

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: P965084

Luminaire Tested: **NAV-SB3D-735-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965084
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-735-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31105.7 lumens
Efficiency: N/A
Efficacy: 142.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 218.1
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



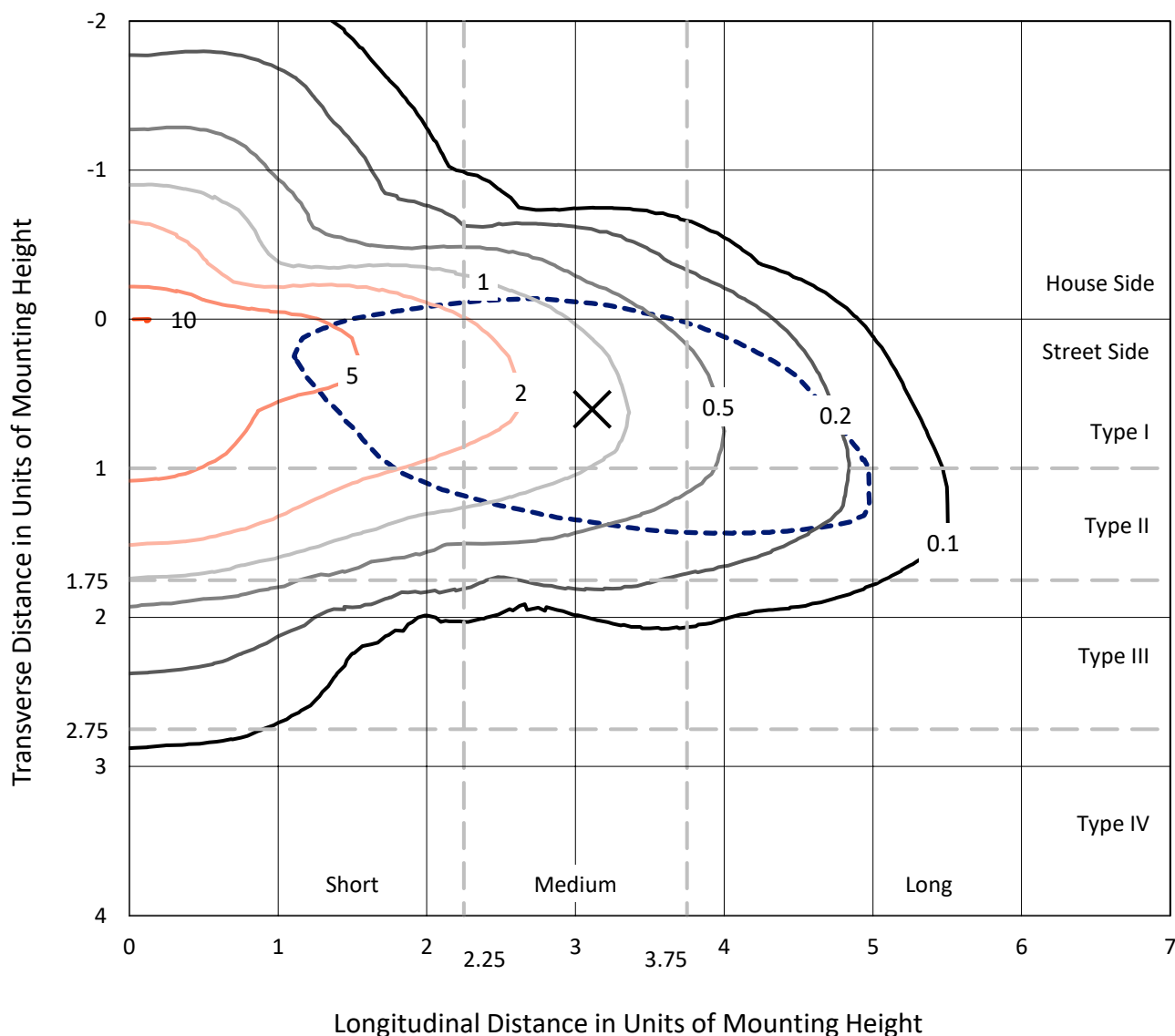
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

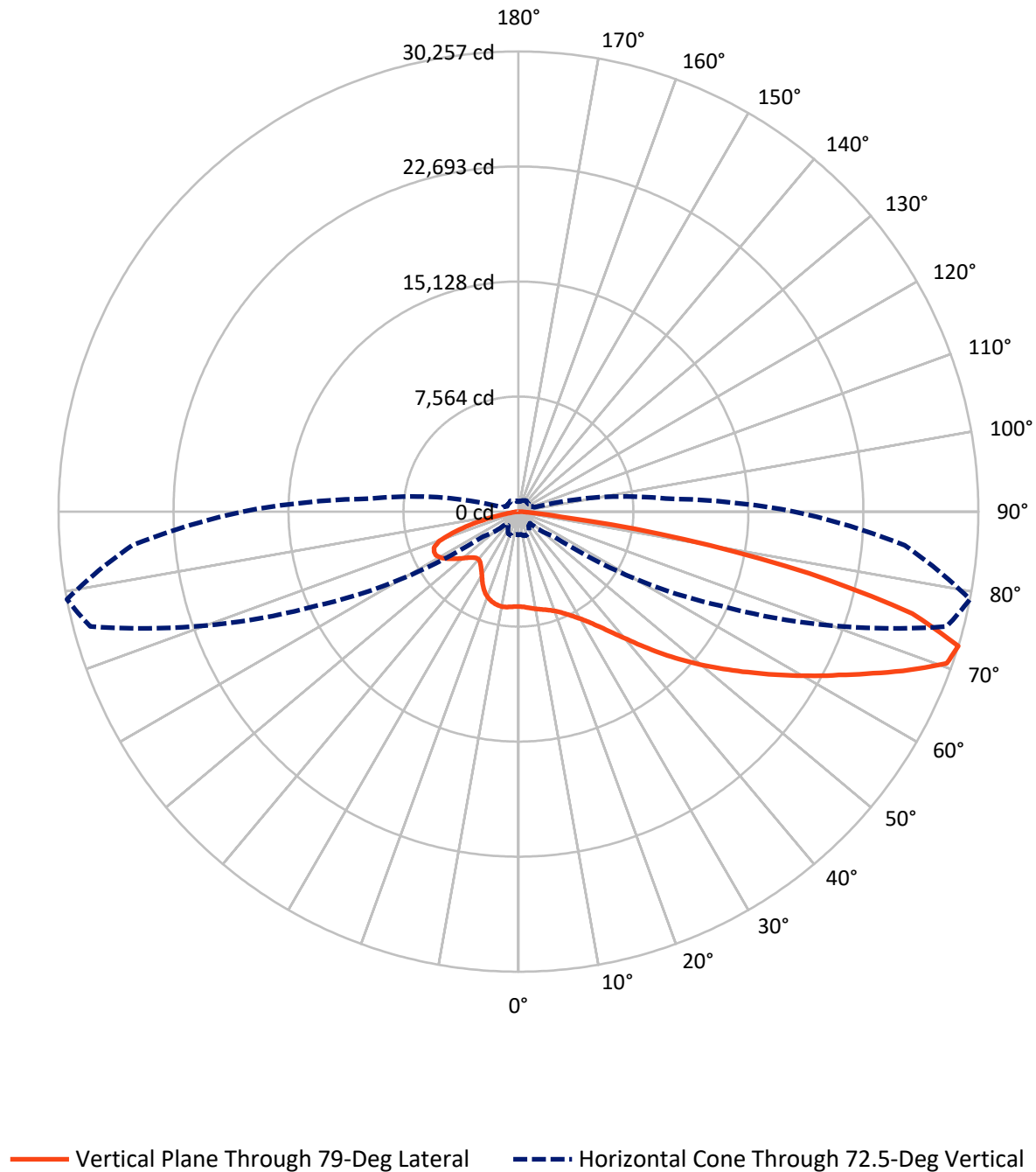
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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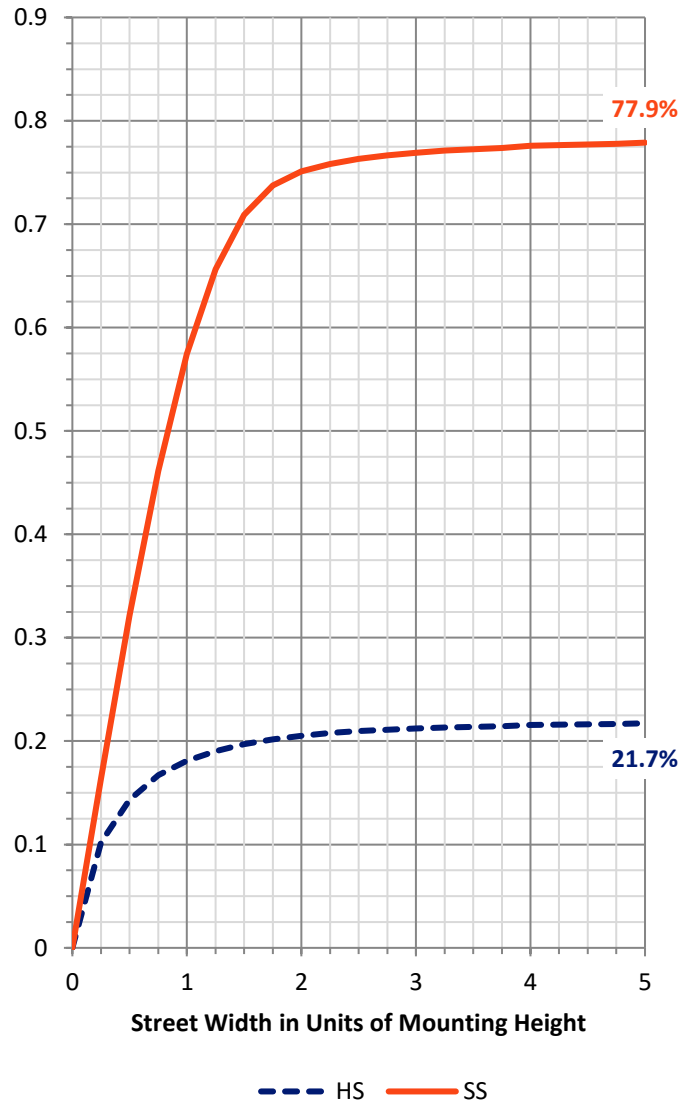
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6845.0	0.0	6845.0
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	24260.7	0.0	24260.7
	% Fixture	78.0	0.0	78.0
Total	Lumens	31105.7	0.0	31105.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	566.8	1.8
10°-20°	1481.9	4.8
20°-30°	2391.1	7.7
30°-40°	3588.8	11.5
40°-50°	5090.9	16.4
50°-60°	6429.1	20.7
60°-70°	6529.6	21.0
70°-80°	4450.2	14.3
80°-90°	577.4	1.9
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°	31105.7	100.0
0°-180°	31105.7	100.0

Coefficient of Utilization



