

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: P884667

Luminaire Tested: **NAV-SB5C-830-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884667
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-830-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32948 lumens
Efficiency: N/A
Efficacy: 132.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G4

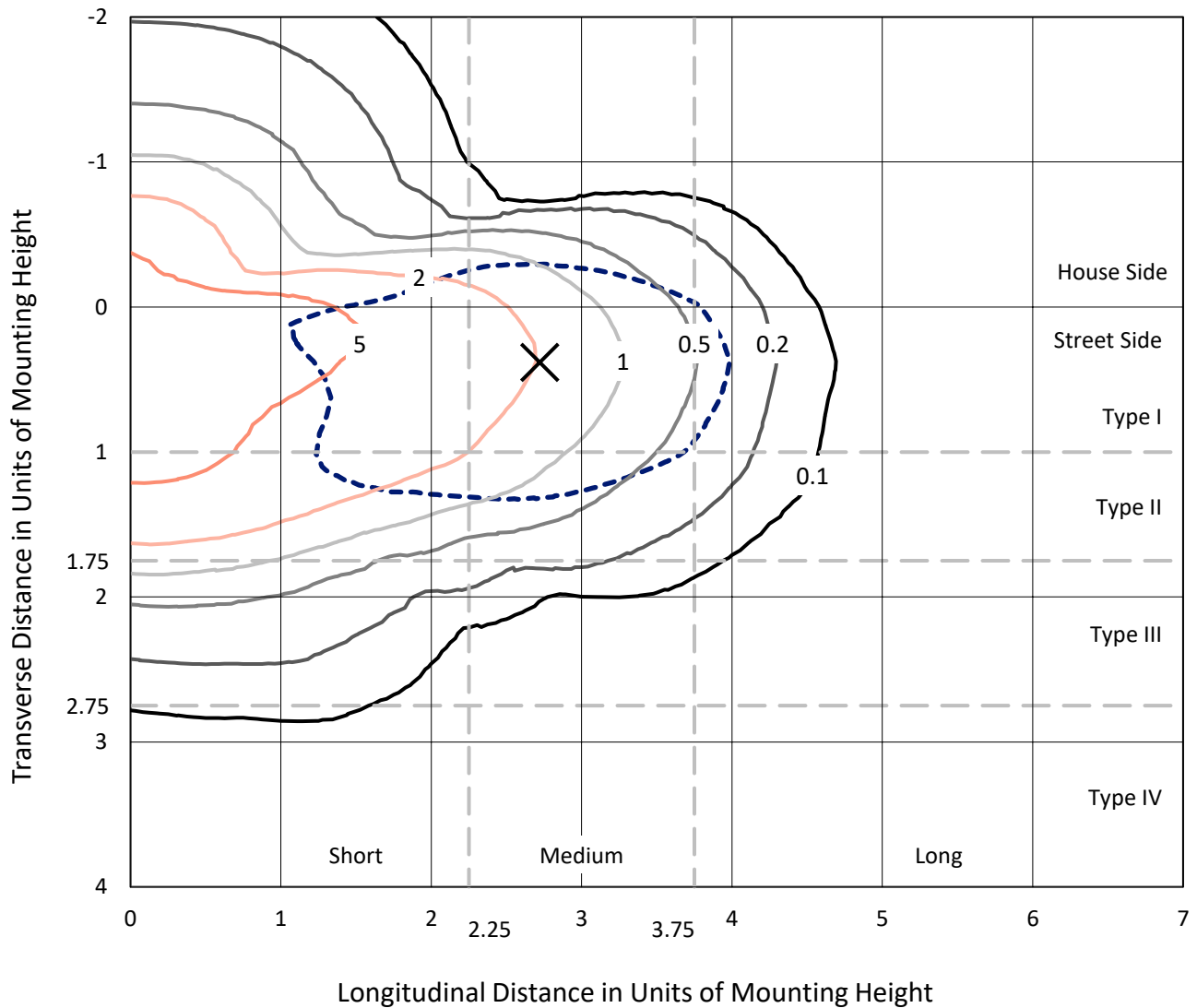
Input Watts (W): 249.5
Input Voltage (V): 120.0
Input Current (Ain): 2.116
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 7.885
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

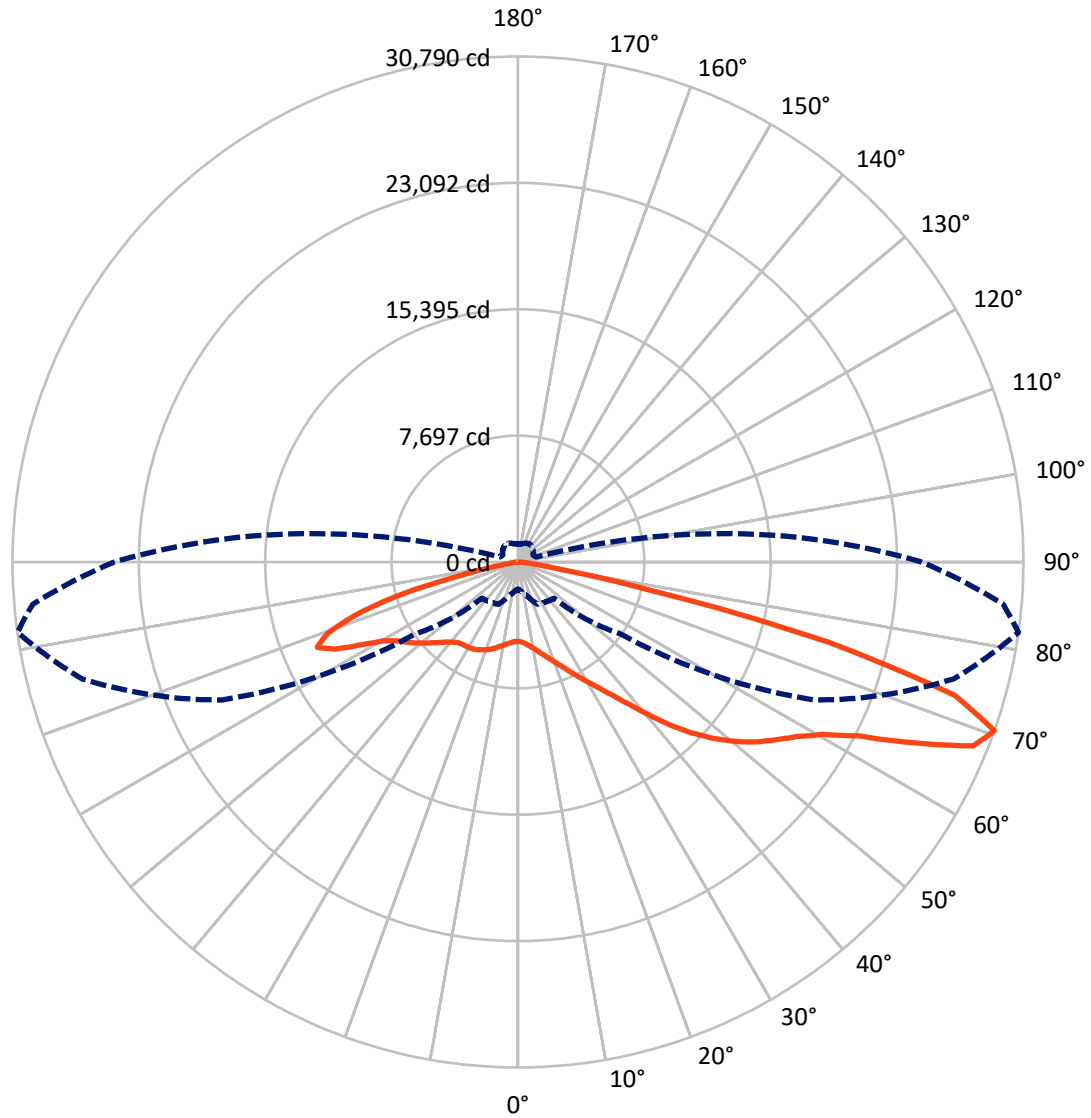
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.8 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	8122.5	0.0	8122.5
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	24825.5	0.0	24825.5
	% Fixture	75.3	0.0	75.3
Total	Lumens	32948.0	0.0	32948.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	456.1	1.4
10°-20°	1310.4	4.0
20°-30°	2192.1	6.7
30°-40°	3424.7	10.4
40°-50°	5454.2	16.6
50°-60°	7590.2	23.0
60°-70°	7939.7	24.1
70°-80°	4149.7	12.6
80°-90°	430.9	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°	32948.0	100.0
0°-180°	32948.0	100.0

Coefficient of Utilization

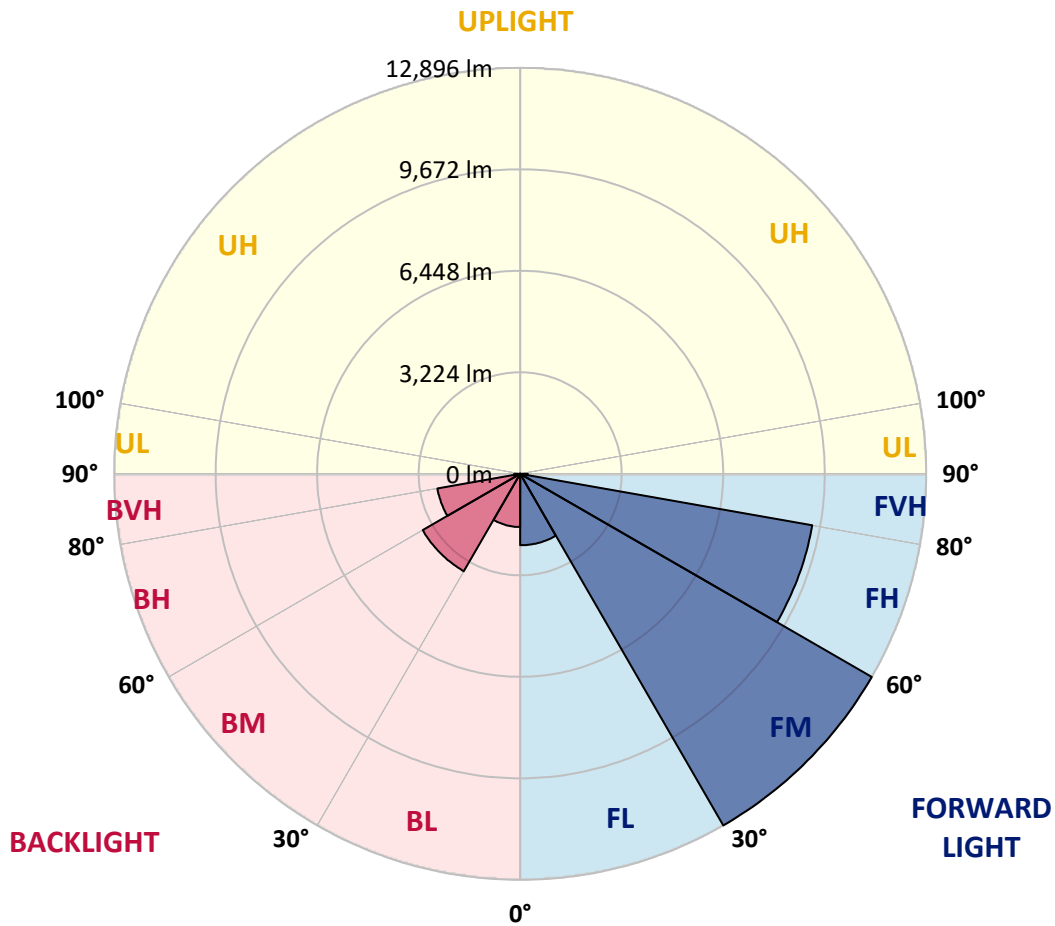


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2268.8	6.9			
FM (30°-60°)	12895.5	39.1			
FH (60°-80°)	9419.9	28.6			G4/12000
FVH (80°-90°)	241.2	0.7			G3/500
BL (0°-30°)	1689.8	5.1	B3/2500		
BM (30°-60°)	3573.6	10.8	B3/5000		
BH (60°-80°)	2669.5	8.1	B4/5000		G4/5000
