

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: P885504

Luminaire Tested: **NAV-SB6D-827-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P885504
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-SB6D-827-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 2700K, 900mA 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: 49746 lumens
Efficiency: N/A
Efficacy: 113.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B4 - U0 - G5

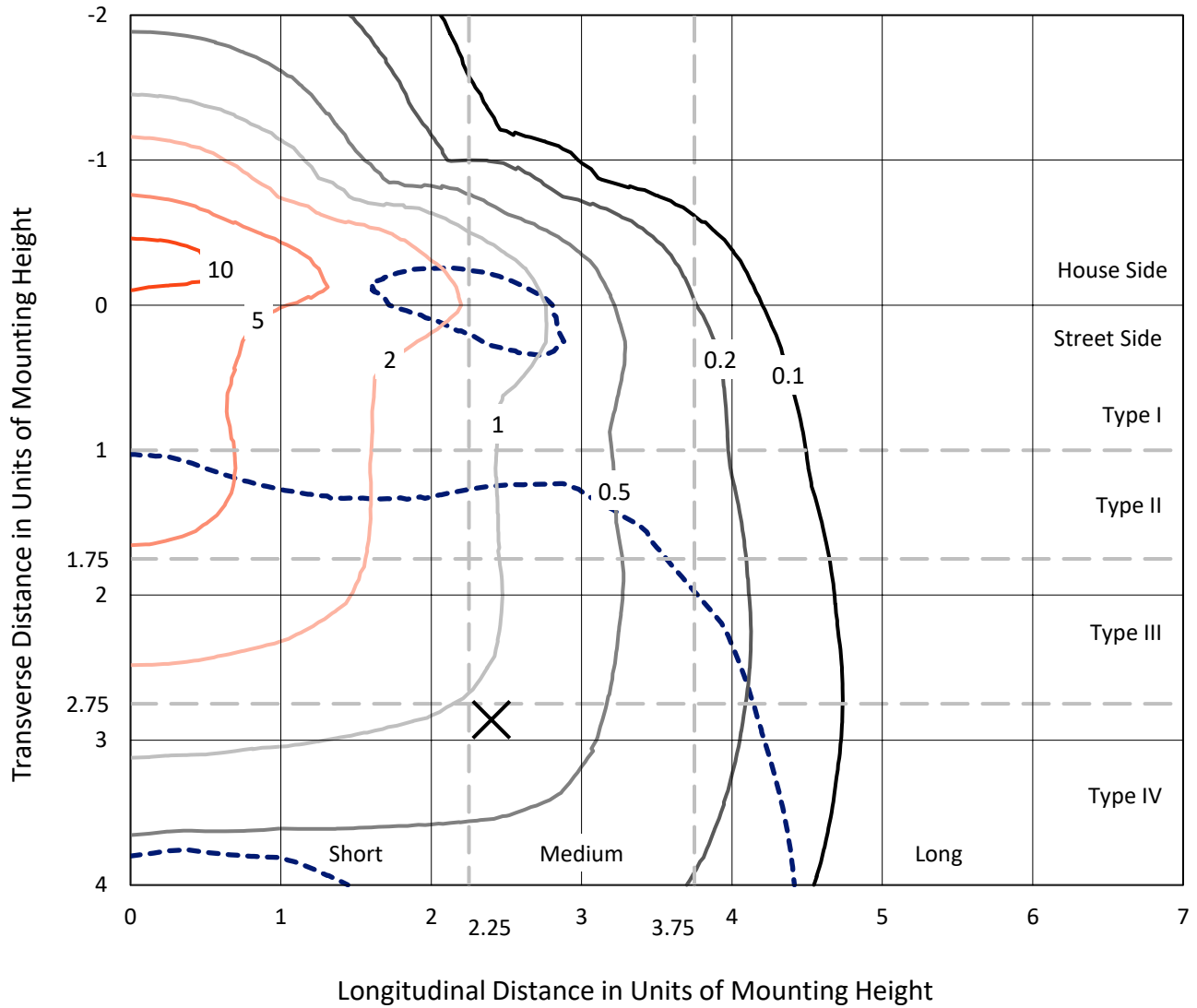
Input Watts (W): 440.1
Input Voltage (V): 120.0
Input Current (Ain): 3.68
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 2.542
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

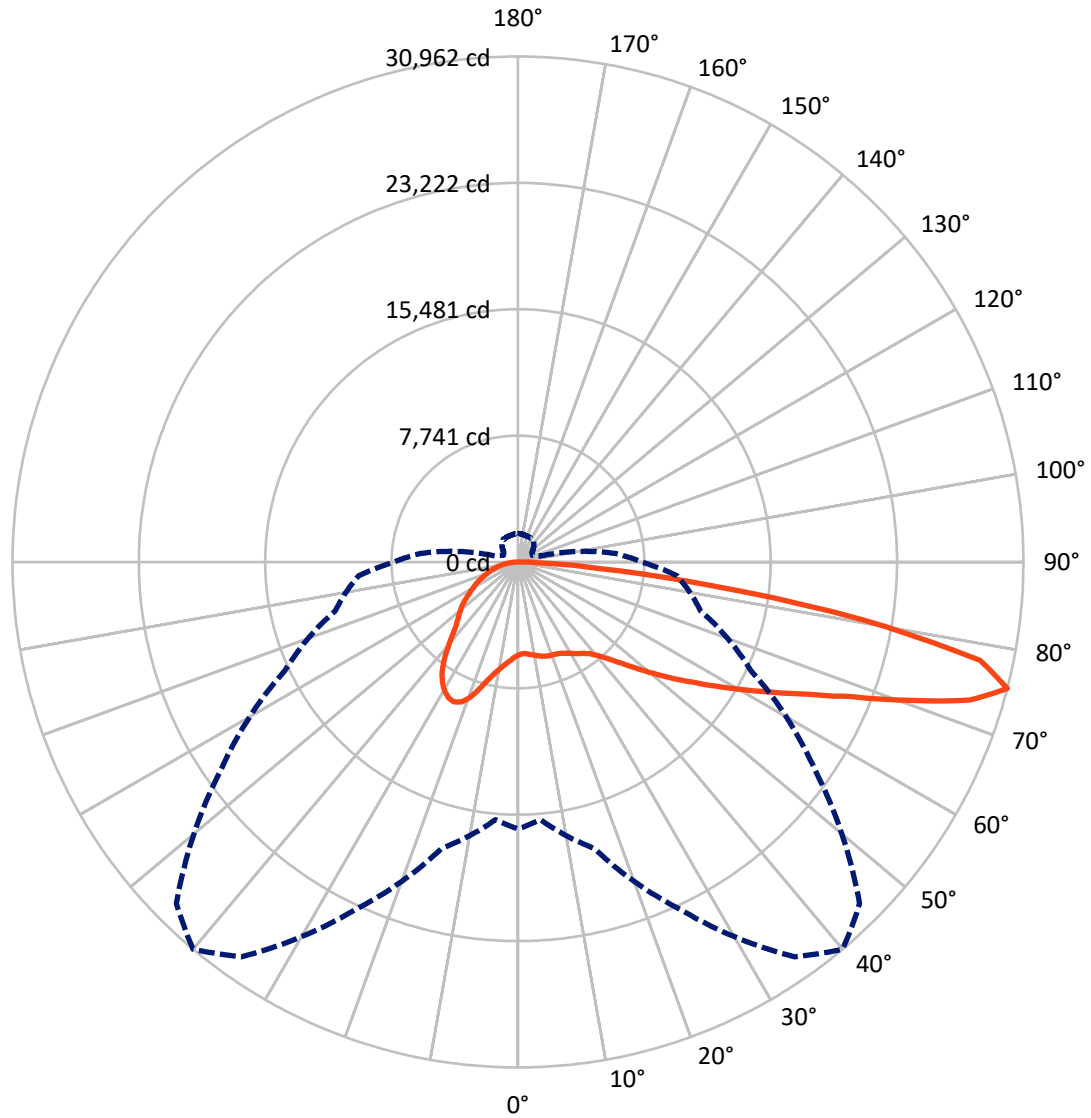
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.8 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	15413.0	0.0	15413.0
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	34333.0	0.0	34333.0
	% Fixture	69.0	0.0	69.0
Total	Lumens	49746.0	0.0	49746.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	567.8	1.1
10°-20°	1906.4	3.8
20°-30°	3481.0	7.0
30°-40°	4937.0	9.9
40°-50°	6666.5	13.4
50°-60°	8968.2	18.0
60°-70°	11382.7	22.9
70°-80°	10330.5	20.8
80°-90°	1505.9	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°	49746.0	100.0
0°-180°	49746.0	100.0

Coefficient of Utilization



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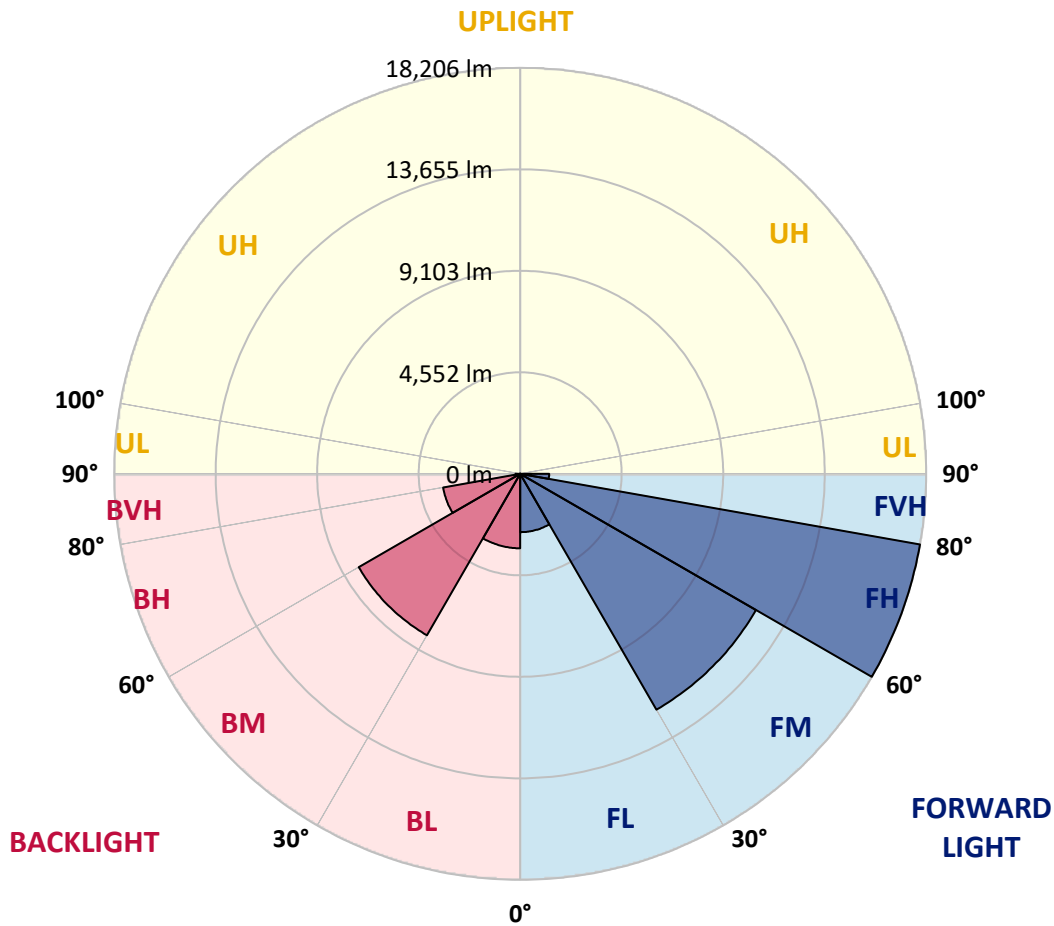
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2616.7	5.3			
FM (30°-60°)	12211.5	24.5			
FH (60°-80°)	18206.3	36.6			G5
FVH (80°-90°)	1298.5	2.6			G5
