

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: P966853

Luminaire Tested: **NAV-SB4C-835-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966853
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-SB4C-835-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3500K, 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: 27889.2 lumens
Efficiency: N/A
Efficacy: 139.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G5

Input Watts (W): 200.7
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



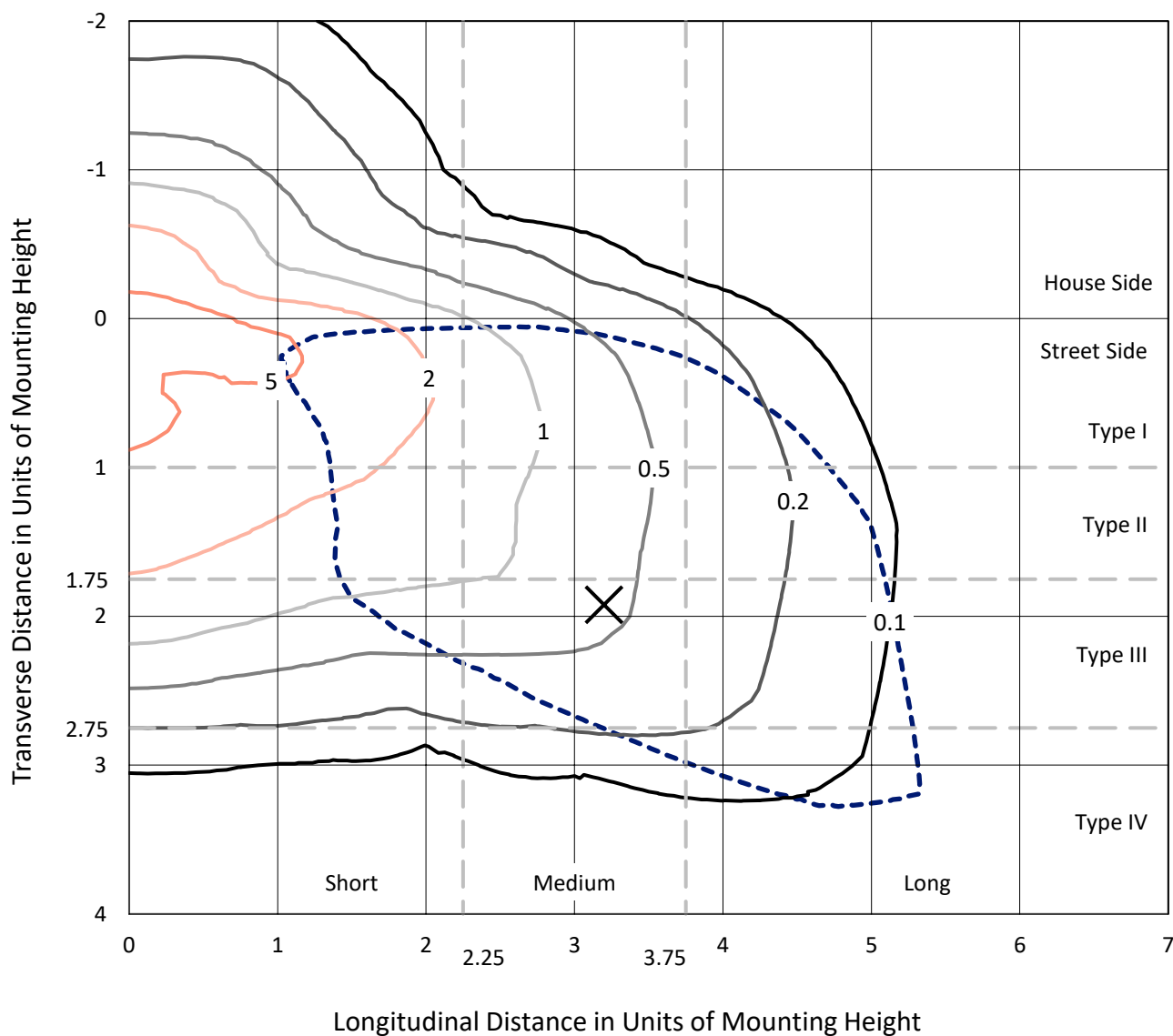
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

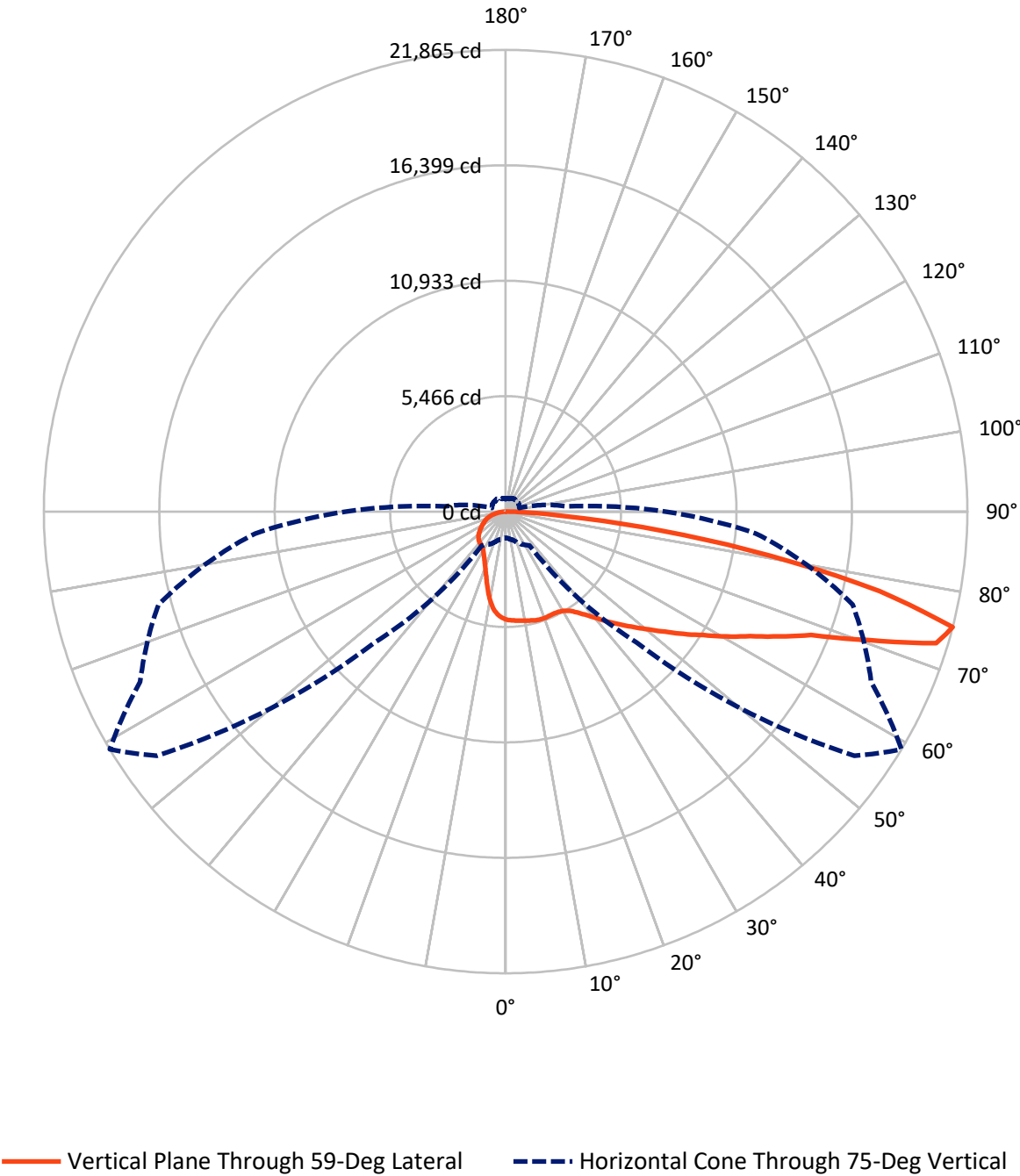
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.2 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	5230.8	0.0	5230.8
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	22658.4	0.0	22658.4
	% Fixture	81.2	0.0	81.2
Total	Lumens	27889.2	0.0	27889.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	459.0	1.6
10°-20°	1173.2	4.2
20°-30°	1782.1	6.4
30°-40°	2649.0	9.5
40°-50°	3939.5	14.1
50°-60°	5347.4	19.2
60°-70°	6528.3	23.4
70°-80°	5123.3	18.4
80°-90°	887.5	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°	27889.2	100.0
0°-180°	27889.2	100.0

Coefficient of Utilization



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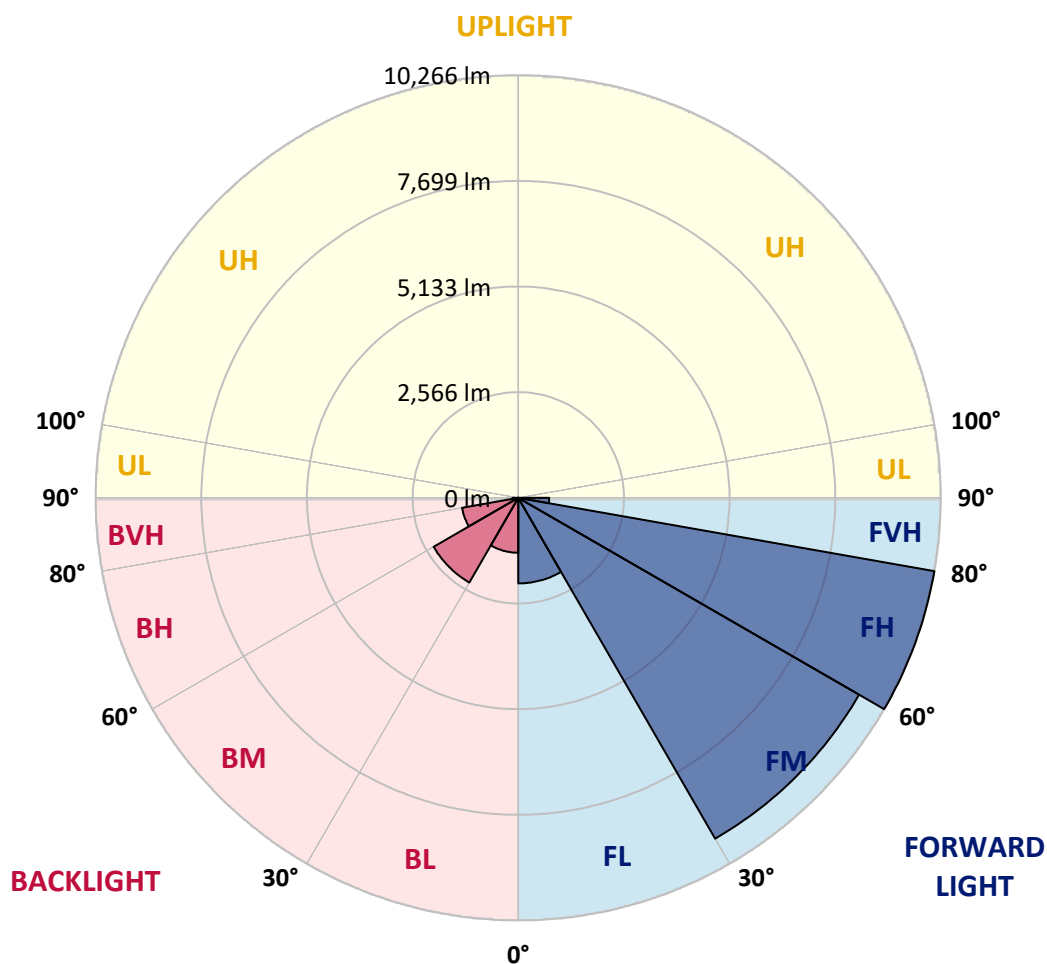
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2079.4	7.5			
FM	(30°-60°)	9561.6	34.3			
FH	(60°-80°)	10265.8	36.8			G4/12000
FVH	(80°-90°)	751.6	2.7			G5
BL	(0°-30°)	1334.8	4.8	B3/2500		
