

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: P232514

Luminaire Tested: **8SKB1-LD5-10-N-UNV-L840-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P232514  
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: 8SKB1-LD5-10-N-UNV-L840-CD1-U  
Description: METALUX SKYBAR 8' WAVESTREAM STRIP  
WITH NARROW LENS  
Light Source: (392) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10777.0 lumens  
Efficiency: N/A  
Efficacy: 139.2 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.53 / 1.51  
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 8' x H: 0.29')  
CIE Type: Direct

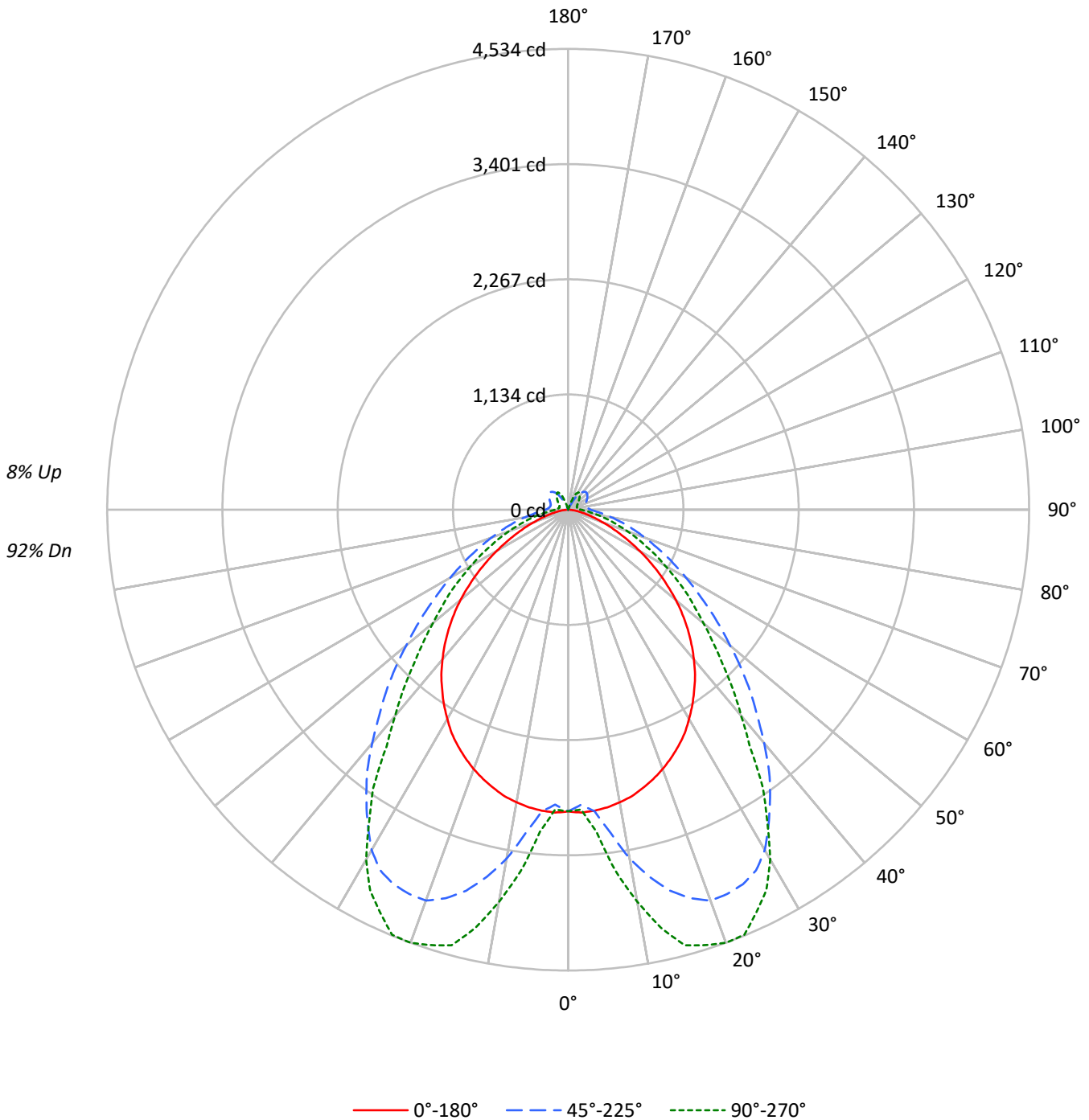
Input Watts (W): 77.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P232514

