

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: P962064

Luminaire Tested: **NAV-SB2B-827-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962064
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-827-U-T3R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

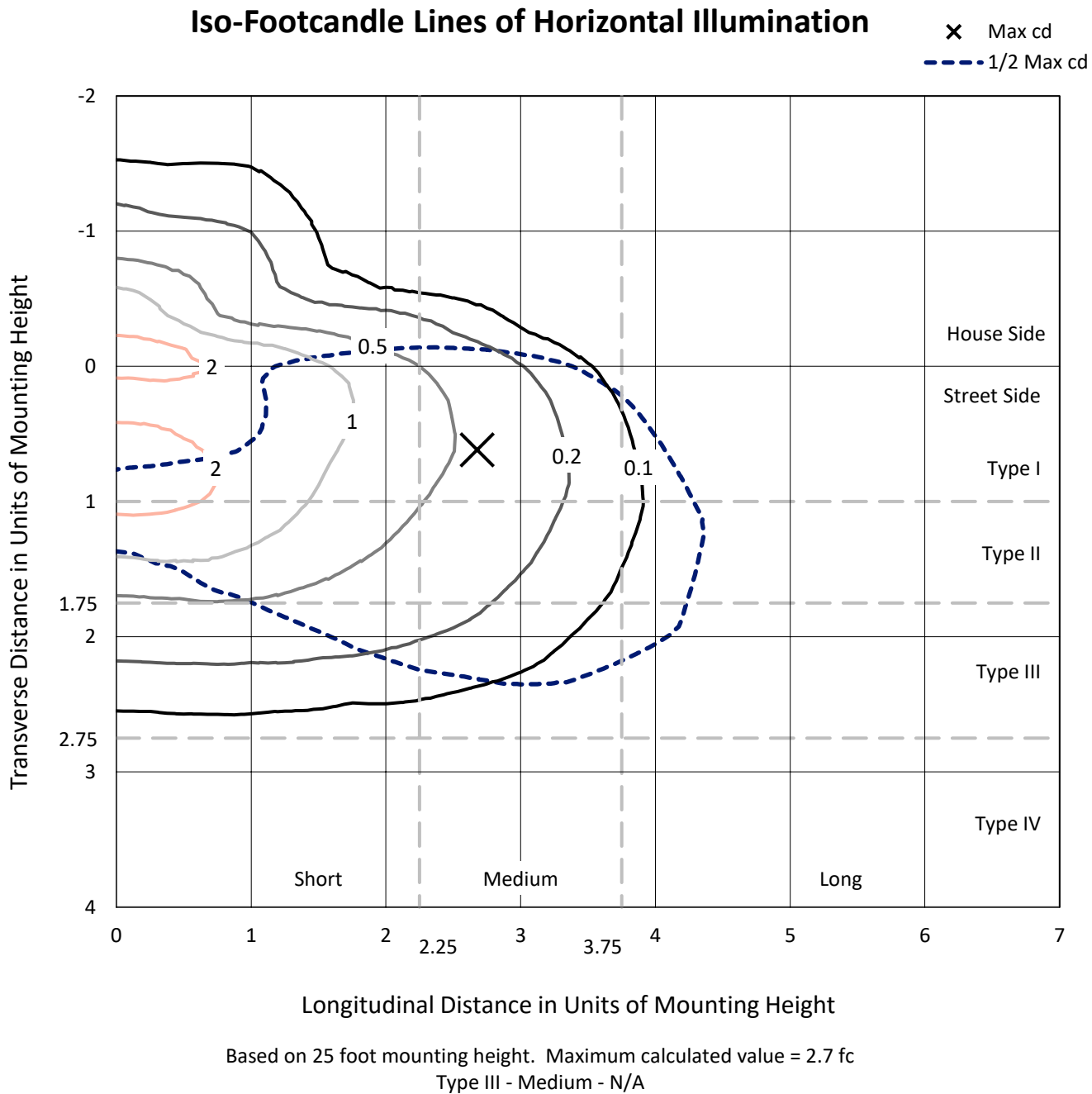
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10304.3 lumens
Efficiency: N/A
Efficacy: 139.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
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

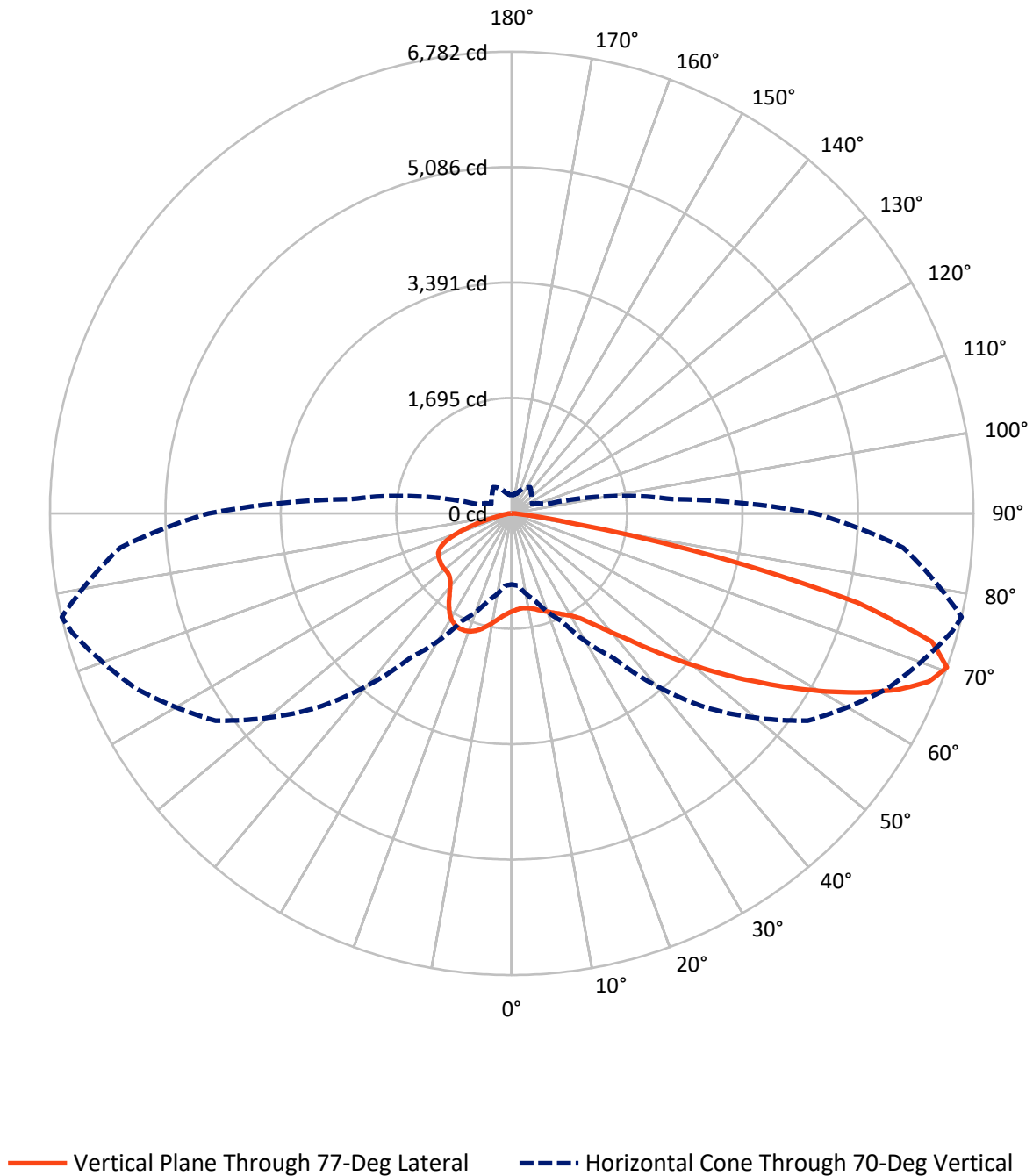


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Luminous Intensity Polar Plot



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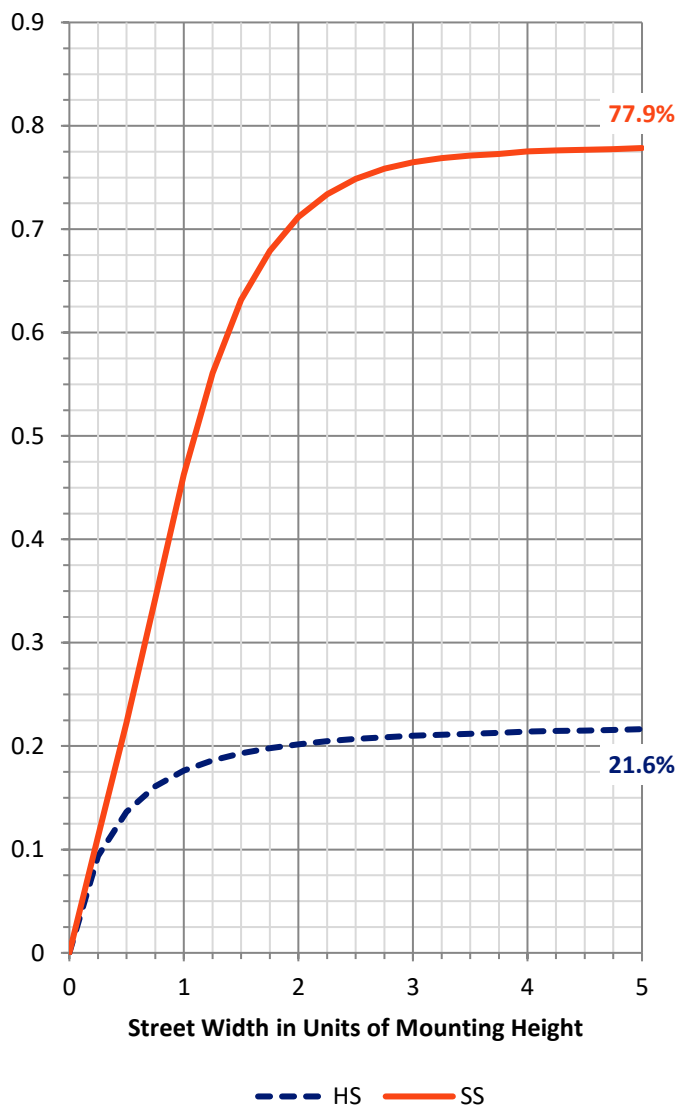
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2256.5	0.0	2256.5
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	8047.8	0.0	8047.8
	% Fixture	78.1	0.0	78.1
Total	Lumens	10304.3	0.0	10304.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.1	1.3
10°-20°	395.7	3.8
20°-30°	676.7	6.6
30°-40°	1088.2	10.6
40°-50°	1698.9	16.5
50°-60°	2269.4	22.0
60°-70°	2418.8	23.5
70°-80°	1489.0	14.5
80°-90°	130.5	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°	10304.3	100.0
0°-180°	10304.3	100.0

