

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: P883069

Luminaire Tested: **NAV-SB3B-727-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883069
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-SB3B-727-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15317 lumens
Efficiency: N/A
Efficacy: 140.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

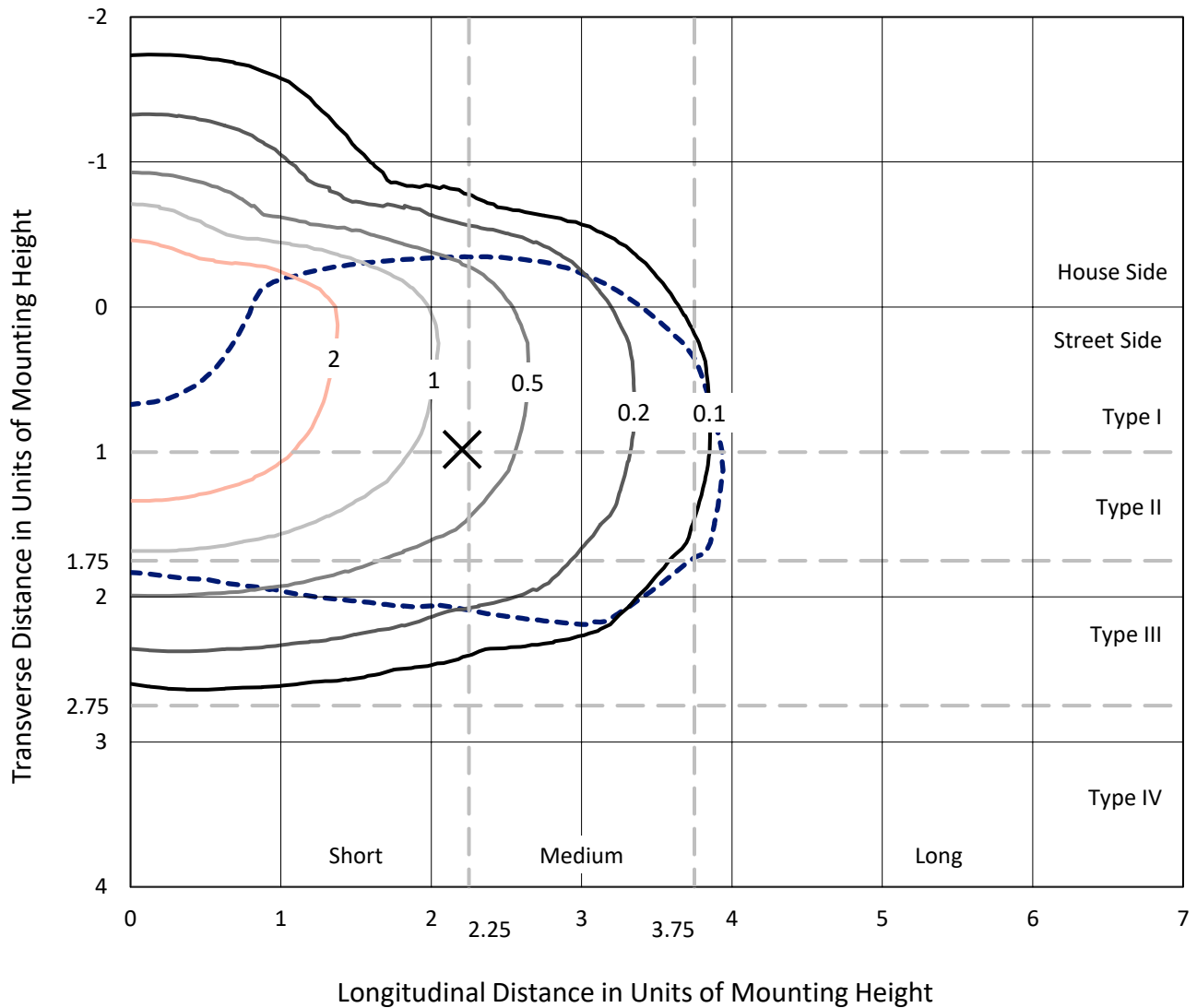
Input Watts (W): 109.2
Input Voltage (V): 120.0
Input Current (Ain): 0.919
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

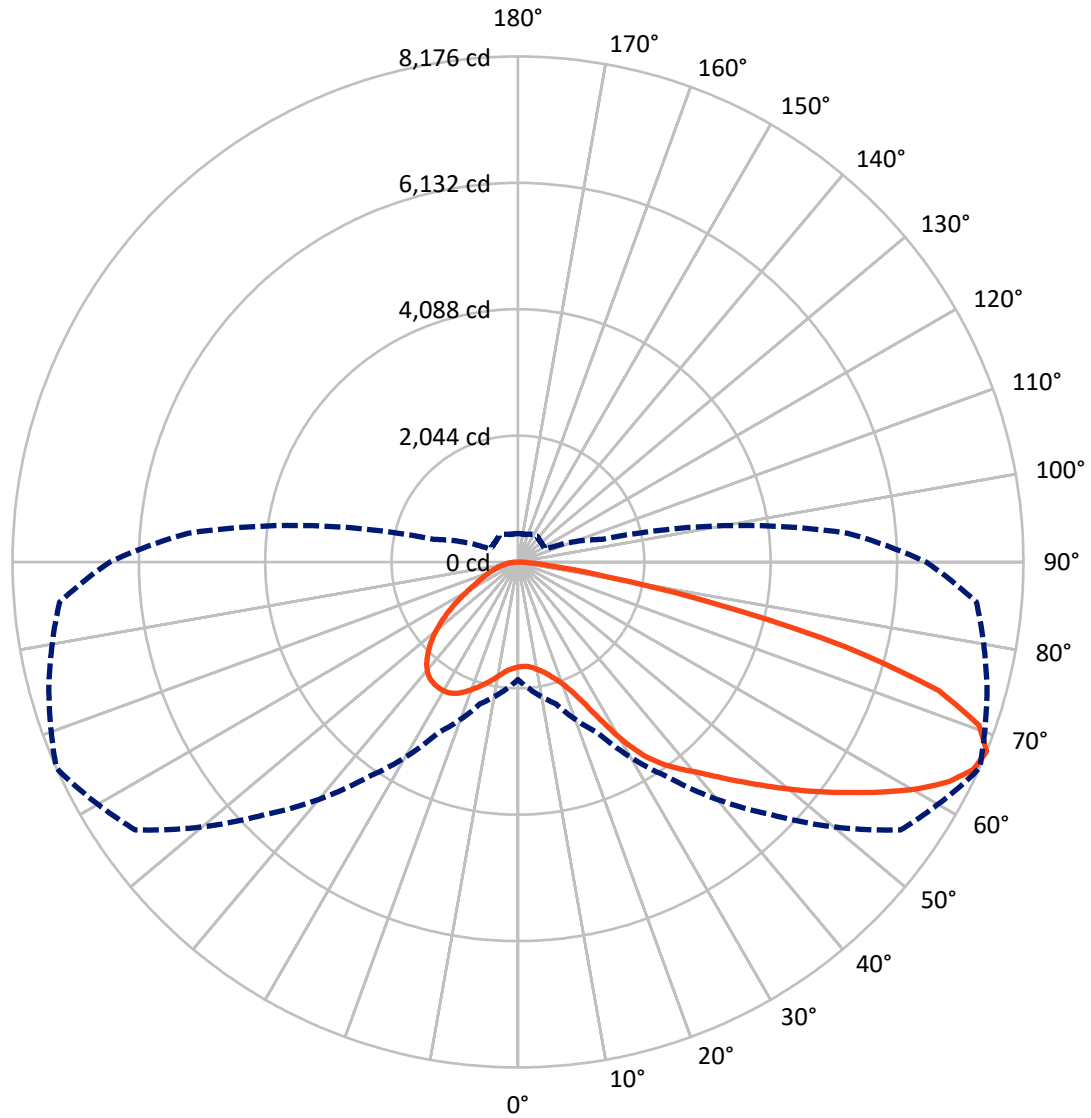
✕ Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3808.5	0.0	3808.5
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	11508.5	0.0	11508.5
	% Fixture	75.1	0.0	75.1
Total	Lumens	15317.0	0.0	15317.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.4	1.1
10°-20°	556.5	3.6
20°-30°	1072.6	7.0
30°-40°	1880.7	12.3
40°-50°	2795.9	18.3
50°-60°	3544.1	23.1
60°-70°	3467.8	22.6
70°-80°	1654.2	10.8
80°-90°	176.8	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°	15317.0	100.0
0°-180°	15317.0	100.0

Coefficient of Utilization



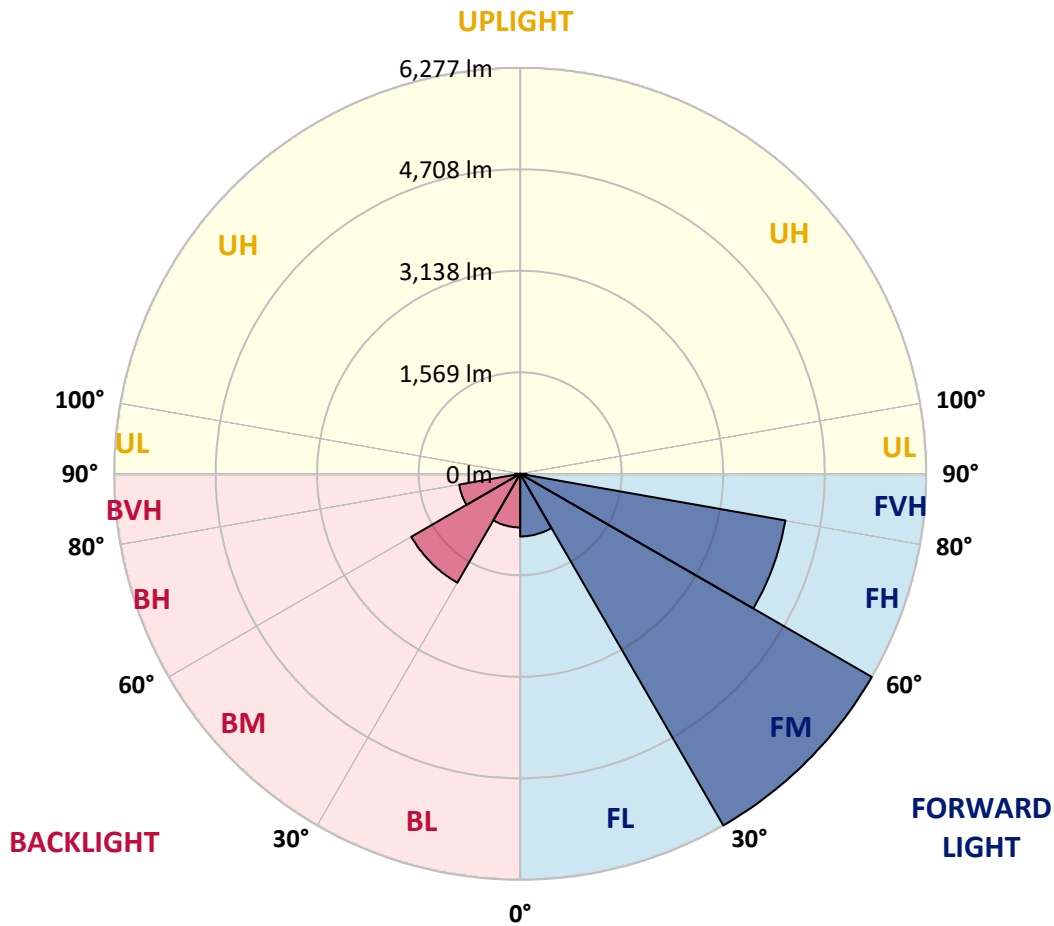
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	967.9	6.3			
FM (30°-60°)	6276.8	41.0			
FH (60°-80°)	4163.6	27.2			G2/5000
FVH (80°-90°)	100.2	0.7			G2/225
BL (0°-30°)	829.6	5.4	B2/1000		
BM (30°-60°)	1943.9	12.7	B2/2500		
BH (60°-80°)	958.4	6.3	B2/1000		G2/1000
