

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: P883599

Luminaire Tested: **NAV-SB4A-735-U-T3**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883599  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB4A-735-U-T3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18192 lumens  
Efficiency: N/A  
Efficacy: 159.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G3

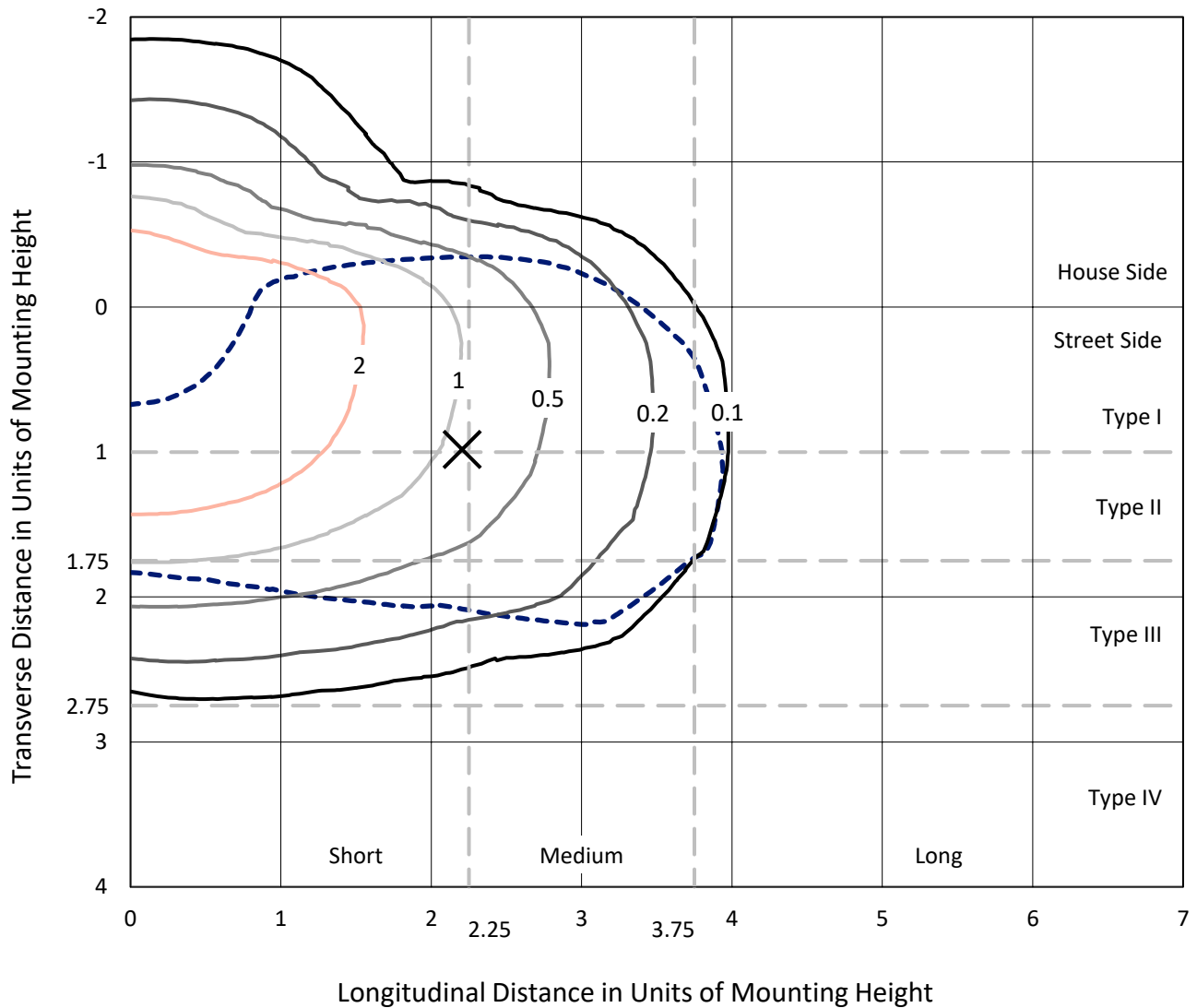
Input Watts (W): 114  
Input Voltage (V): 120.0  
Input Current (Ain): 0.952  
Voltage Rise (V): NR  
Power Factor: 0.995  
Total Harmonic Distortion (THDi): 8.206  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P883599  
 CATALOG NUMBER: NAV-SB4A-735-U-T3

