

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P232594

Luminaire Tested: **4SKB1-LD5-8-N-UNV-L835-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P232594
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1709-317-6)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SKB1-LD5-8-N-UNV-L835-CD1-U
Description: METALUX SKYBAR 4' WAVESTREAM STRIP
WITH NARROW LENS
Light Source: (238) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8051.0 lumens
Efficiency: N/A
Efficacy: 123.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.53 / 1.51
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.29')
CIE Type: Direct

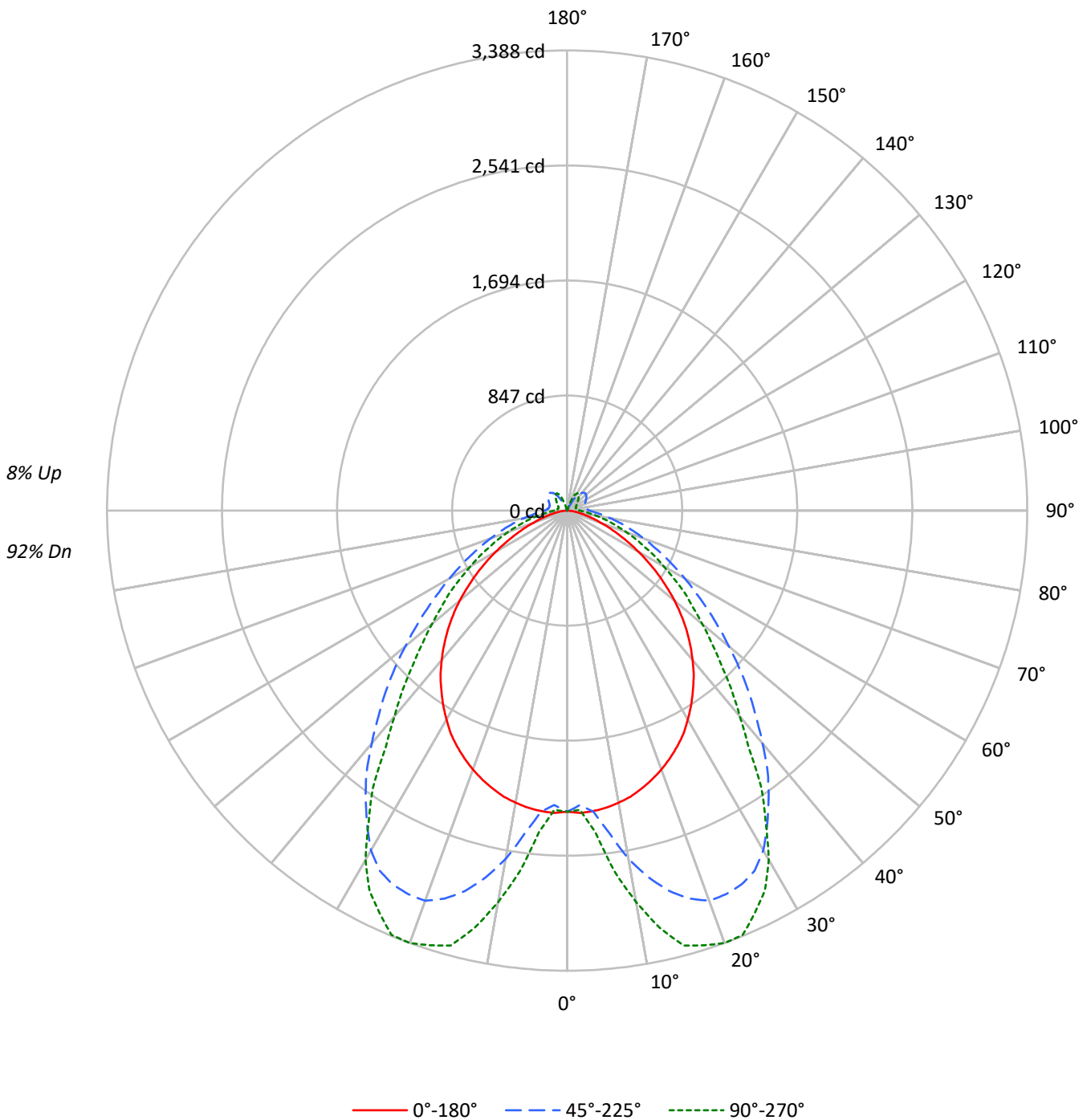
Input Watts (W): 65.23
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0	
RCR																						
0	117	117	117	117	113	113	113	113	107	107	107	100	100	100	95	95	95	92				
1	107	103	98	95	104	99	96	92	94	91	88	88	86	84	84	82	80	77				
2	98	90	84	78	95	88	82	77	83	78	74	78	74	71	74	71	68	65				
3	90	80	72	66	87	78	70	65	74	68	63	70	65	61	66	62	58	56				
4	83	71	63	56	80	69	62	56	66	59	54	63	57	52	60	55	51	48				
5	76	64	55	49	74	62	54	48	59	52	47	56	51	46	54	49	45	42				
6	70	58	49	43	68	56	48	42	54	47	41	51	45	40	49	44	40	37				
7	65	52	44	38	63	51	43	38	49	42	37	47	41	36	45	39	35	33				
8	61	48	40	34	59	47	39	34	45	38	33	43	37	32	41	36	32	30				
9	57	44	36	31	55	43	36	30	41	35	30	40	34	29	38	33	29	27				
10	53	41	33	28	52	40	33	28	38	32	27	37	31	27	35	30	26	24				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23868	23868	23868
5°	23843	22329	23286
10°	23565	24657	26529
15°	23154	26164	28141
20°	22644	26547	27238
25°	22010	25607	25136
30°	21181	23837	22049
35°	20189	21058	18050
40°	19022	18129	14038
45°	17620	15358	11262
50°	15917	12736	9089
55°	13881	10468	7440
60°	11577	8562	5867
65°	9198	6935	4548
70°	6956	5533	3467
75°	5048	4362	2509
80°	3385	3353	1779
85°	1832	2523	1218



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	227.0	2.8
10°-20°	789.9	9.8
20°-30°	1300.5	16.2
30°-40°	1461.0	18.1
40°-50°	1300.1	16.1
50°-60°	1005.5	12.5
