

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: P962118

Luminaire Tested: **NAV-SB2B-835-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962118
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-835-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7817.7 lumens
Efficiency: N/A
Efficacy: 105.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
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

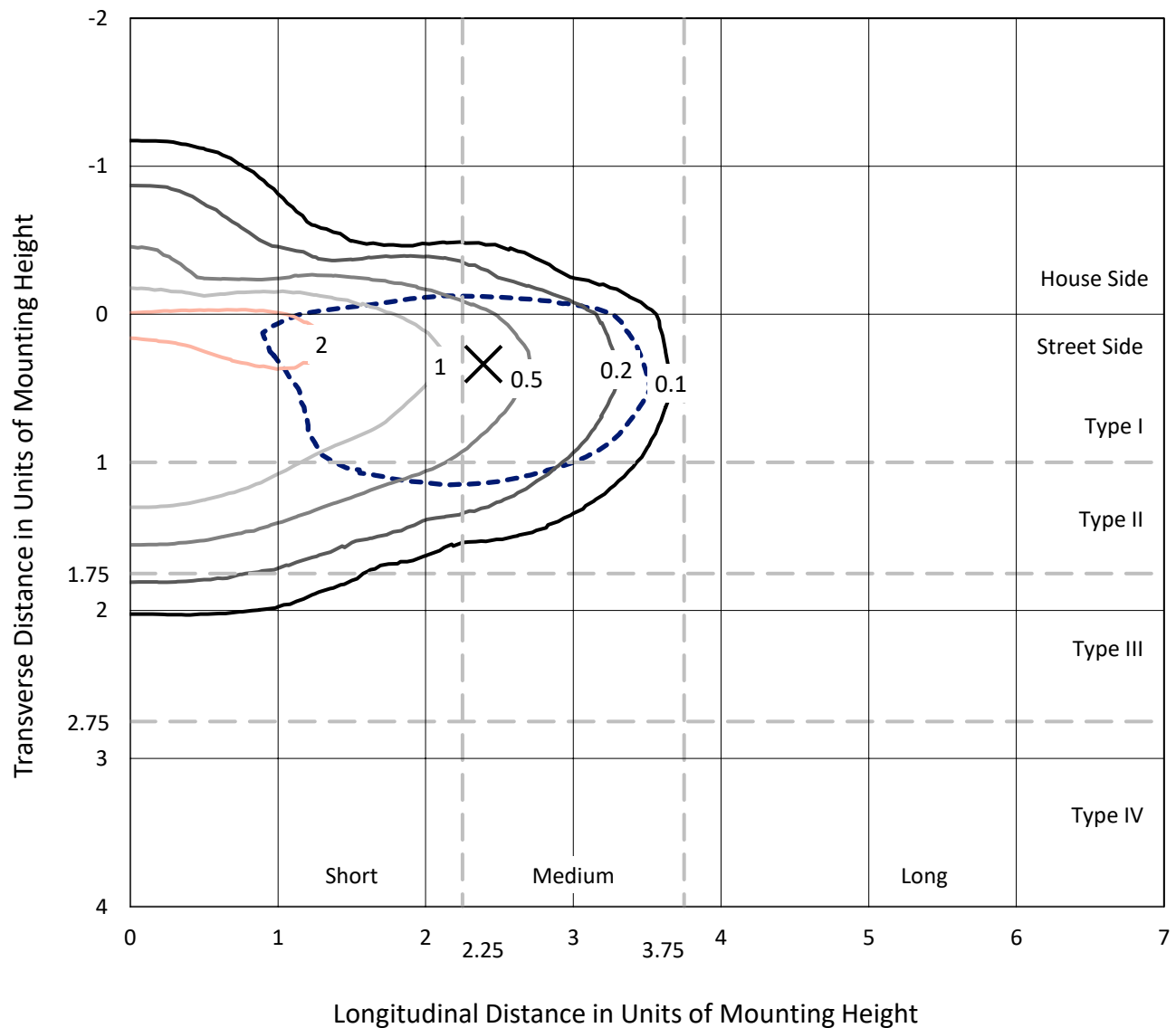


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Iso-Footcandle Lines of Horizontal Illumination

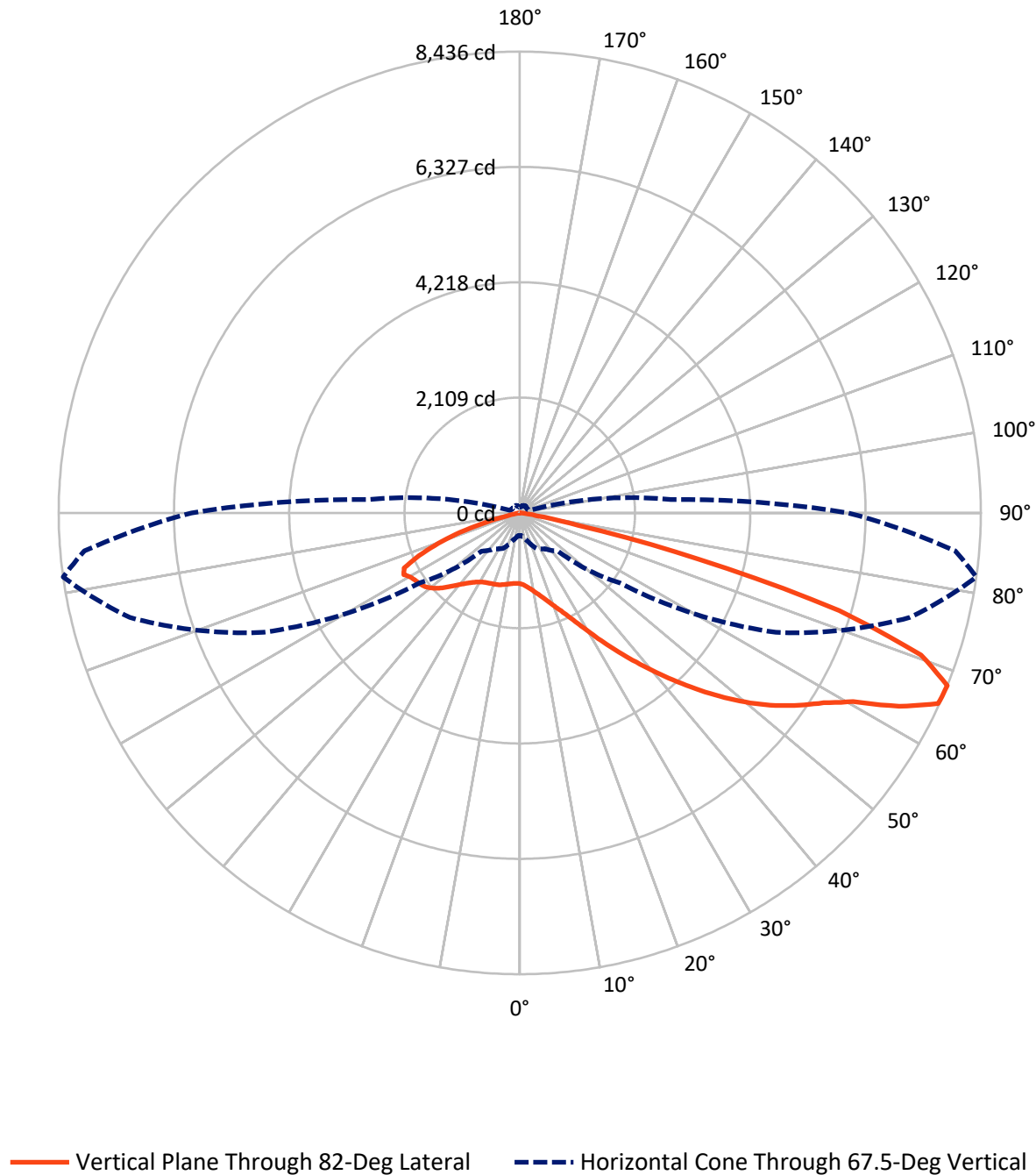
× Max cd
- - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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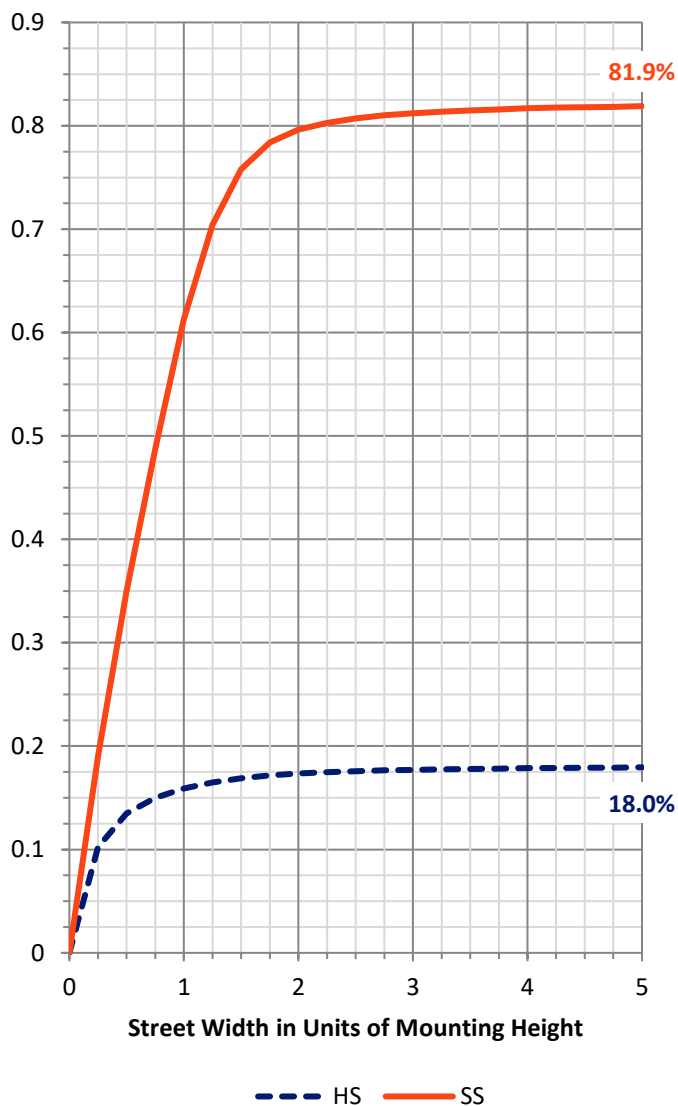
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1416.1	0.0	1416.1
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	6401.6	0.0	6401.6
	% Fixture	81.9	0.0	81.9
Total	Lumens	7817.7	0.0	7817.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.4	1.5
10°-20°	299.8	3.8
20°-30°	480.3	6.1
30°-40°	849.2	10.9
40°-50°	1487.9	19.0
50°-60°	1984.5	25.4
60°-70°	1847.5	23.6
70°-80°	709.0	9.1
80°-90°	44.0	0.6
