

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: P961443

Luminaire Tested: **NAV-SB2A-740-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961443
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-SB2A-740-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8098.5 lumens
Efficiency: N/A
Efficacy: 141.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G2

Input Watts (W): 57.3
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



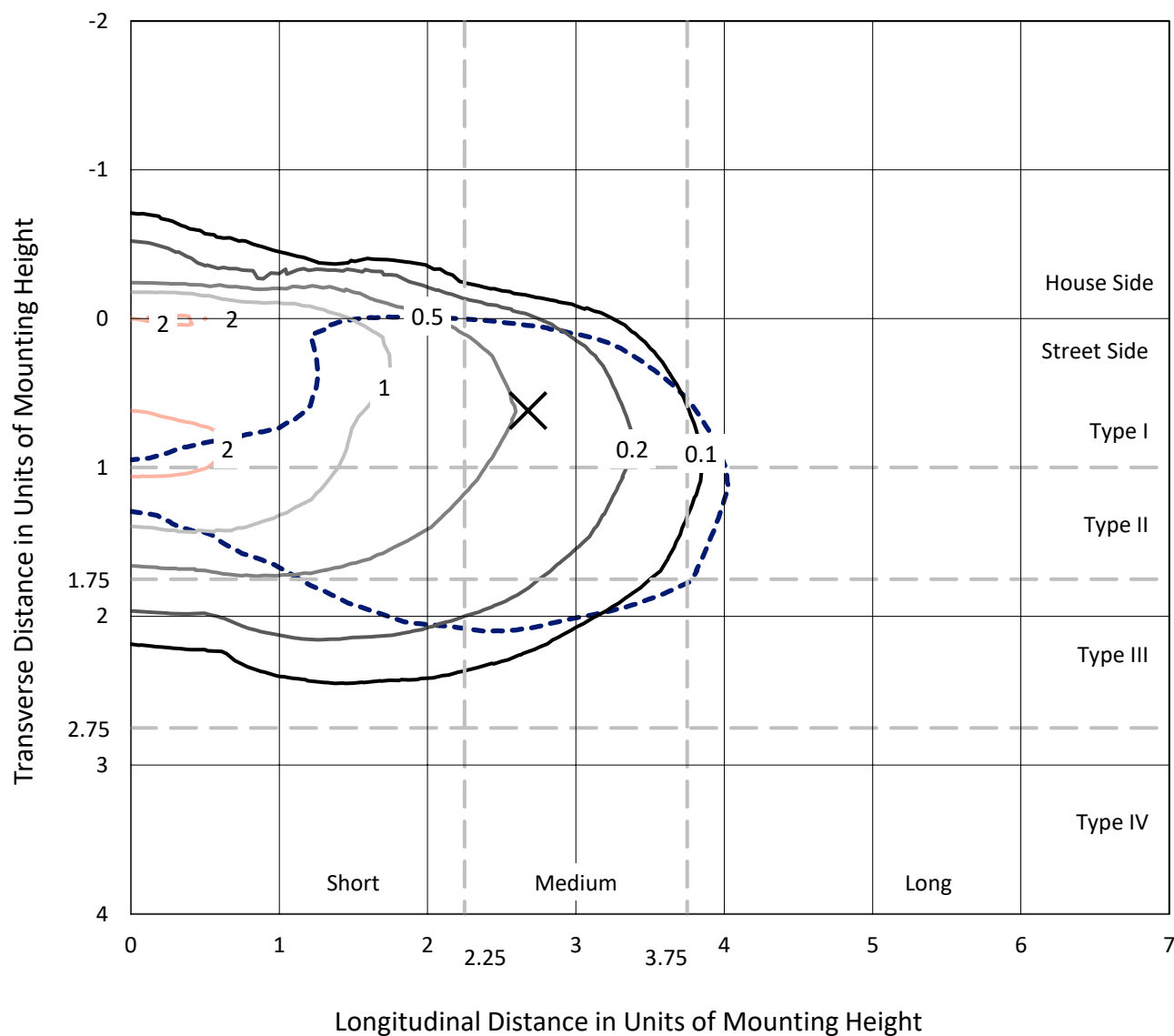
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

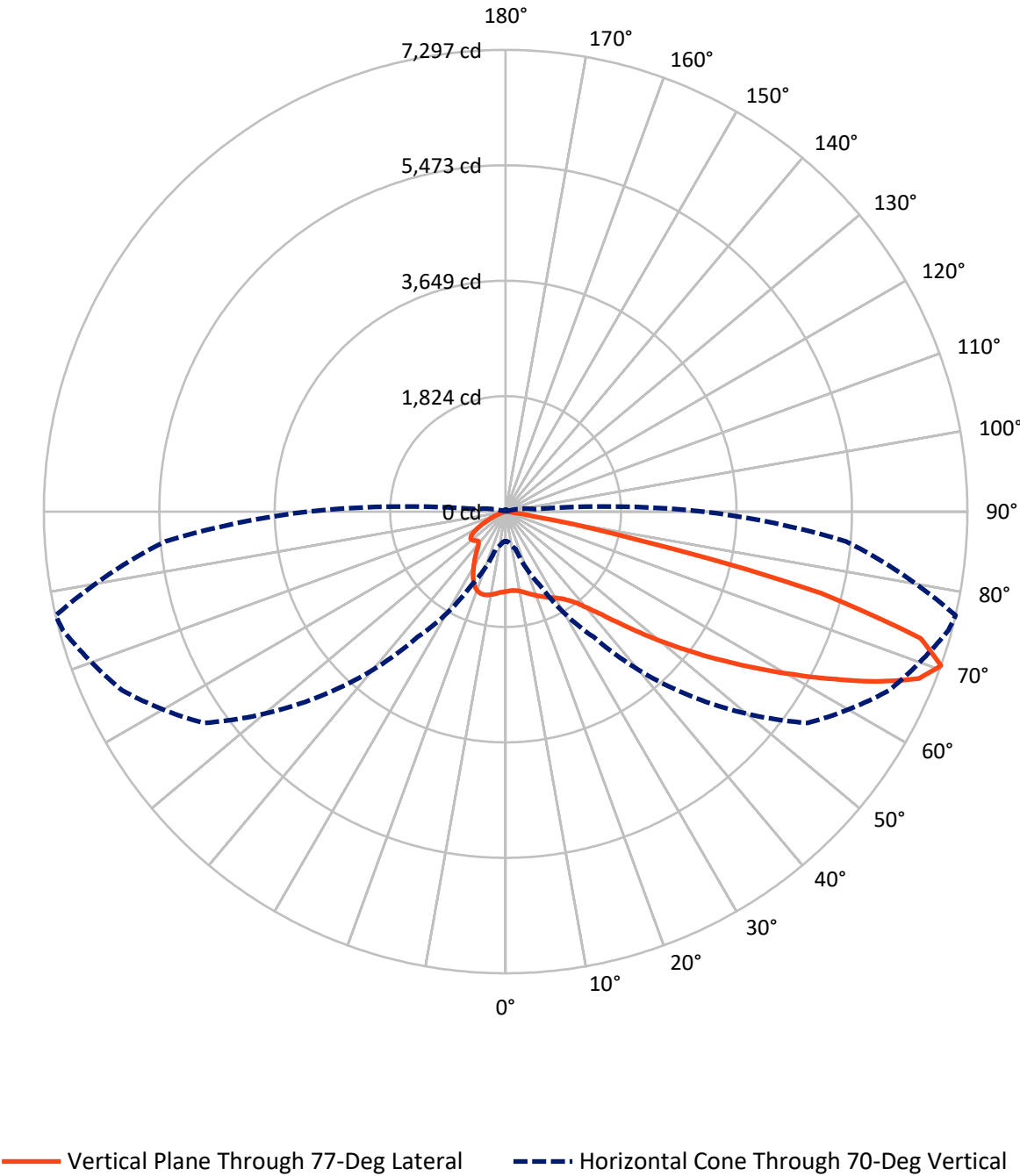
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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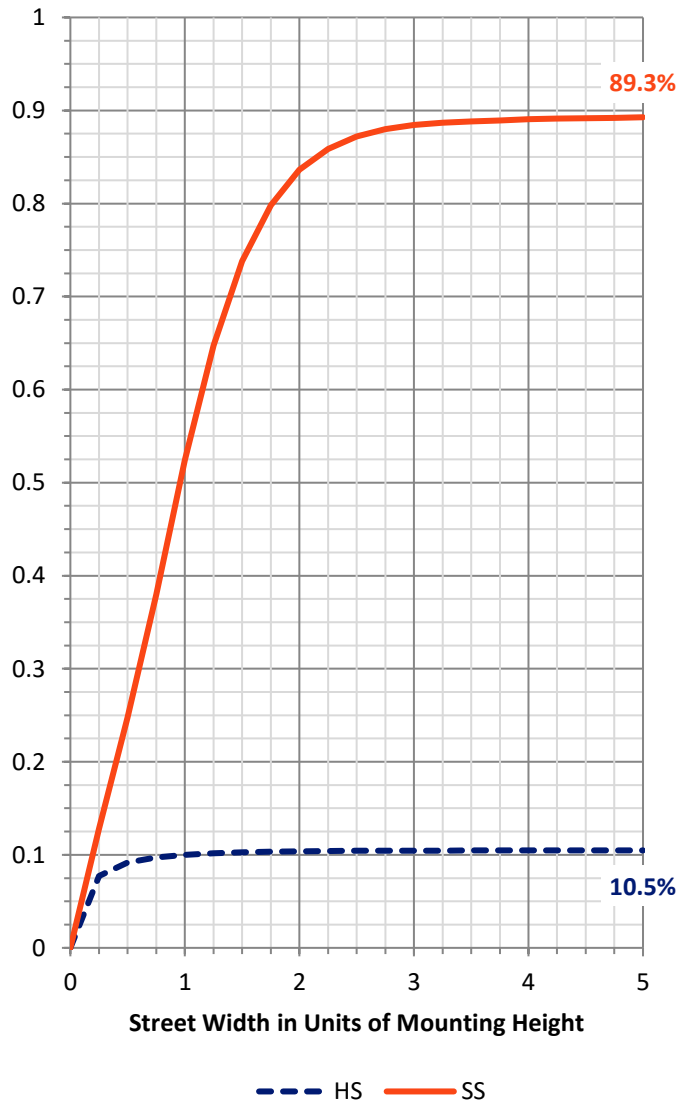
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	853.7	0.0	853.7
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	7244.8	0.0	7244.8
	% Fixture	89.5	0.0	89.5
Total	Lumens	8098.5	0.0	8098.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.9	1.3
10°-20°	258.4	3.2
20°-30°	399.7	4.9
30°-40°	725.4	9.0
40°-50°	1369.2	16.9
50°-60°	1978.4	24.4
60°-70°	2105.9	26.0
70°-80°	1116.0	13.8
80°-90°	36.6	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°	8098.5	100.0
