

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: P969211

Luminaire Tested: **NAV-SB5D-722-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969211
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-SB5D-722-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 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: 43145.3 lumens
Efficiency: N/A
Efficacy: 118.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B4 - U0 - G5

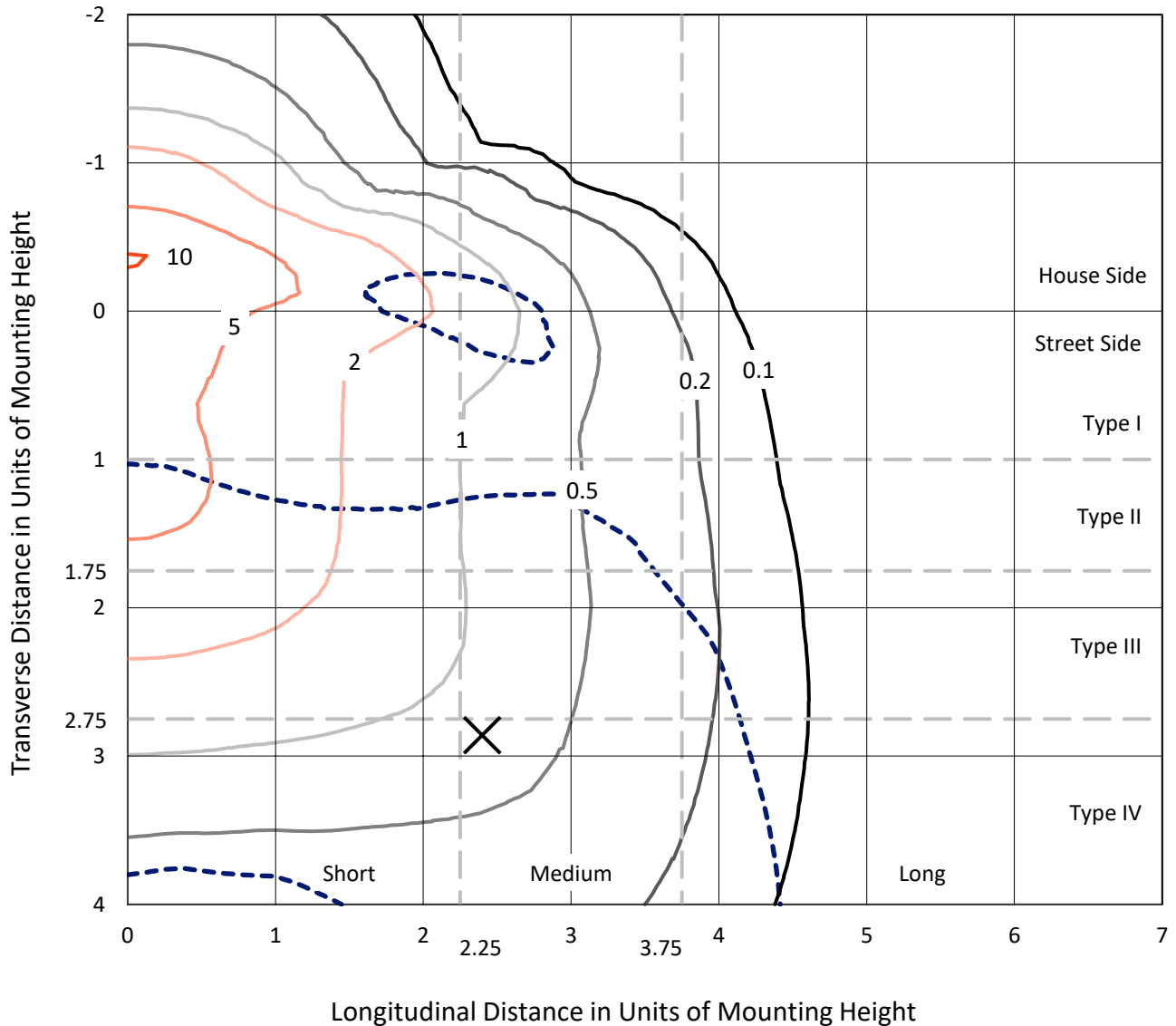
Input Watts (W): 364.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

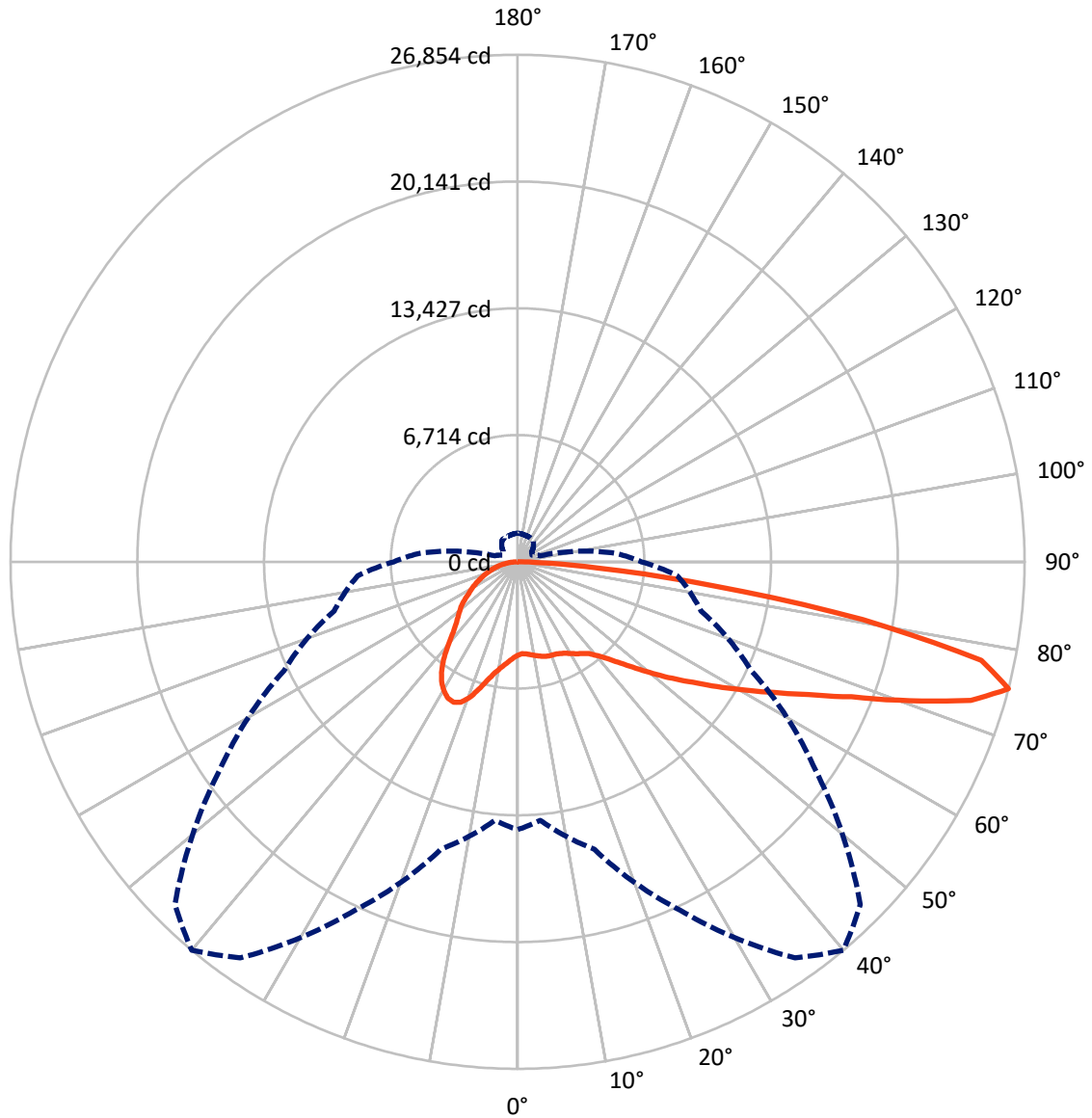
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.2 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	13367.9	0.0	13367.9
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	29777.5	0.0	29777.5
	% Fixture	69.0	0.0	69.0
Total	Lumens	43145.3	0.0	43145.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	492.5	1.1
10°-20°	1653.5	3.8
20°-30°	3019.1	7.0
30°-40°	4281.9	9.9
40°-50°	5781.9	13.4
50°-60°	7778.2	18.0
60°-70°	9872.3	22.9
70°-80°	8959.8	20.8
80°-90°	1306.0	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°	43145.3	100.0
0°-180°	43145.3	100.0

Coefficient of Utilization

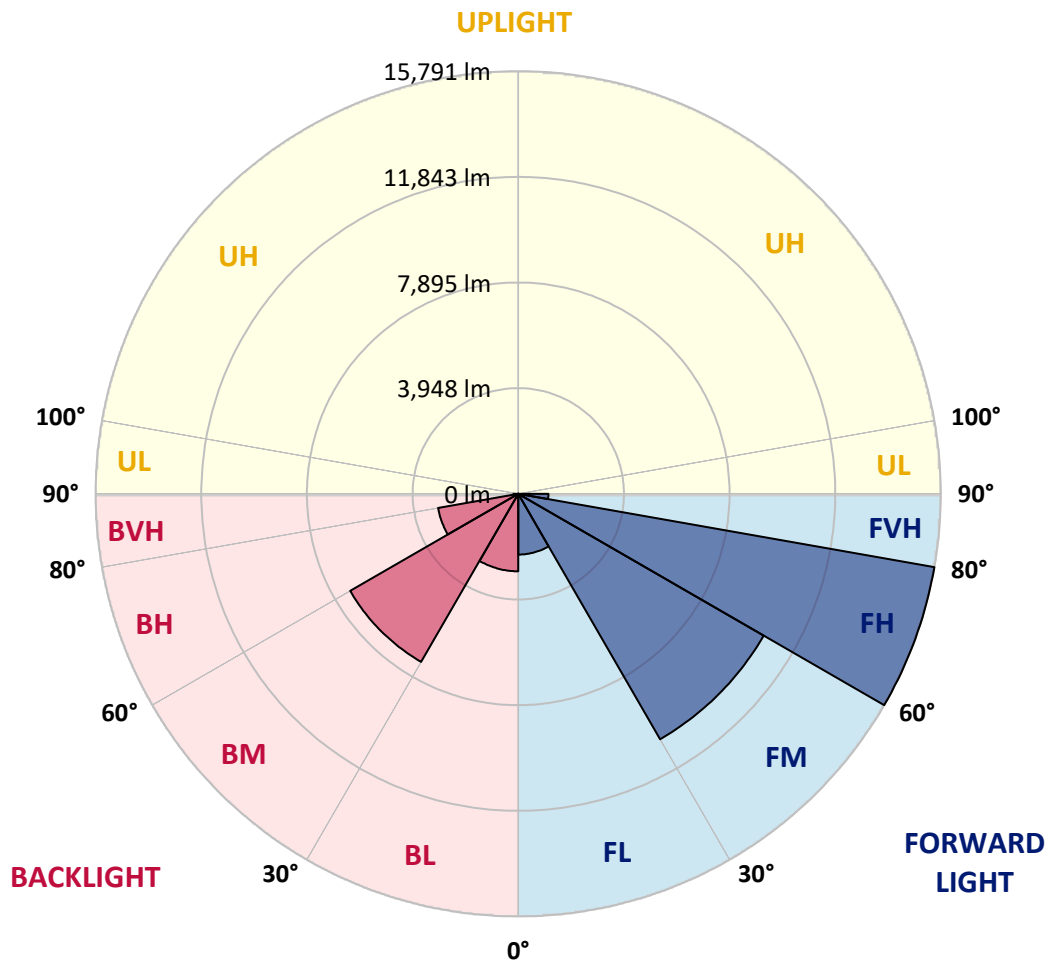


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2269.5	5.3			
FM (30°-60°)	10591.2	24.5			
FH (60°-80°)	15790.5	36.6			G5
FVH (80°-90°)	1126.2	2.6			G5
BL (0°-30°)	2895.6	6.7	B4/5000		
BM (30°-60°)	7250.9	16.8	B4/8500		
BH (60°-80°)	3041.6	7.0	B4/5000		G4/5000
