

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: P963679

Luminaire Tested: **NAV-SB3A-830-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963679
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-830-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12251.8 lumens
Efficiency: N/A
Efficacy: 144.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

Input Watts (W): 84.7
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

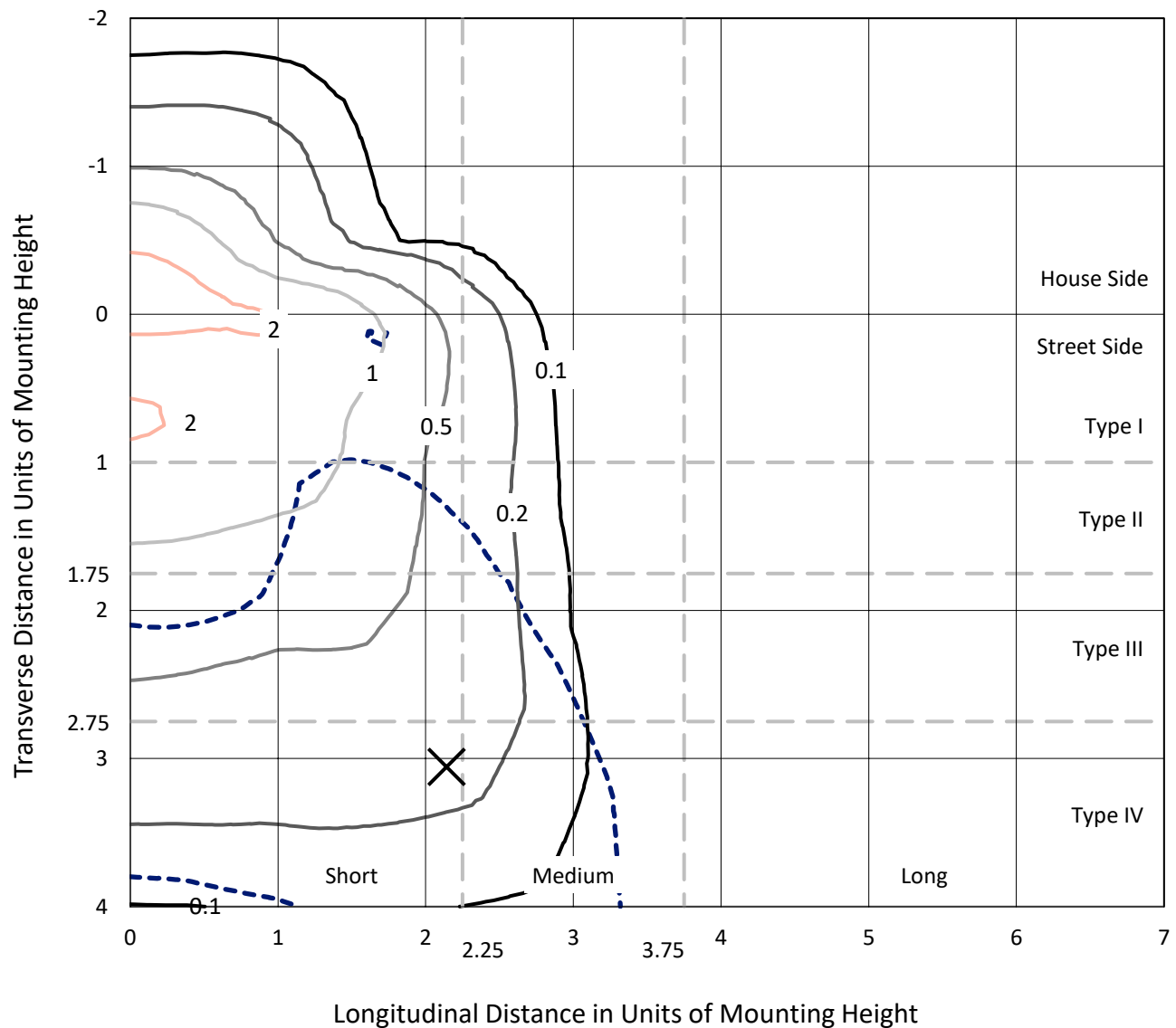


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Iso-Footcandle Lines of Horizontal Illumination

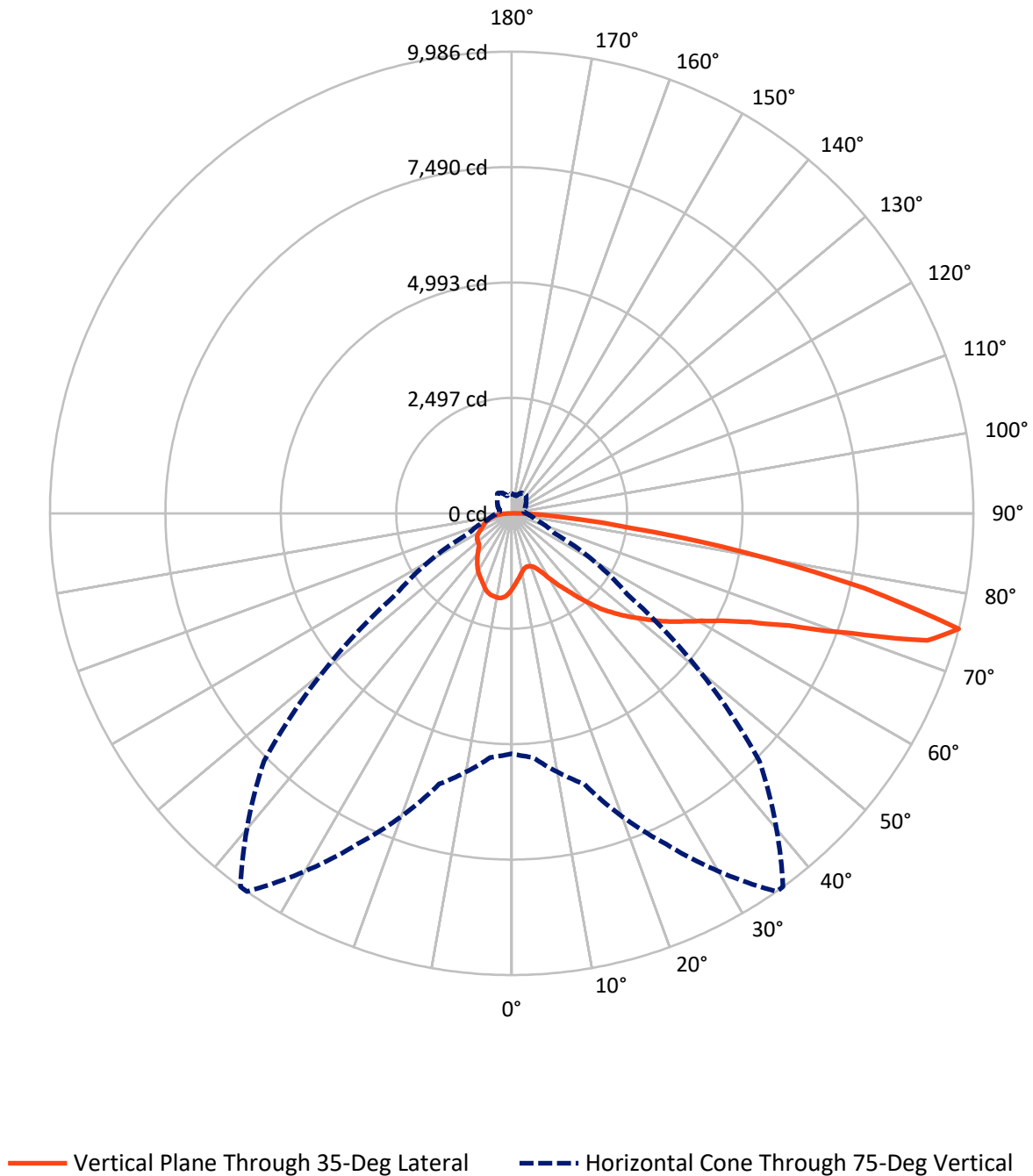
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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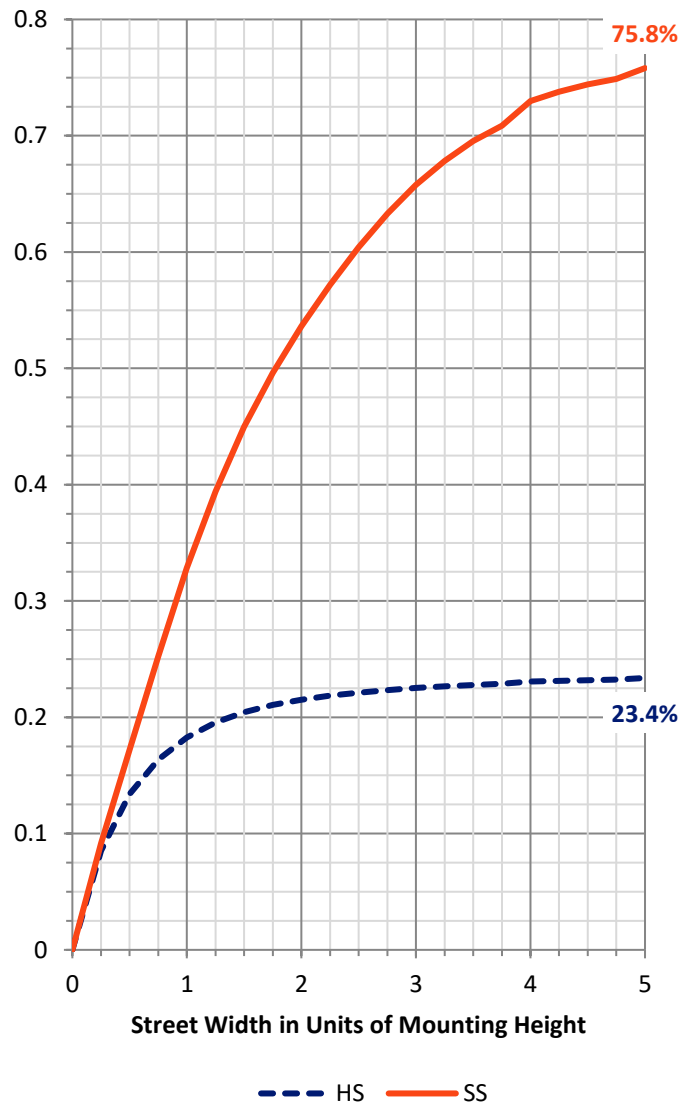
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2915.6	0.0	2915.6
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	9336.2	0.0	9336.2
	% Fixture	76.2	0.0	76.2
Total	Lumens	12251.8	0.0	12251.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.6	1.3
10°-20°	445.9	3.6
20°-30°	748.7	6.1
30°-40°	1163.6	9.5
40°-50°	1727.2	14.1
50°-60°	2384.4	19.5
60°-70°	2892.9	23.6
70°-80°	2390.7	19.5
80°-90°	343.9	2.8
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°	12251.8	100.0
