

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: P959817

Luminaire Tested: **NAV-SB1B-735-U-SL4-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959817
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-735-U-SL4-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

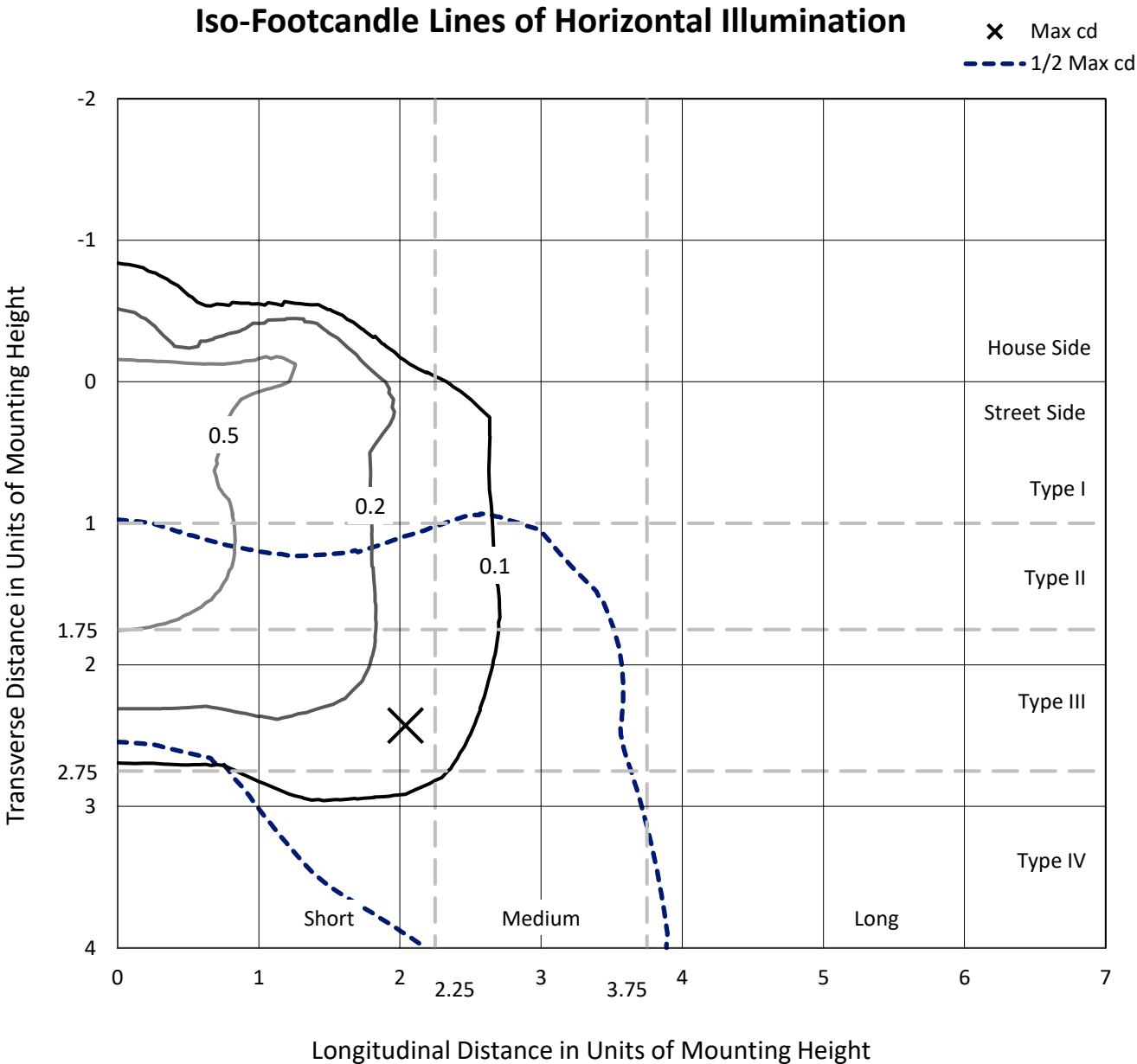
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4030.3 lumens
Efficiency: N/A
Efficacy: 101.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 39.8
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



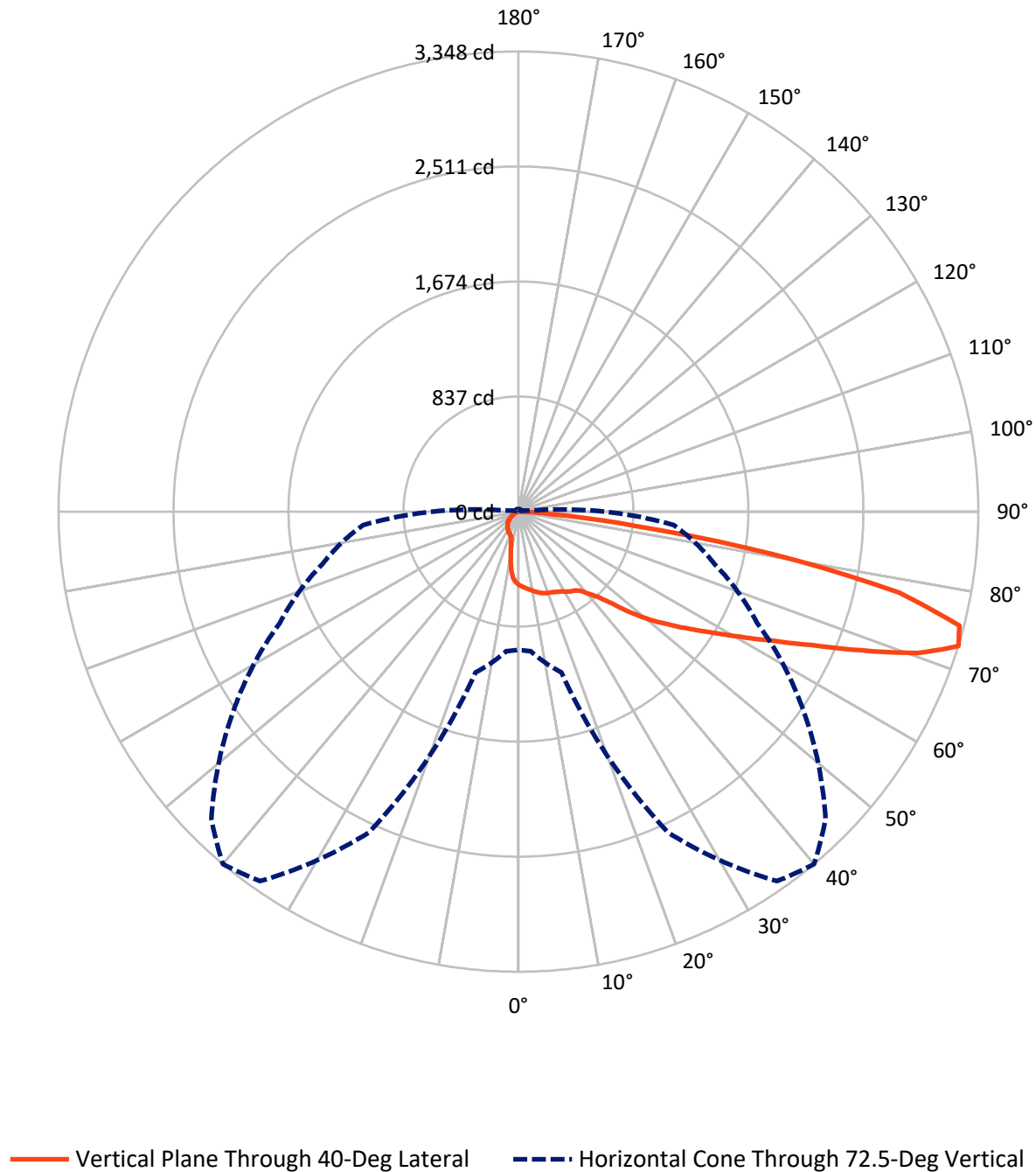
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Based on 25 foot mounting height. Maximum calculated value = 1 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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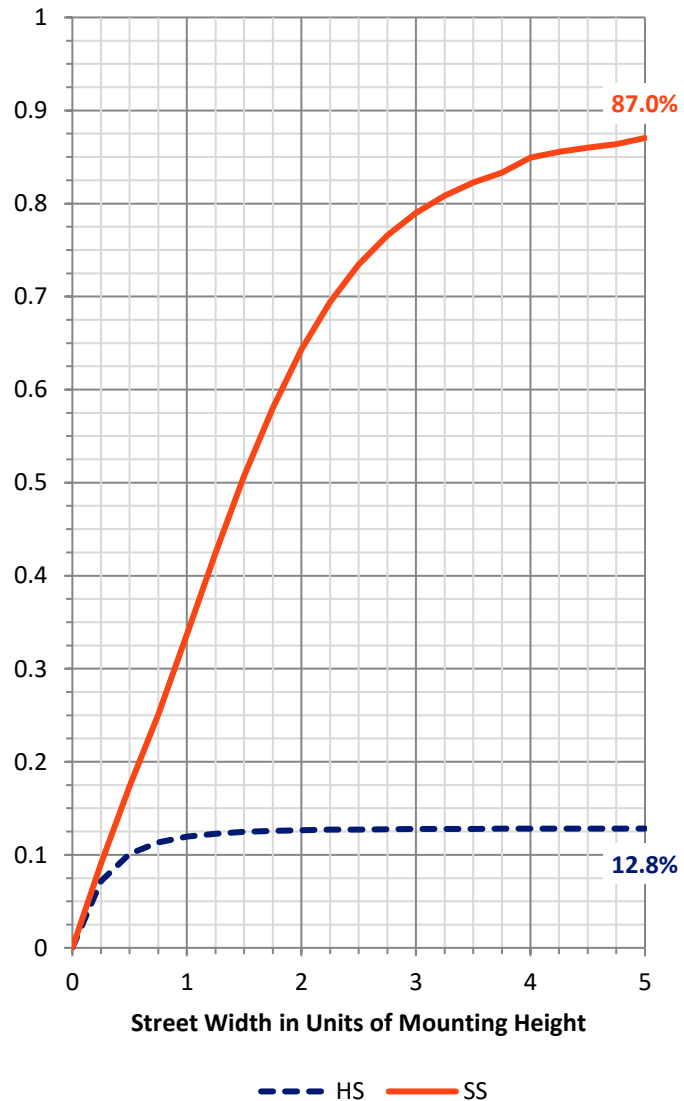
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	520.5	0.0	520.5
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	3509.8	0.0	3509.8
	% Fixture	87.1	0.0	87.1
Total	Lumens	4030.3	0.0	4030.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.7	1.2
10°-20°	132.3	3.3
20°-30°	214.2	5.3
30°-40°	316.2	7.8
