

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: P882914

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

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882914
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
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: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13337 lumens
Efficiency: N/A
Efficacy: 157.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G3

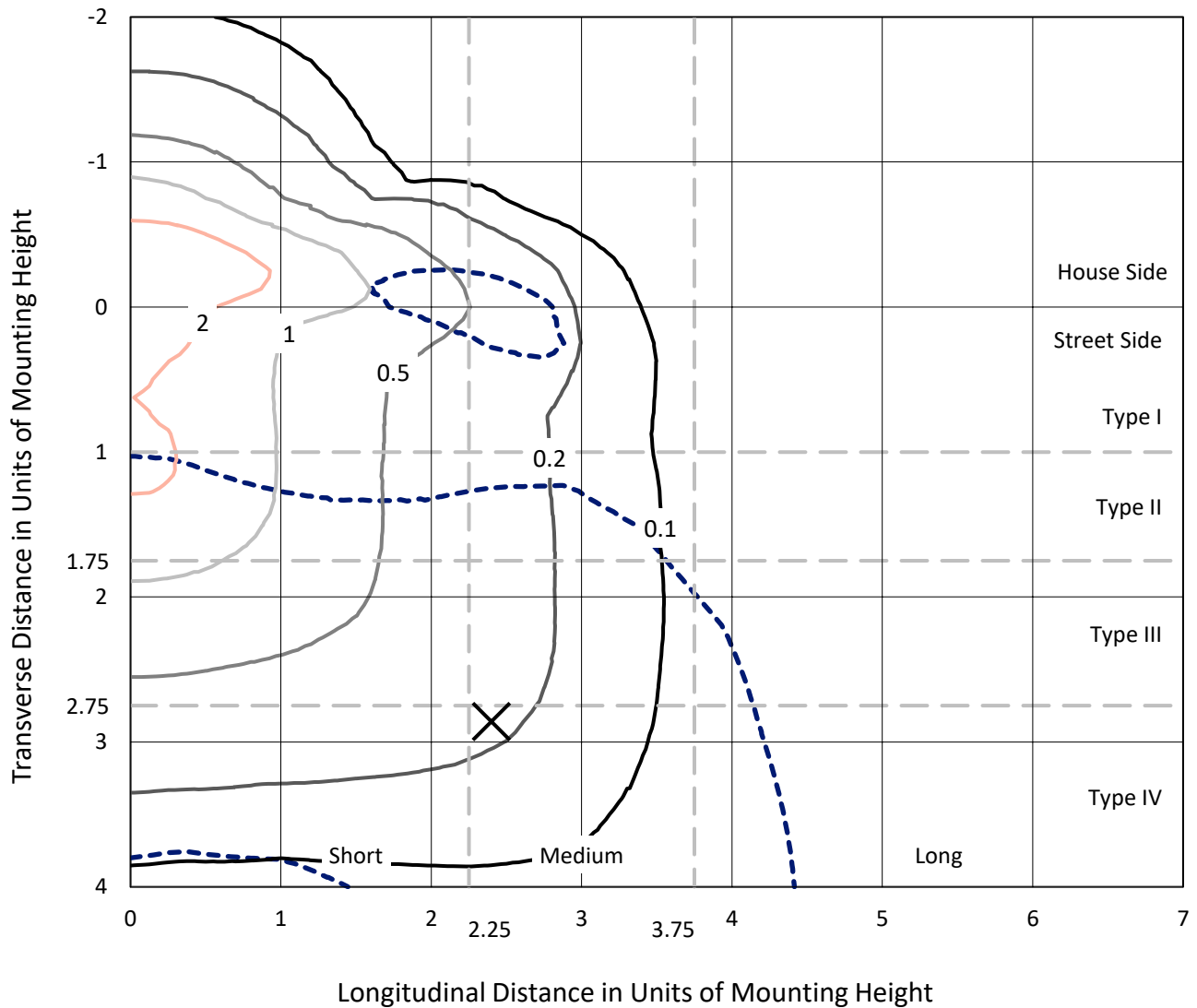
Input Watts (W): 84.7
Input Voltage (V): 120.0
Input Current (Ain): 0.717
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 11.969
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P882914
 CATALOG NUMBER: NAV-SB3A-735-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

