

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: P232590

Luminaire Tested: **4SKB1-LD5-6-N-UNV-L850-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P232590
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-L850-CD1-U
Description: METALUX SKYBAR 4' WAVESTREAM STRIP
WITH NARROW LENS
Light Source: (196) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6649.0 lumens
Efficiency: N/A
Efficacy: 141.0 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

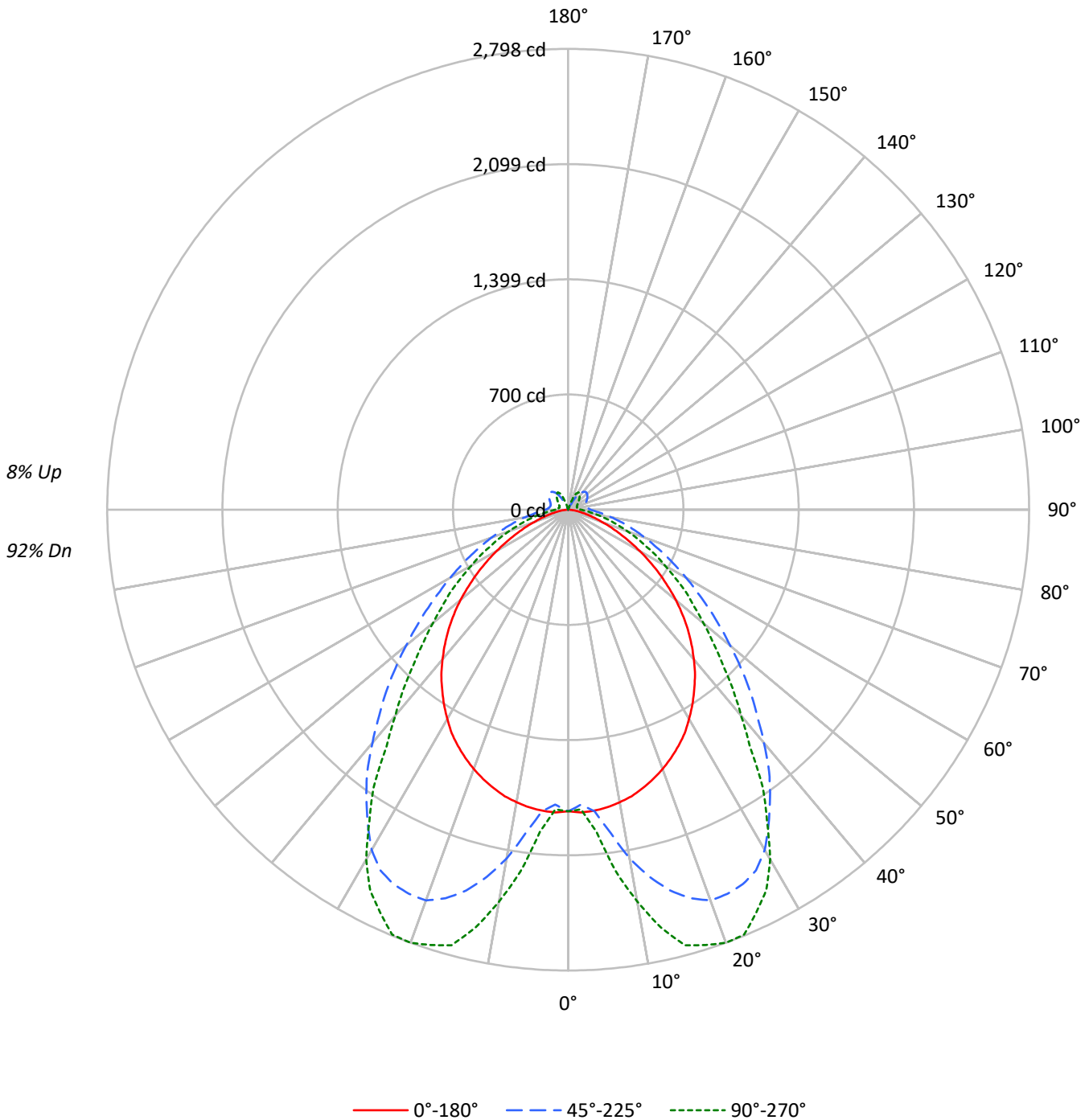
Input Watts (W): 47.16
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P232590

