

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: P882964

Luminaire Tested: **NAV-SB3A-830-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882964
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-830-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 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: 11670 lumens
Efficiency: N/A
Efficacy: 137.8 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

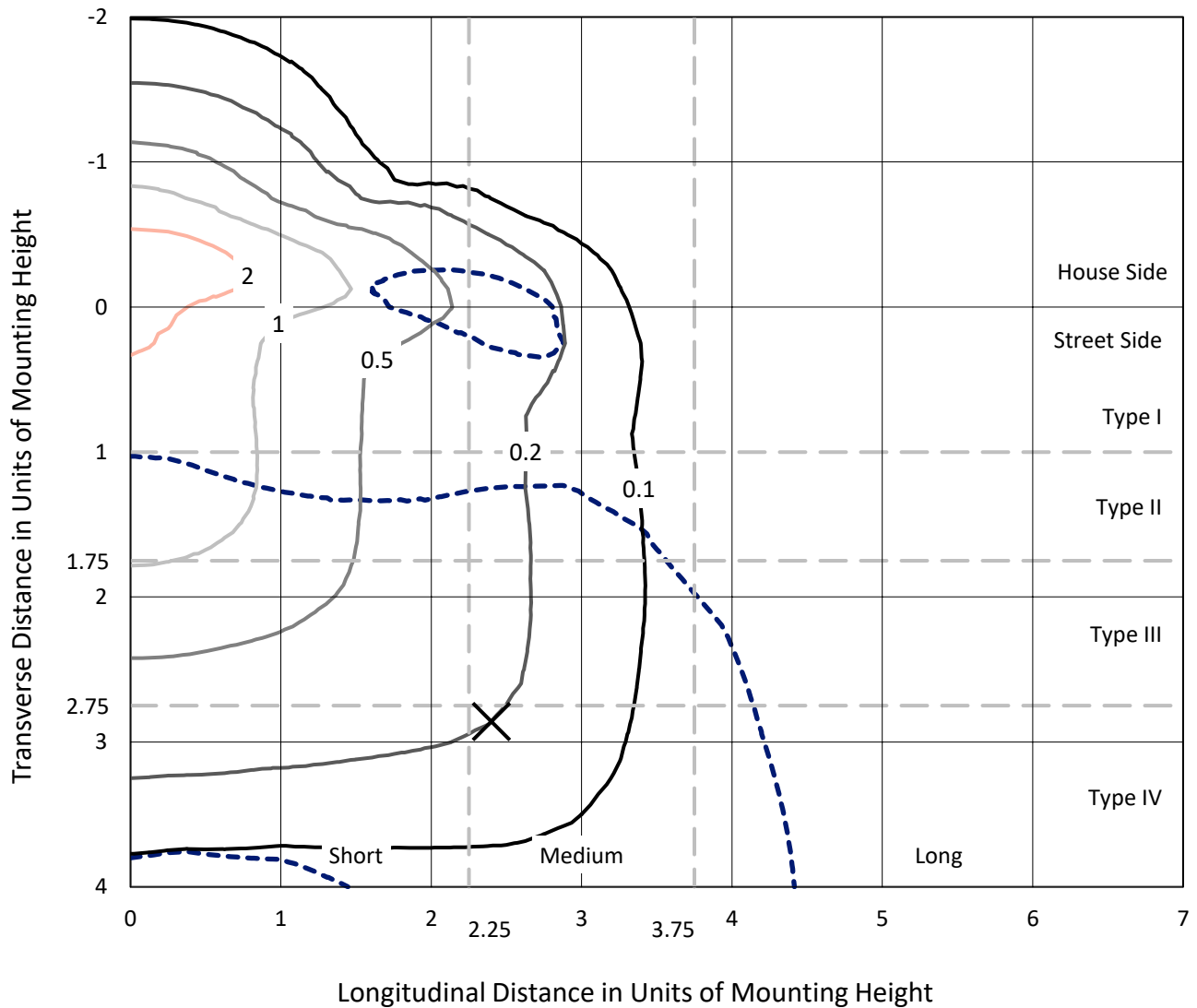
Input Watts (W): 84.7
Input Voltage (V): 120.0
Input Current (Ain): 0.717
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 11.969
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

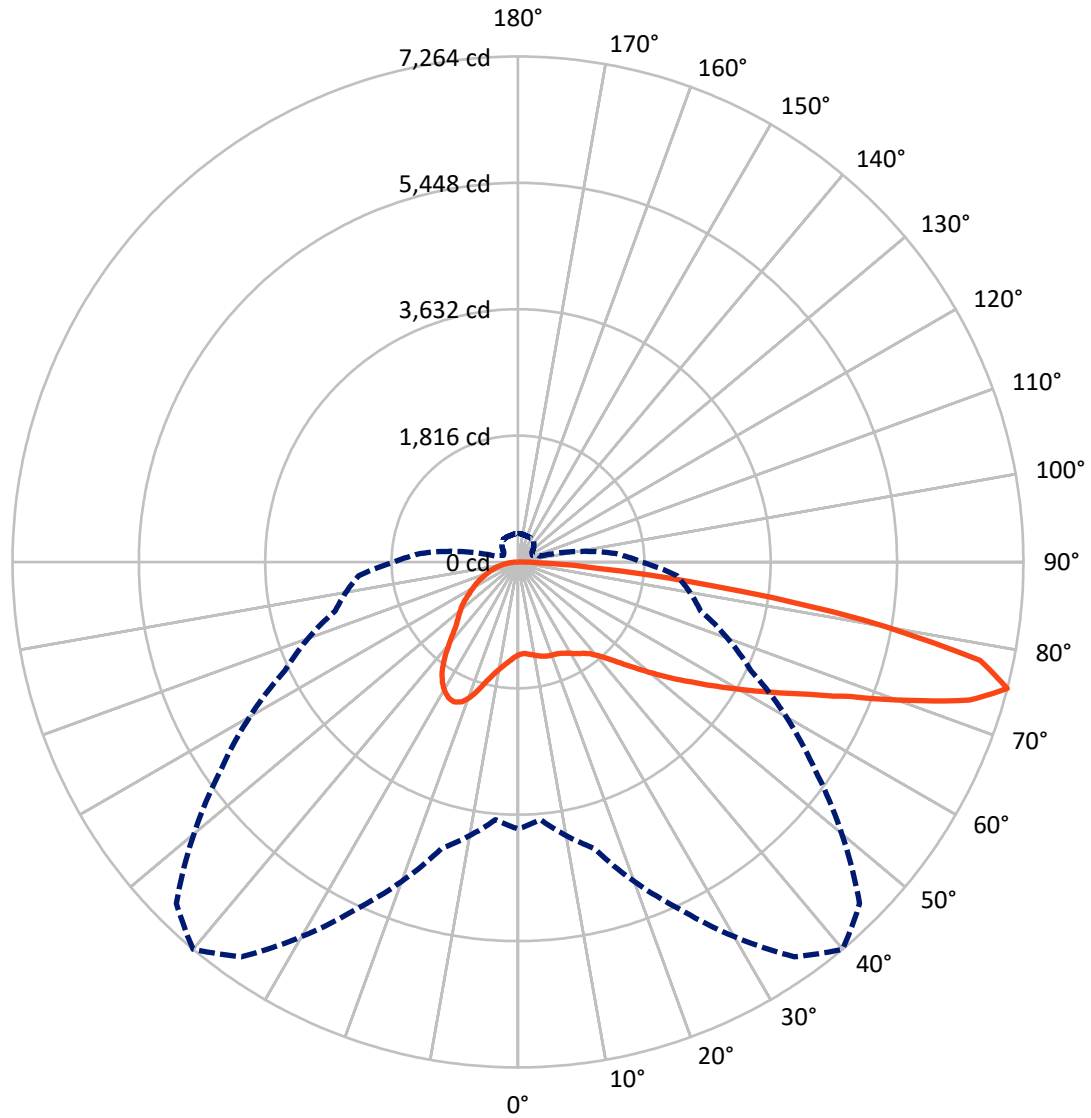
✕ Max cd
 - - - 1/2 Max cd



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	3615.8	0.0	3615.8
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	8054.2	0.0	8054.2
	% Fixture	69.0	0.0	69.0
Total	Lumens	11670.0	0.0	11670.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.2	1.1
10°-20°	447.2	3.8
20°-30°	816.6	7.0
30°-40°	1158.2	9.9
40°-50°	1563.9	13.4
50°-60°	2103.9	18.0
60°-70°	2670.3	22.9
70°-80°	2423.4	20.8
80°-90°	353.3	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°	11670.0	100.0
0°-180°	11670.0	100.0

Coefficient of Utilization



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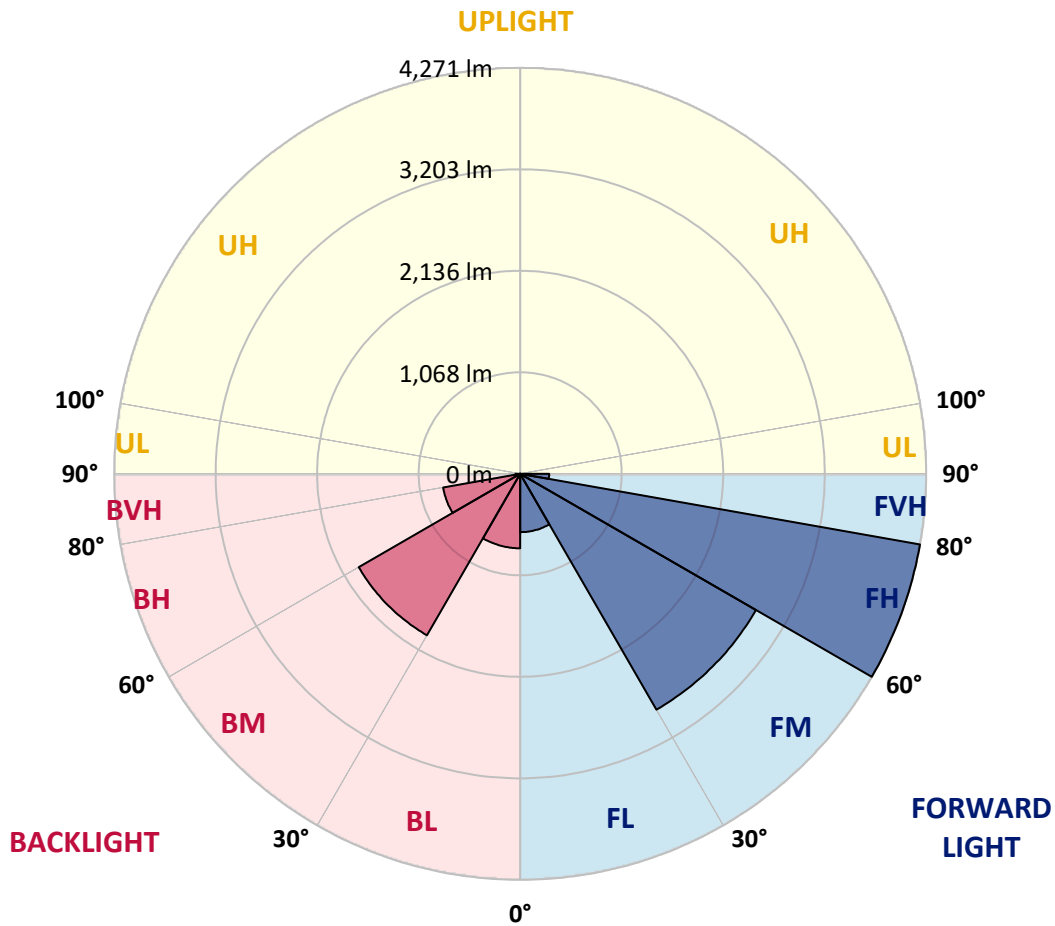
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	613.9	5.3			
FM (30°-60°)	2864.7	24.5			
FH (60°-80°)	4271.0	36.6			G2/5000
FVH (80°-90°)	304.6	2.6			G3/500