BVH (80°-90°)	76.6	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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1698.9	1698.9	1698.9	1698.9	1698.9	1698.9	1698.9	1698.9	1698.9	1698.9	1698.9
2.5°	1681.2	1690.8	1688.4	1684.4	1683.6	1685.2	1687.6	1690.0	1689.2	1693.2	1699.7
5°	1676.3	1686.0	1685.2	1685.2	1688.4	1694.8	1698.9	1702.9	1698.9	1703.7	1712.5
7.5°	1679.5	1686.8	1690.0	1693.2	1701.3	1713.3	1723.0	1731.9	1727.0	1732.7	1743.9
10°	1720.6	1726.2	1729.4	1729.4	1735.1	1748.8	1758.4	1774.5	1770.5	1779.3	1793.8
12.5°	1795.4	1801.1	1801.1	1797.8	1801.9	1810.7	1813.9	1831.6	1824.4	1838.9	1853.4
15°	1887.2	1898.4	1889.6	1884.0	1885.6	1894.4	1893.6	1907.3	1900.0	1912.1	1925.0
17.5°	1988.6	2003.1	1988.6	1987.8	1984.5	1994.2	1995.0	2007.1	1994.2	2003.1	2011.9
20°	2108.5	2128.6	2116.5	2120.6	2113.3	2117.3	2121.4	2139.1	2118.9	2125.4	2123.0
22.5°	2277.5	2301.6	2288.8	2304.0	2299.2	2296.0	2295.2	2326.6	2295.2	2297.6	2274.3
25°	2523.7	2552.7	2530.2	2551.1	2551.1	2561.6	2573.6	2613.9	2561.6	2546.3	2485.9
27.5°	2887.5	2916.5	2872.2	2885.1	2881.1	2906.8	2893.9	2993.7	2937.4	2912.4	2790.9
30°	3325.3	3376.8	3293.1	3289.9	3285.9	3326.9	3345.4	3411.4	3354.3	3329.3	3182.8
32.5°	3798.5	3852.4	3752.6	3723.6	3708.4	3733.3	3718.0	3771.1	3731.7	3693.1	3512.0
35°	4299.1	4352.2	4257.2	4200.9	4139.7	4087.4	4032.7	4046.4	4009.3	3950.6	3763.1
37.5°	4772.3	4869.6	4769.0	4708.7	4596.0	4493.8	4340.9	4277.3	4242.7	4188.8	3999.7
40°	5254.3	5309.8	5233.4	5181.9	5059.6	4899.4	4654.8	4520.4	4473.7	4421.4	4261.2
