

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: P884594

Luminaire Tested: **NAV-SB5C-727-U-SL4**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884594  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5C-727-U-SL4  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

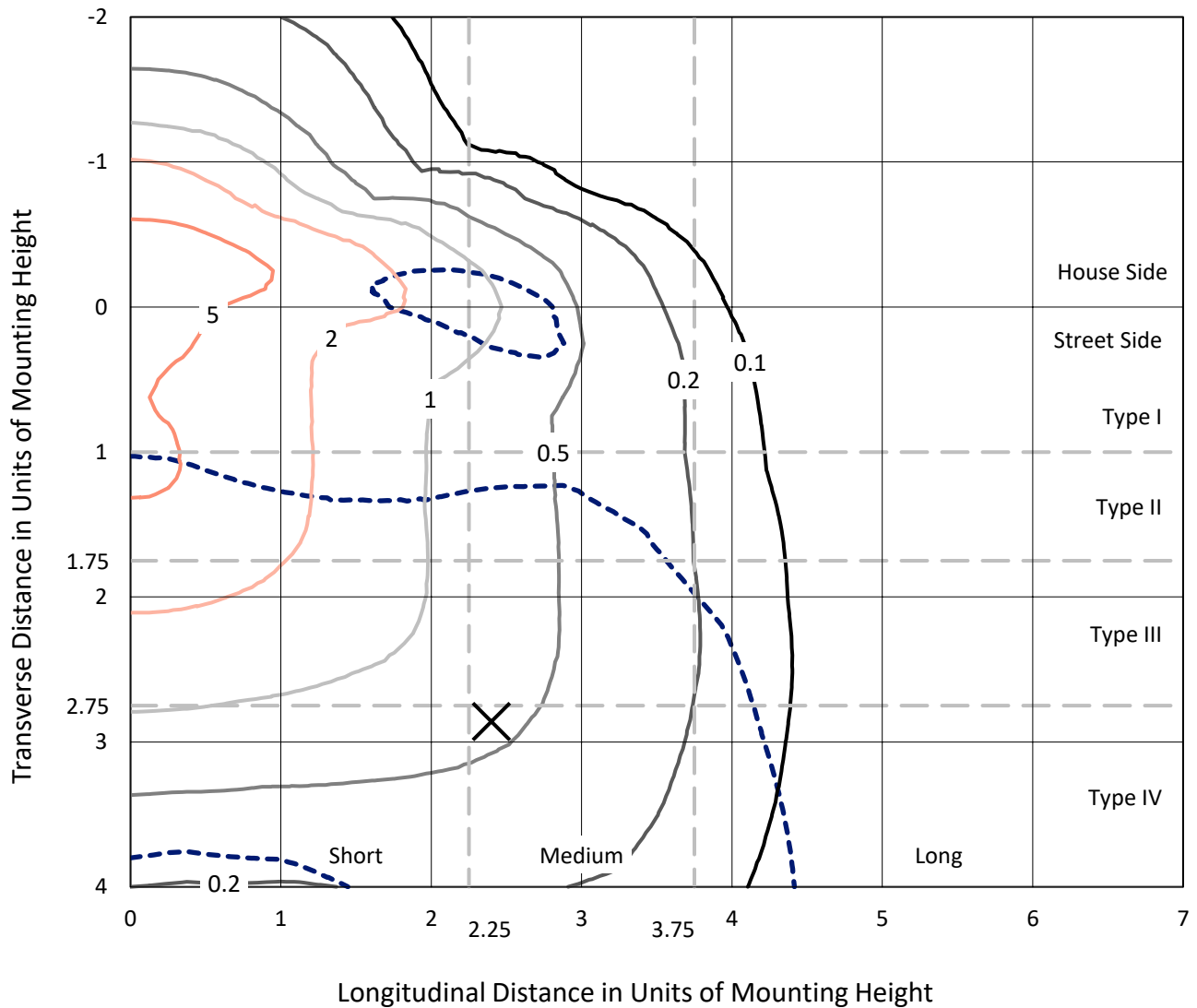
Lumens per Lamp: N/A  
Luminaire Lumens: 34139 lumens  
Efficiency: N/A  
Efficacy: 136.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B4 - U0 - G5  
  
Input Watts (W): 249.5  
Input Voltage (V): 120.0  
Input Current (Ain): 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

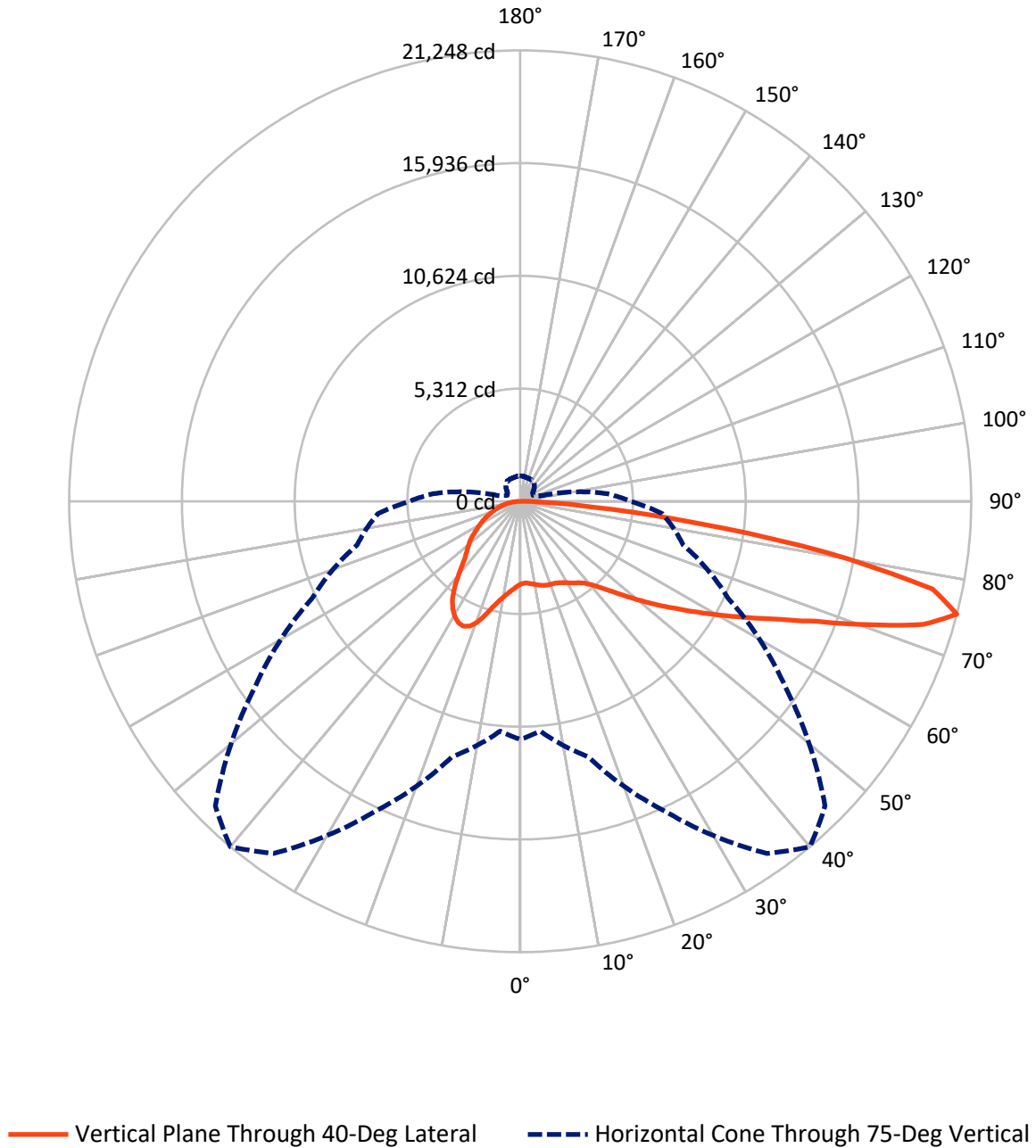
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.1 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10577.4	0.0	10577.4
	% Fixture	31.0	0.0	31.0
<b>Street Side</b>	Lumens	23561.6	0.0	23561.6
	% Fixture	69.0	0.0	69.0
<b>Total</b>	Lumens	34139.0	0.0	34139.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	389.7	1.1
10°-20°	1308.3	3.8
20°-30°	2388.9	7.0
30°-40°	3388.1	9.9
40°-50°	4575.0	13.4
50°-60°	6154.6	18.0
60°-70°	7811.6	22.9
70°-80°	7089.5	20.8
80°-90°	1033.4	3.0
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°	34139.0	100.0
0°-180°	34139.0	100.0

**Coefficient of Utilization**



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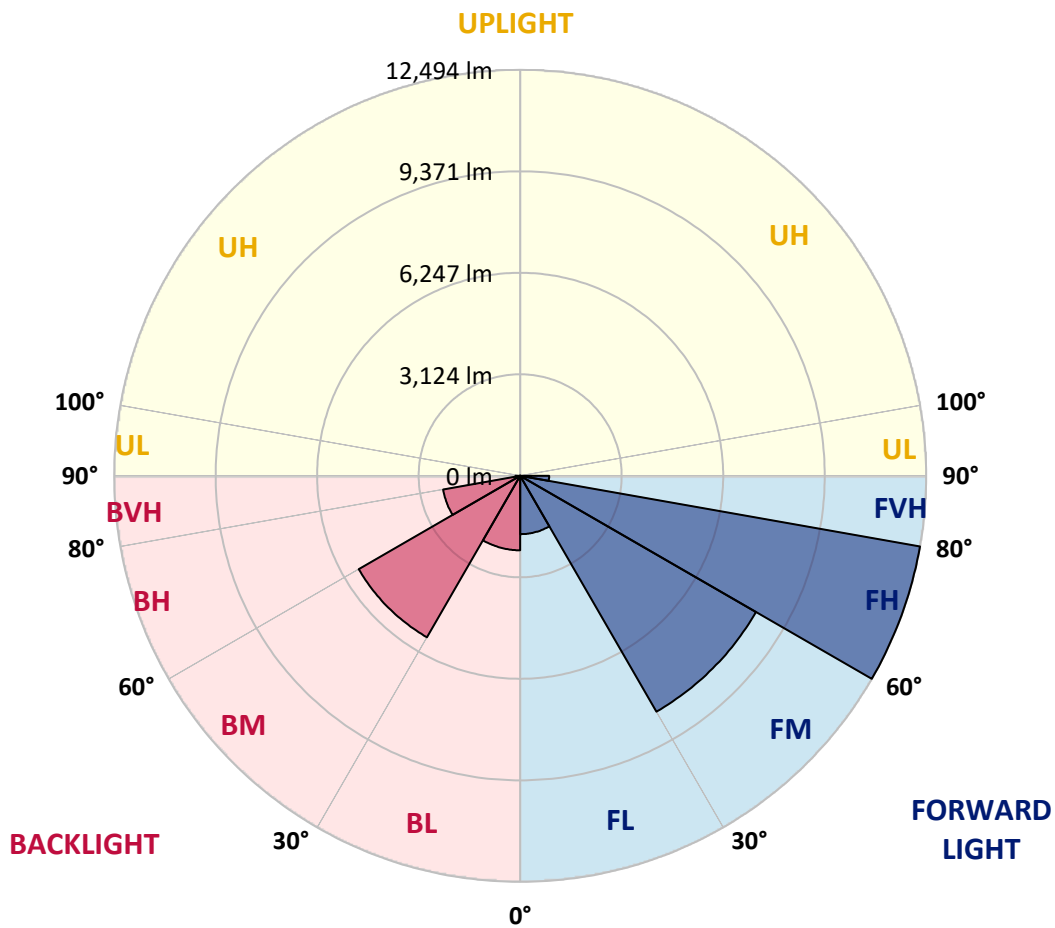
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1795.7	5.3			
FM (30°-60°)	8380.4	24.5			
FH (60°-80°)	12494.4	36.6			G5
FVH (80°-90°)	891.1	2.6			G5
BL (0°-30°)	2291.2	6.7	B3/2500		