CATALOG NUMBER: 4SKB1-LD5-6-N-UNV-L850-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P232590

CATALOG NUMBER: 4SKB1-LD5-6-N-UNV-L850-CD1-U

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°	19712	19712	19712
5°	19691	18441	19231
10°	19461	20363	21908
15°	19122	21607	23240
20°	18701	21924	22494
25°	18177	21148	20759
30°	17492	19686	18209
35°	16674	17390	14907
40°	15709	14972	11593
45°	14553	12684	9301
50°	13145	10519	7506
55°	11464	8645	6145
60°	9563	7072	4845
65°	7597	5727	3756
70°	5745	4570	2863
75°	4168	3603	2072
80°	2798	2769	1469
85°	1516	2084	1006



TEST NUMBER: P232590

CATALOG NUMBER: 4SKB1-LD5-6-N-UNV-L850-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.5	2.8
10°-20°	652.3	9.8
20°-30°	1074.0	16.2
30°-40°	1206.6	18.1
40°-50°	1073.7	16.1
50°-60°	830.4	12.5
60°-70°	563.9	8.5
70°-80°	336.5	5.1
80°-90°	180.5	2.7
90°-100°	118.8	1.8
100°-110°	100.7	1.5
110°-120°	93.2	1.4
120°-130°	86.8	1.3
130°-140°	73.6	1.1
140°-150°	50.3	0.8
150°-160°	19.4	0.3
160°-170°	0.6	0.0
170°-180°	0.0	0.0
0°-30°	1913.8	28.8
0°-40°	3120.4	46.9
0°-60°	5024.6	75.6
0°-90°	6105.4	91.8
90°-120°	312.7	4.7
90°-150°	523.5	7.9
90°-180°	544.0	8.2
0°-180°	6649.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1831	1831	1831	1831	1831	
5°	1834	1809	1838	1935	1962	174
15°	1750	1965	2394	2694	2738	493
25°	1582	2032	2508	2705	2699	728
35°	1334	1830	2136	2116	2061	833
45°	1026	1414	1564	1430	1324	789
55°	674	964	1037	941	873	602
65°	345	599	648	584	516	348
75°	128	361	370	319	267	140
85°	22	227	186	146	117	28
90°	2	193	136	99	76	2
95°	1	187	119	84	64	1
105°	1	170	110	71	55	1
115°	1	156	122	77	60	1
125°	1	128	142	94	74	1
135°	1	49	152	121	95	1
145°	1	4	118	137	119	1
155°	1	3	26	91	101	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P232590

