

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: P963549

Luminaire Tested: **NAV-SB3A-740-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963549
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-740-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14461.7 lumens
Efficiency: N/A
Efficacy: 170.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - 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



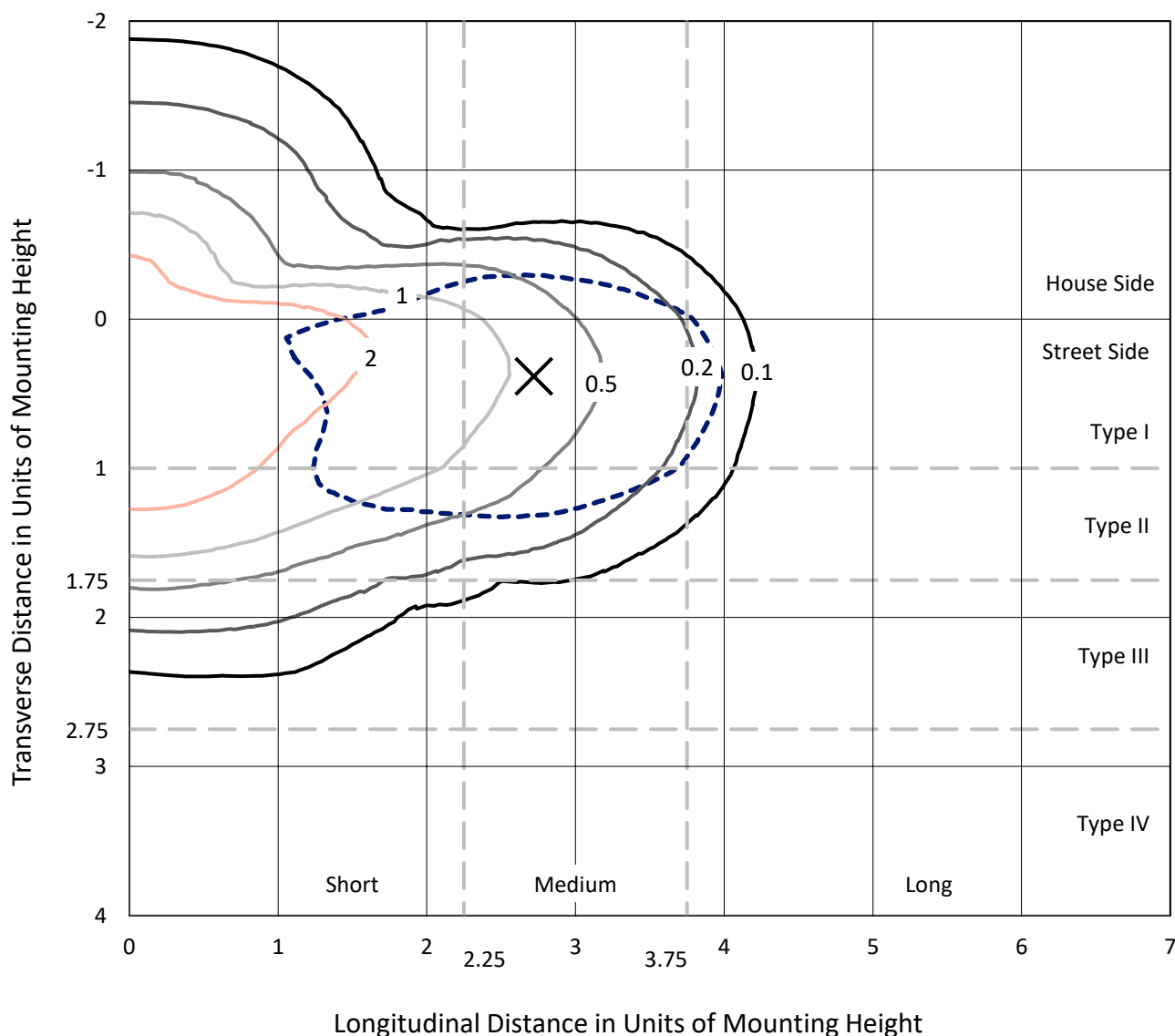
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

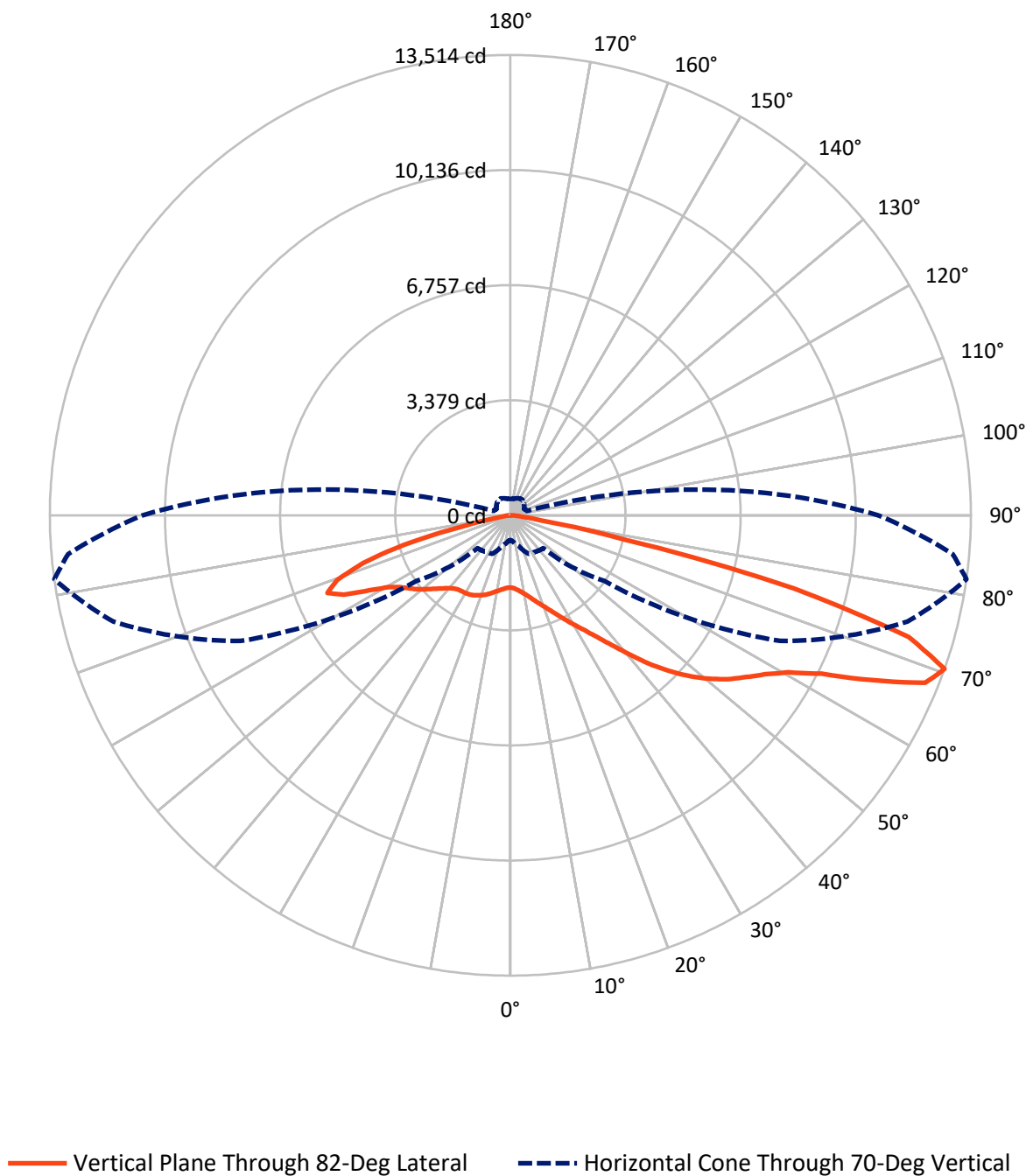
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 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	3565.2	0.0	3565.2
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	10896.6	0.0	10896.6
	% Fixture	75.3	0.0	75.3
Total	Lumens	14461.7	0.0	14461.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.2	1.4
10°-20°	575.2	4.0
20°-30°	962.2	6.7
30°-40°	1503.2	10.4
40°-50°	2394.0	16.6
50°-60°	3331.5	23.0
60°-70°	3484.9	24.1
70°-80°	1821.4	12.6
80°-90°	189.1	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°	14461.7	100.0
0°-180°	14461.7	100.0

Coefficient of Utilization



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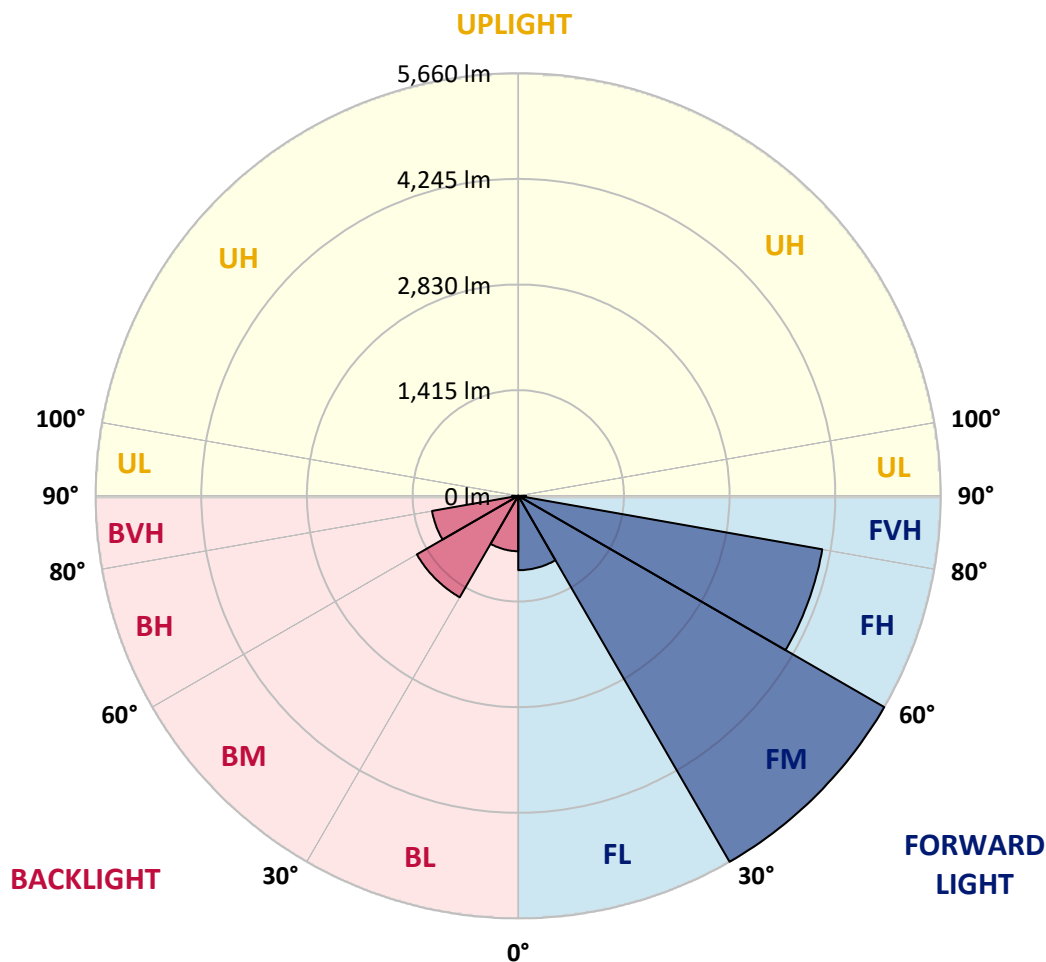
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	995.9	6.9			
FM	(30°-60°)	5660.2	39.1			
FH	(60°-80°)	4134.7	28.6			G2/5000
FVH	(80°-90°)	105.9	0.7			G2/225
BL	(0°-30°)	741.7	5.1	B2/1000		
BM	(30°-60°)	1568.5	10.8	B2/2500		