### Iso-Footcandle Lines of Horizontal Illumination

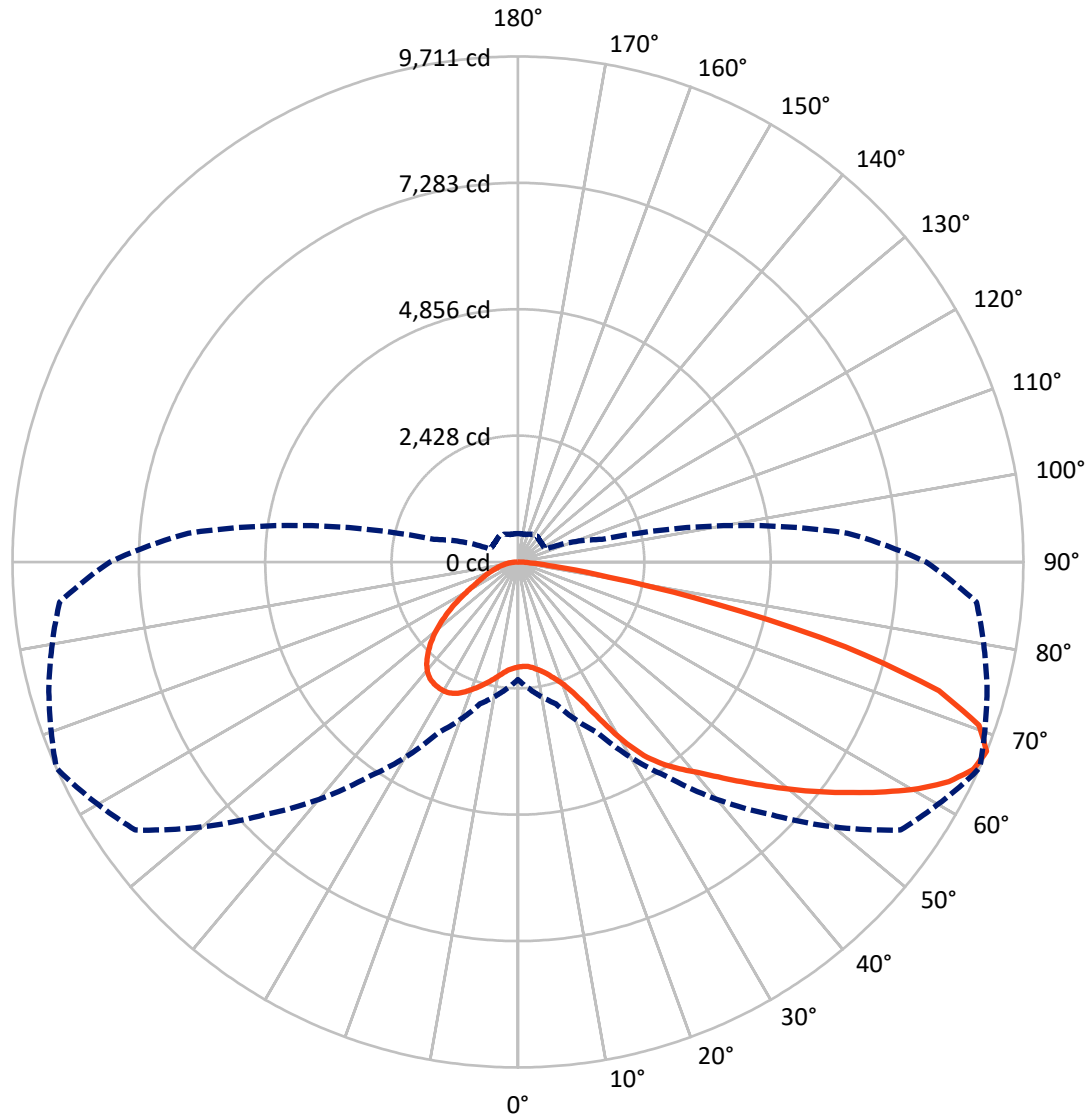
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc  
 Type III - Short - N/A

