

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: P885507

Luminaire Tested: **NAV-SB6D-827-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P885507
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6D-827-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 49725 lumens
Efficiency: N/A
Efficacy: 113.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G5

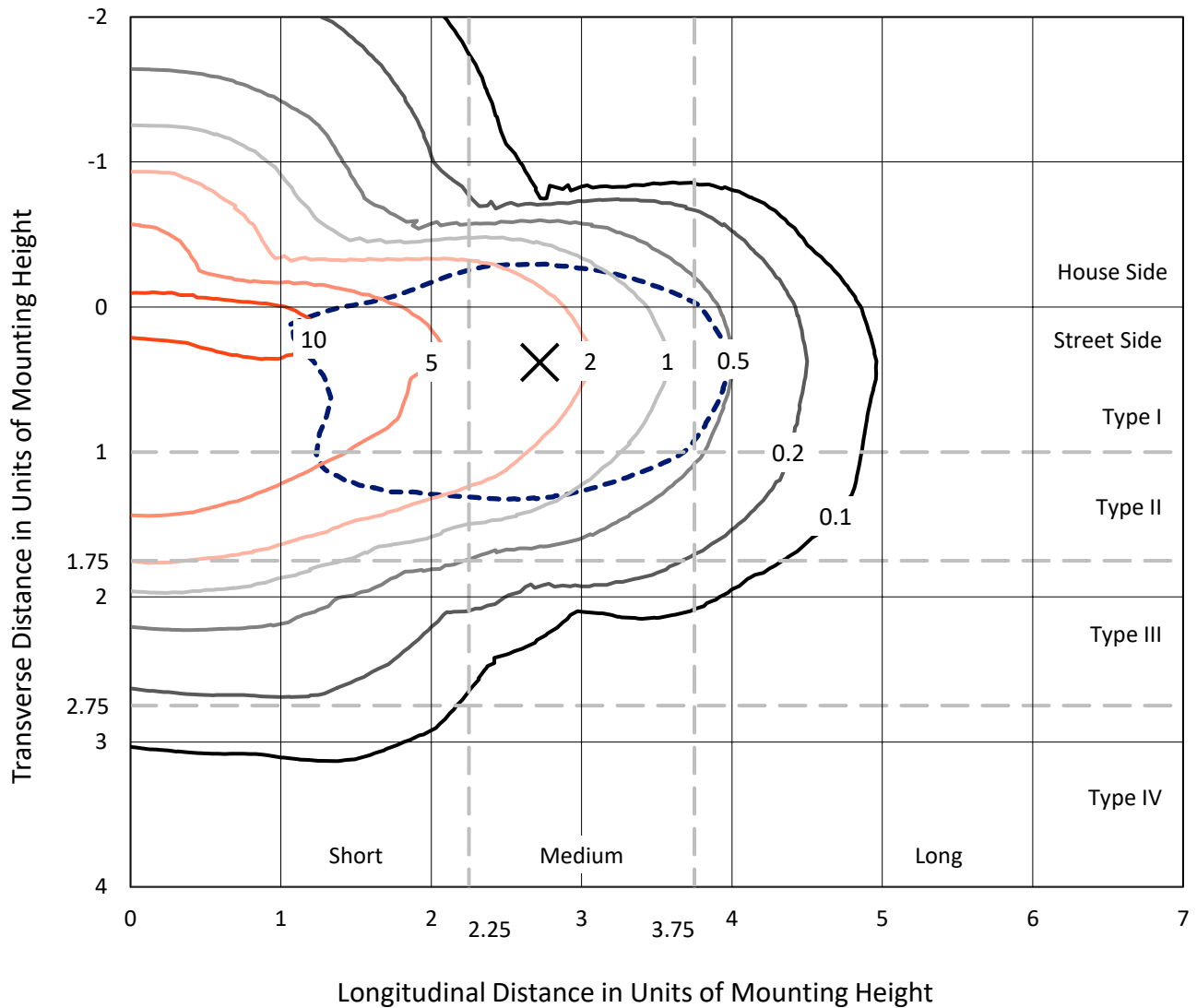
Input Watts (W): 440.1
Input Voltage (V): 120.0
Input Current (Ain): 3.68
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 2.542
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

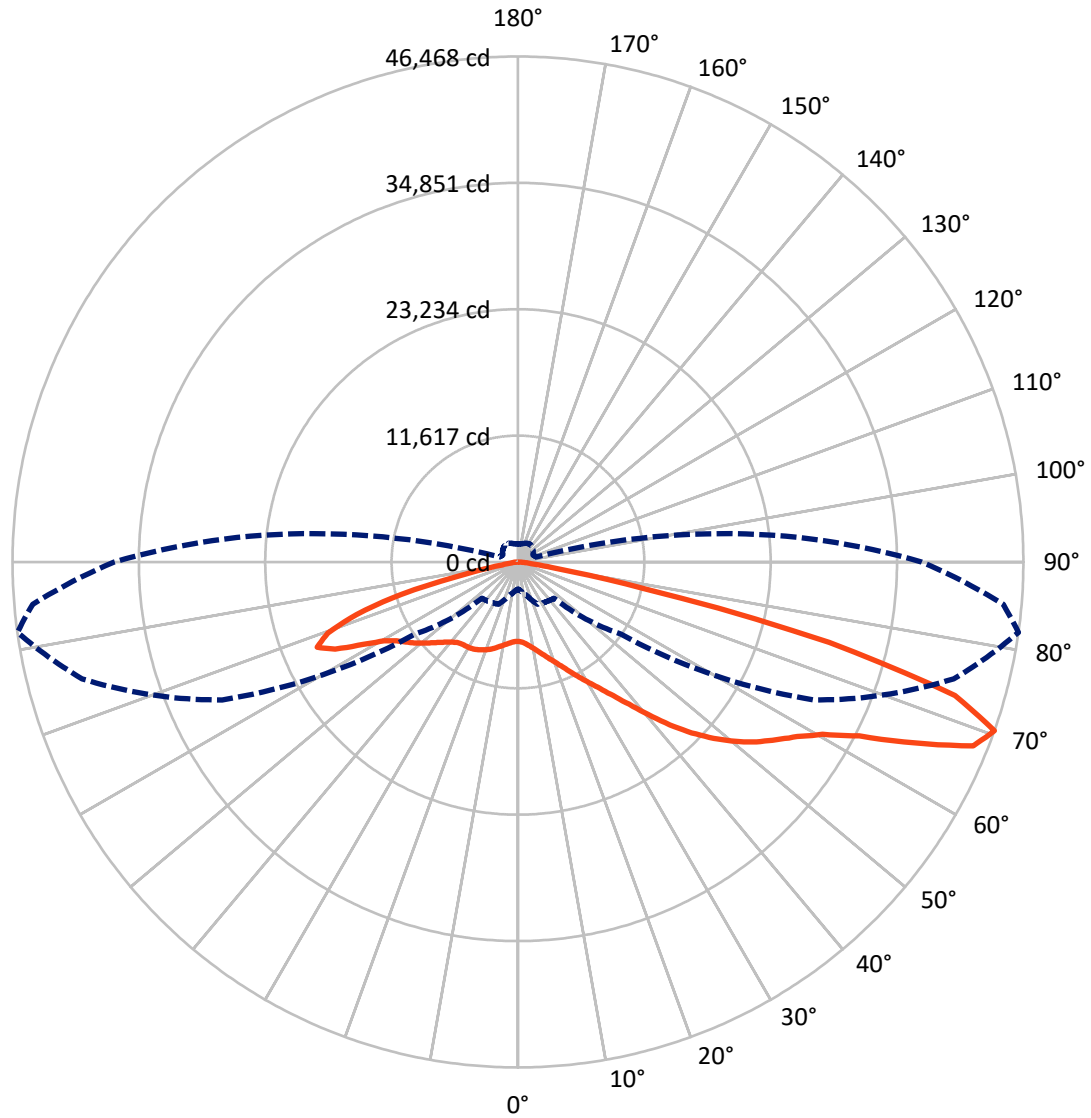
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.3 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12258.4	0.0	12258.4
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	37466.6	0.0	37466.6
	% Fixture	75.3	0.0	75.3
Total	Lumens	49725.0	0.0	49725.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	688.3	1.4
10°-20°	1977.6	4.0
20°-30°	3308.4	6.7
30°-40°	5168.5	10.4
40°-50°	8231.5	16.6
50°-60°	11455.1	23.0
60°-70°	11982.5	24.1
70°-80°	6262.7	12.6
80°-90°	650.3	1.3
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°	49725.0	100.0
0°-180°	49725.0	100.0

Coefficient of Utilization



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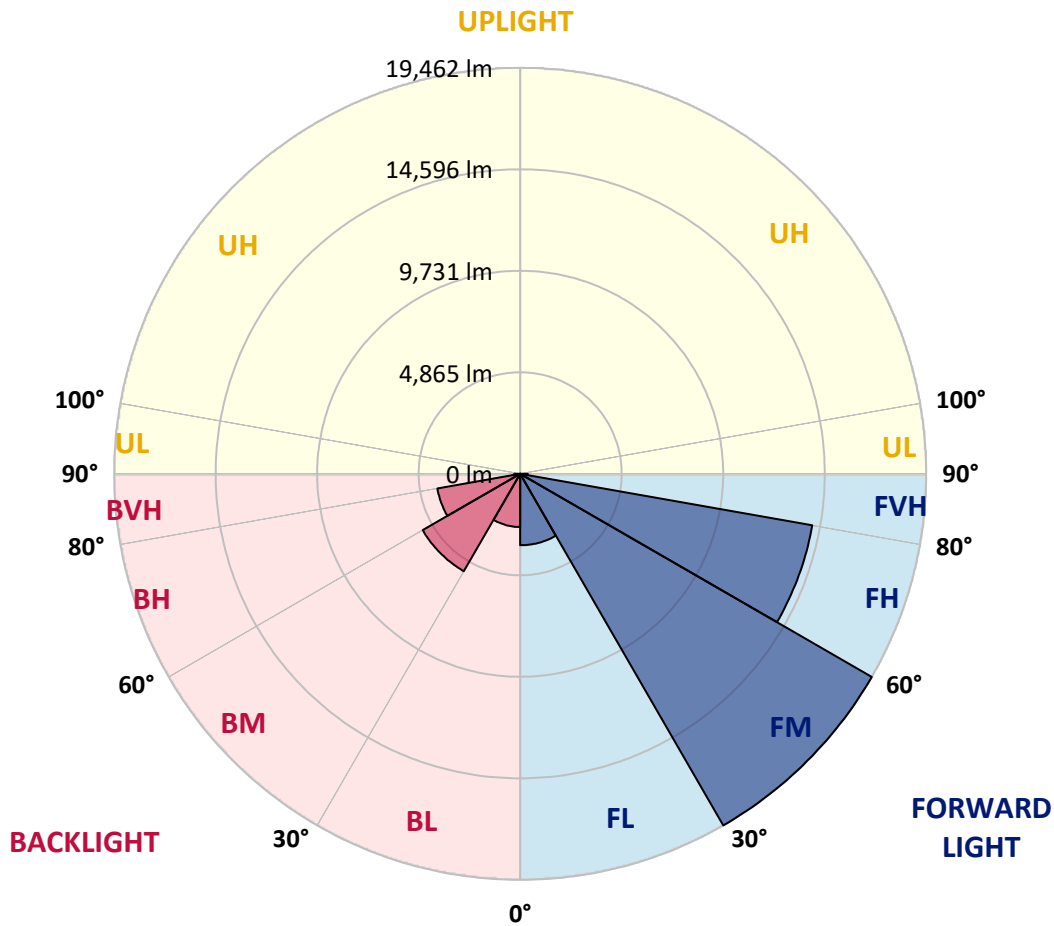
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3424.1	6.9			
FM (30°-60°)	19461.9	39.1			
FH (60°-80°)	14216.5	28.6			G5
FVH (80°-90°)	364.1	0.7			G3/500
BL (0°-30°)	2550.2	5.1	B4/5000		
BM (30°-60°)	5393.2	10.8	B4/8500		
