

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: P967719

Luminaire Tested: **NAV-SB5A-735-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967719
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-SB5A-735-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23085 lumens
Efficiency: N/A
Efficacy: 162.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

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

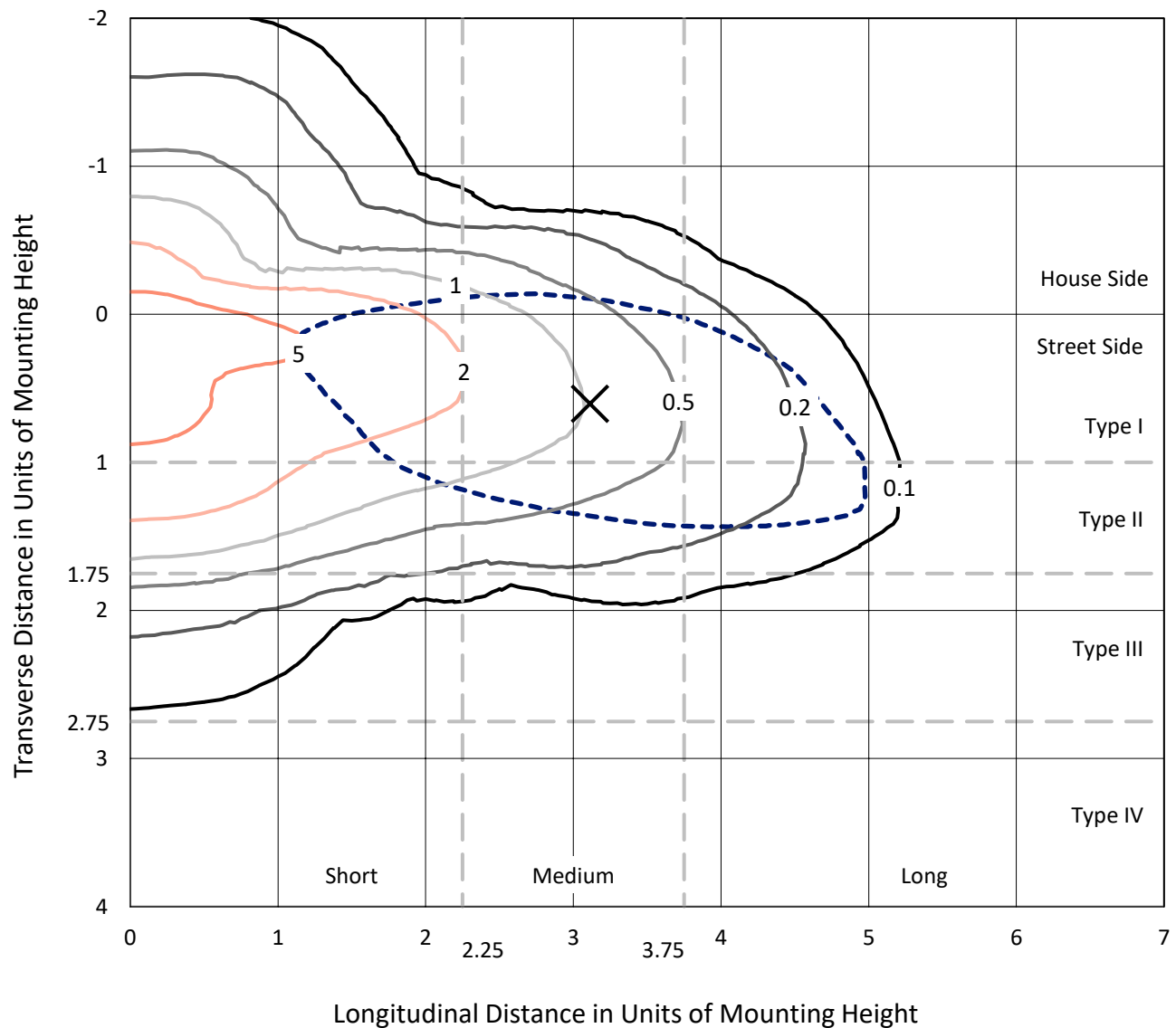


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Iso-Footcandle Lines of Horizontal Illumination

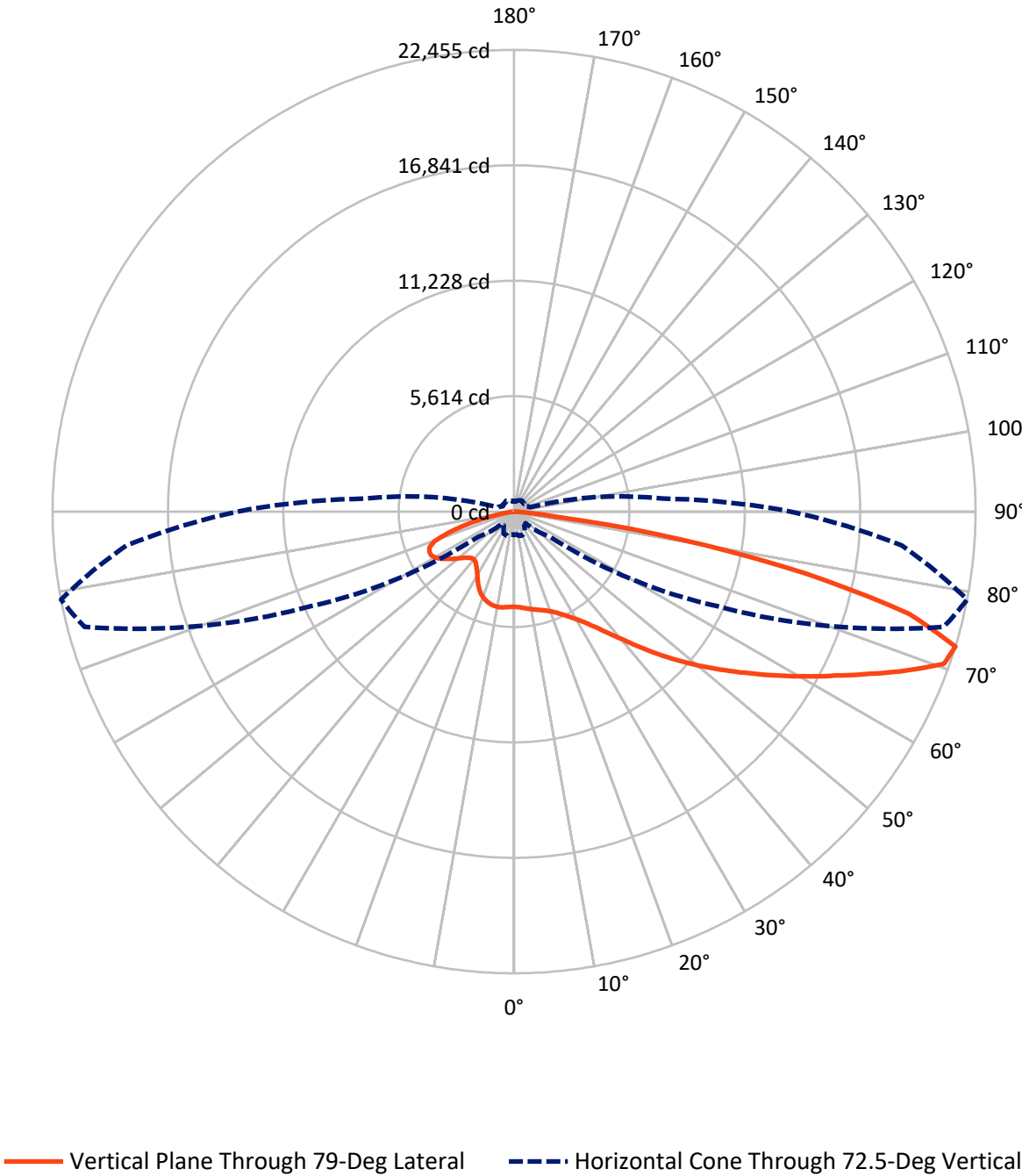
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.4 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	5080.0	0.0	5080.0
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	18005.1	0.0	18005.1
	% Fixture	78.0	0.0	78.0
Total	Lumens	23085.0	0.0	23085.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	420.6	1.8
10°-20°	1099.8	4.8
20°-30°	1774.6	7.7
30°-40°	2663.4	11.5
40°-50°	3778.2	16.4
50°-60°	4771.3	20.7
60°-70°	4845.9	21.0
70°-80°	3302.7	14.3
80°-90°	428.5	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°	23085.0	100.0
0°-180°	23085.0	100.0

Coefficient of Utilization



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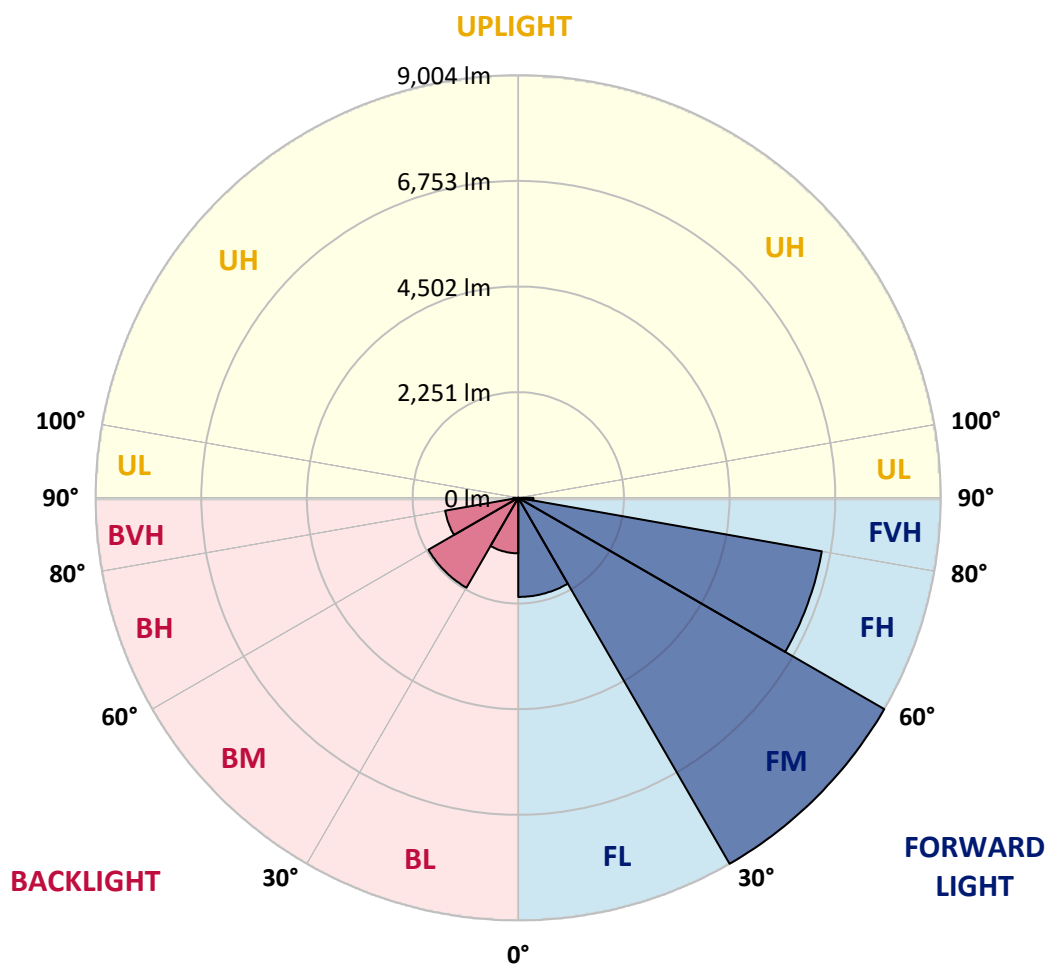
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2111.7	9.1			
FM	(30°-60°)	9003.6	39.0			
FH	(60°-80°)	6566.9	28.4			G3/7500
FVH	(80°-90°)	322.8	1.4			G3/500
BL	(0°-30°)	1183.3	5.1	B3/2500		
