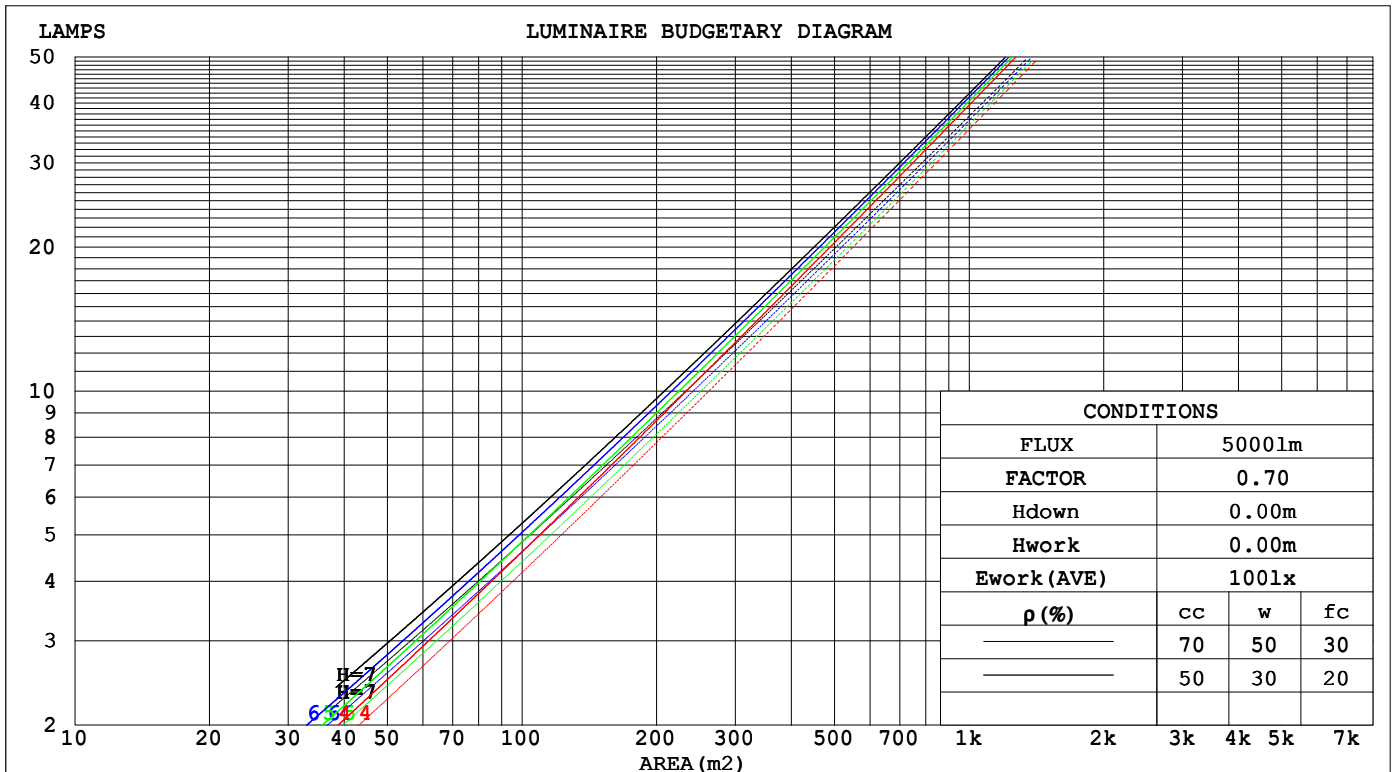
H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:ZT
Test Date:2024-01-22

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-C20-3-36-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	.84	.84	.84	.82	.82	.82	.78	.78	.78	.75	.75	.75	.72	.72	.72	.70
1.0	.79	.77	.76	.77	.76	.75	.75	.74	.73	.72	.71	.70	.70	.69	.68	.67
2.0	.75	.72	.70	.73	.71	.69	.71	.69	.68	.69	.68	.67	.67	.66	.65	.64
3.0	.71	.68	.66	.70	.67	.65	.68	.66	.64	.66	.65	.63	.65	.63	.62	.61
4.0	.67	.64	.62	.67	.64	.61	.65	.63	.61	.64	.62	.60	.63	.61	.59	.58
5.0	.64	.61	.59	.64	.61	.58	.63	.60	.58	.61	.59	.57	.60	.58	.57	.56
6.0	.62	.58	.56	.61	.58	.56	.60	.57	.55	.59	.57	.55	.58	.56	.55	.54
7.0	.59	.56	.53	.59	.55	.53	.58	.55	.53	.57	.55	.53	.56	.54	.52	.52
8.0	.57	.53	.51	.56	.53	.51	.56	.53	.51	.55	.52	.51	.54	.52	.50	.50
9.0	.55	.51	.49	.54	.51	.49	.54	.51	.49	.53	.51	.49	.53	.50	.49	.48
10.0	.53	.49	.47	.52	.49	.47	.52	.49	.47	.51	.49	.47	.51	.49	.47	.46



