

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: P883397

Luminaire Tested: **NAV-SB3D-722-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883397
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-SB3D-722-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24100 lumens
Efficiency: N/A
Efficacy: 110.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

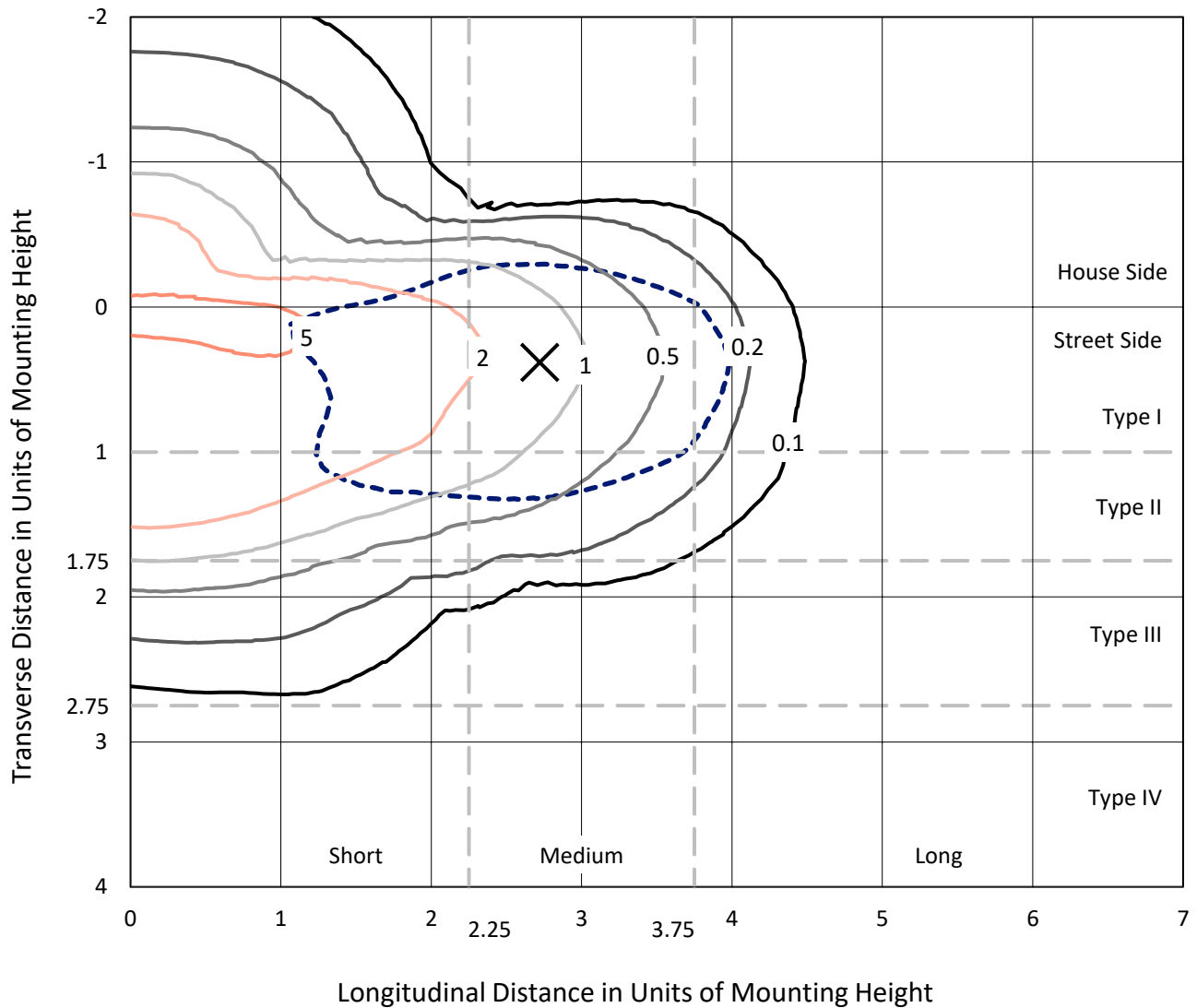
Input Watts (W): 218.1
Input Voltage (V): 120.0
Input Current (Ain): 1.84
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 2.542
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

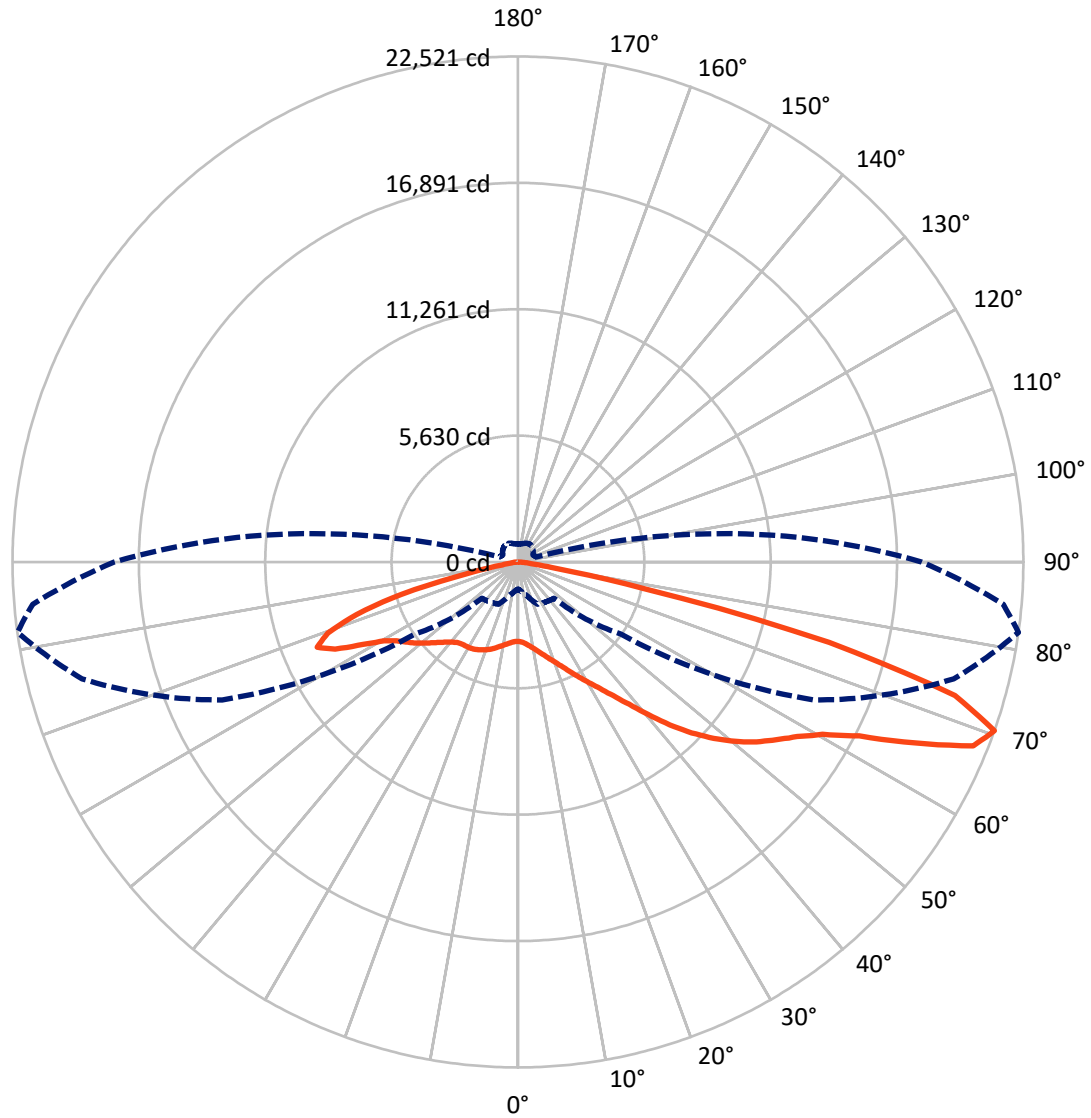
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.4 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	5941.3	0.0	5941.3
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	18158.8	0.0	18158.8
	% Fixture	75.3	0.0	75.3
Total	Lumens	24100.0	0.0	24100.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	333.6	1.4
10°-20°	958.5	4.0
20°-30°	1603.5	6.7
30°-40°	2505.0	10.4
40°-50°	3989.5	16.6
50°-60°	5551.9	23.0
60°-70°	5807.5	24.1
70°-80°	3035.3	12.6
80°-90°	315.2	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°	24100.0	100.0
0°-180°	24100.0	100.0

Coefficient of Utilization



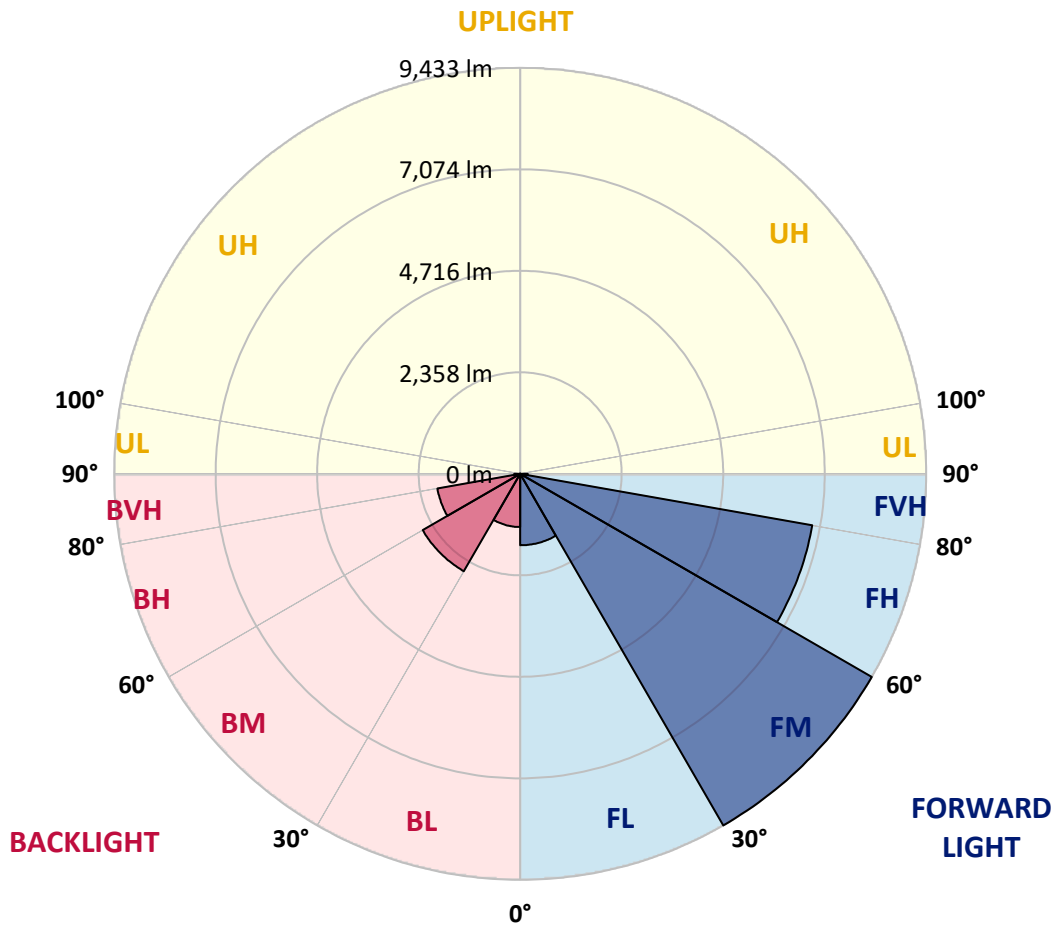
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1659.6	6.9			
FM (30°-60°)	9432.5	39.1			
FH (60°-80°)	6890.3	28.6			G3/7500
FVH (80°-90°)	176.4	0.7			G2/225
BL (0°-30°)	1236.0	5.1	B3/2500		
BM (30°-60°)	2613.9	10.8	B3/5000		