BVH (80°-90°)	189.7	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4
 Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	4830.6	4830.6	4830.6	4830.6	4830.6	4830.6	4830.6	4830.6	4830.6	4830.6	4830.6
2.5°	4946.0	4974.0	4965.2	4956.5	4956.5	4944.2	4942.5	4925.0	4911.0	4888.3	4883.0
5°	5008.9	5038.6	5035.1	5042.1	5064.9	5070.1	5075.4	5064.9	5036.9	5008.9	4996.7
7.5°	4953.0	4986.2	4996.7	5038.6	5108.6	5171.5	5218.7	5237.9	5211.7	5171.5	5152.3
10°	4764.2	4800.9	4837.6	4937.2	5061.4	5210.0	5335.9	5411.0	5405.8	5367.3	5334.1
12.5°	4381.3	4419.7	4498.4	4692.5	4919.8	5182.0	5416.3	5573.6	5627.8	5599.8	5542.2
15°	4075.3	4108.5	4168.0	4367.3	4662.8	5061.4	5446.0	5751.9	5890.1	5874.3	5804.4
17.5°	4066.6	4080.6	4117.3	4211.7	4439.0	4872.5	5414.5	5926.8	6190.8	6189.0	6101.6
20°	4220.4	4225.7	4246.7	4265.9	4395.3	4729.2	5334.1	6071.9	6528.2	6528.2	6433.8
22.5°	4433.7	4430.2	4451.2	4433.7	4496.7	4716.9	5283.4	6199.5	6904.1	6932.1	6813.2
25°	4753.7	4736.2	4730.9	4690.7	4703.0	4830.6	5339.3	6344.6	7349.9	7407.6	7259.0
27.5°	5180.3	5152.3	5133.0	5040.4	5008.9	5064.9	5510.7	6519.5	7846.4	7946.1	7757.3
30°	5736.2	5685.5	5657.5	5496.7	5383.1	5391.8	5769.4	6752.0	8365.7	8526.5	8287.0
32.5°	6495.0	6416.3	6341.1	6077.1	5869.1	5800.9	6103.4	7073.7	8928.6	9185.6	8877.9
35°	7344.7	7281.7	7201.3	6793.9	6474.0	6316.7	6554.4	7523.0	9587.7	9995.1	9594.7
37.5°	8162.9	8108.7	8147.1	7598.2	7185.6	6956.5	7145.4	8126.2	10400.7	11002.1	10493.4
40°	9009.1	8967.1	8972.3	8447.8	7967.1	7710.1	7862.2	8883.2	11332.6	12199.7	11573.8