BVH (80°-90°)	179.8	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°	4933.7	4933.7	4933.7	4933.7	4933.7	4933.7	4933.7	4933.7	4933.7	4933.7	4933.7
2.5°	4858.2	4885.7	4878.8	4869.7	4869.7	4871.9	4869.7	4885.7	4901.7	4917.7	4942.9
5°	4908.5	4936.0	4922.3	4910.9	4901.7	4899.4	4892.5	4890.3	4899.4	4920.0	4954.3
7.5°	5006.9	5034.4	5013.8	4993.2	4974.9	4965.7	4956.6	4942.9	4936.0	4947.5	4995.5
10°	5116.8	5144.3	5119.1	5082.5	5052.7	5041.3	5032.1	5018.4	5009.3	5016.1	5068.7
12.5°	5226.7	5254.0	5219.8	5169.4	5130.5	5123.7	5112.2	5107.7	5105.3	5103.1	5155.6
15°	5329.6	5352.4	5309.0	5249.5	5208.3	5196.9	5185.5	5192.3	5203.7	5217.5	5277.0
17.5°	5409.7	5432.6	5368.5	5290.7	5251.8	5247.3	5240.4	5263.3	5295.3	5329.6	5402.9
20°	5482.9	5505.8	5423.5	5318.2	5272.4	5272.4	5274.6	5322.7	5368.5	5418.9	5519.5
22.5°	5585.9	5604.2	5503.5	5359.3	5293.0	5297.6	5315.9	5363.9	5421.1	5489.8	5629.4
25°	5739.3	5752.9	5629.4	5437.2	5361.7	5375.4	5391.4	5414.3	5469.2	5549.2	5736.9
27.5°	5986.4	5997.8	5835.3	5574.5	5460.1	5482.9	5505.8	5489.8	5515.0	5583.6	5823.9
30°	6334.2	6341.1	6135.1	5789.6	5627.1	5638.5	5643.1	5576.7	5528.7	5583.6	5885.7
32.5°	6746.1	6743.8	6499.0	6050.5	5817.1	5805.6	5766.6	5636.3	5524.1	5572.2	5940.6
35°	7384.6	7359.4	7043.6	6416.6	6032.1	5961.2	5869.7	5702.6	5547.0	5560.7	5988.7
37.5°	8441.8	8364.0	7926.9	7016.1	6352.5	6171.7	6036.7	5810.2	5597.3	5556.1	6045.9
40°	9634.1	9535.7	9055.1	7837.7	6833.1	6542.5	6325.1	5963.4	5679.7	5576.7	6130.5
42.5°	11048.3	10908.7	10391.4	8805.7	7441.8	7020.7	6693.5	6158.0	5801.0	5643.1	6244.9
