

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: P960914

Luminaire Tested: **NAV-SB1D-740-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960914
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-740-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 4000K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10937.8 lumens
Efficiency: N/A
Efficacy: 137.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

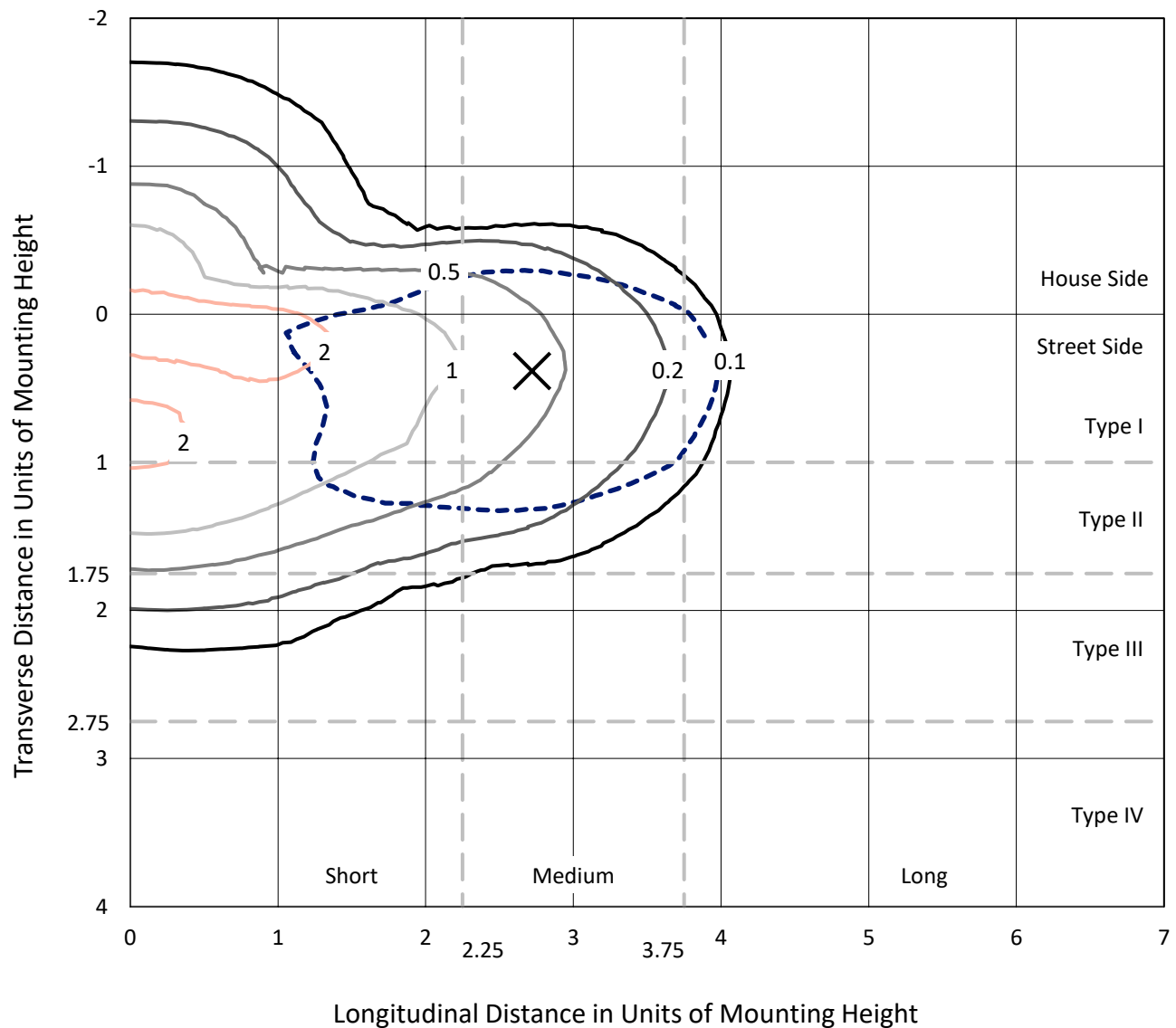
Input Watts (W): 79.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

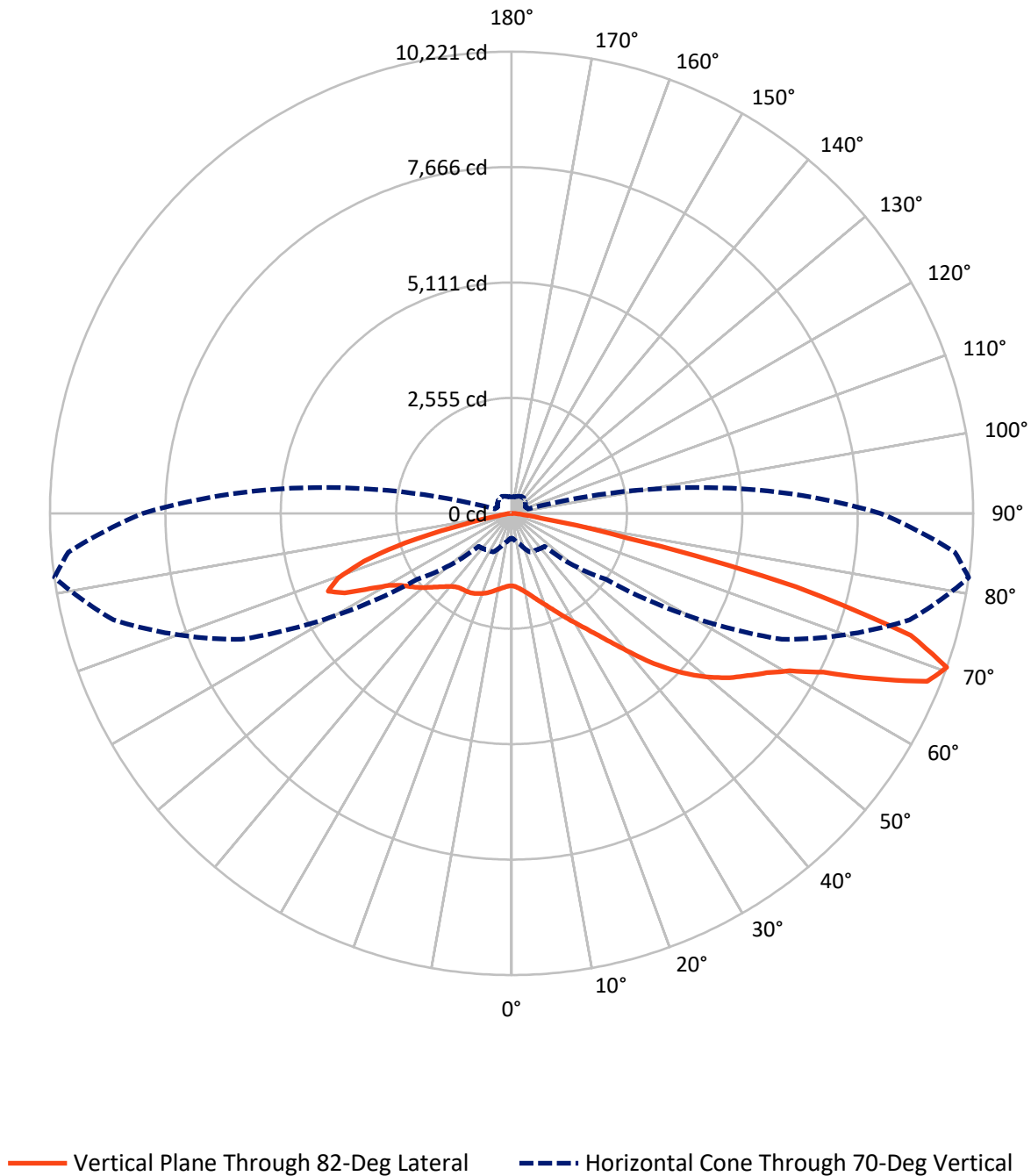
× Max cd
- - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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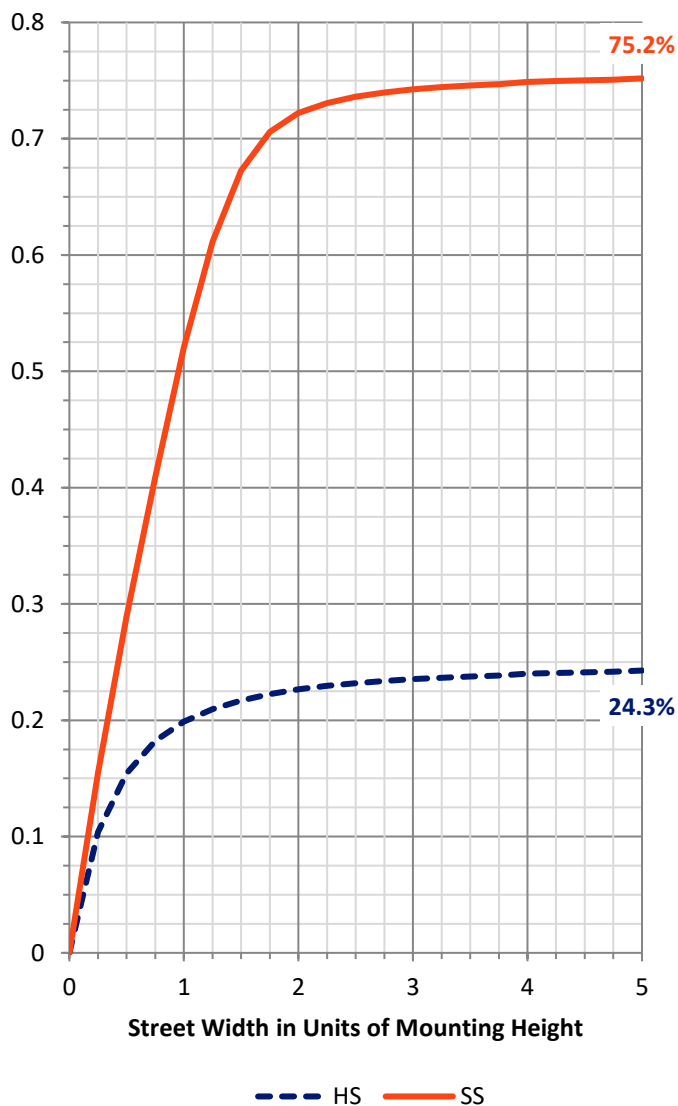
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2696.4	0.0	2696.4
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	8241.3	0.0	8241.3
	% Fixture	75.3	0.0	75.3
Total	Lumens	10937.8	0.0	10937.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.4	1.4
10°-20°	435.0	4.0
20°-30°	727.7	6.7
30°-40°	1136.9	10.4
40°-50°	1810.6	16.6
50°-60°	2519.7	23.0
60°-70°	2635.7	24.1
70°-80°	1377.6	12.6
80°-90°	143.0	1.3
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°	10937.8	100.0
0°-180°	10937.8	100.0