BH (60°-80°)	4028.7	8.1	B4/5000		G4/5000
BVH (80°-90°)	286.3	0.6			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	7290.3	7290.3	7290.3	7290.3	7290.3	7290.3	7290.3	7290.3	7290.3	7290.3	7290.3
2.5°	7464.5	7506.7	7493.5	7480.3	7480.3	7461.8	7459.2	7432.8	7411.7	7377.4	7369.5
5°	7559.4	7604.3	7599.0	7609.6	7643.9	7651.8	7659.7	7643.9	7601.7	7559.4	7541.0
7.5°	7475.0	7525.1	7541.0	7604.3	7709.8	7804.8	7876.1	7905.1	7865.5	7804.8	7775.8
10°	7190.0	7245.5	7300.9	7451.3	7638.6	7862.9	8052.8	8166.3	8158.4	8100.3	8050.2
12.5°	6612.2	6670.2	6789.0	7081.9	7424.9	7820.7	8174.2	8411.7	8493.5	8451.3	8364.2
15°	6150.5	6200.6	6290.3	6591.1	7037.0	7638.6	8219.1	8680.8	8889.3	8865.5	8760.0
17.5°	6137.3	6158.4	6213.8	6356.3	6699.3	7353.6	8171.6	8944.7	9343.1	9340.5	9208.5
20°	6369.5	6377.4	6409.0	6438.1	6633.3	7137.3	8050.2	9163.7	9852.3	9852.3	9709.9
22.5°	6691.4	6686.1	6717.7	6691.4	6786.3	7118.8	7973.7	9356.3	10419.6	10461.8	10282.4
25°	7174.2	7147.8	7139.9	7079.2	7097.7	7290.3	8058.1	9575.3	11092.5	11179.5	10955.2
27.5°	7818.0	7775.8	7746.8	7606.9	7559.4	7643.9	8316.7	9839.1	11841.8	11992.2	11707.2
30°	8657.1	8580.6	8538.3	8295.6	8124.1	8137.3	8707.2	10190.1	12625.4	12868.2	12506.7
32.5°	9802.2	9683.5	9570.0	9171.6	8857.6	8754.7	9211.2	10675.6	13475.1	13862.9	13398.5
35°	11084.5	10989.6	10868.2	10253.4	9770.5	9533.1	9891.9	11353.7	14469.8	15084.6	14480.3
37.5°	12319.4	12237.6	12295.6	11467.1	10844.4	10498.8	10783.7	12264.0	15696.7	16604.4	15836.6
40°	13596.4	13533.1	13541.0	12749.5	12023.9	11636.0	11865.5	13406.5	17103.1	18411.8	17467.2