0°-180°	8098.5	100.0

Coefficient of Utilization



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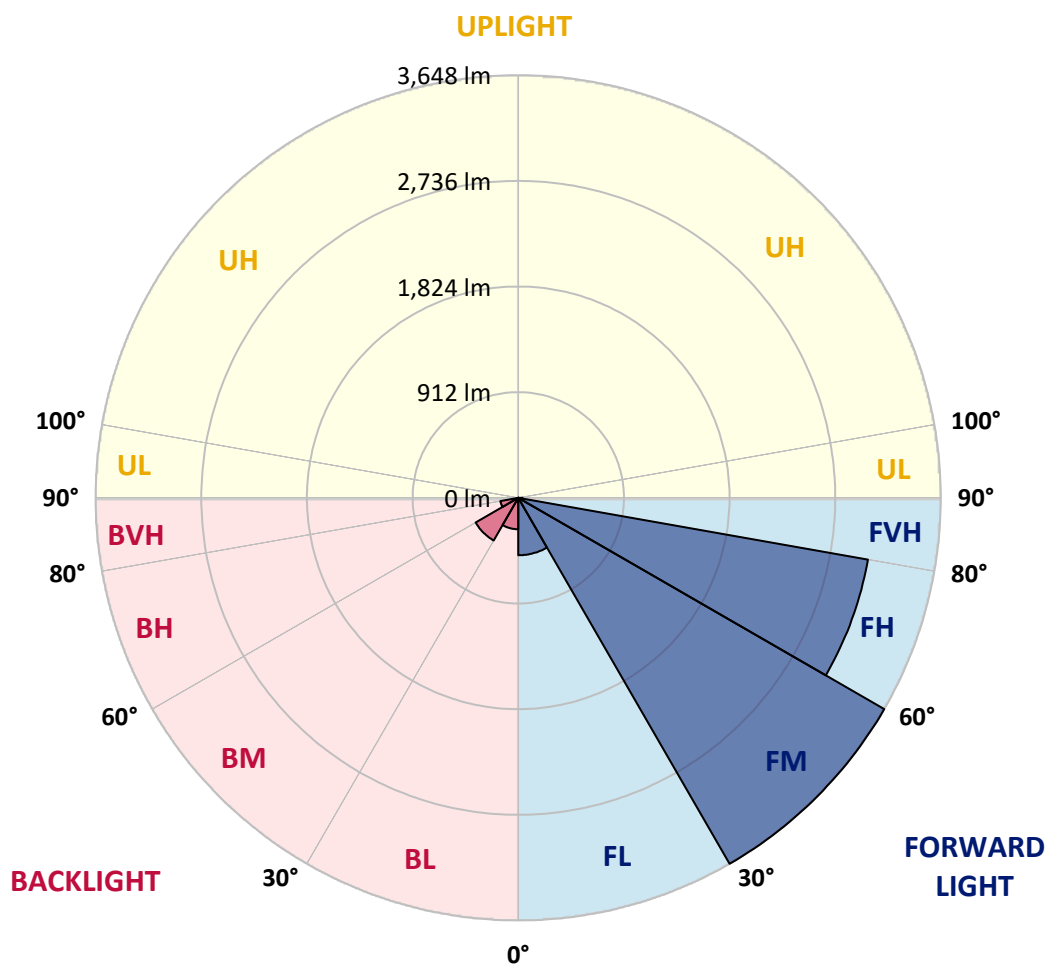
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	495.8	6.1			
FM	(30°-60°)	3647.9	45.0			
FH	(60°-80°)	3065.4	37.9			G2/5000
FVH	(80°-90°)	35.7	0.4			G1/100
BL	(0°-30°)	271.2	3.3	B1/500		
BM	(30°-60°)	425.0	5.2	B1/1000		
BH	(60°-80°)	156.5	1.9	B1/500		G1/500
BVH	(80°-90°)	1.0	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°	1263.2	1263.2	1263.2	1263.2	1263.2	1263.2	1263.2	1263.2	1263.2	1263.2	1263.2
2.5°	1186.0	1196.7	1195.3	1202.3	1204.9	1215.1	1225.4	1239.2	1254.5	1254.0	1264.2
5°	1119.0	1129.8	1132.3	1142.1	1154.3	1170.1	1191.2	1218.7	1247.3	1251.9	1272.4
7.5°	1039.8	1050.9	1057.6	1077.1	1099.5	1132.3	1166.6	1206.9	1254.5	1261.2	1300.5
10°	960.4	970.7	979.4	1007.0	1042.8	1091.4	1147.2	1205.4	1269.4	1279.1	1334.9
12.5°	911.3	921.1	930.8	954.8	999.4	1058.6	1134.4	1212.6	1294.0	1307.7	1381.4
15°	894.0	902.7	910.3	931.8	973.2	1040.8	1131.8	1227.4	1325.1	1343.5	1437.7
17.5°	896.6	901.2	906.2	922.6	963.0	1032.6	1136.4	1253.0	1361.9	1378.3	1493.8
