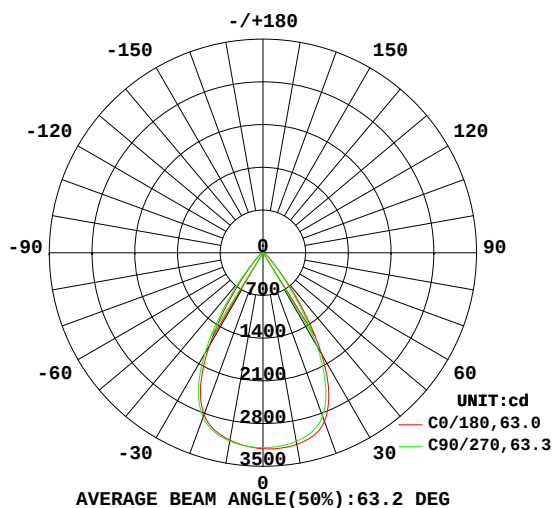


LUMINAIRE PHOTOMETRIC TEST REPORT

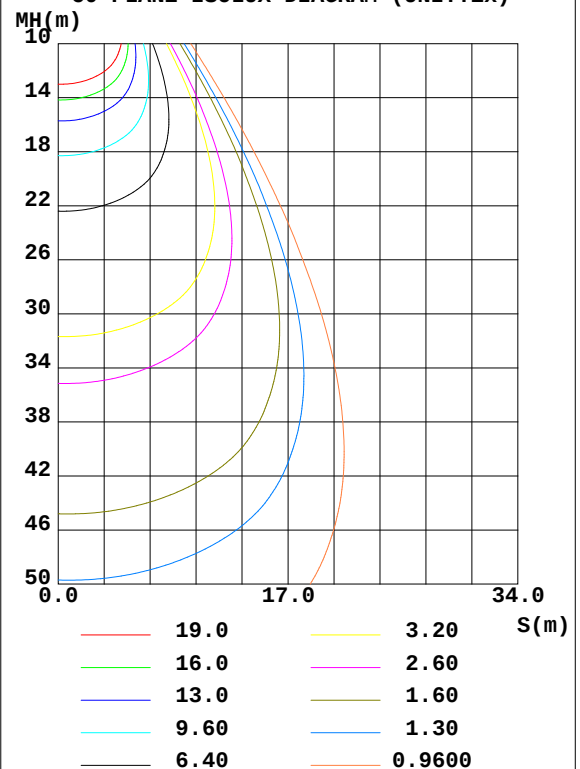
Test:U:220.44V I:0.1539A P:33.066W PF:0.9749 Freq:50.01Hz Lamp Flux:3259.57x1 lm		
NAME: BJ31-WHTC30C023P	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 72mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 98.58 lm/W			
MODEL	TB25171211 5700K	I _{max} (cd)	3217	S/MH(C0/180)	0.91
NOMINAL POWER(W)	35	LOR(%)	100.0	S/MH(C90/270)	0.94
RATED VOLTAGE(V)	220-240	TOTAL FLUX(lm)	3259.6	η UP, DN(C0-180)	0.0, 49.6
NOMINAL FLUX(lm)	3259.57	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 50.4
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	220	η down(%)	100.0	CIBSE SHR MAX	0.95

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: 2023-11-04

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:

