

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: STREETWORKS

Report Number: P969447

Luminaire Tested: **NVN-SB5D-827-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969447
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-SB5D-827-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 45726.3 lumens
Efficiency: N/A
Efficacy: 125.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

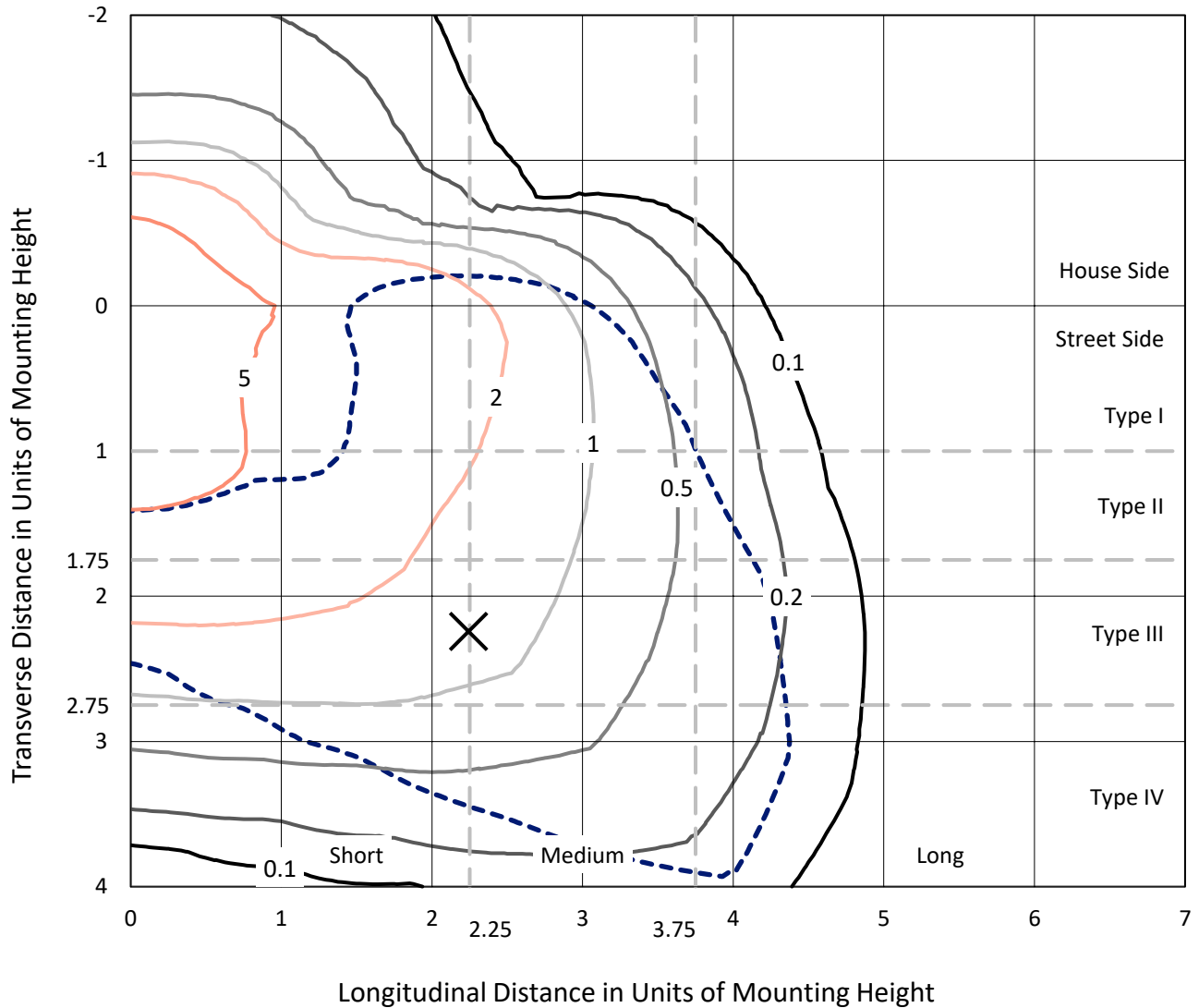
Input Watts (W): 364.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

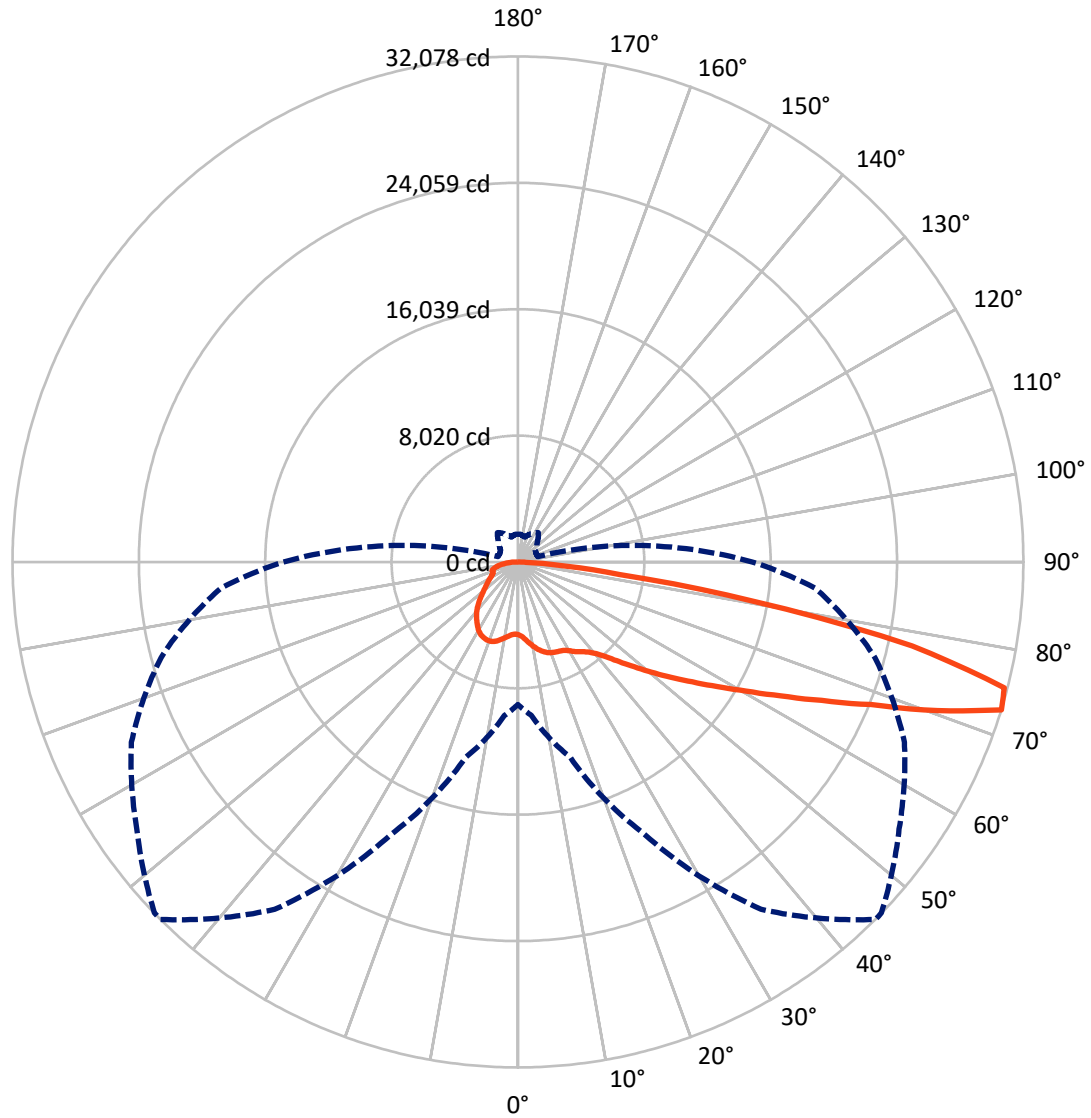
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.2 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10337.1	0.0	10337.1
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	35389.1	0.0	35389.1
	% Fixture	77.4	0.0	77.4
Total	Lumens	45726.3	0.0	45726.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	469.5	1.0
10°-20°	1565.4	3.4
20°-30°	2723.1	6.0
30°-40°	3903.7	8.5
40°-50°	5496.6	12.0
50°-60°	8419.1	18.4
60°-70°	12196.4	26.7
70°-80°	9739.5	21.3
80°-90°	1213.0	2.7
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°	45726.3	100.0
0°-180°	45726.3	100.0



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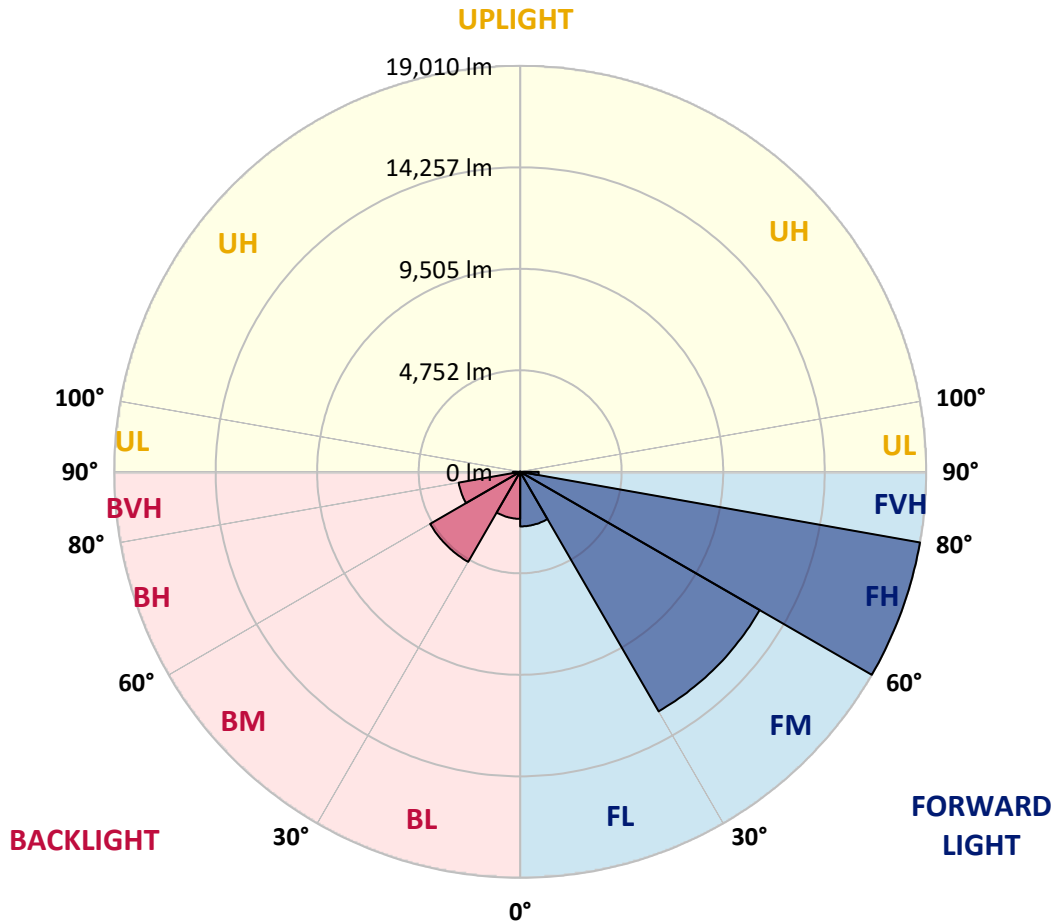
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2557.1	5.6			
FM (30°-60°)	12952.1	28.3			
FH (60°-80°)	19009.8	41.6			G5
FVH (80°-90°)	870.2	1.9			G5
BL (0°-30°)	2200.9	4.8	B3/2500		
BM (30°-60°)	4867.3	10.6	B3/5000		
BH (60°-80°)	2926.2	6.4	B4/5000		G4/5000