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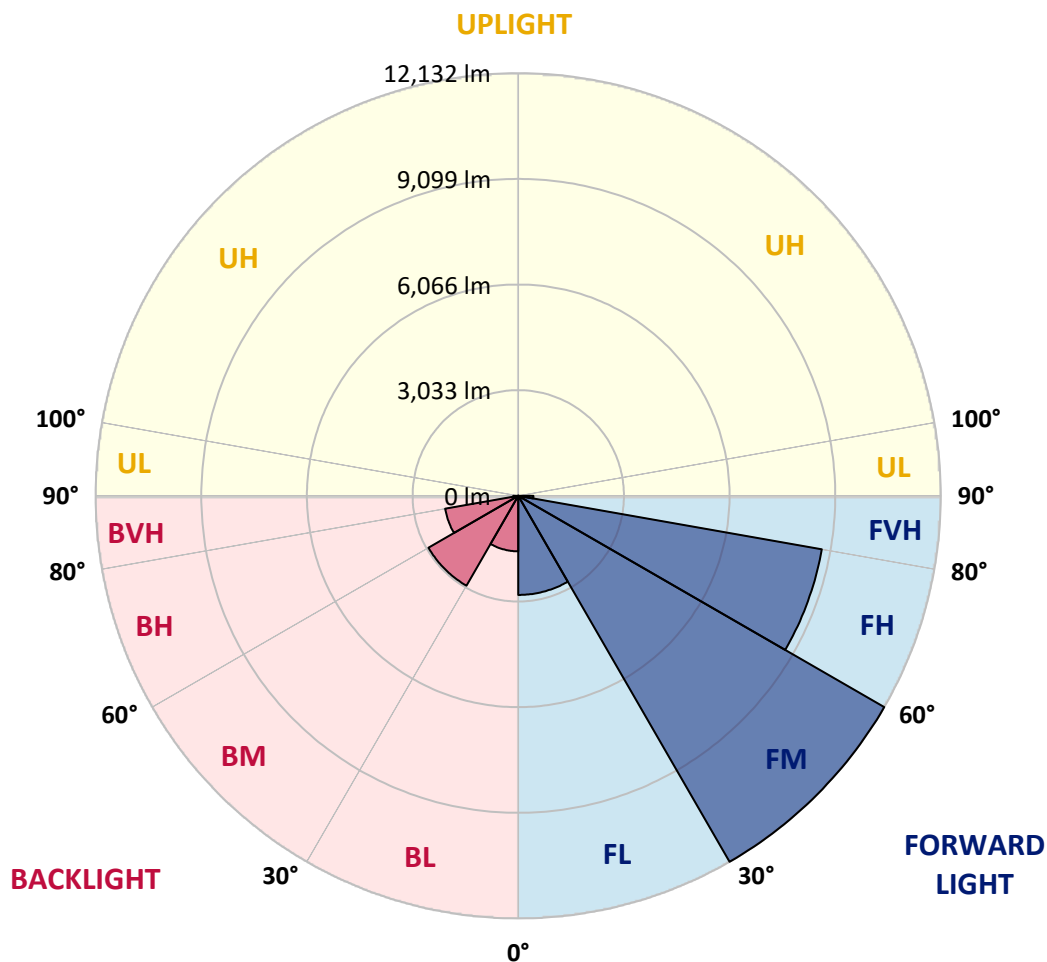
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2845.4	9.1			
FM	(30°-60°)	12131.9	39.0			
FH	(60°-80°)	8848.5	28.4			G4/12000
FVH	(80°-90°)	434.9	1.4			G3/500
BL	(0°-30°)	1594.4	5.1	B3/2500		
BM	(30°-60°)	2976.8	9.6	B3/5000		
BH	(60°-80°)	2131.3	6.9	B3/2500		G3/2500
BVH	(80°-90°)	142.4	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-G4

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	6244.2	6244.2	6244.2	6244.2	6244.2	6244.2	6244.2	6244.2	6244.2	6244.2	6244.2
2.5°	6247.5	6217.9	6235.9	6229.3	6237.6	6247.5	6250.8	6255.7	6272.2	6270.5	6268.9
5°	6234.3	6204.6	6229.3	6221.1	6242.6	6265.5	6285.3	6303.4	6329.7	6341.3	6324.8
7.5°	6206.4	6186.6	6211.3	6235.9	6275.5	6310.0	6338.0	6379.1	6416.9	6423.5	6435.1
10°	6043.4	6028.6	6086.2	6150.4	6259.0	6352.7	6413.6	6461.4	6502.5	6509.1	6525.6
12.5°	5874.0	5855.8	5920.0	6007.2	6183.3	6352.7	6481.1	6543.6	6579.8	6601.2	6625.9
15°	5846.0	5831.2	5867.4	5943.1	6089.5	6308.4	6527.2	6642.3	6673.6	6698.3	6708.1
17.5°	5980.9	5952.9	5967.8	5994.1	6079.6	6267.2	6563.4	6754.2	6801.9	6828.2	6828.2
20°	6293.5	6254.0	6231.0	6178.4	6163.5	6273.8	6560.1	6889.1	6951.7	6984.6	6992.9
22.5°	6709.9	6683.5	6634.1	6500.9	6356.0	6354.4	6622.6	7061.9	7178.7	7210.0	7190.3
