

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: P963662

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

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963662
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
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: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12287.7 lumens
Efficiency: N/A
Efficacy: 145.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G3

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



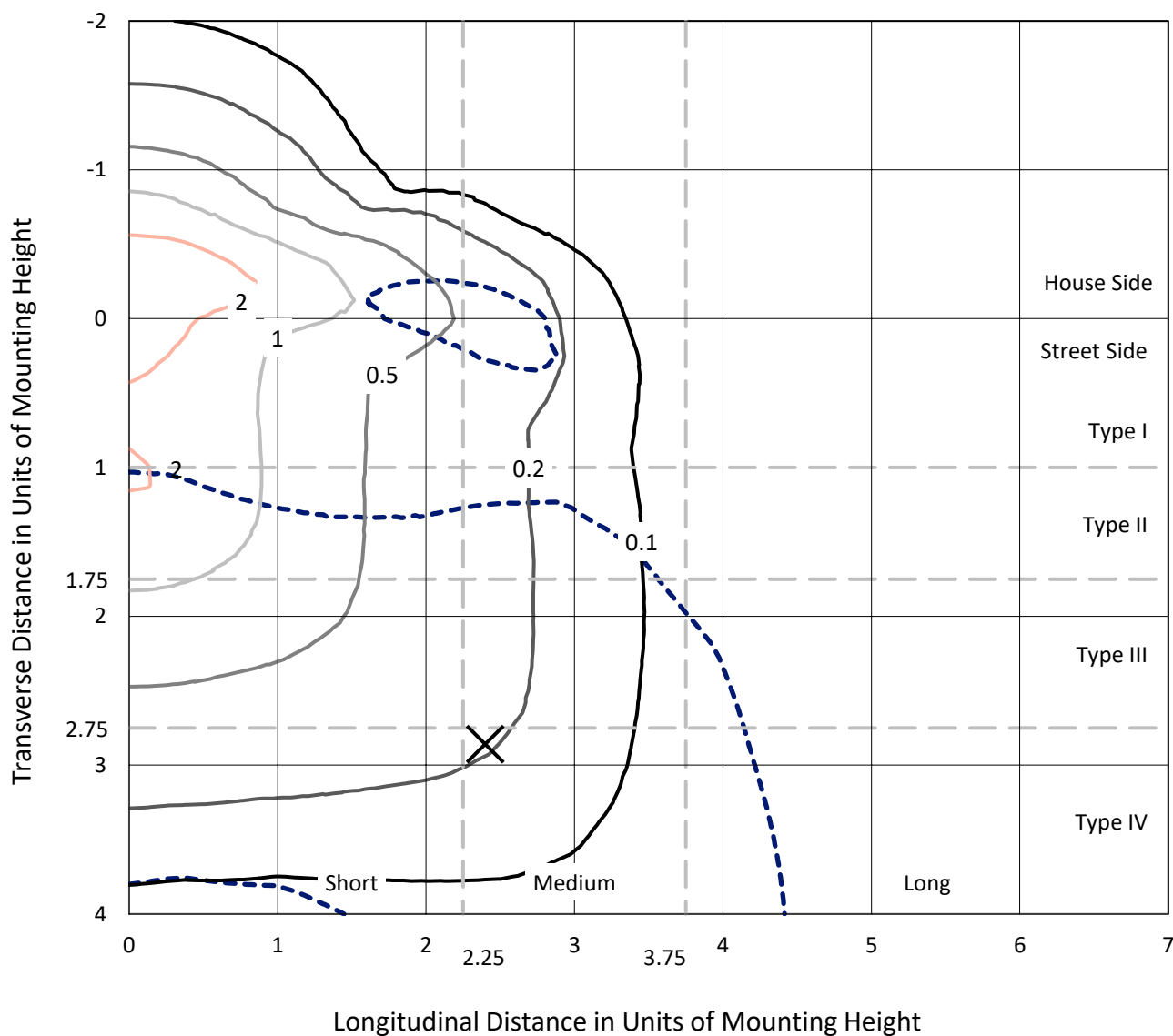
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

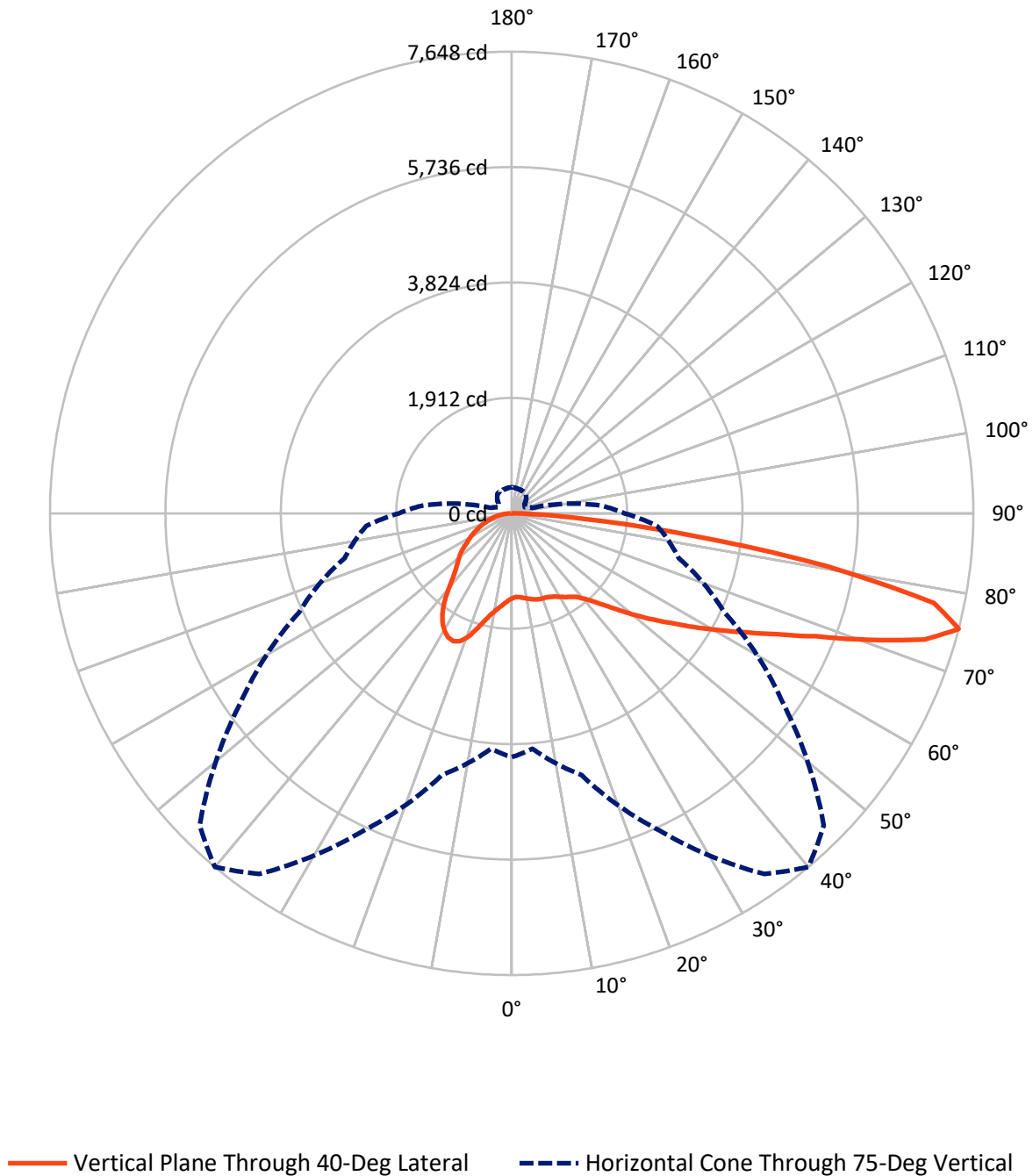
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 fc
Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3807.1	0.0	3807.1
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	8480.6	0.0	8480.6
	% Fixture	69.0	0.0	69.0
Total	Lumens	12287.7	0.0	12287.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.3	1.1
10°-20°	470.9	3.8
20°-30°	859.8	7.0
30°-40°	1219.5	9.9
40°-50°	1646.7	13.4
50°-60°	2215.2	18.0
60°-70°	2811.6	22.9
70°-80°	2551.7	20.8
80°-90°	372.0	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°	12287.7	100.0
0°-180°	12287.7	100.0

Coefficient of Utilization



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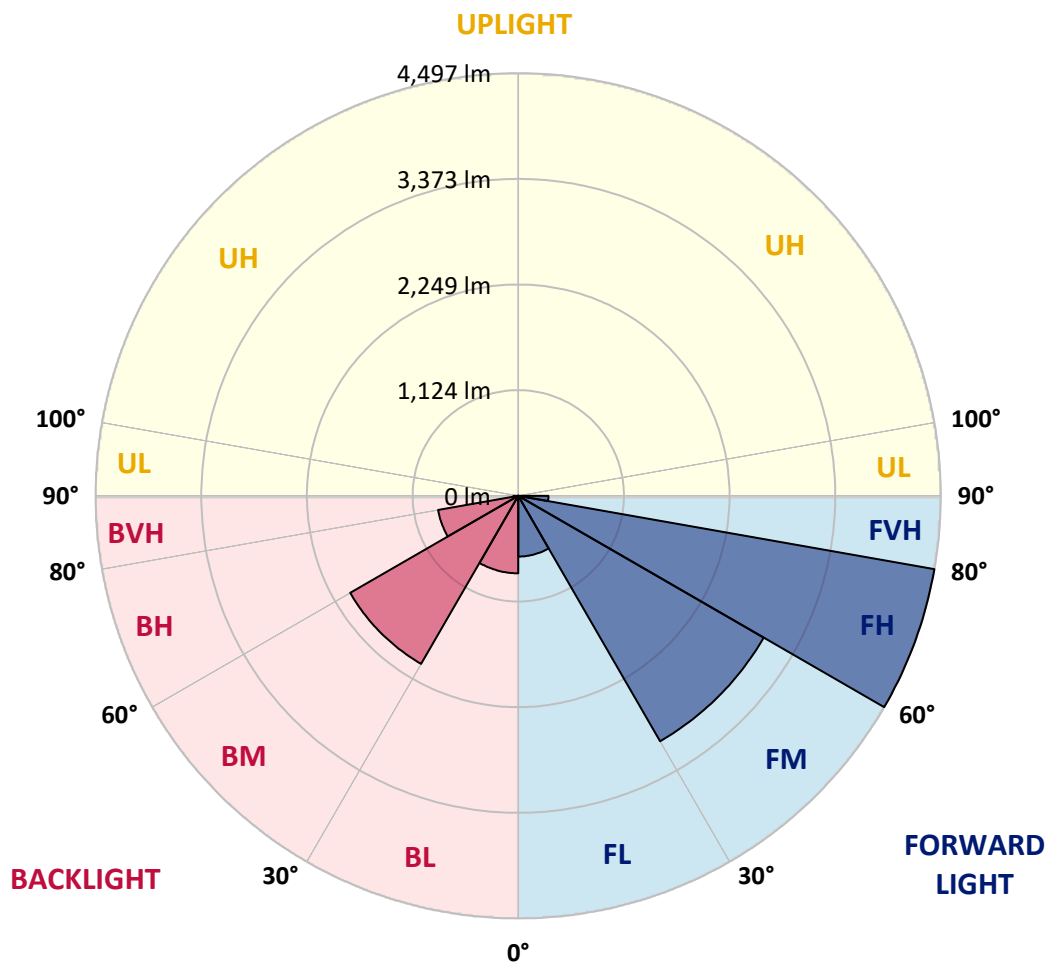
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	646.3	5.3			
FM	(30°-60°)	3016.4	24.5			
FH	(60°-80°)	4497.1	36.6			G2/5000
FVH	(80°-90°)	320.8	2.6			G3/500
