

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: P885509

Luminaire Tested: **NAV-SB6D-827-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P885509
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6D-827-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 50218 lumens
Efficiency: N/A
Efficacy: 114.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

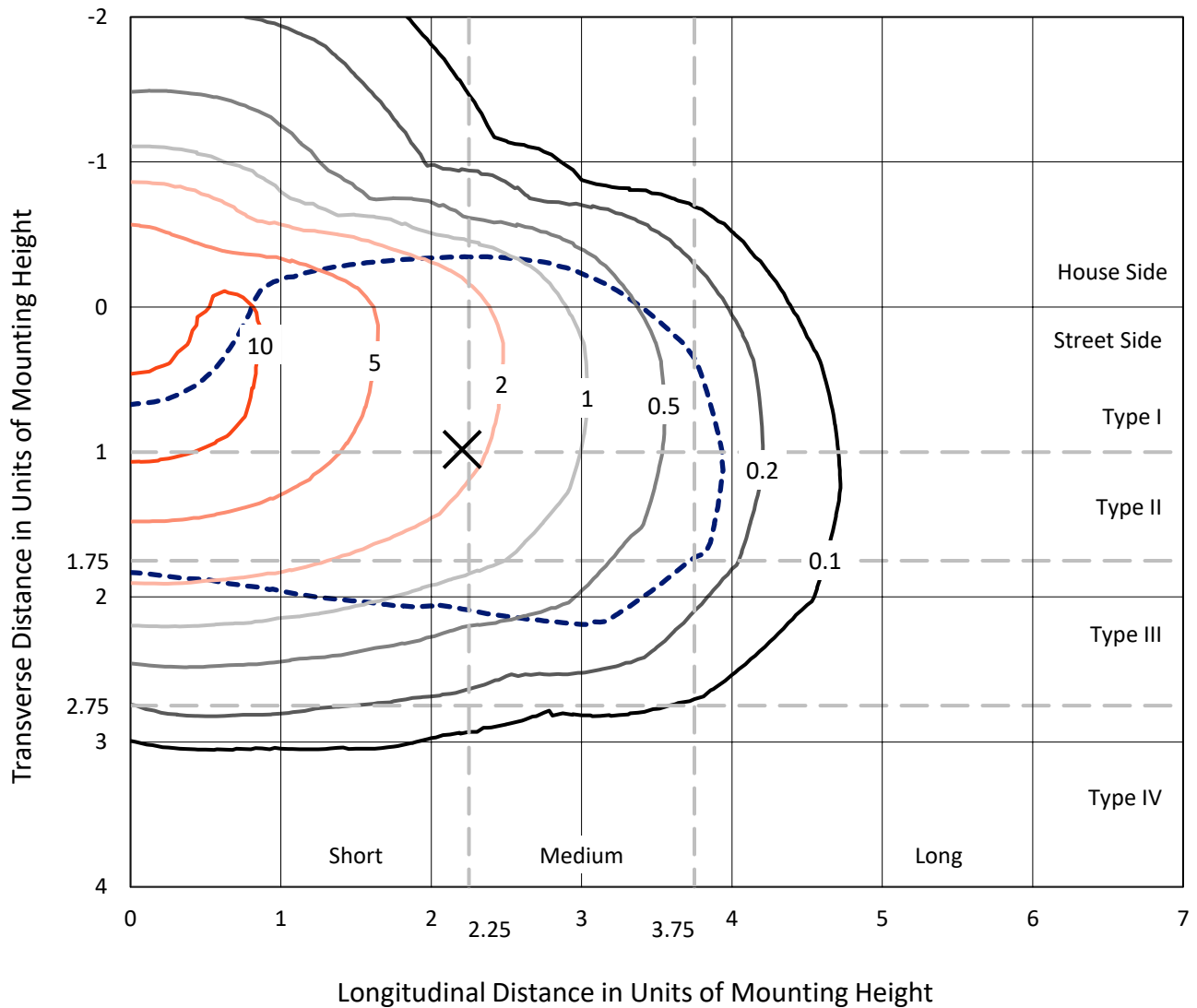
Input Watts (W): 440.1
Input Voltage (V): 120.0
Input Current (Ain): 3.68
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 2.542
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

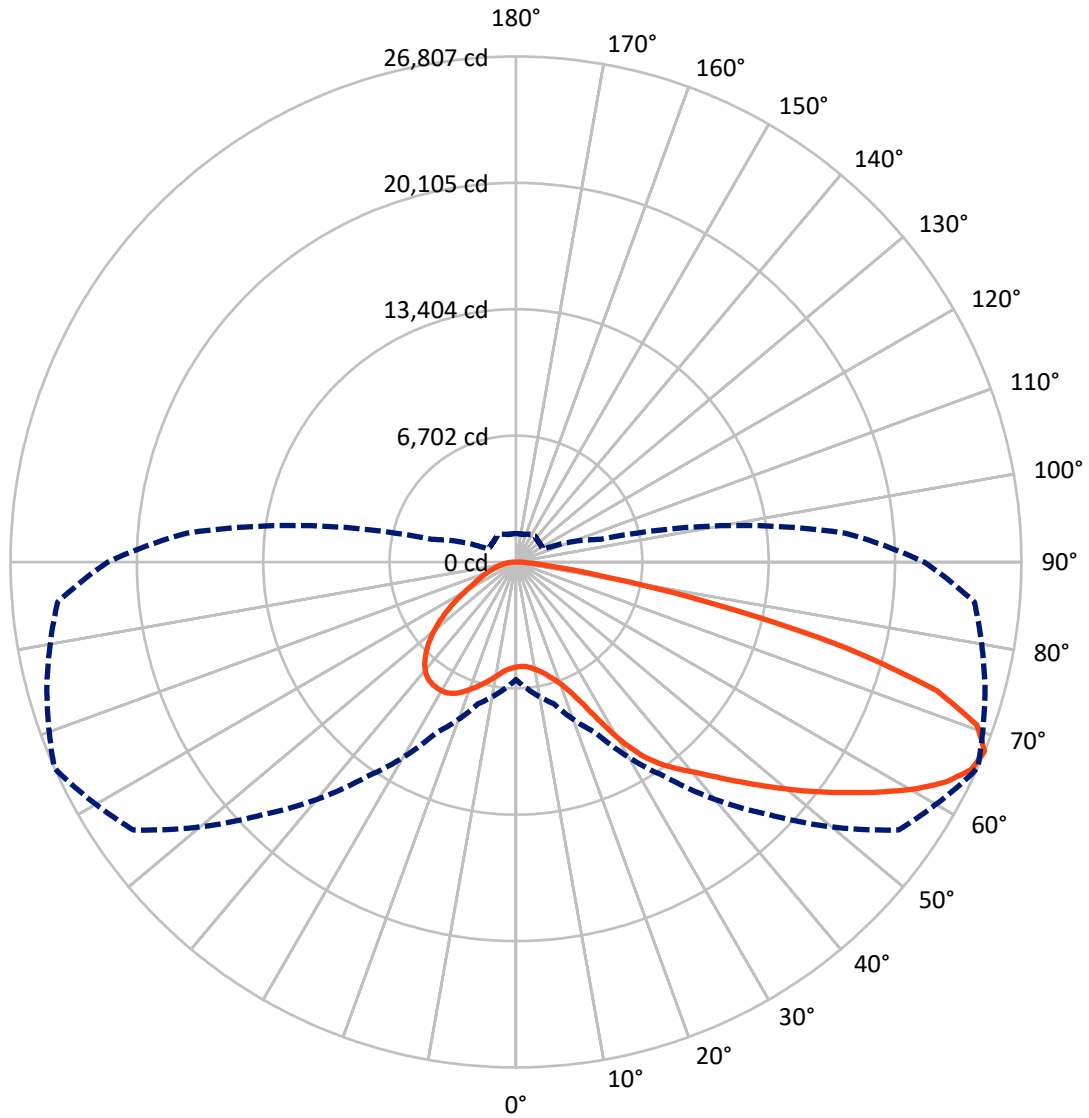
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.6 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12486.6	0.0	12486.6
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	37731.4	0.0	37731.4
	% Fixture	75.1	0.0	75.1
Total	Lumens	50218.0	0.0	50218.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	552.2	1.1
10°-20°	1824.5	3.6
20°-30°	3516.6	7.0
30°-40°	6165.9	12.3
40°-50°	9166.7	18.3
50°-60°	11619.6	23.1
60°-70°	11369.5	22.6
70°-80°	5423.4	10.8
80°-90°	579.6	1.2
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°	50218.0	100.0
0°-180°	50218.0	100.0

Coefficient of Utilization



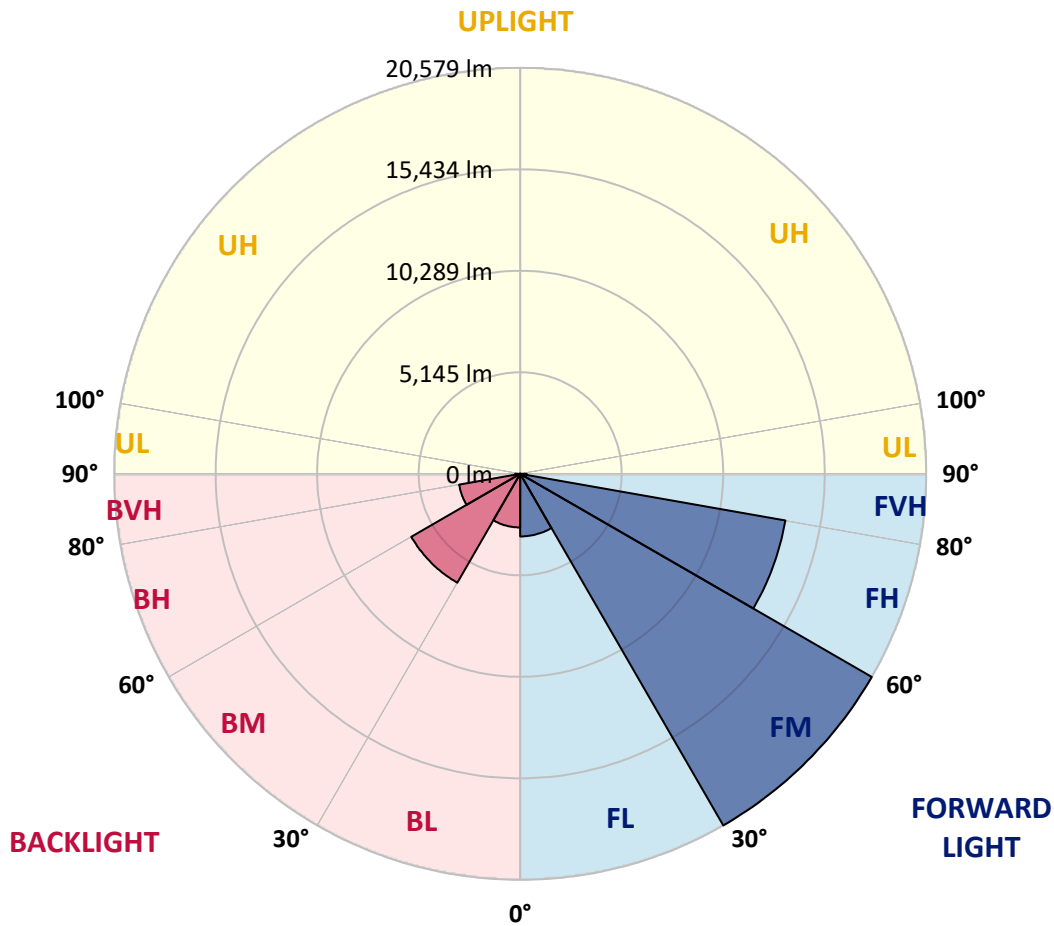
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3173.3	6.3			
FM (30°-60°)	20578.9	41.0			
FH (60°-80°)	13650.6	27.2			G5
FVH (80°-90°)	328.6	0.7			G3/500
BL (0°-30°)	2720.0	5.4	B4/5000		
BM (30°-60°)	6373.3	12.7	B4/8500		
BH (60°-80°)	3142.3	6.3	B4/5000		G4/5000