Coefficient of Utilization



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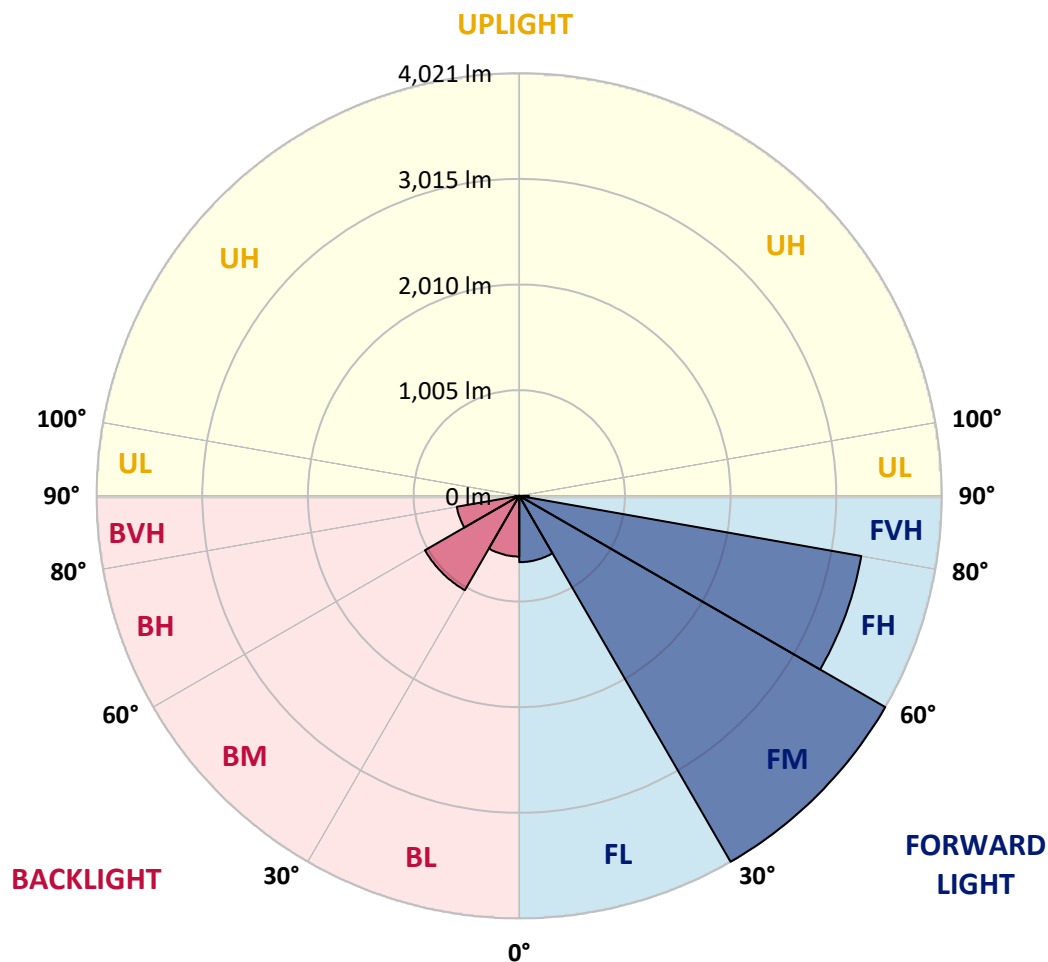
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	631.3	6.1			
FM	(30°-60°)	4020.5	39.0			
FH	(60°-80°)	3304.8	32.1			G2/5000
FVH	(80°-90°)	91.2	0.9			G1/100
BL	(0°-30°)	578.2	5.6	B2/1000		
BM	(30°-60°)	1036.0	10.1	B2/2500		
BH	(60°-80°)	603.1	5.9	B2/1000		G2/1000
BVH	(80°-90°)	39.2	0.4			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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1437.6	1437.6	1437.6	1437.6	1437.6	1437.6	1437.6	1437.6	1437.6	1437.6	1437.6
2.5°	1325.1	1324.6	1331.5	1333.6	1346.2	1355.3	1372.1	1390.0	1413.3	1415.9	1430.2
5°	1248.7	1248.7	1256.5	1265.0	1281.4	1299.3	1325.1	1356.3	1396.4	1402.7	1438.1
7.5°	1183.7	1188.0	1194.7	1211.1	1230.1	1256.0	1295.6	1339.9	1392.7	1402.7	1459.7
10°	1131.5	1136.2	1144.6	1157.8	1186.3	1222.2	1274.0	1331.0	1401.7	1417.5	1491.4
12.5°	1115.1	1119.8	1124.6	1134.7	1161.0	1203.2	1265.0	1335.2	1423.3	1439.1	1534.6
15°	1153.1	1158.9	1155.2	1152.6	1166.2	1204.8	1269.2	1350.4	1450.2	1472.9	1587.9
17.5°	1240.7	1242.8	1234.4	1209.6	1207.4	1228.1	1289.2	1371.6	1484.0	1508.8	1641.7
20°	1382.1	1378.4	1361.0	1311.9	1284.0	1279.7	1323.6	1403.2	1518.8	1545.2	1699.9