40°-50°	532.1	13.2
50°-60°	826.2	20.5
60°-70°	1033.9	25.7
70°-80°	846.4	21.0
80°-90°	80.3	2.0
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°	4030.3	100.0
0°-180°	4030.3	100.0

Coefficient of Utilization



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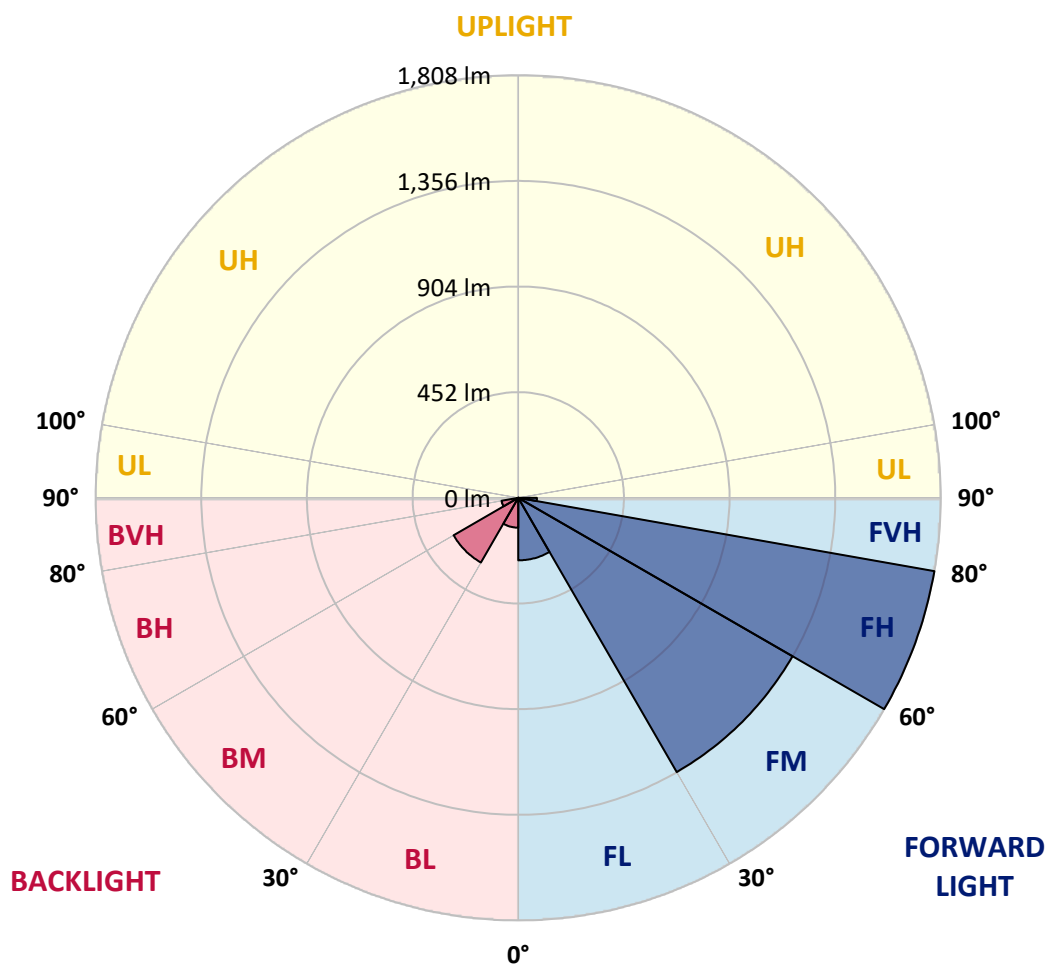
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	267.5	6.6			
FM	(30°-60°)	1354.9	33.6			
FH	(60°-80°)	1807.8	44.9			G2/5000
FVH	(80°-90°)	79.6	2.0			G1/100
BL	(0°-30°)	127.7	3.2	B1/500		
BM	(30°-60°)	319.6	7.9	B1/1000		
BH	(60°-80°)	72.5	1.8	B0/110		G0/110
BVH	(80°-90°)	0.6	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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	533.6	533.6	533.6	533.6	533.6	533.6	533.6	533.6	533.6	533.6	533.6
2.5°	549.7	551.9	550.6	548.2	547.7	546.4	544.9	544.3	542.1	540.3	538.2
5°	565.2	567.3	565.8	562.5	561.0	559.4	557.3	555.6	551.2	547.3	542.4
7.5°	582.2	584.0	582.2	577.4	574.9	573.1	570.1	567.3	562.5	556.7	550.6
10°	601.1	602.6	599.8	593.5	589.5	586.8	584.0	581.0	576.5	570.1	562.8
12.5°	618.7	620.4	616.2	608.6	604.0	601.4	598.3	595.8	591.3	585.3	577.7
15°	634.7	637.4	630.2	622.0	616.8	614.7	611.6	610.2	607.1	602.9	595.8
