

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: P884597

Luminaire Tested: **NAV-SB5C-727-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884597
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-727-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 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: 34124 lumens
Efficiency: N/A
Efficacy: 136.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G4

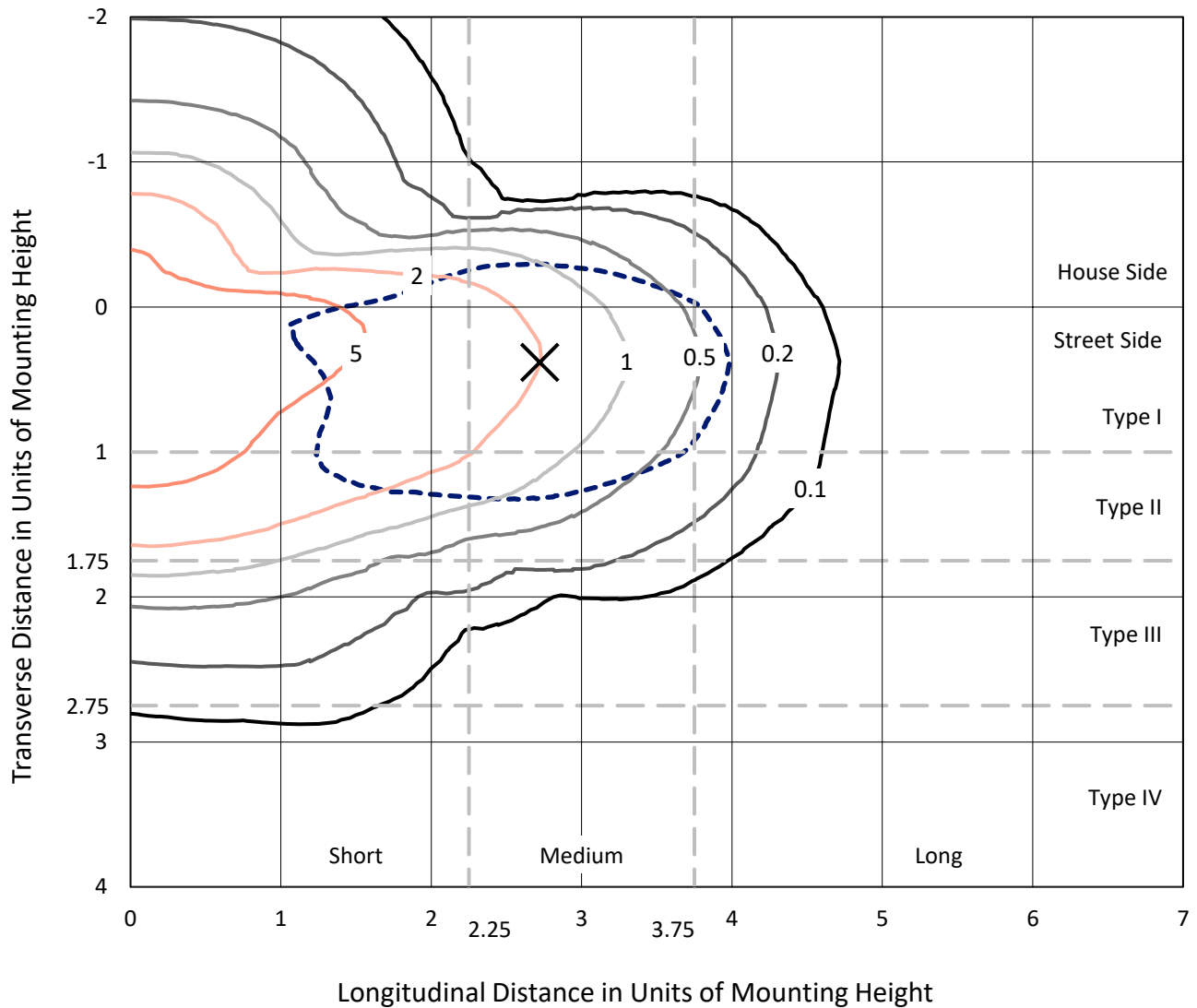
Input Watts (W): 249.5
Input Voltage (V): 120.0
Input Current (Ain): 2.116
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 7.885
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

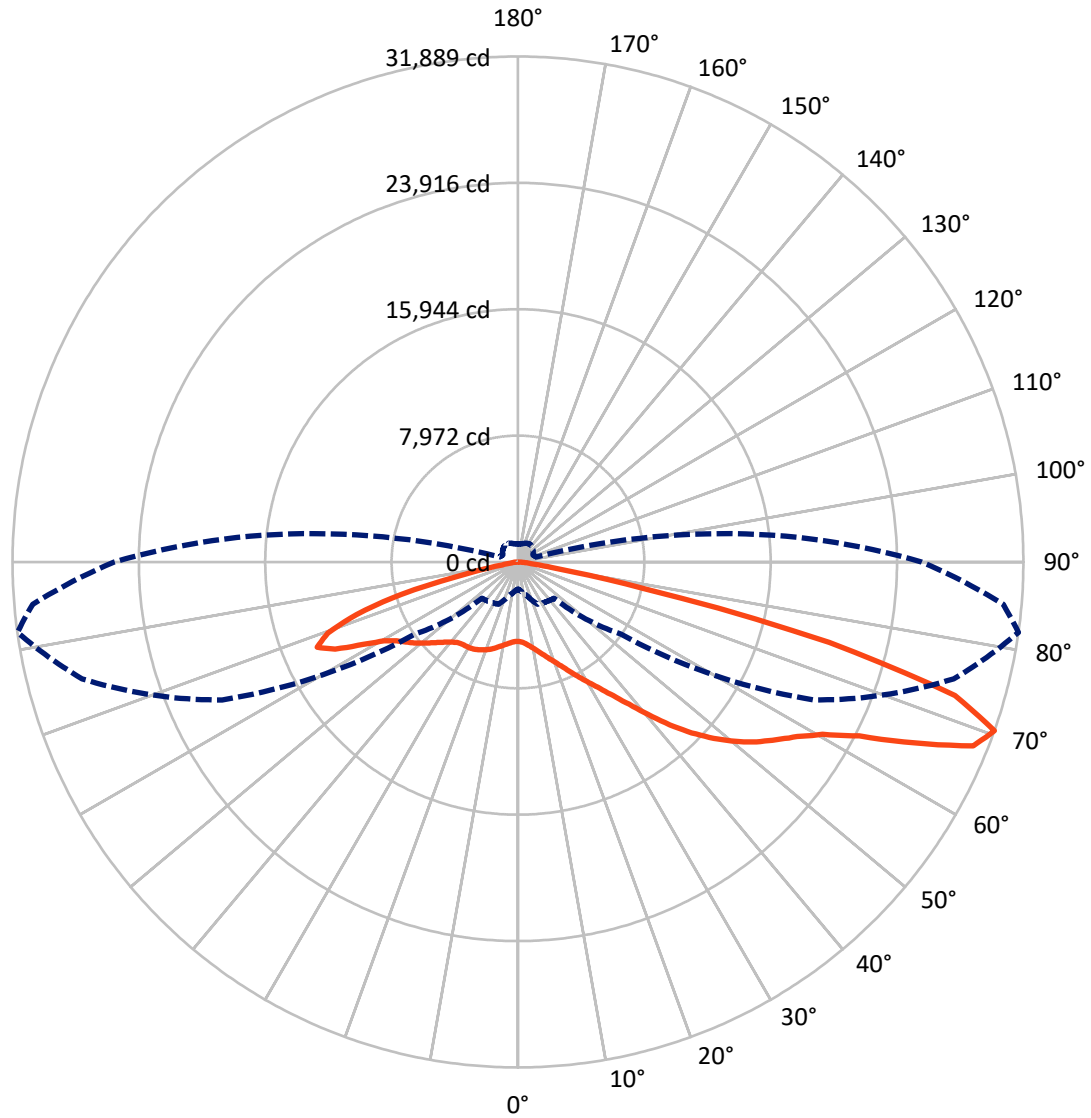
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.1 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	8412.4	0.0	8412.4
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	25711.6	0.0	25711.6
	% Fixture	75.3	0.0	75.3
Total	Lumens	34124.0	0.0	34124.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	472.4	1.4
10°-20°	1357.2	4.0
20°-30°	2270.4	6.7
30°-40°	3546.9	10.4
40°-50°	5648.9	16.6
50°-60°	7861.1	23.0
60°-70°	8223.1	24.1
70°-80°	4297.8	12.6
80°-90°	446.3	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°	34124.0	100.0
0°-180°	34124.0	100.0

Coefficient of Utilization



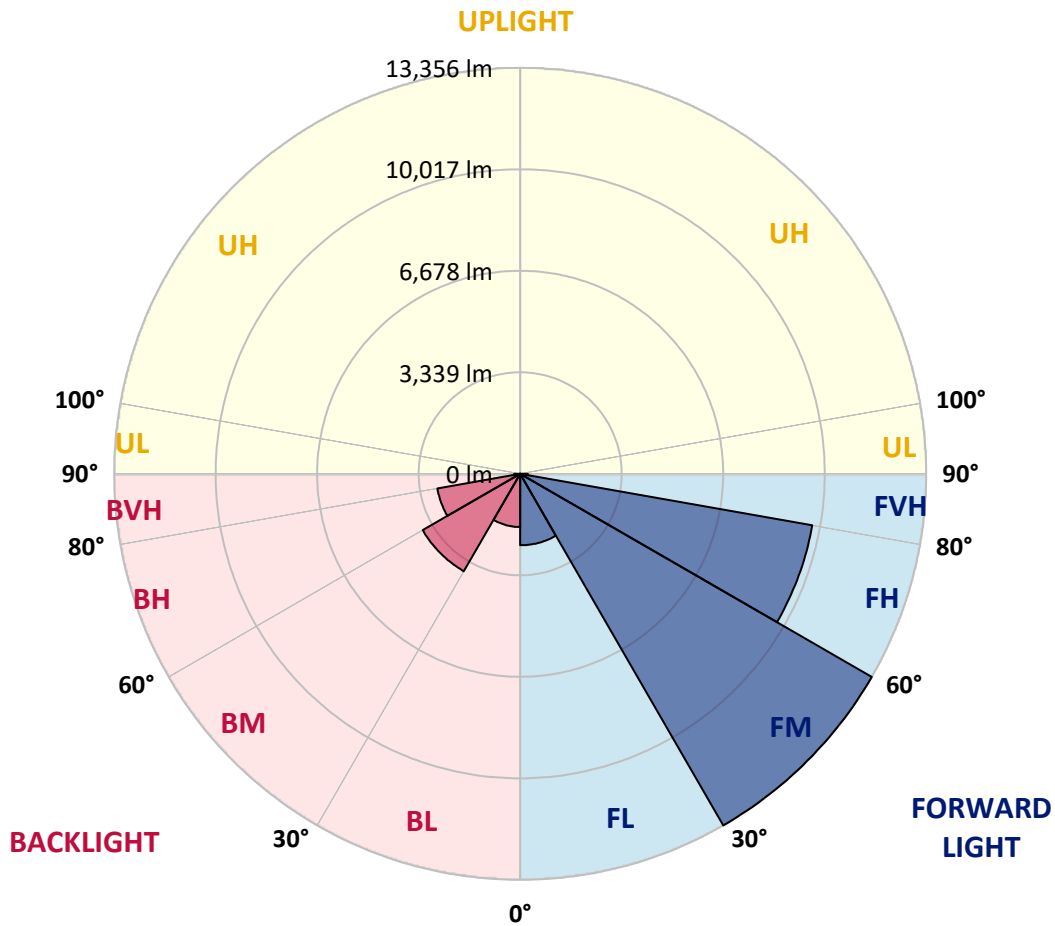
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2349.8	6.9			
FM (30°-60°)	13355.8	39.1			
FH (60°-80°)	9756.2	28.6			G4/12000
FVH (80°-90°)	249.8	0.7			G3/500
BL (0°-30°)	1750.1	5.1	B3/2500		
