

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: P961967

Luminaire Tested: **NAV-SB2B-740-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961967
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-740-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12375.9 lumens
Efficiency: N/A
Efficacy: 167.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

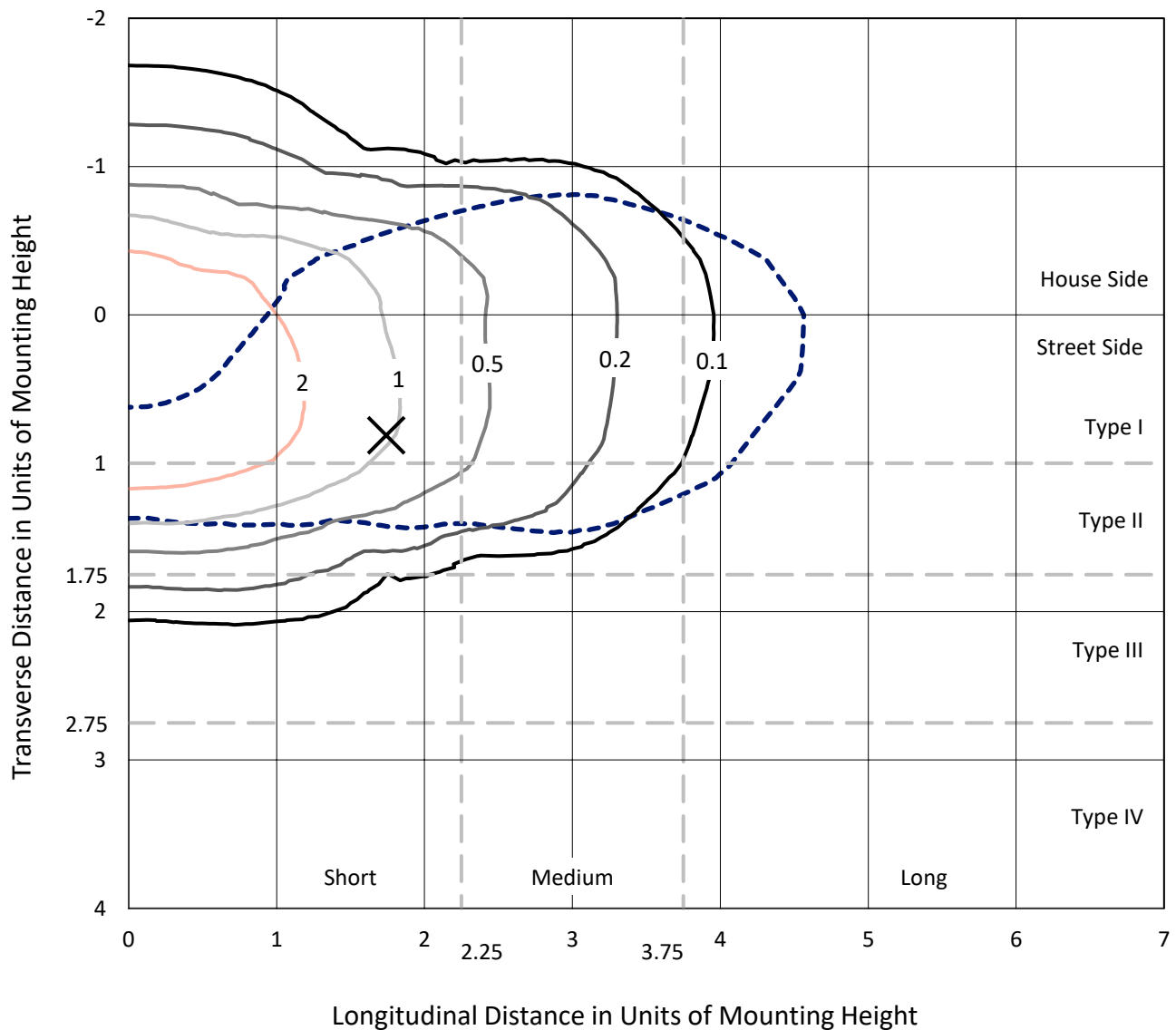
Input Watts (W): 73.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

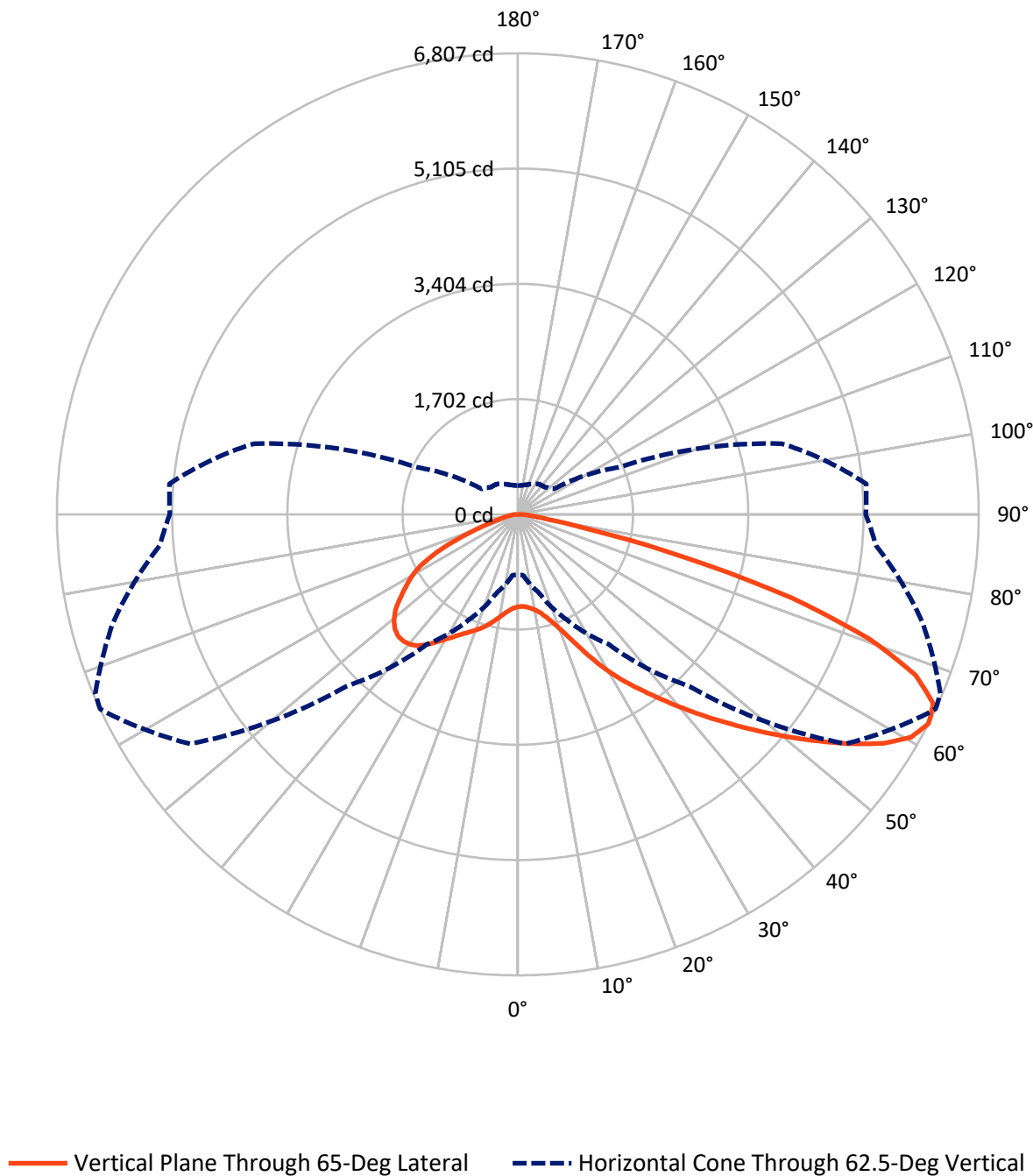
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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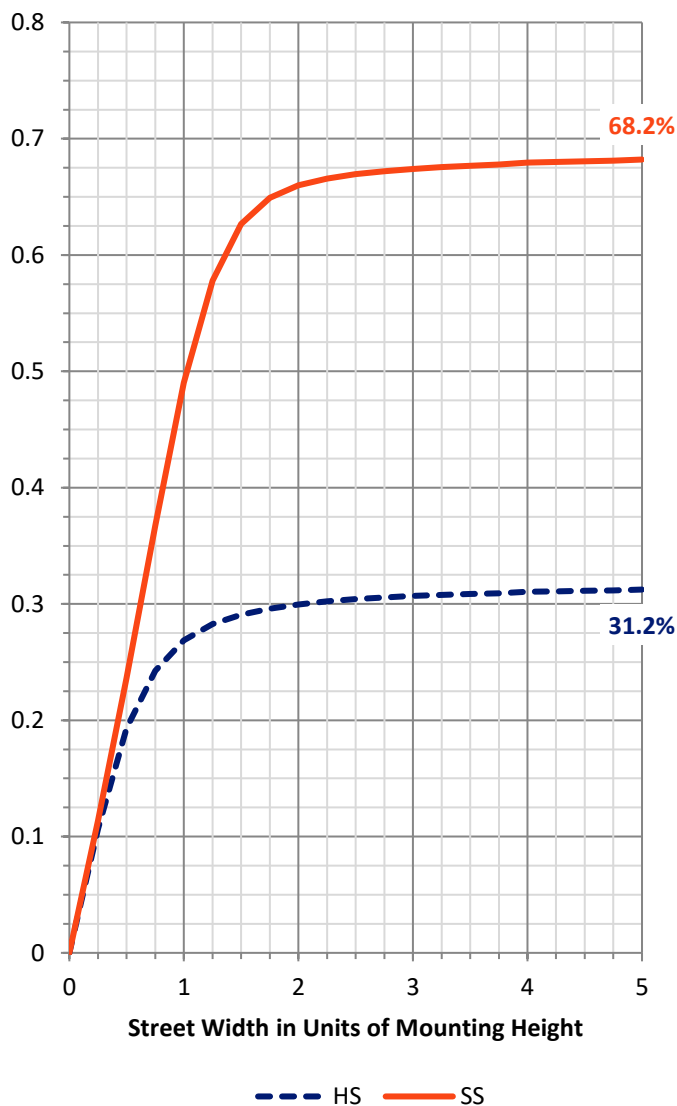
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3905.3	0.0	3905.3
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	8470.6	0.0	8470.6
	% Fixture	68.4	0.0	68.4
Total	Lumens	12375.9	0.0	12375.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.0	1.1
10°-20°	461.1	3.7
20°-30°	934.9	7.6
30°-40°	1617.8	13.1
40°-50°	2448.2	19.8
50°-60°	2870.4	23.2
60°-70°	2406.5	19.4
70°-80°	1328.6	10.7
80°-90°	172.6	1.4
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°	12375.9	100.0
0°-180°	12375.9	100.0

Coefficient of Utilization



