

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: P964076

Luminaire Tested: **NAV-SB3B-740-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964076
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-SB3B-740-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18153.8 lumens
Efficiency: N/A
Efficacy: 166.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

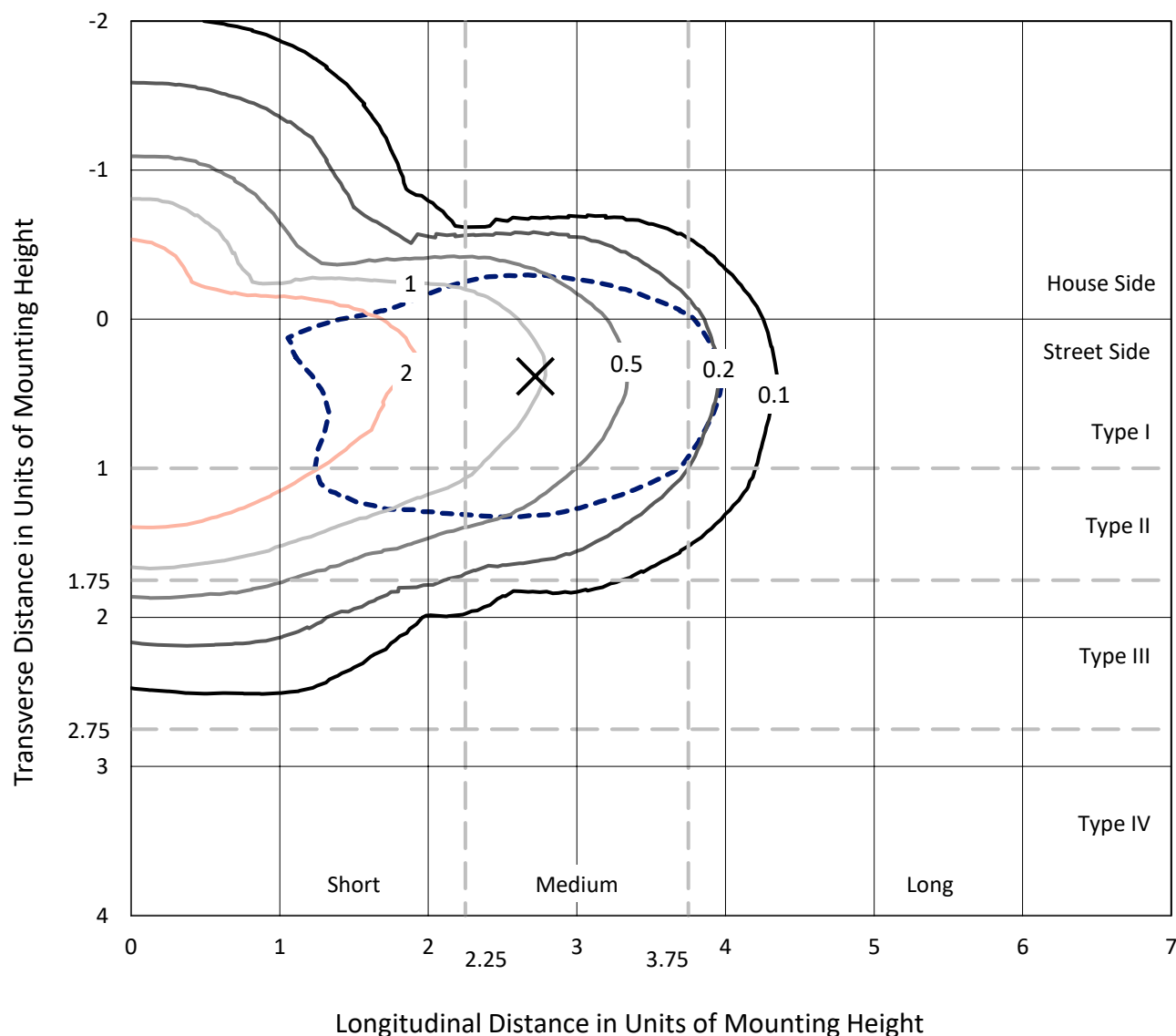
Input Watts (W): 109.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

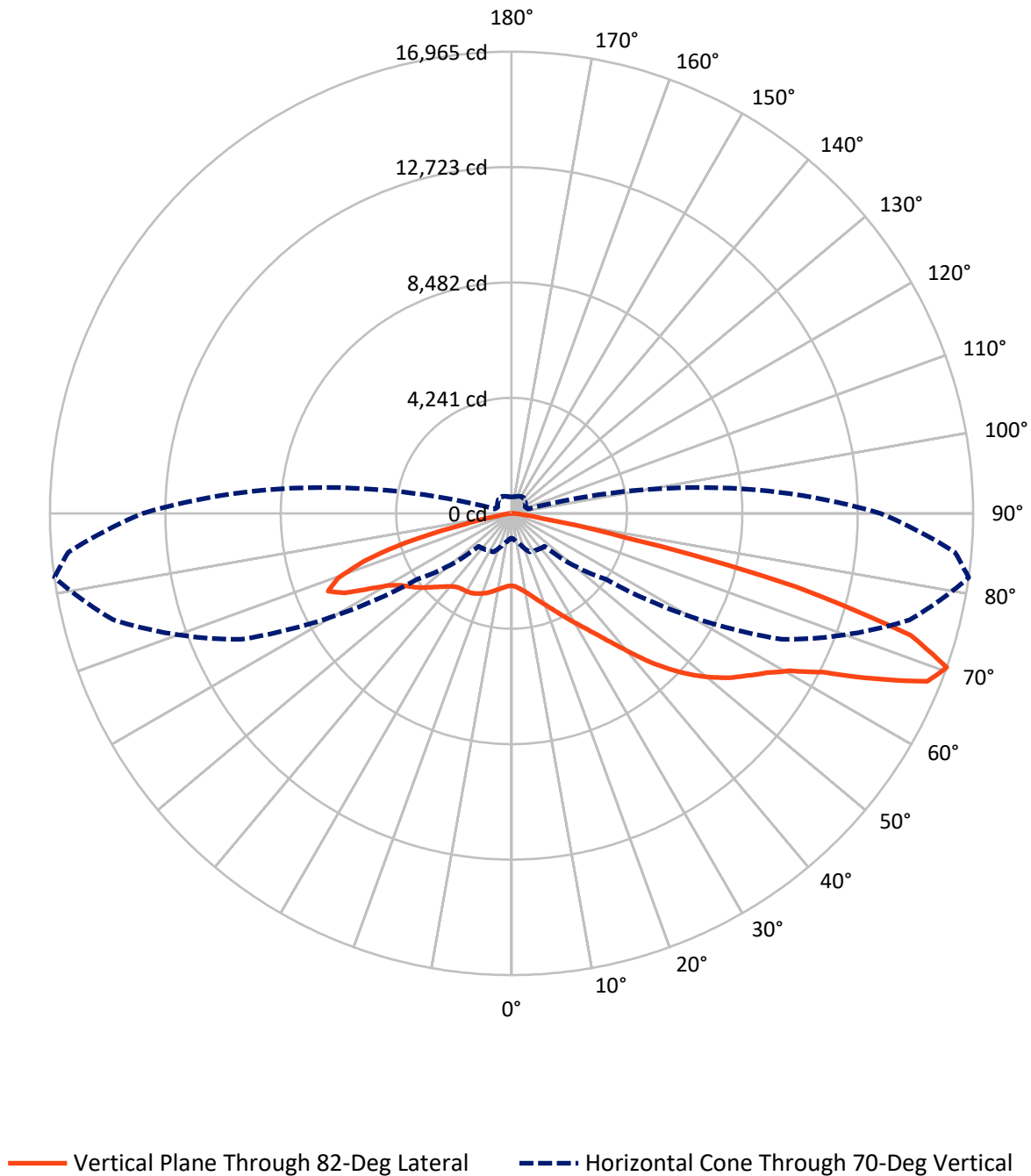
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 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	4475.4	0.0	4475.4
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	13678.4	0.0	13678.4
	% Fixture	75.3	0.0	75.3
Total	Lumens	18153.8	0.0	18153.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	251.3	1.4
10°-20°	722.0	4.0
20°-30°	1207.8	6.7
30°-40°	1886.9	10.4
40°-50°	3005.2	16.6
50°-60°	4182.1	23.0
60°-70°	4374.6	24.1
70°-80°	2286.4	12.6
80°-90°	237.4	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°	18153.8	100.0
0°-180°	18153.8	100.0

Coefficient of Utilization



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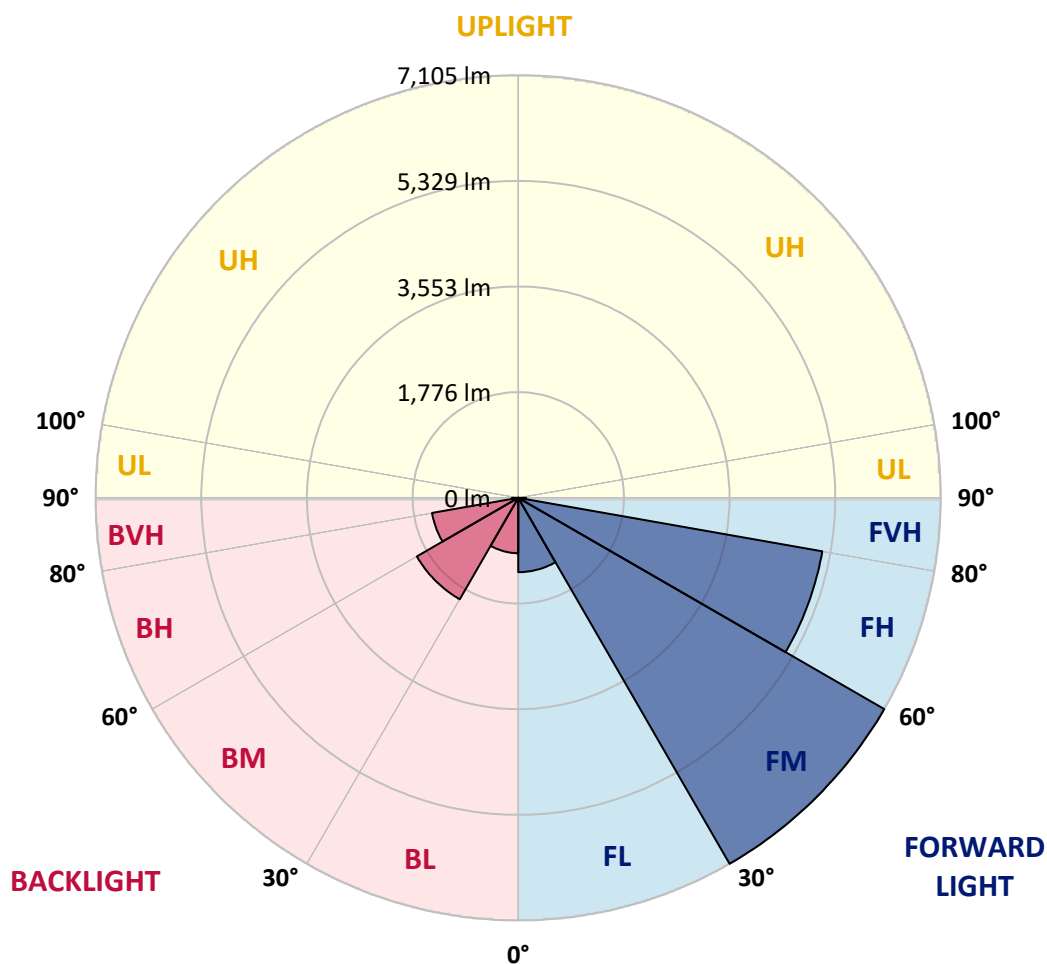
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1250.1	6.9			
FM	(30°-60°)	7105.2	39.1			
FH	(60°-80°)	5190.2	28.6			G3/7500
FVH	(80°-90°)	132.9	0.7			G2/225
BL	(0°-30°)	931.0	5.1	B2/1000		
BM	(30°-60°)	1969.0	10.8	B2/2500		
BH	(60°-80°)	1470.8	8.1	B3/2500		G3/2500
