

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: LUMARK

Report Number: P962093

Luminaire Tested: **NAV-SB2B-830-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962093
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-830-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8134.4 lumens
Efficiency: N/A
Efficacy: 110.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 73.9
Input Voltage (V): NR
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: 24 FT



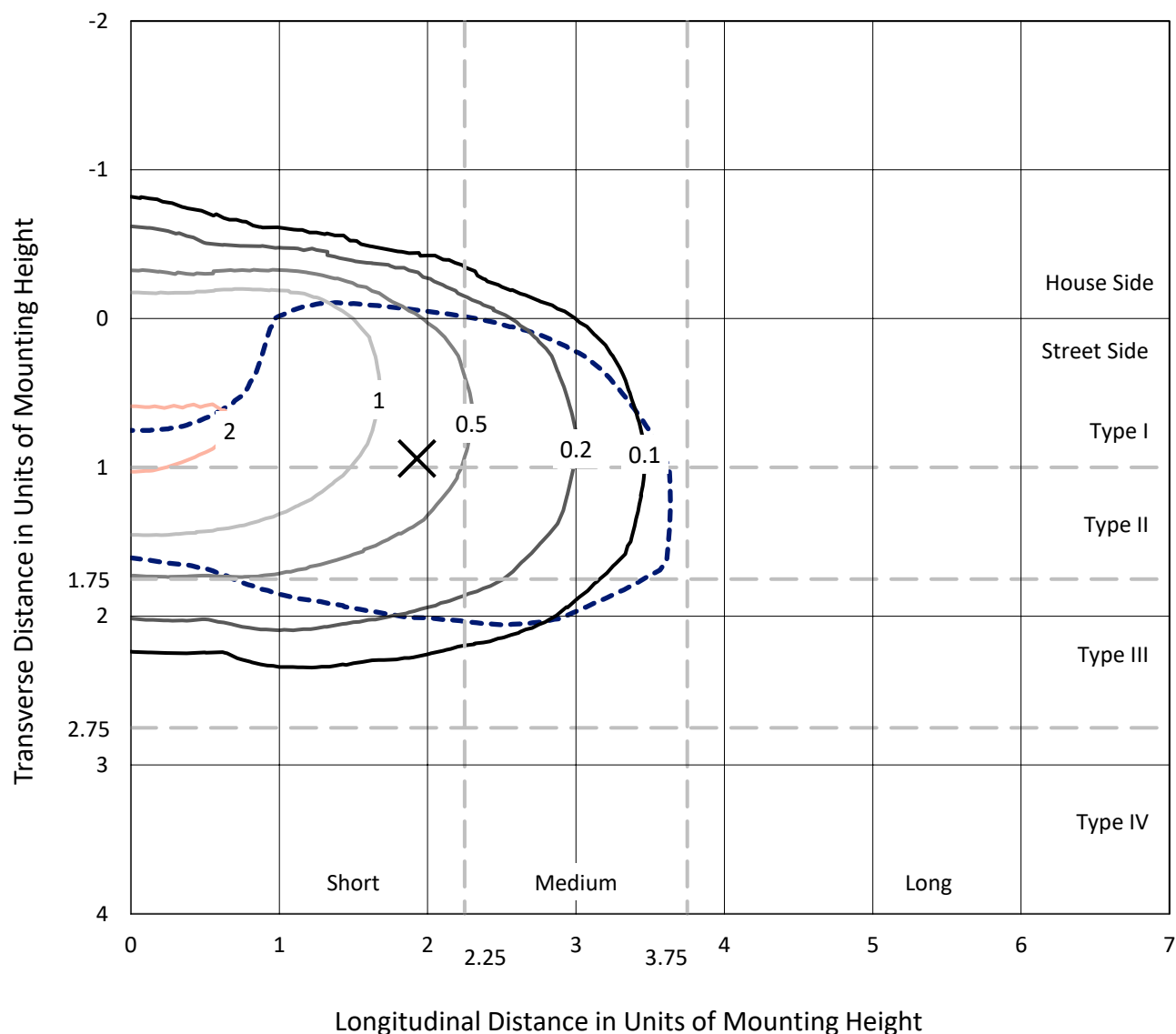
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

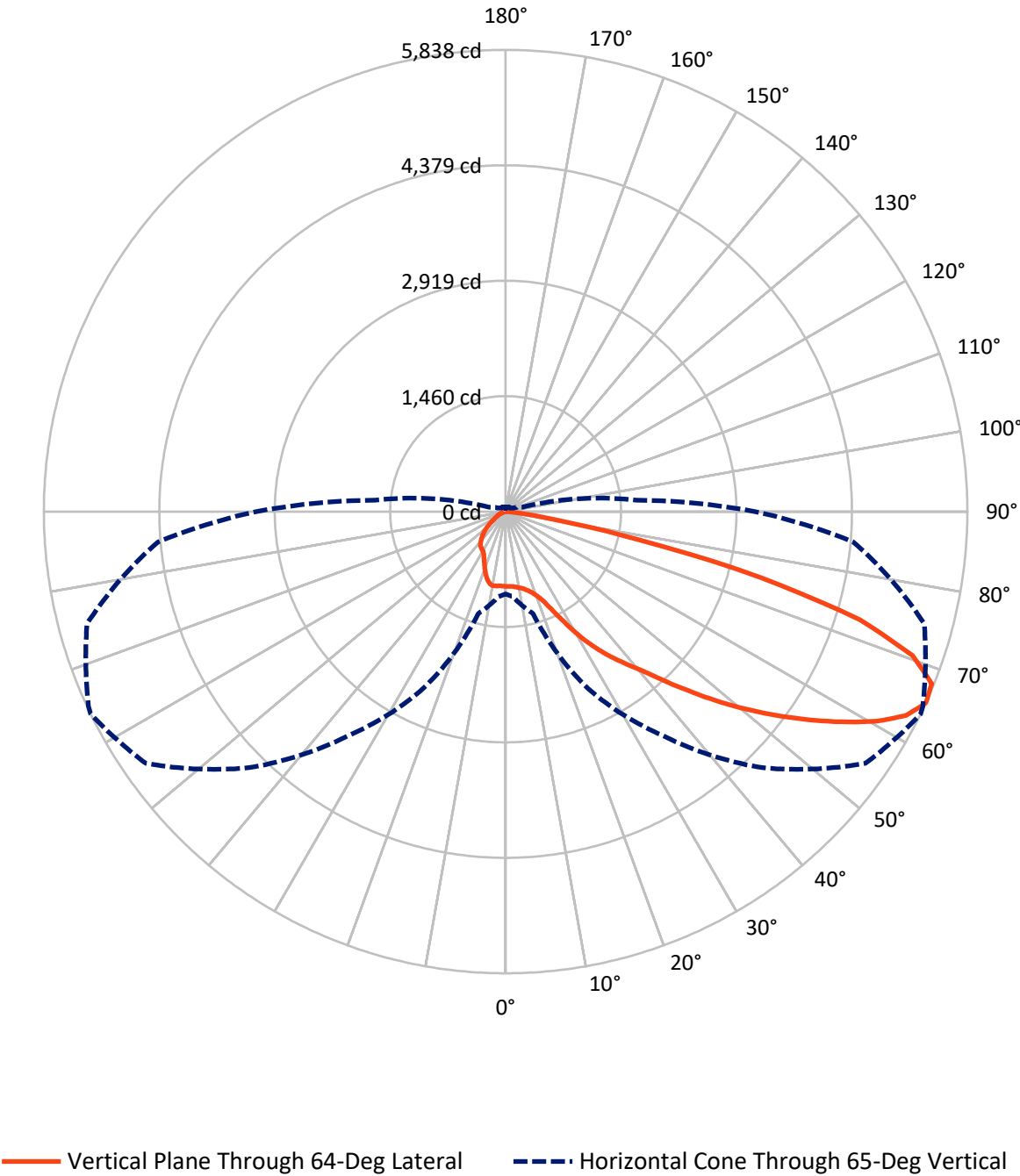


Based on 25 foot mounting height. Maximum calculated value = 2.4 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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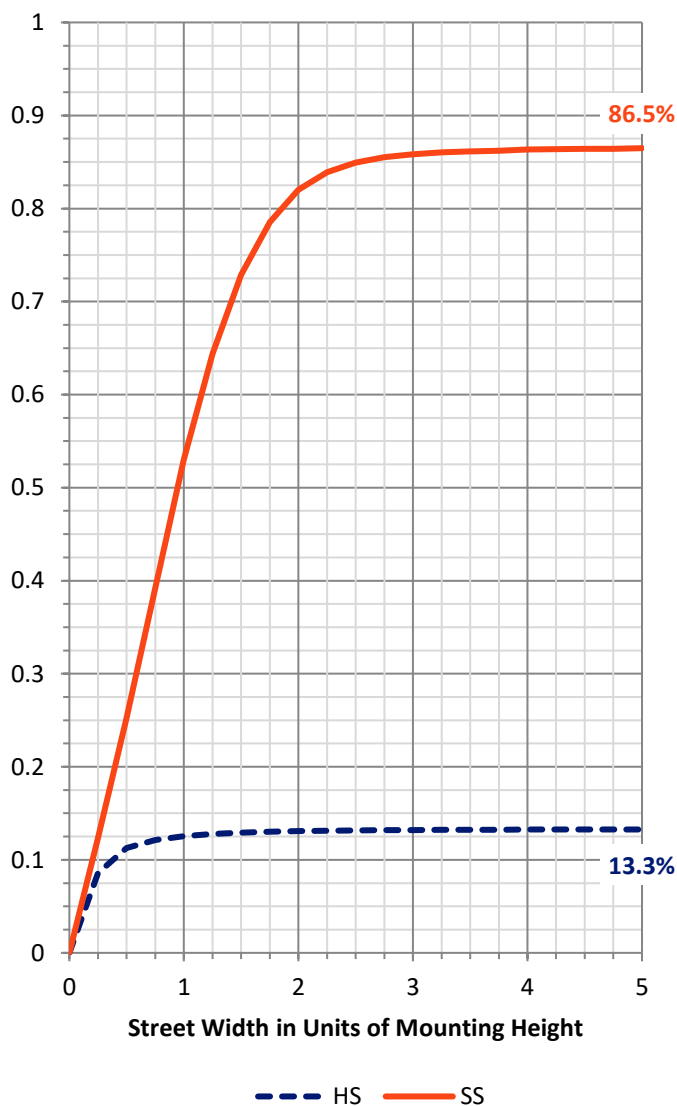
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1087.8	0.0	1087.8
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	7046.6	0.0	7046.6
	% Fixture	86.6	0.0	86.6
Total	Lumens	8134.4	0.0	8134.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.3	1.1
10°-20°	236.7	2.9
20°-30°	448.6	5.5
30°-40°	907.8	11.2
40°-50°	1546.4	19.0
50°-60°	2103.1	25.9