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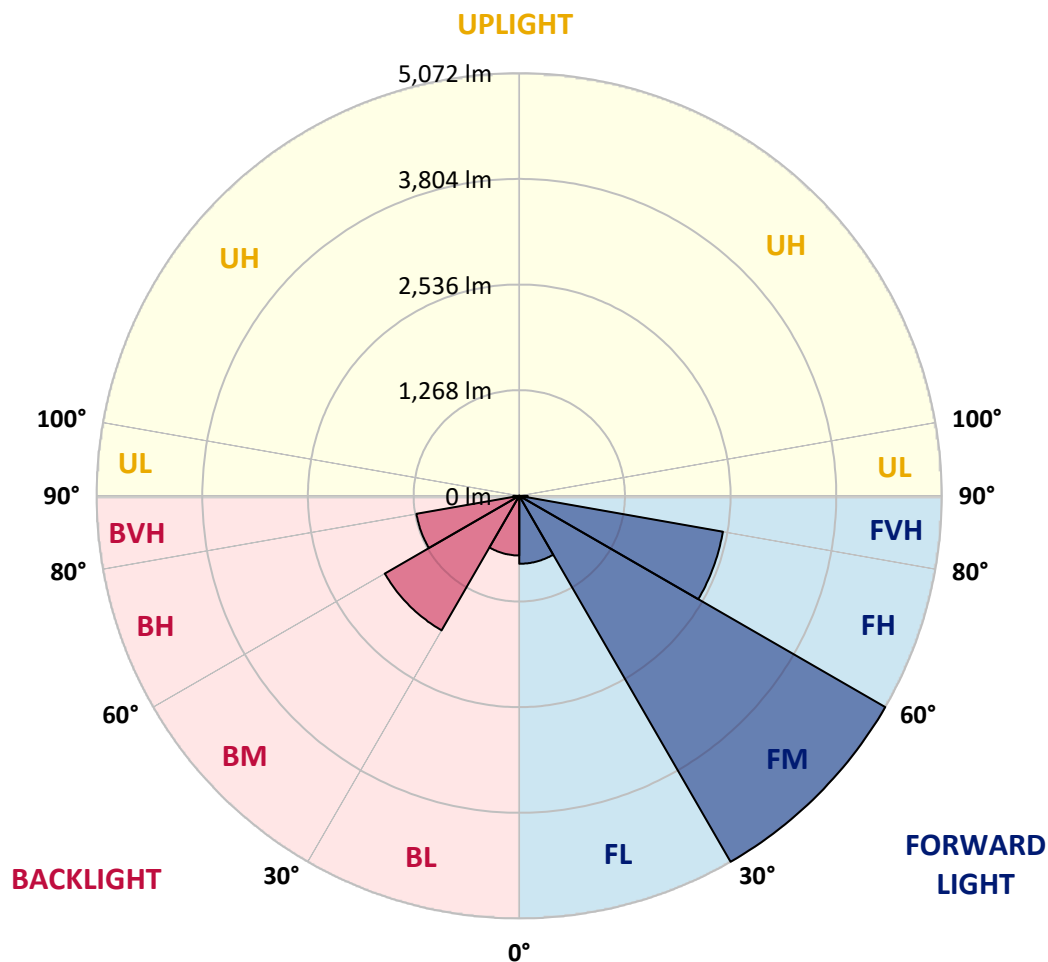
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	815.7	6.6			
FM	(30°-60°)	5072.0	41.0			
FH	(60°-80°)	2482.2	20.1			G2/5000
FVH	(80°-90°)	100.6	0.8			G2/225
BL	(0°-30°)	716.2	5.8	B2/1000		
BM	(30°-60°)	1864.3	15.1	B2/2500		
BH	(60°-80°)	1252.8	10.1	B3/2500		G3/2500
BVH	(80°-90°)	72.0	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	1363.8	1363.8	1363.8	1363.8	1363.8	1363.8	1363.8	1363.8	1363.8	1363.8	1363.8
2.5°	1354.7	1350.9	1354.1	1354.1	1355.5	1354.7	1359.3	1360.6	1362.4	1366.3	1366.3
5°	1341.3	1340.7	1346.4	1351.6	1356.7	1361.2	1366.9	1375.3	1376.6	1381.1	1386.9
7.5°	1336.8	1332.9	1341.9	1348.4	1360.6	1371.4	1386.9	1401.0	1406.8	1408.8	1419.6
10°	1371.4	1365.1	1373.4	1377.3	1387.5	1398.4	1416.4	1438.9	1445.4	1453.0	1465.2
12.5°	1430.5	1423.5	1435.7	1441.5	1451.1	1460.7	1472.9	1494.8	1497.9	1512.1	1523.7
15°	1511.5	1503.1	1510.8	1517.8	1533.9	1542.9	1555.1	1576.2	1576.2	1587.2	1595.5
17.5°	1621.2	1610.3	1616.1	1618.7	1628.9	1642.5	1663.0	1681.6	1691.2	1687.4	1675.8
20°	1784.9	1771.5	1771.5	1758.6	1754.8	1765.7	1792.6	1818.4	1828.6	1808.7	1780.4
22.5°	2030.8	2011.7	2000.7	1957.0	1939.7	1940.9	1968.0	1999.5	2007.8	1972.4	1908.9
