

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: P236367

Luminaire Tested: **SKB2-LD5-9-N-UNV-L835-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236367
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-365-3)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SKB2-LD5-9-N-UNV-L835-CD1-U
Description: METALUX SKYBAR LED WAVESTREAM LUMINAIRE
2 BLADES WITH NARROW DISTRIBUTION LENS, ALL BLADES VERTICAL
Light Source: (476) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

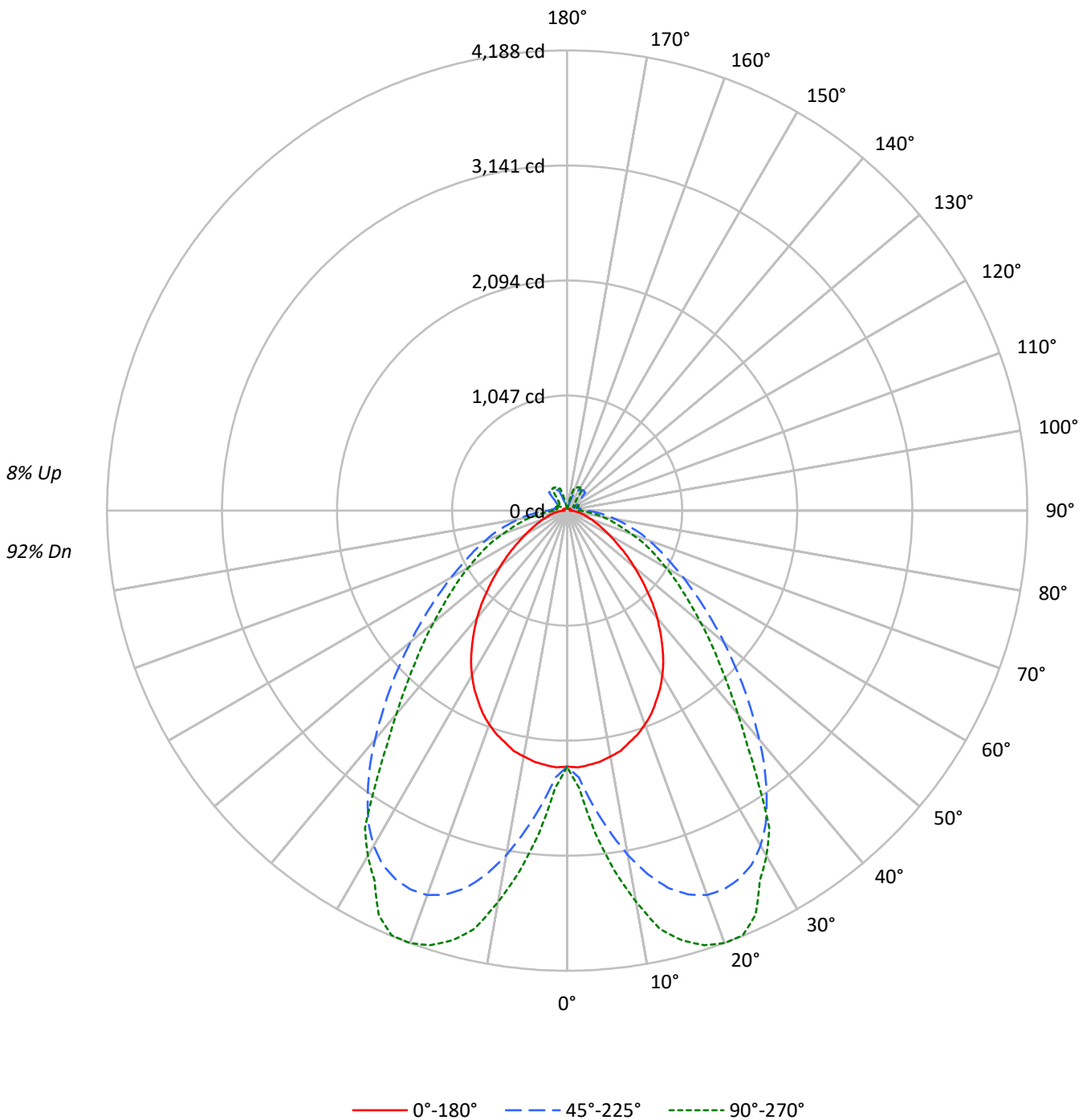
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9669.0 lumens
Efficiency: N/A
Efficacy: 128.2 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.63 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 1.25' x L: 2' x H: 0.21')
CIE Type: Direct

Input Watts (W): 75.4
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

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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	114	114	114	114	107	107	107	101	101	101	95	95	95	92
1	107	102	98	94	103	99	95	92	93	90	88	88	86	83	83	81	80	77
2	98	90	83	78	94	87	81	76	82	77	73	78	74	70	74	71	68	65
3	90	79	72	65	86	77	70	64	73	67	62	69	64	60	66	62	58	56
4	82	71	62	56	79	69	61	55	65	59	53	62	57	52	59	54	50	48
5	76	64	55	49	73	62	54	48	59	52	47	56	50	45	54	48	44	42
6	70	57	49	43	68	56	48	42	53	46	41	51	45	40	49	43	39	37
7	65	52	44	38	63	51	43	37	49	42	37	47	40	36	45	39	35	33
8	61	48	39	34	59	47	39	33	45	38	33	43	37	32	41	36	32	30
9	57	44	36	30	55	43	35	30	41	34	30	40	33	29	38	33	29	27
10	53	40	33	28	52	40	32	27	38	32	27	37	31	26	35	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10029	10029	10029
5°	9947	11443	12557
10°	9756	13462	15355
15°	9471	15075	17283
20°	9144	15952	18091
25°	8674	16140	17886
30°	8119	15764	16454
35°	7405	14666	14295
40°	6592	13173	11920
45°	5649	11608	10192
50°	4761	10152	8859
55°	3933	8899	7804
60°	3218	7911	6931
65°	2677	7094	6239
70°	2293	6485	5366
75°	2008	5906	4705
80°	1788	5313	4149
85°	1547	4677	3433



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	266.8	2.8
10°-20°	952.3	9.8
20°-30°	1560.9	16.1
30°-40°	1744.3	18.0
40°-50°	1519.7	15.7
50°-60°	1169.6	12.1
60°-70°	839.2	8.7
70°-80°	554.1	5.7
80°-90°	299.6	3.1
90°-100°	132.7	1.4
100°-110°	105.7	1.1
