

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: P884677

Luminaire Tested: **NAV-SB5C-835-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884677
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-835-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31771 lumens
Efficiency: N/A
Efficacy: 127.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G4

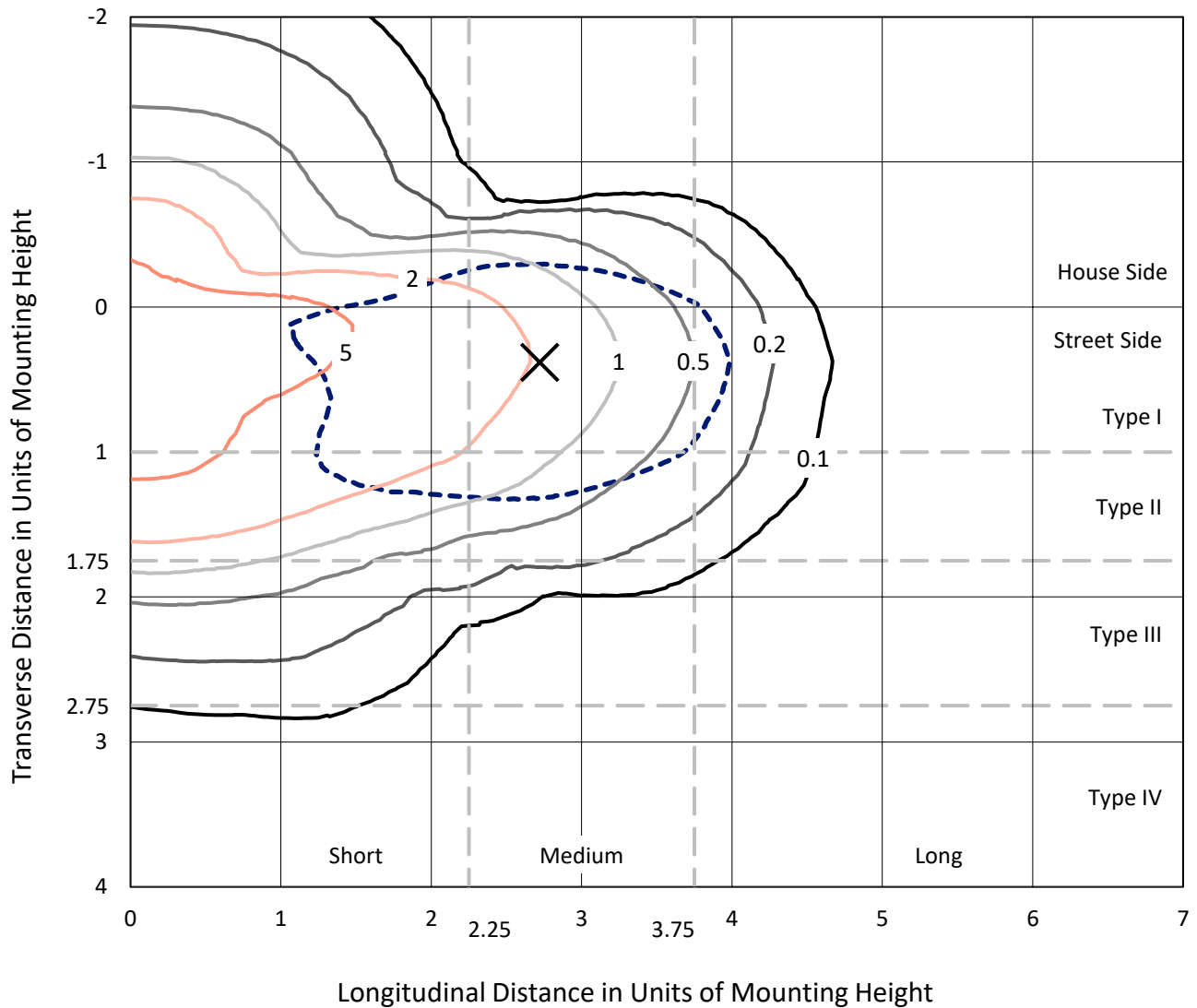
Input Watts (W): 249.5
Input Voltage (V): 120.0
Input Current (Ain): 2.116
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 7.885
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

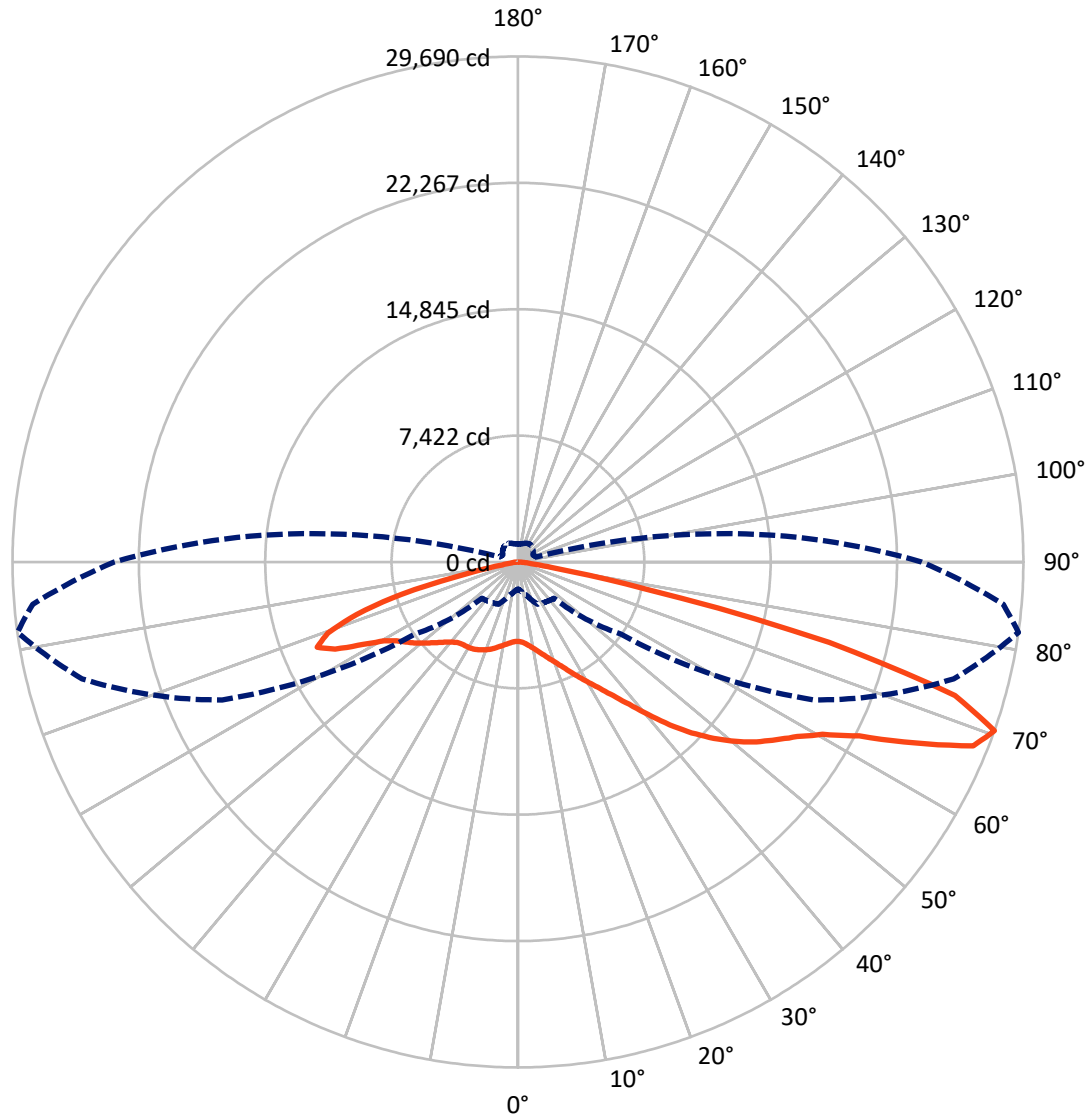
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.5 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7832.3	0.0	7832.3
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	23938.7	0.0	23938.7
	% Fixture	75.3	0.0	75.3
Total	Lumens	31771.0	0.0	31771.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	439.8	1.4
10°-20°	1263.6	4.0
20°-30°	2113.8	6.7
30°-40°	3302.3	10.4
40°-50°	5259.4	16.6
50°-60°	7319.1	23.0
60°-70°	7656.1	24.1
70°-80°	4001.5	12.6
80°-90°	415.5	1.3
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°	31771.0	100.0
0°-180°	31771.0	100.0

Coefficient of Utilization



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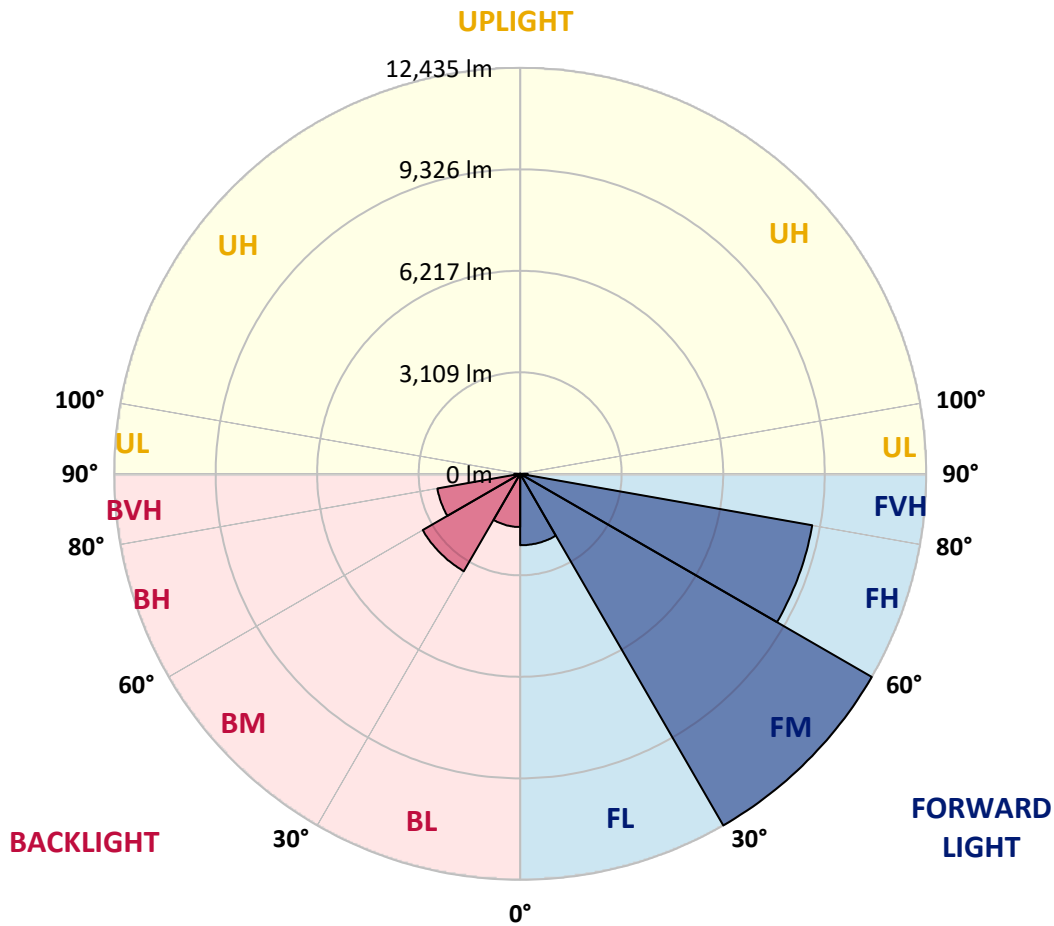
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2187.8	6.9			
FM (30°-60°)	12434.9	39.1			
FH (60°-80°)	9083.4	28.6			G4/12000
FVH (80°-90°)	232.6	0.7			G3/500
BL (0°-30°)	1629.4	5.1	B3/2500		