25°	2343.6	2313.4	2298.7	2234.4	2195.2	2161.2	2182.4	2222.8	2234.4	2190.7	2088.0
27.5°	2656.3	2658.2	2644.1	2567.0	2502.1	2439.9	2428.9	2471.4	2483.6	2434.1	2307.0
30°	3094.8	3049.2	3022.2	2929.8	2837.3	2750.0	2705.1	2722.4	2725.6	2666.5	2518.8
32.5°	3473.0	3461.4	3403.6	3322.7	3203.9	3067.2	2992.1	2964.5	2959.3	2875.2	2700.0
35°	3903.8	3897.4	3836.4	3740.1	3611.7	3421.7	3286.2	3207.1	3200.8	3082.6	2879.0
37.5°	4341.7	4341.7	4282.0	4176.7	4043.8	3806.2	3600.1	3475.0	3454.4	3300.3	3061.4
40°	4691.0	4669.8	4680.8	4636.4	4484.3	4231.9	3948.7	3767.1	3739.4	3554.5	3255.3
42.5°	4889.4	4882.3	4947.8	4997.3	4935.0	4733.3	4332.7	4083.6	4045.1	3834.4	3478.7
45°	4933.7	4925.9	5042.9	5223.9	5311.2	5228.4	4750.1	4416.8	4370.0	4127.3	3718.3
47.5°	4831.6	4816.2	4987.6	5273.3	5553.3	5699.0	5202.1	4778.3	4710.3	4412.3	3964.2
50°	4524.7	4509.9	4769.3	5148.8	5634.8	6018.8	5692.6	5161.6	5057.7	4718.0	4212.6
52.5°	3857.6	3864.7	4271.1	4792.5	5527.6	6217.9	6115.2	5565.5	5440.3	5030.7	4445.7
55°	3004.9	3020.3	3519.8	4093.8	5098.8	6187.6	6403.4	5981.6	5857.0	5324.7	4686.5
57.5°	2151.6	2219.6	2687.8	3255.9	4275.0	5709.4	6466.3	6377.0	6256.4	5645.8	4922.2
60°	1394.6	1406.8	1888.4	2461.0	3255.3	4859.2	6338.6	6677.0	6582.6	5973.2	5119.3
