

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: P963673

Luminaire Tested: **NAV-SB3A-830-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963673
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-830-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12282.6 lumens
Efficiency: N/A
Efficacy: 145.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

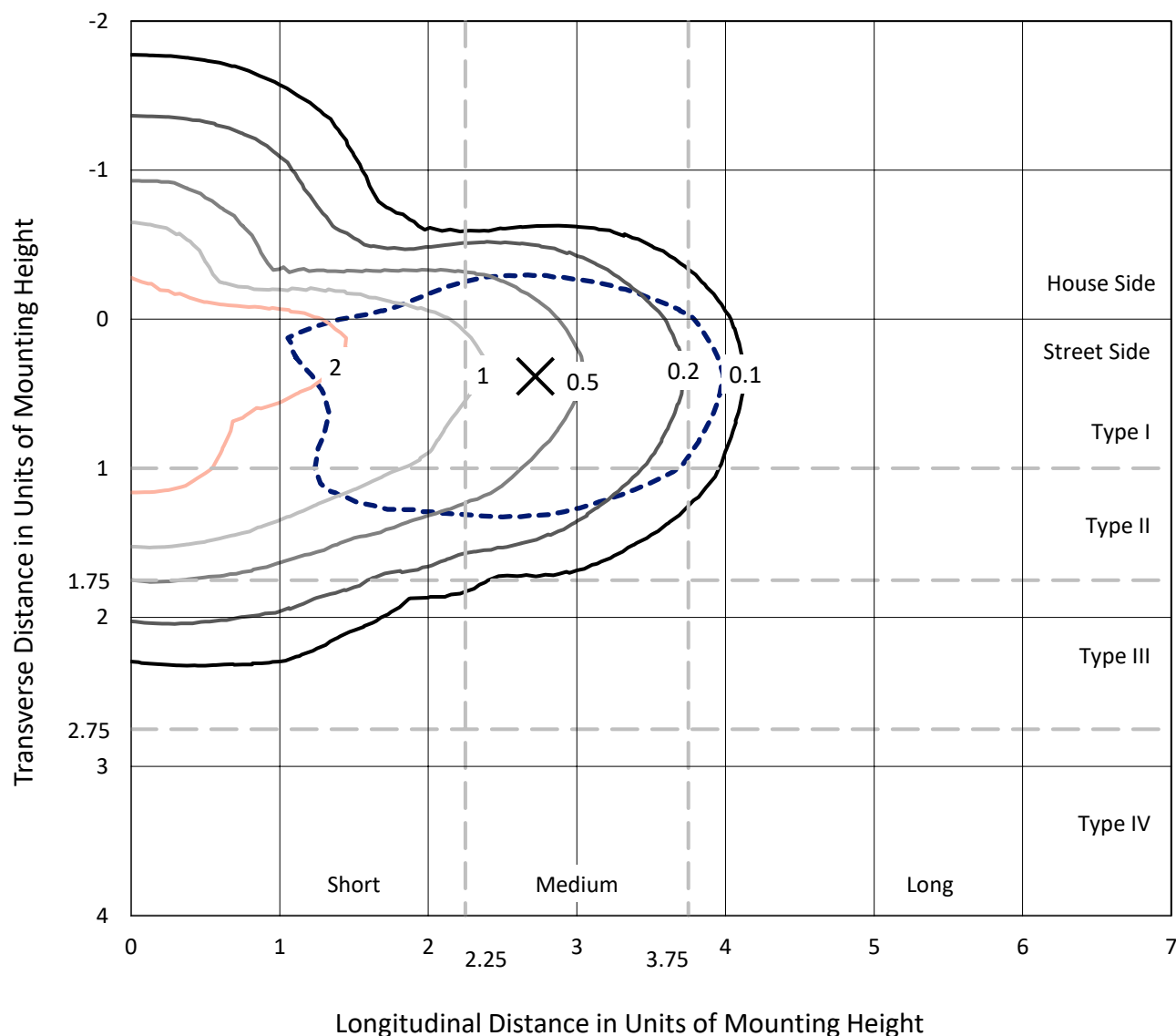
Input Watts (W): 84.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

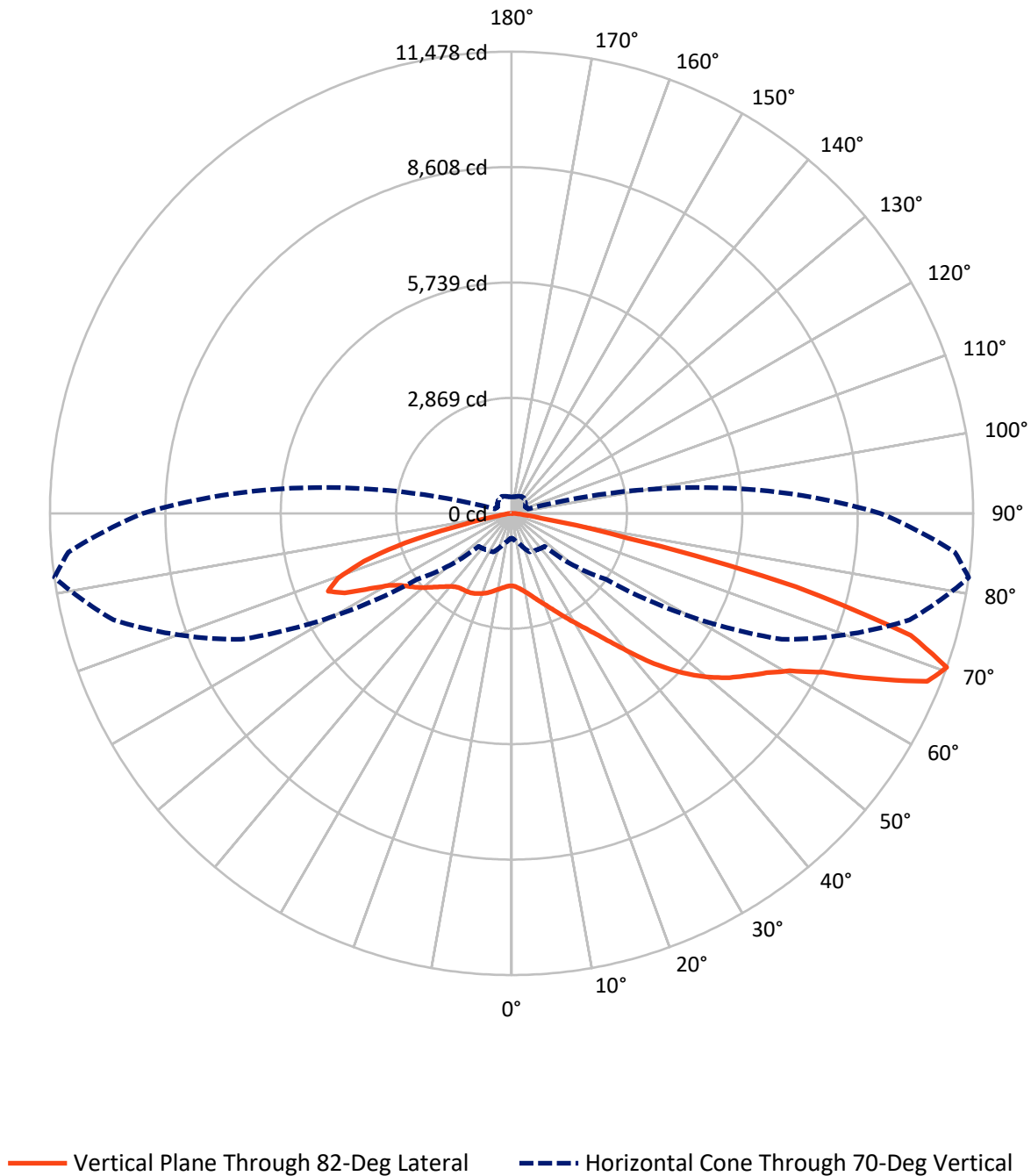
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3028.0	0.0	3028.0
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	9254.6	0.0	9254.6
	% Fixture	75.3	0.0	75.3
Total	Lumens	12282.6	0.0	12282.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.0	1.4
10°-20°	488.5	4.0
20°-30°	817.2	6.7
30°-40°	1276.7	10.4
40°-50°	2033.3	16.6
50°-60°	2829.5	23.0
60°-70°	2959.8	24.1
70°-80°	1547.0	12.6
80°-90°	160.6	1.3
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°	12282.6	100.0
0°-180°	12282.6	100.0

Coefficient of Utilization



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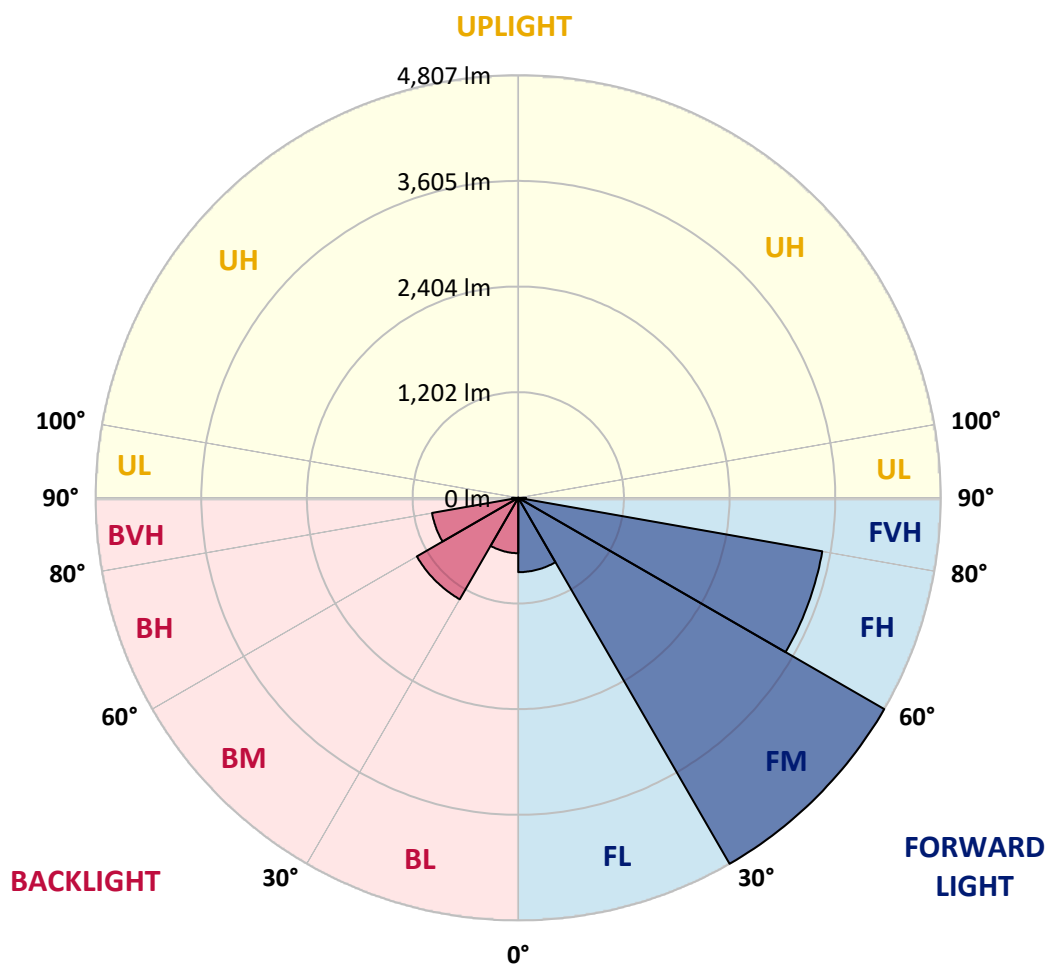
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	845.8	6.9			
FM	(30°-60°)	4807.3	39.1			
FH	(60°-80°)	3511.6	28.6			G2/5000
FVH	(80°-90°)	89.9	0.7			G1/100
BL	(0°-30°)	629.9	5.1	B2/1000		
BM	(30°-60°)	1332.2	10.8	B2/2500		
BH	(60°-80°)	995.1	8.1	B2/1000		G2/1000
