

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: P893337

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893337
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-2SL-RNDU-UNV-L830
Description: 2000 Lumen 4FT MICROBAY LINEAR BAY with ROUND FROSTED LENS WITH UPLIGHT, 80CRI, 5
Light Source: -
Ballast/Driver: -

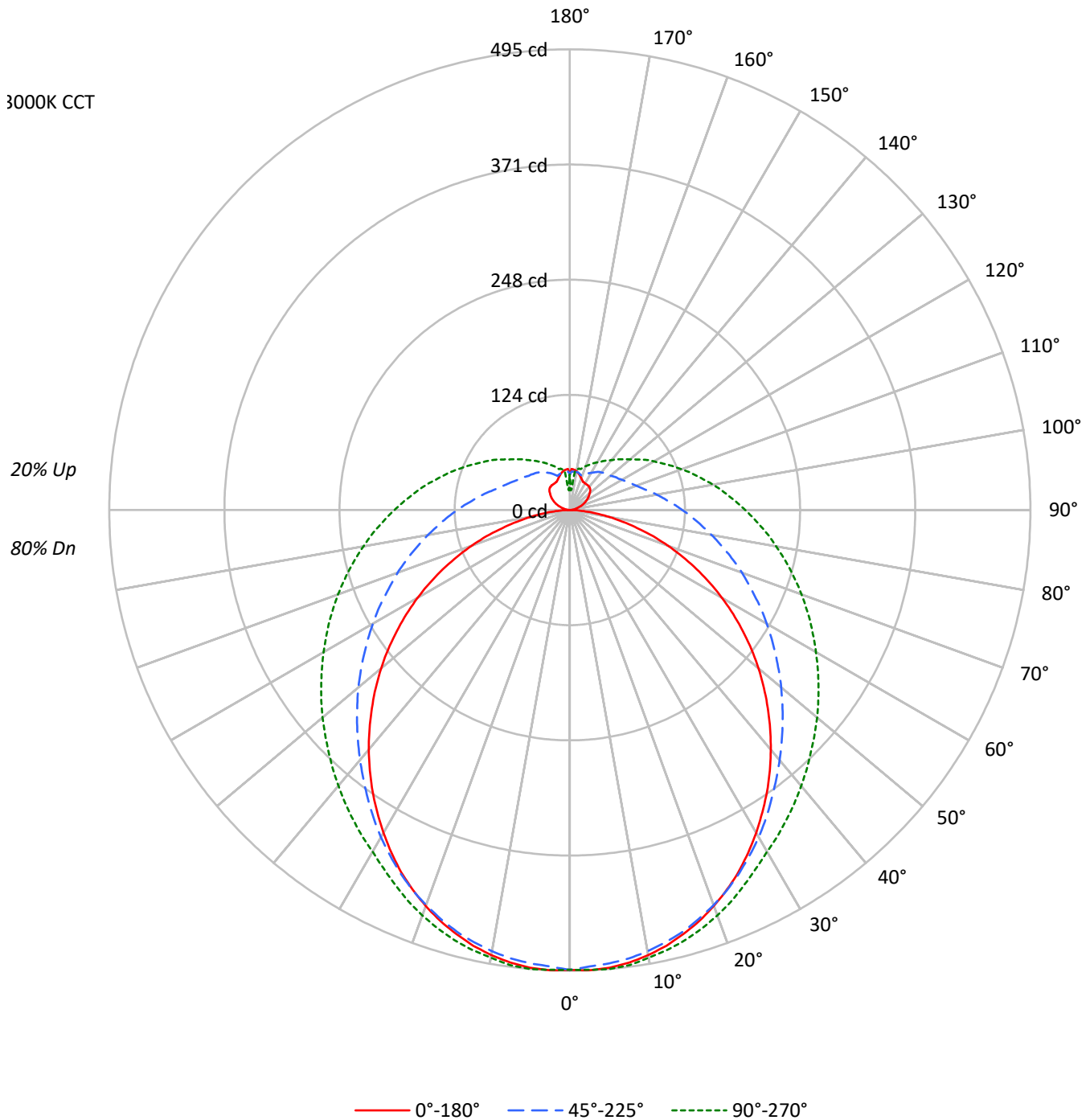
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2078.0 lumens
Efficiency: N/A
Efficacy: 150.6 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): 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

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3515	3515	3515
5°	3509	3367	3374
10°	3476	3236	3218
15°	3425	3103	3073
20°	3364	2962	2926
25°	3289	2822	2778
30°	3194	2680	2646
35°	3096	2534	2549
40°	2990	2402	2462
45°	2876	2284	2384
50°	2758	2180	2323
55°	2620	2084	2270
60°	2466	2004	2230
65°	2276	1934	2208
70°	2042	1892	2201
75°	1729	1861	2211
80°	1352	1860	2246
85°	863	1908	2320

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2876 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.7	2.2
10°-20°	133.3	6.4
20°-30°	200.1	9.6
30°-40°	240.6	11.6
40°-50°	254.9	12.3
50°-60°	245.5	11.8
60°-70°	217.3	10.5
70°-80°	178.2	8.6
80°-90°	138.3	6.7
90°-100°	107.3	5.2
100°-110°	85.1	4.1
110°-120°	67.8	3.3
120°-130°	53.8	2.6
130°-140°	42.0	2.0
140°-150°	30.9	1.5
150°-160°	20.5	1.0
160°-170°	11.8	0.6
170°-180°	3.8	0.2
0°-30°	380.1	18.3
0°-40°	620.8	29.9
0°-60°	1121.2	54.0
0°-90°	1655.1	79.6
90°-120°	260.2	12.5
90°-150°	386.9	18.6
90°-180°	423.0	20.4
0°-180°	2078.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	494	494	494	494	494	
5°	494	494	489	493	495	47
15°	472	472	469	476	478	133
25°	429	431	431	441	444	197
35°	370	374	378	398	406	231
45°	301	308	323	354	367	232
55°	227	238	270	310	326	203
65°	150	171	220	266	285	149
75°	75	113	175	224	245	80
85°	17	68	137	187	206	19
90°	0	54	121	169	188	1
95°	2	44	107	153	172	3
105°	8	36	84	125	142	9
115°	17	34	70	102	116	17
125°	24	36	61	84	94	22
135°	31	38	55	70	77	24
145°	33	38	50	61	64	21
155°	33	39	43	52	54	16
165°	40	42	40	40	46	11
175°	44	43	41	34	23	4
180°	38	38	38	38	38	



TEST NUMBER: P893337
