

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: P884624

Luminaire Tested: **NAV-SB5C-740-U-SL4**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884624  
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-740-U-SL4  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

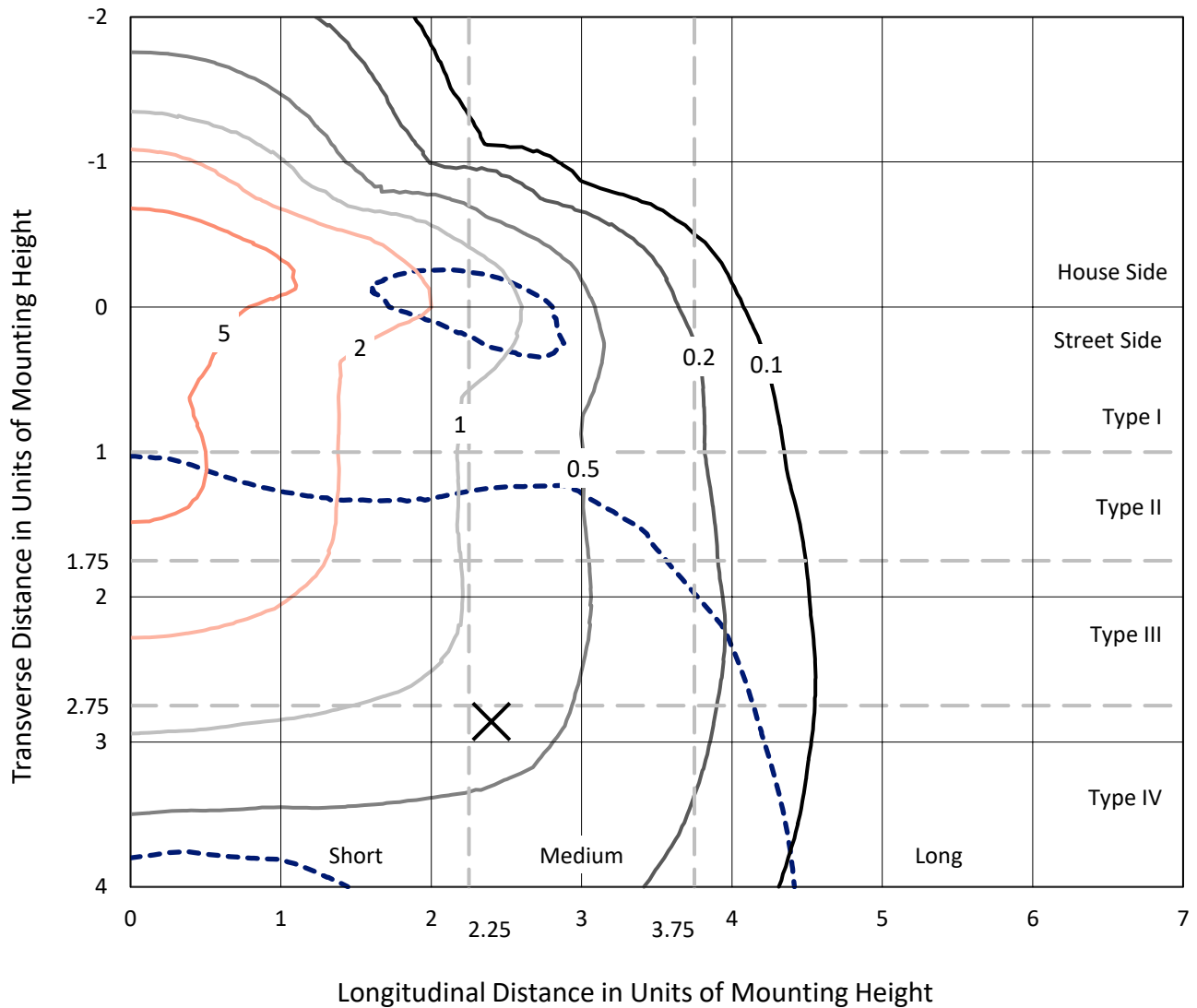
Lumens per Lamp: N/A  
Luminaire Lumens: 40613 lumens  
Efficiency: N/A  
Efficacy: 162.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B4 - U0 - G5  
  
Input Watts (W): 249.5  
Input Voltage (V): 120.0  
Input Current (Ain): 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

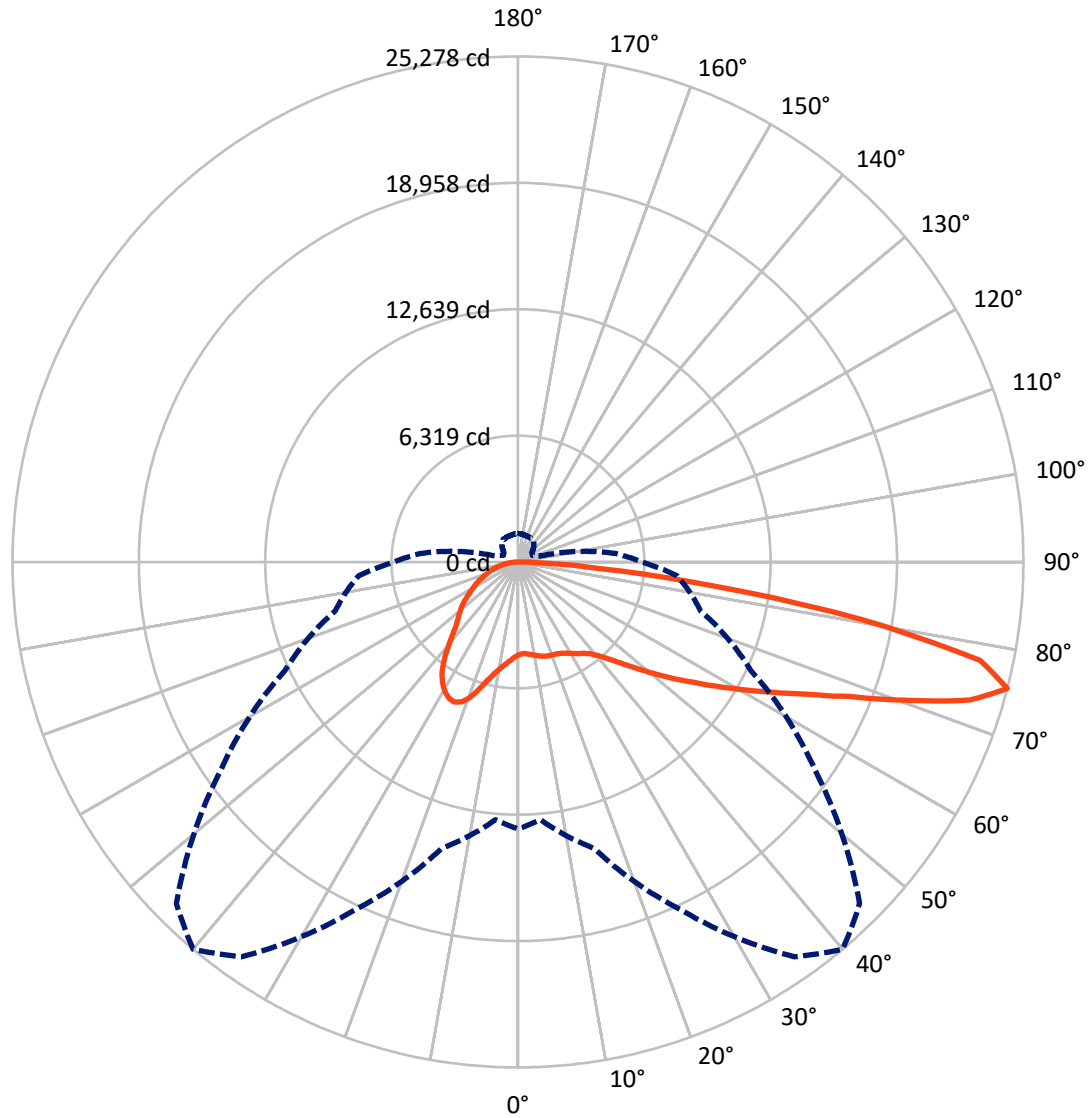
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.6 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

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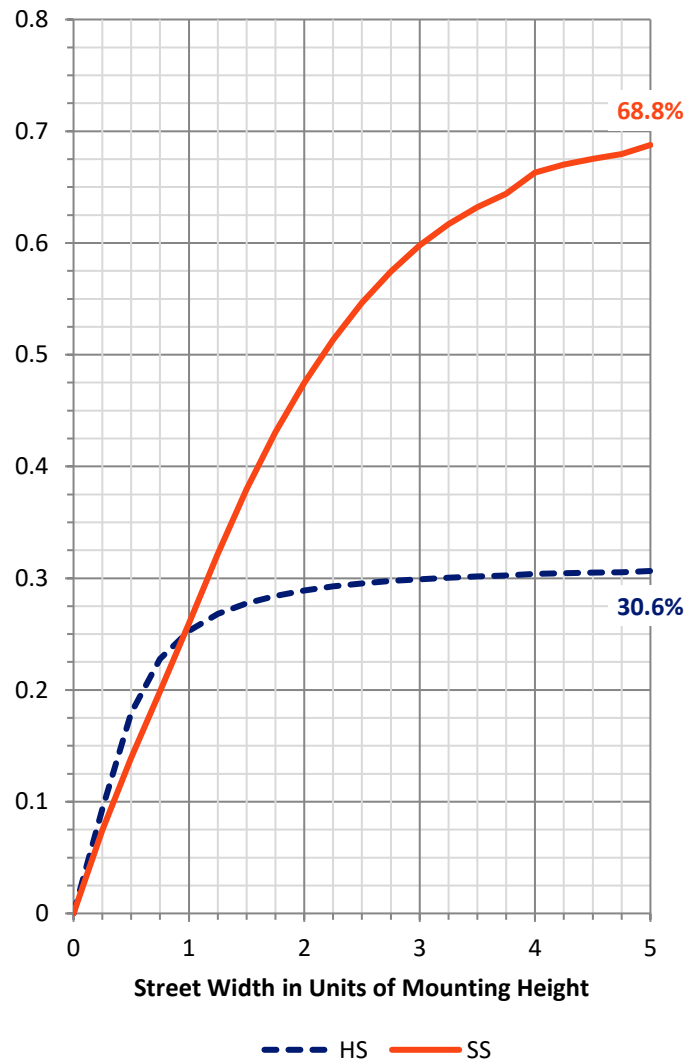
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	12583.3	0.0	12583.3
	% Fixture	31.0	0.0	31.0
<b>Street Side</b>	Lumens	28029.7	0.0	28029.7
	% Fixture	69.0	0.0	69.0
<b>Total</b>	Lumens	40613.0	0.0	40613.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	463.6	1.1
10°-20°	1556.4	3.8
20°-30°	2841.9	7.0
30°-40°	4030.6	9.9
40°-50°	5442.5	13.4
50°-60°	7321.7	18.0
60°-70°	9292.9	22.9
70°-80°	8433.9	20.8
80°-90°	1229.4	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°	40613.0	100.0
