

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: P961957

Luminaire Tested: **NAV-SB2B-740-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961957
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-740-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12105.3 lumens
Efficiency: N/A
Efficacy: 163.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G3

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

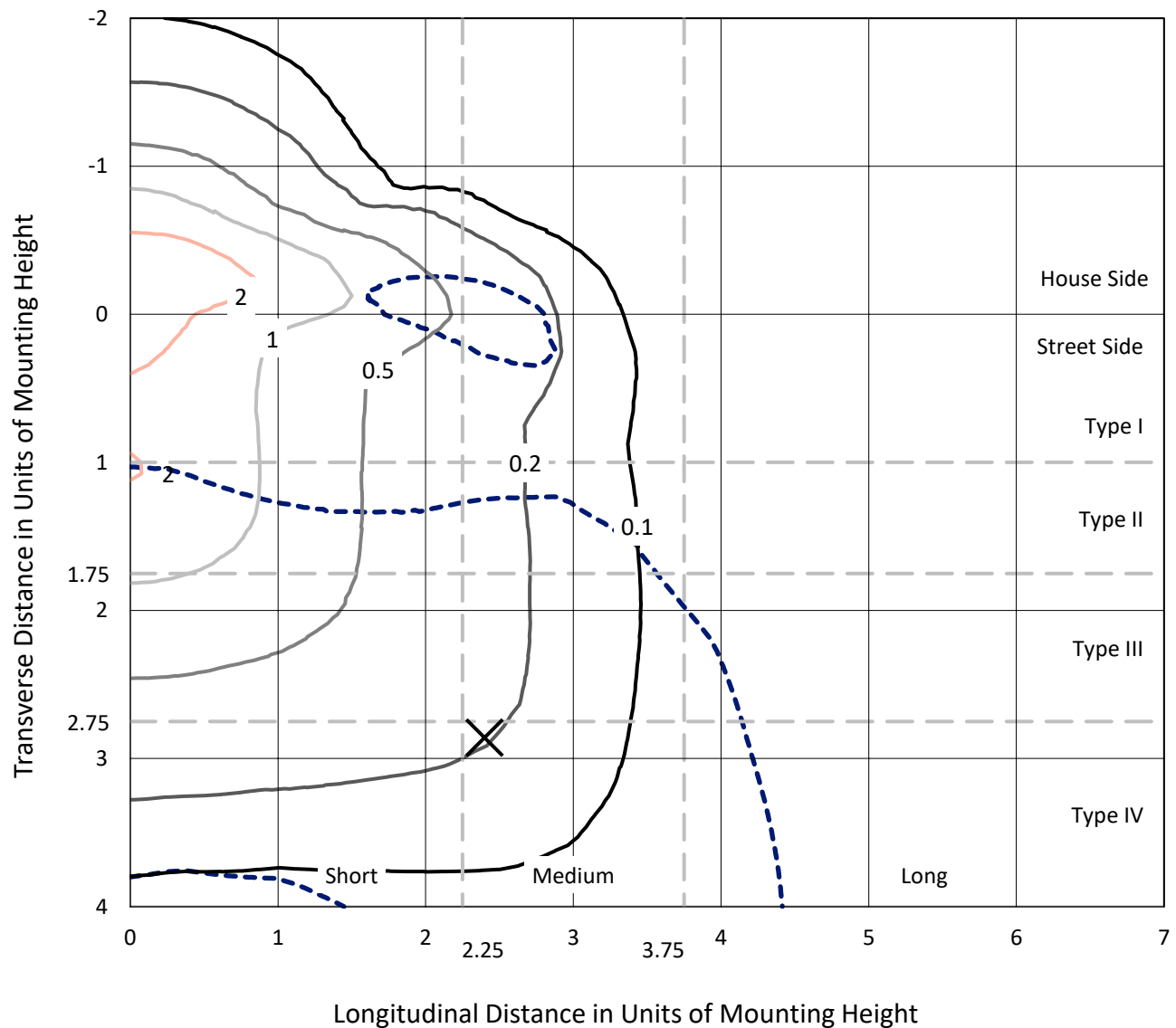


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Iso-Footcandle Lines of Horizontal Illumination

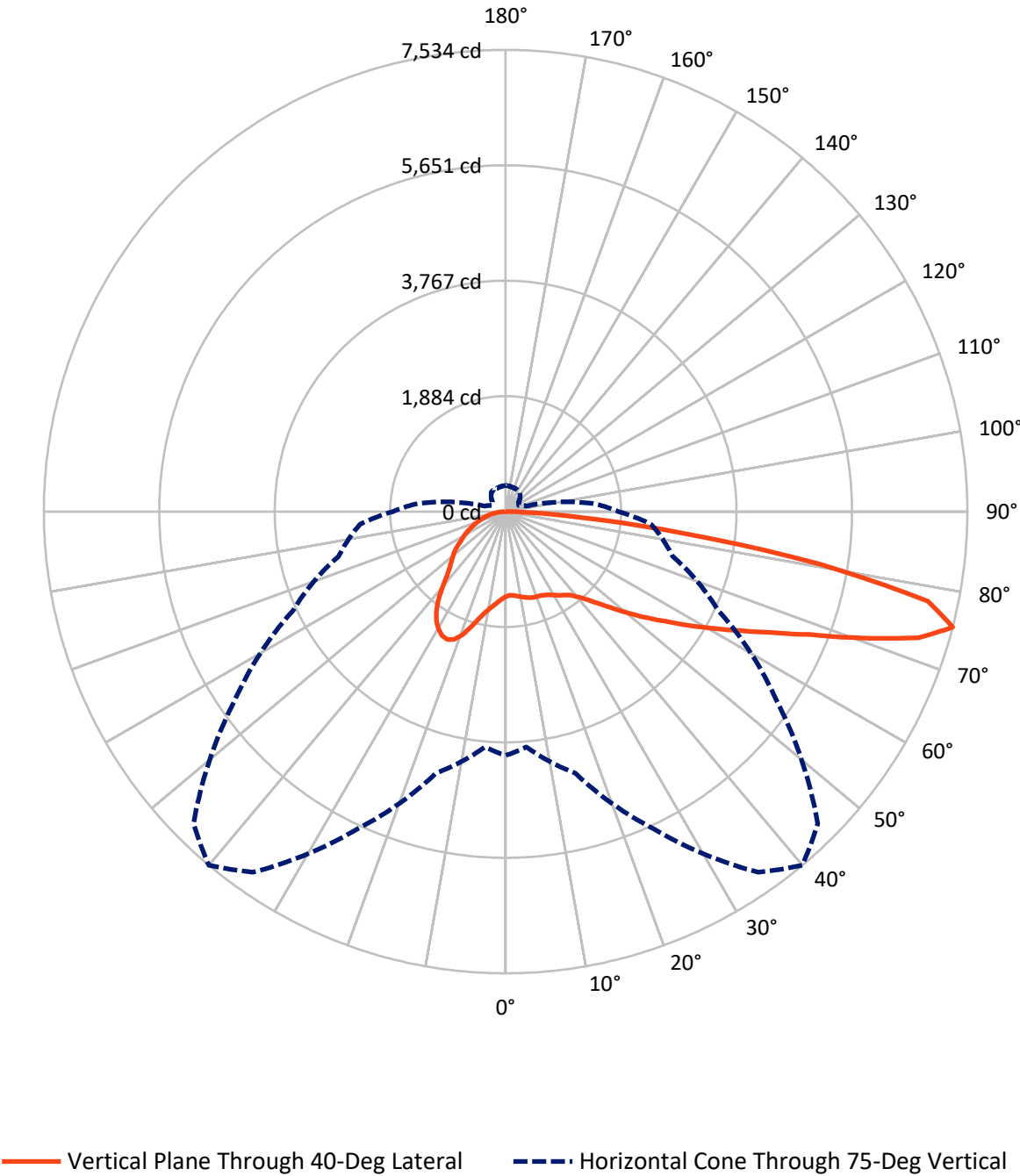
× Max cd
- - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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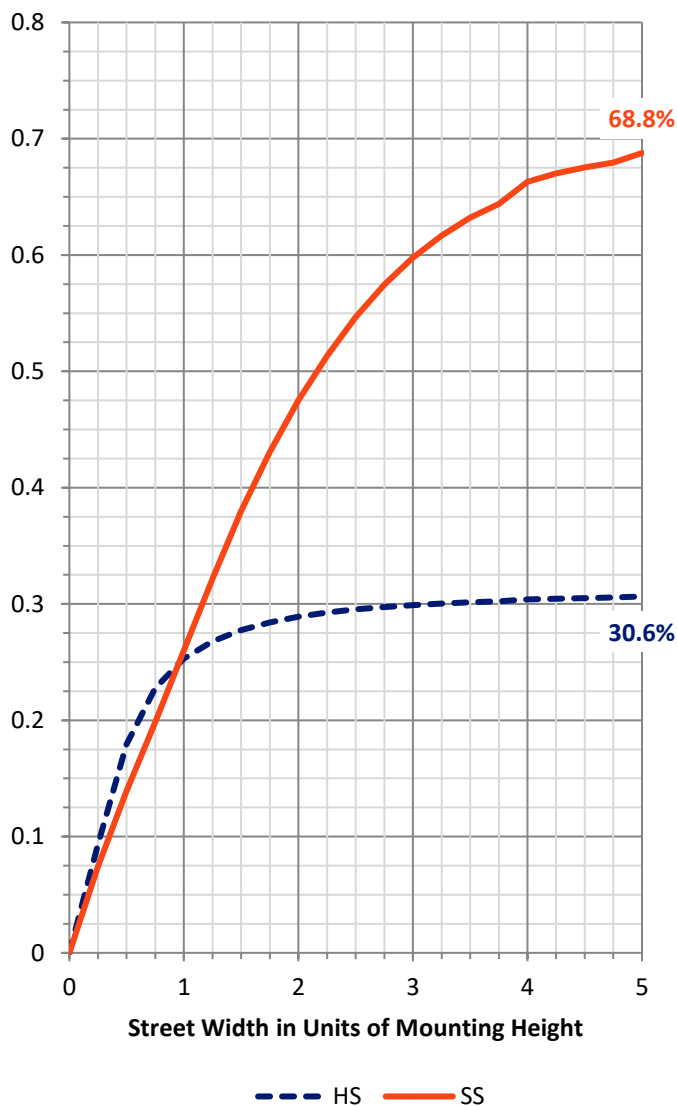
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3750.6	0.0	3750.6
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	8354.6	0.0	8354.6
	% Fixture	69.0	0.0	69.0
Total	Lumens	12105.3	0.0	12105.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.2	1.1
10°-20°	463.9	3.8
20°-30°	847.1	7.0
30°-40°	1201.4	9.9
40°-50°	1622.2	13.4
50°-60°	2182.3	18.0
60°-70°	2769.9	22.9
70°-80°	2513.8	20.8
80°-90°	366.4	3.0
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°	12105.3	100.0