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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0
2.5°	495.0	494.5	495.5	496.4	499.2	495.5	497.3	492.2	492.6	493.1	490.8
5°	493.6	492.2	493.6	494.5	496.9	494.0	495.9	490.3	490.8	491.7	488.9
7.5°	490.3	488.9	489.8	490.8	493.1	490.3	492.6	487.0	487.9	488.4	486.1
10°	485.6	483.7	484.6	486.1	487.9	485.6	487.5	482.3	482.8	483.7	481.4
12.5°	479.5	477.6	478.5	479.5	481.8	479.5	481.4	476.2	477.1	478.1	475.7
15°	471.5	469.6	470.5	471.5	473.4	472.0	473.8	468.7	469.6	471.5	469.1
17.5°	463.0	460.2	461.1	462.6	464.4	463.5	464.9	460.7	461.1	463.0	460.7
20°	452.7	449.9	450.8	452.2	454.1	453.6	454.6	450.8	451.7	454.1	451.7
22.5°	441.4	438.6	439.5	441.4	442.8	442.8	443.3	440.5	441.4	443.7	441.9
25°	429.2	426.4	427.3	429.2	430.6	430.6	431.5	428.7	430.1	432.5	430.6
27.5°	415.1	413.7	413.7	415.5	416.5	417.4	417.9	415.5	417.4	419.8	418.4
30°	400.5	398.6	399.6	401.9	401.9	403.8	403.8	401.9	404.3	407.1	406.1
32.5°	385.0	383.6	384.1	386.9	386.9	389.2	388.8	387.8	390.2	393.5	392.5
35°	369.5	368.1	368.5	371.4	371.4	374.2	373.2	373.2	375.6	379.3	378.4
37.5°	353.0	352.1	352.6	355.4	355.4	358.2	357.3	357.7	360.5	364.8	364.3
40°	336.1	335.2	336.1	338.5	339.4	341.7	340.8	341.7	345.5	349.3	350.7
42.5°	318.7	318.2	319.2	321.5	322.5	324.8	324.4	325.8	329.5	335.2	337.0
45°	300.8	300.8	301.8	304.1	305.1	307.9	307.4	309.3	314.0	320.1	323.4
47.5°	283.0	283.5	283.9	286.7	286.7	291.4	290.0	292.9	299.0	306.0	309.8
50°	264.7	265.6	266.1	268.4	269.4	273.6	272.6	277.3	283.9	291.4	296.6
52.5°	246.3	247.3	248.2	250.1	251.0	256.2	255.3	261.4	269.4	277.3	283.0
55°	227.0	228.9	229.4	231.7	233.2	238.3	238.3	245.4	253.8	262.8	269.8
57.5°	208.2	210.1	210.6	213.4	215.3	221.4	222.3	230.3	239.7	248.7	257.1
60°	189.0	191.3	191.8	194.6	197.9	204.5	205.9	214.8	225.2	234.6	244.4
62.5°	169.7	172.0	173.0	175.8	181.0	187.6	189.9	200.3	211.1	221.4	232.2
65°	150.4	152.8	154.2	157.9	164.1	171.1	174.4	185.2	197.4	208.2	219.5
67.5°	131.2	134.0	135.9	140.6	148.5	156.1	159.4	171.6	184.3	196.0	207.8
70°	112.3	115.2	117.5	123.6	133.0	140.6	144.8	157.9	171.1	183.8	197.0
72.5°	94.0	96.8	100.1	107.6	118.0	126.4	131.2	144.8	159.4	172.0	185.7
