

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: P963552

Luminaire Tested: **NAV-SB3A-740-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963552
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-740-U-T3R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14983.4 lumens
Efficiency: N/A
Efficacy: 176.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - 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



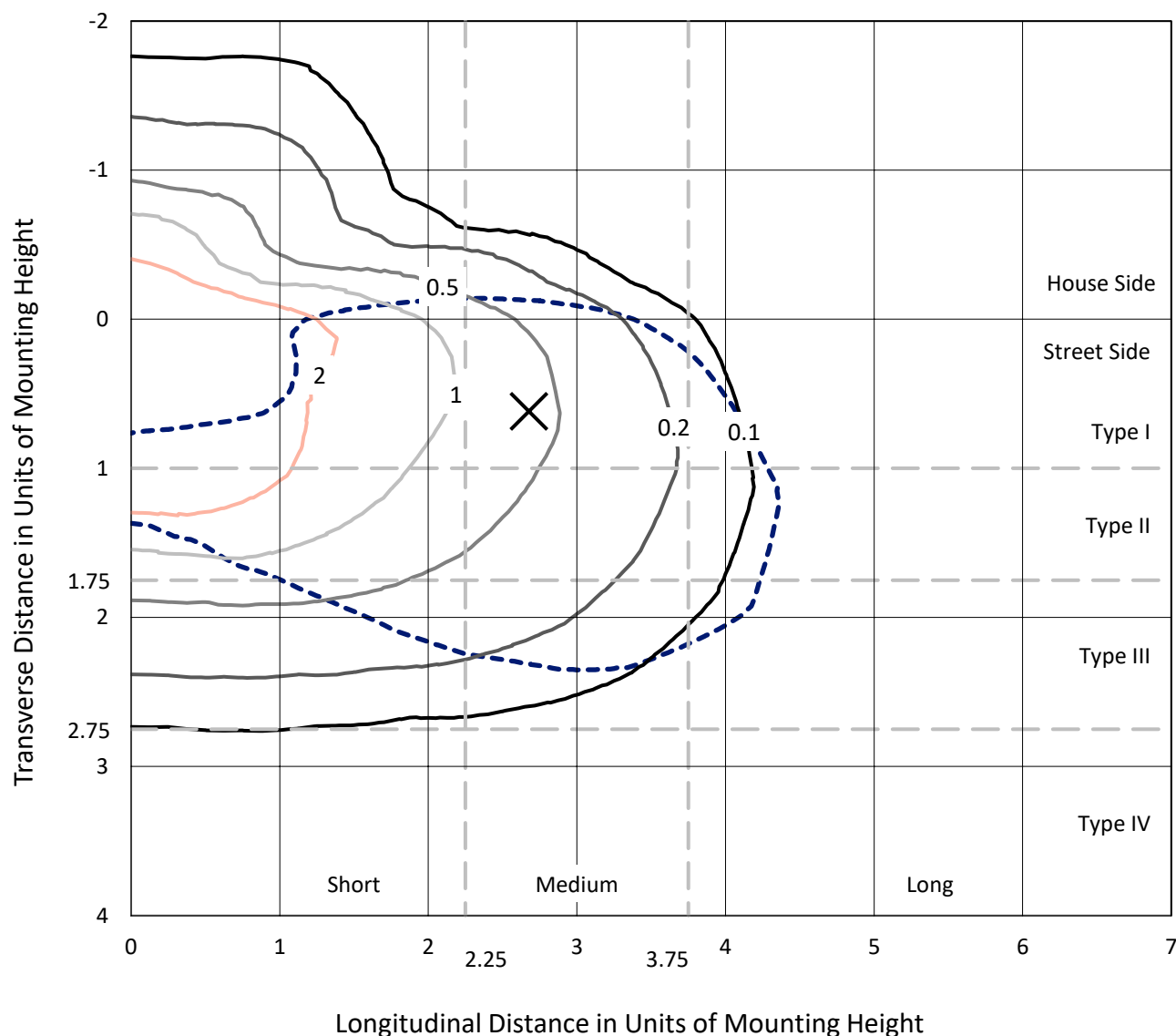
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

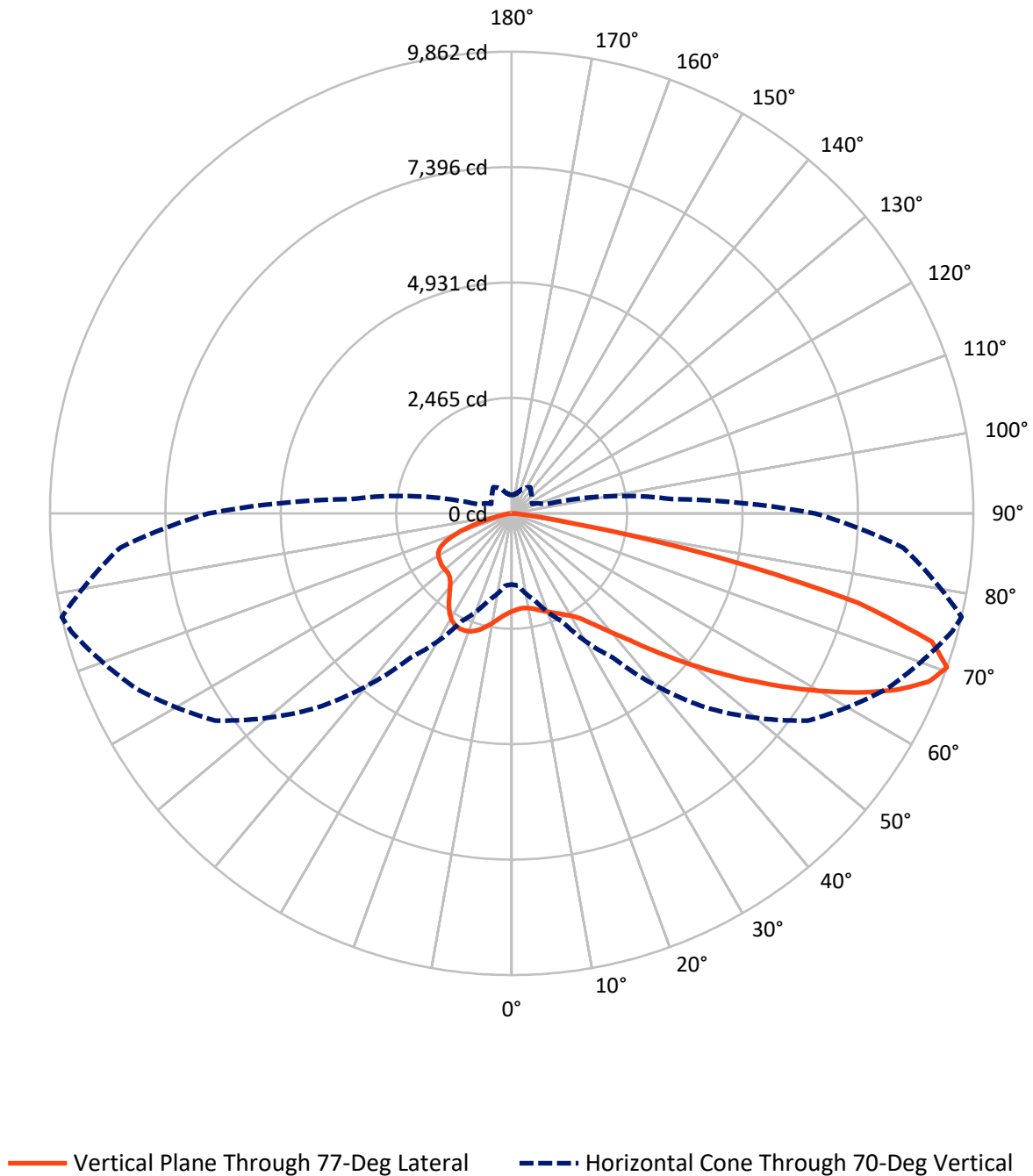
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3281.1	0.0	3281.1
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	11702.3	0.0	11702.3
	% Fixture	78.1	0.0	78.1
Total	Lumens	14983.4	0.0	14983.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.4	1.3
10°-20°	575.4	3.8
20°-30°	984.0	6.6
30°-40°	1582.3	10.6
40°-50°	2470.4	16.5
50°-60°	3299.9	22.0
60°-70°	3517.2	23.5
70°-80°	2165.2	14.5
80°-90°	189.7	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°	14983.4	100.0
0°-180°	14983.4	100.0

Coefficient of Utilization



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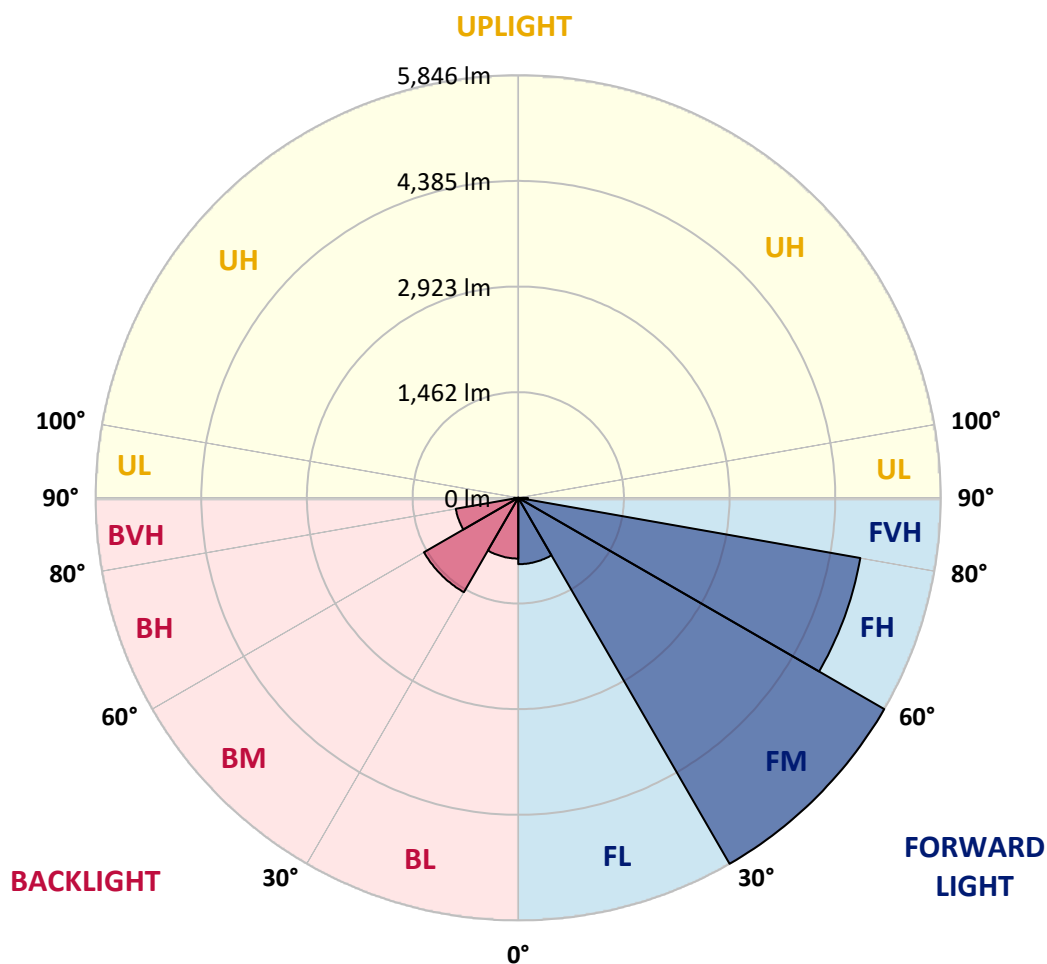
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	918.0	6.1			
FM	(30°-60°)	5846.2	39.0			
FH	(60°-80°)	4805.4	32.1			G2/5000
FVH	(80°-90°)	132.7	0.9			G2/225
BL	(0°-30°)	840.7	5.6	B2/1000		
BM	(30°-60°)	1506.4	10.1	B2/2500		
BH	(60°-80°)	876.9	5.9	B2/1000		G2/1000
