

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: P968899

Luminaire Tested: **NAV-SB5C-827-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968899
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-SB5C-827-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 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: 32954.8 lumens
Efficiency: N/A
Efficacy: 132.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G5

Input Watts (W): 249.5
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

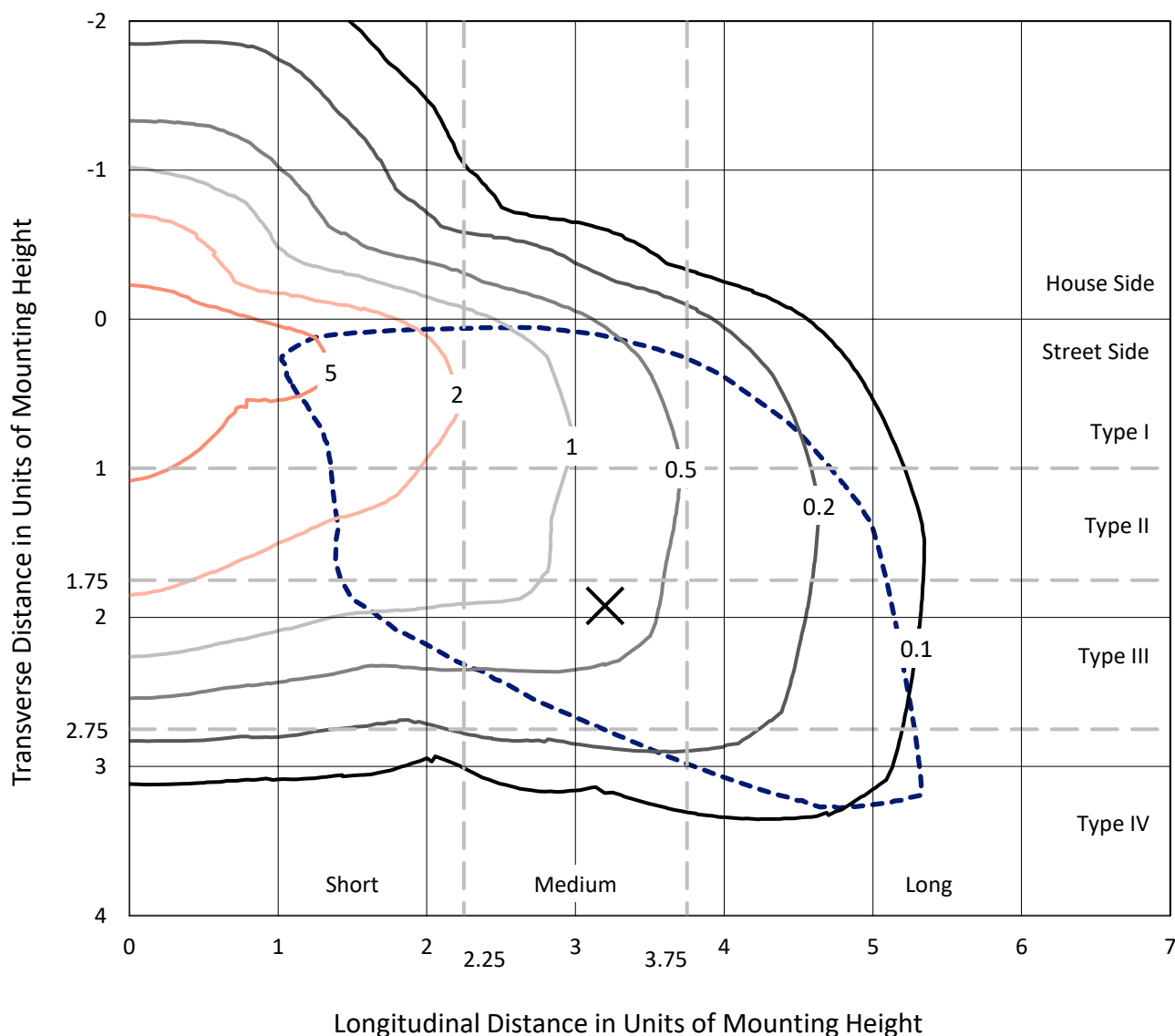


REPORT NUMBER: P968899

CATALOG NUMBER: NAV-SB5C-827-U-SL3

Iso-Footcandle Lines of Horizontal Illumination

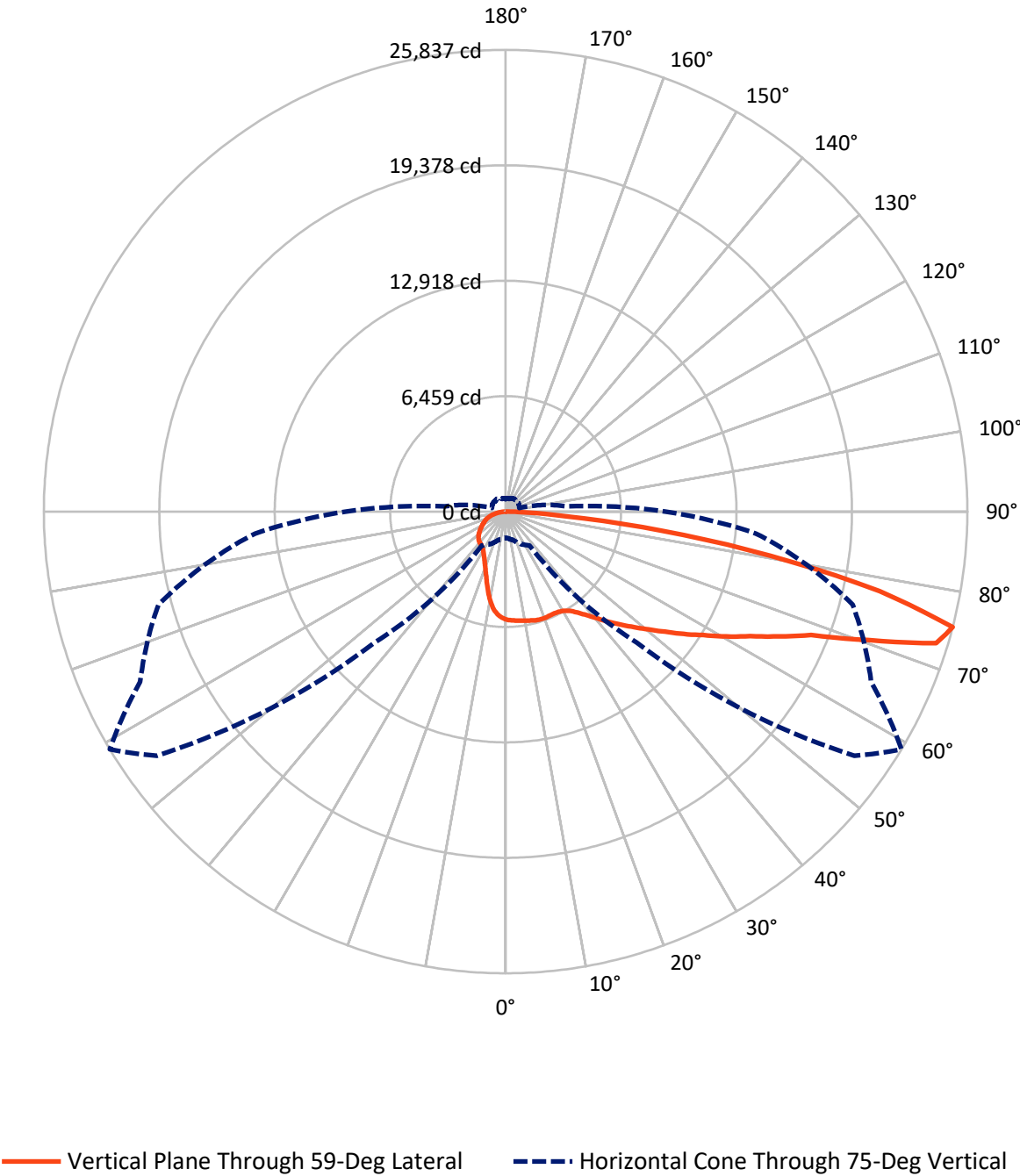
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.7 fc
 Type IV - Medium - N/A

