

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: P883124

Luminaire Tested: **NAV-SB3B-827-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883124
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-SB3B-827-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 450mA 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: 13603 lumens
Efficiency: N/A
Efficacy: 124.6 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

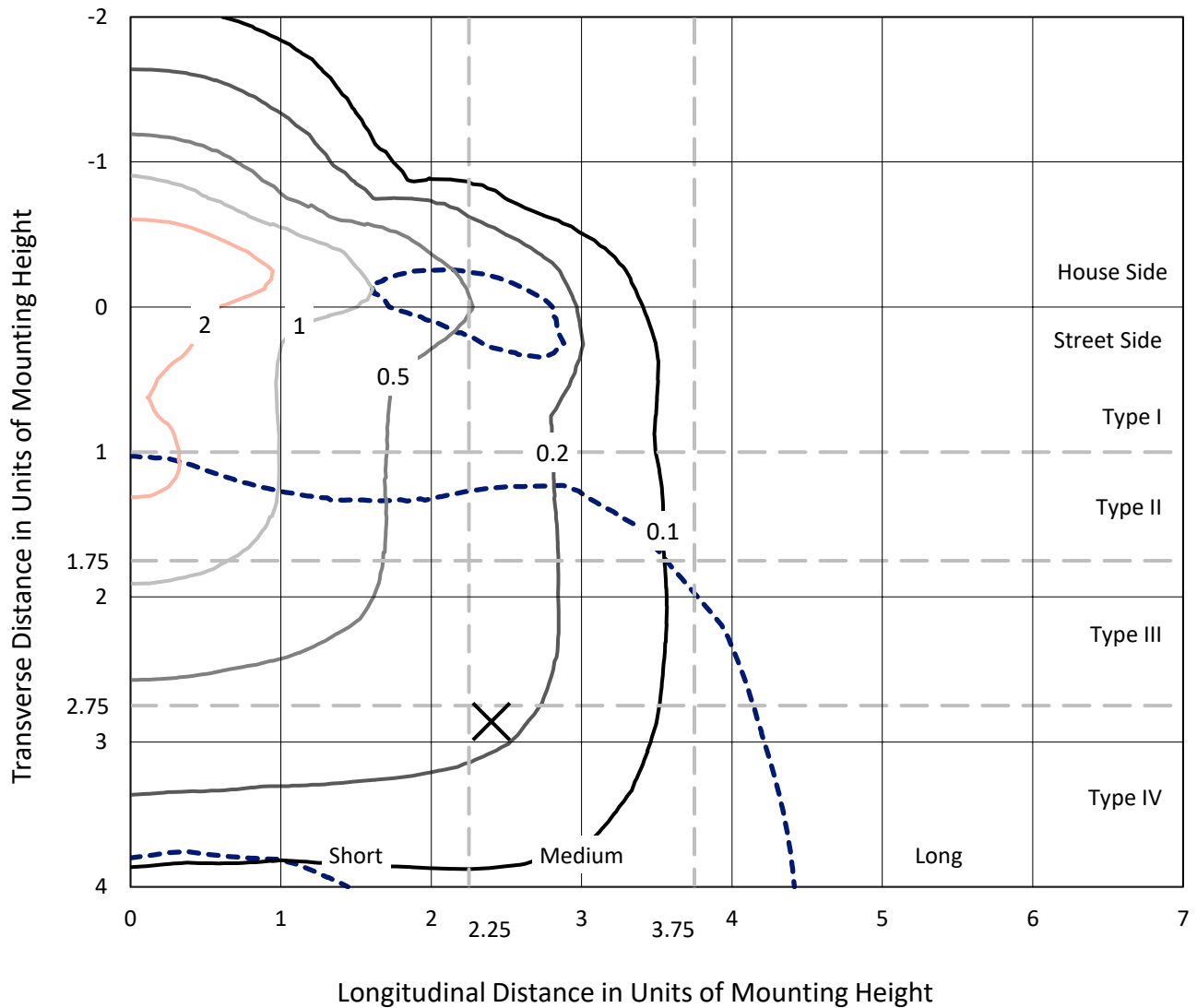
Input Watts (W): 109.2
Input Voltage (V): 120.0
Input Current (Ain): 0.919
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

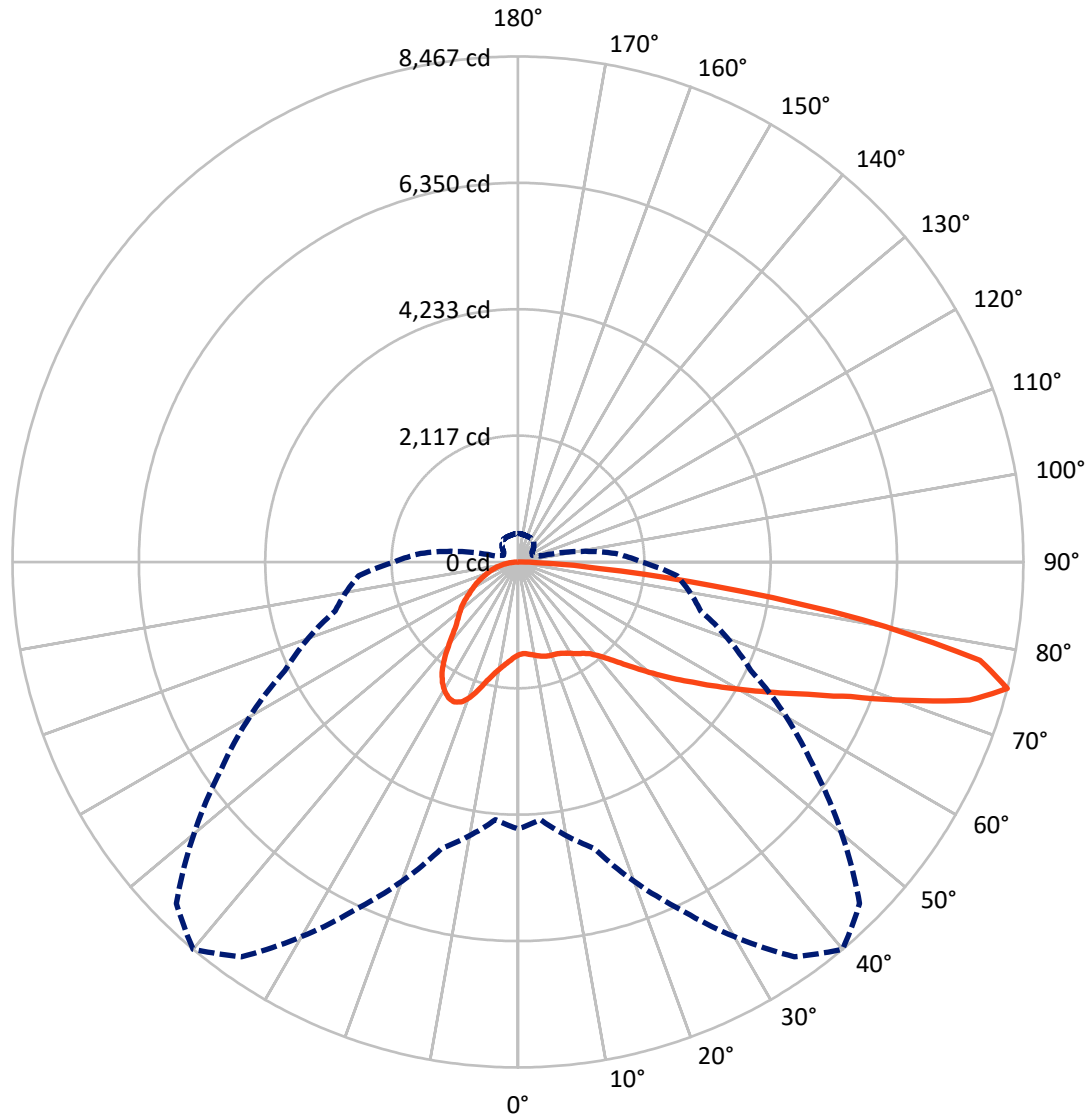
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 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	4214.7	0.0	4214.7
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	9388.3	0.0	9388.3
	% Fixture	69.0	0.0	69.0
Total	Lumens	13603.0	0.0	13603.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.3	1.1
10°-20°	521.3	3.8
20°-30°	951.9	7.0
30°-40°	1350.0	9.9
40°-50°	1822.9	13.4
50°-60°	2452.3	18.0
60°-70°	3112.6	22.9
70°-80°	2824.9	20.8
80°-90°	411.8	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°	13603.0	100.0
0°-180°	13603.0	100.0

Coefficient of Utilization



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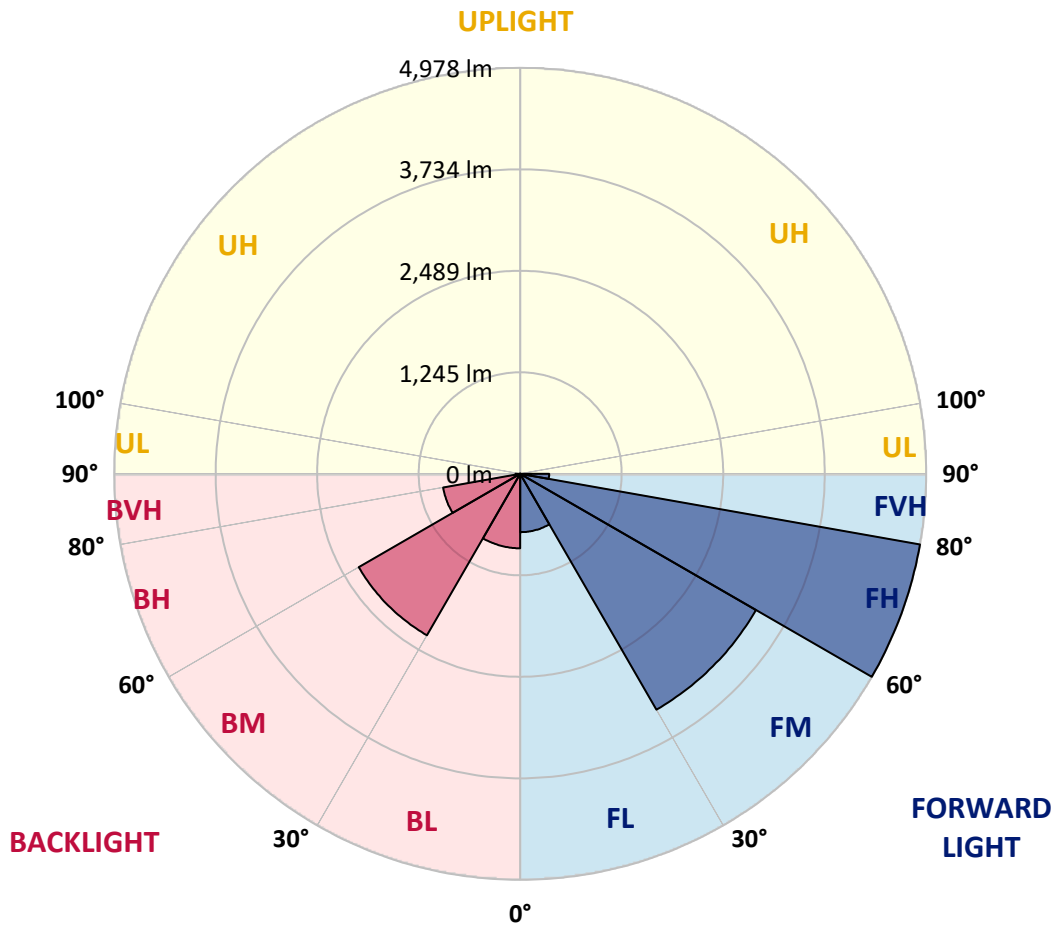
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	715.5	5.3			
FM (30°-60°)	3339.2	24.5			
FH (60°-80°)	4978.5	36.6			G2/5000
FVH (80°-90°)	355.1	2.6			G3/500