BVH	(80°-90°)	104.5	0.6			G2/225
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°	2661.6	2661.6	2661.6	2661.6	2661.6	2661.6	2661.6	2661.6	2661.6	2661.6	2661.6
2.5°	2725.2	2740.5	2735.7	2730.9	2730.9	2724.1	2723.2	2713.6	2705.9	2693.4	2690.4
5°	2759.8	2776.2	2774.3	2778.2	2790.7	2793.5	2796.4	2790.7	2775.2	2759.8	2753.0
7.5°	2729.0	2747.3	2753.0	2776.2	2814.8	2849.4	2875.4	2886.0	2871.5	2849.4	2838.8
10°	2624.9	2645.2	2665.4	2720.4	2788.7	2870.6	2940.0	2981.4	2978.4	2957.3	2939.0
12.5°	2414.0	2435.2	2478.6	2585.5	2710.7	2855.2	2984.3	3071.0	3100.8	3085.5	3053.7
15°	2245.5	2263.7	2296.5	2406.3	2569.1	2788.7	3000.7	3169.2	3245.4	3236.6	3198.1
17.5°	2240.6	2248.3	2268.5	2320.6	2445.8	2684.7	2983.3	3265.5	3411.0	3410.1	3361.9
20°	2325.4	2328.3	2339.9	2350.4	2421.7	2605.7	2939.0	3345.5	3596.9	3596.9	3544.9
22.5°	2442.9	2440.9	2452.5	2442.9	2477.6	2599.0	2911.1	3415.8	3804.1	3819.5	3754.0
25°	2619.2	2609.5	2606.7	2584.5	2591.2	2661.6	2941.9	3495.8	4049.7	4081.4	3999.6
27.5°	2854.2	2838.8	2828.2	2777.1	2759.8	2790.7	3036.3	3592.1	4323.2	4378.2	4274.1
30°	3160.6	3132.6	3117.2	3028.6	2965.9	2970.8	3178.8	3720.2	4609.3	4698.0	4566.0
32.5°	3578.6	3535.2	3493.8	3348.4	3233.8	3196.2	3362.8	3897.5	4919.5	5061.1	4891.6
35°	4046.8	4012.1	3967.8	3743.3	3567.1	3480.4	3611.4	4145.0	5282.6	5507.1	5286.5
37.5°	4497.6	4467.8	4488.9	4186.4	3959.2	3832.9	3936.9	4477.4	5730.6	6062.0	5781.7
40°	4963.9	4940.7	4943.6	4654.6	4389.7	4248.1	4332.0	4894.5	6244.1	6721.8	6376.9