0°-180°	40613.0	100.0

**Coefficient of Utilization**



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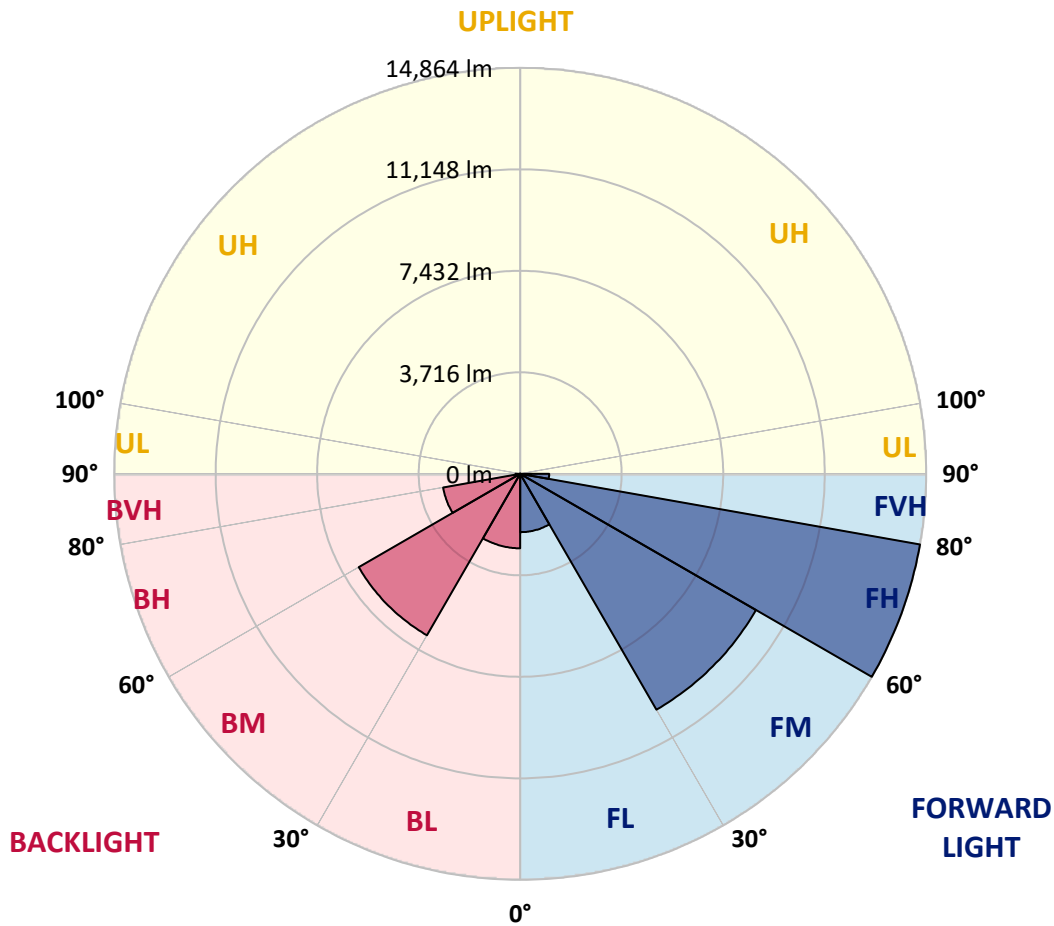
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2136.3	5.3			
FM (30°-60°)	9969.6	24.5			
FH (60°-80°)	14863.7	36.6			G5
FVH (80°-90°)	1060.1	2.6			G5
BL (0°-30°)	2725.7	6.7	B4/5000		
BM (30°-60°)	6825.3	16.8	B4/8500		
BH (60°-80°)	2863.1	7.0	B4/5000		G4/5000
BVH (80°-90°)	169.3	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°	4644.2	4644.2	4644.2	4644.2	4644.2	4644.2	4644.2	4644.2	4644.2	4644.2	4644.2
2.5°	4573.1	4598.9	4592.5	4583.8	4583.8	4586.0	4583.8	4598.9	4614.0	4629.1	4652.8
5°	4620.5	4646.3	4633.4	4622.6	4614.0	4611.8	4605.4	4603.2	4611.8	4631.2	4663.5
7.5°	4713.1	4738.9	4719.5	4700.2	4682.9	4674.3	4665.7	4652.8	4646.3	4657.1	4702.3
10°	4816.5	4842.3	4818.6	4784.2	4756.2	4745.4	4736.8	4723.9	4715.2	4721.7	4771.2
12.5°	4919.9	4945.7	4913.4	4866.0	4829.4	4822.9	4812.2	4807.9	4805.7	4803.6	4853.1
15°	5016.8	5038.3	4997.4	4941.4	4902.6	4891.9	4881.1	4887.6	4898.3	4911.3	4967.3
17.5°	5092.2	5113.7	5053.4	4980.2	4943.6	4939.3	4932.8	4954.3	4984.5	5016.8	5085.7
20°	5161.1	5182.7	5105.1	5006.0	4963.0	4963.0	4965.1	5010.3	5053.4	5100.8	5195.6
22.5°	5258.1	5275.3	5180.5	5044.8	4982.3	4986.6	5003.9	5049.1	5103.0	5167.6	5299.0