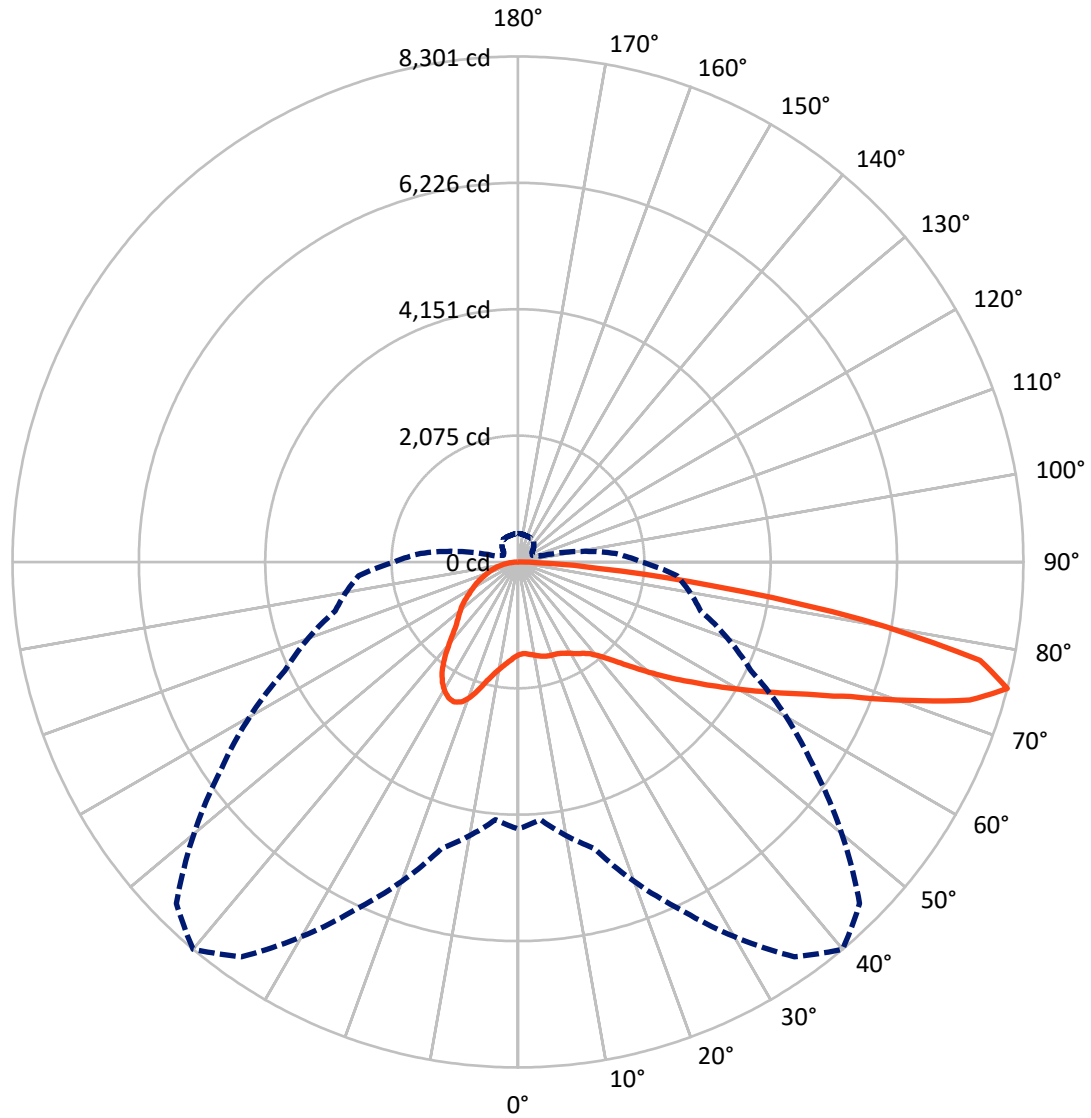
✕ Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P882914
CATALOG NUMBER: NAV-SB3A-735-U-SL4

