

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: P968912

Luminaire Tested: **NAV-SB5C-827-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968912
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-827-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33409.9 lumens
Efficiency: N/A
Efficacy: 133.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G4

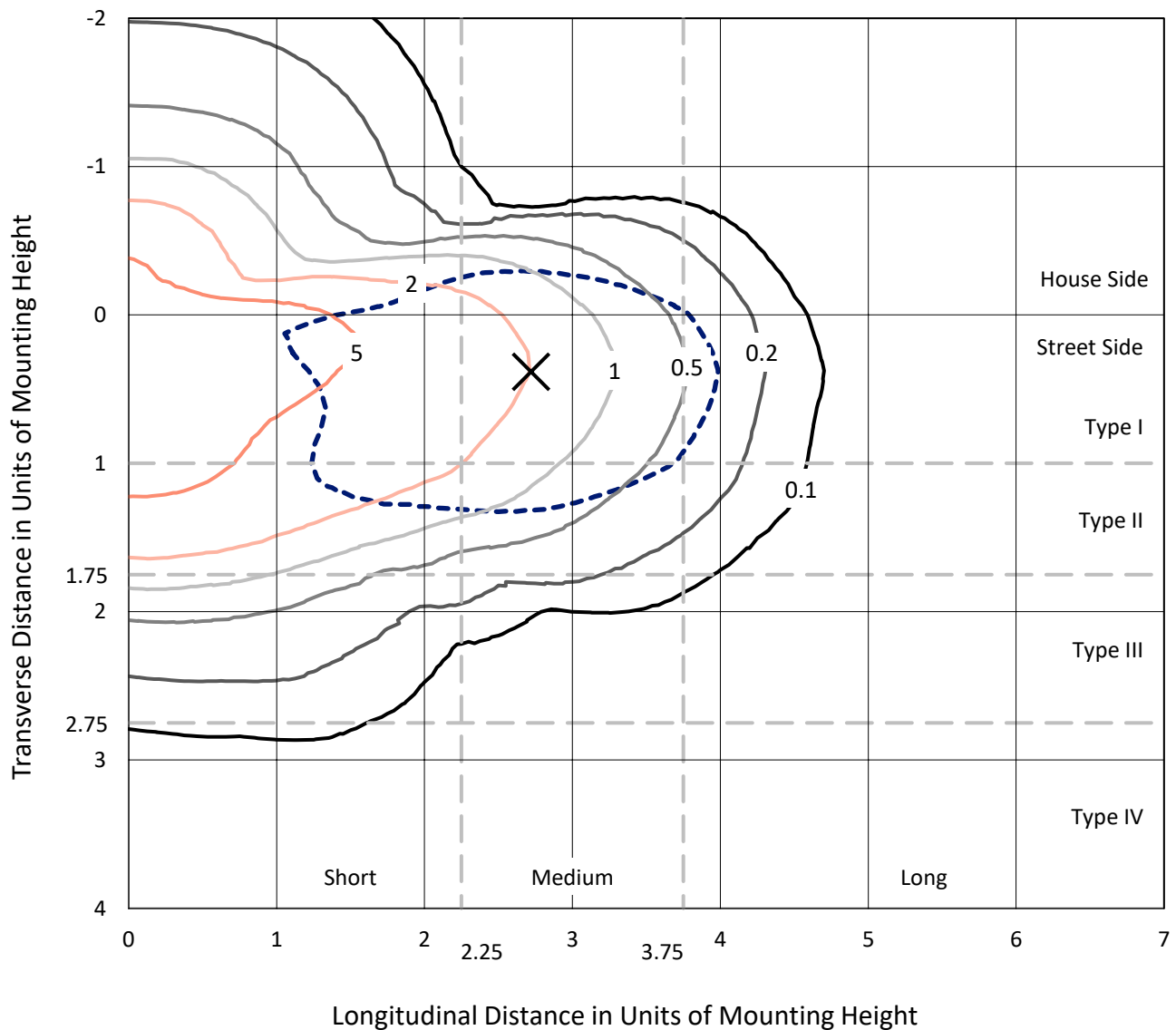
Input Watts (W): 249.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

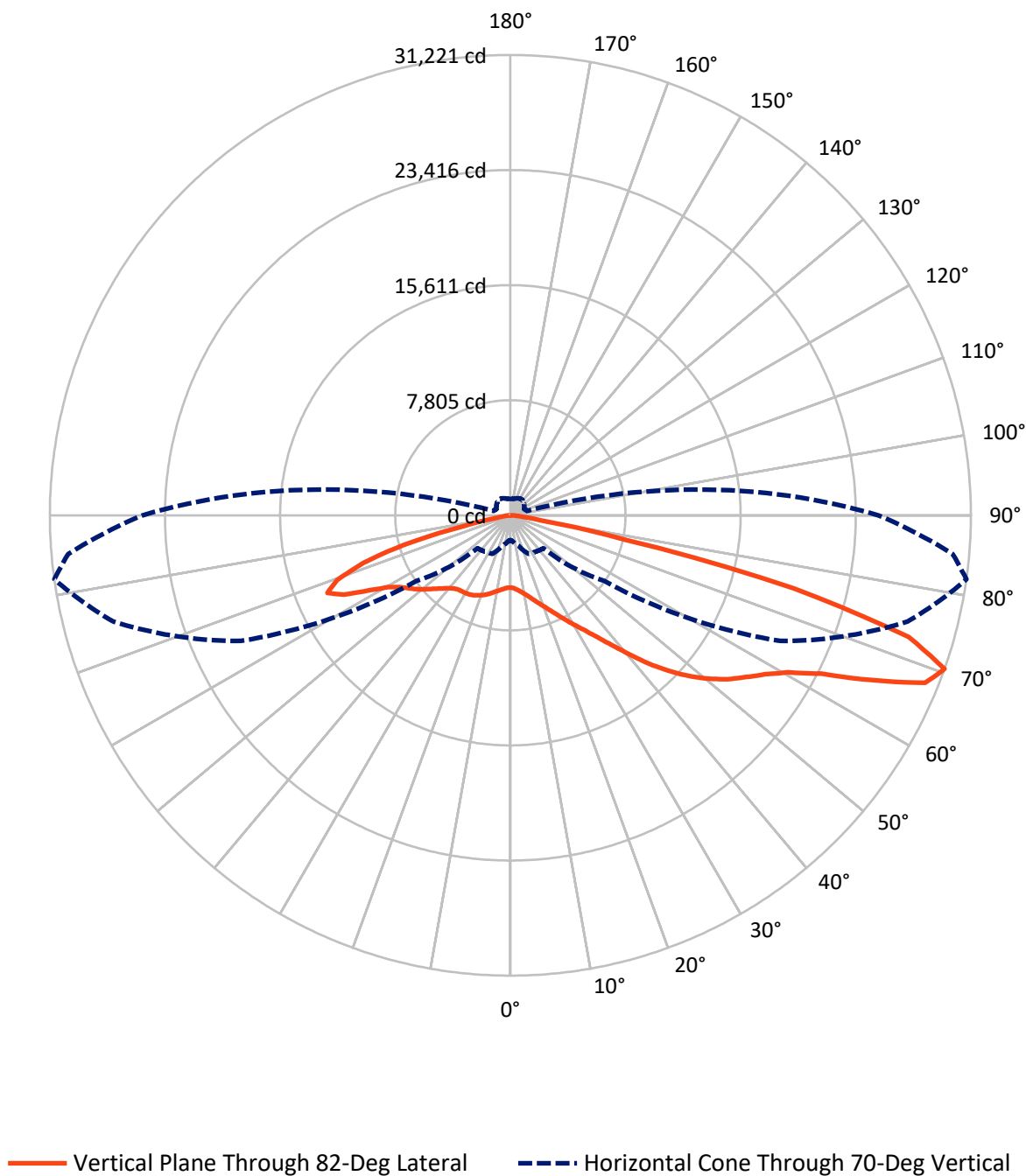
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.9 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	8236.4	0.0	8236.4
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	25173.5	0.0	25173.5
	% Fixture	75.3	0.0	75.3
Total	Lumens	33409.9	0.0	33409.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	462.5	1.4
10°-20°	1328.7	4.0
20°-30°	2222.9	6.7
30°-40°	3472.7	10.4
40°-50°	5530.7	16.6
50°-60°	7696.6	23.0
60°-70°	8051.0	24.1
70°-80°	4207.9	12.6
80°-90°	436.9	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°	33409.9	100.0
0°-180°	33409.9	100.0

Coefficient of Utilization



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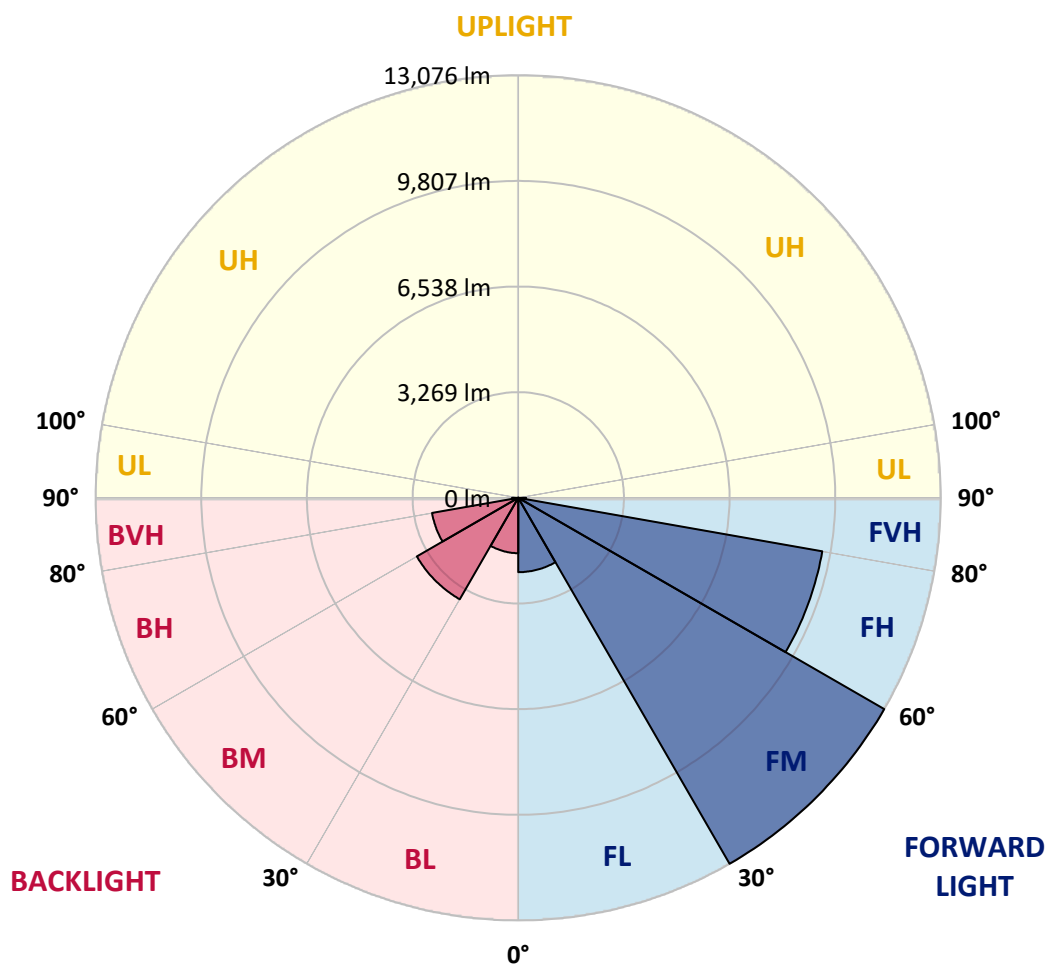
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2300.6	6.9			
FM	(30°-60°)	13076.3	39.1			
FH	(60°-80°)	9552.0	28.6			G4/12000
FVH	(80°-90°)	244.6	0.7			G3/500
BL	(0°-30°)	1713.5	5.1	B3/2500		
BM	(30°-60°)	3623.7	10.8	B3/5000		
BH	(60°-80°)	2706.9	8.1	B4/5000		G4/5000