25°	7213.3	7173.8	7111.2	6930.3	6652.2	6514.0	6727.9	7282.4	7478.2	7486.4	7428.8
27.5°	7792.5	7733.2	7647.6	7409.1	7034.0	6764.1	6889.1	7535.8	7822.1	7818.8	7700.3
30°	8402.8	8343.7	8253.2	7963.5	7491.3	7101.4	7112.9	7809.0	8230.1	8212.0	8009.7
32.5°	8848.8	8804.3	8786.3	8562.4	8017.9	7499.6	7369.6	8111.6	8733.6	8717.1	8434.1
35°	9191.0	9133.5	9154.8	9041.3	8592.1	7945.5	7683.9	8472.0	9345.6	9344.0	8991.9
37.5°	9529.9	9479.0	9497.0	9421.4	9123.5	8511.5	8067.3	8913.0	10104.2	10140.4	9666.6
40°	9839.3	9785.0	9857.4	9786.6	9536.5	9113.7	8503.3	9411.6	10982.9	11052.0	10482.7
42.5°	10025.2	9982.5	10102.6	10104.2	9895.2	9622.1	8982.1	9961.1	11999.7	12154.3	11486.4
45°	10089.4	10074.6	10255.5	10293.5	10212.8	9916.7	9413.2	10560.0	13095.5	13371.9	12629.8
47.5°	10020.3	9992.3	10242.4	10382.2	10446.4	10054.8	9770.2	11208.3	14214.3	14619.1	13877.1
50°	9671.5	9617.2	9989.0	10283.5	10512.3	10145.3	10130.5	11956.9	15486.2	15928.8	15130.8
52.5°	9044.6	9003.5	9426.3	9938.0	10367.5	10189.7	10535.3	12774.7	16693.9	17266.4	16415.8
55°	8243.3	8189.0	8654.6	9322.7	10007.1	10175.0	10940.0	13689.5	18118.8	18699.6	17743.7
57.5°	6973.1	6864.4	7453.5	8243.3	9419.8	10156.8	11361.3	14599.4	19566.7	20262.7	19160.3
60°	5120.4	4959.2	5681.5	6617.7	8271.2	9980.8	11882.8	15619.5	21304.2	21931.1	20706.9