0°-180°	12251.8	100.0

Coefficient of Utilization



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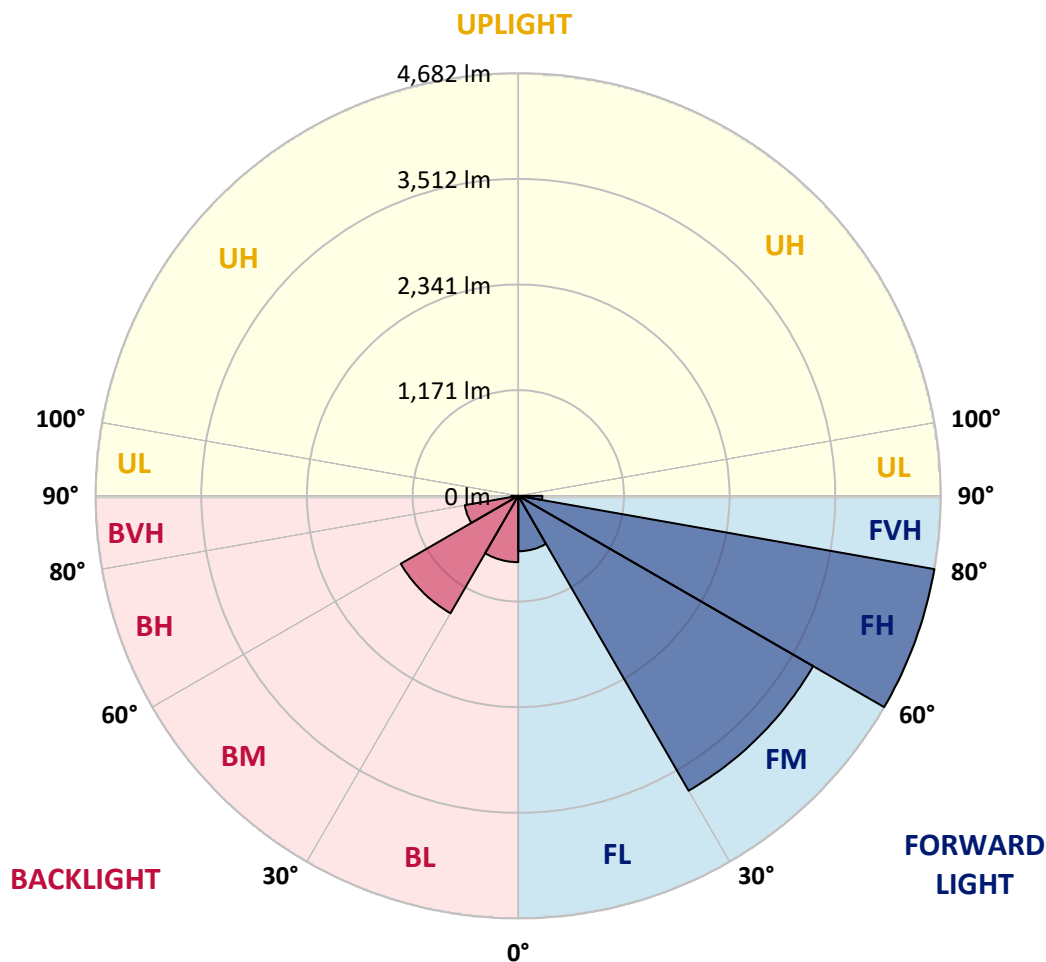
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	614.4	5.0			
FM	(30°-60°)	3772.9	30.8			
FH	(60°-80°)	4682.5	38.2			G2/5000
FVH	(80°-90°)	266.4	2.2			G3/500
BL	(0°-30°)	734.8	6.0	B2/1000		
BM	(30°-60°)	1502.3	12.3	B2/2500		
BH	(60°-80°)	601.1	4.9	B2/1000		G2/1000
BVH	(80°-90°)	77.4	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	1632.6	1632.6	1632.6	1632.6	1632.6	1632.6	1632.6	1632.6	1632.6	1632.6	1632.6
2.5°	1505.5	1514.7	1518.7	1516.7	1526.6	1525.3	1539.2	1556.5	1580.3	1603.5	1637.2
5°	1389.6	1399.5	1408.1	1416.0	1435.3	1441.3	1463.1	1496.2	1540.0	1584.2	1639.9
7.5°	1281.6	1290.2	1303.5	1318.0	1350.4	1356.5	1392.9	1444.5	1505.5	1570.4	1647.2
10°	1193.5	1202.1	1216.1	1232.6	1272.9	1280.3	1326.7	1395.5	1475.0	1557.2	1655.2
12.5°	1155.8	1158.5	1166.3	1183.0	1218.0	1222.6	1273.7	1352.5	1445.2	1547.2	1667.1
15°	1153.7	1159.1	1159.8	1168.4	1197.5	1199.5	1246.5	1324.6	1426.7	1545.2	1685.0
17.5°	1173.6	1177.6	1171.7	1177.0	1201.5	1204.8	1241.9	1311.4	1420.6	1553.8	1715.4
20°	1226.6	1229.9	1212.1	1204.8	1222.6	1225.3	1261.8	1320.0	1426.7	1571.7	1757.2