60°-70°	682.8	8.5
70°-80°	407.5	5.1
80°-90°	218.5	2.7
90°-100°	143.8	1.8
100°-110°	122.0	1.5
110°-120°	112.9	1.4
120°-130°	105.1	1.3
130°-140°	89.2	1.1
140°-150°	60.9	0.8
150°-160°	23.5	0.3
160°-170°	0.7	0.0
170°-180°	0.0	0.0
0°-30°	2317.4	28.8
0°-40°	3778.4	46.9
0°-60°	6084.0	75.6
0°-90°	7392.8	91.8
90°-120°	378.7	4.7
90°-150°	633.9	7.9
90°-180°	658.0	8.2
0°-180°	8051.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2217	2217	2217	2217	2217	
5°	2221	2190	2225	2344	2375	211
15°	2118	2379	2899	3261	3315	597
25°	1916	2461	3037	3276	3268	881
35°	1615	2216	2586	2562	2496	1009
45°	1242	1713	1893	1731	1603	955
55°	817	1167	1256	1140	1057	729
65°	418	725	784	707	625	421
75°	154	437	448	386	323	169
85°	27	275	225	176	141	33
90°	2	234	164	120	92	2
95°	1	226	144	101	77	1
105°	1	206	133	86	66	1
115°	1	189	148	94	73	1
125°	1	156	172	114	89	1
135°	1	60	184	147	115	1
145°	1	5	142	166	144	1
155°	1	3	32	110	122	1
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2217.4	2217.4	2217.4	2217.4	2217.4	2217.4	2217.4	2217.4	2217.4	2217.4	2217.4
2.5°	2228.3	2219.6	2204.4	2203.3	2193.5	2189.1	2190.2	2187.0	2183.7	2178.3	2169.6
5°	2220.7	2204.4	2179.3	2179.3	2184.8	2190.2	2203.3	2215.2	2218.5	2226.1	2225.0
7.5°	2206.5	2181.5	2157.6	2177.2	2196.7	2204.4	2219.6	2241.3	2275.0	2337.0	2397.9
10°	2183.7	2150.0	2142.4	2173.9	2200.0	2222.8	2257.6	2358.8	2452.3	2544.7	2604.6
12.5°	2157.6	2116.3	2127.1	2167.4	2228.3	2271.8	2361.0	2494.7	2568.7	2676.3	2764.4
15°	2118.4	2079.3	2098.9	2158.7	2285.9	2379.4	2429.5	2592.6	2711.1	2800.3	2899.3
17.5°	2076.0	2041.2	2068.4	2173.9	2346.8	2437.1	2517.6	2655.7	2769.9	2901.4	2995.0
20°	2029.3	1998.8	2033.6	2193.5	2376.2	2468.6	2557.8	2689.4	2840.5	2976.5	3057.0
22.5°	1974.9	1947.7	2001.0	2202.2	2387.1	2479.5	2566.5	2719.8	2876.4	2988.4	3057.0
25°	1916.2	1889.0	1961.8	2184.8	2376.2	2461.0	2554.5	2736.1	2864.5	2952.6	3037.4
27.5°	1853.1	1822.6	1932.5	2148.9	2332.7	2428.4	2533.9	2704.6	2805.7	2903.6	2989.5
30°	1775.9	1748.7	1881.4	2096.7	2271.8	2384.9	2475.1	2628.5	2725.3	2822.1	2888.4
