

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: P967752

Luminaire Tested: **NAV-SB5A-740-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967752
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-SB5A-740-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24015.8 lumens
Efficiency: N/A
Efficacy: 169.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 141.7
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



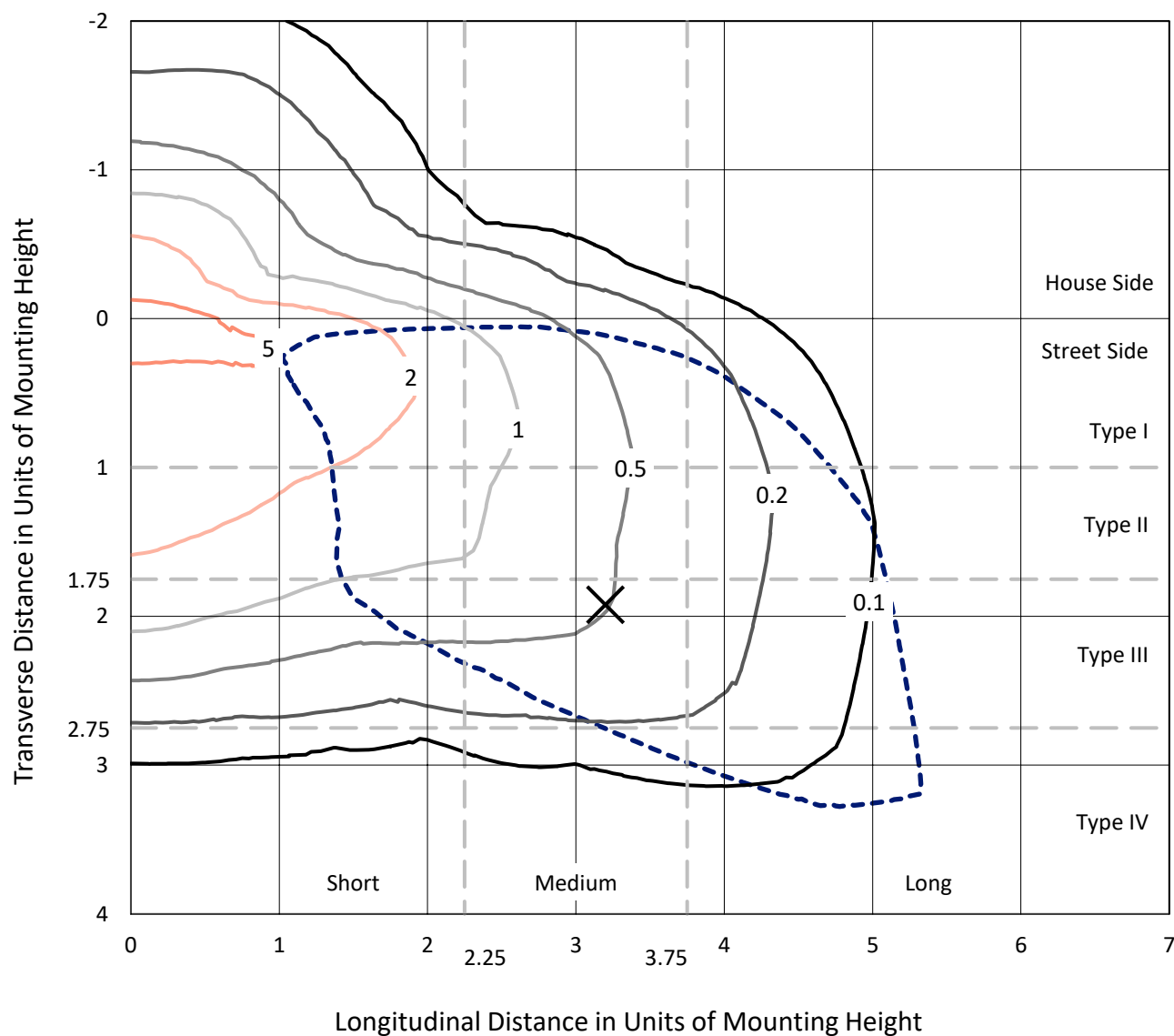
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

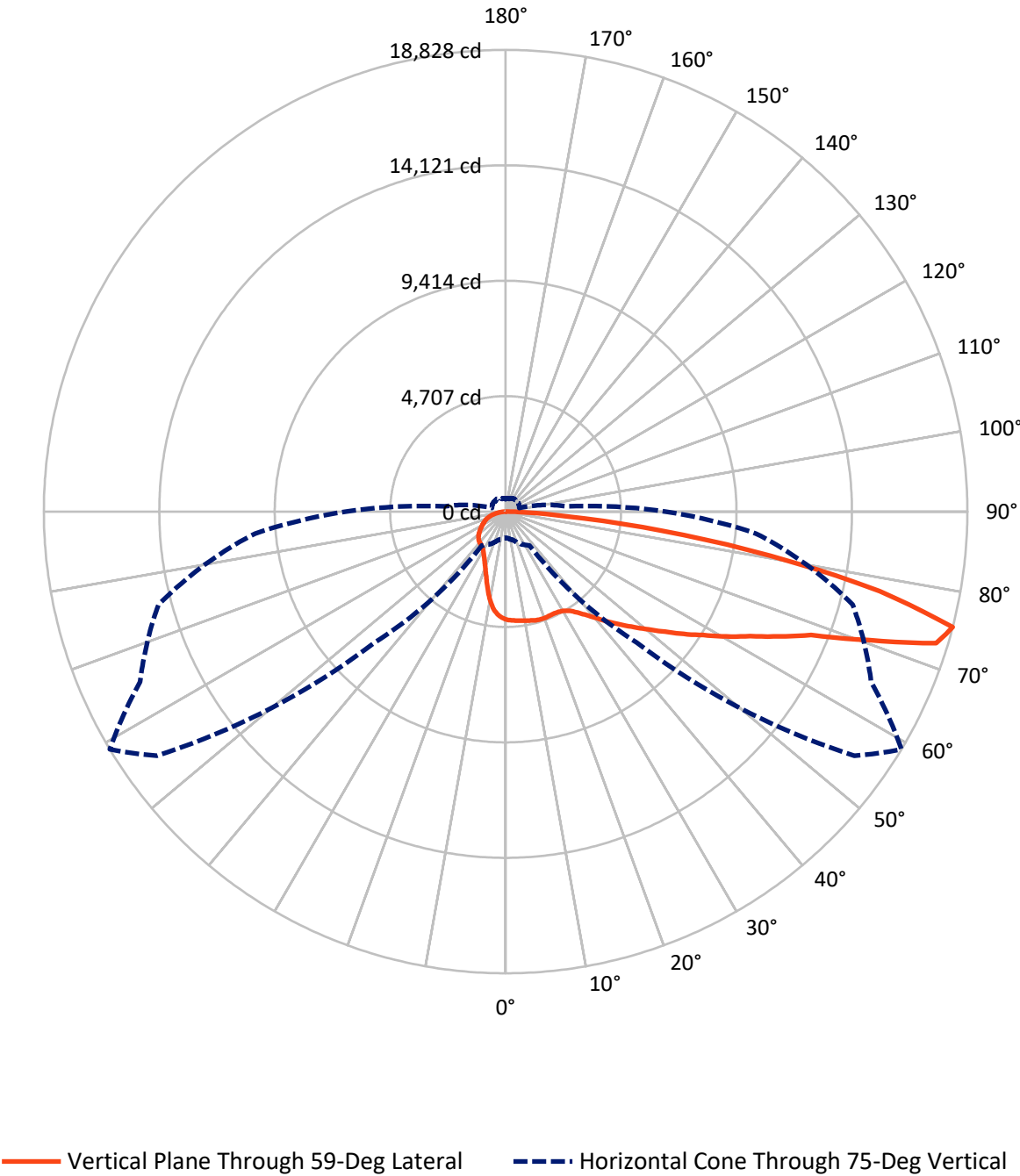
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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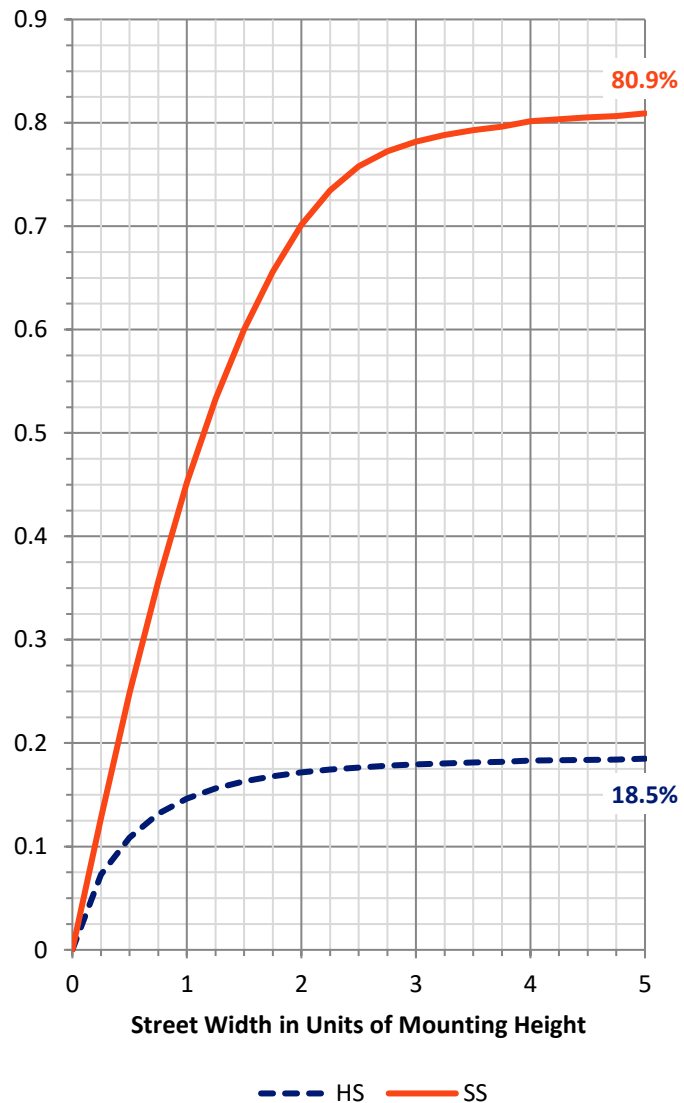
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4504.3	0.0	4504.3
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	19511.4	0.0	19511.4
	% Fixture	81.2	0.0	81.2
Total	Lumens	24015.8	0.0	24015.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	395.2	1.6
10°-20°	1010.3	4.2
20°-30°	1534.6	6.4
30°-40°	2281.1	9.5
40°-50°	3392.4	14.1
50°-60°	4604.7	19.2
60°-70°	5621.6	23.4
70°-80°	4411.7	18.4
80°-90°	764.2	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°	24015.8	100.0
0°-180°	24015.8	100.0

Coefficient of Utilization



