

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: P962587

Luminaire Tested: **NAV-SB2C-827-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962587
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2C-827-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13527.9 lumens
Efficiency: N/A
Efficacy: 134.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 100.9
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

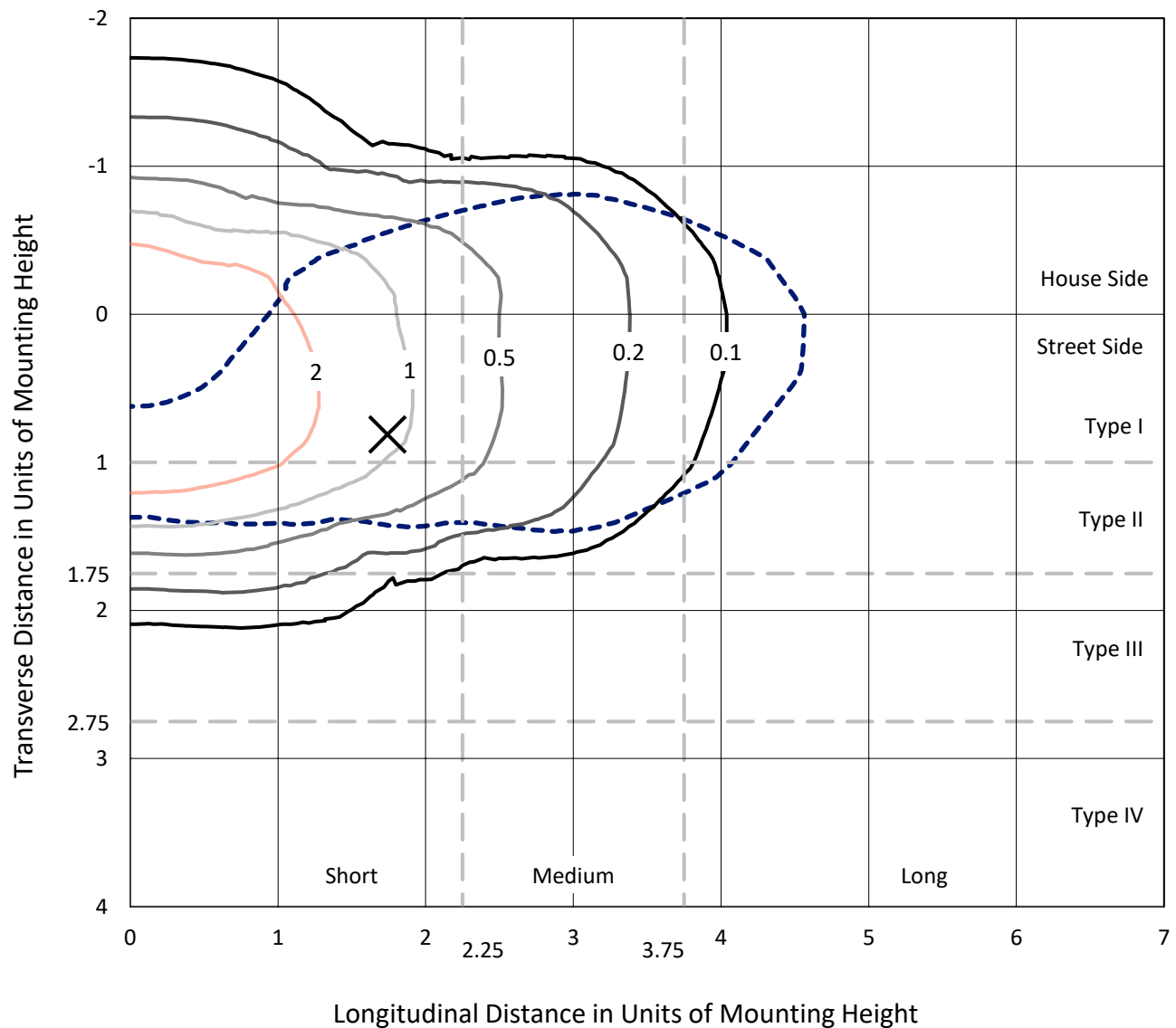


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Iso-Footcandle Lines of Horizontal Illumination

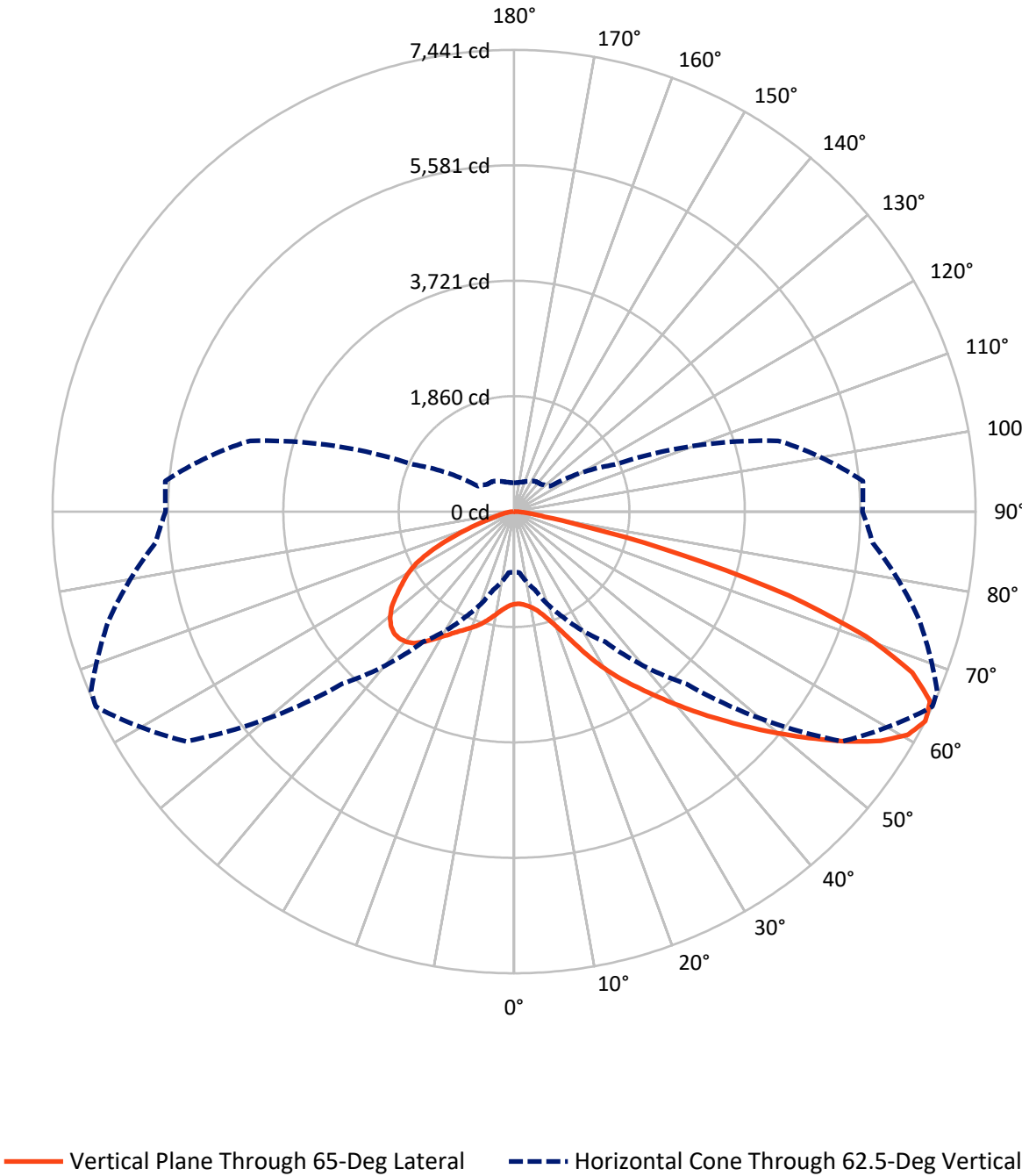
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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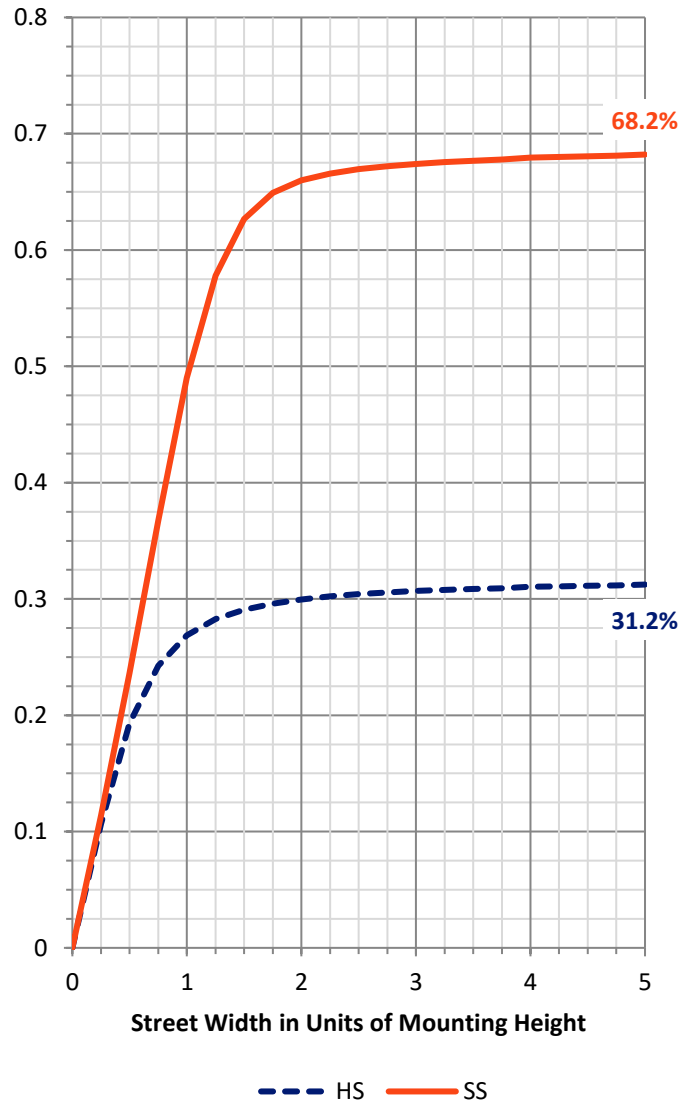
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4268.8	0.0	4268.8
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	9259.1	0.0	9259.1
	% Fixture	68.4	0.0	68.4
Total	Lumens	13527.9	0.0	13527.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.6	1.1
10°-20°	504.0	3.7
20°-30°	1021.9	7.6
30°-40°	1768.4	13.1
40°-50°	2676.1	19.8
50°-60°	3137.6	23.2
60°-70°	2630.5	19.4
70°-80°	1452.2	10.7
80°-90°	188.6	1.4
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°	13527.9	100.0
