

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: P961976

Luminaire Tested: **NAV-SB2B-740-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961976
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-740-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12188.3 lumens
Efficiency: N/A
Efficacy: 164.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - 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



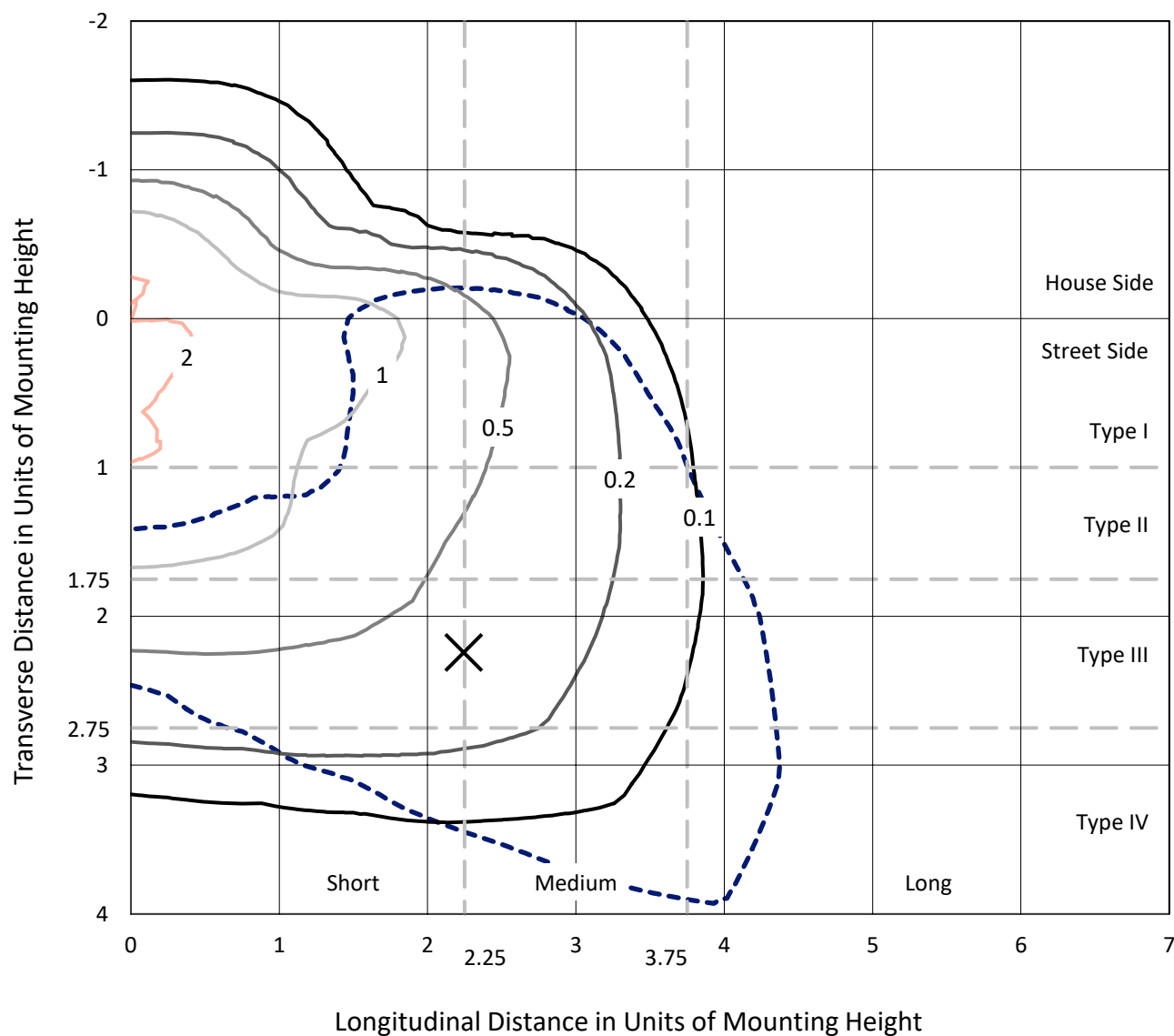
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

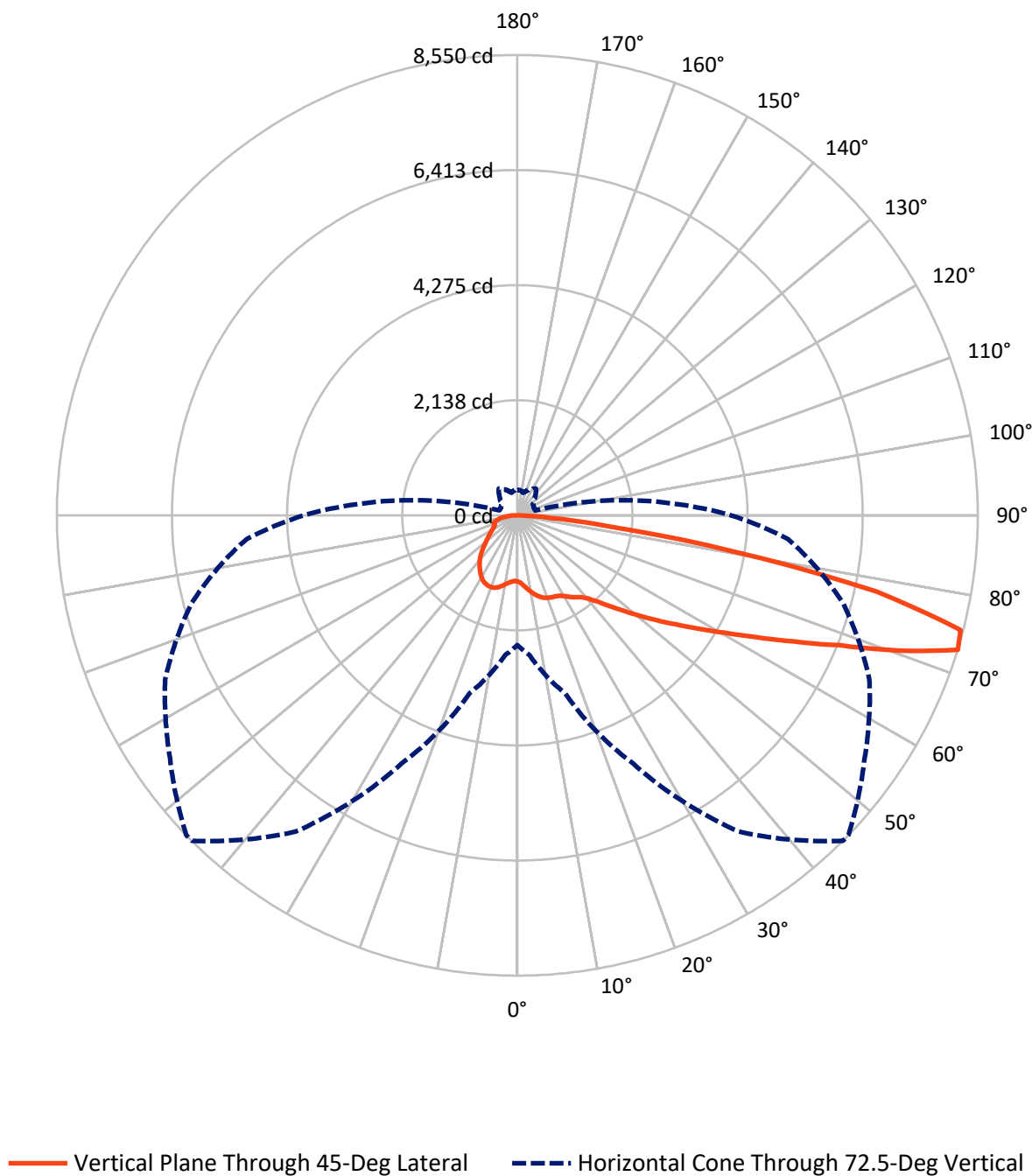


Based on 25 foot mounting height. Maximum calculated value = 2.4 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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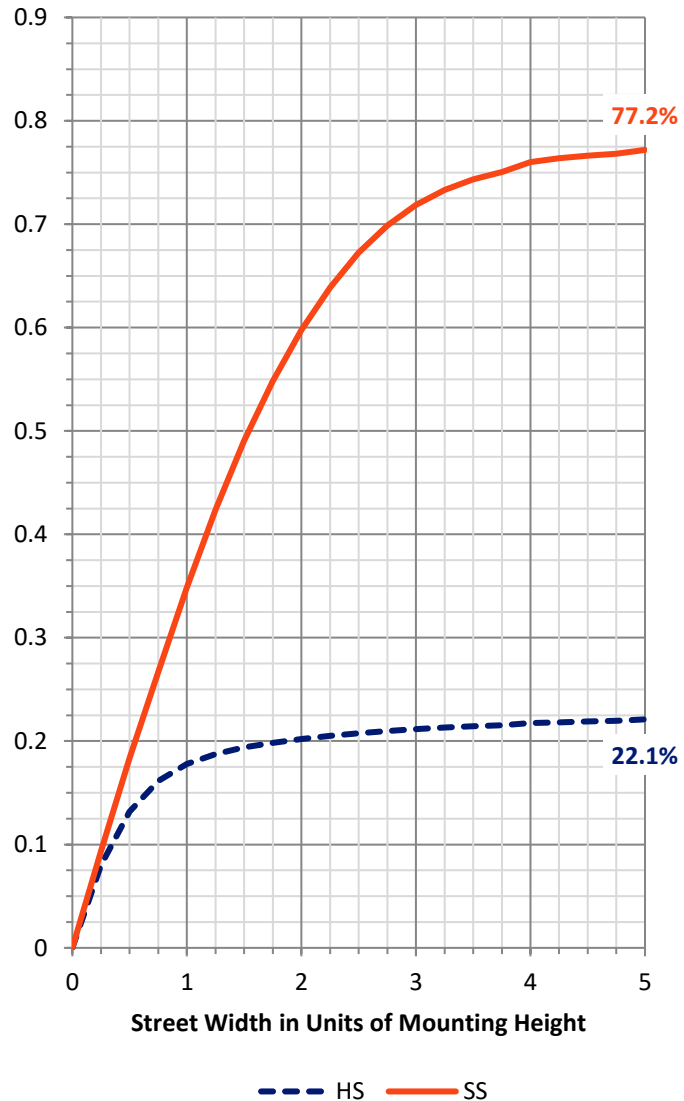
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2755.3	0.0	2755.3
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	9432.9	0.0	9432.9
	% Fixture	77.4	0.0	77.4
Total	Lumens	12188.3	0.0	12188.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.1	1.0
10°-20°	417.2	3.4
20°-30°	725.8	6.0
30°-40°	1040.5	8.5
40°-50°	1465.1	12.0
50°-60°	2244.1	18.4
60°-70°	3250.9	26.7
70°-80°	2596.1	21.3
80°-90°	323.3	2.7
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°	12188.3	100.0