BVH	(80°-90°)	57.1	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-G2

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	2090.3	2090.3	2090.3	2090.3	2090.3	2090.3	2090.3	2090.3	2090.3	2090.3	2090.3
2.5°	1926.9	1926.1	1936.1	1939.2	1957.5	1970.7	1995.2	2021.3	2055.0	2058.8	2079.6
5°	1815.6	1815.6	1827.2	1839.4	1863.1	1889.3	1926.9	1972.2	2030.4	2039.6	2091.1
7.5°	1721.2	1727.3	1737.4	1761.2	1788.7	1826.3	1884.0	1948.3	2025.1	2039.6	2122.6
10°	1645.2	1652.2	1664.4	1683.7	1725.1	1777.2	1852.5	1935.3	2038.1	2061.2	2168.6
12.5°	1621.4	1628.4	1635.3	1649.8	1688.2	1749.6	1839.4	1941.5	2069.6	2092.6	2231.5
15°	1676.7	1685.2	1679.8	1676.0	1695.9	1751.9	1845.5	1963.7	2108.7	2141.7	2309.0
17.5°	1804.1	1807.2	1794.9	1758.8	1755.7	1785.7	1874.7	1994.4	2157.8	2193.9	2387.3
20°	2009.7	2004.4	1979.1	1907.7	1867.0	1860.9	1924.5	2040.5	2208.5	2246.9	2471.7
22.5°	2289.0	2283.0	2232.2	2119.5	2029.0	1969.1	1996.7	2100.3	2265.2	2308.3	2553.8
25°	2637.4	2629.0	2554.6	2401.2	2260.6	2112.6	2094.9	2179.4	2335.2	2375.0	2639.8
27.5°	3044.1	3037.3	2956.7	2754.1	2551.5	2309.0	2217.0	2272.2	2408.0	2453.3	2736.4
30°	3481.6	3501.5	3358.8	3140.9	2884.6	2565.4	2381.2	2386.5	2502.4	2543.1	2853.9
32.5°	3995.8	4030.3	3858.4	3582.1	3232.1	2843.9	2588.3	2546.1	2639.8	2673.5	3002.0
35°	4505.3	4544.4	4401.7	4096.2	3693.4	3172.4	2804.7	2729.6	2822.4	2859.2	3198.4
37.5°	4945.7	4997.9	4924.2	4658.7	4186.8	3568.3	3087.2	2945.1	3047.2	3093.2	3462.3