20°	911.3	913.9	914.4	925.7	961.4	1031.6	1145.6	1277.6	1396.7	1418.7	1549.6
22.5°	930.3	931.3	930.3	938.0	971.2	1039.2	1157.8	1307.2	1435.6	1456.0	1605.9
25°	1018.7	999.4	974.8	959.9	987.6	1054.0	1176.3	1347.1	1478.0	1497.9	1660.6
27.5°	1293.4	1237.7	1149.6	1050.9	1021.3	1075.5	1201.8	1387.5	1521.0	1538.8	1719.4
30°	1739.3	1666.2	1516.9	1294.4	1129.8	1120.5	1235.1	1427.9	1566.5	1586.0	1782.4
32.5°	2186.3	2168.5	1996.1	1688.2	1373.7	1220.8	1290.4	1482.7	1626.9	1642.2	1867.2
35°	2638.5	2602.2	2461.0	2156.7	1749.6	1424.9	1382.4	1554.2	1706.1	1723.5	1991.0
37.5°	2984.7	2962.7	2875.2	2624.6	2195.5	1739.8	1539.9	1665.2	1821.2	1840.6	2149.5
40°	3290.6	3280.3	3250.6	3085.5	2694.2	2152.1	1784.8	1837.0	1980.7	2003.8	2343.9
42.5°	3530.9	3554.9	3571.8	3525.8	3208.1	2622.6	2114.3	2078.4	2203.2	2226.7	2591.4
45°	3776.9	3785.0	3853.1	3919.6	3718.6	3114.6	2485.5	2361.3	2479.9	2509.1	2888.0
47.5°	3934.9	3967.7	4087.3	4204.4	4147.7	3602.5	2884.5	2695.2	2800.6	2855.3	3220.4
50°	3946.7	4008.6	4173.3	4377.3	4460.2	4066.9	3318.1	3075.7	3187.7	3248.0	3575.4
52.5°	3750.8	3846.9	4102.2	4400.8	4628.9	4460.2	3766.7	3456.2	3599.9	3678.7	3943.6
55°	2875.7	3001.6	3834.6	4273.0	4635.6	4758.4	4203.4	3852.6	4059.2	4148.2	4341.5
