

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: P966667

Luminaire Tested: **NAV-SB4C-735-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966667
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-12)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4C-735-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30067.4 lumens
Efficiency: N/A
Efficacy: 149.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G5

Input Watts (W): 200.7
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

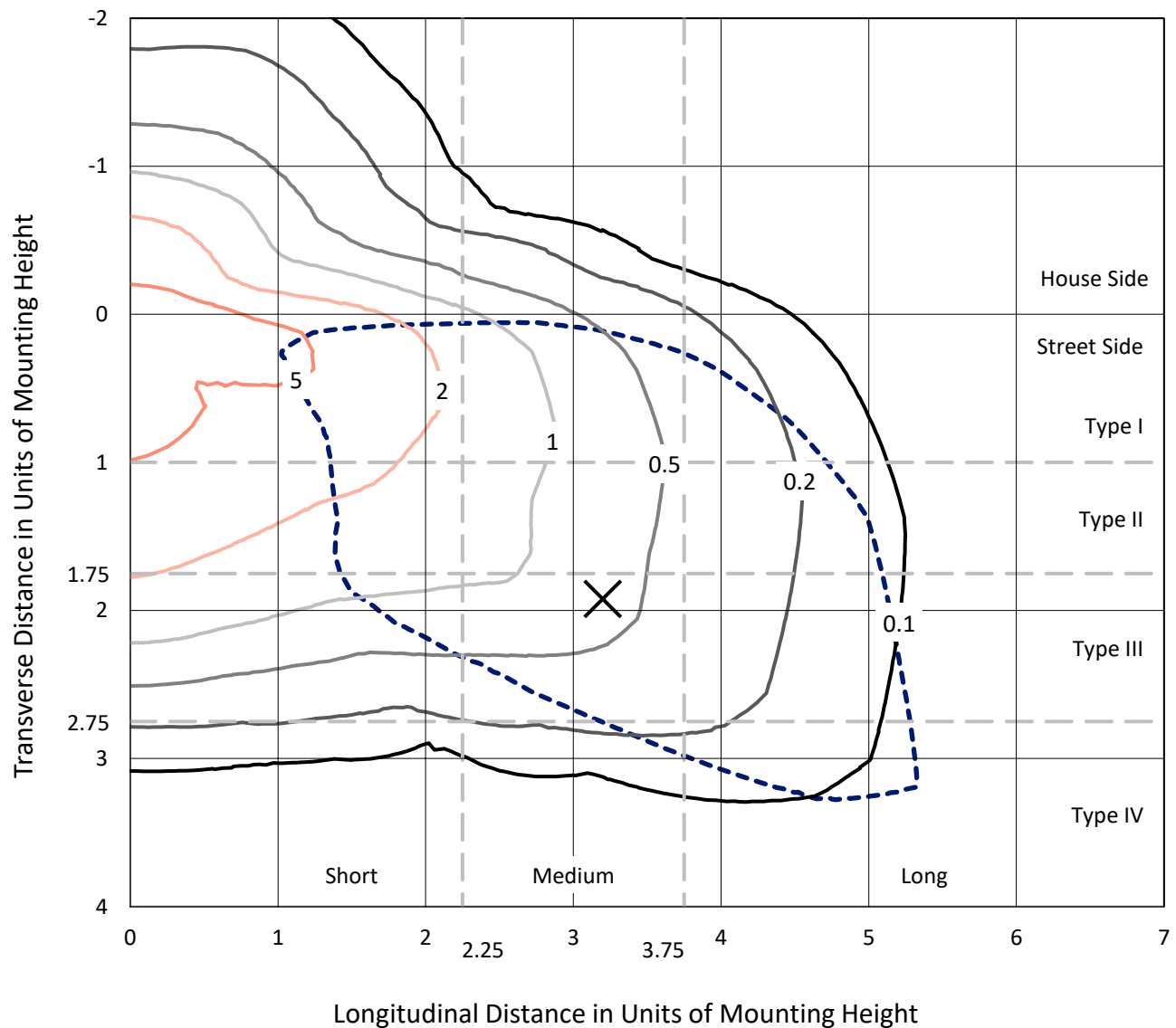


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Iso-Footcandle Lines of Horizontal Illumination

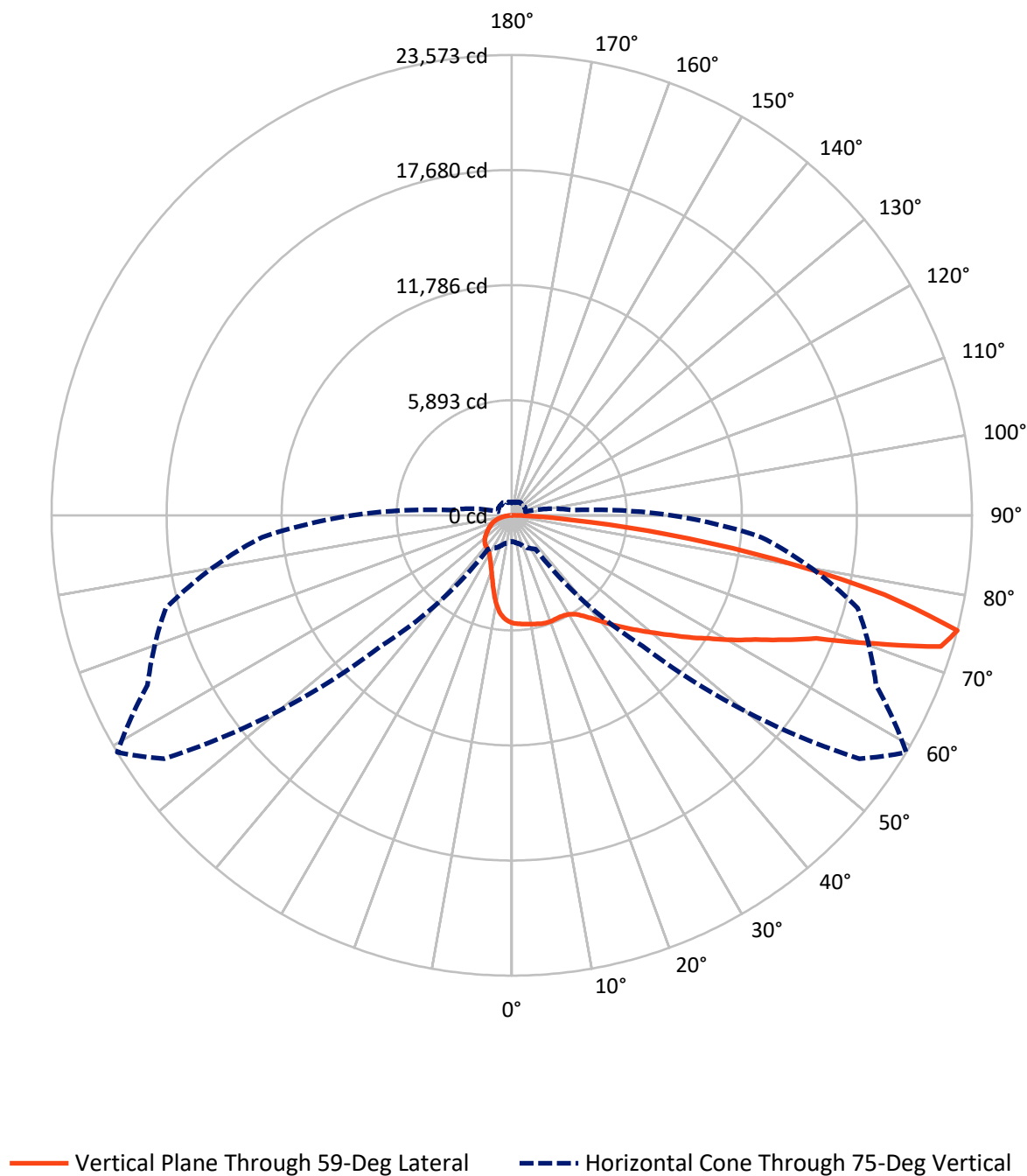
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.8 fc
Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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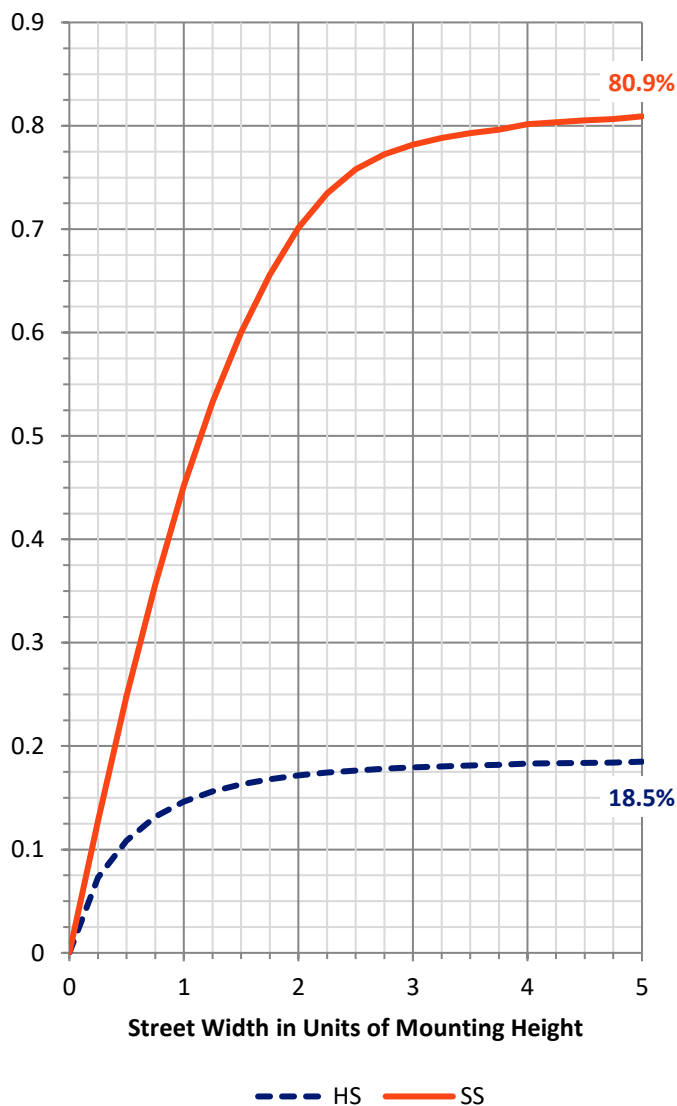
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5639.3	0.0	5639.3
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	24428.0	0.0	24428.0
	% Fixture	81.2	0.0	81.2
Total	Lumens	30067.4	0.0	30067.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	494.8	1.6
10°-20°	1264.9	4.2
20°-30°	1921.2	6.4
30°-40°	2855.9	9.5
40°-50°	4247.2	14.1
50°-60°	5765.0	19.2
60°-70°	7038.1	23.4
70°-80°	5523.4	18.4
80°-90°	956.8	3.2