22.5°	1339.3	1341.2	1297.5	1267.7	1269.1	1270.4	1302.2	1355.2	1449.9	1604.1	1810.2
25°	1514.7	1513.4	1443.9	1386.2	1353.1	1345.8	1367.0	1412.0	1488.9	1647.2	1878.3
27.5°	1720.1	1710.1	1640.6	1554.5	1482.3	1471.7	1467.1	1486.2	1544.6	1704.2	1961.8
30°	1951.9	1942.6	1867.8	1755.2	1655.2	1637.9	1594.2	1584.2	1627.3	1781.7	2077.7
32.5°	2206.2	2200.3	2110.9	1974.4	1840.6	1820.7	1747.2	1720.8	1754.5	1898.9	2239.3
35°	2419.5	2414.2	2340.0	2199.5	2036.0	2011.5	1936.6	1906.8	1924.0	2049.3	2450.6
37.5°	2612.2	2609.5	2546.0	2435.4	2266.5	2236.7	2152.6	2142.7	2139.3	2247.3	2706.9
40°	2791.1	2784.4	2718.2	2659.9	2534.7	2507.6	2433.4	2424.7	2399.6	2491.1	2997.0
42.5°	2989.1	2971.9	2875.8	2848.7	2814.9	2792.4	2748.0	2749.4	2693.7	2765.9	3304.4
45°	3150.6	3140.8	3042.1	3026.2	3062.6	3053.4	3091.7	3101.6	2993.7	3054.0	3623.6
47.5°	3324.2	3315.0	3231.5	3220.2	3319.0	3321.6	3457.3	3460.7	3286.5	3353.4	3943.5
50°	3538.2	3524.9	3442.2	3456.0	3566.6	3576.5	3825.0	3802.4	3556.0	3657.4	4260.7
52.5°	3679.2	3687.1	3669.3	3691.8	3842.8	3852.1	4186.6	4128.9	3822.9	3957.4	4572.0
55°	3783.2	3799.2	3854.7	3906.4	4134.2	4143.6	4527.6	4439.6	4044.1	4235.6	4864.8
57.5°	3917.0	3894.5	3998.5	4099.2	4411.1	4435.6	4859.5	4739.0	4240.2	4475.4	5065.4
60°	4109.1	4093.2	4174.0	4323.0	4721.0	4760.2	5210.5	5008.6	4383.9	4665.4	5104.6
