

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: P963507

Luminaire Tested: **NAV-SB3A-735-U-SL4**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P963507  
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-SB3A-735-U-SL4  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

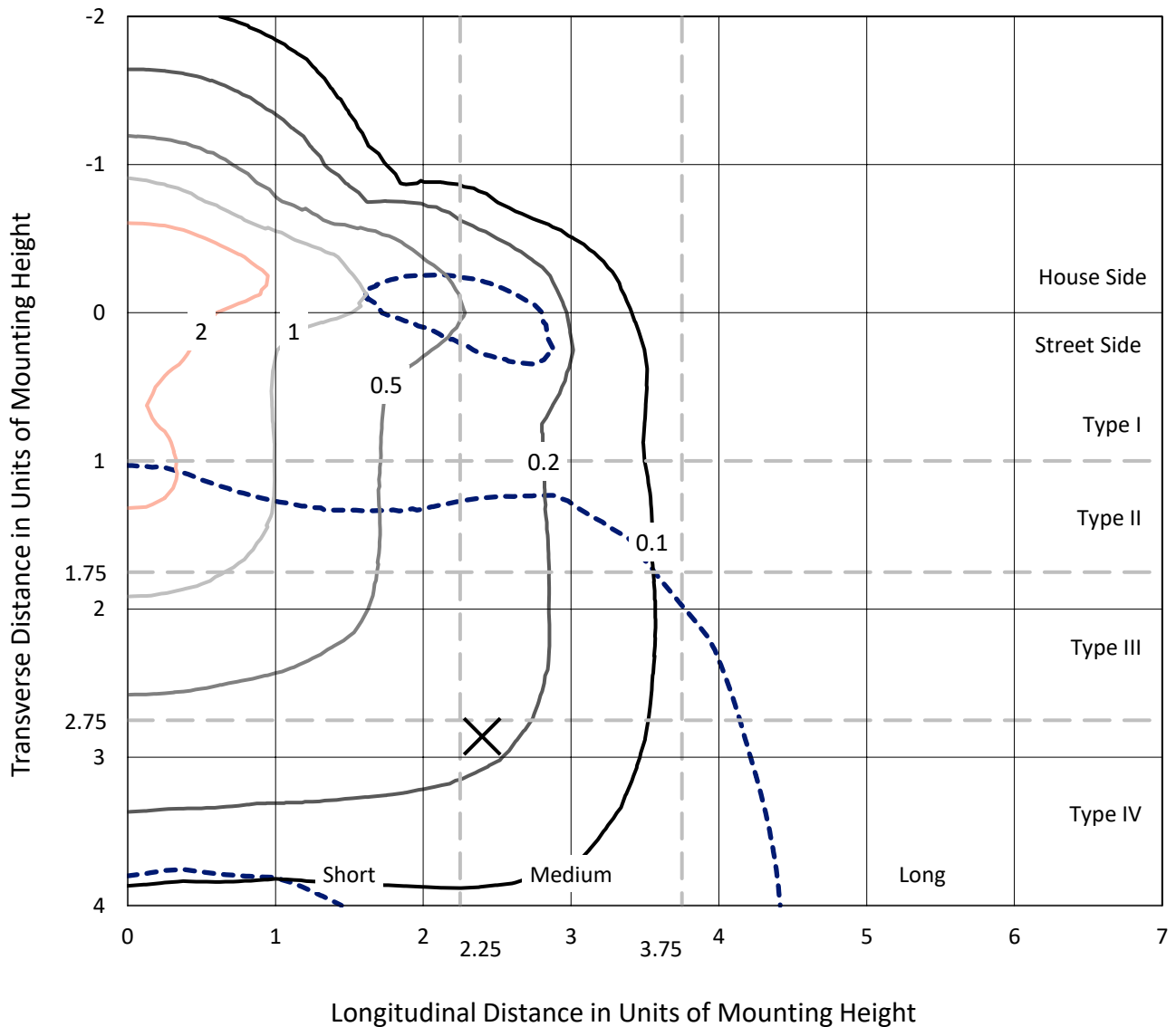
Lumens per Lamp: N/A  
Luminaire Lumens: 13674.5 lumens  
Efficiency: N/A  
Efficacy: 161.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B2 - U0 - G3  
  
