

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P893329

Luminaire Tested: 4MB-2SL-RND-UNV-L830

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893329
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-327-1)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-2SL-RND-UNV-L830
Description: 2000 Lumen 4FT MICROBAY LINEAR BAY with ROUND FROSTED LENS, 80CRI, 3000K CCT
Light Source: -
Ballast/Driver: -

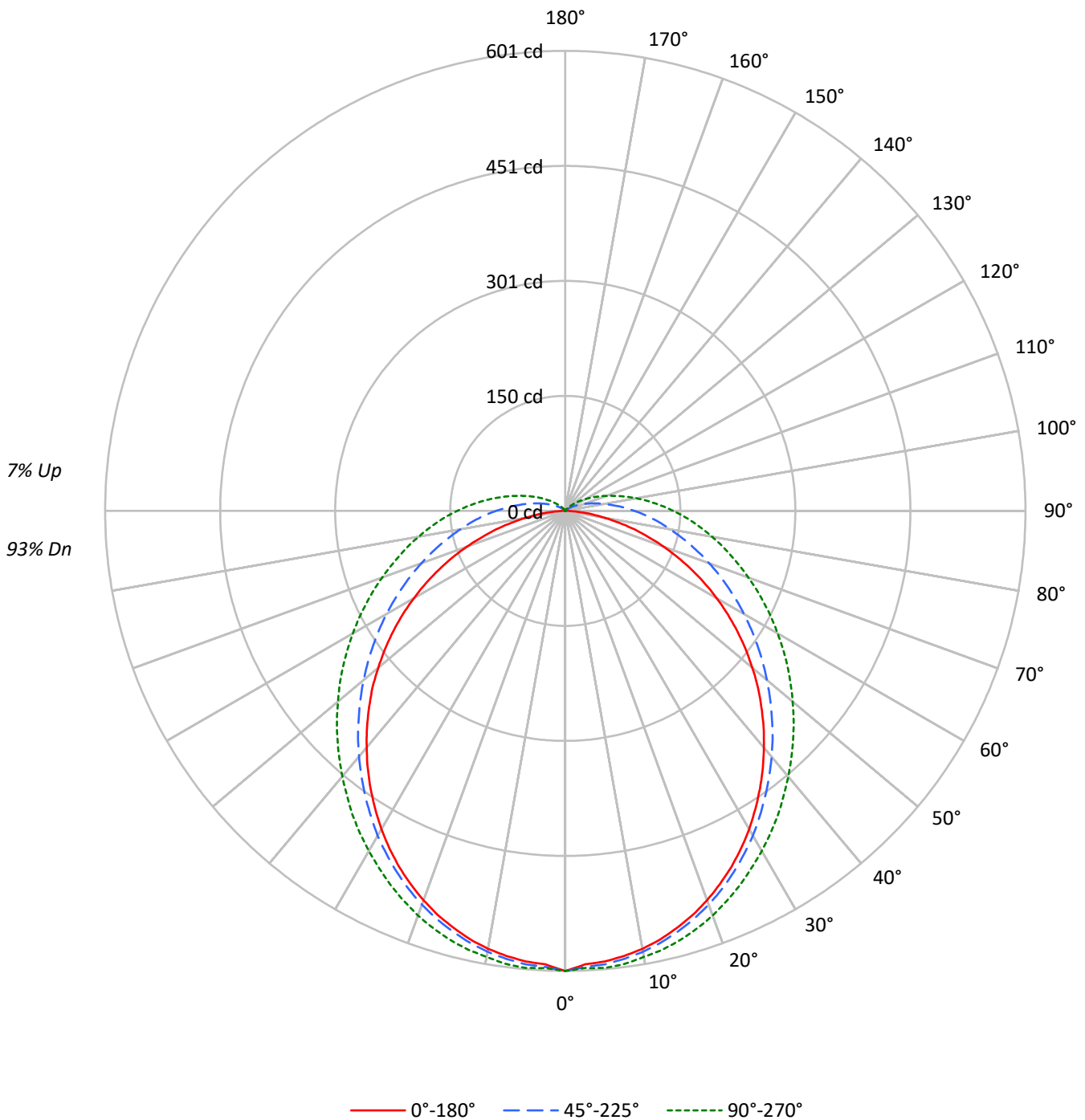
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1990.0 lumens
Efficiency: N/A
Efficacy: 144.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.35
Luminous Opening: Rectangular (W 0.38' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 13.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.92
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P893329
CATALOG NUMBER: 4MB-2SL-RND-UNV-L830

