

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: P960947

Luminaire Tested: **NAV-SB1D-750-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960947
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-750-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 5000K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE III ROADWAY
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9190.1 lumens
Efficiency: N/A
Efficacy: 115.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - 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

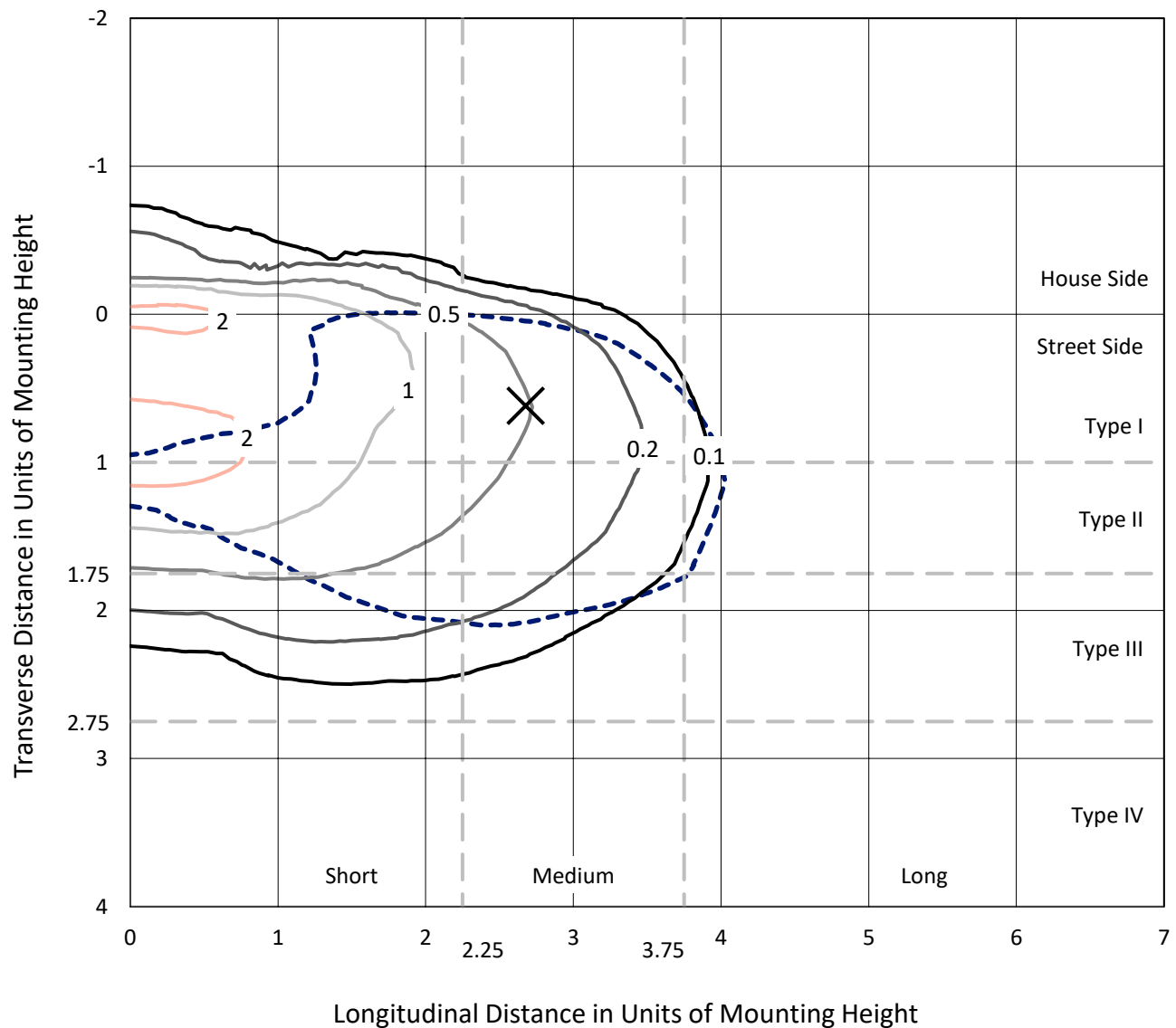


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Iso-Footcandle Lines of Horizontal Illumination

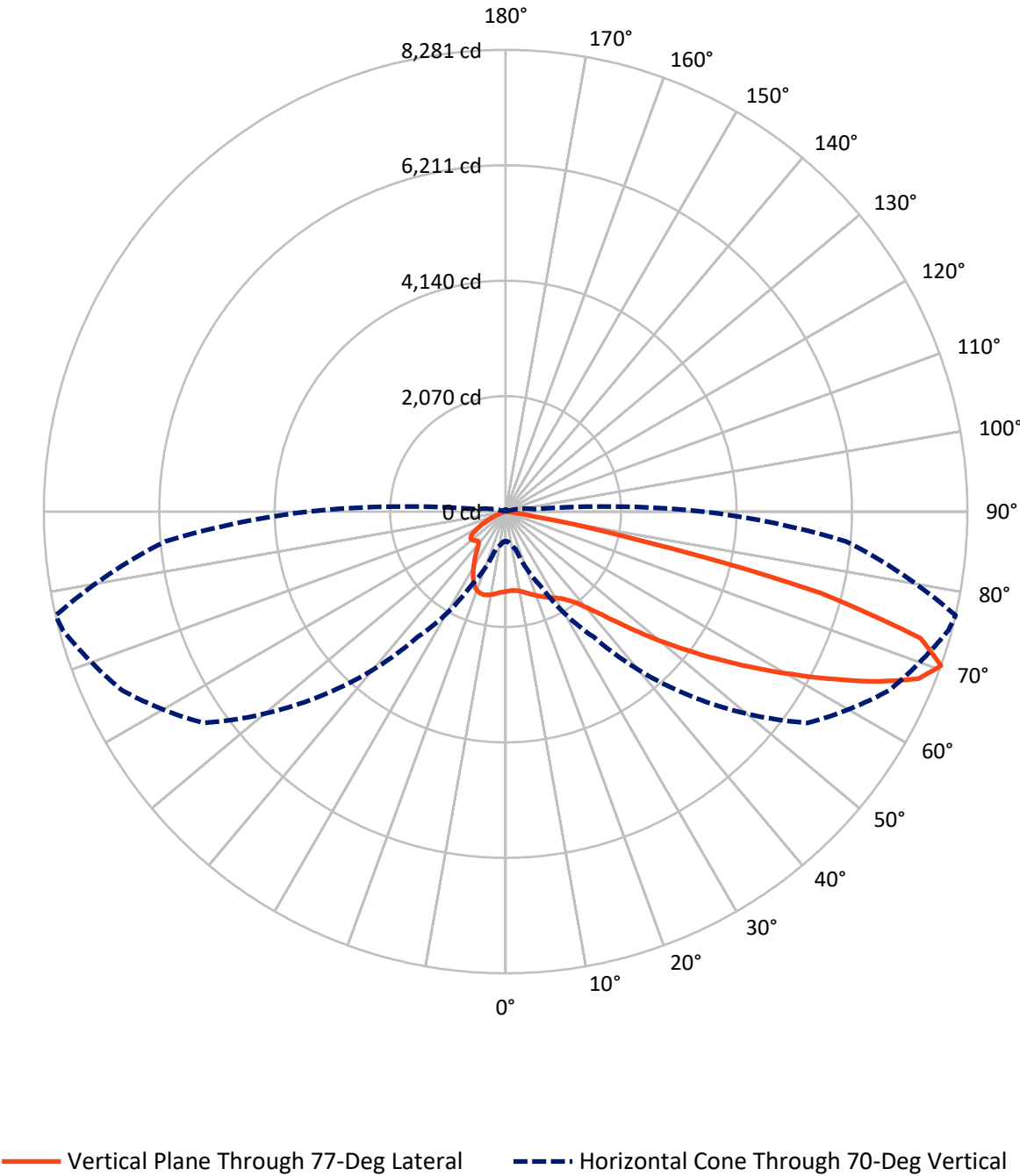
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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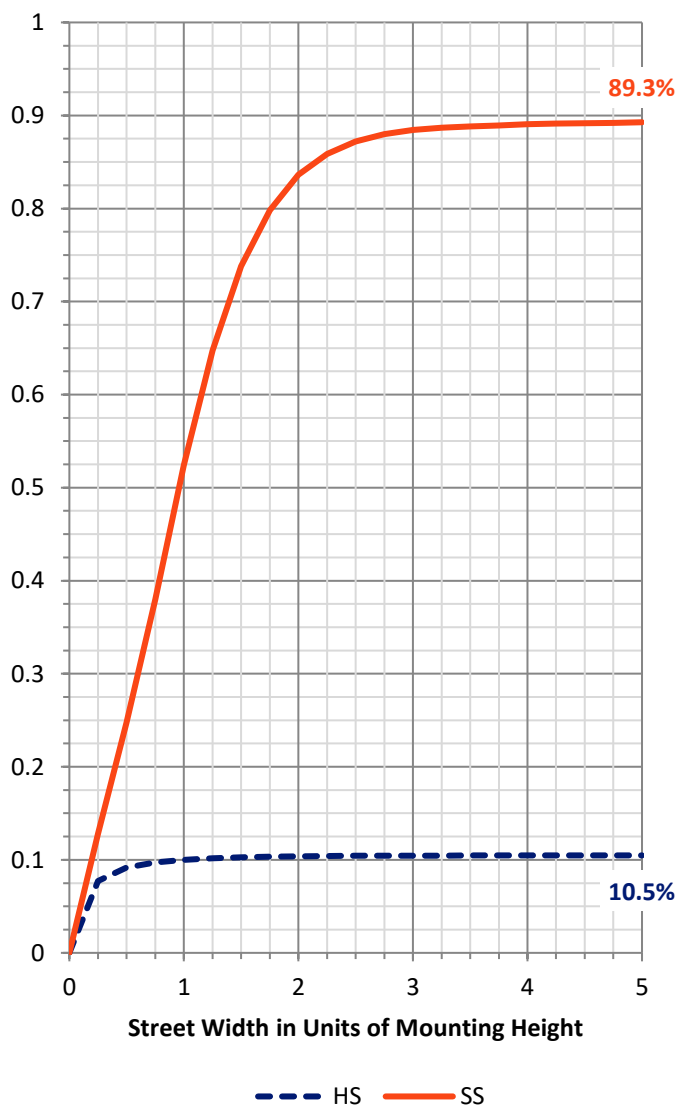
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	968.8	0.0	968.8
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	8221.4	0.0	8221.4
	% Fixture	89.5	0.0	89.5
Total	Lumens	9190.1	0.0	9190.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.5	1.3
10°-20°	293.3	3.2
20°-30°	453.6	4.9
30°-40°	823.1	9.0
