

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: P893561

Luminaire Tested: 4MB-4SL-RNDU-UNV-L830

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893561
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-327-3)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-4SL-RNDU-UNV-L830
Description: 4000 Lumen 4FT MICROBAY LINEAR BAY with ROUND FROSTED LENS WITH UPLIGHT, 80CRI, 5
Light Source: -
Ballast/Driver: -

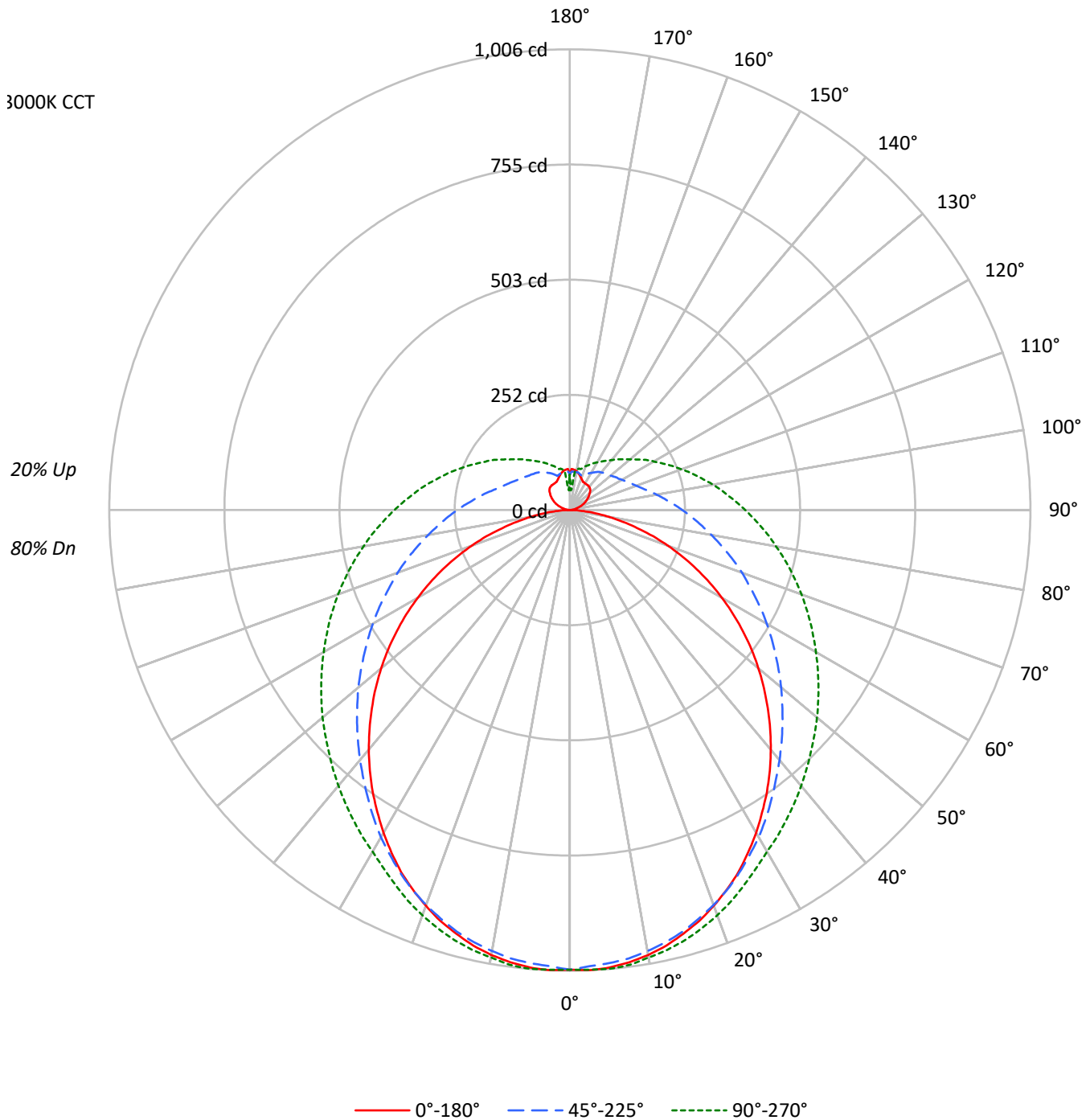
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4222.0 lumens
Efficiency: N/A
Efficacy: 141.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 3.98' x H: 0.21')
CIE Type: Semi-Direct