BVH	(80°-90°)	70.7	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1800.8	1800.8	1800.8	1800.8	1800.8	1800.8	1800.8	1800.8	1800.8	1800.8	1800.8
2.5°	1843.8	1854.2	1850.9	1847.7	1847.7	1843.2	1842.5	1836.0	1830.8	1822.2	1820.3
5°	1867.2	1878.3	1877.1	1879.6	1888.2	1890.1	1892.0	1888.2	1877.7	1867.2	1862.7
7.5°	1846.4	1858.7	1862.7	1878.3	1904.4	1927.8	1945.4	1952.6	1942.9	1927.8	1920.7
10°	1776.0	1789.6	1803.4	1840.5	1886.8	1942.2	1989.1	2017.2	2015.3	2000.9	1988.5
12.5°	1633.2	1647.6	1676.9	1749.3	1834.0	1931.8	2019.1	2077.8	2098.0	2087.5	2066.0
15°	1519.3	1531.7	1553.8	1628.1	1738.2	1886.8	2030.2	2144.3	2195.8	2189.9	2163.8
17.5°	1516.0	1521.2	1534.8	1570.1	1654.8	1816.4	2018.4	2209.4	2307.9	2307.2	2274.6
20°	1573.3	1575.3	1583.1	1590.3	1638.5	1763.0	1988.5	2263.5	2433.7	2433.7	2398.4
22.5°	1652.8	1651.5	1659.4	1652.8	1676.3	1758.4	1969.5	2311.1	2573.8	2584.2	2539.8
25°	1772.1	1765.6	1763.6	1748.6	1753.2	1800.8	1990.4	2365.2	2739.9	2761.5	2706.1
27.5°	1931.1	1920.7	1913.6	1879.0	1867.2	1888.2	2054.3	2430.4	2925.0	2962.1	2891.8
30°	2138.4	2119.5	2109.0	2049.1	2006.7	2010.0	2150.8	2517.1	3118.6	3178.5	3089.2
32.5°	2421.3	2391.9	2363.9	2265.5	2188.0	2162.5	2275.3	2637.0	3328.5	3424.3	3309.6
35°	2738.0	2714.5	2684.6	2532.7	2413.5	2354.7	2443.4	2804.5	3574.2	3726.1	3576.8
37.5°	3043.0	3022.8	3037.2	2832.5	2678.6	2593.4	2663.7	3029.3	3877.3	4101.4	3911.8
40°	3358.4	3342.8	3344.8	3149.2	2970.0	2874.2	2930.9	3311.6	4224.6	4547.9	4314.5