0°-180°	12105.3	100.0

Coefficient of Utilization



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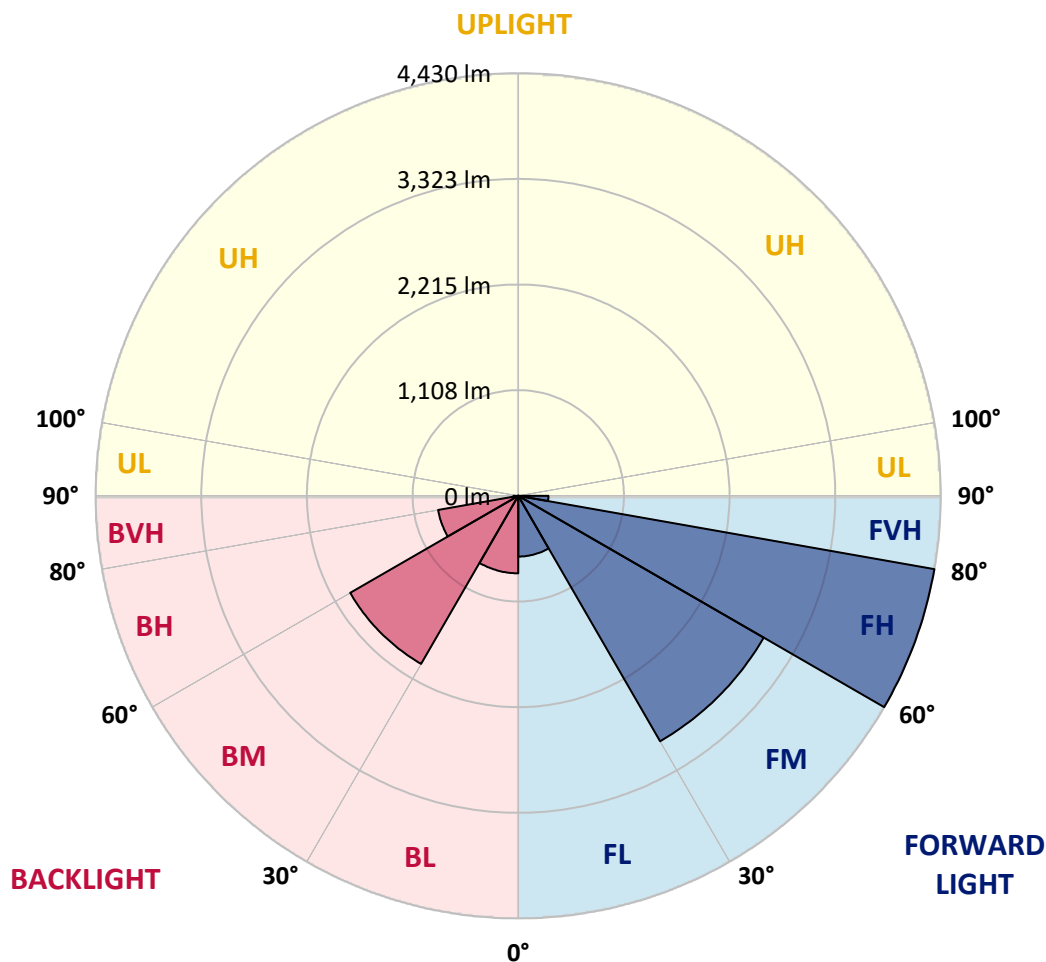
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	636.7	5.3			
FM	(30°-60°)	2971.6	24.5			
FH	(60°-80°)	4430.3	36.6			G2/5000
FVH	(80°-90°)	316.0	2.6			G3/500
BL	(0°-30°)	812.4	6.7	B2/1000		
BM	(30°-60°)	2034.4	16.8	B2/2500		
BH	(60°-80°)	853.4	7.0	B2/1000		G2/1000
BVH	(80°-90°)	50.4	0.4			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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3
2.5°	1363.0	1370.7	1368.9	1366.3	1366.3	1366.9	1366.3	1370.7	1375.2	1379.8	1386.8
5°	1377.2	1384.9	1381.1	1377.8	1375.2	1374.6	1372.7	1372.1	1374.6	1380.4	1390.0
7.5°	1404.8	1412.6	1406.7	1401.0	1395.8	1393.3	1390.7	1386.8	1384.9	1388.1	1401.6
10°	1435.6	1443.3	1436.2	1426.0	1417.7	1414.4	1411.8	1408.0	1405.5	1407.3	1422.1
12.5°	1466.5	1474.2	1464.5	1450.4	1439.5	1437.6	1434.3	1433.1	1432.4	1431.7	1446.5
15°	1495.4	1501.7	1489.5	1472.8	1461.3	1458.1	1454.9	1456.8	1460.0	1463.9	1480.5
17.5°	1517.8	1524.2	1506.2	1484.4	1473.5	1472.2	1470.3	1476.7	1485.7	1495.4	1515.9
20°	1538.3	1544.8	1521.6	1492.1	1479.3	1479.3	1479.9	1493.4	1506.2	1520.4	1548.6
22.5°	1567.2	1572.4	1544.2	1503.7	1485.0	1486.4	1491.5	1504.9	1521.0	1540.3	1579.4