32.5°	1698.7	1672.6	1819.4	2022.7	2202.2	2308.8	2395.8	2515.4	2625.2	2700.3	2741.6
35°	1614.9	1585.6	1747.6	1932.5	2123.9	2216.3	2289.2	2397.9	2490.4	2545.8	2586.1
37.5°	1531.2	1499.7	1656.3	1837.9	2020.6	2105.4	2166.3	2276.1	2346.8	2392.5	2426.2
40°	1436.6	1404.0	1561.6	1731.3	1912.9	1972.7	2035.8	2133.7	2185.9	2222.8	2239.2
42.5°	1340.9	1308.3	1459.4	1619.3	1781.3	1840.0	1905.3	1982.5	2033.6	2055.4	2055.4
45°	1241.9	1210.4	1353.9	1508.4	1645.4	1712.8	1770.4	1832.4	1874.8	1892.2	1893.3
47.5°	1138.6	1112.5	1249.5	1389.8	1518.1	1576.9	1621.5	1681.3	1718.2	1722.6	1721.5
50°	1033.1	1010.3	1133.2	1271.3	1385.5	1437.7	1476.8	1532.3	1561.6	1560.6	1555.1
52.5°	922.2	908.1	1022.2	1148.4	1251.7	1298.5	1333.3	1382.2	1406.1	1406.1	1401.8
55°	816.7	808.0	907.0	1028.8	1125.6	1166.9	1199.5	1243.0	1262.6	1262.6	1256.1
57.5°	710.1	709.0	801.5	910.2	1002.7	1039.6	1074.4	1112.5	1129.9	1129.9	1119.0
60°	605.7	611.2	702.5	802.6	887.4	923.3	953.7	990.7	1001.6	1003.8	1001.6
62.5°	508.9	523.1	610.1	701.4	786.3	816.7	843.9	879.8	888.5	891.7	886.3
65°	417.6	439.3	527.4	614.4	693.8	725.4	749.3	774.3	781.9	785.2	784.1
67.5°	342.6	365.4	453.5	539.4	612.3	637.3	661.2	682.9	684.0	689.5	685.1
70°	265.3	300.1	388.2	469.8	538.3	561.1	580.7	595.9	599.2	600.3	599.2
72.5°	204.4	245.8	329.5	410.0	472.0	493.7	508.9	520.9	520.9	522.0	518.7
75°	154.4	204.4	286.0	360.0	415.4	437.2	449.1	456.7	452.4	451.3	448.0
77.5°	112.0	169.6	246.9	316.5	368.7	385.0	395.8	396.9	390.4	389.3	382.8
80°	77.2	138.1	213.1	278.4	326.2	342.6	348.0	343.6	338.2	331.7	323.0
82.5°	51.1	112.0	184.9	246.9	291.4	304.5	308.8	302.3	294.7	283.8	269.7
85°	27.2	90.3	160.9	220.8	263.2	275.1	277.3	265.3	253.4	239.2	225.1
87.5°	12.0	73.9	143.5	203.4	240.3	249.0	250.1	237.1	221.8	205.5	188.1
90°	2.2	63.1	132.7	190.3	226.2	233.8	233.8	216.4	201.2	183.8	164.2
92.5°	1.1	59.8	129.4	186.0	221.8	229.5	228.4	209.9	191.4	171.8	152.2
95°	1.1	52.2	121.8	181.6	218.6	226.2	225.1	205.5	186.0	165.3	143.5
97.5°	1.1	43.5	114.2	174.0	213.1	220.8	220.8	202.3	182.7	160.9	138.1
