

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: P968186

Luminaire Tested: **NAV-SB5B-727-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968186
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-SB5B-727-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26430.6 lumens
Efficiency: N/A
Efficacy: 144.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

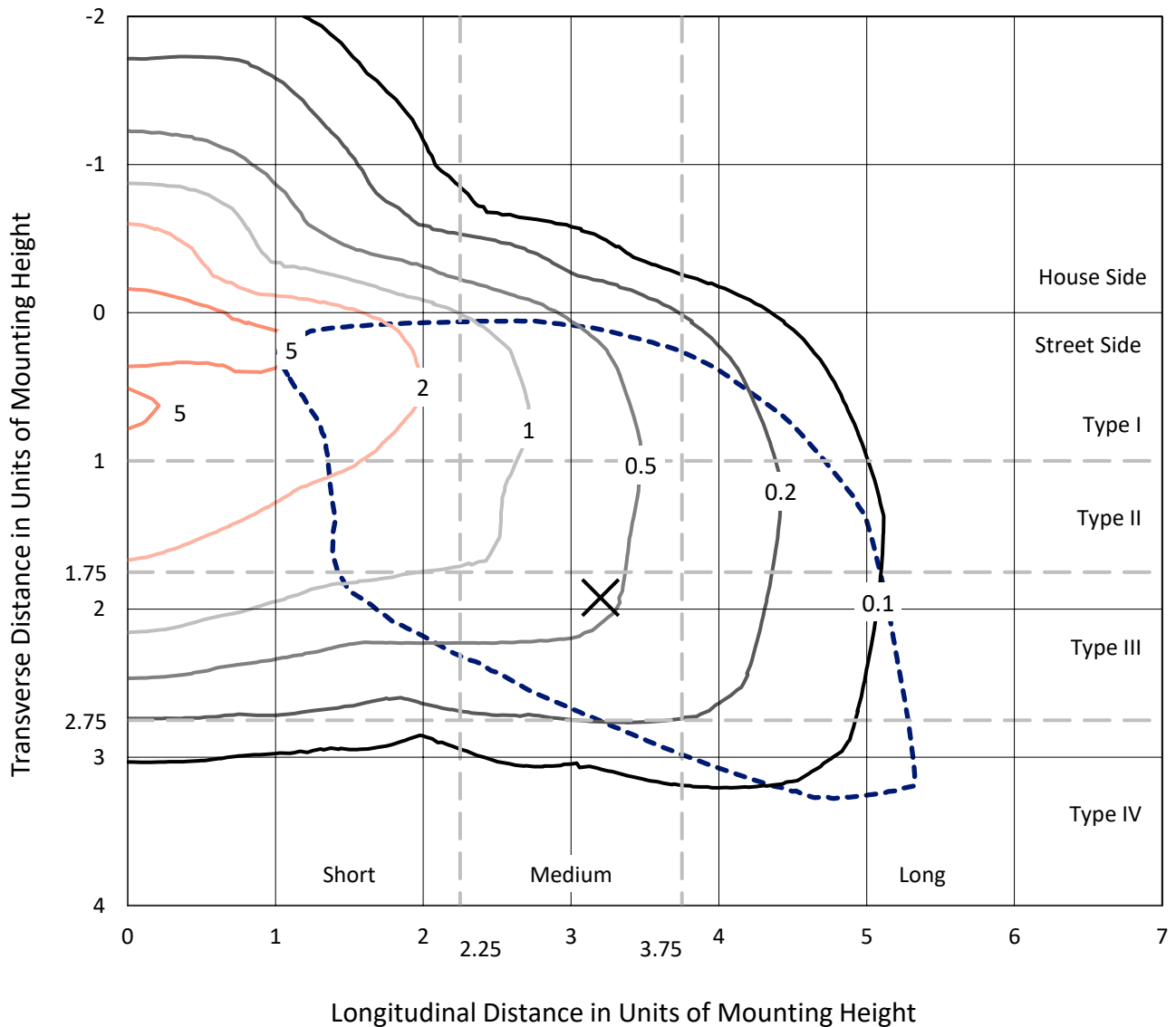
Input Watts (W): 182.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

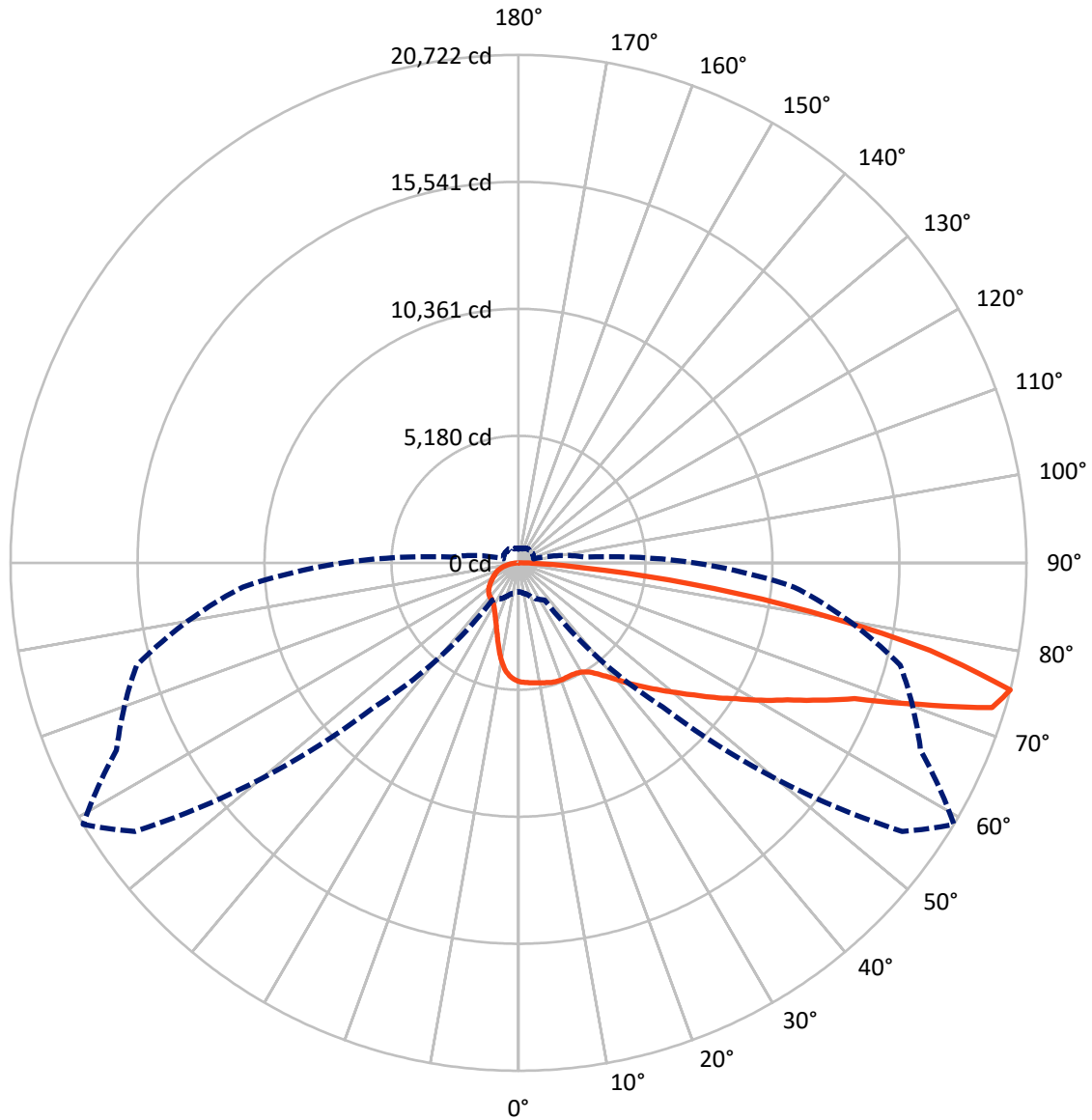
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.8 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4957.2	0.0	4957.2
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	21473.4	0.0	21473.4
	% Fixture	81.2	0.0	81.2
Total	Lumens	26430.6	0.0	26430.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	435.0	1.6
10°-20°	1111.9	4.2
20°-30°	1688.9	6.4
30°-40°	2510.4	9.5
40°-50°	3733.5	14.1
50°-60°	5067.7	19.2
60°-70°	6186.9	23.4
70°-80°	4855.4	18.4
80°-90°	841.1	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°	26430.6	100.0
0°-180°	26430.6	100.0

Coefficient of Utilization

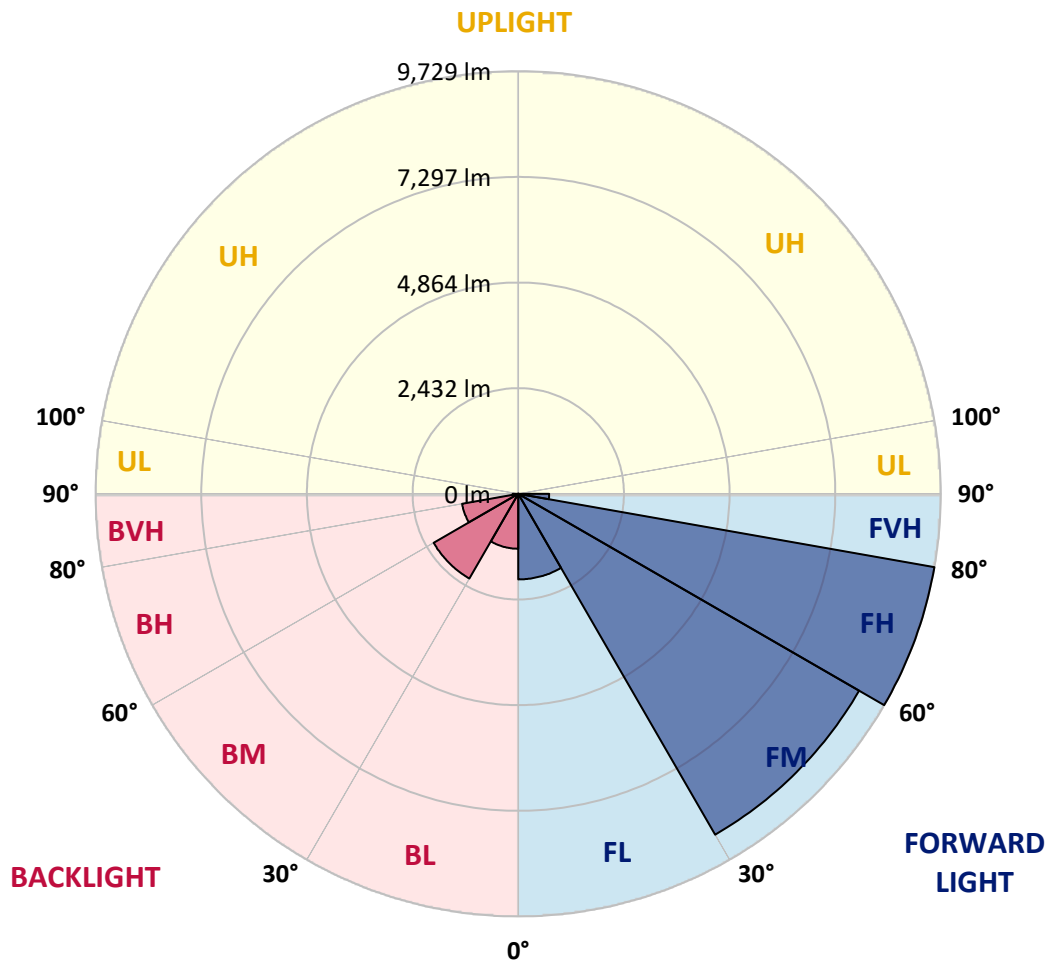


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1970.7	7.5			
FM (30°-60°)	9061.5	34.3			
FH (60°-80°)	9728.9	36.8			G4/12000
FVH (80°-90°)	712.3	2.7			G4/750
BL (0°-30°)	1265.0	4.8	B3/2500		
BM (30°-60°)	2250.1	8.5	B2/2500		
BH (60°-80°)	1313.4	5.0	B3/2500		G3/2500
