

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: P236372

Luminaire Tested: **SKB2-LD5-12-N-UNV-L850-CD2-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236372
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-LD5-12-N-UNV-L850-CD2-U
Description: METALUX SKYBAR LED WAVESTREAM LUMINAIRE
2 BLADES WITH NARROW DISTRIBUTION LENS, ALL BLADES VERTICAL
Light Source: (476) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

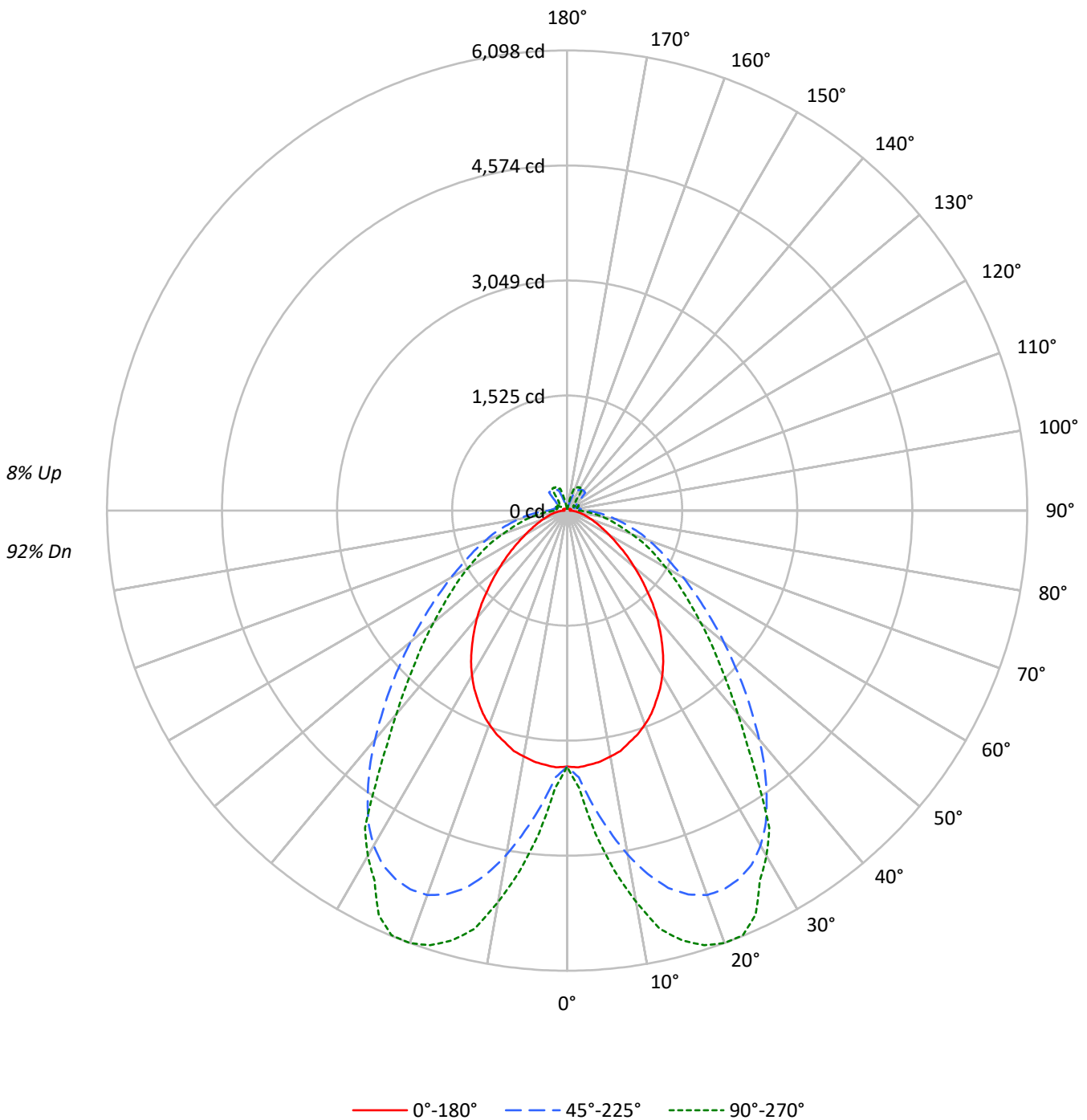
Lumens per Lamp: N/A
Luminaire Lumens: 14078.0 lumens
Efficiency: N/A
Efficacy: 134.2 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.63 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 1.25' x L: 2' x H: 0.21')
CIE Type: Direct

Input Watts (W): 104.9
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°	14601	14601	14601
5°	14482	16661	18283
10°	14204	19600	22357
15°	13790	21949	25165
20°	13314	23226	26340
25°	12629	23499	26042
30°	11821	22952	23957
35°	10782	21354	20813
40°	9598	19180	17356
45°	8226	16900	14839
50°	6932	14782	12898
55°	5727	12956	11363
60°	4686	11518	10091
65°	3899	10329	9084
70°	3339	9442	7814
75°	2924	8599	6851
80°	2603	7736	6041
85°	2253	6810	5000



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	388.5	2.8
10°-20°	1386.5	9.8
20°-30°	2272.7	16.1
30°-40°	2539.7	18.0
40°-50°	2212.6	15.7
50°-60°	1703.0	12.1
60°-70°	1221.8	8.7
70°-80°	806.8	5.7
80°-90°	436.2	3.1
90°-100°	193.2	1.4
100°-110°	153.9	1.1
110°-120°	154.3	1.1
120°-130°	149.2	1.1
130°-140°	161.7	1.1
140°-150°	160.5	1.1
150°-160°	102.0	0.7
160°-170°	32.2	0.2
170°-180°	3.2	0.0
0°-30°	4047.7	28.8
0°-40°	6587.4	46.8
0°-60°	10503.0	74.6
0°-90°	12967.8	92.1
90°-120°	501.3	3.6
90°-150°	972.8	6.9
90°-180°	1110.0	7.9
0°-180°	14078.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3391	3391	3391	3391	3391	
5°	3381	3571	3919	4175	4292	321
15°	3180	4161	5177	5759	5898	897
25°	2788	4290	5388	5862	5908	1282
35°	2201	3758	4607	4555	4422	1372
45°	1492	2813	3307	3042	2843	1155
55°	876	1911	2198	2005	1874	790
65°	468	1276	1430	1312	1210	472
75°	244	885	886	758	668	262
85°	100	574	440	344	294	95
90°	37	343	251	188	161	25
95°	50	237	190	154	140	41
105°	54	144	158	141	136	57
