

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: P882554

Luminaire Tested: **NAV-SB2C-727-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882554
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-SB2C-727-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2700K, 615mA 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: 13712 lumens
Efficiency: N/A
Efficacy: 135.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G3

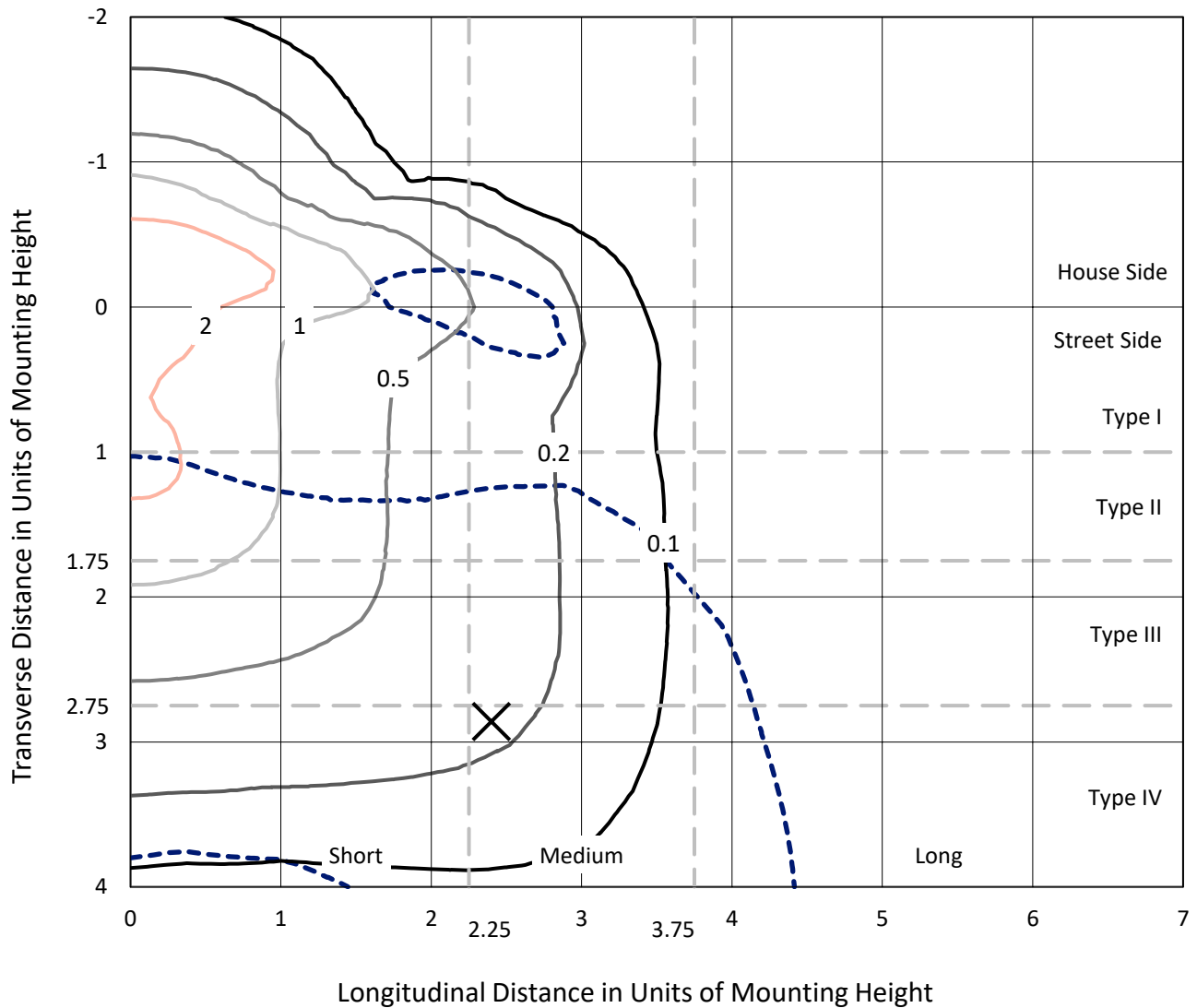
Input Watts (W): 100.9
Input Voltage (V): 120.0
Input Current (Ain): 0.857
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P882554
 CATALOG NUMBER: NAV-SB2C-727-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