0°-180°	12188.3	100.0

Coefficient of Utilization



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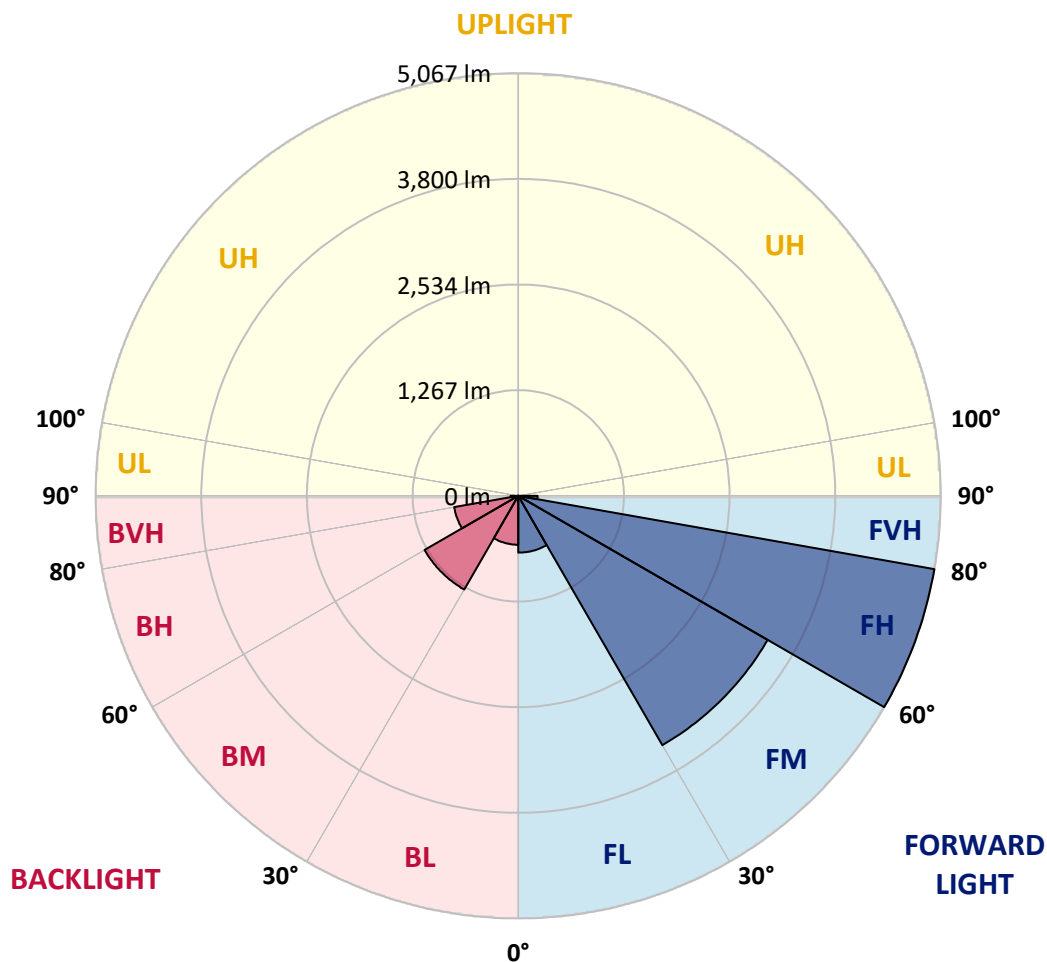
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	681.6	5.6			
FM	(30°-60°)	3452.4	28.3			
FH	(60°-80°)	5067.0	41.6			G3/7500
FVH	(80°-90°)	232.0	1.9			G3/500
BL	(0°-30°)	586.6	4.8	B2/1000		
BM	(30°-60°)	1297.4	10.6	B2/2500		
BH	(60°-80°)	780.0	6.4	B2/1000		G2/1000
BVH	(80°-90°)	91.4	0.7			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 Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1229.6	1229.6	1229.6	1229.6	1229.6	1229.6	1229.6	1229.6	1229.6	1229.6	1229.6
2.5°	1277.8	1286.1	1278.4	1271.3	1268.1	1259.7	1259.1	1254.0	1250.7	1241.8	1239.2
5°	1366.9	1377.9	1365.0	1350.9	1338.0	1317.5	1315.0	1300.2	1283.5	1264.2	1253.3
7.5°	1467.8	1477.4	1462.7	1441.5	1419.0	1385.0	1384.3	1357.3	1331.0	1298.3	1279.6
10°	1555.7	1568.6	1548.7	1519.8	1491.5	1453.0	1448.5	1417.7	1384.3	1341.9	1313.6
12.5°	1633.4	1642.5	1623.2	1587.8	1555.1	1516.6	1510.7	1476.7	1439.5	1391.3	1355.4
15°	1695.0	1706.6	1680.9	1643.1	1608.4	1570.5	1565.4	1534.5	1497.3	1446.6	1400.4
17.5°	1735.5	1745.2	1718.8	1676.5	1643.1	1611.6	1607.7	1582.1	1549.3	1497.9	1448.5
20°	1750.9	1761.2	1733.6	1690.5	1659.8	1635.4	1633.4	1614.8	1592.3	1545.5	1495.4
