

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: P232511

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P232511
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-LD5-8-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: 8565.0 lumens
Efficiency: N/A
Efficacy: 143.9 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

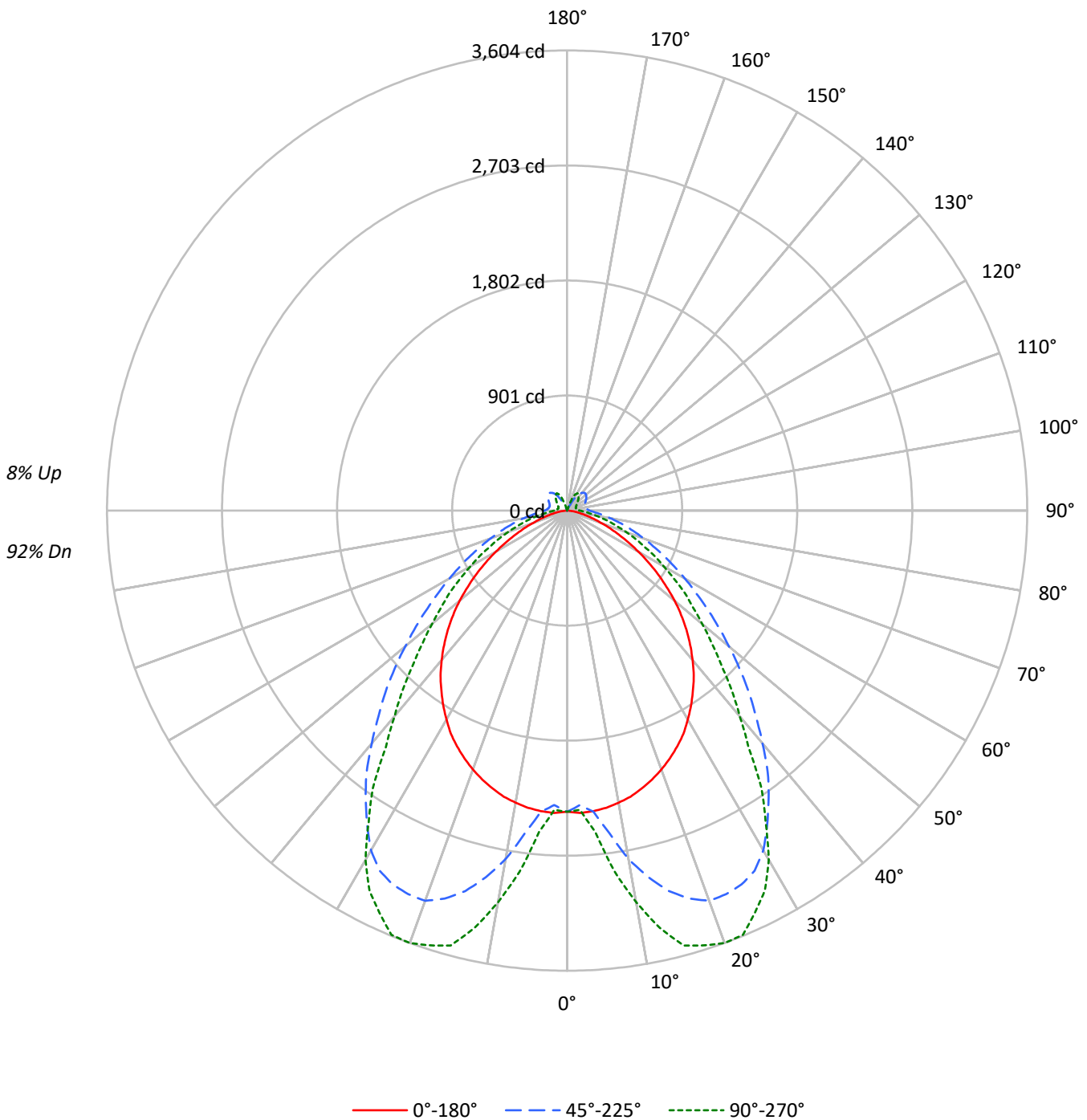
Input Watts (W): 59.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	12696	12696	12696
5°	12722	11902	12386
10°	12615	13167	14111
15°	12436	13995	14968
20°	12202	14222	14488
25°	11903	13738	13371
30°	11499	12806	11728
35°	11007	11328	9601
40°	10419	9765	7467
45°	9702	8283	5990
50°	8819	6878	4834
55°	7750	5660	3957
60°	6524	4637	3121
65°	5248	3761	2419
70°	4038	3006	1844
75°	3007	2374	1334
80°	2109	1828	946
85°	1260	1379	648