110°-120°	106.0	1.1
120°-130°	102.5	1.1
130°-140°	111.0	1.1
140°-150°	110.3	1.1
150°-160°	70.0	0.7
160°-170°	22.1	0.2
170°-180°	2.2	0.0
0°-30°	2780.0	28.8
0°-40°	4524.3	46.8
0°-60°	7213.6	74.6
0°-90°	8906.5	92.1
90°-120°	344.3	3.6
90°-150°	668.1	6.9
90°-180°	762.0	7.9
0°-180°	9669.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2329	2329	2329	2329	2329	
5°	2322	2453	2692	2867	2948	220
15°	2184	2858	3556	3956	4051	616
25°	1914	2947	3701	4026	4058	880
35°	1512	2581	3164	3128	3037	942
45°	1024	1932	2271	2089	1953	793
55°	602	1313	1510	1377	1287	543
65°	322	876	982	901	831	324
75°	168	608	609	520	459	180
85°	69	394	302	236	202	65
90°	26	235	172	129	111	17
95°	34	163	130	106	96	28
105°	37	99	109	97	93	39
115°	32	174	74	110	115	33
125°	28	207	115	78	70	26
135°	22	187	232	120	104	18
145°	20	143	230	239	237	12
155°	19	40	209	227	235	9
165°	19	26	50	122	149	5
175°	19	20	22	24	21	2
180°	18	18	18	18	18	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2329.2	2329.2	2329.2	2329.2	2329.2	2329.2	2329.2	2329.2	2329.2	2329.2	2329.2
2.5°	2339.0	2334.1	2344.9	2354.7	2355.7	2362.5	2361.6	2374.3	2390.0	2409.6	2429.2
5°	2322.4	2325.3	2350.8	2390.0	2423.3	2452.7	2468.4	2522.3	2567.4	2630.2	2691.9
7.5°	2304.7	2312.6	2367.5	2442.9	2519.4	2562.5	2601.7	2694.9	2777.2	2864.5	2940.0
10°	2272.4	2291.0	2384.1	2506.7	2626.3	2687.0	2742.9	2856.6	2975.2	3085.0	3183.1
12.5°	2241.0	2271.4	2397.8	2556.7	2706.6	2783.1	2856.6	3002.7	3137.0	3277.2	3388.0
15°	2184.1	2237.1	2405.7	2598.8	2779.2	2857.6	2949.8	3118.4	3277.2	3422.3	3555.6
17.5°	2135.1	2203.7	2401.8	2620.4	2831.1	2923.3	3015.4	3195.8	3370.3	3536.0	3663.4
20°	2071.4	2158.6	2390.0	2630.2	2851.7	2958.6	3058.6	3252.7	3436.0	3593.8	3724.2
22.5°	2001.8	2103.7	2360.6	2614.5	2849.8	2960.5	3069.4	3265.4	3447.8	3605.6	3731.1
25°	1914.5	2040.0	2308.6	2579.2	2823.3	2946.8	3045.8	3240.9	3422.3	3573.2	3700.7
27.5°	1829.3	1965.5	2249.8	2526.3	2775.3	2891.9	2989.9	3195.8	3371.3	3513.4	3635.0
30°	1731.2	1879.3	2173.3	2449.8	2698.8	2813.5	2918.4	3109.5	3277.2	3417.4	3521.3
32.5°	1628.3	1780.2	2080.2	2350.8	2592.9	2715.5	2810.6	2997.8	3161.5	3276.2	3367.4
35°	1511.6	1677.3	1963.6	2237.1	2469.4	2581.2	2677.2	2852.7	3006.6	3110.5	3164.4
37.5°	1391.1	1562.6	1845.9	2099.8	2332.2	2426.3	2519.4	2696.8	2823.3	2914.5	2952.7