BL (0°-30°)	912.9	6.7	B2/1000		
BM (30°-60°)	2286.1	16.8	B2/2500		
BH (60°-80°)	959.0	7.0	B2/1000		G2/1000
BVH (80°-90°)	56.7	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°	1555.5	1555.5	1555.5	1555.5	1555.5	1555.5	1555.5	1555.5	1555.5	1555.5	1555.5
2.5°	1531.7	1540.4	1538.2	1535.3	1535.3	1536.0	1535.3	1540.4	1545.4	1550.5	1558.4
5°	1547.6	1556.2	1551.9	1548.3	1545.4	1544.7	1542.5	1541.8	1544.7	1551.2	1562.0
7.5°	1578.6	1587.3	1580.8	1574.3	1568.5	1565.6	1562.7	1558.4	1556.2	1559.9	1575.0
10°	1613.2	1621.9	1614.0	1602.4	1593.0	1589.4	1586.5	1582.2	1579.3	1581.5	1598.1
12.5°	1647.9	1656.5	1645.7	1629.8	1617.6	1615.4	1611.8	1610.4	1609.6	1608.9	1625.5
15°	1680.3	1687.6	1673.8	1655.1	1642.1	1638.5	1634.9	1637.0	1640.7	1645.0	1663.7
17.5°	1705.6	1712.8	1692.6	1668.1	1655.8	1654.4	1652.2	1659.4	1669.5	1680.3	1703.4
20°	1728.7	1735.9	1709.9	1676.7	1662.3	1662.3	1663.0	1678.2	1692.6	1708.5	1740.2
22.5°	1761.1	1766.9	1735.2	1689.7	1668.8	1670.2	1676.0	1691.2	1709.2	1730.8	1774.9
25°	1809.5	1813.8	1774.9	1714.2	1690.4	1694.8	1699.8	1707.0	1724.3	1749.6	1808.8
27.5°	1887.4	1891.0	1839.8	1757.5	1721.5	1728.7	1735.9	1730.8	1738.8	1760.4	1836.2
30°	1997.1	1999.2	1934.3	1825.4	1774.1	1777.7	1779.2	1758.3	1743.1	1760.4	1855.7
32.5°	2126.9	2126.2	2049.0	1907.6	1834.0	1830.4	1818.1	1777.0	1741.7	1756.8	1873.0
35°	2328.2	2320.3	2220.7	2023.0	1901.8	1879.5	1850.6	1797.9	1748.9	1753.2	1888.1
37.5°	2661.6	2637.0	2499.2	2212.1	2002.8	1945.8	1903.3	1831.8	1764.8	1751.8	1906.2
