Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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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: P964569

Luminaire Tested: **NAV-SB3C-735-U-T2R**

Issue Date: 1/21/2025

Report Generated By 670246001

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Test Information

Test Method:	LM-79-08
Report Number:	P964569
	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-SB3C-735-U-T2R
Description:	NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
	(3) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II ROADWAY OPTICS
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	23459.2 lumens
Efficiency:	N/A
Efficacy:	157.3 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Medium
BUG Rating:	B3 - U0 - G3

Input Watts (W):	149.1
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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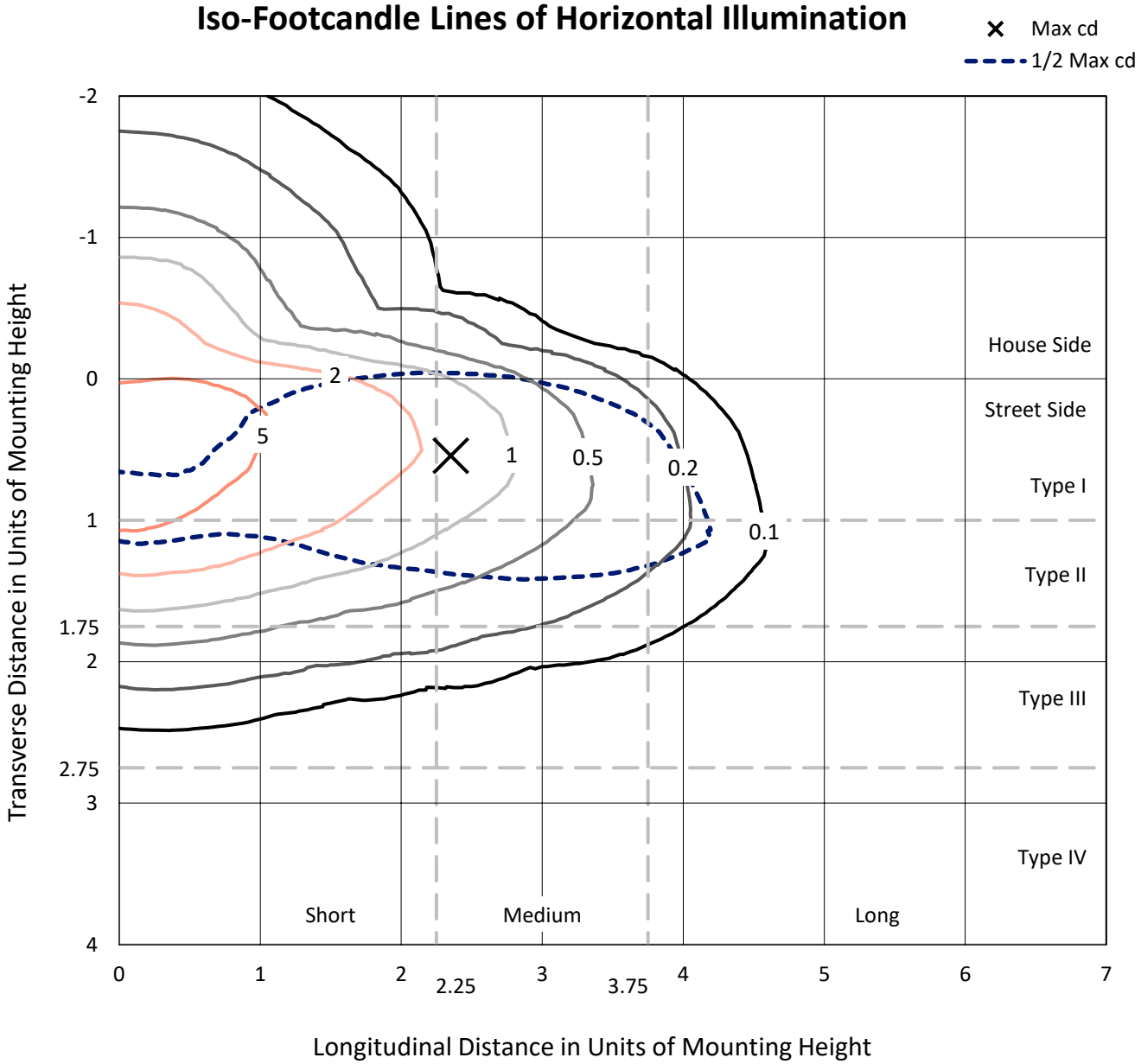
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 8.6 fc
Type II - Medium - N/A

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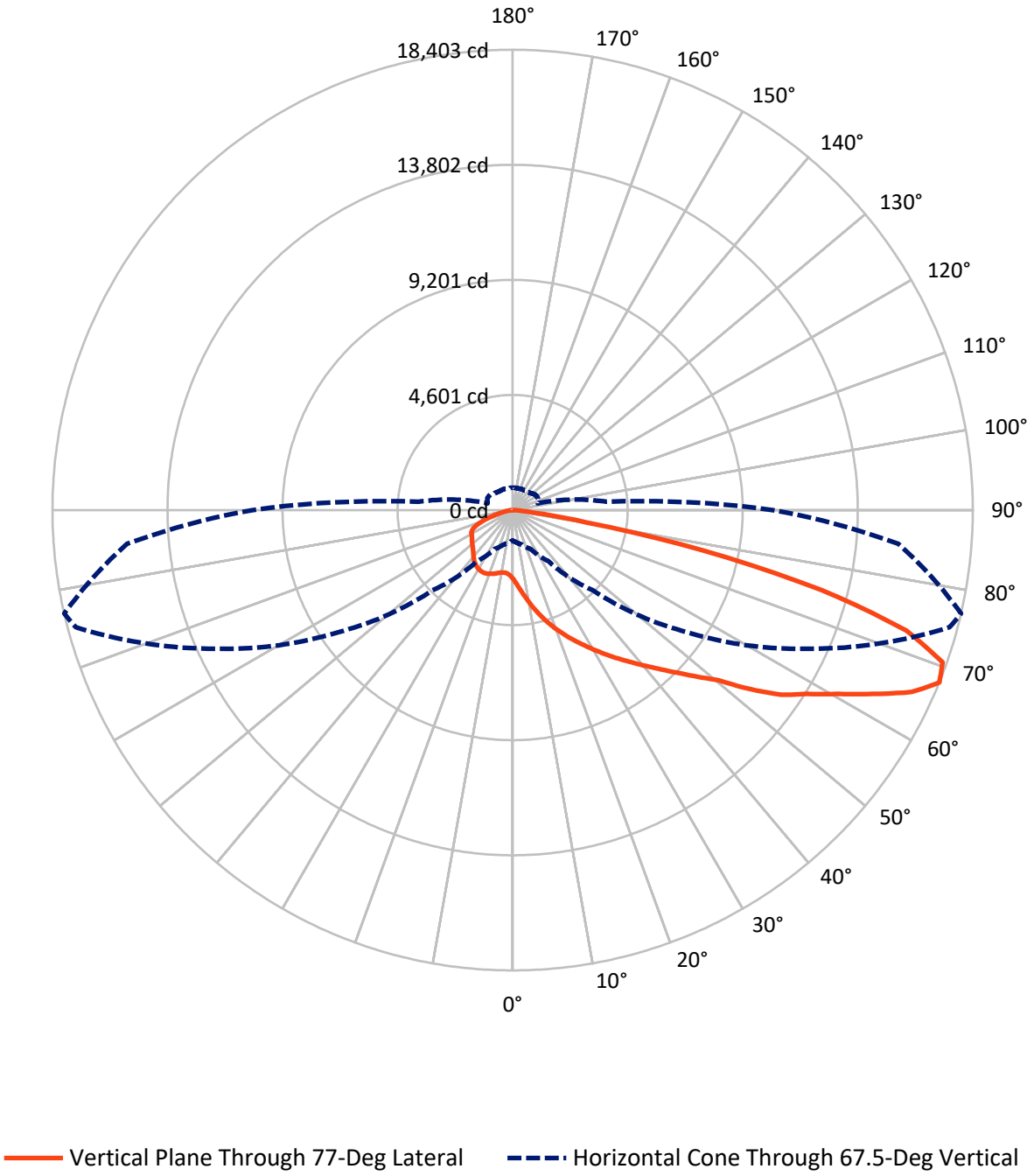
Luminous Intensity Polar Plot



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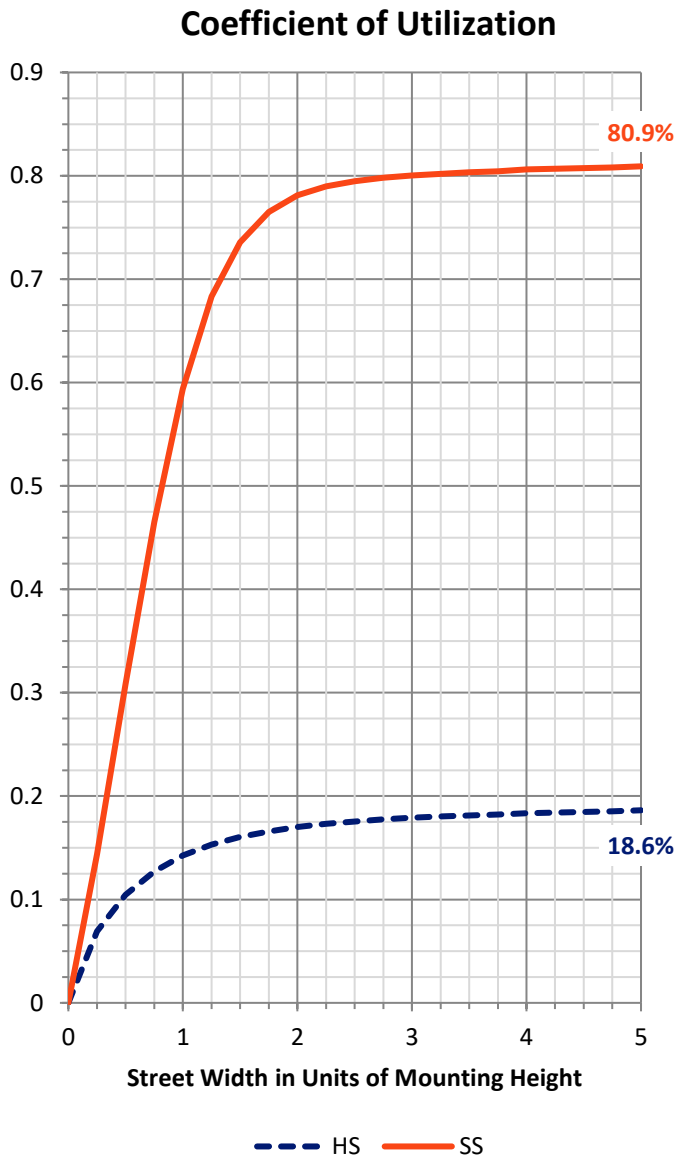
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4437.5	0.0	4437.5
