

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: P882544

Luminaire Tested: **NAV-SB2C-722-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882544
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-722-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2200K, 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: 12057 lumens
Efficiency: N/A
Efficacy: 119.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G3

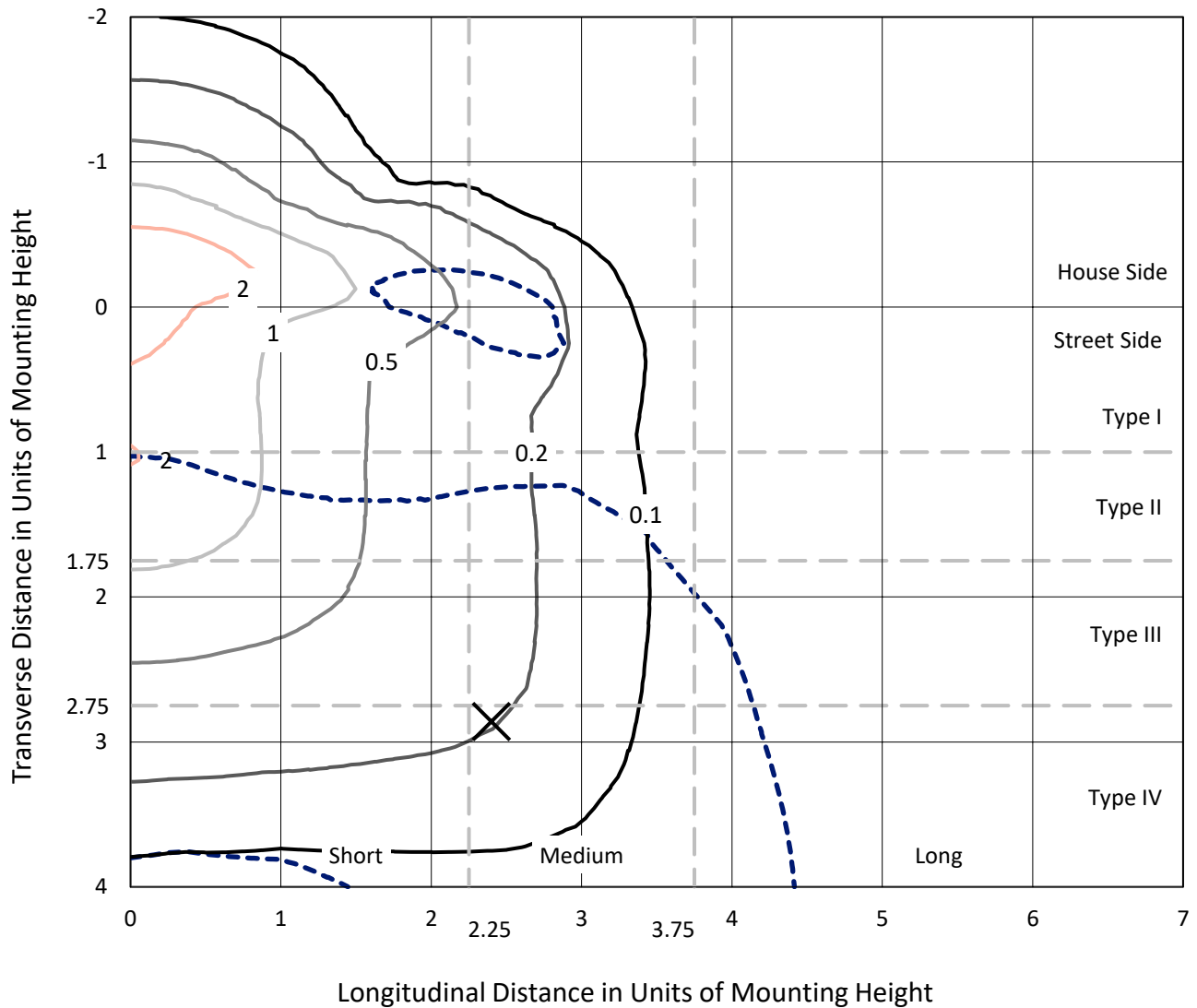
Input Watts (W): 100.9
Input Voltage (V): 120.0
Input Current (Ain): 0.857
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

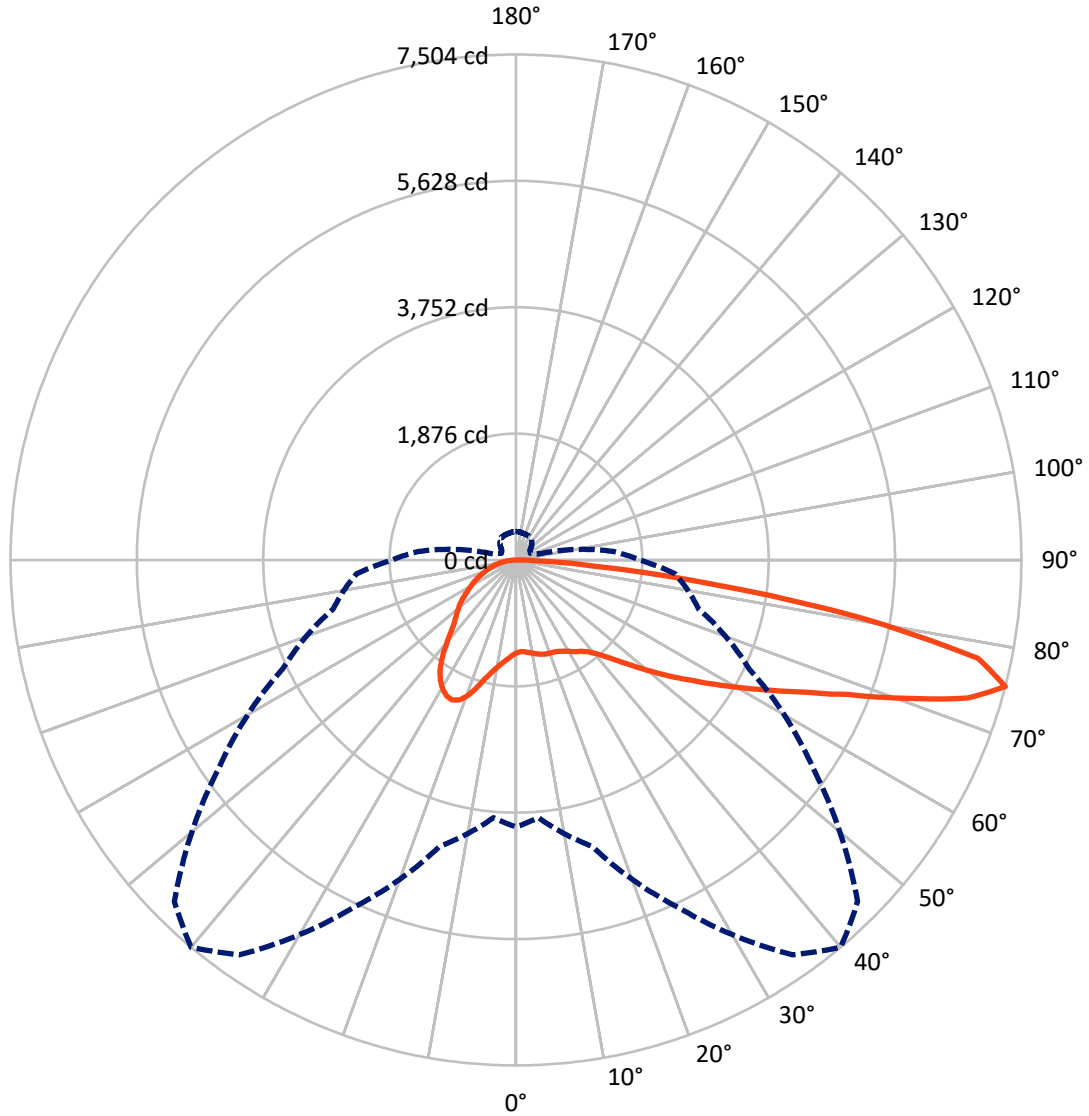
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 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	3735.7	0.0	3735.7
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	8321.3	0.0	8321.3
	% Fixture	69.0	0.0	69.0
Total	Lumens	12057.0	0.0	12057.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.6	1.1
10°-20°	462.1	3.8
20°-30°	843.7	7.0
30°-40°	1196.6	9.9
40°-50°	1615.8	13.4
50°-60°	2173.6	18.0
60°-70°	2758.8	22.9
70°-80°	2503.8	20.8
80°-90°	365.0	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°	12057.0	100.0
0°-180°	12057.0	100.0

Coefficient of Utilization



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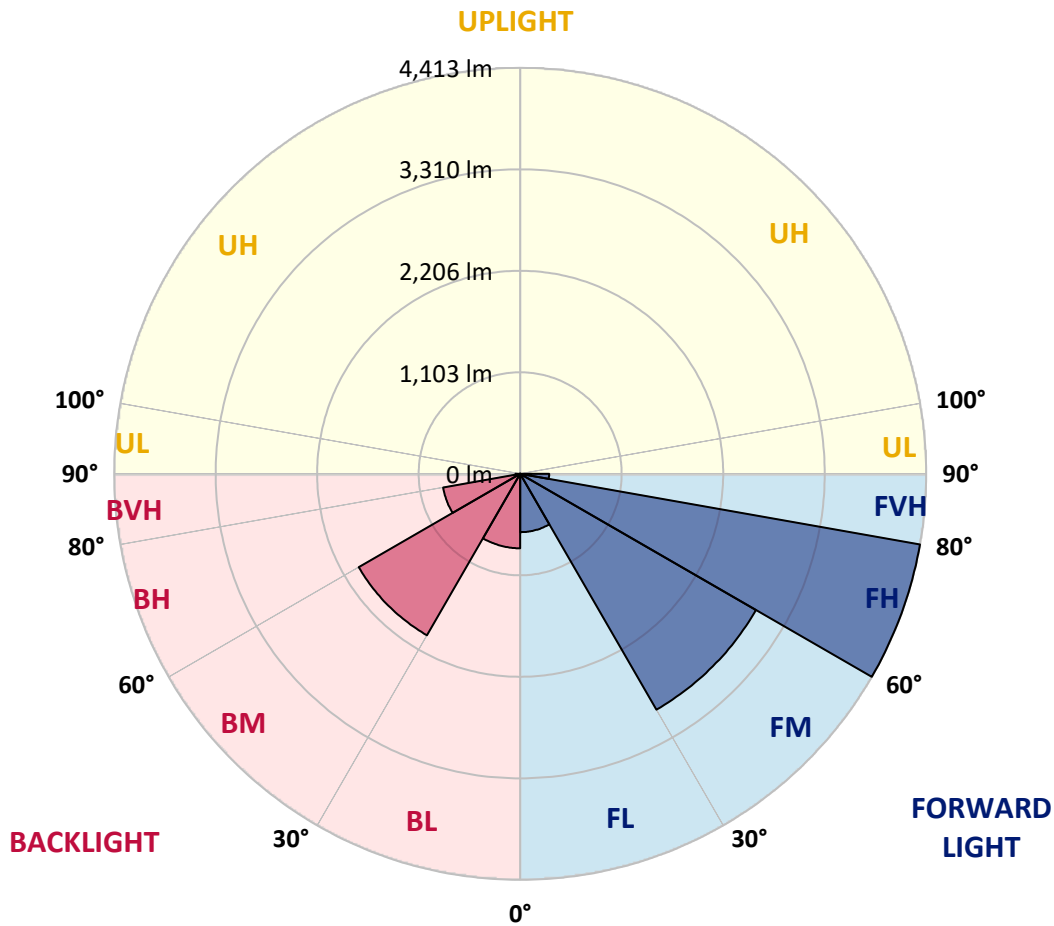
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	634.2	5.3			
FM (30°-60°)	2959.7	24.5			
FH (60°-80°)	4412.7	36.6			G2/5000
FVH (80°-90°)	314.7	2.6			G3/500