CATALOG NUMBER: 8SKB1-LD5-10-N-UNV-L840-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P232514

CATALOG NUMBER: 8SKB1-LD5-10-N-UNV-L840-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°	15975	15975	15975
5°	16008	14976	15585
10°	15873	16568	17755
15°	15647	17609	18834
20°	15354	17895	18230
25°	14977	17286	16824
30°	14469	16113	14757
35°	13849	14253	12081
40°	13109	12287	9395
45°	12208	10423	7537
50°	11097	8655	6083
55°	9750	7122	4980
60°	8209	5834	3927
65°	6603	4732	3044
70°	5080	3782	2320
75°	3783	2987	1679
80°	2656	2300	1191
85°	1587	1735	815



TEST NUMBER: P232514

CATALOG NUMBER: 8SKB1-LD5-10-N-UNV-L840-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	303.9	2.8
10°-20°	1057.4	9.8
20°-30°	1740.8	16.2
30°-40°	1955.7	18.1
40°-50°	1740.4	16.1
50°-60°	1345.9	12.5
60°-70°	914.0	8.5
70°-80°	545.4	5.1
80°-90°	292.6	2.7
90°-100°	192.5	1.8
100°-110°	163.3	1.5
110°-120°	151.1	1.4
120°-130°	140.7	1.3
130°-140°	119.3	1.1
140°-150°	81.5	0.8
150°-160°	31.5	0.3
160°-170°	1.0	0.0
170°-180°	0.0	0.0
0°-30°	3102.0	28.8
0°-40°	5057.7	46.9
0°-60°	8144.0	75.6
0°-90°	9896.0	91.8
90°-120°	506.9	4.7
90°-150°	848.5	7.9
90°-180°	881.0	8.2
0°-180°	10777.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2968	2968	2968	2968	2968	
5°	2973	2932	2978	3137	3179	282
15°	2836	3185	3881	4366	4437	799
25°	2565	3294	4066	4385	4374	1180
35°	2162	2967	3462	3430	3341	1351
45°	1662	2293	2534	2318	2146	1279
55°	1093	1562	1681	1526	1415	976
65°	559	971	1050	946	837	563
75°	207	585	600	517	432	226
85°	36	368	301	236	189	45
90°	3	313	220	160	124	3
95°	2	303	192	135	103	1
105°	2	275	178	115	89	1
115°	2	253	198	125	98	1
125°	2	208	230	153	119	1
135°	2	80	246	196	154	1
145°	2	7	191	223	192	1
155°	2	4	42	147	163	1
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P232514