42.5°	9928.7	9897.2	9792.3	9327.2	8787.0	8547.5	8687.4	9757.3	12332.6	13563.4	12759.2
45°	10958.4	10939.2	10841.3	10308.1	9689.2	9419.9	9608.7	10722.4	13337.9	14846.7	13949.8
47.5°	11848.3	11864.1	11851.8	11402.5	10760.9	10365.7	10591.3	11729.4	14273.2	16053.0	15091.4
50°	12276.7	12358.8	12479.5	12339.6	11941.0	11538.9	11582.6	12701.5	15164.9	17184.2	16185.9
52.5°	12052.9	12208.5	12537.2	12760.9	12914.8	12830.9	12713.7	13666.6	16004.1	18205.2	17220.9
55°	11218.9	11437.5	11982.9	12523.2	13308.2	13918.3	14072.2	14736.5	16822.3	19103.8	18199.9
57.5°	9699.6	10054.5	10544.1	11636.8	12958.5	14444.6	15656.1	16220.8	17689.4	20063.6	19224.4
60°	7094.7	7570.2	8178.6	9804.5	11734.7	14163.1	17004.1	18500.6	18922.0	21306.7	20558.4
62.5°	4540.4	4834.1	5393.5	6925.1	9143.7	12720.7	17416.7	21350.4	21011.2	23345.2	22558.5
65°	3108.5	3297.3	3809.6	4669.7	5911.0	9468.9	16311.8	23486.8	24329.5	26576.1	25978.2
67.5°	2258.8	2402.2	2839.3	3592.8	3851.5	5603.3	12657.8	23388.9	27555.2	29904.9	28974.8
70°	1646.9	1748.3	2115.5	2839.3	2963.4	3117.2	7668.1	19881.8	27485.2	30789.5	29675.9
72.5°	1220.3	1290.3	1536.8	2202.9	2398.7	2105.0	3795.6	14449.8	23618.0	27848.9	26955.5
75°	882.9	935.3	1117.2	1685.4	1919.6	1603.2	1893.4	8444.4	16474.4	19589.8	19747.2
77.5°	674.8	715.1	833.9	1234.3	1536.8	1202.8	1174.9	3884.8	7811.5	7849.9	8290.5
80°	542.0	568.2	632.9	868.9	1178.4	900.4	765.8	1568.2	2468.6	2089.2	2192.4
82.5°	398.6	442.3	535.0	610.2	842.7	620.7	466.8	792.0	938.8	807.7	814.7
85°	227.3	257.0	323.4	437.1	538.5	379.4	267.5	351.4	437.1	358.4	319.9