62.5°	2981.4	2887.6	3359.8	4233.6	6234.3	8944.3	12175.7	16805.8	23012.1	23670.2	22227.2
65°	2315.1	2288.7	2329.8	2397.3	3470.0	6696.6	11272.4	17962.5	25183.9	25644.7	23811.8
67.5°	2117.5	2097.9	2115.9	1989.2	1760.5	3730.1	8917.9	18255.4	27510.6	27790.2	25198.8
70°	1882.3	1859.2	1918.5	1809.9	1385.4	1696.4	5762.0	17192.4	29361.5	29886.4	26253.5
72.5°	1533.5	1507.2	1645.3	1596.0	1166.6	1089.3	2894.2	14666.8	29167.4	30256.7	25498.2
75°	1178.0	1163.3	1327.8	1369.0	951.0	857.2	1388.7	10902.2	25667.7	26765.2	21975.5
77.5°	914.8	903.3	987.2	1136.9	766.7	664.7	853.9	6915.5	19343.0	19535.5	15144.0
80°	686.1	653.2	730.5	880.3	597.3	485.3	579.1	4032.8	12226.7	11083.2	6591.4
82.5°	429.5	413.0	477.1	587.4	421.2	334.0	376.8	2227.8	4899.9	2886.0	1271.8
85°	245.2	238.6	259.9	335.7	228.7	192.5	215.6	983.9	895.0	615.4	383.3
87.5°	98.7	95.4	118.5	149.8	83.9	70.7	75.6	237.0	197.4	182.7	126.7
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°	6244.2	6244.2	6244.2	6244.2	6244.2	6244.2	6244.2	6244.2	6244.2	6244.2	6244.2
2.5°	6262.2	6262.2	6239.3	6203.0	6161.9	6135.5	6092.8	6081.3	6036.8	6023.7	6045.0
5°	6338.0	6324.8	6254.0	6152.0	6012.1	5883.8	5742.4	5653.5	5528.4	5484.1	5517.0
7.5°	6433.4	6397.2	6275.5	6051.7	5758.8	5470.8	5171.4	4944.3	4727.1	4649.8	4659.6