17.5°	646.9	648.7	641.1	631.4	625.7	624.1	622.0	622.9	622.3	620.1	615.6
20°	657.2	658.4	648.4	636.5	630.2	630.5	629.9	632.9	634.2	634.2	633.9
22.5°	669.9	670.2	657.5	642.6	635.0	637.1	638.1	641.4	643.8	646.3	651.7
25°	686.6	686.0	670.9	650.5	643.8	646.9	649.0	650.2	652.9	656.9	669.3
27.5°	711.6	709.7	690.2	663.3	655.4	658.0	662.0	661.4	660.2	663.3	684.2
30°	743.1	740.7	714.8	681.2	673.8	676.3	677.5	672.1	663.3	665.9	697.3
32.5°	793.1	788.9	753.1	701.2	689.9	692.7	691.2	680.0	666.9	669.6	710.3
35°	880.3	870.0	819.3	743.1	708.2	705.2	701.5	690.5	674.4	671.8	721.2
37.5°	1065.5	1047.2	960.7	824.7	749.5	729.7	718.5	707.6	682.6	671.8	733.7
40°	1274.3	1255.8	1155.9	961.3	818.1	784.6	758.0	727.6	691.2	675.7	753.1
42.5°	1492.3	1471.9	1369.3	1130.8	916.1	847.5	797.8	743.7	705.2	687.9	778.9
45°	1735.7	1710.2	1576.0	1307.4	1058.5	951.9	861.8	776.7	729.4	709.4	814.2
47.5°	1992.5	1959.4	1782.2	1478.9	1211.8	1096.4	979.0	836.0	765.3	741.6	861.8
50°	2220.1	2187.4	1995.0	1658.3	1355.0	1233.9	1112.5	918.0	819.0	787.1	925.9
52.5°	2383.8	2358.9	2188.6	1843.5	1504.1	1362.9	1233.6	1013.2	886.9	845.4	1001.4
