

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: P961056

Luminaire Tested: **NAV-SB1D-835-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961056
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-12)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-835-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3500K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE III SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9458.7 lumens
Efficiency: N/A
Efficacy: 118.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G3

Input Watts (W): 79.6
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

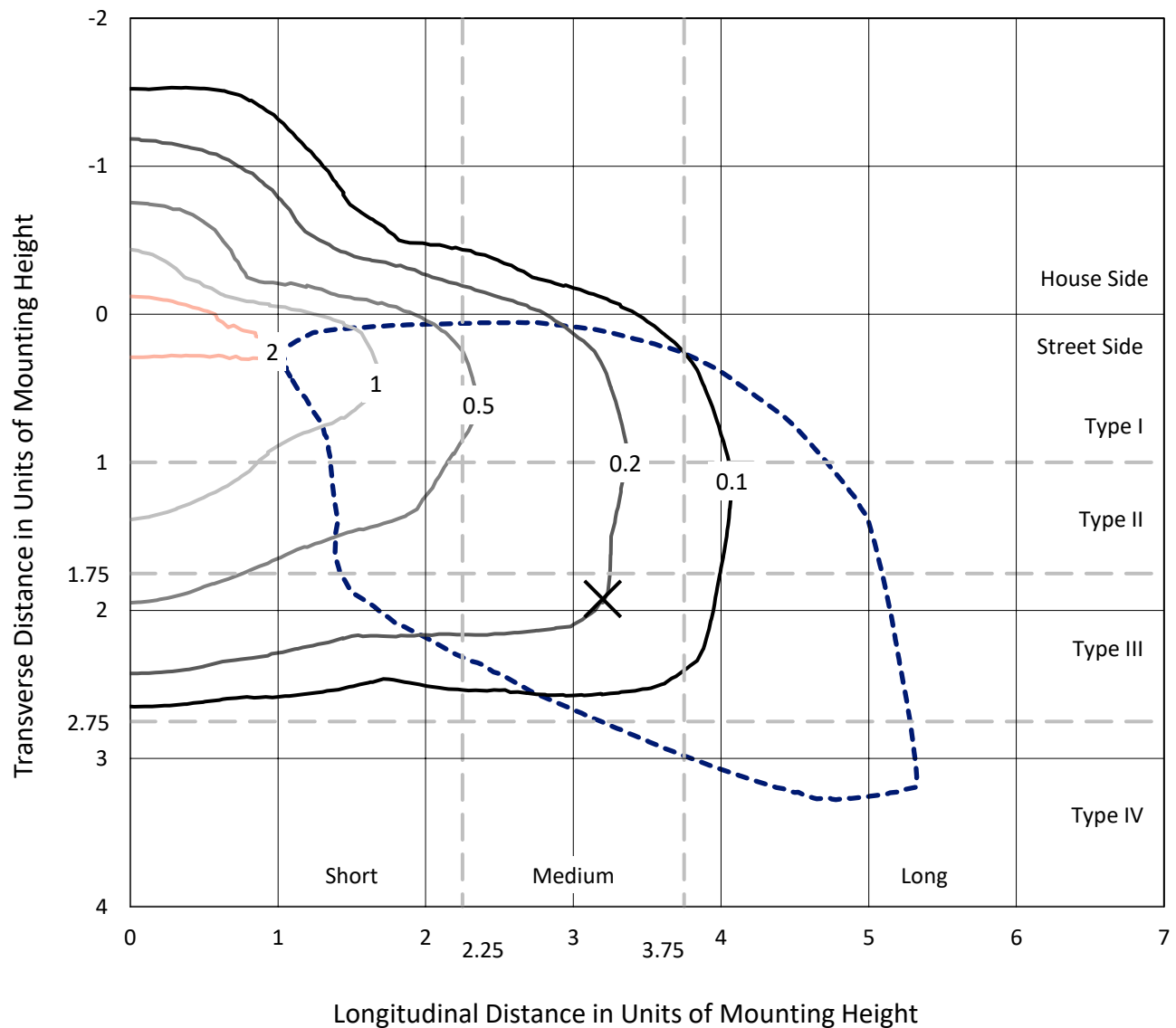


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Iso-Footcandle Lines of Horizontal Illumination

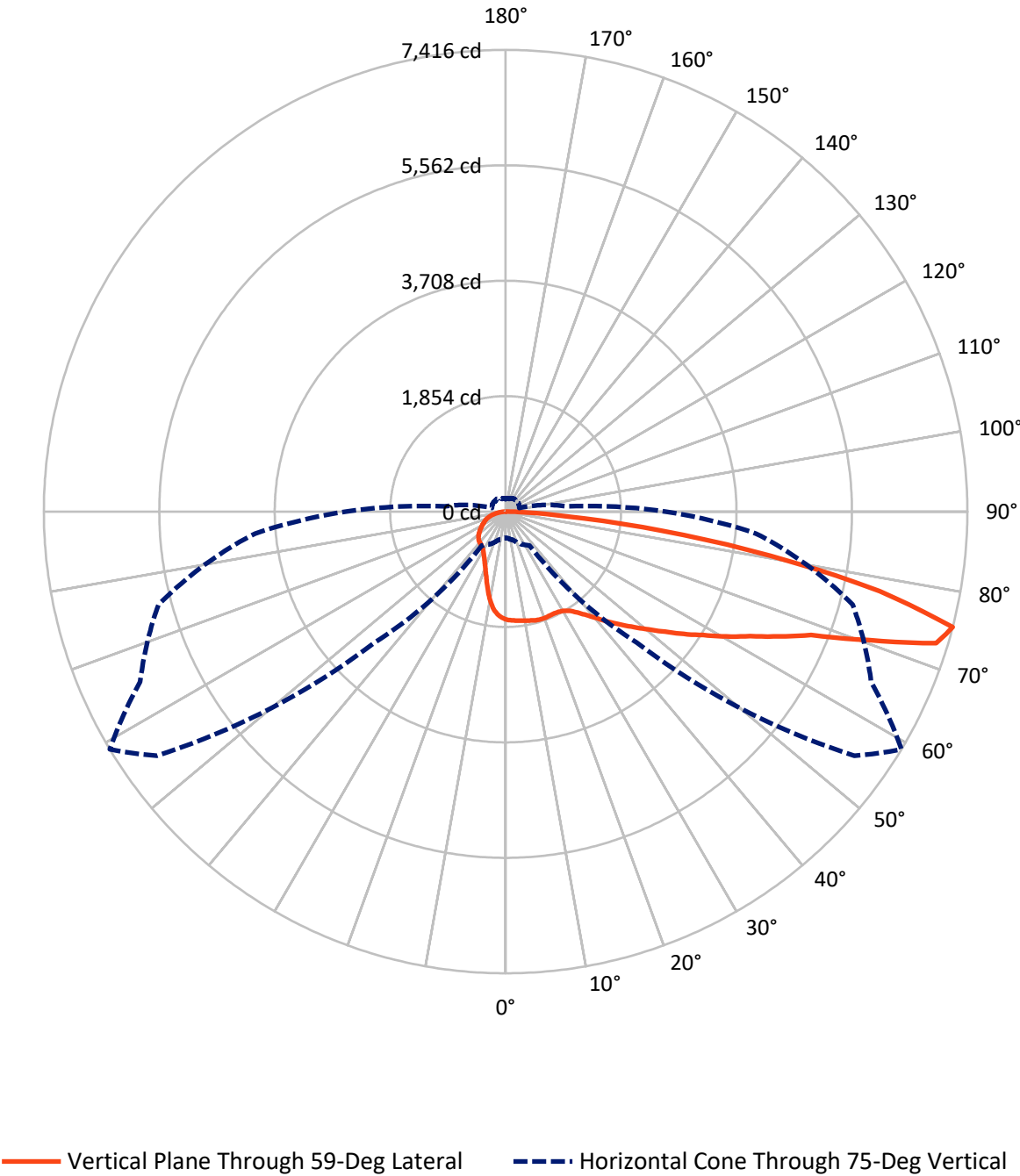
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 fc
Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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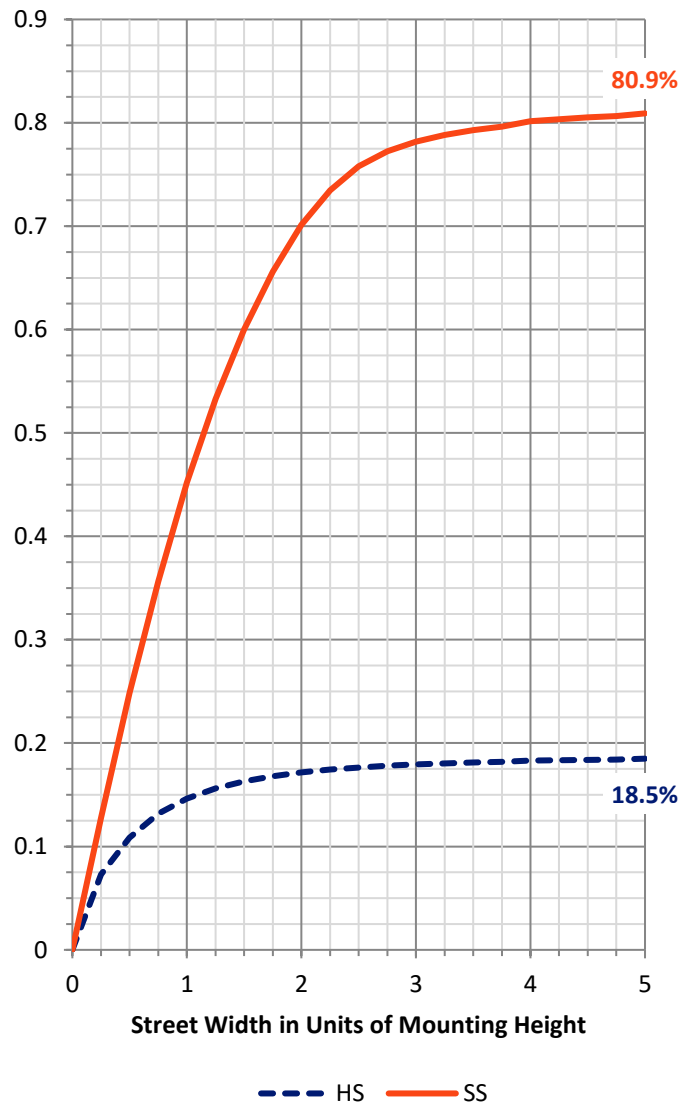
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1774.0	0.0	1774.0
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	7684.7	0.0	7684.7
	% Fixture	81.2	0.0	81.2
Total	Lumens	9458.7	0.0	9458.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.7	1.6