10°	6520.6	6469.6	6262.2	5870.7	5363.9	4865.4	4388.2	4054.2	3800.8	3697.2	3720.1
12.5°	6607.8	6514.0	6175.1	5569.5	4802.8	4126.5	3618.1	3358.2	3201.9	3076.8	3117.9
15°	6690.1	6558.5	6040.1	5166.4	4187.4	3501.3	3126.1	2918.9	2793.8	2711.5	2726.4
17.5°	6785.5	6596.3	5837.8	4654.7	3601.7	3068.6	2762.6	2637.5	2612.8	2603.0	2609.5
20°	6918.7	6630.8	5571.2	4082.2	3170.6	2723.1	2565.2	2553.6	2551.9	2547.0	2563.5
22.5°	7061.9	6671.9	5219.1	3562.2	2803.7	2507.6	2479.6	2456.5	2441.8	2440.1	2458.2
25°	7231.4	6685.2	4778.1	3136.1	2491.1	2405.6	2372.7	2338.0	2328.2	2328.2	2338.0
27.5°	7395.9	6640.7	4264.8	2765.9	2315.1	2311.8	2268.9	2257.5	2255.8	2260.7	2273.9
30°	7560.5	6556.8	3754.7	2423.6	2213.0	2213.0	2198.2	2206.4	2213.0	2229.5	2241.0
32.5°	7782.6	6468.0	3328.6	2170.2	2124.2	2107.7	2122.6	2139.0	2145.5	2167.0	2185.1
35°	8108.4	6405.4	2989.6	2032.1	2032.1	2010.6	2018.8	2015.6	2000.8	1990.9	2013.9
37.5°	8539.5	6402.2	2709.9	1967.9	1954.7	1951.4	1953.0	1931.6	1874.1	1804.9	1806.6
40°	9057.7	6491.0	2494.3	1923.4	1913.6	1933.4	1923.4	1865.8	1707.9	1587.8	1584.4
42.5°	9753.7	6744.4	2356.2	1869.1	1898.7	1923.4	1884.0	1684.9	1577.9	1497.3	1494.0
45°	10573.1	7155.7	2285.4	1811.6	1870.8	1900.4	1709.5	1622.4	1536.8	1439.7	1433.2
47.5°	11501.1	7674.0	2268.9	1757.3	1808.3	1826.3	1635.5	1596.0	1499.0	1393.6	1385.4