CATALOG NUMBER: 8SKB1-LD5-10-N-UNV-L840-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2968.2	2968.2	2968.2	2968.2	2968.2	2968.2	2968.2	2968.2	2968.2	2968.2	2968.2
2.5°	2982.8	2971.1	2950.7	2949.3	2936.2	2930.4	2931.8	2927.4	2923.1	2915.8	2904.1
5°	2972.6	2950.7	2917.2	2917.2	2924.5	2931.8	2949.3	2965.3	2969.7	2979.8	2978.4
7.5°	2953.6	2920.2	2888.1	2914.3	2940.5	2950.7	2971.1	3000.2	3045.4	3128.3	3209.8
10°	2923.1	2877.9	2867.8	2910.0	2944.9	2975.5	3022.1	3157.4	3282.6	3406.4	3486.4
12.5°	2888.1	2832.8	2847.4	2901.2	2982.8	3041.0	3160.4	3339.4	3438.4	3582.5	3700.4
15°	2835.7	2783.3	2809.5	2889.6	3059.9	3185.1	3252.1	3470.4	3629.1	3748.5	3880.9
17.5°	2779.0	2732.4	2768.8	2910.0	3141.4	3262.3	3370.0	3554.9	3707.7	3883.8	4009.0
20°	2716.4	2675.6	2722.2	2936.2	3180.7	3304.5	3423.8	3600.0	3802.3	3984.3	4092.0
22.5°	2643.6	2607.2	2678.5	2947.8	3195.3	3319.0	3435.5	3640.7	3850.4	4000.3	4092.0
25°	2565.0	2528.6	2626.1	2924.5	3180.7	3294.3	3419.5	3662.6	3834.3	3952.3	4065.8
27.5°	2480.5	2439.8	2586.8	2876.5	3122.5	3250.6	3391.8	3620.4	3755.7	3886.8	4001.8
30°	2377.2	2340.8	2518.4	2806.6	3041.0	3192.4	3313.2	3518.5	3648.0	3777.6	3866.4
32.5°	2273.8	2238.9	2435.4	2707.6	2947.8	3090.5	3206.9	3367.1	3514.1	3614.5	3669.9
35°	2161.7	2122.4	2339.3	2586.8	2843.0	2966.7	3064.3	3209.8	3333.6	3407.8	3461.7
37.5°	2049.6	2007.4	2217.1	2460.2	2704.7	2818.3	2899.8	3046.8	3141.4	3202.6	3247.7
40°	1923.0	1879.3	2090.4	2317.5	2560.6	2640.7	2725.1	2856.1	2926.0	2975.5	2997.3
42.5°	1794.9	1751.2	1953.6	2167.6	2384.5	2463.1	2550.4	2653.8	2722.2	2751.3	2751.3
45°	1662.4	1620.2	1812.4	2019.1	2202.5	2292.7	2369.9	2452.9	2509.6	2532.9	2534.4
47.5°	1524.1	1489.2	1672.6	1860.4	2032.2	2110.8	2170.5	2250.5	2300.0	2305.8	2304.4
50°	1382.9	1352.4	1516.9	1701.7	1854.6	1924.5	1976.9	2051.1	2090.4	2088.9	2081.7
52.5°	1234.4	1215.5	1368.4	1537.2	1675.5	1738.1	1784.7	1850.2	1882.2	1882.2	1876.4
55°	1093.2	1081.6	1214.1	1377.1	1506.7	1562.0	1605.7	1663.9	1690.1	1690.1	1681.3
57.5°	950.6	949.1	1072.9	1218.4	1342.2	1391.7	1438.2	1489.2	1512.5	1512.5	1497.9
60°	810.8	818.1	940.4	1074.3	1187.9	1235.9	1276.7	1326.2	1340.7	1343.6	1340.7
62.5°	681.3	700.2	816.7	938.9	1052.5	1093.2	1129.6	1177.7	1189.3	1193.7	1186.4
65°	559.0	588.1	706.0	822.5	928.7	971.0	1003.0	1036.5	1046.7	1051.0	1049.6
67.5°	458.5	489.1	607.0	722.0	819.6	853.0	885.1	914.2	915.6	922.9	917.1
70°	355.2	401.8	519.7	628.9	720.6	751.1	777.4	797.7	802.1	803.6	802.1
72.5°	273.7	329.0	441.1	548.8	631.8	660.9	681.3	697.3	697.3	698.7	694.4
75°	206.7	273.7	382.9	481.8	556.1	585.2	601.2	611.4	605.6	604.1	599.8
77.5°	149.9	227.1	330.4	423.6	493.5	515.3	529.9	531.3	522.6	521.1	512.4
80°	103.4	184.9	285.3	372.7	436.7	458.5	465.8	460.0	452.7	444.0	432.3
82.5°	68.4	149.9	247.5	330.4	390.1	407.6	413.4	404.7	394.5	379.9	361.0
85°	36.4	120.8	215.4	295.5	352.3	368.3	371.2	355.2	339.2	320.3	301.3
87.5°	16.0	99.0	192.2	272.2	321.7	333.4	334.8	317.3	297.0	275.1	251.8
90°	2.9	84.4	177.6	254.7	302.8	313.0	313.0	289.7	269.3	246.0	219.8
92.5°	1.5	80.1	173.2	248.9	297.0	307.2	305.7	281.0	256.2	230.0	203.8
95°	1.5	69.9	163.0	243.1	292.6	302.8	301.3	275.1	248.9	221.3	192.2
97.5°	1.5	58.2	152.8	232.9	285.3	295.5	295.5	270.8	244.6	215.4	184.9
100°	0.0	45.1	141.2	222.7	275.1	288.2	289.7	266.4	238.7	209.6	180.5
102.5°	0.0	30.6	131.0	214.0	267.9	281.0	283.9	264.9	235.8	206.7	177.6
105°	1.5	18.9	117.9	203.8	260.6	275.1	279.5	263.5	234.4	206.7	177.6
107.5°	1.5	13.1	104.8	193.6	254.7	270.8	276.6	263.5	235.8	208.2	180.5
110°	1.5	11.6	88.8	183.4	247.5	264.9	273.7	264.9	238.7	212.5	184.9