Input Watts (W): 84.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

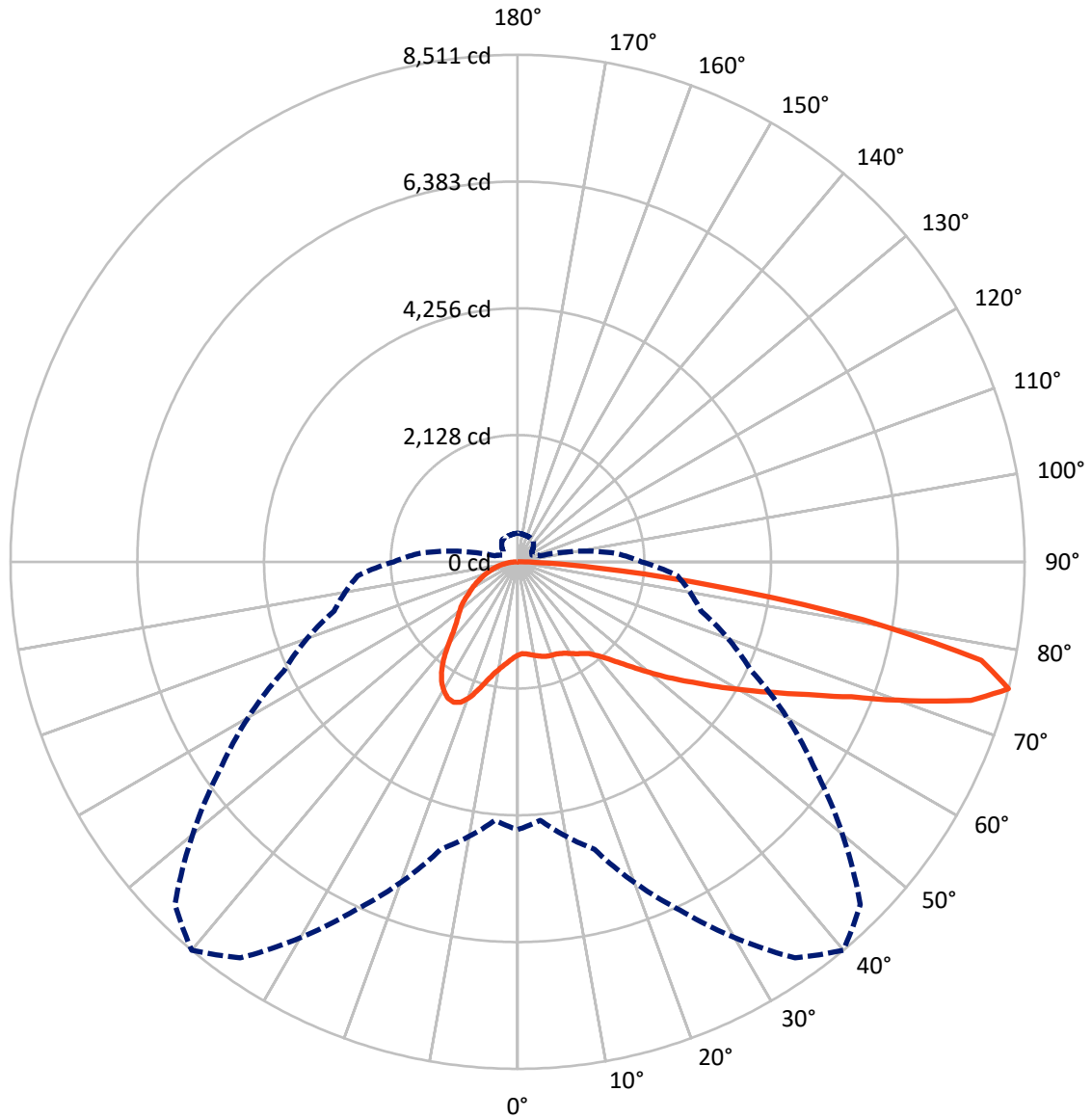
✕ Max cd  
 - - - 1/2 Max cd



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
<b>House Side</b>	Lumens	4236.8	0.0	4236.8
	% Fixture	31.0	0.0	31.0
<b>Street Side</b>	Lumens	9437.7	0.0	9437.7
	% Fixture	69.0	0.0	69.0
<b>Total</b>	Lumens	13674.5	0.0	13674.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	156.1	1.1
10°-20°	524.1	3.8
20°-30°	956.9	7.0
30°-40°	1357.1	9.9
40°-50°	1832.5	13.4
50°-60°	2465.2	18.0
60°-70°	3129.0	22.9
70°-80°	2839.7	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°	13674.5	100.0
0°-180°	13674.5	100.0

