

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: P962608

Luminaire Tested: **NAV-SB2C-830-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962608
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2C-830-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13673.5 lumens
Efficiency: N/A
Efficacy: 135.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G3

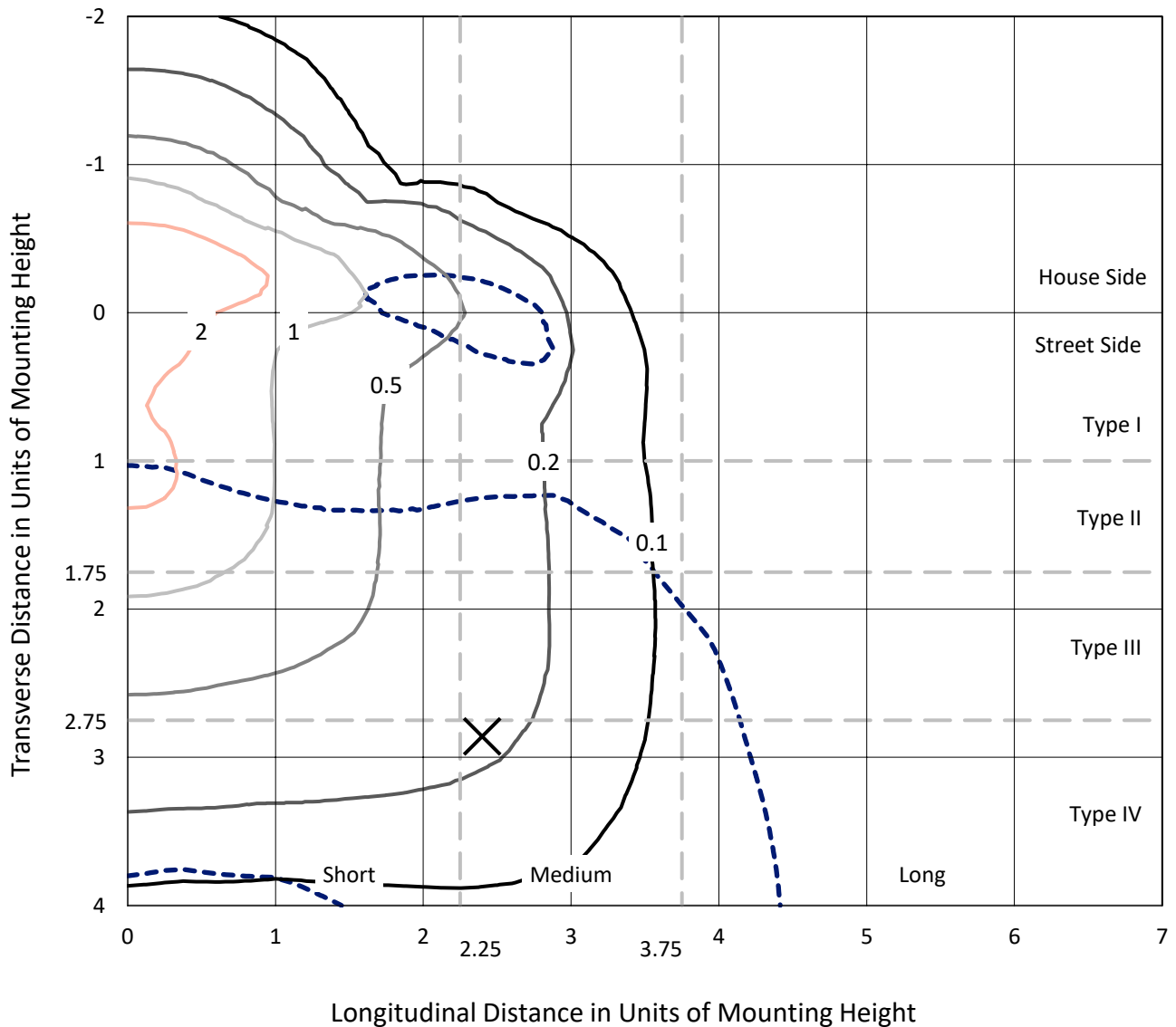
Input Watts (W): 100.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

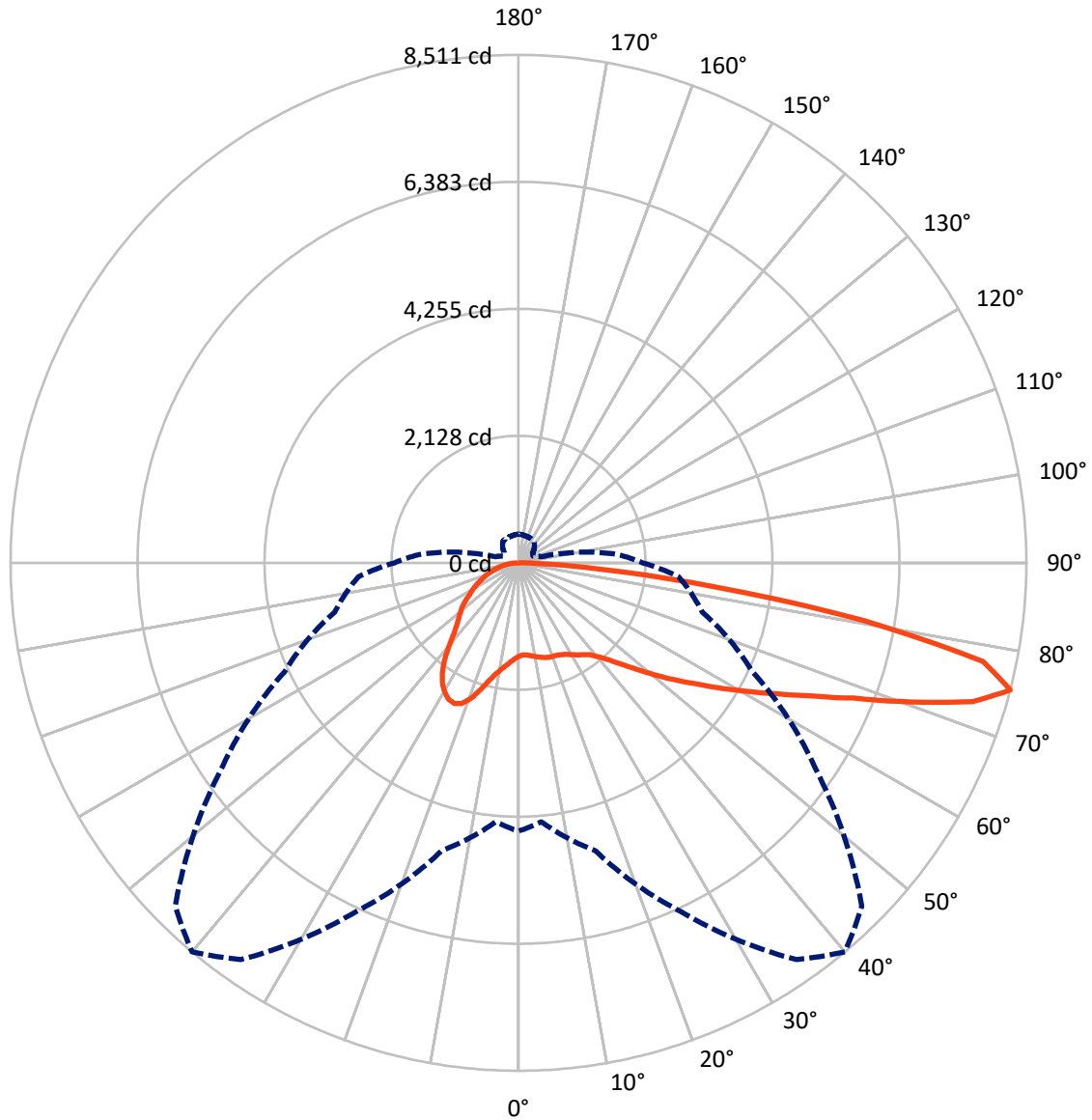
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4236.5	0.0	4236.5
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	9437.0	0.0	9437.0
	% Fixture	69.0	0.0	69.0
Total	Lumens	13673.5	0.0	13673.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.1	1.1
10°-20°	524.0	3.8
20°-30°	956.8	7.0
30°-40°	1357.0	9.9
40°-50°	1832.4	13.4
50°-60°	2465.1	18.0
60°-70°	3128.7	22.9
70°-80°	2839.5	20.8
80°-90°	413.9	3.0
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°	13673.5	100.0
0°-180°	13673.5	100.0

Coefficient of Utilization

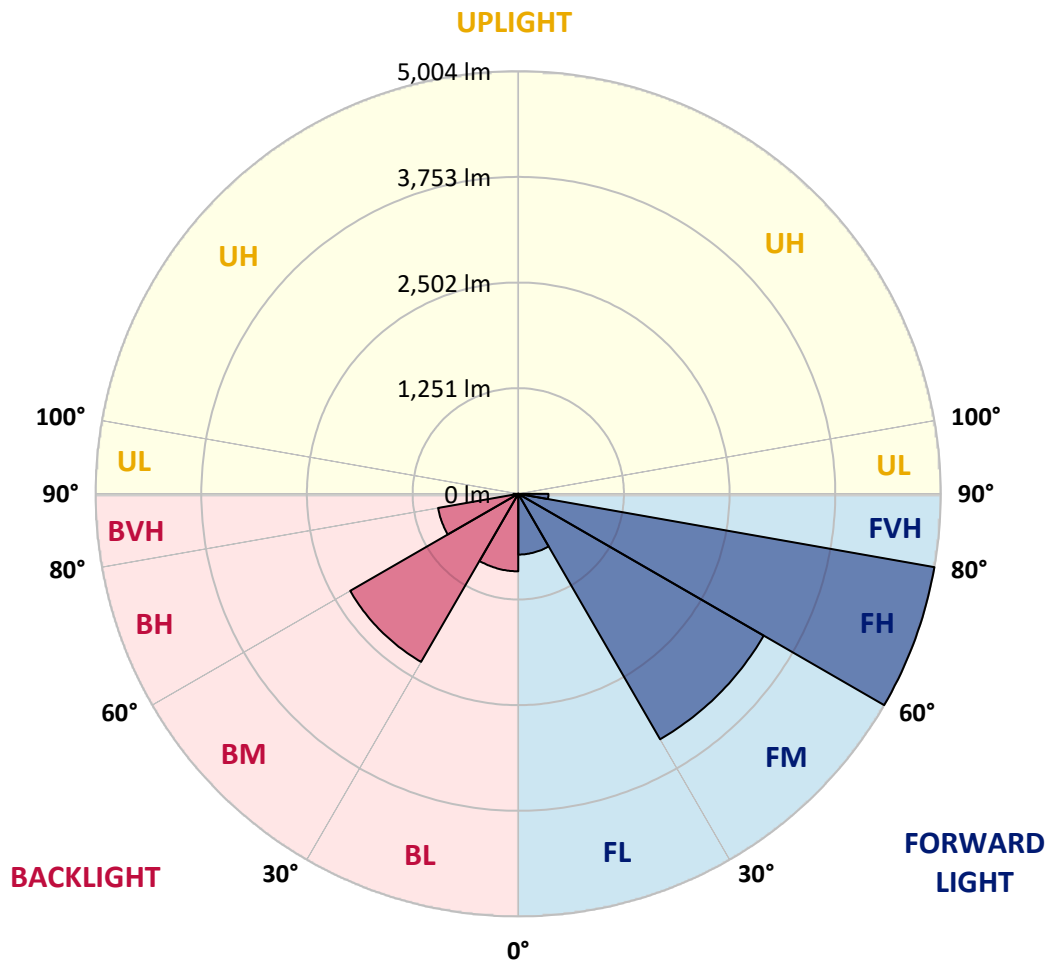


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	719.2	5.3			
FM (30°-60°)	3356.5	24.5			
FH (60°-80°)	5004.3	36.6			G3/7500
FVH (80°-90°)	356.9	2.6			G3/500
BL (0°-30°)	917.7	6.7	B2/1000		
BM (30°-60°)	2297.9	16.8	B2/2500		
BH (60°-80°)	963.9	7.0	B2/1000		G2/1000
BVH (80°-90°)	57.0	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3
 Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1563.5	1563.5	1563.5	1563.5	1563.5	1563.5	1563.5	1563.5	1563.5	1563.5	1563.5
2.5°	1539.7	1548.4	1546.2	1543.2	1543.2	1544.0	1543.2	1548.4	1553.4	1558.5	1566.5
5°	1555.6	1564.4	1559.9	1556.4	1553.4	1552.7	1550.5	1549.8	1552.7	1559.2	1570.1
7.5°	1586.8	1595.5	1589.0	1582.4	1576.7	1573.8	1570.8	1566.5	1564.4	1567.9	1583.2
10°	1621.6	1630.3	1622.4	1610.7	1601.3	1597.7	1594.8	1590.4	1587.5	1589.7	1606.4
12.5°	1656.4	1665.1	1654.2	1638.3	1626.0	1623.8	1620.1	1618.7	1618.0	1617.2	1634.0
15°	1689.1	1696.3	1682.5	1663.7	1650.7	1647.0	1643.4	1645.5	1649.1	1653.5	1672.4
17.5°	1714.4	1721.7	1701.4	1676.7	1664.4	1663.0	1660.8	1668.0	1678.1	1689.1	1712.3
20°	1737.7	1744.9	1718.8	1685.4	1671.0	1671.0	1671.7	1686.8	1701.4	1717.3	1749.3
22.5°	1770.3	1776.1	1744.1	1698.4	1677.4	1678.8	1684.7	1700.0	1718.1	1739.8	1784.0
25°	1818.9	1823.2	1784.0	1723.1	1699.2	1703.6	1708.7	1715.8	1733.3	1758.7	1818.1
27.5°	1897.2	1900.9	1849.3	1766.7	1730.4	1737.7	1744.9	1739.8	1747.8	1769.6	1845.7
30°	2007.5	2009.6	1944.3	1834.9	1783.3	1787.0	1788.4	1767.4	1752.1	1769.6	1865.3
32.5°	2137.9	2137.2	2059.6	1917.5	1843.6	1839.9	1827.6	1786.3	1750.7	1765.9	1882.7
35°	2340.3	2332.3	2232.2	2033.5	1911.7	1889.2	1860.2	1807.3	1758.0	1762.3	1897.9
37.5°	2675.4	2650.6	2512.2	2223.5	2013.2	1955.9	1913.2	1841.3	1773.9	1760.8	1916.0
40°	3053.2	3022.0	2869.7	2483.9	2165.5	2073.4	2004.5	1889.9	1800.0	1767.4	1942.9
