

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: P232523

Luminaire Tested: **8SKB1-LD5-16-N-UNV-L840-CD2-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P232523
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-LD5-16-N-UNV-L840-CD2-U
Description: METALUX SKYBAR 8' WAVESTREAM STRIP
WITH NARROW LENS
Light Source: (476) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17221.0 lumens
Efficiency: N/A
Efficacy: 132.0 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

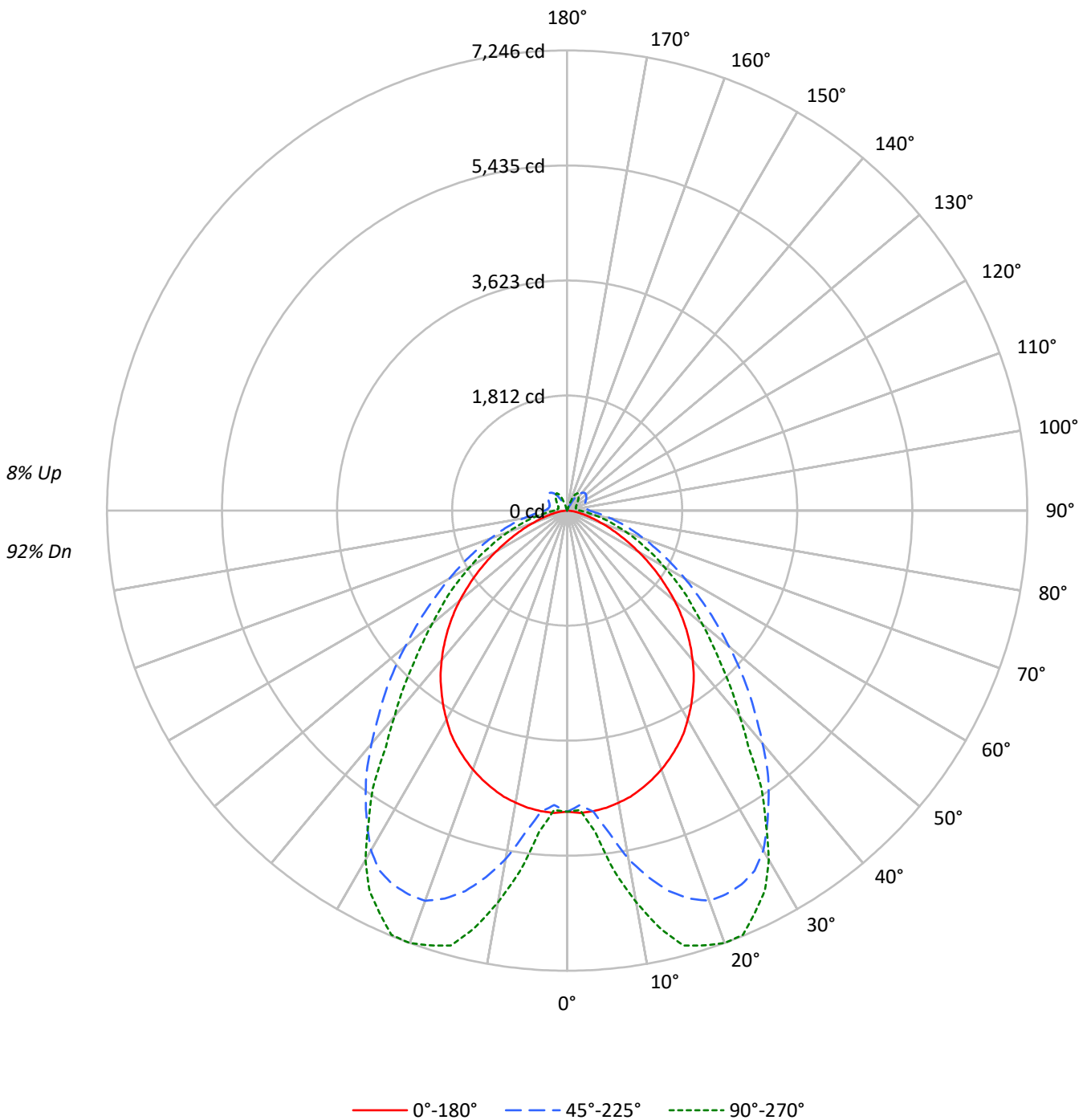
Input Watts (W): 130.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	25527	25527	25527
5°	25580	23931	24904
10°	25363	26474	28372
15°	25003	28139	30096
20°	24535	28595	29130
25°	23933	27622	26884
30°	23120	25748	23581
35°	22130	22776	19304
40°	20948	19633	15013
45°	19508	16655	12044
50°	17732	13830	9720
55°	15580	11381	7957
60°	13118	9323	6275
65°	10550	7562	4864
70°	8118	6043	3708
75°	6046	4773	2683
80°	4243	3676	1903
85°	2537	2772	1303



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	485.6	2.8
10°-20°	1689.6	9.8
20°-30°	2781.7	16.2
30°-40°	3125.1	18.1
40°-50°	2781.0	16.1
50°-60°	2150.7	12.5
60°-70°	1460.5	8.5
70°-80°	871.6	5.1
80°-90°	467.5	2.7
90°-100°	307.6	1.8
100°-110°	260.9	1.5
110°-120°	241.4	1.4
120°-130°	224.9	1.3
130°-140°	190.7	1.1
140°-150°	130.3	0.8
150°-160°	50.3	0.3
160°-170°	1.6	0.0
170°-180°	0.0	0.0
0°-30°	4956.9	28.8
0°-40°	8082.0	46.9
0°-60°	13013.7	75.6
0°-90°	15813.2	91.8
90°-120°	810.0	4.7
90°-150°	1355.9	7.9
90°-180°	1408.0	8.2
0°-180°	17221.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4743	4743	4743	4743	4743	
5°	4750	4685	4759	5013	5080	451
15°	4531	5090	6202	6976	7090	1277
25°	4099	5264	6497	7006	6990	1885
35°	3454	4741	5532	5480	5338	2158
45°	2656	3664	4050	3703	3429	2043
55°	1747	2496	2687	2438	2261	1560
65°	893	1552	1677	1512	1338	900
75°	330	935	958	826	691	362
85°	58	588	482	377	302	71
90°	5	500	351	256	198	5
95°	2	484	307	216	165	2
