

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: P959815

Luminaire Tested: **NAV-SB1B-735-U-SL3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959815
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-13)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-735-U-SL3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE III SPILL
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4649.4 lumens
Efficiency: N/A
Efficacy: 116.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G2

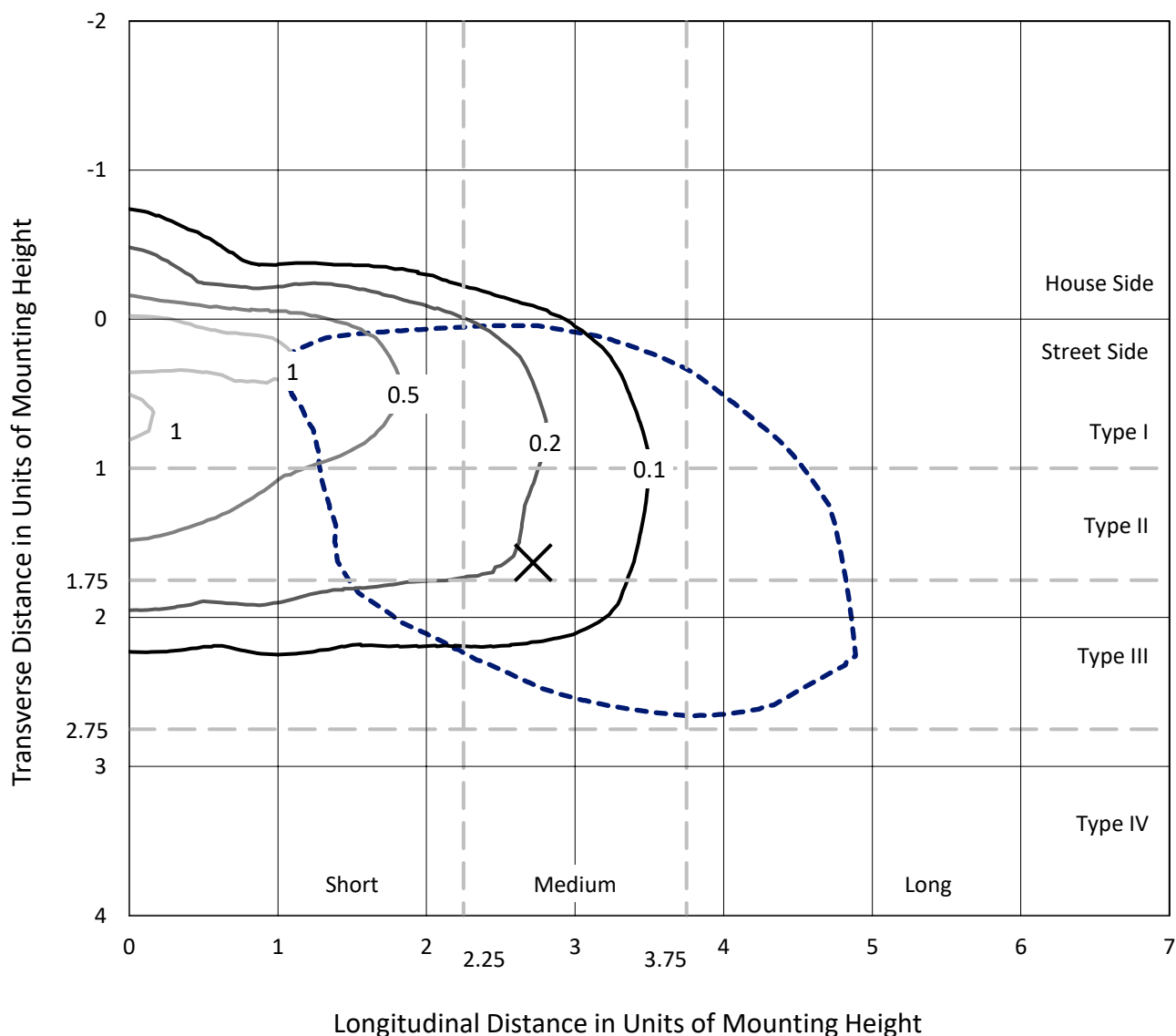
Input Watts (W): 39.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

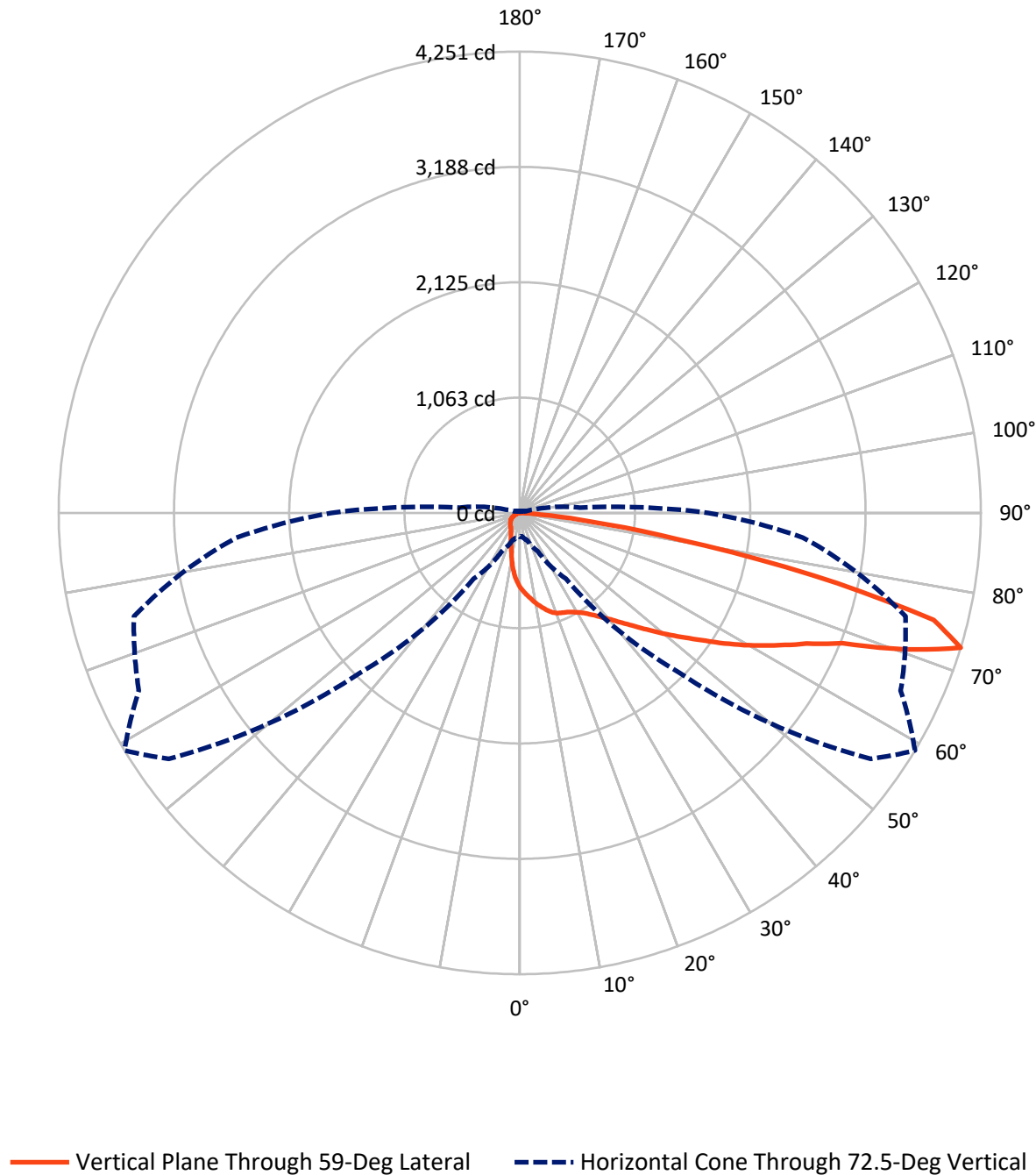
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



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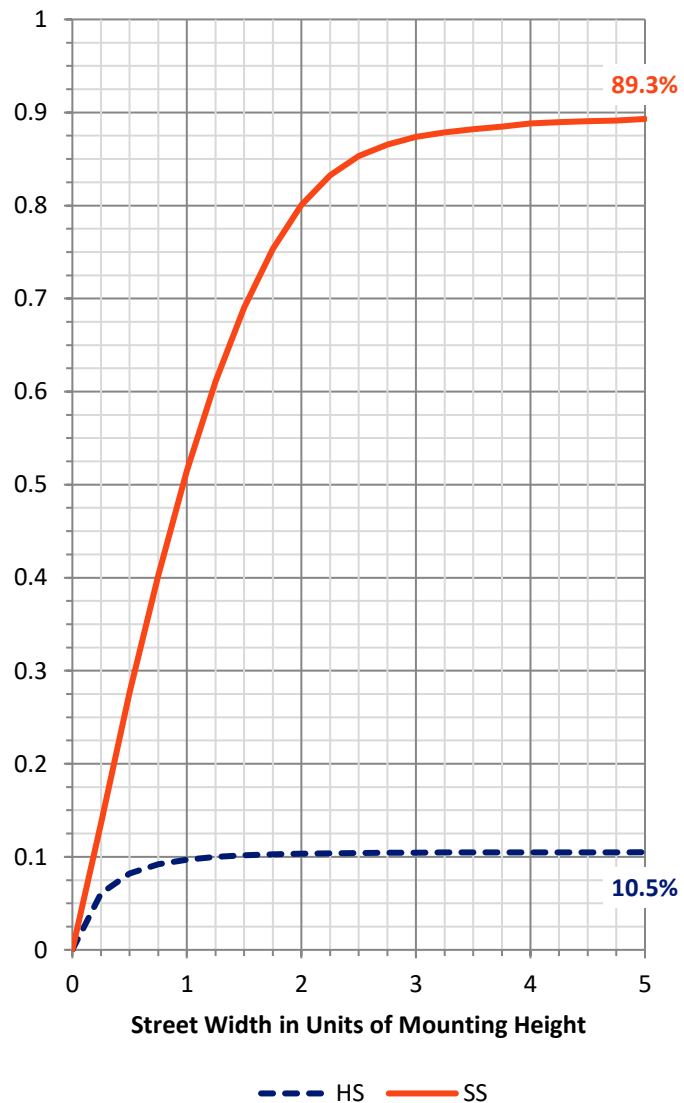
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	491.1	0.0	491.1
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	4158.3	0.0	4158.3
	% Fixture	89.4	0.0	89.4
Total	Lumens	4649.4	0.0	4649.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.2	1.3
10°-20°	165.2	3.6
20°-30°	261.9	5.6
30°-40°	420.2	9.0
40°-50°	671.2	14.4
50°-60°	971.8	20.9