57.5°	2505.5	2568.9	3014.8	4051.0	4512.4	4878.5	4598.3	4230.0	4558.9	4669.3	4717.4
60°	2084.5	2168.0	2528.5	3687.8	4345.1	4890.3	4947.1	4716.8	5100.5	5224.7	5062.1
62.5°	1416.7	1507.2	1865.7	3063.9	4116.5	4884.6	5232.9	5218.1	5702.4	5835.8	5354.1
65°	877.6	934.4	1170.7	2501.9	3796.8	4890.8	5532.1	5826.7	6337.6	6473.1	5580.2
67.5°	693.5	719.6	842.9	1921.0	3246.1	4752.7	5830.8	6399.0	6935.5	7042.9	5649.2
70°	465.9	481.7	613.2	1287.8	2415.0	4115.5	5825.2	6686.4	7243.4	7297.1	5397.5
72.5°	245.5	257.8	358.5	596.3	1458.6	2925.4	4910.2	6342.7	6937.0	6856.2	4613.6
75°	122.7	143.2	241.4	302.8	622.9	1631.5	3049.2	5000.8	5460.0	5147.0	2960.1
77.5°	93.1	112.5	199.5	199.5	216.9	549.3	1291.4	2727.4	2515.7	2094.8	868.9
80°	59.3	76.7	174.4	150.9	90.5	139.6	336.5	764.0	534.4	406.6	158.1
82.5°	34.7	50.1	145.2	99.7	50.6	51.7	95.1	162.7	138.6	107.9	48.6
85°	13.8	32.7	99.7	39.4	20.0	12.8	28.6	34.7	28.6	21.5	12.3
87.5°	0.0	7.7	17.4	0.0	1.5	1.0	2.0	2.6	2.6	2.0	4.1
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°	1263.2	1263.2	1263.2	1263.2	1263.2	1263.2	1263.2	1263.2	1263.2	1263.2	1263.2
2.5°	1268.8	1269.9	1272.9	1273.5	1266.3	1257.1	1253.5	1251.9	1245.8	1245.3	1246.3