50°	12511.4	8287.7	2313.4	1693.1	1717.8	1655.3	1610.8	1574.6	1474.3	1370.6	1359.0
52.5°	13556.1	8963.9	2402.2	1605.9	1627.3	1558.2	1600.9	1569.7	1459.4	1319.6	1309.7
55°	14582.9	9645.1	2487.8	1503.9	1535.1	1471.0	1573.0	1549.9	1391.9	1234.0	1225.8
57.5°	15626.0	10323.1	2571.7	1413.4	1446.3	1387.0	1528.6	1497.3	1316.3	1155.1	1151.8
60°	16710.4	10981.1	2611.2	1326.1	1349.2	1309.7	1461.0	1406.8	1230.7	1074.4	1069.5
62.5°	17725.5	11529.1	2547.0	1238.9	1253.8	1237.3	1372.3	1299.8	1145.1	983.9	982.3
65°	18744.1	11854.8	2349.6	1153.4	1156.7	1148.5	1247.2	1184.7	1044.8	905.0	895.0
67.5°	19667.1	12037.5	2035.3	1061.3	1053.1	1049.7	1130.4	1059.6	947.7	825.9	816.1
70°	19862.9	11573.5	1554.8	952.6	952.6	944.4	1002.0	929.7	840.8	742.1	738.8
72.5°	18141.8	9735.7	1104.0	829.2	842.4	825.9	873.7	812.8	732.2	666.4	646.7
75°	14629.0	7139.2	803.0	702.5	725.6	697.6	742.1	699.3	630.2	628.5	566.0
77.5°	10051.6	4414.5	582.5	579.1	595.6	559.4	610.4	587.4	524.9	496.9	465.7
80°	4289.5	1760.5	424.6	447.5	447.5	414.6	473.9	480.4	426.2	413.0	413.0
82.5°	853.9	500.2	297.8	307.7	289.6	279.7	335.7	371.9	513.3	570.9	572.6
85°	256.7	184.3	179.4	167.8	148.1	149.8	197.4	373.5	460.7	263.2	227.0
87.5°	70.7	46.0	47.8	37.8	31.3	41.1	67.4	283.0	154.7	65.8	56.0
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)