BM (30°-60°)	3701.1	10.8	B3/5000		
BH (60°-80°)	2764.7	8.1	B4/5000		G4/5000
BVH (80°-90°)	196.5	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°	5003.0	5003.0	5003.0	5003.0	5003.0	5003.0	5003.0	5003.0	5003.0	5003.0	5003.0
2.5°	5122.5	5151.5	5142.4	5133.4	5133.4	5120.7	5118.9	5100.8	5086.3	5062.8	5057.3
5°	5187.7	5218.5	5214.9	5222.1	5245.6	5251.1	5256.5	5245.6	5216.7	5187.7	5175.0
7.5°	5129.8	5164.2	5175.0	5218.5	5290.9	5356.1	5405.0	5424.9	5397.7	5356.1	5336.2
10°	4934.2	4972.2	5010.2	5113.5	5242.0	5395.9	5526.3	5604.2	5598.7	5558.9	5524.5
12.5°	4537.7	4577.5	4659.0	4860.0	5095.4	5367.0	5609.6	5772.6	5828.7	5799.7	5740.0
15°	4220.8	4255.2	4316.7	4523.2	4829.2	5242.0	5640.4	5957.3	6100.3	6084.0	6011.6
17.5°	4211.7	4226.2	4264.2	4362.0	4597.4	5046.5	5607.8	6138.3	6411.7	6409.9	6319.4
20°	4371.1	4376.5	4398.2	4418.1	4552.1	4898.0	5524.5	6288.6	6761.2	6761.2	6663.4
22.5°	4592.0	4588.4	4610.1	4592.0	4657.2	4885.3	5472.0	6420.8	7150.5	7179.5	7056.4
25°	4923.3	4905.2	4899.8	4858.1	4870.8	5003.0	5529.9	6571.1	7612.2	7672.0	7518.1
27.5°	5365.1	5336.2	5316.3	5220.3	5187.7	5245.6	5707.4	6752.2	8126.5	8229.7	8034.1
30°	5941.0	5888.4	5859.5	5692.9	5575.2	5584.2	5975.4	6993.0	8664.3	8830.9	8582.8
32.5°	6726.8	6645.3	6567.5	6294.0	6078.6	6008.0	6321.2	7326.2	9247.3	9513.5	9194.8
35°	7606.8	7541.6	7458.3	7036.4	6705.1	6542.1	6788.4	7791.5	9930.0	10351.9	9937.2
37.5°	8454.2	8398.1	8437.9	7869.4	7442.0	7204.8	7400.4	8416.2	10771.9	11394.8	10867.9
40°	9330.6	9287.2	9292.6	8749.4	8251.4	7985.3	8142.8	9200.2	11737.1	12635.2	11986.9