60°-70°	1153.3	24.8
70°-80°	856.1	18.4
80°-90°	87.5	1.9
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°	4649.4	100.0
0°-180°	4649.4	100.0

Coefficient of Utilization



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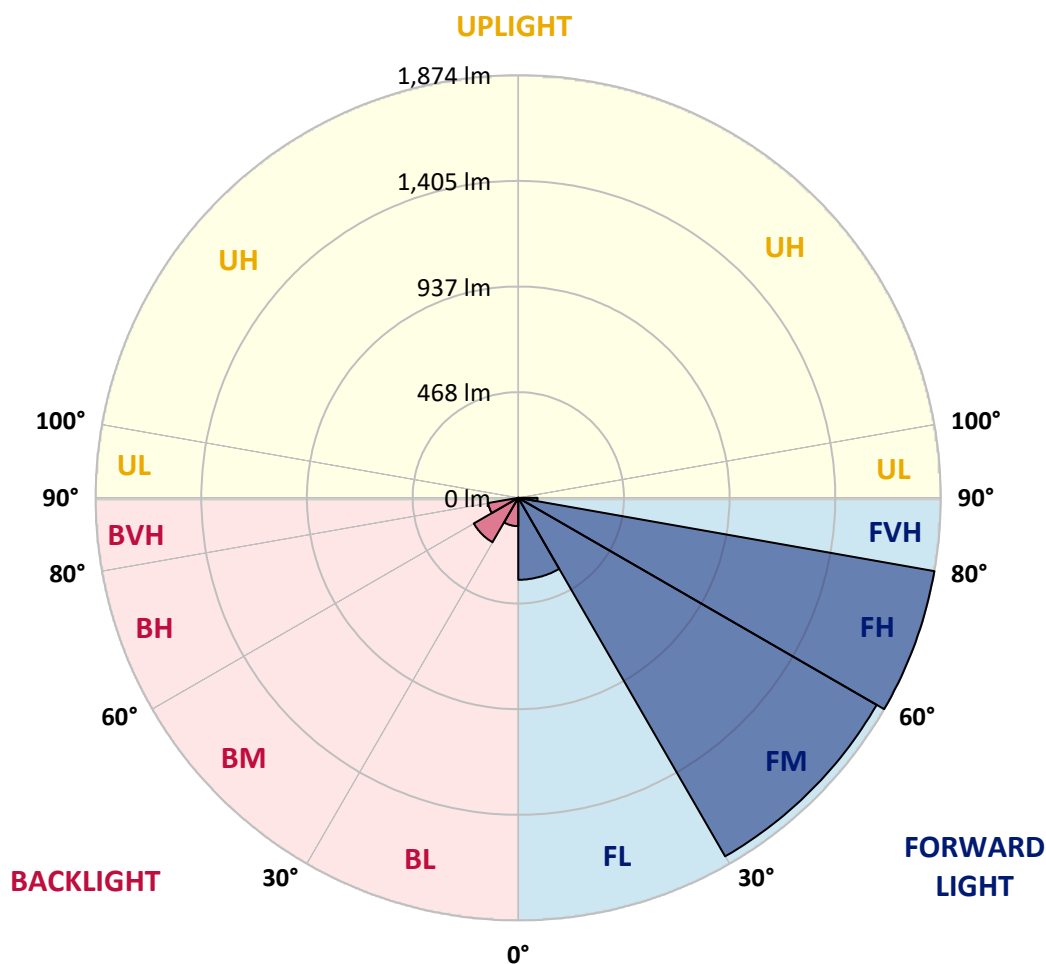
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	363.5	7.8			
FM	(30°-60°)	1835.5	39.5			
FH	(60°-80°)	1874.0	40.3			G2/5000
FVH	(80°-90°)	85.4	1.8			G1/100
BL	(0°-30°)	125.8	2.7	B1/500		
BM	(30°-60°)	227.7	4.9	B1/1000		
BH	(60°-80°)	135.4	2.9	B1/500		G1/500
BVH	(80°-90°)	2.2	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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	687.6	687.6	687.6	687.6	687.6	687.6	687.6	687.6	687.6	687.6	687.6
2.5°	762.8	758.6	759.2	751.8	746.7	741.3	730.6	729.1	721.5	708.2	694.5
5°	829.3	826.6	824.1	815.9	805.3	791.9	774.1	767.6	753.7	730.6	704.0
7.5°	877.8	874.5	875.8	867.6	859.1	844.2	819.6	807.7	789.2	754.0	713.6
10°	887.2	885.5	893.4	896.4	896.4	886.9	862.9	851.2	824.1	779.2	723.6
12.5°	834.5	834.8	854.4	878.1	909.2	917.9	901.8	889.1	862.3	806.0	736.4
15°	772.8	773.2	792.2	822.7	873.3	924.0	936.7	928.5	901.0	834.8	751.3