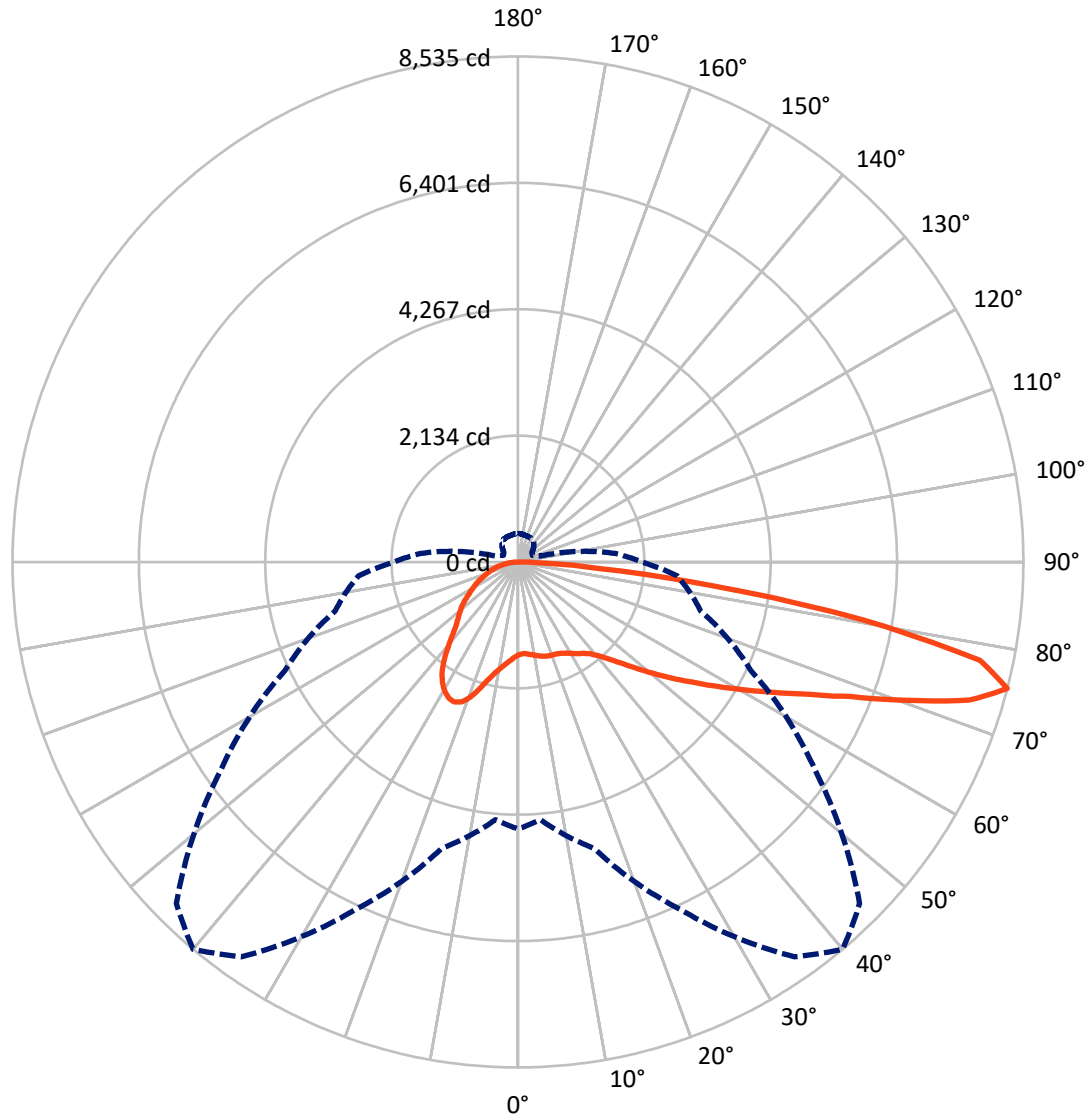
✕ Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P882554
CATALOG NUMBER: NAV-SB2C-727-U-SL4