10°-20°	397.9	4.2
20°-30°	604.4	6.4
30°-40°	898.4	9.5
40°-50°	1336.1	14.1
50°-60°	1813.6	19.2
60°-70°	2214.1	23.4
70°-80°	1737.6	18.4
80°-90°	301.0	3.2
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°	9458.7	100.0
0°-180°	9458.7	100.0

Coefficient of Utilization



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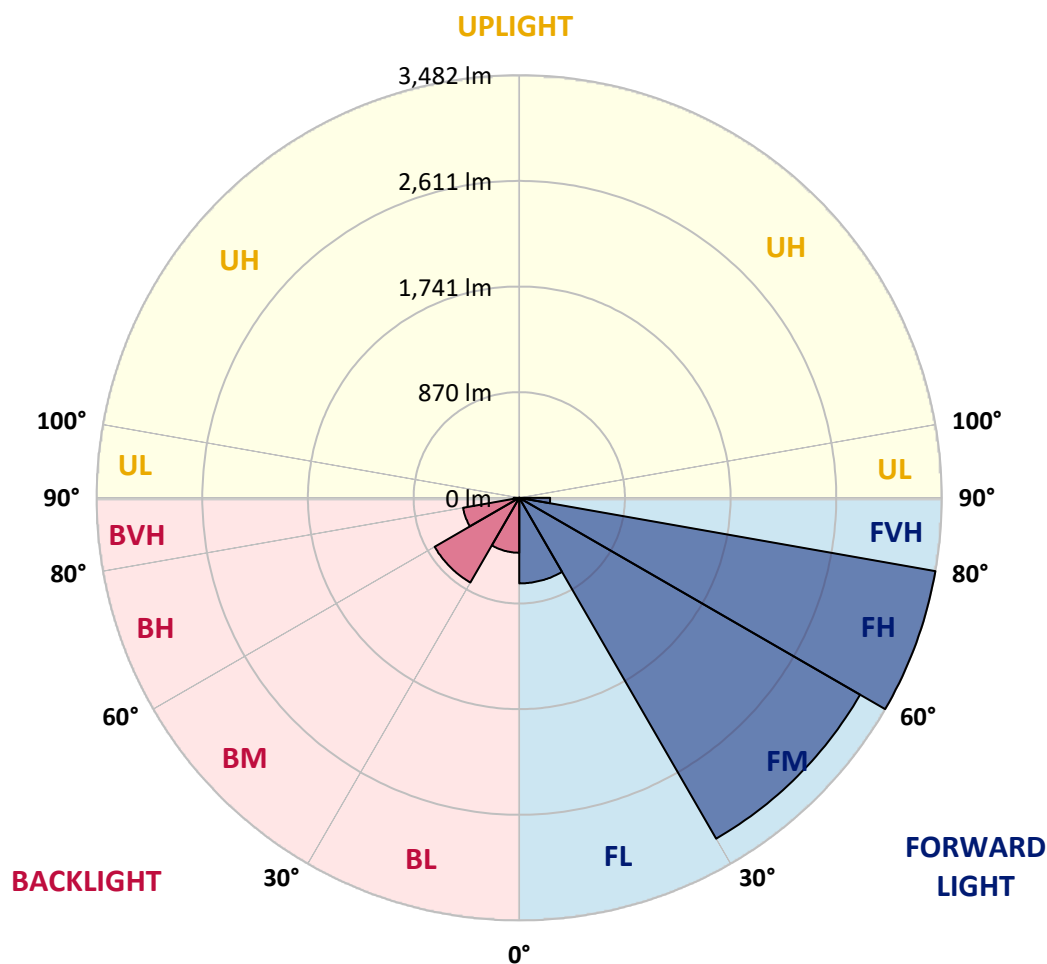
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	705.2	7.5			
FM	(30°-60°)	3242.8	34.3			
FH	(60°-80°)	3481.7	36.8			G2/5000
FVH	(80°-90°)	254.9	2.7			G3/500
BL	(0°-30°)	452.7	4.8	B1/500		
BM	(30°-60°)	805.2	8.5	B1/1000		
BH	(60°-80°)	470.0	5.0	B1/500		G1/500
BVH	(80°-90°)	46.1	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1736.1	1736.1	1736.1	1736.1	1736.1	1736.1	1736.1	1736.1	1736.1	1736.1	1736.1
2.5°	1750.9	1744.8	1750.9	1748.3	1747.3	1745.3	1745.8	1749.4	1747.3	1749.9	1741.2
5°	1739.2	1735.6	1741.7	1740.2	1746.8	1747.8	1754.4	1758.5	1761.1	1761.6	1754.9
7.5°	1719.8	1716.3	1725.0	1732.0	1746.3	1750.4	1764.1	1770.7	1774.3	1780.4	1770.7
10°	1649.1	1647.6	1669.0	1696.0	1729.5	1750.4	1771.2	1782.5	1788.0	1804.3	1793.1
12.5°	1524.0	1526.0	1554.0	1605.9	1673.0	1740.2	1779.4	1795.7	1804.3	1824.7	1819.6
15°	1404.4	1403.8	1434.4	1489.8	1583.9	1695.5	1783.4	1811.4	1826.1	1856.2	1852.2