BVH	(80°-90°)	192.3	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°	4898.3	4898.3	4898.3	4898.3	4898.3	4898.3	4898.3	4898.3	4898.3	4898.3	4898.3
2.5°	5015.3	5043.7	5034.8	5026.0	5026.0	5013.6	5011.7	4994.0	4979.9	4956.8	4951.5
5°	5079.2	5109.3	5105.7	5112.8	5135.9	5141.2	5146.5	5135.9	5107.5	5079.2	5066.7
7.5°	5022.4	5056.1	5066.7	5109.3	5180.1	5244.0	5291.9	5311.3	5284.8	5244.0	5224.5
10°	4830.9	4868.1	4905.4	5006.4	5132.3	5283.1	5410.7	5486.9	5481.6	5442.5	5408.9
12.5°	4442.7	4481.7	4561.5	4758.3	4988.7	5254.7	5492.2	5651.7	5706.7	5678.4	5619.9
15°	4132.5	4166.1	4226.4	4428.5	4728.1	5132.3	5522.3	5832.6	5972.7	5956.7	5885.8
17.5°	4123.6	4137.7	4175.0	4270.8	4501.2	4940.8	5490.4	6009.9	6277.5	6275.8	6187.1
20°	4279.6	4284.9	4306.2	4325.7	4456.9	4795.5	5408.9	6157.0	6619.8	6619.8	6524.0
22.5°	4495.9	4492.4	4513.6	4495.9	4559.7	4783.1	5357.5	6286.4	7000.9	7029.2	6908.7
25°	4820.3	4802.5	4797.2	4756.5	4768.9	4898.3	5414.2	6433.6	7453.0	7511.4	7360.7
27.5°	5252.9	5224.5	5205.1	5111.1	5079.2	5135.9	5587.9	6610.8	7956.5	8057.4	7866.1
30°	5816.7	5765.2	5736.8	5573.7	5458.5	5467.3	5850.3	6846.6	8482.9	8646.1	8403.2
32.5°	6586.0	6506.3	6430.0	6162.3	5951.4	5882.3	6189.0	7172.8	9053.8	9314.4	9002.4
35°	7447.6	7383.8	7302.2	6889.2	6564.7	6405.2	6646.3	7628.5	9722.1	10135.2	9729.2
37.5°	8277.3	8222.3	8261.4	7704.7	7286.3	7054.0	7245.5	8240.1	10546.5	11156.4	10640.5
40°	9135.3	9092.8	9098.1	8566.2	8078.7	7818.2	7972.3	9007.7	11491.4	12370.7	11736.0
42.5°	10067.9	10036.0	9929.6	9458.0	8910.2	8667.3	8809.2	9894.1	12505.5	13753.6	12938.1