BL (0°-30°)	783.2	6.7	B2/1000		
BM (30°-60°)	1961.2	16.8	B2/2500		
BH (60°-80°)	822.7	7.0	B2/1000		G2/1000
BVH (80°-90°)	48.6	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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1334.5	1334.5	1334.5	1334.5	1334.5	1334.5	1334.5	1334.5	1334.5	1334.5	1334.5
2.5°	1314.1	1321.5	1319.6	1317.1	1317.1	1317.8	1317.1	1321.5	1325.8	1330.1	1337.0
5°	1327.7	1335.1	1331.4	1328.3	1325.8	1325.2	1323.3	1322.7	1325.2	1330.8	1340.1
7.5°	1354.3	1361.7	1356.1	1350.6	1345.6	1343.1	1340.7	1337.0	1335.1	1338.2	1351.2
10°	1384.0	1391.4	1384.6	1374.7	1366.7	1363.6	1361.1	1357.4	1354.9	1356.8	1371.0
12.5°	1413.7	1421.1	1411.9	1398.2	1387.7	1385.9	1382.8	1381.5	1380.9	1380.3	1394.5
15°	1441.6	1447.7	1436.0	1419.9	1408.8	1405.7	1402.6	1404.4	1407.5	1411.2	1427.3
17.5°	1463.2	1469.4	1452.1	1431.0	1420.5	1419.3	1417.4	1423.6	1432.3	1441.6	1461.4
20°	1483.0	1489.2	1466.9	1438.5	1426.1	1426.1	1426.7	1439.7	1452.1	1465.7	1492.9
22.5°	1510.9	1515.8	1488.6	1449.6	1431.7	1432.9	1437.8	1450.8	1466.3	1484.9	1522.6
25°	1552.4	1556.1	1522.6	1470.7	1450.2	1453.9	1458.3	1464.5	1479.3	1501.0	1551.7
27.5°	1619.2	1622.3	1578.4	1507.8	1476.8	1483.0	1489.2	1484.9	1491.7	1510.3	1575.3
30°	1713.3	1715.1	1659.4	1566.0	1522.0	1525.1	1526.4	1508.4	1495.4	1510.3	1592.0
32.5°	1824.7	1824.1	1757.8	1636.5	1573.4	1570.3	1559.8	1524.5	1494.2	1507.2	1606.8
35°	1997.4	1990.6	1905.2	1735.6	1631.6	1612.4	1587.6	1542.5	1500.4	1504.1	1619.8
37.5°	2283.3	2262.3	2144.1	1897.7	1718.2	1669.3	1632.8	1571.5	1514.0	1502.8	1635.3