105°	2	440	284	184	142	2
115°	2	405	316	200	156	2
125°	2	333	368	244	191	2
135°	2	128	393	314	247	2
145°	2	12	305	356	307	1
155°	2	7	68	235	260	1
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°	4743.0	4743.0	4743.0	4743.0	4743.0	4743.0	4743.0	4743.0	4743.0	4743.0	4743.0
2.5°	4766.3	4747.7	4715.1	4712.8	4691.8	4682.5	4684.9	4677.9	4670.9	4659.3	4640.7
5°	4750.0	4715.1	4661.6	4661.6	4673.2	4684.9	4712.8	4738.4	4745.3	4761.6	4759.3
7.5°	4719.7	4666.2	4615.1	4656.9	4698.8	4715.1	4747.7	4794.2	4866.3	4998.9	5129.1
10°	4670.9	4598.8	4582.5	4650.0	4705.8	4754.6	4829.1	5045.4	5245.5	5443.2	5571.1
12.5°	4615.1	4526.7	4549.9	4636.0	4766.3	4859.3	5050.1	5336.2	5494.3	5724.6	5913.1
15°	4531.3	4447.6	4489.5	4617.4	4889.6	5089.6	5196.6	5545.5	5799.1	5989.8	6201.5
17.5°	4440.6	4366.2	4424.3	4650.0	5019.8	5212.9	5385.0	5680.4	5924.7	6206.1	6406.2
20°	4340.6	4275.4	4349.9	4691.8	5082.6	5280.3	5471.1	5752.5	6075.9	6366.7	6538.8
22.5°	4224.3	4166.1	4280.1	4710.4	5105.9	5303.6	5489.7	5817.7	6152.6	6392.2	6538.8
25°	4098.7	4040.5	4196.4	4673.2	5082.6	5264.1	5464.1	5852.6	6127.1	6315.5	6496.9
27.5°	3963.7	3898.6	4133.6	4596.5	4989.6	5194.3	5419.9	5785.1	6001.4	6210.8	6394.6
30°	3798.6	3740.4	4024.2	4484.8	4859.3	5101.2	5294.3	5622.3	5829.3	6036.3	6178.2
32.5°	3633.4	3577.6	3891.6	4326.6	4710.4	4938.4	5124.5	5380.4	5615.3	5775.8	5864.2
35°	3454.3	3391.5	3738.1	4133.6	4543.0	4740.7	4896.5	5129.1	5326.9	5445.5	5531.6
37.5°	3275.2	3207.7	3542.7	3931.2	4322.0	4503.4	4633.7	4868.6	5019.8	5117.5	5189.6
40°	3072.8	3003.0	3340.3	3703.2	4091.7	4219.6	4354.5	4563.9	4675.5	4754.6	4789.5
42.5°	2868.1	2798.3	3121.7	3463.6	3810.2	3935.8	4075.4	4240.6	4349.9	4396.4	4396.4
45°	2656.5	2589.0	2896.0	3226.4	3519.5	3663.7	3787.0	3919.5	4010.3	4047.5	4049.8
47.5°	2435.5	2379.6	2672.7	2972.8	3247.3	3372.9	3468.3	3596.2	3675.3	3684.6	3682.3
50°	2209.8	2161.0	2423.8	2719.3	2963.5	3075.2	3158.9	3277.5	3340.3	3338.0	3326.4
