

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: P232596

Luminaire Tested: **4SKB1-LD5-8-N-UNV-L850-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P232596
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-L850-CD1-U
Description: METALUX SKYBAR 4' WAVESTREAM STRIP
WITH NARROW LENS
Light Source: (238) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8883.1 lumens
Efficiency: N/A
Efficacy: 136.2 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

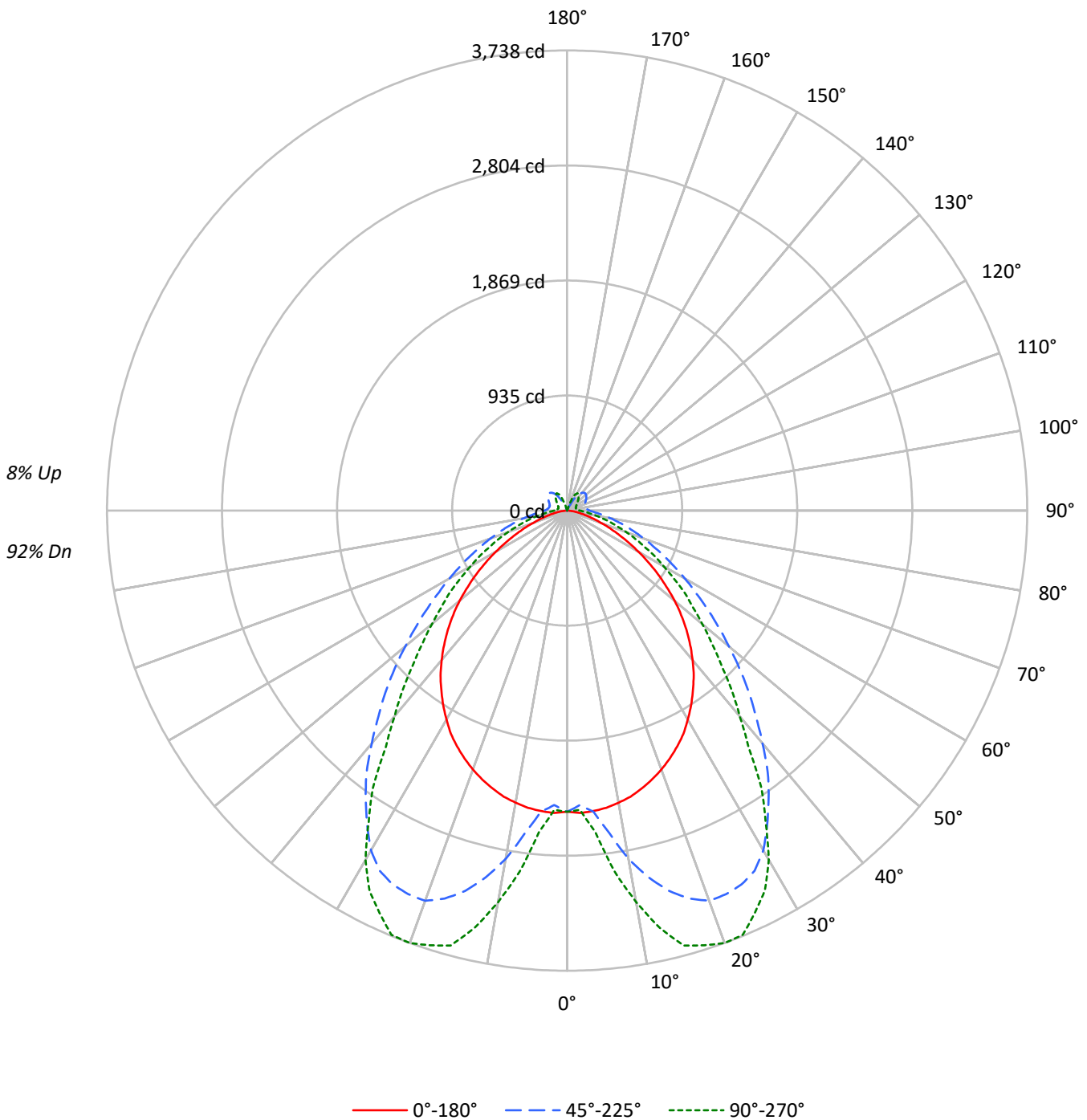
Input Watts (W): 65.23
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	60	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°	26335	26335	26335
5°	26307	24637	25692
10°	26000	27205	29270
15°	25548	28867	31048
20°	24984	29291	30052
25°	24284	28254	27734
30°	23370	26300	24327
35°	22276	23233	19915
40°	20987	20003	15488
45°	19442	16946	12426
50°	17562	14053	10028
55°	15315	11550	8209
60°	12774	9447	6473
65°	10149	7651	5018
70°	7677	6104	3825
75°	5571	4814	2768
80°	3736	3700	1963
85°	2021	2784	1344



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.5	2.8
10°-20°	871.5	9.8
20°-30°	1434.9	16.2
30°-40°	1612.0	18.1
40°-50°	1434.5	16.1
50°-60°	1109.4	12.5
60°-70°	753.3	8.5
70°-80°	449.6	5.1
80°-90°	241.2	2.7
90°-100°	158.7	1.8
100°-110°	134.6	1.5
110°-120°	124.5	1.4
120°-130°	116.0	1.3
130°-140°	98.4	1.1
140°-150°	67.2	0.8
150°-160°	26.0	0.3
160°-170°	0.8	0.0
170°-180°	0.0	0.0
0°-30°	2556.9	28.8
0°-40°	4168.9	46.9
0°-60°	6712.8	75.6
0°-90°	8156.8	91.8
90°-120°	417.9	4.7
90°-150°	699.5	7.9
90°-180°	726.0	8.2
0°-180°	8883.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2447	2447	2447	2447	2447	
5°	2450	2417	2455	2586	2620	233
15°	2337	2625	3199	3598	3657	659
25°	2114	2715	3351	3614	3606	973
35°	1782	2445	2853	2827	2754	1113
45°	1370	1890	2089	1910	1769	1054
55°	901	1288	1386	1258	1166	805
65°	461	800	865	780	690	464
75°	170	482	494	426	356	187
85°	30	304	248	194	156	37
90°	2	258	181	132	102	3
95°	1	250	158	112	85	1
105°	1	227	146	95	73	1
115°	1	209	163	103	80	1
125°	1	172	190	126	98	1
135°	1	66	203	162	127	1
145°	1	6	157	184	158	1
155°	1	4	35	121	134	1
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P232596

CATALOG NUMBER: 4SKB1-LD5-8-N-UNV-L850-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2446.6	2446.6	2446.6	2446.6	2446.6	2446.6	2446.6	2446.6	2446.6	2446.6	2446.6
