

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: P883659

Luminaire Tested: **NAV-SB4A-835-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883659
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-835-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 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: 15349 lumens
Efficiency: N/A
Efficacy: 134.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

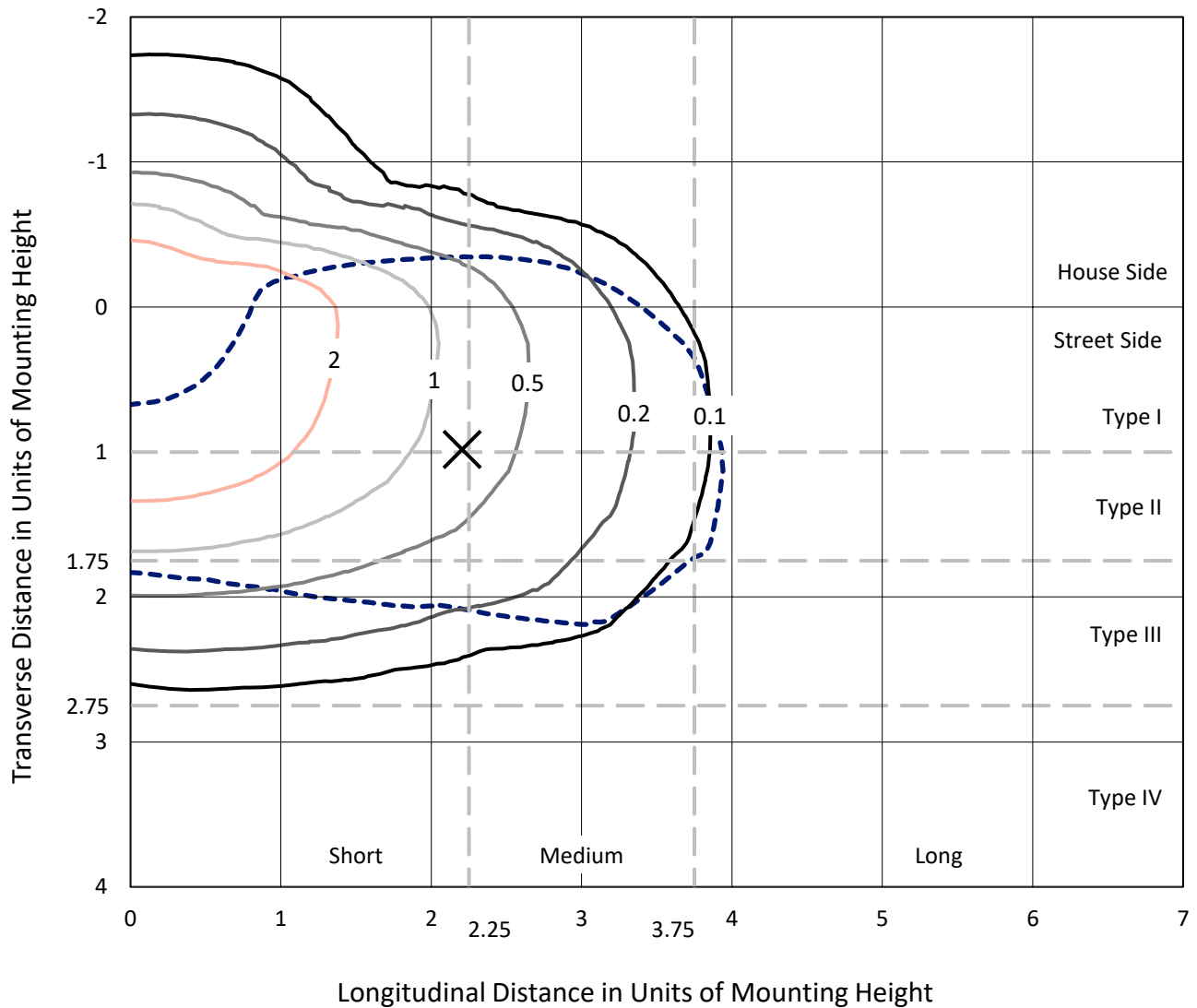
Input Watts (W): 114
Input Voltage (V): 120.0
Input Current (Ain): 0.952
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.206
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P883659
 CATALOG NUMBER: NAV-SB4A-835-U-T3