87.5°	80.4	104.9	113.6	171.3	234.3	157.3	103.2	101.4	143.4	106.6	89.2
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°	4830.6	4830.6	4830.6	4830.6	4830.6	4830.6	4830.6	4830.6	4830.6	4830.6	4830.6
2.5°	4865.6	4856.8	4821.8	4774.6	4725.7	4678.5	4662.8	4629.5	4606.8	4594.6	4608.6
5°	4963.5	4935.5	4853.3	4748.4	4638.3	4519.4	4435.5	4358.5	4302.6	4250.1	4271.1
7.5°	5103.3	5054.4	4912.8	4729.2	4533.4	4335.8	4189.0	4077.1	4001.9	3952.9	3963.4
10°	5265.9	5190.7	4974.0	4699.5	4397.0	4113.8	3940.7	3844.5	3797.3	3771.1	3778.1
12.5°	5453.0	5346.3	5036.9	4631.3	4189.0	3865.5	3746.6	3718.7	3720.4	3722.2	3725.7
15°	5683.8	5535.2	5087.6	4482.7	3918.0	3675.0	3654.0	3699.4	3746.6	3769.4	3767.6
17.5°	5944.3	5734.5	5096.3	4237.9	3652.2	3552.6	3619.0	3716.9	3788.6	3820.1	3827.1
20°	6224.0	5937.3	5033.4	3891.7	3433.7	3452.9	3571.8	3697.7	3776.4	3816.6	3827.1
22.5°	6543.9	6154.1	4883.0	3528.1	3255.4	3344.5	3484.4	3606.8	3688.9	3729.2	3739.6
25°	6909.3	6397.1	4647.0	3222.1	3101.5	3222.1	3362.0	3463.4	3529.8	3566.6	3577.0
27.5°	7314.9	6650.6	4332.3	2979.1	2966.9	3096.3	3211.7	3290.3	3325.3	3353.3	3363.8
30°	7722.3	6881.4	3951.2	2795.6	2849.8	2972.1	3054.3	3089.3	3099.8	3105.0	3117.2
32.5°	8162.9	7080.7	3550.8	2643.4	2737.9	2851.5	2900.5	2916.2	2867.2	2834.0	2844.5
35°	8696.1	7294.0	3159.2	2522.8	2627.7	2725.6	2741.4	2727.4	2669.7	2601.5	2605.0
37.5°	9355.2	7559.7	2846.3	2437.1	2524.6	2589.3	2570.0	2566.5	2571.8	2491.3	2496.6
40°	10162.9	7905.9	2617.2	2370.7	2440.6	2454.6	2400.4	2430.2	2456.4	2334.0	2337.5
