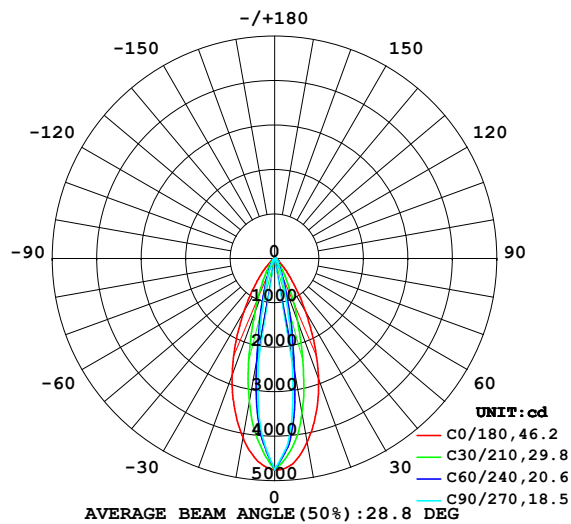


LUMINAIRE PHOTOMETRIC TEST REPORT

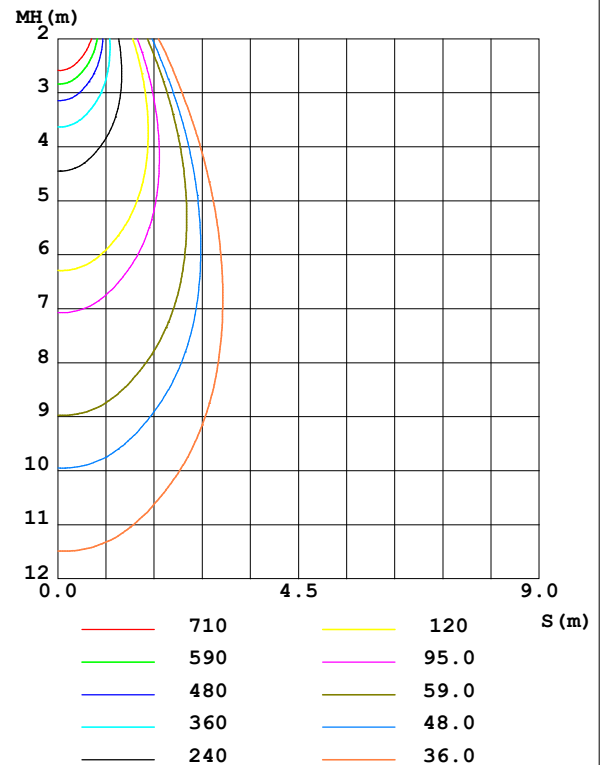
NAME: BL7069-C20-3-2050-NS	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 80.83 lm/W
MODEL		Imax (cd)	4753	S/MH (C0/180)		0.72
NOMINAL POWER(W)	20	LOR (%)	53.6	S/MH (C90/270)		0.31
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	1608.6	η UP,DN (C0-180)		0.0,27.8
NOMINAL FLUX(lm)	3000	CIE CLASS	DIRECT	η UP,DN (C180-360)		0.0,25.9
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM		0.00
TEST VOLTAGE (V)	220.3	η down (%)	53.6	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:2024-01-20

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	4198	3050	2229	3080	4101	2776	1992	2917	0- 10	358.4	358.4	22.3, 11.9
20	2892	960.5	527.0	987.7	2802	826.1	473.4	922.9	10- 20	552.5	910.9	56.6, 30.4
30	1416	297.3	172.9	307.9	1394	259.3	154.4	282.6	20- 30	374.6	1285	79.9, 42.8
40	524.2	105.0	72.54	106.9	510.7	89.96	65.15	96.84	30- 40	187.5	1473	91.6, 49.1
50	152.9	43.84	32.77	43.65	125.5	35.79	28.92	41.05	40- 50	81.30	1554	96.6, 51.8
60	65.64	20.35	15.15	19.44	50.72	15.45	11.57	16.51	50- 60	32.37	1587	98.6, 52.9
70	26.58	7.776	7.519	7.421	22.33	4.250	4.146	5.191	60- 70	14.66	1601	99.5, 53.4
80	5.380	3.748	3.930	3.910	8.844	1.403	1.349	1.718	70- 80	5.266	1607	99.9, 53.6
90	2.594	0	0	0	3.091	0	0	0	80- 90	1.986	1609	100, 53.6
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): 1522.7 lm