100°	0.0	33.7	105.5	166.4	205.5	215.3	216.4	199.0	178.3	156.6	134.8
102.5°	0.0	22.8	97.9	159.9	200.1	209.9	212.1	197.9	176.2	154.4	132.7
105°	1.1	14.1	88.1	152.2	194.7	205.5	208.8	196.8	175.1	154.4	132.7
107.5°	1.1	9.8	78.3	144.6	190.3	202.3	206.6	196.8	176.2	155.5	134.8
110°	1.1	8.7	66.3	137.0	184.9	197.9	204.4	197.9	178.3	158.8	138.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	1.1	6.5	50.0	127.2	178.3	193.6	202.3	199.0	181.6	162.0	142.5
115°	1.1	5.4	33.7	117.4	171.8	189.2	200.1	200.1	184.9	166.4	147.9
117.5°	1.1	5.4	22.8	104.4	164.2	183.8	195.7	201.2	189.2	170.7	154.4
120°	1.1	4.3	10.9	89.2	154.4	176.2	191.4	201.2	192.5	176.2	159.9
122.5°	1.1	4.3	8.7	68.5	143.5	167.5	184.9	200.1	195.7	180.5	166.4
125°	1.1	3.3	7.6	45.7	129.4	155.5	176.2	196.8	196.8	184.9	171.8
127.5°	1.1	3.3	6.5	32.6	110.9	142.5	164.2	191.4	196.8	188.1	177.3
130°	1.1	3.3	5.4	9.8	84.8	124.0	150.1	182.7	194.7	190.3	180.5
132.5°	1.1	2.2	5.4	7.6	54.4	96.8	130.5	168.6	188.1	190.3	183.8
135°	1.1	2.2	4.3	6.5	39.1	59.8	104.4	151.2	176.2	183.8	183.8
137.5°	1.1	2.2	4.3	5.4	17.4	44.6	65.2	130.5	160.9	175.1	178.3
140°	1.1	2.2	3.3	4.3	6.5	23.9	46.8	103.3	142.5	162.0	170.7
142.5°	1.1	2.2	3.3	4.3	5.4	5.4	28.3	59.8	119.6	144.6	158.8
145°	1.1	2.2	2.2	3.3	4.3	5.4	5.4	45.7	85.9	124.0	142.5
147.5°	1.1	1.1	2.2	3.3	4.3	4.3	4.3	20.7	51.1	94.6	121.8
150°	1.1	1.1	2.2	2.2	3.3	3.3	4.3	4.3	33.7	53.3	90.3
152.5°	1.1	1.1	2.2	2.2	3.3	3.3	3.3	4.3	4.3	35.9	50.0
155°	1.1	1.1	2.2	2.2	2.2	3.3	3.3	3.3	3.3	4.3	31.5
157.5°	1.1	1.1	2.2	2.2	2.2	2.2	2.2	3.3	3.3	4.3	4.3
160°	1.1	2.2	2.2	2.2	2.2	2.2	2.2	3.3	3.3	3.3	4.3
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	2217.4	2217.4	2217.4	2217.4	2217.4	2217.4	2217.4	2217.4	2217.4	2217.4
2.5°	2180.4	2196.7	2196.7	2210.9	2218.5	2216.3	2218.5	2222.8	2209.8	2205.4
5°	2248.9	2281.6	2297.9	2334.9	2343.6	2359.9	2365.3	2383.8	2388.1	2375.1
7.5°	2464.3	2531.7	2575.2	2619.8	2639.4	2649.1	2666.5	2678.5	2697.0	2682.9
10°	2666.5	2748.1	2810.1	2859.0	2871.0	2880.8	2901.4	2930.8	2928.6	2926.5
12.5°	2841.6	2913.4	2989.5	3060.2	3096.1	3103.7	3134.2	3170.1	3176.6	3147.2