5°	1284.2	1288.8	1284.2	1270.9	1239.2	1194.7	1160.9	1133.3	1108.2	1100.5	1096.0
7.5°	1314.9	1319.5	1305.6	1253.5	1173.7	1085.3	1005.4	949.3	898.6	879.7	872.0
10°	1358.8	1365.0	1321.5	1216.2	1075.0	932.9	797.9	702.7	628.5	598.4	585.6
12.5°	1414.1	1416.7	1330.2	1159.4	946.7	743.6	552.4	450.6	384.6	360.1	352.4
15°	1475.0	1471.4	1331.3	1082.2	771.7	525.7	360.6	296.1	269.5	261.4	261.4
17.5°	1538.8	1524.1	1310.8	970.7	579.9	359.6	267.5	252.2	247.5	245.5	245.0
20°	1601.8	1568.6	1273.5	824.9	416.3	268.5	242.9	238.3	235.7	234.7	233.7
22.5°	1659.1	1602.3	1209.5	655.7	302.3	237.3	229.6	225.5	220.9	218.9	218.4
25°	1714.8	1621.8	1119.5	497.6	241.9	221.9	215.9	208.2	202.0	199.5	198.4
27.5°	1769.0	1634.1	1007.0	368.2	215.9	207.7	196.4	185.6	181.0	180.0	179.0
30°	1826.9	1638.1	879.1	274.6	200.0	189.7	173.3	161.1	158.6	159.1	159.1
32.5°	1897.4	1644.2	750.3	225.0	186.7	168.3	148.8	136.0	134.0	136.0	135.5
35°	1981.7	1656.5	626.0	207.2	174.9	146.3	125.3	114.6	112.5	114.1	113.6
37.5°	2096.3	1676.5	509.9	203.6	165.2	127.8	105.4	96.7	96.7	97.2	96.7
40°	2248.7	1729.7	406.1	201.0	160.1	114.1	89.0	85.4	86.9	87.9	87.9
42.5°	2434.4	1842.6	336.0	197.9	154.5	107.9	80.8	79.2	81.8	82.8	82.8