22.5°	1574.2	1570.0	1535.1	1457.6	1395.3	1354.1	1373.2	1444.4	1557.9	1587.4	1756.3
25°	1813.8	1808.0	1756.8	1651.3	1554.7	1452.8	1440.7	1498.8	1605.9	1633.3	1815.4
27.5°	2093.6	2088.7	2033.4	1894.0	1754.7	1587.9	1524.6	1562.6	1656.0	1687.2	1881.9
30°	2394.3	2408.0	2309.9	2160.0	1983.8	1764.2	1637.5	1641.2	1721.0	1749.0	1962.7
32.5°	2747.9	2771.7	2653.4	2463.5	2222.8	1955.8	1780.0	1751.0	1815.4	1838.6	2064.5
35°	3098.4	3125.2	3027.1	2817.0	2540.0	2181.6	1928.8	1877.2	1941.0	1966.4	2199.5
37.5°	3401.3	3437.1	3386.5	3203.8	2879.3	2454.0	2123.1	2025.4	2095.6	2127.3	2381.2
40°	3640.3	3695.2	3691.5	3577.6	3279.4	2784.3	2369.5	2208.6	2287.7	2322.0	2601.2
42.5°	3834.5	3882.0	3923.2	3917.3	3696.8	3159.6	2659.3	2446.6	2506.7	2546.3	2848.7
45°	3968.6	4019.2	4107.9	4203.4	4098.4	3561.2	2991.2	2729.0	2783.8	2843.5	3143.7
47.5°	4088.3	4145.9	4260.9	4412.4	4439.3	3964.3	3354.8	3057.7	3107.8	3169.6	3439.8
50°	4098.9	4148.5	4326.9	4541.7	4681.5	4351.7	3745.3	3426.6	3473.5	3539.5	3756.9
52.5°	3844.1	3922.2	4233.5	4538.0	4792.9	4675.7	4133.2	3810.2	3863.0	3942.2	4085.1
55°	2983.8	3098.4	3959.6	4396.5	4753.3	4885.3	4502.1	4218.2	4285.7	4368.5	4415.6
57.5°	2570.1	2620.2	3143.2	4139.1	4572.8	4939.6	4813.5	4630.3	4739.1	4829.8	4764.9
