

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: P959810

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

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959810
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-735-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 450mA LIGHTSQUARE WITH 26 LEDS AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4923.1 lumens
Efficiency: N/A
Efficacy: 123.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

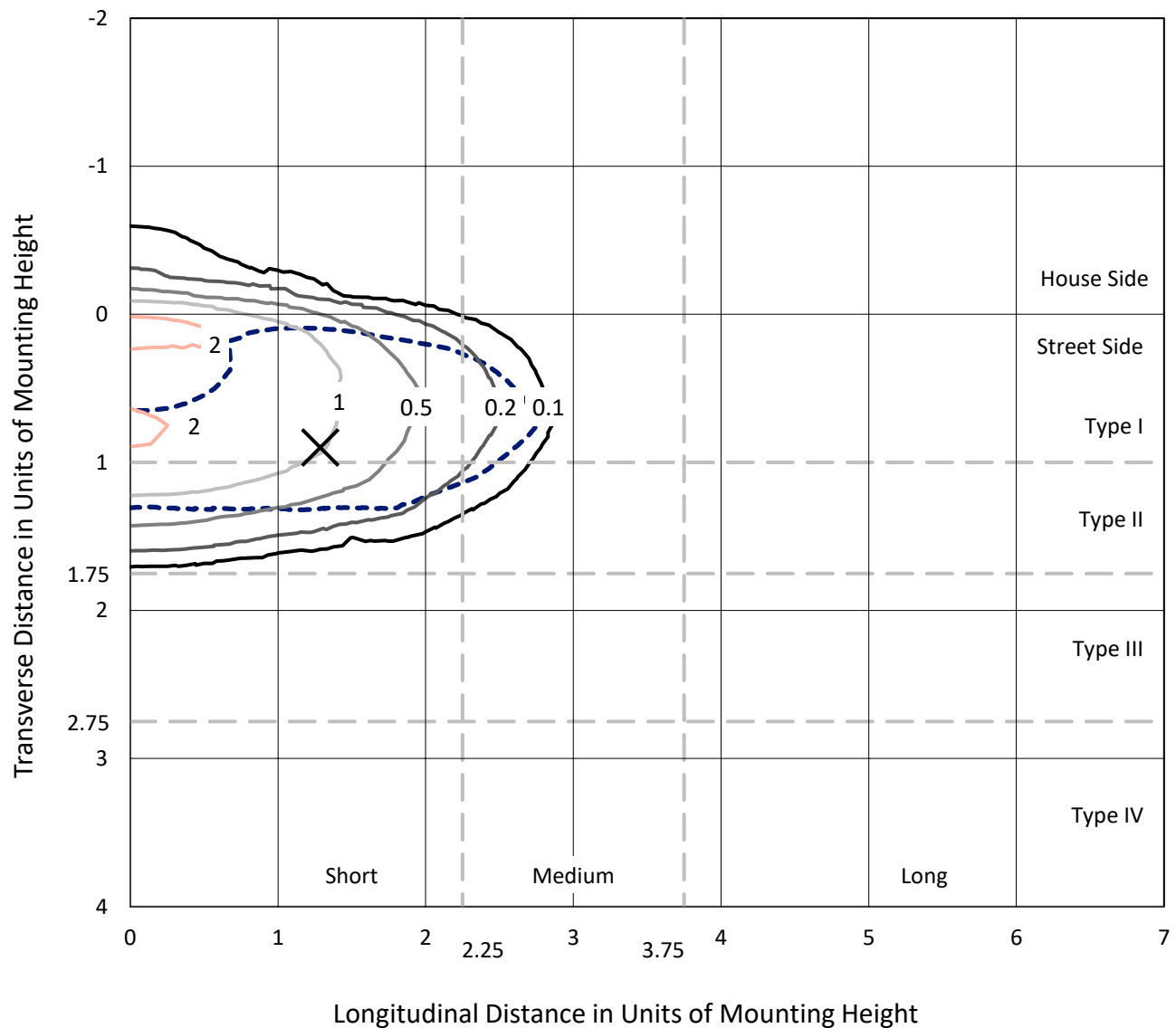
Input Watts (W): 39.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

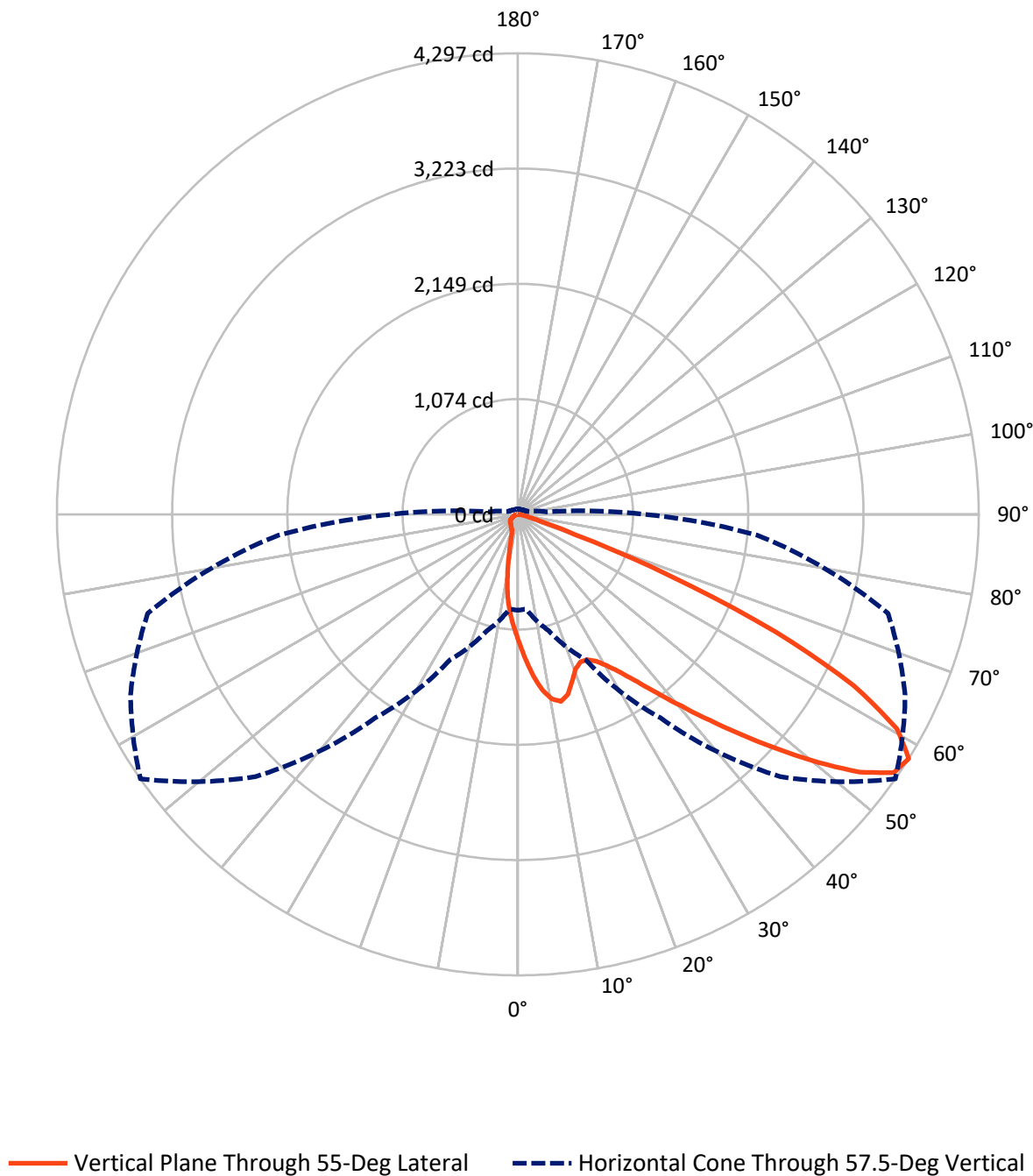
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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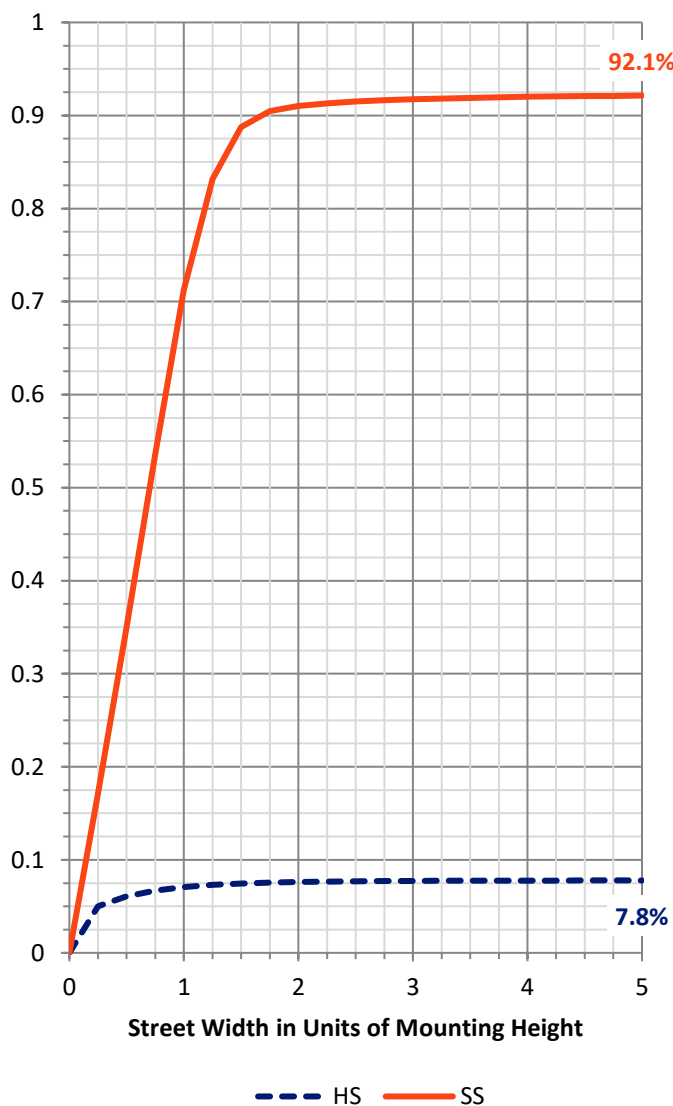
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	384.5	0.0	384.5
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	4538.6	0.0	4538.6
	% Fixture	92.2	0.0	92.2
Total	Lumens	4923.1	0.0	4923.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.4	2.2
10°-20°	266.6	5.4
20°-30°	426.6	8.7
30°-40°	722.1	14.7
40°-50°	1185.5	24.1
50°-60°	1302.9	26.5