25°	5402.4	5415.3	5299.0	5118.0	5047.0	5059.9	5075.0	5096.5	5148.2	5223.6	5400.2
27.5°	5635.0	5645.8	5492.8	5247.3	5139.6	5161.1	5182.7	5167.6	5191.3	5255.9	5482.1
30°	5962.4	5968.9	5775.0	5449.8	5296.8	5307.6	5311.9	5249.4	5204.2	5255.9	5540.2
32.5°	6350.2	6348.0	6117.5	5695.3	5475.6	5464.8	5428.2	5305.4	5199.9	5245.1	5591.9
35°	6951.1	6927.5	6630.2	6040.0	5678.1	5611.3	5525.2	5367.9	5221.4	5234.4	5637.2
37.5°	7946.3	7873.1	7461.7	6604.3	5979.7	5809.5	5682.4	5469.2	5268.8	5230.1	5691.0
40°	9068.6	8976.0	8523.6	7377.7	6432.0	6158.5	5953.8	5613.5	5346.4	5249.4	5770.7
42.5°	10399.8	10268.4	9781.6	8288.8	7005.0	6608.7	6300.6	5796.6	5460.5	5311.9	5878.4
45°	12034.7	11860.2	11170.9	9316.3	7726.6	7198.9	6787.4	6074.4	5635.0	5432.5	6040.0
47.5°	13686.9	13730.0	12749.9	10492.4	8592.5	7926.9	7397.0	6492.3	5889.2	5626.4	6300.6
50°	15442.4	15472.6	14320.2	11795.6	9574.8	8749.8	8082.0	6959.8	6242.5	5902.1	6690.5
52.5°	16812.4	16816.7	15746.2	13159.1	10598.0	9654.5	8820.9	7494.0	6651.7	6268.3	7209.6
55°	17669.7	17659.0	16745.7	14449.4	11774.1	10604.4	9639.4	8101.4	7151.5	6699.1	7862.3
57.5°	18292.3	18260.0	17435.0	15558.8	13027.7	11726.7	10565.7	8790.7	7741.7	7211.8	8721.8
60°	18529.2	18509.8	17902.4	16517.3	14346.0	12967.4	11634.1	9561.9	8411.6	7817.1	9826.8