BL (0°-30°)	809.2	6.7	B2/1000		
BM (30°-60°)	2026.3	16.8	B2/2500		
BH (60°-80°)	850.0	7.0	B2/1000		G2/1000
BVH (80°-90°)	50.2	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°	1378.7	1378.7	1378.7	1378.7	1378.7	1378.7	1378.7	1378.7	1378.7	1378.7	1378.7
2.5°	1357.6	1365.3	1363.4	1360.8	1360.8	1361.5	1360.8	1365.3	1369.8	1374.3	1381.3
5°	1371.7	1379.4	1375.5	1372.3	1369.8	1369.1	1367.2	1366.6	1369.1	1374.9	1384.5
7.5°	1399.2	1406.9	1401.1	1395.4	1390.2	1387.7	1385.1	1381.3	1379.4	1382.6	1396.0
10°	1429.9	1437.6	1430.5	1420.3	1412.0	1408.8	1406.2	1402.4	1399.8	1401.8	1416.5
12.5°	1460.6	1468.3	1458.7	1444.6	1433.7	1431.8	1428.6	1427.3	1426.7	1426.1	1440.8
15°	1489.4	1495.8	1483.6	1467.0	1455.5	1452.3	1449.1	1451.0	1454.2	1458.0	1474.7
17.5°	1511.7	1518.1	1500.2	1478.5	1467.6	1466.3	1464.4	1470.8	1479.8	1489.4	1509.8
20°	1532.2	1538.6	1515.6	1486.2	1473.4	1473.4	1474.0	1487.4	1500.2	1514.3	1542.4
22.5°	1561.0	1566.1	1538.0	1497.7	1479.1	1480.4	1485.5	1499.0	1514.9	1534.1	1573.1
25°	1603.8	1607.7	1573.1	1519.4	1498.3	1502.2	1506.6	1513.0	1528.4	1550.8	1603.2
27.5°	1672.9	1676.1	1630.7	1557.8	1525.8	1532.2	1538.6	1534.1	1541.2	1560.3	1627.5
30°	1770.1	1772.0	1714.5	1617.9	1572.5	1575.7	1577.0	1558.4	1545.0	1560.3	1644.8
32.5°	1885.2	1884.6	1816.1	1690.8	1625.6	1622.4	1611.5	1575.1	1543.7	1557.2	1660.1
35°	2063.6	2056.6	1968.3	1793.1	1685.7	1665.9	1640.3	1593.6	1550.1	1554.0	1673.5
37.5°	2359.1	2337.3	2215.2	1960.7	1775.2	1724.7	1687.0	1623.7	1564.2	1552.7	1689.5