BM (30°-60°)	3445.9	10.8	B3/5000		
BH (60°-80°)	2574.1	8.1	B4/5000		G4/5000
BVH (80°-90°)	182.9	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	4658.0	4658.0	4658.0	4658.0	4658.0	4658.0	4658.0	4658.0	4658.0	4658.0	4658.0
2.5°	4769.3	4796.3	4787.8	4779.4	4779.4	4767.6	4765.9	4749.1	4735.6	4713.7	4708.6
5°	4830.0	4858.6	4855.3	4862.0	4883.9	4889.0	4894.0	4883.9	4857.0	4830.0	4818.2
7.5°	4776.0	4808.1	4818.2	4858.6	4926.1	4986.8	5032.3	5050.8	5025.5	4986.8	4968.2
10°	4594.0	4629.4	4664.8	4760.9	4880.6	5023.9	5145.2	5217.7	5212.7	5175.6	5143.6
12.5°	4224.8	4261.8	4337.7	4524.8	4744.0	4996.9	5222.8	5374.5	5426.8	5399.8	5344.2
15°	3929.7	3961.8	4019.1	4211.3	4496.2	4880.6	5251.4	5546.5	5679.7	5664.5	5597.0
17.5°	3921.3	3934.8	3970.2	4061.2	4280.4	4698.5	5221.1	5715.1	5969.6	5967.9	5883.6
20°	4069.7	4074.7	4094.9	4113.5	4238.2	4560.2	5143.6	5855.0	6295.0	6295.0	6204.0
22.5°	4275.3	4272.0	4292.2	4275.3	4336.0	4548.4	5094.7	5978.1	6657.5	6684.4	6569.8
25°	4583.8	4567.0	4561.9	4523.2	4535.0	4658.0	5148.6	6118.0	7087.3	7143.0	6999.7
27.5°	4995.2	4968.2	4949.7	4860.3	4830.0	4883.9	5313.8	6286.6	7566.1	7662.2	7480.2
30°	5531.3	5482.4	5455.4	5300.3	5190.8	5199.2	5563.3	6510.8	8066.8	8221.9	7991.0
32.5°	6263.0	6187.1	6114.6	5860.0	5659.4	5593.7	5885.3	6821.0	8609.7	8857.5	8560.8
35°	7082.3	7021.6	6944.0	6551.2	6242.7	6091.0	6320.3	7254.2	9245.2	9638.1	9252.0
37.5°	7871.3	7819.0	7856.1	7326.7	6928.9	6708.0	6890.1	7835.9	10029.2	10609.1	10118.5
40°	8687.2	8646.8	8651.8	8146.1	7682.5	7434.6	7581.3	8565.8	10927.7	11763.9	11160.4