%lum = 94.7%

%lamp = 50.8%

Conical surface Flux(120deg): 1586.7 lm

%lum = 98.6%

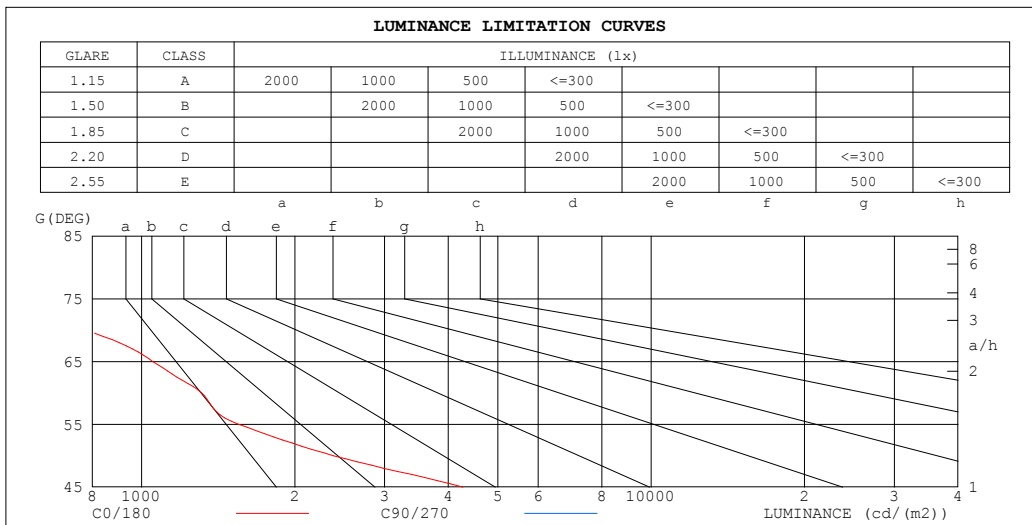
%lamp = 52.9%

H(β) Range:-90 - 90DEG
H(β) Interval: 0.5DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:ZT
Test Date:2024-01-20

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-C20-3-2050-NS	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	427	183
80	310	226
75	418	208
70	777	220
65	1053	254
60	1313	303
55	1554	389
50	2379	510
45	4273	704

