

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: P884681

Luminaire Tested: **NAV-SB5C-835-U-T4FT**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884681  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5C-835-U-T4FT  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 80 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

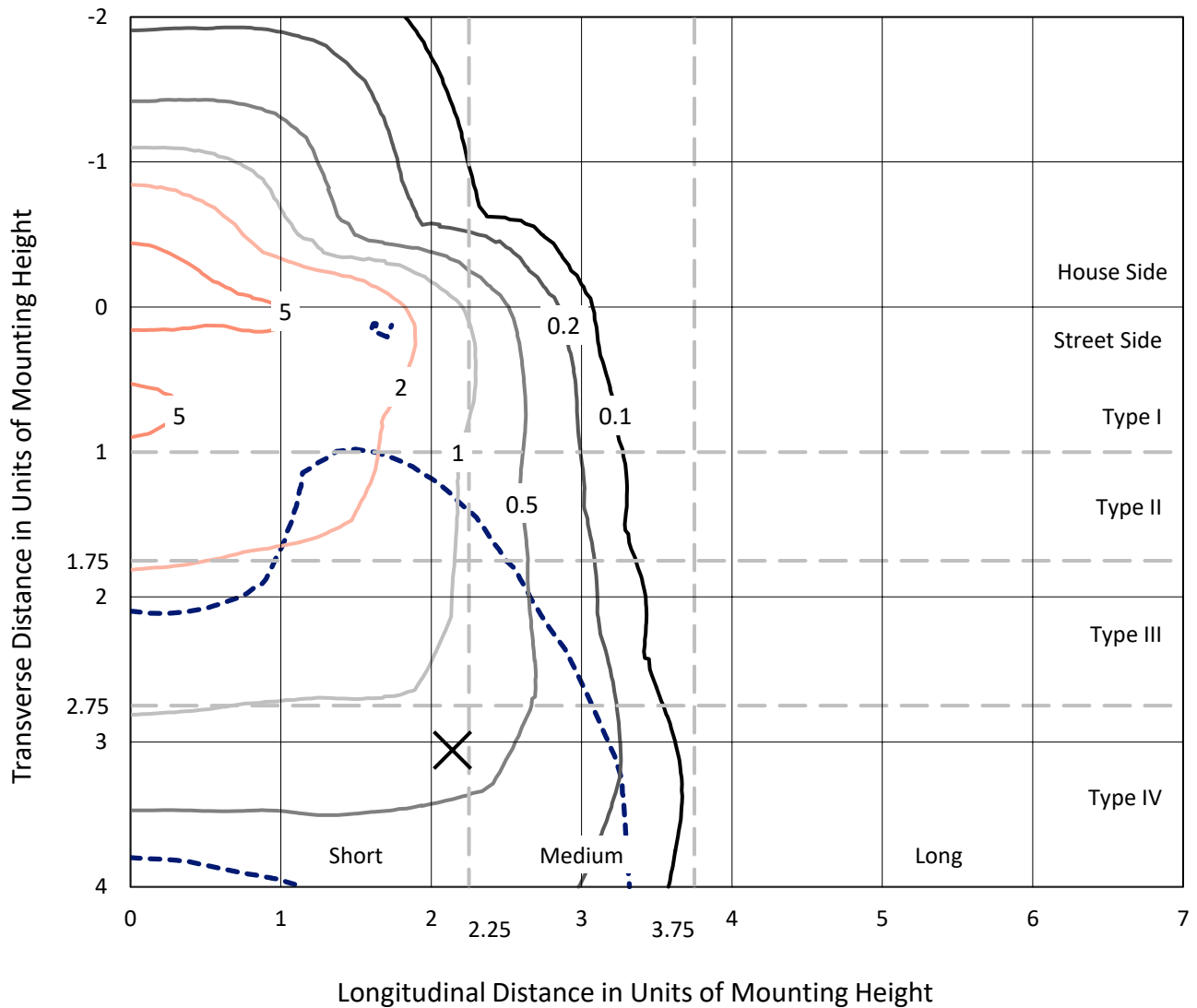
Lumens per Lamp: N/A  
Luminaire Lumens: 31692 lumens  
Efficiency: N/A  
Efficacy: 127.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5  
  
Input Watts (W): 249.5  
Input Voltage (V): 120.0  
Input Current (Ain): 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

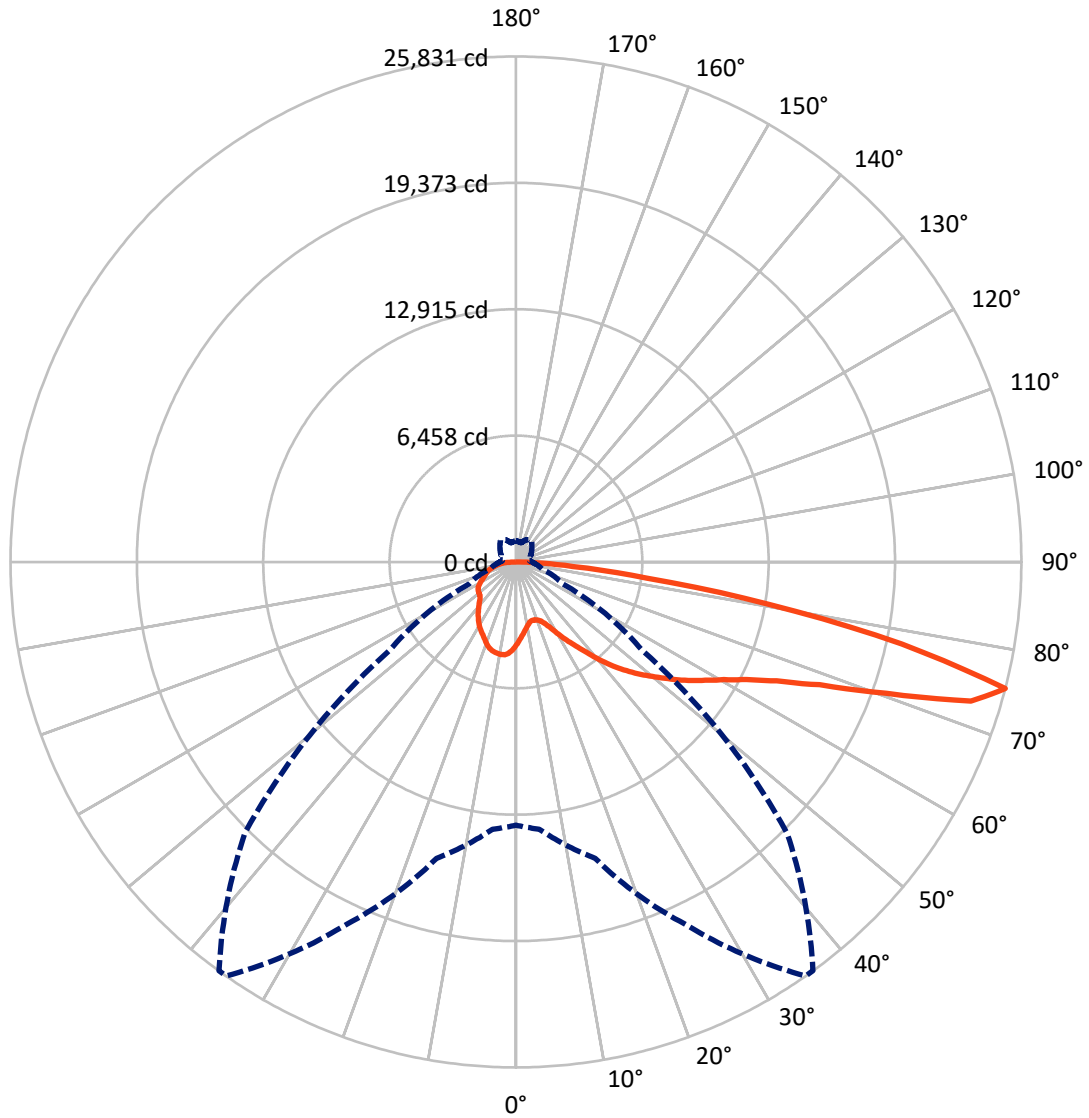
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7541.9	0.0	7541.9
	% Fixture	23.8	0.0	23.8
<b>Street Side</b>	Lumens	24150.1	0.0	24150.1
	% Fixture	76.2	0.0	76.2
<b>Total</b>	Lumens	31692.0	0.0	31692.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	399.8	1.3
10°-20°	1153.3	3.6
20°-30°	1936.8	6.1
30°-40°	3010.0	9.5
40°-50°	4467.6	14.1
50°-60°	6167.8	19.5
60°-70°	7483.0	23.6
70°-80°	6184.1	19.5
80°-90°	889.5	2.8
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°	31692.0	100.0
0°-180°	31692.0	100.0

**Coefficient of Utilization**



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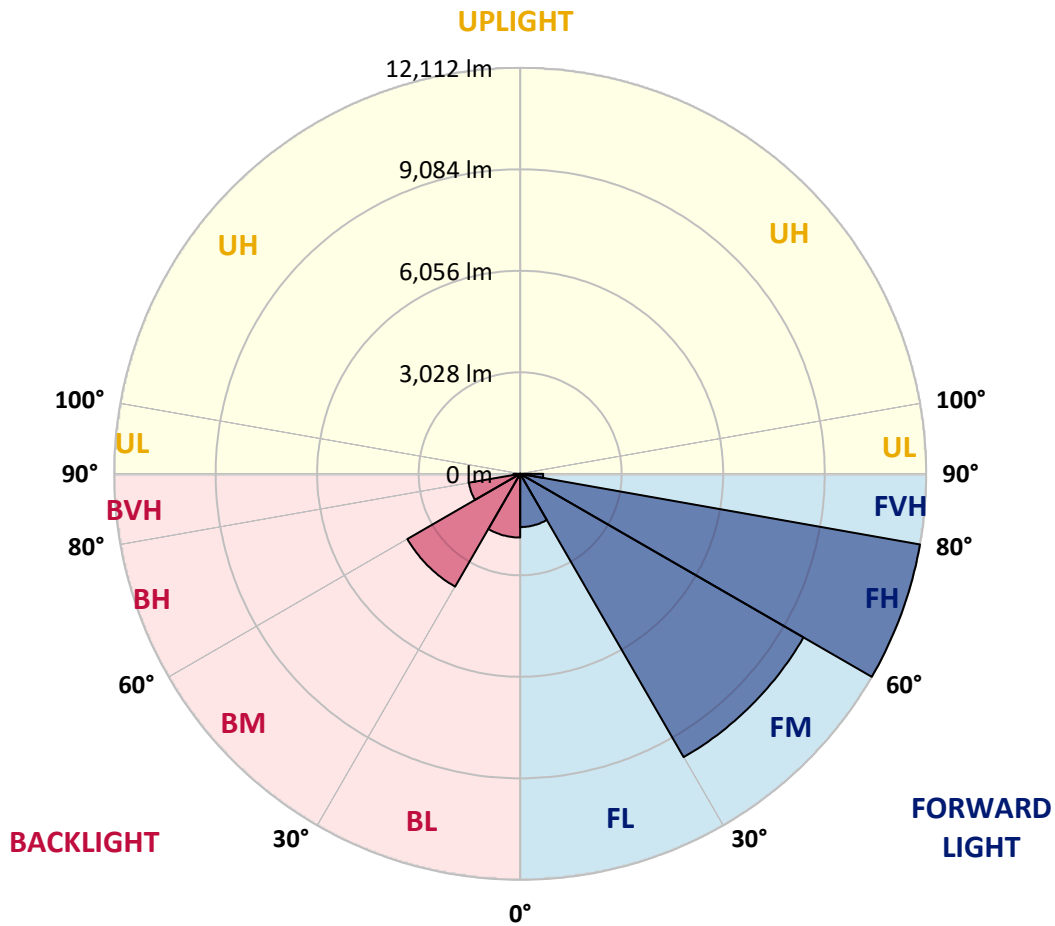
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1589.3	5.0			
FM (30°-60°)	9759.4	30.8			
FH (60°-80°)	12112.2	38.2			G5
FVH (80°-90°)	689.2	2.2			G4/750
BL (0°-30°)	1900.7	6.0	B3/2500		