60°-70°	747.3	15.2
70°-80°	152.7	3.1
80°-90°	9.0	0.2
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°	4923.1	100.0
0°-180°	4923.1	100.0

Coefficient of Utilization



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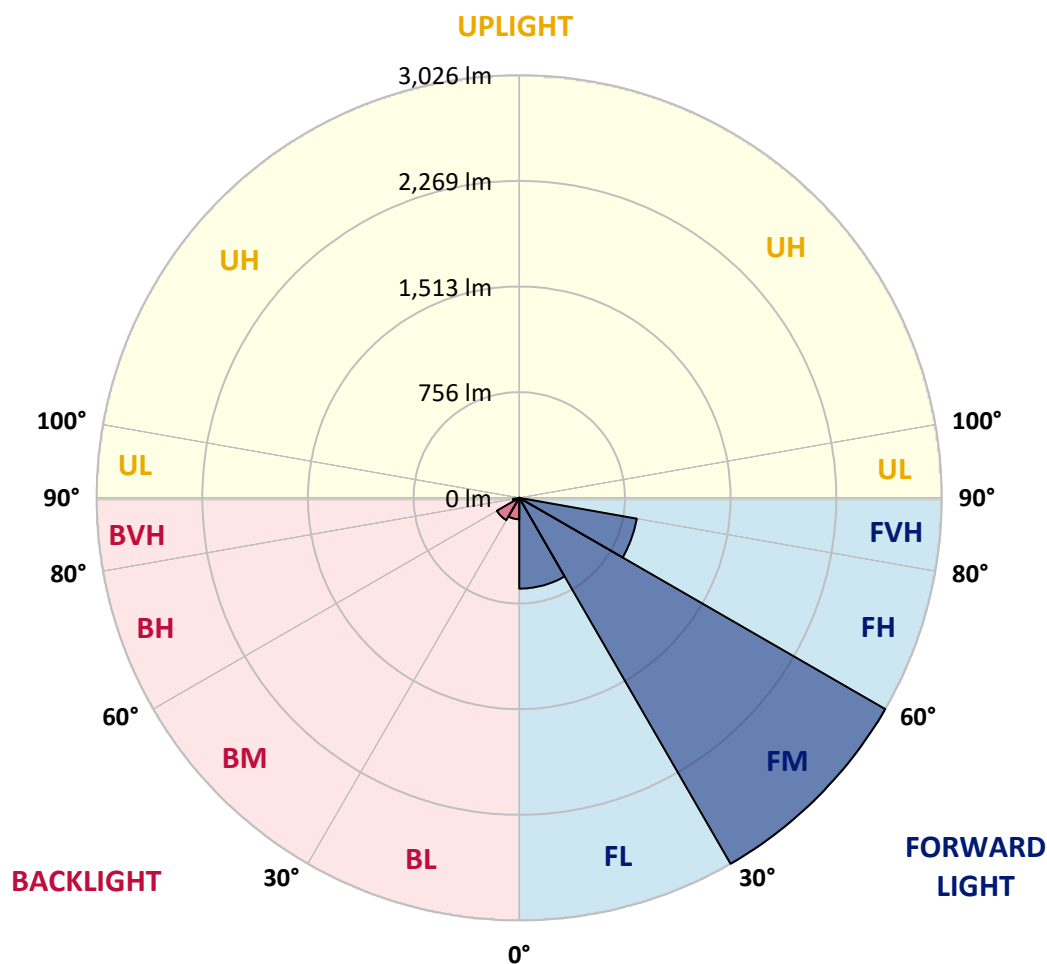
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	650.1	13.2			
FM	(30°-60°)	3025.8	61.5			
FH	(60°-80°)	854.3	17.4			G1/1800
FVH	(80°-90°)	8.4	0.2			G0/10
BL	(0°-30°)	153.5	3.1	B1/500		
BM	(30°-60°)	184.6	3.8	B0/220		
BH	(60°-80°)	45.7	0.9	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-G1

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1186.3	1186.3	1186.3	1186.3	1186.3	1186.3	1186.3	1186.3	1186.3	1186.3	1186.3
2.5°	1472.0	1453.4	1450.8	1447.1	1411.9	1385.5	1347.3	1305.3	1258.3	1210.3	1189.1
5°	1700.6	1686.0	1683.3	1666.2	1626.2	1581.3	1513.3	1427.4	1339.7	1236.5	1192.1
7.5°	1744.9	1742.2	1754.6	1754.0	1748.5	1713.0	1655.7	1553.4	1421.6	1268.6	1200.0
10°	1547.2	1554.3	1591.3	1623.8	1711.5	1762.5	1750.1	1665.6	1506.0	1305.3	1208.8
12.5°	1367.2	1359.0	1385.5	1422.2	1524.2	1676.0	1789.2	1759.5	1602.5	1347.0	1221.9
