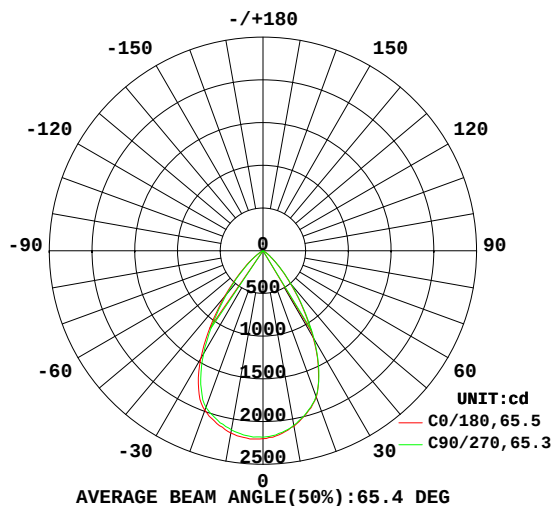


LUMINAIRE PHOTOMETRIC TEST REPORT

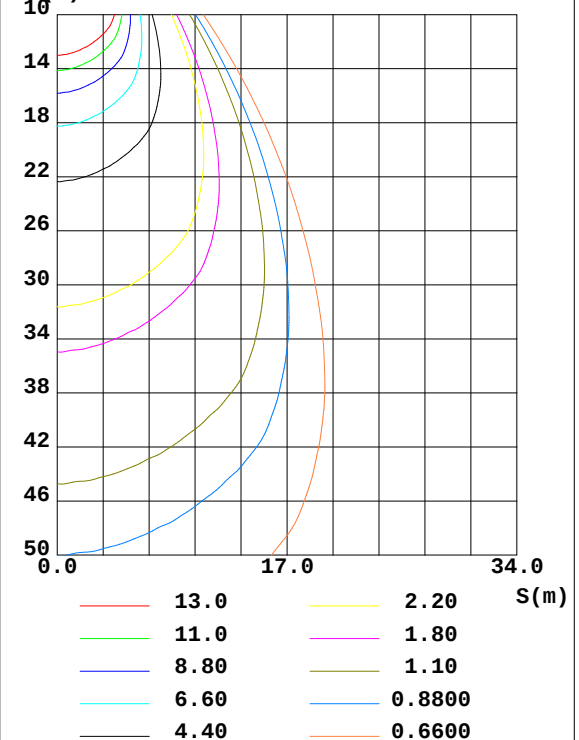
Test:U:230.57V I:0.1316A P:28.109W PF:0.9267 Freq:49.99Hz Lamp Flux:2458.55x1 lm		
NAME: BJ30-BKC30C02	TYPE:	WEIGHT:
SPEC.: black RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 65mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 87.46 lm/W			
MODEL	4000K	I _{max} (cd)	2209	S/MH(C0/180)	1.01
NOMINAL POWER(W)	30	LOR(%)	100.0	S/MH(C90/270)	1.00
RATED VOLTAGE(V)	220-240	TOTAL FLUX(lm)	2458.5	η UP, DN(C0-180)	0.0, 47.7
NOMINAL FLUX(lm)	2458.55	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 52.3
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.00
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: 2024-05-23

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:

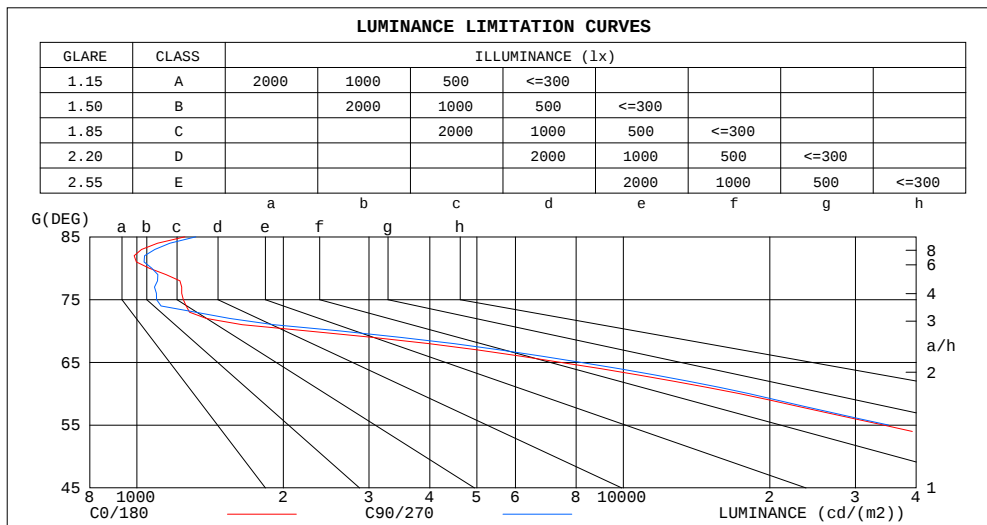
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	2086	2059	2074	2116	2166	2158	2128	2080	0- 10	204.9	204.9	8.33, 8.33
20	1825	1777	1814	1897	1989	2007	1951	1840	10- 20	566.2	771.1	31.4, 31.4
30	1179	1121	1195	1347	1460	1491	1389	1229	20- 30	743.8	1515	61.6, 61.6
40	502.5	468.0	518.3	631.7	699.4	727.5	656.4	541.8	30- 40	576.2	2091	85.1, 85.1
50	141.8	130.1	145.8	191.6	218.4	228.5	197.5	152.6	40- 50	270.9	2362	96.1, 96.1
60	28.80	26.59	30.11	39.17	43.77	46.22	40.32	30.24	50- 60	79.07	2441	99.3, 99.3
70	2.544	2.211	2.969	4.810	5.523	6.132	4.667	2.762	60- 70	15.57	2457	99.9, 99.9
80	0.6112	0.5299	0.6185	0.6955	0.6588	0.8018	0.6508	0.5199	70- 80	1.524	2458	100, 100
90	0.3783	0.4169	0.3783	0.3243	0.0811	0.0888	0.0811	0.0811	80- 90	0.3659	2459	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: 2024-05-23

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:230.57V I:0.1316A P:28.109W PF:0.9267 Freq:49.99Hz Lamp Flux:2458.55x1 lm		
NAME: BJ30-BKC30C02	TYPE:	WEIGHT:
SPEC.: black RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 65mm	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	1255	1322
80	1060	1073
75	1246	1097
70	2240	2615
65	7415	8156
60	17349	18136
55	34265	35085
50	66461	68320
45	119396	123584

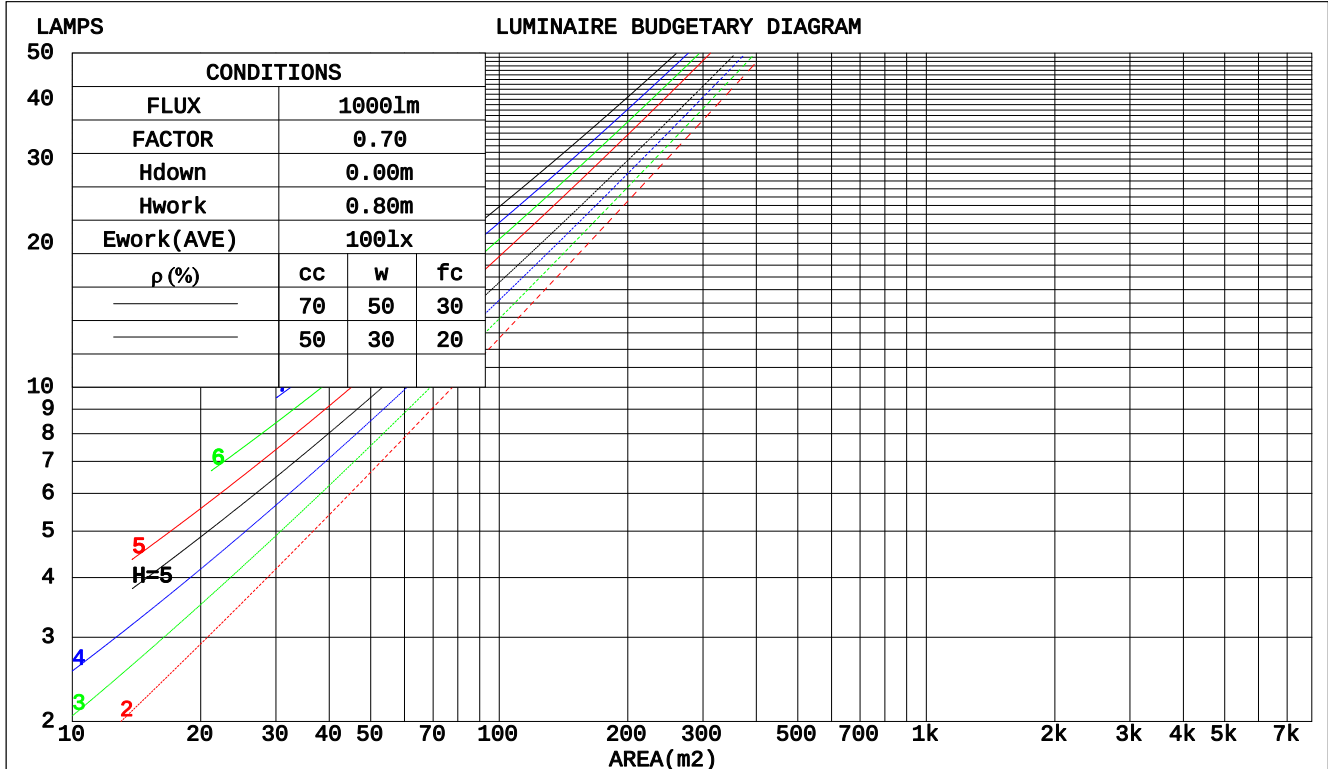
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2024-05-23