BL (0°-30°)	3338.6	6.7	B4/5000		
BM (30°-60°)	8360.1	16.8	B4/8500		
BH (60°-80°)	3506.9	7.0	B4/5000		G4/5000
BVH (80°-90°)	207.3	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°	5688.5	5688.5	5688.5	5688.5	5688.5	5688.5	5688.5	5688.5	5688.5	5688.5	5688.5
2.5°	5601.5	5633.1	5625.2	5614.6	5614.6	5617.3	5614.6	5633.1	5651.6	5670.1	5699.1
5°	5659.5	5691.2	5675.3	5662.1	5651.6	5648.9	5641.0	5638.4	5648.9	5672.7	5712.3
7.5°	5773.0	5804.6	5780.9	5757.1	5736.0	5725.5	5714.9	5699.1	5691.2	5704.4	5759.8
10°	5899.6	5931.3	5902.2	5860.0	5825.7	5812.5	5802.0	5786.1	5775.6	5783.5	5844.2
12.5°	6026.2	6057.9	6018.3	5960.3	5915.4	5907.5	5894.3	5889.0	5886.4	5883.8	5944.5
15°	6145.0	6171.4	6121.2	6052.6	6005.1	5991.9	5978.8	5986.7	5999.9	6015.7	6084.3
17.5°	6237.3	6263.7	6189.8	6100.1	6055.3	6050.0	6042.1	6068.5	6105.4	6145.0	6229.4
20°	6321.8	6348.1	6253.2	6131.8	6079.0	6079.0	6081.7	6137.1	6189.8	6247.9	6364.0
22.5°	6440.5	6461.6	6345.5	6179.3	6102.8	6108.0	6129.1	6184.6	6250.5	6329.7	6490.6
25°	6617.3	6633.1	6490.6	6269.0	6181.9	6197.7	6216.2	6242.6	6305.9	6398.3	6614.6
27.5°	6902.2	6915.4	6728.1	6427.3	6295.4	6321.8	6348.1	6329.7	6358.7	6437.8	6714.9
30°	7303.3	7311.2	7073.7	6675.3	6488.0	6501.2	6506.4	6429.9	6374.5	6437.8	6786.1
32.5°	7778.2	7775.5	7493.2	6976.1	6707.0	6693.8	6648.9	6498.5	6369.2	6424.7	6849.4
35°	8514.3	8485.3	8121.2	7398.2	6955.0	6873.2	6767.7	6575.0	6395.6	6411.5	6904.9
37.5°	9733.3	9643.6	9139.6	8089.5	7324.4	7115.9	6960.3	6699.1	6453.7	6406.2	6970.8
40°	11107.9	10994.5	10440.4	9036.7	7878.4	7543.4	7292.7	6875.8	6548.7	6429.9	7068.4