42.5°	3701.3	3689.6	3650.4	3477.1	3275.7	3186.4	3238.5	3637.4	4597.4	5056.2	4756.4
45°	4085.1	4078.0	4041.5	3842.7	3612.0	3511.6	3582.0	3997.2	4972.2	5534.7	5200.3
47.5°	4416.9	4422.8	4418.2	4250.7	4011.5	3864.2	3948.3	4372.5	5320.9	5984.4	5625.9
50°	4576.5	4607.2	4652.2	4600.0	4451.5	4301.5	4317.8	4735.0	5653.3	6406.0	6033.9
52.5°	4493.2	4551.2	4673.7	4757.1	4814.4	4783.2	4739.5	5094.8	5966.1	6786.6	6419.7
55°	4182.3	4263.7	4467.1	4668.5	4961.1	5188.5	5246.0	5493.6	6271.2	7121.6	6784.7
57.5°	3615.9	3748.2	3930.7	4338.0	4830.7	5384.7	5836.5	6046.9	6594.3	7479.4	7166.6
60°	2644.8	2822.0	3048.9	3655.0	4374.5	5279.8	6338.9	6896.8	7053.8	7942.8	7663.9
62.5°	1692.6	1802.1	2010.6	2581.6	3408.6	4742.2	6492.8	7959.1	7832.7	8702.8	8409.5
65°	1158.8	1229.2	1420.1	1740.9	2203.5	3529.9	6080.8	8755.6	9069.7	9907.2	9684.3
67.5°	842.0	895.5	1058.4	1339.4	1435.8	2088.8	4718.7	8719.1	10272.2	11148.1	10801.4
70°	614.0	651.8	788.6	1058.4	1104.7	1162.0	2858.5	7411.7	10246.1	11477.9	11062.7
72.5°	454.9	481.0	572.9	821.2	894.2	784.7	1414.9	5386.7	8804.4	10381.7	10048.7
75°	329.1	348.7	416.5	628.3	715.7	597.7	705.8	3148.0	6141.4	7302.8	7361.4
77.5°	251.5	266.6	310.9	460.1	572.9	448.4	438.0	1448.2	2912.0	2926.4	3090.6
80°	202.0	211.9	236.0	323.9	439.3	335.7	285.5	584.7	920.2	778.8	817.3
82.5°	148.6	164.9	199.5	227.4	314.2	231.3	174.0	295.2	350.0	301.1	303.7
85°	84.8	95.8	120.5	163.0	200.7	141.4	99.7	131.0	163.0	133.6	119.3