17.5°	735.8	734.3	747.0	771.9	825.0	896.4	958.0	963.5	941.0	866.6	767.6
20°	730.6	728.0	734.6	747.0	784.9	861.8	960.4	986.3	982.3	902.7	786.5
22.5°	762.2	758.0	754.3	754.9	771.0	832.9	954.4	999.0	1024.8	946.2	812.3
25°	824.7	818.1	806.3	791.1	787.7	826.9	950.1	1012.9	1064.3	1001.7	846.2
27.5°	901.3	891.9	869.1	846.2	826.9	843.9	958.9	1035.1	1108.8	1066.4	885.7
30°	985.3	973.7	951.0	907.9	877.0	881.8	979.9	1064.3	1165.9	1139.5	935.2
32.5°	1108.8	1082.2	1042.4	976.5	935.5	922.8	1011.5	1101.3	1236.7	1237.0	1006.9
35°	1214.8	1200.0	1159.9	1077.9	993.8	977.1	1053.0	1153.4	1334.7	1365.9	1107.0
37.5°	1284.3	1263.9	1228.8	1167.2	1084.2	1033.0	1108.5	1217.5	1438.5	1512.9	1230.6
40°	1362.0	1342.0	1295.2	1237.3	1189.3	1128.9	1178.6	1291.3	1552.4	1663.8	1371.8
42.5°	1455.8	1429.7	1374.4	1311.9	1261.9	1255.2	1270.4	1383.2	1669.2	1827.7	1518.6
45°	1566.0	1541.4	1477.9	1399.0	1355.0	1343.2	1385.7	1490.5	1799.4	2007.4	1667.1
47.5°	1669.2	1640.7	1572.4	1500.4	1451.6	1414.2	1508.3	1617.0	1947.0	2195.2	1807.3
50°	1757.0	1727.8	1665.2	1588.4	1555.3	1506.5	1628.8	1758.2	2093.3	2386.2	1935.4
52.5°	1817.0	1791.2	1717.8	1665.5	1643.1	1618.5	1770.0	1907.8	2239.0	2561.1	2062.0