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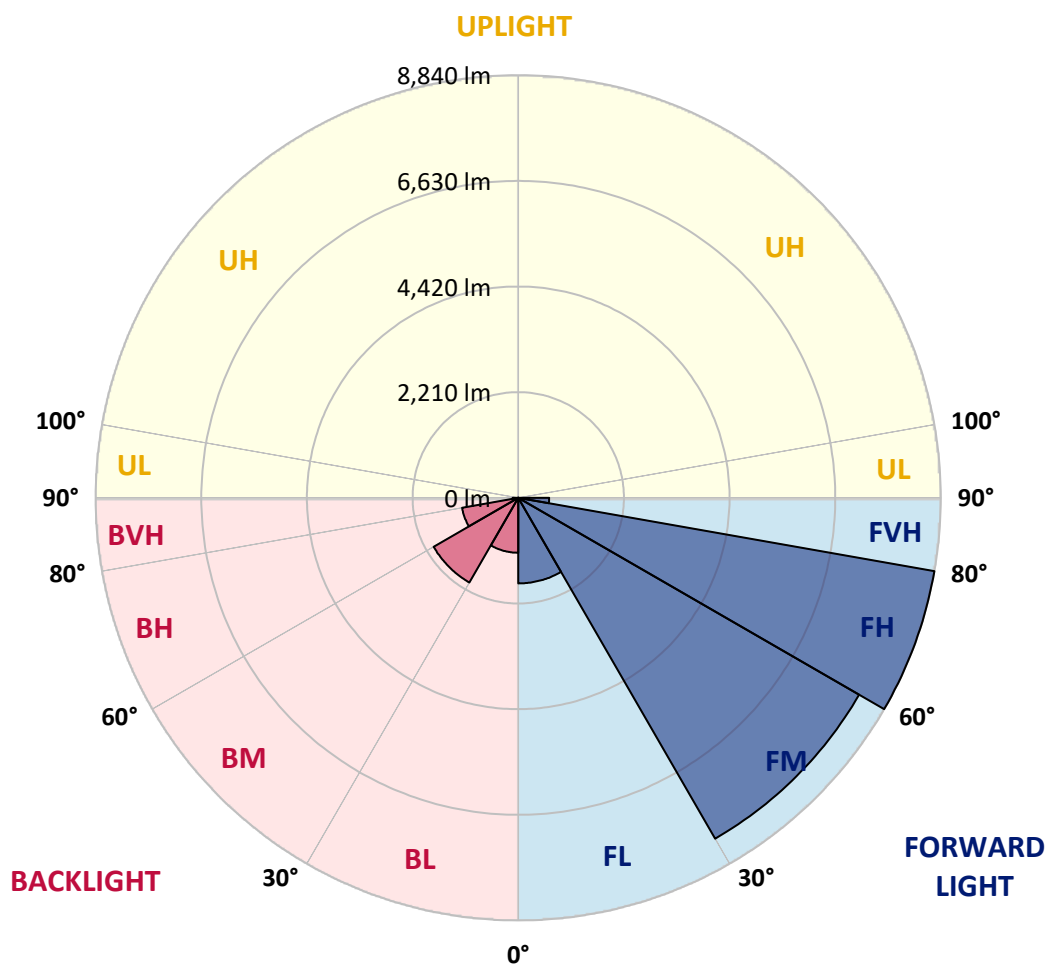
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1790.6	7.5			
FM	(30°-60°)	8233.6	34.3			
FH	(60°-80°)	8840.0	36.8			G4/12000
FVH	(80°-90°)	647.2	2.7			G4/750
BL	(0°-30°)	1149.5	4.8	B3/2500		
BM	(30°-60°)	2044.5	8.5	B2/2500		
BH	(60°-80°)	1193.4	5.0	B3/2500		G3/2500
BVH	(80°-90°)	117.0	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-G4

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	4408.0	4408.0	4408.0	4408.0	4408.0	4408.0	4408.0	4408.0	4408.0	4408.0	4408.0
2.5°	4445.5	4430.0	4445.5	4439.1	4436.5	4431.3	4432.6	4441.6	4436.5	4443.0	4420.9
5°	4415.8	4406.8	4422.3	4418.4	4435.2	4437.7	4454.5	4464.9	4471.4	4472.6	4455.9
7.5°	4366.7	4357.7	4379.6	4397.7	4433.8	4444.2	4479.0	4495.9	4505.0	4520.5	4495.9
10°	4187.1	4183.2	4237.5	4306.0	4391.2	4444.2	4497.2	4525.6	4539.8	4581.1	4552.7
12.5°	3869.3	3874.5	3945.5	4077.3	4247.8	4418.4	4517.9	4559.2	4581.1	4632.8	4619.9
15°	3565.7	3564.4	3641.9	3782.8	4021.8	4304.7	4528.1	4599.3	4636.7	4713.0	4702.6
17.5°	3390.0	3384.9	3439.1	3546.3	3768.5	4130.2	4502.3	4621.2	4701.3	4796.9	4787.9
20°	3357.7	3347.3	3375.8	3428.7	3586.4	3939.1	4435.2	4621.2	4753.0	4877.1	4871.8
22.5°	3475.3	3458.5	3446.9	3440.4	3510.1	3781.4	4358.9	4605.7	4829.2	4992.0	4982.9