BL	(0°-30°)	824.7	6.7	B2/1000		
BM	(30°-60°)	2065.0	16.8	B2/2500		
BH	(60°-80°)	866.2	7.0	B2/1000		G2/1000
BVH	(80°-90°)	51.2	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°	1405.1	1405.1	1405.1	1405.1	1405.1	1405.1	1405.1	1405.1	1405.1	1405.1	1405.1
2.5°	1383.6	1391.4	1389.5	1386.8	1386.8	1387.5	1386.8	1391.4	1395.9	1400.6	1407.7
5°	1397.9	1405.8	1401.9	1398.6	1395.9	1395.3	1393.4	1392.8	1395.3	1401.2	1411.0
7.5°	1426.0	1433.8	1427.9	1422.1	1416.9	1414.2	1411.6	1407.7	1405.8	1409.1	1422.7
10°	1457.2	1465.0	1457.9	1447.5	1439.0	1435.7	1433.2	1429.3	1426.6	1428.5	1443.6
12.5°	1488.5	1496.4	1486.6	1472.2	1461.1	1459.2	1455.9	1454.7	1454.0	1453.3	1468.3
15°	1517.8	1524.4	1512.0	1495.1	1483.3	1480.1	1476.8	1478.8	1482.0	1485.9	1502.9
17.5°	1540.7	1547.2	1529.0	1506.7	1495.7	1494.4	1492.4	1499.0	1508.1	1517.8	1538.7
20°	1561.5	1568.0	1544.6	1514.6	1501.5	1501.5	1502.2	1515.9	1529.0	1543.2	1571.9
22.5°	1590.9	1596.0	1567.4	1526.3	1507.5	1508.7	1513.9	1527.7	1544.0	1563.4	1603.2
25°	1634.6	1638.5	1603.2	1548.5	1526.9	1530.9	1535.4	1542.0	1557.6	1580.4	1633.8
27.5°	1704.9	1708.2	1661.9	1587.6	1555.0	1561.5	1568.0	1563.4	1570.6	1590.2	1658.7
30°	1804.0	1805.9	1747.3	1648.8	1602.6	1605.9	1607.2	1588.2	1574.6	1590.2	1676.2
32.5°	1921.3	1920.6	1850.8	1723.1	1656.7	1653.4	1642.4	1605.1	1573.3	1586.9	1691.9
35°	2103.1	2095.9	2006.0	1827.5	1717.9	1697.7	1671.7	1624.1	1579.7	1583.7	1705.6
37.5°	2404.2	2382.0	2257.6	1998.1	1809.2	1757.7	1719.2	1654.8	1594.1	1582.4	1721.9