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°	30067.4	100.0
0°-180°	30067.4	100.0

Coefficient of Utilization



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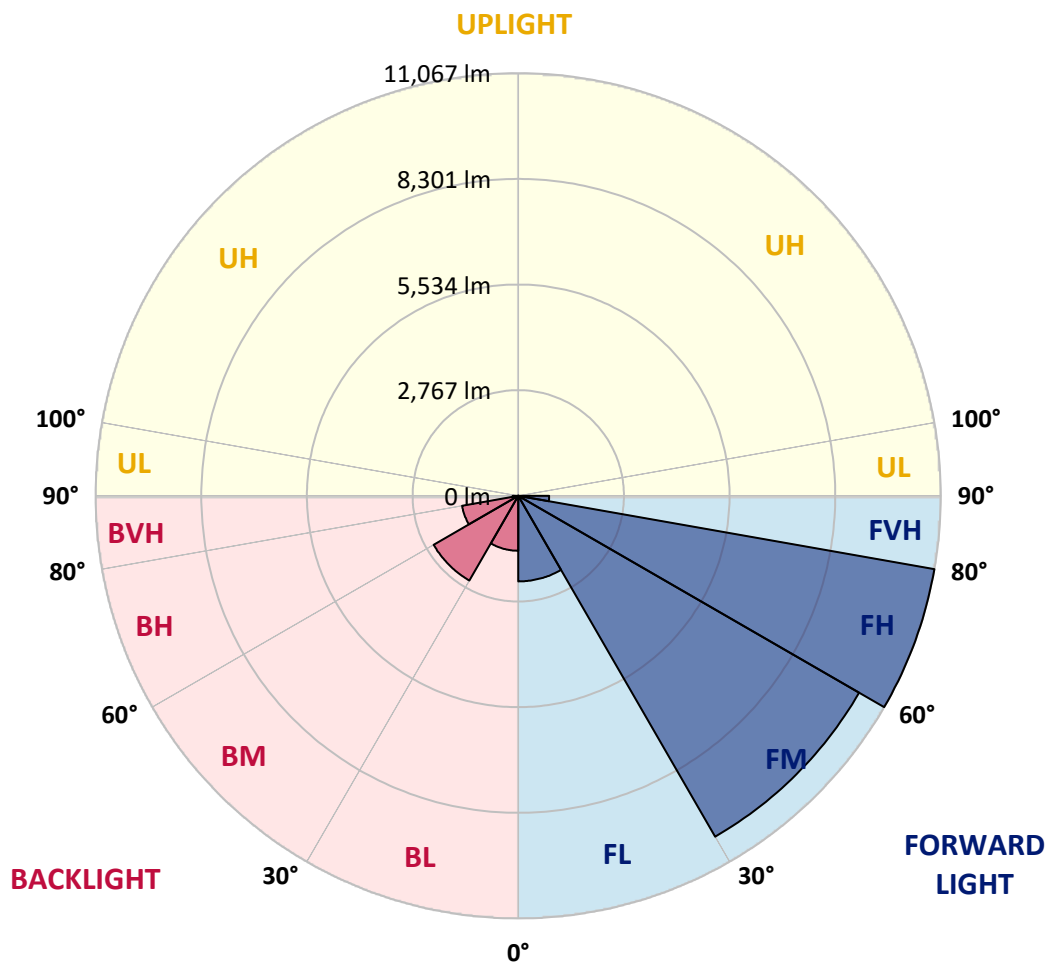
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2241.8	7.5			
FM	(30°-60°)	10308.3	34.3			
FH	(60°-80°)	11067.5	36.8			G4/12000
FVH	(80°-90°)	810.3	2.7			G5
BL	(0°-30°)	1439.1	4.8	B3/2500		
BM	(30°-60°)	2559.7	8.5	B3/5000		
BH	(60°-80°)	1494.1	5.0	B3/2500		G3/2500
BVH	(80°-90°)	146.5	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-G5

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	5518.8	5518.8	5518.8	5518.8	5518.8	5518.8	5518.8	5518.8	5518.8	5518.8	5518.8
2.5°	5565.7	5546.3	5565.7	5557.7	5554.4	5547.9	5549.6	5560.8	5554.4	5562.5	5535.0
5°	5528.5	5517.2	5536.5	5531.7	5552.7	5556.0	5577.0	5589.9	5598.0	5599.7	5578.7
7.5°	5467.0	5455.7	5483.2	5505.9	5551.2	5564.1	5607.8	5628.8	5640.1	5659.5	5628.8
10°	5242.2	5237.3	5305.3	5391.0	5497.8	5564.1	5630.4	5666.0	5683.7	5735.5	5699.9
12.5°	4844.4	4850.8	4939.8	5104.7	5318.2	5531.7	5656.3	5708.0	5735.5	5800.3	5784.1
15°	4464.2	4462.5	4559.6	4735.9	5035.2	5389.3	5669.2	5758.1	5805.1	5900.5	5887.6
17.5°	4244.2	4237.8	4305.7	4440.0	4718.2	5171.0	5636.9	5785.7	5886.0	6005.7	5994.3
20°	4203.8	4190.8	4226.5	4292.8	4490.1	4931.7	5552.7	5785.7	5950.6	6105.9	6099.5