Input Watts (W): 29.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 5.5
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P893561
CATALOG NUMBER: 4MB-4SL-RNDU-UNV-L830

Luminous Intensity Polar Plot





TEST NUMBER: P893561

CATALOG NUMBER: 4MB-4SL-RNDU-UNV-L830

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	0
RCR																					
0	114	114	114	114	109	109	109	109	100	100	100	91	91	91	83	83	83	83	83	83	80
1	102	96	91	86	97	92	87	83	84	80	76	76	73	70	69	67	65	65	65	65	61
2	92	82	75	68	87	79	72	66	72	66	61	65	61	57	60	56	53	53	53	53	49
3	83	72	63	56	79	69	61	54	63	56	51	57	52	47	52	48	44	44	44	44	41
4	76	63	54	47	72	60	52	45	55	48	43	51	45	40	46	41	37	37	37	37	34
5	69	56	47	40	66	54	45	39	49	42	37	45	39	34	41	36	32	32	32	32	29
6	64	50	41	35	61	48	40	34	44	37	32	41	35	30	37	32	28	28	28	28	26
7	59	46	37	30	56	44	35	30	40	33	28	37	31	26	34	29	25	25	25	25	23
8	55	41	33	27	52	40	32	26	37	30	25	34	28	24	31	26	22	22	22	22	20
9	51	38	30	24	49	36	29	23	34	27	22	31	25	21	29	24	20	20	20	20	18
10	48	35	27	22	46	34	26	21	31	25	20	29	23	19	27	22	18	18	18	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7142	7142	7142
5°	7130	6840	6854
10°	7063	6574	6537
15°	6958	6304	6245
20°	6833	6019	5945
25°	6683	5734	5643
30°	6489	5445	5377
35°	6290	5148	5180
40°	6076	4880	5001
45°	5845	4642	4843
50°	5602	4430	4720
55°	5324	4234	4612
60°	5009	4072	4532
65°	4626	3931	4487
70°	4152	3843	4473
75°	3514	3780	4492
80°	2745	3778	4564
85°	1757	3877	4713

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5845 cd/sqm



TEST NUMBER: P893561
 CATALOG NUMBER: 4MB-4SL-RNDU-UNV-L830

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.0	2.2
10°-20°	270.8	6.4
20°-30°	406.6	9.6
30°-40°	488.9	11.6
40°-50°	518.0	12.3
50°-60°	498.8	11.8
60°-70°	441.5	10.5
70°-80°	362.1	8.6
80°-90°	281.0	6.7
90°-100°	218.1	5.2
100°-110°	172.8	4.1
110°-120°	137.7	3.3
120°-130°	109.4	2.6
130°-140°	85.4	2.0
140°-150°	62.8	1.5
150°-160°	41.6	1.0
160°-170°	23.9	0.6
170°-180°	7.7	0.2
0°-30°	772.3	18.3
0°-40°	1261.2	29.9
0°-60°	2278.1	54.0
0°-90°	3362.7	79.6
90°-120°	528.5	12.5
90°-150°	786.1	18.6
90°-180°	859.0	20.3
0°-180°	4222.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1004	1004	1004	1004	1004	
5°	1003	1004	993	1001	1006	95
15°	958	959	953	968	972	270
25°	872	875	875	897	902	401
35°	751	760	769	809	825	469
45°	611	626	657	719	745	472
55°	461	484	548	629	663	413
65°	306	348	446	540	580	303
75°	153	229	355	456	498	163
85°	34	138	278	379	419	39
90°	1	109	246	344	383	3
95°	5	90	217	310	349	5
105°	17	73	171	254	288	18
115°	34	70	142	207	235	34
125°	50	73	124	171	192	44
135°	63	77	112	143	157	48
145°	67	76	101	123	131	42
155°	68	79	87	105	111	32
165°	80	85	82	82	93	22
175°	89	88	84	70	47	8
180°	77	77	77	77	77	