2.5°	2458.6	2449.0	2432.2	2431.0	2420.2	2415.4	2416.6	2413.0	2409.4	2403.4	2393.8
5°	2450.2	2432.2	2404.6	2404.6	2410.6	2416.6	2431.0	2444.2	2447.8	2456.2	2455.0
7.5°	2434.6	2407.0	2380.6	2402.2	2423.8	2432.2	2449.0	2473.0	2510.1	2578.5	2645.7
10°	2409.4	2372.2	2363.8	2398.6	2427.4	2452.6	2490.9	2602.5	2705.7	2807.7	2873.7
12.5°	2380.6	2335.0	2347.0	2391.4	2458.6	2506.5	2604.9	2752.5	2834.1	2952.9	3050.1
15°	2337.4	2294.2	2315.8	2381.8	2522.1	2625.3	2680.5	2860.5	2991.3	3089.7	3198.9
17.5°	2290.6	2252.2	2282.2	2398.6	2589.3	2688.9	2777.7	2930.1	3056.1	3201.3	3304.5
20°	2239.0	2205.4	2243.8	2420.2	2621.7	2723.7	2822.1	2967.3	3134.1	3284.1	3372.9
22.5°	2179.0	2149.0	2207.8	2429.8	2633.7	2735.7	2831.7	3000.9	3173.7	3297.3	3372.9
25°	2114.2	2084.2	2164.6	2410.6	2621.7	2715.3	2818.5	3018.9	3160.5	3257.7	3351.3
27.5°	2044.6	2011.0	2132.2	2371.0	2573.7	2679.3	2795.7	2984.1	3095.7	3203.7	3298.5
30°	1959.4	1929.4	2075.8	2313.4	2506.5	2631.3	2730.9	2900.1	3006.9	3113.7	3186.9
32.5°	1874.2	1845.4	2007.4	2231.8	2429.8	2547.3	2643.3	2775.3	2896.5	2979.3	3024.9
35°	1781.8	1749.4	1928.2	2132.2	2343.4	2445.4	2525.7	2645.7	2747.7	2808.9	2853.3
37.5°	1689.4	1654.6	1827.4	2027.8	2229.4	2323.0	2390.2	2511.3	2589.3	2639.7	2676.9
40°	1585.0	1549.0	1723.0	1910.2	2110.6	2176.6	2246.2	2354.2	2411.8	2452.6	2470.6
42.5°	1479.5	1443.5	1610.2	1786.6	1965.4	2030.2	2102.2	2187.4	2243.8	2267.8	2267.8
45°	1370.3	1335.5	1493.8	1664.2	1815.4	1889.8	1953.4	2021.8	2068.6	2087.8	2089.0
47.5°	1256.3	1227.5	1378.7	1533.4	1675.0	1739.8	1789.0	1855.0	1895.8	1900.6	1899.4
50°	1139.9	1114.7	1250.3	1402.7	1528.6	1586.2	1629.4	1690.6	1723.0	1721.8	1715.8
52.5°	1017.5	1001.9	1127.9	1267.1	1381.1	1432.7	1471.1	1525.0	1551.4	1551.4	1546.6
55°	901.1	891.5	1000.7	1135.1	1241.9	1287.5	1323.5	1371.5	1393.1	1393.1	1385.9
57.5°	783.5	782.3	884.3	1004.3	1106.3	1147.1	1185.5	1227.5	1246.7	1246.7	1234.7
60°	668.3	674.3	775.1	885.5	979.1	1018.7	1052.3	1093.1	1105.1	1107.5	1105.1
62.5°	561.5	577.1	673.1	773.9	867.5	901.1	931.1	970.7	980.3	983.9	977.9
65°	460.8	484.8	581.9	677.9	765.5	800.3	826.7	854.3	862.7	866.3	865.1
67.5°	378.0	403.2	500.3	595.1	675.5	703.1	729.5	753.5	754.7	760.7	755.9
70°	292.8	331.2	428.4	518.3	593.9	619.1	640.7	657.5	661.1	662.3	661.1
72.5°	225.6	271.2	363.6	452.4	520.7	544.7	561.5	574.7	574.7	575.9	572.3