22.5°	4351.0	4329.9	4315.4	4307.4	4394.7	4734.4	5457.3	5766.2	6046.1	6249.9	6238.6
25°	4646.9	4614.7	4540.2	4467.5	4441.5	4645.4	5373.3	5761.4	6188.4	6444.0	6401.9
27.5°	5125.7	5085.3	4934.9	4760.2	4603.3	4690.6	5336.0	5790.5	6345.4	6649.4	6565.3
30°	5719.4	5675.7	5486.4	5218.0	4936.5	4858.9	5382.9	5876.2	6545.9	6922.7	6757.8
32.5°	6251.5	6203.0	6041.2	5767.9	5387.8	5150.0	5531.7	6039.6	6861.2	7302.8	7047.3
35°	6723.8	6667.2	6521.7	6269.3	5941.0	5559.2	5800.3	6329.2	7309.4	7920.7	7440.4
37.5°	7186.4	7120.1	6961.6	6694.7	6465.0	6104.3	6170.6	6701.1	7904.6	8671.2	7961.2
40°	7704.0	7608.6	7416.1	7152.4	6929.2	6743.2	6657.5	7157.3	8509.4	9509.1	8611.4
42.5°	8205.4	8114.8	7885.1	7660.3	7380.5	7327.1	7221.9	7691.1	9171.1	10429.4	9271.3
45°	8745.6	8637.3	8359.1	8074.4	7898.1	7715.3	7768.7	8224.8	9819.6	11367.6	9963.6
47.5°	9252.0	9130.6	8802.3	8485.3	8388.2	8042.0	8270.1	8811.9	10494.2	12318.7	10649.4
50°	9525.2	9405.6	9132.2	8846.0	8769.9	8444.8	8813.6	9457.4	11201.0	13266.5	11307.7
52.5°	9753.3	9623.9	9266.5	9107.9	9085.3	8883.2	9483.2	10194.9	11907.8	14104.3	11943.4
55°	9995.9	9852.0	9395.9	9253.5	9357.0	9374.9	10277.4	11031.2	12655.1	14921.1	12543.4
57.5°	10275.7	10093.0	9520.4	9376.5	9622.3	9950.7	11189.6	11898.1	13389.4	15678.1	13077.3