62.5°	18619.7	18656.3	18361.2	17445.7	15756.9	14341.7	12808.0	10483.8	9165.5	8502.1	10992.2
65°	18938.5	19005.3	18944.9	18660.6	17350.9	15950.8	14365.4	11580.2	9988.4	9236.6	12209.2
67.5°	19569.6	19636.4	19662.2	20114.6	19298.2	17956.2	16308.4	12945.9	10951.2	9999.1	13124.7
70°	19554.5	19535.2	19991.8	21271.3	21736.6	20732.8	18927.7	14626.1	12099.3	10632.4	13241.0
72.5°	17799.0	17643.9	18723.1	21258.4	23765.7	23632.2	22126.5	16793.0	13090.2	10710.0	11489.7
75°	13353.0	12939.4	14845.8	19158.2	24103.9	25277.9	24159.9	18137.2	12855.4	9462.8	7995.9
77.5°	5710.4	5294.7	7541.4	14182.3	21572.9	23630.0	22294.5	15823.7	10261.9	6257.5	3926.8
80°	1494.9	1492.8	2279.0	6429.9	14671.3	17450.0	15308.9	10218.9	5863.3	2235.9	1083.5
82.5°	618.2	603.1	837.9	2500.9	7168.7	9792.4	7991.6	4558.0	2117.4	605.3	359.7
85°	230.5	228.3	407.1	863.8	2528.9	4038.9	2923.1	1165.3	527.7	295.1	161.6
87.5°	64.6	62.5	88.3	299.4	616.1	934.9	499.7	191.7	148.6	116.3	47.4
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°	4644.2	4644.2	4644.2	4644.2	4644.2	4644.2	4644.2	4644.2	4644.2	4644.2	4644.2
2.5°	4659.2	4670.0	4689.4	4704.5	4723.9	4745.4	4775.5	4794.9	4814.3	4827.2	4818.6
5°	4678.6	4702.3	4751.9	4801.4	4859.6	4913.4	4975.9	5021.1	5057.7	5068.5	5072.8
7.5°	4721.7	4760.5	4844.5	4928.5	5021.1	5109.4	5199.9	5277.4	5339.9	5363.6	5365.8