Luminous Intensity Polar Plot



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

REPORT NUMBER: P882914

CATALOG NUMBER: NAV-SB3A-735-U-SL4

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4132.2	0.0	4132.2
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	9204.8	0.0	9204.8
	% Fixture	69.0	0.0	69.0
Total	Lumens	13337.0	0.0	13337.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.2	1.1
10°-20°	511.1	3.8
20°-30°	933.3	7.0
30°-40°	1323.6	9.9
40°-50°	1787.3	13.4
50°-60°	2404.4	18.0
60°-70°	3051.7	22.9
70°-80°	2769.6	20.8
80°-90°	403.7	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°	13337.0	100.0
0°-180°	13337.0	100.0

Coefficient of Utilization



REPORT NUMBER: P882914

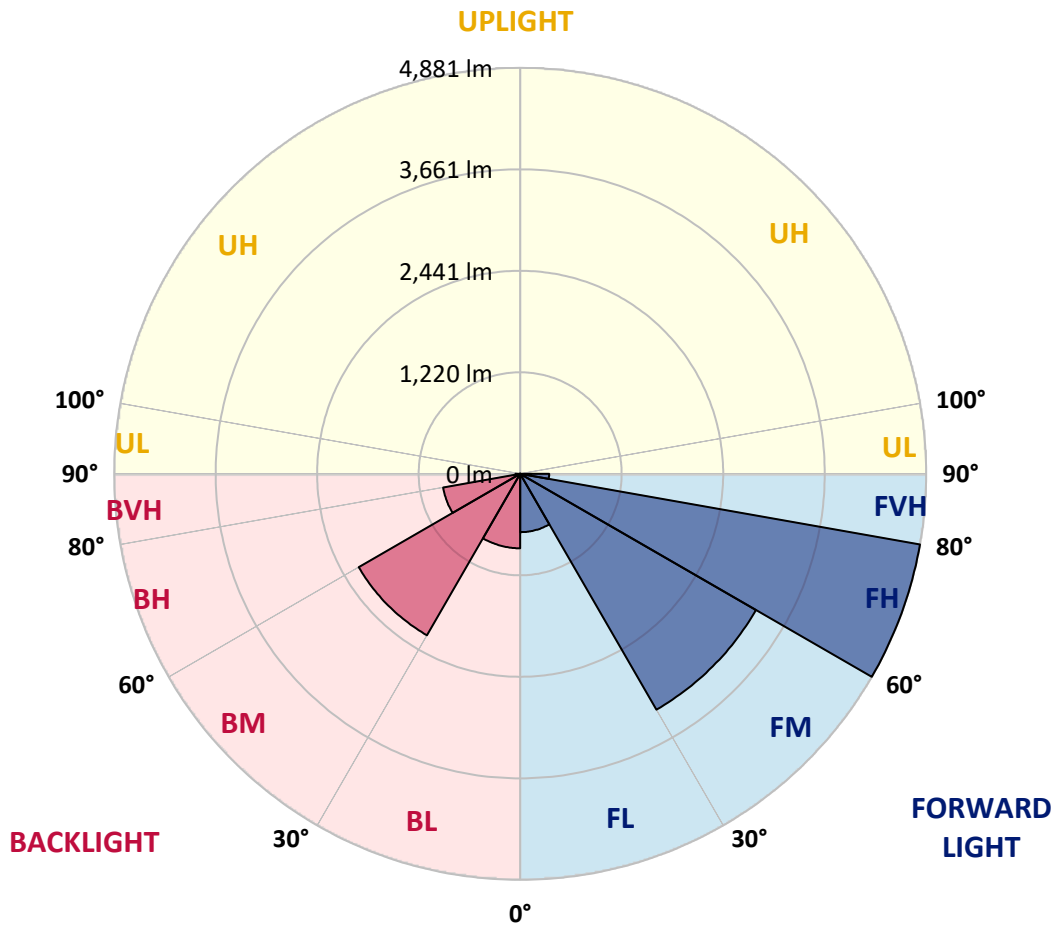
CATALOG NUMBER: NAV-SB3A-735-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	701.5	5.3			
FM (30°-60°)	3273.9	24.5			
FH (60°-80°)	4881.1	36.6			G2/5000
FVH (80°-90°)	348.1	2.6			G3/500
BL (0°-30°)	895.1	6.7	B2/1000		
BM (30°-60°)	2241.4	16.8	B2/2500		
BH (60°-80°)	940.2	7.0	B2/1000		G2/1000
BVH (80°-90°)	55.6	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



