

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: P961972

Luminaire Tested: **NAV-SB2B-740-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961972
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-740-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12220 lumens
Efficiency: N/A
Efficacy: 165.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

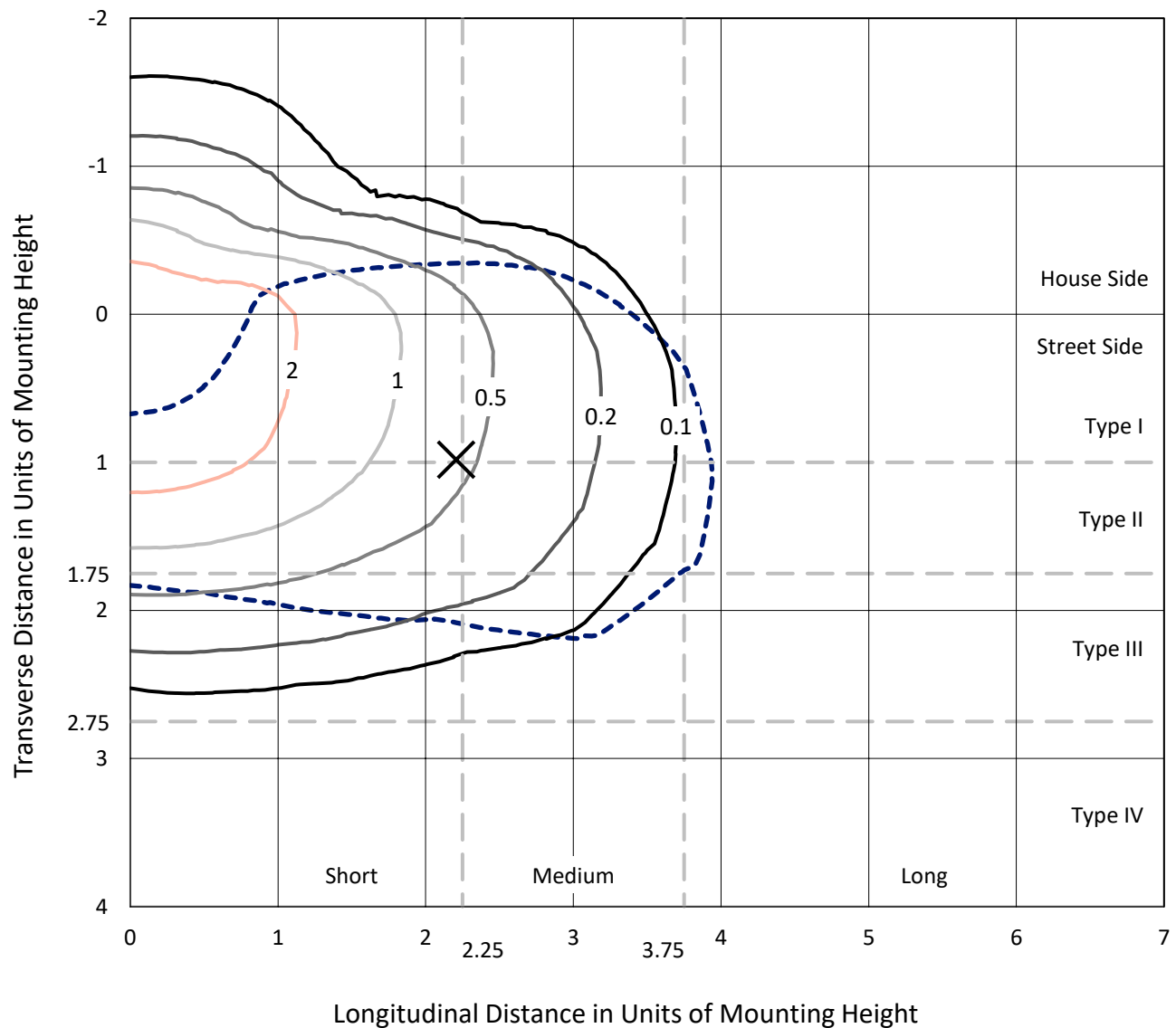
Input Watts (W): 73.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

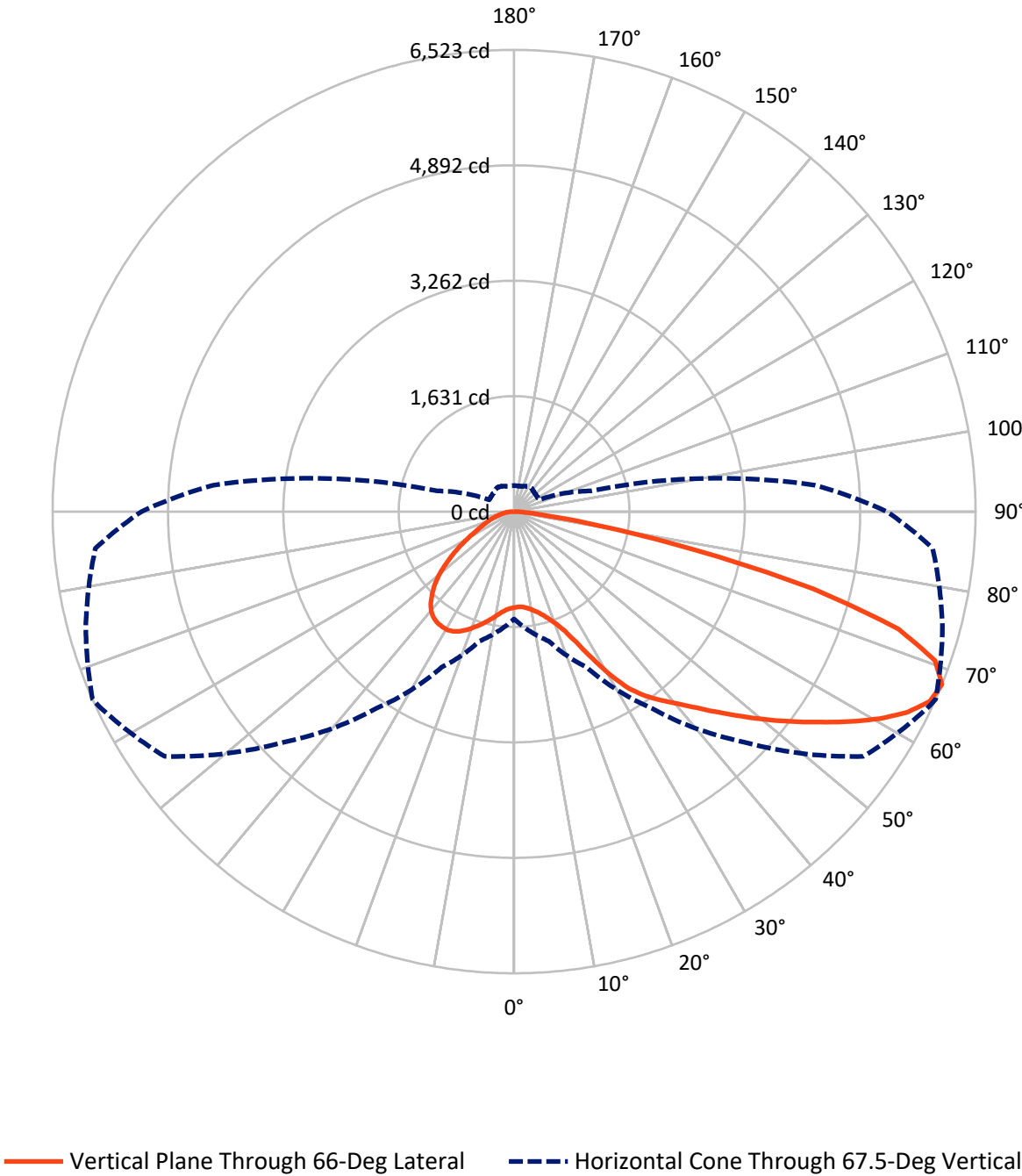
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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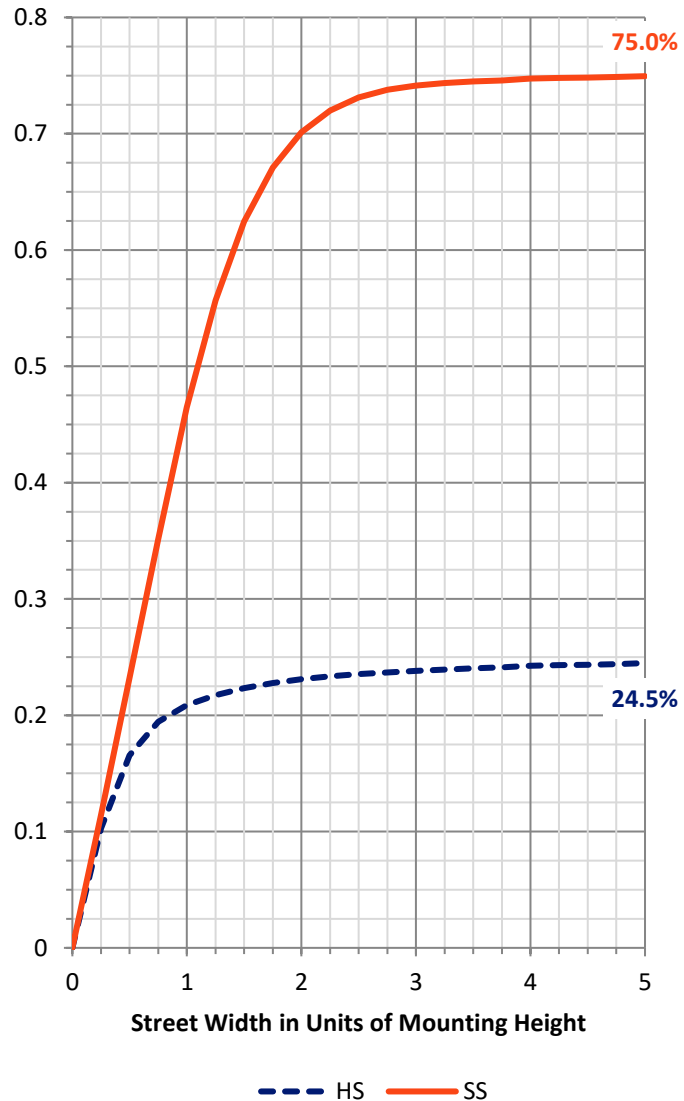
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3038.5	0.0	3038.5
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	9181.6	0.0	9181.6
	% Fixture	75.1	0.0	75.1
Total	Lumens	12220.0	0.0	12220.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.4	1.1
10°-20°	444.0	3.6
20°-30°	855.7	7.0
30°-40°	1500.4	12.3
40°-50°	2230.6	18.3
50°-60°	2827.5	23.1
60°-70°	2766.7	22.6
70°-80°	1319.7	10.8
80°-90°	141.0	1.2
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°	12220.0	100.0
0°-180°	12220.0	100.0

Coefficient of Utilization