17.5°	1335.2	1333.1	1354.5	1396.8	1484.3	1626.7	1773.2	1820.1	1851.7	1889.3	1885.7
20°	1322.5	1318.4	1329.5	1350.4	1412.6	1551.4	1746.8	1820.1	1872.0	1920.8	1918.8
22.5°	1368.8	1362.1	1357.5	1355.0	1382.5	1489.3	1716.8	1813.9	1902.0	1966.2	1962.6
25°	1461.9	1451.7	1428.2	1405.4	1397.3	1461.3	1690.3	1812.4	1946.8	2027.1	2013.9
27.5°	1612.4	1599.7	1552.5	1497.5	1448.1	1475.6	1678.6	1821.6	1996.1	2091.8	2065.4
30°	1799.2	1785.4	1726.0	1641.4	1553.0	1528.5	1693.4	1848.6	2059.2	2177.8	2125.8
32.5°	1966.7	1951.4	1900.5	1814.5	1694.9	1620.1	1740.2	1899.9	2158.4	2297.3	2217.0
35°	2115.2	2097.4	2051.6	1972.2	1868.9	1748.9	1824.7	1991.1	2299.4	2491.8	2340.6
37.5°	2260.7	2239.8	2190.0	2106.1	2033.8	1920.3	1941.1	2108.1	2486.6	2727.8	2504.5
40°	2423.5	2393.6	2333.0	2250.1	2179.9	2121.3	2094.4	2251.6	2677.0	2991.4	2709.0
42.5°	2581.3	2552.8	2480.5	2409.8	2321.8	2305.0	2271.9	2419.5	2885.1	3280.9	2916.6
45°	2751.2	2717.2	2629.6	2540.1	2484.6	2427.1	2443.9	2587.4	3089.1	3576.0	3134.3
47.5°	2910.5	2872.4	2769.0	2669.3	2638.8	2529.9	2601.7	2772.1	3301.3	3875.2	3350.1
50°	2996.5	2958.9	2872.9	2782.8	2758.9	2656.6	2772.6	2975.2	3523.6	4173.4	3557.3
52.5°	3068.2	3027.5	2915.1	2865.2	2858.1	2794.5	2983.3	3207.1	3746.0	4437.0	3757.2