40°	2605.8	2579.2	2449.2	2119.9	1848.2	1769.6	1710.8	1613.0	1536.3	1508.4	1658.2
42.5°	2988.3	2950.6	2810.7	2381.8	2012.9	1899.0	1810.5	1665.6	1569.1	1526.4	1689.1
45°	3458.1	3408.0	3209.9	2677.0	2220.2	2068.6	1950.3	1745.5	1619.2	1561.0	1735.6
47.5°	3932.9	3945.3	3663.6	3015.0	2469.0	2277.8	2125.5	1865.5	1692.2	1616.7	1810.5
50°	4437.3	4446.0	4114.9	3389.4	2751.3	2514.2	2322.3	1999.9	1793.7	1696.0	1922.5
52.5°	4831.0	4832.2	4524.6	3781.2	3045.3	2774.2	2534.6	2153.4	1911.4	1801.2	2071.7
55°	5077.3	5074.2	4811.8	4152.0	3383.2	3047.1	2769.9	2327.9	2055.0	1925.0	2259.2
57.5°	5256.2	5246.9	5009.9	4470.8	3743.5	3369.6	3036.0	2526.0	2224.5	2072.3	2506.2
60°	5324.3	5318.7	5144.2	4746.2	4122.3	3726.1	3343.0	2747.6	2417.0	2246.2	2823.7
62.5°	5350.3	5360.8	5276.0	5013.0	4527.7	4121.0	3680.3	3012.5	2633.7	2443.0	3158.6
65°	5441.9	5461.1	5443.8	5362.1	4985.7	4583.4	4127.9	3327.5	2870.1	2654.1	3508.3
67.5°	5623.3	5642.4	5649.9	5779.9	5545.3	5159.7	4686.2	3720.0	3146.8	2873.2	3771.3
70°	5618.9	5613.4	5744.6	6112.2	6245.9	5957.5	5438.8	4202.7	3476.7	3055.2	3804.8
72.5°	5114.5	5069.9	5380.0	6108.5	6829.0	6790.6	6358.0	4825.4	3761.4	3077.5	3301.5
75°	3836.9	3718.1	4265.9	5505.0	6926.2	7263.5	6942.3	5211.7	3694.0	2719.1	2297.6
77.5°	1640.9	1521.4	2167.0	4075.2	6198.9	6790.0	6406.2	4546.9	2948.7	1798.1	1128.4
80°	429.6	428.9	654.9	1847.6	4215.7	5014.2	4399.0	2936.4	1684.8	642.5	311.3
82.5°	177.6	173.3	240.8	718.6	2059.9	2813.8	2296.3	1309.7	608.4	173.9	103.4