BH (60°-80°)	1952.6	8.1	B3/2500		G3/2500
BVH (80°-90°)	138.7	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-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3533.4	3533.4	3533.4	3533.4	3533.4	3533.4	3533.4	3533.4	3533.4	3533.4	3533.4
2.5°	3617.8	3638.2	3631.8	3625.4	3625.4	3616.5	3615.2	3602.4	3592.2	3575.6	3571.7
5°	3663.8	3685.5	3683.0	3688.1	3704.7	3708.6	3712.4	3704.7	3684.3	3663.8	3654.8
7.5°	3622.9	3647.2	3654.8	3685.5	3736.7	3782.7	3817.3	3831.3	3812.1	3782.7	3768.7
10°	3484.8	3511.6	3538.5	3611.4	3702.2	3810.9	3902.9	3957.9	3954.1	3926.0	3901.7
12.5°	3204.7	3232.8	3290.4	3432.3	3598.6	3790.4	3961.8	4076.9	4116.5	4096.0	4053.8
15°	2980.9	3005.2	3048.7	3194.5	3410.6	3702.2	3983.5	4207.3	4308.3	4296.8	4245.7
17.5°	2974.5	2984.8	3011.6	3080.7	3246.9	3564.1	3960.5	4335.2	4528.3	4527.0	4463.1
20°	3087.1	3090.9	3106.2	3120.3	3214.9	3459.2	3901.7	4441.3	4775.1	4775.1	4706.0
22.5°	3243.1	3240.5	3255.9	3243.1	3289.1	3450.2	3864.6	4534.7	5050.0	5070.5	4983.5
25°	3477.1	3464.3	3460.5	3431.1	3440.0	3533.4	3905.5	4640.8	5376.1	5418.3	5309.6
27.5°	3789.1	3768.7	3754.6	3686.8	3663.8	3704.7	4030.8	4768.7	5739.3	5812.2	5674.1
30°	4195.8	4158.7	4138.2	4020.6	3937.5	3943.9	4220.1	4938.8	6119.1	6236.8	6061.6
32.5°	4750.8	4693.2	4638.3	4445.2	4293.0	4243.1	4464.3	5174.1	6530.9	6718.9	6493.8
35°	5372.3	5326.3	5267.4	4969.5	4735.4	4620.4	4794.3	5502.7	7013.0	7311.0	7018.1
37.5°	5970.8	5931.1	5959.3	5557.7	5255.9	5088.4	5226.5	5943.9	7607.7	8047.6	7675.4
40°	6589.7	6559.0	6562.9	6179.2	5827.6	5639.6	5750.8	6497.7	8289.3	8923.6	8465.7