22.5°	1766.3	1775.9	1740.0	1695.0	1668.1	1652.7	1652.0	1639.8	1630.9	1592.3	1543.5
25°	1828.6	1831.2	1783.0	1718.2	1679.7	1666.1	1665.5	1664.9	1668.7	1638.6	1595.5
27.5°	1882.5	1881.9	1840.8	1779.8	1720.1	1691.9	1691.2	1697.6	1709.8	1684.8	1649.4
30°	1961.5	1954.5	1905.7	1842.1	1787.5	1743.8	1740.0	1734.2	1743.8	1723.9	1703.4
32.5°	2129.1	2106.6	2027.7	1914.6	1843.4	1809.9	1804.8	1768.9	1772.7	1760.5	1750.3
35°	2369.2	2339.7	2234.4	2052.0	1912.8	1865.2	1862.6	1817.0	1809.3	1798.5	1802.3
37.5°	2655.0	2618.4	2495.7	2251.1	2032.2	1929.5	1925.6	1884.5	1853.0	1841.4	1863.2
40°	2942.0	2895.7	2794.3	2493.8	2208.1	2036.7	2024.5	1962.2	1926.2	1906.9	1953.1
42.5°	3220.7	3182.1	3095.4	2766.1	2425.0	2193.3	2166.3	2059.7	2032.8	2014.8	2098.3
45°	3467.2	3432.5	3369.0	3056.9	2679.4	2406.5	2380.2	2206.1	2197.8	2197.8	2318.5
47.5°	3667.4	3659.8	3592.4	3353.5	2979.2	2649.2	2603.6	2409.7	2432.1	2466.9	2631.2
50°	3889.7	3868.5	3796.5	3645.6	3331.7	2927.2	2890.0	2659.5	2743.5	2838.5	3083.2
52.5°	4093.8	4105.3	4025.1	3950.0	3729.8	3237.3	3171.9	2954.2	3135.9	3293.1	3612.9
55°	4303.8	4304.4	4281.9	4271.7	4147.2	3580.1	3508.3	3308.6	3597.5	3792.7	4230.6
57.5°	4500.9	4502.2	4535.5	4626.1	4631.3	3975.7	3894.2	3743.9	4110.6	4309.5	4867.5