BM	(30°-60°)	2374.3	8.5	B2/2500		
BH	(60°-80°)	1385.8	5.0	B3/2500		G3/2500
BVH	(80°-90°)	135.9	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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	5119.1	5119.1	5119.1	5119.1	5119.1	5119.1	5119.1	5119.1	5119.1	5119.1	5119.1
2.5°	5162.5	5144.5	5162.5	5155.0	5152.1	5146.0	5147.5	5158.0	5152.1	5159.5	5134.0
5°	5128.0	5117.5	5135.6	5131.0	5150.5	5153.5	5173.0	5185.1	5192.5	5194.0	5174.5
7.5°	5071.0	5060.5	5085.9	5107.0	5149.0	5161.0	5201.6	5221.0	5231.5	5249.5	5221.0
10°	4862.5	4858.0	4920.9	5000.5	5099.5	5161.0	5222.5	5255.5	5272.0	5320.1	5287.1
12.5°	4493.4	4499.3	4581.9	4734.9	4933.0	5131.0	5246.6	5294.5	5320.1	5380.0	5365.1
15°	4140.8	4139.4	4229.4	4392.8	4670.4	4999.0	5258.6	5341.1	5384.5	5473.1	5461.1
17.5°	3936.8	3930.8	3993.8	4118.3	4376.3	4796.5	5228.5	5366.6	5459.6	5570.6	5560.1
20°	3899.3	3887.3	3920.3	3981.8	4164.8	4574.4	5150.5	5366.6	5519.6	5663.6	5657.6
22.5°	4035.8	4016.3	4002.8	3995.2	4076.3	4391.4	5062.0	5348.6	5608.1	5797.1	5786.6
25°	4310.3	4280.3	4211.3	4143.8	4119.8	4308.9	4984.0	5344.0	5740.1	5977.2	5938.1
27.5°	4754.5	4716.9	4577.4	4415.4	4269.8	4350.8	4949.5	5371.1	5885.7	6167.7	6089.7
30°	5305.1	5264.5	5089.0	4839.9	4578.9	4506.9	4993.0	5450.5	6071.7	6421.2	6268.2
32.5°	5798.6	5753.6	5603.6	5350.1	4997.5	4776.9	5131.0	5602.1	6364.2	6773.8	6536.7
35°	6236.7	6184.2	6049.1	5815.1	5510.6	5156.5	5380.0	5870.7	6779.9	7346.9	6901.3
37.5°	6665.8	6604.3	6457.3	6209.8	5996.7	5662.1	5723.6	6215.7	7331.9	8043.1	7384.4