BM (30°-60°)	5737.3	16.8	B4/8500		
BH (60°-80°)	2406.7	7.0	B3/2500		G3/2500
BVH (80°-90°)	142.3	0.4			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G5**

Type IV Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	3903.8	3903.8	3903.8	3903.8	3903.8	3903.8	3903.8	3903.8	3903.8	3903.8	3903.8
2.5°	3844.1	3865.8	3860.4	3853.1	3853.1	3855.0	3853.1	3865.8	3878.5	3891.2	3911.1
5°	3883.9	3905.7	3894.8	3885.7	3878.5	3876.7	3871.2	3869.4	3876.7	3893.0	3920.1
7.5°	3961.8	3983.5	3967.2	3950.9	3936.4	3929.2	3921.9	3911.1	3905.7	3914.7	3952.7
10°	4048.7	4070.4	4050.5	4021.5	3998.0	3988.9	3981.7	3970.8	3963.6	3969.0	4010.7
12.5°	4135.6	4157.3	4130.2	4090.3	4059.6	4054.1	4045.1	4041.5	4039.6	4037.8	4079.5
15°	4217.1	4235.2	4200.8	4153.7	4121.1	4112.1	4103.0	4108.4	4117.5	4128.4	4175.4
17.5°	4280.5	4298.6	4247.9	4186.3	4155.5	4151.9	4146.5	4164.6	4189.9	4217.1	4275.0
20°	4338.4	4356.5	4291.3	4208.0	4171.8	4171.8	4173.6	4211.7	4247.9	4287.7	4367.4
22.5°	4419.9	4434.4	4354.7	4240.6	4188.1	4191.7	4206.2	4244.2	4289.5	4343.8	4454.3
25°	4541.2	4552.1	4454.3	4302.2	4242.4	4253.3	4266.0	4284.1	4327.5	4390.9	4539.4
27.5°	4736.8	4745.8	4617.3	4410.8	4320.3	4338.4	4356.5	4343.8	4363.8	4418.1	4608.2
30°	5012.0	5017.4	4854.5	4581.0	4452.5	4461.5	4465.2	4412.6	4374.6	4418.1	4657.1
32.5°	5337.9	5336.1	5142.3	4787.5	4602.8	4593.7	4562.9	4459.7	4371.0	4409.0	4700.5
35°	5843.1	5823.2	5573.3	5077.2	4773.0	4716.8	4644.4	4512.2	4389.1	4400.0	4738.6
37.5°	6679.6	6618.1	6272.2	5551.6	5026.5	4883.4	4776.6	4597.3	4428.9	4396.3	4783.8
