

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: P961934

Luminaire Tested: **NAV-SB2B-735-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961934
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-735-U-T2R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11756.7 lumens
Efficiency: N/A
Efficacy: 159.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - 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

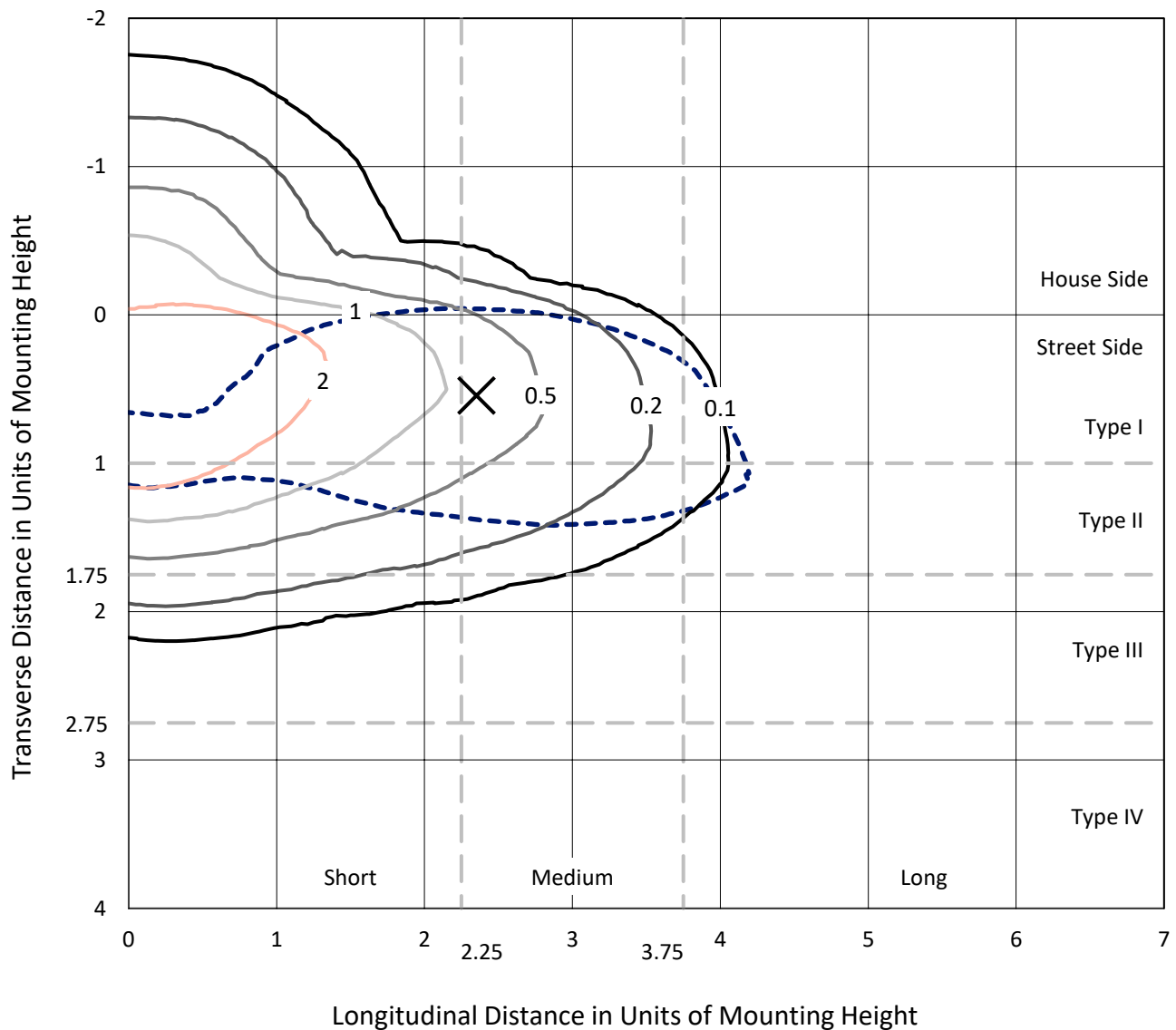


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Iso-Footcandle Lines of Horizontal Illumination

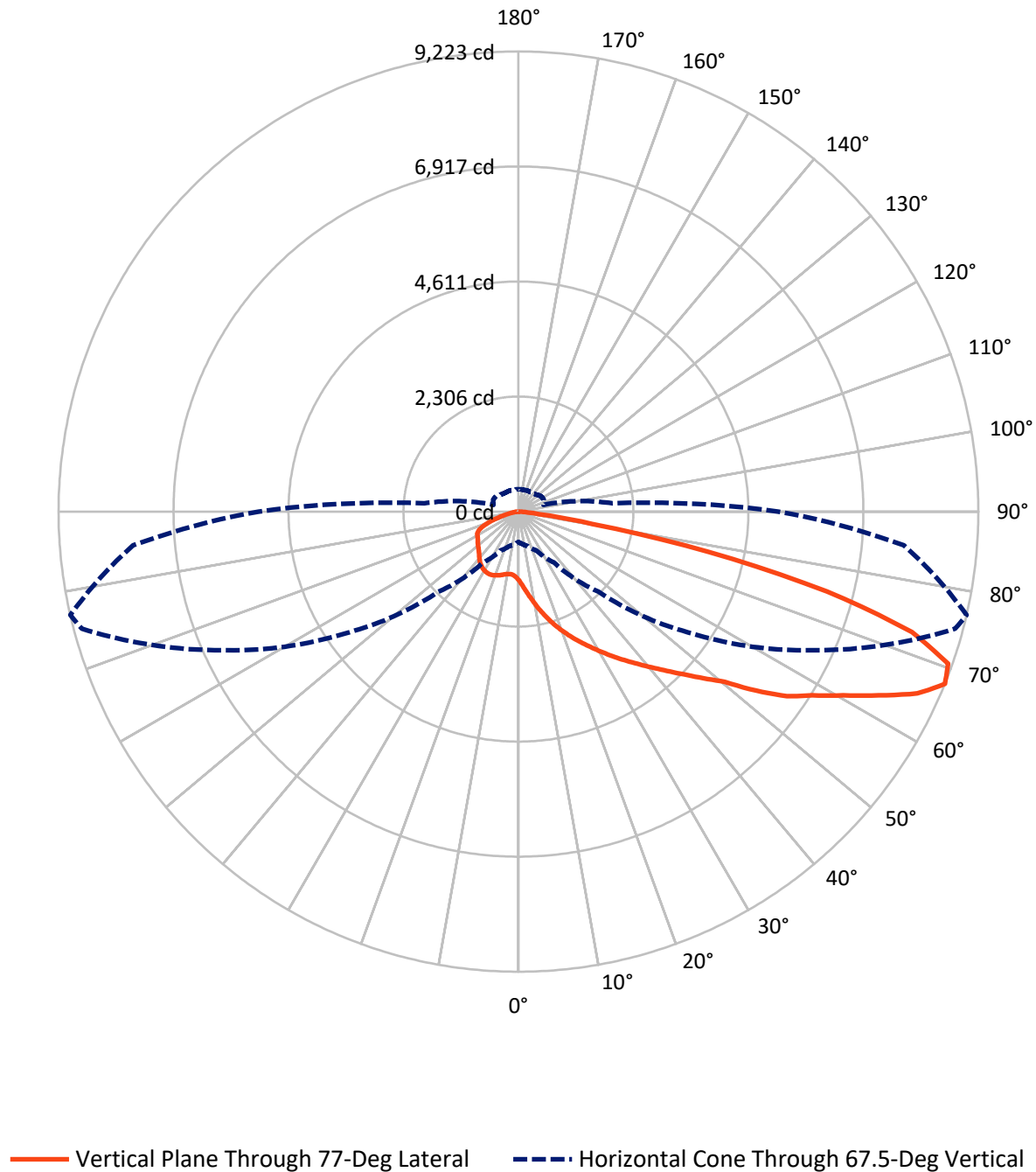
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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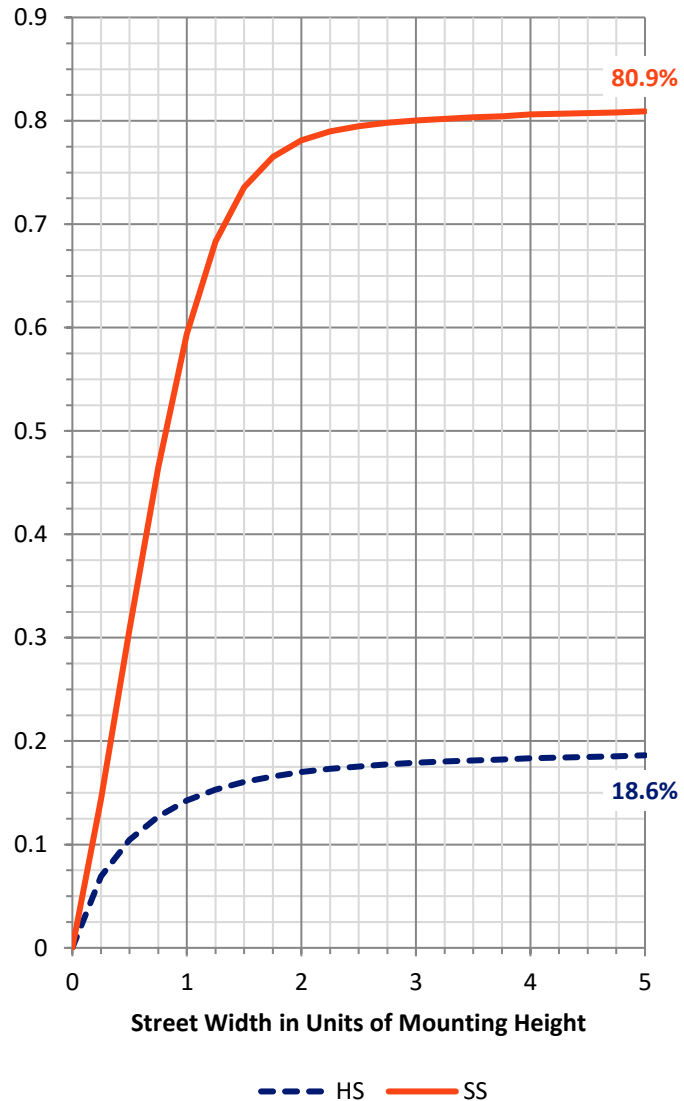
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2223.9	0.0	2223.9
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	9532.8	0.0	9532.8
	% Fixture	81.1	0.0	81.1
Total	Lumens	11756.7	0.0	11756.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.9	1.3
10°-20°	531.2	4.5
20°-30°	1002.9	8.5
30°-40°	1615.7	13.7
40°-50°	2210.0	18.8
50°-60°	2492.9	21.2
60°-70°	2326.8	19.8
70°-80°	1275.5	10.8
80°-90°	153.9	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°	11756.7	100.0