40°	1275.4	1436.2	1705.7	1963.6	2175.3	2270.4	2352.7	2513.5	2637.0	2699.8	2720.4
42.5°	1152.8	1314.6	1568.5	1808.7	2012.6	2103.7	2186.1	2327.3	2435.1	2491.0	2486.1
45°	1024.4	1187.2	1422.4	1657.7	1851.8	1932.2	2013.6	2135.1	2233.1	2271.4	2271.4
47.5°	907.8	1055.8	1292.0	1500.9	1687.1	1767.5	1842.0	1955.7	2036.1	2063.6	2053.8
50°	799.0	937.2	1154.8	1350.9	1532.2	1611.6	1674.4	1786.1	1855.7	1868.5	1861.6
52.5°	697.0	824.4	1029.3	1221.5	1387.1	1456.7	1521.4	1621.4	1678.3	1691.0	1678.3
55°	601.9	722.5	912.7	1095.0	1250.9	1312.6	1378.3	1463.6	1508.7	1512.6	1509.7
57.5°	514.7	632.3	810.7	981.3	1124.4	1188.1	1241.1	1320.5	1348.9	1359.7	1354.8
60°	441.1	552.9	717.6	881.3	1014.6	1072.5	1121.5	1176.4	1210.7	1213.6	1223.4
62.5°	376.4	483.3	641.1	790.1	919.5	968.5	1011.7	1061.7	1086.2	1090.1	1090.1
65°	321.5	422.5	574.5	710.7	830.3	876.4	910.7	956.8	972.5	972.5	982.3
67.5°	274.5	372.5	514.7	649.0	756.8	792.1	827.4	859.7	865.6	877.4	884.2
70°	234.3	330.4	463.7	594.1	687.2	725.4	751.9	770.5	783.3	783.3	786.2
72.5°	198.0	291.2	419.6	545.1	634.3	661.7	680.3	700.9	705.8	704.8	706.8
75°	167.6	258.8	385.3	496.0	581.3	607.8	622.5	636.2	633.3	627.4	608.8
77.5°	141.2	229.4	354.9	461.7	533.3	560.7	571.5	576.4	560.7	541.1	523.5
80°	114.7	201.9	321.5	422.5	490.2	511.7	517.6	500.0	482.3	466.6	447.0
82.5°	90.2	176.5	293.1	388.2	444.1	450.9	452.9	434.3	418.6	399.0	379.4
85°	68.6	151.9	260.8	342.1	385.3	394.1	391.1	369.6	346.0	324.5	301.9
87.5°	46.1	124.5	221.6	289.2	321.5	322.5	315.7	296.1	277.4	255.9	232.3
90°	25.5	87.2	163.7	210.8	237.2	235.3	237.2	221.6	206.8	190.2	172.5
92.5°	29.4	66.7	118.6	166.7	195.1	198.0	200.0	189.2	176.5	163.7	147.0
95°	34.3	58.8	83.3	125.5	154.9	162.7	164.7	161.8	154.9	145.1	130.4
97.5°	35.3	60.8	86.3	88.2	125.5	135.3	141.2	140.2	134.3	126.5	119.6
100°	36.3	65.7	99.0	95.1	90.2	105.9	116.7	125.5	124.5	118.6	109.8
102.5°	37.3	68.6	114.7	109.8	94.1	84.3	87.2	109.8	115.7	113.7	108.8
105°	37.3	70.6	118.6	128.4	108.8	99.0	88.2	87.2	102.9	109.8	108.8
107.5°	37.3	68.6	121.6	150.0	127.4	114.7	103.9	82.3	76.5	100.0	105.9
110°	36.3	65.7	124.5	166.7	144.1	132.3	119.6	95.1	78.4	68.6	99.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	34.3	56.9	124.5	165.7	168.6	149.0	135.3	109.8	88.2	75.5	65.7
