

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: P232591

Luminaire Tested: **4SKB1-LD5-7-N-UNV-L835-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P232591
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-LD5-7-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: 6922.0 lumens
Efficiency: N/A
Efficacy: 131.3 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

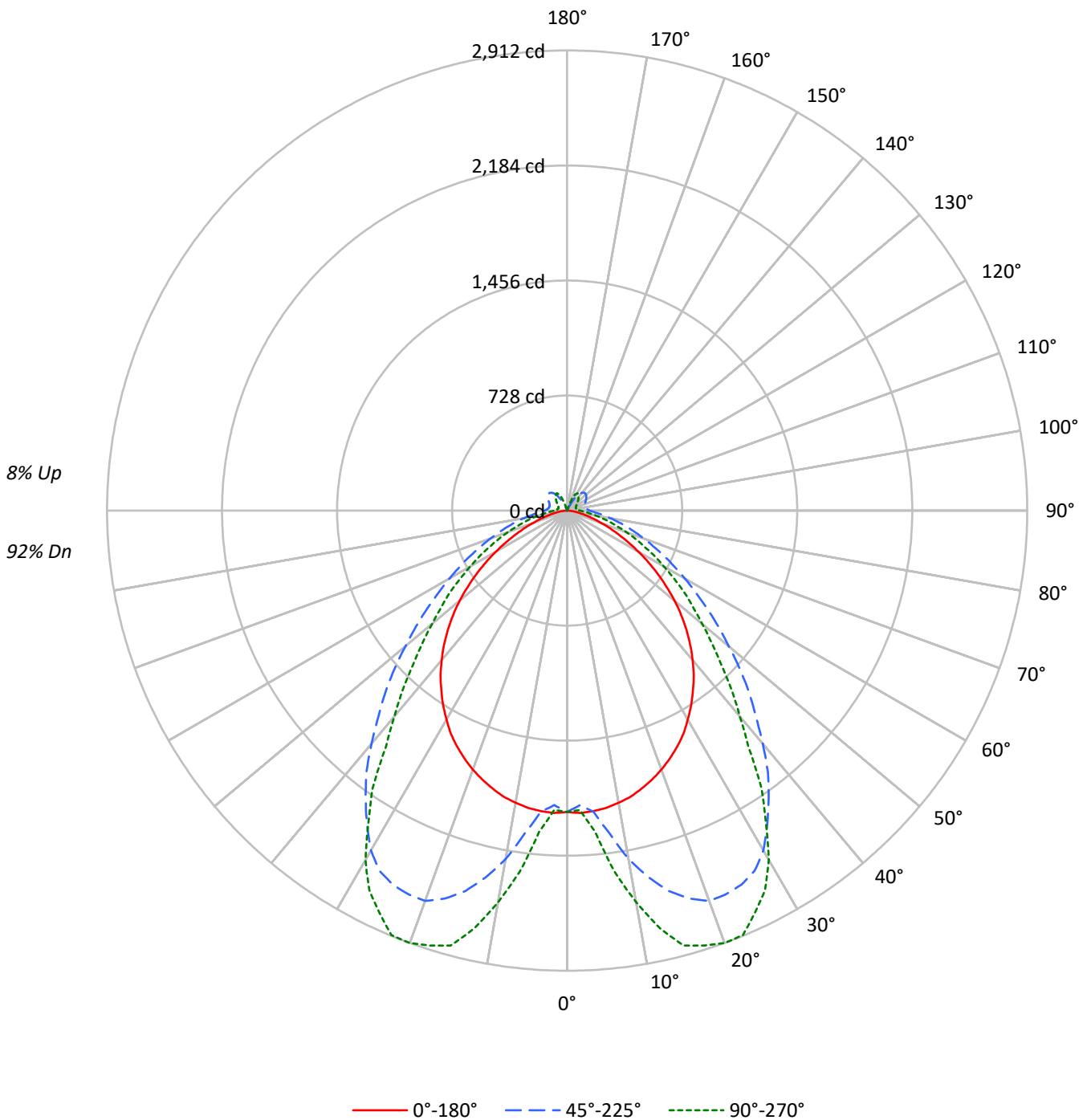
Input Watts (W): 52.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	20521	20521	20521
5°	20499	19198	20020
10°	20261	21199	22809
15°	19908	22494	24195
20°	19468	22825	23418
25°	18923	22016	21612
30°	18210	20494	18956
35°	17359	18104	15519
40°	16354	15587	12069
45°	15150	13205	9683
50°	13684	10950	7814
55°	11935	9000	6397
60°	9954	7361	5044
65°	7907	5962	3910
70°	5981	4757	2981
75°	4341	3751	2157
80°	2912	2883	1529
85°	1576	2169	1047



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.2	2.8
10°-20°	679.1	9.8
20°-30°	1118.1	16.2
30°-40°	1256.1	18.1
40°-50°	1117.8	16.1
50°-60°	864.5	12.5
60°-70°	587.0	8.5
70°-80°	350.3	5.1
80°-90°	187.9	2.7
90°-100°	123.7	1.8
100°-110°	104.9	1.5
110°-120°	97.0	1.4
120°-130°	90.4	1.3
130°-140°	76.7	1.1
140°-150°	52.4	0.8
150°-160°	20.2	0.3
160°-170°	0.6	0.0
170°-180°	0.0	0.0
0°-30°	1992.4	28.8
0°-40°	3248.6	46.9
0°-60°	5230.9	75.6
0°-90°	6356.1	91.8
90°-120°	325.6	4.7
90°-150°	545.0	7.9
90°-180°	566.0	8.2
0°-180°	6922.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1906	1906	1906	1906	1906	
5°	1909	1883	1913	2015	2042	181
15°	1821	2046	2493	2804	2850	513
25°	1648	2116	2611	2816	2810	758
35°	1388	1906	2223	2203	2146	868
45°	1068	1473	1628	1488	1378	821
55°	702	1003	1080	980	909	627
65°	359	624	674	608	538	362
75°	133	376	385	332	278	145
85°	23	237	194	152	122	29
90°	2	201	141	103	80	2
95°	1	194	123	87	66	1
105°	1	177	114	74	57	1
115°	1	163	127	80	63	1
125°	1	134	148	98	77	1
135°	1	51	158	126	99	1
145°	1	5	122	143	123	1
155°	1	3	27	94	105	0
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°	1906.5	1906.5	1906.5	1906.5	1906.5	1906.5	1906.5	1906.5	1906.5	1906.5	1906.5
2.5°	1915.8	1908.3	1895.2	1894.3	1885.9	1882.1	1883.1	1880.3	1877.5	1872.8	1865.3
5°	1909.3	1895.2	1873.7	1873.7	1878.4	1883.1	1894.3	1904.6	1907.4	1913.9	1913.0