Iso-Footcandle Lines of Horizontal Illumination

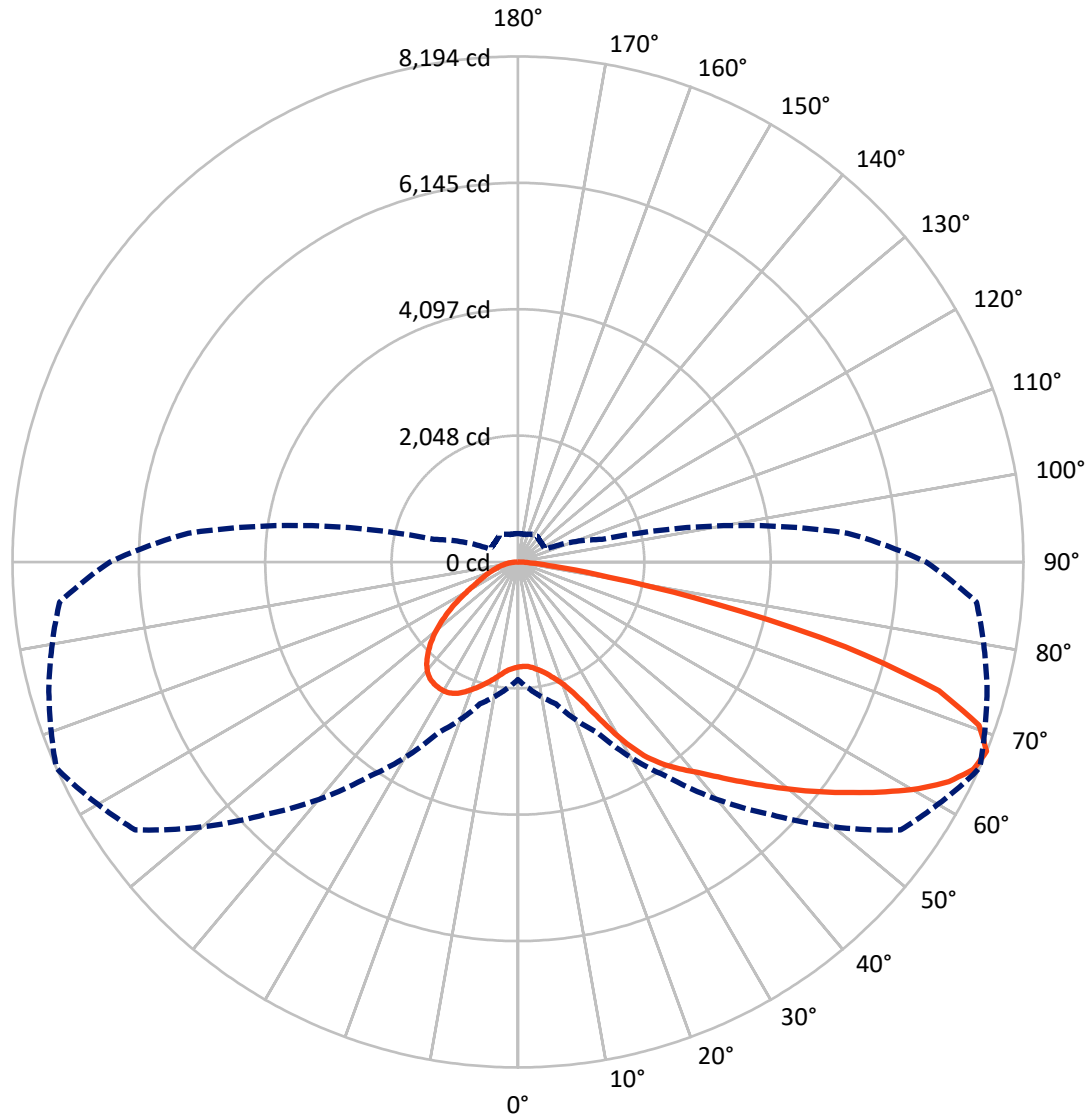
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc
 Type III - Short - N/A