75°	75.2	78.5	82.3	92.6	104.4	112.8	118.0	132.6	147.6	160.3	174.9
77.5°	58.3	61.6	67.2	77.6	90.7	100.1	105.8	121.3	136.8	149.5	164.5
80°	42.8	46.1	53.6	64.9	78.5	87.4	94.5	110.5	126.4	139.6	154.7
82.5°	29.1	32.4	41.4	53.6	68.2	77.1	83.7	100.6	116.6	130.2	145.3
85°	16.9	21.6	31.0	44.2	59.2	68.2	74.7	92.1	107.6	121.3	136.8
87.5°	7.5	13.2	23.5	36.7	51.7	60.2	67.2	83.2	99.7	113.3	128.8
90°	0.5	7.5	18.3	31.0	45.6	53.6	60.2	76.2	91.7	105.8	120.8
92.5°	0.9	5.2	15.0	26.8	40.4	48.4	55.0	70.0	84.6	99.2	113.8
95°	2.4	5.2	13.2	24.0	36.7	44.2	50.3	64.9	78.5	92.6	106.7
97.5°	3.8	5.6	12.7	22.6	33.8	40.9	46.5	60.2	73.8	86.5	100.6
100°	5.2	7.1	12.7	21.6	32.0	38.5	43.7	56.4	69.1	80.9	95.0
102.5°	6.6	8.5	13.6	21.6	31.0	36.7	41.8	53.6	65.3	76.2	89.3
105°	8.5	9.9	14.6	21.6	30.1	35.7	40.0	50.8	62.0	72.4	84.1
107.5°	10.3	11.3	15.5	22.1	30.1	34.8	39.0	48.9	59.2	68.6	79.9
110°	12.7	13.2	16.9	23.0	30.1	34.3	38.1	47.5	56.9	65.8	76.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	14.6	14.6	18.3	24.0	30.1	34.3	37.6	46.1	55.0	63.0	72.9
115°	16.9	16.9	19.7	24.9	30.6	34.3	37.6	45.6	53.6	60.6	70.0
117.5°	18.8	18.8	21.6	25.9	31.5	34.8	37.6	44.7	52.2	58.8	67.2
120°	20.7	20.7	22.6	26.8	32.0	35.3	37.6	44.2	50.8	57.3	64.9
122.5°	22.6	22.6	24.0	28.2	32.4	35.3	37.6	43.7	49.8	55.5	62.5
125°	24.4	24.4	25.4	29.1	33.4	35.7	38.1	43.7	49.4	54.1	61.1
127.5°	26.3	25.9	27.3	30.6	33.8	36.2	38.5	43.7	48.4	53.1	59.2
130°	27.7	27.3	29.1	31.5	34.8	36.7	38.5	43.2	47.9	52.2	57.3
132.5°	29.6	28.7	31.0	32.0	35.7	37.6	39.0	43.2	47.5	51.2	56.4
135°	31.0	30.1	32.4	33.4	36.2	38.1	39.5	43.2	47.0	50.8	55.0
137.5°	32.0	31.5	33.8	34.8	36.7	38.5	40.0	43.2	46.5	49.8	54.1
140°	32.4	32.0	33.8	35.7	36.7	38.5	39.5	42.8	46.1	48.9	52.6
142.5°	32.9	32.9	34.3	36.2	36.7	38.1	39.5	42.3	45.1	47.5	51.7
145°	32.9	32.9	34.3	36.7	37.1	37.6	38.5	41.4	43.7	46.1	49.8
147.5°	32.9	32.9	34.8	36.7	37.6	38.1	37.6	40.4	42.8	44.7	47.9
150°	32.9	32.9	34.8	36.7	38.1	38.5	38.1	39.5	41.4	43.2	46.1
152.5°	33.4	33.4	34.8	36.7	38.1	38.5	38.5	38.5	40.0	41.8	44.7
155°	33.4	33.8	34.8	37.6	38.5	39.0	39.0	39.0	38.5	40.4	42.8
157.5°	34.8	35.3	35.7	38.1	39.0	39.5	39.5	39.5	39.0	38.5	40.9
