

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: P963693

Luminaire Tested: **NAV-SB3A-835-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963693
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-SB3A-835-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12684.4 lumens
Efficiency: N/A
Efficacy: 149.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
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



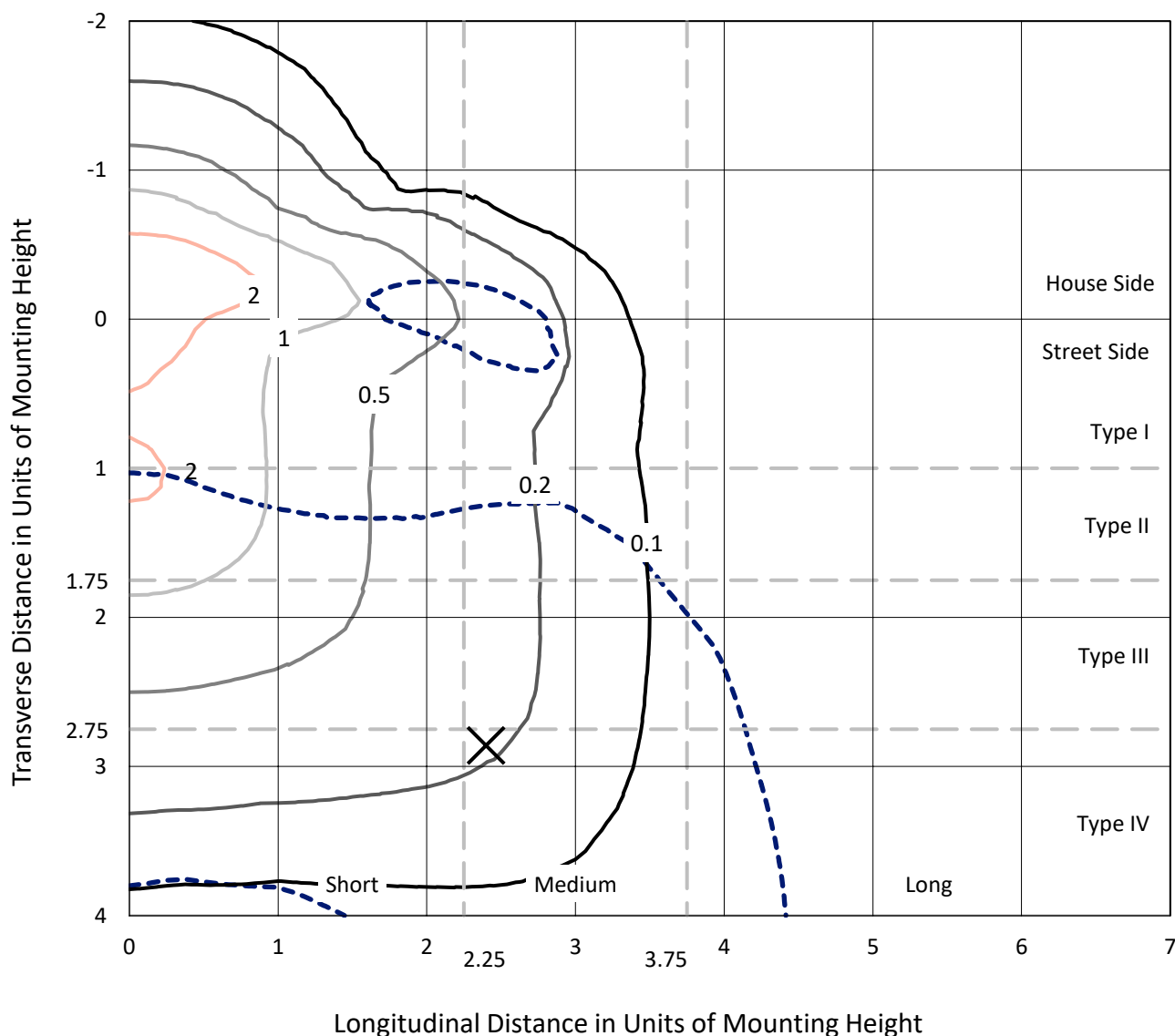
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

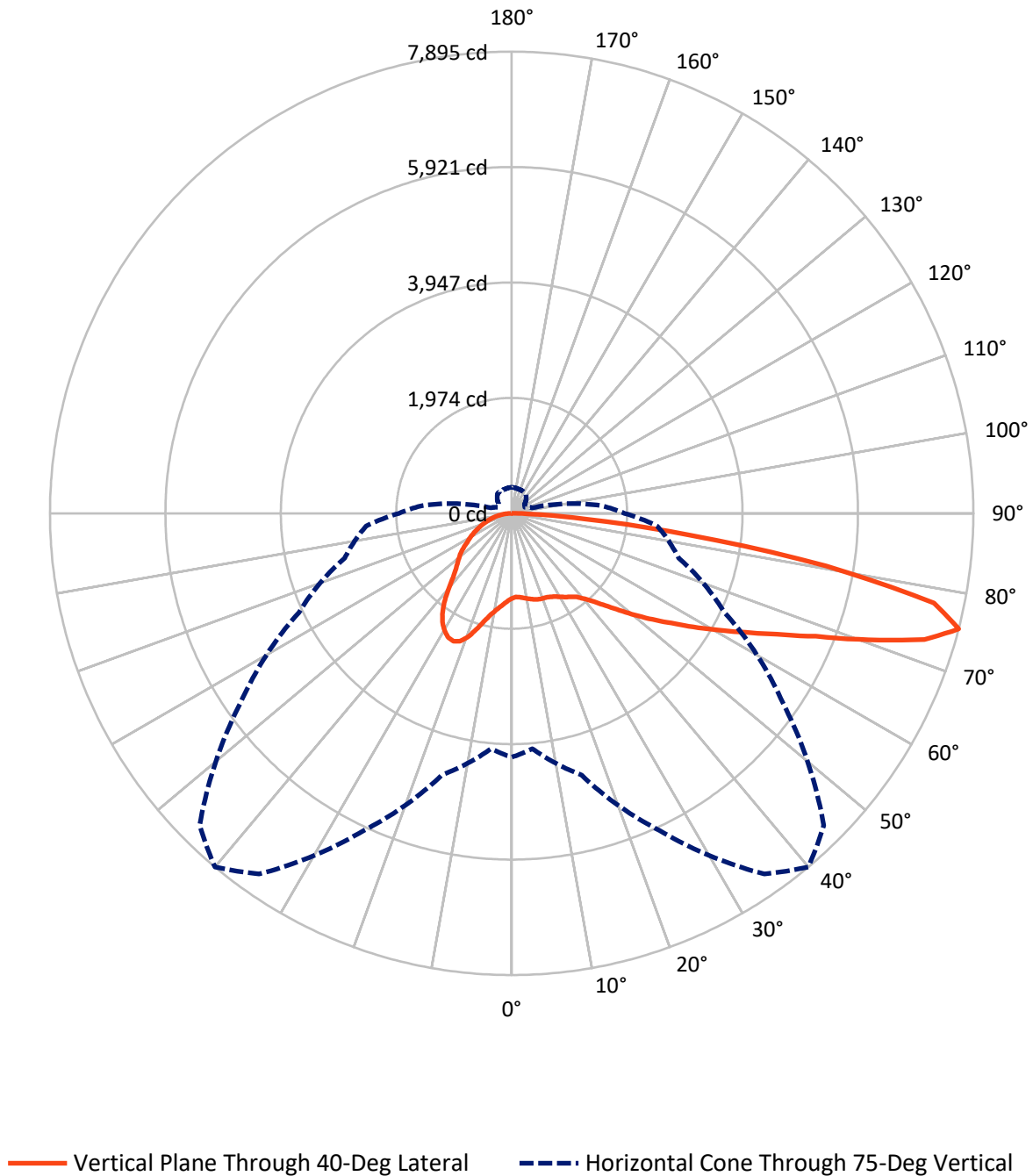
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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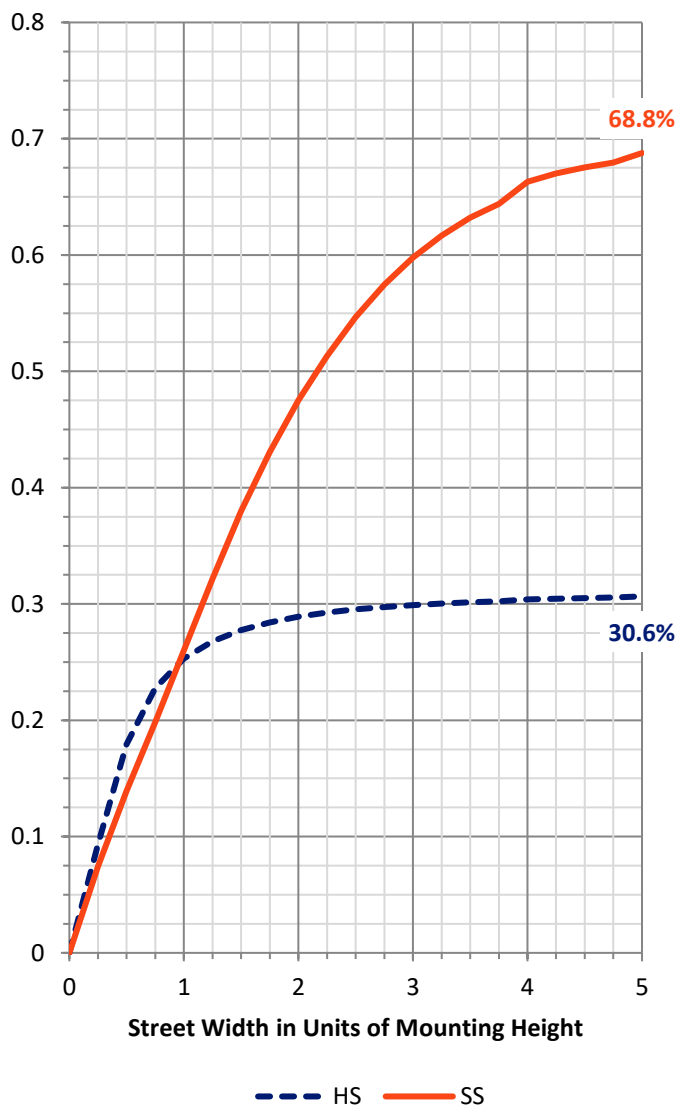
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3930.0	0.0	3930.0
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	8754.3	0.0	8754.3
	% Fixture	69.0	0.0	69.0
Total	Lumens	12684.4	0.0	12684.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.8	1.1
10°-20°	486.1	3.8
20°-30°	887.6	7.0
30°-40°	1258.9	9.9
40°-50°	1699.8	13.4
50°-60°	2286.7	18.0
60°-70°	2902.4	22.9
70°-80°	2634.1	20.8
80°-90°	384.0	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°	12684.4	100.0
0°-180°	12684.4	100.0

Coefficient of Utilization