Luminous Intensity Polar Plot



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

REPORT NUMBER: P882554

CATALOG NUMBER: NAV-SB2C-727-U-SL4

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4248.4	0.0	4248.4
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	9463.6	0.0	9463.6
	% Fixture	69.0	0.0	69.0
Total	Lumens	13712.0	0.0	13712.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.5	1.1
10°-20°	525.5	3.8
20°-30°	959.5	7.0
30°-40°	1360.8	9.9
40°-50°	1837.5	13.4
50°-60°	2472.0	18.0
60°-70°	3137.5	22.9
70°-80°	2847.5	20.8
80°-90°	415.1	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°	13712.0	100.0
0°-180°	13712.0	100.0

Coefficient of Utilization



REPORT NUMBER: P882554

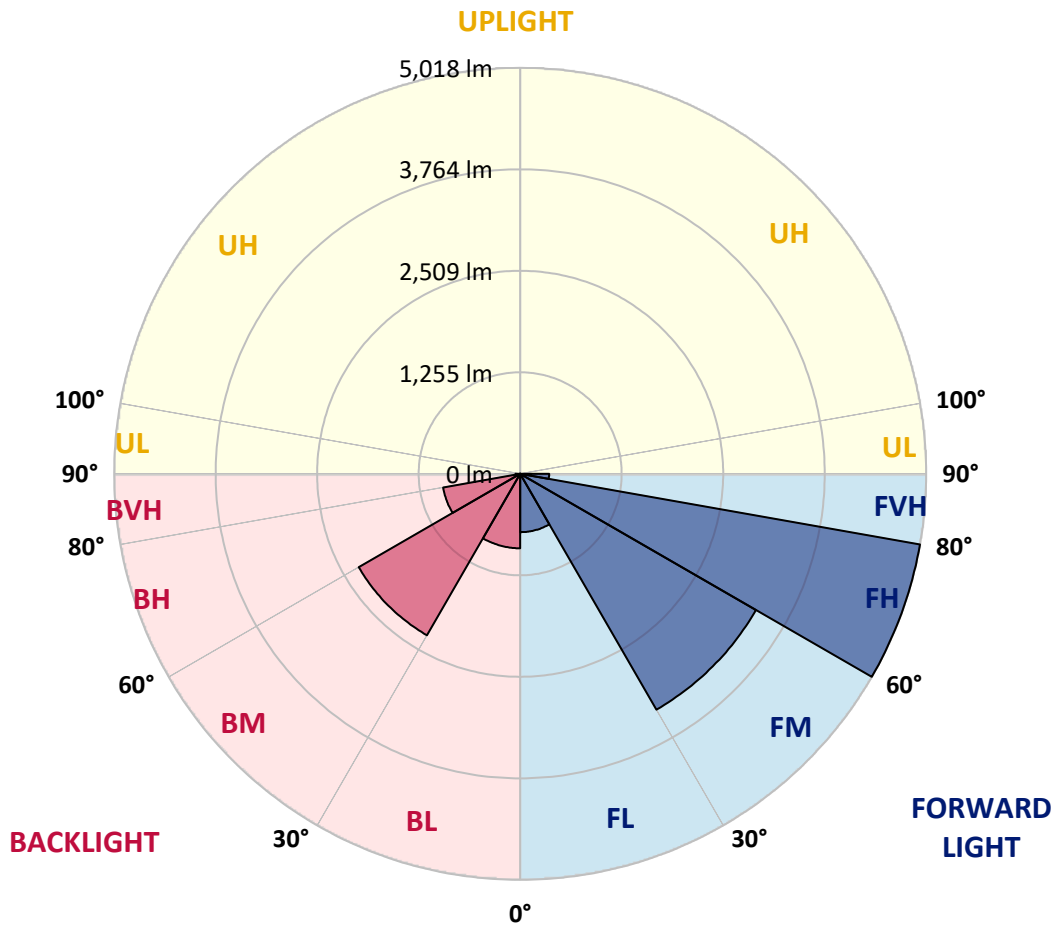
CATALOG NUMBER: NAV-SB2C-727-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	721.3	5.3			
FM	(30°-60°)	3366.0	24.5			
FH	(60°-80°)	5018.4	36.6			G3/7500
FVH	(80°-90°)	357.9	2.6			G3/500
BL	(0°-30°)	920.3	6.7	B2/1000		
BM	(30°-60°)	2304.4	16.8	B2/2500		
BH	(60°-80°)	966.6	7.0	B2/1000		G2/1000
BVH	(80°-90°)	57.1	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: P882554