55°	3144.6	3099.3	2955.8	2911.0	2943.6	2949.1	3233.1	3470.2	3981.1	4694.0	3945.9
57.5°	3232.5	3175.0	2994.9	2949.6	3027.0	3130.4	3520.1	3743.0	4212.0	4932.1	4113.8
60°	3315.6	3257.6	3070.3	3011.2	3117.1	3340.5	3849.3	4073.1	4473.6	5144.3	4272.6
62.5°	3331.8	3284.0	3130.4	3129.8	3239.2	3585.8	4239.1	4406.5	4702.1	5353.9	4415.1
65°	3049.9	3019.9	2928.8	3125.2	3414.3	3938.9	4673.1	4832.9	4992.7	5537.0	4540.2
67.5°	2321.3	2325.3	2318.8	2697.8	3272.8	4446.1	5301.5	5289.3	5351.3	5742.7	4684.2
70°	1061.4	1085.4	1241.1	1862.3	2622.0	4504.7	6340.5	6182.3	5801.7	6008.8	4808.9
72.5°	573.5	591.7	655.4	902.1	1576.3	4005.0	7117.0	7229.4	6400.5	6187.8	4672.1
75°	420.8	431.0	475.3	573.5	661.9	2976.6	6838.7	7415.7	6475.3	5770.1	4034.5
77.5°	315.0	319.6	355.7	454.4	338.9	1569.3	5464.3	6141.6	5543.2	4740.7	2980.2
80°	228.5	233.6	260.6	340.9	237.6	574.0	3752.1	4310.8	3796.4	3021.9	1485.2
82.5°	157.7	159.8	171.5	232.1	165.8	222.8	2128.9	2527.9	2119.3	1060.4	401.0
85°	95.1	97.7	102.8	135.3	94.1	105.9	918.9	950.5	633.4	253.4	124.6
87.5°	39.2	41.7	45.8	57.0	37.1	29.5	151.6	190.3	118.6	74.3	38.6
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°	1736.1	1736.1	1736.1	1736.1	1736.1	1736.1	1736.1	1736.1	1736.1	1736.1	1736.1
2.5°	1738.7	1735.1	1725.5	1712.2	1700.0	1684.7	1678.1	1672.5	1667.5	1657.7	1653.2