40°	2692.2	2664.7	2530.5	2190.2	1909.5	1828.3	1767.5	1666.5	1587.2	1558.4	1713.2
42.5°	3087.4	3048.4	2903.9	2460.7	2079.6	1961.9	1870.5	1720.9	1621.1	1577.0	1745.2
45°	3572.8	3521.0	3316.4	2765.8	2293.8	2137.2	2015.0	1803.4	1672.9	1612.8	1793.1
47.5°	4063.3	4076.1	3785.1	3114.9	2550.9	2353.3	2196.0	1927.4	1748.4	1670.3	1870.5
50°	4584.5	4593.4	4251.3	3501.8	2842.5	2597.6	2399.4	2066.2	1853.2	1752.2	1986.2
52.5°	4991.2	4992.5	4674.7	3906.6	3146.3	2866.2	2618.7	2224.8	1974.7	1860.9	2140.4
55°	5245.7	5242.5	4971.4	4289.7	3495.4	3148.2	2861.7	2405.1	2123.1	1988.8	2334.1
57.5°	5430.5	5420.9	5176.0	4619.0	3867.6	3481.4	3136.7	2609.7	2298.3	2141.0	2589.3
60°	5500.9	5495.1	5314.8	4903.6	4259.0	3849.7	3453.9	2838.7	2497.2	2320.7	2917.3
62.5°	5527.7	5538.6	5451.0	5179.2	4677.8	4257.7	3802.4	3112.4	2721.0	2524.1	3263.3
65°	5622.4	5642.2	5624.3	5539.9	5151.1	4735.4	4264.7	3437.9	2965.3	2742.1	3624.6
67.5°	5809.7	5829.6	5837.2	5971.5	5729.2	5330.8	4841.6	3843.3	3251.2	2968.5	3896.4
70°	5805.3	5799.5	5935.1	6314.9	6453.1	6155.1	5619.2	4342.1	3592.0	3156.5	3930.9
72.5°	5284.1	5238.0	5558.4	6311.1	7055.5	7015.8	6568.8	4985.4	3886.2	3179.5	3411.0
75°	3964.2	3841.4	4407.3	5687.6	7155.9	7504.4	7172.5	5384.5	3816.5	2809.3	2373.8
77.5°	1695.3	1571.9	2238.8	4210.4	6404.5	7015.2	6618.7	4697.7	3046.5	1857.7	1165.8
80°	443.8	443.2	676.6	1908.9	4355.5	5180.5	4544.8	3033.7	1740.7	663.8	321.7
82.5°	183.5	179.1	248.8	742.4	2128.2	2907.1	2372.5	1353.2	628.6	179.7	106.8
85°	68.4	67.8	120.9	256.4	750.8	1199.0	867.8	346.0	156.7	87.6	48.0