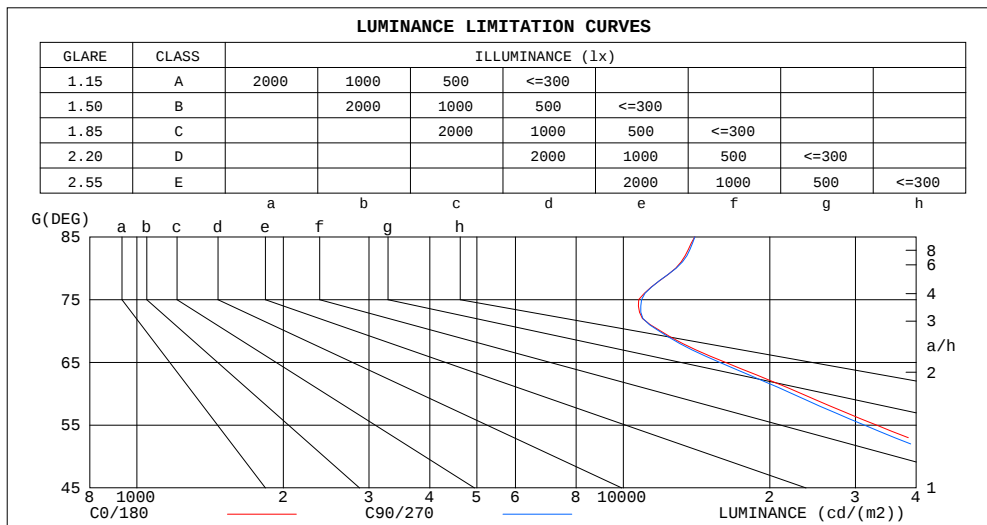
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	3189	3155	3137	3119	3119	3105	3134	3170	0- 10	302.5	302.5	9.28, 9.28
20	2942	2895	2851	2809	2824	2835	2870	2920	10- 20	856.8	1159	35.6, 35.6
30	1926	1910	1778	1673	1761	1872	1906	1922	20- 30	1112	2272	69.7, 69.7
40	541.9	549.0	467.3	389.2	447.7	523.6	551.1	525.4	30- 40	680.7	2952	90.6, 90.6
50	128.8	130.8	119.9	107.4	113.4	123.6	128.1	124.8	40- 50	192.8	3145	96.5, 96.5
60	47.31	47.80	45.24	42.37	43.44	45.40	46.58	46.60	50- 60	68.73	3214	98.6, 98.6
70	16.60	16.68	16.47	15.95	16.27	16.55	16.65	16.56	60- 70	28.10	3242	99.5, 99.5
80	9.058	9.205	9.074	8.861	9.037	9.172	9.068	8.895	70- 80	12.56	3254	99.8, 99.8
90	0.3397	0.3474	0.3552	0.3397	0.1235	0.1197	0.1120	0.1235	80- 90	5.165	3260	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:2023-11-04

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:220.44V I:0.1539A P:33.066W PF:0.9749 Freq:50.01Hz Lamp Flux:3259.57x1 lm		
NAME: BJ31-WHTC30C023P	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 72mm	Shielding Angle:



LUMINANCE cd/(m ²)		
G(DEG)	C0/180	C90/270
85	14026	14027
80	12817	12838
75	10753	10900
70	11926	11829
65	16199	15765
60	23248	22233
55	33130	31280
50	49226	45845
45	84366	74816

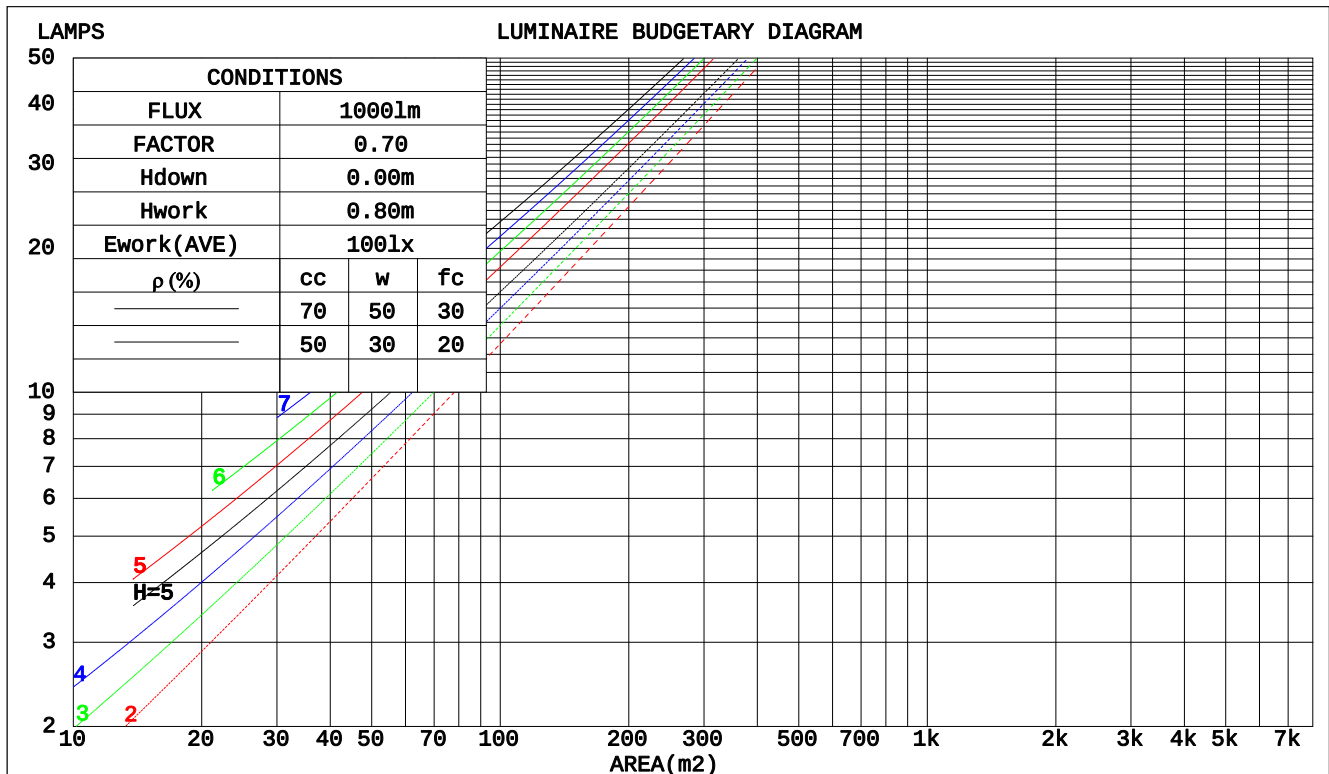
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2023-11-04