87.5°	29.9	39.2	42.3	63.9	87.3	58.6	38.4	37.8	53.4	39.8	33.2
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°	1800.8	1800.8	1800.8	1800.8	1800.8	1800.8	1800.8	1800.8	1800.8	1800.8	1800.8
2.5°	1813.8	1810.6	1797.5	1779.9	1761.7	1744.0	1738.2	1725.8	1717.4	1712.8	1718.0
5°	1850.3	1839.9	1809.2	1770.2	1729.1	1684.8	1653.5	1624.8	1603.9	1584.4	1592.2
7.5°	1902.5	1884.2	1831.4	1763.0	1690.0	1616.3	1561.6	1519.9	1491.9	1473.6	1477.5
10°	1963.1	1935.0	1854.2	1751.9	1639.2	1533.6	1469.0	1433.2	1415.6	1405.8	1408.5
12.5°	2032.8	1993.0	1877.7	1726.5	1561.6	1441.0	1396.7	1386.3	1386.9	1387.5	1388.9
15°	2118.9	2063.4	1896.6	1671.1	1460.5	1370.0	1362.1	1379.1	1396.7	1405.2	1404.6
17.5°	2215.9	2137.7	1899.8	1579.8	1361.5	1324.4	1349.1	1385.6	1412.3	1424.0	1426.7
20°	2320.2	2213.4	1876.4	1450.8	1280.0	1287.2	1331.5	1378.4	1407.7	1422.8	1426.7
22.5°	2439.5	2294.2	1820.3	1315.2	1213.6	1246.8	1299.0	1344.6	1375.1	1390.2	1394.1
25°	2575.7	2384.8	1732.4	1201.2	1156.2	1201.2	1253.3	1291.1	1315.9	1329.5	1333.5
27.5°	2726.9	2479.3	1615.0	1110.6	1106.0	1154.3	1197.3	1226.6	1239.6	1250.1	1254.0
30°	2878.8	2565.3	1472.9	1042.1	1062.3	1107.9	1138.6	1151.6	1155.6	1157.5	1162.0
32.5°	3043.0	2639.6	1323.7	985.4	1020.6	1063.0	1081.3	1087.1	1068.9	1056.5	1060.4
35°	3241.8	2719.1	1177.7	940.4	979.6	1016.1	1021.9	1016.7	995.2	969.8	971.1
37.5°	3487.5	2818.1	1061.1	908.6	941.2	965.2	958.1	956.7	958.7	928.8	930.7
40°	3788.6	2947.2	975.7	883.8	909.8	915.0	894.8	905.9	915.7	870.1	871.4