42.5°	11059.8	8323.7	2472.1	2325.3	2370.7	2337.5	2253.6	2286.8	2283.3	2122.5	2120.7
45°	11974.2	8778.3	2421.4	2292.0	2306.0	2239.6	2146.9	2155.7	2082.2	1937.1	1942.4
47.5°	12883.3	9266.1	2452.9	2264.1	2225.6	2150.4	2078.7	2040.3	1931.9	1823.5	1823.5
50°	13775.0	9778.3	2568.3	2208.1	2115.5	2071.8	2019.3	1951.1	1835.7	1743.1	1736.1
52.5°	14601.9	10294.1	2697.6	2115.5	1977.3	2003.6	1970.3	1891.7	1778.0	1683.6	1685.4
55°	15385.2	10809.8	2748.3	1987.8	1848.0	1944.1	1924.9	1779.8	1643.4	1566.5	1559.5
57.5°	16238.3	11430.5	2692.4	1825.2	1743.1	1875.9	1802.5	1641.7	1563.0	1505.3	1500.1
60°	17420.2	12404.3	2571.8	1624.2	1643.4	1774.5	1648.7	1582.2	1496.6	1431.9	1428.4
62.5°	19383.5	14220.8	2377.7	1424.9	1526.3	1624.2	1575.2	1508.8	1421.4	1358.4	1358.4
65°	22285.7	16745.3	2012.3	1269.3	1395.2	1477.3	1496.6	1430.1	1339.2	1272.8	1276.3
67.5°	24733.4	18329.3	1522.8	1139.9	1260.5	1358.4	1412.6	1347.9	1251.8	1187.1	1188.9
70°	24598.8	17178.9	1162.6	1012.3	1141.6	1241.3	1311.2	1260.5	1157.4	1096.2	1101.4
72.5°	21848.7	14371.1	940.6	882.9	1021.0	1118.9	1202.8	1164.4	1059.5	1000.0	1000.0
75°	16051.3	10201.4	751.8	751.8	870.7	991.3	1084.0	1059.5	963.3	921.4	909.1
77.5°	6766.0	4279.9	589.2	624.1	723.8	851.4	966.8	975.6	891.6	944.1	856.7
80°	1799.0	1180.1	449.3	491.3	568.2	702.8	840.9	837.4	746.5	697.6	648.6
82.5°	685.3	465.1	319.9	346.2	410.9	538.5	666.1	687.1	596.2	515.8	515.8
85°	264.0	199.3	197.6	208.0	239.5	356.7	503.5	521.0	449.3	381.1	393.4
87.5°	68.2	59.4	73.4	69.9	110.1	190.6	288.5	299.0	274.5	159.1	227.3
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)