CATALOG NUMBER: 4SKB1-LD5-6-N-UNV-L850-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1831.3	1831.3	1831.3	1831.3	1831.3	1831.3	1831.3	1831.3	1831.3	1831.3	1831.3
2.5°	1840.2	1833.1	1820.5	1819.6	1811.5	1807.9	1808.8	1806.1	1803.4	1798.9	1791.7
5°	1834.0	1820.5	1799.8	1799.8	1804.3	1808.8	1819.6	1829.5	1832.2	1838.5	1837.6
7.5°	1822.3	1801.6	1781.9	1798.0	1814.2	1820.5	1833.1	1851.0	1878.9	1930.1	1980.4
10°	1803.4	1775.6	1769.3	1795.3	1816.9	1835.8	1864.5	1948.0	2025.3	2101.6	2151.0
12.5°	1781.9	1747.7	1756.7	1790.0	1840.2	1876.2	1949.8	2060.3	2121.4	2210.3	2283.0
15°	1749.5	1717.2	1733.4	1782.8	1887.8	1965.1	2006.4	2141.1	2239.0	2312.7	2394.4
17.5°	1714.5	1685.8	1708.2	1795.3	1938.1	2012.7	2079.1	2193.2	2287.5	2396.2	2473.4
20°	1675.9	1650.7	1679.5	1811.5	1962.4	2038.7	2112.4	2221.0	2345.9	2458.2	2524.6
22.5°	1631.0	1608.5	1652.5	1818.7	1971.4	2047.7	2119.6	2246.2	2375.5	2468.0	2524.6
25°	1582.5	1560.0	1620.2	1804.3	1962.4	2032.4	2109.7	2259.7	2365.6	2438.4	2508.4
27.5°	1530.4	1505.2	1596.0	1774.7	1926.5	2005.5	2092.6	2233.6	2317.1	2398.0	2468.9
30°	1466.6	1444.2	1553.7	1731.6	1876.2	1969.6	2044.1	2170.8	2250.7	2330.6	2385.4
32.5°	1402.9	1381.3	1502.6	1670.5	1818.7	1906.7	1978.6	2077.4	2168.1	2230.0	2264.2
35°	1333.7	1309.5	1443.3	1596.0	1754.0	1830.4	1890.5	1980.4	2056.7	2102.5	2135.7
37.5°	1264.6	1238.5	1367.8	1517.8	1668.7	1738.8	1789.1	1879.8	1938.1	1975.9	2003.7
40°	1186.4	1159.5	1289.7	1429.8	1579.8	1629.2	1681.3	1762.1	1805.2	1835.8	1849.2
42.5°	1107.4	1080.4	1205.3	1337.3	1471.1	1519.6	1573.5	1637.3	1679.5	1697.4	1697.4
45°	1025.7	999.6	1118.2	1245.7	1358.9	1414.5	1462.1	1513.3	1548.4	1562.7	1563.6
47.5°	940.3	918.8	1031.9	1147.8	1253.8	1302.3	1339.1	1388.5	1419.0	1422.6	1421.7
50°	853.2	834.4	935.8	1049.9	1144.2	1187.3	1219.6	1265.5	1289.7	1288.8	1284.3
52.5°	761.6	749.9	844.2	948.4	1033.7	1072.4	1101.1	1141.5	1161.3	1161.3	1157.7
55°	674.5	667.3	749.0	849.6	929.6	963.7	990.6	1026.6	1042.7	1042.7	1037.3
57.5°	586.5	585.6	661.9	751.7	828.1	858.6	887.3	918.8	933.1	933.1	924.2
60°	500.3	504.7	580.2	662.8	732.9	762.5	787.7	818.2	827.2	829.0	827.2
62.5°	420.3	432.0	503.8	579.3	649.3	674.5	696.9	726.6	733.8	736.5	732.0
65°	344.9	362.8	435.6	507.4	573.0	599.0	618.8	639.5	645.7	648.4	647.5
67.5°	282.9	301.8	374.5	445.5	505.6	526.3	546.1	564.0	564.9	569.4	565.8
70°	219.1	247.9	320.6	388.0	444.6	463.4	479.6	492.2	494.9	495.8	494.9
72.5°	168.8	203.0	272.1	338.6	389.8	407.7	420.3	430.2	430.2	431.1	428.4
75°	127.5	168.8	236.2	297.3	343.1	361.0	370.9	377.2	373.6	372.7	370.0
77.5°	92.5	140.1	203.9	261.4	304.5	317.9	326.9	327.8	322.4	321.5	316.1
80°	63.8	114.1	176.0	229.9	269.4	282.9	287.4	283.8	279.3	273.9	266.7
82.5°	42.2	92.5	152.7	203.9	240.7	251.5	255.1	249.7	243.4	234.4	222.7
85°	22.5	74.5	132.9	182.3	217.3	227.2	229.0	219.1	209.3	197.6	185.9
87.5°	9.9	61.1	118.6	167.9	198.5	205.7	206.6	195.8	183.2	169.7	155.4
90°	1.8	52.1	109.6	157.2	186.8	193.1	193.1	178.7	166.2	151.8	135.6
92.5°	0.9	49.4	106.9	153.6	183.2	189.5	188.6	173.3	158.1	141.9	125.7
95°	0.9	43.1	100.6	150.0	180.5	186.8	185.9	169.7	153.6	136.5	118.6
97.5°	0.9	35.9	94.3	143.7	176.0	182.3	182.3	167.1	150.9	132.9	114.1
100°	0.0	27.8	87.1	137.4	169.7	177.8	178.7	164.4	147.3	129.3	111.4
102.5°	0.0	18.9	80.8	132.0	165.3	173.3	175.1	163.5	145.5	127.5	109.6
105°	0.9	11.7	72.7	125.7	160.8	169.7	172.4	162.6	144.6	127.5	109.6
107.5°	0.9	8.1	64.7	119.4	157.2	167.1	170.6	162.6	145.5	128.4	111.4
110°	0.9	7.2	54.8	113.2	152.7	163.5	168.8	163.5	147.3	131.1	114.1