42.5°	12738.5	12577.5	11981.3	10152.8	8580.3	8094.8	7717.5	7100.1	6688.5	6506.4	7200.4
45°	14741.1	14527.4	13683.1	11411.3	9464.2	8817.7	8313.8	7440.5	6902.2	6654.2	7398.2
47.5°	16764.8	16817.5	15617.0	12851.9	10524.8	9709.5	9060.5	7952.3	7213.6	6891.7	7717.5
50°	18915.1	18952.1	17540.5	14448.2	11728.0	10717.4	9899.5	8524.9	7646.3	7229.4	8195.1
52.5°	20593.2	20598.5	19287.1	16118.4	12981.2	11825.6	10804.5	9179.2	8147.6	7677.9	8830.9
55°	21643.3	21630.1	20511.4	17698.8	14421.8	12989.1	11807.1	9923.3	8759.7	8205.6	9630.4
57.5°	22405.8	22366.2	21355.7	19057.6	15957.4	14363.8	12941.7	10767.6	9482.6	8833.6	10683.1
60°	22696.0	22672.3	21928.2	20231.7	17572.1	15883.5	14250.3	11712.1	10303.2	9575.0	12036.7
62.5°	22806.9	22851.7	22490.2	21368.9	19300.3	17566.9	15688.3	12841.4	11226.7	10414.0	13464.1
65°	23197.3	23279.1	23205.3	22857.0	21252.8	19537.8	17595.9	14184.4	12234.5	11313.7	14954.8
67.5°	23970.4	24052.2	24083.9	24637.9	23638.0	21994.2	19975.8	15857.1	13413.9	12247.7	16076.1
70°	23951.9	23928.2	24487.6	26054.8	26624.7	25395.2	23184.2	17915.1	14820.2	13023.4	16218.6
72.5°	21801.6	21611.6	22933.5	26039.0	29110.1	28946.6	27102.3	20569.4	16033.9	13118.4	14073.5
75°	16355.8	15849.2	18184.3	23466.5	29524.4	30962.3	29593.0	22215.8	15746.3	11590.8	9794.0
77.5°	6994.6	6485.3	9237.3	17371.6	26424.2	28943.9	27308.1	19382.1	12569.6	7664.7	4809.9
80°	1831.1	1828.5	2791.5	7875.8	17970.6	21374.2	18751.5	12516.9	7181.9	2738.7	1327.1
82.5°	757.2	738.8	1026.4	3063.3	8780.8	11994.4	9788.7	5583.0	2593.6	741.4	440.6
85°	282.3	279.7	498.7	1058.0	3097.6	4947.1	3580.4	1427.4	646.4	361.5	197.9