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	19021.6	0.0	19021.6
	% Fixture	81.1	0.0	81.1
Total	Lumens	23459.2	0.0	23459.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	295.0	1.3
10°-20°	1059.9	4.5
20°-30°	2001.2	8.5
30°-40°	3224.0	13.7
40°-50°	4409.8	18.8
50°-60°	4974.3	21.2
60°-70°	4642.9	19.8
70°-80°	2545.1	10.8
80°-90°	307.0	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°	23459.2	100.0
0°-180°	23459.2	100.0



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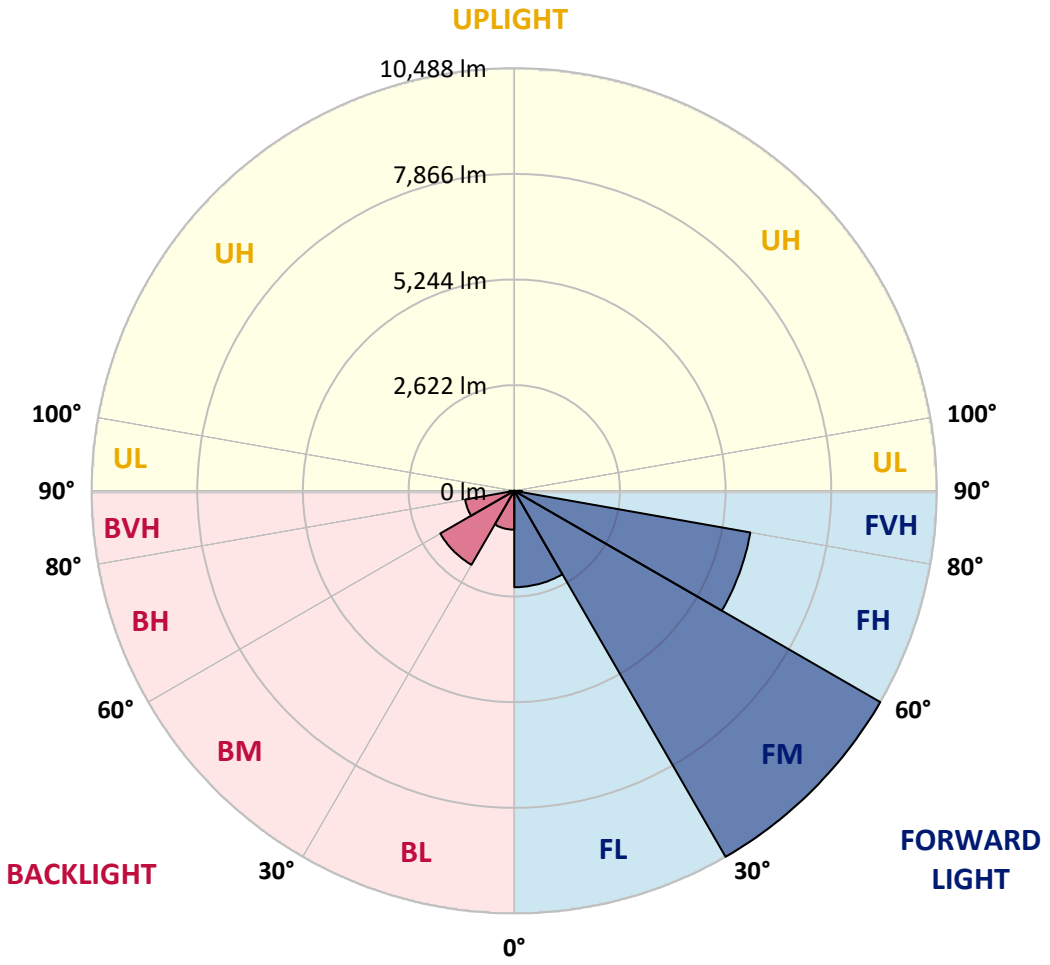
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2391.4	10.2			
FM	(30°-60°)	10488.3	44.7			
FH	(60°-80°)	5949.9	25.4			G3/7500
FVH	(80°-90°)	192.0	0.8			G2/225
BL	(0°-30°)	964.8	4.1	B2/1000		
BM	(30°-60°)	2119.7	9.0	B2/2500		
BH	(60°-80°)	1238.0	5.3	B3/2500		G3/2500
BVH	(80°-90°)	115.0	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3
Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	2752.5	2752.5	2752.5	2752.5	2752.5	2752.5	2752.5	2752.5	2752.5	2752.5	2752.5
2.5°	3446.4	3470.5	3440.3	3440.3	3338.6	3285.3	3183.5	3106.1	2966.9	2942.6	2850.6
5°	4073.7	4103.9	4061.6	4043.3	3923.5	3813.3	3642.5	3474.2	3226.0	3200.6	2983.8
7.5°	4559.2	4597.9	4560.4	4541.1	4434.5	4310.9	4111.2	3876.2	3526.3	3476.6	3163.0
10°	4955.2	4961.3	4949.1	4956.4	4872.8	4771.2	4566.5	4292.8	3855.6	3787.9	3379.7
12.5°	5179.2	5207.1	5231.3	5274.9	5260.4	5197.4	5013.4	4686.4	4204.4	4117.2	3615.9