85°	66.2	65.6	117.0	248.2	726.7	1160.6	839.9	334.9	151.6	84.8	46.4
87.5°	18.6	17.9	25.4	86.0	177.0	268.6	143.6	55.1	42.7	33.4	13.6
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°	1334.5	1334.5	1334.5	1334.5	1334.5	1334.5	1334.5	1334.5	1334.5	1334.5	1334.5
2.5°	1338.8	1341.9	1347.5	1351.8	1357.4	1363.6	1372.2	1377.8	1383.4	1387.1	1384.6
5°	1344.4	1351.2	1365.4	1379.7	1396.4	1411.9	1429.8	1442.8	1453.3	1456.4	1457.7
7.5°	1356.8	1367.9	1392.0	1416.2	1442.8	1468.2	1494.2	1516.5	1534.4	1541.2	1541.8
10°	1378.4	1393.3	1427.3	1461.4	1496.6	1535.6	1569.1	1601.3	1626.6	1637.2	1637.8
12.5°	1405.7	1424.2	1468.8	1515.8	1564.7	1618.6	1661.9	1701.5	1733.1	1747.3	1747.3
15°	1440.9	1465.1	1522.0	1585.2	1657.0	1731.9	1786.9	1830.9	1866.2	1883.5	1882.3
17.5°	1479.3	1511.5	1583.3	1678.6	1781.4	1879.8	1944.2	1976.3	2012.9	2029.6	2029.0
20°	1516.5	1556.1	1658.8	1797.5	1934.3	2038.9	2090.9	2099.5	2102.0	2103.8	2108.8
22.5°	1554.8	1608.1	1753.5	1947.3	2093.9	2166.4	2173.8	2136.7	2084.7	2060.5	2067.3
25°	1596.9	1667.5	1877.3	2112.5	2231.4	2240.0	2183.1	2092.7	1994.3	1949.1	1955.9
27.5°	1637.8	1736.2	2025.9	2270.3	2330.4	2254.3	2131.7	2003.6	1884.7	1837.1	1842.6
30°	1678.6	1814.8	2189.9	2408.4	2375.6	2219.0	2050.6	1907.6	1788.2	1738.0	1743.6
32.5°	1720.1	1906.4	2378.7	2508.0	2367.5	2144.1	1949.7	1799.9	1694.7	1642.1	1648.9
35°	1767.1	2019.1	2557.5	2562.5	2313.7	2033.9	1816.7	1671.2	1579.6	1537.5	1546.8
37.5°	1828.4	2162.0	2715.4	2576.1	2219.6	1872.4	1651.4	1518.9	1443.4	1424.2	1437.8