TEST NUMBER: P232514

CATALOG NUMBER: 8SKB1-LD5-10-N-UNV-L840-CD1-U

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	1.5	8.7	67.0	170.3	238.7	259.1	270.8	266.4	243.1	216.9	190.7
115°	1.5	7.3	45.1	157.2	230.0	253.3	267.9	267.9	247.5	222.7	198.0
117.5°	1.5	7.3	30.6	139.7	219.8	246.0	262.0	269.3	253.3	228.5	206.7
120°	1.5	5.8	14.6	119.4	206.7	235.8	256.2	269.3	257.7	235.8	214.0
122.5°	1.5	5.8	11.6	91.7	192.2	224.2	247.5	267.9	262.0	241.6	222.7
125°	1.5	4.4	10.2	61.1	173.2	208.2	235.8	263.5	263.5	247.5	230.0
127.5°	1.5	4.4	8.7	43.7	148.5	190.7	219.8	256.2	263.5	251.8	237.3
130°	1.5	4.4	7.3	13.1	113.5	166.0	200.9	244.6	260.6	254.7	241.6
132.5°	1.5	2.9	7.3	10.2	72.8	129.6	174.7	225.6	251.8	254.7	246.0
135°	1.5	2.9	5.8	8.7	52.4	80.1	139.7	202.3	235.8	246.0	246.0
137.5°	1.5	2.9	5.8	7.3	23.3	59.7	87.3	174.7	215.4	234.4	238.7
140°	1.5	2.9	4.4	5.8	8.7	32.0	62.6	138.3	190.7	216.9	228.5
142.5°	1.5	2.9	4.4	5.8	7.3	7.3	37.8	80.1	160.1	193.6	212.5
145°	1.5	2.9	2.9	4.4	5.8	7.3	7.3	61.1	115.0	166.0	190.7
147.5°	1.5	1.5	2.9	4.4	5.8	5.8	5.8	27.7	68.4	126.6	163.0
150°	1.5	1.5	2.9	2.9	4.4	4.4	5.8	5.8	45.1	71.3	120.8
152.5°	1.5	1.5	2.9	2.9	4.4	4.4	4.4	5.8	5.8	48.0	67.0
155°	1.5	1.5	2.9	2.9	2.9	4.4	4.4	4.4	4.4	5.8	42.2
157.5°	1.5	1.5	2.9	2.9	2.9	2.9	2.9	4.4	4.4	5.8	5.8
160°	1.5	2.9	2.9	2.9	2.9	2.9	2.9	4.4	4.4	4.4	5.8
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