62.5°	4498.5	4458.8	4471.4	4603.2	5111.9	5163.5	5606.6	5243.7	4455.5	4739.6	4895.3
65°	5080.7	5012.5	4948.9	5040.3	5662.2	5713.2	6053.6	5428.4	4429.0	4595.9	4339.5
67.5°	5813.9	5746.4	5668.2	5754.3	6473.0	6513.4	6605.4	5532.4	4220.3	4042.2	3357.4
70°	6418.7	6393.4	6486.8	6841.2	7767.8	7769.1	7312.8	5446.3	3648.8	2865.9	1942.6
72.5°	6338.5	6323.2	6815.3	7910.8	9399.8	9364.6	7982.4	4794.6	2458.0	1292.8	727.9
75°	5199.9	5298.6	6060.9	7891.7	9986.0	9981.2	7572.4	3048.0	1016.7	535.9	376.2
77.5°	2788.4	2944.7	3934.9	5826.5	7795.6	7912.8	5323.7	1066.3	436.4	343.1	260.2
80°	909.4	1045.8	1568.4	2966.6	5065.4	5043.6	2281.8	418.6	298.7	243.0	180.2
82.5°	386.1	402.0	700.8	1400.9	2599.6	2559.2	726.6	240.5	209.9	166.3	111.3
85°	151.0	168.9	309.3	647.8	1126.0	1101.5	262.3	119.2	134.5	108.6	66.2
87.5°	49.7	60.3	110.6	221.9	350.3	337.7	64.3	41.1	58.3	49.7	23.9
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°	1632.6	1632.6	1632.6	1632.6	1632.6	1632.6	1632.6	1632.6	1632.6	1632.6	1632.6
2.5°	1646.6	1657.1	1669.7	1688.3	1704.2	1717.4	1731.3	1739.9	1743.2	1753.2	1752.5
5°	1658.4	1681.6	1712.8	1743.2	1773.0	1791.0	1806.9	1814.8	1822.0	1827.4	1828.7
7.5°	1678.3	1708.2	1757.2	1796.9	1822.0	1836.6	1847.3	1844.6	1847.3	1848.6	1850.5