40°	7623.0	7545.1	7164.9	6201.6	5406.7	5176.8	5004.7	4718.6	4494.1	4412.6	4850.8
42.5°	8742.0	8631.5	8222.3	6967.5	5888.4	5555.2	5296.3	4872.6	4590.1	4465.2	4941.4
45°	10116.3	9969.6	9390.2	7831.2	6494.9	6051.3	5705.5	5106.1	4736.8	4566.6	5077.2
47.5°	11505.1	11541.3	10717.5	8819.9	7222.8	6663.3	6217.9	5457.4	4950.4	4729.5	5296.3
50°	12980.8	13006.2	12037.4	9915.3	8048.5	7355.0	6793.7	5850.3	5247.4	4961.3	5624.0
52.5°	14132.4	14136.0	13236.1	11061.5	8908.6	8115.5	7414.8	6299.4	5591.4	5269.1	6060.4
55°	14853.1	14844.0	14076.3	12146.1	9897.2	8914.0	8102.8	6810.0	6011.5	5631.2	6609.0
57.5°	15376.3	15349.2	14655.7	13078.6	10951.0	9857.4	8881.4	7389.4	6507.6	6062.2	7331.5
60°	15575.5	15559.2	15048.6	13884.3	12059.2	10900.3	9779.5	8037.6	7070.7	6571.0	8260.4
62.5°	15651.6	15682.4	15434.3	14664.8	13245.2	12055.6	10766.3	8812.6	7704.5	7146.8	9239.9
65°	15919.6	15975.7	15925.0	15686.0	14585.1	13408.1	12075.5	9734.3	8396.2	7764.2	10263.0
67.5°	16450.1	16506.2	16527.9	16908.2	16221.9	15093.9	13708.7	10882.2	9205.5	8405.2	11032.5
70°	16437.4	16421.1	16805.0	17880.5	18271.6	17427.9	15910.5	12294.6	10170.6	8937.5	11130.3
72.5°	14961.7	14831.3	15738.5	17869.7	19977.3	19865.0	18599.4	14116.1	11003.5	9002.7	9658.2
75°	11224.4	10876.8	12479.3	16104.2	20261.6	21248.4	20308.7	15246.0	10806.2	7954.3	6721.3
77.5°	4800.1	4450.7	6339.2	11921.6	18134.0	19863.2	18740.6	13301.3	8626.1	5260.0	3300.9
80°	1256.6	1254.8	1915.7	5404.9	12332.6	14668.4	12868.5	8589.9	4928.7	1879.5	910.8
82.5°	519.7	507.0	704.4	2102.2	6026.0	8231.4	6717.6	3831.4	1779.9	508.8	302.4