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.5	2.8
10°-20°	840.3	9.8
20°-30°	1383.5	16.2
30°-40°	1554.3	18.1
40°-50°	1383.2	16.1
50°-60°	1069.7	12.5
60°-70°	726.4	8.5
70°-80°	433.5	5.1
80°-90°	232.5	2.7
90°-100°	153.0	1.8
100°-110°	129.8	1.5
110°-120°	120.1	1.4
120°-130°	111.9	1.3
130°-140°	94.9	1.1
140°-150°	64.8	0.8
150°-160°	25.0	0.3
160°-170°	0.8	0.0
170°-180°	0.0	0.0
0°-30°	2465.3	28.8
0°-40°	4019.6	46.9
0°-60°	6472.4	75.6
0°-90°	7864.8	91.8
90°-120°	402.9	4.7
90°-150°	674.4	7.9
90°-180°	700.0	8.2
0°-180°	8565.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2359	2359	2359	2359	2359	
5°	2362	2330	2367	2493	2527	224
15°	2254	2531	3084	3470	3526	635
25°	2038	2618	3231	3485	3477	938
35°	1718	2358	2751	2726	2655	1073
45°	1321	1822	2014	1842	1705	1016
55°	869	1241	1336	1212	1124	776
65°	444	772	834	752	665	448
75°	164	465	477	411	344	180
85°	29	293	240	187	150	36
90°	2	249	175	127	98	3
95°	1	241	153	108	82	1
105°	1	219	141	91	71	1
115°	1	201	157	100	78	1
125°	1	165	183	122	95	1
135°	1	64	196	156	123	1
145°	1	6	152	177	153	1
155°	1	4	34	117	130	1
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P232511