0°-180°	13527.9	100.0

Coefficient of Utilization



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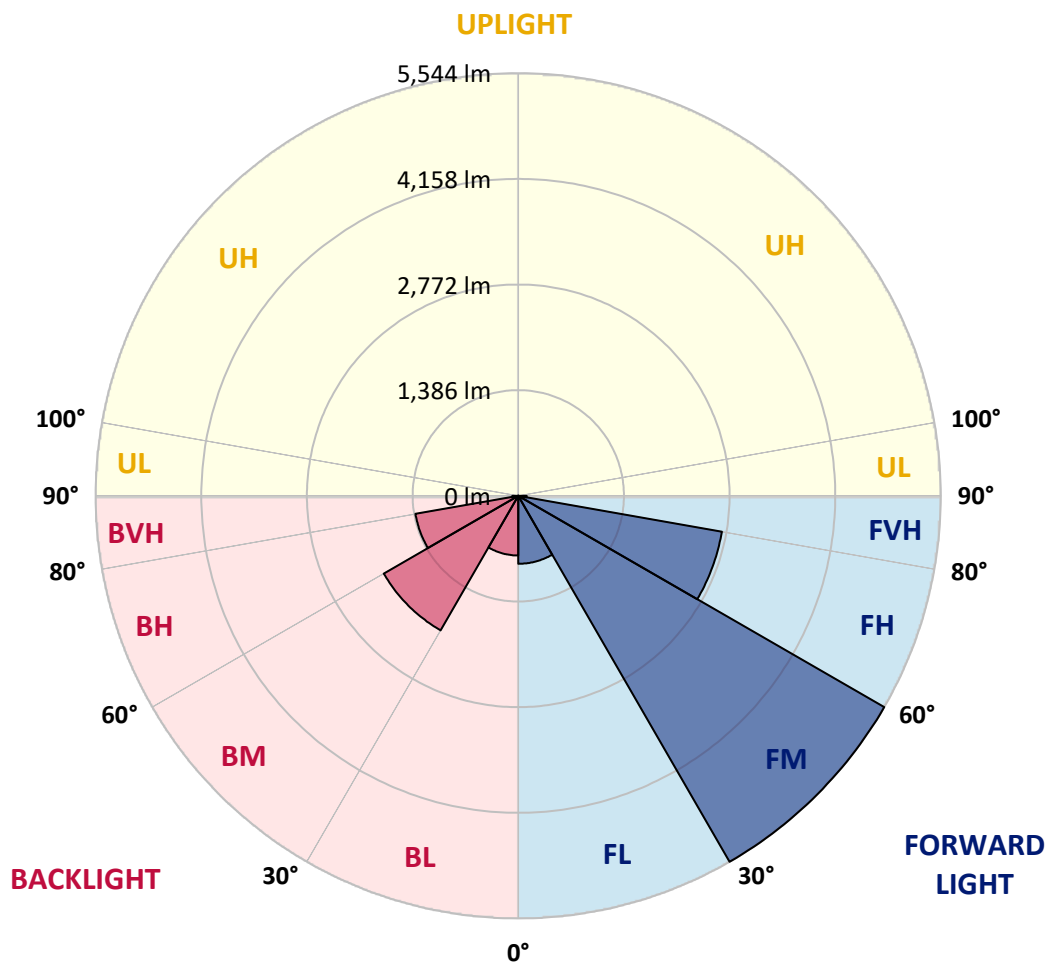
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	891.7	6.6			
FM	(30°-60°)	5544.2	41.0			
FH	(60°-80°)	2713.3	20.1			G2/5000
FVH	(80°-90°)	109.9	0.8			G2/225
BL	(0°-30°)	782.9	5.8	B2/1000		
BM	(30°-60°)	2037.9	15.1	B2/2500		
BH	(60°-80°)	1369.4	10.1	B3/2500		G3/2500
BVH	(80°-90°)	78.7	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	1490.8	1490.8	1490.8	1490.8	1490.8	1490.8	1490.8	1490.8	1490.8	1490.8	1490.8
2.5°	1480.9	1476.7	1480.2	1480.2	1481.6	1480.9	1485.8	1487.2	1489.3	1493.5	1493.5
5°	1466.2	1465.4	1471.8	1477.4	1483.0	1487.9	1494.2	1503.4	1504.8	1509.7	1516.0
7.5°	1461.2	1457.0	1466.9	1473.8	1487.2	1499.2	1516.0	1531.5	1537.7	1539.9	1551.7
10°	1499.2	1492.1	1501.2	1505.4	1516.7	1528.6	1548.3	1572.9	1579.8	1588.2	1601.6
12.5°	1563.7	1555.9	1569.4	1575.6	1586.2	1596.7	1610.1	1633.8	1637.4	1652.8	1665.5
15°	1652.1	1643.0	1651.5	1659.2	1676.7	1686.5	1699.9	1723.0	1723.0	1734.9	1744.0
17.5°	1772.1	1760.2	1766.6	1769.4	1780.6	1795.3	1817.7	1838.1	1848.7	1844.5	1831.8
20°	1951.1	1936.4	1936.4	1922.4	1918.2	1930.1	1959.6	1987.6	1998.9	1977.1	1946.3