42.5°	10283.0	10250.5	10141.8	9660.2	9100.7	8852.6	8997.4	10105.6	12772.8	14047.5	13214.6
45°	11349.6	11329.6	11228.2	10676.0	10035.0	9756.1	9951.7	11105.1	13813.9	15376.6	14447.7
47.5°	12271.2	12287.5	12274.8	11809.5	11144.9	10735.7	10969.3	12148.1	14782.7	16626.0	15630.1
50°	12714.8	12799.9	12924.9	12780.0	12367.2	11950.7	11996.0	13154.8	15706.1	17797.5	16763.6
52.5°	12483.1	12644.2	12984.6	13216.4	13375.8	13288.8	13167.5	14154.4	16575.3	18855.0	17835.5
55°	11619.4	11845.7	12410.6	12970.2	13783.2	14415.1	14574.4	15262.5	17422.7	19785.7	18849.5
57.5°	10045.8	10413.4	10920.4	12052.1	13421.0	14960.1	16215.0	16799.8	18320.8	20779.8	19910.6
60°	7347.9	7840.4	8470.5	10154.5	12153.5	14668.6	17611.0	19161.0	19597.4	22067.2	21292.2
62.5°	4702.4	5006.6	5586.1	7172.2	9470.0	13174.8	18038.3	22112.4	21761.2	24178.5	23363.7
65°	3219.5	3415.0	3945.5	4836.4	6122.0	9806.8	16894.0	24325.1	25197.9	27524.7	26905.4
67.5°	2339.4	2487.9	2940.6	3721.0	3989.0	5803.3	13109.6	24223.7	28538.7	30972.3	30009.0
70°	1705.7	1810.7	2191.0	2940.6	3069.2	3228.5	7941.8	20591.4	28466.2	31888.5	30735.1
72.5°	1263.9	1336.3	1591.6	2281.5	2484.3	2180.1	3931.1	14965.6	24460.9	28842.9	27917.6
75°	914.4	968.7	1157.0	1745.5	1988.2	1660.4	1961.0	8745.8	17062.4	20289.1	20452.0
77.5°	698.9	740.6	863.7	1278.4	1591.6	1245.8	1216.8	4023.4	8090.3	8130.1	8586.4
80°	561.3	588.5	655.5	899.9	1220.4	932.5	793.1	1624.2	2556.7	2163.8	2270.6
82.5°	412.8	458.1	554.1	631.9	872.8	642.8	483.5	820.3	972.4	836.6	843.8
85°	235.4	266.2	335.0	452.7	557.7	392.9	277.0	364.0	452.7	371.2	331.4