40°-50°	1553.7	16.9
50°-60°	2245.0	24.4
60°-70°	2389.8	26.0
70°-80°	1266.4	13.8
80°-90°	41.6	0.5
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°	9190.1	100.0
0°-180°	9190.1	100.0

Coefficient of Utilization



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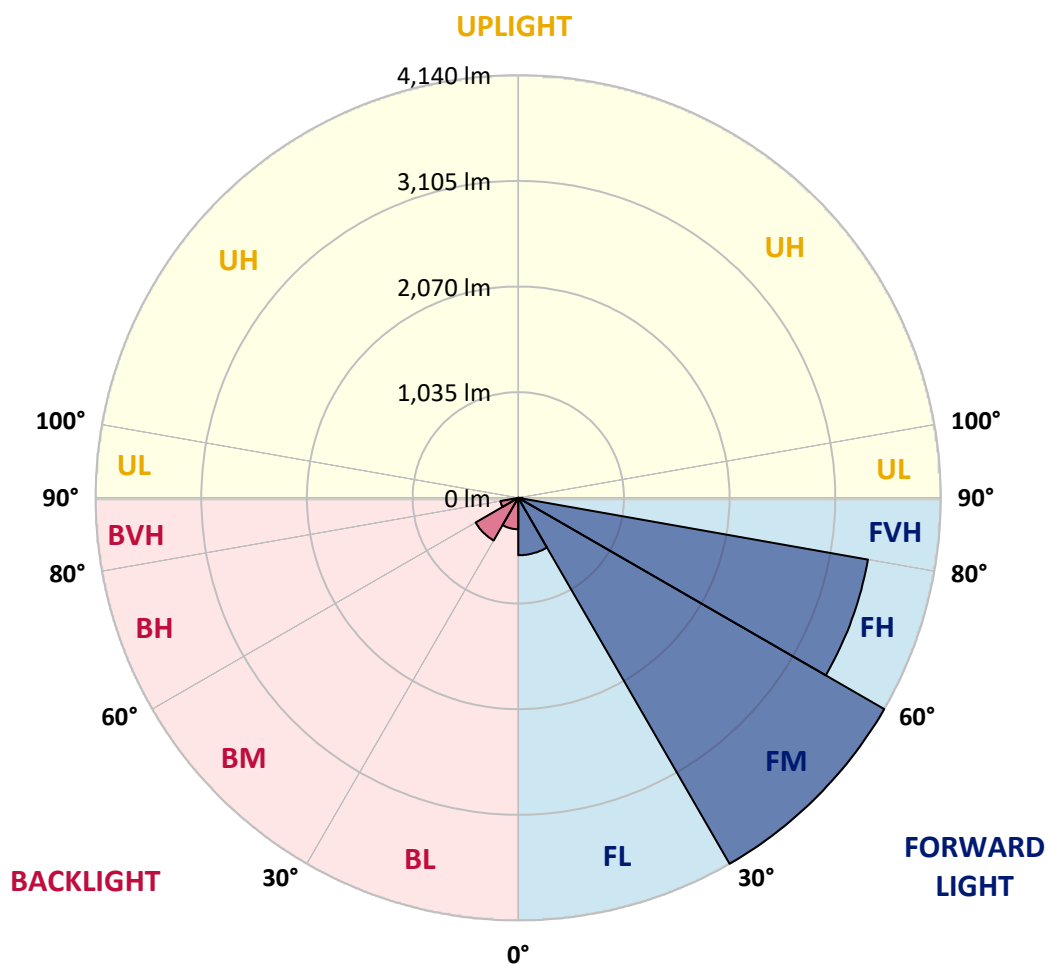
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	562.7	6.1			
FM	(30°-60°)	4139.7	45.0			
FH	(60°-80°)	3478.6	37.9			G2/5000
FVH	(80°-90°)	40.5	0.4			G1/100
BL	(0°-30°)	307.8	3.3	B1/500		
BM	(30°-60°)	482.3	5.2	B1/1000		
BH	(60°-80°)	177.6	1.9	B1/500		G1/500
BVH	(80°-90°)	1.1	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1433.5	1433.5	1433.5	1433.5	1433.5	1433.5	1433.5	1433.5	1433.5	1433.5	1433.5
2.5°	1345.8	1358.0	1356.3	1364.5	1367.4	1378.9	1390.5	1406.2	1423.6	1423.0	1434.7
5°	1269.9	1282.1	1284.9	1295.9	1309.8	1327.9	1351.7	1383.0	1415.5	1420.8	1443.9
7.5°	1179.9	1192.7	1200.2	1222.2	1247.7	1284.9	1323.8	1369.7	1423.6	1431.2	1475.9
10°	1089.9	1101.6	1111.4	1142.8	1183.4	1238.5	1301.8	1368.0	1440.4	1451.5	1514.7
12.5°	1034.2	1045.2	1056.3	1083.5	1134.1	1201.4	1287.2	1376.1	1468.3	1484.0	1567.5
15°	1014.4	1024.4	1033.1	1057.4	1104.4	1181.0	1284.3	1392.9	1503.7	1524.6	1631.4