BM (30°-60°)	3886.0	12.3	B3/5000		
BH (60°-80°)	1554.9	4.9	B3/2500		G3/2500
BVH (80°-90°)	200.3	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-G5**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	4223.2	4223.2	4223.2	4223.2	4223.2	4223.2	4223.2	4223.2	4223.2	4223.2	4223.2
2.5°	3894.2	3918.2	3928.5	3923.4	3949.1	3945.6	3981.6	4026.1	4087.8	4147.8	4235.2
5°	3594.4	3620.1	3642.4	3662.9	3712.6	3728.0	3784.6	3870.2	3983.3	4098.1	4242.0
7.5°	3315.1	3337.4	3371.7	3409.4	3493.3	3508.7	3603.0	3736.6	3894.2	4062.1	4260.9
10°	3087.3	3109.6	3145.5	3188.4	3292.9	3311.7	3431.6	3609.8	3815.4	4027.9	4281.4
12.5°	2989.6	2996.5	3017.0	3059.9	3150.7	3162.7	3294.6	3498.5	3738.3	4002.2	4312.3
15°	2984.5	2998.2	2999.9	3022.2	3097.6	3102.7	3224.3	3426.5	3690.4	3997.0	4358.5
17.5°	3035.9	3046.2	3030.7	3044.5	3107.8	3116.4	3212.4	3392.2	3674.9	4019.3	4437.3
20°	3172.9	3181.5	3135.3	3116.4	3162.7	3169.5	3263.8	3414.5	3690.4	4065.6	4545.3
22.5°	3464.2	3469.3	3356.3	3279.2	3282.6	3286.0	3368.3	3505.3	3750.3	4149.5	4682.3
25°	3918.2	3914.8	3734.9	3585.8	3500.2	3481.3	3536.2	3652.7	3851.4	4260.9	4858.8
27.5°	4449.3	4423.6	4243.7	4021.0	3834.3	3806.9	3794.9	3844.5	3995.3	4408.2	5074.7
30°	5049.0	5025.0	4831.4	4540.1	4281.4	4236.9	4123.8	4098.1	4209.5	4608.7	5374.5
32.5°	5706.9	5691.4	5460.1	5107.2	4761.1	4709.7	4519.6	4451.0	4538.4	4911.9	5792.5
35°	6258.5	6244.8	6052.9	5689.7	5266.5	5203.2	5009.6	4932.5	4977.0	5300.8	6339.0
37.5°	6757.1	6750.2	6585.8	6299.6	5862.8	5785.7	5568.1	5542.4	5533.8	5813.1	7002.1
40°	7219.7	7202.5	7031.2	6880.4	6556.6	6486.4	6294.5	6272.2	6207.1	6443.6	7752.5