52.5°	1972.6	1942.3	2186.6	2456.4	2677.4	2777.4	2851.9	2956.5	3007.7	3007.7	2998.4
55°	1746.9	1728.3	1940.0	2200.5	2407.6	2496.0	2565.7	2658.8	2700.7	2700.7	2686.7
57.5°	1519.0	1516.6	1714.4	1947.0	2144.7	2223.8	2298.2	2379.6	2416.9	2416.9	2393.6
60°	1295.7	1307.3	1502.7	1716.7	1898.1	1974.9	2040.0	2119.1	2142.4	2147.0	2142.4
62.5°	1088.6	1118.9	1305.0	1500.4	1681.8	1746.9	1805.1	1881.8	1900.5	1907.4	1895.8
65°	893.2	939.8	1128.2	1314.3	1484.1	1551.5	1602.7	1656.2	1672.5	1679.5	1677.1
67.5°	732.7	781.6	970.0	1153.8	1309.6	1363.1	1414.3	1460.8	1463.1	1474.8	1465.5
70°	567.6	642.0	830.4	1004.9	1151.4	1200.3	1242.2	1274.7	1281.7	1284.0	1281.7
72.5°	437.3	525.7	704.8	877.0	1009.5	1056.1	1088.6	1114.2	1114.2	1116.5	1109.6
75°	330.3	437.3	611.8	770.0	888.6	935.1	960.7	977.0	967.7	965.3	958.4
77.5°	239.6	362.9	528.0	676.9	788.6	823.5	846.7	849.0	835.1	832.8	818.8
80°	165.2	295.4	455.9	595.5	697.8	732.7	744.4	735.1	723.4	709.5	690.9
82.5°	109.3	239.6	395.4	528.0	623.4	651.3	660.6	646.7	630.4	607.1	576.9
85°	58.2	193.1	344.3	472.2	562.9	588.5	593.2	567.6	542.0	511.8	481.5
87.5°	25.6	158.2	307.1	435.0	514.1	532.7	535.0	507.1	474.5	439.6	402.4
90°	4.7	134.9	283.8	407.1	483.8	500.1	500.1	462.9	430.3	393.1	351.2
92.5°	2.3	127.9	276.8	397.8	474.5	490.8	488.5	448.9	409.4	367.5	325.7
95°	2.3	111.7	260.5	388.5	467.6	483.8	481.5	439.6	397.8	353.6	307.1
97.5°	2.3	93.0	244.2	372.2	455.9	472.2	472.2	432.7	390.8	344.3	295.4
100°	0.0	72.1	225.6	355.9	439.6	460.6	462.9	425.7	381.5	335.0	288.4
102.5°	0.0	48.8	209.4	341.9	428.0	448.9	453.6	423.4	376.8	330.3	283.8
105°	2.3	30.2	188.4	325.7	416.4	439.6	446.6	421.0	374.5	330.3	283.8
107.5°	2.3	20.9	167.5	309.4	407.1	432.7	442.0	421.0	376.8	332.6	288.4
110°	2.3	18.6	141.9	293.1	395.4	423.4	437.3	423.4	381.5	339.6	295.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	2.3	14.0	107.0	272.2	381.5	414.1	432.7	425.7	388.5	346.6	304.7
115°	2.3	11.6	72.1	251.2	367.5	404.7	428.0	428.0	395.4	355.9	316.4