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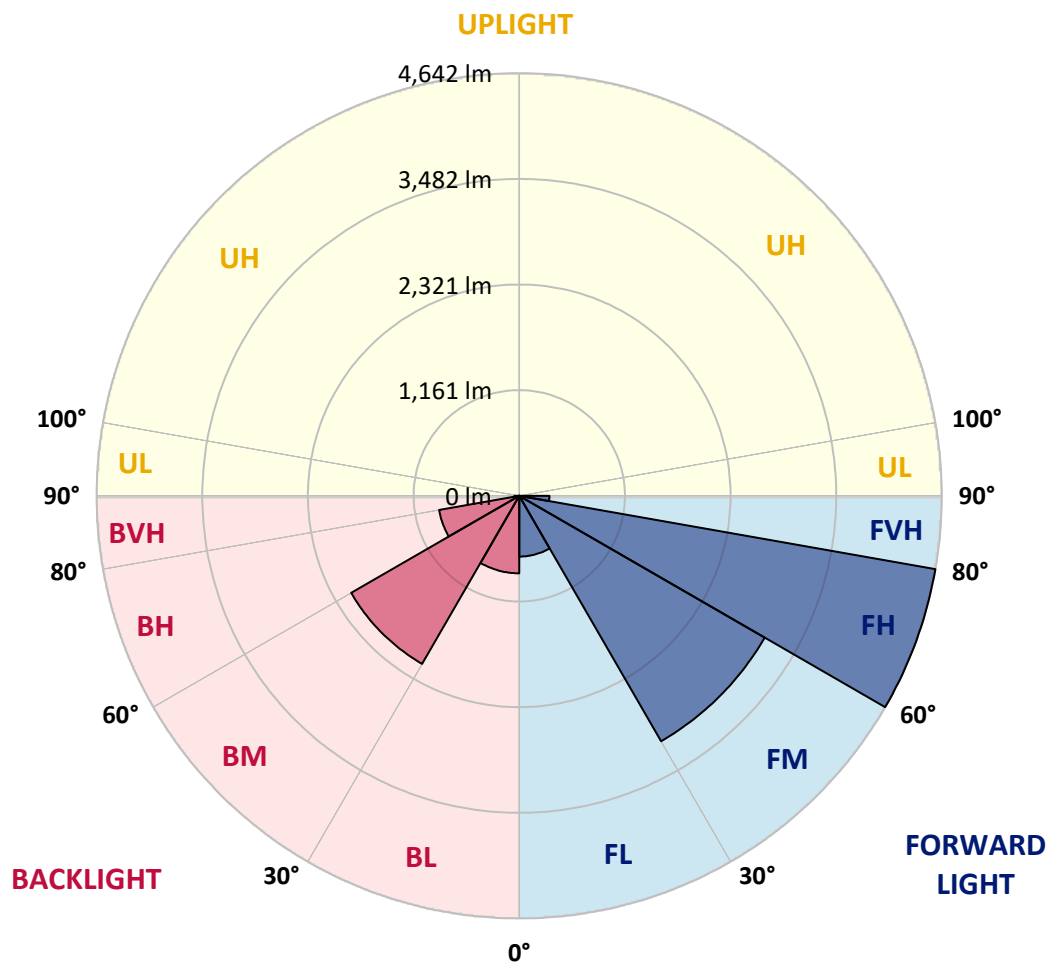
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	667.2	5.3			
FM	(30°-60°)	3113.7	24.5			
FH	(60°-80°)	4642.3	36.6			G2/5000
FVH	(80°-90°)	331.1	2.6			G3/500
BL	(0°-30°)	851.3	6.7	B2/1000		
BM	(30°-60°)	2131.7	16.8	B2/2500		
BH	(60°-80°)	894.2	7.0	B2/1000		G2/1000
BVH	(80°-90°)	52.9	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°	1450.5	1450.5	1450.5	1450.5	1450.5	1450.5	1450.5	1450.5	1450.5	1450.5	1450.5
2.5°	1428.2	1436.3	1434.3	1431.6	1431.6	1432.3	1431.6	1436.3	1441.0	1445.8	1453.1
5°	1443.1	1451.2	1447.1	1443.7	1441.0	1440.4	1438.4	1437.7	1440.4	1446.5	1456.5
7.5°	1472.0	1480.1	1474.1	1468.0	1462.6	1459.9	1457.2	1453.1	1451.2	1454.5	1468.6
10°	1504.3	1512.4	1505.0	1494.2	1485.4	1482.0	1479.4	1475.4	1472.7	1474.7	1490.1
12.5°	1536.6	1544.7	1534.5	1519.8	1508.3	1506.3	1503.0	1501.6	1500.9	1500.3	1515.8
15°	1566.8	1573.6	1560.8	1543.3	1531.2	1527.9	1524.5	1526.5	1529.8	1533.9	1551.4
17.5°	1590.4	1597.2	1578.3	1555.4	1544.0	1542.6	1540.6	1547.3	1556.8	1566.8	1588.4
20°	1611.9	1618.7	1594.5	1563.5	1550.0	1550.0	1550.7	1564.9	1578.3	1593.1	1622.7
22.5°	1642.3	1647.6	1618.0	1575.6	1556.1	1557.5	1562.8	1577.0	1593.8	1614.0	1655.0