TEST NUMBER: P893561
 CATALOG NUMBER: 4MB-4SL-RNDU-UNV-L830

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1003.8	1003.8	1003.8	1003.8	1003.8	1003.8	1003.8	1003.8	1003.8	1003.8	1003.8
2.5°	1005.7	1004.7	1006.7	1008.6	1014.3	1006.7	1010.5	1000.0	1000.9	1001.9	997.1
5°	1002.8	1000.0	1002.8	1004.7	1009.5	1003.8	1007.6	996.1	997.1	999.0	993.3
7.5°	996.1	993.3	995.2	997.1	1001.9	996.1	1000.9	989.5	991.4	992.3	987.6
10°	986.6	982.8	984.7	987.6	991.4	986.6	990.4	979.9	980.9	982.8	978.0
12.5°	974.2	970.4	972.3	974.2	979.0	974.2	978.0	967.5	969.4	971.3	966.5
15°	957.9	954.1	956.0	957.9	961.8	958.9	962.7	952.2	954.1	957.9	953.2
17.5°	940.8	935.0	936.9	939.8	943.6	941.7	944.6	936.0	936.9	940.8	936.0
20°	919.7	914.0	915.9	918.8	922.6	921.7	923.6	915.9	917.8	922.6	917.8
22.5°	896.8	891.1	893.0	896.8	899.7	899.7	900.6	894.9	896.8	901.6	897.8
25°	872.0	866.3	868.2	872.0	874.9	874.9	876.8	871.0	873.9	878.7	874.9
27.5°	843.3	840.5	840.5	844.3	846.2	848.1	849.1	844.3	848.1	852.9	850.0
30°	813.7	809.9	811.8	816.6	816.6	820.4	820.4	816.6	821.4	827.1	825.2
32.5°	782.2	779.3	780.3	786.0	786.0	790.8	789.8	787.9	792.7	799.4	797.5
35°	750.7	747.8	748.8	754.5	754.5	760.2	758.3	758.3	763.1	770.7	768.8
37.5°	717.3	715.4	716.3	722.0	722.0	727.8	725.9	726.8	732.5	741.1	740.2
40°	682.9	681.0	682.9	687.7	689.6	694.3	692.4	694.3	702.0	709.6	712.5
42.5°	647.5	646.6	648.5	653.3	655.2	660.0	659.0	661.9	669.5	681.0	684.8
45°	611.3	611.3	613.2	617.9	619.8	625.6	624.6	628.4	638.0	650.4	657.1
47.5°	575.0	575.9	576.9	582.6	582.6	592.1	589.3	595.0	607.4	621.8	629.4
50°	537.7	539.6	540.6	545.3	547.3	555.9	553.9	563.5	576.9	592.1	602.7