0°-180°	11756.7	100.0

Coefficient of Utilization



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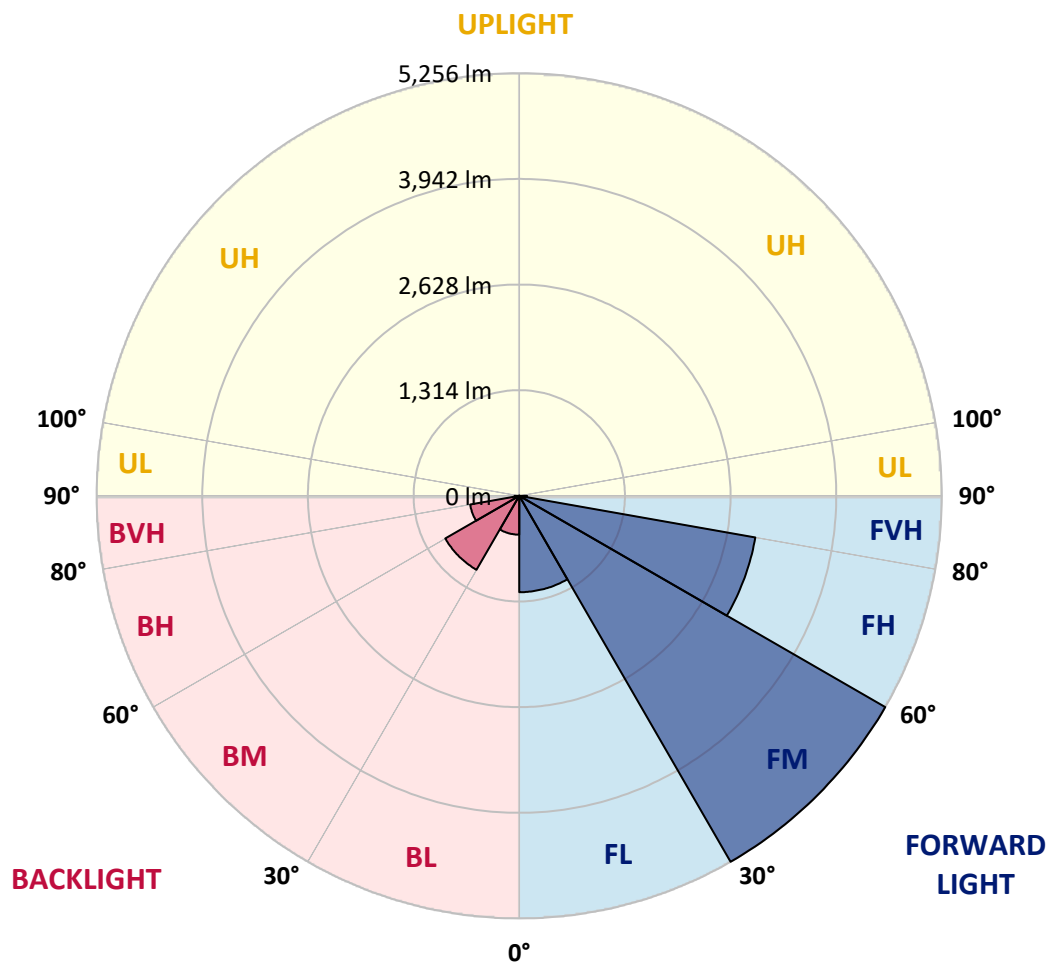
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1198.5	10.2			
FM	(30°-60°)	5256.3	44.7			
FH	(60°-80°)	2981.9	25.4			G2/5000
FVH	(80°-90°)	96.2	0.8			G1/100
BL	(0°-30°)	483.5	4.1	B1/500		
BM	(30°-60°)	1062.3	9.0	B2/2500		
BH	(60°-80°)	620.4	5.3	B2/1000		G2/1000
BVH	(80°-90°)	57.6	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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1379.4	1379.4	1379.4	1379.4	1379.4	1379.4	1379.4	1379.4	1379.4	1379.4	1379.4
2.5°	1727.1	1739.3	1724.2	1724.2	1673.2	1646.5	1595.5	1556.7	1486.9	1474.7	1428.5
5°	2041.5	2056.7	2035.4	2026.3	1966.3	1911.0	1825.5	1741.2	1616.7	1604.0	1495.4
7.5°	2284.9	2304.3	2285.5	2275.8	2222.4	2160.5	2060.4	1942.6	1767.2	1742.3	1585.2
10°	2483.4	2486.3	2480.3	2484.0	2442.1	2391.1	2288.5	2151.4	1932.3	1898.3	1693.8
12.5°	2595.6	2609.5	2621.7	2643.6	2636.3	2604.7	2512.5	2348.6	2107.1	2063.4	1812.1
15°	2648.4	2672.7	2700.0	2750.4	2791.1	2799.0	2728.5	2560.4	2284.9	2232.1	1931.7
17.5°	2667.3	2690.3	2733.4	2806.2	2893.6	2952.4	2920.9	2766.2	2460.9	2400.2	2057.3
20°	2762.5	2769.1	2795.3	2864.5	2959.2	3056.9	3080.5	2964.0	2635.1	2566.5	2187.1