40°	2743.7	2715.7	2578.9	2232.1	1946.1	1863.2	1801.3	1698.4	1617.6	1588.2	1746.0
42.5°	3146.5	3106.8	2959.5	2507.9	2119.4	1999.5	1906.3	1753.8	1652.1	1607.2	1778.6
45°	3641.2	3588.4	3379.8	2818.7	2337.7	2178.0	2053.6	1837.8	1704.9	1643.7	1827.5
47.5°	4141.0	4154.1	3857.6	3174.5	2599.7	2398.3	2238.0	1964.3	1781.9	1702.3	1906.3
50°	4672.2	4681.3	4332.7	3568.8	2897.0	2647.3	2445.2	2105.8	1888.7	1785.8	2024.3
52.5°	5086.7	5088.0	4764.1	3981.4	3206.5	2921.0	2668.8	2267.3	2012.5	1896.6	2181.3
55°	5346.1	5342.8	5066.5	4371.7	3562.3	3208.5	2916.4	2451.1	2163.7	2026.8	2378.8
57.5°	5534.4	5524.6	5275.1	4707.4	3941.6	3547.9	3196.7	2659.7	2342.3	2181.9	2638.9
60°	5606.1	5600.3	5416.5	4997.4	4340.5	3923.4	3520.0	2893.0	2545.0	2365.1	2973.1
62.5°	5633.5	5644.6	5555.3	5278.3	4767.4	4339.1	3875.1	3172.0	2773.0	2572.3	3325.7
65°	5730.0	5750.1	5731.9	5645.9	5249.6	4826.0	4346.3	3503.7	3022.0	2794.6	3694.0
67.5°	5920.9	5941.1	5948.9	6085.8	5838.8	5432.8	4934.1	3916.8	3313.3	3025.3	3971.0
70°	5916.3	5910.5	6048.6	6435.8	6576.5	6272.8	5726.7	4425.2	3660.7	3216.9	4006.1
72.5°	5385.1	5338.3	5664.8	6431.9	7190.5	7150.1	6694.5	5080.8	3960.5	3240.3	3476.3
75°	4040.0	3914.9	4491.7	5796.4	7292.8	7647.9	7309.7	5487.5	3889.5	2863.0	2419.2
77.5°	1727.7	1602.0	2281.6	4291.0	6527.0	7149.4	6745.3	4787.6	3104.8	1893.3	1188.1
80°	452.3	451.6	689.5	1945.3	4438.9	5279.6	4631.8	3091.8	1774.0	676.5	327.8
82.5°	187.1	182.4	253.5	756.7	2168.9	2962.8	2417.9	1379.0	640.6	183.2	108.9
85°	69.7	69.1	123.2	261.4	765.2	1222.0	884.4	352.6	159.7	89.3	48.9