25°	3711.7	3685.9	3626.4	3568.3	3547.6	3710.4	4291.8	4601.8	4942.9	5147.0	5113.4
27.5°	4094.1	4061.8	3941.6	3802.1	3676.8	3746.6	4262.1	4625.1	5068.2	5311.1	5243.9
30°	4568.2	4533.4	4382.2	4167.8	3943.0	3881.0	4299.5	4693.6	5228.4	5529.5	5397.6
32.5°	4993.3	4954.5	4825.3	4607.0	4303.4	4113.5	4418.4	4824.1	5480.4	5833.1	5628.9
35°	5370.5	5325.3	5209.0	5007.5	4745.2	4440.3	4632.8	5055.3	5838.2	6326.5	5942.8
37.5°	5740.0	5687.0	5560.4	5347.2	5163.8	4875.7	4928.7	5352.4	6313.6	6926.0	6358.8
40°	6153.4	6077.2	5923.5	5712.8	5534.6	5386.1	5317.6	5716.7	6796.8	7595.2	6878.2
42.5°	6554.0	6481.6	6298.1	6118.5	5895.1	5852.4	5768.4	6143.1	7325.2	8330.3	7405.3
45°	6985.4	6898.9	6676.6	6449.3	6308.5	6162.5	6205.1	6569.4	7843.3	9079.7	7958.2
47.5°	7389.8	7292.9	7030.7	6777.4	6699.9	6423.5	6605.6	7038.4	8382.0	9839.3	8506.0
50°	7608.2	7512.5	7294.2	7065.5	7004.8	6745.1	7039.7	7553.8	8946.6	10596.3	9031.8
52.5°	7790.3	7686.9	7401.4	7274.8	7256.7	7095.3	7574.5	8143.0	9511.2	11265.6	9539.6
55°	7984.0	7869.1	7504.7	7391.1	7473.8	7487.9	8208.9	8810.9	10108.0	11918.0	10018.9
57.5°	8207.6	8061.6	7604.3	7489.3	7685.7	7948.0	8937.5	9503.4	10694.5	12522.6	10445.2
60°	8418.1	8270.9	7795.4	7645.6	7914.3	8481.5	9773.4	10341.8	11358.5	13061.4	10848.3