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°	7817.7	100.0
0°-180°	7817.7	100.0

Coefficient of Utilization



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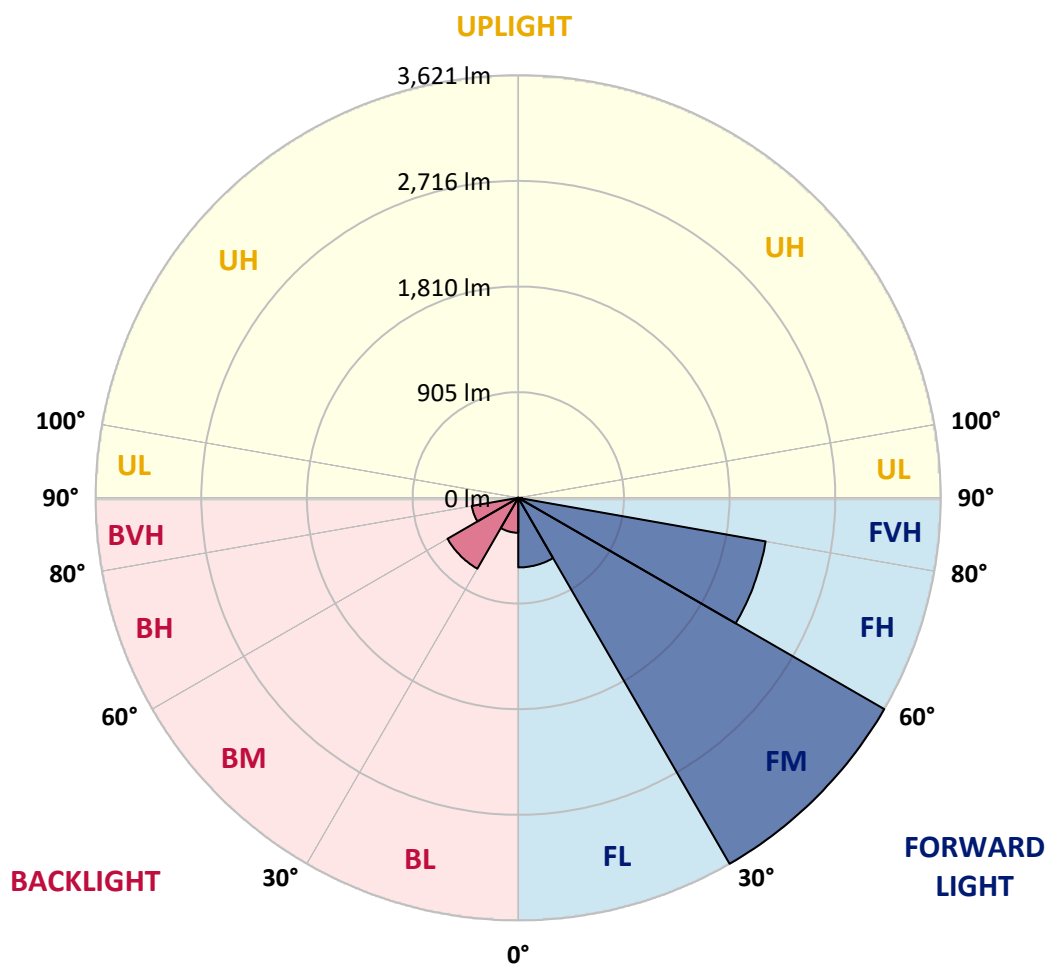
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	596.4	7.6			
FM	(30°-60°)	3620.8	46.3			
FH	(60°-80°)	2152.3	27.5			G2/5000
FVH	(80°-90°)	32.0	0.4			G1/100
BL	(0°-30°)	299.1	3.8	B1/500		
BM	(30°-60°)	700.8	9.0	B1/1000		
BH	(60°-80°)	404.2	5.2	B1/500		G1/500
BVH	(80°-90°)	12.0	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1295.1	1295.1	1295.1	1295.1	1295.1	1295.1	1295.1	1295.1	1295.1	1295.1	1295.1
2.5°	1368.9	1376.8	1372.3	1370.0	1366.0	1360.4	1355.9	1341.8	1327.2	1317.6	1314.3
5°	1396.5	1404.4	1403.7	1406.0	1408.9	1410.5	1409.4	1393.6	1372.8	1356.5	1347.0
7.5°	1372.8	1381.8	1389.1	1400.4	1420.0	1440.9	1451.0	1447.6	1426.3	1403.7	1391.9
10°	1305.8	1315.4	1332.8	1359.3	1401.0	1446.0	1483.7	1501.1	1487.6	1462.9	1446.6
12.5°	1183.2	1192.7	1227.0	1284.4	1354.2	1432.4	1504.5	1551.2	1554.6	1529.8	1510.7
15°	1045.2	1054.8	1091.4	1163.4	1269.8	1395.3	1515.8	1604.1	1634.0	1612.5	1589.5
17.5°	959.7	968.1	995.7	1053.7	1164.5	1321.0	1511.8	1660.4	1728.6	1711.6	1684.1