60°	4676.9	4685.8	4777.0	4988.9	5056.9	4429.0	4351.9	4258.2	4640.9	4841.2	5537.2
62.5°	4735.9	4768.6	4971.6	5272.7	5477.5	4985.0	4909.2	4853.4	5198.2	5384.4	6097.1
65°	4635.8	4710.9	5103.2	5507.0	5910.3	5645.7	5570.6	5509.6	5777.3	5952.6	6556.8
67.5°	4389.8	4486.7	5095.5	5752.9	6435.5	6440.6	6370.6	6227.4	6398.3	6465.6	6706.4
70°	3742.0	3887.1	4646.6	5844.8	7038.4	7527.6	7460.2	7091.7	7017.8	6691.6	6285.2
72.5°	2411.0	2606.2	3421.6	5089.0	7172.5	8550.4	8546.6	7871.8	7213.6	6252.5	5040.8
75°	879.7	999.1	1589.8	3194.3	6020.6	8498.4	8523.5	7738.2	6585.0	4829.6	3140.4
77.5°	320.4	350.5	518.8	1227.6	3702.8	6818.7	6870.8	6186.3	4687.1	2423.8	1244.4
80°	168.2	184.9	265.8	476.4	1586.6	4049.6	4131.1	3676.5	2202.9	730.0	373.0
82.5°	93.1	100.8	148.9	258.7	714.6	1731.6	1780.4	1452.3	775.0	309.4	154.1
85°	50.1	53.3	70.0	141.2	349.3	600.3	613.8	434.1	308.8	181.7	74.5
87.5°	14.8	17.9	23.2	44.9	136.7	134.8	138.1	86.0	122.0	91.8	24.4
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°	1229.6	1229.6	1229.6	1229.6	1229.6	1229.6	1229.6	1229.6	1229.6	1229.6	1229.6
2.5°	1235.3	1233.4	1226.3	1223.1	1219.2	1218.6	1221.9	1222.5	1223.1	1223.7	1226.3
5°	1246.9	1240.5	1234.1	1230.2	1231.4	1232.2	1238.5	1243.0	1246.3	1248.9	1250.1
7.5°	1269.4	1264.2	1253.3	1252.7	1254.6	1260.3	1268.7	1279.0	1284.7	1289.2	1290.6