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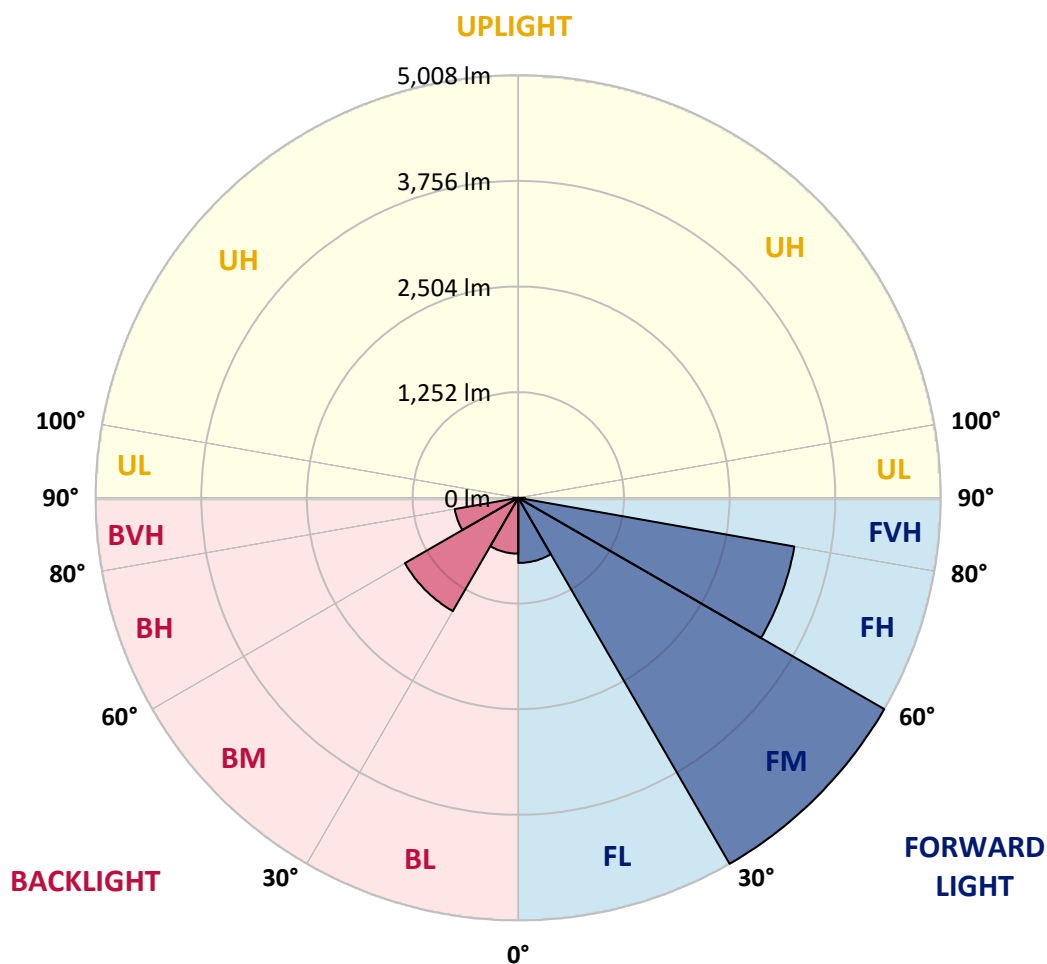
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	772.2	6.3			
FM	(30°-60°)	5007.7	41.0			
FH	(60°-80°)	3321.7	27.2			G2/5000
FVH	(80°-90°)	80.0	0.7			G1/100
BL	(0°-30°)	661.9	5.4	B2/1000		
BM	(30°-60°)	1550.9	12.7	B2/2500		
BH	(60°-80°)	764.6	6.3	B2/1000		G2/1000
BVH	(80°-90°)	61.1	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1355.4	1355.4	1355.4	1355.4	1355.4	1355.4	1355.4	1355.4	1355.4	1355.4	1355.4
2.5°	1341.2	1348.9	1347.1	1343.8	1343.2	1344.5	1346.3	1348.3	1347.7	1350.8	1356.0
5°	1337.4	1345.1	1344.5	1344.5	1347.1	1352.2	1355.4	1358.5	1355.4	1359.3	1366.3
7.5°	1340.0	1345.7	1348.3	1350.8	1357.3	1366.9	1374.6	1381.7	1377.8	1382.3	1391.3
10°	1372.7	1377.2	1379.8	1379.8	1384.3	1395.1	1402.9	1415.7	1412.6	1419.5	1431.1
12.5°	1432.4	1436.9	1436.9	1434.4	1437.6	1444.6	1447.2	1461.3	1455.5	1467.1	1478.7
15°	1505.6	1514.6	1507.6	1503.1	1504.3	1511.4	1510.7	1521.6	1515.9	1525.5	1535.8
17.5°	1586.5	1598.1	1586.5	1585.9	1583.3	1591.0	1591.6	1601.3	1591.0	1598.1	1605.1
20°	1682.1	1698.2	1688.6	1691.8	1686.0	1689.2	1692.5	1706.5	1690.5	1695.7	1693.7
22.5°	1817.0	1836.3	1826.0	1838.2	1834.3	1831.8	1831.2	1856.2	1831.2	1833.0	1814.5