160°	36.2	36.7	37.1	39.0	40.0	40.4	40.4	40.4	39.5	39.0	39.0
162.5°	37.6	38.5	38.5	39.5	40.4	40.9	40.9	41.4	40.4	40.0	39.5
165°	39.5	40.0	40.0	40.4	41.4	41.8	41.4	41.8	41.4	40.9	40.4
167.5°	40.9	41.4	41.4	41.8	41.8	42.3	42.3	42.3	41.8	41.4	41.4
170°	42.3	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.3	41.4	41.4
172.5°	43.2	43.7	43.7	43.2	43.2	43.2	43.2	42.8	41.8	41.4	41.4
175°	43.7	44.2	44.2	43.7	43.2	43.2	43.2	42.8	41.8	41.4	41.4
177.5°	44.2	44.7	44.2	44.2	43.2	43.2	43.2	43.2	42.3	41.8	41.4
180°	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0
2.5°	493.6	487.9	491.7	492.2	494.0	492.2	493.6	492.2	495.9	494.5
5°	491.7	486.5	489.8	490.3	492.6	490.3	492.6	491.7	496.4	495.0
7.5°	488.4	484.2	487.0	487.5	490.3	487.9	490.3	489.3	495.0	493.1
10°	483.7	480.4	483.2	483.7	486.5	484.2	486.1	485.1	491.2	488.4
12.5°	478.5	475.7	478.1	478.5	481.8	479.5	481.8	480.9	487.0	484.2
15°	471.0	469.6	472.0	472.9	476.2	474.3	476.7	475.7	482.3	478.5
17.5°	463.5	462.6	464.9	465.8	469.6	467.3	469.6	468.7	475.2	471.5
20°	454.1	453.6	456.0	457.4	460.7	458.3	461.1	460.2	467.3	463.5
22.5°	444.2	444.2	446.1	447.5	450.8	448.9	451.7	451.3	458.3	454.6
25°	433.4	433.9	435.8	437.6	441.4	440.0	442.3	442.3	448.9	444.2
27.5°	421.2	423.5	424.9	427.3	430.6	429.2	431.5	432.0	438.6	433.9
30°	408.5	411.8	413.2	416.0	418.8	418.8	421.2	422.1	428.7	424.0
32.5°	395.3	399.1	401.0	404.7	408.5	408.5	411.8	413.2	419.8	415.5
35°	382.2	387.3	389.7	394.4	398.2	398.6	401.9	403.8	410.4	406.1
37.5°	369.5	376.1	378.4	384.1	387.3	388.3	392.0	394.4	400.5	396.7
40°	356.3	364.3	367.1	373.2	376.1	377.9	381.7	384.5	390.2	386.9
42.5°	343.6	352.6	355.4	362.0	365.2	367.1	370.9	374.6	380.3	377.0
45°	330.9	340.8	344.1	351.1	354.0	356.8	361.0	364.3	369.5	366.7
47.5°	318.7	329.1	332.3	339.9	343.2	346.4	350.2	354.9	359.6	356.8
50°	306.0	316.8	321.1	329.1	331.9	335.6	340.3	344.6	349.3	346.9
52.5°	293.8	305.1	309.3	317.8	321.1	324.8	329.5	334.2	338.5	336.6
55°	280.6	292.9	297.6	306.5	309.8	313.5	318.7	323.9	327.6	326.2
57.5°	268.4	281.1	285.8	295.7	298.5	303.2	308.4	314.0	317.3	315.9
60°	256.2	268.9	274.5	284.4	287.7	292.4	297.6	303.7	306.5	305.5