60°-70°	1974.9	24.3
70°-80°	791.2	9.7
80°-90°	38.3	0.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	8134.4	100.0
0°-180°	8134.4	100.0

Coefficient of Utilization



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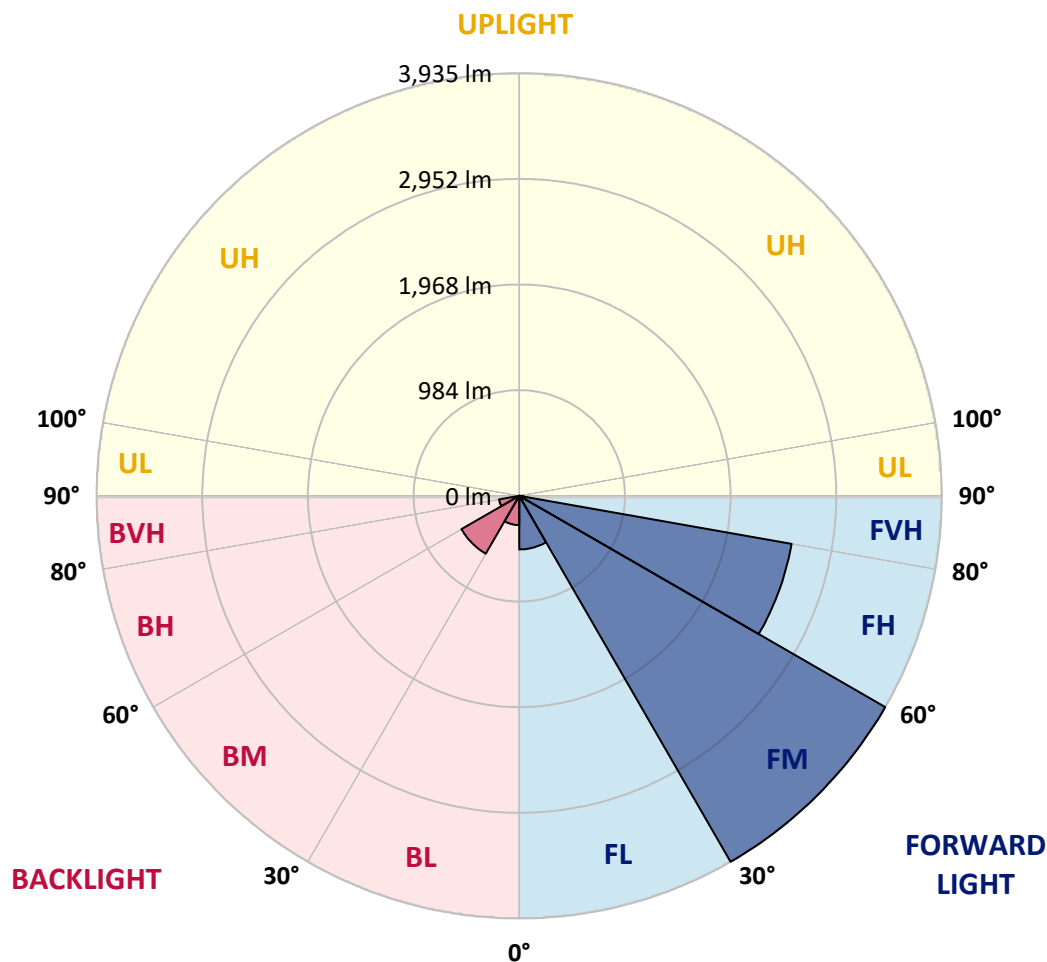
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	499.5	6.1			
FM	(30°-60°)	3935.4	48.4			
FH	(60°-80°)	2575.2	31.7			G2/5000
FVH	(80°-90°)	36.5	0.4			G1/100
BL	(0°-30°)	273.1	3.4	B1/500		
BM	(30°-60°)	621.9	7.6	B1/1000		
BH	(60°-80°)	190.9	2.3	B1/500		G1/500
BVH	(80°-90°)	1.9	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	946.1	946.1	946.1	946.1	946.1	946.1	946.1	946.1	946.1	946.1	946.1
2.5°	942.8	949.4	947.7	946.1	945.6	946.7	947.2	946.7	946.7	946.7	947.2
5°	924.9	930.3	930.3	934.1	939.6	946.1	951.0	952.1	953.2	954.9	954.3
7.5°	890.5	894.8	898.1	910.7	924.3	941.8	956.4	964.1	965.2	971.2	973.3
10°	867.0	872.5	877.9	891.0	910.7	936.8	962.0	980.5	983.2	997.3	1003.9
12.5°	865.9	871.5	878.5	892.7	915.5	943.4	974.0	1000.6	1005.5	1026.2	1039.9
15°	877.4	884.0	890.5	907.9	932.4	966.3	999.0	1032.3	1037.2	1066.6	1081.4
17.5°	900.9	909.6	914.5	931.9	958.1	995.8	1038.8	1077.0	1081.4	1115.7	1134.3