REPORT NUMBER: P882914

CATALOG NUMBER: NAV-SB3A-735-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1525.1	1525.1	1525.1	1525.1	1525.1	1525.1	1525.1	1525.1	1525.1	1525.1	1525.1
2.5°	1501.8	1510.2	1508.1	1505.3	1505.3	1506.0	1505.3	1510.2	1515.2	1520.2	1527.9
5°	1517.3	1525.8	1521.6	1518.0	1515.2	1514.5	1512.4	1511.7	1514.5	1520.9	1531.5
7.5°	1547.7	1556.2	1549.9	1543.5	1537.8	1535.0	1532.2	1527.9	1525.8	1529.3	1544.2
10°	1581.7	1590.2	1582.4	1571.1	1561.9	1558.4	1555.5	1551.3	1548.4	1550.6	1566.8
12.5°	1615.6	1624.1	1613.5	1598.0	1585.9	1583.8	1580.3	1578.9	1578.2	1577.4	1593.7
15°	1647.5	1654.6	1641.1	1622.7	1610.0	1606.5	1602.9	1605.0	1608.6	1612.8	1631.2
17.5°	1672.2	1679.3	1659.5	1635.5	1623.4	1622.0	1619.9	1627.0	1636.9	1647.5	1670.1
20°	1694.9	1701.9	1676.5	1643.9	1629.8	1629.8	1630.5	1645.4	1659.5	1675.1	1706.2
22.5°	1726.7	1732.4	1701.2	1656.7	1636.2	1637.6	1643.2	1658.1	1675.8	1697.0	1740.1
25°	1774.1	1778.3	1740.1	1680.7	1657.4	1661.6	1666.6	1673.7	1690.6	1715.4	1773.4
27.5°	1850.5	1854.0	1803.8	1723.2	1687.8	1694.9	1701.9	1697.0	1704.8	1726.0	1800.3
30°	1958.0	1960.1	1896.5	1789.7	1739.4	1743.0	1744.4	1723.9	1709.0	1726.0	1819.4
32.5°	2085.3	2084.6	2008.9	1870.3	1798.2	1794.6	1782.6	1742.3	1707.6	1722.5	1836.3
35°	2282.7	2274.9	2177.3	1983.5	1864.6	1842.7	1814.4	1762.8	1714.7	1718.9	1851.2
37.5°	2609.5	2585.5	2450.4	2168.8	1963.7	1907.8	1866.1	1796.0	1730.2	1717.5	1868.9
40°	2978.1	2947.6	2799.1	2422.8	2112.2	2022.4	1955.2	1843.4	1755.7	1723.9	1895.1
42.5°	3415.2	3372.1	3212.2	2722.0	2300.4	2170.2	2069.1	1903.6	1793.2	1744.4	1930.4