BVH (80°-90°)	251.0	0.5			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	5569.8	5569.8	5569.8	5569.8	5569.8	5569.8	5569.8	5569.8	5569.8	5569.8	5569.8
2.5°	5511.8	5543.5	5535.5	5522.3	5519.7	5525.0	5532.9	5540.8	5538.2	5551.4	5572.5
5°	5496.0	5527.6	5525.0	5525.0	5535.5	5556.6	5569.8	5583.0	5569.8	5585.7	5614.7
7.5°	5506.5	5530.3	5540.8	5551.4	5577.8	5617.3	5649.0	5678.0	5662.2	5680.7	5717.6
10°	5641.1	5659.5	5670.1	5670.1	5688.6	5733.4	5765.1	5817.9	5804.7	5833.7	5881.2
12.5°	5886.5	5904.9	5904.9	5894.4	5907.6	5936.6	5947.1	6005.2	5981.4	6028.9	6076.4
15°	6187.2	6224.2	6195.2	6176.7	6182.0	6211.0	6208.4	6253.2	6229.5	6269.0	6311.3
17.5°	6519.7	6567.2	6519.7	6517.1	6506.5	6538.2	6540.8	6580.4	6538.2	6567.2	6596.2
20°	6912.8	6978.8	6939.2	6952.4	6928.7	6941.9	6955.0	7013.1	6947.1	6968.2	6960.3
22.5°	7466.9	7546.1	7503.8	7554.0	7538.1	7527.6	7525.0	7627.9	7525.0	7532.9	7456.4
25°	8274.3	8369.3	8295.4	8364.0	8364.0	8398.3	8437.9	8569.8	8398.3	8348.2	8150.3
27.5°	9466.9	9561.9	9416.7	9459.0	9445.8	9530.2	9488.0	9815.2	9630.5	9548.7	9150.3
30°	10902.2	11071.1	10796.7	10786.1	10772.9	10907.5	10968.2	11184.5	10997.2	10915.4	10435.2
32.5°	12453.6	12630.4	12303.3	12208.3	12158.1	12239.9	12189.8	12363.9	12234.7	12108.0	11514.3
35°	14094.8	14268.9	13957.6	13772.9	13572.4	13400.9	13221.4	13266.3	13144.9	12952.3	12337.6
37.5°	15646.2	15965.5	15635.7	15437.8	15068.4	14733.3	14232.0	14023.5	13910.1	13733.3	13113.3
40°	17226.7	17408.7	17158.1	16989.2	16588.1	16063.1	15261.0	14820.4	14667.3	14495.8	13970.8
