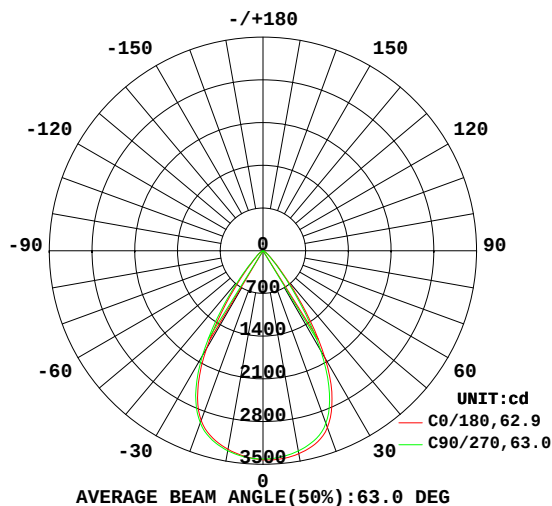


LUMINAIRE PHOTOMETRIC TEST REPORT

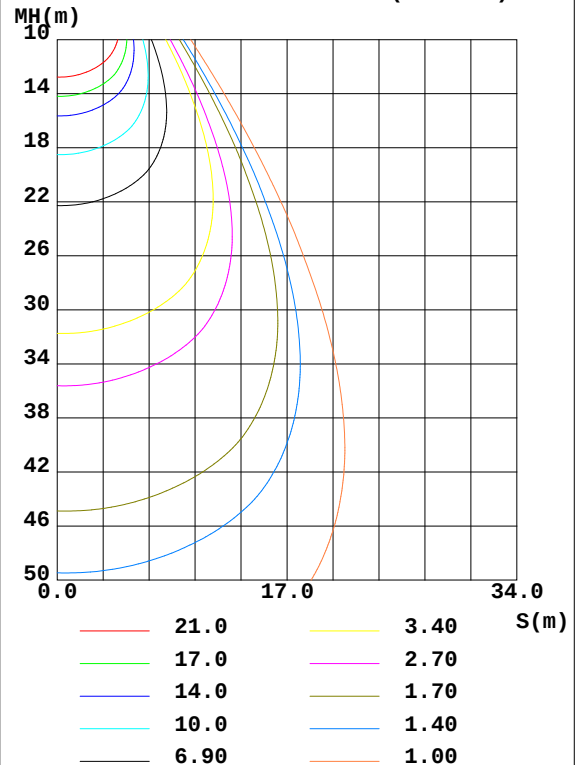
Test:U:220.46V I:0.1448A P:30.970W PF:0.9703 Freq:50.01Hz Lamp Flux:3448.49x1 lm		
NAME: BJ31-WHTC30C023P	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 72mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 111.35 lm/W			
MODEL	TB25171211 4000K	I _{max} (cd)	3429	S/MH(C0/180)	0.91
NOMINAL POWER(W)	35	LOR(%)	100.0	S/MH(C90/270)	0.93
RATED VOLTAGE(V)	220-240	TOTAL FLUX(lm)	3448.5	η UP, DN(C0-180)	0.0, 49.8
NOMINAL FLUX(lm)	3448.49	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 50.2
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:

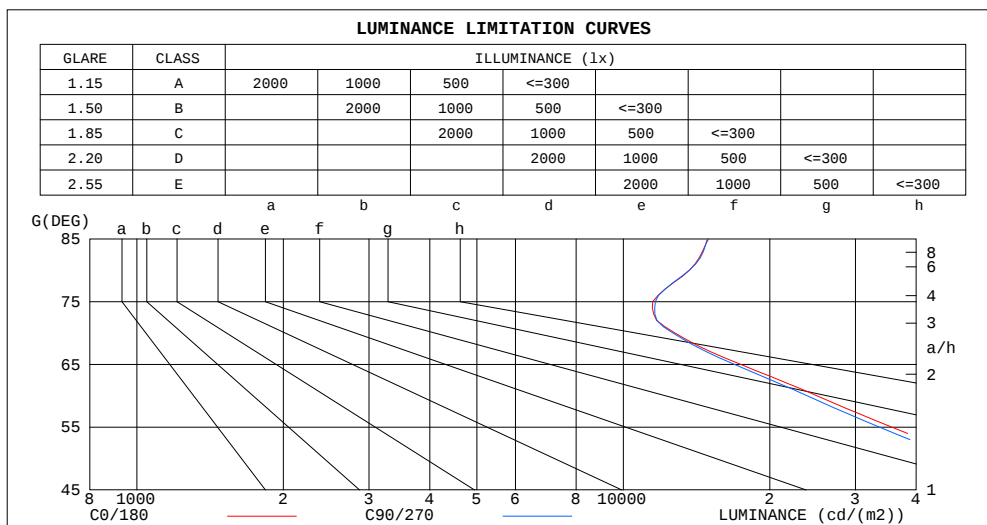
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	3378	3358	3331	3302	3303	3304	3328	3356	0- 10	322.0	322.0	9.34, 9.34
20	3085	3045	3010	2966	2961	2961	3003	3065	10- 20	904.0	1226	35.6, 35.6
30	2038	1975	1899	1813	1854	1906	1987	2041	20- 30	1167	2393	69.4, 69.4
40	587.1	561.4	508.1	465.7	483.2	525.9	579.8	607.1	30- 40	723.9	3117	90.4, 90.4
50	138.8	136.3	128.2	122.1	121.8	127.2	135.6	141.0	40- 50	208.8	3326	96.4, 96.4
60	50.83	50.33	48.54	46.77	46.52	47.59	49.70	51.47	50- 60	73.85	3399	98.6, 98.6
70	17.77	17.70	17.60	17.26	17.40	17.57	17.80	17.99	60- 70	30.18	3430	99.5, 99.5
80	9.665	9.773	9.657	9.491	9.627	9.773	9.697	9.570	70- 80	13.44	3443	99.8, 99.8
90	0.3706	0.3629	0.3783	0.3783	0.1351	0.1274	0.1274	0.1313	80- 90	5.514	3448	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:220.46V I:0.1448A P:30.970W PF:0.9703 Freq:50.01Hz Lamp Flux:3448.49x1 lm		
NAME: BJ31-WHTC30C023P	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 72mm	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	14964	14878
80	13675	13664
75	11494	11637
70	12765	12642
65	17408	16902
60	24979	23851
55	35617	33598
50	53065	48996
45	91379	80953

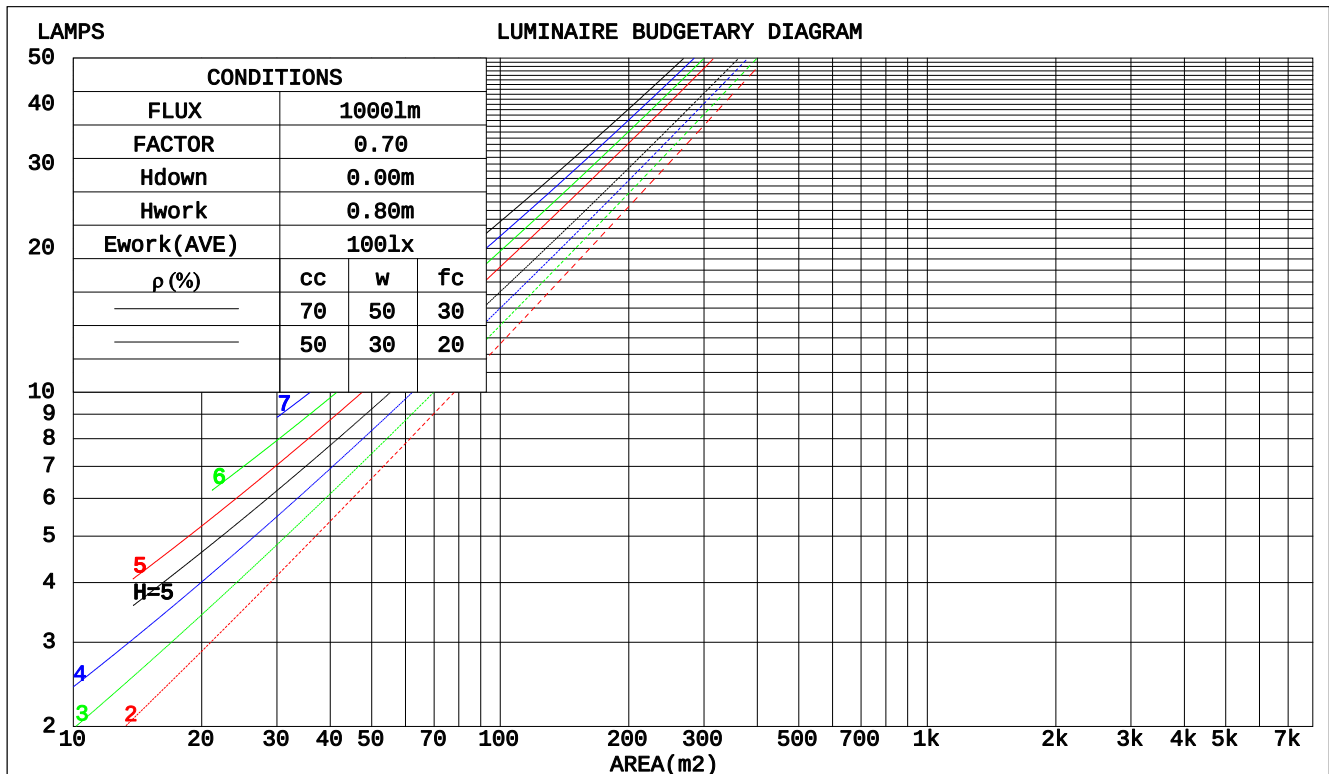
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2023-11-04