55°	2493.4	2470.7	2325.8	2018.9	1677.4	1505.0	1352.9	1116.7	968.9	915.2	1084.9
57.5°	2559.8	2546.8	2425.0	2175.6	1849.2	1660.4	1489.5	1230.6	1065.5	997.4	1178.1
60°	2583.5	2573.0	2486.6	2324.9	2056.9	1847.2	1650.1	1359.0	1182.6	1091.0	1273.7
62.5°	2520.4	2522.5	2531.0	2501.9	2275.7	2065.7	1842.5	1513.2	1312.5	1196.9	1363.6
65°	2223.2	2240.9	2402.3	2698.0	2565.6	2339.5	2087.5	1701.4	1461.3	1317.4	1434.9
67.5°	1840.7	1866.2	2067.2	2812.7	2874.6	2694.9	2428.7	1941.2	1638.6	1440.0	1462.0
70°	1409.1	1436.4	1679.9	2788.7	3164.0	3083.5	2850.6	2246.3	1822.2	1525.0	1393.0
72.5°	1005.6	1019.7	1211.4	2575.3	3282.6	3348.2	3161.5	2535.2	1916.0	1477.9	1136.2
75°	706.6	704.3	831.5	2073.9	3097.8	3316.0	3052.6	2378.9	1733.9	1174.1	700.6
77.5°	307.8	308.4	415.2	1259.4	2472.4	2832.2	2537.4	1490.1	1208.8	622.3	295.6
80°	79.8	82.3	152.4	501.4	1488.6	1869.3	1547.5	655.1	558.5	151.8	56.5
82.5°	28.2	30.0	70.1	157.5	549.1	857.2	689.1	209.4	145.8	43.4	15.2
85°	8.2	9.7	37.6	48.3	113.6	242.2	167.3	40.7	35.8	22.4	3.9
87.5°	0.0	1.2	7.6	6.7	6.7	4.5	8.5	4.5	5.7	2.8	1.2
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°	533.6	533.6	533.6	533.6	533.6	533.6	533.6	533.6	533.6	533.6	533.6