15°	1254.3	1251.0	1265.9	1282.9	1360.6	1513.6	1743.7	1835.7	1695.5	1396.2	1241.6
17.5°	1218.2	1215.4	1220.1	1224.3	1274.7	1393.1	1635.3	1882.4	1784.3	1452.2	1263.4
20°	1247.6	1244.0	1243.4	1240.0	1261.1	1341.7	1537.3	1885.8	1864.2	1503.3	1282.3
22.5°	1333.5	1329.3	1314.5	1301.1	1302.9	1348.8	1493.5	1852.4	1924.3	1550.9	1294.1
25°	1489.3	1482.4	1451.4	1406.4	1377.9	1397.3	1500.2	1808.3	1981.7	1588.2	1288.3
27.5°	1684.2	1675.1	1635.3	1568.6	1503.3	1479.6	1548.5	1778.0	2029.3	1616.8	1275.9
30°	1875.1	1863.2	1824.1	1772.2	1676.9	1602.2	1635.6	1791.4	2086.1	1646.6	1259.5
32.5°	2081.3	2070.0	2018.1	1953.8	1874.8	1774.4	1754.9	1856.6	2155.7	1688.2	1247.9
35°	2342.0	2324.4	2250.7	2163.0	2079.1	1977.4	1916.4	1969.2	2248.2	1751.6	1254.3
37.5°	2638.9	2615.2	2535.6	2414.6	2305.3	2191.4	2113.1	2124.1	2383.9	1836.6	1274.1
40°	2918.8	2897.3	2823.8	2709.7	2572.4	2434.3	2350.8	2326.5	2571.2	1940.1	1308.7
42.5°	3086.7	3067.2	3036.3	2988.0	2872.4	2731.5	2626.2	2573.7	2792.8	2063.9	1350.8
45°	3096.1	3079.1	3120.7	3176.8	3154.0	3060.2	2931.8	2835.7	3015.3	2180.2	1394.6
47.5°	2945.5	2934.0	3060.2	3256.3	3354.1	3393.6	3275.2	3075.7	3199.0	2263.7	1412.4