40°	3037.5	3006.4	2854.9	2471.1	2154.4	2062.7	1994.2	1880.2	1790.7	1758.3	1932.9
42.5°	3483.3	3439.3	3276.3	2776.3	2346.3	2213.5	2110.3	1941.5	1829.0	1779.2	1968.9
45°	4030.9	3972.5	3741.6	3120.4	2588.0	2411.2	2273.4	2034.6	1887.4	1819.6	2023.0
47.5°	4584.3	4598.7	4270.5	3514.4	2878.0	2655.1	2477.6	2174.6	1972.5	1884.5	2110.3
50°	5172.3	5182.4	4796.4	3950.9	3207.0	2930.7	2707.0	2331.1	2090.9	1976.9	2240.9
52.5°	5631.2	5632.6	5274.1	4407.6	3549.7	3233.7	2954.5	2510.0	2227.9	2099.5	2414.8
55°	5918.3	5914.7	5608.8	4839.7	3943.6	3551.9	3228.6	2713.5	2395.3	2243.8	2633.4
57.5°	6126.8	6116.0	5839.7	5211.3	4363.5	3927.8	3538.9	2944.4	2593.0	2415.5	2921.3
60°	6206.2	6199.7	5996.3	5532.3	4805.1	4343.3	3896.7	3202.7	2817.4	2618.3	3291.4
62.5°	6236.5	6248.8	6149.9	5843.3	5277.7	4803.6	4289.9	3511.5	3069.9	2847.7	3681.7
65°	6343.3	6365.7	6345.5	6250.2	5811.6	5342.6	4811.6	3878.7	3345.5	3093.7	4089.4
67.5°	6554.7	6577.1	6585.7	6737.2	6463.8	6014.3	5462.4	4336.1	3668.0	3349.1	4396.0
70°	6549.6	6543.1	6696.1	7124.7	7280.5	6944.3	6339.7	4898.9	4052.6	3561.2	4435.0
72.5°	5961.6	5909.7	6271.1	7120.3	7960.1	7915.4	7411.1	5624.7	4384.5	3587.2	3848.4
75°	4472.5	4334.0	4972.5	6416.9	8073.4	8466.6	8092.2	6074.9	4305.8	3169.5	2678.2
77.5°	1912.7	1773.4	2525.9	4750.3	7225.7	7914.7	7467.4	5300.0	3437.2	2095.9	1315.3
80°	500.7	500.0	763.3	2153.6	4914.0	5844.7	5127.6	3422.7	1963.9	748.9	362.9
82.5°	207.1	202.0	280.7	837.6	2401.1	3279.9	2676.7	1526.7	709.2	202.7	120.5
85°	77.2	76.5	136.4	289.3	847.0	1352.8	979.1	390.3	176.8	98.8	54.1