TEST NUMBER: P232514

CATALOG NUMBER: 8SKB1-LD5-10-N-UNV-L840-CD1-U

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	2968.2	2968.2	2968.2	2968.2	2968.2	2968.2	2968.2	2968.2	2968.2	2968.2
2.5°	2918.7	2940.5	2940.5	2959.5	2969.7	2966.7	2969.7	2975.5	2958.0	2952.2
5°	3010.4	3054.1	3075.9	3125.4	3137.1	3158.9	3166.2	3190.9	3196.7	3179.3
7.5°	3298.6	3388.9	3447.1	3506.8	3533.0	3546.1	3569.4	3585.4	3610.2	3591.2
10°	3569.4	3678.6	3761.6	3827.1	3843.1	3856.2	3883.8	3923.1	3920.2	3917.3
12.5°	3803.8	3899.9	4001.8	4096.4	4144.4	4154.6	4195.4	4243.4	4252.1	4212.8
15°	3997.4	4131.3	4246.3	4346.8	4365.7	4391.9	4422.5	4438.5	4431.2	4437.0
17.5°	4159.0	4272.5	4354.0	4407.9	4419.5	4439.9	4467.6	4488.0	4490.9	4492.3
20°	4223.0	4298.7	4377.3	4451.6	4474.9	4495.2	4528.7	4546.2	4543.3	4534.5
22.5°	4211.4	4322.0	4394.8	4455.9	4479.2	4498.2	4527.3	4538.9	4534.5	4525.8
25°	4193.9	4288.5	4352.6	4384.6	4384.6	4399.2	4391.9	4383.2	4373.0	4374.4
27.5°	4110.9	4166.3	4209.9	4246.3	4250.7	4252.1	4247.8	4239.0	4233.2	4220.1
30°	3942.1	4009.0	4029.4	4026.5	4020.7	4019.2	4001.8	3988.7	3972.6	3974.1
32.5°	3744.1	3758.7	3767.4	3742.6	3728.1	3725.2	3709.2	3687.3	3665.5	3642.2
35°	3489.3	3479.2	3458.8	3441.3	3429.7	3412.2	3388.9	3367.1	3339.4	3340.9
37.5°	3243.3	3211.3	3182.2	3134.1	3125.4	3084.7	3039.5	3004.6	2959.5	2934.7
40°	2987.1	2955.1	2918.7	2866.3	2843.0	2805.2	2755.7	2697.4	2661.0	2646.5
42.5°	2742.6	2703.3	2661.0	2598.4	2569.3	2538.8	2486.4	2429.6	2403.4	2399.0
45°	2503.8	2458.7	2417.9	2348.1	2317.5	2281.1	2227.2	2192.3	2154.5	2145.7
47.5°	2273.8	2234.5	2171.9	2118.1	2088.9	2058.4	2003.1	1971.0	1943.4	1933.2
50°	2051.1	2013.3	1965.2	1905.5	1877.9	1848.8	1809.5	1778.9	1746.9	1736.7
52.5°	1851.7	1813.8	1764.3	1717.7	1690.1	1672.6	1636.2	1601.3	1576.5	1560.5
55°	1659.5	1624.6	1579.4	1535.8	1525.6	1502.3	1460.1	1429.5	1413.5	1415.0
57.5°	1483.4	1452.8	1417.9	1375.6	1359.6	1337.8	1310.1	1273.7	1254.8	1249.0
60°	1323.2	1294.1	1265.0	1233.0	1212.6	1196.6	1158.7	1129.6	1104.9	1102.0
62.5°	1170.4	1148.6	1123.8	1091.8	1074.3	1056.8	1023.4	995.7	976.8	971.0
65°	1037.9	1019.0	989.9	963.7	946.2	928.7	896.7	869.1	853.0	837.0
67.5°	906.9	890.9	869.1	841.4	825.4	807.9	780.3	749.7	730.8	726.4
70°	790.5	773.0	755.5	726.4	711.8	701.7	671.1	640.5	626.0	620.1
72.5°	690.0	671.1	646.3	626.0	617.2	598.3	569.2	548.8	529.9	518.2
75°	585.2	573.6	556.1	532.8	516.8	503.7	480.4	460.0	444.0	432.3
77.5°	499.3	484.8	470.2	446.9	435.3	423.6	398.9	381.4	365.4	359.6
80°	419.2	406.1	385.8	368.3	358.1	347.9	329.0	310.1	298.4	292.6
82.5°	346.5	334.8	318.8	304.2	292.6	285.3	267.9	251.8	241.6	232.9
85°	286.8	272.2	257.7	244.6	235.8	230.0	216.9	205.3	192.2	189.2
87.5°	235.8	224.2	211.1	198.0	192.2	184.9	173.2	164.5	154.3	149.9
90°	202.3	187.8	176.1	166.0	160.1	155.8	147.0	135.4	128.1	123.7
92.5°	183.4	170.3	160.1	149.9	145.6	141.2	131.0	122.3	115.0	109.2
95°	171.8	158.7	148.5	139.7	135.4	132.5	123.7	115.0	107.7	103.4
97.5°	163.0	148.5	138.3	131.0	126.6	123.7	116.5	109.2	101.9	97.5
100°	155.8	141.2	131.0	123.7	120.8	117.9	110.6	103.4	97.5	93.2
102.5°	152.8	136.8	126.6	120.8	117.9	115.0	107.7	101.9	94.6	90.3
105°	152.8	135.4	125.2	117.9	115.0	112.1	106.3	100.4	93.2	88.8
107.5°	155.8	136.8	125.2	119.4	116.5	113.5	106.3	100.4	93.2	88.8
110°	160.1	141.2	128.1	120.8	117.9	115.0	107.7	101.9	94.6	90.3