40°	1904.5	2334.1	2836.1	2554.5	2080.3	1676.1	1470.7	1364.8	1322.1	1326.4	1341.3
42.5°	2003.6	2526.6	2920.9	2498.7	1886.6	1473.7	1312.2	1265.2	1285.6	1302.9	1319.0
45°	2132.3	2726.5	2973.5	2404.0	1667.5	1302.3	1218.7	1229.9	1245.3	1247.2	1259.6
47.5°	2297.0	2928.9	3008.2	2261.1	1444.0	1181.6	1159.3	1161.8	1158.7	1145.7	1155.6
50°	2502.5	3125.8	3039.1	2071.7	1254.0	1106.1	1076.4	1067.7	1025.0	982.9	988.5
52.5°	2736.4	3306.5	3052.1	1836.5	1106.1	1042.9	994.7	940.2	860.4	847.4	851.7
55°	2996.4	3473.6	3018.7	1547.4	981.7	961.9	888.8	823.2	814.6	803.4	805.3
57.5°	3307.1	3653.7	2950.6	1224.9	854.2	867.2	796.0	803.4	787.9	770.6	767.5
60°	3646.9	3840.0	2831.1	930.9	722.3	748.9	771.8	771.2	766.9	752.7	747.7
62.5°	3952.7	3962.6	2595.9	713.0	606.6	657.3	719.9	719.2	715.5	707.5	704.4
65°	4134.7	3944.0	2203.5	561.4	511.3	581.8	649.3	654.2	654.9	654.2	654.2
67.5°	4102.5	3726.8	1665.0	446.9	432.7	505.1	579.3	586.2	591.1	592.3	593.6
70°	3738.5	3249.5	1085.7	356.5	362.7	437.6	513.1	519.9	524.3	529.2	531.7
72.5°	2914.1	2389.2	621.4	288.4	301.4	379.4	447.5	455.6	458.0	467.3	471.0
75°	1775.8	1405.0	335.5	227.2	247.6	324.3	382.5	391.8	396.1	407.3	408.5
77.5°	844.3	608.4	191.3	177.0	199.3	264.9	323.1	333.6	321.9	328.0	323.1
80°	285.3	225.9	120.7	134.9	152.3	206.7	258.7	269.2	244.5	243.3	240.8
82.5°	99.7	91.6	76.8	89.7	98.4	147.9	195.6	209.2	182.0	181.4	172.7
85°	39.0	37.1	42.7	48.9	58.8	91.0	128.7	135.6	112.0	90.4	89.1
87.5°	8.0	8.7	10.5	11.1	17.9	31.6	46.4	56.9	45.2	38.4	35.3
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)