BH	(60°-80°)	1171.7	8.1	B3/2500		G3/2500
BVH	(80°-90°)	83.2	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2120.3	2120.3	2120.3	2120.3	2120.3	2120.3	2120.3	2120.3	2120.3	2120.3	2120.3
2.5°	2171.0	2183.1	2179.4	2175.6	2175.6	2170.1	2169.4	2161.7	2155.6	2145.6	2143.3
5°	2198.5	2211.5	2210.0	2213.1	2223.1	2225.4	2227.7	2223.1	2210.8	2198.5	2193.2
7.5°	2174.0	2188.6	2193.2	2211.5	2242.3	2269.9	2290.7	2299.1	2287.6	2269.9	2261.5
10°	2091.1	2107.2	2123.4	2167.1	2221.6	2286.8	2342.0	2375.0	2372.8	2355.9	2341.3
12.5°	1923.0	1939.9	1974.5	2059.6	2159.4	2274.5	2377.4	2446.4	2470.1	2458.0	2432.6
15°	1788.7	1803.4	1829.4	1917.0	2046.6	2221.6	2390.4	2524.7	2585.3	2578.4	2547.7
17.5°	1784.9	1791.1	1807.2	1848.6	1948.4	2138.7	2376.6	2601.4	2717.3	2716.6	2678.1
20°	1852.5	1854.7	1864.0	1872.4	1929.2	2075.7	2341.3	2665.1	2865.4	2865.4	2824.0
22.5°	1946.1	1944.5	1953.8	1946.1	1973.7	2070.4	2319.1	2721.2	3030.4	3042.6	2990.4
25°	2086.5	2078.8	2076.5	2058.9	2064.2	2120.3	2343.6	2784.8	3226.1	3251.4	3186.1
27.5°	2273.8	2261.5	2253.1	2212.4	2198.5	2223.1	2418.8	2861.6	3444.0	3487.8	3404.8
30°	2517.8	2495.6	2483.3	2412.6	2362.7	2366.6	2532.4	2963.6	3672.0	3742.5	3637.4
32.5°	2850.8	2816.3	2783.3	2667.5	2576.1	2546.2	2678.9	3104.8	3919.0	4031.8	3896.7
35°	3223.7	3196.2	3160.8	2982.0	2841.6	2772.5	2876.9	3302.0	4208.3	4387.1	4211.4
37.5°	3582.9	3559.1	3576.0	3335.0	3153.9	3053.4	3136.3	3566.8	4565.1	4829.1	4605.8
40°	3954.3	3935.9	3938.2	3707.9	3497.0	3384.1	3450.9	3899.1	4974.1	5354.8	5080.0