60°	10539.5	10355.1	9759.7	9572.2	9908.6	10618.7	12236.1	12947.8	14220.7	16352.5	13581.9
62.5°	10591.1	10439.1	9950.7	9949.1	10296.7	11398.3	13475.2	14007.2	14947.0	17019.0	14034.7
65°	9695.1	9599.6	9310.2	9934.5	10853.2	12520.8	14854.8	15362.7	15870.6	17601.3	14432.6
67.5°	7378.9	7391.8	7370.8	8575.8	10403.5	14133.4	16852.3	16813.6	17010.9	18254.7	14890.4
70°	3374.0	3450.0	3945.0	5919.9	8334.8	14319.5	20155.3	19652.2	18442.3	19100.7	15286.6
72.5°	1822.9	1881.1	2083.3	2867.7	5010.9	12731.1	22623.5	22981.0	20346.1	19670.1	14851.5
75°	1337.6	1370.0	1510.7	1822.9	2104.3	9462.2	21738.7	23572.9	20583.8	18342.1	12824.9
77.5°	1001.2	1015.8	1130.6	1444.4	1077.3	4988.3	17370.0	19522.9	17620.7	15070.0	9473.5
80°	726.2	742.4	828.1	1083.7	755.3	1824.5	11927.2	13703.2	12067.9	9606.1	4721.4
82.5°	501.4	507.9	545.1	737.6	527.3	708.5	6767.5	8035.6	6736.7	3370.8	1274.6
85°	302.5	310.6	326.8	430.3	299.2	336.4	2921.1	3021.4	2013.7	805.5	396.3
87.5°	124.5	132.6	145.5	181.1	118.1	93.8	482.0	605.0	376.9	236.2	122.9
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°	5518.8	5518.8	5518.8	5518.8	5518.8	5518.8	5518.8	5518.8	5518.8	5518.8	5518.8
2.5°	5526.9	5515.5	5484.9	5442.7	5404.0	5355.4	5334.4	5316.6	5300.5	5269.7	5255.2
5°	5560.8	5530.1	5447.7	5340.9	5219.6	5087.0	4957.5	4868.5	4792.6	4735.9	4689.1