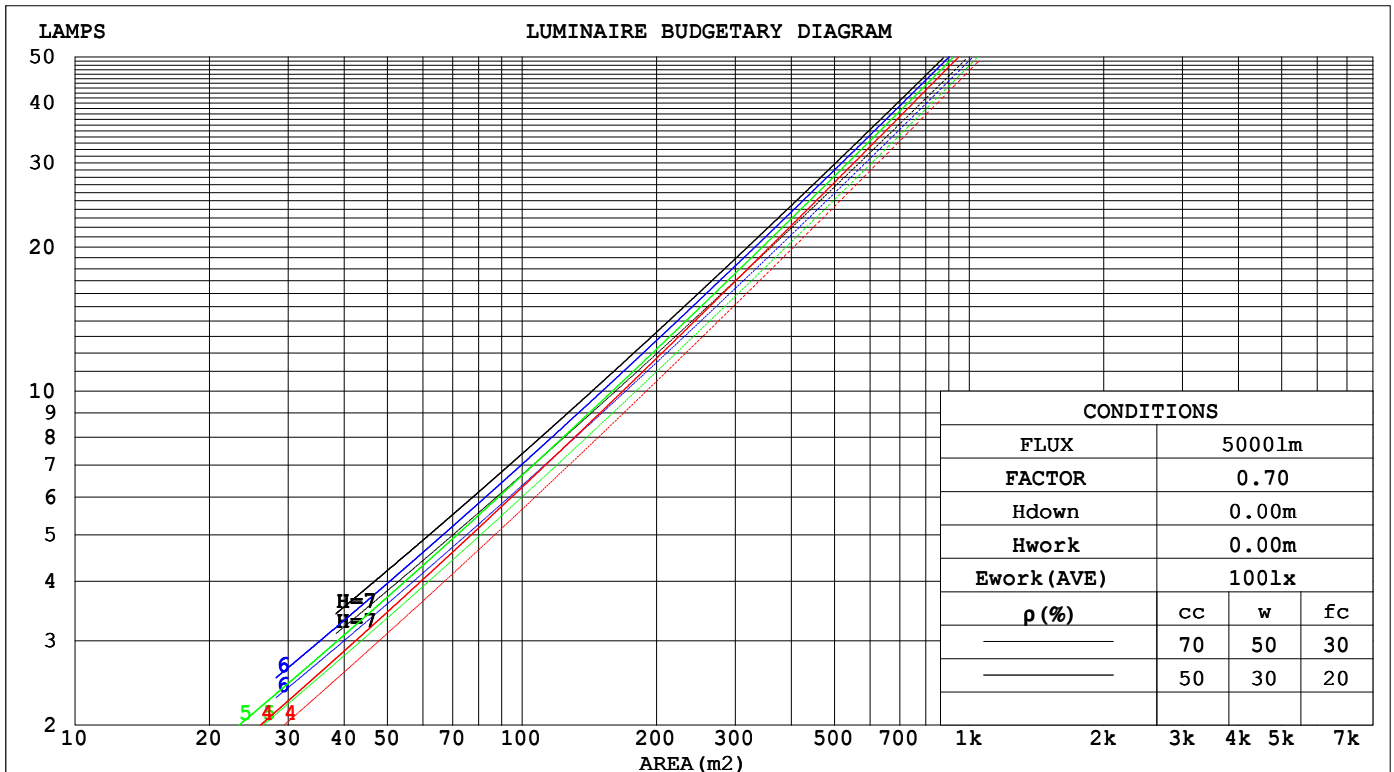
H(β) Range:-90 - 90DEG
H(β) Interval: 0.5DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:ZT
Test Date:2024-01-20

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-C20-3-2050-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	.64	.64	.64	.62	.62	.62	.60	.60	.60	.57	.57	.57	.55	.55	.55	.54
1.0	.60	.58	.57	.59	.57	.56	.56	.56	.55	.54	.54	.53	.53	.52	.52	.51
2.0	.56	.54	.52	.55	.53	.52	.53	.52	.51	.52	.51	.50	.50	.49	.49	.48
3.0	.53	.50	.48	.52	.50	.48	.51	.49	.47	.49	.48	.47	.48	.47	.46	.45
4.0	.50	.47	.45	.49	.47	.45	.48	.46	.44	.47	.45	.44	.46	.45	.43	.43
5.0	.47	.44	.42	.47	.44	.42	.46	.44	.42	.45	.43	.42	.44	.43	.41	.40
6.0	.45	.42	.40	.45	.42	.40	.44	.41	.40	.43	.41	.39	.42	.41	.39	.38
7.0	.43	.40	.38	.42	.40	.38	.42	.39	.38	.41	.39	.38	.41	.39	.37	.37
8.0	.41	.38	.36	.41	.38	.36	.40	.38	.36	.40	.37	.36	.39	.37	.36	.35
9.0	.39	.36	.35	.39	.36	.34	.38	.36	.34	.38	.36	.34	.38	.36	.34	.34
10.0	.38	.35	.33	.37	.35	.33	.37	.35	.33	.37	.34	.33	.36	.34	.33	.32



H(β) Range:-90 - 90DEG
H(β) Interval: 0.5DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:ZT
Test Date:2024-01-20

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-C20-3-2050-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	.089	.051	.016	.085	.049	.015	.079	.045	.014	.072	.042	.013	.067	.039	.012															
2.0	.084	.046	.014	.081	.045	.014	.075	.042	.013	.070	.039	.012	.065	.037	.012															
3.0	.079	.042	.013	.077	.041	.012	.072	.039	.012	.068	.037	.011	.064	.035	.011															
4.0	.075	.039	.011	.073	.038	.011	.069	.036	.011	.065	.035	.011	.061	.033	.010															
5.0	.071	.036	.010	.069	.035	.010	.066	.034	.010	.062	.033	.010	.059	.032	.010															
6.0	.067	.034	.010	.066	.033	.010	.063	.032	.009	.060	.031	.009	.057	.030	.009															
7.0	.064	.032	.009	.063	.031	.009	.060	.030	.009	.057	.029	.009	.055	.029	.008															
8.0	.061	.030	.008	.060	.029	.008	.057	.029	.008	.055	.028	.008	.053	.027	.008															
9.0	.058	.028	.008	.057	.028	.008	.055	.027	.008	.053	.027	.008	.051	.026	.008															
10.0	.056	.027	.007	.055	.026	.007	.053	.026	.007	.051	.025	.007	.049	.025	.007															