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:230.57V I:0.1316A P:28.109W PF:0.9267 Freq:49.99Hz Lamp Flux:2458.55x1 lm		
NAME: BJ30-BKC30C02	TYPE:	WEIGHT:
SPEC.: black RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 65mm	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	Coefficients of Utilization(CU)															
RCR:Room Cavity Ratio																
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	1.10	1.07	1.05	1.08	1.06	1.03	1.04	1.02	1.00	1.00	.99	.97	.97	.96	.94	.93
2.0	1.02	.97	.94	.90	.96	.93	.97	.93	.91	.94	.91	.89	.91	.89	.87	.85
3.0	.94	.89	.84	.93	.88	.84	.90	.86	.82	.87	.84	.81	.85	.82	.80	.78
4.0	.87	.81	.77	.86	.80	.76	.84	.79	.75	.82	.78	.74	.80	.76	.73	.72
5.0	.81	.75	.70	.80	.74	.70	.78	.73	.69	.76	.72	.68	.75	.71	.68	.66
6.0	.75	.69	.64	.74	.68	.64	.73	.67	.63	.71	.67	.63	.70	.66	.63	.61
7.0	.70	.64	.59	.69	.63	.59	.68	.63	.59	.67	.62	.58	.66	.61	.58	.57
8.0	.66	.59	.55	.65	.59	.55	.64	.58	.54	.63	.58	.54	.62	.57	.54	.52
9.0	.62	.55	.51	.61	.55	.51	.60	.55	.51	.59	.54	.50	.58	.54	.50	.49
10.0	.58	.52	.48	.57	.51	.47	.57	.51	.47	.56	.51	.47	.55	.50	.47	.46



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2024-05-23

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:230.57V I:0.1316A P:28.109W PF:0.9267 Freq:49.99Hz Lamp Flux:2458.55x1 lm					
NAME: BJ30-BKC30C02			TYPE:		WEIGHT:
SPEC.: black RA90 3000K+5700K			DIM.:		SERIAL No.:
MFR.:			SUR.: 65mm		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	.190	.108	.034	.183	.104	.033	.170	.098	.031	.159	.092	.029	.148	.086	.028	
2.0	.184	.101	.031	.178	.098	.030	.167	.093	.029	.157	.088	.028	.148	.084	.026	
3.0	.176	.094	.028	.171	.092	.028	.162	.088	.027	.153	.084	.026	.146	.081	.025	
4.0	.168	.087	.026	.164	.086	.025	.156	.083	.025	.149	.080	.024	.142	.077	.023	
5.0	.161	.082	.024	.157	.081	.023	.150	.078	.023	.143	.076	.022	.137	.073	.022	
6.0	.153	.077	.022	.150	.076	.022	.144	.074	.021	.138	.072	.021	.132	.070	.021	
7.0	.146	.072	.020	.143	.071	.020	.138	.070	.020	.133	.068	.020	.128	.066	.020	
8.0	.140	.068	.019	.137	.068	.019	.132	.066	.019	.128	.065	.019	.123	.063	.018	
9.0	.134	.065	.018	.131	.064	.018	.127	.063	.018	.123	.062	.018	.119	.060	.017	
10.0	.128	.061	.017	.126	.061	.017	.122	.060	.017	.118	.059	.017	.114	.058	.017	

