

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: P964702

Luminaire Tested: **NAV-SB3C-827-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964702
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3C-827-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19794.8 lumens
Efficiency: N/A
Efficacy: 132.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

Input Watts (W): 149.1
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

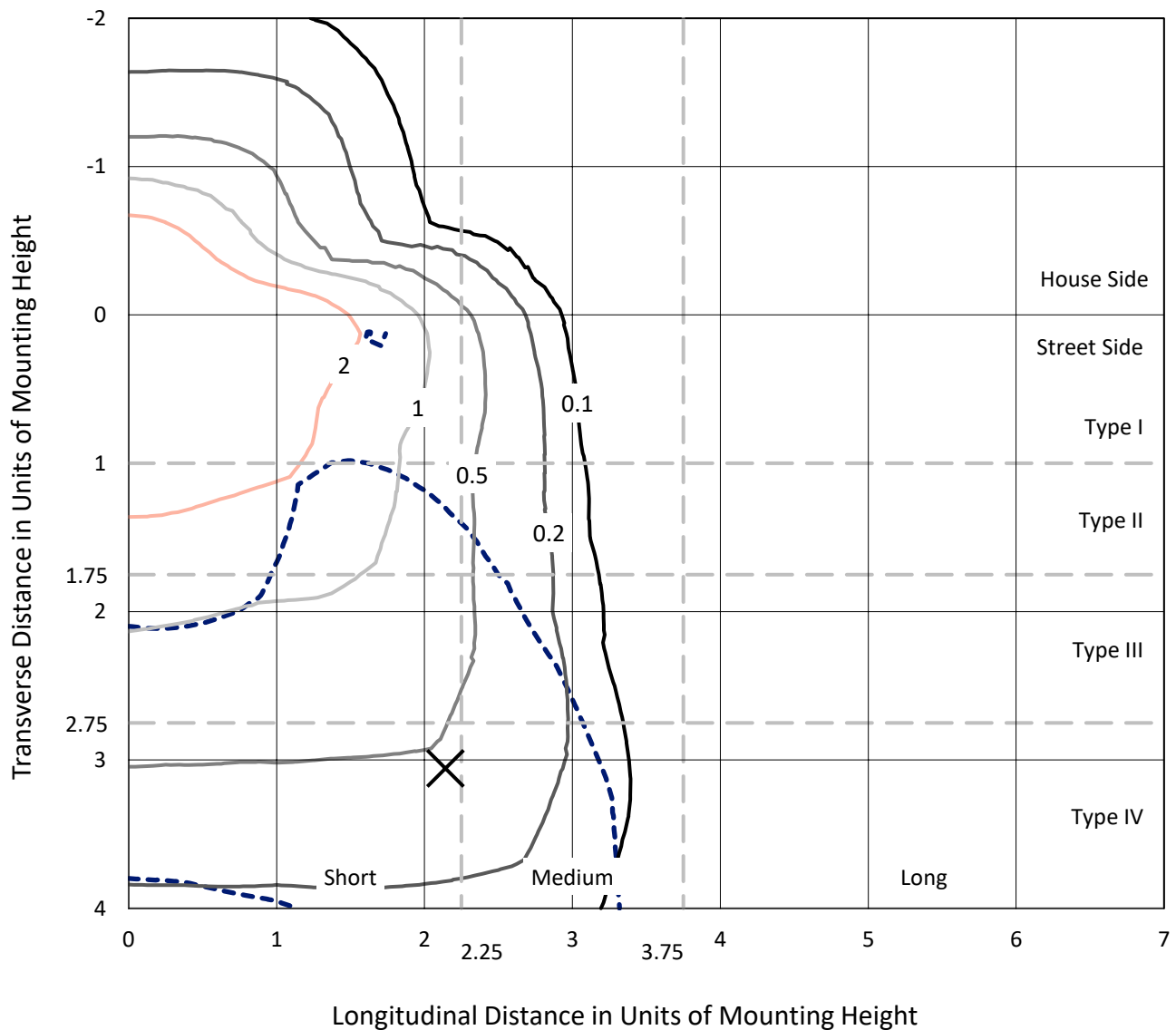


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

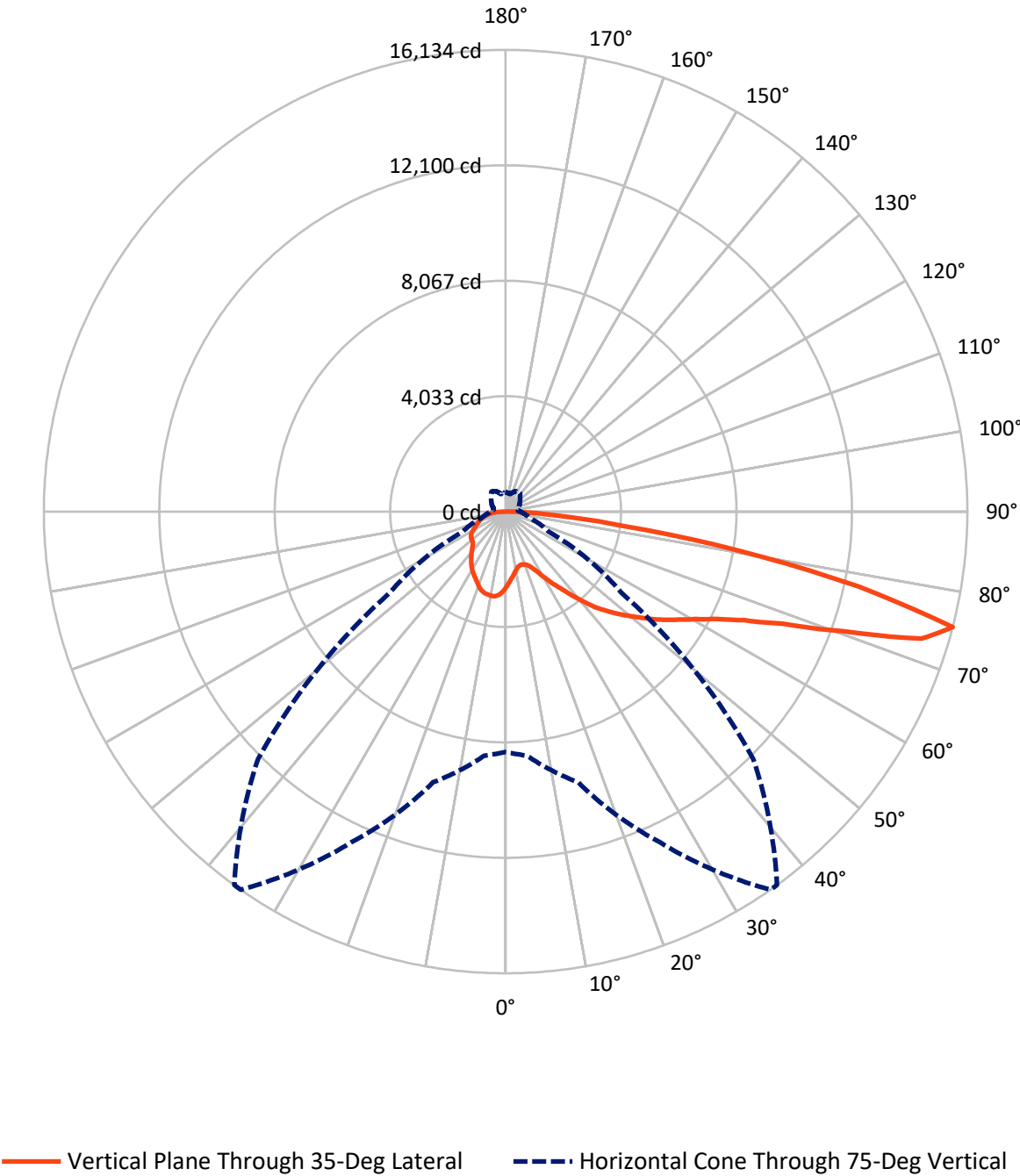


Based on 25 foot mounting height. Maximum calculated value = 4.7 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4710.7	0.0	4710.7
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	15084.1	0.0	15084.1
	% Fixture	76.2	0.0	76.2
Total	Lumens	19794.8	0.0	19794.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	249.7	1.3
10°-20°	720.4	3.6
20°-30°	1209.7	6.1
30°-40°	1880.0	9.5
40°-50°	2790.5	14.1
50°-60°	3852.4	19.5
60°-70°	4673.9	23.6
70°-80°	3862.6	19.5
80°-90°	555.6	2.8
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°	19794.8	100.0
0°-180°	19794.8	100.0