17.5°	1017.4	1022.6	1028.4	1046.9	1092.9	1171.8	1289.6	1421.9	1545.5	1564.0	1695.2
20°	1034.2	1037.1	1037.7	1050.4	1091.1	1170.6	1300.0	1449.8	1585.0	1610.0	1758.5
22.5°	1055.6	1056.9	1055.6	1064.4	1102.1	1179.3	1313.9	1483.4	1629.0	1652.3	1822.3
25°	1156.1	1134.1	1106.2	1089.4	1120.6	1196.2	1334.9	1528.7	1677.2	1699.9	1884.5
27.5°	1467.7	1404.5	1304.6	1192.7	1159.0	1220.5	1363.9	1574.5	1726.0	1746.3	1951.2
30°	1973.8	1890.8	1721.4	1468.9	1282.1	1271.6	1401.6	1620.4	1777.7	1799.7	2022.5
32.5°	2481.0	2460.7	2265.1	1915.8	1558.8	1385.3	1464.2	1682.4	1846.1	1863.6	2118.9
35°	2994.1	2952.9	2792.7	2447.4	1985.4	1616.9	1568.8	1763.7	1936.1	1955.8	2259.3
37.5°	3387.0	3362.0	3262.8	2978.4	2491.5	1974.4	1747.5	1889.7	2066.7	2088.7	2439.3
40°	3734.1	3722.5	3688.8	3501.3	3057.4	2442.2	2025.5	2084.6	2247.7	2273.9	2659.8
42.5°	4006.8	4034.1	4053.3	4001.0	3640.6	2976.1	2399.2	2358.6	2500.2	2526.9	2940.7
45°	4285.9	4295.3	4372.4	4447.9	4219.8	3534.4	2820.6	2679.6	2814.1	2847.2	3277.3
47.5°	4465.3	4502.4	4638.2	4771.2	4706.7	4088.1	3273.2	3058.5	3178.1	3240.1	3654.5
50°	4478.6	4548.8	4735.8	4967.4	5061.3	4615.1	3765.4	3490.3	3617.4	3685.9	4057.4