42.5°	14984.3	14936.8	14778.5	14076.7	13261.3	12899.9	13110.9	14725.7	18612.3	20469.9	19256.1
45°	16538.4	16509.4	16361.6	15556.9	14622.8	14216.5	14501.5	16182.2	20129.5	22406.5	21053.0
47.5°	17881.4	17905.2	17886.7	17208.6	16240.3	15643.9	15984.3	17702.0	21541.1	24227.1	22775.9
50°	18527.9	18651.9	18834.0	18622.9	18021.3	17414.4	17480.4	19169.0	22886.8	25934.3	24427.7
52.5°	18190.1	18425.0	18921.0	19258.8	19491.0	19364.3	19187.5	20625.5	24153.3	27475.2	25989.7
55°	16931.6	17261.4	18084.6	18899.9	20084.6	21005.5	21237.7	22240.3	25388.1	28831.4	27467.3
57.5°	14638.7	15174.3	15913.1	17562.2	19556.9	21799.7	23628.2	24480.4	26696.8	30280.0	29013.5
60°	10707.2	11424.9	12343.1	14797.0	17709.9	21374.9	25662.5	27921.1	28557.0	32156.0	31026.7
62.5°	6852.3	7295.6	8139.9	10451.3	13799.6	19198.1	26285.2	32221.9	31710.1	35232.5	34045.2
65°	4691.3	4976.3	5749.4	7047.6	8920.9	14290.4	24617.6	35446.2	36718.0	40108.6	39206.2
67.5°	3409.0	3625.4	4285.0	5422.2	5812.7	8456.5	19103.1	35298.5	41586.1	45132.4	43728.6
70°	2485.5	2638.5	3192.6	4285.0	4472.3	4704.5	11572.7	30005.6	41480.6	46467.5	44786.7
72.5°	1841.7	1947.2	2319.3	3324.6	3620.1	3176.8	5728.3	21807.6	35644.1	42029.4	40681.1
75°	1332.5	1411.6	1686.0	2543.6	2897.1	2419.5	2857.5	12744.2	24863.0	29564.9	29802.4
77.5°	1018.5	1079.2	1258.6	1862.8	2319.3	1815.3	1773.1	5862.9	11789.0	11847.1	12512.0
80°	817.9	857.5	955.2	1311.4	1778.4	1358.9	1155.7	2366.8	3725.6	3153.1	3308.7
82.5°	601.6	667.6	807.4	920.9	1271.8	936.7	704.5	1195.3	1416.9	1219.0	1229.6
85°	343.0	387.9	488.1	659.6	812.7	572.6	403.7	530.3	659.6	540.9	482.9