Coefficient of Utilization



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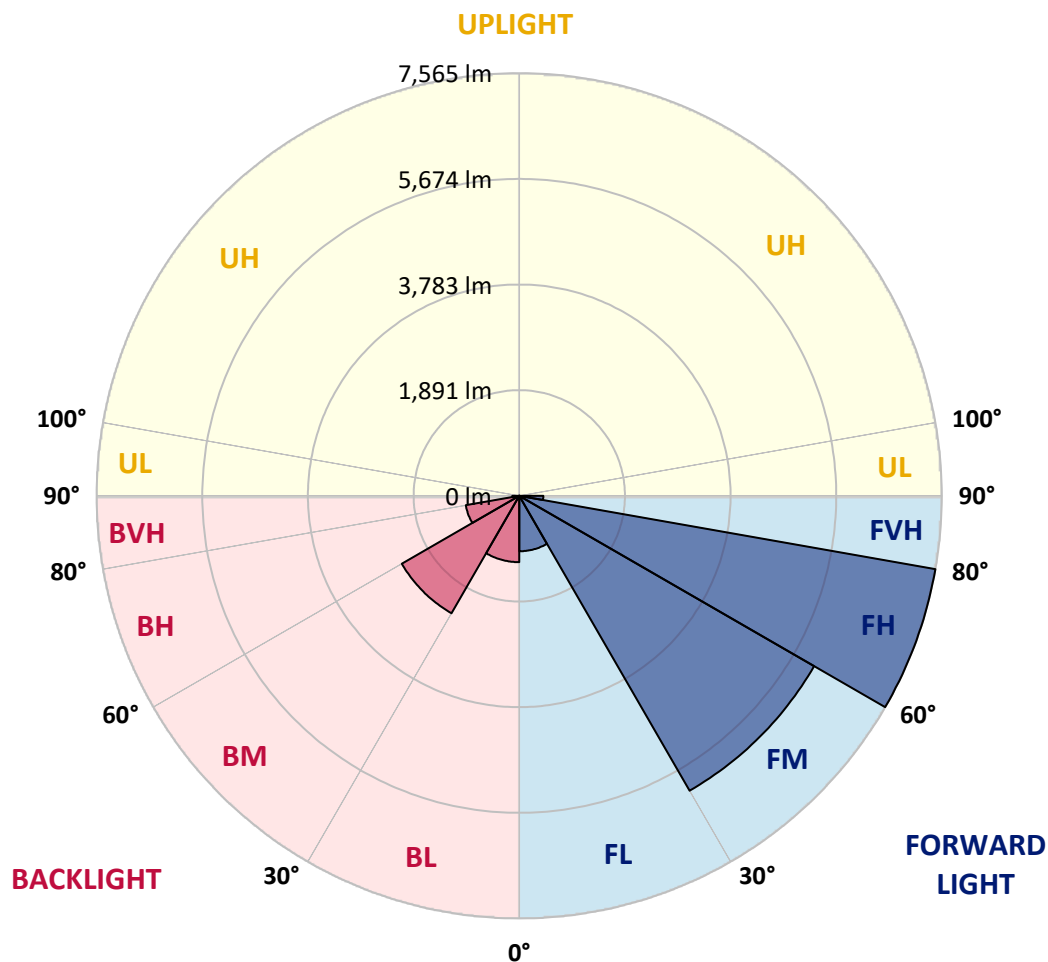
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	992.7	5.0			
FM	(30°-60°)	6095.7	30.8			
FH	(60°-80°)	7565.3	38.2			G4/12000
FVH	(80°-90°)	430.5	2.2			G3/500
BL	(0°-30°)	1187.2	6.0	B3/2500		
BM	(30°-60°)	2427.2	12.3	B2/2500		
BH	(60°-80°)	971.2	4.9	B2/1000		G2/1000
BVH	(80°-90°)	125.1	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-G4