20°	933.8	941.1	954.1	994.6	1086.9	1243.9	1485.9	1713.3	1830.4	1820.8	1789.9
22.5°	961.3	968.1	972.0	990.0	1048.1	1193.2	1453.2	1767.4	1948.6	1949.8	1912.0
25°	1025.0	1031.7	1027.3	1038.4	1063.7	1177.5	1440.9	1831.0	2097.1	2109.6	2066.8
27.5°	1129.7	1130.2	1119.5	1119.0	1122.9	1201.1	1453.9	1899.0	2284.6	2307.7	2254.8
30°	1339.6	1331.2	1290.1	1245.6	1225.3	1272.0	1489.8	1979.6	2505.8	2546.9	2480.5
32.5°	1663.3	1650.9	1575.4	1469.0	1362.1	1386.3	1554.6	2071.3	2746.7	2821.0	2739.9
35°	2014.4	2011.0	1932.2	1774.1	1587.2	1549.0	1659.9	2191.8	3009.6	3127.8	3031.5
37.5°	2340.9	2339.3	2294.2	2107.9	1880.5	1775.8	1828.7	2349.3	3291.0	3462.1	3348.4
40°	2639.2	2644.3	2599.3	2432.6	2203.5	2066.8	2058.3	2544.0	3603.9	3826.2	3691.2
42.5°	2897.0	2902.6	2857.1	2733.8	2522.7	2388.8	2340.4	2782.8	3909.6	4217.5	4057.6
45°	3072.0	3107.0	3100.2	3001.7	2850.3	2711.2	2679.1	3082.2	4258.0	4632.3	4444.8
47.5°	3121.5	3153.6	3204.4	3217.8	3125.5	2988.8	3027.0	3443.0	4610.3	5047.6	4834.3
50°	2999.5	3029.3	3134.6	3274.7	3338.8	3296.6	3365.3	3829.6	4971.1	5461.9	5216.5
52.5°	2758.6	2788.9	2921.8	3143.6	3405.3	3538.1	3704.7	4210.7	5320.7	5854.2	5578.5
55°	2410.2	2442.3	2612.7	2863.7	3278.7	3637.7	3987.8	4591.2	5640.9	6207.1	5904.9