62.5°	893.8	902.1	1195.6	1721.4	2342.9	3595.0	5908.4	6807.2	6778.3	6189.6	5308.7
65°	656.8	650.5	803.2	1137.8	1578.2	2217.1	5073.0	6744.3	6801.5	6325.1	5465.3
67.5°	548.4	539.4	614.5	787.8	1162.8	1259.1	3753.6	6335.3	6544.6	6309.7	5580.3
70°	499.5	491.8	537.4	585.0	907.2	843.1	1892.2	5507.7	5830.0	6134.4	5561.6
72.5°	423.1	409.7	471.9	519.5	705.6	646.6	782.1	4230.6	4623.6	5572.5	5299.7
75°	328.1	319.1	372.4	457.2	530.3	504.7	494.4	2569.0	2997.8	4309.6	4636.4
77.5°	260.0	247.8	296.6	356.4	477.0	380.8	360.2	1106.3	1531.4	2751.3	3469.1
80°	195.9	184.9	225.4	281.9	366.6	287.0	233.1	451.4	577.2	1393.9	1744.6
82.5°	139.3	129.7	157.3	206.7	246.5	257.5	143.2	253.0	284.4	537.4	389.7
85°	89.3	83.4	105.3	129.7	156.6	165.6	87.3	132.2	145.1	221.5	162.5
87.5°	48.8	39.8	56.5	60.4	72.6	66.1	41.7	48.2	52.0	80.3	68.7
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°	1363.8	1363.8	1363.8	1363.8	1363.8	1363.8	1363.8	1363.8	1363.8	1363.8	1363.8
2.5°	1368.9	1370.8	1377.3	1379.1	1383.6	1389.5	1393.3	1397.2	1397.2	1401.0	1401.0
5°	1387.5	1392.1	1405.5	1412.6	1424.1	1435.7	1442.8	1451.1	1456.2	1458.8	1460.1
7.5°	1423.5	1430.5	1449.8	1462.0	1481.9	1497.9	1508.9	1520.4	1523.0	1530.0	1527.5
10°	1472.3	1480.6	1502.4	1525.6	1549.3	1569.3	1579.5	1587.8	1591.1	1592.3	1589.2
