

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: P232588

Luminaire Tested: **4SKB1-LD5-6-N-UNV-L835-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P232588
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-LD5-6-N-UNV-L835-CD1-U
Description: METALUX SKYBAR 4' WAVESTREAM STRIP
WITH NARROW LENS
Light Source: (196) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6026.0 lumens
Efficiency: N/A
Efficacy: 127.8 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

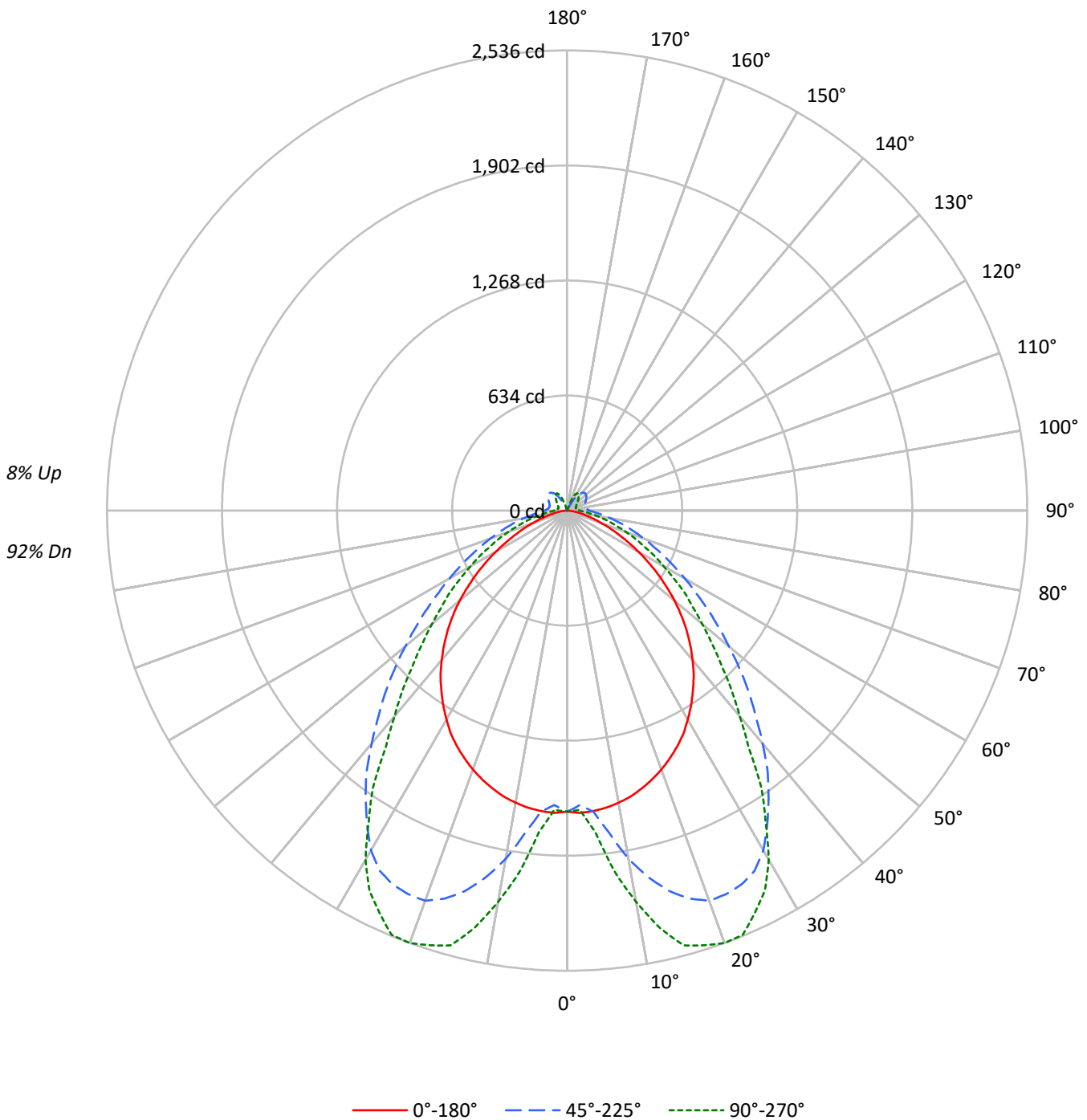
Input Watts (W): 47.16
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	17865	17865	17865
5°	17845	16713	17429
10°	17637	18456	19856
15°	17331	19582	21063
20°	16949	19870	20386
25°	16473	19166	18814
30°	15853	17841	16503
35°	15111	15761	13510
40°	14238	13569	10507
45°	13189	11495	8429
50°	11914	9533	6803
55°	10390	7835	5569
60°	8666	6409	4391
65°	6885	5191	3404
70°	5207	4141	2595
75°	3779	3266	1877
80°	2535	2509	1331
85°	1367	1889	911



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.9	2.8
10°-20°	591.2	9.8
20°-30°	973.4	16.2
30°-40°	1093.5	18.1
40°-50°	973.1	16.1
50°-60°	752.6	12.5
60°-70°	511.0	8.5
70°-80°	305.0	5.1
80°-90°	163.6	2.7
90°-100°	107.6	1.8
100°-110°	91.3	1.5
110°-120°	84.5	1.4
120°-130°	78.7	1.3
130°-140°	66.7	1.1
140°-150°	45.6	0.8
150°-160°	17.6	0.3
160°-170°	0.5	0.0
170°-180°	0.0	0.0
0°-30°	1734.5	28.8
0°-40°	2828.1	46.9
0°-60°	4553.8	75.6
0°-90°	5533.4	91.8
90°-120°	283.4	4.7
90°-150°	474.5	7.9
90°-180°	493.0	8.2
0°-180°	6026.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1660	1660	1660	1660	1660	
5°	1662	1639	1665	1754	1778	158
15°	1586	1781	2170	2441	2481	447
25°	1434	1842	2273	2452	2446	660
35°	1209	1659	1936	1918	1868	755
45°	930	1282	1417	1296	1200	715
55°	611	873	940	853	791	546
65°	313	543	587	529	468	315
75°	116	327	335	289	242	127
85°	20	206	168	132	106	25
90°	2	175	123	90	69	2
95°	1	169	107	76	58	1
105°	1	154	99	64	50	1
115°	1	142	111	70	54	1
125°	1	116	129	86	67	1
135°	1	45	138	110	86	1
145°	1	4	107	124	107	1
155°	1	2	24	82	91	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°	1659.7	1659.7	1659.7	1659.7	1659.7	1659.7	1659.7	1659.7	1659.7	1659.7	1659.7
2.5°	1667.8	1661.3	1649.9	1649.1	1641.8	1638.5	1639.3	1636.9	1634.4	1630.4	1623.9