117.5°	2.3	11.6	48.8	223.3	351.2	393.1	418.7	430.3	404.7	365.2	330.3
120°	2.3	9.3	23.3	190.7	330.3	376.8	409.4	430.3	411.7	376.8	341.9
122.5°	2.3	9.3	18.6	146.5	307.1	358.2	395.4	428.0	418.7	386.1	355.9
125°	2.3	7.0	16.3	97.7	276.8	332.6	376.8	421.0	421.0	395.4	367.5
127.5°	2.3	7.0	14.0	69.8	237.3	304.7	351.2	409.4	421.0	402.4	379.2
130°	2.3	7.0	11.6	20.9	181.4	265.2	321.0	390.8	416.4	407.1	386.1
132.5°	2.3	4.7	11.6	16.3	116.3	207.0	279.1	360.6	402.4	407.1	393.1
135°	2.3	4.7	9.3	14.0	83.7	127.9	223.3	323.3	376.8	393.1	393.1
137.5°	2.3	4.7	9.3	11.6	37.2	95.4	139.6	279.1	344.3	374.5	381.5
140°	2.3	4.7	7.0	9.3	14.0	51.2	100.0	221.0	304.7	346.6	365.2
142.5°	2.3	4.7	7.0	9.3	11.6	11.6	60.5	127.9	255.9	309.4	339.6
145°	2.3	4.7	4.7	7.0	9.3	11.6	11.6	97.7	183.8	265.2	304.7
147.5°	2.3	2.3	4.7	7.0	9.3	9.3	9.3	44.2	109.3	202.4	260.5
150°	2.3	2.3	4.7	4.7	7.0	7.0	9.3	9.3	72.1	114.0	193.1
152.5°	2.3	2.3	4.7	4.7	7.0	7.0	7.0	9.3	9.3	76.8	107.0
155°	2.3	2.3	4.7	4.7	4.7	7.0	7.0	7.0	7.0	9.3	67.5
157.5°	2.3	2.3	4.7	4.7	4.7	4.7	4.7	7.0	7.0	9.3	9.3
160°	2.3	4.7	4.7	4.7	4.7	4.7	4.7	7.0	7.0	7.0	9.3
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°	4743.0	4743.0	4743.0	4743.0	4743.0	4743.0	4743.0	4743.0	4743.0	4743.0
2.5°	4663.9	4698.8	4698.8	4729.0	4745.3	4740.7	4745.3	4754.6	4726.7	4717.4
5°	4810.5	4880.2	4915.1	4994.2	5012.8	5047.7	5059.4	5098.9	5108.2	5080.3
7.5°	5271.0	5415.3	5508.3	5603.7	5645.5	5666.5	5703.7	5729.3	5768.8	5738.6
10°	5703.7	5878.2	6010.8	6115.4	6141.0	6162.0	6206.1	6269.0	6264.3	6259.6
12.5°	6078.2	6231.7	6394.6	6545.8	6622.5	6638.8	6703.9	6780.7	6794.7	6731.9
15°	6387.6	6601.6	6785.4	6945.9	6976.1	7018.0	7066.8	7092.4	7080.8	7090.1
17.5°	6645.8	6827.2	6957.5	7043.6	7062.2	7094.7	7138.9	7171.5	7176.1	7178.5
20°	6748.1	6869.1	6994.7	7113.3	7150.6	7183.1	7236.6	7264.5	7259.9	7245.9
22.5°	6729.5	6906.3	7022.6	7120.3	7157.5	7187.8	7234.3	7252.9	7245.9	7232.0
25°	6701.6	6852.8	6955.2	7006.3	7006.3	7029.6	7018.0	7004.0	6987.7	6990.1