40°	5293.3	5373.2	5367.8	5202.1	4768.5	4048.6	3445.5	3211.4	3326.5	3376.5	3782.4
42.5°	5575.7	5644.8	5704.6	5696.2	5375.4	4594.3	3866.8	3557.6	3645.0	3702.6	4142.3
45°	5770.6	5844.3	5973.3	6112.2	5959.5	5178.2	4349.5	3968.1	4047.9	4134.6	4571.3
47.5°	5944.9	6028.5	6195.8	6416.0	6455.1	5764.5	4878.2	4446.1	4519.0	4608.8	5001.8
50°	5960.2	6032.3	6291.7	6604.1	6807.3	6327.7	5446.0	4982.5	5050.9	5146.7	5462.9
52.5°	5589.5	5703.1	6155.8	6598.6	6969.3	6798.9	6010.1	5540.4	5617.2	5732.3	5940.3
55°	4338.7	4505.3	5757.6	6393.0	6911.8	7103.6	6546.5	6133.6	6231.9	6352.3	6420.6
57.5°	3737.2	3810.0	4570.5	6018.5	6649.3	7182.6	6999.2	6732.9	6891.0	7023.0	6928.6
60°	3358.8	3419.4	3869.1	5436.1	6304.0	7057.5	7349.1	7291.5	7564.8	7722.0	7448.2
62.5°	2953.6	3011.1	3420.2	4539.0	5862.0	6849.6	7570.1	7807.2	8255.5	8427.3	7937.7
65°	2551.5	2600.6	2992.8	3813.8	5300.3	6641.6	7684.5	8253.1	8894.6	9072.7	8344.4
67.5°	2103.4	2144.1	2514.7	3217.6	4617.3	6356.9	7741.3	8603.8	9451.0	9603.7	8545.5
70°	1517.8	1549.3	1932.2	2544.6	3760.1	5867.3	7718.2	8852.4	9739.6	9861.5	8393.5
72.5°	717.5	745.9	1195.6	1652.2	2655.9	4914.3	7252.5	8655.2	9446.4	9385.7	7463.4
75°	382.9	407.4	686.7	906.3	1402.7	3368.8	5934.9	7455.8	7932.4	7637.7	5515.9
77.5°	259.3	278.6	425.2	544.1	640.7	1599.2	3814.6	5162.1	4966.4	4480.0	2762.6
80°	205.6	225.6	348.4	368.4	310.1	577.8	1576.1	2389.6	1716.6	1372.8	785.8
82.5°	158.1	180.3	293.2	267.0	168.8	237.1	458.9	755.8	439.7	334.6	190.3
85°	96.7	120.4	230.2	170.4	95.1	108.2	155.8	210.2	134.3	112.0	68.3