Coefficient of Utilization



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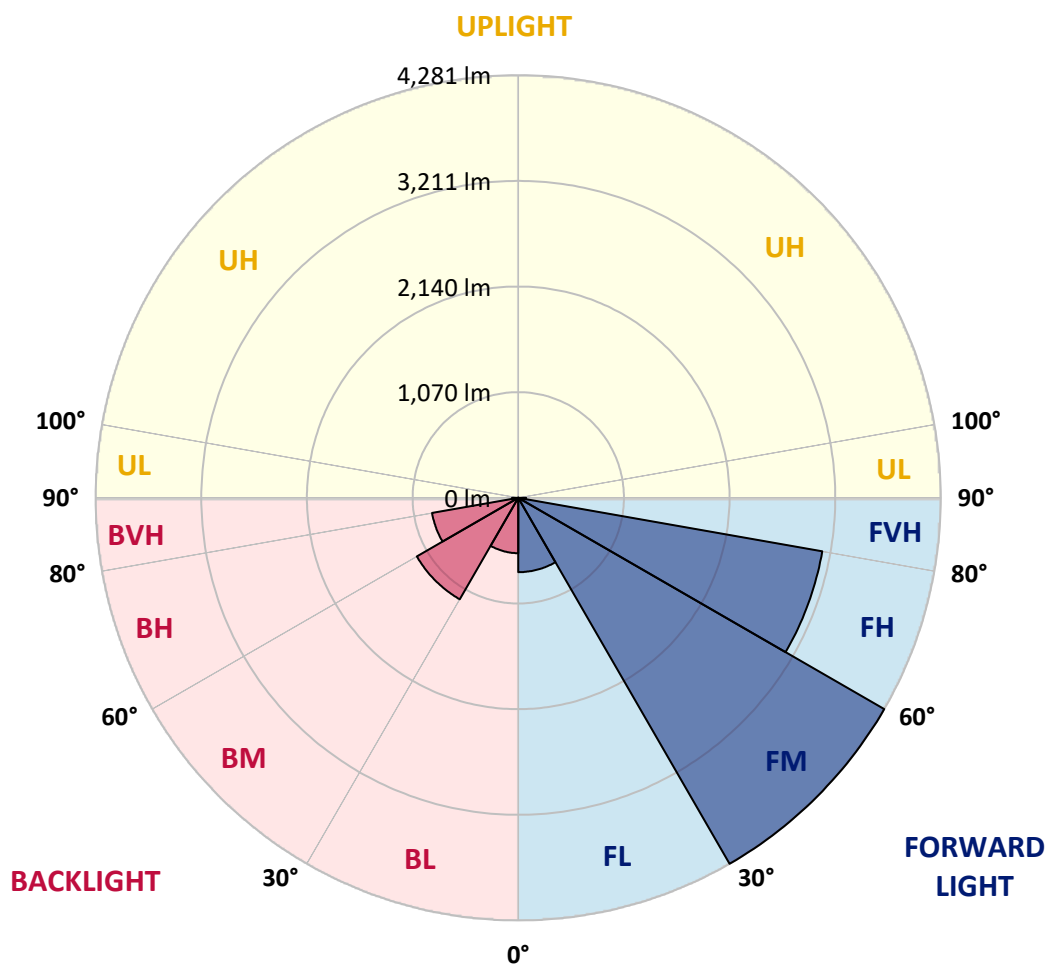
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	753.2	6.9			
FM	(30°-60°)	4280.9	39.1			
FH	(60°-80°)	3127.1	28.6			G2/5000
FVH	(80°-90°)	80.1	0.7			G1/100
BL	(0°-30°)	561.0	5.1	B2/1000		
BM	(30°-60°)	1186.3	10.8	B2/2500		
BH	(60°-80°)	886.2	8.1	B2/1000		G2/1000
BVH	(80°-90°)	63.0	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-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1603.6	1603.6	1603.6	1603.6	1603.6	1603.6	1603.6	1603.6	1603.6	1603.6	1603.6
2.5°	1641.9	1651.2	1648.3	1645.4	1645.4	1641.3	1640.7	1635.0	1630.3	1622.8	1621.0
5°	1662.9	1672.7	1671.6	1673.8	1681.4	1683.2	1684.9	1681.4	1672.1	1662.9	1658.8
7.5°	1644.2	1655.3	1658.8	1672.7	1695.9	1716.8	1732.5	1738.8	1730.1	1716.8	1710.4
10°	1581.6	1593.8	1606.0	1639.0	1680.2	1729.6	1771.3	1796.3	1794.6	1781.8	1770.8
12.5°	1454.5	1467.2	1493.3	1557.8	1633.2	1720.3	1798.1	1850.3	1868.3	1858.9	1839.9
15°	1352.9	1363.9	1383.6	1449.9	1547.9	1680.2	1807.9	1909.5	1955.3	1950.1	1926.9
17.5°	1350.0	1354.6	1366.8	1398.2	1473.6	1617.6	1797.4	1967.5	2055.1	2054.6	2025.6
20°	1401.1	1402.8	1409.8	1416.1	1459.1	1570.0	1770.8	2015.7	2167.2	2167.2	2135.8