15°	5284.6	5333.1	5387.5	5488.1	5569.1	5584.9	5444.4	5109.0	4559.2	4453.8	3854.4
17.5°	5322.1	5368.1	5454.1	5599.5	5773.8	5891.3	5828.4	5519.5	4910.4	4789.3	4105.1
20°	5512.2	5525.6	5577.6	5715.7	5904.6	6099.6	6146.8	5914.2	5257.9	5121.1	4364.2
22.5°	5919.2	5892.5	5907.0	5970.0	6105.6	6294.5	6402.3	6263.1	5615.2	5457.7	4625.8
25°	6591.2	6513.7	6436.2	6363.5	6432.6	6539.1	6661.5	6611.8	5989.4	5789.5	4889.9
27.5°	7440.1	7345.7	7174.9	6936.3	6852.7	6890.4	6944.8	6935.2	6335.7	6133.5	5162.3
30°	8275.6	8165.5	7962.0	7616.9	7396.5	7297.2	7256.0	7228.2	6712.3	6496.8	5437.2
32.5°	8942.8	8855.7	8655.9	8269.6	7949.9	7780.4	7643.5	7544.2	7105.8	6890.4	5727.8
35°	9526.6	9445.4	9216.5	8795.1	8447.6	8267.1	8088.0	7876.0	7515.2	7297.2	6040.2
37.5°	10059.3	9978.3	9664.6	9226.2	8876.3	8751.6	8591.7	8232.1	7925.7	7719.8	6370.8
40°	10396.0	10377.8	10084.8	9588.3	9225.0	9163.3	9110.0	8645.0	8381.0	8189.6	6734.0
42.5°	10482.0	10521.9	10289.5	9881.3	9535.1	9485.3	9610.1	9112.4	8892.0	8709.1	7145.8
45°	10274.9	10389.9	10237.4	9960.0	9755.4	9728.8	10053.3	9623.4	9457.6	9290.4	7642.3
47.5°	9750.6	9945.6	9882.5	9843.8	9814.8	9929.8	10443.2	10165.9	10098.1	9952.8	8209.0
50°	8692.2	9061.5	9171.7	9416.4	9697.3	10086.0	10798.1	10758.1	10846.4	10700.0	8899.3
52.5°	6862.5	7371.1	8010.5	8623.2	9336.4	10033.9	11188.0	11608.1	11981.1	11901.2	9996.4