52.5°	500.5	502.4	504.3	508.1	510.0	520.5	518.6	531.0	547.3	563.5	575.0
55°	461.3	465.1	466.1	470.9	473.7	484.2	484.2	498.6	515.7	533.9	548.2
57.5°	423.1	426.9	427.9	433.6	437.4	449.8	451.8	468.0	487.1	505.2	522.4
60°	383.9	388.7	389.7	395.4	402.1	415.5	418.3	436.5	457.5	476.6	496.6
62.5°	344.8	349.6	351.5	357.2	367.7	381.1	385.9	406.9	428.8	449.8	471.8
65°	305.6	310.4	313.3	320.9	333.3	347.6	354.3	376.3	401.1	423.1	446.0
67.5°	266.5	272.2	276.0	285.6	301.8	317.1	323.8	348.6	374.4	398.3	422.1
70°	228.3	234.0	238.8	251.2	270.3	285.6	294.2	320.9	347.6	373.4	400.2
72.5°	191.0	196.7	203.4	218.7	239.7	256.9	266.5	294.2	323.8	349.6	377.3
75°	152.8	159.5	167.1	188.2	212.0	229.2	239.7	269.3	299.9	325.7	355.3
77.5°	118.4	125.1	136.6	157.6	184.3	203.4	214.9	246.4	277.9	303.7	334.3
80°	86.9	93.6	108.9	131.8	159.5	177.6	192.0	224.4	256.9	283.7	314.2
82.5°	59.2	65.9	84.0	108.9	138.5	156.6	170.0	204.4	236.9	264.6	295.1
85°	34.4	43.9	63.0	89.8	120.3	138.5	151.9	187.2	218.7	246.4	277.9
87.5°	15.3	26.7	47.8	74.5	105.1	122.3	136.6	169.0	202.5	230.2	261.7
90°	1.0	15.3	37.2	63.0	92.6	108.9	122.3	154.7	186.2	214.9	245.5
92.5°	1.9	10.5	30.6	54.4	82.1	98.4	111.7	142.3	171.9	201.5	231.1
95°	4.8	10.5	26.7	48.7	74.5	89.8	102.2	131.8	159.5	188.2	216.8
97.5°	7.6	11.5	25.8	45.8	68.8	83.1	94.6	122.3	149.9	175.7	204.4
100°	10.5	14.3	25.8	43.9	64.9	78.3	88.8	114.6	140.4	164.3	192.9
102.5°	13.4	17.2	27.7	43.9	63.0	74.5	85.0	108.9	132.8	154.7	181.5
105°	17.2	20.1	29.6	43.9	61.1	72.6	81.2	103.1	126.1	147.1	171.0
107.5°	21.0	22.9	31.5	44.9	61.1	70.7	79.3	99.3	120.3	139.4	162.4
110°	25.8	26.7	34.4	46.8	61.1	69.7	77.4	96.5	115.6	133.7	154.7