52.5°	4256.4	4365.5	4655.1	4994.0	5252.8	5061.3	4274.4	3922.1	4085.1	4174.5	4475.2
55°	3263.4	3406.2	4351.5	4849.0	5260.4	5399.7	4770.0	4371.8	4606.3	4707.3	4926.7
57.5°	2843.2	2915.2	3421.2	4597.0	5120.6	5536.1	5218.1	4800.2	5173.4	5298.7	5353.3
60°	2365.6	2460.2	2869.3	4185.0	4930.8	5549.5	5613.8	5352.7	5788.0	5929.0	5744.4
62.5°	1607.6	1710.3	2117.1	3477.0	4671.3	5543.1	5938.2	5921.4	6471.0	6622.5	6075.8
65°	995.9	1060.4	1328.5	2839.1	4308.6	5550.0	6277.8	6612.1	7191.9	7345.7	6332.3
67.5°	787.0	816.6	956.4	2179.9	3683.5	5393.3	6616.7	7261.5	7870.3	7992.2	6410.7
70°	528.7	546.7	695.9	1461.3	2740.4	4670.2	6610.3	7587.7	8219.7	8280.7	6125.2
72.5°	278.6	292.5	406.8	676.7	1655.2	3319.7	5572.1	7197.7	7872.0	7780.4	5235.5
75°	139.3	162.5	274.0	343.6	706.8	1851.4	3460.1	5674.8	6195.9	5840.8	3359.1
77.5°	105.6	127.7	226.3	226.3	246.1	623.3	1465.4	3095.1	2854.8	2377.2	986.0
80°	67.3	87.0	197.9	171.2	102.7	158.5	381.9	867.0	606.5	461.4	179.4
82.5°	39.5	56.9	164.8	113.2	57.5	58.6	107.9	184.6	157.2	122.5	55.1
85°	15.7	37.1	113.2	44.7	22.7	14.6	32.5	39.5	32.5	24.4	13.9
87.5°	0.0	8.7	19.8	0.0	1.7	1.1	2.4	2.9	2.9	2.4	4.6
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°	1433.5	1433.5	1433.5	1433.5	1433.5	1433.5	1433.5	1433.5	1433.5	1433.5	1433.5