REPORT NUMBER: P968899
CATALOG NUMBER: NAV-SB5C-827-U-SL3

Luminous Intensity Polar Plot



REPORT NUMBER: P968899

CATALOG NUMBER: NAV-SB5C-827-U-SL3

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6180.9	0.0	6180.9
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	26773.9	0.0	26773.9
	% Fixture	81.2	0.0	81.2
Total	Lumens	32954.8	0.0	32954.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	542.4	1.6
10°-20°	1386.3	4.2
20°-30°	2105.7	6.4
30°-40°	3130.1	9.5
40°-50°	4655.0	14.1
50°-60°	6318.6	19.2
60°-70°	7714.0	23.4
70°-80°	6053.9	18.4
80°-90°	1048.7	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°	32954.8	100.0
0°-180°	32954.8	100.0

Coefficient of Utilization



REPORT NUMBER: P968899

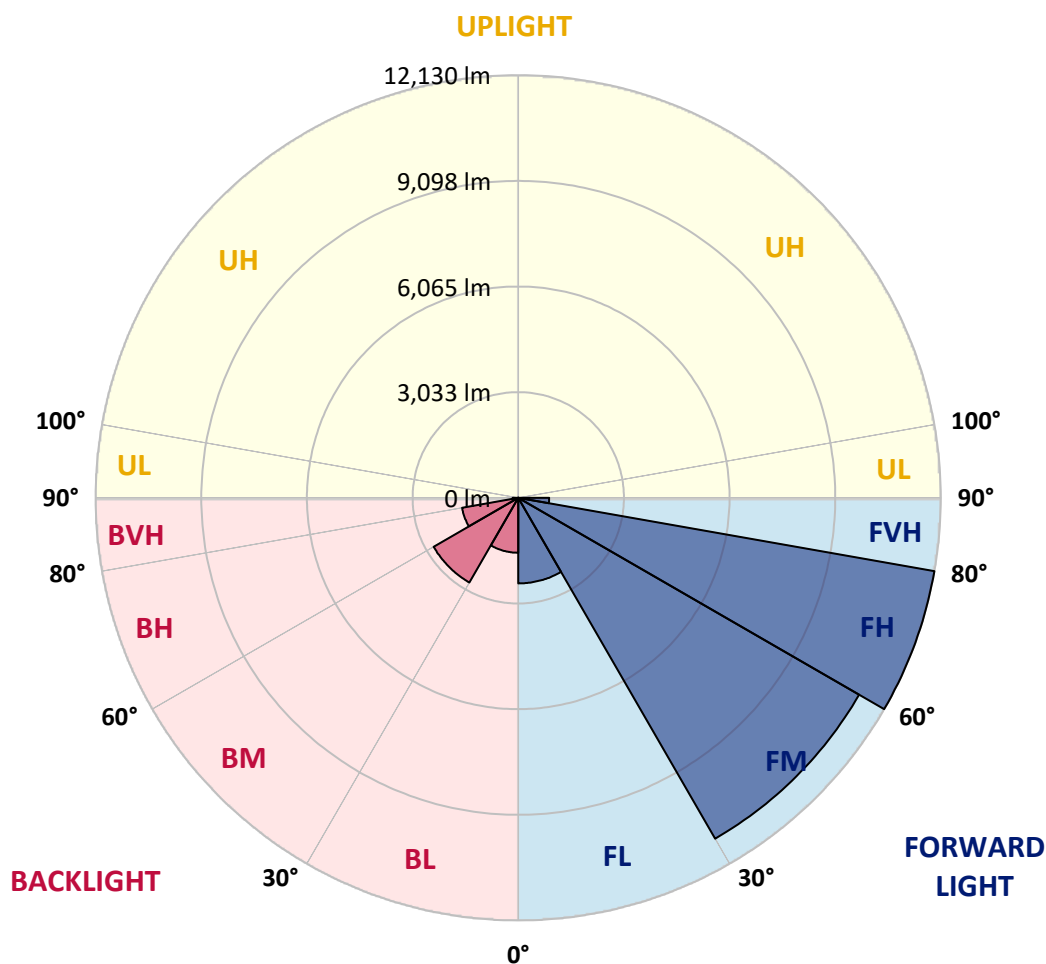
CATALOG NUMBER: NAV-SB5C-827-U-SL3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2457.1	7.5			
FM	(30°-60°)	11298.3	34.3			
FH	(60°-80°)	12130.3	36.8			G5
FVH	(80°-90°)	888.1	2.7			G5
BL	(0°-30°)	1577.3	4.8	B3/2500		
BM	(30°-60°)	2805.5	8.5	B3/5000		
BH	(60°-80°)	1637.6	5.0	B3/2500		G3/2500
BVH	(80°-90°)	160.5	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