55°	5664.9	5893.6	6385.3	7509.2	8636.5	9814.8	11363.6	12294.8	13107.3	13035.8	10828.3
57.5°	4744.5	4949.1	5251.9	6190.4	7578.1	9317.0	11472.5	12713.8	13878.7	13871.4	11649.3
60°	3757.5	3974.3	4284.3	4949.1	6341.8	8457.3	11448.3	13190.9	14863.2	14923.8	12650.8
62.5°	2643.5	2882.1	3226.0	3846.0	5078.8	7343.2	10954.3	13536.0	16022.1	16186.8	13855.6
65°	1737.7	1895.1	2154.2	2689.5	3784.2	5910.7	10011.0	13580.8	17262.1	17540.6	14986.7
67.5°	1218.2	1278.8	1431.3	1722.0	2494.5	4532.5	8508.1	13117.0	18089.2	18402.8	15477.2
70°	950.6	980.8	1058.4	1174.6	1567.0	3047.9	6519.7	11910.9	17912.4	18239.4	14964.9
72.5°	821.0	850.1	879.1	893.7	1051.1	1881.8	4416.3	9958.9	16247.3	16468.9	13011.7
75°	744.8	752.0	776.2	771.4	801.7	1220.7	2549.1	7256.0	12819.2	12742.8	9605.3
77.5°	626.1	635.7	675.7	669.6	712.1	834.4	1323.6	4682.7	8310.8	7792.5	5346.3
80°	530.4	535.3	578.8	571.5	618.8	604.2	675.7	2386.8	3525.1	2986.2	1541.5
82.5°	184.1	227.7	442.0	455.3	472.3	365.7	389.9	973.6	1076.6	824.6	323.3
85°	89.6	95.6	225.2	319.7	318.5	184.1	190.1	347.6	339.1	266.4	107.7
87.5°	14.6	18.1	26.6	124.7	99.3	48.5	65.4	67.9	70.2	60.6	24.2
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°	2752.5	2752.5	2752.5	2752.5	2752.5	2752.5	2752.5	2752.5	2752.5	2752.5	2752.5
2.5°	2782.8	2722.2	2595.1	2477.6	2385.6	2297.1	2247.5	2205.2	2180.9	2176.1	2176.1