75°	170.4	225.6	315.6	397.2	458.4	482.4	495.6	503.9	499.1	497.9	494.4
77.5°	123.6	187.2	272.4	349.2	406.8	424.8	436.8	438.0	430.8	429.6	422.4
80°	85.2	152.4	235.2	307.2	360.0	378.0	384.0	379.2	373.2	366.0	356.4
82.5°	56.4	123.6	204.0	272.4	321.6	336.0	340.8	333.6	325.2	313.2	297.6
85°	30.0	99.6	177.6	243.6	290.4	303.6	306.0	292.8	279.6	264.0	248.4
87.5°	13.2	81.6	158.4	224.4	265.2	274.8	276.0	261.6	244.8	226.8	207.6
90°	2.4	69.6	146.4	210.0	249.6	258.0	258.0	238.8	222.0	202.8	181.2
92.5°	1.2	66.0	142.8	205.2	244.8	253.2	252.0	231.6	211.2	189.6	168.0
95°	1.2	57.6	134.4	200.4	241.2	249.6	248.4	226.8	205.2	182.4	158.4
97.5°	1.2	48.0	126.0	192.0	235.2	243.6	243.6	223.2	201.6	177.6	152.4
100°	0.0	37.2	116.4	183.6	226.8	237.6	238.8	219.6	196.8	172.8	148.8
102.5°	0.0	25.2	108.0	176.4	220.8	231.6	234.0	218.4	194.4	170.4	146.4
105°	1.2	15.6	97.2	168.0	214.8	226.8	230.4	217.2	193.2	170.4	146.4
107.5°	1.2	10.8	86.4	159.6	210.0	223.2	228.0	217.2	194.4	171.6	148.8
110°	1.2	9.6	73.2	151.2	204.0	218.4	225.6	218.4	196.8	175.2	152.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	1.2	7.2	55.2	140.4	196.8	213.6	223.2	219.6	200.4	178.8	157.2
115°	1.2	6.0	37.2	129.6	189.6	208.8	220.8	220.8	204.0	183.6	163.2
117.5°	1.2	6.0	25.2	115.2	181.2	202.8	216.0	222.0	208.8	188.4	170.4
120°	1.2	4.8	12.0	98.4	170.4	194.4	211.2	222.0	212.4	194.4	176.4
122.5°	1.2	4.8	9.6	75.6	158.4	184.8	204.0	220.8	216.0	199.2	183.6
125°	1.2	3.6	8.4	50.4	142.8	171.6	194.4	217.2	217.2	204.0	189.6
127.5°	1.2	3.6	7.2	36.0	122.4	157.2	181.2	211.2	217.2	207.6	195.6
130°	1.2	3.6	6.0	10.8	93.6	136.8	165.6	201.6	214.8	210.0	199.2
132.5°	1.2	2.4	6.0	8.4	60.0	106.8	144.0	186.0	207.6	210.0	202.8
135°	1.2	2.4	4.8	7.2	43.2	66.0	115.2	166.8	194.4	202.8	202.8
137.5°	1.2	2.4	4.8	6.0	19.2	49.2	72.0	144.0	177.6	193.2	196.8
140°	1.2	2.4	3.6	4.8	7.2	26.4	51.6	114.0	157.2	178.8	188.4
142.5°	1.2	2.4	3.6	4.8	6.0	6.0	31.2	66.0	132.0	159.6	175.2
145°	1.2	2.4	2.4	3.6	4.8	6.0	6.0	50.4	94.8	136.8	157.2
147.5°	1.2	1.2	2.4	3.6	4.8	4.8	4.8	22.8	56.4	104.4	134.4
150°	1.2	1.2	2.4	2.4	3.6	3.6	4.8	4.8	37.2	58.8	99.6
152.5°	1.2	1.2	2.4	2.4	3.6	3.6	3.6	4.8	4.8	39.6	55.2
155°	1.2	1.2	2.4	2.4	2.4	3.6	3.6	3.6	3.6	4.8	34.8
157.5°	1.2	1.2	2.4	2.4	2.4	2.4	2.4	3.6	3.6	4.8	4.8
160°	1.2	2.4	2.4	2.4	2.4	2.4	2.4	3.6	3.6	3.6	4.8