25°	2013.5	2036.6	2018.6	2035.3	2035.3	2043.6	2053.3	2085.4	2043.6	2031.4	1983.3
27.5°	2303.7	2326.8	2291.5	2301.7	2298.6	2319.1	2308.8	2388.5	2343.5	2323.6	2226.6
30°	2652.9	2694.0	2627.3	2624.7	2621.4	2654.2	2669.0	2721.7	2676.1	2656.2	2539.3
32.5°	3030.5	3073.5	2993.9	2970.8	2958.6	2978.4	2966.2	3008.7	2977.2	2946.4	2801.9
35°	3429.9	3472.2	3396.4	3351.5	3302.7	3260.9	3217.3	3228.2	3198.7	3151.8	3002.2
37.5°	3807.4	3885.1	3804.8	3756.6	3666.7	3585.2	3463.2	3412.5	3384.9	3341.9	3191.0
40°	4191.9	4236.2	4175.2	4134.1	4036.6	3908.8	3713.6	3606.4	3569.2	3527.4	3399.6
42.5°	4475.0	4517.5	4484.7	4456.5	4380.0	4231.7	3979.5	3845.2	3791.3	3744.4	3635.9
45°	4699.8	4731.3	4710.7	4720.9	4688.2	4544.4	4254.9	4101.4	4045.6	3988.4	3903.0
47.5°	4790.3	4823.8	4856.4	4917.4	4973.3	4867.4	4550.8	4378.8	4319.7	4261.2	4177.2
50°	4780.1	4814.1	4909.1	5038.8	5212.1	5176.9	4862.9	4674.1	4619.6	4552.7	4475.0
52.5°	4697.9	4736.4	4858.4	5074.2	5350.2	5408.6	5180.7	4979.0	4927.7	4848.1	4770.5
55°	4482.1	4505.3	4688.2	4993.9	5382.9	5570.5	5492.1	5304.0	5252.6	5141.5	5056.7
57.5°	4082.2	4115.6	4382.0	4777.5	5300.8	5680.2	5765.6	5645.5	5596.1	5436.2	5347.6
60°	3560.1	3613.4	3918.5	4414.1	5091.5	5679.5	6014.1	5981.3	5940.3	5726.5	5634.0