87.5°	121.4	158.3	171.5	258.6	353.6	237.5	155.7	153.0	216.4	161.0	134.6
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°	7290.3	7290.3	7290.3	7290.3	7290.3	7290.3	7290.3	7290.3	7290.3	7290.3	7290.3
2.5°	7343.1	7329.9	7277.1	7205.9	7132.0	7060.8	7037.0	6986.9	6952.6	6934.1	6955.2
5°	7490.8	7448.6	7324.6	7166.3	7000.1	6820.6	6694.0	6577.9	6493.5	6414.3	6446.0
7.5°	7701.9	7628.0	7414.3	7137.3	6841.8	6543.6	6322.0	6153.1	6039.6	5965.8	5981.6
10°	7947.3	7833.8	7506.7	7092.4	6635.9	6208.5	5947.3	5802.2	5730.9	5691.3	5701.9
12.5°	8229.6	8068.7	7601.7	6989.5	6322.0	5833.8	5654.4	5612.2	5614.8	5617.5	5622.7
15°	8577.9	8353.6	7678.2	6765.2	5913.0	5546.2	5514.6	5583.2	5654.4	5688.7	5686.1
17.5°	8971.1	8654.4	7691.4	6395.8	5511.9	5361.5	5461.8	5609.6	5717.7	5765.2	5775.8
20°	9393.2	8960.5	7596.4	5873.4	5182.1	5211.1	5390.6	5580.5	5699.3	5759.9	5775.8
22.5°	9876.1	9287.7	7369.5	5324.6	4913.0	5047.5	5258.6	5443.3	5567.3	5628.0	5643.9
25°	10427.5	9654.4	7013.3	4862.8	4680.8	4862.8	5073.9	5227.0	5327.2	5382.6	5398.5
27.5°	11039.7	10037.0	6538.3	4496.1	4477.6	4672.9	4847.0	4965.7	5018.5	5060.7	5076.6
30°	11654.5	10385.3	5963.1	4219.0	4300.8	4485.5	4609.5	4662.3	4678.1	4686.1	4704.5
32.5°	12319.4	10686.1	5358.9	3989.5	4132.0	4303.5	4377.4	4401.1	4327.2	4277.1	4292.9
35°	13124.1	11008.0	4767.9	3807.4	3965.7	4113.5	4137.2	4116.1	4029.1	3926.2	3931.4
37.5°	14118.9	11409.1	4295.6	3678.1	3810.1	3907.7	3878.7	3873.4	3881.3	3759.9	3767.8
40°	15337.9	11931.5	3949.9	3577.9	3683.4	3704.5	3622.7	3667.6	3707.2	3522.5	3527.7