42.5°	9574.0	9543.6	9442.5	8994.1	8473.1	8242.2	8377.0	9408.8	11892.0	13078.9	12303.4
45°	10567.0	10548.4	10454.0	9939.8	9343.0	9083.4	9265.5	10339.4	12861.4	14316.3	13451.5
47.5°	11425.1	11440.2	11428.4	10995.2	10376.5	9995.5	10212.9	11310.4	13763.3	15479.5	14552.3
50°	11838.1	11917.3	12033.7	11898.8	11514.4	11126.7	11168.8	12247.8	14623.1	16570.3	15607.7
52.5°	11622.3	11772.3	12089.3	12305.1	12453.4	12372.5	12259.6	13178.4	15432.3	17554.8	16605.7
55°	10818.2	11028.9	11554.9	12075.8	12832.8	13421.1	13569.5	14210.1	16221.3	18421.4	17549.8
57.5°	9353.1	9695.4	10167.4	11221.1	12495.6	13928.6	15096.9	15641.4	17057.5	19346.9	18537.7
60°	6841.2	7299.8	7886.4	9454.3	11315.5	13657.1	16396.7	17839.8	18246.0	20545.6	19824.0
62.5°	4378.2	4661.4	5200.9	6677.7	8817.0	12266.3	16794.5	20587.7	20260.6	22511.3	21752.6
65°	2997.5	3179.5	3673.5	4502.9	5699.9	9130.6	15729.1	22647.8	23460.4	25626.7	25050.2
67.5°	2178.1	2316.4	2737.8	3464.4	3713.9	5403.2	12205.6	22553.4	26570.8	28836.6	27939.7
70°	1588.1	1685.9	2039.9	2737.8	2857.5	3005.9	7394.2	19171.6	26503.4	29689.6	28615.8
72.5°	1176.7	1244.2	1481.9	2124.2	2313.0	2029.8	3660.0	13933.6	22774.3	26854.0	25992.6
75°	851.4	901.9	1077.3	1625.2	1851.1	1545.9	1825.8	8142.7	15885.8	18890.0	19041.8
77.5°	650.7	689.5	804.2	1190.2	1481.9	1159.9	1132.9	3746.0	7532.4	7569.5	7994.3
80°	522.6	547.9	610.3	837.9	1136.3	868.2	738.4	1512.2	2380.4	2014.6	2114.1
82.5°	384.4	426.5	515.9	588.4	812.6	598.5	450.1	763.7	905.3	778.9	785.6
85°	219.2	247.8	311.9	421.5	519.2	365.8	257.9	338.9	421.5	345.6	308.5