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20															
RC	80					70					50					30					10					0										
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0									
RCR																																				
0	117	117	117	117	114	114	114	114	107	107	107	101	101	101	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	93						
1	105	100	95	90	102	97	92	88	91	87	84	86	83	80	81	79	76	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74			
2	95	86	78	72	92	83	77	71	79	73	68	74	70	65	70	66	63	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60			
3	86	75	66	59	83	73	65	58	69	62	56	65	59	55	62	57	53	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50		
4	79	66	57	50	76	64	56	49	61	54	48	58	51	46	55	49	45	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43		
5	72	59	50	43	70	58	49	42	55	47	41	52	45	40	49	44	39	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37		
6	67	53	44	37	64	52	43	37	49	42	36	47	40	35	45	39	34	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32		
7	62	48	39	33	60	47	38	32	45	37	32	43	36	31	41	35	30	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	
8	58	44	35	29	56	43	35	29	41	34	28	39	33	28	37	32	27	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	
9	54	40	32	26	52	39	31	26	38	31	25	36	30	25	35	29	24	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
10	50	37	29	24	49	36	29	24	35	28	23	33	27	23	32	26	22	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4277	4277	4277
5°	4220	4246	4280
10°	4197	4224	4275
15°	4154	4189	4275
20°	4099	4145	4260
25°	4029	4088	4235
30°	3945	4027	4216
35°	3849	3955	4208
40°	3749	3893	4207
45°	3645	3839	4236
50°	3530	3806	4290
55°	3401	3798	4394
60°	3253	3835	4558
65°	3072	3936	4830
70°	2848	4158	5294
75°	2573	4629	6141
80°	2180	5704	7978
85°	1763	9290	13674

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 87.5°
 Luminance: 25169 cd/sqm



TEST NUMBER: P893329
 CATALOG NUMBER: 4MB-2SL-RND-UNV-L830

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.9	2.9
10°-20°	162.0	8.1
20°-30°	242.5	12.2
30°-40°	289.2	14.5
40°-50°	299.9	15.1
50°-60°	278.3	14.0
60°-70°	232.1	11.7
70°-80°	173.1	8.7
80°-90°	115.2	5.8
90°-100°	70.2	3.5
100°-110°	39.2	2.0
110°-120°	19.6	1.0
120°-130°	8.2	0.4
130°-140°	2.6	0.1
140°-150°	0.6	0.0
150°-160°	0.3	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-30°	461.4	23.2
0°-40°	750.5	37.7
0°-60°	1328.7	66.8
0°-90°	1849.2	92.9
90°-120°	128.9	6.5
90°-150°	140.3	7.1
90°-180°	141.0	7.1
0°-180°	1990.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	601	601	601	601	601	
5°	591	604	594	598	599	56
15°	564	578	569	579	580	159
25°	513	527	521	535	540	236
35°	443	455	455	478	484	277
45°	362	372	382	412	421	280
55°	274	284	306	342	354	245
65°	182	197	234	273	287	181
75°	94	120	168	209	223	99
85°	22	59	114	153	168	24
90°	1	39	90	128	141	2
95°	0	24	70	104	117	0
105°	0	8	38	64	74	0
115°	0	2	18	36	43	0
125°	0	0	7	17	22	0
135°	0	0	2	6	8	0
145°	0	0	0	1	2	0
155°	1	1	0	0	0	0
165°	1	1	0	0	0	0
175°	1	1	1	0	0	0
180°	1	1	1	1	1	0