BVH (80°-90°)	342.8	0.7			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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	4612.9	4612.9	4612.9	4612.9	4612.9	4612.9	4612.9	4612.9	4612.9	4612.9	4612.9
2.5°	4793.5	4824.9	4796.0	4769.4	4757.4	4726.1	4723.7	4704.4	4692.3	4658.6	4649.0
5°	5128.4	5169.3	5121.1	5068.1	5019.9	4942.9	4933.2	4877.9	4815.2	4743.0	4702.0
7.5°	5506.6	5542.7	5487.3	5407.8	5323.5	5195.8	5193.4	5092.2	4993.5	4870.6	4800.8
10°	5836.6	5884.7	5810.1	5701.7	5595.7	5451.2	5434.3	5318.7	5193.4	5034.4	4928.4
12.5°	6128.1	6161.8	6089.5	5957.0	5834.2	5689.7	5667.9	5540.3	5400.6	5219.9	5085.0
15°	6359.3	6402.7	6306.3	6164.1	6034.1	5892.0	5872.7	5757.1	5617.4	5427.1	5253.6
17.5°	6511.0	6547.2	6448.4	6289.4	6164.1	6046.2	6031.7	5935.4	5812.5	5619.8	5434.3
20°	6568.8	6607.4	6503.8	6342.4	6226.8	6135.2	6128.1	6058.2	5973.9	5798.0	5610.1
22.5°	6626.6	6662.8	6527.9	6359.3	6258.1	6200.3	6197.9	6152.2	6118.4	5973.9	5790.8
25°	6860.3	6870.0	6689.3	6446.0	6301.5	6250.9	6248.5	6246.0	6260.5	6147.3	5985.9
27.5°	7062.7	7060.3	6906.0	6677.3	6453.2	6347.2	6344.9	6368.9	6414.7	6320.8	6188.2
30°	7359.0	7332.4	7149.4	6910.9	6706.2	6542.4	6527.9	6506.2	6542.4	6467.6	6390.6
32.5°	7987.6	7903.4	7607.0	7183.1	6915.7	6790.4	6771.2	6636.3	6650.7	6605.0	6566.5
35°	8888.6	8777.8	8382.7	7698.6	7175.9	6997.6	6987.9	6817.0	6788.1	6747.1	6761.5
37.5°	9960.4	9823.2	9363.1	8445.3	7623.9	7238.6	7224.1	7069.9	6951.9	6908.5	6990.4
40°	11037.2	10863.8	10483.2	9355.9	8283.9	7640.8	7595.0	7361.3	7226.5	7154.2	7327.6
42.5°	12082.6	11938.1	11612.9	10377.2	9098.1	8228.5	8127.3	7727.5	7626.3	7558.9	7872.0