2.5°	536.4	534.2	529.7	524.8	520.3	516.1	514.9	510.2	508.2	508.4	508.2
5°	539.2	535.2	526.3	515.8	504.8	492.4	482.1	467.5	455.0	453.5	452.6
7.5°	546.4	540.0	525.7	505.1	477.8	443.5	411.6	380.1	362.1	352.4	351.8
10°	557.6	549.1	527.3	487.8	429.8	368.5	320.2	280.4	260.1	250.7	248.9
12.5°	571.0	561.6	529.7	458.4	367.9	287.5	235.2	210.9	206.7	206.1	205.8
15°	589.8	579.4	532.4	418.6	300.8	218.8	194.9	195.2	198.5	200.4	200.1
17.5°	610.8	600.4	528.5	370.0	234.6	187.0	186.3	189.1	193.9	195.8	195.5
20°	632.0	622.3	514.6	312.9	189.7	178.1	180.6	183.7	188.5	191.0	191.0
22.5°	653.8	645.3	492.4	252.3	171.2	171.8	174.9	177.8	183.4	186.0	186.0
25°	677.2	669.9	462.9	202.1	163.3	165.1	169.1	172.7	178.5	181.8	181.8
27.5°	700.9	695.5	429.5	168.8	156.0	158.2	162.7	167.6	173.3	177.3	177.5
30°	726.7	723.6	402.8	156.3	149.0	150.9	156.0	161.5	167.9	172.7	173.3
32.5°	753.1	752.6	389.8	165.4	142.7	143.9	148.4	153.9	161.7	167.9	168.5
35°	779.2	780.4	382.2	191.3	140.5	137.2	140.2	145.1	154.5	162.1	163.3
37.5°	812.6	815.7	381.9	219.1	145.8	130.5	132.6	136.0	144.2	153.0	154.5
40°	862.4	878.5	401.3	243.1	154.8	124.4	125.0	125.7	130.0	137.2	139.6
42.5°	928.5	975.6	471.4	259.5	158.5	119.0	116.8	113.6	113.0	116.8	119.0