42.5°	5609.2	5662.3	5621.3	5585.9	5490.1	5304.2	4987.9	4819.7	4752.1	4693.4	4557.4
45°	5890.9	5930.3	5904.6	5917.4	5876.4	5696.1	5333.2	5140.8	5070.8	4999.2	4892.2
47.5°	6004.3	6046.2	6087.2	6163.7	6233.7	6100.9	5704.2	5488.5	5414.5	5341.2	5235.8
50°	5991.5	6034.1	6153.2	6315.8	6533.1	6488.8	6095.3	5858.7	5790.3	5706.6	5609.2
52.5°	5888.5	5936.7	6089.7	6360.1	6706.1	6779.3	6493.6	6240.9	6176.6	6076.8	5979.4
55°	5618.1	5647.0	5876.4	6259.5	6747.1	6982.1	6884.0	6648.2	6583.8	6444.6	6338.3
57.5°	5116.7	5158.5	5492.5	5988.3	6644.1	7119.8	7226.8	7076.3	7014.3	6813.9	6702.9
60°	4462.4	4529.2	4911.5	5532.8	6381.8	7118.9	7538.2	7497.2	7445.7	7177.7	7061.8
62.5°	3722.0	3799.3	4167.1	4888.9	5923.1	6917.0	7733.0	7849.7	7823.1	7513.3	7365.2
65°	2858.5	2911.6	3277.8	4056.0	5209.2	6483.2	7755.5	8090.3	8095.1	7768.4	7523.7
67.5°	1903.3	2056.2	2374.1	3043.6	4253.2	5774.2	7557.5	8129.7	8176.4	7856.1	7444.1
70°	928.7	1129.9	1441.3	1978.1	3043.6	4686.9	7040.1	7806.2	7910.0	7600.2	6969.3
72.5°	385.5	450.7	620.5	976.2	1747.1	3162.7	6000.3	6929.0	7121.4	6734.3	5859.5
75°	259.9	281.7	354.9	500.6	795.9	1559.6	4327.2	5166.6	5476.4	5086.1	4157.4
77.5°	200.4	214.1	258.3	350.1	473.2	589.9	2316.1	3113.6	3273.8	3030.7	2163.2
80°	157.7	168.2	193.1	255.1	335.6	315.5	789.5	1410.8	1503.3	1261.1	695.3
82.5°	136.8	140.8	138.4	173.0	222.9	184.3	259.1	520.7	574.6	416.9	226.9
85°	99.0	110.3	115.1	107.0	118.3	93.4	106.2	184.3	202.8	181.1	128.0