115°	47	254	107	160	167	48
125°	41	301	167	114	101	37
135°	33	273	338	174	151	26
145°	28	208	335	348	345	18
155°	27	58	304	331	343	13
165°	27	38	73	177	217	8
175°	27	28	33	36	30	3
180°	26	26	26	26	26	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	3391.3	3391.3	3391.3	3391.3	3391.3	3391.3	3391.3	3391.3	3391.3	3391.3	3391.3
2.5°	3405.6	3398.5	3414.2	3428.4	3429.9	3439.9	3438.4	3457.0	3479.8	3508.4	3536.9
5°	3381.3	3385.6	3422.7	3479.8	3528.4	3571.2	3594.0	3672.5	3738.2	3829.5	3919.4
7.5°	3355.6	3367.1	3447.0	3556.9	3668.2	3731.0	3788.1	3923.7	4043.6	4170.6	4280.6
10°	3308.5	3335.7	3471.3	3649.7	3823.8	3912.3	3993.7	4159.2	4331.9	4491.8	4634.5
12.5°	3262.9	3307.1	3491.2	3722.5	3940.8	4052.2	4159.2	4371.9	4567.4	4771.6	4932.8
15°	3180.1	3257.2	3502.7	3783.8	4046.5	4160.7	4294.8	4540.3	4771.6	4982.8	5176.9
17.5°	3108.7	3208.6	3496.9	3815.2	4122.1	4256.3	4390.5	4653.1	4907.1	5148.4	5333.9
20°	3015.9	3143.0	3479.8	3829.5	4152.1	4307.7	4453.3	4735.9	5002.8	5232.6	5422.4
22.5°	2914.6	3063.0	3437.0	3806.7	4149.2	4310.5	4469.0	4754.4	5019.9	5249.7	5432.4
25°	2787.6	2970.3	3361.4	3755.3	4110.7	4290.5	4434.7	4718.7	4982.8	5202.6	5388.2
27.5°	2663.4	2861.8	3275.7	3678.2	4040.8	4210.6	4353.3	4653.1	4908.6	5115.5	5292.5
30°	2520.7	2736.2	3164.4	3566.9	3929.4	4096.4	4249.2	4527.5	4771.6	4975.7	5127.0
32.5°	2370.8	2592.0	3028.8	3422.7	3775.3	3953.7	4092.1	4364.8	4603.1	4770.1	4902.9
35°	2200.9	2442.2	2858.9	3257.2	3595.4	3758.2	3898.0	4153.5	4377.6	4528.9	4607.4
37.5°	2025.4	2275.2	2687.7	3057.3	3395.6	3532.6	3668.2	3926.6	4110.7	4243.4	4299.1
40°	1857.0	2091.0	2483.5	2858.9	3167.2	3305.7	3425.6	3659.7	3839.5	3930.9	3960.8
42.5°	1678.5	1914.0	2283.7	2633.4	2930.3	3063.0	3182.9	3388.5	3545.5	3626.8	3619.7
45°	1491.6	1728.5	2071.1	2413.6	2696.2	2813.3	2931.7	3108.7	3251.4	3307.1	3307.1
47.5°	1321.7	1537.2	1881.2	2185.2	2456.4	2573.5	2681.9	2847.5	2964.6	3004.5	2990.2
50°	1163.3	1364.5	1681.4	1966.9	2230.9	2346.5	2437.9	2600.6	2701.9	2720.5	2710.5
52.5°	1014.8	1200.4	1498.7	1778.4	2019.7	2121.0	2215.2	2360.8	2443.6	2462.1	2443.6
55°	876.4	1051.9	1328.8	1594.3	1821.3	1911.2	2006.8	2131.0	2196.7	2202.4	2198.1
