

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: P967103

Luminaire Tested: **NAV-SB4D-722-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967103
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4D-722-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 34230.9 lumens
Efficiency: N/A
Efficacy: 116.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B4 - U0 - G5

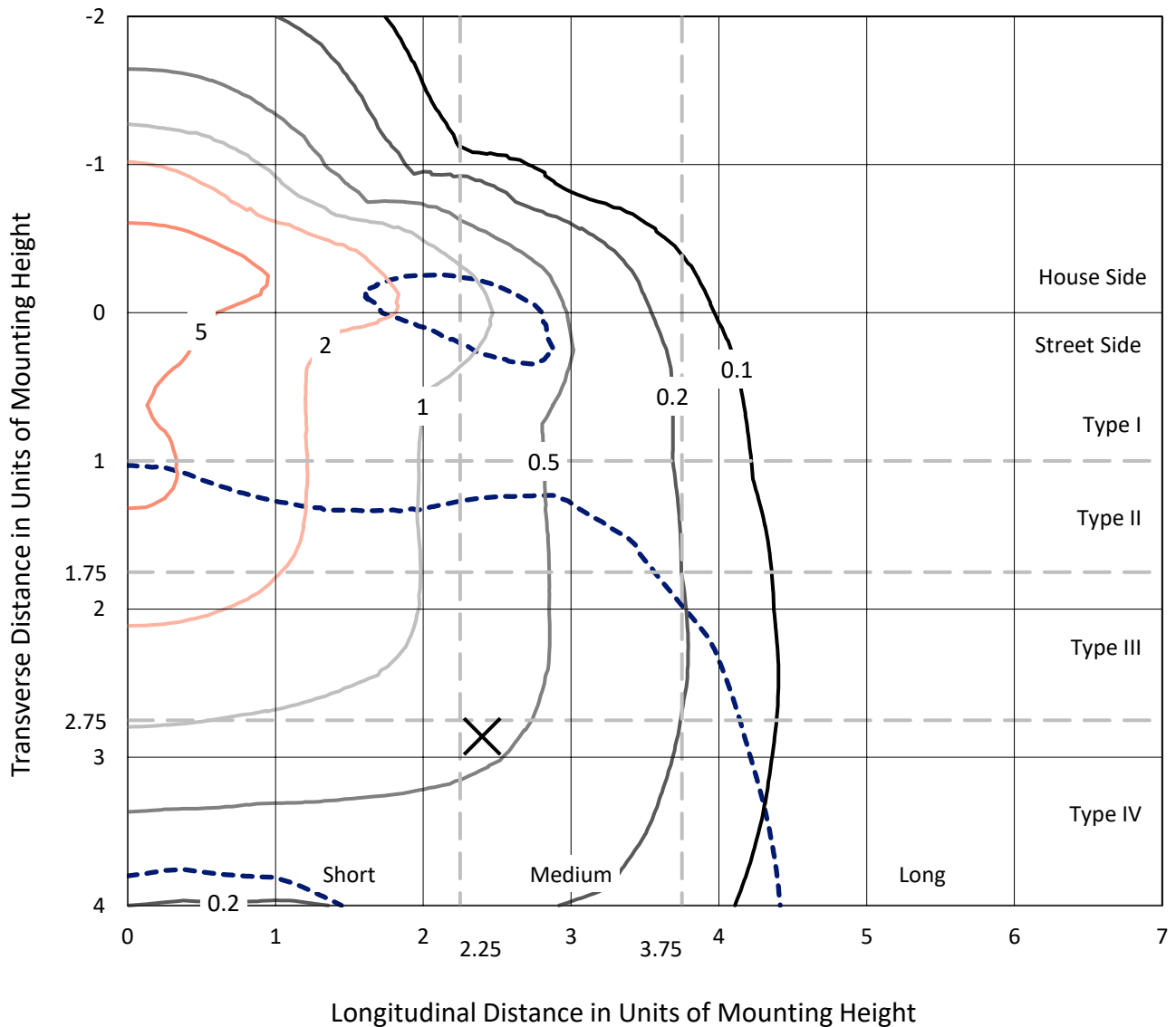
Input Watts (W): 293.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

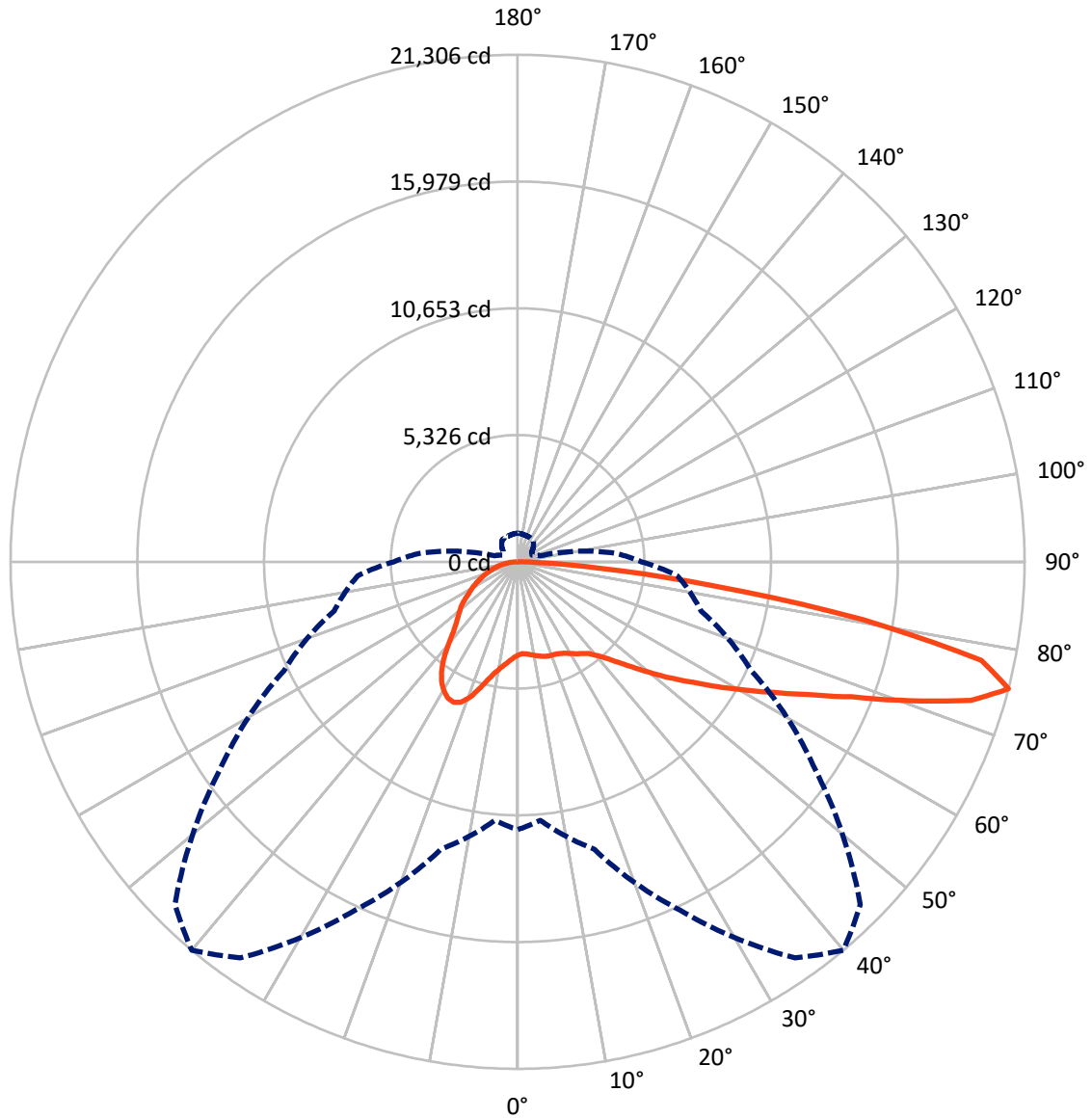
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.1 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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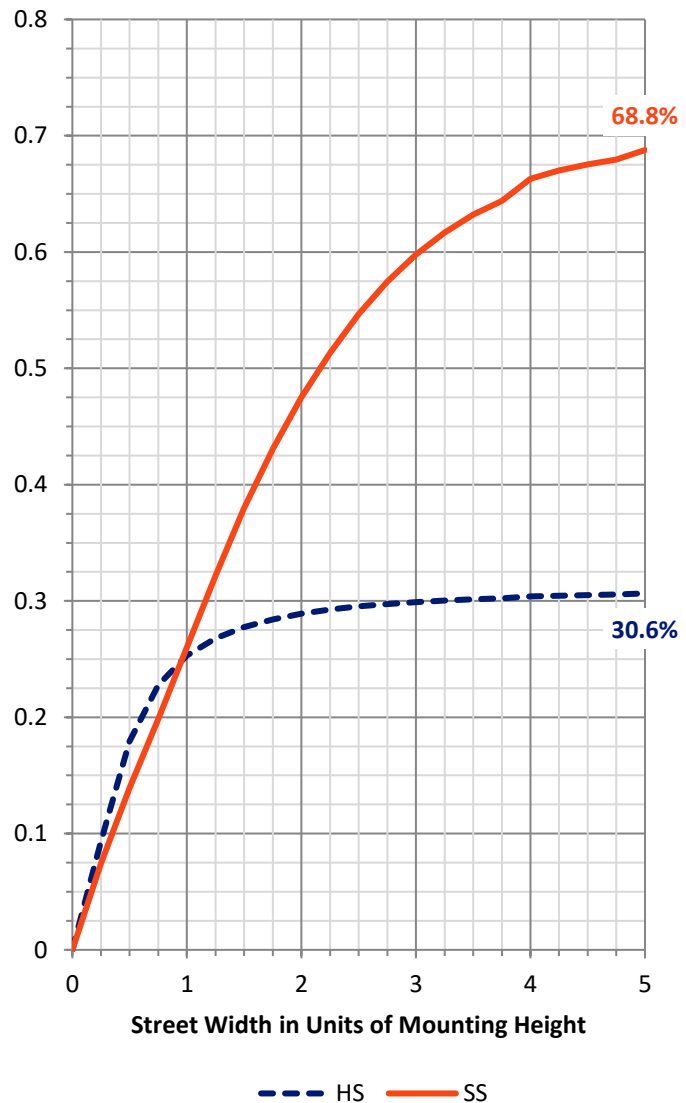
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10605.9	0.0	10605.9
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	23625.0	0.0	23625.0
	% Fixture	69.0	0.0	69.0
Total	Lumens	34230.9	0.0	34230.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	390.7	1.1
10°-20°	1311.8	3.8
20°-30°	2395.3	7.0
30°-40°	3397.2	9.9
40°-50°	4587.3	13.4
50°-60°	6171.1	18.0
60°-70°	7832.6	22.9
70°-80°	7108.6	20.8
80°-90°	1036.2	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°	34230.9	100.0
0°-180°	34230.9	100.0

Coefficient of Utilization