60°	2309.9	2351.6	2660.8	3738.5	4335.3	4853.6	5054.1	5014.5	5202.4	5310.6	5122.2
62.5°	2031.2	2070.8	2352.1	3121.5	4031.3	4710.6	5206.1	5369.2	5677.4	5795.6	5458.8
65°	1754.7	1788.5	2058.2	2622.9	3645.1	4567.5	5284.7	5675.7	6117.0	6239.4	5738.6
67.5°	1446.5	1474.5	1729.4	2212.8	3175.3	4371.7	5323.7	5916.9	6499.5	6604.6	5876.8
70°	1043.9	1065.5	1328.8	1750.0	2585.9	4035.0	5308.0	6088.0	6698.0	6781.9	5772.4
72.5°	493.4	512.9	822.3	1136.2	1826.4	3379.6	4987.6	5952.3	6496.4	6454.7	5132.8
75°	263.3	280.2	472.3	623.3	964.7	2316.7	4081.4	5127.5	5455.2	5252.5	3793.3
77.5°	178.4	191.6	292.3	374.1	440.6	1099.8	2623.4	3550.1	3415.5	3080.9	1899.8
80°	141.4	155.2	239.5	253.3	213.2	397.4	1083.9	1643.4	1180.5	944.1	540.4
82.5°	108.8	124.0	201.6	183.7	116.1	163.1	315.6	519.8	302.4	230.1	130.9
85°	66.5	82.8	158.4	117.2	65.4	74.4	107.1	144.6	92.4	77.1	46.9
87.5°	33.8	47.5	80.3	42.7	29.5	17.4	28.5	28.5	24.3	21.1	12.1
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°	1437.6	1437.6	1437.6	1437.6	1437.6	1437.6	1437.6	1437.6	1437.6	1437.6	1437.6
2.5°	1442.8	1453.3	1471.3	1488.2	1501.4	1514.0	1526.7	1533.6	1535.7	1544.2	1548.9
5°	1459.7	1479.3	1514.0	1546.8	1567.3	1580.0	1589.1	1594.3	1595.3	1598.0	1602.2