42.5°	18390.2	18564.4	18429.8	18313.7	17999.7	17390.2	16353.3	15801.9	15580.2	15387.6	14941.7
45°	19313.7	19443.0	19358.6	19400.8	19266.2	18675.2	17485.2	16854.6	16625.1	16390.3	16039.3
47.5°	19685.7	19822.9	19957.5	20208.1	20437.7	20002.3	18701.6	17994.5	17751.7	17511.6	17166.0
50°	19643.5	19783.4	20173.8	20706.8	21419.2	21274.1	19983.9	19208.2	18983.9	18709.5	18390.2
52.5°	19305.8	19464.1	19965.4	20851.9	21986.5	22226.6	21289.9	20461.4	20250.4	19923.2	19603.9
55°	18419.3	18514.2	19266.2	20522.1	22121.1	22891.5	22569.6	21796.5	21585.4	21129.0	20780.7
57.5°	16775.5	16912.7	18007.7	19633.0	21783.3	23342.7	23693.6	23200.2	22997.0	22340.0	21975.9
60°	14630.4	14849.4	16102.7	18139.6	20923.2	23340.0	24714.7	24580.1	24411.3	23532.6	23152.7
62.5°	12203.0	12456.3	13662.1	16028.8	19419.2	22677.8	25353.2	25735.8	25648.7	24632.9	24147.4
65°	9371.9	9546.0	10746.5	13298.0	17078.9	21255.6	25427.1	26524.7	26540.5	25469.3	24667.2
67.5°	6240.0	6741.3	7783.5	9978.7	13944.4	18931.1	24778.0	26654.0	26807.0	25756.9	24406.0
70°	3044.8	3704.4	4725.5	6485.4	9978.7	15366.5	23081.5	25593.3	25933.7	24917.8	22849.3
72.5°	1263.8	1477.6	2034.3	3200.5	5728.1	10369.2	19672.5	22717.3	23347.9	22078.8	19210.8
75°	852.2	923.5	1163.6	1641.1	2609.5	5113.4	14187.1	16939.1	17954.9	16675.2	13630.4
77.5°	657.0	701.8	847.0	1147.7	1551.4	1934.0	7593.6	10208.3	10733.4	9936.5	7092.2
80°	517.1	551.4	633.2	836.4	1100.2	1034.3	2588.4	4625.3	4928.7	4134.5	2279.7
82.5°	448.5	461.7	453.8	567.3	730.9	604.2	849.6	1707.1	1883.9	1366.7	744.1
85°	324.5	361.5	377.3	350.9	387.9	306.1	348.3	604.2	664.9	593.7	419.5