55°	1803.4	1780.3	1715.6	1712.1	1710.5	1736.2	1938.8	2077.5	2387.4	2726.5	2188.0
57.5°	1759.9	1733.9	1653.1	1708.7	1762.4	1841.3	2121.5	2278.2	2550.1	2882.5	2309.4
60°	1632.2	1623.1	1573.9	1702.3	1784.2	1944.2	2330.3	2479.7	2726.2	3019.6	2417.2
62.5°	1361.7	1369.6	1369.3	1715.6	1823.7	2061.4	2520.1	2683.7	2898.3	3151.8	2513.1
65°	1019.6	1046.9	1081.9	1595.4	1876.6	2270.6	2746.8	2905.0	3073.2	3305.3	2610.5
67.5°	685.1	706.9	730.6	1308.9	1719.3	2490.3	3123.5	3208.1	3282.6	3475.6	2720.0
70°	392.2	399.1	432.2	817.4	1325.3	2429.6	3736.9	3767.6	3594.9	3685.4	2799.9
72.5°	219.8	217.3	261.1	388.0	740.7	2080.5	3951.9	4250.9	3874.5	3682.0	2621.7
75°	146.9	147.2	179.7	244.7	288.6	1456.4	3405.5	3941.5	3706.9	3264.9	2142.1
77.5°	100.1	103.5	132.0	189.1	133.6	710.6	2253.0	2761.0	3001.2	2521.3	1478.9
80°	43.4	43.7	87.1	135.7	90.2	226.1	1168.1	1479.2	1882.3	1415.7	585.9
82.5°	22.4	25.5	55.6	87.7	56.8	79.2	551.9	646.3	789.9	415.5	120.2
85°	7.9	9.4	34.3	43.2	28.5	28.2	192.2	195.8	167.3	62.5	33.1
87.5°	0.0	1.5	13.3	10.7	3.7	3.4	22.8	19.2	15.2	8.8	11.0
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°	687.6	687.6	687.6	687.6	687.6	687.6	687.6	687.6	687.6	687.6	687.6