45°	13007.7	12877.6	12639.1	11468.4	10052.0	9028.3	8929.5	8276.7	8245.4	8245.4	8698.3
47.5°	13759.2	13730.3	13477.3	12581.3	11176.9	9938.8	9767.7	9040.3	9124.7	9254.7	9871.4
50°	14592.6	14513.2	14243.4	13677.3	12499.4	10981.8	10842.1	9977.3	10292.8	10649.4	11567.1
52.5°	15358.6	15402.0	15100.9	14819.0	13992.8	12145.2	11899.5	11083.0	11764.6	12354.8	13554.4
55°	16146.3	16148.8	16064.4	16025.9	15558.6	13431.6	13161.8	12412.6	13496.6	14228.9	15871.7
57.5°	16885.8	16890.7	17015.9	17355.5	17374.8	14915.4	14609.5	14045.9	15421.2	16168.0	18261.3
60°	17545.8	17579.6	17921.6	18716.5	18971.8	16616.1	16327.0	15975.3	17411.0	18162.5	20773.7
62.5°	17767.5	17890.4	18651.5	19781.3	20549.6	18702.0	18417.8	18208.3	19501.9	20200.4	22874.2
65°	17391.7	17673.6	19145.3	20660.4	22173.2	21180.8	20898.9	20670.0	21674.5	22332.2	24598.9
67.5°	16469.1	16832.9	19116.4	21583.0	24143.6	24162.8	23900.3	23363.1	24003.9	24256.8	25160.2
70°	14038.6	14583.0	17432.6	21927.5	26405.5	28241.0	27988.0	26605.4	26328.5	25104.7	23579.9
72.5°	9045.1	9777.4	12836.6	19092.3	26908.9	32078.3	32063.8	29532.1	27063.1	23457.1	18911.7
75°	3300.1	3748.1	5964.3	11983.9	22587.5	31883.1	31977.1	29031.1	24704.9	18119.1	11781.6
77.5°	1202.0	1315.2	1946.4	4605.6	13891.6	25581.6	25776.8	23209.0	17584.4	9093.3	4668.3
80°	631.1	693.7	997.2	1787.4	5952.2	15192.4	15498.3	13792.9	8264.7	2738.8	1399.5
82.5°	349.3	378.2	558.8	970.8	2681.0	6496.6	6679.6	5448.8	2907.4	1161.0	578.1
85°	187.9	200.0	262.6	529.9	1310.4	2252.2	2302.9	1628.3	1158.7	681.7	279.4