7.5°	1490.9	1522.0	1570.5	1603.3	1618.6	1617.6	1613.8	1600.6	1595.3	1590.6	1591.6
10°	1534.6	1575.8	1635.5	1658.1	1648.6	1623.3	1590.6	1552.1	1534.1	1516.7	1511.5
12.5°	1589.1	1641.2	1699.9	1698.7	1651.8	1586.9	1511.0	1451.8	1414.3	1387.4	1381.1
15°	1655.0	1715.1	1760.0	1724.2	1621.2	1504.6	1393.2	1316.2	1282.4	1252.9	1249.7
17.5°	1723.0	1787.4	1808.0	1716.2	1544.2	1382.6	1256.5	1195.9	1162.6	1146.8	1151.5
20°	1789.5	1853.4	1836.5	1670.9	1427.0	1244.4	1132.0	1098.7	1091.9	1095.6	1094.0
22.5°	1859.8	1916.7	1842.3	1583.2	1277.7	1103.0	1041.2	1042.3	1057.6	1068.7	1071.3
25°	1931.5	1970.0	1827.1	1456.5	1117.2	999.0	983.7	1000.6	1030.6	1052.3	1058.1
27.5°	2000.6	2017.5	1793.7	1299.8	979.5	924.6	927.2	962.1	1007.5	1037.5	1044.9
30°	2078.7	2059.7	1729.9	1123.5	884.0	860.7	882.9	923.5	968.9	995.8	1002.1
32.5°	2166.8	2096.1	1628.6	960.4	816.4	809.5	845.9	872.4	892.4	900.4	904.6
35°	2276.6	2147.4	1498.8	845.9	755.7	772.0	806.9	793.8	785.8	781.6	785.8
37.5°	2419.1	2216.5	1346.7	771.5	706.6	745.2	759.4	718.2	687.2	671.8	675.5
40°	2590.7	2317.8	1200.6	714.0	675.5	721.9	697.1	647.5	607.9	586.3	587.9
42.5°	2781.1	2423.9	1077.6	670.8	658.0	702.9	651.2	592.1	528.3	521.4	528.3
45°	2981.2	2533.1	993.7	637.6	649.6	686.5	624.8	529.3	483.9	511.9	526.6