15°	2986.3	3086.3	3172.2	3247.3	3261.4	3281.0	3303.8	3315.8	3310.3	3314.7
17.5°	3107.0	3191.8	3252.7	3292.9	3301.6	3316.9	3337.5	3352.8	3354.9	3356.0
20°	3154.8	3211.4	3270.1	3325.6	3343.0	3358.2	3383.2	3396.3	3394.1	3387.6
22.5°	3146.1	3228.8	3283.2	3328.8	3346.2	3360.4	3382.1	3390.8	3387.6	3381.0
25°	3133.1	3203.8	3251.6	3275.5	3275.5	3286.4	3281.0	3274.5	3266.8	3267.9
27.5°	3071.1	3112.4	3145.0	3172.2	3175.5	3176.6	3173.3	3166.8	3162.4	3152.7
30°	2944.9	2995.0	3010.2	3008.0	3003.7	3002.6	2989.5	2979.7	2967.8	2968.9
32.5°	2797.0	2807.9	2814.4	2796.0	2785.1	2782.9	2770.9	2754.6	2738.3	2720.9
35°	2606.7	2599.1	2583.9	2570.8	2562.1	2549.1	2531.7	2515.4	2494.7	2495.8
37.5°	2422.9	2399.0	2377.3	2341.4	2334.9	2304.4	2270.7	2244.6	2210.9	2192.4
40°	2231.5	2207.6	2180.4	2141.3	2123.9	2095.6	2058.6	2015.1	1987.9	1977.1
42.5°	2048.8	2019.5	1987.9	1941.2	1919.4	1896.6	1857.4	1815.0	1795.5	1792.2
45°	1870.5	1836.8	1806.3	1754.1	1731.3	1704.1	1663.9	1637.8	1609.5	1603.0
47.5°	1698.7	1669.3	1622.5	1582.3	1560.6	1537.7	1496.4	1472.5	1451.8	1444.2
50°	1532.3	1504.0	1468.1	1423.5	1402.9	1381.1	1351.8	1328.9	1305.0	1297.4
52.5°	1383.3	1355.0	1318.0	1283.2	1262.6	1249.5	1222.3	1196.2	1177.8	1165.8
55°	1239.7	1213.6	1179.9	1147.3	1139.7	1122.3	1090.8	1067.9	1056.0	1057.0
57.5°	1108.2	1085.3	1059.2	1027.7	1015.7	999.4	978.7	951.6	937.4	933.1
60°	988.5	966.8	945.0	921.1	905.9	893.9	865.6	843.9	825.4	823.2
62.5°	874.3	858.0	839.5	815.6	802.6	789.5	764.5	743.8	729.7	725.4
65°	775.4	761.2	739.5	719.9	706.9	693.8	669.9	649.2	637.3	625.3
67.5°	677.5	665.5	649.2	628.6	616.6	603.6	582.9	560.1	545.9	542.7
70°	590.5	577.5	564.4	542.7	531.8	524.2	501.3	478.5	467.6	463.3
72.5°	515.5	501.3	482.8	467.6	461.1	447.0	425.2	410.0	395.8	387.1
75°	437.2	428.5	415.4	398.0	386.1	376.3	358.9	343.6	331.7	323.0
77.5°	373.0	362.1	351.3	333.9	325.2	316.5	298.0	284.9	273.0	268.6
80°	313.2	303.4	288.2	275.1	267.5	259.9	245.8	231.6	222.9	218.6
82.5°	258.8	250.1	238.2	227.3	218.6	213.1	200.1	188.1	180.5	174.0
85°	214.2	203.4	192.5	182.7	176.2	171.8	162.0	153.3	143.5	141.4