42.5°	3501.4	3457.1	3293.2	2790.7	2358.4	2225.0	2121.2	1951.6	1838.4	1788.4	1979.2
45°	4051.8	3993.1	3761.0	3136.6	2601.3	2423.7	2285.1	2045.2	1897.2	1829.0	2033.5
47.5°	4608.1	4622.5	4292.6	3532.6	2893.0	2668.8	2490.4	2185.8	1982.8	1894.3	2121.2
50°	5199.1	5209.3	4821.3	3971.4	3223.6	2945.8	2721.1	2343.1	2101.7	1987.1	2252.5
52.5°	5660.4	5661.8	5301.4	4430.4	3568.1	3250.5	2969.8	2523.0	2239.5	2110.4	2427.3
55°	5949.0	5945.4	5637.9	4864.8	3964.1	3570.3	3245.4	2727.5	2407.7	2255.4	2647.1
57.5°	6158.6	6147.7	5870.0	5238.3	4386.2	3948.1	3557.3	2959.7	2606.5	2428.0	2936.4
60°	6238.4	6231.9	6027.3	5561.0	4830.0	4365.9	3916.9	3219.3	2832.0	2631.8	3308.5
62.5°	6268.8	6281.2	6181.8	5873.6	5305.0	4828.6	4312.2	3529.7	3085.9	2862.4	3700.9
65°	6376.2	6398.7	6378.4	6282.6	5841.7	5370.3	4836.6	3898.8	3362.8	3109.7	4110.6
67.5°	6588.7	6611.1	6619.9	6772.2	6497.3	6045.4	5490.7	4358.6	3687.0	3366.5	4418.8
70°	6583.6	6577.0	6730.8	7161.6	7318.2	6980.2	6372.5	4924.3	4073.6	3579.7	4457.9
72.5°	5992.6	5940.3	6303.6	7157.3	8001.4	7956.5	7449.5	5653.8	4407.2	3605.8	3868.3
75°	4495.6	4356.5	4998.2	6450.1	8115.2	8510.5	8134.1	6106.3	4328.2	3185.9	2692.1
77.5°	1922.6	1782.6	2539.0	4774.9	7263.2	7955.7	7506.1	5327.5	3455.0	2106.8	1322.0
80°	503.3	502.6	767.3	2164.8	4939.5	5875.0	5154.2	3440.4	1974.0	752.8	364.8
82.5°	208.2	203.1	282.1	841.9	2413.6	3296.9	2690.6	1534.5	712.9	203.8	121.2
85°	77.6	76.9	137.0	290.8	851.4	1359.8	984.1	392.4	177.6	99.3	54.4
87.5°	21.7	21.0	29.7	100.8	207.5	314.8	168.2	64.6	50.0	39.2	16.0