**Coefficient of Utilization**

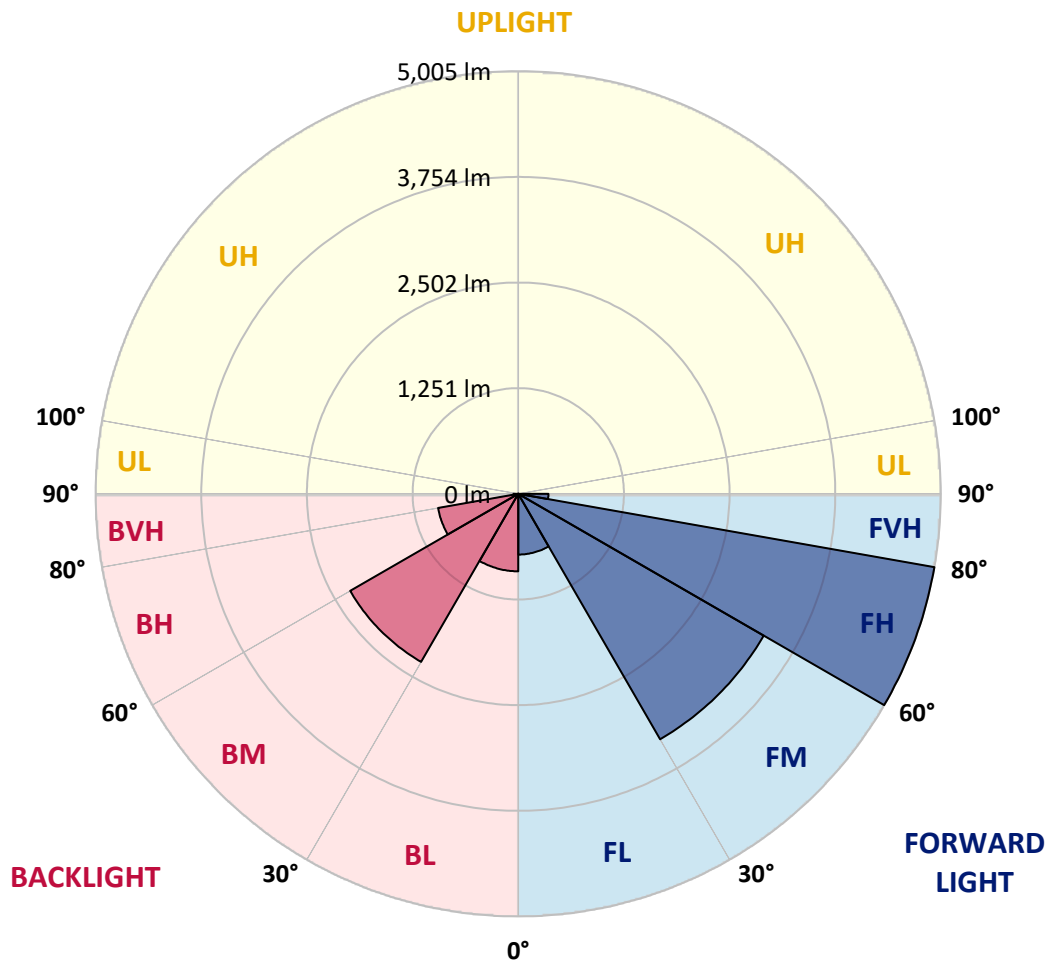


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	719.3	5.3			
FM (30°-60°)	3356.8	24.5			
FH (60°-80°)	5004.7	36.6			G3/7500
FVH (80°-90°)	357.0	2.6			G3/500
BL (0°-30°)	917.7	6.7	B2/1000		
BM (30°-60°)	2298.1	16.8	B2/2500		
BH (60°-80°)	964.0	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°	1563.7	1563.7	1563.7	1563.7	1563.7	1563.7	1563.7	1563.7	1563.7	1563.7	1563.7
2.5°	1539.8	1548.5	1546.3	1543.3	1543.3	1544.2	1543.3	1548.5	1553.6	1558.6	1566.6
5°	1555.7	1564.5	1560.0	1556.5	1553.6	1552.8	1550.6	1549.9	1552.8	1559.3	1570.2
7.5°	1586.9	1595.6	1589.1	1582.6	1576.8	1573.9	1570.9	1566.6	1564.5	1568.0	1583.3
10°	1621.8	1630.5	1622.5	1610.9	1601.5	1597.8	1594.9	1590.5	1587.6	1589.8	1606.5
12.5°	1656.5	1665.2	1654.4	1638.4	1626.1	1623.9	1620.3	1618.8	1618.1	1617.3	1634.1
15°	1689.2	1696.4	1682.6	1663.8	1650.8	1647.1	1643.5	1645.6	1649.3	1653.6	1672.5
17.5°	1714.5	1721.8	1701.5	1676.8	1664.5	1663.1	1660.9	1668.2	1678.3	1689.2	1712.4
20°	1737.8	1745.1	1718.9	1685.5	1671.1	1671.1	1671.8	1687.0	1701.5	1717.5	1749.4
22.5°	1770.4	1776.2	1744.3	1698.6	1677.6	1679.1	1684.8	1700.1	1718.2	1739.9	1784.2
25°	1819.0	1823.4	1784.2	1723.2	1699.3	1703.7	1708.8	1716.1	1733.4	1758.8	1818.2
27.5°	1897.4	1901.0	1849.5	1766.8	1730.5	1737.8	1745.1	1739.9	1747.9	1769.7	1845.8
30°	2007.6	2009.7	1944.4	1835.0	1783.5	1787.1	1788.5	1767.5	1752.2	1769.7	1865.4
32.5°	2138.1	2137.4	2059.8	1917.7	1843.7	1840.1	1827.7	1786.4	1750.8	1766.1	1882.8
35°	2340.5	2332.5	2232.4	2033.7	1911.8	1889.4	1860.4	1807.4	1758.1	1762.4	1898.1
37.5°	2675.6	2650.9	2512.4	2223.7	2013.4	1956.1	1913.3	1841.5	1774.1	1761.0	1916.1
40°	3053.4	3022.2	2869.9	2484.1	2165.7	2073.6	2004.7	1890.1	1800.1	1767.5	1943.0
42.5°	3501.6	3457.4	3293.5	2790.9	2358.6	2225.2	2121.4	1951.7	1838.5	1788.5	1979.3
45°	4052.1	3993.4	3761.3	3136.8	2601.6	2423.9	2285.3	2045.3	1897.4	1829.1	2033.7
47.5°	4608.4	4623.0	4292.9	3532.9	2893.2	2669.0	2490.6	2186.0	1982.9	1894.4	2121.4