REPORT NUMBER: P883599  
CATALOG NUMBER: NAV-SB4A-735-U-T3

### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P883599  
 CATALOG NUMBER: NAV-SB4A-735-U-T3

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4523.4	0.0	4523.4
	% Fixture	24.9	0.0	24.9
<b>Street Side</b>	Lumens	13668.6	0.0	13668.6
	% Fixture	75.1	0.0	75.1
<b>Total</b>	Lumens	18192.0	0.0	18192.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	200.0	1.1
10°-20°	660.9	3.6
20°-30°	1273.9	7.0
30°-40°	2233.7	12.3
40°-50°	3320.7	18.3
50°-60°	4209.3	23.1
60°-70°	4118.7	22.6
70°-80°	1964.7	10.8
80°-90°	210.0	1.2
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°	18192.0	100.0
0°-180°	18192.0	100.0



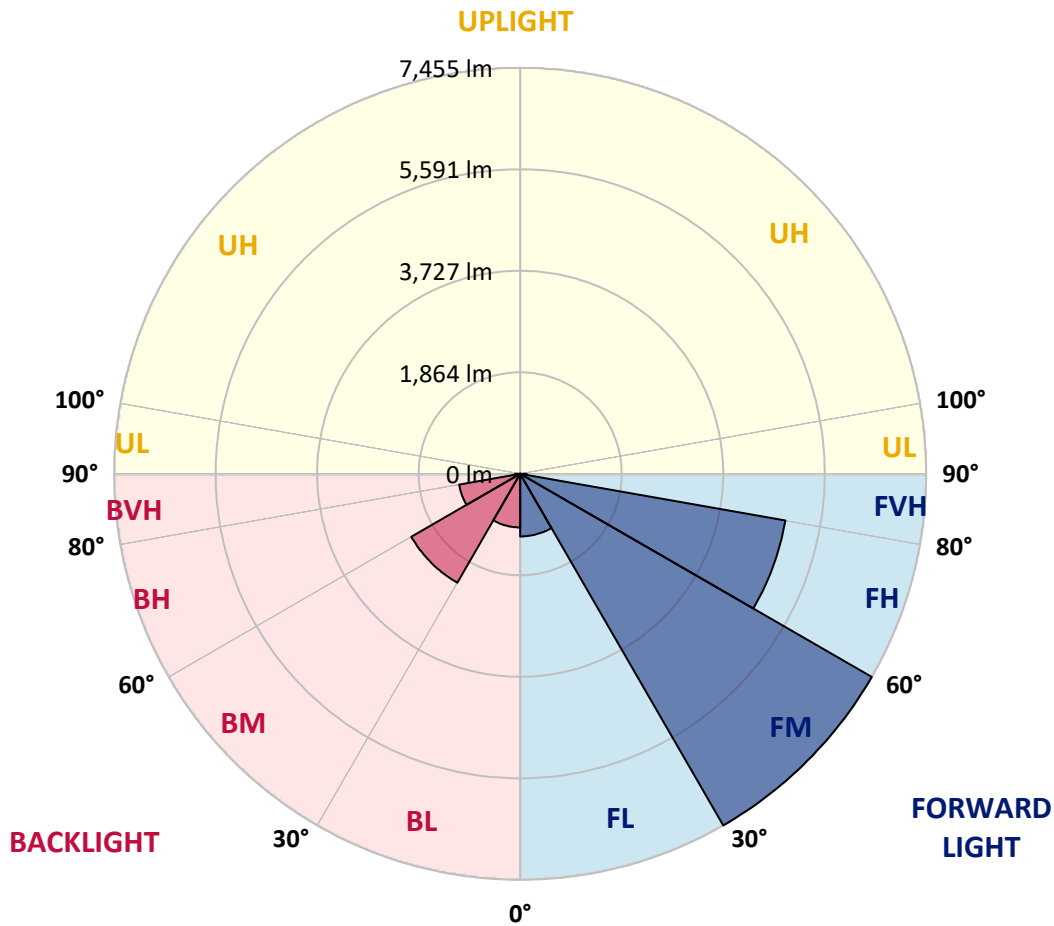
REPORT NUMBER: P883599  
 CATALOG NUMBER: NAV-SB4A-735-U-T3