12.5°	1528.2	1540.4	1568.6	1596.8	1621.9	1639.2	1641.7	1639.9	1630.9	1623.2	1623.2
15°	1596.8	1607.7	1639.2	1670.0	1694.4	1697.6	1681.6	1671.4	1660.4	1658.4	1658.4
17.5°	1679.1	1684.8	1713.7	1743.8	1745.8	1734.9	1711.1	1701.5	1691.2	1684.2	1684.8
20°	1774.7	1772.7	1793.3	1806.2	1792.6	1759.3	1723.3	1707.2	1697.0	1688.7	1689.3
22.5°	1889.0	1874.2	1871.6	1868.5	1832.5	1762.5	1713.7	1693.2	1677.1	1665.5	1669.4
25°	2055.2	1998.7	1959.6	1937.8	1856.9	1745.2	1682.8	1637.3	1607.1	1587.2	1594.9
27.5°	2263.3	2168.3	2069.4	2016.1	1856.9	1709.8	1608.4	1534.5	1485.1	1464.5	1474.9
30°	2461.7	2362.2	2216.5	2110.5	1852.4	1652.1	1488.3	1385.6	1327.8	1307.3	1319.5
32.5°	2631.2	2522.7	2372.5	2213.9	1841.5	1558.3	1339.4	1225.7	1169.8	1145.4	1157.6
35°	2788.5	2673.0	2529.1	2327.5	1812.6	1421.0	1175.7	1089.0	1026.6	987.5	1000.4
37.5°	2949.6	2812.3	2677.4	2430.3	1760.5	1260.3	1049.8	975.9	902.7	850.1	864.3
40°	3125.0	2960.6	2836.1	2491.3	1675.2	1107.6	952.2	884.8	807.1	751.2	762.2
42.5°	3329.8	3138.4	3012.6	2522.7	1558.3	999.1	888.7	822.5	749.3	703.7	712.7
45°	3543.6	3334.3	3173.8	2522.1	1427.9	948.3	868.1	802.6	721.7	674.1	681.9
47.5°	3767.7	3539.1	3313.1	2481.0	1315.0	955.4	856.5	759.5	670.3	624.1	630.5