20°	947.2	957.6	959.2	973.3	999.0	1039.4	1090.6	1138.1	1143.5	1182.7	1203.5
22.5°	1043.1	1057.9	1044.8	1051.9	1074.8	1115.2	1170.8	1230.7	1238.4	1283.1	1301.6
25°	1212.3	1233.0	1199.1	1187.2	1197.0	1238.9	1308.7	1384.6	1393.3	1429.3	1438.5
27.5°	1544.4	1517.6	1466.4	1416.1	1386.7	1410.7	1489.2	1583.0	1594.0	1628.8	1618.0
30°	1909.2	1885.7	1816.4	1705.2	1635.4	1631.6	1704.1	1808.8	1821.3	1854.6	1821.3
32.5°	2274.5	2252.1	2176.9	2040.1	1918.9	1858.9	1909.2	2025.3	2031.9	2053.1	2004.0
35°	2633.8	2611.0	2535.7	2395.5	2246.7	2110.4	2100.5	2231.4	2233.6	2255.9	2182.8
37.5°	2995.4	2976.3	2896.1	2758.7	2612.0	2423.9	2332.8	2426.6	2429.4	2451.2	2375.3
40°	3253.4	3261.5	3206.4	3100.1	2974.1	2768.5	2593.5	2634.4	2618.1	2654.5	2609.3
42.5°	3474.7	3491.0	3443.1	3389.7	3316.6	3135.6	2916.3	2909.3	2883.0	2902.7	2855.8
45°	3666.1	3679.7	3636.7	3624.1	3622.5	3495.5	3269.1	3226.6	3190.1	3186.2	3130.0
47.5°	3736.4	3762.7	3781.2	3823.1	3904.9	3851.5	3633.9	3567.9	3527.0	3497.1	3408.2
50°	3763.2	3791.0	3854.3	3976.4	4170.0	4192.9	3997.1	3923.0	3872.8	3818.2	3687.4
52.5°	3727.2	3776.8	3861.9	4067.5	4348.4	4466.6	4345.6	4280.7	4223.4	4134.5	3940.4
55°	3515.0	3564.7	3738.7	4066.4	4437.2	4658.6	4674.9	4646.0	4581.8	4441.5	4144.9