7.5°	5612.6	5554.4	5404.0	5185.6	4907.4	4622.8	4365.6	4182.7	4045.3	3995.1	3907.8
10°	5666.0	5596.4	5334.4	4949.4	4469.1	4030.7	3689.5	3501.8	3391.8	3356.3	3301.2
12.5°	5729.0	5627.1	5226.1	4621.1	3978.9	3498.5	3201.0	3091.0	3034.4	3014.9	3019.9
15°	5821.3	5653.1	5062.7	4210.3	3511.5	3110.4	2917.9	2841.9	2812.8	2811.2	2817.6
17.5°	5890.8	5657.9	4808.7	3770.4	3152.5	2875.8	2717.4	2688.3	2707.6	2736.7	2748.0
20°	5968.5	5614.2	4475.6	3369.2	2900.1	2670.4	2604.1	2623.5	2670.4	2712.5	2727.0
22.5°	6023.4	5535.0	4072.7	3057.1	2681.8	2552.4	2549.2	2589.6	2615.5	2636.5	2647.8
25°	6072.0	5400.7	3645.7	2795.0	2502.2	2481.2	2516.8	2503.9	2486.0	2503.9	2515.1
27.5°	6107.6	5188.9	3264.0	2565.3	2376.1	2432.6	2411.6	2382.5	2380.9	2390.6	2406.8
30°	6096.2	4905.8	2950.3	2346.9	2287.1	2342.1	2291.9	2287.1	2282.3	2287.1	2304.9
32.5°	6096.2	4583.9	2709.3	2196.5	2230.5	2209.5	2204.6	2193.3	2173.9	2172.3	2193.3
35°	6130.2	4262.1	2502.2	2115.6	2183.6	2133.4	2136.7	2109.1	2068.8	2049.3	2068.8
37.5°	6199.7	4003.2	2296.8	2076.9	2101.0	2099.5	2086.5	2039.6	1968.4	1907.0	1928.0
40°	6367.9	3927.2	2156.1	2059.0	2062.3	2081.7	2047.7	1957.1	1795.4	1695.1	1708.1
42.5°	6631.6	4055.0	2125.3	2015.4	2036.4	2055.8	1989.5	1779.2	1664.4	1604.5	1604.5
45°	6966.4	4278.2	2191.7	1952.3	1975.0	2008.9	1811.6	1711.2	1659.5	1661.1	1669.2
47.5°	7390.2	4512.8	2314.6	1897.3	1886.0	1905.4	1693.5	1632.0	1560.9	1578.6	1623.9