TEST NUMBER: P893329

CATALOG NUMBER: 4MB-2SL-RND-UNV-L830

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	601.1	601.1	601.1	601.1	601.1	601.1	601.1	601.1	601.1	601.1	601.1
2.5°	593.1	594.1	602.5	602.1	600.7	606.3	607.7	603.0	595.5	603.0	596.4
5°	590.8	591.7	600.2	599.7	598.3	604.4	604.9	600.7	593.1	600.7	594.5
7.5°	586.5	587.5	596.0	595.5	594.5	600.7	600.2	596.9	588.9	596.9	590.3
10°	580.9	581.4	590.3	589.4	588.9	595.0	593.6	590.8	582.8	590.8	584.7
12.5°	573.4	573.8	582.8	581.8	581.8	587.5	585.6	583.3	575.3	582.8	577.6
15°	564.0	564.4	572.9	572.4	572.4	578.5	575.7	573.8	566.3	574.3	568.7
17.5°	553.6	553.1	562.1	561.1	562.1	567.7	564.0	563.0	556.0	563.5	558.8
20°	541.4	541.4	549.4	548.9	550.3	555.5	550.8	551.3	544.2	552.2	547.5
22.5°	527.7	527.3	535.3	535.3	536.7	541.9	536.7	538.1	531.0	538.6	534.8
25°	513.2	512.2	520.2	520.2	522.6	526.8	521.2	523.0	516.5	524.0	520.7
27.5°	497.2	495.8	503.8	504.2	506.1	510.3	504.2	507.1	500.9	508.0	505.6
30°	480.2	478.8	486.8	487.3	489.7	492.9	486.8	490.6	484.9	492.0	490.1
32.5°	461.9	461.0	468.5	469.4	471.8	474.1	468.5	472.2	467.5	474.6	472.7
35°	443.1	442.1	449.2	450.6	453.0	454.8	448.7	453.9	449.7	456.3	455.3
37.5°	423.8	422.4	429.9	430.9	433.7	434.6	429.0	435.1	431.3	437.9	437.4
40°	403.6	402.2	409.7	410.6	413.5	413.5	408.7	415.3	412.5	418.6	419.1
42.5°	383.3	381.9	388.5	390.4	392.8	392.8	388.1	395.1	393.2	399.3	400.8
45°	362.2	360.8	366.9	368.8	371.6	371.6	366.9	374.9	373.5	379.6	381.5
47.5°	341.5	339.6	345.2	347.1	350.0	349.5	345.7	353.7	353.2	359.4	362.7
50°	318.9	317.5	323.1	325.0	328.3	327.4	324.6	333.0	333.0	339.1	343.8
52.5°	296.8	295.4	301.0	302.9	305.7	305.7	302.9	311.9	313.3	319.4	325.0
55°	274.2	272.3	278.0	279.9	283.2	283.6	281.3	290.2	293.0	300.1	306.2
57.5°	251.6	250.7	255.4	257.3	261.5	261.5	260.1	269.5	273.3	280.8	287.9
60°	228.6	227.7	231.9	234.2	238.9	239.9	238.9	248.8	254.0	261.5	269.5
62.5°	205.5	204.6	208.8	212.1	217.3	218.2	218.7	229.1	234.7	242.7	251.6
65°	182.5	181.6	185.8	189.6	195.7	197.1	198.5	209.3	215.9	224.4	233.8
67.5°	159.5	159.0	163.2	167.9	174.5	176.4	178.7	190.0	197.6	206.5	216.8
70°	136.9	136.4	140.6	146.3	154.3	156.6	159.5	170.7	180.1	189.6	199.9
72.5°	114.3	114.8	119.5	126.1	135.0	137.3	141.1	152.9	163.2	173.1	183.9
75°	93.6	93.6	98.8	106.3	116.2	119.5	123.7	135.9	146.8	157.1	168.4
77.5°	72.4	72.4	78.6	88.0	98.8	102.1	107.2	119.9	131.7	142.1	153.3
80°	53.2	54.1	61.1	70.6	81.8	86.1	92.2	104.9	117.6	127.9	139.2
82.5°	36.2	37.6	45.2	56.0	67.3	71.5	77.6	91.3	104.0	114.8	126.5
85°	21.6	24.0	32.0	42.8	54.6	59.3	65.9	78.6	91.3	102.1	113.8
87.5°	9.9	13.2	21.6	32.5	43.7	48.9	54.6	66.8	79.5	90.3	102.5
90°	0.9	5.6	14.1	23.5	34.3	39.0	44.7	56.4	68.7	78.6	90.3
92.5°	0.0	2.4	8.5	16.9	26.3	31.0	36.2	47.5	58.3	68.2	79.5
95°	0.0	0.9	4.7	11.8	19.8	24.0	28.7	39.0	49.9	59.3	69.6
97.5°	0.0	0.5	2.8	8.0	14.6	18.3	22.6	32.0	41.9	50.8	60.2
100°	0.0	0.5	1.4	5.2	10.8	13.6	17.9	25.9	34.8	42.8	52.2
102.5°	0.0	0.0	0.9	3.3	8.0	10.3	13.6	20.7	28.7	36.2	44.7
105°	0.0	0.0	0.5	2.4	5.6	7.5	10.3	16.5	23.5	30.1	38.1
107.5°	0.0	0.0	0.5	1.4	3.8	5.6	8.0	12.7	18.8	24.9	32.0
110°	0.5	0.5	0.5	0.9	2.8	4.2	5.6	9.9	15.5	20.7	26.8