42.5°	7731.9	7687.4	7439.0	7368.7	7281.3	7223.1	7108.3	7111.7	6967.8	7154.6	8547.4
45°	8150.0	8124.3	7869.0	7827.9	7922.1	7898.1	7997.5	8023.2	7743.9	7899.8	9373.2
47.5°	8598.8	8574.8	8359.0	8329.8	8585.1	8592.0	8943.2	8951.8	8501.2	8674.2	10200.7
50°	9152.2	9117.9	8903.8	8939.8	9225.9	9251.6	9894.0	9835.8	9198.5	9460.6	11021.4
52.5°	9517.1	9537.7	9491.4	9549.7	9940.3	9964.3	10829.5	10680.4	9888.9	10236.7	11826.6
55°	9786.1	9827.2	9971.1	10104.8	10694.1	10718.1	11711.8	11483.9	10461.1	10956.3	12583.9
57.5°	10132.2	10073.9	10342.9	10603.3	11410.3	11473.7	12570.2	12258.3	10968.3	11576.5	13103.0
60°	10629.0	10587.9	10796.9	11182.4	12212.1	12313.2	13478.2	12955.6	11340.0	12068.2	13204.1
62.5°	11636.4	11533.6	11566.2	11907.1	13222.9	13356.5	14502.7	13563.8	11525.1	12260.1	12662.7
65°	13142.4	12965.9	12801.4	13037.9	14646.6	14778.5	15659.1	14041.8	11456.5	11888.3	11225.2
67.5°	15039.0	14864.2	14662.0	14884.8	16743.6	16848.1	17086.3	14310.8	10916.9	10456.0	8684.5
70°	16603.2	16538.0	16779.6	17696.2	20093.1	20096.5	18916.0	14088.1	9438.3	7413.3	5025.0
72.5°	16395.8	16356.4	17629.4	20463.1	24314.5	24223.7	20648.1	12402.3	6357.9	3344.3	1882.9
75°	13450.8	13706.0	15678.0	20413.4	25830.7	25818.8	19587.6	7884.4	2629.8	1386.0	973.1
77.5°	7212.8	7617.1	10178.4	15071.5	20165.0	20468.3	13771.1	2758.3	1129.0	887.5	673.3
80°	2352.3	2705.2	4057.0	7673.7	13103.0	13046.4	5902.2	1082.8	772.7	628.8	466.0
82.5°	998.8	1039.9	1812.6	3623.5	6724.5	6620.0	1879.4	621.9	543.1	430.0	287.8