BM	(30°-60°)	2209.3	9.6	B2/2500		
BH	(60°-80°)	1581.7	6.9	B3/2500		G3/2500
BVH	(80°-90°)	105.7	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-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	4634.1	4634.1	4634.1	4634.1	4634.1	4634.1	4634.1	4634.1	4634.1	4634.1	4634.1
2.5°	4636.6	4614.5	4628.0	4623.2	4629.2	4636.6	4638.9	4642.6	4654.8	4653.6	4652.4
5°	4626.7	4604.8	4623.2	4617.0	4632.9	4650.0	4664.7	4678.1	4697.6	4706.2	4694.0
7.5°	4606.0	4591.4	4609.7	4628.0	4657.3	4682.9	4703.7	4734.3	4762.4	4767.2	4775.8
10°	4485.1	4474.1	4516.9	4564.5	4645.1	4714.7	4759.9	4795.3	4825.8	4830.7	4842.9
12.5°	4359.3	4345.9	4393.6	4458.2	4588.9	4714.7	4809.9	4856.3	4883.2	4899.1	4917.4
15°	4338.6	4327.7	4354.5	4410.7	4519.3	4681.7	4844.2	4929.6	4952.8	4971.1	4978.4
17.5°	4438.8	4418.0	4428.9	4448.5	4511.9	4651.2	4871.0	5012.7	5048.0	5067.6	5067.6
20°	4670.7	4641.4	4624.3	4585.2	4574.3	4656.1	4868.5	5112.8	5159.1	5183.6	5189.7
22.5°	4979.7	4960.2	4923.5	4824.6	4717.2	4715.9	4915.0	5241.0	5327.6	5350.9	5336.3
25°	5353.4	5324.1	5277.6	5143.3	4936.9	4834.4	4993.1	5404.6	5550.0	5556.0	5513.3
27.5°	5783.2	5739.2	5675.7	5498.6	5220.2	5019.9	5112.8	5592.7	5805.2	5802.7	5714.8
30°	6236.2	6192.2	6125.1	5910.2	5559.7	5270.3	5278.9	5795.3	6108.0	6094.5	5944.4
32.5°	6567.1	6534.2	6520.7	6354.7	5950.4	5565.9	5469.3	6020.0	6481.7	6469.4	6259.4
35°	6821.1	6778.3	6794.2	6710.0	6376.6	5896.7	5702.6	6287.5	6935.9	6934.6	6673.4
37.5°	7072.7	7034.8	7048.2	6992.0	6771.0	6316.8	5987.1	6614.7	7498.8	7525.7	7174.0