REPORT NUMBER: P883659
CATALOG NUMBER: NAV-SB4A-835-U-T3

Luminous Intensity Polar Plot



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

REPORT NUMBER: P883659
 CATALOG NUMBER: NAV-SB4A-835-U-T3

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3816.5	0.0	3816.5
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	11532.5	0.0	11532.5
	% Fixture	75.1	0.0	75.1
Total	Lumens	15349.0	0.0	15349.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.8	1.1
10°-20°	557.6	3.6
20°-30°	1074.8	7.0
30°-40°	1884.6	12.3
40°-50°	2801.8	18.3
50°-60°	3551.5	23.1
60°-70°	3475.1	22.6
70°-80°	1657.6	10.8
80°-90°	177.2	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°	15349.0	100.0
0°-180°	15349.0	100.0

Coefficient of Utilization



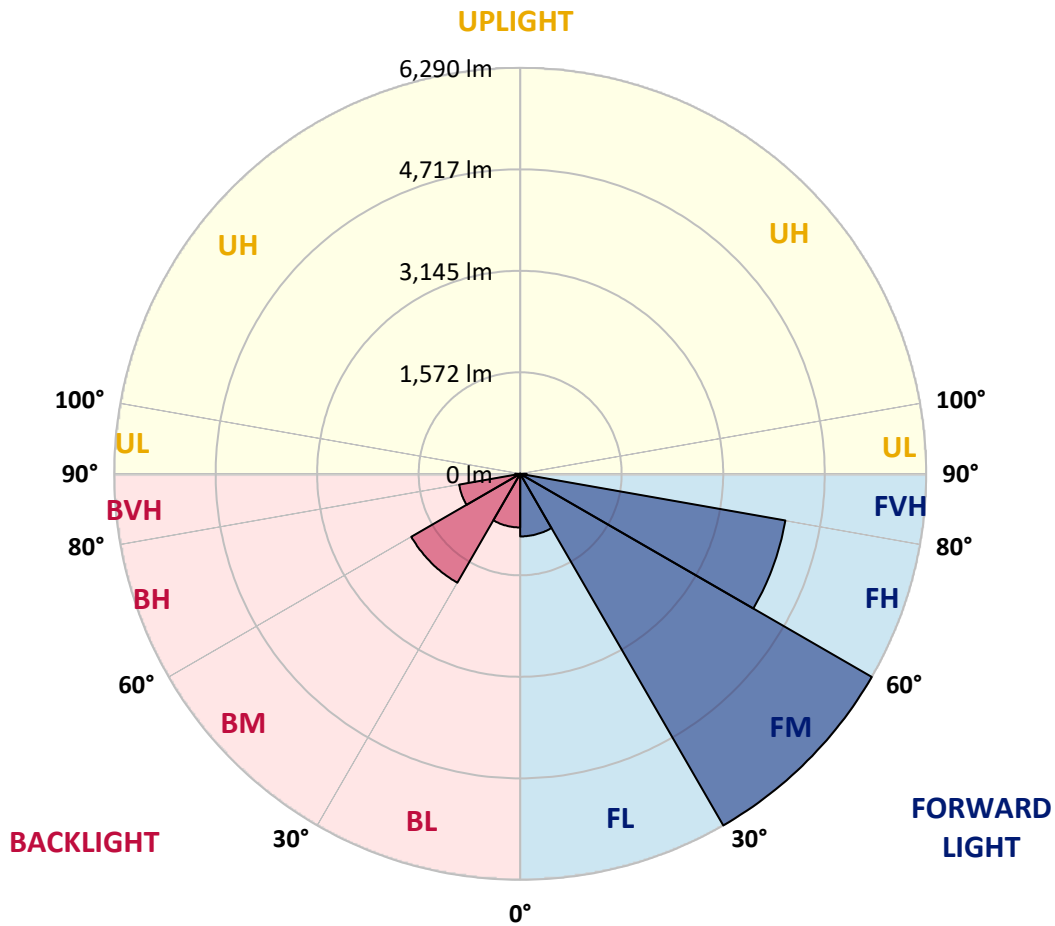
REPORT NUMBER: P883659
 CATALOG NUMBER: NAV-SB4A-835-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	969.9	6.3			
FM (30°-60°)	6289.9	41.0			
FH (60°-80°)	4172.3	27.2			G2/5000
FVH (80°-90°)	100.4	0.7			G2/225
BL (0°-30°)	831.4	5.4	B2/1000		
BM (30°-60°)	1948.0	12.7	B2/2500		
BH (60°-80°)	960.4	6.3	B2/1000		G2/1000
BVH (80°-90°)	76.7	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Short