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°	2446.6	2446.6	2446.6	2446.6	2446.6	2446.6	2446.6	2446.6	2446.6	2446.6
2.5°	2405.8	2423.8	2423.8	2439.4	2447.8	2445.4	2447.8	2452.6	2438.2	2433.4
5°	2481.4	2517.3	2535.3	2576.1	2585.7	2603.7	2609.7	2630.1	2634.9	2620.5
7.5°	2718.9	2793.3	2841.3	2890.5	2912.1	2922.9	2942.1	2955.3	2975.7	2960.1
10°	2942.1	3032.1	3100.5	3154.5	3167.7	3178.5	3201.3	3233.7	3231.3	3228.9
12.5°	3135.3	3214.5	3298.5	3376.5	3416.1	3424.5	3458.1	3497.6	3504.8	3472.5
15°	3294.9	3405.3	3500.0	3582.8	3598.4	3620.0	3645.2	3658.4	3652.4	3657.2
17.5°	3428.1	3521.6	3588.8	3633.2	3642.8	3659.6	3682.4	3699.2	3701.6	3702.8
20°	3480.8	3543.2	3608.0	3669.2	3688.4	3705.2	3732.8	3747.2	3744.8	3737.6
22.5°	3471.3	3562.4	3622.4	3672.8	3692.0	3707.6	3731.6	3741.2	3737.6	3730.4
25°	3456.9	3534.8	3587.6	3614.0	3614.0	3626.0	3620.0	3612.8	3604.4	3605.6
27.5°	3388.5	3434.1	3470.1	3500.0	3503.6	3504.8	3501.2	3494.0	3489.2	3478.4
30°	3249.3	3304.5	3321.3	3318.9	3314.1	3312.9	3298.5	3287.7	3274.5	3275.7
32.5°	3086.1	3098.1	3105.3	3084.9	3072.9	3070.5	3057.3	3039.3	3021.3	3002.1
35°	2876.1	2867.7	2850.9	2836.5	2826.9	2812.5	2793.3	2775.3	2752.5	2753.7
37.5°	2673.3	2646.9	2622.9	2583.3	2576.1	2542.5	2505.3	2476.6	2439.4	2419.0
40°	2462.2	2435.8	2405.8	2362.6	2343.4	2312.2	2271.4	2223.4	2193.4	2181.4
42.5°	2260.6	2228.2	2193.4	2141.8	2117.8	2092.6	2049.4	2002.6	1981.0	1977.4
45°	2063.8	2026.6	1993.0	1935.4	1910.2	1880.2	1835.8	1807.0	1775.8	1768.6
47.5°	1874.2	1841.8	1790.2	1745.8	1721.8	1696.6	1651.0	1624.6	1601.8	1593.4
50°	1690.6	1659.4	1619.8	1570.6	1547.8	1523.8	1491.4	1466.3	1439.9	1431.5
52.5°	1526.2	1495.0	1454.3	1415.9	1393.1	1378.7	1348.7	1319.9	1299.5	1286.3
55°	1367.9	1339.1	1301.9	1265.9	1257.5	1238.3	1203.5	1178.3	1165.1	1166.3
57.5°	1222.7	1197.5	1168.7	1133.9	1120.7	1102.7	1079.9	1049.9	1034.3	1029.5
60°	1090.7	1066.7	1042.7	1016.3	999.5	986.3	955.1	931.1	910.7	908.3
62.5°	964.7	946.7	926.3	899.9	885.5	871.1	843.5	820.7	805.1	800.3
65°	855.5	839.9	815.9	794.3	779.9	765.5	739.1	716.3	703.1	689.9
67.5°	747.5	734.3	716.3	693.5	680.3	665.9	643.1	617.9	602.3	598.7
70°	651.5	637.1	622.7	598.7	586.7	578.3	553.1	527.9	515.9	511.1
72.5°	568.7	553.1	532.7	515.9	508.7	493.2	469.2	452.4	436.8	427.2
75°	482.4	472.8	458.4	439.2	426.0	415.2	396.0	379.2	366.0	356.4