10°	1302.8	1293.1	1280.3	1282.2	1286.1	1294.4	1311.8	1320.1	1329.7	1338.0	1336.2
12.5°	1336.8	1328.4	1313.6	1315.0	1321.3	1336.2	1352.8	1363.1	1369.5	1376.0	1378.5
15°	1381.1	1366.3	1350.2	1350.2	1361.8	1377.9	1385.6	1393.9	1397.8	1404.9	1407.4
17.5°	1426.7	1407.4	1386.2	1385.0	1399.0	1406.8	1411.2	1412.6	1413.8	1421.6	1424.1
20°	1472.3	1451.1	1420.9	1418.3	1421.6	1420.2	1419.6	1418.3	1420.2	1429.9	1433.8
22.5°	1517.2	1492.8	1451.1	1439.5	1430.5	1418.3	1417.7	1417.1	1418.3	1427.9	1434.4
25°	1569.9	1540.4	1484.5	1449.8	1419.6	1402.9	1404.9	1405.5	1406.8	1414.5	1424.7
27.5°	1627.0	1594.3	1515.3	1446.6	1392.1	1380.5	1377.2	1379.1	1383.6	1395.8	1408.0
30°	1684.2	1645.6	1543.5	1433.8	1357.3	1341.3	1331.0	1335.5	1349.6	1361.8	1375.3
32.5°	1736.1	1697.6	1566.0	1405.5	1313.0	1288.0	1274.5	1280.3	1294.4	1298.9	1315.0
35°	1797.1	1753.5	1575.6	1360.6	1264.8	1226.3	1208.4	1200.1	1207.0	1202.6	1216.7
37.5°	1865.2	1819.6	1574.4	1301.4	1208.4	1164.1	1139.0	1107.6	1092.8	1077.4	1087.0
40°	1966.1	1900.6	1558.9	1230.2	1138.4	1098.0	1053.0	999.7	966.3	936.1	938.1
42.5°	2103.4	2012.9	1530.7	1151.9	1059.4	1021.5	960.5	898.2	845.6	795.5	791.0
45°	2308.2	2159.9	1495.4	1068.4	974.1	936.7	870.6	800.6	741.0	676.7	669.0