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:220.44V I:0.1539A P:33.066W PF:0.9749 Freq:50.01Hz Lamp Flux:3259.57x1 lm		
NAME: BJ31-WHTC30C023P	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 72mm	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						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	1.10	1.08	1.05	1.08	1.06	1.04	1.04	1.02	1.01	1.00	.99	.98	.97	.96	.95	.93
2.0	1.02	.98	.95	1.01	.97	.94	.97	.94	.92	.94	.92	.90	.92	.90	.88	.86
3.0	.95	.90	.86	.94	.89	.85	.91	.87	.84	.89	.85	.83	.86	.84	.81	.80
4.0	.89	.83	.79	.88	.82	.78	.85	.81	.77	.83	.79	.76	.81	.78	.75	.74
5.0	.83	.77	.72	.82	.76	.72	.80	.75	.71	.78	.74	.71	.77	.73	.70	.69
6.0	.78	.71	.67	.77	.71	.67	.75	.70	.66	.74	.69	.66	.72	.68	.65	.64
7.0	.73	.67	.62	.72	.66	.62	.71	.66	.62	.70	.65	.61	.68	.64	.61	.60
8.0	.68	.62	.58	.68	.62	.58	.67	.61	.58	.66	.61	.57	.65	.60	.57	.56
9.0	.64	.58	.54	.64	.58	.54	.63	.58	.54	.62	.57	.54	.61	.57	.54	.52
10.0	.61	.55	.51	.60	.55	.51	.60	.54	.51	.59	.54	.51	.58	.54	.50	.49



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 2023-11-04

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:220.44V I:0.1539A P:33.066W PF:0.9749 Freq:50.01Hz Lamp Flux:3259.57x1 lm					
NAME: BJ31-WHTC30C023P			TYPE:		WEIGHT:
SPEC.: white RA90 3000K+5700K			DIM.:		SERIAL No.:
MFR.:			SUR.: 72mm		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	.185	.105	.033	.178	.102	.032	.166	.095	.030	.154	.089	.029	.143	.083	.027	
2.0	.177	.097	.030	.172	.094	.029	.161	.089	.028	.151	.085	.027	.142	.080	.025	
3.0	.169	.090	.027	.164	.088	.026	.155	.084	.025	.146	.080	.025	.138	.077	.024	
4.0	.161	.083	.025	.156	.082	.024	.148	.079	.024	.141	.076	.023	.134	.073	.022	
5.0	.153	.078	.023	.149	.077	.022	.142	.074	.022	.136	.072	.021	.130	.069	.021	
6.0	.146	.073	.021	.143	.072	.021	.137	.070	.020	.131	.068	.020	.126	.066	.020	
7.0	.139	.069	.020	.136	.068	.019	.131	.066	.019	.126	.065	.019	.121	.063	.019	
8.0	.133	.065	.018	.131	.064	.018	.126	.063	.018	.121	.061	.018	.117	.060	.017	
9.0	.128	.062	.017	.125	.061	.017	.121	.060	.017	.117	.059	.017	.113	.057	.017	
10.0	.122	.059	.016	.120	.058	.016	.116	.057	.016	.113	.056	.016	.109	.055	.016	