87.5°	40.2	59.6	73.2	69.2	43.5	26.6	33.0	53.9	62.0	67.6	41.8
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°	1698.9	1698.9	1698.9	1698.9	1698.9	1698.9	1698.9	1698.9	1698.9	1698.9	1698.9
2.5°	1700.5	1706.1	1710.1	1715.0	1718.2	1723.0	1732.7	1738.3	1739.1	1743.1	1742.3
5°	1715.8	1723.8	1732.7	1745.5	1760.0	1772.1	1790.6	1803.5	1808.3	1812.3	1811.5
7.5°	1748.8	1760.0	1776.1	1798.6	1819.6	1835.7	1858.2	1873.5	1888.8	1894.4	1895.2
10°	1797.8	1813.9	1837.3	1867.9	1890.4	1911.3	1934.7	1947.5	1962.8	1969.3	1972.5
12.5°	1859.0	1875.9	1906.5	1949.1	1970.1	1984.5	1992.6	1989.4	1992.6	1998.2	1999.8
15°	1929.0	1947.5	1982.1	2028.0	2042.5	2029.6	2011.9	1995.8	1993.4	1995.0	2000.6
17.5°	2011.9	2025.6	2065.8	2104.5	2094.0	2040.9	2002.3	1976.5	1963.6	1959.6	1965.2
20°	2127.8	2127.8	2160.8	2184.9	2114.9	2024.8	1964.4	1922.6	1896.0	1884.8	1882.3
22.5°	2268.6	2255.8	2276.7	2259.8	2110.9	1979.7	1896.0	1823.6	1783.4	1767.3	1764.8
25°	2447.3	2432.0	2426.4	2321.7	2081.9	1908.1	1772.1	1684.4	1649.0	1640.1	1641.7
27.5°	2716.9	2678.3	2605.0	2355.5	2028.8	1795.4	1627.2	1546.0	1525.8	1526.6	1529.1
30°	3075.8	2998.6	2819.1	2361.2	1941.9	1636.1	1479.2	1421.2	1411.6	1415.6	1429.3
32.5°	3408.2	3334.9	3038.0	2335.4	1808.3	1480.0	1346.4	1307.7	1293.3	1298.1	1304.5
35°	3668.9	3648.8	3240.8	2299.2	1644.1	1333.5	1227.3	1194.3	1166.1	1159.7	1164.5
37.5°	3915.2	3907.1	3392.9	2248.5	1481.6	1229.7	1131.5	1088.0	1047.0	1024.5	1025.3
40°	4185.6	4177.5	3492.7	2170.4	1337.5	1139.5	1045.4	988.3	937.6	896.5	900.5