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:220.46V I:0.1448A P:30.970W PF:0.9703 Freq:50.01Hz Lamp Flux:3448.49x1 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	.82	.86	.84	.81	.80
4.0	.89	.83	.79	.87	.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	.77	.71	.67	.77	.71	.67	.75	.70	.66	.74	.69	.66	.72	.68	.65	.64
7.0	.73	.66	.62	.72	.66	.62	.71	.65	.62	.69	.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	.59	.54	.51	.59	.54	.50	.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:220.46V I:0.1448A P:30.970W PF:0.9703 Freq:50.01Hz Lamp Flux:3448.49x1 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	.179	.102	.032	.166	.095	.030	.154	.089	.029	.144	.083	.027	
2.0	.177	.097	.030	.172	.095	.029	.161	.090	.028	.151	.085	.027	.142	.080	.025	
3.0	.169	.090	.027	.164	.088	.026	.155	.084	.026	.147	.080	.025	.139	.077	.024	
4.0	.161	.084	.025	.157	.082	.024	.149	.079	.024	.141	.076	.023	.135	.073	.022	
5.0	.153	.078	.023	.149	.077	.022	.143	.074	.022	.136	.072	.021	.130	.070	.021	
6.0	.146	.073	.021	.143	.072	.021	.137	.070	.020	.131	.068	.020	.126	.066	.020	
7.0	.139	.069	.020	.137	.068	.019	.131	.066	.019	.126	.065	.019	.121	.063	.019	
8.0	.133	.065	.018	.131	.064	.018	.126	.063	.018	.121	.062	.018	.117	.060	.018	
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	

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	.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	.071	.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:220.46V I:0.1448A P:30.970W PF:0.9703 Freq:50.01Hz Lamp Flux:3448.49x1 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	2H	20.4	21.4	20.7	21.6	21.8	20.0	21.0	20.2	21.1	21.3	
	3H	20.3	21.2	20.6	21.4	21.6	19.9	20.8	20.1	21.0	21.2	
	4H	20.3	21.1	20.5	21.3	21.6	19.8	20.7	20.1	20.9	21.1	
	6H	20.2	21.0	20.5	21.3	21.5	19.8	20.6	20.1	20.8	21.1	
	8H	20.2	21.0	20.5	21.2	21.5	19.8	20.5	20.1	20.8	21.1	
	12H	20.2	20.9	20.5	21.2	21.5	19.7	20.5	20.1	20.7	21.0	
	4H	2H	20.2	21.1	20.5	21.3	21.5	19.8	20.6	20.1	20.9	21.1
		3H	20.1	20.9	20.5	21.2	21.4	19.7	20.5	20.0	20.7	21.0
		4H	20.1	20.8	20.5	21.1	21.4	19.7	20.3	20.0	20.6	21.0
		6H	20.1	20.7	20.5	21.0	21.3	19.7	20.2	20.0	20.6	20.9
		8H	20.1	20.6	20.5	21.0	21.3	19.7	20.2	20.1	20.6	20.9
		12H	20.1	20.6	20.5	20.9	21.3	19.7	20.1	20.1	20.5	20.9
8H	4H	20.0	20.5	20.4	20.9	21.3	19.6	20.1	20.0	20.5	20.8	
	6H	20.0	20.4	20.4	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	
	12H	20.0	20.4	20.5	20.8	21.3	19.6	20.0	20.1	20.4	20.9	
12H	4H	19.9	20.4	20.4	20.8	21.2	19.5	20.0	19.9	20.4	20.8	
	6H	20.0	20.4	20.4	20.8	21.2	19.6	19.9	20.0	20.4	20.8	
	8H	20.0	20.3	20.5	20.8	21.2	19.6	19.9	20.1	20.4	20.8	
Variations with the observer position at spacings(CIE Pub.117):												
S = 1.0H	+ 3.0 / - 5.2					+ 2.7 / - 4.8						
1.5H	+ 4.9 / - 4.3					+ 4.6 / - 3.8						
2.0H	+ 3.8 / - 2.6					+ 3.3 / - 2.3						