2.5°	1439.9	1441.0	1444.5	1445.1	1436.9	1426.5	1422.5	1420.8	1413.8	1413.2	1414.3
5°	1457.2	1462.5	1457.2	1442.2	1406.2	1355.8	1317.4	1286.1	1257.7	1249.0	1243.7
7.5°	1492.1	1497.3	1481.6	1422.5	1331.9	1231.5	1141.0	1077.2	1019.7	998.2	989.5
10°	1542.0	1549.0	1499.7	1380.1	1220.0	1058.6	905.4	797.4	713.3	679.1	664.5
12.5°	1604.7	1607.6	1509.5	1315.7	1074.3	843.9	626.8	511.3	436.4	408.6	399.9
15°	1673.7	1669.7	1510.6	1228.1	875.8	596.7	409.2	336.0	305.9	296.5	296.5
17.5°	1746.3	1729.5	1487.5	1101.6	658.2	408.0	303.5	286.1	280.8	278.6	278.0
20°	1817.7	1780.0	1445.1	936.1	472.4	304.7	275.6	270.5	267.5	266.4	265.3
22.5°	1882.7	1818.2	1372.6	744.0	343.0	269.3	260.6	255.9	250.7	248.4	247.8
25°	1946.0	1840.3	1270.4	564.7	274.5	251.8	244.9	236.2	229.3	226.3	225.2
27.5°	2007.5	1854.2	1142.8	417.9	244.9	235.6	222.8	210.6	205.4	204.3	203.2
30°	2073.1	1858.9	997.6	311.7	226.9	215.4	196.7	182.9	179.9	180.5	180.5
32.5°	2153.1	1865.9	851.4	255.3	211.9	191.0	168.9	154.4	152.0	154.4	153.8
35°	2249.0	1879.7	710.3	235.0	198.4	165.9	142.2	130.0	127.7	129.5	128.8
37.5°	2378.9	1902.4	578.6	231.0	187.5	145.1	119.5	109.7	109.7	110.3	109.7