85°	193.7	191.9	342.2	726.1	2125.7	3395.0	2457.1	979.6	443.6	248.1	135.8
87.5°	54.3	52.5	74.2	251.7	517.9	785.8	420.1	161.2	124.9	97.8	39.8
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°	3903.8	3903.8	3903.8	3903.8	3903.8	3903.8	3903.8	3903.8	3903.8	3903.8	3903.8
2.5°	3916.5	3925.6	3941.9	3954.5	3970.8	3988.9	4014.3	4030.6	4046.9	4057.7	4050.5
5°	3932.8	3952.7	3994.4	4036.0	4084.9	4130.2	4182.7	4220.7	4251.5	4260.5	4264.2
7.5°	3969.0	4001.6	4072.2	4142.9	4220.7	4294.9	4371.0	4436.2	4488.7	4508.6	4510.4
10°	4032.4	4075.9	4175.4	4275.0	4378.2	4492.3	4590.1	4684.2	4758.5	4789.3	4791.1
12.5°	4112.1	4166.4	4296.8	4434.4	4577.4	4734.9	4861.7	4977.6	5069.9	5111.6	5111.6
15°	4215.3	4285.9	4452.5	4637.2	4847.2	5066.3	5227.5	5356.0	5459.2	5509.9	5506.3
17.5°	4327.5	4421.7	4631.7	4910.6	5211.2	5499.1	5687.4	5781.5	5888.4	5937.2	5935.4
20°	4436.2	4552.1	4852.6	5258.2	5658.4	5964.4	6116.5	6141.8	6149.1	6154.5	6169.0
22.5°	4548.4	4704.2	5129.7	5696.4	6125.6	6337.4	6359.1	6250.5	6098.4	6027.8	6047.7
25°	4671.6	4878.0	5491.8	6179.9	6527.5	6552.9	6386.3	6121.9	5834.0	5701.9	5721.8
27.5°	4791.1	5079.0	5926.4	6641.6	6817.2	6594.5	6236.0	5861.2	5513.5	5374.1	5390.4
30°	4910.6	5308.9	6406.2	7045.4	6949.4	6491.3	5998.8	5580.5	5231.1	5084.4	5100.7
32.5°	5031.9	5576.9	6958.5	7336.9	6925.9	6272.2	5703.7	5265.5	4957.7	4803.8	4823.7
35°	5169.5	5906.5	7481.8	7496.2	6768.3	5949.9	5314.4	4888.9	4620.9	4497.7	4524.9
37.5°	5348.8	6324.7	7943.5	7536.1	6493.1	5477.3	4830.9	4443.4	4222.5	4166.4	4206.2
40°	5571.5	6828.1	8296.6	7472.7	6085.7	4903.3	4302.2	3992.6	3867.6	3880.3	3923.8