47.5°	2603.6	2357.7	1462.0	973.3	884.2	850.1	790.4	725.5	654.9	592.7	585.6
50°	3009.4	2641.4	1431.2	880.9	795.5	769.9	722.3	656.2	585.0	534.8	531.7
52.5°	3525.6	3027.3	1418.3	791.7	712.7	703.0	665.2	603.5	536.2	493.7	490.6
55°	4118.2	3489.0	1418.3	706.2	640.1	643.4	617.0	559.9	501.4	463.6	459.7
57.5°	4723.1	3956.4	1392.7	627.3	578.5	591.9	575.3	525.2	472.5	433.4	427.0
60°	5280.4	4348.0	1288.6	555.3	523.9	545.1	534.2	491.2	427.0	394.2	389.1
62.5°	5708.6	4568.9	1088.3	498.3	479.0	503.4	497.6	446.3	418.6	405.2	400.7
65°	5923.1	4533.0	832.1	447.5	441.1	479.0	466.8	464.8	443.0	427.6	422.5
67.5°	5791.5	4223.5	603.5	410.3	419.2	456.5	503.4	511.1	470.7	440.4	435.3
70°	5214.3	3663.7	449.5	374.9	391.7	457.2	574.0	534.8	461.7	426.3	420.6
72.5°	3966.6	2732.0	348.6	337.7	355.7	460.3	605.5	523.9	435.9	471.3	467.4
75°	2268.4	1499.9	279.9	292.1	310.8	430.2	589.4	495.7	416.0	432.8	432.8
77.5°	864.9	576.6	231.1	247.2	249.8	375.6	563.8	493.7	396.2	386.5	352.5
80°	299.8	225.4	191.4	196.5	193.2	333.8	540.6	429.6	324.2	290.2	280.5
82.5°	122.6	112.3	151.5	145.1	137.5	259.4	436.6	351.2	265.2	234.3	231.8
85°	53.3	71.2	100.1	87.9	79.6	179.8	349.9	297.2	224.1	193.2	192.6
87.5°	10.9	27.0	42.3	39.8	41.1	120.0	248.5	211.3	158.6	118.8	93.1
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)