115°	32.4	49.0	122.5	165.7	199.0	174.5	150.0	125.5	102.0	85.3	73.5
117.5°	32.4	44.1	122.5	166.7	199.0	210.8	179.4	140.2	114.7	97.1	81.4
120°	31.4	40.2	119.6	166.7	199.0	210.8	220.6	158.8	128.4	108.8	94.1
122.5°	29.4	36.3	111.8	163.7	197.0	208.8	217.6	193.1	145.1	121.6	103.9
125°	28.4	32.4	93.1	160.8	194.1	206.8	216.6	229.4	167.6	133.3	114.7
127.5°	27.4	30.4	77.4	161.8	190.2	202.9	213.7	227.4	221.6	152.9	128.4
130°	25.5	29.4	62.7	157.8	185.3	198.0	209.8	223.5	231.4	201.0	147.0
132.5°	23.5	27.4	50.0	140.2	180.4	193.1	203.9	220.6	229.4	233.3	184.3
135°	22.5	25.5	38.2	117.6	178.4	187.2	198.0	217.6	228.4	233.3	232.3
137.5°	21.6	25.5	34.3	93.1	178.4	185.3	192.1	210.8	224.5	232.3	232.3
140°	20.6	24.5	28.4	71.6	162.7	186.3	189.2	205.9	220.6	230.4	235.3
142.5°	20.6	23.5	27.4	55.9	131.4	173.5	189.2	199.0	214.7	227.4	234.3
145°	19.6	22.5	26.5	41.2	100.0	143.1	181.4	195.1	207.8	220.6	230.4
147.5°	19.6	21.6	25.5	33.3	75.5	109.8	149.0	198.0	201.9	213.7	223.5
150°	18.6	21.6	25.5	27.4	55.9	78.4	111.8	180.4	202.9	205.9	216.6
152.5°	18.6	20.6	25.5	27.4	40.2	56.9	79.4	136.3	190.2	206.8	208.8
155°	18.6	20.6	24.5	26.5	31.4	40.2	53.9	97.1	150.0	199.0	208.8
157.5°	18.6	20.6	23.5	26.5	27.4	30.4	38.2	63.7	105.9	151.0	192.1
160°	18.6	19.6	23.5	25.5	27.4	27.4	28.4	44.1	65.7	100.0	134.3
162.5°	18.6	19.6	21.6	24.5	26.5	27.4	27.4	29.4	42.2	60.8	85.3
165°	18.6	19.6	21.6	23.5	25.5	26.5	27.4	28.4	28.4	35.3	50.0
167.5°	18.6	18.6	20.6	22.5	24.5	25.5	25.5	27.4	27.4	28.4	29.4
170°	18.6	18.6	19.6	21.6	22.5	23.5	24.5	25.5	26.5	27.4	27.4
172.5°	18.6	18.6	19.6	19.6	20.6	21.6	21.6	22.5	24.5	24.5	25.5
175°	18.6	18.6	18.6	18.6	19.6	19.6	19.6	20.6	20.6	21.6	22.5
177.5°	17.6	17.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6	19.6
180°	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	2329.2	2329.2	2329.2	2329.2	2329.2	2329.2	2329.2	2329.2	2329.2	2329.2
2.5°	2462.5	2460.6	2479.2	2505.7	2500.8	2511.6	2526.3	2541.9	2543.9	2530.2
5°	2735.1	2766.4	2813.5	2847.8	2867.4	2876.2	2902.7	2918.4	2910.5	2947.8
7.5°	3032.1	3079.2	3139.0	3194.8	3217.4	3224.2	3249.7	3293.8	3289.9	3307.6
10°	3284.0	3352.7	3429.1	3501.7	3522.3	3544.8	3584.0	3612.4	3623.2	3615.4
12.5°	3504.6	3595.8	3668.3	3730.1	3770.3	3809.5	3843.8	3870.3	3893.8	3899.7
15°	3675.2	3765.4	3849.7	3929.1	3955.6	3977.1	4021.2	4044.8	4046.7	4050.6