10°	4797.1	4848.8	4967.3	5085.7	5208.5	5344.2	5460.5	5572.5	5660.9	5697.5	5699.6
12.5°	4891.9	4956.5	5111.6	5275.3	5445.5	5632.9	5783.6	5921.5	6031.4	6080.9	6080.9
15°	5014.6	5098.7	5296.8	5516.5	5766.4	6027.1	6218.8	6371.7	6494.5	6554.8	6550.5
17.5°	5148.2	5260.2	5510.1	5841.8	6199.4	6541.9	6765.9	6877.9	7005.0	7063.2	7061.0
20°	5277.4	5415.3	5772.9	6255.4	6731.4	7095.5	7276.4	7306.6	7315.2	7321.6	7338.9
22.5°	5411.0	5596.2	6102.4	6776.7	7287.2	7539.2	7565.1	7435.8	7254.9	7170.9	7194.6
25°	5557.5	5803.0	6533.3	7351.8	7765.4	7795.5	7597.4	7282.9	6940.4	6783.1	6806.8
27.5°	5699.6	6042.1	7050.2	7901.1	8110.0	7845.1	7418.6	6972.7	6559.1	6393.2	6412.6
30°	5841.8	6315.7	7621.1	8381.4	8267.3	7722.3	7136.4	6638.8	6223.1	6048.6	6068.0
32.5°	5986.1	6634.5	8278.0	8728.2	8239.3	7461.7	6785.3	6264.0	5897.8	5714.7	5738.4
35°	6149.8	7026.5	8900.6	8917.8	8051.9	7078.2	6322.2	5816.0	5497.2	5350.7	5383.0
37.5°	6363.1	7524.1	9449.9	8965.2	7724.5	6516.0	5747.0	5286.1	5023.3	4956.5	5003.9
40°	6628.0	8123.0	9869.9	8889.8	7239.8	5833.2	5118.0	4749.7	4601.1	4616.1	4667.8
42.5°	6972.7	8792.9	10165.0	8695.9	6565.6	5128.8	4566.6	4402.9	4474.0	4534.3	4590.3
45°	7420.7	9488.6	10348.1	8366.4	5803.0	4532.1	4241.3	4280.1	4334.0	4340.4	4383.5
47.5°	7993.7	10193.0	10468.7	7868.8	5025.4	4112.1	4034.6	4043.2	4032.4	3987.2	4021.6