45°	12785.1	12599.8	11867.4	9897.2	8208.4	7647.7	7210.7	6453.2	5986.4	5771.3	6416.6
47.5°	14540.3	14586.1	13544.9	11146.7	9128.3	8421.2	7858.3	6897.1	6256.4	5977.2	6693.5
50°	16405.3	16437.3	15213.0	12531.1	10171.8	9295.3	8585.9	7393.7	6631.6	6270.1	7107.7
52.5°	17860.7	17865.3	16728.0	13979.7	11258.8	10256.5	9370.9	7961.3	7066.5	6659.1	7659.2
55°	18771.5	18760.1	17789.8	15350.4	12508.3	11265.7	10240.5	8606.5	7597.4	7116.8	8352.5
57.5°	19432.9	19398.5	18522.1	16528.9	13840.1	12457.8	11224.5	9338.9	8224.4	7661.5	9265.6
60°	19684.5	19664.0	19018.7	17547.2	15240.5	13776.0	12359.4	10158.1	8936.1	8304.4	10439.5
62.5°	19780.7	19819.6	19506.1	18533.5	16739.4	15236.0	13606.7	11137.4	9737.0	9032.2	11677.5
65°	20119.3	20190.2	20126.2	19824.1	18432.8	16945.4	15261.1	12302.3	10611.2	9812.5	12970.5
67.5°	20789.9	20860.8	20888.3	21368.8	20501.5	19075.9	17325.3	13753.1	11634.1	10622.6	13943.1
70°	20773.8	20753.2	21238.4	22597.7	23091.9	22025.6	20107.9	15538.1	12853.8	11295.4	14066.6
72.5°	18908.8	18744.1	19890.5	22583.9	25247.6	25105.7	23506.1	17840.1	13906.4	11377.8	12206.2
75°	14185.6	13746.3	15771.5	20352.8	25606.9	26854.0	25666.3	19268.1	13657.0	10052.8	8494.4
77.5°	6066.5	5624.8	8011.6	15066.6	22918.0	25103.4	23684.7	16810.4	10901.8	6647.7	4171.6
80°	1588.1	1585.9	2421.0	6830.8	15586.0	18538.0	16263.5	10856.0	6228.9	2375.3	1151.1
82.5°	656.7	640.7	890.2	2656.8	7615.6	10402.9	8489.9	4842.2	2249.5	643.0	382.1
85°	244.9	242.6	432.6	917.7	2686.5	4290.6	3105.3	1238.0	560.7	313.5	171.6
87.5°	68.7	66.3	93.8	318.1	654.5	993.1	530.9	203.7	157.8	123.6	50.3