87.5°	77.5	101.2	109.6	165.2	225.9	151.7	99.5	97.8	138.2	102.8	86.0
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°	4658.0	4658.0	4658.0	4658.0	4658.0	4658.0	4658.0	4658.0	4658.0	4658.0	4658.0
2.5°	4691.7	4683.3	4649.6	4604.1	4556.9	4511.4	4496.2	4464.2	4442.2	4430.4	4443.9
5°	4786.2	4759.2	4679.9	4578.8	4472.6	4357.9	4277.0	4202.8	4148.9	4098.3	4118.6
7.5°	4921.0	4873.8	4737.3	4560.2	4371.4	4180.9	4039.3	3931.4	3858.9	3811.7	3821.8
10°	5077.8	5005.3	4796.3	4531.6	4239.9	3966.8	3799.9	3707.2	3661.7	3636.4	3643.1
12.5°	5258.2	5155.4	4857.0	4465.8	4039.3	3727.4	3612.8	3585.8	3587.5	3589.2	3592.6
15°	5480.7	5337.4	4905.8	4322.5	3778.0	3543.7	3523.4	3567.3	3612.8	3634.7	3633.0
17.5°	5731.9	5529.6	4914.3	4086.5	3521.8	3425.7	3489.7	3584.1	3653.3	3683.6	3690.3
20°	6001.7	5725.2	4853.6	3752.7	3311.0	3329.6	3444.2	3565.6	3641.5	3680.2	3690.3
22.5°	6310.2	5934.2	4708.6	3402.1	3139.1	3225.0	3359.9	3477.9	3557.2	3595.9	3606.1
25°	6662.5	6168.6	4481.0	3107.0	2990.7	3107.0	3241.9	3339.7	3403.7	3439.2	3449.3
27.5°	7053.6	6413.0	4177.6	2872.7	2860.9	2985.7	3096.9	3172.8	3206.5	3233.5	3243.6
30°	7446.4	6635.5	3810.0	2695.7	2747.9	2866.0	2945.2	2978.9	2989.0	2994.1	3005.9
32.5°	7871.3	6827.7	3424.0	2549.0	2640.1	2749.6	2796.8	2812.0	2764.8	2732.8	2742.9
35°	8385.5	7033.4	3046.3	2432.7	2533.8	2628.3	2643.4	2629.9	2574.3	2508.6	2511.9
37.5°	9021.0	7289.7	2744.6	2350.1	2434.4	2496.8	2478.2	2474.8	2479.9	2402.3	2407.4
40°	9799.9	7623.5	2523.7	2286.0	2353.5	2366.9	2314.7	2343.3	2368.6	2250.6	2254.0