40°	2551.8	1962.8	460.8	228.1	181.6	129.5	101.0	97.0	98.7	99.8	99.8
42.5°	2762.6	2091.0	381.3	224.6	175.3	122.5	91.7	90.0	92.9	94.0	94.0
45°	2998.7	2253.6	353.4	218.8	169.4	127.1	87.6	85.3	88.8	89.4	90.0
47.5°	3243.1	2412.5	349.9	212.4	163.7	134.1	86.5	81.3	85.3	85.9	86.5
50°	3490.3	2516.5	353.4	202.5	154.4	134.1	87.0	77.2	80.7	82.4	83.0
52.5°	3739.3	2564.0	351.2	181.1	138.2	126.0	87.0	73.7	77.2	78.3	78.3
55°	3980.7	2554.7	315.7	149.1	117.3	111.4	84.8	70.8	73.1	73.7	73.7
57.5°	4171.6	2425.4	250.1	116.0	95.2	92.9	77.2	67.3	69.1	68.5	68.5
60°	4271.5	2140.9	178.8	89.4	74.8	73.1	67.9	62.7	63.9	61.0	60.4
62.5°	4272.6	1764.8	119.5	70.8	59.8	58.0	58.0	56.3	55.1	49.3	47.6
65°	4181.5	1347.6	79.5	56.3	48.2	45.3	48.8	48.2	44.1	36.0	34.8
67.5°	3975.0	883.3	60.4	44.1	37.1	35.4	38.8	40.6	37.7	30.1	29.6
70°	3550.1	514.2	49.9	34.2	27.9	26.1	31.4	34.8	31.4	24.4	23.2
72.5°	2948.8	277.4	40.6	25.5	19.2	17.4	24.9	28.4	24.9	18.0	17.4
75°	1913.5	148.5	31.4	16.8	9.8	11.1	18.6	20.9	17.4	11.6	10.5
77.5°	642.5	65.6	19.8	8.1	4.6	4.6	11.1	12.8	8.1	4.1	3.5
80°	143.4	27.3	8.1	3.5	1.7	1.7	2.4	2.4	1.1	0.0	0.0
82.5°	47.0	11.1	3.5	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	18.0	4.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)