REPORT NUMBER: P968899

CATALOG NUMBER: NAV-SB5C-827-U-SL3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	6048.7	6048.7	6048.7	6048.7	6048.7	6048.7	6048.7	6048.7	6048.7	6048.7	6048.7
2.5°	6100.2	6078.9	6100.2	6091.4	6087.8	6080.7	6082.5	6094.9	6087.8	6096.6	6066.5
5°	6059.4	6047.0	6068.3	6063.0	6086.0	6089.5	6112.6	6126.7	6135.6	6137.4	6114.3
7.5°	5992.0	5979.6	6009.8	6034.6	6084.2	6098.4	6146.3	6169.4	6181.8	6203.0	6169.4
10°	5745.6	5740.3	5814.7	5908.7	6025.8	6098.4	6171.1	6210.1	6229.6	6286.3	6247.4
12.5°	5309.5	5316.6	5414.2	5595.0	5829.0	6063.0	6199.5	6256.2	6286.3	6357.3	6339.5
15°	4892.9	4891.1	4997.5	5190.7	5518.7	5907.0	6213.7	6311.1	6362.6	6467.1	6453.0
17.5°	4651.9	4644.7	4719.2	4866.3	5171.2	5667.6	6178.2	6341.3	6451.2	6582.3	6569.9
20°	4607.5	4593.3	4632.3	4705.0	4921.2	5405.2	6086.0	6341.3	6522.1	6692.3	6685.3
22.5°	4768.8	4745.8	4729.9	4720.9	4816.7	5189.0	5981.4	6320.0	6626.7	6850.1	6837.7
25°	5093.2	5057.8	4976.3	4896.4	4868.1	5091.5	5889.2	6314.7	6782.7	7062.9	7016.7
27.5°	5618.0	5573.6	5408.8	5217.4	5045.4	5141.1	5848.4	6346.6	6954.6	7288.0	7195.8
30°	6268.6	6220.7	6013.4	5719.0	5410.6	5325.5	5899.9	6440.6	7174.5	7587.6	7406.8
32.5°	6851.8	6798.6	6621.4	6321.8	5905.2	5644.6	6063.0	6619.7	7520.2	8004.1	7724.1
35°	7369.5	7307.4	7147.9	6871.4	6511.5	6093.1	6357.3	6937.0	8011.3	8681.3	8154.9
37.5°	7876.5	7803.8	7630.1	7337.6	7085.8	6690.5	6763.3	7344.6	8663.6	9503.9	8725.7
40°	8443.8	8339.2	8128.2	7839.3	7594.6	7390.8	7296.9	7844.6	9326.7	10422.3	9438.4
42.5°	8993.3	8894.1	8642.4	8396.0	8089.3	8030.8	7915.6	8429.6	10051.8	11431.0	10161.6