REPORT NUMBER: P883659
 CATALOG NUMBER: NAV-SB4A-835-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1702.4	1702.4	1702.4	1702.4	1702.4	1702.4	1702.4	1702.4	1702.4	1702.4	1702.4
2.5°	1684.7	1694.3	1691.9	1687.9	1687.1	1688.7	1691.1	1693.5	1692.7	1696.8	1703.2
5°	1679.8	1689.5	1688.7	1688.7	1691.9	1698.4	1702.4	1706.4	1702.4	1707.2	1716.1
7.5°	1683.1	1690.3	1693.5	1696.8	1704.8	1716.9	1726.6	1735.5	1730.6	1736.3	1747.6
10°	1724.2	1729.8	1733.1	1733.1	1738.7	1752.4	1762.1	1778.2	1774.2	1783.1	1797.6
12.5°	1799.2	1804.8	1804.8	1801.6	1805.6	1814.5	1817.7	1835.5	1828.2	1842.7	1857.2
15°	1891.1	1902.4	1893.5	1887.9	1889.5	1898.4	1897.6	1911.3	1904.0	1916.1	1929.0
17.5°	1992.7	2007.2	1992.7	1991.9	1988.7	1998.4	1999.2	2011.3	1998.4	2007.2	2016.1
20°	2112.9	2133.0	2121.0	2125.0	2117.7	2121.8	2125.8	2143.5	2123.4	2129.8	2127.4
22.5°	2282.2	2306.4	2293.5	2308.9	2304.0	2300.8	2300.0	2331.4	2300.0	2302.4	2279.0
25°	2529.0	2558.0	2535.5	2556.4	2556.4	2566.9	2579.0	2619.3	2566.9	2551.6	2491.1
27.5°	2893.5	2922.6	2878.2	2891.1	2887.1	2912.9	2900.0	3000.0	2943.5	2918.5	2796.8
30°	3332.2	3383.8	3300.0	3296.8	3292.7	3333.8	3352.4	3418.5	3361.3	3336.3	3189.5
32.5°	3806.4	3860.5	3760.5	3731.4	3716.1	3741.1	3725.8	3779.0	3739.5	3700.8	3519.3
35°	4308.0	4361.3	4266.1	4209.6	4148.4	4095.9	4041.1	4054.8	4017.7	3958.8	3770.9
37.5°	4782.2	4879.8	4779.0	4718.5	4605.6	4503.2	4350.0	4286.3	4251.6	4197.6	4008.0
40°	5265.3	5320.9	5244.3	5192.7	5070.1	4909.6	4664.5	4529.8	4483.0	4430.6	4270.1
42.5°	5620.9	5674.2	5633.0	5597.5	5501.6	5315.3	4998.4	4829.8	4762.1	4703.2	4566.9
45°	5903.2	5942.7	5916.9	5929.8	5888.7	5708.0	5344.3	5151.6	5081.4	5009.6	4902.4
47.5°	6016.9	6058.8	6100.0	6176.6	6246.7	6113.7	5716.1	5500.0	5425.8	5352.4	5246.7
50°	6004.0	6046.7	6166.1	6329.0	6546.7	6502.4	6108.0	5870.9	5802.4	5718.5	5620.9
52.5°	5900.8	5949.2	6102.4	6373.3	6720.1	6793.5	6507.2	6254.0	6189.5	6089.5	5991.9
55°	5629.8	5658.8	5888.7	6272.5	6761.2	6996.7	6898.3	6662.0	6597.5	6458.0	6351.6