57.5°	3067.9	3141.5	3416.9	3927.9	4435.6	4823.9	4997.8	5018.5	4946.5	4745.9	4305.8
60°	2448.4	2548.3	2884.1	3620.9	4298.6	4913.2	5280.8	5384.4	5308.1	5045.8	4436.1
62.5°	1708.5	1824.1	2141.9	3139.9	3985.7	4848.9	5487.4	5678.9	5621.1	5314.0	4486.3
65°	1042.1	1079.1	1335.5	2470.8	3453.4	4579.5	5551.3	5838.1	5819.0	5478.2	4412.1
67.5°	694.2	725.3	798.9	1694.3	2680.8	4041.3	5398.6	5810.3	5815.7	5451.5	4140.6
70°	418.3	445.0	492.9	985.3	1737.4	3198.8	4925.8	5455.9	5487.4	5094.2	3625.7
72.5°	172.3	190.3	233.9	446.6	899.7	2030.2	3922.5	4684.2	4757.8	4283.4	2782.8
75°	97.6	106.9	137.5	224.2	390.4	946.1	2376.0	3325.3	3433.9	2952.3	1674.1
77.5°	64.9	69.3	88.9	145.0	219.8	322.9	1015.4	1732.5	1939.7	1612.5	724.7
80°	43.7	47.5	61.1	97.1	142.9	138.5	323.4	641.9	789.7	554.0	176.7
82.5°	29.4	30.0	43.7	63.8	90.5	67.0	95.4	199.6	250.8	160.3	67.0
85°	16.9	16.4	32.2	37.1	40.4	27.8	28.9	60.0	78.5	67.6	38.1
87.5°	2.2	3.3	12.5	9.8	5.4	6.0	6.0	10.4	15.3	16.4	8.2
90°	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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	946.1	946.1	946.1	946.1	946.1	946.1	946.1	946.1	946.1	946.1	946.1
2.5°	947.2	946.7	945.0	943.4	939.6	937.4	938.5	937.4	936.8	937.4	939.6