BVH (80°-90°)	128.7	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°	4851.3	4851.3	4851.3	4851.3	4851.3	4851.3	4851.3	4851.3	4851.3	4851.3	4851.3
2.5°	4892.5	4875.4	4892.5	4885.5	4882.6	4876.8	4878.3	4888.2	4882.6	4889.7	4865.5
5°	4859.8	4849.9	4866.9	4862.7	4881.2	4884.0	4902.5	4913.8	4920.9	4922.4	4903.9
7.5°	4805.8	4795.9	4820.0	4839.9	4879.7	4891.1	4929.5	4948.0	4957.9	4974.9	4948.0
10°	4608.2	4603.9	4663.6	4739.0	4832.8	4891.1	4949.4	4980.7	4996.4	5041.8	5010.5
12.5°	4258.4	4264.1	4342.3	4487.3	4675.0	4862.7	4972.2	5017.7	5041.8	5098.7	5084.5
15°	3924.2	3922.9	4008.2	4163.1	4426.2	4737.5	4983.5	5061.8	5103.0	5186.8	5175.4
17.5°	3730.9	3725.2	3784.9	3902.9	4147.5	4545.6	4955.1	5085.8	5174.0	5279.3	5269.3
20°	3695.3	3684.0	3715.2	3773.5	3947.0	4335.1	4881.2	5085.8	5230.9	5367.4	5361.8
22.5°	3824.7	3806.2	3793.4	3786.3	3863.1	4161.7	4797.3	5068.8	5314.8	5494.0	5484.0
25°	4084.9	4056.4	3991.0	3927.1	3904.3	4083.5	4723.3	5064.5	5439.9	5664.6	5627.6
27.5°	4505.8	4470.2	4338.0	4184.5	4046.5	4123.3	4690.6	5090.2	5577.8	5845.2	5771.3
30°	5027.6	4989.2	4822.8	4586.9	4339.4	4271.2	4731.8	5165.5	5754.1	6085.4	5940.4
32.5°	5495.3	5452.7	5310.5	5070.3	4736.1	4527.1	4862.7	5309.1	6031.4	6419.6	6194.9
35°	5910.6	5860.7	5732.8	5511.0	5222.4	4886.8	5098.7	5563.6	6425.2	6962.7	6540.4
37.5°	6317.2	6258.9	6119.6	5884.9	5683.0	5366.0	5424.3	5890.7	6948.5	7622.4	6998.3
40°	6772.2	6688.3	6519.1	6287.3	6091.2	5927.6	5852.2	6291.6	7480.2	8359.0	7569.8
42.5°	7212.9	7133.3	6931.5	6733.8	6487.8	6440.9	6348.4	6760.8	8061.8	9168.0	8150.0