5°	2857.8	2733.2	2501.8	2306.9	2179.7	2085.3	2035.6	2004.1	1988.4	1978.7	1977.5
7.5°	2965.6	2782.8	2453.3	2231.7	2098.6	2030.7	2005.3	2000.5	1999.3	2000.5	2004.1
10°	3114.6	2863.8	2448.5	2213.6	2102.2	2064.7	2063.4	2064.7	2069.5	2070.7	2071.9
12.5°	3275.6	2947.5	2467.9	2229.4	2148.2	2127.6	2124.0	2122.8	2126.5	2128.8	2130.1
15°	3451.2	3057.7	2500.6	2263.3	2199.0	2177.3	2173.6	2166.4	2165.2	2164.0	2162.8
17.5°	3631.7	3166.6	2537.0	2299.6	2231.7	2201.5	2188.2	2171.3	2157.9	2154.2	2157.9
20°	3814.5	3274.4	2562.4	2317.7	2234.2	2191.9	2165.2	2136.1	2113.1	2099.8	2104.6
22.5°	4009.5	3387.0	2578.1	2312.9	2212.4	2154.2	2105.9	2071.9	2036.8	2013.8	2015.0
25°	4199.5	3485.1	2577.0	2287.5	2170.0	2096.1	2034.4	1990.8	1942.4	1918.2	1918.2
27.5°	4382.4	3573.6	2546.6	2242.7	2109.4	2027.1	1953.2	1901.2	1853.9	1831.0	1829.7
30°	4571.3	3647.4	2499.4	2177.3	2038.0	1947.2	1866.1	1821.2	1778.9	1757.1	1755.9
32.5°	4759.1	3715.2	2432.8	2096.1	1955.7	1868.5	1788.5	1747.4	1722.0	1722.0	1723.2
35°	4957.6	3762.5	2344.4	2001.7	1868.5	1784.9	1722.0	1697.7	1695.4	1680.8	1677.2
37.5°	5167.1	3792.7	2236.7	1904.9	1782.5	1703.9	1684.4	1655.4	1631.2	1599.6	1594.8
40°	5387.5	3822.9	2107.1	1804.3	1691.7	1648.1	1639.6	1600.8	1531.9	1454.4	1443.4
42.5°	5655.1	3843.5	1972.6	1703.9	1596.0	1581.5	1593.6	1527.0	1416.9	1358.6	1359.9
45°	5965.1	3877.5	1849.1	1604.5	1497.9	1497.9	1548.8	1461.6	1370.8	1334.4	1340.5