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						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	.100	.093	.086	.058	.054	.050	.019	.017	.016	
2.0	.157	.132	.112	.134	.114	.097	.092	.079	.067	.053	.046	.040	.017	.015	.013	
3.0	.145	.114	.089	.124	.098	.077	.085	.068	.054	.049	.040	.032	.016	.013	.010	
4.0	.135	.099	.072	.116	.086	.062	.080	.060	.044	.046	.035	.026	.015	.011	.009	
5.0	.127	.088	.059	.109	.076	.051	.075	.053	.036	.043	.031	.021	.014	.010	.007	
6.0	.119	.078	.049	.103	.068	.043	.071	.047	.030	.041	.028	.018	.013	.009	.006	
7.0	.113	.071	.041	.097	.061	.036	.067	.043	.026	.039	.025	.015	.013	.008	.005	
8.0	.107	.065	.035	.092	.056	.031	.064	.039	.022	.037	.023	.013	.012	.008	.004	
9.0	.102	.060	.031	.088	.052	.027	.061	.036	.019	.036	.021	.011	.012	.007	.004	
10.0	.098	.055	.027	.084	.048	.023	.058	.034	.017	.034	.020	.010	.011	.007	.003	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2023-11-04

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:220.44V I:0.1539A P:33.066W PF:0.9749 Freq:50.01Hz Lamp Flux:3259.57x1 lm											
NAME: BJ31-WHTC30C023P					TYPE:			WEIGHT:			
SPEC.: white RA90 3000K+5700K					DIM.:			SERIAL No.:			
MFR.:					SUR.: 72mm			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	20.5	21.5	20.7	21.6	21.8	20.0	21.0	20.3	21.2	21.4	
	3H	20.4	21.3	20.6	21.5	21.7	19.9	20.8	20.2	21.0	21.2
	4H	20.3	21.2	20.6	21.4	21.6	19.9	20.7	20.2	20.9	21.2
	6H	20.3	21.1	20.6	21.3	21.6	19.8	20.6	20.1	20.9	21.1
	8H	20.2	21.0	20.6	21.3	21.5	19.8	20.6	20.1	20.8	21.1
	12H	20.2	21.0	20.5	21.2	21.5	19.8	20.5	20.1	20.8	21.1
4H	2H	20.3	21.1	20.6	21.4	21.6	19.8	20.7	20.1	20.9	21.1
	3H	20.2	20.9	20.5	21.2	21.5	19.8	20.5	20.1	20.8	21.0
	4H	20.2	20.8	20.5	21.1	21.4	19.7	20.4	20.1	20.7	21.0
	6H	20.1	20.7	20.5	21.0	21.4	19.7	20.3	20.1	20.6	21.0
	8H	20.1	20.7	20.5	21.0	21.4	19.7	20.2	20.1	20.6	21.0
	12H	20.1	20.6	20.5	21.0	21.4	19.7	20.2	20.1	20.6	21.0
8H	4H	20.0	20.6	20.4	20.9	21.3	19.6	20.2	20.0	20.5	20.9
	6H	20.0	20.5	20.5	20.9	21.3	19.6	20.1	20.1	20.5	20.9
	8H	20.1	20.4	20.5	20.9	21.3	19.6	20.0	20.1	20.5	20.9
	12H	20.1	20.4	20.5	20.8	21.3	19.7	20.0	20.1	20.4	20.9
12H	4H	20.0	20.5	20.4	20.9	21.3	19.6	20.1	20.0	20.4	20.8
	6H	20.0	20.4	20.5	20.8	21.3	19.6	20.0	20.0	20.4	20.8
	8H	20.0	20.4	20.5	20.8	21.3	19.6	20.0	20.1	20.4	20.9
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H	+ 2.8 / - 5.2					+ 2.6 / - 4.8					
1.5H	+ 4.8 / - 4.3					+ 4.4 / - 3.8					
2.0H	+ 3.7 / - 2.6					+ 3.3 / - 2.3					