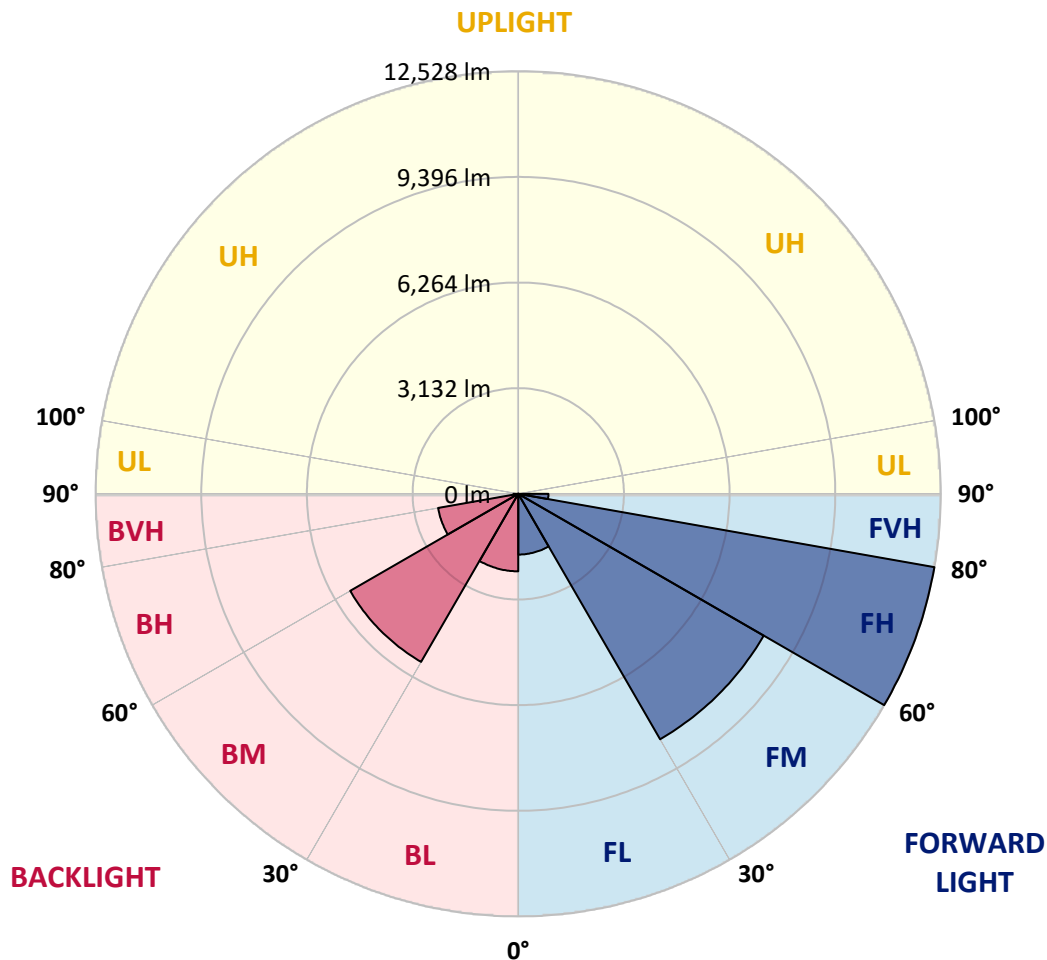


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1800.6	5.3			
FM (30°-60°)	8402.9	24.5			
FH (60°-80°)	12528.0	36.6			G5
FVH (80°-90°)	893.5	2.6			G5
BL (0°-30°)	2297.3	6.7	B3/2500		
BM (30°-60°)	5752.7	16.8	B4/8500		
BH (60°-80°)	2413.2	7.0	B3/2500		G3/2500
BVH (80°-90°)	142.7	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°	3914.4	3914.4	3914.4	3914.4	3914.4	3914.4	3914.4	3914.4	3914.4	3914.4	3914.4
2.5°	3854.4	3876.2	3870.8	3863.5	3863.5	3865.4	3863.5	3876.2	3889.0	3901.7	3921.6
5°	3894.4	3916.1	3905.2	3896.2	3889.0	3887.1	3881.7	3879.8	3887.1	3903.4	3930.7
7.5°	3972.5	3994.2	3977.9	3961.5	3947.1	3939.8	3932.5	3921.6	3916.1	3925.2	3963.4
10°	4059.6	4081.3	4061.5	4032.3	4008.8	3999.7	3992.4	3981.5	3974.2	3979.7	4021.5
12.5°	4146.7	4168.6	4141.3	4101.3	4070.5	4065.0	4055.9	4052.3	4050.5	4048.7	4090.5
15°	4228.4	4246.6	4212.1	4164.9	4132.2	4123.2	4114.0	4119.5	4128.6	4139.5	4186.7
17.5°	4292.0	4310.1	4259.3	4197.6	4166.7	4163.0	4157.6	4175.7	4201.2	4228.4	4286.5
20°	4350.1	4368.2	4302.8	4219.4	4183.0	4183.0	4184.9	4223.0	4259.3	4299.3	4379.1
22.5°	4431.8	4446.3	4366.4	4252.0	4199.4	4203.0	4217.6	4255.7	4301.1	4355.5	4466.2
25°	4553.5	4564.3	4466.2	4313.8	4253.9	4264.7	4277.4	4295.6	4339.2	4402.8	4551.6