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1149.6	6.3			
FM (30°-60°)	7454.9	41.0			
FH (60°-80°)	4945.1	27.2			G2/5000
FVH (80°-90°)	119.0	0.7			G2/225
BL (0°-30°)	985.4	5.4	B2/1000		
BM (30°-60°)	2308.8	12.7	B2/2500		
BH (60°-80°)	1138.3	6.3	B3/2500		G3/2500
BVH (80°-90°)	90.9	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type III Short



REPORT NUMBER: P883599  
 CATALOG NUMBER: NAV-SB4A-735-U-T3

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2017.7	2017.7	2017.7	2017.7	2017.7	2017.7	2017.7	2017.7	2017.7	2017.7	2017.7
2.5°	1996.7	2008.2	2005.3	2000.5	1999.6	2001.5	2004.4	2007.2	2006.3	2011.0	2018.7
5°	1991.0	2002.4	2001.5	2001.5	2005.3	2013.0	2017.7	2022.5	2017.7	2023.5	2034.0
7.5°	1994.8	2003.4	2007.2	2011.0	2020.6	2034.9	2046.4	2056.9	2051.2	2057.9	2071.3
10°	2043.5	2050.2	2054.1	2054.1	2060.7	2077.0	2088.5	2107.6	2102.8	2113.3	2130.5
12.5°	2132.4	2139.1	2139.1	2135.3	2140.1	2150.6	2154.4	2175.4	2166.8	2184.0	2201.3
15°	2241.4	2254.8	2244.3	2237.6	2239.5	2250.0	2249.0	2265.3	2256.7	2271.0	2286.3
17.5°	2361.8	2379.0	2361.8	2360.9	2357.0	2368.5	2369.5	2383.8	2368.5	2379.0	2389.5
20°	2504.2	2528.1	2513.8	2518.6	2510.0	2514.8	2519.5	2540.6	2516.7	2524.3	2521.4
22.5°	2705.0	2733.6	2718.3	2736.5	2730.8	2727.0	2726.0	2763.3	2726.0	2728.9	2701.1
25°	2997.4	3031.9	3005.1	3029.9	3029.9	3042.4	3056.7	3104.5	3042.4	3024.2	2952.5
27.5°	3429.5	3463.9	3411.3	3426.6	3421.8	3452.4	3437.1	3555.6	3488.7	3459.1	3314.8
30°	3949.4	4010.6	3911.2	3907.4	3902.6	3951.4	3973.3	4051.7	3983.9	3954.2	3780.3
32.5°	4511.5	4575.5	4457.0	4422.6	4404.4	4434.0	4415.9	4479.0	4432.1	4386.3	4171.2
35°	5106.0	5169.1	5056.3	4989.4	4916.7	4854.6	4789.6	4805.9	4761.9	4692.1	4469.4
37.5°	5668.0	5783.7	5664.2	5592.5	5458.7	5337.3	5155.7	5080.2	5039.1	4975.0	4750.4
40°	6240.5	6306.5	6215.7	6154.5	6009.2	5819.0	5528.5	5368.8	5313.4	5251.3	5061.1
42.5°	6662.1	6725.1	6676.4	6634.3	6520.6	6299.8	5924.2	5724.4	5644.1	5574.3	5412.8
45°	6996.6	7043.4	7012.8	7028.1	6979.4	6765.3	6334.2	6105.8	6022.6	5937.5	5810.4
47.5°	7131.4	7181.1	7229.8	7320.6	7403.8	7246.1	6774.8	6518.7	6430.7	6343.8	6218.6