87.5°	19.6	18.9	26.8	90.6	186.3	282.8	151.2	58.0	45.0	35.2	14.3
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°	1405.1	1405.1	1405.1	1405.1	1405.1	1405.1	1405.1	1405.1	1405.1	1405.1	1405.1
2.5°	1409.7	1413.0	1418.8	1423.3	1429.3	1435.7	1444.8	1450.8	1456.6	1460.5	1457.9
5°	1415.5	1422.7	1437.7	1452.7	1470.3	1486.6	1505.5	1519.2	1530.2	1533.5	1534.8
7.5°	1428.5	1440.3	1465.7	1491.2	1519.2	1545.9	1573.3	1596.7	1615.6	1622.8	1623.4
10°	1451.4	1467.0	1502.9	1538.7	1575.8	1616.9	1652.1	1686.0	1712.8	1723.8	1724.5
12.5°	1480.1	1499.6	1546.5	1596.0	1647.6	1704.3	1749.9	1791.6	1824.8	1839.8	1839.8
15°	1517.2	1542.6	1602.6	1669.1	1744.7	1823.5	1881.5	1927.8	1964.9	1983.2	1981.9
17.5°	1557.6	1591.5	1667.1	1767.5	1875.6	1979.3	2047.0	2081.0	2119.4	2137.0	2136.3
20°	1596.7	1638.5	1746.6	1892.6	2036.7	2146.8	2201.5	2210.6	2213.3	2215.2	2220.5
22.5°	1637.1	1693.2	1846.3	2050.3	2204.8	2281.0	2288.8	2249.8	2195.0	2169.6	2176.8
25°	1681.4	1755.7	1976.7	2224.4	2349.5	2358.6	2298.7	2203.4	2099.8	2052.3	2059.4
27.5°	1724.5	1828.1	2133.1	2390.5	2453.7	2373.6	2244.5	2109.7	1984.5	1934.3	1940.2
30°	1767.5	1910.8	2305.8	2535.8	2501.3	2336.4	2159.2	2008.6	1882.8	1830.0	1835.9
32.5°	1811.2	2007.3	2504.6	2640.8	2492.8	2257.6	2053.0	1895.2	1784.4	1729.0	1736.1
35°	1860.7	2126.0	2692.9	2698.1	2436.1	2141.5	1912.9	1759.6	1663.2	1618.9	1628.6
37.5°	1925.2	2276.4	2859.1	2712.5	2337.1	1971.5	1738.8	1599.3	1519.8	1499.6	1513.9
40°	2005.3	2457.6	2986.2	2689.7	2190.4	1764.8	1548.5	1437.0	1392.1	1396.7	1412.2