87.5°	21.6	20.9	29.6	100.3	206.3	313.1	167.4	64.2	49.8	39.0	15.9
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°	1555.5	1555.5	1555.5	1555.5	1555.5	1555.5	1555.5	1555.5	1555.5	1555.5	1555.5
2.5°	1560.6	1564.2	1570.7	1575.7	1582.2	1589.4	1599.5	1606.0	1612.5	1616.8	1614.0
5°	1567.1	1575.0	1591.6	1608.2	1627.7	1645.7	1666.6	1681.8	1694.0	1697.7	1699.1
7.5°	1581.5	1594.5	1622.6	1650.8	1681.8	1711.4	1741.7	1767.6	1788.6	1796.5	1797.2
10°	1606.7	1624.1	1663.7	1703.4	1744.6	1790.0	1829.0	1866.5	1896.1	1908.3	1909.0
12.5°	1638.5	1660.1	1712.1	1766.9	1823.9	1886.7	1937.2	1983.4	2020.2	2036.8	2036.8
15°	1679.6	1707.8	1774.1	1847.7	1931.4	2018.7	2082.9	2134.2	2175.3	2195.5	2194.0
17.5°	1724.3	1761.9	1845.6	1956.7	2076.4	2191.1	2266.2	2303.7	2346.3	2365.7	2365.0
20°	1767.6	1813.8	1933.6	2095.2	2254.6	2376.6	2437.2	2447.3	2450.2	2452.3	2458.1
22.5°	1812.4	1874.4	2044.0	2269.8	2440.8	2525.2	2533.9	2490.6	2430.0	2401.8	2409.8
25°	1861.4	1943.7	2188.3	2462.4	2601.0	2611.1	2544.7	2439.3	2324.6	2272.0	2279.9
27.5°	1909.0	2023.8	2361.4	2646.4	2716.4	2627.6	2484.8	2335.4	2196.9	2141.4	2147.9
30°	1956.7	2115.4	2552.6	2807.3	2769.1	2586.5	2390.3	2223.6	2084.4	2025.9	2032.4
32.5°	2005.0	2222.2	2772.7	2923.5	2759.7	2499.2	2272.7	2098.1	1975.4	1914.1	1922.0
35°	2059.8	2353.5	2981.2	2986.9	2696.9	2370.8	2117.6	1948.0	1841.2	1792.2	1803.0
37.5°	2131.3	2520.1	3165.2	3002.8	2587.2	2182.5	1924.9	1770.5	1682.5	1660.1	1676.0
40°	2220.0	2720.7	3305.8	2977.6	2424.9	1953.8	1714.2	1590.9	1541.1	1546.1	1563.5