40°	7302.2	7261.9	7315.6	7263.2	7077.5	6763.7	6310.7	6984.8	8150.9	8202.2	7779.6
42.5°	7440.2	7408.5	7497.6	7498.8	7343.7	7141.1	6666.0	7392.6	8905.5	9020.3	8524.5
45°	7487.8	7476.9	7611.1	7639.2	7579.5	7359.6	6986.0	7837.0	9718.8	9923.9	9373.2
47.5°	7436.6	7415.8	7601.4	7705.2	7752.8	7462.2	7251.0	8318.2	10549.2	10849.5	10298.8
50°	7177.7	7137.4	7413.3	7631.9	7801.7	7529.3	7518.4	8873.8	11493.0	11821.5	11229.3
52.5°	6712.4	6681.9	6995.7	7375.5	7694.2	7562.3	7818.8	9480.6	12389.4	12814.3	12182.9
55°	6117.7	6077.4	6423.1	6918.7	7426.7	7551.4	8119.1	10159.6	13446.9	13877.9	13168.4
57.5°	5175.0	5094.5	5531.6	6117.7	6990.8	7537.8	8431.8	10834.9	14521.4	15038.0	14219.8
60°	3800.1	3680.5	4216.4	4911.3	6138.5	7407.3	8818.8	11591.9	15810.9	16276.2	15367.6
62.5°	2212.7	2143.1	2493.5	3141.9	4626.7	6637.9	9036.2	12472.4	17078.4	17566.9	16495.9
65°	1718.1	1698.5	1729.1	1779.2	2575.3	4969.9	8365.8	13330.8	18690.3	19032.2	17671.9
67.5°	1571.5	1556.9	1570.3	1476.3	1306.6	2768.2	6618.4	13548.1	20416.9	20624.5	18701.2
70°	1397.0	1379.9	1423.8	1343.3	1028.2	1259.0	4276.3	12759.4	21790.7	22180.2	19484.0
72.5°	1138.1	1118.6	1221.1	1184.5	865.7	808.4	2147.9	10885.0	21646.6	22455.0	18923.6
75°	874.3	863.4	985.4	1016.0	705.8	636.2	1030.6	8091.0	19049.3	19863.8	16309.1
77.5°	679.0	670.3	732.7	843.8	569.1	493.3	633.8	5132.3	14355.3	14498.2	11239.1
80°	509.2	484.8	542.1	653.3	443.3	360.2	429.8	2992.9	9074.0	8225.4	4891.7
82.5°	318.7	306.5	354.1	435.9	312.6	247.8	279.6	1653.4	3636.5	2141.8	943.9
85°	181.9	177.0	192.9	249.1	169.7	142.9	160.0	730.2	664.3	456.7	284.5