7.5°	1897.1	1875.6	1855.0	1871.9	1888.7	1895.2	1908.3	1927.0	1956.0	2009.3	2061.7
10°	1877.5	1848.5	1841.9	1869.1	1891.5	1911.1	1941.1	2028.0	2108.4	2187.9	2239.3
12.5°	1855.0	1819.5	1828.9	1863.4	1915.8	1953.2	2029.9	2144.9	2208.5	2301.0	2376.8
15°	1821.4	1787.7	1804.5	1856.0	1965.4	2045.8	2088.8	2229.0	2330.9	2407.6	2492.7
17.5°	1784.9	1755.0	1778.4	1869.1	2017.7	2095.3	2164.5	2283.3	2381.4	2494.6	2575.0
20°	1744.7	1718.5	1748.4	1885.9	2043.0	2122.4	2199.1	2312.2	2442.2	2559.1	2628.3
22.5°	1698.0	1674.6	1720.4	1893.4	2052.3	2131.8	2206.6	2338.4	2473.1	2569.4	2628.3
25°	1647.5	1624.1	1686.7	1878.4	2043.0	2115.9	2196.3	2352.4	2462.8	2538.5	2611.4
27.5°	1593.2	1567.1	1661.5	1847.6	2005.6	2087.8	2178.5	2325.3	2412.3	2496.4	2570.3
30°	1526.8	1503.5	1617.5	1802.7	1953.2	2050.4	2128.0	2259.9	2343.1	2426.3	2483.3
32.5°	1460.5	1438.0	1564.2	1739.1	1893.4	1985.0	2059.8	2162.6	2257.1	2321.6	2357.1
35°	1388.5	1363.2	1502.5	1661.5	1826.0	1905.5	1968.2	2061.7	2141.1	2188.8	2223.4
37.5°	1316.5	1289.4	1424.0	1580.1	1737.2	1810.2	1862.5	1956.9	2017.7	2057.0	2086.0
40°	1235.1	1207.1	1342.7	1488.5	1644.7	1696.1	1750.3	1834.5	1879.3	1911.1	1925.2
42.5°	1152.8	1124.8	1254.8	1392.2	1531.5	1582.0	1638.1	1704.5	1748.4	1767.1	1767.1
45°	1067.8	1040.6	1164.1	1296.8	1414.6	1472.6	1522.2	1575.5	1611.9	1626.9	1627.8
47.5°	978.9	956.5	1074.3	1194.9	1305.3	1355.7	1394.1	1445.5	1477.3	1481.0	1480.1
50°	888.2	868.6	974.3	1093.0	1191.2	1236.1	1269.7	1317.4	1342.7	1341.7	1337.0
52.5°	792.9	780.7	878.9	987.4	1076.2	1116.4	1146.3	1188.4	1208.9	1208.9	1205.2
55°	702.2	694.7	779.8	884.5	967.7	1003.3	1031.3	1068.7	1085.5	1085.5	1079.9
57.5°	610.6	609.6	689.1	782.6	862.1	893.9	923.8	956.5	971.5	971.5	962.1
60°	520.8	525.5	604.0	690.0	763.0	793.8	820.0	851.8	861.1	863.0	861.1
62.5°	437.6	449.7	524.5	603.1	676.0	702.2	725.6	756.4	763.9	766.7	762.0
65°	359.0	377.7	453.5	528.3	596.5	623.6	644.2	665.7	672.3	675.1	674.1
67.5°	294.5	314.2	389.9	463.8	526.4	547.9	568.5	587.2	588.1	592.8	589.0
70°	228.1	258.1	333.8	403.9	462.8	482.5	499.3	512.4	515.2	516.1	515.2
72.5°	175.8	211.3	283.3	352.5	405.8	424.5	437.6	447.9	447.9	448.8	446.0
75°	132.8	175.8	245.9	309.5	357.2	375.9	386.2	392.7	389.0	388.0	385.2