10°	1695.6	1737.3	1795.6	1833.3	1852.5	1853.2	1850.5	1841.3	1836.6	1837.3	1838.6
12.5°	1716.1	1762.5	1825.4	1857.2	1862.4	1847.9	1836.6	1820.7	1814.8	1812.1	1810.8
15°	1743.9	1796.9	1857.8	1869.7	1856.5	1837.9	1818.8	1792.9	1779.7	1769.0	1772.4
17.5°	1777.7	1836.0	1883.0	1874.4	1845.9	1815.5	1784.3	1745.3	1718.1	1706.8	1707.4
20°	1824.7	1877.1	1902.2	1864.5	1821.4	1775.0	1722.1	1674.3	1649.2	1637.9	1636.6
22.5°	1881.7	1932.0	1920.7	1847.3	1786.3	1712.2	1645.8	1610.8	1598.2	1590.3	1591.6
25°	1949.9	1992.9	1934.0	1822.0	1728.7	1628.6	1577.7	1566.4	1560.5	1554.5	1554.5
27.5°	2038.6	2061.8	1943.9	1784.9	1638.6	1540.0	1521.4	1523.4	1521.4	1511.5	1513.4
30°	2155.9	2151.3	1953.2	1724.7	1535.2	1459.8	1461.1	1469.7	1471.1	1464.4	1467.7
32.5°	2310.2	2263.2	1957.9	1646.6	1436.6	1389.6	1390.9	1400.1	1406.8	1395.5	1400.9
35°	2497.0	2393.7	1950.6	1548.6	1360.4	1322.7	1312.7	1315.4	1317.3	1306.8	1314.0
37.5°	2714.9	2540.1	1918.1	1439.9	1297.5	1257.1	1235.9	1218.0	1207.4	1197.5	1204.1
40°	2953.9	2699.6	1858.5	1333.9	1227.3	1187.6	1155.8	1122.0	1086.2	1073.0	1078.9
42.5°	3204.4	2864.0	1786.3	1232.6	1146.5	1114.1	1080.2	1031.3	977.6	950.5	953.8
45°	3464.0	3032.2	1715.4	1132.6	1063.7	1049.8	1010.8	951.8	893.5	859.1	856.4