87.5°	73.3	70.8	87.9	111.1	62.3	52.5	56.2	175.9	146.6	135.5	94.0
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°	4634.1	4634.1	4634.1	4634.1	4634.1	4634.1	4634.1	4634.1	4634.1	4634.1	4634.1
2.5°	4647.6	4647.6	4630.4	4603.6	4573.0	4553.5	4521.8	4513.2	4480.3	4470.4	4486.3
5°	4703.7	4694.0	4641.4	4565.8	4461.9	4366.7	4261.6	4195.7	4103.0	4070.0	4094.4
7.5°	4774.6	4747.7	4657.3	4491.2	4273.8	4060.2	3837.9	3669.4	3508.3	3450.9	3458.1
10°	4839.2	4801.4	4647.6	4356.9	3980.8	3610.8	3256.7	3008.8	2820.8	2743.8	2760.9
12.5°	4904.0	4834.4	4582.8	4133.4	3564.4	3062.5	2685.2	2492.3	2376.3	2283.5	2314.0
15°	4965.0	4867.3	4482.7	3834.3	3107.7	2598.5	2320.1	2166.2	2073.5	2012.4	2023.4
17.5°	5035.8	4895.4	4332.5	3454.6	2673.0	2277.3	2050.2	1957.4	1939.1	1931.8	1936.6
20°	5134.7	4921.0	4134.6	3029.6	2353.1	2020.9	1903.7	1895.1	1893.9	1890.3	1902.5
22.5°	5241.0	4951.6	3873.4	2643.7	2080.8	1861.0	1840.2	1823.1	1812.1	1810.9	1824.3
25°	5366.8	4961.4	3546.1	2327.5	1848.8	1785.2	1760.8	1735.2	1727.8	1727.8	1735.2
27.5°	5488.9	4928.4	3165.1	2052.7	1718.1	1715.6	1683.9	1675.4	1674.1	1677.8	1687.6
30°	5611.0	4866.1	2786.6	1798.7	1642.4	1642.4	1631.4	1637.5	1642.4	1654.6	1663.2
32.5°	5775.9	4800.2	2470.2	1610.7	1576.4	1564.3	1575.2	1587.4	1592.3	1608.2	1621.7
35°	6017.6	4753.7	2218.7	1508.1	1508.1	1492.2	1498.3	1495.9	1484.9	1477.5	1494.7
37.5°	6337.6	4751.3	2011.2	1460.4	1450.7	1448.2	1449.5	1433.6	1390.8	1339.6	1340.8
40°	6722.2	4817.3	1851.2	1427.5	1420.1	1434.8	1427.5	1384.8	1267.5	1178.3	1175.9