27.5°	4749.5	4758.6	4629.7	4422.7	4332.0	4350.1	4368.2	4355.5	4375.5	4429.9	4620.6
30°	5025.5	5030.9	4867.5	4593.3	4464.5	4473.5	4477.2	4424.5	4386.4	4429.9	4669.6
32.5°	5352.2	5350.5	5156.2	4800.4	4615.2	4606.0	4575.2	4471.8	4382.8	4420.9	4713.2
35°	5858.8	5838.8	5588.3	5090.9	4785.8	4729.6	4656.9	4524.3	4400.9	4411.8	4751.3
37.5°	6697.6	6635.8	6289.1	5566.5	5040.0	4896.5	4789.4	4609.7	4440.8	4408.2	4796.7
40°	7643.5	7565.4	7184.2	6218.3	5421.2	5190.7	5018.2	4731.4	4506.2	4424.5	4863.9
42.5°	8765.5	8654.8	8244.5	6986.3	5904.2	5570.2	5310.5	4885.7	4602.5	4477.2	4954.6
45°	10143.5	9996.5	9415.5	7852.3	6512.4	6067.6	5720.8	5119.9	4749.5	4578.9	5090.9
47.5°	11536.1	11572.4	10746.3	8843.6	7242.2	6681.3	6234.7	5472.1	4963.8	4742.3	5310.5
50°	13015.8	13041.2	12069.9	9942.0	8070.1	7374.8	6811.9	5866.1	5261.5	4974.6	5639.1
52.5°	14170.4	14174.1	13271.7	11091.2	8932.6	8137.4	7434.7	6316.4	5606.4	5283.3	6076.7
55°	14893.0	14883.9	14114.1	12178.7	9923.8	8938.0	8124.7	6828.3	6027.6	5646.4	6626.8
57.5°	15417.7	15390.5	14695.1	13113.7	10980.5	9883.9	8905.3	7409.3	6525.2	6078.5	7351.2
60°	15617.4	15601.1	15089.1	13921.8	12091.6	10929.7	9805.9	8059.3	7089.7	6588.7	8282.6
62.5°	15693.7	15724.5	15475.9	14704.2	13280.8	12088.0	10795.3	8836.3	7725.2	7166.0	9264.8