22.5°	2966.5	2953.0	2960.3	2991.9	3059.8	3154.5	3208.6	3138.8	2814.1	2735.2	2318.2
25°	3303.3	3264.4	3225.6	3189.2	3223.7	3277.1	3338.4	3313.5	3001.6	2901.5	2450.6
27.5°	3728.6	3681.3	3595.7	3476.2	3434.4	3453.1	3480.5	3475.6	3175.1	3073.9	2587.1
30°	4147.4	4092.2	3990.2	3817.3	3706.8	3657.0	3636.4	3622.5	3363.9	3255.9	2724.9
32.5°	4481.8	4438.0	4338.0	4144.4	3984.2	3899.2	3830.6	3780.8	3561.2	3453.1	2870.5
35°	4774.3	4733.7	4619.0	4407.7	4233.6	4143.2	4053.4	3947.2	3766.3	3657.0	3027.1
37.5°	5041.4	5000.7	4843.5	4623.8	4448.4	4385.9	4305.8	4125.5	3972.0	3868.9	3192.8
40°	5210.1	5201.0	5054.1	4805.3	4623.2	4592.2	4565.6	4332.5	4200.2	4104.3	3374.8
42.5°	5253.1	5273.1	5156.7	4952.1	4778.5	4753.6	4816.2	4566.8	4456.3	4364.7	3581.1
45°	5149.4	5207.0	5130.5	4991.5	4889.0	4875.6	5038.3	4822.8	4739.7	4656.0	3830.0
47.5°	4886.6	4984.3	4952.7	4933.3	4918.8	4976.4	5233.8	5094.8	5060.7	4988.0	4114.0
50°	4356.1	4541.3	4596.5	4719.1	4859.8	5054.7	5411.5	5391.5	5435.8	5362.4	4460.0
52.5°	3439.2	3694.1	4014.5	4321.6	4679.0	5028.5	5607.0	5817.5	6004.4	5964.4	5009.8
55°	2838.9	2953.6	3200.0	3763.3	4328.3	4918.8	5694.9	6161.6	6568.8	6533.0	5426.7
57.5°	2377.8	2480.3	2632.0	3102.4	3797.8	4669.3	5749.5	6371.6	6955.4	6951.8	5838.2