62.5°	8459.5	8338.1	7948.0	7946.6	8224.4	9104.2	10763.0	11188.1	11938.7	13593.7	11210.0
65°	7743.8	7667.5	7436.3	7934.9	8668.8	10000.7	11865.0	12270.7	12676.4	14058.7	11527.9
67.5°	5893.7	5904.1	5887.3	6849.8	8309.7	11288.8	13460.5	13429.6	13587.1	14580.6	11893.4
70°	2694.9	2755.7	3151.0	4728.4	6657.3	11437.4	16098.6	15696.8	14730.5	15256.3	12209.9
72.5°	1456.0	1502.5	1664.0	2290.6	4002.4	10168.7	18070.1	18355.6	16251.1	15711.1	11862.4
75°	1068.5	1094.3	1206.6	1456.0	1680.8	7557.7	17363.4	18828.4	16441.0	14650.4	10243.6
77.5°	799.7	811.3	903.0	1153.6	860.4	3984.3	13874.0	15593.5	14074.2	12036.9	7566.8
80°	580.0	593.0	661.4	865.6	603.3	1457.2	9526.7	10945.2	9639.0	7672.7	3771.1
82.5°	400.5	405.7	435.4	589.1	421.2	565.9	5405.4	6418.2	5380.8	2692.4	1018.0
85°	241.6	248.0	261.0	343.7	239.0	268.8	2333.2	2413.3	1608.4	643.4	316.5
87.5°	99.5	106.0	116.2	144.7	94.3	74.9	385.0	483.2	301.0	188.6	98.2
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°	4408.0	4408.0	4408.0	4408.0	4408.0	4408.0	4408.0	4408.0	4408.0	4408.0	4408.0
2.5°	4414.5	4405.4	4381.0	4347.3	4316.3	4277.5	4260.7	4246.6	4233.7	4209.1	4197.5
5°	4441.6	4417.0	4351.2	4265.9	4169.0	4063.1	3959.8	3888.6	3828.0	3782.8	3745.2
7.5°	4482.9	4436.5	4316.3	4141.9	3919.7	3692.4	3486.9	3340.9	3231.1	3191.0	3121.3