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°	1563.5	1563.5	1563.5	1563.5	1563.5	1563.5	1563.5	1563.5	1563.5	1563.5	1563.5
2.5°	1568.7	1572.2	1578.8	1583.9	1590.4	1597.7	1607.8	1614.4	1620.8	1625.2	1622.4
5°	1575.2	1583.2	1599.8	1616.5	1636.1	1654.2	1675.3	1690.5	1702.8	1706.4	1707.9
7.5°	1589.7	1602.8	1631.0	1659.3	1690.5	1720.3	1750.7	1776.8	1797.8	1805.8	1806.6
10°	1615.1	1632.5	1672.4	1712.3	1753.6	1799.3	1838.4	1876.2	1905.9	1918.2	1918.9
12.5°	1647.0	1668.7	1721.0	1776.1	1833.4	1896.5	1947.2	1993.6	2030.6	2047.3	2047.3
15°	1688.3	1716.6	1783.3	1857.3	1941.5	2029.2	2093.8	2145.2	2186.5	2206.8	2205.4
17.5°	1733.3	1771.0	1855.1	1966.8	2087.2	2202.5	2278.0	2315.7	2358.4	2378.0	2377.3
20°	1776.8	1823.2	1943.6	2106.1	2266.3	2388.9	2449.9	2460.0	2462.9	2465.0	2470.9
22.5°	1821.7	1884.2	2054.5	2281.5	2453.4	2538.3	2547.0	2503.5	2442.6	2414.3	2422.3
25°	1871.0	1953.8	2199.6	2475.2	2614.5	2624.6	2557.9	2452.0	2336.7	2283.7	2291.7
27.5°	1918.9	2034.2	2373.7	2660.1	2730.5	2641.2	2497.7	2347.6	2208.3	2152.5	2159.0
30°	1966.8	2126.4	2565.9	2821.8	2783.4	2599.9	2402.7	2235.1	2095.2	2036.5	2042.9
32.5°	2015.4	2233.7	2787.1	2938.6	2774.0	2512.2	2284.4	2108.9	1985.6	1924.0	1932.0
35°	2070.5	2365.7	2996.6	3002.4	2710.9	2383.1	2128.5	1958.1	1850.7	1801.4	1812.3
37.5°	2142.4	2533.2	3181.6	3018.4	2600.6	2193.8	1934.9	1779.7	1691.2	1668.7	1684.7
40°	2231.5	2734.8	3322.9	2993.0	2437.4	1963.9	1723.1	1599.1	1549.1	1554.1	1571.5