TEST NUMBER: P232590

CATALOG NUMBER: 4SKB1-LD5-6-N-UNV-L850-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.9	5.4	41.3	105.1	147.3	159.9	167.1	164.4	150.0	133.8	117.7
115°	0.9	4.5	27.8	97.0	141.9	156.3	165.3	165.3	152.7	137.4	122.1
117.5°	0.9	4.5	18.9	86.2	135.6	151.8	161.7	166.2	156.3	141.0	127.5
120°	0.9	3.6	9.0	73.6	127.5	145.5	158.1	166.2	159.0	145.5	132.0
122.5°	0.9	3.6	7.2	56.6	118.6	138.3	152.7	165.3	161.7	149.1	137.4
125°	0.9	2.7	6.3	37.7	106.9	128.4	145.5	162.6	162.6	152.7	141.9
127.5°	0.9	2.7	5.4	26.9	91.6	117.7	135.6	158.1	162.6	155.4	146.4
130°	0.9	2.7	4.5	8.1	70.1	102.4	123.9	150.9	160.8	157.2	149.1
132.5°	0.9	1.8	4.5	6.3	44.9	79.9	107.8	139.2	155.4	157.2	151.8
135°	0.9	1.8	3.6	5.4	32.3	49.4	86.2	124.8	145.5	151.8	151.8
137.5°	0.9	1.8	3.6	4.5	14.4	36.8	53.9	107.8	132.9	144.6	147.3
140°	0.9	1.8	2.7	3.6	5.4	19.8	38.6	85.3	117.7	133.8	141.0
142.5°	0.9	1.8	2.7	3.6	4.5	4.5	23.4	49.4	98.8	119.4	131.1
145°	0.9	1.8	1.8	2.7	3.6	4.5	4.5	37.7	71.0	102.4	117.7
147.5°	0.9	0.9	1.8	2.7	3.6	3.6	3.6	17.1	42.2	78.1	100.6
150°	0.9	0.9	1.8	1.8	2.7	2.7	3.6	3.6	27.8	44.0	74.5
152.5°	0.9	0.9	1.8	1.8	2.7	2.7	2.7	3.6	3.6	29.6	41.3
155°	0.9	0.9	1.8	1.8	1.8	2.7	2.7	2.7	2.7	3.6	26.0
157.5°	0.9	0.9	1.8	1.8	1.8	1.8	1.8	2.7	2.7	3.6	3.6
160°	0.9	1.8	1.8	1.8	1.8	1.8	1.8	2.7	2.7	2.7	3.6
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