77.5°	411.6	399.6	387.6	368.4	358.8	349.2	328.8	314.4	301.2	296.4
80°	345.6	334.8	318.0	303.6	295.2	286.8	271.2	255.6	246.0	241.2
82.5°	285.6	276.0	262.8	250.8	241.2	235.2	220.8	207.6	199.2	192.0
85°	236.4	224.4	212.4	201.6	194.4	189.6	178.8	169.2	158.4	156.0
87.5°	194.4	184.8	174.0	163.2	158.4	152.4	142.8	135.6	127.2	123.6
90°	166.8	154.8	145.2	136.8	132.0	128.4	121.2	111.6	105.6	102.0
92.5°	151.2	140.4	132.0	123.6	120.0	116.4	108.0	100.8	94.8	90.0
95°	141.6	130.8	122.4	115.2	111.6	109.2	102.0	94.8	88.8	85.2
97.5°	134.4	122.4	114.0	108.0	104.4	102.0	96.0	90.0	84.0	80.4
100°	128.4	116.4	108.0	102.0	99.6	97.2	91.2	85.2	80.4	76.8
102.5°	126.0	112.8	104.4	99.6	97.2	94.8	88.8	84.0	78.0	74.4
105°	126.0	111.6	103.2	97.2	94.8	92.4	87.6	82.8	76.8	73.2
107.5°	128.4	112.8	103.2	98.4	96.0	93.6	87.6	82.8	76.8	73.2
110°	132.0	116.4	105.6	99.6	97.2	94.8	88.8	84.0	78.0	74.4



TEST NUMBER: P232596

CATALOG NUMBER: 4SKB1-LD5-8-N-UNV-L850-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	136.8	120.0	109.2	102.0	99.6	97.2	91.2	86.4	80.4	76.8
115°	142.8	124.8	114.0	105.6	103.2	100.8	94.8	88.8	84.0	80.4
117.5°	150.0	132.0	118.8	110.4	108.0	104.4	98.4	92.4	87.6	84.0
120°	157.2	140.4	126.0	116.4	112.8	109.2	103.2	97.2	91.2	87.6
122.5°	165.6	147.6	133.2	123.6	120.0	116.4	109.2	103.2	97.2	92.4
125°	174.0	157.2	141.6	130.8	126.0	122.4	115.2	108.0	103.2	98.4
127.5°	181.2	165.6	150.0	139.2	134.4	129.6	122.4	115.2	109.2	105.6
130°	187.2	174.0	159.6	147.6	142.8	139.2	129.6	122.4	116.4	112.8
132.5°	193.2	181.2	169.2	157.2	152.4	147.6	139.2	130.8	124.8	120.0
135°	196.8	187.2	177.6	166.8	162.0	156.0	147.6	139.2	132.0	127.2
137.5°	196.8	192.0	183.6	175.2	170.4	165.6	156.0	147.6	140.4	136.8
140°	190.8	192.0	188.4	182.4	177.6	174.0	165.6	156.0	148.8	145.2
142.5°	182.4	186.0	188.4	184.8	182.4	180.0	172.8	164.4	157.2	152.4
145°	169.2	176.4	181.2	184.8	183.6	182.4	176.4	170.4	163.2	158.4
147.5°	152.4	163.2	169.2	177.6	180.0	180.0	177.6	172.8	166.8	163.2
150°	128.4	144.0	154.8	163.2	166.8	171.6	171.6	168.0	164.4	160.8
152.5°	91.2	116.4	132.0	144.0	148.8	153.6	159.6	157.2	152.4	150.0
155°	51.6	63.6	96.0	115.2	121.2	127.2	136.8	139.2	138.0	134.4
157.5°	26.4	43.2	54.0	62.4	66.0	75.6	94.8	108.0	106.8	109.2
160°	6.0	7.2	20.4	38.4	43.2	45.6	50.4	54.0	54.0	51.6
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)