42.5°	7238.8	5005.3	1748.6	1387.1	1409.2	1427.5	1398.2	1250.4	1171.1	1111.2	1108.7
45°	7846.9	5310.6	1696.2	1344.4	1388.4	1410.4	1268.7	1204.0	1140.5	1068.5	1063.5
47.5°	8535.6	5695.2	1683.9	1304.1	1342.0	1355.5	1213.8	1184.5	1112.4	1034.3	1028.2
50°	9285.3	6150.7	1716.9	1256.5	1274.8	1228.5	1195.5	1168.6	1094.1	1017.2	1008.6
52.5°	10060.7	6652.6	1782.8	1191.8	1207.7	1156.4	1188.2	1164.9	1083.1	979.3	972.0
55°	10822.7	7158.1	1846.3	1116.1	1139.3	1091.6	1167.4	1150.3	1033.1	915.8	909.7
57.5°	11596.8	7661.3	1908.5	1048.9	1073.4	1029.4	1134.4	1111.2	976.9	857.2	854.7
60°	12401.6	8149.7	1937.9	984.2	1001.3	972.0	1084.3	1044.1	913.4	797.3	793.8
62.5°	13155.0	8556.3	1890.3	919.5	930.5	918.3	1018.4	964.6	849.9	730.2	729.0
65°	13910.9	8798.1	1743.7	856.0	858.4	852.3	925.6	879.2	775.4	671.6	664.3
67.5°	14595.9	8933.6	1510.5	787.6	781.5	779.1	838.9	786.4	703.4	612.9	605.7
70°	14741.2	8589.3	1153.9	707.0	707.0	700.9	743.6	689.9	624.0	550.7	548.3
72.5°	13463.9	7225.3	819.4	615.4	625.2	612.9	648.4	603.2	543.4	494.6	479.9
75°	10856.9	5298.4	595.9	521.4	538.5	517.7	550.7	519.0	467.7	466.5	420.0
77.5°	7459.7	3276.2	432.2	429.8	442.1	415.2	453.0	435.9	389.5	368.8	345.5
80°	3183.4	1306.6	315.1	332.1	332.1	307.7	351.7	356.6	316.3	306.5	306.5
82.5°	633.8	371.3	221.0	228.4	214.9	207.6	249.1	275.9	381.0	423.7	425.0
85°	190.4	136.7	133.1	124.5	109.9	111.1	146.6	277.2	341.9	195.4	168.5
87.5°	52.5	34.2	35.4	28.1	23.2	30.5	50.0	210.0	114.8	48.9	41.5
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)