57.5°	5127.4	5169.3	5504.0	6000.8	6658.0	7134.6	7241.9	7091.1	7029.0	6828.2	6716.9
60°	4471.7	4538.7	4921.7	5544.3	6395.1	7133.8	7554.0	7512.8	7461.2	7192.7	7076.6
62.5°	3729.8	3807.2	4175.8	4899.2	5935.4	6931.4	7749.1	7866.1	7839.5	7529.0	7380.6
65°	2864.5	2917.7	3284.7	4064.5	5220.1	6496.7	7771.7	8107.2	8112.0	7784.6	7539.5
67.5°	1907.2	2060.5	2379.0	3050.0	4262.1	5786.2	7573.3	8146.7	8193.5	7872.5	7459.6
70°	930.6	1132.2	1444.3	1982.2	3050.0	4696.7	7054.8	7822.5	7926.6	7616.1	6983.8
72.5°	386.3	451.6	621.8	978.2	1750.8	3169.3	6012.9	6943.5	7136.2	6748.3	5871.7
75°	260.5	282.3	355.6	501.6	797.6	1562.9	4336.3	5177.4	5487.9	5096.7	4166.1
77.5°	200.8	214.5	258.9	350.8	474.2	591.1	2321.0	3120.1	3280.6	3037.1	2167.7
80°	158.1	168.5	193.5	255.6	336.3	316.1	791.1	1413.7	1506.4	1263.7	696.8
82.5°	137.1	141.1	138.7	173.4	223.4	184.7	259.7	521.8	575.8	417.7	227.4
85°	99.2	110.5	115.3	107.3	118.5	93.5	106.5	184.7	203.2	181.5	128.2
87.5°	40.3	59.7	73.4	69.4	43.5	26.6	33.1	54.0	62.1	67.7	41.9
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: P883659
 CATALOG NUMBER: NAV-SB4A-835-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1702.4	1702.4	1702.4	1702.4	1702.4	1702.4	1702.4	1702.4	1702.4	1702.4	1702.4
2.5°	1704.0	1709.7	1713.7	1718.5	1721.8	1726.6	1736.3	1741.9	1742.7	1746.8	1746.0
5°	1719.3	1727.4	1736.3	1749.2	1763.7	1775.8	1794.3	1807.2	1812.1	1816.1	1815.3
7.5°	1752.4	1763.7	1779.8	1802.4	1823.4	1839.5	1862.1	1877.4	1892.7	1898.4	1899.2
10°	1801.6	1817.7	1841.1	1871.8	1894.3	1915.3	1938.7	1951.6	1966.9	1973.4	1976.6
12.5°	1862.9	1879.8	1910.5	1953.2	1974.2	1988.7	1996.8	1993.5	1996.8	2002.4	2004.0
15°	1933.1	1951.6	1986.3	2032.2	2046.8	2033.9	2016.1	2000.0	1997.6	1999.2	2004.8
17.5°	2016.1	2029.8	2070.1	2108.9	2098.4	2045.1	2006.4	1980.6	1967.7	1963.7	1969.3
20°	2132.2	2132.2	2165.3	2189.5	2119.3	2029.0	1968.5	1926.6	1900.0	1888.7	1886.3
22.5°	2273.4	2260.5	2281.4	2264.5	2115.3	1983.9	1900.0	1827.4	1787.1	1771.0	1768.5
