

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: P884657

Luminaire Tested: **NAV-SB5C-827-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884657
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-SB5C-827-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30594 lumens
Efficiency: N/A
Efficacy: 122.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

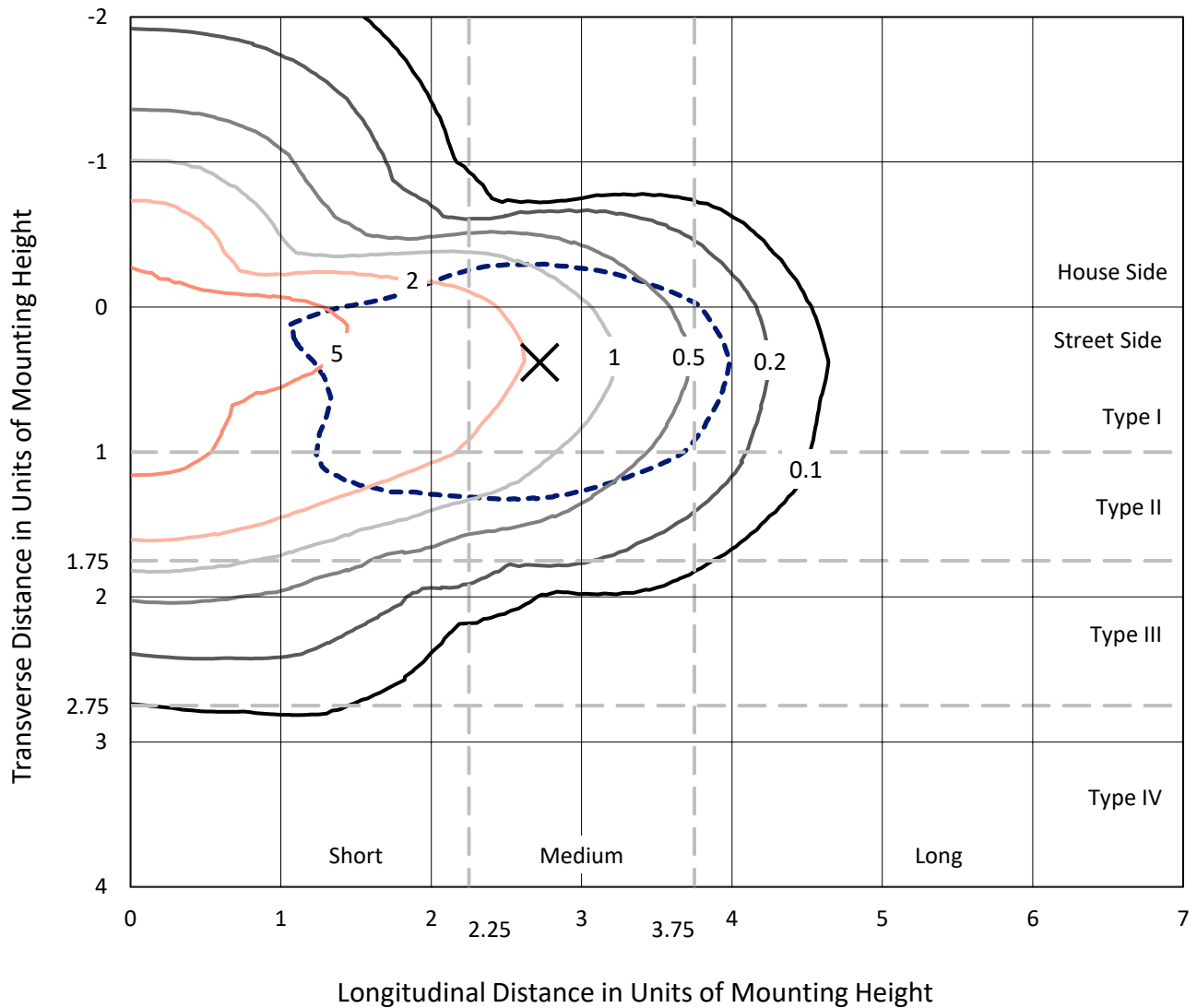
Input Watts (W): 249.5
Input Voltage (V): 120.0
Input Current (Ain): 2.116
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 7.885
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

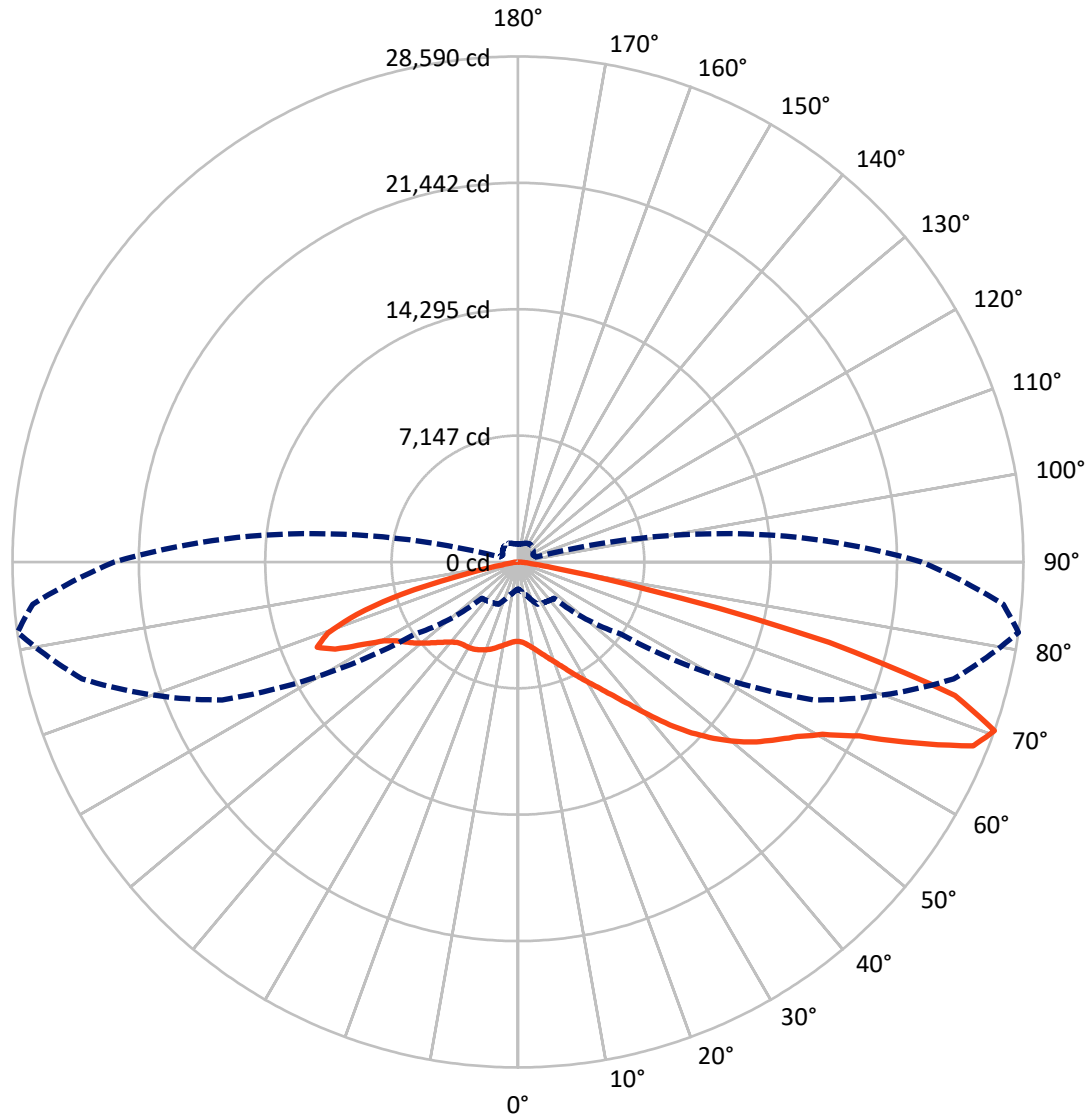
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.2 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	7542.2	0.0	7542.2
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	23051.8	0.0	23051.8
	% Fixture	75.3	0.0	75.3
Total	Lumens	30594.0	0.0	30594.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	423.5	1.4
10°-20°	1216.8	4.0
20°-30°	2035.5	6.7
30°-40°	3180.0	10.4
40°-50°	5064.5	16.6
50°-60°	7047.9	23.0
60°-70°	7372.4	24.1
70°-80°	3853.2	12.6
80°-90°	400.1	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°	30594.0	100.0
0°-180°	30594.0	100.0

Coefficient of Utilization



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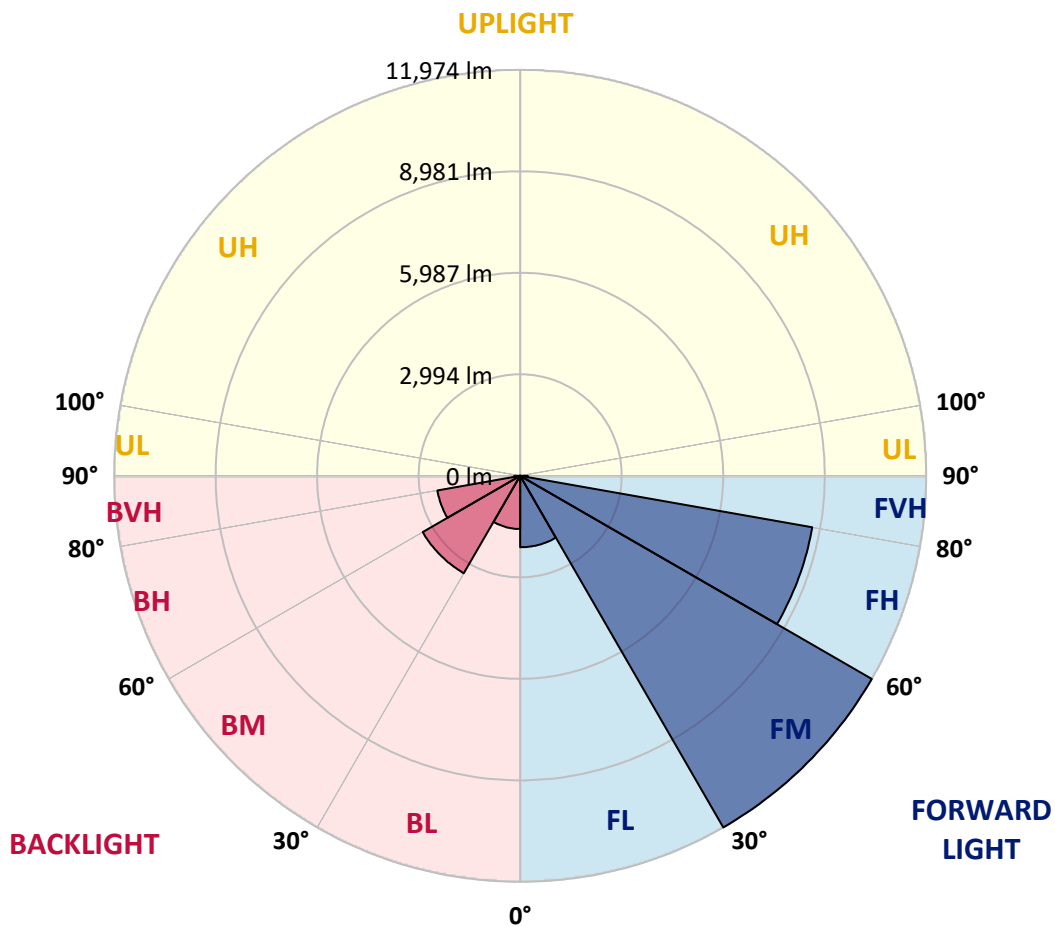
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2106.7	6.9			
FM (30°-60°)	11974.2	39.1			
FH (60°-80°)	8746.9	28.6			G4/12000
FVH (80°-90°)	224.0	0.7			G2/225
BL (0°-30°)	1569.0	5.1	B3/2500		