42.5°	5861.2	7391.2	8544.6	7309.7	5519.0	4311.2	3838.7	3701.0	3760.8	3811.5	3858.6
45°	6237.8	7976.1	8698.5	7032.7	4878.0	3809.7	3565.2	3597.8	3643.1	3648.5	3684.7
47.5°	6719.5	8568.2	8799.9	6614.4	4224.3	3456.6	3391.4	3398.7	3389.6	3351.6	3380.6
50°	7320.6	9144.0	8890.5	6060.4	3668.5	3235.7	3148.8	3123.4	2998.5	2875.4	2891.7
52.5°	8005.0	9672.7	8928.5	5372.3	3235.7	3051.0	2909.8	2750.4	2516.9	2478.8	2491.5
55°	8765.5	10161.6	8830.7	4526.7	2871.7	2813.8	2600.1	2408.2	2382.9	2350.3	2355.7
57.5°	9674.5	10688.5	8631.5	3583.3	2498.7	2536.8	2328.5	2350.3	2305.0	2254.3	2245.3
60°	10668.6	11233.5	8282.1	2723.3	2113.1	2190.9	2257.9	2256.1	2243.4	2201.8	2187.3
62.5°	11563.0	11592.0	7594.0	2085.9	1774.5	1922.9	2105.8	2104.0	2093.2	2069.6	2060.6
65°	12095.4	11537.7	6446.0	1642.3	1495.6	1702.0	1899.4	1913.9	1915.7	1913.9	1913.9
67.5°	12001.2	10902.1	4870.7	1307.3	1265.7	1477.5	1694.8	1714.7	1729.2	1732.8	1736.4
70°	10936.5	9506.1	3175.9	1043.0	1061.1	1280.2	1501.1	1521.0	1533.7	1548.1	1555.4
72.5°	8524.7	6989.2	1817.9	843.8	881.8	1110.0	1309.1	1332.7	1339.9	1367.1	1377.9
75°	5194.9	4110.3	981.4	664.5	724.3	948.8	1119.0	1146.2	1158.8	1191.4	1195.1
77.5°	2469.8	1779.9	559.5	517.9	583.0	775.0	945.2	976.0	941.6	959.7	945.2
80°	834.7	660.9	353.1	394.7	445.4	604.8	756.9	787.6	715.2	711.6	704.4
82.5°	291.5	268.0	224.5	262.5	287.9	432.8	572.2	612.0	532.3	530.5	505.2
85°	114.1	108.6	124.9	143.0	172.0	266.2	376.6	396.5	327.7	264.4	260.7
87.5°	23.5	25.3	30.8	32.6	52.5	92.3	135.8	166.6	132.2	112.3	103.2
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)