22.5°	2219.9	2198.9	2186.9	2139.3	2120.3	2121.6	2151.2	2185.5	2194.6	2156.1	2086.6
25°	2561.8	2528.8	2512.6	2442.5	2399.6	2362.4	2385.6	2429.8	2442.5	2394.7	2282.4
27.5°	2903.5	2905.7	2890.2	2805.9	2735.1	2667.0	2655.1	2701.4	2714.7	2660.7	2521.7
30°	3382.9	3333.1	3303.6	3202.5	3101.4	3006.0	2956.9	2975.8	2979.4	2914.8	2753.4
32.5°	3796.3	3783.7	3720.4	3632.1	3502.2	3352.7	3270.6	3240.4	3234.8	3142.9	2951.3
35°	4267.2	4260.2	4193.6	4088.2	3947.9	3740.1	3592.0	3505.7	3498.7	3369.6	3147.1
37.5°	4745.9	4745.9	4680.7	4565.6	4420.2	4160.6	3935.3	3798.3	3775.9	3607.5	3346.4
40°	5127.7	5104.5	5116.5	5068.0	4901.7	4625.8	4316.4	4117.7	4087.6	3885.5	3558.4
42.5°	5344.6	5336.9	5408.4	5462.4	5394.4	5174.0	4736.0	4463.8	4421.6	4191.4	3802.6
45°	5393.0	5384.5	5512.3	5710.2	5805.7	5715.1	5192.2	4828.0	4776.8	4511.4	4064.4
47.5°	5281.4	5264.5	5452.0	5764.3	6070.3	6229.5	5686.4	5223.1	5148.8	4823.1	4333.2
50°	4945.9	4929.7	5213.4	5628.1	6159.4	6579.1	6222.6	5642.1	5528.4	5157.2	4604.8
52.5°	4216.6	4224.4	4668.7	5238.6	6042.2	6796.7	6684.3	6083.6	5946.7	5498.9	4859.6
55°	3284.6	3301.5	3847.5	4474.9	5573.3	6763.7	6999.5	6538.4	6402.3	5820.4	5122.7
57.5°	2351.9	2426.3	2938.0	3559.1	4672.9	6240.8	7068.3	6970.7	6838.8	6171.3	5380.3