TEST NUMBER: P893329

CATALOG NUMBER: 4MB-2SL-RND-UNV-L830

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.5	0.5	0.5	0.5	1.9	2.8	4.2	7.5	12.2	16.5	22.1
115°	0.5	0.5	0.5	0.5	1.4	1.9	2.8	5.6	9.4	13.2	17.9
117.5°	0.5	0.5	0.5	0.5	0.9	1.4	1.9	4.2	7.1	10.3	14.6
120°	0.5	0.5	0.5	0.5	0.5	0.9	1.4	2.8	5.6	8.0	11.8
122.5°	0.5	0.5	0.5	0.5	0.5	0.9	0.9	2.4	4.2	6.1	8.9
125°	0.5	0.5	0.5	0.5	0.5	0.5	0.9	1.4	2.8	4.7	7.1
127.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.9	1.4	1.9	3.3	5.2
130°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.9	1.4	2.4	3.8
132.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.9	1.4	1.9	2.8
135°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.9	1.4	1.9
137.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.9	0.9	1.4
140°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.9	0.9
142.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.9
145°	0.5	0.9	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
147.5°	0.5	0.9	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
150°	0.5	0.9	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
152.5°	0.9	0.9	0.9	0.9	0.9	0.5	0.5	0.5	0.5	0.5	0.5
155°	0.9	0.9	0.9	0.9	0.9	0.9	0.5	0.5	0.5	0.5	0.5
157.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.5	0.5	0.5
160°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.5	0.5	0.5
162.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.5	0.5	0.5
165°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.5	0.5
167.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.5
170°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
172.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.5
175°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
177.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
180°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	601.1	601.1	601.1	601.1	601.1	601.1	601.1	601.1	601.1	601.1
2.5°	598.3	599.7	601.1	597.4	599.7	603.9	605.4	599.7	601.6	597.8
5°	596.4	597.4	599.2	594.5	597.8	601.6	603.9	599.2	602.1	599.2
7.5°	592.7	593.6	596.0	591.2	595.5	598.8	601.6	596.9	599.7	596.9
10°	587.0	588.4	591.7	586.1	591.2	594.1	596.9	591.7	594.5	591.7
12.5°	580.0	582.3	585.1	580.0	585.1	587.5	591.2	586.1	589.4	587.0
15°	571.5	573.8	577.6	572.4	579.0	580.9	584.7	579.5	582.8	580.4
17.5°	561.6	564.4	569.1	563.0	570.6	572.0	575.7	571.0	574.3	572.0