42.5°	7262.4	7239.4	7162.6	6822.5	6427.3	6252.1	6354.4	7137.1	9020.7	9921.0	9332.8
45°	8015.6	8001.5	7929.9	7539.9	7087.2	6890.2	7028.4	7843.0	9756.1	10859.7	10203.7
47.5°	8666.5	8678.0	8669.1	8340.4	7871.1	7582.1	7747.1	8579.6	10440.2	11742.1	11038.7
50°	8979.8	9039.9	9128.2	9025.9	8734.3	8440.2	8472.1	9290.6	11092.4	12569.5	11839.3
52.5°	8816.1	8930.0	9170.4	9334.1	9446.6	9385.2	9299.5	9996.5	11706.3	13316.3	12596.3
55°	8206.1	8366.0	8765.0	9160.1	9734.3	10180.6	10293.2	10779.1	12304.7	13973.6	13312.4
57.5°	7094.9	7354.5	7712.5	8511.8	9478.6	10565.6	11451.8	11864.8	12939.0	14675.7	14061.8
60°	5189.4	5537.3	5982.3	7171.6	8583.4	10359.7	12437.7	13532.4	13840.6	15584.9	15037.6
62.5°	3321.1	3535.9	3945.1	5065.4	6688.2	9304.6	12739.5	15616.9	15368.8	17076.0	16500.5
65°	2273.7	2411.8	2786.5	3415.7	4323.7	6926.1	11931.3	17179.6	17796.0	19439.2	19001.9
67.5°	1652.2	1757.1	2076.8	2628.0	2817.2	4098.6	9258.6	17108.0	20155.4	21874.1	21193.8
70°	1204.6	1278.8	1547.4	2076.8	2167.6	2280.1	5608.9	14542.7	20104.2	22521.2	21706.6
72.5°	892.6	943.8	1124.1	1611.3	1754.5	1539.7	2776.3	10569.4	17275.5	20370.2	19716.7
75°	645.8	684.2	817.2	1232.8	1404.1	1172.7	1385.0	6176.7	12050.3	14329.1	14444.2
77.5°	493.6	523.0	610.0	902.8	1124.1	879.8	859.4	2841.5	5713.7	5741.9	6064.1
80°	396.4	415.6	462.9	635.6	861.9	658.6	560.1	1147.1	1805.7	1528.2	1603.6
82.5°	291.6	323.5	391.3	446.3	616.4	454.0	341.4	579.3	686.7	590.8	595.9
85°	166.2	188.0	236.6	319.7	393.9	277.5	195.7	257.0	319.7	262.2	234.0