60°	1524.4	1537.7	2064.1	2690.2	3558.4	5311.5	6928.6	7298.5	7195.3	6529.2	5595.8
62.5°	976.9	986.0	1306.9	1881.7	2561.1	3929.6	6458.4	7441.0	7409.4	6765.8	5802.8
65°	718.0	710.9	878.0	1243.6	1725.2	2423.5	5545.2	7372.2	7434.6	6913.9	5974.1
67.5°	599.4	589.6	671.7	861.2	1271.0	1376.4	4103.0	6925.1	7153.9	6897.0	6099.8
70°	546.0	537.6	587.4	639.4	991.7	921.5	2068.3	6020.4	6372.7	6705.4	6079.4
72.5°	462.5	447.8	515.9	567.7	771.3	706.7	854.8	4624.5	5054.0	6091.4	5793.0
75°	358.6	348.8	407.0	499.7	579.7	551.7	540.4	2808.1	3276.9	4710.8	5068.0
77.5°	284.2	270.9	324.2	389.5	521.5	416.2	393.7	1209.3	1673.9	3007.5	3792.1
80°	214.0	202.1	246.3	308.1	400.8	313.8	254.8	493.4	631.0	1523.7	1906.9
82.5°	152.3	141.8	172.0	226.0	269.5	281.5	156.5	276.5	310.9	587.4	426.0
85°	97.6	91.2	115.1	141.8	171.3	181.1	95.4	144.6	158.6	242.1	177.5
87.5°	53.3	43.6	61.8	66.0	79.3	72.3	45.6	52.7	56.9	87.7	75.1
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°	1490.8	1490.8	1490.8	1490.8	1490.8	1490.8	1490.8	1490.8	1490.8	1490.8	1490.8
2.5°	1496.3	1498.4	1505.4	1507.6	1512.5	1518.8	1523.0	1527.2	1527.2	1531.5	1531.5
5°	1516.7	1521.6	1536.4	1544.1	1556.7	1569.4	1577.1	1586.2	1591.8	1594.6	1596.0
7.5°	1555.9	1563.7	1584.8	1598.1	1619.9	1637.4	1649.3	1661.9	1664.8	1672.5	1669.7