22.5°	1471.9	1470.7	1477.6	1471.9	1492.8	1565.9	1754.0	2058.1	2292.0	2301.2	2261.8
25°	1578.1	1572.2	1570.5	1557.2	1561.3	1603.6	1772.5	2106.3	2439.9	2459.1	2409.8
27.5°	1719.6	1710.4	1704.1	1673.3	1662.9	1681.4	1829.4	2164.3	2604.8	2637.8	2575.2
30°	1904.2	1887.4	1878.1	1824.7	1787.0	1790.0	1915.3	2241.5	2777.1	2830.5	2751.0
32.5°	2156.2	2130.1	2105.0	2017.4	1948.3	1925.8	2026.1	2348.3	2964.1	3049.4	2947.2
35°	2438.2	2417.4	2390.6	2255.4	2149.2	2096.9	2175.9	2497.4	3182.8	3318.1	3185.2
37.5°	2709.8	2691.9	2704.6	2522.3	2385.4	2309.3	2372.1	2697.7	3452.7	3652.4	3483.5
40°	2990.7	2976.8	2978.5	2804.4	2644.8	2559.5	2610.1	2948.9	3762.1	4050.0	3842.2
42.5°	3296.0	3285.5	3250.8	3096.4	2917.0	2837.5	2883.9	3239.1	4094.1	4502.6	4235.7
45°	3637.8	3631.5	3599.0	3422.0	3216.6	3127.2	3189.8	3559.5	4427.8	4928.7	4631.0
47.5°	3933.3	3938.6	3934.5	3785.3	3572.3	3441.1	3516.0	3893.9	4738.3	5329.2	5009.9
50°	4075.5	4102.8	4142.8	4096.4	3964.1	3830.5	3845.1	4216.5	5034.3	5704.6	5373.3
52.5°	4001.2	4052.8	4162.0	4236.2	4287.4	4259.5	4220.5	4536.9	5312.9	6043.6	5716.8
55°	3724.3	3796.9	3978.0	4157.3	4418.0	4620.5	4671.5	4892.1	5584.5	6341.9	6041.9
57.5°	3220.0	3337.8	3500.4	3863.0	4301.8	4795.2	5197.4	5384.8	5872.3	6660.6	6382.0