62.5°	2969.4	3031.1	3324.5	3900.4	4725.5	5518.4	6169.5	6262.5	6241.3	5994.2	5876.0
65°	2280.5	2323.0	2615.1	3235.9	4156.0	5172.4	6187.4	6454.5	6458.3	6197.7	6002.5
67.5°	1518.4	1640.4	1894.0	2428.2	3393.3	4606.7	6029.5	6486.0	6523.2	6267.7	5939.0
70°	741.0	901.5	1149.9	1578.2	2428.2	3739.3	5616.7	6227.9	6310.7	6063.5	5560.1
72.5°	307.5	359.6	495.0	778.8	1393.9	2523.2	4787.2	5528.0	5681.5	5372.6	4674.7
75°	207.4	224.7	283.1	399.3	635.0	1244.2	3452.3	4121.9	4369.2	4057.8	3316.8
77.5°	159.9	170.8	206.1	279.3	377.5	470.6	1847.8	2484.1	2611.9	2418.0	1725.8
80°	125.9	134.2	154.1	203.6	267.7	251.6	629.9	1125.6	1199.4	1006.1	554.7
82.5°	109.2	112.3	110.4	138.1	177.8	147.0	206.7	415.4	458.4	332.6	181.0
85°	78.9	87.9	91.8	85.4	94.4	74.5	84.8	147.0	161.8	144.4	102.1
87.5°	32.1	47.6	58.4	55.2	34.6	21.2	26.3	43.0	49.4	53.9	33.4
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°	1355.4	1355.4	1355.4	1355.4	1355.4	1355.4	1355.4	1355.4	1355.4	1355.4	1355.4
2.5°	1356.7	1361.1	1364.4	1368.2	1370.7	1374.6	1382.3	1386.8	1387.4	1390.7	1390.0
5°	1368.9	1375.2	1382.3	1392.6	1404.1	1413.8	1428.5	1438.8	1442.7	1445.9	1445.2
7.5°	1395.1	1404.1	1417.0	1435.0	1451.7	1464.5	1482.5	1494.7	1506.9	1511.4	1512.0