65°	15962.4	16018.7	15967.9	15728.2	14624.4	13444.2	12108.0	9760.5	8418.7	7785.1	10290.6
67.5°	16494.4	16550.7	16572.4	16953.7	16265.6	15134.5	13745.7	10911.5	9230.3	8427.9	11062.2
70°	16481.7	16465.3	16850.2	17928.7	18320.8	17474.8	15953.3	12327.7	10198.0	8961.6	11160.3
72.5°	15002.0	14871.2	15780.9	17917.8	20031.1	19918.5	18649.5	14154.1	11033.2	9027.0	9684.2
75°	11254.7	10906.1	12512.9	16147.6	20316.1	21305.6	20363.4	15287.1	10835.3	7975.7	6739.4
77.5°	4813.1	4462.6	6356.2	11953.7	18182.9	19916.7	18791.0	13337.1	8649.4	5274.2	3309.7
80°	1260.0	1258.2	1920.8	5419.5	12365.8	14707.8	12903.2	8613.0	4941.9	1884.6	913.3
82.5°	521.1	508.4	706.2	2107.9	6042.2	8253.5	6735.7	3841.7	1784.7	510.1	303.2
85°	194.2	192.5	343.2	728.1	2131.5	3404.1	2463.7	982.3	444.8	248.8	136.1
87.5°	54.4	52.7	74.4	252.4	519.3	787.9	421.2	161.5	125.3	98.0	40.0
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°	3914.4	3914.4	3914.4	3914.4	3914.4	3914.4	3914.4	3914.4	3914.4	3914.4	3914.4
2.5°	3927.1	3936.1	3952.5	3965.2	3981.5	3999.7	4025.1	4041.5	4057.8	4068.6	4061.5
5°	3943.4	3963.4	4005.1	4046.9	4095.9	4141.3	4194.0	4232.1	4263.0	4272.0	4275.7
7.5°	3979.7	4012.4	4083.2	4154.0	4232.1	4306.5	4382.8	4448.1	4500.8	4520.8	4522.6
10°	4043.2	4086.8	4186.7	4286.5	4390.1	4504.4	4602.5	4696.9	4771.3	4802.1	4804.0