TEST NUMBER: P232590

CATALOG NUMBER: 4SKB1-LD5-6-N-UNV-L850-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	1831.3	1831.3	1831.3	1831.3	1831.3	1831.3	1831.3	1831.3	1831.3	1831.3
2.5°	1800.7	1814.2	1814.2	1825.9	1832.2	1830.4	1832.2	1835.8	1825.0	1821.4
5°	1857.3	1884.3	1897.7	1928.3	1935.4	1948.9	1953.4	1968.7	1972.3	1961.5
7.5°	2035.1	2090.8	2126.7	2163.6	2179.7	2187.8	2202.2	2212.1	2227.3	2215.7
10°	2202.2	2269.5	2320.7	2361.2	2371.0	2379.1	2396.2	2420.4	2418.6	2416.8
12.5°	2346.8	2406.1	2468.9	2527.3	2556.9	2563.2	2588.4	2618.0	2623.4	2599.2
15°	2466.2	2548.9	2619.8	2681.8	2693.5	2709.6	2728.5	2738.4	2733.9	2737.5
17.5°	2565.9	2636.0	2686.3	2719.5	2726.7	2739.3	2756.3	2768.9	2770.7	2771.6
20°	2605.4	2652.1	2700.6	2746.4	2760.8	2773.4	2794.1	2804.8	2803.0	2797.6
22.5°	2598.3	2666.5	2711.4	2749.1	2763.5	2775.2	2793.2	2800.3	2797.6	2792.3
25°	2587.5	2645.9	2685.4	2705.1	2705.1	2714.1	2709.6	2704.2	2698.0	2698.8
27.5°	2536.3	2570.4	2597.4	2619.8	2622.5	2623.4	2620.7	2615.3	2611.7	2603.6
30°	2432.1	2473.4	2486.0	2484.2	2480.6	2479.7	2468.9	2460.8	2451.0	2451.9
32.5°	2310.0	2318.9	2324.3	2309.1	2300.1	2298.3	2288.4	2274.9	2261.5	2247.1
35°	2152.8	2146.5	2133.9	2123.2	2116.0	2105.2	2090.8	2077.4	2060.3	2061.2
37.5°	2001.0	1981.3	1963.3	1933.7	1928.3	1903.1	1875.3	1853.7	1825.9	1810.6
40°	1842.9	1823.2	1800.7	1768.4	1754.0	1730.7	1700.1	1664.2	1641.8	1632.8
42.5°	1692.1	1667.8	1641.8	1603.1	1585.2	1566.3	1534.0	1499.0	1482.8	1480.1
45°	1544.8	1516.9	1491.8	1448.7	1429.8	1407.4	1374.1	1352.6	1329.2	1323.8
47.5°	1402.9	1378.6	1340.0	1306.8	1288.8	1269.9	1235.8	1216.1	1199.0	1192.7
50°	1265.5	1242.1	1212.5	1175.6	1158.6	1140.6	1116.4	1097.5	1077.7	1071.5
52.5°	1142.4	1119.1	1088.5	1059.8	1042.7	1031.9	1009.5	987.9	972.7	962.8
55°	1023.9	1002.3	974.5	947.5	941.2	926.9	900.8	882.0	872.1	873.0
57.5°	915.2	896.3	874.8	848.7	838.8	825.4	808.3	785.9	774.2	770.6
60°	816.4	798.4	780.5	760.7	748.1	738.3	714.9	696.9	681.7	679.9
62.5°	722.1	708.6	693.3	673.6	662.8	652.0	631.4	614.3	602.6	599.0
65°	640.4	628.7	610.7	594.6	583.8	573.0	553.2	536.2	526.3	516.4
67.5°	559.5	549.6	536.2	519.1	509.2	498.5	481.4	462.5	450.9	448.2
70°	487.7	476.9	466.1	448.2	439.2	432.9	414.0	395.2	386.2	382.6
72.5°	425.7	414.0	398.8	386.2	380.8	369.1	351.2	338.6	326.9	319.7
75°	361.0	353.9	343.1	328.7	318.8	310.7	296.4	283.8	273.9	266.7
77.5°	308.1	299.1	290.1	275.7	268.5	261.4	246.1	235.3	225.4	221.8
80°	258.7	250.6	238.0	227.2	220.9	214.7	203.0	191.3	184.1	180.5
82.5°	213.8	206.6	196.7	187.7	180.5	176.0	165.3	155.4	149.1	143.7
85°	176.9	167.9	159.0	150.9	145.5	141.9	133.8	126.6	118.6	116.8
87.5°	145.5	138.3	130.2	122.1	118.6	114.1	106.9	101.5	95.2	92.5
90°	124.8	115.9	108.7	102.4	98.8	96.1	90.7	83.5	79.0	76.3
92.5°	113.2	105.1	98.8	92.5	89.8	87.1	80.8	75.4	71.0	67.4
95°	106.0	97.9	91.6	86.2	83.5	81.7	76.3	71.0	66.5	63.8
97.5°	100.6	91.6	85.3	80.8	78.1	76.3	71.8	67.4	62.9	60.2
100°	96.1	87.1	80.8	76.3	74.5	72.7	68.3	63.8	60.2	57.5
102.5°	94.3	84.4	78.1	74.5	72.7	71.0	66.5	62.9	58.4	55.7
105°	94.3	83.5	77.2	72.7	71.0	69.2	65.6	62.0	57.5	54.8
107.5°	96.1	84.4	77.2	73.6	71.8	70.1	65.6	62.0	57.5	54.8
110°	98.8	87.1	79.0	74.5	72.7	71.0	66.5	62.9	58.4	55.7