45°	9585.5	9466.7	9161.8	8849.7	8656.5	8456.2	8514.8	9014.7	10762.6	12459.2	10920.5
47.5°	10140.4	10007.4	9647.5	9300.0	9193.7	8814.4	9064.3	9658.2	11501.9	13501.6	11672.1
50°	10440.0	10308.8	10009.2	9695.4	9612.1	9255.8	9659.9	10365.5	12276.6	14540.4	12393.6
52.5°	10689.9	10548.2	10156.3	9982.6	9957.8	9736.2	10393.9	11173.9	13051.3	15458.7	13090.3
55°	10955.9	10798.1	10298.2	10142.2	10255.6	10275.1	11264.3	12090.5	13870.3	16354.1	13748.0
57.5°	11262.6	11062.2	10434.7	10276.9	10546.3	10906.2	12264.2	13040.7	14675.2	17183.7	14333.1
60°	11551.5	11349.4	10697.0	10491.4	10860.2	11638.4	13411.2	14191.2	15586.5	17922.9	14886.2
62.5°	11608.2	11441.7	10906.2	10904.5	11285.7	12492.9	14769.1	15352.4	16382.4	18653.4	15382.6
65°	10626.2	10521.5	10204.2	10888.5	11895.4	13723.2	16281.3	16838.0	17394.7	19291.5	15818.6
67.5°	8087.5	8101.7	8078.6	9399.4	11402.6	15490.7	18470.7	18428.2	18644.4	20007.8	16320.4
70°	3698.1	3781.3	4323.9	6488.5	9135.2	15694.6	22090.8	21539.5	20213.4	20934.9	16754.6
72.5°	1997.9	2061.8	2283.4	3143.2	5492.2	13953.6	24796.1	25187.8	22300.0	21558.9	16277.8
75°	1466.1	1501.5	1655.8	1997.9	2306.5	10370.8	23826.3	25836.7	22560.6	20103.5	14056.4
77.5°	1097.4	1113.4	1239.2	1583.1	1180.7	5467.3	19038.0	21397.6	19312.8	16517.2	10383.2
80°	796.0	813.7	907.6	1187.8	827.9	1999.7	13072.5	15019.1	13226.8	10528.6	5174.8
82.5°	549.6	556.7	597.5	808.4	577.9	776.4	7417.4	8807.2	7383.7	3694.5	1397.0
85°	331.5	340.4	358.1	471.6	328.0	368.7	3201.7	3311.6	2207.1	882.8	434.3
87.5°	136.5	145.3	159.6	198.5	129.5	102.8	528.3	663.1	413.1	258.8	134.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P968899