BM (30°-60°)	3318.3	10.8	B3/5000		
BH (60°-80°)	2478.7	8.1	B3/2500		G3/2500
BVH (80°-90°)	176.1	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	4485.5	4485.5	4485.5	4485.5	4485.5	4485.5	4485.5	4485.5	4485.5	4485.5	4485.5
2.5°	4592.6	4618.6	4610.5	4602.3	4602.3	4591.0	4589.4	4573.1	4560.1	4539.0	4534.2
5°	4651.1	4678.6	4675.4	4681.9	4703.0	4707.9	4712.7	4703.0	4677.0	4651.1	4639.7
7.5°	4599.1	4629.9	4639.7	4678.6	4743.6	4802.0	4845.9	4863.7	4839.4	4802.0	4784.2
10°	4423.8	4457.9	4492.0	4584.5	4699.8	4837.7	4954.6	5024.4	5019.6	4983.8	4953.0
12.5°	4068.2	4104.0	4177.0	4357.2	4568.3	4811.8	5029.3	5175.4	5225.7	5199.8	5146.2
15°	3784.2	3815.0	3870.2	4055.3	4329.6	4699.8	5056.9	5341.0	5469.2	5454.6	5389.7
17.5°	3776.0	3789.0	3823.1	3910.8	4121.8	4524.4	5027.7	5503.3	5748.5	5746.8	5665.7
20°	3918.9	3923.8	3943.2	3961.1	4081.2	4391.3	4953.0	5638.1	6061.8	6061.8	5974.1
22.5°	4117.0	4113.7	4133.2	4117.0	4175.4	4379.9	4905.9	5756.6	6410.8	6436.8	6326.4
25°	4414.0	4397.8	4392.9	4355.6	4367.0	4485.5	4957.9	5891.3	6824.8	6878.4	6740.4
27.5°	4810.1	4784.2	4766.3	4680.3	4651.1	4703.0	5117.0	6053.7	7285.8	7378.4	7203.0
30°	5326.4	5279.3	5253.3	5104.0	4998.5	5006.6	5357.2	6269.6	7768.0	7917.3	7694.9
32.5°	6030.9	5957.9	5888.1	5642.9	5449.8	5386.5	5667.3	6568.3	8290.7	8529.4	8243.6
35°	6819.9	6761.5	6686.8	6308.5	6011.5	5865.4	6086.1	6985.5	8902.7	9281.0	8909.2
37.5°	7579.7	7529.3	7565.1	7055.3	6672.2	6459.5	6634.8	7545.6	9657.6	10216.1	9743.7
40°	8365.4	8326.4	8331.3	7844.3	7397.8	7159.2	7300.4	8248.5	10522.9	11328.1	10746.9