87.5°	19.2	18.5	26.2	88.9	182.9	277.5	148.4	56.9	44.1	34.5	14.1
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°	1378.7	1378.7	1378.7	1378.7	1378.7	1378.7	1378.7	1378.7	1378.7	1378.7	1378.7
2.5°	1383.2	1386.4	1392.2	1396.6	1402.4	1408.8	1417.7	1423.5	1429.3	1433.1	1430.5
5°	1389.0	1396.0	1410.7	1425.4	1442.7	1458.7	1477.2	1490.6	1501.5	1504.7	1506.0
7.5°	1401.8	1413.3	1438.2	1463.1	1490.6	1516.9	1543.7	1566.7	1585.3	1592.3	1593.0
10°	1424.1	1439.5	1474.7	1509.8	1546.3	1586.6	1621.1	1654.4	1680.6	1691.4	1692.1
12.5°	1452.3	1471.5	1517.5	1566.1	1616.6	1672.3	1717.0	1757.9	1790.6	1805.3	1805.3
15°	1488.7	1513.7	1572.5	1637.7	1711.9	1789.3	1846.2	1891.6	1928.1	1946.0	1944.7
17.5°	1528.4	1561.6	1635.8	1734.3	1840.4	1942.1	2008.6	2041.9	2079.6	2096.9	2096.2
20°	1566.7	1607.7	1713.8	1857.1	1998.4	2106.5	2160.2	2169.1	2171.7	2173.6	2178.7
22.5°	1606.4	1661.4	1811.7	2011.8	2163.4	2238.2	2245.9	2207.5	2153.8	2128.9	2135.9
25°	1649.9	1722.8	1939.6	2182.6	2305.4	2314.3	2255.5	2162.1	2060.4	2013.7	2020.8
27.5°	1692.1	1793.8	2093.0	2345.6	2407.7	2329.0	2202.4	2070.0	1947.2	1898.0	1903.8
30°	1734.3	1875.0	2262.5	2488.2	2454.4	2292.6	2118.6	1970.9	1847.5	1795.7	1801.4
32.5°	1777.1	1969.6	2457.5	2591.2	2446.0	2215.2	2014.4	1859.6	1750.9	1696.6	1703.6
35°	1825.7	2086.0	2642.4	2647.5	2390.4	2101.4	1876.9	1726.6	1632.0	1588.5	1598.1
37.5°	1889.0	2233.7	2805.4	2661.5	2293.2	1934.4	1706.2	1569.3	1491.3	1471.5	1485.5
40°	1967.7	2411.5	2930.1	2639.2	2149.3	1731.7	1519.4	1410.1	1365.9	1370.4	1385.8