47.5°	6367.2	3956.2	1734.1	1495.5	1407.1	1431.3	1449.6	1382.9	1332.1	1287.2	1286.1
50°	6948.5	4145.1	1615.4	1385.3	1338.1	1386.5	1361.1	1322.4	1263.0	1226.7	1223.0
52.5°	7670.2	4256.5	1510.0	1286.1	1278.8	1327.2	1290.9	1254.5	1209.7	1161.3	1151.6
55°	8161.8	4277.1	1421.7	1213.4	1238.8	1234.0	1220.7	1188.0	1163.7	1099.5	1100.7
57.5°	8711.6	4318.2	1349.0	1169.7	1213.4	1160.1	1155.3	1127.4	1095.9	1052.3	1037.8
60°	9369.1	4382.4	1286.1	1152.8	1191.6	1111.6	1087.4	1076.6	1045.1	1023.3	1029.3
62.5°	10086.0	4440.5	1221.8	1155.3	1166.1	1064.5	1028.1	1024.5	1005.1	997.8	997.8
65°	10575.2	4281.9	1142.0	1152.8	1126.2	1016.0	970.0	968.7	953.0	950.6	949.4
67.5°	*10404.5*	*3779.4*	*1034.1*	*1118.9*	*1085.0*	*967.6*	*916.7*	*911.8*	*891.2*	*892.5*	*892.5*
70°	9549.5	3062.5	885.2	1035.4	1034.1	923.9	861.0	845.2	817.4	822.3	827.1
72.5°	7946.2	2269.4	685.4	896.1	953.0	884.0	796.8	771.4	736.3	741.1	739.8
75°	5738.7	1542.7	498.9	681.7	829.5	836.8	733.8	690.2	647.9	655.1	657.5
77.5°	2936.5	874.3	367.0	469.9	651.5	760.4	676.9	618.8	609.2	676.9	667.3
80°	957.9	438.4	254.3	329.3	427.4	622.4	593.4	526.7	524.4	540.1	463.8
82.5°	285.8	185.3	163.5	216.8	236.2	477.1	512.2	398.4	342.7	360.9	373.0
85°	98.1	89.6	93.3	107.7	112.6	279.7	358.4	263.9	249.5	274.9	271.2
87.5°	23.0	31.5	26.6	24.2	24.2	67.9	139.3	110.2	152.6	101.7	98.1
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)