60°	2355.2	2513.1	2715.0	3254.8	3895.6	4701.8	5644.9	6141.7	6281.5	7073.2	6824.8
62.5°	1507.3	1604.7	1790.5	2298.9	3035.4	4222.9	5781.8	7087.7	6975.1	7749.9	7488.8
65°	1032.0	1094.6	1264.6	1550.2	1962.3	3143.4	5415.1	7797.0	8076.7	8822.5	8624.0
67.5°	749.9	797.4	942.6	1192.7	1278.6	1860.2	4202.0	7764.5	9147.5	9927.5	9618.8
70°	546.7	580.4	702.2	942.6	983.8	1034.8	2545.6	6600.2	9124.3	10221.2	9851.5
72.5°	405.1	428.3	510.1	731.3	796.3	698.7	1260.0	4796.9	7840.4	9245.0	8948.5
75°	293.0	310.5	370.8	559.4	637.2	532.2	628.5	2803.3	5469.0	6503.2	6555.5
77.5°	224.1	237.4	276.9	409.8	510.1	399.3	390.0	1289.7	2593.1	2606.0	2752.2
80°	179.9	188.6	210.1	288.4	391.1	298.9	254.2	520.6	819.5	693.5	727.9
82.5°	132.3	146.9	177.6	202.5	279.7	206.0	155.0	262.9	311.7	268.1	270.5
85°	75.4	85.3	107.4	145.1	178.8	126.0	88.8	116.6	145.1	119.0	106.2
87.5°	26.6	34.8	37.7	56.9	77.8	52.3	34.2	33.6	47.6	35.4	29.6
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°	1603.6	1603.6	1603.6	1603.6	1603.6	1603.6	1603.6	1603.6	1603.6	1603.6	1603.6
2.5°	1615.2	1612.3	1600.7	1585.1	1568.8	1553.1	1547.9	1536.9	1529.3	1525.3	1529.9
5°	1647.7	1638.5	1611.2	1576.3	1539.8	1500.3	1472.4	1446.9	1428.3	1410.9	1417.9
7.5°	1694.1	1677.9	1630.9	1570.0	1504.9	1439.4	1390.6	1353.5	1328.5	1312.3	1315.8