87.5°	55.5	67.4	86.7	168.6	513.1	505.8	517.9	322.8	457.7	344.5	91.5
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°	4612.9	4612.9	4612.9	4612.9	4612.9	4612.9	4612.9	4612.9	4612.9	4612.9	4612.9
2.5°	4634.5	4627.4	4600.8	4588.8	4574.4	4571.9	4584.0	4586.4	4588.8	4591.2	4600.8
5°	4677.9	4653.8	4629.7	4615.3	4620.1	4622.5	4646.6	4663.4	4675.5	4685.2	4690.0
7.5°	4762.3	4743.0	4702.0	4699.6	4706.8	4728.5	4759.8	4798.3	4820.1	4836.9	4841.7
10°	4887.5	4851.3	4803.2	4810.4	4824.9	4856.1	4921.2	4952.5	4988.7	5019.9	5012.8
12.5°	5015.1	4983.9	4928.4	4933.2	4957.3	5012.8	5075.4	5113.9	5138.0	5162.1	5171.7
15°	5181.4	5125.9	5065.8	5065.8	5109.1	5169.3	5198.2	5229.5	5244.0	5270.5	5280.2
17.5°	5352.4	5280.2	5200.6	5195.8	5248.8	5277.7	5294.6	5299.5	5304.3	5333.2	5342.8
20°	5523.4	5444.0	5330.7	5321.1	5333.2	5328.4	5325.9	5321.1	5328.4	5364.4	5378.9
22.5°	5692.0	5600.5	5444.0	5400.6	5366.9	5321.1	5318.7	5316.3	5321.1	5357.3	5381.4
25°	5889.5	5778.7	5569.2	5439.2	5325.9	5263.3	5270.5	5272.9	5277.7	5306.6	5345.2
27.5°	6104.0	5981.1	5684.9	5427.1	5222.3	5178.9	5166.9	5174.1	5191.0	5236.7	5282.5
30°	6318.3	6173.8	5790.8	5378.9	5092.2	5032.0	4993.5	5010.3	5063.3	5109.1	5159.6
32.5°	6513.5	6368.9	5875.1	5272.9	4926.0	4832.1	4781.5	4803.2	4856.1	4873.1	4933.2
35°	6742.2	6578.4	5911.3	5104.3	4745.3	4600.8	4533.4	4502.1	4528.6	4511.7	4564.7
37.5°	6997.6	6826.6	5906.5	4882.7	4533.4	4367.2	4273.2	4155.2	4099.8	4042.0	4078.2
40°	7375.8	7130.1	5848.6	4615.3	4270.9	4119.1	3950.5	3750.6	3625.3	3512.1	3519.3
42.5°	7891.3	7551.7	5742.7	4321.4	3974.5	3832.5	3603.6	3369.9	3172.4	2984.5	2967.7