50°	5199.5	5209.7	4821.6	3971.7	3223.8	2946.1	2721.3	2343.4	2101.9	1987.3	2252.7
52.5°	5660.8	5662.2	5301.8	4430.8	3568.3	3250.7	2970.0	2523.2	2239.6	2110.6	2427.5
55°	5949.4	5945.8	5638.3	4865.2	3964.4	3570.6	3245.7	2727.7	2407.9	2255.6	2647.3
57.5°	6159.0	6148.2	5870.4	5238.7	4386.5	3948.4	3557.5	2959.9	2606.7	2428.2	2936.6
60°	6238.9	6232.3	6027.8	5561.4	4830.3	4366.2	3917.2	3219.5	2832.2	2632.0	3308.7
62.5°	6269.3	6281.6	6182.3	5874.1	5305.4	4828.9	4312.5	3529.9	3086.1	2862.7	3701.1
65°	6376.6	6399.2	6378.8	6283.0	5842.1	5370.7	4836.9	3899.1	3363.1	3110.0	4110.9
67.5°	6589.1	6611.7	6620.4	6772.7	6497.8	6046.0	5491.1	4358.9	3687.3	3366.7	4419.1
70°	6584.1	6577.5	6731.3	7162.1	7318.8	6980.8	6373.0	4924.6	4073.9	3580.0	4458.2
72.5°	5993.0	5940.8	6304.2	7157.8	8002.0	7957.1	7450.1	5654.3	4407.5	3606.1	3868.7
75°	4496.0	4356.8	4998.6	6450.6	8115.8	8511.2	8134.7	6106.8	4328.5	3186.1	2692.3
77.5°	1922.7	1782.8	2539.2	4775.3	7263.7	7956.3	7506.6	5327.8	3455.3	2106.9	1322.1
80°	503.4	502.7	767.3	2165.0	4939.9	5875.5	5154.5	3440.7	1974.3	752.9	364.8
82.5°	208.2	203.1	282.2	842.0	2413.8	3297.1	2690.8	1534.7	713.0	203.8	121.2
85°	77.6	76.9	137.0	290.8	851.5	1359.9	984.2	392.4	177.7	99.3	54.4
87.5°	21.7	21.0	29.7	100.9	207.5	314.8	168.3	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°	1563.7	1563.7	1563.7	1563.7	1563.7	1563.7	1563.7	1563.7	1563.7	1563.7	1563.7
2.5°	1568.8	1572.5	1578.9	1584.0	1590.5	1597.8	1607.9	1614.5	1621.0	1625.3	1622.5
5°	1575.3	1583.3	1599.9	1616.6	1636.2	1654.4	1675.4	1690.6	1702.9	1706.6	1708.1
7.5°	1589.8	1602.9	1631.2	1659.5	1690.6	1720.4	1750.8	1776.9	1798.0	1805.9	1806.7
10°	1615.2	1632.6	1672.5	1712.4	1753.7	1799.4	1838.5	1876.3	1906.0	1918.4	1919.1
12.5°	1647.1	1668.9	1721.1	1776.2	1833.5	1896.6	1947.4	1993.8	2030.7	2047.4	2047.4
15°	1688.5	1716.8	1783.5	1857.4	1941.6	2029.3	2093.9	2145.3	2186.7	2207.0	2205.6
17.5°	1733.4	1771.1	1855.2	1967.0	2087.3	2202.6	2278.1	2315.8	2358.6	2378.2	2377.5
20°	1776.9	1823.4	1943.7	2106.2	2266.5	2389.1	2450.0	2460.1	2463.1	2465.2	2471.1