50°	7880.3	4750.5	2431.1	1822.9	1787.3	1724.3	1617.4	1559.2	1468.6	1426.6	1438.0
52.5°	8410.8	4980.2	2477.9	1732.4	1680.6	1607.7	1565.7	1494.6	1384.6	1315.0	1313.3
55°	8913.8	5188.9	2426.2	1623.9	1573.8	1517.2	1510.7	1467.1	1349.0	1251.9	1251.9
57.5°	9389.4	5363.5	2296.8	1513.9	1465.4	1431.4	1475.2	1454.1	1305.3	1180.8	1174.2
60°	9792.1	5483.2	2109.1	1402.3	1368.4	1350.5	1416.9	1410.4	1243.8	1104.7	1099.9
62.5°	10112.4	5530.1	1902.1	1295.6	1287.5	1255.1	1336.0	1336.0	1166.1	1030.3	1025.5
65°	10363.1	5484.9	1691.9	1190.4	1206.6	1158.1	1237.4	1227.6	1083.7	964.0	957.6
67.5°	10584.7	5336.0	1459.0	1086.9	1124.1	1062.7	1133.9	1111.2	993.1	897.7	891.2
70°	10683.4	4989.9	1193.7	983.4	1028.7	968.8	1030.3	988.3	891.2	826.6	813.5
72.5°	9890.8	4147.2	939.7	875.0	913.9	865.3	918.7	870.2	781.3	752.1	727.9
75°	8182.8	3112.0	723.0	757.0	786.1	748.9	784.4	748.9	668.0	689.0	629.1
77.5°	5942.5	2101.0	553.2	632.4	645.3	626.0	656.7	616.2	543.5	538.6	514.3
80°	2955.1	1230.9	433.5	499.8	495.0	482.0	517.6	498.2	436.8	462.6	457.8
82.5°	855.7	527.3	315.4	351.0	341.3	344.5	370.4	380.1	569.4	564.5	577.5
85°	268.5	207.0	189.2	195.7	186.0	190.9	218.3	433.5	401.1	234.5	253.9
87.5°	69.6	71.1	46.9	50.1	51.8	61.5	69.6	263.6	126.2	82.5	87.3
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)