85°	390.6	436.9	800.1	1675.6	2912.5	2849.1	678.4	308.4	347.8	281.0	171.3
87.5°	128.5	155.9	286.1	573.9	906.3	873.8	166.2	106.2	150.8	128.5	61.7
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°	4223.2	4223.2	4223.2	4223.2	4223.2	4223.2	4223.2	4223.2	4223.2	4223.2	4223.2
2.5°	4259.2	4286.6	4319.1	4367.1	4408.2	4442.5	4478.4	4500.7	4509.3	4535.0	4533.3
5°	4290.0	4350.0	4430.5	4509.3	4586.4	4632.6	4673.8	4694.3	4713.2	4726.9	4730.3
7.5°	4341.4	4418.5	4545.3	4648.1	4713.2	4750.9	4778.3	4771.4	4778.3	4781.7	4786.8
10°	4385.9	4493.9	4644.6	4742.3	4792.0	4793.7	4786.8	4762.8	4750.9	4752.6	4756.0
12.5°	4439.0	4559.0	4721.7	4804.0	4817.7	4780.0	4750.9	4709.7	4694.3	4687.5	4684.0
15°	4511.0	4648.1	4805.7	4836.5	4802.3	4754.3	4704.6	4637.8	4603.5	4576.1	4584.7
17.5°	4598.4	4749.1	4870.8	4848.5	4774.8	4696.0	4615.5	4514.4	4444.2	4415.1	4416.8
20°	4720.0	4855.4	4920.5	4822.8	4711.5	4591.5	4454.5	4331.1	4266.0	4236.9	4233.5
22.5°	4867.4	4997.6	4968.4	4778.3	4620.6	4428.8	4257.4	4166.6	4134.1	4113.5	4117.0
25°	5043.8	5155.2	5002.7	4713.2	4471.6	4212.9	4081.0	4051.8	4036.4	4021.0	4021.0
27.5°	5273.4	5333.4	5028.4	4617.2	4238.6	3983.3	3935.3	3940.5	3935.3	3909.6	3914.8
30°	5576.6	5564.7	5052.4	4461.3	3971.3	3776.0	3779.4	3801.7	3805.1	3788.0	3796.6
32.5°	5975.8	5854.2	5064.4	4259.2	3716.0	3594.4	3597.8	3621.8	3639.0	3609.8	3623.5
35°	6459.0	6191.7	5045.5	4005.6	3519.0	3421.4	3395.7	3402.5	3407.7	3380.3	3399.1
37.5°	7022.6	6570.3	4961.6	3724.6	3356.3	3251.8	3196.9	3150.7	3123.3	3097.6	3114.7
40°	7641.1	6983.2	4807.4	3450.5	3174.7	3071.9	2989.6	2902.3	2809.7	2775.5	2790.9