42.5°	4358.0	4344.2	4298.1	4094.0	3856.9	3751.7	3813.1	4282.8	5413.1	5953.3	5600.3
45°	4809.9	4801.5	4758.6	4524.5	4252.8	4134.6	4217.6	4706.4	5854.3	6516.5	6122.9
47.5°	5200.5	5207.4	5202.1	5004.9	4723.2	4549.8	4648.8	5148.4	6264.9	7046.1	6624.1
50°	5388.5	5424.6	5477.6	5416.2	5241.2	5064.7	5083.9	5575.0	6656.2	7542.6	7104.4
52.5°	5290.3	5358.6	5502.9	5601.1	5668.7	5631.8	5580.4	5998.6	7024.6	7990.7	7558.7
55°	4924.3	5020.2	5259.6	5496.8	5841.3	6109.1	6176.6	6468.3	7383.7	8385.1	7988.4
57.5°	4257.4	4413.2	4628.1	5107.7	5687.8	6340.1	6871.9	7119.8	7764.4	8806.5	8438.1
60°	3114.1	3322.7	3589.8	4303.5	5150.6	6216.5	7463.5	8120.5	8305.4	9352.1	9023.6
62.5°	1992.9	2121.9	2367.3	3039.6	4013.4	5583.5	7644.7	9371.3	9222.3	10246.8	9901.5
65°	1364.4	1447.3	1672.1	2049.7	2594.5	4156.2	7159.6	10308.9	10678.9	11664.9	11402.5
67.5°	991.5	1054.4	1246.2	1577.0	1690.5	2459.5	5555.8	10266.0	12094.7	13126.0	12717.8
70°	722.8	767.4	928.5	1246.2	1300.7	1368.3	3365.7	8726.6	12063.9	13514.3	13025.5
72.5°	535.7	566.3	674.6	966.9	1052.9	923.9	1665.9	6342.4	10366.5	12223.6	11831.5
75°	387.6	410.5	490.4	739.7	842.6	703.7	831.1	3706.4	7231.1	8598.5	8667.5
77.5°	296.2	313.9	366.0	541.8	674.6	528.0	515.7	1705.1	3428.6	3445.5	3639.0
80°	237.9	249.4	277.8	381.4	517.2	395.2	336.1	688.4	1083.5	917.1	962.3
82.5°	175.0	194.1	234.8	267.8	369.9	272.4	204.9	347.6	412.0	354.5	357.6
85°	99.7	112.9	142.0	191.9	236.4	166.6	117.4	154.3	191.9	157.3	140.4