77.5°	96.3	145.9	212.2	272.1	317.0	331.0	340.3	341.3	335.7	334.7	329.1
80°	66.4	118.7	183.3	239.4	280.5	294.5	299.2	295.5	290.8	285.2	277.7
82.5°	43.9	96.3	158.9	212.2	250.6	261.8	265.5	259.9	253.4	244.0	231.9
85°	23.4	77.6	138.4	189.8	226.3	236.6	238.4	228.1	217.9	205.7	193.5
87.5°	10.3	63.6	123.4	174.8	206.6	214.1	215.0	203.8	190.7	176.7	161.8
90°	1.9	54.2	114.1	163.6	194.5	201.0	201.0	186.1	173.0	158.0	141.2
92.5°	0.9	51.4	111.3	159.9	190.7	197.3	196.3	180.5	164.6	147.7	130.9
95°	0.9	44.9	104.7	156.1	187.9	194.5	193.5	176.7	159.9	142.1	123.4
97.5°	0.9	37.4	98.2	149.6	183.3	189.8	189.8	173.9	157.1	138.4	118.7
100°	0.0	29.0	90.7	143.1	176.7	185.1	186.1	171.1	153.3	134.6	115.9
102.5°	0.0	19.6	84.1	137.4	172.0	180.5	182.3	170.2	151.5	132.8	114.1
105°	0.9	12.2	75.7	130.9	167.4	176.7	179.5	169.2	150.5	132.8	114.1
107.5°	0.9	8.4	67.3	124.4	163.6	173.9	177.6	169.2	151.5	133.7	115.9
110°	0.9	7.5	57.0	117.8	158.9	170.2	175.8	170.2	153.3	136.5	118.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.9	5.6	43.0	109.4	153.3	166.4	173.9	171.1	156.1	139.3	122.5
115°	0.9	4.7	29.0	101.0	147.7	162.7	172.0	172.0	158.9	143.1	127.2
117.5°	0.9	4.7	19.6	89.8	141.2	158.0	168.3	173.0	162.7	146.8	132.8
120°	0.9	3.7	9.3	76.7	132.8	151.5	164.6	173.0	165.5	151.5	137.4
122.5°	0.9	3.7	7.5	58.9	123.4	144.0	158.9	172.0	168.3	155.2	143.1
125°	0.9	2.8	6.5	39.3	111.3	133.7	151.5	169.2	169.2	158.9	147.7
127.5°	0.9	2.8	5.6	28.0	95.4	122.5	141.2	164.6	169.2	161.8	152.4
130°	0.9	2.8	4.7	8.4	72.9	106.6	129.0	157.1	167.4	163.6	155.2
132.5°	0.9	1.9	4.7	6.5	46.7	83.2	112.2	144.9	161.8	163.6	158.0
135°	0.9	1.9	3.7	5.6	33.7	51.4	89.8	130.0	151.5	158.0	158.0
137.5°	0.9	1.9	3.7	4.7	15.0	38.3	56.1	112.2	138.4	150.5	153.3
140°	0.9	1.9	2.8	3.7	5.6	20.6	40.2	88.8	122.5	139.3	146.8
142.5°	0.9	1.9	2.8	3.7	4.7	4.7	24.3	51.4	102.8	124.4	136.5
145°	0.9	1.9	1.9	2.8	3.7	4.7	4.7	39.3	73.9	106.6	122.5
147.5°	0.9	0.9	1.9	2.8	3.7	3.7	3.7	17.8	43.9	81.3	104.7
150°	0.9	0.9	1.9	1.9	2.8	2.8	3.7	3.7	29.0	45.8	77.6
152.5°	0.9	0.9	1.9	1.9	2.8	2.8	2.8	3.7	3.7	30.9	43.0
155°	0.9	0.9	1.9	1.9	1.9	2.8	2.8	2.8	2.8	3.7	27.1
157.5°	0.9	0.9	1.9	1.9	1.9	1.9	1.9	2.8	2.8	3.7	3.7
160°	0.9	1.9	1.9	1.9	1.9	1.9	1.9	2.8	2.8	2.8	3.7
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°	1906.5	1906.5	1906.5	1906.5	1906.5	1906.5	1906.5	1906.5	1906.5	1906.5