TEST NUMBER: P893561
 CATALOG NUMBER: 4MB-4SL-RNDU-UNV-L830

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	29.6	29.6	37.2	48.7	61.1	69.7	76.4	93.6	111.7	128.0	148.0
115°	34.4	34.4	40.1	50.6	62.1	69.7	76.4	92.6	108.9	123.2	142.3
117.5°	38.2	38.2	43.9	52.5	64.0	70.7	76.4	90.7	106.0	119.4	136.6
120°	42.0	42.0	45.8	54.4	64.9	71.6	76.4	89.8	103.1	116.5	131.8
122.5°	45.8	45.8	48.7	57.3	65.9	71.6	76.4	88.8	101.2	112.7	127.0
125°	49.7	49.7	51.6	59.2	67.8	72.6	77.4	88.8	100.3	109.8	124.2
127.5°	53.5	52.5	55.4	62.1	68.8	73.5	78.3	88.8	98.4	107.9	120.3
130°	56.3	55.4	59.2	64.0	70.7	74.5	78.3	87.9	97.4	106.0	116.5
132.5°	60.2	58.3	63.0	64.9	72.6	76.4	79.3	87.9	96.5	104.1	114.6
135°	63.0	61.1	65.9	67.8	73.5	77.4	80.2	87.9	95.5	103.1	111.7
137.5°	64.9	64.0	68.8	70.7	74.5	78.3	81.2	87.9	94.6	101.2	109.8
140°	65.9	64.9	68.8	72.6	74.5	78.3	80.2	86.9	93.6	99.3	107.0
142.5°	66.9	66.9	69.7	73.5	74.5	77.4	80.2	86.0	91.7	96.5	105.1
145°	66.9	66.9	69.7	74.5	75.5	76.4	78.3	84.0	88.8	93.6	101.2
147.5°	66.9	66.9	70.7	74.5	76.4	77.4	76.4	82.1	86.9	90.7	97.4
150°	66.9	66.9	70.7	74.5	77.4	78.3	77.4	80.2	84.0	87.9	93.6
152.5°	67.8	67.8	70.7	74.5	77.4	78.3	78.3	78.3	81.2	85.0	90.7
155°	67.8	68.8	70.7	76.4	78.3	79.3	79.3	79.3	78.3	82.1	86.9
157.5°	70.7	71.6	72.6	77.4	79.3	80.2	80.2	80.2	79.3	78.3	83.1
160°	73.5	74.5	75.5	79.3	81.2	82.1	82.1	82.1	80.2	79.3	79.3
162.5°	76.4	78.3	78.3	80.2	82.1	83.1	83.1	84.0	82.1	81.2	80.2
165°	80.2	81.2	81.2	82.1	84.0	85.0	84.0	85.0	84.0	83.1	82.1
167.5°	83.1	84.0	84.0	85.0	85.0	86.0	86.0	86.0	85.0	84.0	84.0
170°	86.0	86.9	86.9	86.9	86.9	86.9	86.9	86.9	86.0	84.0	84.0
172.5°	87.9	88.8	88.8	87.9	87.9	87.9	87.9	86.9	85.0	84.0	84.0
175°	88.8	89.8	89.8	88.8	87.9	87.9	87.9	86.9	85.0	84.0	84.0
177.5°	89.8	90.7	89.8	89.8	87.9	87.9	87.9	87.9	86.0	85.0	84.0
180°	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4