12.5°	4123.2	4177.6	4308.3	4446.3	4589.7	4747.7	4874.8	4990.9	5083.6	5125.3	5125.3
15°	4226.6	4297.4	4464.5	4649.6	4860.2	5079.9	5241.5	5370.4	5473.9	5524.7	5521.2
17.5°	4339.2	4433.6	4644.2	4923.8	5225.1	5513.9	5702.7	5797.1	5904.2	5953.2	5951.5
20°	4448.1	4564.3	4865.7	5272.4	5673.6	5980.5	6133.0	6158.4	6165.7	6171.1	6185.6
22.5°	4560.7	4716.8	5143.4	5711.7	6142.0	6354.5	6376.2	6267.4	6114.8	6044.0	6064.0
25°	4684.1	4891.1	5506.6	6196.5	6545.1	6570.6	6403.5	6138.4	5849.8	5717.2	5737.1
27.5°	4804.0	5092.6	5942.3	6659.5	6835.6	6612.3	6252.8	5876.9	5528.3	5388.6	5404.9
30°	4923.8	5323.2	6423.5	7064.3	6968.2	6508.7	6014.9	5595.6	5245.1	5098.1	5114.4
32.5°	5045.5	5591.9	6977.2	7356.6	6944.5	6289.1	5719.0	5279.7	4971.0	4816.7	4836.7
35°	5183.4	5922.3	7501.9	7516.4	6786.5	5965.9	5328.7	4902.1	4633.3	4509.9	4537.1
37.5°	5363.2	6341.8	7964.9	7556.4	6510.6	5492.1	4843.9	4455.4	4233.9	4177.6	4217.6
40°	5586.5	6846.5	8318.9	7492.9	6102.1	4916.5	4313.8	4003.3	3878.1	3890.8	3934.4
42.5°	5876.9	7411.2	8567.7	7329.5	5533.9	4322.8	3849.0	3711.0	3770.9	3821.7	3869.0
45°	6254.7	7997.6	8721.9	7051.6	4891.1	3820.0	3574.8	3607.5	3652.9	3658.3	3694.7
47.5°	6737.5	8591.2	8823.6	6632.3	4235.7	3465.9	3400.5	3407.8	3398.7	3360.6	3389.7