10°	1434.4	1447.2	1465.7	1490.1	1508.2	1524.9	1543.4	1553.8	1566.0	1571.1	1573.7
12.5°	1483.2	1496.6	1521.0	1555.0	1571.7	1583.3	1589.7	1587.1	1589.7	1594.2	1595.5
15°	1539.0	1553.8	1581.4	1618.0	1629.5	1619.3	1605.1	1592.2	1590.4	1591.6	1596.1
17.5°	1605.1	1616.0	1648.1	1679.0	1670.6	1628.2	1597.5	1576.9	1566.6	1563.4	1567.8
20°	1697.6	1697.6	1723.9	1743.1	1687.4	1615.4	1567.2	1533.8	1512.7	1503.7	1501.7
22.5°	1809.9	1799.7	1816.4	1802.9	1684.1	1579.4	1512.7	1454.9	1422.8	1410.0	1408.0
25°	1952.4	1940.2	1935.8	1852.3	1661.0	1522.3	1413.8	1343.8	1315.6	1308.5	1309.7
27.5°	2167.6	2136.7	2078.3	1879.2	1618.6	1432.4	1298.3	1233.4	1217.3	1218.0	1219.9
30°	2454.0	2392.2	2249.1	1883.7	1549.3	1305.2	1180.1	1133.9	1126.2	1129.3	1140.3
32.5°	2719.1	2660.7	2423.7	1863.2	1442.7	1180.7	1074.1	1043.3	1031.8	1035.7	1040.8
35°	2927.1	2911.0	2585.6	1834.3	1311.7	1063.8	979.1	952.8	930.3	925.2	929.1
37.5°	3123.6	3117.1	2706.9	1793.9	1182.0	981.0	902.7	868.1	835.3	817.3	817.9
40°	3339.2	3332.9	2786.5	1731.6	1067.1	909.2	834.0	788.4	747.9	715.2	718.4
42.5°	3582.0	3544.1	2824.4	1642.4	969.4	848.2	778.2	716.6	663.3	633.0	635.0
45°	3847.1	3761.7	2823.8	1528.7	887.3	792.3	718.4	631.1	581.7	553.4	552.2
47.5°	4128.4	3969.8	2789.0	1402.9	807.7	730.6	626.0	559.2	526.4	509.1	505.3