2.5°	1874.7	1888.7	1888.7	1900.8	1907.4	1905.5	1907.4	1911.1	1899.9	1896.2
5°	1933.6	1961.6	1975.6	2007.4	2014.9	2028.9	2033.6	2049.5	2053.2	2042.0
7.5°	2118.7	2176.7	2214.1	2252.4	2269.2	2277.6	2292.6	2302.9	2318.8	2306.6
10°	2292.6	2362.7	2416.0	2458.1	2468.4	2476.8	2494.6	2519.8	2517.9	2516.1
12.5°	2443.1	2504.9	2570.3	2631.1	2661.9	2668.5	2694.7	2725.5	2731.1	2705.9
15°	2567.5	2653.5	2727.4	2791.9	2804.1	2820.9	2840.5	2850.8	2846.1	2849.9
17.5°	2671.3	2744.2	2796.6	2831.2	2838.6	2851.7	2869.5	2882.6	2884.5	2885.4
20°	2712.4	2761.0	2811.5	2859.2	2874.2	2887.3	2908.8	2920.0	2918.1	2912.5
22.5°	2704.9	2776.0	2822.8	2862.0	2877.0	2889.1	2907.8	2915.3	2912.5	2906.9
25°	2693.7	2754.5	2795.6	2816.2	2816.2	2825.6	2820.9	2815.3	2808.7	2809.7
27.5°	2640.4	2676.0	2704.0	2727.4	2730.2	2731.1	2728.3	2722.7	2719.0	2710.6
30°	2532.0	2575.0	2588.1	2586.2	2582.5	2581.5	2570.3	2561.9	2551.6	2552.5
32.5°	2404.8	2414.2	2419.8	2403.9	2394.5	2392.7	2382.4	2368.3	2354.3	2339.4
35°	2241.2	2234.6	2221.5	2210.3	2202.8	2191.6	2176.7	2162.6	2144.9	2145.8
37.5°	2083.2	2062.6	2043.9	2013.0	2007.4	1981.3	1952.3	1929.8	1900.8	1885.0
40°	1918.6	1898.0	1874.7	1841.0	1826.0	1801.7	1769.9	1732.5	1709.2	1699.8
42.5°	1761.5	1736.3	1709.2	1669.0	1650.3	1630.6	1597.0	1560.5	1543.7	1540.9
45°	1608.2	1579.2	1553.0	1508.1	1488.5	1465.1	1430.5	1408.1	1383.8	1378.2
47.5°	1460.5	1435.2	1395.0	1360.4	1341.7	1322.1	1286.6	1266.0	1248.2	1241.7
50°	1317.4	1293.1	1262.2	1223.9	1206.1	1187.4	1162.2	1142.6	1122.0	1115.4
52.5°	1189.3	1165.0	1133.2	1103.3	1085.5	1074.3	1050.9	1028.5	1012.6	1002.3
55°	1065.9	1043.5	1014.5	986.4	979.9	964.9	937.8	918.2	907.9	908.8
57.5°	952.8	933.1	910.7	883.6	873.3	859.3	841.5	818.1	806.0	802.2
60°	849.9	831.2	812.5	791.9	778.9	768.6	744.3	725.6	709.7	707.8
62.5°	751.7	737.7	721.8	701.2	690.0	678.8	657.3	639.5	627.4	623.6
65°	666.7	654.5	635.8	619.0	607.7	596.5	576.0	558.2	547.9	537.6
67.5°	582.5	572.2	558.2	540.4	530.1	518.9	501.2	481.5	469.4	466.6
70°	507.7	496.5	485.3	466.6	457.2	450.7	431.0	411.4	402.0	398.3
72.5°	443.2	431.0	415.1	402.0	396.4	384.3	365.6	352.5	340.3	332.9
75°	375.9	368.4	357.2	342.2	331.9	323.5	308.5	295.5	285.2	277.7