CIE Pub.117, 3260 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 4.1)
Area: 0.00407 m2

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2023-11-04

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:220.44V I:0.1539A P:33.066W PF:0.9749 Freq:50.01Hz Lamp Flux:3259.57x1 lm		
NAME: BJ31-WHTC30C023P	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 72mm	Shielding Angle:

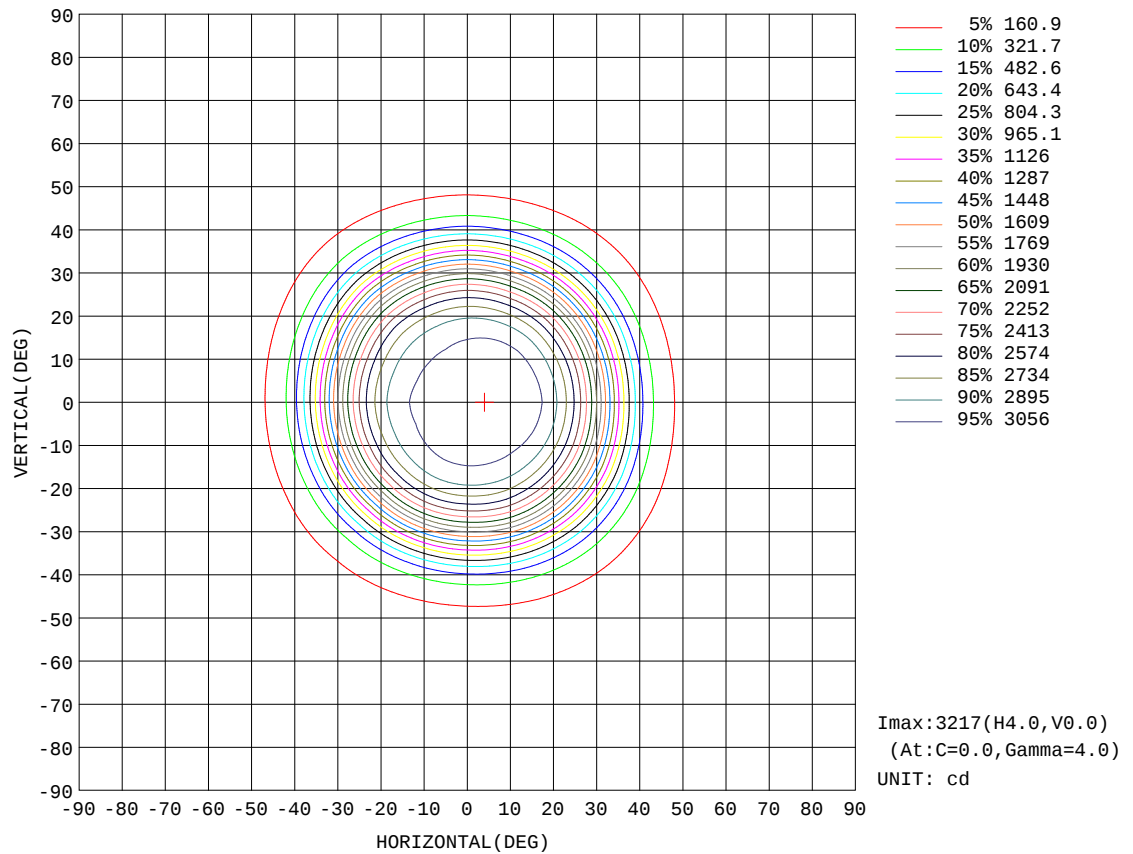
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	86	79	75	85	79	75	84	78	75	71
0.80	93	87	83	93	87	83	91	86	83	79
1.00	98	92	88	97	92	88	96	92	88	84
1.25	102	97	93	101	96	93	99	95	92	88
1.50	105	100	97	104	99	96	102	98	95	90
2.00	108	104	100	107	103	100	104	101	98	93
2.50	110	106	103	108	105	102	105	102	100	94
3.00	111	108	105	110	106	104	106	104	102	95
4.00	113	111	108	111	109	107	108	106	104	97
5.00	115	112	110	113	111	109	109	107	106	98
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:2023-11-04