42.5°	2347.6	2960.4	3422.4	2927.7	2210.5	1726.7	1537.5	1482.4	1506.3	1526.6	1545.5
45°	2498.4	3194.6	3484.0	2816.8	1953.8	1525.9	1427.9	1441.0	1459.2	1461.3	1475.8
47.5°	2691.3	3431.8	3524.6	2649.2	1692.0	1384.5	1358.3	1361.2	1357.6	1342.3	1354.0
50°	2932.1	3662.4	3560.8	2427.3	1469.3	1296.0	1261.2	1251.0	1201.0	1151.7	1158.1
52.5°	3206.2	3874.2	3576.1	2151.8	1296.0	1222.0	1165.4	1101.6	1008.1	992.8	997.9
55°	3510.8	4070.0	3537.0	1813.0	1150.3	1127.0	1041.4	964.5	954.4	941.4	943.5
57.5°	3874.9	4281.0	3457.1	1435.2	1000.8	1016.1	932.6	941.4	923.2	902.9	899.2
60°	4273.0	4499.3	3317.2	1090.7	846.3	877.5	904.4	903.6	898.5	881.9	876.1
62.5°	4631.3	4642.8	3041.6	835.5	710.7	770.2	843.5	842.8	838.3	828.9	825.3
65°	4844.5	4621.1	2581.8	657.7	599.0	681.7	760.8	766.6	767.3	766.6	766.6
67.5°	4806.7	4366.6	1950.9	523.6	507.0	591.7	678.9	686.7	692.6	694.0	695.5
70°	4380.3	3807.5	1272.0	417.7	425.0	512.7	601.2	609.2	614.3	620.0	623.0
72.5°	3414.4	2799.4	728.2	337.9	353.2	444.5	524.3	533.7	536.7	547.6	551.9
75°	2080.6	1646.3	393.1	266.2	290.1	380.0	448.2	459.1	464.1	477.2	478.7
77.5°	989.2	712.9	224.1	207.5	233.5	310.4	378.5	390.9	377.1	384.4	378.5
80°	334.4	264.8	141.4	158.1	178.5	242.2	303.1	315.5	286.5	285.1	282.1
82.5°	116.7	107.3	89.9	105.2	115.3	173.3	229.2	245.1	213.2	212.5	202.3
85°	45.7	43.6	50.0	57.3	68.9	106.6	150.9	158.9	131.3	105.9	104.4
87.5°	9.4	10.1	12.3	13.0	21.0	37.0	54.4	66.7	53.0	45.0	41.3
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)