42.5°	5470.5	5453.2	5395.4	5139.1	4841.5	4709.6	4786.5	5376.1	6795.0	7473.2	7030.1
45°	6037.9	6027.3	5973.4	5679.5	5338.5	5190.2	5294.2	5907.9	7348.9	8180.2	7686.1
47.5°	6528.2	6536.9	6530.2	6282.5	5929.0	5711.3	5835.6	6462.7	7864.3	8844.9	8315.1
50°	6764.2	6809.5	6876.0	6798.9	6579.3	6357.7	6381.8	6998.3	8355.6	9468.1	8918.1
52.5°	6640.9	6726.7	6907.8	7031.1	7115.9	7069.6	7005.1	7530.1	8818.0	10030.8	9488.4
55°	6181.5	6301.8	6602.4	6900.1	7332.5	7668.7	7753.5	8119.5	9268.8	10525.8	10027.9
57.5°	5344.3	5539.9	5809.6	6411.7	7139.9	7958.7	8626.3	8937.4	9746.5	11054.7	10592.3
60°	3909.0	4171.0	4506.3	5402.2	6465.6	7803.6	9368.9	10193.5	10425.7	11739.6	11327.4
62.5°	2501.6	2663.5	2971.8	3815.6	5038.0	7008.8	9596.3	11763.7	11576.9	12862.8	12429.4
65°	1712.8	1816.8	2099.0	2573.0	3256.8	5217.1	8987.5	12940.8	13405.2	14642.9	14313.5
67.5°	1244.6	1323.6	1564.4	1979.6	2122.2	3087.3	6974.2	12886.9	15182.4	16477.1	15964.6
70°	907.4	963.3	1165.6	1564.4	1632.8	1717.6	4224.9	10954.6	15143.9	16964.5	16350.9
72.5°	672.4	710.9	846.8	1213.7	1321.6	1159.8	2091.3	7961.6	13013.1	15344.2	14852.0
75°	486.5	515.4	615.5	928.6	1057.7	883.3	1043.2	4652.7	9077.1	10793.7	10880.4
77.5°	371.9	394.0	459.5	680.1	846.8	662.8	647.3	2140.4	4304.0	4325.2	4567.9
80°	298.6	313.0	348.7	478.8	649.2	496.1	421.9	864.1	1360.2	1151.2	1208.0
82.5°	219.7	243.7	294.8	336.2	464.3	341.9	257.2	436.3	517.3	445.1	448.8
85°	125.3	141.6	178.2	240.8	296.7	209.0	147.4	193.6	240.8	197.5	176.3