42.5°	16691.5	12562.1	3730.9	3509.3	3577.9	3527.7	3401.1	3451.2	3445.9	3203.2	3200.6
45°	18071.4	13248.1	3654.4	3459.1	3480.2	3380.0	3240.1	3253.3	3142.5	2923.5	2931.4
47.5°	19443.5	13984.3	3701.9	3416.9	3358.9	3245.4	3137.2	3079.2	2915.6	2752.0	2752.0
50°	20789.1	14757.4	3876.0	3332.5	3192.6	3126.7	3047.5	2944.6	2770.5	2630.6	2620.1
52.5°	22037.1	15535.8	4071.3	3192.6	2984.2	3023.8	2973.6	2854.9	2683.4	2540.9	2543.6
55°	23219.2	16314.1	4147.8	3000.0	2788.9	2934.1	2905.0	2686.0	2480.2	2364.1	2353.6
57.5°	24506.8	17250.8	4063.4	2754.6	2630.6	2831.2	2720.3	2477.6	2358.9	2271.8	2263.9
60°	26290.5	18720.5	3881.3	2451.2	2480.2	2678.1	2488.2	2387.9	2258.6	2161.0	2155.7
62.5°	29253.6	21461.9	3588.4	2150.4	2303.5	2451.2	2377.3	2277.1	2145.1	2050.2	2050.2
65°	33633.6	25272.0	3037.0	1915.6	2105.6	2229.6	2258.6	2158.3	2021.1	1920.9	1926.1
67.5°	37327.5	27662.5	2298.2	1720.3	1902.4	2050.2	2131.9	2034.3	1889.2	1791.6	1794.2
70°	37124.4	25926.4	1754.6	1527.7	1723.0	1873.4	1978.9	1902.4	1746.7	1654.4	1662.3
72.5°	32973.9	21688.9	1419.5	1332.5	1540.9	1688.7	1815.3	1757.3	1599.0	1509.2	1509.2
75°	24224.5	15395.9	1134.6	1134.6	1314.0	1496.1	1635.9	1599.0	1453.8	1390.5	1372.0
77.5°	10211.2	6459.2	889.2	942.0	1092.4	1285.0	1459.1	1472.3	1345.7	1424.8	1292.9
80°	2715.1	1781.0	678.1	741.4	857.5	1060.7	1269.1	1263.9	1126.7	1052.8	978.9
82.5°	1034.3	701.9	482.9	522.4	620.1	812.7	1005.3	1036.9	899.7	778.4	778.4
85°	398.4	300.8	298.2	314.0	361.5	538.3	759.9	786.3	678.1	575.2	593.7
87.5°	102.9	89.7	110.8	105.5	166.2	287.6	435.4	451.2	414.3	240.1	343.0
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)