45°	3952.1	3894.8	3668.5	3059.4	2537.4	2364.1	2228.9	1994.8	1850.5	1784.0	1983.5
47.5°	4494.7	4508.8	4187.0	3445.6	2821.7	2603.1	2429.1	2132.0	1934.0	1847.7	2069.1
50°	5071.2	5081.1	4702.6	3873.6	3144.3	2873.4	2654.1	2285.5	2050.0	1938.2	2197.1
52.5°	5521.1	5522.5	5170.9	4321.4	3480.3	3170.5	2896.7	2461.0	2184.4	2058.5	2367.6
55°	5802.6	5799.1	5499.1	4745.1	3866.5	3482.4	3165.5	2660.4	2348.5	2199.9	2581.9
57.5°	6007.0	5996.4	5725.5	5109.4	4278.2	3851.0	3469.7	2886.8	2542.3	2368.3	2864.2
60°	6084.9	6078.5	5879.0	5424.2	4711.1	4258.4	3820.5	3140.0	2762.3	2567.1	3227.1
62.5°	6114.6	6126.6	6029.7	5729.0	5174.5	4709.7	4206.1	3442.8	3009.9	2792.0	3609.7
65°	6219.3	6241.2	6221.4	6128.0	5697.9	5238.1	4717.5	3802.9	3280.1	3033.2	4009.4
67.5°	6426.5	6448.4	6456.9	6605.5	6337.4	5896.7	5355.5	4251.3	3596.3	3283.6	4310.0
70°	6421.6	6415.2	6565.2	6985.3	7138.1	6808.5	6215.7	4803.1	3973.3	3491.6	4348.2
72.5°	5845.1	5794.1	6148.5	6981.1	7804.5	7760.6	7266.2	5514.7	4298.7	3517.1	3773.1
75°	4385.0	4249.2	4875.2	6291.4	7915.5	8301.1	7933.9	5956.1	4221.6	3107.5	2625.8
77.5°	1875.3	1738.7	2476.5	4657.4	7084.4	7759.9	7321.3	5196.4	3369.9	2054.9	1289.5
80°	490.9	490.2	748.4	2111.5	4817.9	5730.5	5027.3	3355.8	1925.5	734.3	355.8
82.5°	203.0	198.1	275.2	821.3	2354.1	3215.7	2624.4	1496.8	695.4	198.8	118.1
85°	75.7	75.0	133.7	283.7	830.5	1326.3	959.9	382.7	173.3	96.9	53.1
87.5°	21.2	20.5	29.0	98.3	202.3	307.0	164.1	63.0	48.8	38.2	15.6
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: P882914