87.5°	44.3	57.8	62.6	94.4	129.0	86.7	56.8	55.9	79.0	58.7	49.1
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°	2661.6	2661.6	2661.6	2661.6	2661.6	2661.6	2661.6	2661.6	2661.6	2661.6	2661.6
2.5°	2680.8	2676.1	2656.8	2630.8	2603.8	2577.8	2569.1	2550.8	2538.3	2531.5	2539.2
5°	2734.8	2719.3	2674.1	2616.3	2555.6	2490.1	2443.9	2401.5	2370.6	2341.7	2353.3
7.5°	2811.9	2784.8	2706.8	2605.7	2497.8	2389.0	2308.0	2246.4	2205.0	2178.0	2183.8
10°	2901.5	2860.1	2740.5	2589.4	2422.7	2266.6	2171.3	2118.3	2092.2	2077.8	2081.7
12.5°	3004.5	2945.7	2775.2	2551.7	2308.0	2129.8	2064.4	2048.9	2049.9	2050.8	2052.8
15°	3131.7	3049.8	2803.2	2469.8	2158.8	2024.8	2013.3	2038.3	2064.4	2076.9	2075.9
17.5°	3275.2	3159.6	2808.0	2335.1	2012.3	1957.4	1994.0	2048.0	2087.4	2104.8	2108.6
20°	3429.3	3271.3	2773.3	2144.3	1891.9	1902.5	1968.0	2037.4	2080.8	2102.9	2108.6
22.5°	3605.6	3390.8	2690.4	1943.9	1793.6	1842.7	1919.8	1987.3	2032.6	2054.7	2060.5
25°	3807.0	3524.7	2560.4	1775.3	1708.9	1775.3	1852.4	1908.2	1944.8	1965.1	1970.9
27.5°	4030.4	3664.4	2387.0	1641.4	1634.7	1706.0	1769.6	1812.9	1832.2	1847.6	1853.4
30°	4254.9	3791.5	2177.0	1540.3	1570.2	1637.6	1682.8	1702.1	1708.0	1710.8	1717.6
32.5°	4497.6	3901.4	1956.4	1456.5	1508.5	1571.1	1598.1	1606.8	1579.8	1561.5	1567.2
35°	4791.4	4018.8	1740.7	1390.0	1447.8	1501.7	1510.4	1502.8	1471.0	1433.4	1435.3
37.5°	5154.5	4165.3	1568.2	1342.9	1391.0	1426.6	1416.0	1414.1	1417.0	1372.7	1375.6
40°	5599.6	4356.0	1442.1	1306.3	1344.8	1352.5	1322.6	1339.0	1353.4	1286.0	1287.9