40°	7145.9	7057.4	6878.9	6634.3	6427.3	6254.8	6175.2	6638.8	7893.0	8820.2	7987.5
42.5°	7611.0	7527.0	7313.9	7105.4	6845.9	6796.4	6698.8	7133.9	8506.7	9673.9	8599.6
45°	8112.1	8011.6	7753.5	7489.5	7326.0	7156.4	7206.0	7629.0	9108.3	10544.1	9241.8
47.5°	8581.7	8469.2	8164.6	7870.6	7780.6	7459.4	7671.0	8173.6	9733.9	11426.3	9877.9
50°	8835.2	8724.2	8470.7	8205.1	8134.6	7833.0	8175.1	8772.3	10389.5	12305.4	10488.5
52.5°	9046.8	8926.7	8595.1	8448.2	8427.1	8239.7	8796.2	9456.3	11045.2	13082.6	11078.2
55°	9271.8	9138.3	8715.2	8583.1	8679.2	8695.7	9532.9	10232.0	11738.3	13840.3	11634.8
57.5°	9531.4	9361.8	8830.8	8697.2	8925.3	9229.8	10379.0	11036.2	12419.4	14542.4	12129.8
60°	9775.9	9604.9	9052.8	8878.8	9190.8	9849.4	11349.7	12009.8	13190.6	15168.0	12598.0
62.5°	9823.9	9682.9	9229.8	9228.3	9550.8	10572.6	12499.0	12992.6	13864.3	15786.1	13018.0
65°	8992.7	8904.3	8635.7	9214.9	10066.9	11613.8	13778.7	14249.8	14720.8	16326.2	13387.1
67.5°	6844.3	6856.3	6836.9	7954.5	9649.9	13109.5	15631.6	15595.6	15778.6	16932.3	13811.7
70°	3129.6	3200.2	3659.2	5491.0	7731.1	13282.2	18695.2	18228.6	17106.3	17717.0	14179.2
72.5°	1690.8	1744.9	1932.3	2660.0	4647.9	11808.8	20984.6	21316.2	18872.2	18245.1	13775.7
75°	1240.8	1270.8	1401.3	1690.8	1951.9	8776.8	20164.0	21865.3	19092.8	17013.4	11895.8
77.5°	928.6	942.2	1048.7	1339.8	999.2	4627.0	16111.7	18108.6	16344.2	13978.2	8787.2
80°	673.6	688.6	768.1	1005.2	700.6	1692.4	11063.1	12710.5	11193.7	8910.2	4379.3
82.5°	465.0	471.1	505.6	684.1	489.1	657.1	6277.2	7453.5	6248.7	3126.7	1182.2