TEST NUMBER: P232590

CATALOG NUMBER: 4SKB1-LD5-6-N-UNV-L850-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	102.4	89.8	81.7	76.3	74.5	72.7	68.3	64.7	60.2	57.5
115°	106.9	93.4	85.3	79.0	77.2	75.4	71.0	66.5	62.9	60.2
117.5°	112.3	98.8	88.9	82.6	80.8	78.1	73.6	69.2	65.6	62.9
120°	117.7	105.1	94.3	87.1	84.4	81.7	77.2	72.7	68.3	65.6
122.5°	123.9	110.5	99.7	92.5	89.8	87.1	81.7	77.2	72.7	69.2
125°	130.2	117.7	106.0	97.9	94.3	91.6	86.2	80.8	77.2	73.6
127.5°	135.6	123.9	112.3	104.2	100.6	97.0	91.6	86.2	81.7	79.0
130°	140.1	130.2	119.4	110.5	106.9	104.2	97.0	91.6	87.1	84.4
132.5°	144.6	135.6	126.6	117.7	114.1	110.5	104.2	97.9	93.4	89.8
135°	147.3	140.1	132.9	124.8	121.2	116.8	110.5	104.2	98.8	95.2
137.5°	147.3	143.7	137.4	131.1	127.5	123.9	116.8	110.5	105.1	102.4
140°	142.8	143.7	141.0	136.5	132.9	130.2	123.9	116.8	111.4	108.7
142.5°	136.5	139.2	141.0	138.3	136.5	134.7	129.3	123.0	117.7	114.1
145°	126.6	132.0	135.6	138.3	137.4	136.5	132.0	127.5	122.1	118.6
147.5°	114.1	122.1	126.6	132.9	134.7	134.7	132.9	129.3	124.8	122.1
150°	96.1	107.8	115.9	122.1	124.8	128.4	128.4	125.7	123.0	120.3
152.5°	68.3	87.1	98.8	107.8	111.4	115.0	119.4	117.7	114.1	112.3
155°	38.6	47.6	71.8	86.2	90.7	95.2	102.4	104.2	103.3	100.6
157.5°	19.8	32.3	40.4	46.7	49.4	56.6	71.0	80.8	79.9	81.7
160°	4.5	5.4	15.3	28.7	32.3	34.1	37.7	40.4	40.4	38.6
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)