87.5°	58.8	76.7	83.1	125.3	171.4	115.1	75.4	74.2	104.9	78.0	65.2
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°	3533.4	3533.4	3533.4	3533.4	3533.4	3533.4	3533.4	3533.4	3533.4	3533.4	3533.4
2.5°	3558.9	3552.5	3527.0	3492.4	3456.6	3422.1	3410.6	3386.3	3369.7	3360.7	3371.0
5°	3630.6	3610.1	3550.0	3473.3	3392.7	3305.7	3244.3	3188.1	3147.2	3108.8	3124.1
7.5°	3732.9	3697.0	3593.5	3459.2	3316.0	3171.5	3064.0	2982.2	2927.2	2891.4	2899.1
10°	3851.8	3796.8	3638.2	3437.5	3216.2	3009.0	2882.4	2812.1	2777.6	2758.4	2763.5
12.5°	3988.6	3910.6	3684.3	3387.6	3064.0	2827.5	2740.5	2720.0	2721.3	2722.6	2725.2
15°	4157.4	4048.7	3721.3	3278.9	2865.8	2688.1	2672.7	2706.0	2740.5	2757.1	2755.8
17.5°	4348.0	4194.5	3727.7	3099.8	2671.4	2598.5	2647.1	2718.8	2771.2	2794.2	2799.3
20°	4552.6	4342.9	3681.7	2846.6	2511.6	2525.7	2612.6	2704.7	2762.2	2791.6	2799.3
22.5°	4786.6	4501.4	3571.7	2580.6	2381.2	2446.4	2548.7	2638.2	2698.3	2727.7	2735.4
25°	5053.9	4679.2	3399.1	2356.9	2268.6	2356.9	2459.2	2533.3	2581.9	2608.8	2616.5
27.5°	5350.6	4864.6	3168.9	2179.1	2170.1	2264.8	2349.2	2406.7	2432.3	2452.8	2460.4
30°	5648.5	5033.4	2890.1	2044.8	2084.5	2174.0	2234.1	2259.7	2267.3	2271.2	2280.1
32.5°	5970.8	5179.2	2597.3	1933.6	2002.6	2085.7	2121.6	2133.1	2097.3	2073.0	2080.6
35°	6360.8	5335.2	2310.8	1845.3	1922.1	1993.7	2005.2	1994.9	1952.7	1902.9	1905.4
37.5°	6842.9	5529.6	2081.9	1782.7	1846.6	1893.9	1879.9	1877.3	1881.1	1822.3	1826.1
40°	7433.7	5782.8	1914.4	1734.1	1785.2	1795.5	1755.8	1777.6	1796.7	1707.2	1709.8