87.5°	131.9	195.2	240.1	226.9	142.5	87.1	108.2	176.8	203.2	221.6	137.2
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°	5569.8	5569.8	5569.8	5569.8	5569.8	5569.8	5569.8	5569.8	5569.8	5569.8	5569.8
2.5°	5575.1	5593.6	5606.8	5622.6	5633.2	5649.0	5680.7	5699.1	5701.8	5715.0	5712.3
5°	5625.2	5651.6	5680.7	5722.9	5770.4	5809.9	5870.6	5912.8	5928.7	5941.9	5939.2
7.5°	5733.4	5770.4	5823.1	5897.0	5965.6	6018.4	6092.3	6142.4	6192.5	6211.0	6213.6
10°	5894.4	5947.1	6023.7	6123.9	6197.8	6266.4	6342.9	6385.1	6435.3	6456.4	6466.9
12.5°	6094.9	6150.3	6250.6	6390.4	6459.0	6506.5	6532.9	6522.3	6532.9	6551.4	6556.6
15°	6324.4	6385.1	6498.6	6649.0	6696.5	6654.3	6596.2	6543.4	6535.5	6540.8	6559.3
17.5°	6596.2	6641.1	6773.0	6899.6	6865.3	6691.2	6564.5	6480.1	6437.9	6424.7	6443.2
20°	6976.2	6976.2	7084.3	7163.5	6933.9	6638.4	6440.5	6303.3	6216.3	6179.3	6171.4
22.5°	7437.9	7395.7	7464.3	7408.9	6920.7	6490.7	6216.3	5978.8	5846.9	5794.1	5786.2
25°	8023.6	7973.5	7955.0	7612.0	6825.8	6255.8	5809.9	5522.3	5406.3	5377.2	5382.5
27.5°	8907.5	8780.9	8540.8	7722.8	6651.6	5886.5	5335.0	5068.5	5002.6	5005.2	5013.1
30°	10084.3	9831.0	9242.6	7741.3	6366.7	5364.0	4849.5	4659.6	4627.9	4641.1	4685.9
32.5°	11174.0	10933.9	9960.3	7656.9	5928.7	4852.2	4414.2	4287.5	4240.0	4255.9	4277.0
35°	12028.8	11962.9	10625.2	7538.1	5390.4	4372.0	4023.7	3915.5	3823.2	3802.1	3817.9
37.5°	12836.2	12809.8	11123.8	7371.9	4857.4	4031.6	3709.7	3567.2	3432.7	3358.8	3361.4
40°	13722.8	13696.4	11451.0	7116.0	4385.2	3736.1	3427.4	3240.1	3073.8	2939.3	2952.5
42.5°	14720.1	14564.4	11606.7	6749.2	3984.1	3485.4	3197.8	2944.5	2725.6	2601.5	2609.5