45°	7687.8	7592.6	7348.0	7097.8	6942.8	6782.1	6829.1	7230.0	8631.9	9992.6	8758.5
47.5°	8132.9	8026.3	7737.6	7458.9	7373.6	7069.3	7269.8	7746.1	9224.8	10828.7	9361.3
50°	8373.1	8268.0	8027.7	7776.0	7709.1	7423.4	7747.6	8313.5	9846.2	11661.8	9940.0
52.5°	8573.6	8459.9	8145.7	8006.4	7986.4	7808.7	8336.2	8961.8	10467.5	12398.4	10498.8
55°	8786.9	8660.3	8259.4	8134.3	8225.3	8240.9	9034.3	9696.9	11124.4	13116.4	11026.3
57.5°	9032.9	8872.2	8368.9	8242.3	8458.5	8747.1	9836.2	10459.0	11769.9	13781.8	11495.5
60°	9264.7	9102.5	8579.4	8414.4	8710.1	9334.4	10756.1	11381.8	12500.7	14374.7	11939.1
62.5°	9310.2	9176.5	8747.1	8745.7	9051.4	10019.7	11845.3	12313.0	13139.2	14960.5	12337.2
65°	8522.5	8438.5	8184.0	8732.9	9540.5	11006.3	13058.1	13504.6	13951.0	15472.4	12687.0
67.5°	6486.4	6497.8	6479.3	7538.6	9145.3	12423.9	14814.0	14779.9	14953.4	16046.8	13089.4
70°	2965.9	3032.8	3467.9	5203.9	7326.7	12587.5	17717.4	17275.2	16211.7	16790.4	13437.7
72.5°	1602.4	1653.6	1831.4	2520.9	4404.8	11191.3	19887.2	20201.4	17885.2	17290.9	13055.2
75°	1175.9	1204.3	1328.0	1602.4	1849.8	8317.7	19109.4	20721.8	18094.2	16123.6	11273.7
77.5°	880.1	892.9	993.8	1269.7	946.9	4385.0	15269.0	17161.5	15489.4	13247.2	8327.6
80°	638.4	652.6	728.0	952.6	664.0	1603.8	10484.6	12045.8	10608.2	8444.3	4150.3
82.5°	440.7	446.5	479.2	648.3	463.5	622.8	5948.9	7063.7	5921.9	2963.1	1120.4
85°	265.9	273.0	287.2	378.2	263.0	295.7	2567.8	2656.0	1770.2	708.1	348.4
87.5°	109.5	116.5	127.9	159.3	103.8	82.5	423.7	531.8	331.3	207.6	108.0