10°	1609.4	1618.5	1642.4	1667.6	1693.5	1715.3	1726.5	1735.6	1739.2	1740.6	1737.1
12.5°	1670.4	1683.8	1714.6	1745.5	1772.8	1791.8	1794.6	1792.5	1782.7	1774.3	1774.3
15°	1745.5	1757.5	1791.8	1825.5	1852.2	1855.7	1838.1	1826.9	1815.0	1812.9	1812.9
17.5°	1835.4	1841.6	1873.2	1906.2	1908.3	1896.4	1870.4	1859.9	1848.7	1840.9	1841.6
20°	1939.9	1937.8	1960.2	1974.3	1959.6	1923.1	1883.7	1866.2	1854.9	1845.8	1846.5
22.5°	2064.9	2048.7	2045.9	2042.4	2003.1	1926.6	1873.2	1850.7	1833.2	1820.6	1824.8
25°	2246.6	2184.9	2142.0	2118.2	2029.7	1907.6	1839.6	1789.8	1756.7	1734.9	1743.4
27.5°	2474.0	2370.1	2262.1	2203.8	2029.7	1869.0	1758.1	1677.4	1623.4	1600.9	1612.1
30°	2690.8	2582.1	2422.8	2307.0	2024.8	1805.8	1626.9	1514.5	1451.4	1429.0	1442.3
32.5°	2876.1	2757.6	2593.4	2419.9	2012.9	1703.3	1464.0	1339.8	1278.8	1252.1	1265.5
35°	3048.1	2921.8	2764.5	2544.2	1981.3	1553.2	1285.0	1190.3	1122.3	1079.4	1093.5
37.5°	3224.2	3074.1	2926.7	2656.5	1924.4	1377.7	1147.5	1066.8	986.8	929.3	944.6
40°	3415.9	3236.2	3100.0	2723.1	1831.2	1210.7	1040.9	967.2	882.2	821.1	833.1
42.5°	3639.8	3430.7	3293.0	2757.6	1703.3	1092.0	971.4	899.0	819.1	769.3	779.0
45°	3873.5	3644.7	3469.2	2756.8	1560.9	1036.6	948.9	877.3	788.8	737.0	745.4
47.5°	4118.4	3868.6	3621.5	2711.9	1437.4	1044.4	936.2	830.2	732.8	682.2	689.2