85°	280.5	288.0	303.1	399.0	277.6	312.1	2709.5	2802.6	1867.9	747.1	367.6
87.5°	115.5	123.0	135.0	168.0	109.6	87.0	447.1	561.1	349.5	219.0	114.0
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°	5119.1	5119.1	5119.1	5119.1	5119.1	5119.1	5119.1	5119.1	5119.1	5119.1	5119.1
2.5°	5126.5	5116.0	5087.5	5048.5	5012.5	4967.5	4948.0	4931.5	4916.5	4887.9	4874.5
5°	5158.0	5129.5	5052.9	4953.9	4841.5	4718.4	4598.4	4515.8	4445.3	4392.8	4349.4
7.5°	5206.0	5152.1	5012.5	4809.9	4551.9	4287.9	4049.3	3879.7	3752.2	3705.7	3624.7
10°	5255.5	5191.0	4948.0	4590.9	4145.3	3738.7	3422.2	3248.1	3146.1	3113.1	3062.1
12.5°	5314.0	5219.5	4847.4	4286.3	3690.7	3245.1	2969.1	2867.0	2814.5	2796.5	2801.0
15°	5399.6	5243.5	4695.9	3905.2	3257.1	2885.1	2706.5	2636.0	2609.0	2607.5	2613.5
17.5°	5464.1	5248.0	4460.4	3497.2	2924.1	2667.6	2520.5	2493.5	2511.5	2538.5	2549.0
20°	5536.1	5207.5	4151.4	3125.1	2690.0	2477.0	2415.5	2433.5	2477.0	2516.0	2529.5
22.5°	5587.1	5134.0	3777.7	2835.6	2487.5	2367.4	2364.5	2402.0	2426.0	2445.4	2456.0
25°	5632.1	5009.5	3381.7	2592.5	2320.9	2301.4	2334.4	2322.4	2305.9	2322.4	2333.0
27.5°	5665.1	4813.0	3027.6	2379.4	2204.0	2256.4	2237.0	2209.9	2208.5	2217.5	2232.4
30°	5654.6	4550.4	2736.5	2176.9	2121.4	2172.4	2126.0	2121.4	2116.9	2121.4	2137.9
32.5°	5654.6	4251.8	2513.0	2037.4	2068.9	2049.4	2044.9	2034.4	2016.4	2014.9	2034.4
35°	5686.1	3953.3	2320.9	1962.4	2025.4	1978.9	1981.9	1956.4	1918.9	1900.9	1918.9
37.5°	5750.7	3713.3	2130.5	1926.4	1948.8	1947.4	1935.4	1891.8	1825.8	1768.8	1788.3
40°	5906.7	3642.7	1999.9	1909.9	1912.9	1930.9	1899.3	1815.4	1665.3	1572.4	1584.3