42.5°	6093.7	4586.3	1362.1	1281.1	1306.3	1287.9	1241.7	1260.0	1258.1	1169.4	1168.5
45°	6597.6	4836.7	1334.1	1262.9	1270.6	1234.0	1183.0	1187.8	1147.3	1067.3	1070.2
47.5°	7098.5	5105.4	1351.5	1247.4	1226.3	1184.8	1145.3	1124.1	1064.5	1004.7	1004.7
50°	7589.7	5387.7	1415.1	1216.7	1165.6	1141.5	1112.6	1075.0	1011.5	960.4	956.5
52.5°	8045.4	5671.8	1486.4	1165.6	1089.5	1103.9	1085.6	1042.3	979.7	927.6	928.6
55°	8477.0	5956.1	1514.3	1095.2	1018.2	1071.2	1060.6	980.6	905.5	863.2	859.3
57.5°	8947.0	6298.0	1483.5	1005.6	960.4	1033.6	993.1	904.6	861.2	829.4	826.5
60°	9598.2	6834.5	1417.0	894.9	905.5	977.7	908.4	871.8	824.6	788.9	787.0
62.5°	10680.0	7835.4	1310.1	785.0	840.9	894.9	868.0	831.3	783.2	748.5	748.5
65°	12279.1	9226.4	1108.7	699.4	768.7	814.0	824.6	788.0	737.9	701.3	703.3
67.5°	13627.7	10099.1	839.1	628.0	694.5	748.5	778.4	742.7	689.7	654.1	655.1
70°	13553.5	9465.3	640.6	557.7	629.0	684.0	722.4	694.5	637.7	604.0	606.9
72.5°	12038.2	7918.2	518.2	486.5	562.5	616.5	662.8	641.5	583.7	551.0	551.0
75°	8844.0	5620.8	414.2	414.2	479.7	546.2	597.3	583.7	530.7	507.7	500.9
77.5°	3727.9	2358.1	324.6	343.9	398.8	469.1	532.7	537.5	491.3	520.2	472.0
80°	991.2	650.3	247.5	270.7	313.0	387.2	463.3	461.5	411.3	384.4	357.4
82.5°	377.6	256.2	176.3	190.8	226.4	296.7	367.1	378.5	328.5	284.1	284.1
85°	145.4	109.8	108.9	114.6	132.0	196.5	277.5	287.1	247.5	210.0	216.8
87.5°	37.6	32.8	40.5	38.5	60.7	105.0	159.0	164.7	151.2	87.6	125.3
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)