50°	7116.1	7166.7	7308.2	7501.3	7759.3	7706.8	7239.4	6958.4	6877.1	6777.7	6662.1
52.5°	6993.7	7051.1	7232.7	7553.8	7964.8	8051.8	7712.5	7412.4	7335.9	7217.4	7101.7
55°	6672.6	6707.0	6979.4	7434.4	8013.6	8292.7	8176.1	7896.0	7819.6	7654.2	7528.0
57.5°	6077.1	6126.8	6523.5	7112.2	7891.2	8456.1	8583.3	8404.5	8330.9	8092.9	7961.0
60°	5300.0	5379.3	5833.4	6571.3	7579.6	8455.2	8953.2	8904.4	8843.2	8524.9	8387.3
62.5°	4420.7	4512.4	4949.2	5806.6	7034.8	8215.3	9184.5	9323.1	9291.5	8923.5	8747.7
65°	3395.1	3458.2	3893.0	4817.3	6187.0	7700.1	9211.2	9608.8	9614.6	9226.5	8935.9
67.5°	2260.5	2442.1	2819.7	3614.9	5051.5	6858.0	8976.1	9655.7	9711.1	9330.7	8841.3
70°	1103.0	1342.0	1711.9	2349.4	3614.9	5566.7	8361.5	9271.4	9394.7	9026.8	8277.4
72.5°	457.8	535.3	736.9	1159.4	2075.1	3756.4	7126.6	8229.6	8458.0	7998.3	6959.3
75°	308.7	334.5	421.5	594.5	945.3	1852.4	5139.4	6136.4	6504.3	6040.8	4937.8
77.5°	238.0	254.2	306.8	415.8	562.0	700.6	2750.8	3698.1	3888.3	3599.6	2569.2
80°	187.3	199.8	229.4	303.0	398.6	374.7	937.7	1675.6	1785.5	1497.8	825.8
82.5°	162.5	167.3	164.4	205.5	264.8	218.9	307.8	618.4	682.5	495.1	269.5
85°	117.6	130.9	136.7	127.1	140.5	110.9	126.2	218.9	240.9	215.1	152.0
87.5°	47.8	70.7	87.0	82.2	51.6	31.5	39.2	64.0	73.6	80.3	49.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P883599  
 CATALOG NUMBER: NAV-SB4A-735-U-T3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2017.7	2017.7	2017.7	2017.7	2017.7	2017.7	2017.7	2017.7	2017.7	2017.7	2017.7
2.5°	2019.6	2026.3	2031.1	2036.8	2040.7	2046.4	2057.9	2064.6	2065.5	2070.3	2069.3
5°	2037.8	2047.4	2057.9	2073.2	2090.4	2104.7	2126.7	2142.0	2147.7	2152.5	2151.5
7.5°	2077.0	2090.4	2109.5	2136.3	2161.1	2180.2	2207.0	2225.1	2243.3	2250.0	2251.0
10°	2135.3	2154.4	2182.1	2218.5	2245.2	2270.1	2297.8	2313.1	2331.2	2338.9	2342.7
12.5°	2207.9	2228.0	2264.3	2315.0	2339.8	2357.0	2366.6	2362.8	2366.6	2373.3	2375.2
15°	2291.1	2313.1	2354.2	2408.7	2425.9	2410.6	2389.5	2370.4	2367.6	2369.5	2376.2
17.5°	2389.5	2405.8	2453.6	2499.5	2487.0	2424.0	2378.1	2347.5	2332.2	2327.4	2334.1
20°	2527.2	2527.2	2566.4	2595.0	2511.9	2404.8	2333.2	2283.5	2251.9	2238.5	2235.7