57.5°	749.3	920.6	1180.4	1428.8	1637.1	1729.9	1807.0	1922.6	1964.0	1979.7	1972.6
60°	642.3	805.0	1044.8	1283.2	1477.3	1561.5	1632.9	1712.8	1762.7	1767.0	1781.3
62.5°	548.1	703.7	933.5	1150.4	1338.8	1410.2	1473.0	1545.8	1581.5	1587.2	1587.2
65°	468.2	615.2	836.4	1034.8	1208.9	1276.0	1326.0	1393.1	1415.9	1415.9	1430.2
67.5°	399.7	542.4	749.3	944.9	1101.9	1153.3	1204.7	1251.8	1260.3	1277.5	1287.4
70°	341.1	481.0	675.1	865.0	1000.6	1056.2	1094.8	1121.9	1140.4	1140.4	1144.7
72.5°	288.3	423.9	610.9	793.6	923.5	963.4	990.6	1020.5	1027.7	1026.2	1029.1
75°	244.1	376.8	560.9	722.2	846.4	884.9	906.4	926.3	922.1	913.5	886.4
77.5°	205.5	334.0	516.7	672.3	776.5	816.4	832.1	839.3	816.4	787.9	762.2
80°	167.0	294.0	468.2	615.2	713.7	745.1	753.6	727.9	702.2	679.4	650.9
82.5°	131.3	256.9	426.8	565.2	646.6	656.6	659.4	632.3	609.5	580.9	552.4
85°	99.9	221.2	379.7	498.1	560.9	573.8	569.5	538.1	503.8	472.4	439.6
87.5°	67.1	181.3	322.6	421.1	468.2	469.6	459.6	431.1	403.9	372.5	338.3
90°	37.1	127.0	238.4	306.9	345.4	342.6	345.4	322.6	301.2	276.9	251.2
92.5°	42.8	97.1	172.7	242.6	284.0	288.3	291.2	275.5	256.9	238.4	214.1
95°	50.0	85.6	121.3	182.7	225.5	236.9	239.8	235.5	225.5	211.2	189.8
97.5°	51.4	88.5	125.6	128.5	182.7	197.0	205.5	204.1	195.5	184.1	174.1
100°	52.8	95.6	144.2	138.5	131.3	154.2	169.9	182.7	181.3	172.7	159.9
102.5°	54.2	99.9	167.0	159.9	137.0	122.8	127.0	159.9	168.4	165.6	158.4
105°	54.2	102.8	172.7	187.0	158.4	144.2	128.5	127.0	149.9	159.9	158.4
107.5°	54.2	99.9	177.0	218.4	185.6	167.0	151.3	119.9	111.3	145.6	154.2
110°	52.8	95.6	181.3	242.6	209.8	192.7	174.1	138.5	114.2	99.9	144.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	50.0	82.8	181.3	241.2	245.5	217.0	197.0	159.9	128.5	109.9	95.6
115°	47.1	71.4	178.4	241.2	289.7	254.1	218.4	182.7	148.4	124.2	107.0
117.5°	47.1	64.2	178.4	242.6	289.7	306.9	261.2	204.1	167.0	141.3	118.5
120°	45.7	58.5	174.1	242.6	289.7	306.9	321.1	231.2	187.0	158.4	137.0
122.5°	42.8	52.8	162.7	238.4	286.9	304.0	316.9	281.2	211.2	177.0	151.3
125°	41.4	47.1	135.6	234.1	282.6	301.2	315.4	334.0	244.1	194.1	167.0
127.5°	40.0	44.2	112.8	235.5	276.9	295.5	311.2	331.1	322.6	222.7	187.0
130°	37.1	42.8	91.3	229.8	269.8	288.3	305.4	325.4	336.8	292.6	214.1