2.5°	688.2	680.0	666.6	650.2	631.1	620.7	605.9	596.8	588.6	588.9	595.5
5°	689.0	675.4	641.4	605.3	565.2	535.8	503.0	479.9	462.3	458.1	464.4
7.5°	691.8	668.7	613.2	553.1	486.3	436.9	391.5	363.1	347.0	342.7	347.0
10°	695.5	661.4	581.3	489.3	406.4	347.0	309.3	291.1	283.8	278.4	281.7
12.5°	698.4	653.8	541.2	423.4	335.4	288.9	260.5	245.3	238.9	234.9	237.1
15°	703.7	643.8	497.8	362.1	287.4	249.5	222.5	211.3	209.4	210.0	210.9
17.5°	708.8	634.1	449.3	314.2	252.3	214.9	198.5	196.7	199.2	201.5	202.4
20°	714.5	620.1	400.1	278.1	219.8	191.0	186.7	187.9	189.1	193.3	194.5
22.5°	723.0	602.5	357.0	247.4	192.8	179.4	177.2	178.1	179.1	183.4	184.6
25°	735.2	583.7	322.1	219.1	175.8	169.9	167.9	167.9	169.1	173.0	174.6
27.5°	747.9	557.0	293.9	193.0	165.7	159.7	156.0	156.0	157.5	162.1	163.9
30°	762.2	532.7	271.6	173.6	157.2	149.3	144.5	143.3	145.1	150.9	152.4
32.5°	788.0	516.9	255.8	164.5	149.6	139.9	133.2	129.9	131.7	138.4	140.2
35°	827.2	513.3	245.0	160.0	142.4	131.4	122.0	116.8	118.4	125.4	127.5
37.5°	873.0	520.9	234.3	153.9	135.4	123.2	110.8	104.1	106.5	113.0	114.7
40°	938.9	552.5	226.1	149.3	128.4	113.6	99.5	92.9	96.9	102.3	103.2