TEST NUMBER: P893561
 CATALOG NUMBER: 4MB-4SL-RNDU-UNV-L830

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	1003.8	1003.8	1003.8	1003.8	1003.8	1003.8	1003.8	1003.8	1003.8	1003.8
2.5°	1002.8	991.4	999.0	1000.0	1003.8	1000.0	1002.8	1000.0	1007.6	1004.7
5°	999.0	988.5	995.2	996.1	1000.9	996.1	1000.9	999.0	1008.6	1005.7
7.5°	992.3	983.7	989.5	990.4	996.1	991.4	996.1	994.2	1005.7	1001.9
10°	982.8	976.1	981.8	982.8	988.5	983.7	987.6	985.6	998.1	992.3
12.5°	972.3	966.5	971.3	972.3	979.0	974.2	979.0	977.0	989.5	983.7
15°	957.0	954.1	958.9	960.8	967.5	963.7	968.4	966.5	979.9	972.3
17.5°	941.7	939.8	944.6	946.5	954.1	949.3	954.1	952.2	965.6	957.9
20°	922.6	921.7	926.4	929.3	936.0	931.2	936.9	935.0	949.3	941.7
22.5°	902.5	902.5	906.4	909.2	915.9	912.1	917.8	916.9	931.2	923.6
25°	880.6	881.5	885.4	889.2	896.8	894.0	898.7	898.7	912.1	902.5
27.5°	855.8	860.5	863.4	868.2	874.9	872.0	876.8	877.7	891.1	881.5
30°	830.0	836.6	839.5	845.2	851.0	851.0	855.8	857.7	871.0	861.5
32.5°	803.2	810.9	814.7	822.3	830.0	830.0	836.6	839.5	852.9	844.3
35°	776.5	787.0	791.8	801.3	809.0	809.9	816.6	820.4	833.8	825.2
37.5°	750.7	764.1	768.8	780.3	787.0	788.9	796.5	801.3	813.7	806.1
40°	723.9	740.2	745.9	758.3	764.1	767.9	775.5	781.3	792.7	786.0
42.5°	698.2	716.3	722.0	735.4	742.1	745.9	753.6	761.2	772.7	766.0
45°	672.4	692.4	699.1	713.4	719.2	724.9	733.5	740.2	750.7	745.0
47.5°	647.5	668.6	675.2	690.5	697.2	703.9	711.5	721.1	730.6	724.9
50°	621.8	643.7	652.3	668.6	674.3	681.9	691.5	700.1	709.6	704.8
52.5°	596.9	619.8	628.4	645.6	652.3	660.0	669.5	679.1	687.7	683.8
55°	570.2	595.0	604.6	622.7	629.4	637.0	647.5	658.0	665.7	662.8
57.5°	545.3	571.1	580.7	600.7	606.5	616.0	626.5	638.0	644.7	641.8
60°	520.5	546.3	557.8	577.8	584.5	594.1	604.6	617.0	622.7	620.8
62.5°	495.7	522.4	534.8	555.9	561.6	572.1	584.5	595.0	600.7	599.8
65°	472.8	498.6	512.9	533.9	539.6	551.1	562.5	574.0	579.7	579.7
67.5°	448.9	476.6	490.9	512.9	517.7	530.1	542.5	553.9	558.7	558.7
70°	426.9	453.7	469.9	491.9	496.6	508.1	521.5	533.9	537.7	538.7
72.5°	405.0	431.7	448.9	471.8	476.6	488.0	500.5	513.8	516.7	517.7
75°	383.9	410.7	427.9	450.8	455.6	467.0	480.4	492.8	496.6	497.6
77.5°	362.9	389.7	408.8	430.7	435.5	447.0	460.3	472.8	475.6	477.5
80°	343.8	369.6	387.8	411.6	416.4	427.9	440.3	452.7	454.6	457.5
82.5°	324.7	350.5	369.6	392.5	397.3	408.8	421.2	433.6	435.5	439.3
85°	306.6	332.4	351.5	373.4	379.2	389.7	403.0	414.5	416.4	419.3
87.5°	290.3	314.2	334.3	355.3	361.0	371.5	384.9	396.4	397.3	401.1
90°	273.2	297.0	317.1	338.1	343.8	353.4	366.8	378.2	380.1	383.0
92.5°	258.8	280.8	301.8	321.9	326.6	337.1	349.6	361.0	362.9	365.8
95°	243.5	265.5	286.5	305.6	310.4	320.9	332.4	343.8	345.7	348.6
97.5°	230.2	251.2	271.2	290.3	295.1	304.7	317.1	327.6	329.5	333.3
100°	217.8	237.8	258.8	276.0	280.8	290.3	301.8	312.3	314.2	318.0
102.5°	206.3	225.4	245.5	261.7	267.4	276.0	287.5	297.0	298.9	301.8
105°	195.8	213.9	233.0	248.3	254.1	262.6	273.2	282.7	284.6	287.5
107.5°	185.3	202.5	220.6	235.9	240.7	248.3	258.8	268.4	270.3	274.1
110°	175.7	192.9	210.1	224.4	230.2	235.9	246.4	255.0	256.9	259.8