60°	1883.1	1991.8	2147.2	2480.3	3178.2	4238.5	5737.4	6610.7	7448.8	7479.1	6340.0
62.5°	1324.8	1444.3	1616.7	1927.4	2545.3	3680.1	5489.8	6783.7	8029.5	8112.2	6943.9
65°	870.8	949.8	1079.6	1347.9	1896.5	2962.1	5017.1	6806.1	8651.0	8790.6	7510.7
67.5°	610.5	640.8	717.3	862.9	1250.2	2271.5	4263.9	6573.7	9065.5	9222.7	7756.5
70°	476.4	491.6	530.4	588.7	785.3	1527.6	3267.4	5969.3	8976.9	9140.7	7499.8
72.5°	411.4	426.0	440.5	447.9	526.7	943.1	2213.3	4990.9	8142.5	8253.5	6520.8
75°	373.2	376.9	389.0	386.6	401.8	611.7	1277.5	3636.4	6424.4	6386.2	4813.7
77.5°	313.8	318.6	338.7	335.6	356.8	418.1	663.3	2346.8	4165.0	3905.2	2679.4
80°	265.8	268.2	290.1	286.5	310.2	302.8	338.7	1196.2	1766.6	1496.6	772.5
82.5°	92.2	114.1	221.5	228.2	236.7	183.3	195.4	487.9	539.6	413.3	162.1
85°	44.9	48.0	112.9	160.2	159.6	92.2	95.3	174.1	169.9	133.6	54.0
87.5°	7.3	9.1	13.3	62.5	49.8	24.3	32.8	34.0	35.2	30.3	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°	1379.4	1379.4	1379.4	1379.4	1379.4	1379.4	1379.4	1379.4	1379.4	1379.4	1379.4
2.5°	1394.6	1364.3	1300.5	1241.7	1195.6	1151.3	1126.4	1105.2	1093.0	1090.6	1090.6
5°	1432.2	1369.7	1253.8	1156.1	1092.3	1045.1	1020.2	1004.4	996.5	991.7	991.1