45°	2642.6	1985.8	311.5	192.8	149.3	112.0	77.2	75.1	78.2	78.7	79.2
47.5°	2857.8	2126.0	308.4	187.2	144.2	118.2	76.2	71.6	75.1	75.6	76.2
50°	3075.7	2217.6	311.5	178.5	136.0	118.2	76.7	68.1	71.1	72.7	73.2
52.5°	3295.2	2259.5	309.4	159.6	121.8	111.0	76.7	65.0	68.1	69.1	69.1
55°	3507.9	2251.3	278.2	131.4	103.3	98.2	74.6	62.4	64.5	65.0	65.0
57.5°	3676.2	2137.2	220.4	102.3	83.8	81.8	68.1	59.3	60.9	60.4	60.4
60°	3764.1	1886.6	157.5	78.7	66.0	64.5	59.9	55.2	56.3	53.7	53.2
62.5°	3765.1	1555.2	105.4	62.4	52.7	51.1	51.1	49.6	48.6	43.5	41.9
65°	3684.9	1187.6	70.1	49.6	42.4	39.9	42.9	42.4	38.8	31.7	30.6
67.5°	3502.7	778.4	53.2	38.8	32.7	31.2	34.2	35.8	33.2	26.5	26.0
70°	3128.4	453.2	44.0	30.1	24.5	23.1	27.6	30.6	27.6	21.5	20.5
72.5°	2598.6	244.5	35.8	22.5	16.9	15.4	22.0	25.0	22.0	15.9	15.4
75°	1686.1	130.9	27.6	14.9	8.7	9.7	16.4	18.4	15.4	10.2	9.2
77.5°	566.1	57.8	17.4	7.2	4.1	4.1	9.7	11.3	7.2	3.6	3.1
80°	126.3	24.1	7.2	3.1	1.5	1.5	2.0	2.0	1.0	0.0	0.0
82.5°	41.4	9.7	3.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.9	3.6	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.1	0.5	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)