10°	1748.1	1723.1	1651.2	1560.0	1459.7	1365.6	1308.2	1276.2	1260.6	1251.9	1254.2
12.5°	1810.3	1774.8	1672.1	1537.5	1390.6	1283.2	1243.7	1234.5	1235.0	1235.6	1236.8
15°	1886.8	1837.5	1688.9	1488.1	1300.6	1220.0	1213.0	1228.1	1243.7	1251.3	1250.7
17.5°	1973.3	1903.6	1691.9	1406.8	1212.5	1179.4	1201.4	1233.9	1257.7	1268.1	1270.5
20°	2066.2	1971.0	1671.0	1291.9	1139.9	1146.3	1185.7	1227.5	1253.7	1267.0	1270.5
22.5°	2172.4	2042.9	1621.0	1171.3	1080.7	1110.3	1156.7	1197.3	1224.7	1238.0	1241.5
25°	2293.7	2123.6	1542.6	1069.7	1029.6	1069.7	1116.1	1149.7	1171.8	1184.0	1187.5
27.5°	2428.3	2207.8	1438.2	989.0	984.9	1027.9	1066.2	1092.3	1103.9	1113.1	1116.6
30°	2563.6	2284.4	1311.7	928.0	946.1	986.7	1013.9	1025.5	1029.0	1030.7	1034.8
32.5°	2709.8	2350.5	1178.8	877.5	908.9	946.6	962.9	968.1	951.8	940.8	944.3
35°	2886.8	2421.4	1048.8	837.5	872.3	904.9	910.1	905.4	886.2	863.7	864.8
37.5°	3105.6	2509.6	944.8	809.0	838.0	859.6	853.2	852.0	853.7	827.1	828.8
40°	3373.8	2624.5	868.9	787.0	810.3	814.9	796.8	806.8	815.5	774.8	776.0
42.5°	3671.6	2763.2	820.7	771.9	787.0	776.0	748.1	759.1	758.0	704.6	704.0
45°	3975.1	2914.2	803.8	760.9	765.6	743.4	712.7	715.7	691.3	643.1	644.8