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	.102	.102	.102	.087	.087	.087	.060	.060	.060	.034	.034	.034	.011	.011	.011	
1.0	.091	.084	.078	.078	.072	.067	.053	.050	.047	.031	.029	.027	.010	.009	.009	
2.0	.083	.071	.061	.071	.061	.053	.049	.042	.037	.028	.025	.022	.009	.008	.007	
3.0	.076	.061	.049	.065	.052	.043	.044	.036	.030	.026	.021	.018	.008	.007	.006	
4.0	.070	.053	.040	.060	.046	.035	.041	.032	.024	.024	.019	.014	.008	.006	.005	
5.0	.065	.046	.033	.055	.040	.029	.038	.028	.020	.022	.016	.012	.007	.005	.004	
6.0	.060	.041	.028	.052	.036	.024	.036	.025	.017	.021	.015	.010	.007	.005	.003	
7.0	.057	.037	.024	.049	.032	.021	.034	.023	.015	.020	.013	.009	.006	.004	.003	
8.0	.053	.034	.020	.046	.029	.018	.032	.021	.013	.018	.012	.007	.006	.004	.002	
9.0	.050	.031	.018	.043	.027	.015	.030	.019	.011	.018	.011	.007	.006	.004	.002	
10.0	.048	.028	.015	.041	.025	.014	.029	.017	.010	.017	.010	.006	.005	.003	.002	

H(β) Range:-90 - 90DEG
H(β) Interval: 0.5DEG
Test Speed: MEDIUM
Temperature:25.3℃
Operators:ZT
Test Date:2024-01-20

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-C20-3-2050-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	8.3	9.1	8.5	9.3	9.4	-0.6	0.3	-0.4	0.4	0.6				
3H	8.4	9.1	8.6	9.3	9.5	-0.3	0.5	-0.1	0.7	0.9				
4H	8.3	9.1	8.6	9.3	9.5	-0.2	0.6	0.1	0.8	1.0				
6H	8.3	9.0	8.6	9.2	9.4	-0.0	0.7	0.3	0.9	1.2				
8H	8.2	8.9	8.5	9.2	9.4	0.1	0.7	0.4	1.0	1.3				
12H	8.2	8.9	8.5	9.1	9.4	0.2	0.8	0.5	1.1	1.4				
4H 2H	8.1	8.8	8.3	9.0	9.2	-0.3	0.4	-0.0	0.6	0.9				
3H	8.2	8.8	8.5	9.1	9.3	0.0	0.7	0.4	1.0	1.2				
4H	8.1	8.7	8.5	9.0	9.3	0.2	0.8	0.6	1.1	1.4				
6H	8.1	8.6	8.4	8.9	9.3	0.5	1.0	0.9	1.3	1.7				
8H	8.0	8.5	8.4	8.9	9.2	0.6	1.1	1.0	1.5	1.8				
12H	8.0	8.5	8.4	8.8	9.2	0.8	1.2	1.2	1.6	2.0				
8H 4H	8.0	8.5	8.4	8.8	9.2	0.3	0.8	0.7	1.1	1.5				
6H	7.9	8.3	8.4	8.7	9.1	0.6	1.0	1.1	1.4	1.8				
8H	7.9	8.3	8.4	8.7	9.1	0.9	1.2	1.3	1.6	2.1				
12H	7.9	8.2	8.4	8.7	9.1	1.1	1.4	1.6	1.9	2.3				
12H 4H	7.9	8.4	8.3	8.7	9.1	0.3	0.7	0.7	1.1	1.5				
6H	7.9	8.2	8.3	8.7	9.1	0.7	1.0	1.1	1.4	1.9				
8H	7.9	8.2	8.4	8.6	9.1	0.9	1.2	1.4	1.7	2.2				
Variations with the observer position at spacings(CIE Pub.117):														
S = 1.0H	+ 4.8 / - 5.1					+ 1.0 / - 1.3								
1.5H	+ 6.3 / - 6.1					+ 1.2 / - 1.1								
2.0H	+ 7.0 / - 5.5					+ 1.6 / - 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: 0.5DEG
Test Speed: MEDIUM
Temperature:25.3℃
Operators:ZT
Test Date:2024-01-20