45°	11112.0	11092.6	10993.2	10452.5	9824.9	9552.0	9743.4	10872.7	13524.9	15054.8	14145.3
47.5°	12014.4	12030.3	12017.9	11562.3	10911.7	10511.1	10739.7	11893.9	14473.3	16278.0	15303.0
50°	12448.7	12532.1	12654.4	12512.6	12108.3	11700.6	11745.0	12879.5	15377.5	17425.1	16412.8
52.5°	12221.8	12379.6	12712.9	12939.8	13095.8	13010.7	12891.9	13858.1	16228.4	18460.4	17462.3
55°	11376.2	11597.8	12151.0	12698.7	13494.7	14113.4	14269.4	14943.1	17058.0	19371.6	18455.0
57.5°	9835.6	10195.5	10691.9	11799.9	13140.2	14647.0	15875.6	16448.3	17937.4	20344.9	19494.0
60°	7194.1	7676.3	8293.3	9942.0	11899.2	14361.6	17242.4	18760.0	19187.3	21605.4	20846.7
62.5°	4604.0	4901.9	5469.2	7022.2	9271.8	12899.0	17660.9	21649.7	21305.8	23672.5	22874.7
65°	3152.1	3343.6	3863.0	4735.2	5993.9	9601.6	16540.4	23816.1	24670.6	26948.7	26342.4
67.5°	2290.5	2435.8	2879.0	3643.2	3905.6	5681.9	12835.3	23716.8	27941.4	30324.1	29381.0
70°	1670.0	1772.8	2145.1	2879.0	3004.9	3160.9	7775.5	20160.5	27870.6	31221.2	30091.8
72.5°	1237.4	1308.3	1558.3	2233.8	2432.3	2134.5	3848.8	14652.4	23949.0	28239.3	27333.4
75°	895.2	948.4	1132.8	1709.0	1946.6	1625.6	1919.9	8562.7	16705.2	19864.5	20024.0
77.5°	684.3	725.1	845.6	1251.6	1558.3	1219.8	1191.4	3939.2	7921.0	7959.9	8406.7
80°	549.6	576.2	641.8	881.1	1194.8	913.0	776.5	1590.2	2503.3	2118.6	2223.1
82.5°	404.2	448.5	542.5	618.7	854.5	629.3	473.3	803.1	952.0	819.1	826.2
85°	230.4	260.6	328.0	443.2	546.0	384.7	271.2	356.3	443.2	363.5	324.4
87.5°	81.6	106.4	115.2	173.7	237.6	159.6	104.6	102.8	145.3	108.1	90.4