50°	2535.1	2530.8	2790.7	3150.7	3430.3	3685.6	3637.3	3299.2	3341.4	2306.8	1395.5
52.5°	2198.1	2182.6	2334.1	2812.5	3319.5	3839.2	3991.2	3518.3	3440.9	2315.0	1355.8
55°	1667.2	1653.5	1843.6	2246.7	2962.2	3784.6	4250.3	3744.5	3512.3	2294.1	1284.4
57.5°	894.3	885.8	1126.0	1495.4	2315.6	3456.7	4297.0	3983.7	3572.3	2238.5	1184.5
60°	348.2	346.7	436.5	725.5	1407.3	2812.3	4061.2	4127.3	3610.0	2170.2	1101.1
62.5°	210.6	215.2	229.8	325.7	621.7	1747.0	3517.4	3964.0	3635.3	2107.7	1032.2
65°	174.2	174.6	176.4	223.8	297.8	731.0	2648.0	3426.7	3572.9	1996.3	934.4
67.5°	149.3	152.1	159.1	177.6	210.0	320.5	1524.5	2654.3	3194.4	1737.0	782.0
70°	117.8	121.5	130.3	146.1	162.2	200.7	563.4	1766.2	2440.4	1309.3	591.3
72.5°	99.2	98.9	103.5	118.7	128.7	141.1	216.8	989.6	1418.3	625.0	292.6
75°	76.8	79.8	85.6	99.2	105.4	102.3	117.5	361.5	508.2	189.4	99.5
77.5°	60.1	62.5	67.6	81.1	87.1	72.6	67.6	129.4	163.3	68.0	44.9
80°	27.1	29.1	46.1	59.8	71.0	50.1	36.7	66.2	72.6	31.0	22.8
82.5°	4.8	8.2	27.1	31.6	36.4	32.5	19.2	34.3	35.6	12.4	7.9
85°	0.3	0.6	9.4	11.6	14.6	10.7	5.7	13.6	11.9	4.2	3.1