87.5°	49.1	69.1	116.6	62.1	42.9	25.3	41.4	41.4	35.3	30.6	17.6
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°	2090.3	2090.3	2090.3	2090.3	2090.3	2090.3	2090.3	2090.3	2090.3	2090.3	2090.3
2.5°	2098.0	2113.3	2139.5	2164.0	2183.1	2201.6	2220.0	2230.0	2233.1	2245.4	2252.2
5°	2122.6	2151.0	2201.6	2249.2	2279.1	2297.5	2310.6	2318.2	2319.8	2323.6	2329.7
7.5°	2167.9	2213.1	2283.7	2331.3	2353.5	2352.0	2346.6	2327.5	2319.8	2312.9	2314.4
10°	2231.5	2291.4	2378.1	2411.1	2397.3	2360.5	2312.9	2256.8	2230.7	2205.4	2197.8
12.5°	2310.6	2386.5	2471.7	2470.1	2401.9	2307.5	2197.0	2111.1	2056.6	2017.4	2008.2
15°	2406.5	2493.9	2559.2	2507.0	2357.4	2187.8	2025.9	1913.9	1864.7	1821.7	1817.1
17.5°	2505.5	2599.1	2629.0	2495.5	2245.4	2010.5	1827.2	1738.9	1690.5	1667.5	1674.4
20°	2602.2	2695.0	2670.4	2429.6	2075.0	1809.4	1646.0	1597.7	1587.7	1593.1	1590.8
22.5°	2704.3	2787.1	2678.9	2302.1	1857.8	1603.8	1514.0	1515.6	1537.8	1553.9	1557.8
25°	2808.6	2864.6	2656.7	2118.0	1624.5	1452.6	1430.4	1455.0	1498.7	1530.1	1538.6
27.5°	2909.2	2933.7	2608.3	1890.0	1424.2	1344.4	1348.3	1398.9	1464.9	1508.7	1519.4
30°	3022.7	2995.0	2515.5	1633.7	1285.4	1251.6	1283.8	1343.0	1408.9	1448.0	1457.2
32.5°	3150.8	3048.0	2368.2	1396.7	1187.2	1177.1	1230.1	1268.4	1297.6	1309.1	1315.3
35°	3310.4	3122.5	2179.4	1230.1	1098.9	1122.7	1173.3	1154.1	1142.7	1136.5	1142.7
37.5°	3517.6	3223.0	1958.4	1121.9	1027.6	1083.5	1104.2	1044.4	999.2	976.8	982.3