50°	4364.0	4113.5	3768.9	2627.7	1384.8	1027.5	889.3	764.3	649.2	603.6	606.4
52.5°	4607.6	4373.9	3895.9	2507.7	1331.4	965.0	828.9	678.7	614.8	583.2	583.2
55°	4852.6	4631.5	4034.2	2332.9	1198.0	892.1	727.9	646.4	587.4	558.6	555.9
57.5°	5098.2	4929.0	4165.5	2158.1	1030.3	802.2	672.4	607.1	560.1	535.5	531.3
60°	5353.7	5269.4	4300.9	1997.4	864.7	687.1	631.7	575.5	527.8	500.4	498.4
62.5°	5616.9	5644.3	4406.9	1790.4	712.4	616.9	595.1	537.6	491.3	465.4	464.6
65°	5882.2	6005.7	4476.4	1503.4	577.6	550.2	555.9	496.2	449.2	426.7	426.0
67.5°	6082.2	6266.1	4456.7	1137.6	473.8	487.1	506.8	452.6	408.5	390.9	391.7
70°	6104.7	6235.2	4263.0	779.0	396.6	425.3	452.0	409.9	364.3	351.6	352.3
72.5°	5805.7	5814.1	3723.3	508.8	335.5	373.4	394.4	366.3	322.2	309.5	308.8
75°	5021.7	4808.4	2733.7	335.5	280.7	320.7	340.4	320.7	278.0	280.7	270.9
77.5°	3804.7	3405.4	1659.9	238.6	234.4	269.5	296.2	282.2	245.7	275.8	242.8
80°	1960.2	1842.3	740.5	178.2	185.3	215.5	243.5	225.3	194.4	185.3	169.1
82.5°	449.2	522.1	291.9	127.7	134.1	155.1	186.0	169.1	139.7	117.9	116.5
85°	157.2	172.0	129.1	80.1	78.6	96.9	126.4	113.0	94.7	75.8	80.1
87.5°	49.8	65.3	48.4	32.3	33.7	43.6	58.2	53.3	44.2	28.8	30.1
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)