87.5°	0.0	0.0	0.0	0.3	0.3	1.5	1.8	2.5	1.8	1.5	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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1186.3	1186.3	1186.3	1186.3	1186.3	1186.3	1186.3	1186.3	1186.3	1186.3
2.5°	1167.2	1124.1	1082.2	1048.0	1027.9	993.8	971.4	967.8	958.4	966.6
5°	1144.7	1067.6	989.6	919.8	862.4	788.3	733.1	709.7	689.4	696.4
7.5°	1134.2	1012.4	890.9	771.6	649.0	530.6	442.6	405.9	377.9	381.9
10°	1119.8	955.0	764.6	582.5	418.3	301.5	240.8	218.2	205.8	206.1
12.5°	1108.9	886.4	618.1	394.9	254.7	192.5	173.6	168.2	164.5	164.8
15°	1103.5	805.6	473.2	263.2	182.1	163.0	158.5	156.0	153.6	153.3
17.5°	1094.4	715.9	346.3	192.2	159.4	152.7	148.7	146.1	143.0	142.4
20°	1080.7	613.8	253.2	162.4	149.3	144.2	138.7	135.1	131.4	130.8
22.5°	1055.5	506.0	194.5	150.3	142.1	136.3	129.7	125.4	121.8	121.2
25°	1008.7	405.0	163.9	142.7	135.7	128.7	121.5	115.6	112.3	111.7
27.5°	949.6	318.2	148.7	135.7	127.5	121.2	113.0	107.4	104.4	103.8
30°	879.8	245.0	139.9	127.8	117.8	112.3	105.1	100.4	98.7	98.7
32.5°	804.4	195.8	136.3	119.9	109.3	103.2	97.5	95.6	95.0	94.7
35°	733.7	170.0	134.5	113.6	101.7	95.9	93.5	93.8	95.0	95.0
37.5°	670.9	161.8	133.6	109.0	95.0	89.9	91.3	94.1	92.9	92.9