5°	1662.1	1649.9	1631.2	1631.2	1635.3	1639.3	1649.1	1658.1	1660.5	1666.2	1665.4
7.5°	1651.5	1632.8	1614.9	1629.6	1644.2	1649.9	1661.3	1677.6	1702.8	1749.2	1794.8
10°	1634.4	1609.2	1603.5	1627.1	1646.7	1663.7	1689.8	1765.5	1835.5	1904.7	1949.5
12.5°	1614.9	1584.0	1592.1	1622.2	1667.8	1700.4	1767.1	1867.2	1922.6	2003.2	2069.1
15°	1585.6	1556.3	1571.0	1615.7	1711.0	1781.0	1818.4	1940.5	2029.2	2096.0	2170.0
17.5°	1553.9	1527.8	1548.2	1627.1	1756.5	1824.1	1884.3	1987.7	2073.2	2171.7	2241.7
20°	1518.9	1496.1	1522.1	1641.8	1778.5	1847.7	1914.5	2012.9	2126.1	2227.8	2288.1
22.5°	1478.2	1457.8	1497.7	1648.3	1786.7	1855.8	1921.0	2035.7	2152.9	2236.8	2288.1
25°	1434.2	1413.9	1468.4	1635.3	1778.5	1842.0	1912.0	2047.9	2144.0	2209.9	2273.4
27.5°	1387.0	1364.2	1446.4	1608.4	1746.0	1817.6	1896.5	2024.3	2100.0	2173.3	2237.6
30°	1329.2	1308.9	1408.2	1569.3	1700.4	1785.0	1852.6	1967.4	2039.8	2112.2	2161.9
32.5°	1271.4	1251.9	1361.8	1514.0	1648.3	1728.1	1793.2	1882.7	1964.9	2021.1	2052.0
35°	1208.7	1186.8	1308.0	1446.4	1589.7	1658.9	1713.4	1794.8	1864.0	1905.5	1935.6
37.5°	1146.1	1122.5	1239.7	1375.6	1512.4	1575.8	1621.4	1703.6	1756.5	1790.7	1816.0
40°	1075.3	1050.8	1168.9	1295.8	1431.8	1476.5	1523.7	1597.0	1636.1	1663.7	1676.0
42.5°	1003.6	979.2	1092.3	1212.0	1333.3	1377.2	1426.1	1483.9	1522.1	1538.4	1538.4
45°	929.6	905.9	1013.4	1129.0	1231.5	1282.0	1325.1	1371.5	1403.3	1416.3	1417.1
47.5°	852.2	832.7	935.2	1040.3	1136.3	1180.3	1213.6	1258.4	1286.1	1289.3	1288.5
50°	773.3	756.2	848.2	951.5	1037.0	1076.1	1105.4	1146.9	1168.9	1168.0	1164.0
52.5°	690.2	679.7	765.1	859.5	936.9	971.9	997.9	1034.6	1052.5	1052.5	1049.2
55°	611.3	604.8	678.8	770.0	842.5	873.4	897.8	930.4	945.0	945.0	940.1
57.5°	531.5	530.7	599.9	681.3	750.5	778.2	804.2	832.7	845.7	845.7	837.6
60°	453.4	457.4	525.8	600.7	664.2	691.1	713.8	741.5	749.7	751.3	749.7
62.5°	380.9	391.5	456.6	525.0	588.5	611.3	631.6	658.5	665.0	667.5	663.4
65°	312.6	328.8	394.8	459.9	519.3	542.9	560.8	579.5	585.2	587.7	586.9
67.5°	256.4	273.5	339.4	403.7	458.3	477.0	494.9	511.2	512.0	516.1	512.8
70°	198.6	224.7	290.6	351.6	402.9	420.0	434.7	446.1	448.5	449.3	448.5
72.5°	153.0	184.0	246.6	306.9	353.3	369.5	380.9	389.9	389.9	390.7	388.3