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°	4933.7	4933.7	4933.7	4933.7	4933.7	4933.7	4933.7	4933.7	4933.7	4933.7	4933.7
2.5°	4949.7	4961.2	4981.8	4997.8	5018.4	5041.3	5073.3	5093.9	5114.5	5128.3	5119.1
5°	4970.3	4995.5	5048.1	5100.8	5162.5	5219.8	5286.1	5334.2	5373.0	5384.5	5389.1
7.5°	5016.1	5057.2	5146.5	5235.8	5334.2	5428.0	5524.1	5606.5	5672.9	5698.1	5700.3
10°	5096.2	5151.1	5277.0	5402.9	5533.3	5677.5	5801.0	5920.0	6013.9	6052.7	6055.0
12.5°	5196.9	5265.5	5430.3	5604.2	5785.0	5984.1	6144.3	6290.7	6407.5	6460.1	6460.1
15°	5327.3	5416.6	5627.1	5860.5	6126.0	6402.9	6606.5	6769.0	6899.5	6963.5	6958.9
17.5°	5469.2	5588.2	5853.7	6206.1	6585.9	6949.8	7187.8	7306.8	7441.8	7503.6	7501.3
20°	5606.5	5752.9	6132.8	6645.4	7151.1	7537.8	7730.1	7762.1	7771.3	7778.2	7796.5
22.5°	5748.4	5945.2	6482.9	7199.2	7741.5	8009.2	8036.7	7899.5	7707.2	7618.0	7643.1
25°	5904.0	6164.9	6940.6	7810.2	8249.6	8281.6	8071.1	7737.0	7373.1	7206.1	7231.3
27.5°	6055.0	6418.9	7489.9	8393.7	8615.7	8334.3	7881.1	7407.5	6968.1	6791.9	6812.5
30°	6206.1	6709.5	8096.3	8904.1	8782.7	8203.8	7581.4	7052.7	6611.1	6425.7	6446.3
32.5°	6359.4	7048.2	8794.2	9272.5	8753.0	7926.9	7208.4	6654.6	6265.5	6071.1	6096.2
35°	6533.2	7464.7	9455.5	9473.9	8553.9	7519.6	6716.4	6178.6	5839.9	5684.3	5718.7
37.5°	6759.9	7993.3	10039.1	9524.2	8206.0	6922.3	6105.4	5615.7	5336.5	5265.5	5315.9
40°	7041.3	8629.5	10485.3	9444.1	7691.2	6196.9	5437.2	5045.9	4887.9	4904.0	4958.8
42.5°	7407.5	9341.1	10798.8	9238.1	6974.9	5448.6	4851.3	4677.4	4752.9	4817.0	4876.5