40°	614.1	162.7	132.9	105.7	89.6	86.5	89.6	87.4	84.4	84.0
42.5°	570.7	170.3	131.7	102.9	86.2	84.0	82.9	79.5	79.2	79.8
45°	539.2	177.0	131.4	101.7	82.6	78.6	77.1	73.8	79.8	81.4
47.5°	501.8	177.0	131.4	97.5	76.5	75.0	72.6	68.9	75.0	76.5
50°	453.6	165.7	126.3	92.6	71.6	70.7	66.5	61.9	60.7	61.6
52.5°	392.5	145.4	113.3	85.9	66.8	65.0	59.8	56.5	55.6	55.6
55°	323.0	121.8	95.6	76.2	61.6	58.3	54.6	53.1	52.2	51.6
57.5°	262.6	99.8	76.8	67.6	56.8	52.5	51.4	49.5	48.0	47.0
60°	215.6	78.6	63.4	60.1	51.9	48.0	47.7	45.2	41.3	40.7
62.5°	166.4	57.7	53.4	52.2	47.0	43.7	43.2	38.2	32.2	31.0
65°	117.5	44.9	43.2	45.8	41.9	38.8	37.3	30.0	23.7	22.8
67.5°	82.6	37.6	34.0	40.1	36.4	32.5	31.6	25.5	19.8	19.2
70°	58.9	30.6	27.9	34.3	29.1	28.5	26.8	21.2	16.1	15.5
72.5°	41.6	23.4	21.5	29.7	20.0	24.6	21.8	16.4	12.1	11.6
75°	30.6	16.7	15.2	17.3	14.6	18.6	15.5	11.0	7.6	7.3
77.5°	22.4	10.7	9.1	8.5	8.5	11.6	8.5	4.5	3.4	3.1
80°	15.8	4.8	4.2	3.7	3.4	2.8	1.2	0.6	0.3	0.3
82.5°	9.4	2.2	2.2	1.5	0.9	0.0	0.0	0.0	0.0	0.0
85°	2.2	0.9	0.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	0.3	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

(END OF REPORT)