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°	4898.3	4898.3	4898.3	4898.3	4898.3	4898.3	4898.3	4898.3	4898.3	4898.3	4898.3
2.5°	4933.7	4924.9	4889.5	4841.6	4792.0	4744.1	4728.1	4694.4	4671.3	4658.9	4673.2
5°	5033.1	5004.7	4921.3	4814.9	4703.3	4582.8	4497.6	4419.6	4362.9	4309.7	4331.0
7.5°	5174.8	5125.2	4981.6	4795.5	4596.9	4396.6	4247.7	4134.2	4058.0	4008.4	4019.0
10°	5339.7	5263.5	5043.7	4765.3	4458.6	4171.4	3996.0	3898.5	3850.6	3824.0	3831.0
12.5°	5529.5	5421.3	5107.5	4696.2	4247.7	3919.7	3799.2	3770.8	3772.6	3774.4	3777.8
15°	5763.5	5612.8	5158.9	4545.5	3972.9	3726.5	3705.2	3751.3	3799.2	3822.2	3820.4
17.5°	6027.6	5814.8	5167.7	4297.3	3703.4	3602.4	3669.7	3769.0	3841.7	3873.6	3880.8
20°	6311.2	6020.5	5104.0	3946.2	3481.8	3501.3	3621.8	3749.6	3829.3	3870.1	3880.8
22.5°	6635.6	6240.3	4951.5	3577.6	3301.0	3391.4	3533.3	3657.3	3740.6	3781.4	3792.1
25°	7006.2	6486.7	4712.1	3267.3	3145.0	3267.3	3409.2	3512.0	3579.3	3616.5	3627.2
27.5°	7417.5	6743.8	4393.0	3020.9	3008.5	3139.7	3256.6	3336.5	3371.9	3400.2	3410.9
30°	7830.6	6977.8	4006.6	2834.7	2889.7	3013.8	3097.1	3132.6	3143.2	3148.5	3160.9
32.5°	8277.3	7179.9	3600.6	2680.5	2776.2	2891.4	2941.1	2957.0	2907.4	2873.8	2884.4
35°	8818.0	7396.2	3203.5	2558.2	2664.6	2763.8	2779.8	2765.6	2707.1	2637.9	2641.5
37.5°	9486.4	7665.7	2886.2	2471.3	2559.9	2625.5	2606.1	2602.5	2607.8	2526.3	2531.5
40°	10305.5	8016.7	2653.9	2403.9	2474.9	2489.0	2434.1	2464.2	2490.9	2366.7	2370.3
42.5°	11214.8	8440.4	2506.7	2357.8	2403.9	2370.3	2285.1	2318.9	2315.3	2152.2	2150.4