87.5°	79.2	76.5	108.2	366.7	754.6	1145.1	612.1	234.8	182.1	142.5	58.0
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°	5688.5	5688.5	5688.5	5688.5	5688.5	5688.5	5688.5	5688.5	5688.5	5688.5	5688.5
2.5°	5707.0	5720.2	5743.9	5762.4	5786.1	5812.5	5849.5	5873.2	5897.0	5912.8	5902.2
5°	5730.7	5759.8	5820.4	5881.1	5952.4	6018.3	6094.8	6150.3	6195.1	6208.3	6213.6
7.5°	5783.5	5831.0	5933.9	6036.8	6150.3	6258.4	6369.2	6464.2	6540.7	6569.8	6572.4
10°	5875.9	5939.2	6084.3	6229.4	6379.8	6546.0	6688.5	6825.7	6933.9	6978.7	6981.4
12.5°	5991.9	6071.1	6261.1	6461.6	6670.0	6899.6	7084.3	7253.1	7387.7	7448.4	7448.4
15°	6142.3	6245.2	6488.0	6757.1	7063.2	7382.4	7617.2	7804.6	7955.0	8028.8	8023.6
17.5°	6305.9	6443.1	6749.2	7155.5	7593.5	8013.0	8287.4	8424.6	8580.3	8651.5	8648.9
20°	6464.2	6633.1	7071.1	7662.1	8245.2	8691.1	8912.7	8949.7	8960.2	8968.1	8989.2
22.5°	6627.8	6854.7	7474.8	8300.6	8925.9	9234.6	9266.3	9108.0	8886.3	8783.4	8812.5
25°	6807.2	7108.0	8002.5	9005.1	9511.7	9548.6	9305.9	8920.6	8501.1	8308.5	8337.5
27.5°	6981.4	7400.9	8635.7	9677.9	9933.8	9609.3	9086.9	8540.7	8034.1	7831.0	7854.7
30°	7155.5	7736.0	9334.9	10266.3	10126.4	9458.9	8741.2	8131.7	7622.5	7408.8	7432.5
32.5°	7332.3	8126.5	10139.6	10691.0	10092.1	9139.6	8311.2	7672.6	7224.1	6999.8	7028.9
35°	7532.8	8606.7	10902.1	10923.2	9862.6	8670.0	7743.9	7123.8	6733.4	6553.9	6593.5
37.5°	7794.0	9216.1	11574.9	10981.3	9461.5	7981.3	7039.4	6474.8	6152.9	6071.1	6129.1
40°	8118.5	9949.6	12089.4	10888.9	8867.9	7145.0	6269.0	5817.8	5635.8	5654.2	5717.5