75°	115.6	153.0	214.1	269.4	310.9	327.2	336.2	341.9	338.6	337.8	335.4
77.5°	83.8	127.0	184.8	236.9	275.9	288.1	296.3	297.1	292.2	291.4	286.5
80°	57.8	103.4	159.5	208.4	244.2	256.4	260.5	257.2	253.1	248.3	241.7
82.5°	38.3	83.8	138.4	184.8	218.1	227.9	231.2	226.3	220.6	212.4	201.9
85°	20.3	67.6	120.5	165.2	197.0	205.9	207.6	198.6	189.7	179.1	168.5
87.5°	9.0	55.3	107.4	152.2	179.9	186.4	187.2	177.4	166.0	153.8	140.8
90°	1.6	47.2	99.3	142.4	169.3	175.0	175.0	162.0	150.6	137.6	122.9
92.5°	0.8	44.8	96.9	139.2	166.0	171.7	170.9	157.1	143.3	128.6	114.0
95°	0.8	39.1	91.2	135.9	163.6	169.3	168.5	153.8	139.2	123.7	107.4
97.5°	0.8	32.6	85.5	130.2	159.5	165.2	165.2	151.4	136.7	120.5	103.4
100°	0.0	25.2	79.0	124.5	153.8	161.2	162.0	149.0	133.5	117.2	100.9
102.5°	0.0	17.1	73.3	119.7	149.8	157.1	158.7	148.1	131.9	115.6	99.3
105°	0.8	10.6	65.9	114.0	145.7	153.8	156.3	147.3	131.0	115.6	99.3
107.5°	0.8	7.3	58.6	108.3	142.4	151.4	154.7	147.3	131.9	116.4	100.9
110°	0.8	6.5	49.7	102.6	138.4	148.1	153.0	148.1	133.5	118.8	103.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.8	4.9	37.4	95.2	133.5	144.9	151.4	149.0	135.9	121.3	106.6
115°	0.8	4.1	25.2	87.9	128.6	141.6	149.8	149.8	138.4	124.5	110.7
117.5°	0.8	4.1	17.1	78.1	122.9	137.6	146.5	150.6	141.6	127.8	115.6
120°	0.8	3.3	8.1	66.7	115.6	131.9	143.3	150.6	144.1	131.9	119.7
122.5°	0.8	3.3	6.5	51.3	107.4	125.4	138.4	149.8	146.5	135.1	124.5
125°	0.8	2.4	5.7	34.2	96.9	116.4	131.9	147.3	147.3	138.4	128.6
127.5°	0.8	2.4	4.9	24.4	83.0	106.6	122.9	143.3	147.3	140.8	132.7
130°	0.8	2.4	4.1	7.3	63.5	92.8	112.3	136.7	145.7	142.4	135.1
132.5°	0.8	1.6	4.1	5.7	40.7	72.4	97.7	126.2	140.8	142.4	137.6
135°	0.8	1.6	3.3	4.9	29.3	44.8	78.1	113.1	131.9	137.6	137.6
137.5°	0.8	1.6	3.3	4.1	13.0	33.4	48.8	97.7	120.5	131.0	133.5
140°	0.8	1.6	2.4	3.3	4.9	17.9	35.0	77.3	106.6	121.3	127.8
142.5°	0.8	1.6	2.4	3.3	4.1	4.1	21.2	44.8	89.5	108.3	118.8
145°	0.8	1.6	1.6	2.4	3.3	4.1	4.1	34.2	64.3	92.8	106.6
147.5°	0.8	0.8	1.6	2.4	3.3	3.3	3.3	15.5	38.3	70.8	91.2
150°	0.8	0.8	1.6	1.6	2.4	2.4	3.3	3.3	25.2	39.9	67.6
152.5°	0.8	0.8	1.6	1.6	2.4	2.4	2.4	3.3	3.3	26.9	37.4
155°	0.8	0.8	1.6	1.6	1.6	2.4	2.4	2.4	2.4	3.3	23.6
157.5°	0.8	0.8	1.6	1.6	1.6	1.6	1.6	2.4	2.4	3.3	3.3
160°	0.8	1.6	1.6	1.6	1.6	1.6	1.6	2.4	2.4	2.4	3.3