25°	1610.3	1614.1	1579.4	1525.5	1504.3	1508.2	1512.7	1519.0	1534.5	1557.0	1609.7
27.5°	1679.6	1682.8	1637.2	1564.0	1532.0	1538.3	1544.8	1540.3	1547.3	1566.6	1634.1
30°	1777.1	1779.1	1721.3	1624.4	1578.8	1582.0	1583.3	1564.7	1551.1	1566.6	1651.4
32.5°	1892.8	1892.2	1823.4	1697.6	1632.1	1628.8	1618.0	1581.4	1549.9	1563.4	1666.8
35°	2071.8	2064.9	1976.2	1800.3	1692.5	1672.5	1646.9	1600.0	1556.4	1560.2	1680.3
37.5°	2368.5	2346.6	2224.0	1968.5	1782.3	1731.6	1693.7	1630.2	1570.4	1558.9	1696.3
40°	2703.0	2675.5	2540.6	2199.0	1917.2	1835.6	1774.6	1673.2	1593.6	1564.7	1720.1
42.5°	3099.8	3060.6	2915.5	2470.6	2087.9	1969.8	1878.0	1727.7	1627.6	1583.3	1752.1
45°	3587.1	3535.1	3329.6	2776.8	2303.0	2145.7	2023.0	1810.6	1679.6	1619.2	1800.3
47.5°	4079.6	4092.4	3800.3	3127.4	2561.2	2362.7	2204.8	1935.1	1755.3	1677.0	1878.0
50°	4602.9	4611.8	4268.3	3515.9	2853.9	2608.0	2409.0	2074.5	1860.7	1759.2	1994.2
52.5°	5011.1	5012.5	4693.4	3922.3	3158.8	2877.7	2629.2	2233.7	1982.7	1868.4	2148.9
55°	5266.7	5263.5	4991.2	4306.8	3509.4	3160.8	2873.2	2414.7	2131.6	1996.8	2343.5
57.5°	5452.3	5442.6	5196.8	4637.5	3883.1	3495.2	3149.2	2620.2	2307.5	2149.5	2599.6
60°	5522.9	5517.1	5336.0	4923.2	4276.0	3865.1	3467.7	2850.0	2507.1	2330.0	2929.0