45°	8659.7	8103.2	5610.1	4008.3	3654.2	3514.5	3266.4	3003.8	2779.8	2538.9	2510.0
47.5°	9767.7	8845.2	5484.9	3651.8	3316.9	3189.3	2965.2	2722.0	2457.0	2223.3	2196.9
50°	11290.2	9909.9	5369.3	3304.9	2984.5	2888.1	2709.9	2461.8	2194.4	2006.5	1994.5
52.5°	13226.8	11357.6	5321.1	2970.0	2673.8	2637.6	2495.6	2264.3	2011.4	1852.4	1840.4
55°	15450.1	13089.6	5321.1	2649.7	2401.6	2413.7	2314.9	2100.5	1881.3	1739.1	1724.7
57.5°	17719.3	14843.1	5224.7	2353.4	2170.3	2221.0	2158.3	1970.5	1772.9	1626.0	1601.9
60°	19810.2	16312.6	4834.5	2083.6	1965.6	2045.1	2004.2	1842.7	1601.9	1479.0	1459.7
62.5°	21416.9	17141.2	4083.0	1869.3	1797.0	1888.6	1866.8	1674.1	1570.5	1520.0	1503.1
65°	22221.4	17006.3	3121.8	1679.0	1654.9	1797.0	1751.2	1743.9	1662.0	1604.2	1585.0
67.5°	21727.5	15845.3	2264.3	1539.2	1573.0	1712.7	1888.6	1917.5	1765.7	1652.4	1633.1
70°	19562.0	13744.7	1686.1	1406.7	1469.3	1715.0	2153.5	2006.5	1731.9	1599.4	1577.8
72.5°	14881.7	10249.5	1308.0	1267.0	1334.4	1727.1	2271.5	1965.6	1635.6	1768.1	1753.7
75°	8510.4	5627.0	1050.2	1096.0	1165.8	1613.9	2211.3	1859.7	1560.9	1623.5	1623.5
77.5°	3244.6	2163.2	867.2	927.4	937.1	1409.2	2115.0	1852.4	1486.2	1450.1	1322.5
80°	1124.9	845.5	717.8	737.1	725.1	1252.6	2028.3	1611.5	1216.5	1088.8	1052.7
82.5°	460.1	421.6	568.5	544.4	515.5	973.1	1637.9	1317.6	994.9	879.2	869.6
85°	200.0	267.4	375.8	330.0	298.7	674.4	1312.8	1115.3	840.7	725.1	722.6
87.5°	41.0	101.2	159.0	149.3	154.2	450.5	932.2	792.5	595.0	445.7	349.3
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)