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-C20-3-2050-NS	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

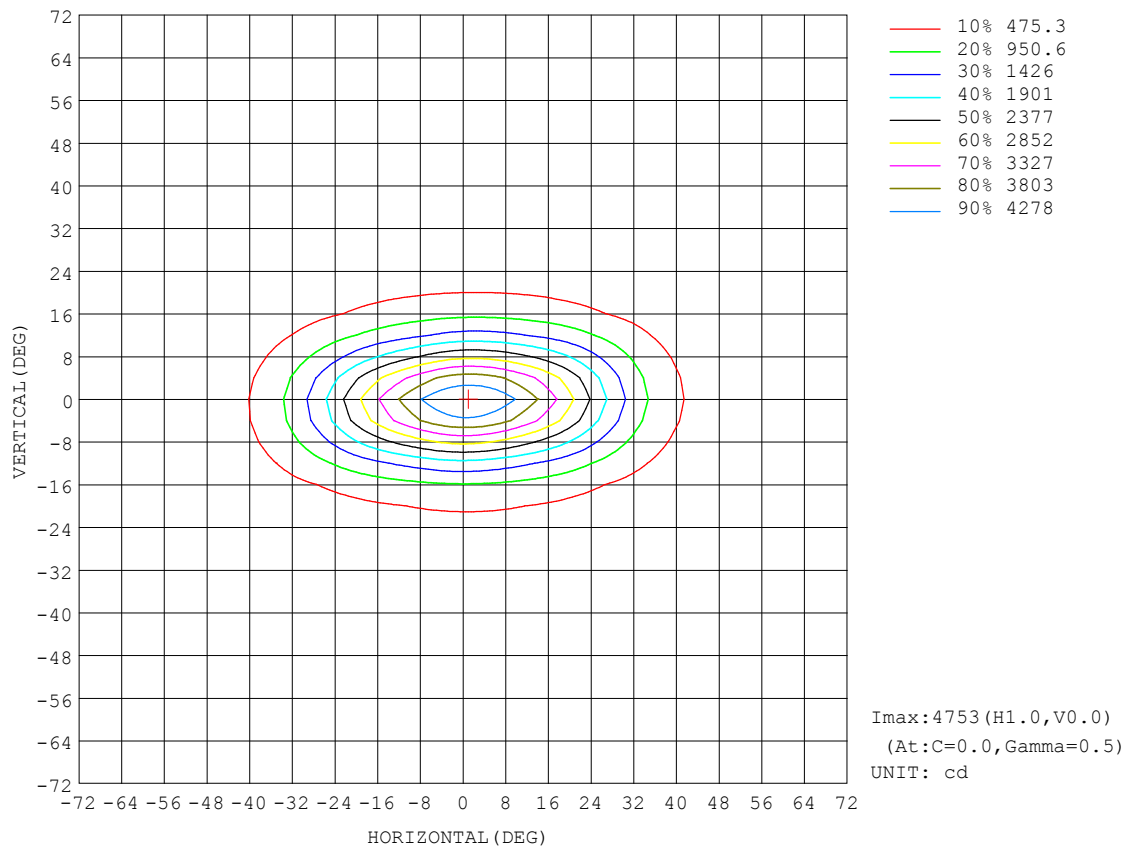
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	46	43	41	46	43	41	46	42	41	39
0.80	50	47	45	50	47	45	49	47	45	43
1.00	53	50	48	52	49	48	51	49	47	45
1.25	55	52	50	54	52	50	53	51	50	47
1.50	56	54	52	56	53	52	55	53	51	49
2.00	58	56	54	57	55	54	56	54	53	50
2.50	59	57	55	58	56	55	56	55	54	50
3.00	60	58	56	59	57	56	57	56	55	51
4.00	61	59	58	60	59	57	58	57	56	52
5.00	62	60	59	60	59	58	58	58	57	53
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:2024-01-20