25°	1687.3	1691.4	1655.0	1598.5	1576.2	1580.3	1585.1	1591.7	1607.9	1631.5	1686.6
27.5°	1759.9	1763.3	1715.5	1638.9	1605.3	1611.9	1618.7	1614.0	1621.3	1641.5	1712.2
30°	1862.2	1864.3	1803.7	1702.1	1654.4	1657.7	1659.1	1639.5	1625.3	1641.5	1730.3
32.5°	1983.3	1982.7	1910.6	1778.8	1710.2	1706.8	1695.4	1657.0	1624.0	1638.2	1746.5
35°	2171.1	2163.6	2070.8	1886.4	1773.4	1752.5	1725.6	1676.5	1630.8	1634.8	1760.6
37.5°	2481.8	2459.0	2330.4	2062.7	1867.5	1814.5	1774.8	1708.2	1645.5	1633.4	1777.5
40°	2832.3	2803.4	2662.1	2304.2	2008.9	1923.4	1859.6	1753.3	1669.8	1639.5	1802.4
42.5°	3248.1	3207.0	3055.0	2588.7	2187.9	2064.0	1967.8	1810.4	1705.5	1659.1	1836.0
45°	3758.7	3704.2	3488.9	2909.7	2413.2	2248.3	2119.9	1897.2	1759.9	1696.7	1886.4
47.5°	4274.8	4288.2	3982.1	3277.0	2683.7	2475.8	2310.2	2027.7	1839.4	1757.3	1967.8
50°	4823.0	4832.5	4472.5	3684.1	2990.4	2732.8	2524.2	2173.7	1949.7	1843.4	2089.6
52.5°	5250.9	5252.3	4917.8	4109.9	3310.0	3015.3	2755.0	2340.6	2077.5	1957.7	2251.7
55°	5518.7	5515.3	5230.1	4512.9	3677.3	3312.0	3010.6	2530.2	2233.6	2092.3	2455.6
57.5°	5713.1	5703.0	5445.3	4859.3	4068.8	3662.5	3299.9	2745.6	2417.9	2252.4	2724.0
60°	5787.2	5781.0	5591.4	5158.7	4480.6	4050.0	3633.6	2986.4	2627.2	2441.4	3069.2