H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
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-C20-3-36-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	.108	.062	.019	.103	.059	.019	.095	.054	.017	.087	.050	.016	.079	.046	.015	
2.0	.101	.055	.017	.097	.054	.017	.090	.050	.016	.083	.047	.015	.077	.044	.014	
3.0	.095	.051	.015	.092	.049	.015	.086	.046	.014	.080	.044	.013	.075	.041	.013	
4.0	.089	.047	.014	.087	.045	.013	.081	.043	.013	.077	.041	.012	.072	.039	.012	
5.0	.085	.043	.012	.082	.042	.012	.078	.041	.012	.074	.039	.012	.070	.037	.011	
6.0	.080	.040	.012	.078	.040	.011	.074	.038	.011	.071	.037	.011	.067	.035	.011	
7.0	.077	.038	.011	.075	.037	.011	.071	.036	.010	.068	.035	.010	.065	.034	.010	
8.0	.073	.036	.010	.072	.035	.010	.069	.034	.010	.066	.033	.010	.063	.032	.009	
9.0	.070	.034	.009	.069	.033	.009	.066	.033	.009	.063	.032	.009	.061	.031	.009	
10.0	.067	.032	.009	.066	.032	.009	.064	.031	.009	.061	.030	.009	.059	.030	.009	

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	.134	.134	.134	.115	.115	.115	.078	.078	.078	.045	.045	.045	.014	.014	.014	
1.0	.119	.111	.103	.102	.095	.089	.070	.066	.062	.040	.038	.036	.013	.012	.012	
2.0	.107	.093	.082	.092	.080	.071	.063	.056	.049	.036	.032	.029	.012	.010	.009	
3.0	.098	.080	.066	.084	.069	.057	.057	.048	.040	.033	.028	.024	.011	.009	.008	
4.0	.089	.069	.054	.077	.060	.047	.053	.042	.033	.030	.024	.020	.010	.008	.006	
5.0	.082	.061	.045	.071	.053	.039	.049	.037	.028	.028	.022	.016	.009	.007	.005	
6.0	.077	.054	.038	.066	.047	.033	.045	.033	.023	.026	.019	.014	.008	.006	.005	
7.0	.071	.048	.032	.061	.042	.028	.042	.029	.020	.025	.017	.012	.008	.006	.004	
8.0	.067	.044	.028	.058	.038	.024	.040	.027	.017	.023	.016	.010	.008	.005	.003	
9.0	.063	.040	.024	.055	.035	.021	.038	.024	.015	.022	.014	.009	.007	.005	.003	
10.0	.060	.037	.021	.052	.032	.018	.036	.022	.013	.021	.013	.008	.007	.004	.003	