5°	1749.4	1739.7	1713.7	1680.2	1641.9	1600.2	1559.5	1531.6	1507.7	1489.8	1475.1
7.5°	1765.7	1747.3	1700.0	1631.3	1543.8	1454.3	1373.3	1315.8	1272.5	1256.9	1229.3
10°	1782.5	1760.5	1678.1	1557.0	1405.9	1268.0	1160.6	1101.6	1067.0	1055.9	1038.5
12.5°	1802.3	1770.2	1644.0	1453.8	1251.7	1100.6	1007.0	972.4	954.6	948.4	950.0
15°	1831.3	1778.4	1592.6	1324.5	1104.6	978.5	917.9	894.0	884.9	884.4	886.4
17.5°	1853.2	1779.9	1512.8	1186.1	991.7	904.7	854.8	845.6	851.8	860.9	864.5
20°	1877.6	1766.2	1407.9	1059.8	912.4	840.1	819.2	825.3	840.1	853.3	857.9
22.5°	1894.9	1741.2	1281.2	961.7	843.7	802.9	802.0	814.7	822.8	829.4	832.9
25°	1910.2	1698.9	1146.9	879.2	787.2	780.5	791.7	787.7	782.1	787.7	791.2
27.5°	1921.4	1632.3	1026.8	807.0	747.4	765.3	758.7	749.5	749.0	752.0	757.2
30°	1917.8	1543.2	928.1	738.3	719.4	736.8	721.0	719.4	717.9	719.4	725.1
32.5°	1917.8	1442.0	852.3	691.0	701.7	695.1	693.5	689.9	683.9	683.4	689.9
35°	1928.4	1340.8	787.2	665.5	687.0	671.2	672.2	663.5	650.8	644.7	650.8
37.5°	1950.4	1259.3	722.5	653.3	660.9	660.5	656.4	641.6	619.2	599.9	606.5
40°	2003.3	1235.4	678.2	647.7	648.7	654.9	644.2	615.7	564.8	533.2	537.3
42.5°	2086.2	1275.6	668.6	634.0	640.6	646.7	625.9	559.8	523.6	504.7	504.7
45°	2191.6	1345.8	689.4	614.2	621.3	632.0	569.9	538.3	522.0	522.5	525.1