17.5°	3784.0	3864.4	3946.7	4014.4	4045.7	4066.3	4101.6	4131.0	4139.9	4147.7
20°	3836.9	3910.5	3989.9	4052.6	4085.0	4104.6	4140.8	4160.4	4175.1	4187.9
22.5°	3839.9	3916.3	3994.8	4055.5	4084.0	4106.5	4140.8	4163.4	4175.1	4182.0
25°	3798.7	3877.1	3955.6	3998.7	4026.1	4046.7	4054.6	4051.6	4049.7	4057.5
27.5°	3723.2	3787.9	3836.0	3853.6	3845.8	3847.7	3830.1	3809.5	3801.6	3797.7
30°	3589.9	3635.0	3637.0	3635.0	3624.2	3630.1	3615.4	3609.5	3623.2	3628.1
32.5°	3406.6	3422.3	3432.1	3408.5	3408.5	3407.6	3413.4	3398.7	3406.6	3424.2
35°	3196.8	3175.2	3174.2	3139.9	3128.2	3122.3	3089.0	3062.5	3044.8	3037.0
37.5°	2948.8	2920.3	2911.5	2868.4	2851.7	2835.1	2783.1	2735.1	2708.6	2693.9
40°	2708.6	2677.2	2657.6	2604.7	2579.2	2560.6	2515.5	2459.6	2448.8	2417.4
42.5°	2468.4	2453.7	2400.8	2364.5	2323.3	2295.9	2251.8	2214.5	2184.1	2170.4
45°	2258.6	2222.4	2176.3	2117.5	2089.0	2061.6	2014.5	1982.2	1966.5	1952.8
47.5°	2041.0	2005.7	1966.5	1910.6	1888.1	1864.6	1824.4	1791.0	1775.3	1768.5
50°	1846.9	1813.6	1774.4	1708.7	1695.0	1670.4	1634.2	1610.7	1592.0	1585.2
52.5°	1660.6	1635.2	1592.0	1544.0	1531.2	1503.8	1476.3	1446.9	1437.1	1425.4
55°	1497.9	1466.5	1435.2	1396.9	1377.3	1360.7	1331.3	1303.8	1298.9	1287.1
57.5°	1352.8	1321.5	1286.2	1251.9	1243.0	1228.3	1197.0	1180.3	1162.6	1161.7
60°	1205.8	1189.1	1164.6	1134.2	1125.4	1107.8	1078.3	1055.8	1040.1	1037.2
62.5°	1083.2	1069.5	1045.0	1017.6	1006.8	993.1	968.5	943.1	933.3	927.4
65°	977.4	960.7	938.2	916.6	900.9	898.0	869.5	847.0	834.2	831.3
67.5°	871.5	865.6	847.0	826.4	813.7	798.0	774.4	749.9	737.2	729.4
70°	783.3	772.5	749.0	717.6	703.9	695.0	660.7	640.1	628.4	621.5
72.5°	691.1	672.5	644.1	617.6	603.9	592.1	569.6	550.0	541.1	533.3
75°	592.1	576.4	553.9	534.3	520.5	511.7	493.1	473.5	463.7	458.8
77.5°	510.7	493.1	481.3	461.7	448.0	437.2	420.6	402.9	398.0	392.1
80°	433.3	419.6	406.8	387.2	374.5	365.7	349.0	333.3	324.5	325.5
82.5°	356.8	343.1	326.4	309.8	301.9	292.1	279.4	268.6	265.7	259.8
85°	283.3	270.6	257.8	243.1	236.3	230.4	217.6	209.8	203.9	201.9
87.5°	218.6	205.9	194.1	182.3	178.4	172.5	162.7	159.8	154.9	150.0
90°	157.8	149.0	140.2	133.3	129.4	125.5	120.6	117.6	112.7	110.8
92.5°	135.3	125.5	119.6	113.7	112.7	109.8	105.9	102.9	100.0	98.0
95°	120.6	114.7	110.8	106.9	105.9	103.9	101.0	100.0	98.0	96.1