7.5°	1486.2	1394.6	1229.5	1118.5	1051.8	1017.7	1005.0	1002.6	1001.9	1002.6	1004.4
10°	1560.9	1435.3	1227.1	1109.4	1053.5	1034.7	1034.1	1034.7	1037.2	1037.7	1038.3
12.5°	1641.6	1477.1	1236.8	1117.2	1076.6	1066.3	1064.5	1063.8	1065.7	1066.9	1067.5
15°	1729.6	1532.4	1253.2	1134.3	1102.1	1091.2	1089.4	1085.7	1085.1	1084.4	1083.8
17.5°	1820.0	1587.0	1271.4	1152.5	1118.5	1103.3	1096.6	1088.1	1081.5	1079.6	1081.5
20°	1911.6	1641.0	1284.1	1161.5	1119.7	1098.5	1085.1	1070.5	1059.0	1052.4	1054.7
22.5°	2009.4	1697.4	1292.0	1159.2	1108.7	1079.6	1055.3	1038.3	1020.8	1009.2	1009.8
25°	2104.6	1746.6	1291.4	1146.4	1087.5	1050.5	1019.6	997.7	973.4	961.2	961.2
27.5°	2196.3	1790.9	1276.2	1123.9	1057.2	1015.9	978.9	952.8	929.2	917.6	917.0
30°	2291.0	1827.9	1252.6	1091.2	1021.4	975.9	935.2	912.8	891.5	880.6	880.0
32.5°	2385.1	1861.9	1219.2	1050.5	980.1	936.4	896.4	875.8	862.9	862.9	863.6
35°	2484.6	1885.6	1175.0	1003.2	936.4	894.5	862.9	850.9	849.6	842.3	840.5
37.5°	2589.6	1900.8	1120.9	954.6	893.3	853.9	844.2	829.6	817.4	801.7	799.3
40°	2700.0	1915.9	1056.0	904.3	847.8	825.9	821.7	802.3	767.7	728.9	723.4
42.5°	2834.1	1926.2	988.6	853.9	799.9	792.6	798.7	765.3	710.0	680.9	681.5
45°	2989.5	1943.2	926.7	804.1	750.7	750.7	776.2	732.5	687.0	668.8	671.8