CIE Pub.117, 3448 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 4.3)
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:220.46V I:0.1448A P:30.970W PF:0.9703 Freq:50.01Hz Lamp Flux:3448.49x1 lm		
NAME: BJ31-WHTC30C023P	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 72mm	Shielding Angle:

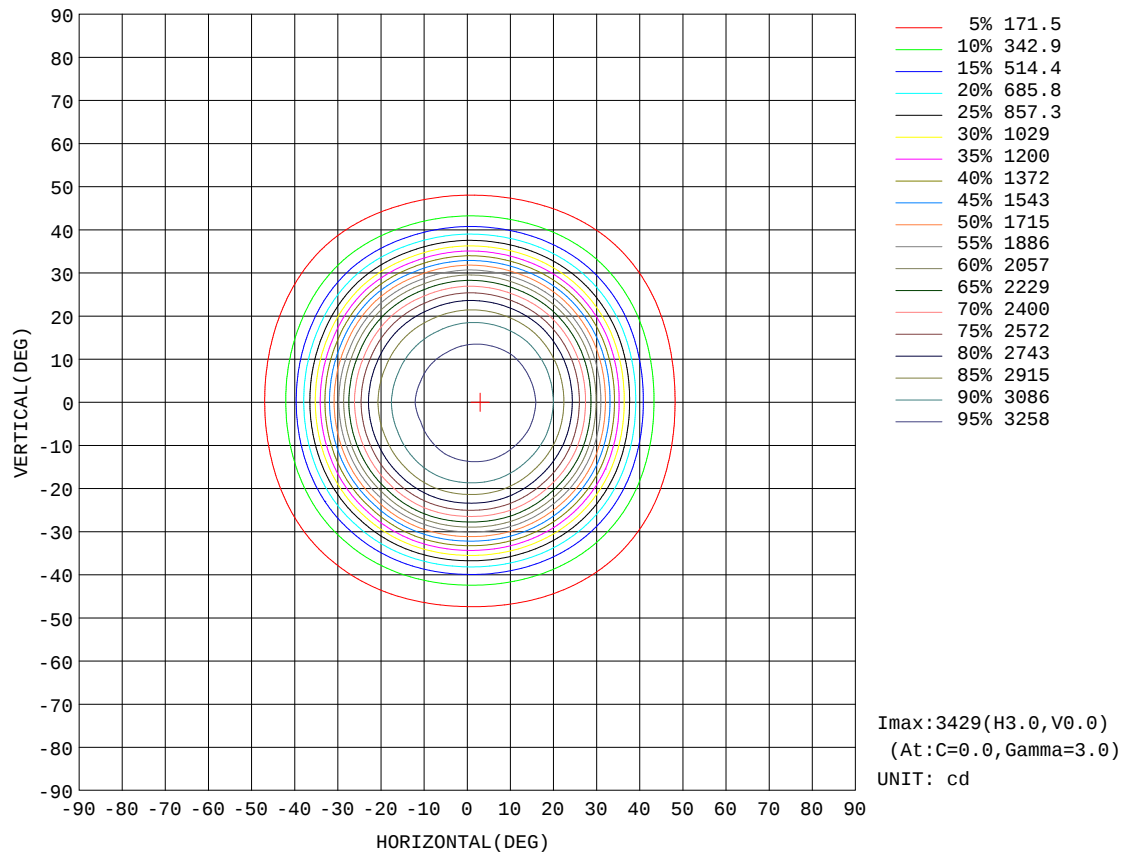
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	85	79	75	85	79	75	84	78	75	71
0.80	93	87	83	92	87	83	91	86	83	79
1.00	98	92	88	97	92	88	96	92	87	83
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	99	104	101	98	93
2.50	110	106	103	108	104	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	110	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:220.46V I:0.1448A P:30.970W PF:0.9703 Freq:50.01Hz Lamp Flux:3448.49x1 lm		
NAME: BJ31-WHTC30C023P	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 72mm	Shielding Angle:

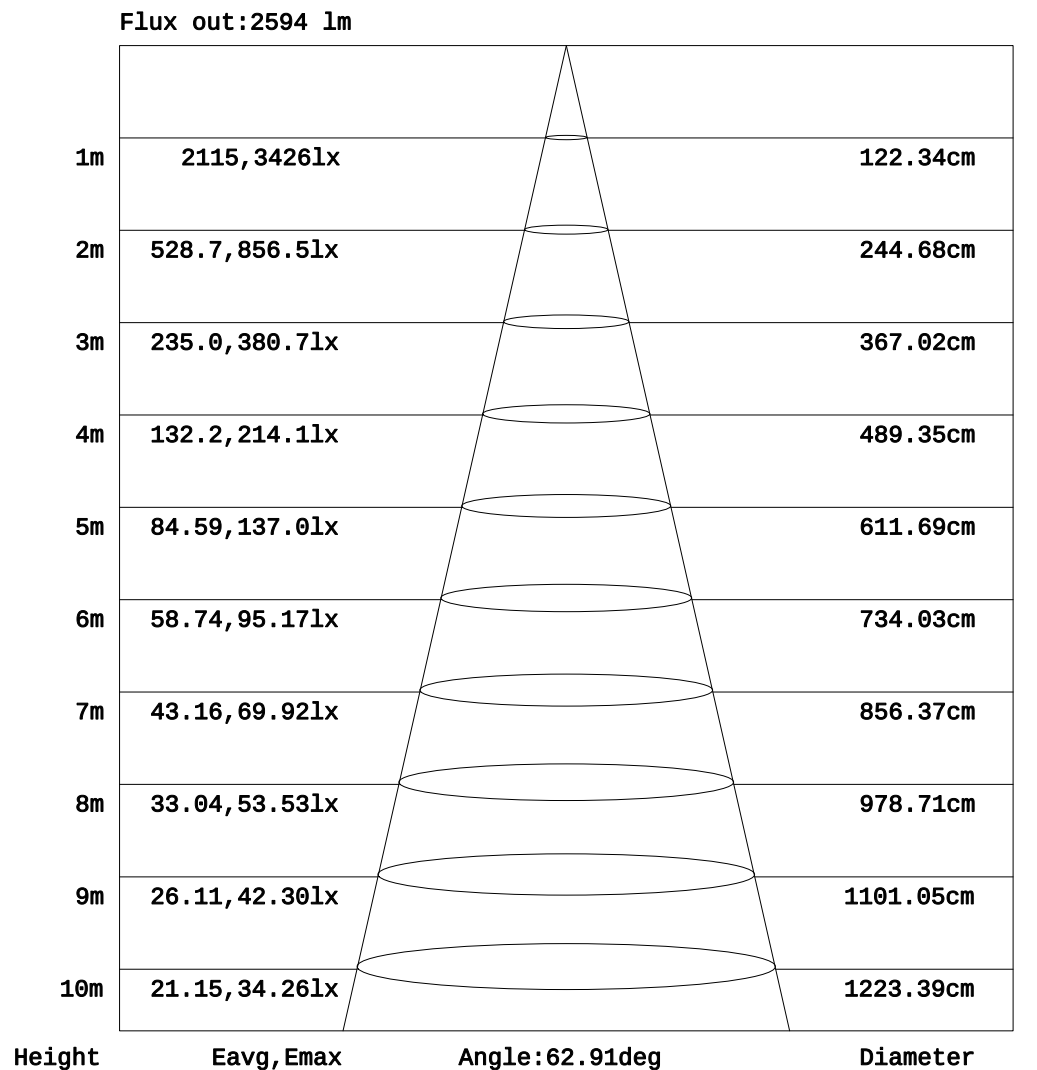


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2023-11-04

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:220.46V I:0.1448A P:30.970W PF:0.9703 Freq:50.01Hz Lamp Flux:3448.49x1 lm		
NAME: BJ31-WHTC30C023P	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 72mm	Shielding Angle:



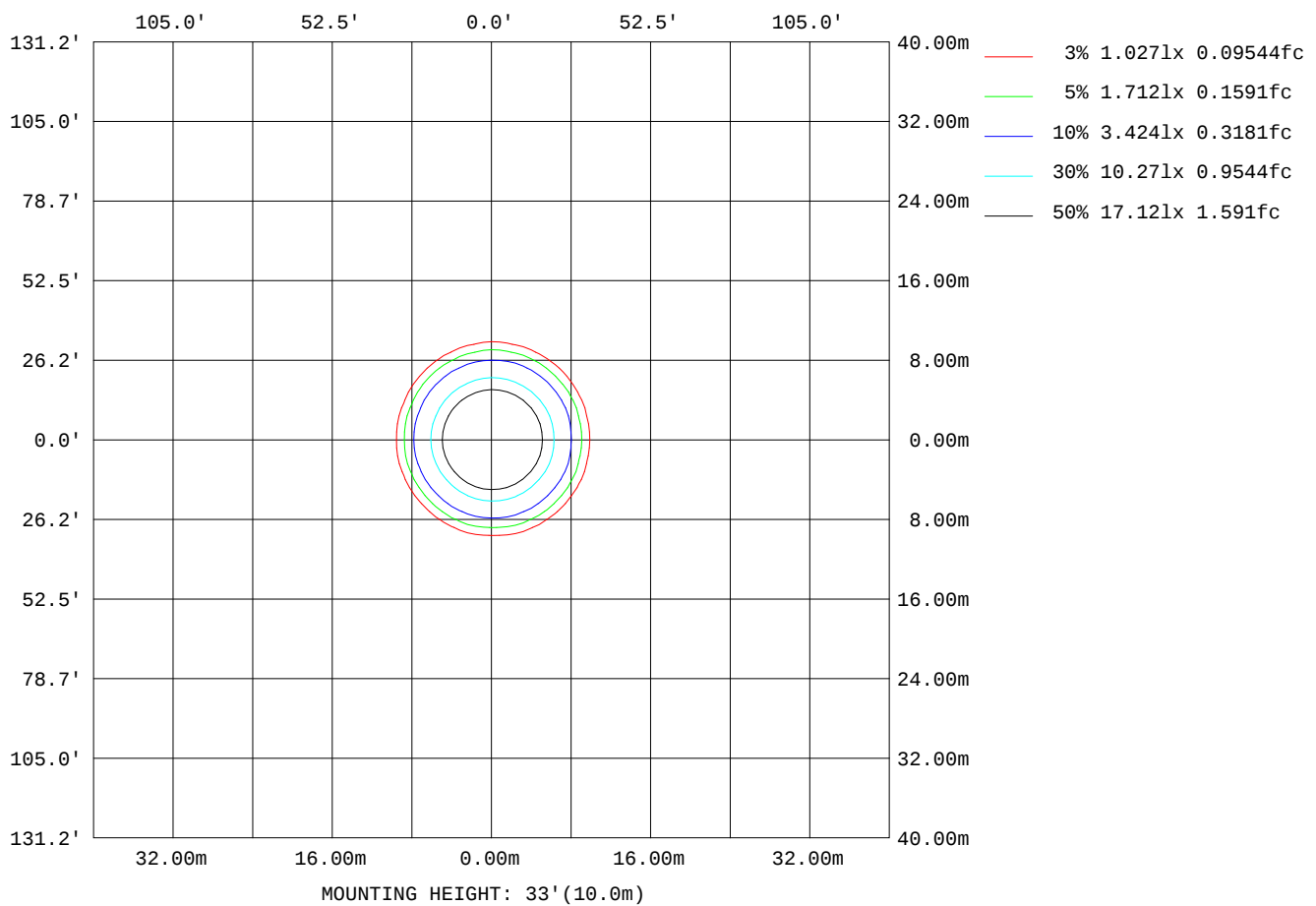
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:220.46V I:0.1448A P:30.970W PF:0.9703 Freq:50.01Hz Lamp Flux:3448.49x1 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:220.46V I:0.1448A P:30.970W PF:0.9703 Freq:50.01Hz Lamp Flux:3448.49x1 lm		
NAME: BJ31-WHTC30C023P	TYPE:	WEIGHT:
SPEC.: white RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 72mm	Shielding Angle:

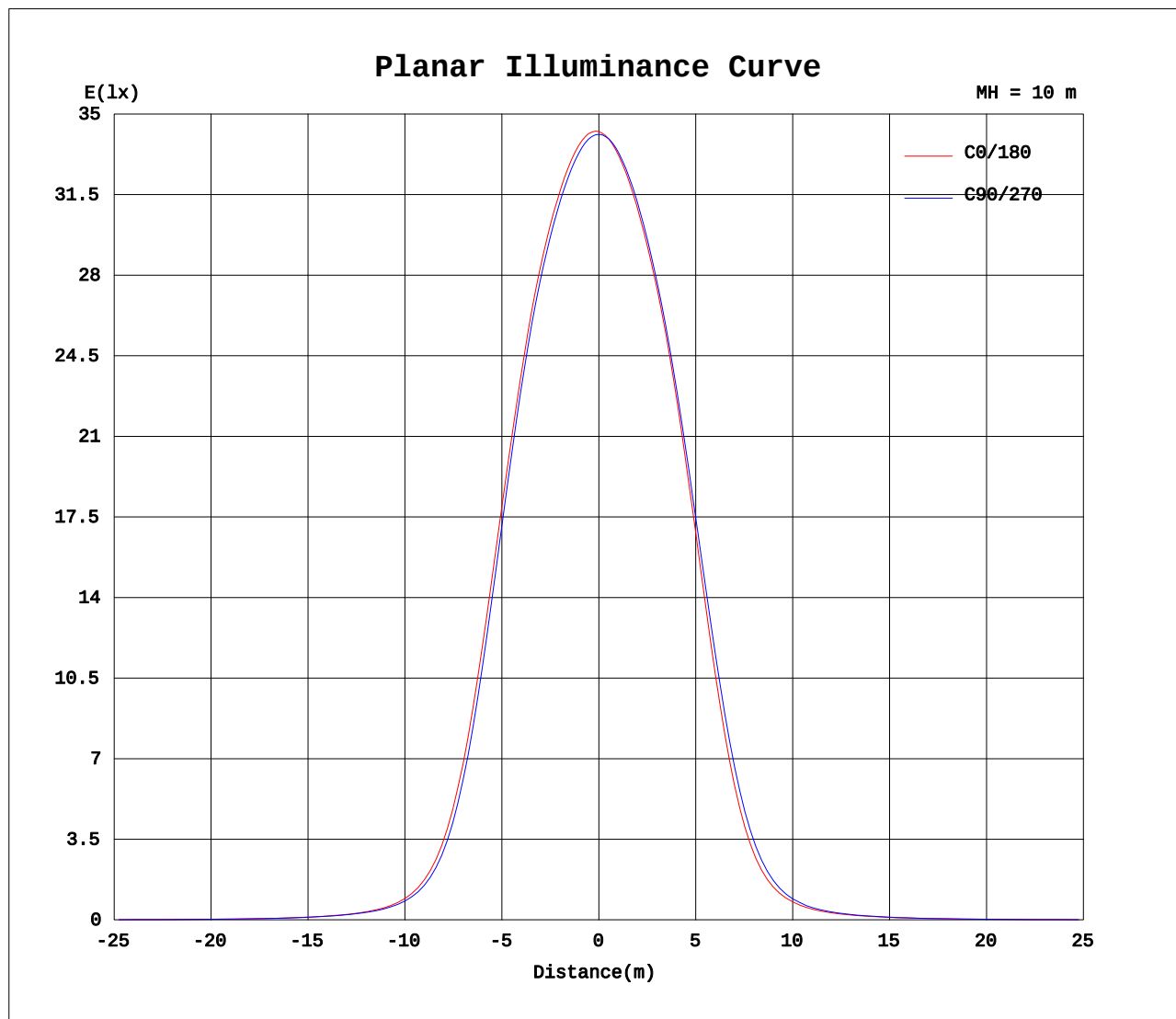
AvgL	cd/m2
L_0~180(65)av	16856
L_0~180(75)av	11556
L_0~180(85)av	14532
L_90~270(65)av	17022
L_90~270(75)av	11655
L_90~270(85)av	14680
L_45(65)av	16937
L_45(75)av	11597
L_45(85)av	14566

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:

```