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

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2359.0	2359.0	2359.0	2359.0	2359.0	2359.0	2359.0	2359.0	2359.0	2359.0	2359.0
2.5°	2370.5	2361.3	2345.1	2343.9	2333.5	2328.9	2330.0	2326.6	2323.1	2317.3	2308.1
5°	2362.4	2345.1	2318.5	2318.5	2324.3	2330.0	2343.9	2356.7	2360.1	2368.2	2367.1
7.5°	2347.4	2320.8	2295.3	2316.2	2337.0	2345.1	2361.3	2384.4	2420.3	2486.2	2551.0
10°	2323.1	2287.2	2279.1	2312.7	2340.5	2364.8	2401.8	2509.4	2608.9	2707.2	2770.8
12.5°	2295.3	2251.4	2262.9	2305.8	2370.5	2416.8	2511.7	2654.0	2732.7	2847.2	2940.9
15°	2253.7	2212.0	2232.9	2296.5	2431.9	2531.4	2584.6	2758.1	2884.2	2979.1	3084.4
17.5°	2208.6	2171.5	2200.5	2312.7	2496.6	2592.7	2678.3	2825.2	2946.7	3086.7	3186.2
20°	2158.8	2126.4	2163.4	2333.5	2527.9	2626.2	2721.1	2861.1	3021.9	3166.5	3252.1
22.5°	2101.0	2072.1	2128.7	2342.8	2539.5	2637.8	2730.3	2893.5	3060.1	3179.2	3252.1
25°	2038.5	2009.6	2087.1	2324.3	2527.9	2618.1	2717.6	2910.8	3047.3	3141.1	3231.3
27.5°	1971.4	1939.0	2055.9	2286.1	2481.6	2583.4	2695.6	2877.3	2984.9	3089.0	3180.4
30°	1889.3	1860.3	2001.5	2230.6	2416.8	2537.1	2633.2	2796.3	2899.3	3002.2	3072.8
32.5°	1807.1	1779.4	1935.5	2151.9	2342.8	2456.2	2548.7	2676.0	2792.8	2872.6	2916.6
35°	1718.0	1686.8	1859.2	2055.9	2259.5	2357.8	2435.3	2551.0	2649.4	2708.4	2751.2
37.5°	1629.0	1595.4	1762.0	1955.2	2149.6	2239.8	2304.6	2421.4	2496.6	2545.2	2581.1
40°	1528.3	1493.6	1661.3	1841.8	2035.0	2098.7	2165.8	2269.9	2325.4	2364.8	2382.1
42.5°	1426.5	1391.8	1552.6	1722.7	1895.0	1957.5	2026.9	2109.1	2163.4	2186.6	2186.6
45°	1321.2	1287.7	1440.4	1604.7	1750.4	1822.2	1883.5	1949.4	1994.5	2013.0	2014.2
47.5°	1211.3	1183.5	1329.3	1478.6	1615.1	1677.5	1725.0	1788.6	1827.9	1832.6	1831.4
50°	1099.1	1074.8	1205.5	1352.4	1473.9	1529.5	1571.1	1630.1	1661.3	1660.2	1654.4
52.5°	981.1	966.0	1087.5	1221.7	1331.6	1381.4	1418.4	1470.5	1495.9	1495.9	1491.3
55°	868.9	859.6	964.9	1094.5	1197.4	1241.4	1276.1	1322.4	1343.2	1343.2	1336.2
57.5°	755.5	754.3	852.7	968.3	1066.7	1106.0	1143.0	1183.5	1202.0	1202.0	1190.5
60°	644.4	650.2	747.4	853.8	944.1	982.2	1014.6	1054.0	1065.5	1067.8	1065.5
62.5°	541.4	556.5	649.0	746.2	836.5	868.9	897.8	936.0	945.2	948.7	942.9
65°	444.3	467.4	561.1	653.7	738.1	771.7	797.1	823.7	831.8	835.3	834.1
67.5°	364.4	388.7	482.4	573.8	651.3	678.0	703.4	726.5	727.7	733.5	728.9
70°	282.3	319.3	413.0	499.8	572.7	597.0	617.8	634.0	637.5	638.6	637.5
72.5°	217.5	261.5	350.5	436.2	502.1	525.2	541.4	554.2	554.2	555.3	551.9
75°	164.3	217.5	304.3	382.9	441.9	465.1	477.8	485.9	481.3	480.1	476.7
77.5°	119.2	180.5	262.6	336.7	392.2	409.6	421.1	422.3	415.3	414.2	407.2
80°	82.1	146.9	226.8	296.2	347.1	364.4	370.2	365.6	359.8	352.9	343.6
82.5°	54.4	119.2	196.7	262.6	310.1	323.9	328.6	321.6	313.5	302.0	286.9
85°	28.9	96.0	171.2	234.9	280.0	292.7	295.0	282.3	269.6	254.5	239.5
87.5°	12.7	78.7	152.7	216.3	255.7	264.9	266.1	252.2	236.0	218.7	200.1
90°	2.3	67.1	141.1	202.5	240.6	248.7	248.7	230.2	214.0	195.5	174.7
92.5°	1.2	63.6	137.7	197.8	236.0	244.1	243.0	223.3	203.6	182.8	162.0
95°	1.2	55.5	129.6	193.2	232.5	240.6	239.5	218.7	197.8	175.9	152.7
97.5°	1.2	46.3	121.5	185.1	226.8	234.9	234.9	215.2	194.4	171.2	146.9
100°	0.0	35.9	112.2	177.0	218.7	229.1	230.2	211.7	189.7	166.6	143.5
102.5°	0.0	24.3	104.1	170.1	212.9	223.3	225.6	210.6	187.4	164.3	141.1
105°	1.2	15.0	93.7	162.0	207.1	218.7	222.1	209.4	186.3	164.3	141.1
107.5°	1.2	10.4	83.3	153.9	202.5	215.2	219.8	209.4	187.4	165.4	143.5
110°	1.2	9.3	70.6	145.8	196.7	210.6	217.5	210.6	189.7	168.9	146.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	1.2	6.9	53.2	135.4	189.7	205.9	215.2	211.7	193.2	172.4	151.6
115°	1.2	5.8	35.9	124.9	182.8	201.3	212.9	212.9	196.7	177.0	157.3
117.5°	1.2	5.8	24.3	111.1	174.7	195.5	208.2	214.0	201.3	181.6	164.3
120°	1.2	4.6	11.6	94.9	164.3	187.4	203.6	214.0	204.8	187.4	170.1
122.5°	1.2	4.6	9.3	72.9	152.7	178.2	196.7	212.9	208.2	192.0	177.0
125°	1.2	3.5	8.1	48.6	137.7	165.4	187.4	209.4	209.4	196.7	182.8