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-C20-3-2050-NS	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

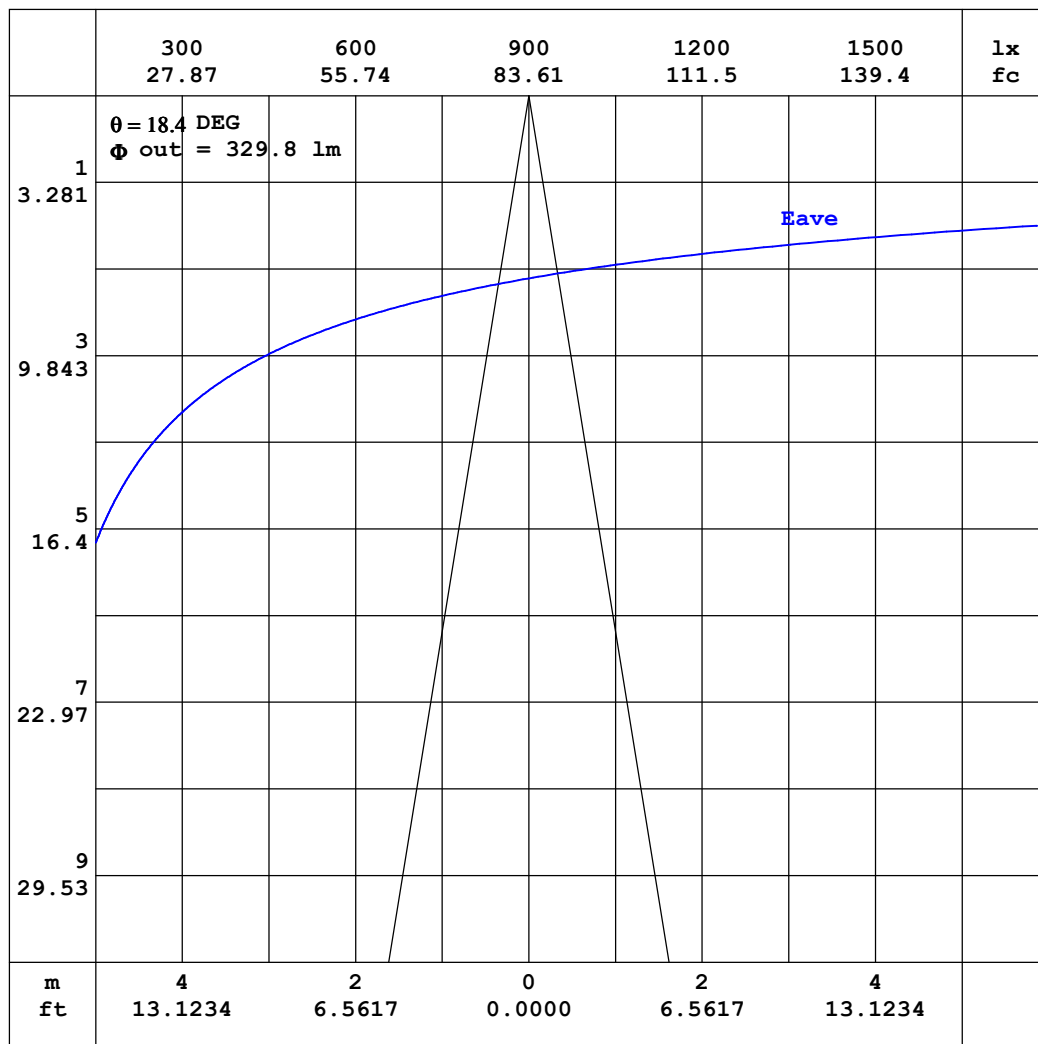


H(β) Range: -90 - 90DEG
H(β) Interval: 0.5DEG
Test Speed: MEDIUM
Temperature: 25.3°C
Operators: ZT
Test Date: 2024-01-20