27.5°	6569.0	6657.4	6727.2	6785.4	6792.3	6794.7	6787.7	6773.7	6764.4	6743.5
30°	6299.2	6406.2	6438.8	6434.1	6424.8	6422.5	6394.6	6373.6	6348.0	6350.4
32.5°	5982.8	6006.1	6020.1	5980.5	5957.2	5952.6	5927.0	5892.1	5857.2	5820.0
35°	5575.8	5559.5	5526.9	5499.0	5480.4	5452.5	5415.3	5380.4	5336.2	5338.5
37.5°	5182.6	5131.5	5084.9	5008.2	4994.2	4929.1	4857.0	4801.2	4729.0	4689.5
40°	4773.2	4722.1	4663.9	4580.2	4543.0	4482.5	4403.4	4310.3	4252.2	4228.9
42.5°	4382.5	4319.6	4252.2	4152.2	4105.6	4056.8	3973.1	3882.3	3840.5	3833.5
45°	4001.0	3928.9	3863.7	3752.1	3703.2	3645.1	3559.0	3503.2	3442.7	3428.7
47.5°	3633.4	3570.6	3470.6	3384.5	3338.0	3289.2	3200.8	3149.6	3105.4	3089.1
50°	3277.5	3217.1	3140.3	3044.9	3000.7	2954.2	2891.4	2842.5	2791.4	2775.1
52.5°	2958.9	2898.4	2819.3	2744.8	2700.7	2672.7	2614.6	2558.8	2519.2	2493.6
55°	2651.8	2596.0	2523.9	2454.1	2437.8	2400.6	2333.1	2284.3	2258.7	2261.0
57.5°	2370.3	2321.5	2265.7	2198.2	2172.6	2137.7	2093.5	2035.4	2005.1	1995.8
60°	2114.5	2067.9	2021.4	1970.2	1937.7	1912.1	1851.6	1805.1	1765.5	1760.9
62.5°	1870.2	1835.3	1795.8	1744.6	1716.7	1688.8	1635.3	1591.1	1560.8	1551.5
65°	1658.5	1628.3	1581.8	1539.9	1512.0	1484.1	1432.9	1388.7	1363.1	1337.5
67.5°	1449.2	1423.6	1388.7	1344.5	1318.9	1291.0	1246.8	1198.0	1167.7	1160.7
70°	1263.1	1235.2	1207.3	1160.7	1137.5	1121.2	1072.4	1023.5	1000.2	990.9
72.5°	1102.6	1072.4	1032.8	1000.2	986.3	956.0	909.5	877.0	846.7	828.1
75°	935.1	916.5	888.6	851.4	825.8	804.8	767.6	735.1	709.5	690.9
77.5°	797.9	774.6	751.3	714.1	695.5	676.9	637.4	609.4	583.9	574.6
80°	669.9	649.0	616.4	588.5	572.2	555.9	525.7	495.5	476.9	467.6
82.5°	553.6	535.0	509.4	486.2	467.6	455.9	428.0	402.4	386.1	372.2
85°	458.2	435.0	411.7	390.8	376.8	367.5	346.6	328.0	307.1	302.4
87.5°	376.8	358.2	337.3	316.4	307.1	295.4	276.8	262.9	246.6	239.6
90°	323.3	300.1	281.5	265.2	255.9	248.9	234.9	216.3	204.7	197.7
92.5°	293.1	272.2	255.9	239.6	232.6	225.6	209.4	195.4	183.8	174.5