42.5°	8288.7	7408.1	4620.6	3188.4	2965.6	2881.7	2794.3	2667.5	2528.8	2458.5	2467.1
45°	8960.3	7843.3	4437.3	2929.7	2751.5	2715.5	2614.4	2461.9	2311.2	2222.1	2215.2
47.5°	9618.2	8254.5	4168.3	2669.3	2551.0	2590.4	2511.6	2371.1	2203.2	2062.8	2047.3
50°	10247.0	8639.9	3728.0	2405.4	2388.3	2552.7	2477.4	2275.2	2083.3	1903.4	1888.0
52.5°	10870.6	8951.8	3164.4	2165.6	2300.9	2542.5	2432.8	2210.1	1975.4	1786.9	1766.4
55°	11400.0	9112.8	2621.3	1960.0	2174.1	2455.1	2379.7	2133.0	1822.9	1622.5	1605.3
57.5°	11701.5	8982.6	2169.0	1757.8	1999.4	2311.2	2288.9	1968.5	1641.3	1487.1	1466.5
60°	11571.3	8454.9	1798.9	1581.3	1833.2	2155.3	2131.3	1805.8	1502.5	1356.9	1336.3
62.5°	10853.5	7449.2	1506.0	1427.1	1682.4	1995.9	1973.7	1680.7	1396.3	1255.8	1233.5
65°	9407.5	6059.8	1278.1	1298.6	1529.9	1804.1	1836.6	1576.2	1312.4	1175.3	1153.0
67.5°	7175.1	4389.4	1099.9	1187.3	1380.9	1615.6	1709.8	1500.8	1242.1	1111.9	1091.3
70°	4089.5	2492.8	949.1	1079.4	1249.0	1440.8	1612.2	1440.8	1166.7	1058.8	1045.1
72.5°	1550.5	1144.5	820.6	971.4	1122.2	1293.5	1504.2	1346.6	1079.4	998.8	985.1
75°	827.5	697.3	690.4	844.6	976.6	1149.6	1368.9	1254.1	1014.2	1055.4	1089.6
77.5°	563.7	493.4	577.4	723.0	817.2	990.3	1225.0	1113.6	878.9	875.5	806.9
80°	390.6	349.5	469.4	582.5	632.2	832.6	1069.1	956.0	716.1	668.2	639.0
82.5°	234.7	227.9	351.2	435.2	447.2	642.5	885.8	801.8	585.9	510.5	514.0
85°	128.5	135.3	224.4	255.3	260.4	448.9	693.9	620.2	450.6	378.6	382.1
87.5°	36.0	46.3	82.2	101.1	125.1	233.0	412.9	368.3	226.1	157.6	157.6
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)