45°	7883.5	10080.3	10993.3	8888.0	6164.9	4814.7	4505.8	4547.0	4604.2	4611.1	4656.9
47.5°	8492.1	10828.6	11121.5	8359.4	5338.8	4368.4	4286.1	4295.3	4283.8	4235.8	4272.4
50°	9251.9	11556.3	11235.8	7659.2	4636.3	4089.3	3979.5	3947.5	3789.5	3633.9	3654.5
52.5°	10116.9	12224.5	11283.9	6789.6	4089.3	3855.9	3677.4	3476.1	3180.9	3132.8	3148.8
55°	11078.0	12842.3	11160.4	5720.9	3629.3	3556.1	3286.2	3043.5	3011.4	2970.3	2977.2
57.5°	12226.7	13508.3	10908.7	4528.7	3157.9	3206.0	2942.9	2970.3	2913.0	2849.0	2837.6
60°	13483.1	14197.1	10467.0	3441.7	2670.5	2768.9	2853.6	2851.3	2835.3	2782.7	2764.3
62.5°	14613.5	14650.1	9597.4	2636.2	2242.6	2430.3	2661.4	2659.1	2645.3	2615.6	2604.1
65°	15286.3	14581.4	8146.6	2075.5	1890.2	2151.1	2400.5	2418.8	2421.0	2418.8	2418.8
67.5°	15167.3	13778.3	6155.7	1652.2	1599.6	1867.3	2141.9	2167.1	2185.4	2190.0	2194.5
70°	13821.7	12013.9	4013.8	1318.1	1341.0	1617.9	1897.1	1922.2	1938.3	1956.5	1965.7
72.5°	10773.7	8833.1	2297.5	1066.4	1114.5	1402.8	1654.5	1684.3	1693.4	1727.7	1741.5
75°	6565.3	5194.6	1240.2	839.8	915.3	1199.1	1414.2	1448.5	1464.5	1505.7	1510.3
77.5°	3121.3	2249.5	707.1	654.5	736.9	979.4	1194.5	1233.4	1189.9	1212.9	1194.5
80°	1054.9	835.3	446.2	498.9	562.9	764.3	956.5	995.5	903.9	899.3	890.2
82.5°	368.4	338.7	283.7	331.8	363.9	546.9	723.1	773.5	672.8	670.5	638.5
85°	144.2	137.4	157.8	180.8	217.4	336.4	476.0	501.1	414.2	334.2	329.5
87.5°	29.7	32.1	38.9	41.2	66.3	116.7	171.6	210.5	167.1	141.9	130.5
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)