50°	3992.4	3763.2	3447.9	2403.9	1266.8	940.0	813.5	699.3	593.9	552.2	554.7
52.5°	4215.2	4001.4	3564.1	2294.2	1218.0	882.8	758.3	620.8	562.4	533.5	533.5
55°	4439.3	4237.0	3690.6	2134.3	1096.0	816.1	665.8	591.3	537.4	511.1	508.5
57.5°	4664.1	4509.3	3810.7	1974.4	942.6	733.9	615.1	555.3	512.4	489.9	486.1
60°	4897.8	4820.7	3934.7	1827.4	791.0	628.6	577.9	526.5	482.9	457.8	455.9
62.5°	5138.5	5163.5	4031.6	1637.9	651.7	564.4	544.5	491.8	449.5	425.7	425.1
65°	5381.2	5494.2	4095.2	1375.3	528.4	503.4	508.5	454.0	410.9	390.4	389.7
67.5°	5564.2	5732.4	4077.1	1040.8	433.4	445.6	463.6	414.1	373.7	357.6	358.2
70°	5584.7	5704.2	3899.9	712.7	362.7	389.1	413.5	374.9	333.2	321.6	322.4
72.5°	5311.2	5318.9	3406.2	465.5	306.9	341.6	360.8	335.2	294.7	283.1	282.5
75°	4594.0	4398.9	2500.9	306.9	256.9	293.5	311.4	293.5	254.3	256.9	247.8
77.5°	3480.7	3115.4	1518.5	218.3	214.4	246.5	270.9	258.1	224.7	252.4	222.1
80°	1793.3	1685.4	677.4	163.1	169.5	197.1	222.8	206.1	177.8	169.5	154.8
82.5°	410.9	477.8	267.1	116.8	122.6	141.9	170.1	154.8	127.8	107.8	106.6
85°	143.8	157.3	118.2	73.2	72.0	88.6	115.6	103.4	86.7	69.4	73.2
87.5°	45.6	59.8	44.3	29.5	30.9	39.8	53.3	48.8	40.5	26.3	27.6
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)