87.5°	83.3	108.6	117.7	177.5	242.6	163.0	106.8	105.0	148.5	110.5	92.3
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°	5003.0	5003.0	5003.0	5003.0	5003.0	5003.0	5003.0	5003.0	5003.0	5003.0	5003.0
2.5°	5039.2	5030.2	4994.0	4945.1	4894.4	4845.5	4829.2	4794.8	4771.2	4758.6	4773.0
5°	5140.6	5111.6	5026.5	4917.9	4803.8	4680.7	4593.8	4514.1	4456.2	4401.8	4423.6
7.5°	5285.5	5234.8	5088.1	4898.0	4695.2	4490.6	4338.5	4222.6	4144.7	4094.0	4104.9
10°	5453.9	5376.0	5151.5	4867.2	4553.9	4260.6	4081.4	3981.8	3932.9	3905.7	3913.0
12.5°	5647.6	5537.2	5216.7	4796.6	4338.5	4003.5	3880.4	3851.4	3853.2	3855.0	3858.6
15°	5886.6	5732.7	5269.2	4642.7	4057.8	3806.1	3784.4	3831.5	3880.4	3903.9	3902.1
17.5°	6156.4	5939.1	5278.2	4389.2	3782.6	3679.4	3748.2	3849.6	3923.8	3956.4	3963.7
20°	6446.1	6149.2	5213.0	4030.7	3556.2	3576.2	3699.3	3829.7	3911.1	3952.8	3963.7
22.5°	6777.5	6373.7	5057.3	3654.0	3371.6	3463.9	3608.8	3735.5	3820.6	3862.3	3873.1
25°	7155.9	6625.4	4812.9	3337.1	3212.2	3337.1	3482.0	3587.0	3655.8	3693.9	3704.7
27.5°	7576.0	6888.0	4487.0	3085.5	3072.8	3206.8	3326.3	3407.8	3444.0	3473.0	3483.8
30°	7997.9	7127.0	4092.2	2895.3	2951.5	3078.2	3163.3	3199.5	3210.4	3215.8	3228.5
32.5°	8454.2	7333.4	3677.6	2737.8	2835.6	2953.3	3004.0	3020.3	2969.6	2935.2	2946.0
35°	9006.5	7554.3	3272.0	2612.9	2721.5	2822.9	2839.2	2824.7	2765.0	2694.3	2698.0
37.5°	9689.1	7829.5	2947.8	2524.1	2614.7	2681.7	2661.8	2658.1	2663.6	2580.3	2585.7
40°	10525.7	8188.1	2710.6	2455.3	2527.8	2542.2	2486.1	2516.9	2544.1	2417.3	2420.9