132.5°	34.3	40.0	72.8	204.1	262.6	281.2	296.9	321.1	334.0	339.7	268.3
135°	32.8	37.1	55.7	171.3	259.8	272.6	288.3	316.9	332.6	339.7	338.3
137.5°	31.4	37.1	50.0	135.6	259.8	269.8	279.8	306.9	326.9	338.3	338.3
140°	30.0	35.7	41.4	104.2	236.9	271.2	275.5	299.7	321.1	335.4	342.6
142.5°	30.0	34.3	40.0	81.4	191.3	252.6	275.5	289.7	312.6	331.1	341.1
145°	28.5	32.8	38.5	59.9	145.6	208.4	264.1	284.0	302.6	321.1	335.4
147.5°	28.5	31.4	37.1	48.5	109.9	159.9	217.0	288.3	294.0	311.2	325.4
150°	27.1	31.4	37.1	40.0	81.4	114.2	162.7	262.6	295.5	299.7	315.4
152.5°	27.1	30.0	37.1	40.0	58.5	82.8	115.6	198.4	276.9	301.2	304.0
155°	27.1	30.0	35.7	38.5	45.7	58.5	78.5	141.3	218.4	289.7	304.0
157.5°	27.1	30.0	34.3	38.5	40.0	44.2	55.7	92.8	154.2	219.8	279.8
160°	27.1	28.5	34.3	37.1	40.0	40.0	41.4	64.2	95.6	145.6	195.5
162.5°	27.1	28.5	31.4	35.7	38.5	40.0	40.0	42.8	61.4	88.5	124.2
165°	27.1	28.5	31.4	34.3	37.1	38.5	40.0	41.4	41.4	51.4	72.8
167.5°	27.1	27.1	30.0	32.8	35.7	37.1	37.1	40.0	40.0	41.4	42.8
170°	27.1	27.1	28.5	31.4	32.8	34.3	35.7	37.1	38.5	40.0	40.0
172.5°	27.1	27.1	28.5	28.5	30.0	31.4	31.4	32.8	35.7	35.7	37.1
175°	27.1	27.1	27.1	27.1	28.5	28.5	28.5	30.0	30.0	31.4	32.8
177.5°	25.7	25.7	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	28.5
180°	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	3391.3	3391.3	3391.3	3391.3	3391.3	3391.3	3391.3	3391.3	3391.3	3391.3
2.5°	3585.4	3582.6	3609.7	3648.2	3641.1	3656.8	3678.2	3701.1	3703.9	3683.9
5°	3982.2	4027.9	4096.4	4146.4	4174.9	4187.8	4226.3	4249.2	4237.7	4292.0
7.5°	4414.7	4483.2	4570.3	4651.7	4684.5	4694.5	4731.6	4795.8	4790.1	4815.8
10°	4781.5	4881.5	4992.8	5098.4	5128.4	5161.2	5218.3	5259.7	5275.4	5264.0
12.5°	5102.7	5235.4	5341.1	5431.0	5489.5	5546.6	5596.5	5635.1	5669.3	5677.9
15°	5351.0	5482.4	5605.1	5720.7	5759.3	5790.7	5854.9	5889.1	5892.0	5897.7
17.5°	5509.5	5626.5	5746.4	5844.9	5890.6	5920.5	5971.9	6014.8	6027.6	6039.0
20°	5586.6	5693.6	5809.2	5900.6	5947.7	5976.2	6029.0	6057.6	6079.0	6097.5
22.5°	5590.8	5702.2	5816.4	5904.8	5946.2	5979.1	6029.0	6061.9	6079.0	6089.0
25°	5530.9	5645.1	5759.3	5822.1	5862.0	5892.0	5903.4	5899.1	5896.3	5907.7