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			Ceiling Cavity Exitance Coefficients(CCEC)												
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.172	.157	.144	.147	.135	.124	.101	.093	.086	.058	.054	.050	.019	.017	.016	
2.0	.158	.132	.111	.135	.114	.096	.093	.079	.067	.053	.046	.039	.017	.015	.013	
3.0	.146	.114	.088	.126	.098	.076	.086	.068	.053	.050	.040	.031	.016	.013	.010	
4.0	.137	.099	.070	.117	.086	.061	.081	.060	.043	.047	.035	.025	.015	.011	.008	
5.0	.129	.088	.058	.111	.076	.050	.076	.053	.035	.044	.031	.021	.014	.010	.007	
6.0	.122	.079	.048	.105	.068	.042	.072	.048	.029	.042	.028	.018	.014	.009	.006	
7.0	.116	.071	.040	.099	.062	.035	.069	.043	.025	.040	.026	.015	.013	.008	.005	
8.0	.110	.065	.035	.095	.057	.030	.066	.040	.021	.038	.023	.013	.012	.008	.004	
9.0	.105	.060	.030	.090	.052	.026	.063	.037	.019	.037	.022	.011	.012	.007	.004	
10.0	.100	.056	.026	.087	.049	.023	.060	.034	.016	.035	.020	.010	.011	.007	.003	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2024-05-23

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:230.57V I:0.1316A P:28.109W PF:0.9267 Freq:49.99Hz Lamp Flux:2458.55x1 lm											
NAME: BJ30-BKC30C02						TYPE:			WEIGHT:		
SPEC.: black RA90 3000K+5700K						DIM.:			SERIAL No.:		
MFR.:						SUR.: 65mm			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	21.2	22.3	21.5	22.5	22.6	21.3	22.4	21.5	22.5	22.7	
	3H	21.1	22.0	21.3	22.2	22.4	21.1	22.1	21.4	22.3	22.5
	4H	21.0	21.9	21.3	22.1	22.3	21.1	22.0	21.3	22.2	22.4
	6H	20.9	21.7	21.2	22.0	22.2	21.0	21.8	21.3	22.0	22.3
	8H	20.8	21.7	21.2	21.9	22.2	20.9	21.7	21.2	22.0	22.2
	12H	20.8	21.6	21.1	21.8	22.1	20.9	21.6	21.2	21.9	22.2
4H	2H	21.0	21.9	21.3	22.1	22.4	21.1	22.0	21.4	22.2	22.4
	3H	20.8	21.6	21.2	21.9	22.2	20.9	21.7	21.2	22.0	22.2
	4H	20.7	21.4	21.1	21.7	22.1	20.8	21.5	21.2	21.8	22.1
	6H	20.7	21.3	21.0	21.6	21.9	20.7	21.3	21.1	21.7	22.0
	8H	20.6	21.2	21.0	21.5	21.9	20.7	21.2	21.1	21.6	22.0
	12H	20.6	21.1	21.0	21.4	21.8	20.6	21.1	21.0	21.5	21.9
8H	4H	20.6	21.2	21.0	21.5	21.9	20.7	21.2	21.1	21.6	22.0
	6H	20.5	21.0	20.9	21.4	21.8	20.6	21.0	21.0	21.4	21.8
	8H	20.5	20.9	20.9	21.3	21.7	20.5	20.9	21.0	21.3	21.8
	12H	20.4	20.7	20.9	21.2	21.7	20.5	20.8	20.9	21.3	21.7
12H	4H	20.6	21.1	21.0	21.4	21.8	20.6	21.1	21.0	21.5	21.9
	6H	20.5	20.9	20.9	21.3	21.7	20.5	20.9	21.0	21.3	21.8
	8H	20.4	20.7	20.9	21.2	21.7	20.5	20.8	20.9	21.3	21.7
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H	+ 2.8 / - 8.6					+ 2.9 / - 8.5					
1.5H	+ 4.1 / - 6.4					+ 4.2 / - 6.5					
2.0H	+ 5.8 / - 9.5					+ 5.9 / - 9.5					