42.5°	2070.0	2610.4	3017.7	2581.6	1949.2	1522.6	1355.7	1307.1	1328.2	1346.1	1362.7
45°	2203.0	2816.9	3072.1	2483.8	1722.8	1345.5	1259.1	1270.7	1286.6	1288.6	1301.4
47.5°	2373.1	3026.1	3107.9	2336.0	1491.9	1220.8	1197.8	1200.3	1197.1	1183.7	1193.9
50°	2585.4	3229.4	3139.9	2140.4	1295.6	1142.8	1112.1	1103.1	1059.0	1015.5	1021.3
52.5°	2827.2	3416.1	3153.3	1897.4	1142.8	1077.5	1027.7	971.4	888.9	875.5	879.9
55°	3095.8	3588.8	3118.8	1598.7	1014.2	993.8	918.3	850.5	841.6	830.1	832.0
57.5°	3416.8	3774.9	3048.4	1265.5	882.5	895.9	822.4	830.1	814.1	796.2	793.0
60°	3767.9	3967.4	2925.0	961.8	746.3	773.8	797.4	796.8	792.3	777.6	772.5
62.5°	4083.8	4094.0	2682.0	736.7	626.7	679.1	743.7	743.1	739.2	730.9	727.7
65°	4271.8	4074.8	2276.6	580.0	528.2	601.1	670.8	675.9	676.6	675.9	675.9
67.5°	4238.5	3850.4	1720.2	461.7	447.0	521.8	598.6	605.6	610.7	612.0	613.3
70°	3862.5	3357.3	1121.7	368.3	374.7	452.1	530.1	537.2	541.6	546.8	549.3
72.5°	3010.7	2468.4	642.0	298.0	311.4	392.0	462.3	470.7	473.2	482.8	486.6
75°	1834.7	1451.6	346.6	234.7	255.8	335.1	395.2	404.8	409.3	420.8	422.1
77.5°	872.3	628.6	197.6	182.9	205.9	273.7	333.8	344.7	332.5	338.9	333.8
80°	294.8	233.4	124.7	139.4	157.3	213.6	267.3	278.2	252.6	251.3	248.8
82.5°	103.0	94.6	79.3	92.7	101.7	152.8	202.1	216.1	188.0	187.4	178.4
85°	40.3	38.4	44.1	50.5	60.8	94.0	133.0	140.0	115.7	93.4	92.1
87.5°	8.3	9.0	10.9	11.5	18.5	32.6	48.0	58.8	46.7	39.6	36.5
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)