27.5°	5421.0	5515.2	5585.1	5610.8	5599.4	5602.3	5576.6	5546.6	5535.2	5529.5
30°	5226.9	5292.5	5295.4	5292.5	5276.8	5285.4	5264.0	5255.4	5275.4	5282.5
32.5°	4960.0	4982.8	4997.1	4962.8	4962.8	4961.4	4970.0	4948.5	4960.0	4985.7
35°	4654.5	4623.1	4621.7	4571.7	4554.6	4546.0	4497.5	4459.0	4433.3	4421.9
37.5°	4293.4	4252.0	4239.2	4176.4	4152.1	4127.8	4052.2	3982.2	3943.7	3922.3
40°	3943.7	3898.0	3869.5	3792.4	3755.3	3728.2	3662.5	3581.2	3565.5	3519.8
42.5°	3594.0	3572.6	3495.5	3442.7	3382.8	3342.8	3278.6	3224.3	3180.1	3160.1
45°	3288.6	3235.7	3168.7	3083.0	3041.6	3001.7	2933.2	2886.1	2863.2	2843.2
47.5°	2971.7	2920.3	2863.2	2781.9	2749.0	2714.8	2656.3	2607.7	2584.9	2574.9
50°	2689.1	2640.6	2583.5	2487.8	2467.8	2432.2	2379.4	2345.1	2318.0	2308.0
52.5°	2417.9	2380.8	2318.0	2248.0	2229.5	2189.5	2149.6	2106.7	2092.5	2075.3
55°	2181.0	2135.3	2089.6	2033.9	2005.4	1981.1	1938.3	1898.3	1891.2	1874.1
57.5°	1969.7	1924.0	1872.7	1822.7	1809.8	1788.4	1742.8	1718.5	1692.8	1691.4
60°	1755.6	1731.3	1695.7	1651.4	1638.6	1612.9	1570.1	1537.2	1514.4	1510.1
62.5°	1577.2	1557.2	1521.5	1481.6	1465.9	1445.9	1410.2	1373.1	1358.8	1350.3
65°	1423.0	1398.8	1366.0	1334.6	1311.7	1307.4	1266.0	1233.2	1214.7	1210.4
67.5°	1268.9	1260.3	1233.2	1203.2	1184.7	1161.8	1127.6	1091.9	1073.3	1061.9
70°	1140.4	1124.7	1090.5	1044.8	1024.8	1012.0	962.0	932.0	914.9	904.9
72.5°	1006.3	979.1	937.8	899.2	879.2	862.1	829.3	800.7	787.9	776.5
75°	862.1	839.3	806.4	777.9	757.9	745.1	717.9	689.4	675.1	668.0
77.5°	743.6	717.9	700.8	672.3	652.3	636.6	612.3	586.6	579.5	570.9
80°	630.9	610.9	592.3	563.8	545.2	532.4	508.1	485.3	472.4	473.9
82.5°	519.5	499.6	475.3	451.0	439.6	425.3	406.8	391.1	386.8	378.2
85°	412.5	393.9	375.4	354.0	344.0	335.4	316.9	305.4	296.9	294.0
87.5°	318.3	299.7	282.6	265.5	259.8	251.2	236.9	232.7	225.5	218.4
90°	229.8	217.0	204.1	194.1	188.4	182.7	175.6	171.3	164.1	161.3
92.5°	197.0	182.7	174.1	165.6	164.1	159.9	154.2	149.9	145.6	142.7
95°	175.6	167.0	161.3	155.6	154.2	151.3	147.0	145.6	142.7	139.9
97.5°	164.1	157.0	152.7	149.9	149.9	148.4	147.0	144.2	142.7	141.3
100°	151.3	142.7	142.7	144.2	144.2	144.2	144.2	144.2	142.7	141.3