47.5°	4276.9	3076.0	814.3	751.6	738.8	713.9	690.1	677.3	641.3	605.4	605.4
50°	4572.9	3246.1	852.6	733.1	702.2	687.8	670.3	647.7	609.4	578.6	576.4
52.5°	4847.4	3417.4	895.5	702.2	656.4	665.1	654.1	628.0	590.3	558.9	559.4
55°	5107.5	3588.5	912.4	659.9	613.5	645.4	639.0	590.8	545.6	520.0	517.7
57.5°	5390.7	3794.6	893.8	605.9	578.6	622.8	598.4	545.0	518.9	499.7	497.9
60°	5782.9	4117.8	853.7	539.2	545.6	589.1	547.3	525.2	496.8	475.3	474.2
62.5°	6434.7	4720.8	789.4	473.0	506.7	539.2	523.0	500.9	471.8	451.0	451.0
65°	7398.2	5559.0	668.0	421.4	463.2	490.5	496.8	474.8	444.5	422.5	423.7
67.5°	8210.8	6084.8	505.5	378.4	418.5	451.0	468.9	447.5	415.5	394.1	394.6
70°	8166.1	5702.9	385.9	336.0	379.0	412.0	435.3	418.5	384.2	363.9	365.6
72.5°	7253.1	4770.8	312.2	293.0	339.0	371.5	399.3	386.5	351.7	332.0	332.0
75°	5328.6	3386.6	249.6	249.6	289.0	329.1	359.9	351.7	319.8	305.9	301.8
77.5°	2246.1	1420.8	195.6	207.2	240.3	282.7	320.9	323.9	296.0	313.4	284.4
80°	597.3	391.8	149.1	163.1	188.6	233.3	279.2	278.0	247.8	231.5	215.4
82.5°	227.6	154.4	106.2	114.9	136.4	178.8	221.1	228.1	197.9	171.2	171.2
85°	87.6	66.2	65.6	69.1	79.5	118.4	167.2	172.9	149.1	126.5	130.6
87.5°	22.7	19.8	24.4	23.2	36.6	63.2	95.7	99.2	91.1	52.8	75.4
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)