CIE Pub.117, 2459 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 3.1$)
Area: 0.00332 m²

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2024-05-23

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:230.57V I:0.1316A P:28.109W PF:0.9267 Freq:49.99Hz Lamp Flux:2458.55x1 lm		
NAME: BJ30-BKC30C02	TYPE:	WEIGHT:
SPEC.: black RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 65mm	Shielding Angle:

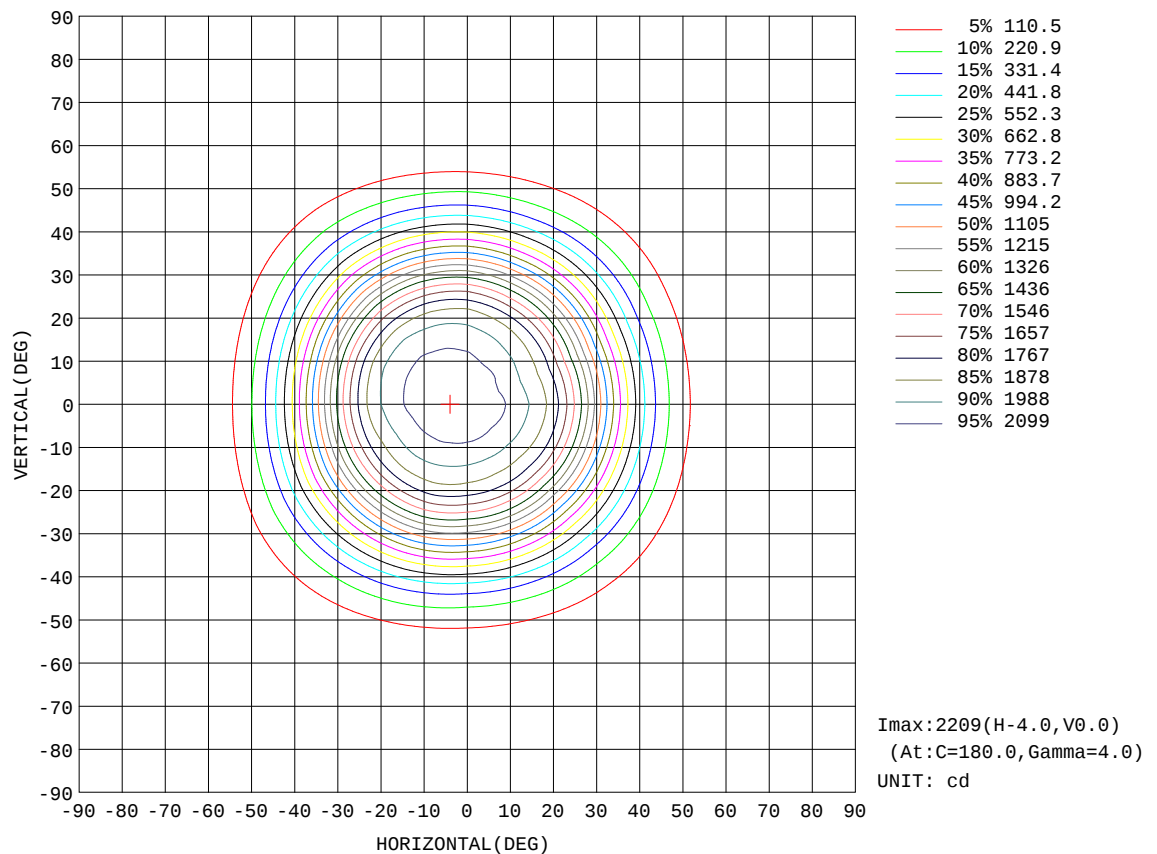
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	82	75	70	81	74	70	81	74	70	66
0.80	90	84	79	90	83	79	88	83	79	75
1.00	96	90	85	95	89	85	93	89	85	80
1.25	101	95	91	100	94	91	98	93	90	85
1.50	104	98	95	103	98	94	100	96	93	88
2.00	107	103	99	106	102	98	103	100	97	91
2.50	109	105	102	107	104	101	104	101	99	93
3.00	111	107	104	109	106	103	106	103	101	94
4.00	113	110	107	111	108	106	107	105	103	96
5.00	114	112	110	112	110	108	108	106	105	97
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:2024-05-23