50°	8708.9	10878.0	10576.4	7209.6	4364.1	3849.3	3745.9	3715.8	3567.1	3420.6	3440.0
52.5°	9523.1	11507.0	10621.7	6391.1	3849.3	3629.6	3461.6	3272.0	2994.1	2948.9	2964.0
55°	10427.8	12088.6	10505.3	5385.1	3416.3	3347.4	3093.2	2864.9	2834.7	2796.0	2802.4
57.5°	11509.1	12715.4	10268.4	4262.9	2972.6	3017.8	2770.1	2796.0	2742.1	2681.8	2671.0
60°	12691.7	13363.8	9852.7	3239.7	2513.8	2606.4	2686.1	2684.0	2668.9	2619.3	2602.1
62.5°	13755.8	13790.3	9034.1	2481.5	2111.0	2287.6	2505.2	2503.0	2490.1	2462.1	2451.3
65°	14389.1	13725.7	7668.4	1953.7	1779.3	2024.8	2259.6	2276.8	2279.0	2276.8	2276.8
67.5°	14277.1	12969.6	5794.4	1555.2	1505.7	1757.7	2016.2	2039.9	2057.1	2061.4	2065.7
70°	13010.5	11308.8	3778.2	1240.7	1262.3	1522.9	1785.7	1809.4	1824.5	1841.7	1850.3
72.5°	10141.3	8314.7	2162.7	1003.8	1049.0	1320.4	1557.4	1585.4	1594.0	1626.3	1639.2
75°	6180.0	4889.7	1167.5	790.5	861.6	1128.7	1331.2	1363.5	1378.6	1417.4	1421.7
77.5°	2938.1	2117.4	665.6	616.1	693.6	921.9	1124.4	1161.0	1120.1	1141.7	1124.4
80°	993.0	786.2	420.0	469.6	529.9	719.5	900.4	937.0	850.9	846.5	837.9
82.5°	346.8	318.8	267.1	312.3	342.5	514.8	680.7	728.1	633.3	631.1	601.0
85°	135.7	129.2	148.6	170.2	204.6	316.6	448.0	471.7	389.9	314.5	310.2
87.5°	28.0	30.2	36.6	38.8	62.5	109.9	161.6	198.2	157.2	133.6	122.8
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)