47.5°	3190.9	1982.7	869.1	749.5	705.2	717.3	726.4	693.1	667.6	645.1	644.5
50°	3482.2	2077.4	809.5	694.2	670.6	694.8	682.1	662.7	632.9	614.8	612.9
52.5°	3844.0	2133.1	756.8	644.5	640.8	665.1	647.0	628.7	606.3	582.0	577.2
55°	4090.4	2143.5	712.5	608.1	620.8	618.4	611.7	595.3	583.2	551.0	551.7
57.5°	4365.9	2164.1	676.1	586.2	608.1	581.4	578.9	565.0	549.2	527.4	520.1
60°	4695.4	2196.3	644.5	577.8	597.2	557.1	545.0	539.6	523.8	512.8	515.9
62.5°	5054.7	2225.4	612.3	578.9	584.5	533.4	515.3	513.4	503.7	500.1	500.1
65°	5299.9	2145.9	572.3	577.8	564.4	509.2	486.2	485.5	477.6	476.4	475.8
67.5°	5214.3	1894.1	518.2	560.8	543.8	484.9	459.4	456.9	446.7	447.3	447.3
70°	4785.8	1534.8	443.6	518.9	518.2	463.1	431.5	423.6	409.7	412.0	414.5
72.5°	3982.3	1137.2	343.5	449.1	477.6	443.0	399.3	386.6	369.0	371.5	370.8
75°	2875.9	773.2	250.0	341.6	415.7	419.3	367.8	345.9	324.7	328.3	329.5
77.5°	1471.7	438.2	183.9	235.4	326.5	381.1	339.3	310.2	305.2	339.3	334.4
80°	480.0	219.7	127.4	165.0	214.2	311.9	297.4	264.0	262.8	270.7	232.5
82.5°	143.2	92.9	81.9	108.6	118.4	239.1	256.7	199.7	171.8	180.8	187.0
85°	49.2	44.9	46.7	54.0	56.5	140.2	179.7	132.3	125.0	137.8	135.9
87.5°	11.5	15.8	13.3	12.1	12.1	34.0	69.8	55.2	76.5	50.9	49.2
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)