62.5°	5815.3	5826.8	5734.7	5448.7	4921.2	4479.2	4000.3	3274.4	2862.6	2655.4	3433.1
65°	5915.0	5935.8	5916.9	5828.2	5419.1	4981.8	4486.6	3616.8	3119.6	2884.8	3813.2
67.5°	6112.1	6132.9	6141.0	6282.2	6027.3	5608.2	5093.5	4043.3	3420.3	3123.0	4099.2
70°	6107.4	6101.3	6243.9	6643.5	6788.9	6475.3	5911.6	4568.0	3778.9	3320.8	4135.5
72.5°	5559.0	5510.6	5847.6	6639.5	7422.5	7380.9	6910.7	5244.8	4088.4	3345.0	3588.5
75°	4170.4	4041.3	4636.7	5983.5	7528.2	7894.9	7545.7	5664.7	4015.0	2955.5	2497.3
77.5°	1783.5	1653.6	2355.3	4429.4	6737.7	7380.2	6963.1	4942.1	3205.1	1954.4	1226.4
80°	466.9	466.3	711.8	2008.2	4582.2	5450.0	4781.3	3191.5	1831.3	698.3	338.4
82.5°	193.1	188.4	261.7	781.0	2238.9	3058.4	2496.0	1423.5	661.3	189.0	112.3
85°	72.0	71.3	127.2	269.8	789.9	1261.5	913.0	364.0	164.8	92.1	50.4
87.5°	20.2	19.5	27.6	93.5	192.4	292.0	156.1	59.9	46.4	36.3	14.8
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°	1450.5	1450.5	1450.5	1450.5	1450.5	1450.5	1450.5	1450.5	1450.5	1450.5	1450.5
2.5°	1455.2	1458.6	1464.6	1469.3	1475.4	1482.0	1491.5	1497.5	1503.6	1507.7	1505.0
5°	1461.2	1468.6	1484.1	1499.6	1517.7	1534.5	1554.1	1568.2	1579.6	1583.0	1584.3
7.5°	1474.7	1486.8	1513.0	1539.2	1568.2	1595.8	1624.0	1648.3	1667.8	1675.2	1675.9