5°	954.3	952.6	948.3	942.8	935.2	926.0	919.9	911.2	903.0	898.1	899.2
7.5°	973.3	971.7	965.8	950.5	926.0	887.2	851.8	820.7	797.2	783.6	784.1
10°	1003.9	1001.2	991.9	958.1	893.8	809.2	738.9	680.5	642.4	624.4	622.8
12.5°	1039.9	1036.7	1020.3	951.0	832.7	700.7	603.6	538.7	503.3	487.5	485.8
15°	1082.4	1078.1	1045.9	917.2	743.8	580.8	491.9	443.3	420.5	406.2	406.8
17.5°	1135.3	1127.7	1065.0	866.5	647.3	489.1	423.1	386.6	366.4	352.8	351.7
20°	1204.1	1191.5	1080.2	806.0	558.4	431.3	376.8	346.2	331.0	319.0	316.8
22.5°	1300.0	1282.1	1098.8	740.6	495.7	391.5	342.5	320.1	307.6	294.0	291.7
25°	1418.9	1397.6	1121.7	680.0	452.6	357.2	317.3	298.8	284.1	268.2	266.7
27.5°	1585.3	1547.0	1148.9	630.4	415.5	327.7	294.5	273.8	256.9	243.7	241.0
30°	1770.6	1708.0	1173.0	600.3	381.7	300.4	264.4	243.7	228.0	218.6	217.0
32.5°	1946.2	1861.2	1188.8	587.3	351.2	269.4	231.8	209.4	197.4	194.6	196.3
35°	2112.0	1999.7	1187.2	574.7	323.9	238.3	199.6	176.7	167.4	169.0	169.0
37.5°	2302.9	2147.5	1175.7	555.1	301.6	209.9	171.8	151.6	143.4	144.0	146.2
40°	2524.8	2318.1	1168.6	518.0	277.1	183.8	148.8	132.5	126.5	124.3	123.8
42.5°	2761.5	2483.4	1169.7	476.0	246.5	160.3	133.0	119.4	114.0	112.3	111.8