CATALOG NUMBER: NAV-SB2C-727-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1568.0	1568.0	1568.0	1568.0	1568.0	1568.0	1568.0	1568.0	1568.0	1568.0	1568.0
2.5°	1544.0	1552.7	1550.5	1547.6	1547.6	1548.3	1547.6	1552.7	1557.8	1562.9	1570.9
5°	1560.0	1568.7	1564.3	1560.7	1557.8	1557.1	1554.9	1554.2	1557.1	1563.6	1574.5
7.5°	1591.3	1600.0	1593.4	1586.9	1581.1	1578.2	1575.3	1570.9	1568.7	1572.3	1587.6
10°	1626.2	1634.9	1626.9	1615.3	1605.8	1602.2	1599.3	1594.9	1592.0	1594.2	1610.9
12.5°	1661.1	1669.8	1658.9	1642.9	1630.5	1628.3	1624.7	1623.3	1622.5	1621.8	1638.5
15°	1693.8	1701.1	1687.3	1668.3	1655.3	1651.6	1648.0	1650.2	1653.8	1658.2	1677.1
17.5°	1719.3	1726.5	1706.2	1681.4	1669.1	1667.6	1665.4	1672.7	1682.9	1693.8	1717.1
20°	1742.5	1749.8	1723.6	1690.2	1675.6	1675.6	1676.3	1691.6	1706.2	1722.2	1754.2
22.5°	1775.3	1781.1	1749.1	1703.3	1682.2	1683.6	1689.4	1704.7	1722.9	1744.7	1789.1
25°	1824.0	1828.3	1789.1	1728.0	1704.0	1708.3	1713.4	1720.7	1738.2	1763.6	1823.3
27.5°	1902.5	1906.2	1854.5	1771.6	1735.3	1742.5	1749.8	1744.7	1752.7	1774.5	1850.9
30°	2013.1	2015.3	1949.8	1840.0	1788.3	1792.0	1793.4	1772.3	1757.1	1774.5	1870.5
32.5°	2144.0	2143.3	2065.4	1922.9	1848.7	1845.1	1832.7	1791.3	1755.6	1770.9	1888.0
35°	2346.9	2338.9	2238.5	2039.3	1917.1	1894.5	1865.4	1812.3	1762.9	1767.3	1903.3
37.5°	2682.9	2658.2	2519.2	2229.8	2018.9	1961.4	1918.5	1846.5	1778.9	1765.8	1921.4
40°	3061.8	3030.5	2877.8	2490.9	2171.6	2079.3	2010.2	1895.3	1805.1	1772.3	1948.3
42.5°	3511.2	3466.9	3302.5	2798.5	2365.1	2231.3	2127.3	1957.1	1843.6	1793.4	1984.7