62.5°	244.0	257.1	263.2	273.6	276.4	281.6	287.7	292.9	295.7	295.2
65°	232.7	245.4	252.4	262.8	265.6	271.2	276.9	282.5	285.3	285.3
67.5°	220.9	234.6	241.6	252.4	254.8	260.9	267.0	272.6	275.0	275.0
70°	210.1	223.3	231.3	242.1	244.4	250.1	256.7	262.8	264.7	265.1
72.5°	199.3	212.5	220.9	232.2	234.6	240.2	246.3	252.9	254.3	254.8
75°	189.0	202.1	210.6	221.9	224.2	229.9	236.4	242.6	244.4	244.9
77.5°	178.6	191.8	201.2	212.0	214.4	220.0	226.6	232.7	234.1	235.0
80°	169.2	181.9	190.9	202.6	205.0	210.6	216.7	222.8	223.8	225.2
82.5°	159.8	172.5	181.9	193.2	195.6	201.2	207.3	213.4	214.4	216.2
85°	150.9	163.6	173.0	183.8	186.6	191.8	198.4	204.0	205.0	206.4
87.5°	142.9	154.7	164.5	174.9	177.7	182.9	189.4	195.1	195.6	197.4
90°	134.4	146.2	156.1	166.4	169.2	173.9	180.5	186.1	187.1	188.5
92.5°	127.4	138.2	148.5	158.4	160.8	165.9	172.0	177.7	178.6	180.0
95°	119.9	130.7	141.0	150.4	152.8	157.9	163.6	169.2	170.2	171.6
97.5°	113.3	123.6	133.5	142.9	145.3	150.0	156.1	161.2	162.2	164.1
100°	107.2	117.0	127.4	135.9	138.2	142.9	148.5	153.7	154.7	156.5
102.5°	101.5	110.9	120.8	128.8	131.6	135.9	141.5	146.2	147.1	148.5
105°	96.4	105.3	114.7	122.2	125.0	129.3	134.4	139.1	140.1	141.5
107.5°	91.2	99.7	108.6	116.1	118.5	122.2	127.4	132.1	133.0	134.9
110°	86.5	95.0	103.4	110.5	113.3	116.1	121.3	125.5	126.4	127.9



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	82.3	89.8	98.2	104.8	107.2	110.5	114.7	118.9	119.9	121.7
115°	78.5	85.6	94.0	100.1	102.0	104.8	109.5	113.3	114.2	115.6
117.5°	75.2	81.3	88.8	95.0	97.3	99.7	103.9	107.2	108.6	109.5
120°	72.4	78.0	84.6	90.3	93.1	95.0	98.7	102.0	103.4	104.4
122.5°	69.6	74.7	80.9	86.0	88.4	89.8	94.0	96.8	98.2	99.7
125°	67.2	71.9	77.6	81.8	84.1	85.6	89.3	92.1	93.5	94.5
127.5°	64.9	69.1	74.7	78.0	80.4	81.3	84.6	87.4	88.8	89.3
130°	62.5	66.8	71.5	74.7	76.6	78.0	80.9	82.7	84.1	84.6
132.5°	60.6	64.4	68.6	71.9	73.8	74.3	77.1	79.0	80.4	80.9
135°	59.2	62.0	66.3	69.1	70.5	71.5	73.8	75.2	76.6	77.1
137.5°	57.3	60.2	63.9	65.8	67.7	68.2	70.5	71.9	73.3	73.8
140°	55.9	58.3	61.6	63.5	65.3	65.3	67.2	68.6	70.0	70.0
142.5°	54.5	56.9	59.7	61.6	63.0	63.0	64.9	65.8	67.2	67.2
145°	52.6	55.0	57.8	59.2	60.6	60.6	62.0	63.0	64.4	64.4