10°	4525.6	4470.0	4260.7	3953.3	3569.6	3219.4	2946.9	2797.0	2709.2	2680.8	2636.8
12.5°	4576.0	4494.6	4174.2	3691.0	3178.1	2794.5	2556.8	2468.8	2423.6	2408.1	2412.0
15°	4649.6	4515.2	4043.7	3362.9	2804.8	2484.4	2330.6	2269.9	2246.7	2245.4	2250.5
17.5°	4705.2	4519.1	3840.9	3011.4	2517.9	2297.0	2170.4	2147.2	2162.6	2185.9	2194.9
20°	4767.2	4484.3	3574.8	2691.0	2316.4	2132.9	2080.0	2095.5	2132.9	2166.5	2178.2
22.5°	4811.1	4420.9	3253.0	2441.8	2142.0	2038.6	2036.1	2068.3	2089.1	2105.9	2114.9
25°	4849.9	4313.7	2912.0	2232.4	1998.6	1981.8	2010.2	1999.9	1985.7	1999.9	2008.9
27.5°	4878.3	4144.5	2607.1	2049.0	1897.8	1943.1	1926.3	1903.0	1901.7	1909.5	1922.4
30°	4869.3	3918.4	2356.5	1874.6	1826.8	1870.7	1830.6	1826.8	1822.9	1826.8	1841.0
32.5°	4869.3	3661.3	2164.0	1754.4	1781.6	1764.7	1760.8	1751.8	1736.4	1735.0	1751.8
35°	4896.4	3404.2	1998.6	1689.8	1744.1	1704.1	1706.6	1684.7	1652.4	1636.8	1652.4
37.5°	4952.0	3197.5	1834.5	1658.9	1678.2	1676.9	1666.5	1629.1	1572.2	1523.1	1540.0
40°	5086.3	3136.8	1722.1	1644.6	1647.2	1662.7	1635.6	1563.2	1434.1	1353.9	1364.3
42.5°	5296.9	3238.9	1697.6	1609.8	1626.6	1642.0	1589.1	1421.2	1329.4	1281.6	1281.6
45°	5564.3	3417.1	1750.6	1559.3	1577.5	1604.5	1447.0	1366.8	1325.5	1326.8	1333.2
47.5°	5902.8	3604.4	1848.7	1515.5	1506.3	1521.9	1352.7	1303.6	1246.7	1261.0	1297.1