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:220.44V I:0.1539A P:33.066W PF:0.9749 Freq:50.01Hz Lamp Flux:3259.57x1 lm		
NAME: BJ31-WHTC30C023P	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 72mm	Shielding Angle:

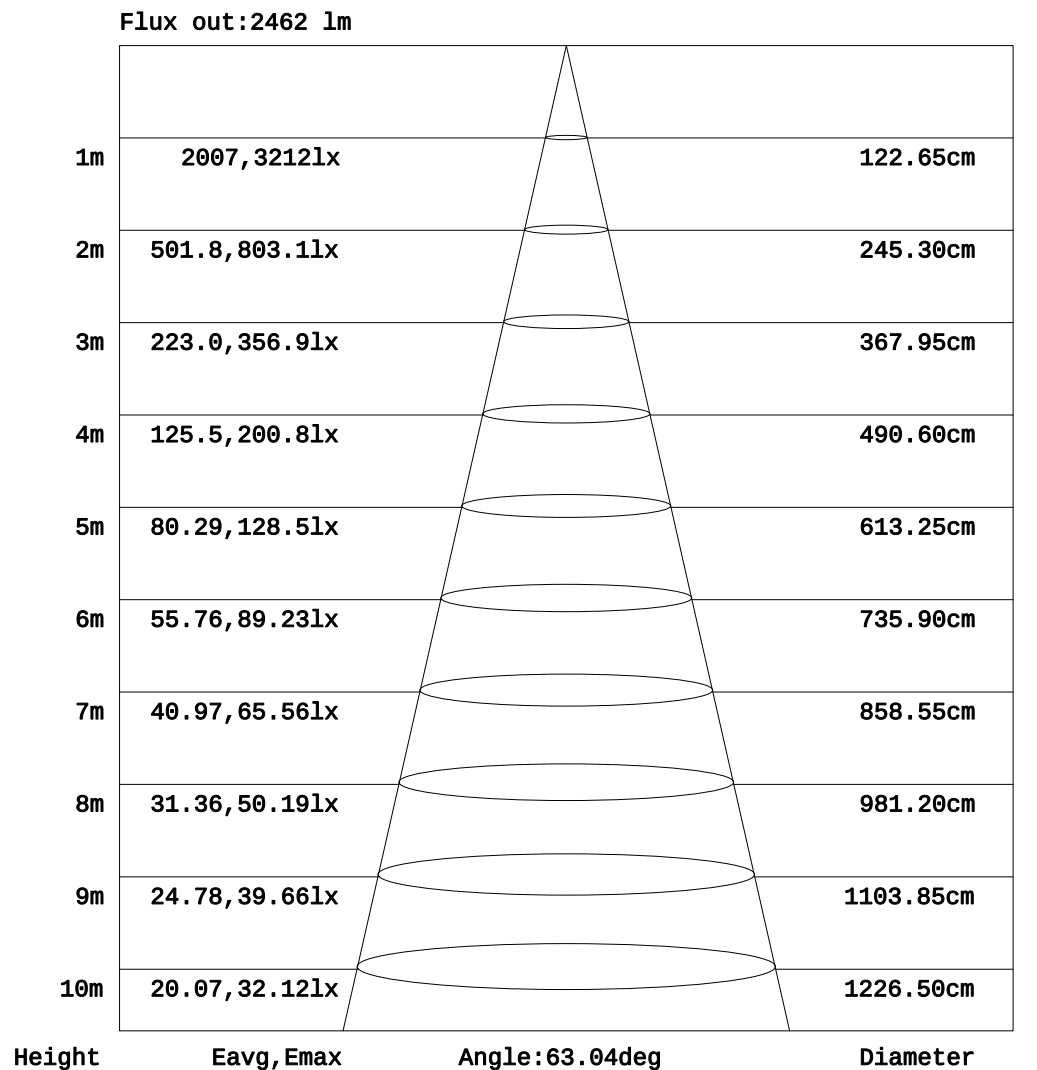


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2023-11-04

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:220.44V I:0.1539A P:33.066W PF:0.9749 Freq:50.01Hz Lamp Flux:3259.57x1 lm		
NAME: BJ31-WHTC30C023P	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 72mm	Shielding Angle:



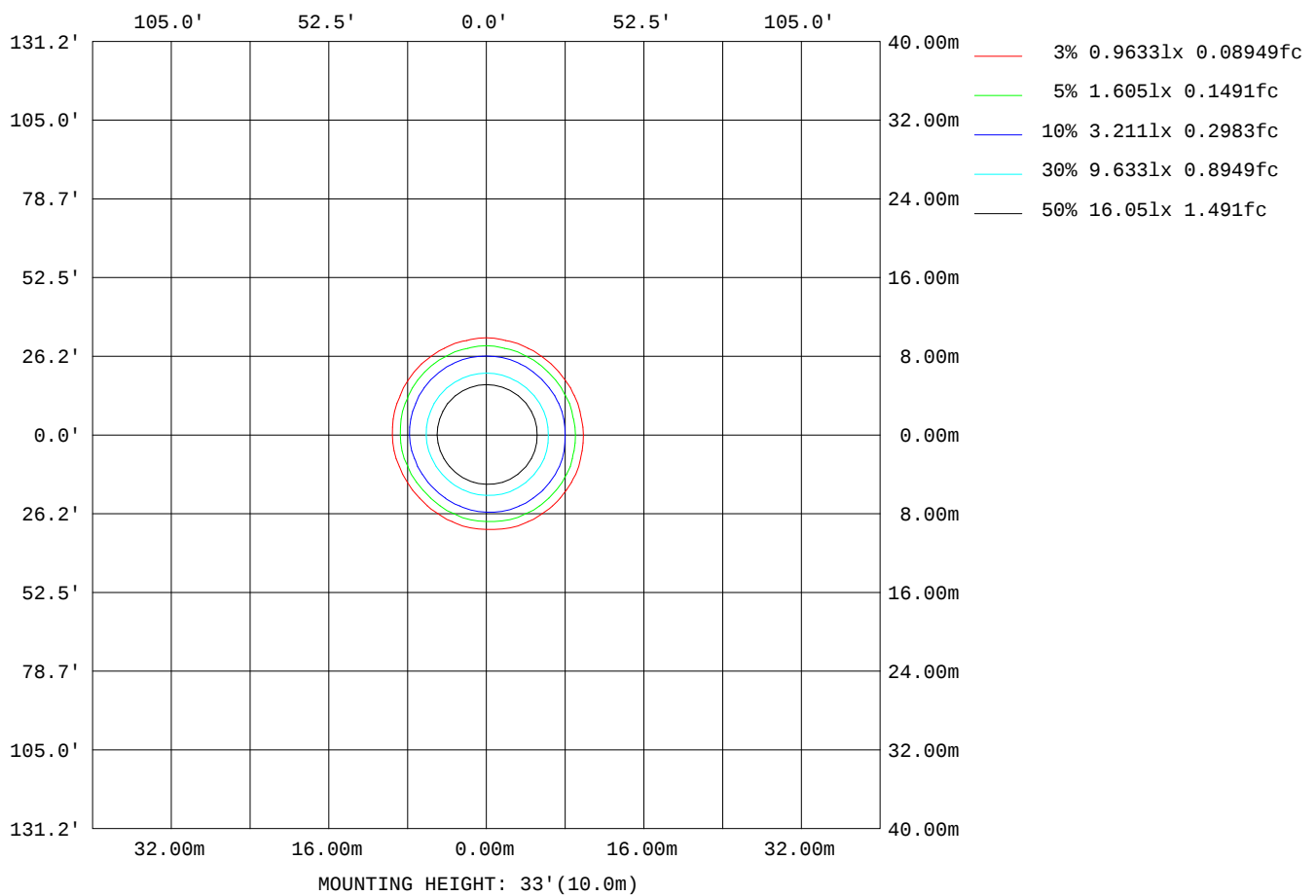
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2023-11-04

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:220.44V I:0.1539A P:33.066W PF:0.9749 Freq:50.01Hz Lamp Flux:3259.57x1 lm		
NAME: BJ31-WHTC30C023P	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 72mm	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2023-11-04

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:220.44V I:0.1539A P:33.066W PF:0.9749 Freq:50.01Hz Lamp Flux:3259.57x1 lm		
NAME: BJ31-WHTC30C023P	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 72mm	Shielding Angle:

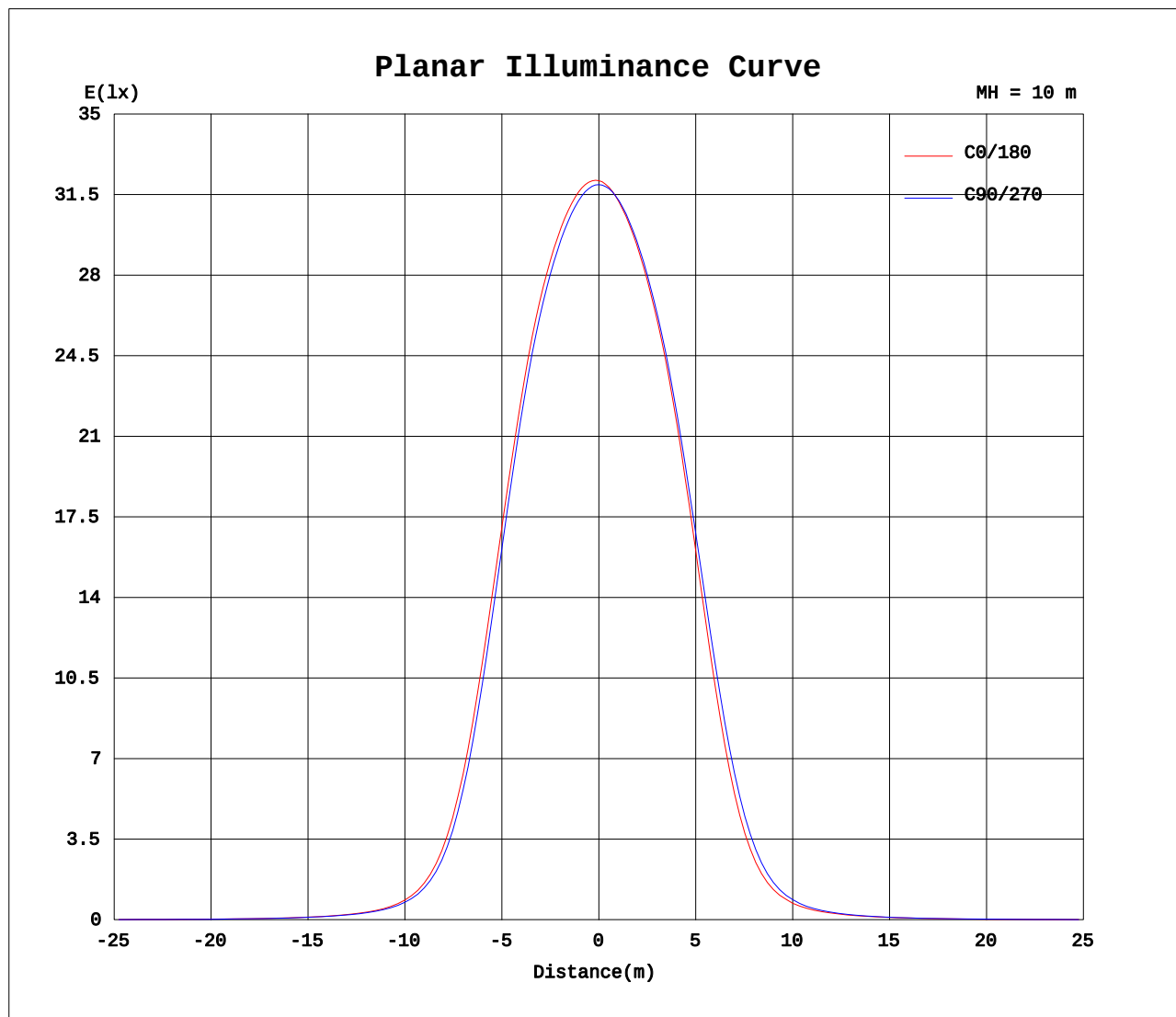
AvgL	cd/m2
L_0~180(65)av	15704
L_0~180(75)av	10813
L_0~180(85)av	13634
L_90~270(65)av	15893
L_90~270(75)av	10895
L_90~270(85)av	13771
L_45(65)av	15729
L_45(75)av	10839
L_45(85)av	13660

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2023-11-04

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: 2023-11-04

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:

```