42.5°	9219.3	9190.1	9092.7	8660.9	8159.2	7936.8	8066.7	9060.2	11451.5	12594.4	11847.6
45°	10175.5	10157.6	10066.7	9571.6	8996.9	8746.9	8922.2	9956.3	12384.9	13785.9	12953.1
47.5°	11001.8	11016.4	11005.1	10587.8	9992.0	9625.2	9834.6	10891.4	13253.5	14906.1	14013.2
50°	11399.5	11475.8	11587.9	11458.0	11087.8	10714.5	10755.0	11794.0	14081.4	15956.4	15029.5
52.5°	11191.7	11336.2	11641.4	11849.2	11992.1	11914.2	11805.4	12690.1	14860.6	16904.5	15990.5
55°	10417.4	10620.3	11126.8	11628.4	12357.3	12923.9	13066.8	13683.7	15620.4	17738.9	16899.6
57.5°	9006.6	9336.2	9790.7	10805.4	12032.7	13412.6	14537.6	15061.9	16425.6	18630.2	17850.9
60°	6587.8	7029.3	7594.3	9104.0	10896.3	13151.2	15789.2	17178.9	17570.1	19784.4	19089.6
62.5°	4216.0	4488.7	5008.2	6430.3	8490.4	11811.9	16172.3	19825.0	19510.1	21677.3	20946.8
65°	2886.4	3061.7	3537.4	4336.1	5488.7	8792.4	15146.4	21808.8	22591.3	24677.4	24122.1
67.5°	2097.4	2230.6	2636.4	3336.1	3576.4	5203.0	11753.4	21717.9	25586.5	27768.3	26904.7
70°	1529.2	1623.4	1964.3	2636.4	2751.7	2894.5	7120.2	18461.3	25521.5	28589.8	27555.6
72.5°	1133.1	1198.1	1427.0	2045.5	2227.3	1954.6	3524.4	13417.4	21930.6	25859.2	25029.6
75°	819.8	868.5	1037.4	1565.0	1782.5	1488.7	1758.1	7841.0	15297.3	18190.2	18336.3
77.5°	626.6	664.0	774.4	1146.1	1427.0	1116.9	1090.9	3607.2	7253.4	7289.1	7698.2
80°	503.3	527.6	587.7	806.8	1094.2	836.1	711.1	1456.2	2292.2	1940.0	2035.7
82.5°	370.1	410.7	496.8	566.6	782.5	576.3	433.4	735.4	871.8	750.0	756.5
85°	211.0	238.6	300.3	405.9	500.0	352.3	248.4	326.3	405.9	332.8	297.1