42.5°	8089.8	6088.4	1808.2	1700.8	1734.1	1709.8	1648.4	1672.7	1670.1	1552.5	1551.2
45°	8758.6	6420.9	1771.2	1676.5	1686.8	1638.2	1570.4	1576.8	1523.1	1416.9	1420.8
47.5°	9423.6	6777.7	1794.2	1656.1	1627.9	1572.9	1520.5	1492.4	1413.1	1333.8	1333.8
50°	10075.8	7152.4	1878.6	1615.1	1547.4	1515.4	1477.0	1427.2	1342.8	1275.0	1269.9
52.5°	10680.6	7529.7	1973.2	1547.4	1446.3	1465.5	1441.2	1383.7	1300.6	1231.5	1232.8
55°	11253.6	7906.9	2010.3	1454.0	1351.7	1422.0	1408.0	1301.8	1202.1	1145.8	1140.7
57.5°	11877.6	8360.9	1969.4	1335.1	1275.0	1372.2	1318.5	1200.8	1143.3	1101.1	1097.2
60°	12742.1	9073.2	1881.1	1188.0	1202.1	1298.0	1205.9	1157.3	1094.7	1047.3	1044.8
62.5°	14178.2	10401.9	1739.2	1042.2	1116.4	1188.0	1152.2	1103.6	1039.7	993.6	993.6
65°	16301.0	12248.5	1471.9	928.4	1020.5	1080.6	1094.7	1046.1	979.6	931.0	933.5
67.5°	18091.4	13407.1	1113.8	833.8	922.0	993.6	1033.3	986.0	915.6	868.3	869.6
70°	17992.9	12565.6	850.4	740.4	835.1	908.0	959.1	922.0	846.6	801.8	805.7
72.5°	15981.3	10511.8	688.0	645.8	746.8	818.4	879.8	851.7	775.0	731.5	731.5
75°	11740.8	7461.9	549.9	549.9	636.8	725.1	792.9	775.0	704.6	673.9	665.0
77.5°	4949.0	3130.5	431.0	456.5	529.4	622.8	707.2	713.6	652.2	690.6	626.6
80°	1315.9	863.2	328.7	359.3	415.6	514.1	615.1	612.6	546.1	510.2	474.4
82.5°	501.3	340.2	234.0	253.2	300.5	393.9	487.2	502.6	436.1	377.2	377.2
85°	193.1	145.8	144.5	152.2	175.2	260.9	368.3	381.1	328.7	278.8	287.7
87.5°	49.9	43.5	53.7	51.2	80.6	139.4	211.0	218.7	200.8	116.4	166.2
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)