TEST NUMBER: P232514

CATALOG NUMBER: 8SKB1-LD5-10-N-UNV-L840-CD1-U

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	166.0	145.6	132.5	123.7	120.8	117.9	110.6	104.8	97.5	93.2
115°	173.2	151.4	138.3	128.1	125.2	122.3	115.0	107.7	101.9	97.5
117.5°	182.0	160.1	144.1	133.9	131.0	126.6	119.4	112.1	106.3	101.9
120°	190.7	170.3	152.8	141.2	136.8	132.5	125.2	117.9	110.6	106.3
122.5°	200.9	179.1	161.6	149.9	145.6	141.2	132.5	125.2	117.9	112.1
125°	211.1	190.7	171.8	158.7	152.8	148.5	139.7	131.0	125.2	119.4
127.5°	219.8	200.9	182.0	168.9	163.0	157.2	148.5	139.7	132.5	128.1
130°	227.1	211.1	193.6	179.1	173.2	168.9	157.2	148.5	141.2	136.8
132.5°	234.4	219.8	205.3	190.7	184.9	179.1	168.9	158.7	151.4	145.6
135°	238.7	227.1	215.4	202.3	196.5	189.2	179.1	168.9	160.1	154.3
137.5°	238.7	232.9	222.7	212.5	206.7	200.9	189.2	179.1	170.3	166.0
140°	231.5	232.9	228.5	221.3	215.4	211.1	200.9	189.2	180.5	176.1
142.5°	221.3	225.6	228.5	224.2	221.3	218.4	209.6	199.4	190.7	184.9
145°	205.3	214.0	219.8	224.2	222.7	221.3	214.0	206.7	198.0	192.2
147.5°	184.9	198.0	205.3	215.4	218.4	218.4	215.4	209.6	202.3	198.0
150°	155.8	174.7	187.8	198.0	202.3	208.2	208.2	203.8	199.4	195.1
152.5°	110.6	141.2	160.1	174.7	180.5	186.3	193.6	190.7	184.9	182.0
155°	62.6	77.2	116.5	139.7	147.0	154.3	166.0	168.9	167.4	163.0
157.5°	32.0	52.4	65.5	75.7	80.1	91.7	115.0	131.0	129.6	132.5
160°	7.3	8.7	24.7	46.6	52.4	55.3	61.1	65.5	65.5	62.6
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)