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
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-C20-3-36-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					0.5	1.2	0.7	1.4	1.5	-0.4	0.3	-0.2	0.5	0.6
3H					0.5	1.2	0.8	1.4	1.6	-0.3	0.4	-0.1	0.6	0.8
4H					0.6	1.2	0.8	1.4	1.6	-0.2	0.4	0.0	0.7	0.9
6H					0.6	1.2	0.9	1.5	1.7	-0.1	0.6	0.2	0.8	1.0
8H					0.7	1.3	1.0	1.5	1.8	0.1	0.7	0.4	0.9	1.2
12H					0.7	1.3	1.1	1.6	1.9	0.2	0.8	0.5	1.1	1.3
4H 2H					0.4	1.1	0.7	1.3	1.5	-0.5	0.2	-0.2	0.4	0.6
3H					0.5	1.1	0.8	1.4	1.6	-0.3	0.3	0.1	0.6	0.9
4H					0.6	1.1	0.9	1.4	1.7	-0.1	0.5	0.3	0.7	1.0
6H					0.7	1.2	1.1	1.5	1.9	0.2	0.7	0.6	1.0	1.4
8H					0.9	1.3	1.3	1.7	2.0	0.4	0.9	0.8	1.2	1.6
12H					1.1	1.5	1.5	1.8	2.2	0.7	1.1	1.1	1.4	1.8
8H 4H					0.6	1.0	1.0	1.3	1.7	-0.1	0.4	0.3	0.7	1.1
6H					0.8	1.2	1.3	1.6	2.0	0.3	0.7	0.8	1.1	1.5
8H					1.1	1.4	1.5	1.8	2.2	0.7	1.0	1.1	1.4	1.9
12H					1.5	1.7	1.9	2.2	2.6	1.0	1.3	1.5	1.8	2.2
12H 4H					0.5	0.9	0.9	1.3	1.7	-0.1	0.3	0.3	0.7	1.1
6H					0.9	1.2	1.3	1.6	2.0	0.4	0.7	0.8	1.1	1.6
8H					1.2	1.4	1.6	1.9	2.3	0.8	1.1	1.2	1.5	2.0
Variations with the observer position at spacings(CIE Pub.117):														
S = 1.0H					+ 1.4 / - 1.4					+ 1.0 / - 1.0				
1.5H					+ 1.9 / - 1.8					+ 1.6 / - 0.7				
2.0H					+ 2.6 / - 2.3					+ 1.1 / - 1.2				

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: 1.0DEG
Test Speed: HIGH
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-C20-3-36-NS	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

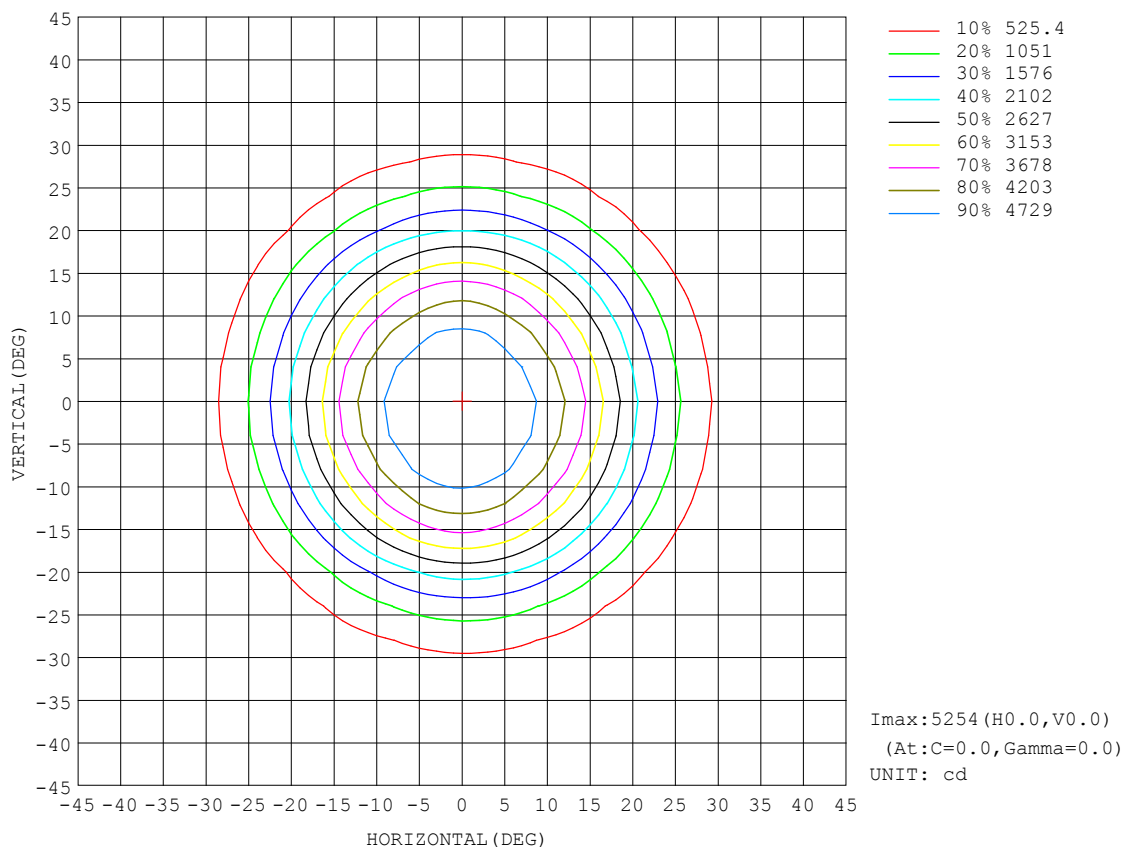
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	63	59	56	63	59	56	62	58	56	54
0.80	68	64	62	67	64	61	67	63	61	59
1.00	71	67	65	70	67	64	69	67	64	61
1.25	73	70	68	73	70	67	71	69	67	64
1.50	75	72	70	74	72	70	73	71	69	66
2.00	77	74	72	76	73	71	74	72	70	67
2.50	78	75	73	77	75	73	75	73	72	67
3.00	79	77	75	78	76	74	75	74	73	68
4.00	80	79	77	79	77	76	76	75	74	69
5.00	81	80	79	80	79	77	77	76	75	70
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004				Suspended				SHRNOM = 1.25		