147.5°	50.8	53.1	55.9	56.9	58.3	58.3	59.7	60.6	61.6	61.6
150°	48.4	50.3	53.6	55.0	56.4	56.4	57.3	58.3	59.2	59.2
152.5°	46.5	47.9	50.8	52.6	54.1	54.1	55.0	55.9	56.9	56.9
155°	44.2	45.6	47.9	50.3	51.7	52.2	53.1	53.6	54.5	54.5
157.5°	42.3	43.7	45.6	47.5	48.9	49.8	51.2	51.7	52.2	52.2
160°	40.0	40.9	42.8	44.7	46.1	47.0	49.4	49.8	50.3	50.3
162.5°	39.0	39.0	40.0	41.4	42.8	43.2	45.6	47.5	48.4	47.9
165°	39.5	39.0	39.0	39.5	40.4	40.9	42.3	45.1	46.1	45.6
167.5°	40.4	39.5	39.0	39.0	40.0	40.0	41.4	43.7	46.5	45.6
170°	40.4	39.0	38.1	38.1	38.5	38.5	39.5	40.9	43.7	44.2
172.5°	40.0	39.0	37.6	35.7	36.2	35.7	35.3	36.2	36.7	41.4
175°	40.4	39.0	37.6	35.3	34.3	32.9	30.6	28.7	28.2	23.0
177.5°	40.0	38.5	36.7	34.8	33.8	32.0	29.1	25.9	24.0	21.2
180°	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1



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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	11.30	12.61	11.94	13.27	14.04	14.84	16.15	15.49	16.82	17.59
	3H	12.65	13.85	13.30	14.52	15.32	17.76	18.96	18.42	19.63	20.44
	4H	13.05	14.19	13.72	14.88	15.69	19.24	20.38	19.91	21.06	21.88
	6H	13.27	14.33	13.95	15.03	15.86	20.79	21.86	21.48	22.55	23.38
	8H	13.30	14.32	14.00	15.04	15.87	21.60	22.62	22.30	23.34	24.17
	12H	13.31	14.28	14.01	14.99	15.86	22.48	23.46	23.19	24.17	25.03
4H	2H	12.44	13.58	13.11	14.27	15.08	15.16	16.30	15.84	16.99	17.80
	3H	14.08	15.06	14.77	15.78	16.62	18.31	19.29	19.00	20.01	20.85
	4H	14.65	15.55	15.36	16.28	17.14	19.96	20.86	20.67	21.59	22.45
	6H	14.99	15.79	15.71	16.54	17.41	21.73	22.53	22.46	23.28	24.15
	8H	15.07	15.82	15.79	16.57	17.45	22.67	23.42	23.40	24.17	25.05
	12H	15.09	15.78	15.84	16.55	17.44	23.69	24.38	24.44	25.15	26.04
8H	4H	15.74	16.49	16.46	17.24	18.12	20.14	20.89	20.86	21.64	22.52
	6H	16.35	16.99	17.10	17.77	18.66	22.09	22.73	22.84	23.52	24.40
	8H	16.54	17.12	17.31	17.91	18.81	23.17	23.75	23.94	24.54	25.44
	12H	16.66	17.17	17.43	17.95	18.91	24.39	24.91	25.16	25.69	26.64
12H	4H	16.09	16.78	16.84	17.55	18.44	20.13	20.82	20.88	21.59	22.48
	6H	16.87	17.45	17.63	18.24	19.13	22.12	22.70	22.88	23.49	24.39
	8H	17.20	17.72	17.97	18.49	19.45	23.27	23.78	24.04	24.56	25.52