45°	12142.0	8901.3	2455.4	2324.2	2338.3	2271.0	2177.0	2185.9	2111.4	1964.3	1969.6
47.5°	13063.9	9396.0	2487.3	2295.8	2256.8	2180.6	2107.9	2068.9	1959.0	1849.1	1849.1
50°	13968.1	9915.4	2604.3	2239.1	2145.1	2100.8	2047.6	1978.5	1861.5	1767.5	1760.4
52.5°	14806.6	10438.4	2735.4	2145.1	2005.1	2031.7	1997.9	1918.2	1803.0	1707.2	1709.0
55°	15600.8	10961.3	2786.9	2015.7	1873.9	1971.4	1951.9	1804.7	1666.4	1588.4	1581.4
57.5°	16466.0	11590.7	2730.2	1850.8	1767.5	1902.2	1827.8	1664.7	1584.9	1526.4	1521.1
60°	17664.4	12578.2	2607.8	1647.0	1666.4	1799.4	1671.8	1604.4	1517.5	1451.9	1448.4
62.5°	19655.3	14420.1	2411.0	1444.8	1547.6	1647.0	1597.4	1529.9	1441.4	1377.5	1377.5
65°	22598.2	16980.0	2040.5	1287.1	1414.7	1498.0	1517.5	1450.2	1358.0	1290.6	1294.2
67.5°	25080.1	18586.2	1544.2	1155.9	1278.2	1377.5	1432.4	1366.8	1269.4	1203.8	1205.5
70°	24943.6	17419.8	1179.0	1026.4	1157.6	1258.7	1329.6	1278.2	1173.6	1111.5	1116.8
72.5°	22155.0	14572.6	953.8	895.2	1035.4	1134.6	1219.8	1180.7	1074.3	1014.0	1014.0
75°	16276.3	10344.4	762.3	762.3	882.8	1005.2	1099.1	1074.3	976.8	934.3	921.9
77.5°	6860.8	4339.8	597.5	632.9	733.9	863.4	980.4	989.2	904.2	957.4	868.7
80°	1824.2	1196.7	455.6	498.2	576.2	712.7	852.7	849.2	757.0	707.4	657.7
82.5°	694.9	471.6	324.4	351.1	416.7	546.0	675.5	696.7	604.5	523.0	523.0
85°	267.7	202.1	200.3	210.9	242.9	361.6	510.6	528.3	455.6	386.4	398.9
87.5°	69.2	60.3	74.4	70.9	111.7	193.2	292.5	303.2	278.3	161.3	230.4
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)