62.5°	5549.9	5560.7	5472.8	5199.9	4696.5	4274.8	3817.6	3124.8	2731.9	2534.1	3276.4
65°	5644.9	5664.8	5646.8	5562.1	5171.6	4754.4	4281.8	3451.7	2977.2	2753.0	3639.2
67.5°	5833.0	5852.9	5860.6	5995.4	5752.1	5352.1	4861.0	3858.7	3264.1	2980.4	3912.0
70°	5828.5	5822.7	5958.8	6340.2	6478.9	6179.7	5641.7	4359.5	3606.4	3169.1	3946.7
72.5°	5305.2	5259.0	5580.7	6336.3	7083.7	7043.9	6595.1	5005.4	3901.8	3192.3	3424.6
75°	3980.1	3856.8	4425.0	5710.4	7184.5	7534.4	7201.2	5406.1	3831.8	2820.5	2383.2
77.5°	1702.1	1578.2	2247.8	4227.2	6430.1	7043.3	6645.2	4716.4	3058.7	1865.2	1170.4
80°	445.6	445.0	679.3	1916.5	4373.0	5201.3	4563.0	3045.9	1747.6	666.5	323.0
82.5°	184.3	179.8	249.8	745.4	2136.7	2918.8	2382.0	1358.5	631.1	180.4	107.2
85°	68.7	68.1	121.4	257.5	753.8	1203.9	871.2	347.4	157.3	87.9	48.2
87.5°	19.3	18.7	26.3	89.3	183.6	278.7	148.9	57.1	44.3	34.6	14.1
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°	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3
2.5°	1388.8	1391.9	1397.7	1402.2	1408.0	1414.4	1423.4	1429.2	1435.0	1438.8	1436.2
5°	1394.5	1401.6	1416.3	1431.1	1448.4	1464.5	1483.2	1496.6	1507.6	1510.7	1512.0
7.5°	1407.3	1418.9	1443.9	1469.0	1496.6	1522.9	1549.9	1573.0	1591.6	1598.7	1599.3