50°	7340.3	9168.6	8914.4	6076.7	3678.3	3244.4	3157.3	3131.9	3006.5	2883.1	2899.4
52.5°	8026.6	9698.8	8952.6	5386.8	3244.4	3059.2	2917.6	2757.9	2523.7	2485.5	2498.2
55°	8789.2	10188.9	8854.5	4538.9	2879.4	2821.4	2607.2	2414.7	2389.3	2356.6	2362.0
57.5°	9700.5	10717.3	8654.8	3593.0	2505.5	2543.6	2334.8	2356.6	2311.2	2260.3	2251.3
60°	10697.3	11263.7	8304.3	2730.6	2118.8	2196.8	2264.0	2262.2	2249.5	2207.7	2193.2
62.5°	11594.2	11623.2	7614.4	2091.5	1779.3	1928.1	2111.5	2109.7	2098.8	2075.2	2066.1
65°	12127.9	11568.8	6463.4	1646.7	1499.7	1706.6	1904.6	1919.0	1920.8	1919.0	1919.0
67.5°	12033.5	10931.5	4883.8	1310.9	1269.1	1481.5	1699.3	1719.3	1733.9	1737.5	1741.2
70°	10966.0	9531.7	3184.5	1045.8	1063.9	1283.6	1505.1	1525.1	1537.8	1552.3	1559.5
72.5°	8547.7	7008.0	1822.9	846.0	884.2	1112.9	1312.6	1336.3	1343.5	1370.7	1381.6
75°	5208.8	4121.3	984.0	666.4	726.2	951.4	1122.1	1149.2	1161.9	1194.6	1198.2
77.5°	2476.4	1784.7	561.0	519.3	584.7	777.1	947.7	978.6	944.1	962.3	947.7
80°	837.0	662.7	354.0	395.8	446.6	606.4	758.9	789.8	717.2	713.5	706.2
82.5°	292.3	268.7	225.1	263.2	288.6	433.9	573.7	613.7	533.8	532.0	506.6
85°	114.4	109.0	125.3	143.4	172.5	266.9	377.6	397.6	328.6	265.1	261.5
87.5°	23.6	25.4	30.9	32.7	52.7	92.6	136.1	167.1	132.5	112.5	103.5
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)