10°	1498.2	1514.4	1551.4	1588.4	1626.8	1669.1	1705.5	1740.4	1768.0	1779.5	1780.1
12.5°	1527.9	1548.1	1596.4	1647.6	1700.8	1759.3	1806.4	1849.4	1883.7	1899.2	1899.2
15°	1566.2	1592.4	1654.4	1722.9	1801.0	1882.4	1942.3	1990.0	2028.4	2047.2	2045.9
17.5°	1607.9	1642.9	1721.0	1824.5	1936.2	2043.1	2113.1	2148.1	2187.9	2206.0	2205.3
20°	1648.3	1691.4	1803.0	1953.8	2102.4	2216.0	2272.6	2282.1	2284.7	2286.7	2292.1
22.5°	1690.0	1747.8	1905.9	2116.5	2275.9	2354.6	2362.7	2322.3	2265.9	2239.6	2247.0
25°	1735.7	1812.4	2040.5	2296.1	2425.4	2434.7	2372.9	2274.6	2167.7	2118.6	2126.0
27.5°	1780.1	1887.1	2201.9	2467.7	2533.0	2450.2	2317.0	2177.7	2048.6	1996.8	2002.8
30°	1824.5	1972.5	2380.3	2617.7	2582.1	2411.8	2228.9	2073.5	1943.6	1889.1	1895.1
32.5°	1869.6	2072.1	2585.5	2726.0	2573.4	2330.4	2119.2	1956.4	1842.0	1784.8	1792.2
35°	1920.7	2194.5	2779.9	2785.2	2514.7	2210.7	1974.6	1816.5	1716.9	1671.2	1681.2
37.5°	1987.4	2349.9	2951.4	2800.0	2412.5	2035.1	1795.0	1651.0	1568.9	1548.1	1562.8
40°	2070.1	2537.0	3082.6	2776.5	2261.1	1821.8	1598.5	1483.5	1437.0	1441.8	1457.9
42.5°	2177.7	2746.2	3174.7	2715.9	2050.6	1601.9	1426.3	1375.1	1397.3	1416.1	1433.7
45°	2317.6	2963.5	3231.9	2613.0	1812.4	1415.5	1324.7	1336.8	1353.6	1355.7	1369.1
47.5°	2496.6	3183.5	3269.6	2457.6	1569.6	1284.3	1260.0	1262.8	1259.4	1245.3	1256.0