10°	1429.9	1445.2	1480.5	1515.9	1552.5	1593.0	1627.6	1661.0	1687.3	1698.2	1698.8
12.5°	1458.1	1477.3	1523.6	1572.4	1623.1	1679.0	1723.8	1764.9	1797.7	1812.5	1812.5
15°	1494.7	1519.8	1578.8	1644.3	1718.7	1796.4	1853.6	1899.2	1935.8	1953.8	1952.4
17.5°	1534.5	1567.8	1642.4	1741.3	1847.8	1949.9	2016.7	2050.1	2087.9	2105.2	2104.6
20°	1573.0	1614.1	1720.7	1864.5	2006.4	2114.9	2168.8	2177.8	2180.4	2182.3	2187.5
22.5°	1612.8	1668.1	1819.0	2019.9	2172.1	2247.2	2254.9	2216.4	2162.4	2137.3	2144.4
25°	1656.5	1729.7	1947.3	2191.3	2314.6	2323.6	2264.5	2170.7	2068.7	2021.8	2028.9
27.5°	1698.8	1800.9	2101.5	2355.0	2417.3	2338.3	2211.2	2078.3	1955.0	1905.6	1911.4
30°	1741.3	1882.5	2271.6	2498.2	2464.2	2301.7	2127.1	1978.8	1854.8	1802.9	1808.6
32.5°	1784.2	1977.5	2467.4	2601.6	2455.8	2224.0	2022.4	1867.0	1757.9	1703.3	1710.4
35°	1833.0	2094.4	2652.9	2658.0	2399.9	2109.8	1884.4	1733.5	1638.5	1594.8	1604.4
37.5°	1896.6	2242.7	2816.7	2672.2	2302.4	1942.2	1713.0	1575.6	1497.2	1477.3	1491.5
40°	1975.6	2421.2	2941.9	2649.7	2157.9	1738.7	1525.5	1415.7	1371.4	1375.9	1391.3
42.5°	2078.3	2620.8	3029.8	2591.9	1956.9	1528.7	1361.1	1312.3	1333.5	1351.5	1368.2
45°	2211.8	2828.2	3084.4	2493.7	1729.7	1350.8	1264.2	1275.7	1291.8	1293.8	1306.6
47.5°	2382.6	3038.2	3120.3	2345.4	1497.9	1225.7	1202.5	1205.1	1201.9	1188.4	1198.7