87.5°	74.7	97.4	105.5	159.1	217.5	146.1	95.8	94.2	133.1	99.0	82.8
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°	4485.5	4485.5	4485.5	4485.5	4485.5	4485.5	4485.5	4485.5	4485.5	4485.5	4485.5
2.5°	4517.9	4509.8	4477.3	4433.5	4388.1	4344.2	4329.6	4298.8	4277.7	4266.3	4279.3
5°	4608.8	4582.9	4506.6	4409.2	4306.9	4196.5	4118.6	4047.1	3995.2	3946.5	3966.0
7.5°	4738.7	4693.3	4561.8	4391.3	4209.5	4026.0	3889.7	3785.8	3716.0	3670.5	3680.3
10°	4889.7	4819.9	4618.6	4363.7	4082.9	3819.9	3659.2	3569.9	3526.0	3501.7	3508.2
12.5°	5063.4	4964.4	4677.0	4300.4	3889.7	3589.3	3479.0	3453.0	3454.6	3456.2	3459.5
15°	5277.7	5139.7	4724.1	4162.4	3638.0	3412.4	3392.9	3435.1	3479.0	3500.1	3498.4
17.5°	5519.6	5324.8	4732.2	3935.1	3391.3	3298.8	3360.4	3451.4	3517.9	3547.1	3553.6
20°	5779.3	5513.1	4673.8	3613.7	3188.4	3206.2	3316.6	3433.5	3506.6	3543.9	3553.6
22.5°	6076.4	5714.4	4534.2	3276.0	3022.8	3105.6	3235.4	3349.1	3425.4	3462.7	3472.5
25°	6415.7	5940.0	4315.0	2991.9	2879.9	2991.9	3121.8	3216.0	3277.7	3311.7	3321.5
27.5°	6792.3	6175.4	4022.8	2766.3	2754.9	2875.0	2982.2	3055.2	3087.7	3113.7	3123.4
30°	7170.6	6389.7	3668.9	2595.8	2646.1	2759.8	2836.1	2868.6	2878.3	2883.2	2894.5
32.5°	7579.7	6574.8	3297.1	2454.6	2542.2	2647.8	2693.2	2707.8	2662.4	2631.5	2641.3
35°	8074.8	6772.8	2933.5	2342.6	2440.0	2530.9	2545.5	2532.5	2478.9	2415.6	2418.9
37.5°	8686.8	7019.6	2642.9	2263.0	2344.2	2404.3	2386.4	2383.2	2388.0	2313.3	2318.2
40°	9436.8	7341.0	2430.2	2201.3	2266.3	2279.3	2228.9	2256.5	2280.9	2167.2	2170.5