42.5°	10664.7	8026.4	2383.8	2242.2	2286.0	2254.0	2173.1	2205.1	2201.7	2046.6	2044.9
45°	11546.4	8464.7	2334.9	2210.2	2223.6	2159.6	2070.2	2078.7	2007.9	1867.9	1873.0
47.5°	12423.1	8935.0	2365.3	2183.2	2146.1	2073.6	2004.5	1967.4	1862.9	1758.3	1758.3
50°	13282.9	9429.0	2476.5	2129.2	2039.9	1997.7	1947.2	1881.4	1770.2	1680.8	1674.1
52.5°	14080.3	9926.3	2601.3	2039.9	1906.7	1932.0	1900.0	1824.1	1714.5	1623.5	1625.2
55°	14835.6	10423.7	2650.2	1916.8	1782.0	1874.7	1856.1	1716.2	1584.7	1510.5	1503.8
57.5°	15658.2	11022.1	2596.2	1760.0	1680.8	1808.9	1738.1	1583.0	1507.2	1451.5	1446.5
60°	16797.9	11961.2	2479.9	1566.2	1584.7	1711.1	1589.8	1525.7	1443.1	1380.7	1377.3
62.5°	18691.1	13712.8	2292.8	1374.0	1471.8	1566.2	1519.0	1454.9	1370.6	1309.9	1309.9
65°	21489.6	16147.1	1940.4	1223.9	1345.3	1424.6	1443.1	1379.0	1291.4	1227.3	1230.7
67.5°	23849.8	17674.5	1468.4	1099.2	1215.5	1309.9	1362.2	1299.8	1207.1	1144.7	1146.4
70°	23720.0	16565.2	1121.1	976.1	1100.9	1197.0	1264.4	1215.5	1116.0	1057.0	1062.1
72.5°	21068.2	13857.8	907.0	851.4	984.5	1078.9	1159.9	1122.8	1021.6	964.3	964.3
75°	15477.9	9837.0	724.9	724.9	839.6	955.9	1045.2	1021.6	928.9	888.4	876.6
77.5°	6524.3	4127.0	568.1	601.9	697.9	821.0	932.3	940.7	859.8	910.4	826.1
80°	1734.7	1138.0	433.3	473.7	547.9	677.7	810.9	807.5	719.9	672.7	625.5
82.5°	660.9	448.4	308.5	333.8	396.2	519.2	642.3	662.5	574.9	497.3	497.3
85°	254.6	192.2	190.5	200.6	231.0	343.9	485.5	502.4	433.3	367.5	379.3
87.5°	65.7	57.3	70.8	67.4	106.2	183.8	278.2	288.3	264.7	153.4	219.2
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)