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°	1659.7	1659.7	1659.7	1659.7	1659.7	1659.7	1659.7	1659.7	1659.7	1659.7
2.5°	1632.0	1644.2	1644.2	1654.8	1660.5	1658.9	1660.5	1663.7	1654.0	1650.7
5°	1683.3	1707.7	1719.9	1747.6	1754.1	1766.3	1770.4	1784.2	1787.5	1777.7
7.5°	1844.5	1894.9	1927.5	1960.8	1975.5	1982.8	1995.8	2004.8	2018.6	2008.1
10°	1995.8	2056.9	2103.3	2139.9	2148.9	2156.2	2171.7	2193.6	2192.0	2190.4
12.5°	2126.9	2180.6	2237.6	2290.5	2317.4	2323.1	2345.9	2372.7	2377.6	2355.6
15°	2235.2	2310.0	2374.3	2430.5	2441.1	2455.7	2472.8	2481.8	2477.7	2481.0
17.5°	2325.5	2389.0	2434.6	2464.7	2471.2	2482.6	2498.1	2509.5	2511.1	2511.9
20°	2361.3	2403.6	2447.6	2489.1	2502.1	2513.5	2532.3	2542.0	2540.4	2535.5
22.5°	2354.8	2416.7	2457.4	2491.6	2504.6	2515.2	2531.4	2538.0	2535.5	2530.6
25°	2345.0	2397.9	2433.8	2451.7	2451.7	2459.8	2455.7	2450.9	2445.2	2446.0
27.5°	2298.6	2329.6	2354.0	2374.3	2376.8	2377.6	2375.2	2370.3	2367.0	2359.7
30°	2204.2	2241.7	2253.1	2251.4	2248.2	2247.4	2237.6	2230.3	2221.3	2222.1
32.5°	2093.5	2101.7	2106.5	2092.7	2084.6	2082.9	2074.0	2061.8	2049.6	2036.5
35°	1951.1	1945.4	1934.0	1924.2	1917.7	1907.9	1894.9	1882.7	1867.2	1868.1
37.5°	1813.5	1795.6	1779.3	1752.5	1747.6	1724.8	1699.6	1680.0	1654.8	1641.0
40°	1670.3	1652.4	1632.0	1602.7	1589.7	1568.5	1540.8	1508.3	1487.9	1479.8
42.5°	1533.5	1511.5	1487.9	1452.9	1436.7	1419.6	1390.3	1358.5	1343.9	1341.4
45°	1400.0	1374.8	1352.0	1312.9	1295.8	1275.5	1245.4	1225.8	1204.7	1199.8
47.5°	1271.4	1249.4	1214.4	1184.3	1168.0	1150.9	1120.0	1102.1	1086.6	1080.9
50°	1146.9	1125.7	1098.9	1065.5	1050.0	1033.7	1011.8	994.7	976.8	971.1
52.5°	1035.4	1014.2	986.5	960.5	945.0	935.2	914.9	895.4	881.5	872.6
55°	927.9	908.4	883.2	858.7	853.0	840.0	816.4	799.3	790.4	791.2
57.5°	829.4	812.3	792.8	769.2	760.2	748.0	732.6	712.2	701.6	698.4
60°	739.9	723.6	707.3	689.4	678.0	669.1	647.9	631.6	617.8	616.2
62.5°	654.4	642.2	628.4	610.5	600.7	590.9	572.2	556.8	546.2	542.9
65°	580.4	569.8	553.5	538.8	529.1	519.3	501.4	485.9	477.0	468.0
67.5°	507.1	498.1	485.9	470.5	461.5	451.8	436.3	419.2	408.6	406.2
70°	442.0	432.2	422.4	406.2	398.0	392.3	375.2	358.1	350.0	346.8
72.5°	385.8	375.2	361.4	350.0	345.1	334.5	318.3	306.9	296.3	289.8