95°	274.5	253.5	237.3	223.3	216.3	211.7	197.7	183.8	172.1	165.2
97.5°	260.5	237.3	221.0	209.4	202.4	197.7	186.1	174.5	162.8	155.9
100°	248.9	225.6	209.4	197.7	193.1	188.4	176.8	165.2	155.9	148.9
102.5°	244.2	218.7	202.4	193.1	188.4	183.8	172.1	162.8	151.2	144.2
105°	244.2	216.3	200.0	188.4	183.8	179.1	169.8	160.5	148.9	141.9
107.5°	248.9	218.7	200.0	190.7	186.1	181.4	169.8	160.5	148.9	141.9
110°	255.9	225.6	204.7	193.1	188.4	183.8	172.1	162.8	151.2	144.2



TEST NUMBER: P232523

CATALOG NUMBER: 8SKB1-LD5-16-N-UNV-L840-CD2-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	265.2	232.6	211.7	197.7	193.1	188.4	176.8	167.5	155.9	148.9
115°	276.8	241.9	221.0	204.7	200.0	195.4	183.8	172.1	162.8	155.9
117.5°	290.8	255.9	230.3	214.0	209.4	202.4	190.7	179.1	169.8	162.8
120°	304.7	272.2	244.2	225.6	218.7	211.7	200.0	188.4	176.8	169.8
122.5°	321.0	286.1	258.2	239.6	232.6	225.6	211.7	200.0	188.4	179.1
125°	337.3	304.7	274.5	253.5	244.2	237.3	223.3	209.4	200.0	190.7
127.5°	351.2	321.0	290.8	269.8	260.5	251.2	237.3	223.3	211.7	204.7
130°	362.9	337.3	309.4	286.1	276.8	269.8	251.2	237.3	225.6	218.7
132.5°	374.5	351.2	328.0	304.7	295.4	286.1	269.8	253.5	241.9	232.6
135°	381.5	362.9	344.3	323.3	314.0	302.4	286.1	269.8	255.9	246.6
137.5°	381.5	372.2	355.9	339.6	330.3	321.0	302.4	286.1	272.2	265.2
140°	369.9	372.2	365.2	353.6	344.3	337.3	321.0	302.4	288.4	281.5
142.5°	353.6	360.6	365.2	358.2	353.6	348.9	335.0	318.7	304.7	295.4
145°	328.0	341.9	351.2	358.2	355.9	353.6	341.9	330.3	316.4	307.1
147.5°	295.4	316.4	328.0	344.3	348.9	348.9	344.3	335.0	323.3	316.4
150°	248.9	279.1	300.1	316.4	323.3	332.6	332.6	325.7	318.7	311.7
152.5°	176.8	225.6	255.9	279.1	288.4	297.7	309.4	304.7	295.4	290.8
155°	100.0	123.3	186.1	223.3	234.9	246.6	265.2	269.8	267.5	260.5
157.5°	51.2	83.7	104.7	121.0	127.9	146.5	183.8	209.4	207.0	211.7
160°	11.6	14.0	39.5	74.4	83.7	88.4	97.7	104.7	104.7	100.0
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)