42.5°	2109.7	2660.3	3075.5	2631.0	1986.4	1551.7	1381.7	1332.1	1353.6	1371.9	1388.8
45°	2245.2	2870.8	3130.9	2531.3	1755.7	1371.2	1283.2	1295.0	1311.3	1313.2	1326.2
47.5°	2418.6	3083.9	3167.4	2380.8	1520.5	1244.1	1220.7	1223.2	1220.1	1206.3	1216.8
50°	2634.9	3291.2	3199.9	2181.3	1320.4	1164.6	1133.3	1124.2	1079.2	1034.9	1040.8
52.5°	2881.3	3481.5	3213.7	1933.7	1164.6	1098.2	1047.3	989.9	905.9	892.2	896.8
55°	3155.0	3657.5	3178.4	1629.3	1033.6	1012.8	935.8	866.8	857.6	845.9	847.9
57.5°	3482.1	3847.1	3106.8	1289.8	899.3	913.1	838.1	845.9	829.6	811.4	808.1
60°	3840.0	4043.3	2981.0	980.2	760.6	788.6	812.7	812.0	807.5	792.5	787.3
62.5°	4161.9	4172.4	2733.4	750.8	638.7	692.1	758.0	757.3	753.4	745.0	741.7
65°	4353.5	4152.8	2320.1	591.1	538.3	612.6	683.7	688.9	689.5	688.9	688.9
67.5°	4319.7	3924.0	1753.2	470.6	455.5	531.8	610.0	617.2	622.4	623.7	625.0
70°	3936.4	3421.6	1143.1	375.4	381.9	460.7	540.3	547.5	552.0	557.2	559.9
72.5°	3068.3	2515.7	654.4	303.7	317.3	399.5	471.2	479.7	482.3	492.0	496.0
75°	1869.8	1479.4	353.2	239.1	260.7	341.5	402.7	412.6	417.1	428.9	430.1
77.5°	889.0	640.6	201.4	186.3	209.8	278.9	340.2	351.3	338.9	345.4	340.2
80°	300.4	237.9	127.1	142.1	160.3	217.7	272.4	283.5	257.5	256.1	253.5
82.5°	105.0	96.5	80.8	94.5	103.6	155.8	205.9	220.3	191.6	191.0	181.8
85°	41.1	39.1	45.0	51.5	61.9	95.8	135.6	142.7	118.0	95.1	93.9
87.5°	8.5	9.1	11.1	11.7	18.9	33.2	48.9	60.0	47.6	40.4	37.1
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)