87.5°	176.2	167.5	157.7	147.9	143.5	138.1	129.4	122.9	115.3	112.0
90°	151.2	140.3	131.6	124.0	119.6	116.4	109.8	101.1	95.7	92.4
92.5°	137.0	127.2	119.6	112.0	108.7	105.5	97.9	91.3	85.9	81.6
95°	128.3	118.5	110.9	104.4	101.1	99.0	92.4	85.9	80.5	77.2
97.5°	121.8	110.9	103.3	97.9	94.6	92.4	87.0	81.6	76.1	72.9
100°	116.4	105.5	97.9	92.4	90.3	88.1	82.6	77.2	72.9	69.6
102.5°	114.2	102.2	94.6	90.3	88.1	85.9	80.5	76.1	70.7	67.4
105°	114.2	101.1	93.5	88.1	85.9	83.7	79.4	75.0	69.6	66.3
107.5°	116.4	102.2	93.5	89.2	87.0	84.8	79.4	75.0	69.6	66.3
110°	119.6	105.5	95.7	90.3	88.1	85.9	80.5	76.1	70.7	67.4



TEST NUMBER: P232594

CATALOG NUMBER: 4SKB1-LD5-8-N-UNV-L835-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	124.0	108.7	99.0	92.4	90.3	88.1	82.6	78.3	72.9	69.6
115°	129.4	113.1	103.3	95.7	93.5	91.3	85.9	80.5	76.1	72.9
117.5°	135.9	119.6	107.7	100.0	97.9	94.6	89.2	83.7	79.4	76.1
120°	142.5	127.2	114.2	105.5	102.2	99.0	93.5	88.1	82.6	79.4
122.5°	150.1	133.8	120.7	112.0	108.7	105.5	99.0	93.5	88.1	83.7
125°	157.7	142.5	128.3	118.5	114.2	110.9	104.4	97.9	93.5	89.2
127.5°	164.2	150.1	135.9	126.1	121.8	117.4	110.9	104.4	99.0	95.7
130°	169.6	157.7	144.6	133.8	129.4	126.1	117.4	110.9	105.5	102.2
132.5°	175.1	164.2	153.3	142.5	138.1	133.8	126.1	118.5	113.1	108.7
135°	178.3	169.6	160.9	151.2	146.8	141.4	133.8	126.1	119.6	115.3
137.5°	178.3	174.0	166.4	158.8	154.4	150.1	141.4	133.8	127.2	124.0
140°	172.9	174.0	170.7	165.3	160.9	157.7	150.1	141.4	134.8	131.6
142.5°	165.3	168.6	170.7	167.5	165.3	163.1	156.6	149.0	142.5	138.1
145°	153.3	159.9	164.2	167.5	166.4	165.3	159.9	154.4	147.9	143.5
147.5°	138.1	147.9	153.3	160.9	163.1	163.1	160.9	156.6	151.2	147.9
150°	116.4	130.5	140.3	147.9	151.2	155.5	155.5	152.2	149.0	145.7
152.5°	82.6	105.5	119.6	130.5	134.8	139.2	144.6	142.5	138.1	135.9
155°	46.8	57.6	87.0	104.4	109.8	115.3	124.0	126.1	125.1	121.8
157.5°	23.9	39.1	48.9	56.5	59.8	68.5	85.9	97.9	96.8	99.0
160°	5.4	6.5	18.5	34.8	39.1	41.3	45.7	48.9	48.9	46.8
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)