127.5°	1.2	3.5	6.9	34.7	118.0	151.6	174.7	203.6	209.4	200.1	188.6
130°	1.2	3.5	5.8	10.4	90.2	131.9	159.7	194.4	207.1	202.5	192.0
132.5°	1.2	2.3	5.8	8.1	57.8	103.0	138.8	179.3	200.1	202.5	195.5
135°	1.2	2.3	4.6	6.9	41.6	63.6	111.1	160.8	187.4	195.5	195.5
137.5°	1.2	2.3	4.6	5.8	18.5	47.4	69.4	138.8	171.2	186.3	189.7
140°	1.2	2.3	3.5	4.6	6.9	25.5	49.7	109.9	151.6	172.4	181.6
142.5°	1.2	2.3	3.5	4.6	5.8	5.8	30.1	63.6	127.3	153.9	168.9
145°	1.2	2.3	2.3	3.5	4.6	5.8	5.8	48.6	91.4	131.9	151.6
147.5°	1.2	1.2	2.3	3.5	4.6	4.6	4.6	22.0	54.4	100.7	129.6
150°	1.2	1.2	2.3	2.3	3.5	3.5	4.6	4.6	35.9	56.7	96.0
152.5°	1.2	1.2	2.3	2.3	3.5	3.5	3.5	4.6	4.6	38.2	53.2
155°	1.2	1.2	2.3	2.3	2.3	3.5	3.5	3.5	3.5	4.6	33.6
157.5°	1.2	1.2	2.3	2.3	2.3	2.3	2.3	3.5	3.5	4.6	4.6
160°	1.2	2.3	2.3	2.3	2.3	2.3	2.3	3.5	3.5	3.5	4.6
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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	2359.0	2359.0	2359.0	2359.0	2359.0	2359.0	2359.0	2359.0	2359.0	2359.0
2.5°	2319.6	2337.0	2337.0	2352.0	2360.1	2357.8	2360.1	2364.8	2350.9	2346.2
5°	2392.5	2427.2	2444.6	2483.9	2493.2	2510.5	2516.3	2536.0	2540.6	2526.7
7.5°	2621.6	2693.3	2739.6	2787.0	2807.9	2818.3	2836.8	2849.5	2869.2	2854.1
10°	2836.8	2923.5	2989.5	3041.6	3054.3	3064.7	3086.7	3117.9	3115.6	3113.3
12.5°	3023.0	3099.4	3180.4	3255.6	3293.8	3301.9	3334.3	3372.4	3379.4	3348.1
15°	3176.9	3283.4	3374.8	3454.6	3469.6	3490.4	3514.7	3527.5	3521.7	3526.3
17.5°	3305.3	3395.6	3460.4	3503.2	3512.4	3528.6	3550.6	3566.8	3569.1	3570.3
20°	3356.2	3416.4	3478.9	3537.9	3556.4	3572.6	3599.2	3613.1	3610.8	3603.8
22.5°	3347.0	3434.9	3492.8	3541.3	3559.9	3574.9	3598.0	3607.3	3603.8	3596.9
25°	3333.1	3408.3	3459.2	3484.7	3484.7	3496.2	3490.4	3483.5	3475.4	3476.6
27.5°	3267.2	3311.1	3345.8	3374.8	3378.2	3379.4	3375.9	3369.0	3364.3	3353.9
30°	3133.0	3186.2	3202.4	3200.1	3195.4	3194.3	3180.4	3170.0	3157.2	3158.4
32.5°	2975.6	2987.2	2994.1	2974.5	2962.9	2960.6	2947.8	2930.5	2913.1	2894.6
35°	2773.1	2765.1	2748.9	2735.0	2725.7	2711.8	2693.3	2676.0	2654.0	2655.1
37.5°	2577.6	2552.2	2529.0	2490.9	2483.9	2451.5	2415.7	2387.9	2352.0	2332.4
40°	2374.0	2348.6	2319.6	2278.0	2259.5	2229.4	2190.1	2143.8	2114.9	2103.3
42.5°	2179.6	2148.4	2114.9	2065.1	2042.0	2017.7	1976.0	1930.9	1910.1	1906.6
45°	1989.9	1954.0	1921.7	1866.1	1841.8	1812.9	1770.1	1742.3	1712.2	1705.3
47.5°	1807.1	1775.9	1726.1	1683.3	1660.2	1635.9	1591.9	1566.5	1544.5	1536.4
50°	1630.1	1600.0	1561.8	1514.4	1492.4	1469.3	1438.1	1413.8	1388.3	1380.2
52.5°	1471.6	1441.5	1402.2	1365.2	1343.2	1329.3	1300.4	1272.6	1252.9	1240.2
55°	1318.9	1291.1	1255.3	1220.6	1212.5	1193.9	1160.4	1136.1	1123.4	1124.5
57.5°	1178.9	1154.6	1126.8	1093.3	1080.6	1063.2	1041.2	1012.3	997.3	992.6
60°	1051.6	1028.5	1005.4	979.9	963.7	951.0	920.9	897.8	878.1	875.8
62.5°	930.2	912.8	893.1	867.7	853.8	839.9	813.3	791.3	776.3	771.7
65°	824.9	809.8	786.7	765.9	752.0	738.1	712.7	690.7	678.0	665.2
67.5°	720.8	708.0	690.7	668.7	656.0	642.1	620.1	595.8	580.8	577.3
70°	628.2	614.3	600.4	577.3	565.7	557.6	533.3	509.0	497.5	492.9
72.5°	548.4	533.3	513.7	497.5	490.5	475.5	452.4	436.2	421.1	411.9
75°	465.1	455.8	441.9	423.4	410.7	400.3	381.8	365.6	352.9	343.6
77.5°	396.8	385.3	373.7	355.2	345.9	336.7	317.0	303.1	290.4	285.8
80°	333.2	322.8	306.6	292.7	284.6	276.5	261.5	246.4	237.2	232.5
82.5°	275.3	266.1	253.4	241.8	232.5	226.8	212.9	200.1	192.0	185.1
85°	227.9	216.3	204.8	194.4	187.4	182.8	172.4	163.1	152.7	150.4
87.5°	187.4	178.2	167.8	157.3	152.7	146.9	137.7	130.7	122.6	119.2
90°	160.8	149.2	140.0	131.9	127.3	123.8	116.8	107.6	101.8	98.3
92.5°	145.8	135.4	127.3	119.2	115.7	112.2	104.1	97.2	91.4	86.8
95°	136.5	126.1	118.0	111.1	107.6	105.3	98.3	91.4	85.6	82.1
97.5°	129.6	118.0	109.9	104.1	100.7	98.3	92.6	86.8	81.0	77.5
100°	123.8	112.2	104.1	98.3	96.0	93.7	87.9	82.1	77.5	74.0
102.5°	121.5	108.8	100.7	96.0	93.7	91.4	85.6	81.0	75.2	71.7
105°	121.5	107.6	99.5	93.7	91.4	89.1	84.5	79.8	74.0	70.6
107.5°	123.8	108.8	99.5	94.9	92.6	90.2	84.5	79.8	74.0	70.6
110°	127.3	112.2	101.8	96.0	93.7	91.4	85.6	81.0	75.2	71.7