42.5°	1018.4	608.6	224.1	145.1	119.9	103.2	89.3	84.4	87.4	92.6	93.5
45°	1117.0	680.3	233.7	139.6	110.5	93.2	81.1	78.3	79.2	84.4	86.8
47.5°	1223.0	753.7	260.5	134.8	102.3	85.0	74.7	72.3	71.6	76.5	79.5
50°	1330.1	819.0	292.0	131.1	96.6	78.3	69.8	66.8	65.3	68.3	69.5
52.5°	1436.1	870.8	312.6	125.0	90.7	71.6	65.6	61.0	58.3	59.8	61.0
55°	1543.5	916.5	313.9	115.9	85.3	67.3	61.3	56.2	52.8	52.8	53.4
57.5°	1644.0	956.5	295.9	103.8	77.7	63.4	55.6	51.2	47.7	46.4	46.7
60°	1733.0	986.3	266.2	90.2	71.0	58.3	49.8	46.4	41.9	39.5	38.8
62.5°	1812.2	1000.8	225.5	76.2	62.8	52.2	44.3	40.7	34.6	31.6	31.3
65°	1879.2	985.9	183.1	63.1	55.9	45.5	37.9	34.3	27.6	24.0	24.0
67.5°	1945.8	917.9	138.4	53.1	48.6	38.2	31.3	27.9	23.1	20.0	20.0
70°	1954.3	775.0	96.9	44.6	40.4	29.4	25.2	23.1	18.9	16.1	15.8
72.5°	1739.6	557.6	58.9	36.4	31.6	20.9	20.0	18.2	13.9	12.1	11.8
75°	1390.5	341.8	34.6	27.4	20.9	14.9	14.9	13.0	9.4	7.9	7.9
77.5°	961.0	178.8	20.3	17.6	12.4	8.8	9.7	7.9	4.5	3.7	3.7
80°	384.9	68.0	11.0	8.2	5.7	3.9	3.4	1.8	0.9	0.6	0.9
82.5°	76.8	17.9	3.7	2.2	2.2	0.9	0.0	0.0	0.0	0.0	0.0
85°	19.7	3.9	0.9	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.0	0.0	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)