47.5°	3181.2	2633.4	943.1	612.7	645.4	668.1	601.6	494.5	462.3	503.0	521.9
50°	3403.9	2723.1	920.3	594.7	640.6	660.7	566.8	485.5	439.6	466.5	486.6
52.5°	3625.0	2792.8	903.4	576.8	633.8	654.9	549.9	475.0	412.2	413.8	424.9
55°	3845.6	2838.1	885.0	553.1	618.5	642.3	548.3	463.3	391.5	384.2	389.5
57.5°	4080.9	2864.1	862.3	526.6	592.1	610.1	546.7	454.4	385.2	373.1	374.7
60°	4320.6	2902.0	832.8	494.5	556.8	571.5	543.0	451.2	381.5	361.0	362.5
62.5°	4535.3	2915.2	797.4	463.9	511.4	533.5	535.2	448.5	371.6	336.2	336.2
65°	4676.3	2858.2	735.6	429.1	462.3	494.5	519.8	439.6	353.6	318.3	318.3
67.5°	4670.4	2695.6	639.1	384.2	414.8	451.2	497.6	424.2	331.9	296.0	297.7
70°	4453.0	2374.8	516.7	331.9	362.5	404.8	469.1	401.6	306.1	271.8	274.9
72.5°	3819.3	1858.6	375.3	270.7	301.9	356.7	432.2	374.1	279.7	250.1	248.6
75°	2728.3	1176.3	254.4	208.0	234.8	302.4	386.3	341.9	255.4	251.2	237.0
77.5°	1393.8	562.0	168.3	152.0	163.6	238.5	324.5	305.6	259.1	207.4	184.7
80°	453.4	207.4	106.1	103.4	108.8	158.9	251.2	250.7	196.3	140.9	124.5
82.5°	144.6	89.2	69.1	66.5	63.9	99.7	175.2	198.4	132.4	89.2	88.7
85°	57.5	53.3	40.6	37.5	27.0	46.9	91.8	131.9	98.7	64.4	66.0
87.5°	21.1	21.1	11.1	7.9	5.8	15.8	24.8	39.6	56.5	33.2	32.7
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)