42.5°	11454.6	8620.8	2560.4	2408.3	2455.3	2420.9	2334.0	2368.4	2364.8	2198.2	2196.4
45°	12401.6	9091.6	2507.8	2373.8	2388.3	2319.5	2223.6	2232.6	2156.6	2006.3	2011.7
47.5°	13343.2	9596.8	2540.4	2344.9	2305.0	2227.2	2152.9	2113.1	2000.8	1888.6	1888.6
50°	14266.6	10127.3	2659.9	2286.9	2191.0	2145.7	2091.4	2020.8	1901.3	1805.3	1798.0
52.5°	15123.1	10661.5	2793.9	2191.0	2047.9	2075.1	2040.7	1959.2	1841.5	1743.7	1745.5
55°	15934.3	11195.6	2846.4	2058.8	1913.9	2013.5	1993.6	1843.3	1702.1	1622.4	1615.2
57.5°	16817.9	11838.5	2788.5	1890.4	1805.3	1942.9	1866.8	1700.3	1618.8	1559.0	1553.6
60°	18042.0	12847.0	2663.6	1682.2	1702.1	1837.9	1707.5	1638.7	1550.0	1483.0	1479.4
62.5°	20075.4	14728.4	2462.6	1475.7	1580.8	1682.2	1631.5	1562.6	1472.1	1406.9	1406.9
65°	23081.2	17343.0	2084.1	1314.6	1445.0	1530.1	1550.0	1481.2	1387.0	1318.2	1321.8
67.5°	25616.2	18983.5	1577.1	1180.6	1305.5	1406.9	1463.1	1396.1	1296.5	1229.5	1231.3
70°	25476.8	17792.1	1204.1	1048.4	1182.4	1285.6	1358.0	1305.5	1198.7	1135.3	1140.8
72.5°	22628.5	14884.1	974.2	914.4	1057.5	1158.9	1245.8	1205.9	1097.3	1035.7	1035.7
75°	16624.2	10565.5	778.6	778.6	901.7	1026.7	1122.6	1097.3	997.7	954.2	941.6
77.5°	7007.5	4432.6	610.2	646.4	749.6	881.8	1001.3	1010.4	923.5	977.8	887.3
80°	1863.2	1222.2	465.4	508.8	588.5	727.9	871.0	867.3	773.2	722.5	671.8
82.5°	709.8	481.7	331.4	358.5	425.5	557.7	689.9	711.6	617.5	534.2	534.2
85°	273.4	206.4	204.6	215.5	248.1	369.4	521.5	539.6	465.4	394.7	407.4
87.5°	70.6	61.6	76.1	72.4	114.1	197.4	298.8	309.6	284.3	164.8	235.4
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)