42.5°	2335.4	2945.1	3404.7	2912.6	2199.1	1717.9	1529.5	1474.7	1498.5	1518.7	1537.5
45°	2485.5	3178.1	3466.0	2802.2	1943.7	1518.0	1420.6	1433.6	1451.6	1453.8	1468.2
47.5°	2677.4	3414.1	3506.4	2635.6	1683.2	1377.3	1351.3	1354.2	1350.6	1335.5	1347.0
50°	2917.0	3643.5	3542.5	2414.8	1461.7	1289.3	1254.7	1244.6	1194.8	1145.7	1152.2
52.5°	3189.7	3854.2	3557.6	2140.6	1289.3	1215.7	1159.4	1095.9	1002.9	987.7	992.8
55°	3492.7	4049.0	3518.7	1803.7	1144.3	1121.2	1036.1	959.6	949.5	936.5	938.7
57.5°	3854.9	4258.9	3439.3	1427.8	995.6	1010.8	927.8	936.5	918.5	898.2	894.6
60°	4251.0	4476.1	3300.1	1085.1	842.0	873.0	899.7	899.0	893.9	877.3	871.6
62.5°	4607.4	4618.9	3025.9	831.2	707.1	766.2	839.1	838.4	834.0	824.7	821.0
65°	4819.5	4597.3	2568.5	654.4	595.9	678.2	756.8	762.6	763.3	762.6	762.6
67.5°	4782.0	4344.1	1940.8	520.9	504.3	588.7	675.3	683.2	689.0	690.5	691.9
70°	4357.8	3787.8	1265.5	415.6	422.8	510.1	598.1	606.0	611.1	616.9	619.8
72.5°	3396.8	2784.9	724.4	336.2	351.4	442.3	521.6	531.0	533.9	544.7	549.0
75°	2069.9	1637.8	391.0	264.8	288.6	378.1	445.9	456.7	461.8	474.7	476.2
77.5°	984.1	709.2	222.9	206.3	232.3	308.8	376.6	388.9	375.2	382.4	376.6
80°	332.6	263.3	140.7	157.3	177.5	241.0	301.6	313.8	285.0	283.5	280.7
82.5°	116.2	106.8	89.5	104.6	114.7	172.4	228.0	243.9	212.1	211.4	201.3
85°	45.5	43.3	49.8	57.0	68.5	106.1	150.1	158.0	130.6	105.3	103.9
87.5°	9.4	10.1	12.3	13.0	20.9	36.8	54.1	66.4	52.7	44.7	41.1
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)