45°	15809.8	15458.9	11604.1	6282.2	3646.4	3255.9	2952.5	2593.6	2390.5	2274.4	2269.1
47.5°	16965.5	16313.7	11461.6	5765.1	3319.2	3002.6	2572.5	2298.1	2163.6	2092.3	2076.5
50°	18158.0	17113.2	11218.8	5171.4	2984.1	2715.0	2335.1	2147.7	2044.8	1978.9	1955.1
52.5°	19279.4	17838.8	10926.0	4498.6	2643.8	2435.3	2229.5	2084.4	1976.2	1902.3	1870.7
55°	20321.6	18464.1	10511.7	3810.0	2366.7	2248.0	2179.4	2058.0	1934.0	1846.9	1812.6
57.5°	21247.7	18870.4	9796.7	3163.5	2168.8	2118.7	2126.6	2013.2	1870.7	1796.8	1749.3
60°	22018.1	19168.6	8738.7	2564.6	2007.9	1992.1	2044.8	1928.7	1762.5	1678.1	1641.1
62.5°	22479.9	19163.3	7440.5	2100.2	1870.7	1876.0	1936.6	1823.2	1654.3	1575.2	1551.4
65°	22440.3	18693.7	6015.7	1796.8	1738.8	1744.0	1823.2	1707.1	1564.6	1517.1	1514.5
67.5°	21646.1	17548.6	4614.7	1598.9	1593.6	1617.4	1709.7	1627.9	1509.2	1503.9	1511.9
70°	19495.8	15171.3	3324.5	1440.6	1443.3	1477.6	1598.9	1577.8	1480.2	1490.7	1488.1
72.5°	15633.0	11567.1	2232.2	1274.4	1277.0	1332.4	1493.4	1538.2	1451.2	1591.0	1612.1
75°	10411.5	7213.6	1435.3	1097.6	1100.2	1171.5	1401.0	1461.7	1372.0	1585.7	1598.9
77.5°	5002.6	3242.7	1039.6	923.5	923.5	989.4	1211.1	1308.7	1168.8	1232.2	1129.3
80°	1728.2	1219.0	817.9	744.1	728.2	773.1	1021.1	1134.5	1007.9	928.7	870.7
82.5°	680.7	633.2	657.0	577.8	525.1	554.1	794.2	936.7	741.4	670.2	667.5
85°	390.5	411.6	464.4	382.6	303.4	340.4	583.1	672.8	559.4	493.4	504.0
87.5°	105.5	145.1	213.7	197.9	137.2	145.1	277.0	372.0	321.9	248.0	255.9
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)