20°	550.3	553.1	557.9	552.2	559.7	560.7	564.9	560.7	564.0	562.6
22.5°	537.2	540.4	545.2	540.0	548.0	548.0	553.1	548.9	552.7	551.3
25°	523.5	527.3	532.5	526.8	535.3	535.3	540.9	536.7	540.4	539.5
27.5°	508.9	513.2	519.3	513.6	522.1	521.6	527.3	523.5	527.7	526.3
30°	493.4	498.1	504.2	499.5	508.5	507.5	513.2	509.9	513.6	513.2
32.5°	476.5	481.7	489.2	484.0	492.9	492.0	499.1	495.3	500.0	499.1
35°	459.5	465.2	472.7	468.0	477.9	476.5	483.5	480.2	484.9	484.5
37.5°	442.1	448.3	455.8	452.0	461.4	460.0	467.5	464.7	469.9	468.5
40°	424.3	430.4	438.4	435.1	445.0	443.1	451.1	448.7	453.9	453.0
42.5°	406.4	413.0	421.0	419.1	428.5	426.6	434.6	432.7	437.9	437.0
45°	388.1	395.1	403.6	401.7	411.6	409.7	417.7	416.3	421.4	421.0
47.5°	369.7	377.2	385.7	384.8	394.2	392.3	400.8	399.3	404.5	404.5
50°	350.9	359.4	367.8	367.4	376.8	374.9	382.4	382.4	388.1	387.6
52.5°	332.1	341.0	350.0	350.0	359.4	357.5	365.9	365.5	371.1	371.1
55°	314.2	322.2	331.1	333.0	342.0	339.1	348.1	349.0	353.7	354.2
57.5°	296.3	304.8	313.7	316.1	324.6	322.7	331.1	332.1	336.8	337.3
60°	278.5	286.5	295.4	298.7	307.1	305.3	313.7	314.7	319.8	320.3
62.5°	260.6	268.6	278.5	281.7	289.7	288.3	297.3	298.2	302.9	303.9
65°	243.2	251.6	261.1	265.8	273.3	271.4	280.3	281.3	286.5	286.9
67.5°	226.2	234.7	244.1	249.3	256.3	255.4	263.9	265.8	270.0	270.9
70°	209.8	218.2	228.1	233.3	240.4	239.9	247.9	249.3	254.0	254.5
72.5°	193.8	202.3	212.1	218.2	224.4	223.9	231.9	233.8	238.5	238.9
75°	178.3	187.2	196.6	203.2	209.3	208.8	216.8	218.7	223.0	223.4
77.5°	163.7	172.6	182.5	189.1	194.3	194.7	201.8	203.7	207.9	209.3
80°	150.0	158.5	167.9	175.0	179.7	180.6	187.2	189.6	192.8	194.7
82.5°	136.9	145.3	154.8	161.3	166.0	167.0	173.1	175.9	179.2	180.6
85°	124.2	132.6	141.6	148.6	152.9	153.3	159.5	162.3	165.1	167.5
87.5°	111.9	120.4	128.9	136.4	140.2	141.1	146.8	149.6	151.9	154.3
90°	99.7	108.2	116.7	123.7	127.5	127.9	134.1	136.9	139.2	141.1
92.5°	88.4	96.9	105.4	112.4	115.7	116.7	121.8	125.1	127.0	128.9
95°	77.6	86.1	93.6	101.1	104.4	105.8	110.5	113.4	115.7	116.7
97.5°	68.2	75.7	82.8	90.3	93.1	94.5	99.2	102.5	104.4	105.4
100°	59.3	66.3	72.9	80.0	82.8	84.2	88.4	91.3	93.1	94.5
102.5°	51.3	57.9	64.0	70.6	73.4	74.3	78.1	80.9	82.8	84.2
105°	44.2	50.3	56.0	62.1	64.4	65.9	69.1	71.5	73.4	74.3
107.5°	37.6	43.7	48.4	54.1	56.4	57.4	60.7	63.5	64.9	65.4
110°	32.0	37.2	41.9	46.6	49.4	50.3	53.2	55.5	56.9	57.4