42.5°	4123.0	3103.0	921.6	866.8	883.8	871.4	840.1	852.5	851.2	791.2	790.6
45°	4463.8	3272.4	902.7	854.4	859.7	834.9	800.3	803.6	776.2	722.1	724.1
47.5°	4802.7	3454.2	914.4	844.0	829.6	801.7	774.9	760.6	720.2	679.8	679.8
50°	5135.1	3645.2	957.5	823.2	788.6	772.3	752.8	727.3	684.3	649.7	647.2
52.5°	5443.4	3837.5	1005.6	788.6	737.1	746.9	734.5	705.2	662.9	627.6	628.3
55°	5735.4	4029.8	1024.6	741.1	688.9	724.8	717.6	663.5	612.6	583.9	581.4
57.5°	6053.4	4261.1	1003.7	680.4	649.7	699.4	672.0	612.0	582.7	561.2	559.2
60°	6494.0	4624.2	958.7	605.5	612.6	661.5	614.6	589.8	557.9	533.8	532.5
62.5°	7225.9	5301.3	886.4	531.2	569.0	605.5	587.2	562.4	529.8	506.5	506.5
65°	8307.8	6242.5	750.2	473.1	520.1	550.7	557.9	533.1	499.3	474.5	475.8
67.5°	9220.3	6833.0	567.6	425.0	469.9	506.5	526.6	502.5	466.7	442.5	443.2
70°	9170.1	6404.1	433.4	377.4	425.6	462.8	488.8	469.9	431.4	408.7	410.6
72.5°	8144.9	5357.4	350.7	329.1	380.6	417.1	448.4	434.1	394.9	372.8	372.8
75°	5983.7	3803.0	280.2	280.2	324.6	369.5	404.1	394.9	359.2	343.5	338.9
77.5°	2522.2	1595.5	219.7	232.7	269.8	317.4	360.4	363.7	332.4	352.0	319.4
80°	670.7	439.9	167.5	183.2	211.9	262.0	313.4	312.2	278.3	260.0	241.8
82.5°	255.5	173.3	119.3	129.0	153.1	200.7	248.4	256.1	222.2	192.3	192.3
85°	98.4	74.3	73.7	77.6	89.3	132.9	187.7	194.2	167.5	142.1	146.7
87.5°	25.4	22.1	27.4	26.0	41.1	71.0	107.5	111.4	102.3	59.3	84.8
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)