50°	4418.6	4164.4	2730.0	1258.4	726.1	660.7	568.3	522.6	497.6	481.5	475.8
52.5°	4691.4	4340.9	2658.7	1094.7	643.3	592.7	542.5	507.2	480.9	462.9	455.2
55°	4945.0	4493.1	2557.9	927.1	575.9	547.0	530.3	500.8	470.6	449.5	441.1
57.5°	5170.4	4591.9	2383.9	769.8	527.8	515.6	517.5	489.8	455.2	437.3	425.7
60°	5357.9	4664.5	2126.5	624.1	488.6	484.7	497.6	469.3	428.9	408.4	399.3
62.5°	5470.2	4663.2	1810.6	511.1	455.2	456.5	471.3	443.6	402.5	383.3	377.5
65°	5460.6	4549.0	1463.9	437.3	423.1	424.4	443.6	415.4	380.7	369.2	368.5
67.5°	5267.4	4270.3	1123.0	389.1	387.8	393.6	416.0	396.2	367.3	365.9	367.9
70°	4744.1	3691.7	809.0	350.5	351.2	359.6	389.1	384.0	360.2	362.7	362.1
72.5°	3804.2	2814.8	543.1	310.1	310.8	324.2	363.4	374.3	353.1	387.1	392.3
75°	2533.5	1755.3	349.3	267.1	267.7	285.1	340.9	355.7	333.8	385.9	389.1
77.5°	1217.3	789.0	253.0	224.7	224.7	240.8	294.7	318.5	284.4	299.8	274.8
80°	420.6	296.6	199.1	181.0	177.2	188.1	248.5	276.0	245.3	226.0	211.9
82.5°	165.6	154.1	159.9	140.6	127.8	134.8	193.2	228.0	180.4	163.1	162.5
85°	95.0	100.1	113.0	93.1	73.8	82.8	141.9	163.7	136.1	120.0	122.6
87.5°	25.7	35.4	52.0	48.2	33.4	35.4	67.4	90.5	78.3	60.4	62.3
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)