87.5°	35.3	46.0	49.9	75.2	102.8	69.1	45.3	44.5	62.9	46.8	39.2
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°	2120.3	2120.3	2120.3	2120.3	2120.3	2120.3	2120.3	2120.3	2120.3	2120.3	2120.3
2.5°	2135.6	2131.8	2116.4	2095.7	2074.2	2053.5	2046.6	2032.1	2022.0	2016.7	2022.8
5°	2178.6	2166.3	2130.3	2084.2	2035.9	1983.7	1946.9	1913.1	1888.6	1865.5	1874.7
7.5°	2239.9	2218.5	2156.3	2075.7	1989.8	1903.1	1838.6	1789.5	1756.5	1735.0	1739.6
10°	2311.4	2278.4	2183.1	2062.7	1930.0	1805.6	1729.7	1687.5	1666.8	1655.3	1658.3
12.5°	2393.5	2346.6	2210.8	2032.8	1838.6	1696.7	1644.5	1632.2	1633.0	1633.7	1635.3
15°	2494.7	2429.6	2233.1	1967.6	1719.7	1613.0	1603.8	1623.8	1644.5	1654.5	1653.7
17.5°	2609.1	2517.0	2237.0	1860.2	1603.1	1559.3	1588.4	1631.5	1663.0	1676.7	1679.8
20°	2731.8	2606.1	2209.3	1708.2	1507.2	1515.6	1567.7	1623.0	1657.5	1675.2	1679.8
22.5°	2872.3	2701.2	2143.3	1548.6	1428.8	1468.0	1529.4	1583.1	1619.2	1636.8	1641.4
25°	3032.7	2807.9	2039.6	1414.3	1361.3	1414.3	1475.7	1520.2	1549.4	1565.5	1570.1
27.5°	3210.7	2919.1	1901.6	1307.6	1302.3	1359.0	1409.7	1444.2	1459.6	1471.8	1476.4
30°	3389.5	3020.4	1734.3	1227.0	1250.8	1304.5	1340.6	1356.0	1360.6	1362.8	1368.3
32.5°	3582.9	3107.9	1558.5	1160.3	1201.7	1251.6	1273.0	1280.0	1258.5	1243.9	1248.6
35°	3816.9	3201.5	1386.6	1107.3	1153.3	1196.4	1203.2	1197.1	1171.8	1141.8	1143.4
37.5°	4106.3	3318.1	1249.3	1069.7	1108.1	1136.5	1128.0	1126.5	1128.8	1093.5	1095.8
40°	4460.8	3470.1	1148.7	1040.6	1071.2	1077.4	1053.6	1066.6	1078.2	1024.5	1026.0