45°	4063.2	4004.3	3771.6	3145.4	2608.7	2430.5	2291.6	2050.9	1902.5	1834.2	2039.3
47.5°	4621.0	4635.6	4304.7	3542.5	2901.1	2676.3	2497.4	2192.0	1988.3	1899.6	2127.3
50°	5213.8	5224.0	4834.9	3982.5	3232.7	2954.2	2728.7	2349.8	2107.6	1992.7	2258.9
52.5°	5676.3	5677.8	5316.3	4442.9	3578.1	3259.6	2978.2	2530.2	2245.8	2116.3	2434.2
55°	5965.8	5962.1	5653.8	4878.5	3975.2	3580.3	3254.5	2735.2	2414.5	2261.8	2654.5
57.5°	6175.9	6165.0	5886.5	5253.0	4398.5	3959.2	3567.2	2968.0	2613.8	2434.9	2944.7
60°	6255.9	6249.4	6044.3	5576.7	4843.6	4378.1	3928.0	3228.3	2840.0	2639.2	3317.8
62.5°	6286.5	6298.9	6199.2	5890.1	5320.0	4842.1	4324.3	3539.6	3094.5	2870.5	3711.2
65°	6394.1	6416.7	6396.3	6300.3	5858.1	5385.4	4850.1	3909.8	3372.3	3118.5	4122.1
67.5°	6607.2	6629.8	6638.5	6791.2	6515.6	6062.5	5506.1	4370.9	3697.4	3376.0	4431.2
70°	6602.1	6595.6	6749.8	7181.8	7338.8	6999.9	6390.5	4938.1	4085.1	3589.8	4470.5
72.5°	6009.4	5957.0	6321.4	7177.4	8023.9	7978.8	7470.5	5669.8	4419.6	3616.0	3879.2
75°	4508.3	4368.7	5012.3	6468.3	8138.1	8534.5	8157.0	6123.6	4340.3	3194.9	2699.6
77.5°	1928.0	1787.6	2546.2	4788.3	7283.6	7978.1	7527.2	5342.5	3464.7	2112.7	1325.8
80°	504.7	504.0	769.4	2170.9	4953.4	5891.6	5168.7	3450.1	1979.6	754.9	365.8
82.5°	208.7	203.6	282.9	844.4	2420.3	3306.2	2698.2	1538.9	714.9	204.4	121.5
85°	77.8	77.1	137.5	291.6	853.8	1363.6	986.9	393.5	178.2	99.6	54.5
87.5°	21.8	21.1	29.8	101.1	208.0	315.6	168.7	64.7	50.2	39.3	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