CATALOG NUMBER: NAV-SB3A-735-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1525.1	1525.1	1525.1	1525.1	1525.1	1525.1	1525.1	1525.1	1525.1	1525.1	1525.1
2.5°	1530.1	1533.6	1540.0	1544.9	1551.3	1558.4	1568.3	1574.6	1581.0	1585.2	1582.4
5°	1536.4	1544.2	1560.5	1576.7	1595.8	1613.5	1634.0	1648.9	1660.9	1664.5	1665.9
7.5°	1550.6	1563.3	1590.9	1618.5	1648.9	1677.9	1707.6	1733.1	1753.6	1761.4	1762.1
10°	1575.3	1592.3	1631.2	1670.1	1710.4	1755.0	1793.2	1830.0	1859.0	1871.0	1871.7
12.5°	1606.5	1627.7	1678.6	1732.4	1788.2	1849.8	1899.3	1944.6	1980.7	1996.9	1996.9
15°	1646.8	1674.4	1739.4	1811.6	1893.6	1979.2	2042.2	2092.4	2132.7	2152.5	2151.1
17.5°	1690.6	1727.4	1809.5	1918.4	2035.8	2148.3	2221.9	2258.7	2300.4	2319.5	2318.8
20°	1733.1	1778.3	1895.8	2054.2	2210.6	2330.1	2389.5	2399.4	2402.3	2404.4	2410.0
22.5°	1776.9	1837.8	2004.0	2225.4	2393.1	2475.8	2484.3	2441.9	2382.4	2354.9	2362.6
25°	1825.0	1905.7	2145.5	2414.3	2550.1	2560.0	2494.9	2391.6	2279.2	2227.5	2235.3
27.5°	1871.7	1984.2	2315.2	2594.7	2663.3	2576.3	2436.2	2289.8	2154.0	2099.5	2105.9
30°	1918.4	2074.0	2502.7	2752.4	2714.9	2535.9	2343.5	2180.1	2043.6	1986.3	1992.7
32.5°	1965.8	2178.7	2718.4	2866.3	2705.7	2450.4	2228.2	2057.1	1936.8	1876.7	1884.5
35°	2019.6	2307.5	2922.9	2928.5	2644.2	2324.4	2076.2	1909.9	1805.2	1757.1	1767.7
37.5°	2089.6	2470.9	3103.3	2944.1	2536.7	2139.8	1887.3	1735.9	1649.6	1627.7	1643.2
40°	2176.6	2667.5	3241.2	2919.3	2377.5	1915.6	1680.7	1559.8	1511.0	1515.9	1532.9
42.5°	2289.8	2887.5	3338.1	2855.7	2156.1	1684.3	1499.6	1445.9	1469.2	1489.0	1507.4
45°	2436.9	3116.0	3398.2	2747.5	1905.7	1488.3	1392.8	1405.6	1423.2	1425.4	1439.5
47.5°	2625.1	3347.3	3437.8	2584.0	1650.3	1350.4	1324.9	1327.7	1324.2	1309.4	1320.7
50°	2859.9	3572.3	3473.2	2367.6	1433.1	1264.1	1230.1	1220.2	1171.4	1123.3	1129.7
52.5°	3127.3	3778.8	3488.1	2098.8	1264.1	1191.9	1136.8	1074.5	983.3	968.4	973.4
55°	3424.4	3969.8	3449.9	1768.4	1121.9	1099.3	1015.8	940.8	930.9	918.2	920.3
57.5°	3779.5	4175.6	3372.1	1399.9	976.2	991.0	909.7	918.2	900.5	880.7	877.1
60°	4167.9	4388.6	3235.5	1063.9	825.5	855.9	882.1	881.4	876.4	860.2	854.5
62.5°	4517.3	4528.6	2966.7	814.9	693.2	751.2	822.7	822.0	817.7	808.5	805.0
65°	4725.3	4507.4	2518.3	641.6	584.3	664.9	742.0	747.7	748.4	747.7	747.7
67.5°	4688.5	4259.1	1902.8	510.7	494.5	577.2	662.1	669.9	675.5	677.0	678.4
70°	4272.6	3713.7	1240.7	407.4	414.5	500.1	586.4	594.2	599.1	604.8	607.6
72.5°	3330.3	2730.5	710.2	329.6	344.5	433.6	511.4	520.6	523.5	534.1	538.3
75°	2029.5	1605.7	383.4	259.6	283.0	370.7	437.2	447.8	452.7	465.5	466.9
77.5°	964.9	695.4	218.6	202.3	227.8	302.8	369.3	381.3	367.8	374.9	369.3
80°	326.1	258.2	137.9	154.2	174.0	236.3	295.7	307.7	279.4	278.0	275.2
82.5°	113.9	104.7	87.7	102.6	112.5	169.1	223.5	239.1	208.0	207.3	197.4
85°	44.6	42.4	48.8	55.9	67.2	104.0	147.1	154.9	128.0	103.3	101.9
87.5°	9.2	9.9	12.0	12.7	20.5	36.1	53.1	65.1	51.6	43.9	40.3
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)