45°	2999.3	2640.9	1171.4	432.4	214.3	142.4	121.6	110.2	106.9	104.7	104.7
47.5°	3222.8	2775.1	1140.8	385.5	182.7	128.7	112.3	104.7	102.0	99.2	99.2
50°	3431.1	2864.6	1067.1	331.0	157.6	117.8	105.3	99.8	97.1	94.3	94.3
52.5°	3593.0	2878.7	945.6	274.8	140.1	109.6	100.9	95.9	92.7	90.0	89.4
55°	3665.0	2789.8	772.7	222.5	126.5	102.5	96.6	91.6	87.8	85.1	84.6
57.5°	3646.5	2602.8	602.6	178.9	113.5	95.4	91.0	87.8	83.4	79.0	78.5
60°	3555.4	2352.5	454.3	148.8	101.5	87.8	85.1	82.3	76.4	69.8	68.7
62.5°	3397.9	2037.8	323.9	123.2	88.4	79.0	78.0	75.7	67.0	55.0	54.0
65°	3156.8	1655.6	218.1	102.5	75.7	69.3	69.8	66.0	54.5	40.9	39.8
67.5°	2804.5	1210.6	139.6	83.9	63.2	57.8	58.3	56.2	46.3	34.8	33.3
70°	2355.8	801.7	91.0	63.8	50.7	44.7	48.0	48.5	39.3	28.4	27.3
72.5°	1727.0	473.3	63.8	47.5	37.1	31.1	39.3	40.4	31.7	21.2	20.2
75°	984.3	224.7	48.0	34.3	22.9	21.8	30.5	30.5	21.8	14.1	13.1
77.5°	413.4	93.8	33.8	22.3	13.1	12.5	20.7	19.1	10.9	6.6	6.6
80°	119.4	42.0	18.0	10.9	5.4	4.9	8.2	6.0	2.8	1.1	1.1
82.5°	46.9	18.6	7.1	4.4	2.2	2.2	1.1	0.0	0.0	0.0	0.0
85°	27.8	7.6	3.3	1.6	0.5	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.1	1.6	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)