42.5°	10269.6	7729.0	2295.5	2159.1	2201.3	2170.5	2092.6	2123.4	2120.2	1970.8	1969.2
45°	11118.7	8151.1	2248.4	2128.3	2141.3	2079.6	1993.5	2001.7	1933.5	1798.7	1803.6
47.5°	11962.9	8604.0	2277.6	2102.3	2066.6	1996.8	1930.2	1894.5	1793.9	1693.2	1693.2
50°	12790.8	9079.7	2384.8	2050.4	1964.3	1923.7	1875.0	1811.7	1704.6	1618.5	1612.0
52.5°	13558.7	9558.6	2504.9	1964.3	1836.1	1860.4	1829.6	1756.5	1651.0	1563.3	1565.0
55°	14285.9	10037.5	2552.0	1845.8	1715.9	1805.2	1787.4	1652.6	1526.0	1454.6	1448.1
57.5°	15078.2	10613.8	2500.0	1694.8	1618.5	1741.9	1673.7	1524.4	1451.3	1397.8	1392.9
60°	16175.6	11518.0	2388.0	1508.1	1526.0	1647.8	1530.9	1469.2	1389.6	1329.6	1326.3
62.5°	17998.7	13204.8	2207.8	1323.1	1417.2	1508.1	1462.7	1401.0	1319.8	1261.4	1261.4
65°	20693.5	15549.0	1868.5	1178.6	1295.5	1371.8	1389.6	1327.9	1243.5	1181.8	1185.1
67.5°	22966.3	17019.8	1414.0	1058.5	1170.5	1261.4	1311.7	1251.6	1162.4	1102.3	1103.9
70°	22841.3	15951.6	1079.6	940.0	1060.1	1152.6	1217.6	1170.5	1074.7	1017.9	1022.7
72.5°	20287.7	13344.4	873.4	819.8	948.1	1039.0	1116.9	1081.2	983.8	928.6	928.6
75°	14904.5	9472.6	698.1	698.1	808.5	920.5	1006.5	983.8	894.5	855.5	844.2
77.5°	6282.6	3974.1	547.1	579.6	672.1	790.6	897.7	905.9	827.9	876.6	795.5
80°	1670.5	1095.8	417.2	456.2	527.6	652.6	780.9	777.6	693.2	647.7	602.3
82.5°	636.4	431.8	297.1	321.4	381.5	500.0	618.5	638.0	553.6	478.9	478.9
85°	245.1	185.1	183.4	193.2	222.4	331.2	467.5	483.8	417.2	353.9	365.3
87.5°	63.3	55.2	68.2	64.9	102.3	177.0	267.9	277.6	254.9	147.7	211.0
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)