50°	6294.2	3794.3	1941.8	1456.0	1427.6	1377.2	1291.9	1245.4	1173.1	1139.5	1148.5
52.5°	6718.0	3977.8	1979.3	1383.6	1342.3	1284.1	1250.6	1193.7	1105.9	1050.3	1049.1
55°	7119.8	4144.5	1937.9	1297.1	1257.1	1211.9	1206.6	1171.8	1077.5	1000.0	1000.0
57.5°	7499.6	4284.0	1834.5	1209.2	1170.4	1143.4	1178.2	1161.4	1042.6	943.1	938.0
60°	7821.3	4379.6	1684.7	1120.1	1093.0	1078.7	1131.7	1126.6	993.5	882.4	878.5
62.5°	8077.1	4417.0	1519.3	1034.8	1028.4	1002.6	1067.1	1067.1	931.5	823.0	819.1
65°	8277.4	4381.0	1351.4	950.9	963.8	925.1	988.3	980.6	865.6	770.0	764.9
67.5°	8454.3	4262.1	1165.3	868.2	897.9	848.8	905.6	887.5	793.2	717.0	711.9
70°	8533.1	3985.6	953.5	785.5	821.6	773.9	823.0	789.4	711.9	660.2	649.8
72.5°	7900.1	3312.5	750.6	698.9	729.9	691.2	733.8	695.1	624.0	600.8	581.4
75°	6535.8	2485.6	577.5	604.6	627.9	598.2	626.6	598.2	533.5	550.3	502.6
77.5°	4746.6	1678.2	441.9	505.1	515.5	500.0	524.5	492.2	434.1	430.2	410.8
80°	2360.4	983.2	346.2	399.2	395.3	385.0	413.4	397.9	348.8	369.5	365.6
82.5°	683.5	421.2	251.9	280.3	272.5	275.2	295.8	303.6	454.8	450.9	461.2
85°	214.4	165.3	151.2	156.3	148.5	152.4	174.5	346.2	320.4	187.4	202.8
87.5°	55.6	56.9	37.5	40.1	41.3	49.1	55.6	210.5	100.8	65.9	69.8
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)