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 CURVES

NAME: BL7069-C20-3-2050-NS	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



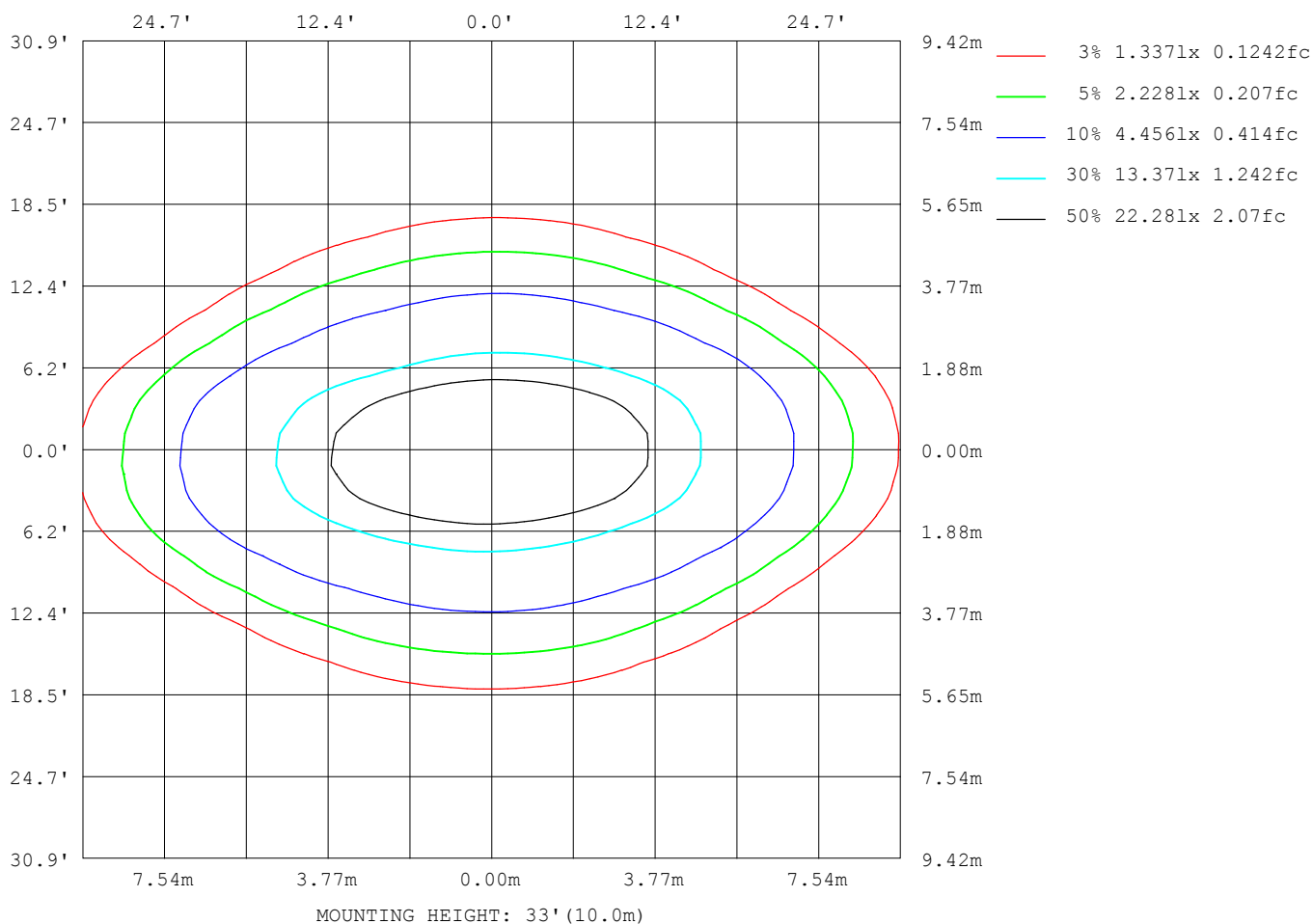
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(B) Range: -90 - 90DEG
H(B) Interval: 0.5DEG
Test Speed: MEDIUM
Temperature: 25.3°C
Operators: ZT
Test Date: 2024-01-20

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-C20-3-2050-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:2024-01-20

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-C20-3-2050-NS	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