77.5°	320.7	311.4	302.0	287.0	279.6	272.1	256.2	245.0	234.7	230.9
80°	269.3	260.9	247.8	236.6	230.0	223.5	211.3	199.2	191.7	187.9
82.5°	222.5	215.0	204.8	195.4	187.9	183.3	172.0	161.8	155.2	149.6
85°	184.2	174.8	165.5	157.1	151.5	147.7	139.3	131.8	123.4	121.5
87.5°	151.5	144.0	135.6	127.2	123.4	118.7	111.3	105.7	99.1	96.3
90°	130.0	120.6	113.1	106.6	102.8	100.0	94.4	87.0	82.3	79.5
92.5°	117.8	109.4	102.8	96.3	93.5	90.7	84.1	78.5	73.9	70.1
95°	110.3	101.9	95.4	89.8	87.0	85.1	79.5	73.9	69.2	66.4
97.5°	104.7	95.4	88.8	84.1	81.3	79.5	74.8	70.1	65.4	62.6
100°	100.0	90.7	84.1	79.5	77.6	75.7	71.1	66.4	62.6	59.8
102.5°	98.2	87.9	81.3	77.6	75.7	73.9	69.2	65.4	60.8	58.0
105°	98.2	87.0	80.4	75.7	73.9	72.0	68.3	64.5	59.8	57.0
107.5°	100.0	87.9	80.4	76.7	74.8	72.9	68.3	64.5	59.8	57.0
110°	102.8	90.7	82.3	77.6	75.7	73.9	69.2	65.4	60.8	58.0



TEST NUMBER: P232591

CATALOG NUMBER: 4SKB1-LD5-7-N-UNV-L835-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	106.6	93.5	85.1	79.5	77.6	75.7	71.1	67.3	62.6	59.8
115°	111.3	97.2	88.8	82.3	80.4	78.5	73.9	69.2	65.4	62.6
117.5°	116.9	102.8	92.6	86.0	84.1	81.3	76.7	72.0	68.3	65.4
120°	122.5	109.4	98.2	90.7	87.9	85.1	80.4	75.7	71.1	68.3
122.5°	129.0	115.0	103.8	96.3	93.5	90.7	85.1	80.4	75.7	72.0
125°	135.6	122.5	110.3	101.9	98.2	95.4	89.8	84.1	80.4	76.7
127.5°	141.2	129.0	116.9	108.5	104.7	101.0	95.4	89.8	85.1	82.3
130°	145.9	135.6	124.4	115.0	111.3	108.5	101.0	95.4	90.7	87.9
132.5°	150.5	141.2	131.8	122.5	118.7	115.0	108.5	101.9	97.2	93.5
135°	153.3	145.9	138.4	130.0	126.2	121.5	115.0	108.5	102.8	99.1
137.5°	153.3	149.6	143.1	136.5	132.8	129.0	121.5	115.0	109.4	106.6
140°	148.7	149.6	146.8	142.1	138.4	135.6	129.0	121.5	115.9	113.1
142.5°	142.1	144.9	146.8	144.0	142.1	140.2	134.6	128.1	122.5	118.7
145°	131.8	137.4	141.2	144.0	143.1	142.1	137.4	132.8	127.2	123.4
147.5°	118.7	127.2	131.8	138.4	140.2	140.2	138.4	134.6	130.0	127.2
150°	100.0	112.2	120.6	127.2	130.0	133.7	133.7	130.9	128.1	125.3
152.5°	71.1	90.7	102.8	112.2	115.9	119.7	124.4	122.5	118.7	116.9
155°	40.2	49.6	74.8	89.8	94.4	99.1	106.6	108.5	107.5	104.7
157.5°	20.6	33.7	42.1	48.6	51.4	58.9	73.9	84.1	83.2	85.1
160°	4.7	5.6	15.9	29.9	33.7	35.5	39.3	42.1	42.1	40.2
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)