25°	2452.4	2437.1	2431.4	2326.6	2086.3	1912.1	1775.8	1687.9	1652.4	1643.5	1645.1
27.5°	2722.6	2683.9	2610.5	2360.5	2033.0	1799.2	1630.6	1549.2	1529.0	1529.8	1532.2
30°	3082.2	3004.8	2825.0	2366.1	1946.0	1639.5	1482.2	1424.2	1414.5	1418.5	1432.2
32.5°	3415.3	3341.9	3044.3	2340.3	1812.1	1483.1	1349.2	1310.5	1296.0	1300.8	1307.2
35°	3676.6	3656.4	3247.6	2304.0	1647.6	1336.3	1229.8	1196.8	1168.5	1162.1	1166.9
37.5°	3923.4	3915.3	3400.0	2253.2	1484.7	1232.2	1133.9	1090.3	1049.2	1026.6	1027.4
40°	4194.3	4186.3	3500.0	2175.0	1340.3	1141.9	1047.6	990.3	939.5	898.4	902.4
42.5°	4499.2	4451.6	3547.6	2062.9	1217.7	1065.3	977.4	900.0	833.1	795.2	797.6
45°	4832.2	4725.0	3546.7	1920.1	1114.5	995.2	902.4	792.7	730.6	695.2	693.5
47.5°	5185.4	4986.3	3503.2	1762.1	1014.5	917.7	786.3	702.4	661.3	639.5	634.7
50°	5550.0	5230.6	3429.0	1580.6	912.1	829.8	713.7	656.4	625.0	604.8	597.6
52.5°	5892.7	5452.4	3339.5	1375.0	808.1	744.3	681.4	637.1	604.0	581.4	571.8
55°	6211.2	5643.5	3212.9	1164.5	723.4	687.1	666.1	629.0	591.1	564.5	554.0
57.5°	6494.3	5767.7	2994.3	966.9	662.9	647.6	650.0	615.3	571.8	549.2	534.7
60°	6729.8	5858.8	2670.9	783.9	613.7	608.9	625.0	589.5	538.7	512.9	501.6
62.5°	6870.9	5857.2	2274.2	641.9	571.8	573.4	591.9	557.3	505.6	481.4	474.2
65°	6858.8	5713.7	1838.7	549.2	531.4	533.1	557.3	521.8	478.2	463.7	462.9
67.5°	6616.1	5363.7	1410.5	488.7	487.1	494.4	522.6	497.6	461.3	459.7	462.1
70°	5958.8	4637.1	1016.1	440.3	441.1	451.6	488.7	482.3	452.4	455.6	454.8
72.5°	4778.2	3535.5	682.3	389.5	390.3	407.3	456.4	470.2	443.5	486.3	492.7
75°	3182.2	2204.8	438.7	335.5	336.3	358.1	428.2	446.8	419.4	484.7	488.7
77.5°	1529.0	991.1	317.7	282.3	282.3	302.4	370.2	400.0	357.3	376.6	345.2
80°	528.2	372.6	250.0	227.4	222.6	236.3	312.1	346.8	308.1	283.9	266.1
82.5°	208.1	193.5	200.8	176.6	160.5	169.4	242.7	286.3	226.6	204.8	204.0
85°	119.4	125.8	141.9	116.9	92.7	104.0	178.2	205.6	171.0	150.8	154.0
87.5°	32.3	44.4	65.3	60.5	41.9	44.4	84.7	113.7	98.4	75.8	78.2
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)