REPORT NUMBER: P882554

CATALOG NUMBER: NAV-SB2C-727-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1568.0	1568.0	1568.0	1568.0	1568.0	1568.0	1568.0	1568.0	1568.0	1568.0	1568.0
2.5°	1573.1	1576.7	1583.3	1588.3	1594.9	1602.2	1612.3	1618.9	1625.4	1629.8	1626.9
5°	1579.6	1587.6	1604.3	1621.1	1640.7	1658.9	1680.0	1695.3	1707.6	1711.3	1712.7
7.5°	1594.2	1607.3	1635.6	1664.0	1695.3	1725.1	1755.6	1781.8	1802.9	1810.9	1811.6
10°	1619.6	1637.1	1677.1	1717.1	1758.5	1804.3	1843.6	1881.4	1911.3	1923.6	1924.3
12.5°	1651.6	1673.4	1725.8	1781.1	1838.5	1901.8	1952.7	1999.3	2036.3	2053.1	2053.1
15°	1693.1	1721.4	1788.3	1862.5	1946.9	2034.9	2099.6	2151.3	2192.7	2213.1	2211.6
17.5°	1738.2	1776.0	1860.3	1972.3	2093.1	2208.7	2284.3	2322.2	2365.1	2384.7	2384.0
20°	1781.8	1828.3	1949.1	2112.0	2272.7	2395.6	2456.7	2466.9	2469.8	2472.0	2477.8
22.5°	1826.9	1889.4	2060.3	2288.0	2460.3	2545.4	2554.2	2510.5	2449.4	2421.1	2429.1
25°	1876.3	1959.3	2205.8	2482.2	2621.8	2632.0	2565.1	2458.9	2343.3	2290.2	2298.2
27.5°	1924.3	2040.0	2380.3	2667.6	2738.2	2648.7	2504.7	2354.2	2214.5	2158.5	2165.1
30°	1972.3	2132.3	2573.1	2829.8	2791.2	2607.2	2409.4	2241.4	2101.1	2042.2	2048.7
32.5°	2021.1	2240.0	2794.9	2946.9	2781.8	2519.2	2290.9	2114.9	1991.3	1929.4	1937.4
35°	2076.3	2372.3	3005.1	3010.9	2718.5	2389.8	2134.5	1963.6	1856.0	1806.5	1817.4
37.5°	2148.3	2540.3	3190.5	3026.9	2608.0	2200.0	1940.3	1784.7	1696.0	1673.4	1689.4
40°	2237.8	2742.5	3332.3	3001.4	2444.3	1969.4	1728.0	1603.6	1553.4	1558.5	1576.0
42.5°	2354.2	2968.7	3432.0	2936.0	2216.7	1731.6	1541.8	1486.5	1510.5	1530.9	1549.8
45°	2505.4	3203.6	3493.8	2824.7	1959.3	1530.2	1432.0	1445.1	1463.3	1465.4	1480.0
47.5°	2698.9	3441.4	3534.5	2656.7	1696.7	1388.4	1362.2	1365.1	1361.4	1346.2	1357.8
50°	2940.3	3672.7	3570.9	2434.2	1473.4	1299.6	1264.7	1254.5	1204.4	1154.9	1161.4
52.5°	3215.2	3885.1	3586.1	2157.8	1299.6	1225.4	1168.7	1104.7	1010.9	995.6	1000.7
55°	3520.7	4081.4	3546.9	1818.2	1153.4	1130.2	1044.4	967.3	957.1	944.0	946.2
57.5°	3885.8	4293.1	3466.9	1439.3	1003.6	1018.9	935.3	944.0	925.8	905.4	901.8
60°	4285.1	4512.0	3326.5	1093.8	848.7	880.0	906.9	906.2	901.1	884.4	878.5
62.5°	4644.3	4656.0	3050.2	837.8	712.7	772.4	845.8	845.1	840.7	831.3	827.6
65°	4858.1	4634.1	2589.1	659.6	600.7	683.6	762.9	768.7	769.4	768.7	768.7
67.5°	4820.3	4378.9	1956.3	525.1	508.4	593.4	680.7	688.7	694.5	696.0	697.4
70°	4392.7	3818.1	1275.6	418.9	426.2	514.2	602.9	610.9	616.0	621.8	624.7
72.5°	3424.0	2807.2	730.2	338.9	354.2	445.8	525.8	535.3	538.2	549.1	553.4
75°	2086.5	1650.9	394.2	266.9	290.9	381.1	449.5	460.4	465.5	478.5	480.0
77.5°	992.0	714.9	224.7	208.0	234.2	311.3	379.6	392.0	378.2	385.5	379.6
80°	335.3	265.5	141.8	158.5	178.9	242.9	304.0	316.4	287.3	285.8	282.9
82.5°	117.1	107.6	90.2	105.5	115.6	173.8	229.8	245.8	213.8	213.1	202.9
85°	45.8	43.6	50.2	57.5	69.1	106.9	151.3	159.3	131.6	106.2	104.7
87.5°	9.5	10.2	12.4	13.1	21.1	37.1	54.5	66.9	53.1	45.1	41.5
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)