22.5°	1821.9	1884.3	2054.7	2281.8	2453.6	2538.5	2547.2	2503.7	2442.8	2414.5	2422.4
25°	1871.2	1953.9	2199.8	2475.4	2614.7	2624.8	2558.1	2452.2	2336.9	2283.9	2291.9
27.5°	1919.1	2034.4	2373.8	2660.3	2730.7	2641.4	2497.8	2347.8	2208.5	2152.6	2159.2
30°	1967.0	2126.5	2566.0	2822.0	2783.6	2600.1	2402.8	2235.3	2095.3	2036.6	2043.1
32.5°	2015.6	2233.9	2787.3	2938.8	2774.2	2512.4	2284.6	2109.1	1985.8	1924.1	1932.1
35°	2070.7	2365.9	2996.9	3002.6	2711.1	2383.2	2128.7	1958.3	1850.9	1801.6	1812.5
37.5°	2142.5	2533.4	3181.8	3018.6	2600.8	2194.0	1935.0	1779.8	1691.4	1668.9	1684.8
40°	2231.7	2735.0	3323.3	2993.2	2437.7	1964.1	1723.2	1599.2	1549.2	1554.3	1571.6
42.5°	2347.8	2960.6	3422.6	2927.9	2210.6	1726.9	1537.6	1482.5	1506.4	1526.7	1545.6
45°	2498.5	3194.8	3484.3	2817.0	1953.9	1526.0	1428.0	1441.1	1459.3	1461.4	1475.9
47.5°	2691.5	3432.0	3524.9	2649.4	1692.1	1384.6	1358.4	1361.3	1357.7	1342.4	1354.1
50°	2932.3	3662.6	3561.2	2427.5	1469.4	1296.1	1261.3	1251.1	1201.1	1151.8	1158.2
52.5°	3206.4	3874.4	3576.3	2151.9	1296.1	1222.1	1165.5	1101.7	1008.1	992.9	997.9
55°	3511.0	4070.3	3537.2	1813.2	1150.3	1127.1	1041.5	964.6	954.5	941.5	943.6
57.5°	3875.1	4281.3	3457.4	1435.3	1000.9	1016.1	932.7	941.5	923.3	902.9	899.3
60°	4273.3	4499.6	3317.4	1090.8	846.4	877.6	904.5	903.7	898.6	881.9	876.2
62.5°	4631.7	4643.2	3041.8	835.5	710.7	770.3	843.5	842.8	838.4	829.0	825.3
65°	4844.9	4621.5	2582.0	657.8	599.1	681.7	760.9	766.6	767.3	766.6	766.6
67.5°	4807.1	4366.9	1951.0	523.7	507.0	591.8	678.9	686.9	692.6	694.1	695.6
70°	4380.6	3807.7	1272.1	417.8	425.0	512.8	601.3	609.3	614.3	620.1	623.0
72.5°	3414.6	2799.6	728.2	337.9	353.2	444.6	524.4	533.8	536.7	547.6	552.0
75°	2080.9	1646.4	393.1	266.2	290.1	380.1	448.2	459.1	464.2	477.2	478.7
77.5°	989.3	713.0	224.1	207.5	233.5	310.4	378.6	390.9	377.1	384.4	378.6
80°	334.4	264.8	141.4	158.2	178.5	242.2	303.2	315.5	286.5	285.1	282.2
82.5°	116.7	107.3	89.9	105.2	115.3	173.3	229.2	245.2	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)