TEST NUMBER: P232511

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

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	131.9	115.7	105.3	98.3	96.0	93.7	87.9	83.3	77.5	74.0
115°	137.7	120.3	109.9	101.8	99.5	97.2	91.4	85.6	81.0	77.5
117.5°	144.6	127.3	114.5	106.4	104.1	100.7	94.9	89.1	84.5	81.0
120°	151.6	135.4	121.5	112.2	108.8	105.3	99.5	93.7	87.9	84.5
122.5°	159.7	142.3	128.4	119.2	115.7	112.2	105.3	99.5	93.7	89.1
125°	167.8	151.6	136.5	126.1	121.5	118.0	111.1	104.1	99.5	94.9
127.5°	174.7	159.7	144.6	134.2	129.6	124.9	118.0	111.1	105.3	101.8
130°	180.5	167.8	153.9	142.3	137.7	134.2	124.9	118.0	112.2	108.8
132.5°	186.3	174.7	163.1	151.6	146.9	142.3	134.2	126.1	120.3	115.7
135°	189.7	180.5	171.2	160.8	156.2	150.4	142.3	134.2	127.3	122.6
137.5°	189.7	185.1	177.0	168.9	164.3	159.7	150.4	142.3	135.4	131.9
140°	184.0	185.1	181.6	175.9	171.2	167.8	159.7	150.4	143.5	140.0
142.5°	175.9	179.3	181.6	178.2	175.9	173.5	166.6	158.5	151.6	146.9
145°	163.1	170.1	174.7	178.2	177.0	175.9	170.1	164.3	157.3	152.7
147.5°	146.9	157.3	163.1	171.2	173.5	173.5	171.2	166.6	160.8	157.3
150°	123.8	138.8	149.2	157.3	160.8	165.4	165.4	162.0	158.5	155.0
152.5°	87.9	112.2	127.3	138.8	143.5	148.1	153.9	151.6	146.9	144.6
155°	49.7	61.3	92.6	111.1	116.8	122.6	131.9	134.2	133.0	129.6
157.5°	25.5	41.6	52.1	60.2	63.6	72.9	91.4	104.1	103.0	105.3
160°	5.8	6.9	19.7	37.0	41.6	44.0	48.6	52.1	52.1	49.7
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)