97.5°	112.7	107.8	104.9	102.9	102.9	102.0	101.0	99.0	98.0	97.1
100°	103.9	98.0	98.0	99.0	99.0	99.0	99.0	99.0	98.0	97.1
102.5°	102.9	98.0	97.1	95.1	95.1	93.1	93.1	92.1	91.2	90.2
105°	104.9	102.0	99.0	98.0	97.1	97.1	95.1	94.1	93.1	93.1
107.5°	106.9	105.9	104.9	102.9	102.9	102.9	101.0	101.0	100.0	98.0
110°	104.9	106.9	107.8	107.8	107.8	107.8	107.8	107.8	105.9	105.9



TEST NUMBER: P236367

CATALOG NUMBER: SKB2-LD5-9-N-UNV-L835-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	98.0	103.9	107.8	111.8	111.8	112.7	112.7	112.7	112.7	111.8
115°	66.7	69.6	103.9	108.8	109.8	111.8	113.7	115.7	115.7	114.7
117.5°	74.5	67.6	63.7	61.8	85.3	99.0	111.8	115.7	114.7	114.7
120°	82.3	74.5	69.6	65.7	65.7	63.7	62.7	62.7	62.7	66.7
122.5°	93.1	83.3	75.5	71.6	70.6	69.6	68.6	66.7	65.7	64.7
125°	102.9	94.1	86.3	79.4	78.4	76.5	74.5	72.5	71.6	69.6
127.5°	112.7	102.9	96.1	91.2	89.2	88.2	82.3	80.4	77.4	77.4
130°	126.5	113.7	104.9	100.0	97.1	96.1	93.1	91.2	89.2	88.2
132.5°	144.1	127.4	117.6	110.8	107.8	105.9	102.0	99.0	96.1	96.1
135°	188.2	149.0	132.3	123.5	119.6	117.6	112.7	108.8	104.9	103.9
137.5°	231.4	212.7	159.8	142.1	137.2	132.3	125.5	120.6	116.7	116.7
140°	234.3	233.3	233.3	191.2	173.5	162.7	146.1	138.2	134.3	130.4
142.5°	236.3	237.2	234.3	236.3	237.2	236.3	227.4	200.0	182.3	181.4
145°	235.3	238.2	238.2	238.2	239.2	239.2	238.2	239.2	236.3	237.2
147.5°	232.3	236.3	239.2	242.1	240.2	242.1	243.1	243.1	242.1	242.1
150°	224.5	232.3	237.2	240.2	239.2	240.2	240.2	241.2	238.2	238.2
152.5°	216.6	224.5	230.4	236.3	236.3	238.2	238.2	238.2	237.2	237.2
155°	207.8	213.7	220.6	226.5	227.4	229.4	232.3	233.3	235.3	235.3
157.5°	208.8	208.8	210.8	214.7	215.7	217.6	219.6	221.6	222.5	223.5
160°	169.6	200.0	209.8	214.7	212.7	210.8	209.8	211.7	209.8	211.7
162.5°	114.7	133.3	160.8	183.3	194.1	201.9	204.9	207.8	208.8	210.8
165°	62.7	78.4	97.1	118.6	121.6	126.5	135.3	141.2	151.0	149.0
167.5°	32.4	43.1	50.0	55.9	59.8	62.7	74.5	77.4	75.5	80.4
170°	28.4	28.4	29.4	29.4	30.4	31.4	32.4	38.2	35.3	33.3
172.5°	26.5	26.5	27.4	27.4	28.4	28.4	27.4	26.5	25.5	24.5
175°	22.5	23.5	24.5	24.5	24.5	25.5	24.5	23.5	22.5	20.6
177.5°	19.6	19.6	19.6	20.6	20.6	20.6	19.6	18.6	17.6	16.7
180°	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6

(END OF REPORT)