75°	327.2	320.7	310.9	297.9	289.0	281.6	268.6	257.2	248.3	241.7
77.5°	279.2	271.1	262.9	249.9	243.4	236.9	223.0	213.3	204.3	201.0
80°	234.4	227.1	215.7	205.9	200.2	194.5	184.0	173.4	166.9	163.6
82.5°	193.7	187.2	178.3	170.1	163.6	159.5	149.8	140.8	135.1	130.2
85°	160.4	152.2	144.1	136.7	131.9	128.6	121.3	114.8	107.4	105.8
87.5°	131.9	125.4	118.0	110.7	107.4	103.4	96.9	92.0	86.3	83.8
90°	113.1	105.0	98.5	92.8	89.5	87.1	82.2	75.7	71.6	69.2
92.5°	102.6	95.2	89.5	83.8	81.4	79.0	73.3	68.4	64.3	61.0
95°	96.0	88.7	83.0	78.1	75.7	74.1	69.2	64.3	60.2	57.8
97.5°	91.2	83.0	77.3	73.3	70.8	69.2	65.1	61.0	57.0	54.5
100°	87.1	79.0	73.3	69.2	67.6	65.9	61.9	57.8	54.5	52.1
102.5°	85.5	76.5	70.8	67.6	65.9	64.3	60.2	57.0	52.9	50.5
105°	85.5	75.7	70.0	65.9	64.3	62.7	59.4	56.2	52.1	49.7
107.5°	87.1	76.5	70.0	66.7	65.1	63.5	59.4	56.2	52.1	49.7
110°	89.5	79.0	71.6	67.6	65.9	64.3	60.2	57.0	52.9	50.5



TEST NUMBER: P232588

CATALOG NUMBER: 4SKB1-LD5-6-N-UNV-L835-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	92.8	81.4	74.1	69.2	67.6	65.9	61.9	58.6	54.5	52.1
115°	96.9	84.7	77.3	71.6	70.0	68.4	64.3	60.2	57.0	54.5
117.5°	101.7	89.5	80.6	74.9	73.3	70.8	66.7	62.7	59.4	57.0
120°	106.6	95.2	85.5	79.0	76.5	74.1	70.0	65.9	61.9	59.4
122.5°	112.3	100.1	90.4	83.8	81.4	79.0	74.1	70.0	65.9	62.7
125°	118.0	106.6	96.0	88.7	85.5	83.0	78.1	73.3	70.0	66.7
127.5°	122.9	112.3	101.7	94.4	91.2	87.9	83.0	78.1	74.1	71.6
130°	127.0	118.0	108.3	100.1	96.9	94.4	87.9	83.0	79.0	76.5
132.5°	131.0	122.9	114.8	106.6	103.4	100.1	94.4	88.7	84.7	81.4
135°	133.5	127.0	120.5	113.1	109.9	105.8	100.1	94.4	89.5	86.3
137.5°	133.5	130.2	124.5	118.8	115.6	112.3	105.8	100.1	95.2	92.8
140°	129.4	130.2	127.8	123.7	120.5	118.0	112.3	105.8	100.9	98.5
142.5°	123.7	126.2	127.8	125.4	123.7	122.1	117.2	111.5	106.6	103.4
145°	114.8	119.7	122.9	125.4	124.5	123.7	119.7	115.6	110.7	107.4
147.5°	103.4	110.7	114.8	120.5	122.1	122.1	120.5	117.2	113.1	110.7
150°	87.1	97.7	105.0	110.7	113.1	116.4	116.4	114.0	111.5	109.1
152.5°	61.9	79.0	89.5	97.7	100.9	104.2	108.3	106.6	103.4	101.7
155°	35.0	43.1	65.1	78.1	82.2	86.3	92.8	94.4	93.6	91.2
157.5°	17.9	29.3	36.6	42.3	44.8	51.3	64.3	73.3	72.4	74.1
160°	4.1	4.9	13.8	26.0	29.3	30.9	34.2	36.6	36.6	35.0
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)