40°	3767.1	3370.3	1745.8	1038.2	982.3	1049.8	1013.7	941.6	884.1	852.6	854.8
42.5°	4044.0	3524.6	1567.0	975.3	956.9	1022.1	946.9	861.0	768.1	758.2	768.1
45°	4334.9	3683.4	1444.9	927.0	944.6	998.4	908.6	769.7	703.7	744.4	765.9
47.5°	4625.7	3829.2	1371.3	890.9	938.5	971.5	874.8	719.0	672.2	731.3	758.9
50°	4949.5	3959.7	1338.3	864.8	931.6	960.7	824.2	706.0	639.2	678.3	707.6
52.5°	5271.1	4060.9	1313.7	838.8	921.6	952.3	799.6	690.6	599.3	601.6	617.8
55°	5591.9	4127.0	1286.9	804.2	899.3	933.9	797.3	673.7	569.4	558.6	566.3
57.5°	5934.1	4164.6	1253.9	765.9	861.0	887.0	795.0	660.7	560.2	542.5	544.8
60°	6282.5	4219.8	1210.9	719.0	809.5	831.1	789.7	656.1	554.8	524.9	527.2
62.5°	6594.8	4239.0	1159.5	674.6	743.5	775.8	778.1	652.3	540.3	488.8	488.8
65°	6799.7	4156.1	1069.7	623.9	672.2	719.0	755.8	639.2	514.1	462.7	462.7
67.5°	6791.2	3919.7	929.3	558.6	603.1	656.1	723.6	616.9	482.7	430.5	432.8
70°	6475.1	3453.2	751.2	482.7	527.2	588.6	682.2	583.9	445.1	395.2	399.9
72.5°	5553.4	2702.7	545.6	393.7	438.9	518.8	628.5	544.1	406.7	363.8	361.4
75°	3967.4	1710.5	369.9	302.4	341.5	439.7	561.7	497.2	371.5	365.3	344.5
77.5°	2026.6	817.2	244.8	221.0	237.9	346.9	471.9	444.3	376.8	301.6	268.5
80°	659.2	301.6	154.3	150.4	158.1	230.9	365.3	364.5	285.5	204.9	181.1
82.5°	210.2	129.7	100.6	96.7	92.9	145.0	254.8	288.5	192.6	129.7	128.9
85°	83.6	77.5	59.0	54.5	39.2	68.3	133.6	191.9	143.5	93.6	95.9
87.5°	30.6	30.6	16.1	11.5	8.4	23.1	36.1	57.5	82.1	48.4	47.6
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)