50°	2719.9	3397.5	3303.3	2251.7	1363.0	1202.2	1169.9	1160.5	1114.1	1068.4	1074.4
52.5°	2974.2	3593.9	3317.4	1996.1	1202.2	1133.6	1081.2	1021.9	935.1	921.0	925.7
55°	3256.8	3775.6	3281.0	1681.9	1067.0	1045.5	966.1	894.7	885.4	873.2	875.2
57.5°	3594.6	3971.4	3207.0	1331.4	928.4	942.6	865.2	873.2	856.4	837.6	834.2
60°	3963.9	4173.8	3077.3	1011.9	785.2	814.1	839.0	838.2	833.5	818.1	812.7
62.5°	4296.3	4307.0	2821.5	775.0	659.3	714.4	782.4	781.8	777.7	769.0	765.6
65°	4494.0	4286.9	2395.0	610.2	555.7	632.4	705.7	711.1	711.8	711.1	711.1
67.5°	4459.1	4050.7	1809.7	485.7	470.3	549.0	629.7	637.1	642.5	643.8	645.1
70°	4063.5	3532.0	1180.0	387.6	394.2	475.6	557.7	565.1	569.8	575.2	577.9
72.5°	3167.4	2596.8	675.5	313.5	327.6	412.4	486.4	495.2	497.8	507.9	512.0
75°	1930.2	1527.1	364.6	246.9	269.1	352.5	415.7	425.9	430.6	442.7	444.0
77.5°	917.7	661.3	207.9	192.4	216.6	287.9	351.2	362.6	349.8	356.6	351.2
80°	310.2	245.6	131.2	146.7	165.5	224.7	281.3	292.6	265.8	264.3	261.7
82.5°	108.3	99.5	83.4	97.6	107.0	160.8	212.6	227.3	197.8	197.1	187.7
85°	42.4	40.4	46.4	53.2	64.0	98.9	139.9	147.3	121.8	98.2	96.9
87.5°	8.7	9.4	11.5	12.1	19.5	34.3	50.4	61.9	49.1	41.7	38.3
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)