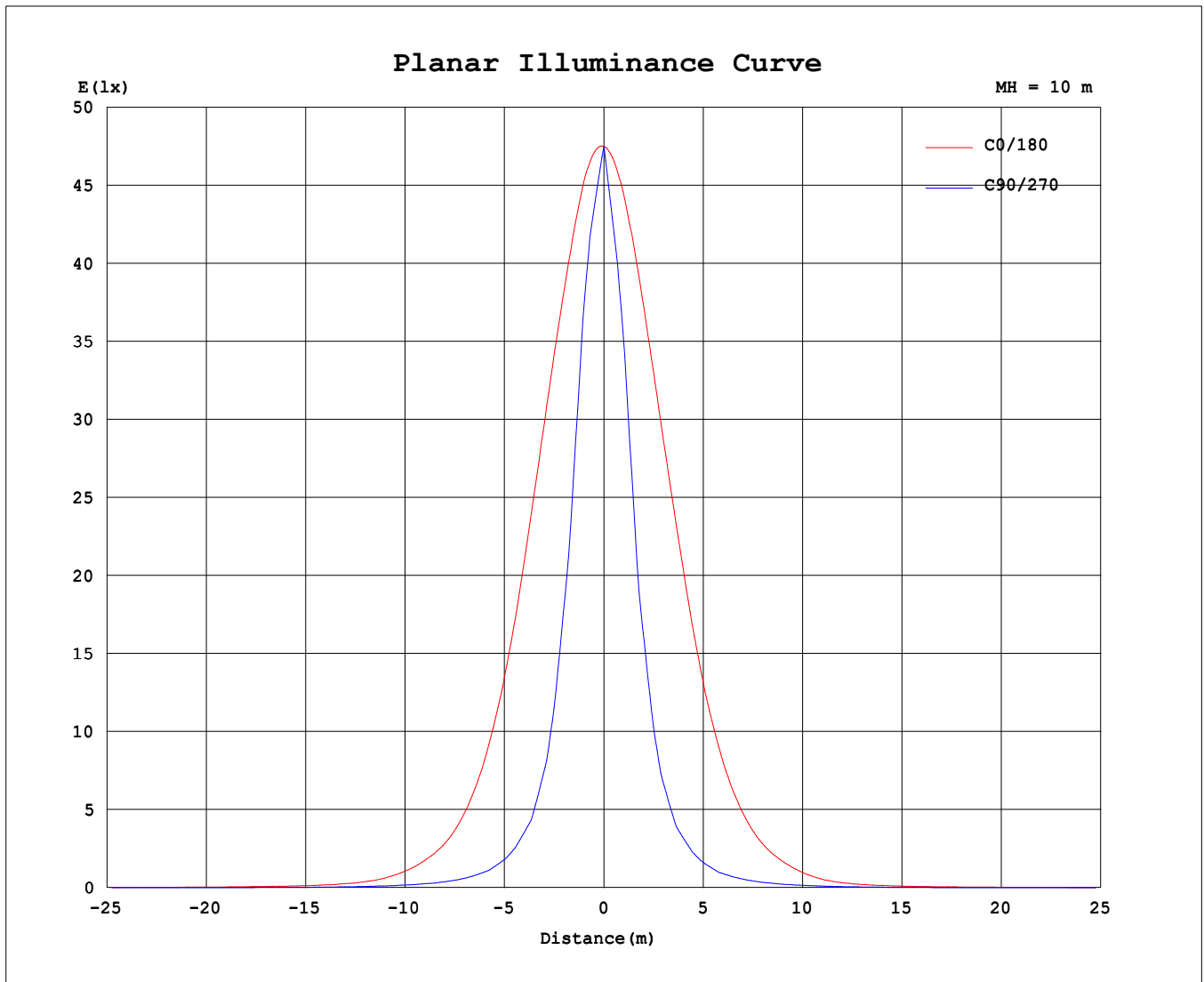
AvgL	cd/m2
L_0~180 (65) av	944
L_0~180 (75) av	434
L_0~180 (85) av	677
L_90~270 (65) av	214
L_90~270 (75) av	146
L_90~270 (85) av	130
L_45 (65) av	244
L_45 (75) av	145
L_45 (85) av	253

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:2024-01-20

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:2024-01-20

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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