50°	2595.8	3242.4	3152.5	2148.9	1300.8	1147.4	1116.5	1107.5	1063.2	1019.6	1025.3
52.5°	2838.5	3429.9	3165.9	1905.0	1147.4	1081.9	1031.8	975.3	892.5	878.9	883.4
55°	3108.1	3603.2	3131.3	1605.1	1018.2	997.7	922.0	853.9	844.9	833.3	835.3
57.5°	3430.5	3790.0	3060.6	1270.6	886.0	899.5	825.6	833.3	817.3	799.4	796.1
60°	3783.0	3983.3	2936.7	965.7	749.3	776.8	800.6	800.0	795.5	780.7	775.6
62.5°	4100.1	4110.4	2692.8	739.6	629.2	681.8	746.7	746.1	742.2	733.9	730.6
65°	4288.9	4091.1	2285.6	582.3	530.3	603.5	673.5	678.7	679.3	678.7	678.7
67.5°	4255.5	3865.8	1727.1	463.6	448.7	523.9	601.0	608.0	613.2	614.5	615.7
70°	3878.0	3370.7	1126.2	369.8	376.3	454.0	532.3	539.4	543.8	549.0	551.6
72.5°	3022.7	2478.3	644.6	299.2	312.7	393.6	464.2	472.5	475.1	484.7	488.6
75°	1842.0	1457.4	348.0	235.6	256.9	336.4	396.8	406.4	410.9	422.5	423.7
77.5°	875.8	631.1	198.4	183.6	206.7	274.8	335.2	346.0	333.8	340.3	335.2
80°	296.0	234.3	125.2	140.0	158.0	214.4	268.3	279.3	253.6	252.4	249.8
82.5°	103.3	95.0	79.6	93.1	102.1	153.4	202.8	217.0	188.8	188.1	179.2
85°	40.5	38.5	44.3	50.7	61.0	94.4	133.6	140.6	116.2	93.8	92.5
87.5°	8.3	9.0	10.9	11.6	18.7	32.7	48.2	59.0	46.8	39.8	36.6
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)