42.5°	4854.4	3653.5	1085.1	1020.6	1040.6	1026.0	989.1	1003.8	1002.2	931.6	930.8
45°	5255.8	3853.0	1062.8	1006.0	1012.2	983.0	942.4	946.2	914.0	850.2	852.6
47.5°	5654.8	4067.1	1076.7	993.7	976.8	943.9	912.5	895.5	848.0	800.4	800.4
50°	6046.2	4292.0	1127.3	969.2	928.5	909.4	886.3	856.4	805.8	765.1	762.0
52.5°	6409.1	4518.3	1184.1	928.5	867.9	879.4	864.8	830.4	780.4	739.0	739.7
55°	6752.9	4744.7	1206.3	872.5	811.1	853.3	844.9	781.2	721.3	687.6	684.5
57.5°	7127.4	5017.2	1181.7	801.1	765.1	823.4	791.2	720.6	686.0	660.7	658.5
60°	7646.2	5444.6	1128.8	712.9	721.3	778.9	723.6	694.4	656.9	628.5	627.0
62.5°	8507.9	6241.8	1043.7	625.5	669.9	712.9	691.4	662.3	623.9	596.2	596.2
65°	9781.8	7350.0	883.2	557.1	612.3	648.4	656.9	627.7	587.8	558.6	560.2
67.5°	10856.1	8045.2	668.4	500.3	553.3	596.2	620.0	591.6	549.4	521.0	521.8
70°	10797.0	7540.3	510.3	444.3	501.1	544.9	575.5	553.3	508.0	481.1	483.5
72.5°	9589.9	6307.8	412.9	387.6	448.1	491.1	528.0	511.1	465.0	438.9	438.9
75°	7045.3	4477.6	329.9	329.9	382.1	435.1	475.8	465.0	422.8	404.4	399.0
77.5°	2969.7	1878.5	258.6	274.0	317.6	373.7	424.4	428.2	391.3	414.4	376.0
80°	789.7	517.9	197.2	215.7	249.4	308.5	369.1	367.6	327.7	306.2	284.7
82.5°	300.8	204.1	140.4	151.9	180.3	236.4	292.3	301.6	261.7	226.4	226.4
85°	115.8	87.4	86.7	91.3	105.2	156.5	221.0	228.7	197.2	167.3	172.6
87.5°	29.9	26.1	32.2	30.6	48.4	83.6	126.6	131.2	120.4	69.8	99.7
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)