42.5°	6151.2	3761.2	1971.4	1869.4	1888.9	1906.9	1845.4	1650.4	1543.8	1488.3	1488.3
45°	6461.8	3968.3	2032.9	1810.9	1831.9	1863.3	1680.3	1587.3	1539.3	1540.8	1548.3
47.5°	6854.9	4185.8	2147.0	1759.8	1749.4	1767.3	1570.8	1513.8	1447.8	1464.3	1506.3
50°	7309.5	4406.4	2254.9	1690.8	1657.8	1599.3	1500.3	1446.3	1362.2	1323.3	1333.7
52.5°	7801.6	4619.4	2298.5	1606.8	1558.8	1491.3	1452.3	1386.3	1284.2	1219.8	1218.2
55°	8268.2	4813.0	2250.5	1506.3	1459.8	1407.3	1401.3	1360.8	1251.2	1161.2	1161.2
57.5°	8709.2	4974.9	2130.5	1404.2	1359.3	1327.8	1368.3	1348.8	1210.7	1095.2	1089.2
60°	9082.8	5085.9	1956.4	1300.7	1269.3	1252.8	1314.3	1308.2	1153.7	1024.7	1020.2
62.5°	9379.9	5129.5	1764.3	1201.7	1194.2	1164.2	1239.2	1239.2	1081.7	955.7	951.2
65°	9612.3	5087.5	1569.3	1104.2	1119.2	1074.2	1147.7	1138.7	1005.2	894.2	888.2
67.5°	9818.0	4949.5	1353.3	1008.2	1042.7	985.7	1051.8	1030.7	921.2	832.7	826.7
70°	9909.5	4628.4	1107.2	912.1	954.2	898.7	955.7	916.7	826.7	766.7	754.6
72.5°	9174.3	3846.7	871.7	811.7	847.7	802.7	852.2	807.2	724.7	697.6	675.2
75°	7590.0	2886.6	670.7	702.1	729.2	694.6	727.6	694.6	619.6	639.1	583.6
77.5°	5512.0	1948.8	513.1	586.6	598.6	580.7	609.2	571.6	504.1	499.6	477.1
80°	2741.1	1141.7	402.1	463.6	459.1	447.1	480.1	462.1	405.1	429.1	424.6
82.5°	793.7	489.1	292.5	325.5	316.5	319.6	343.6	352.6	528.1	523.6	535.6
85°	249.1	192.1	175.6	181.5	172.5	177.0	202.5	402.1	372.1	217.5	235.5
87.5°	64.5	66.0	43.5	46.5	48.0	57.0	64.5	244.6	117.1	76.5	81.0
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)