22.5°	2694.5	2679.2	2704.0	2683.9	2507.1	2351.3	2251.9	2165.9	2118.1	2099.0	2096.1
25°	2906.6	2888.5	2881.8	2757.5	2472.7	2266.2	2104.7	2000.5	1958.5	1948.0	1949.9
27.5°	3226.8	3181.0	3094.0	2797.7	2409.6	2132.4	1932.7	1836.1	1812.2	1813.2	1816.1
30°	3653.1	3561.4	3348.2	2804.4	2306.4	1943.2	1756.8	1688.0	1676.5	1681.3	1697.5
32.5°	4047.9	3960.9	3608.2	2773.8	2147.7	1757.8	1599.1	1553.2	1536.0	1541.7	1549.4
35°	4357.6	4333.7	3849.1	2730.8	1952.7	1583.8	1457.6	1418.4	1385.0	1377.3	1383.1
37.5°	4650.1	4640.5	4029.7	2670.6	1759.7	1460.5	1343.9	1292.3	1243.5	1216.8	1217.7
40°	4971.2	4961.7	4148.3	2577.8	1588.6	1353.4	1241.6	1173.7	1113.5	1064.8	1069.6
42.5°	5332.5	5276.1	4204.6	2445.0	1443.3	1262.6	1158.5	1066.7	987.4	942.4	945.3
45°	5727.3	5600.1	4203.7	2275.8	1320.9	1179.5	1069.6	939.6	866.0	823.9	822.0
47.5°	6145.9	5909.8	4152.1	2088.5	1202.4	1087.7	931.9	832.5	783.8	758.0	752.2
50°	6577.9	6199.4	4064.1	1873.4	1081.0	983.5	845.9	778.0	740.8	716.9	708.3
52.5°	6984.2	6462.3	3958.0	1629.7	957.7	882.2	807.7	755.1	715.9	689.1	677.7
55°	7361.7	6688.8	3808.0	1380.2	857.4	814.4	789.5	745.5	700.6	669.1	656.6
57.5°	7697.2	6836.0	3549.0	1146.0	785.7	767.5	770.4	729.3	677.7	650.9	633.7
60°	7976.3	6944.0	3165.7	929.1	727.4	721.6	740.8	698.7	638.5	607.9	594.5
62.5°	8143.6	6942.1	2695.4	760.8	677.7	679.6	701.6	660.5	599.3	570.6	562.0
65°	8129.2	6772.0	2179.3	650.9	629.9	631.8	660.5	618.4	566.8	549.6	548.6
67.5°	7841.5	6357.1	1671.7	579.2	577.3	585.9	619.4	589.7	546.7	544.8	547.7
70°	7062.5	5496.0	1204.3	521.9	522.8	535.3	579.2	571.6	536.2	540.0	539.1
72.5°	5663.2	4190.3	808.6	461.7	462.6	482.7	541.0	557.2	525.7	576.4	584.0
75°	3771.7	2613.2	520.0	397.6	398.6	424.4	507.5	529.5	497.0	574.4	579.2
77.5°	1812.2	1174.7	376.6	334.5	334.5	358.4	438.7	474.1	423.4	446.4	409.1
80°	626.1	441.6	296.3	269.5	263.8	280.1	369.9	411.0	365.1	336.4	315.4
82.5°	246.6	229.4	238.0	209.3	190.2	200.7	287.7	339.3	268.6	242.8	241.8
85°	141.5	149.1	168.2	138.6	109.9	123.3	211.2	243.7	202.6	178.7	182.6
87.5°	38.2	52.6	77.4	71.7	49.7	52.6	100.4	134.8	116.6	89.8	92.7
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)