$H(\beta)$ Range:-90 - 90DEG
 $H(\beta)$ Interval: 1.0DEG
 Test Speed: HIGH
 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-C20-3-36-NS	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

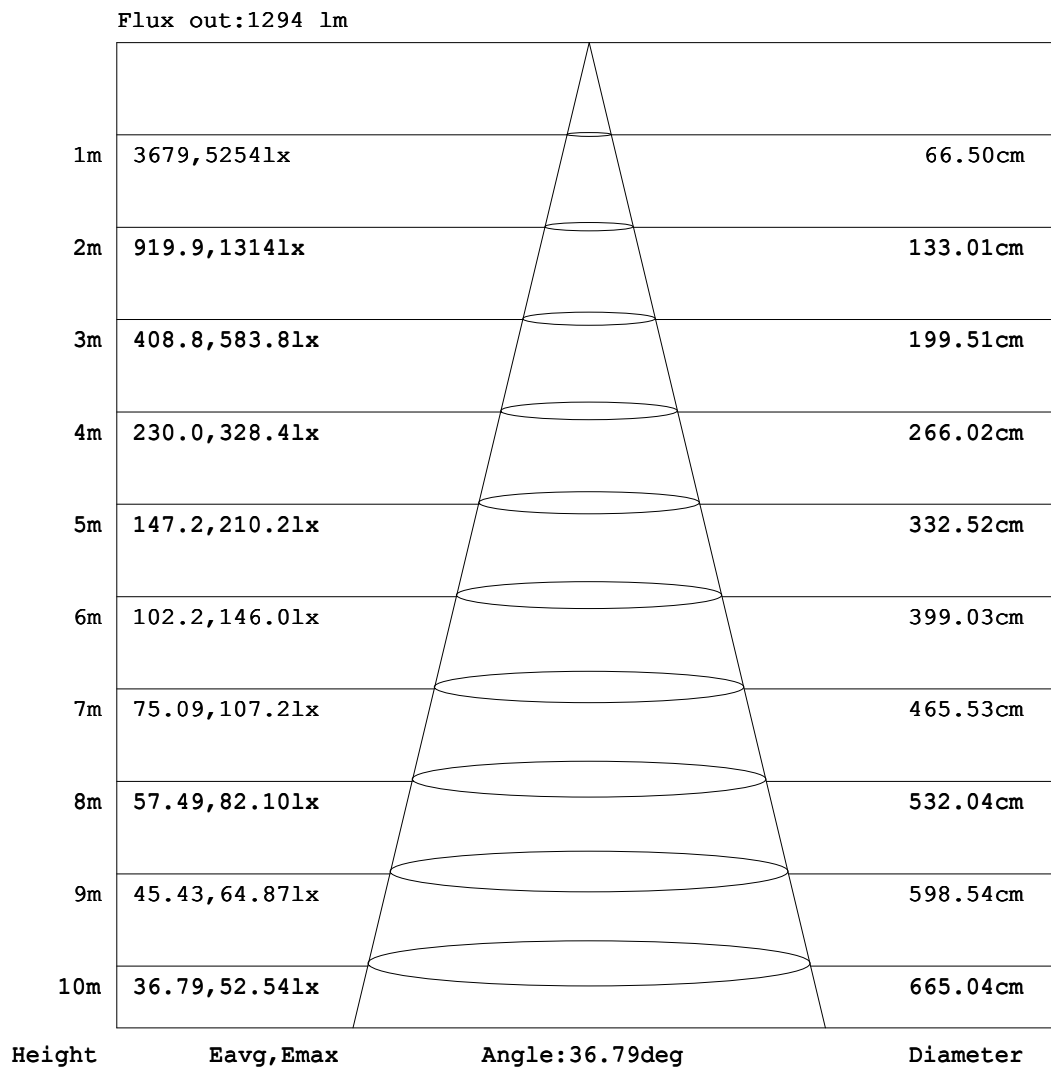


H(β) Range: -90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: ZT
Test Date: 2024-01-22