57.5°	1936.2	1959.9	2137.1	2488.4	2960.0	3538.6	4196.7	5006.6	5942.6	6553.8	6228.5
60°	1261.9	1282.8	1488.7	1880.5	2432.1	3207.7	4238.3	5469.8	6343.3	7004.7	6664.8
62.5°	839.2	853.3	975.4	1263.0	1712.8	2572.2	3994.5	5839.6	6930.9	7789.3	7412.8
65°	575.8	589.9	712.0	912.4	1106.6	1701.5	3293.8	5790.6	7463.4	8412.4	7967.2
67.5°	410.9	422.7	526.2	715.3	800.9	988.4	2232.9	5164.8	7386.9	8436.1	7997.0
70°	294.4	301.1	386.6	557.2	636.6	593.8	1241.7	3950.1	6467.7	7789.9	7388.0
72.5°	206.0	208.3	268.4	424.4	512.8	433.4	591.0	2633.6	4891.7	6114.2	5727.6
75°	139.6	142.4	180.7	311.3	411.4	331.0	312.9	1412.2	2871.6	3384.4	3033.8
77.5°	85.6	86.7	116.5	212.8	307.9	252.2	201.5	598.3	1111.1	1090.8	929.9
80°	48.4	48.4	74.3	132.2	209.9	162.7	141.2	254.4	351.8	309.0	272.4
82.5°	27.1	27.6	54.0	82.2	139.0	96.2	77.7	117.7	152.0	134.5	117.1
85°	11.3	12.4	33.2	38.8	66.4	47.9	31.6	49.5	56.3	50.1	36.6
87.5°	1.1	1.6	10.1	7.3	7.9	9.5	4.5	9.5	7.9	7.9	5.6
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°	1295.1	1295.1	1295.1	1295.1	1295.1	1295.1	1295.1	1295.1	1295.1	1295.1	1295.1
2.5°	1303.6	1295.1	1273.8	1249.0	1216.4	1200.6	1179.2	1164.5	1152.2	1153.3	1142.1
5°	1328.9	1307.5	1259.6	1200.0	1125.7	1072.8	1016.5	977.6	946.2	939.4	924.2