42.5°	8540.7	10770.2	12450.9	10651.5	8042.0	6282.2	5593.5	5393.0	5480.1	5554.0	5622.6
45°	9089.5	11622.4	12675.2	10247.8	7108.0	5551.3	5195.1	5242.6	5308.6	5316.5	5369.3
47.5°	9791.3	12485.2	12822.9	9638.3	6155.5	5036.8	4941.8	4952.4	4939.2	4883.8	4926.0
50°	10667.3	13324.2	12954.8	8830.9	5345.5	4714.9	4588.3	4551.3	4369.3	4189.9	4213.6
52.5°	11664.6	14094.7	13010.2	7828.3	4714.9	4445.8	4240.0	4007.8	3667.5	3612.1	3630.5
55°	12772.8	14807.0	12867.8	6596.2	4184.6	4100.2	3788.8	3509.2	3472.2	3424.7	3432.6
57.5°	14097.3	15574.8	12577.5	5221.5	3641.1	3696.5	3393.1	3424.7	3358.8	3284.9	3271.7
60°	15545.8	16369.0	12068.3	3968.2	3079.1	3192.5	3290.2	3287.5	3269.1	3208.4	3187.3
62.5°	16849.2	16891.4	11065.7	3039.5	2585.7	2802.0	3068.5	3065.9	3050.1	3015.8	3002.6
65°	17624.9	16812.3	9392.9	2393.1	2179.4	2480.2	2767.7	2788.9	2791.5	2788.9	2788.9
67.5°	17487.7	15886.2	7097.5	1905.0	1844.3	2153.0	2469.6	2498.6	2519.7	2525.0	2530.3
70°	15936.3	13851.9	4627.9	1519.8	1546.1	1865.4	2187.3	2216.3	2234.8	2255.9	2266.4
72.5°	12421.9	10184.5	2649.0	1229.5	1284.9	1617.4	1907.6	1941.9	1952.5	1992.0	2007.9
75°	7569.7	5989.3	1430.0	968.3	1055.4	1382.6	1630.6	1670.1	1688.6	1736.1	1741.4
77.5°	3598.9	2593.6	815.3	754.6	849.6	1129.3	1377.3	1422.1	1372.0	1398.4	1377.3
80°	1216.3	963.0	514.5	575.2	649.1	881.2	1102.9	1147.7	1042.2	1036.9	1026.4
82.5°	424.8	390.5	327.2	382.6	419.5	630.6	833.8	891.8	775.7	773.1	736.1
85°	166.2	158.3	182.1	208.4	250.7	387.9	548.8	577.8	477.6	385.2	379.9
87.5°	34.3	36.9	44.9	47.5	76.5	134.6	197.9	242.7	192.6	163.6	150.4
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)