47.5°	2324.8	1419.6	728.2	596.9	593.3	599.4	532.7	513.4	491.0	496.6	510.9
50°	2479.0	1494.4	764.8	573.5	562.2	542.4	508.8	490.5	462.0	448.7	452.3
52.5°	2645.9	1566.7	779.5	545.0	528.7	505.7	492.5	470.2	435.5	413.7	413.2
55°	2804.2	1632.3	763.2	510.9	495.1	477.2	475.3	461.6	424.4	393.8	393.8
57.5°	2953.7	1687.3	722.5	476.2	461.0	450.3	464.0	457.5	410.6	371.5	369.4
60°	3080.4	1725.0	663.5	441.2	430.5	424.9	445.8	443.7	391.2	347.6	346.0
62.5°	3181.2	1739.7	598.4	407.5	405.0	394.8	420.2	420.2	366.8	324.1	322.6
65°	3260.1	1725.5	532.3	374.5	379.6	364.3	389.3	386.2	340.9	303.3	301.2
67.5°	3329.8	1678.6	459.0	341.9	353.6	334.3	356.7	349.5	312.4	282.4	280.3
70°	3360.8	1569.8	375.6	309.3	323.6	304.8	324.1	310.9	280.3	260.0	255.9
72.5°	3111.5	1304.6	295.6	275.3	287.5	272.2	289.0	273.8	245.8	236.6	229.0
75°	2574.2	979.0	227.4	238.1	247.3	235.5	246.8	235.5	210.1	216.8	197.9
77.5°	1869.4	660.9	174.0	199.0	203.1	196.9	206.5	193.8	171.0	169.4	161.8
80°	929.7	387.2	136.3	157.2	155.7	151.6	162.9	156.7	137.4	145.5	144.0
82.5°	269.2	165.8	99.2	110.4	107.3	108.3	116.5	119.6	179.1	177.5	181.6
85°	84.5	65.1	59.6	61.6	58.5	60.1	68.7	136.3	126.2	73.8	79.8
87.5°	21.8	22.3	14.8	15.8	16.3	19.4	21.8	82.9	39.7	25.9	27.5
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)