TEST NUMBER: P893561
 CATALOG NUMBER: 4MB-4SL-RNDU-UNV-L830

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	167.1	182.4	199.6	213.0	217.8	224.4	233.0	241.6	243.5	247.4
115°	159.5	173.8	191.0	203.4	207.3	213.0	222.5	230.2	232.1	234.9
117.5°	152.8	165.2	180.5	192.9	197.7	202.5	211.1	217.8	220.6	222.5
120°	147.1	158.5	171.9	183.4	189.1	192.9	200.6	207.3	210.1	212.0
122.5°	141.4	151.9	164.3	174.8	179.6	182.4	191.0	196.7	199.6	202.5
125°	136.6	146.1	157.6	166.2	171.0	173.8	181.5	187.2	190.1	192.0
127.5°	131.8	140.4	151.9	158.5	163.3	165.2	171.9	177.6	180.5	181.5
130°	127.0	135.6	145.2	151.9	155.7	158.5	164.3	168.1	171.0	171.9
132.5°	123.2	130.8	139.4	146.1	149.9	150.9	156.6	160.5	163.3	164.3
135°	120.3	126.1	134.7	140.4	143.3	145.2	149.9	152.8	155.7	156.6
137.5°	116.5	122.3	129.9	133.7	137.5	138.5	143.3	146.1	149.0	149.9
140°	113.7	118.4	125.1	128.9	132.8	132.8	136.6	139.4	142.3	142.3
142.5°	110.8	115.6	121.3	125.1	128.0	128.0	131.8	133.7	136.6	136.6
145°	107.0	111.7	117.5	120.3	123.2	123.2	126.1	128.0	130.8	130.8
147.5°	103.1	107.9	113.7	115.6	118.4	118.4	121.3	123.2	125.1	125.1
150°	98.4	102.2	108.9	111.7	114.6	114.6	116.5	118.4	120.3	120.3
152.5°	94.6	97.4	103.1	107.0	109.8	109.8	111.7	113.7	115.6	115.6
155°	89.8	92.6	97.4	102.2	105.1	106.0	107.9	108.9	110.8	110.8
157.5°	86.0	88.8	92.6	96.5	99.3	101.2	104.1	105.1	106.0	106.0
160°	81.2	83.1	86.9	90.7	93.6	95.5	100.3	101.2	102.2	102.2
162.5°	79.3	79.3	81.2	84.0	86.9	87.9	92.6	96.5	98.4	97.4
165°	80.2	79.3	79.3	80.2	82.1	83.1	86.0	91.7	93.6	92.6
167.5°	82.1	80.2	79.3	79.3	81.2	81.2	84.0	88.8	94.6	92.6
170°	82.1	79.3	77.4	77.4	78.3	78.3	80.2	83.1	88.8	89.8
172.5°	81.2	79.3	76.4	72.6	73.5	72.6	71.6	73.5	74.5	84.0
175°	82.1	79.3	76.4	71.6	69.7	66.9	62.1	58.3	57.3	46.8
177.5°	81.2	78.3	74.5	70.7	68.8	64.9	59.2	52.5	48.7	43.0
180°	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4



TEST NUMBER: P893561
 CATALOG NUMBER: 4MB-4SL-RNDU-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	13.76	15.07	14.40	15.74	16.51	17.31	18.62	17.95	19.28	20.05
	3H	15.11	16.31	15.76	16.98	17.79	20.22	21.42	20.88	22.10	22.90
	4H	15.51	16.65	16.19	17.34	18.15	21.70	22.84	22.37	23.53	24.34
	6H	15.73	16.79	16.42	17.49	18.32	23.26	24.32	23.94	25.02	25.85
	8H	15.76	16.78	16.46	17.50	18.33	24.07	25.08	24.76	25.80	26.63
	12H	15.77	16.74	16.47	17.46	18.32	24.95	25.92	25.65	26.63	27.50
4H	2H	14.90	16.04	15.58	16.73	17.54	17.63	18.77	18.30	19.45	20.27
	3H	16.55	17.52	17.23	18.24	19.08	20.78	21.75	21.46	22.48	23.31
	4H	17.11	18.02	17.82	18.74	19.60	22.43	23.33	23.13	24.05	24.91
	6H	17.46	18.25	18.18	19.00	19.87	24.20	24.99	24.92	25.74	26.61
	8H	17.53	18.28	18.26	19.03	19.91	25.13	25.88	25.86	26.63	27.51
	12H	17.56	18.24	18.30	19.01	19.90	26.15	26.84	26.90	27.61	28.50
8H	4H	18.20	18.95	18.93	19.70	20.58	22.60	23.35	23.33	24.10	24.98
	6H	18.81	19.45	19.56	20.24	21.12	24.55	25.19	25.31	25.98	26.86
	8H	19.01	19.59	19.77	20.37	21.27	25.63	26.21	26.40	27.00	27.90
	12H	19.12	19.64	19.89	20.42	21.37	26.85	27.37	27.62	28.15	29.10
12H	4H	18.55	19.24	19.30	20.01	20.90	22.60	23.28	23.34	24.05	24.94
	6H	19.33	19.91	20.10	20.70	21.60	24.58	25.16	25.35	25.95	26.85
	8H	19.66	20.18	20.43	20.96	21.91	25.73	26.25	26.50	27.03	27.98