45°	1010.9	1093.1	594.7	268.7	154.8	113.0	107.1	98.4	95.0	97.8	97.8
47.5°	1107.6	1221.8	740.7	270.8	148.7	105.4	95.0	83.4	80.8	81.7	81.4
50°	1202.0	1318.4	869.1	253.2	138.7	95.6	81.7	72.0	70.1	70.4	70.4
52.5°	1285.6	1351.5	905.5	211.6	125.4	83.7	70.1	63.4	62.2	62.2	61.9
55°	1340.8	1315.6	807.5	161.7	108.6	71.6	60.1	56.8	56.2	55.9	55.2
57.5°	1352.3	1199.0	609.9	116.8	85.0	60.4	53.4	51.6	50.4	49.2	48.6
60°	1311.1	1004.8	388.3	81.7	63.8	51.6	47.4	46.1	43.7	41.3	40.4
62.5°	1221.8	758.9	214.9	56.8	51.2	44.0	41.9	40.4	35.8	31.9	30.6
65°	1101.9	504.5	95.0	44.3	41.9	37.0	35.8	33.7	28.2	23.7	22.8
67.5°	981.3	290.5	42.8	35.5	33.7	30.3	29.4	27.9	24.0	19.7	19.2
70°	843.9	147.2	29.4	28.2	26.1	23.1	24.0	23.7	19.7	16.1	15.5
72.5°	628.3	73.2	22.1	21.2	18.9	16.4	19.7	19.5	15.5	12.1	11.6
75°	355.8	36.1	16.1	14.9	11.3	12.1	15.8	14.9	10.7	7.9	7.3
77.5°	141.1	18.6	10.7	9.1	6.7	8.2	11.6	10.0	5.4	3.4	3.1
80°	32.5	9.1	5.4	3.9	3.1	4.8	6.0	3.7	1.5	0.3	0.0
82.5°	9.1	3.9	1.8	1.5	1.5	1.8	1.5	0.6	0.0	0.0	0.0
85°	3.1	1.8	0.6	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0
87.5°	1.2	0.6	0.0	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)