102.5°	149.9	142.7	141.3	138.5	138.5	135.6	135.6	134.2	132.7	131.3
105°	152.7	148.4	144.2	142.7	141.3	141.3	138.5	137.0	135.6	135.6
107.5°	155.6	154.2	152.7	149.9	149.9	149.9	147.0	147.0	145.6	142.7
110°	152.7	155.6	157.0	157.0	157.0	157.0	157.0	154.2	154.2	154.2



TEST NUMBER: P236372

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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	142.7	151.3	157.0	162.7	162.7	164.1	164.1	164.1	164.1	162.7
115°	97.1	101.3	151.3	158.4	159.9	162.7	165.6	168.4	168.4	167.0
117.5°	108.5	98.5	92.8	89.9	124.2	144.2	162.7	168.4	167.0	167.0
120°	119.9	108.5	101.3	95.6	95.6	92.8	91.3	91.3	91.3	97.1
122.5°	135.6	121.3	109.9	104.2	102.8	101.3	99.9	97.1	95.6	94.2
125°	149.9	137.0	125.6	115.6	114.2	111.3	108.5	105.6	104.2	101.3
127.5°	164.1	149.9	139.9	132.7	129.9	128.5	119.9	117.0	112.8	112.8
130°	184.1	165.6	152.7	145.6	141.3	139.9	135.6	132.7	129.9	128.5
132.5°	209.8	185.6	171.3	161.3	157.0	154.2	148.4	144.2	139.9	139.9
135°	274.0	217.0	192.7	179.8	174.1	171.3	164.1	158.4	152.7	151.3
137.5°	336.8	309.7	232.7	207.0	199.8	192.7	182.7	175.6	169.9	169.9
140°	341.1	339.7	339.7	278.3	252.6	236.9	212.7	201.3	195.5	189.8
142.5°	344.0	345.4	341.1	344.0	345.4	344.0	331.1	291.2	265.5	264.1
145°	342.6	346.8	346.8	346.8	348.3	348.3	346.8	348.3	344.0	345.4
147.5°	338.3	344.0	348.3	352.5	349.7	352.5	354.0	354.0	352.5	352.5
150°	326.9	338.3	345.4	349.7	348.3	349.7	349.7	351.1	346.8	346.8
152.5°	315.4	326.9	335.4	344.0	344.0	346.8	346.8	346.8	345.4	345.4
155°	302.6	311.2	321.1	329.7	331.1	334.0	338.3	339.7	342.6	342.6
157.5°	304.0	304.0	306.9	312.6	314.0	316.9	319.7	322.6	324.0	325.4
160°	246.9	291.2	305.4	312.6	309.7	306.9	305.4	308.3	305.4	308.3
162.5°	167.0	194.1	234.1	266.9	282.6	294.0	298.3	302.6	304.0	306.9
165°	91.3	114.2	141.3	172.7	177.0	184.1	197.0	205.5	219.8	217.0
167.5°	47.1	62.8	72.8	81.4	87.1	91.3	108.5	112.8	109.9	117.0
170°	41.4	41.4	42.8	42.8	44.2	45.7	47.1	55.7	51.4	48.5
172.5°	38.5	38.5	40.0	40.0	41.4	41.4	40.0	38.5	37.1	35.7
175°	32.8	34.3	35.7	35.7	35.7	37.1	35.7	34.3	32.8	30.0
177.5°	28.5	28.5	28.5	30.0	30.0	30.0	28.5	27.1	25.7	24.3
180°	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7

(END OF REPORT)