47.5°	3718.3	3191.1	1611.4	1031.9	986.3	1001.4	971.0	916.7	851.8	797.4	791.5
50°	3961.4	3340.2	1441.3	929.9	923.3	986.9	957.8	879.6	805.3	735.8	729.9
52.5°	4202.5	3460.7	1223.3	837.2	889.5	982.9	940.5	854.4	763.6	690.8	682.9
55°	4407.1	3522.9	1013.3	757.7	840.5	949.1	919.9	824.6	704.7	627.2	620.6
57.5°	4523.7	3472.6	838.6	679.6	773.0	893.5	884.9	761.1	634.5	574.9	566.9
60°	4473.4	3268.6	695.5	611.3	708.7	833.2	823.9	698.1	580.9	524.6	516.6
62.5°	4195.8	2879.8	582.2	551.8	650.4	771.6	763.0	649.7	539.8	485.4	476.8
65°	3636.8	2342.6	494.0	502.0	591.4	697.4	710.0	609.4	507.4	454.4	445.8
67.5°	2773.9	1696.9	425.2	459.0	533.8	624.5	661.0	580.2	480.2	429.9	421.9
70°	1581.0	963.7	367.0	417.3	482.9	557.0	623.2	557.0	451.0	409.3	404.1
72.5°	599.4	442.4	317.2	375.6	433.8	500.1	581.5	520.6	417.3	386.1	380.8
75°	319.9	269.6	266.9	326.6	377.5	444.4	529.2	484.8	392.1	408.0	421.3
77.5°	217.9	190.8	223.2	279.5	315.9	382.8	473.6	430.5	339.8	338.5	311.9
80°	151.0	135.1	181.5	225.2	244.4	321.8	413.3	369.6	276.9	258.3	247.0
82.5°	90.7	88.0	135.8	168.2	172.9	248.4	342.5	310.0	226.5	197.4	198.7
85°	49.7	52.3	86.7	98.7	100.7	173.5	268.2	239.7	174.1	146.4	147.7
87.5°	13.9	17.8	31.8	39.1	48.4	90.1	159.6	142.4	87.4	60.9	60.9
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)