42.5°	4489.8	4442.3	3540.2	2058.6	1215.2	1063.1	975.4	898.1	831.3	793.5	795.9
45°	4822.1	4715.1	3539.4	1916.1	1112.2	993.1	900.5	791.1	729.1	693.7	692.1
47.5°	5174.6	4975.9	3495.9	1758.4	1012.4	915.8	784.6	700.9	659.9	638.2	633.3
50°	5538.4	5219.7	3421.9	1577.3	910.2	828.1	712.2	655.1	623.7	603.6	596.3
52.5°	5880.4	5441.0	3332.5	1372.1	806.4	742.8	680.0	635.8	602.8	580.2	570.6
55°	6198.3	5631.7	3206.2	1162.1	721.9	685.7	664.7	627.7	589.9	563.3	552.9
57.5°	6480.8	5755.7	2988.1	964.9	661.5	646.2	648.6	614.0	570.6	548.0	533.6
60°	6715.8	5846.6	2665.4	782.2	612.4	607.6	623.7	588.3	537.6	511.8	500.6
62.5°	6856.6	5845.0	2269.4	640.6	570.6	572.2	590.7	556.1	504.6	480.4	473.2
65°	6844.5	5701.8	1834.9	548.0	530.3	531.9	556.1	520.7	477.2	462.7	461.9
67.5°	6602.3	5352.5	1407.5	487.7	486.1	493.3	521.5	496.5	460.3	458.7	461.1
70°	5946.4	4627.4	1014.0	439.4	440.2	450.7	487.7	481.2	451.5	454.7	453.9
72.5°	4768.2	3528.1	680.8	388.7	389.5	406.4	455.5	469.2	442.6	485.3	491.7
75°	3175.6	2200.2	437.8	334.8	335.6	357.3	427.3	445.8	418.5	483.7	487.7
77.5°	1525.8	989.1	317.1	281.7	281.7	301.8	369.4	399.2	356.5	375.8	344.4
80°	527.1	371.8	249.5	226.9	222.1	235.8	311.4	346.0	307.4	283.3	265.6
82.5°	207.6	193.1	200.4	176.2	160.1	169.0	242.2	285.7	226.1	204.4	203.6
85°	119.1	125.5	141.6	116.7	92.5	103.8	177.9	205.2	170.6	150.5	153.7
87.5°	32.2	44.3	65.2	60.4	41.8	44.3	84.5	113.5	98.2	75.6	78.1
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)