CATALOG NUMBER: NAV-SB5C-827-U-SL3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6048.7	6048.7	6048.7	6048.7	6048.7	6048.7	6048.7	6048.7	6048.7	6048.7	6048.7
2.5°	6057.6	6045.2	6011.5	5965.5	5922.9	5869.8	5846.7	5827.1	5809.5	5775.8	5759.8
5°	6094.9	6061.2	5970.7	5853.8	5720.8	5575.5	5433.6	5336.2	5252.8	5190.7	5139.3
7.5°	6151.6	6087.8	5922.9	5683.6	5378.7	5066.7	4784.8	4584.4	4433.7	4378.8	4283.1
10°	6210.1	6133.9	5846.7	5424.7	4898.3	4417.9	4043.7	3838.1	3717.6	3678.5	3618.2
12.5°	6279.3	6167.5	5727.9	5064.8	4361.1	3834.5	3508.4	3387.8	3325.7	3304.5	3309.8
15°	6380.3	6195.9	5548.8	4614.5	3848.8	3409.0	3198.1	3114.8	3082.9	3081.1	3088.2
17.5°	6456.5	6201.2	5270.5	4132.4	3455.2	3152.1	2978.3	2946.4	2967.7	2999.6	3012.0
20°	6541.7	6153.4	4905.3	3692.8	3178.6	2926.9	2854.2	2875.4	2926.9	2973.0	2988.9
22.5°	6601.9	6066.5	4463.9	3350.6	2939.3	2797.4	2793.9	2838.2	2866.6	2889.7	2902.1
25°	6655.1	5919.4	3995.9	3063.4	2742.5	2719.4	2758.5	2744.3	2724.8	2744.3	2756.7
27.5°	6694.1	5687.1	3577.5	2811.7	2604.2	2666.3	2643.3	2611.3	2609.5	2620.2	2637.9
30°	6681.7	5376.8	3233.6	2572.3	2506.7	2567.0	2512.1	2506.7	2501.4	2506.7	2526.2
32.5°	6681.7	5024.1	2969.4	2407.4	2444.7	2421.7	2416.3	2403.9	2382.6	2380.9	2403.9
35°	6718.9	4671.3	2742.5	2318.9	2393.3	2338.3	2341.8	2311.7	2267.4	2246.1	2267.4
37.5°	6795.1	4387.7	2517.4	2276.2	2302.9	2301.1	2286.9	2235.5	2157.5	2090.1	2113.1
40°	6979.5	4304.4	2363.1	2256.7	2260.3	2281.5	2244.3	2145.1	1967.8	1857.9	1872.1
42.5°	7268.5	4444.4	2329.4	2208.9	2231.9	2253.3	2180.6	1950.1	1824.2	1758.6	1758.6
45°	7635.4	4689.1	2402.1	2139.8	2164.6	2201.8	1985.5	1875.6	1818.9	1820.7	1829.5
47.5°	8099.9	4946.1	2536.9	2079.5	2067.1	2088.3	1856.1	1788.7	1710.7	1730.2	1779.9
50°	8637.1	5206.7	2664.5	1997.9	1959.0	1889.8	1772.8	1709.0	1609.7	1563.6	1576.0
52.5°	9218.5	5458.4	2715.9	1898.7	1841.9	1762.2	1716.1	1638.1	1517.5	1441.3	1439.5
55°	9769.9	5687.1	2659.2	1779.9	1725.0	1662.9	1655.8	1607.9	1478.5	1372.2	1372.2
57.5°	10291.1	5878.6	2517.4	1659.4	1606.2	1569.0	1616.8	1593.8	1430.7	1294.2	1287.1
60°	10732.5	6009.8	2311.7	1537.0	1499.8	1480.3	1553.0	1545.9	1363.2	1210.8	1205.5
62.5°	11083.5	6061.2	2084.8	1420.0	1411.1	1375.7	1464.3	1464.3	1278.2	1129.2	1123.9
65°	11358.3	6011.5	1854.3	1304.8	1322.5	1269.4	1356.2	1345.5	1187.8	1056.6	1049.5
67.5°	11601.2	5848.4	1599.1	1191.4	1232.0	1164.7	1242.7	1217.9	1088.4	983.9	976.8
70°	11709.3	5469.1	1308.3	1077.9	1127.5	1061.9	1129.2	1083.2	976.8	905.9	891.7
72.5°	10840.6	4545.5	1030.0	959.1	1001.6	948.4	1007.0	953.8	856.3	824.3	797.8
75°	8968.5	3410.9	792.4	829.6	861.6	820.8	859.8	820.8	732.2	755.2	689.6
77.5°	6513.3	2302.9	606.3	693.2	707.4	686.0	719.8	675.5	595.6	590.3	563.8
80°	3238.9	1349.1	475.1	547.8	542.4	528.3	567.3	546.0	478.7	507.1	501.7
82.5°	937.8	577.9	345.7	384.7	374.0	377.6	406.0	416.6	624.0	618.7	632.9
85°	294.3	226.9	207.5	214.5	203.9	209.2	239.3	475.1	439.6	257.1	278.3
87.5°	76.3	78.0	51.5	54.9	56.7	67.3	76.3	288.9	138.3	90.4	95.7
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)