7.5°	1363.8	1330.0	1246.2	1138.7	1013.1	918.0	833.0	778.4	739.5	727.2	714.8
10°	1408.9	1359.9	1228.7	1061.5	880.9	759.8	668.7	625.9	599.4	590.4	583.6
12.5°	1461.1	1394.2	1205.6	967.5	744.7	628.1	570.2	548.8	540.4	537.5	535.9
15°	1527.0	1436.9	1170.8	856.1	629.2	547.7	522.9	520.1	521.2	520.1	519.5
17.5°	1605.3	1483.7	1113.9	741.3	551.6	506.6	497.5	499.8	502.7	502.0	500.9
20°	1690.8	1529.8	1041.3	639.4	498.7	477.3	472.2	474.5	476.7	475.6	475.1
22.5°	1788.2	1579.3	960.8	560.1	463.2	450.3	444.6	445.3	445.3	443.0	441.9
25°	1904.7	1634.0	876.4	503.8	436.2	426.1	419.3	417.1	413.7	406.9	405.8
27.5°	2043.7	1692.0	795.3	464.3	414.8	405.3	397.4	391.8	383.3	372.1	370.9
30°	2200.2	1762.3	726.6	439.6	397.9	388.4	379.4	370.9	358.5	344.5	343.4
32.5°	2384.3	1837.7	676.5	423.2	382.7	372.6	361.9	351.8	338.2	324.2	324.7
35°	2603.8	1928.9	647.3	412.0	370.9	357.4	345.6	334.4	324.2	311.8	310.7
37.5°	2841.8	2025.7	638.3	406.4	363.1	342.2	328.7	320.8	319.7	312.4	311.8
40°	3102.5	2140.5	645.0	403.0	354.5	327.6	312.9	311.3	314.1	301.1	301.7
42.5°	3378.2	2276.7	656.3	399.0	342.8	312.9	298.9	298.9	296.6	278.6	278.6
45°	3676.6	2433.8	667.6	389.5	328.7	298.3	287.6	283.7	274.1	256.7	256.1