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°	4851.3	4851.3	4851.3	4851.3	4851.3	4851.3	4851.3	4851.3	4851.3	4851.3	4851.3
2.5°	4858.4	4848.5	4821.4	4784.5	4750.4	4707.7	4689.2	4673.6	4659.3	4632.3	4619.6
5°	4888.2	4861.3	4788.7	4694.9	4588.2	4471.7	4357.9	4279.7	4212.9	4163.1	4121.9
7.5°	4933.7	4882.6	4750.4	4558.4	4313.8	4063.6	3837.5	3676.9	3556.0	3512.0	3435.2
10°	4980.7	4919.5	4689.2	4350.8	3928.5	3543.2	3243.2	3078.3	2981.6	2950.3	2902.0
12.5°	5036.1	4946.5	4593.9	4062.2	3497.7	3075.4	2813.8	2717.1	2667.4	2650.3	2654.5
15°	5117.2	4969.3	4450.3	3701.1	3086.8	2734.2	2565.0	2498.1	2472.6	2471.2	2476.8
17.5°	5178.3	4973.6	4227.1	3314.3	2771.2	2528.1	2388.7	2363.0	2380.2	2405.8	2415.7
20°	5246.6	4935.2	3934.2	2961.6	2549.4	2347.5	2289.1	2306.2	2347.5	2384.5	2397.2
22.5°	5294.9	4865.5	3580.1	2687.2	2357.4	2243.6	2240.9	2276.3	2299.1	2317.6	2327.6
25°	5337.6	4747.5	3204.8	2456.9	2199.5	2181.1	2212.4	2201.0	2185.4	2201.0	2210.9
27.5°	5368.8	4561.2	2869.3	2255.0	2088.6	2138.5	2119.9	2094.4	2092.9	2101.5	2115.7
30°	5358.9	4312.4	2593.5	2063.1	2010.4	2058.8	2014.7	2010.4	2006.2	2010.4	2026.1
32.5°	5358.9	4029.5	2381.6	1930.9	1960.7	1942.2	1938.0	1928.0	1910.9	1909.5	1928.0
35°	5388.7	3746.5	2199.5	1859.8	1919.5	1875.4	1878.2	1854.0	1818.6	1801.4	1818.6
37.5°	5449.9	3519.0	2019.0	1825.6	1846.9	1845.5	1834.1	1792.9	1730.4	1676.4	1694.8
40°	5597.7	3452.2	1895.3	1809.9	1812.8	1829.9	1800.0	1720.5	1578.2	1490.0	1501.4