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-C20-3-36-NS	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



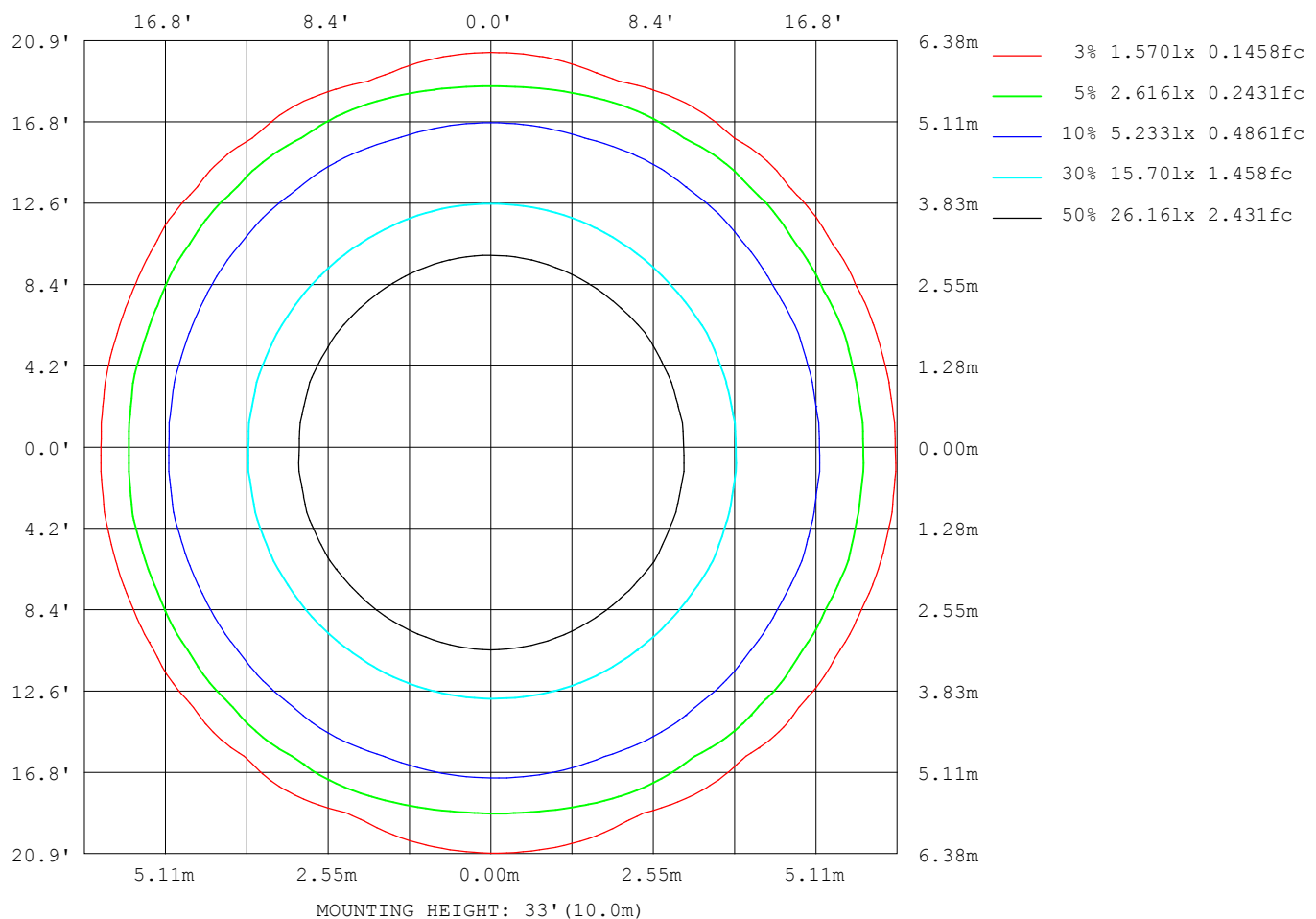
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(β) Range: -90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
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:

ISOLUX DIAGRAM

NAME: BL7069-C20-3-36-NS	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
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-C20-3-36-NS	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

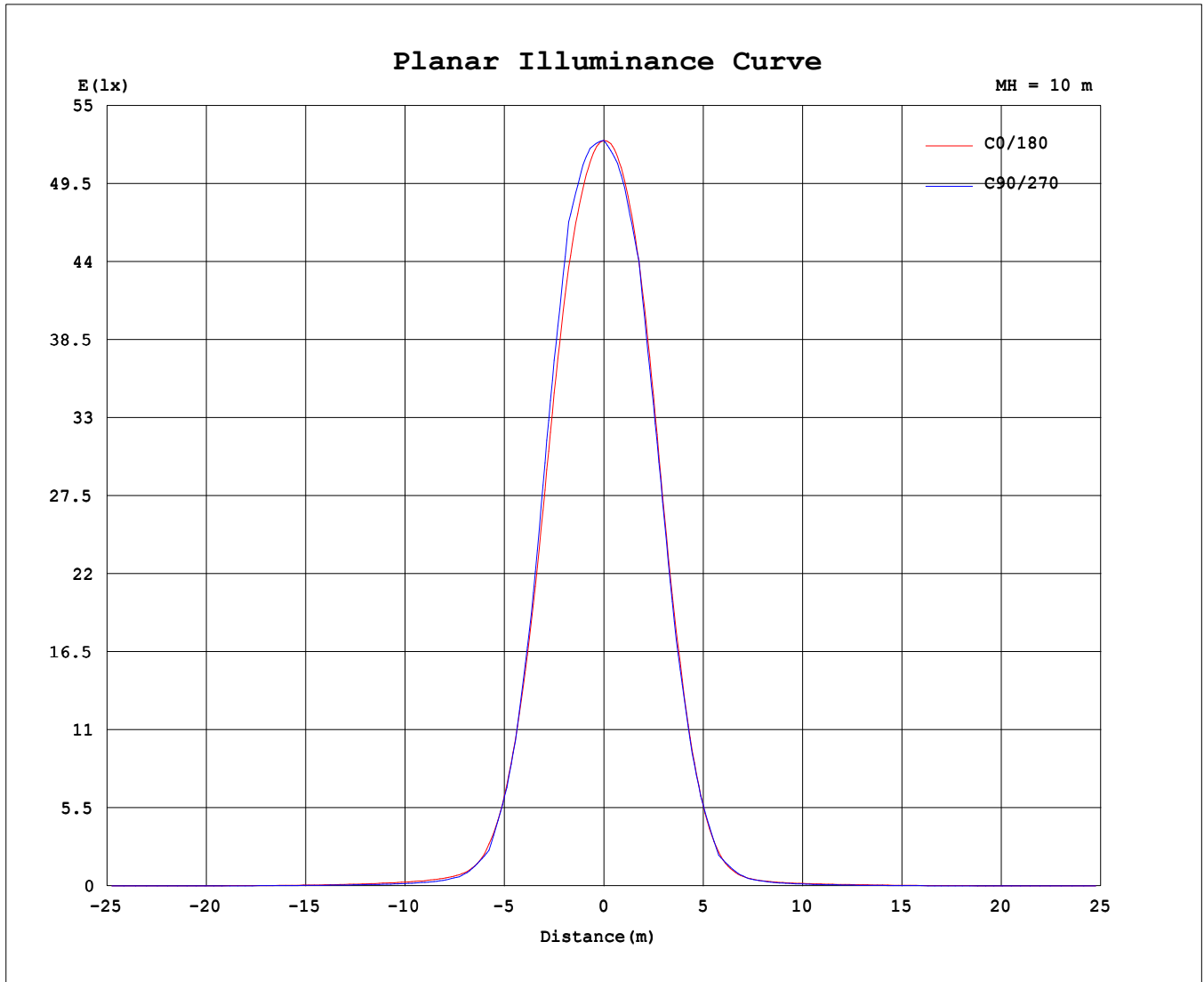
AvgL	cd/m2
L_0~180 (65) av	351
L_0~180 (75) av	341
L_0~180 (85) av	779
L_90~270 (65) av	181
L_90~270 (75) av	145
L_90~270 (85) av	171
L_45 (65) av	178
L_45 (75) av	142
L_45 (85) av	317

Standard: GB/T 29293-2012

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
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: 1.0DEG
Test Speed: HIGH
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:
```

```
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:
```