47.5°	3977.1	2593.7	676.0	372.1	311.8	286.0	276.3	267.3	253.3	237.5	237.0
50°	4262.5	2737.2	667.0	346.1	292.6	274.1	263.9	251.6	236.4	225.7	224.1
52.5°	4517.5	2861.5	628.7	315.8	272.4	261.7	252.8	239.7	227.3	216.2	215.0
55°	4739.2	2962.2	561.2	287.1	254.4	251.0	242.0	225.7	208.8	199.3	198.1
57.5°	4952.0	3038.8	476.7	263.4	238.1	239.2	225.7	211.0	195.3	185.2	184.1
60°	5235.1	3141.3	391.1	241.5	220.7	224.1	209.4	198.6	179.0	166.0	164.3
62.5°	5687.6	3300.6	310.7	214.4	200.4	201.5	195.3	182.3	158.8	143.5	142.4
65°	6046.7	3242.1	244.9	185.2	177.3	179.0	179.0	164.9	139.6	122.2	120.4
67.5°	6006.2	2776.0	195.3	156.5	155.4	156.5	160.4	148.6	123.8	109.8	107.5
70°	5532.8	2208.1	156.5	130.0	135.1	132.2	143.5	135.6	111.4	97.4	95.7
72.5°	4514.6	1590.6	119.3	107.5	103.5	108.0	129.5	122.2	92.9	77.1	75.4
75°	2638.0	848.8	89.0	85.0	74.8	90.1	114.8	104.1	70.9	56.9	55.1
77.5°	859.0	296.0	65.3	62.5	55.8	72.6	97.9	87.8	58.0	45.0	43.4
80°	230.2	89.5	44.5	41.1	36.0	54.0	77.7	69.8	41.6	29.3	28.7
82.5°	92.4	37.7	25.9	23.1	19.7	37.1	61.4	56.3	31.0	18.6	18.6
85°	29.8	12.4	9.5	7.3	9.0	23.1	36.6	38.2	21.9	9.5	7.3
87.5°	3.9	1.6	1.6	2.3	1.6	3.9	11.3	10.7	6.1	1.1	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)