42.5°	5829.5	3564.5	1868.3	1771.6	1790.1	1807.2	1748.9	1564.0	1463.1	1410.5	1410.5
45°	6123.9	3760.7	1926.6	1716.2	1736.0	1765.9	1592.4	1504.3	1458.8	1460.2	1467.3
47.5°	6496.3	3967.0	2034.6	1667.8	1657.8	1675.0	1488.6	1434.6	1372.1	1387.7	1427.5
50°	6927.2	4176.0	2137.0	1602.4	1571.1	1515.7	1421.9	1370.6	1291.0	1254.1	1264.0
52.5°	7393.5	4377.8	2178.2	1522.7	1477.3	1413.3	1376.4	1313.7	1217.1	1156.0	1154.6
55°	7835.7	4561.2	2132.7	1427.5	1383.4	1333.6	1328.0	1289.6	1185.8	1100.5	1100.5
57.5°	8253.7	4714.8	2019.0	1330.9	1288.2	1258.3	1296.7	1278.2	1147.4	1037.9	1032.3
60°	8607.7	4820.0	1854.0	1232.8	1202.8	1187.3	1245.5	1239.8	1093.4	971.1	966.9
62.5°	8889.3	4861.3	1672.1	1138.9	1131.8	1103.3	1174.4	1174.4	1025.1	905.7	901.5
65°	9109.7	4821.4	1487.3	1046.4	1060.7	1018.0	1087.7	1079.1	952.6	847.4	841.7
67.5°	9304.4	4690.6	1282.5	955.5	988.2	934.2	996.7	976.8	873.0	789.1	783.4
70°	9391.2	4386.4	1049.3	864.5	904.3	851.7	905.7	868.7	783.4	726.5	715.1
72.5°	8694.5	3645.6	826.0	769.2	803.3	760.7	807.6	765.0	686.7	661.1	639.8
75°	7193.0	2735.6	635.6	665.4	691.1	658.4	689.6	658.4	587.2	605.7	553.1
77.5°	5223.8	1846.9	486.3	556.0	567.3	550.2	577.3	541.7	477.8	473.4	452.1
80°	2597.7	1082.0	381.1	439.3	435.1	423.7	455.0	437.9	383.9	406.6	402.4
82.5°	752.1	463.5	277.3	308.5	300.0	302.9	325.6	334.2	500.5	496.2	507.6
85°	236.1	182.0	166.4	172.0	163.5	167.8	192.0	381.1	352.6	206.1	223.2
87.5°	61.1	62.5	41.2	44.1	45.5	54.0	61.1	231.8	110.9	72.5	76.8
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)