TEST NUMBER: P893329

CATALOG NUMBER: 4MB-2SL-RND-UNV-L830

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	26.8	31.5	35.7	40.0	42.3	43.3	46.1	48.4	49.4	49.9
115°	22.1	26.8	30.1	34.3	36.2	37.2	39.5	41.9	42.3	43.3
117.5°	17.9	22.1	25.4	28.7	30.6	31.5	33.4	35.3	36.2	36.7
120°	14.6	17.9	20.7	24.0	25.4	26.3	28.2	30.1	30.6	31.0
122.5°	11.8	14.6	16.9	19.8	21.2	22.1	23.5	24.9	25.4	25.9
125°	8.9	11.8	13.6	16.0	17.4	17.9	19.3	20.7	21.2	21.6
127.5°	7.1	8.9	10.8	12.7	13.6	14.1	15.5	16.5	16.9	17.4
130°	5.2	6.6	8.0	9.9	10.8	11.3	12.2	13.2	13.6	13.6
132.5°	3.8	5.2	6.1	7.5	8.0	8.5	9.4	10.3	10.3	10.8
135°	2.4	3.3	4.2	5.2	6.1	6.1	7.1	7.5	8.0	8.0
137.5°	1.9	2.4	2.8	3.8	4.2	4.7	4.7	5.6	5.6	5.6
140°	1.4	1.9	1.9	2.4	2.8	3.3	3.3	3.8	3.8	3.8
142.5°	0.9	1.4	1.4	1.9	1.9	2.4	2.4	2.4	2.8	2.8
145°	0.9	0.9	0.9	1.4	1.4	1.4	1.4	1.9	1.9	1.9
147.5°	0.5	0.5	0.9	0.9	0.9	0.9	0.9	1.4	1.4	1.4
150°	0.5	0.5	0.5	0.5	0.5	0.9	0.9	0.9	0.9	0.9
152.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
155°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
157.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
160°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
162.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
165°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
167.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
170°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
172.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
175°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0
177.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0
180°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9



TEST NUMBER: P893329
 CATALOG NUMBER: 4MB-2SL-RND-UNV-L830

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference 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	15.34	16.87	15.81	17.33	17.82	16.91	18.44	17.38	18.90	19.39
	3H	17.01	18.42	17.50	18.88	19.41	19.53	20.94	20.02	21.40	21.93
	4H	17.61	18.94	18.11	19.43	19.97	20.84	22.18	21.35	22.66	23.20
	6H	18.01	19.25	18.53	19.75	20.30	22.25	23.49	22.77	23.99	24.54
	8H	18.13	19.31	18.65	19.84	20.40	23.00	24.19	23.53	24.71	25.27
	12H	18.20	19.34	18.74	19.86	20.45	23.85	24.99	24.38	25.50	26.10
4H	2H	16.26	17.59	16.77	18.08	18.62	17.46	18.79	17.96	19.27	19.82
	3H	18.24	19.38	18.76	19.91	20.47	20.38	21.51	20.89	22.04	22.60
	4H	19.02	20.06	19.56	20.60	21.19	21.90	22.94	22.44	23.48	24.07
	6H	19.60	20.52	20.16	21.08	21.69	23.54	24.46	24.10	25.03	25.64
	8H	19.78	20.65	20.34	21.21	21.83	24.42	25.29	24.99	25.85	26.48
	12H	19.91	20.69	20.49	21.29	21.91	25.43	26.22	26.01	26.81	27.43
8H	4H	19.90	20.76	20.46	21.33	21.95	22.26	23.13	22.82	23.69	24.31
	6H	20.78	21.52	21.37	22.12	22.75	24.16	24.90	24.76	25.50	26.13
	8H	21.13	21.79	21.73	22.41	23.05	25.25	25.91	25.85	26.53	27.17
	12H	21.40	21.99	22.01	22.60	23.31	26.51	27.10	27.12	27.71	28.42
12H	4H	20.18	20.96	20.76	21.56	22.18	22.30	23.09	22.89	23.68	24.31
	6H	21.23	21.90	21.83	22.51	23.15	24.27	24.94	24.88	25.55	26.19
	8H	21.75	22.34	22.35	22.95	23.65	25.47	26.06	26.08	26.67	27.37