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:230.57V I:0.1316A P:28.109W PF:0.9267 Freq:49.99Hz Lamp Flux:2458.55x1 lm		
NAME: BJ30-BKC30C02	TYPE:	WEIGHT:
SPEC.: black RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 65mm	Shielding Angle:

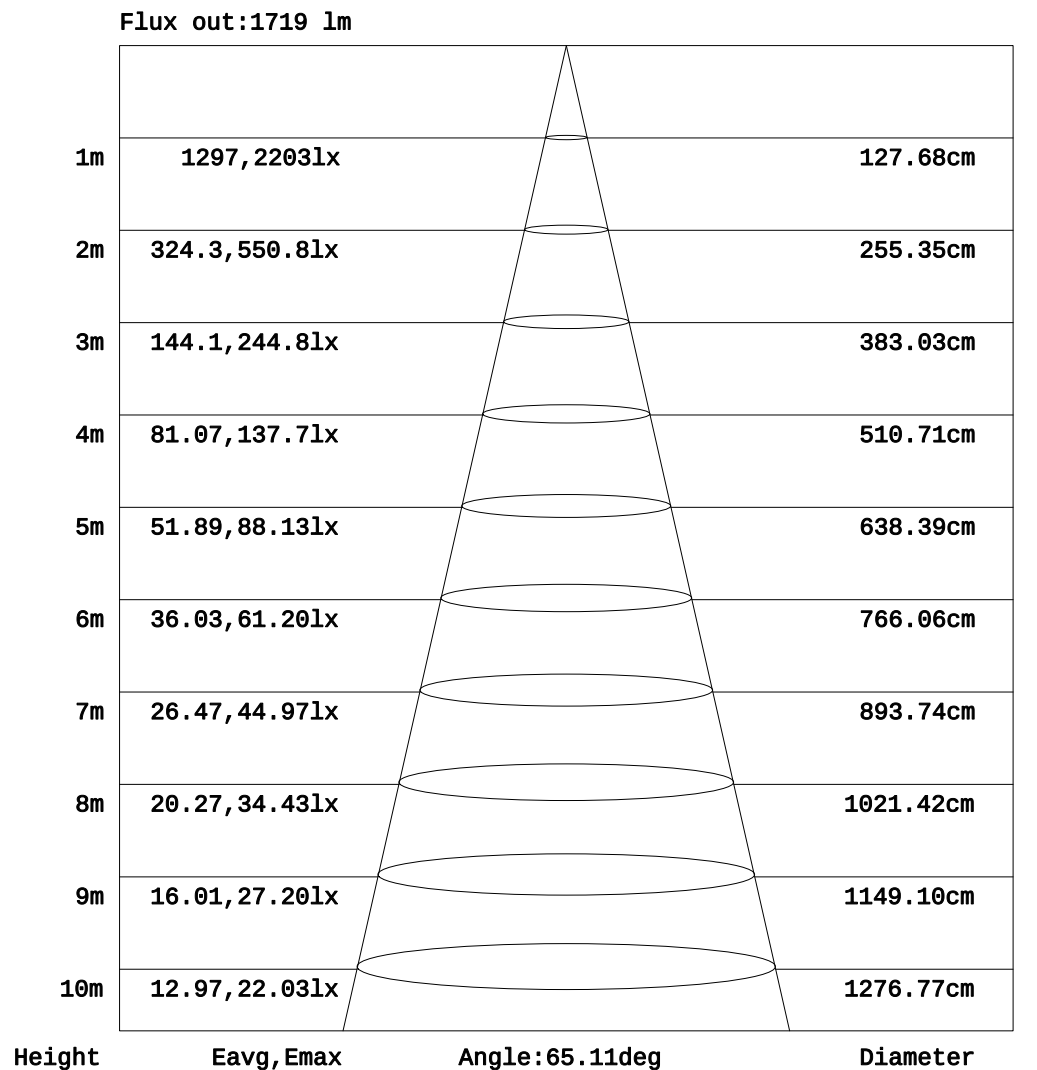


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2024-05-23

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:230.57V I:0.1316A P:28.109W PF:0.9267 Freq:49.99Hz Lamp Flux:2458.55x1 lm		
NAME: BJ30-BKC30C02	TYPE:	WEIGHT:
SPEC.: black RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 65mm	Shielding Angle:



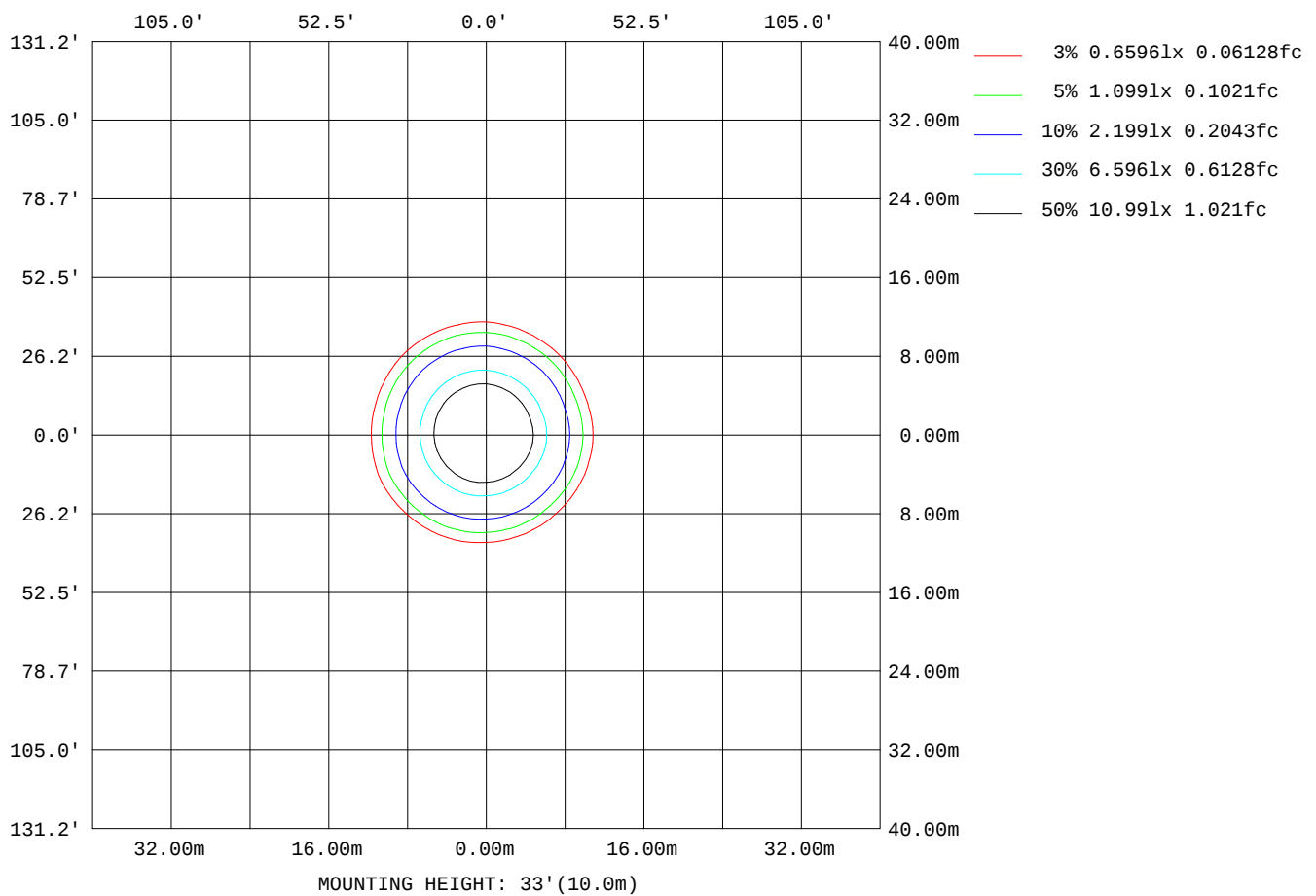
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2024-05-23

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:230.57V I:0.1316A P:28.109W PF:0.9267 Freq:49.99Hz Lamp Flux:2458.55x1 lm		
NAME: BJ30-BKC30C02	TYPE:	WEIGHT:
SPEC.: black RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 65mm	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2024-05-23

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:230.57V I:0.1316A P:28.109W PF:0.9267 Freq:49.99Hz Lamp Flux:2458.55x1 lm		
NAME: BJ30-BKC30C02	TYPE:	WEIGHT:
SPEC.: black RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 65mm	Shielding Angle:

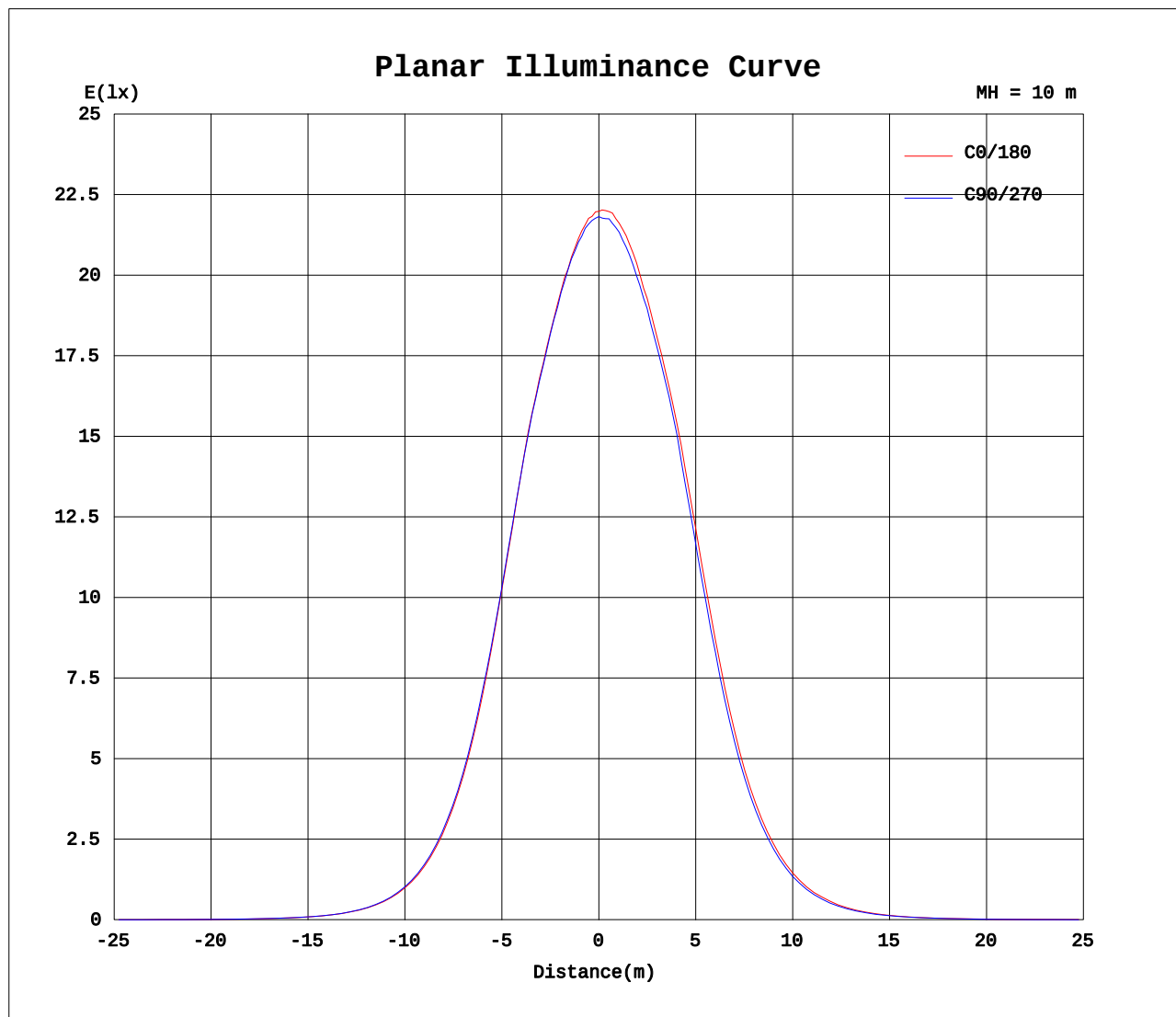
AvgL	cd/m2
L_0~180(65)av	9975
L_0~180(75)av	1271
L_0~180(85)av	954
L_90~270(65)av	9726
L_90~270(75)av	1186
L_90~270(85)av	967
L_45(65)av	9817
L_45(75)av	1254
L_45(85)av	990

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2024-05-23

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: 2024-05-23

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:

```