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	2637.8	2637.8	2637.8	2637.8	2637.8	2637.8	2637.8	2637.8	2637.8	2637.8	2637.8
2.5°	2432.3	2447.3	2453.7	2450.6	2466.6	2464.4	2487.0	2514.7	2553.3	2590.7	2645.3
5°	2245.1	2261.1	2275.0	2287.9	2318.9	2328.5	2363.9	2417.4	2488.0	2559.6	2649.5
7.5°	2070.6	2084.5	2106.0	2129.5	2181.9	2191.6	2250.4	2333.9	2432.3	2537.2	2661.3
10°	1928.3	1942.3	1964.7	1991.5	2056.8	2068.4	2143.4	2254.7	2383.1	2515.8	2674.2
12.5°	1867.3	1871.6	1884.5	1911.2	1967.9	1975.4	2057.8	2185.1	2335.0	2499.8	2693.4
15°	1864.1	1872.7	1873.7	1887.6	1934.7	1938.0	2013.9	2140.2	2305.0	2496.5	2722.3
17.5°	1896.2	1902.6	1893.0	1901.6	1941.1	1946.5	2006.4	2118.8	2295.4	2510.4	2771.6
20°	1981.8	1987.2	1958.3	1946.5	1975.4	1979.7	2038.5	2132.7	2305.0	2539.3	2838.9
22.5°	2163.8	2167.0	2096.3	2048.2	2050.3	2052.5	2103.8	2189.4	2342.4	2591.8	2924.5
25°	2447.3	2445.1	2332.8	2239.7	2186.2	2174.4	2208.7	2281.4	2405.6	2661.3	3034.8
27.5°	2779.1	2763.0	2650.6	2511.6	2394.9	2377.8	2370.3	2401.3	2495.5	2753.4	3169.6
30°	3153.6	3138.5	3017.7	2835.8	2674.2	2646.3	2575.7	2559.6	2629.2	2878.6	3356.9
32.5°	3564.5	3554.9	3410.4	3190.0	2973.8	2941.7	2823.0	2780.1	2834.7	3067.9	3618.0
35°	3909.0	3900.5	3780.6	3553.8	3289.4	3249.9	3128.9	3080.8	3108.6	3310.9	3959.4
37.5°	4220.4	4216.2	4113.4	3934.8	3661.9	3613.7	3477.8	3461.7	3456.4	3630.9	4373.5
40°	4509.4	4498.7	4391.7	4297.5	4095.3	4051.4	3931.5	3917.7	3877.0	4024.7	4842.2
42.5°	4829.4	4801.5	4646.3	4602.5	4547.9	4511.5	4439.8	4441.9	4352.0	4468.7	5338.7
45°	5090.5	5074.4	4915.0	4889.2	4948.1	4933.1	4995.2	5011.2	4836.9	4934.2	5854.5
47.5°	5370.8	5355.8	5221.0	5202.8	5362.3	5366.5	5585.9	5591.3	5309.8	5417.9	6371.4
50°	5716.4	5695.1	5561.3	5583.8	5762.4	5778.5	6179.8	6143.4	5745.3	5909.1	6883.9
52.5°	5944.4	5957.2	5928.3	5964.7	6208.7	6223.7	6764.1	6671.0	6176.6	6393.8	7386.9
55°	6112.4	6138.1	6228.0	6311.4	6679.5	6694.6	7315.2	7172.8	6534.1	6843.3	7859.9
57.5°	6328.6	6292.2	6460.2	6622.8	7126.8	7166.5	7851.3	7656.5	6850.8	7230.7	8184.1
60°	6638.9	6613.2	6743.8	6984.6	7627.6	7690.8	8418.4	8092.1	7083.0	7537.7	8247.3
62.5°	7268.1	7203.9	7224.2	7437.2	8259.0	8342.5	9058.3	8471.9	7198.6	7657.6	7909.1
65°	8208.7	8098.5	7995.8	8143.4	9148.2	9230.6	9780.7	8770.5	7155.7	7425.4	7011.3
67.5°	9393.3	9284.1	9157.9	9297.1	10458.1	10523.4	10672.1	8938.5	6818.7	6530.8	5424.3
70°	10370.3	10329.6	10480.5	11053.1	12550.1	12552.3	11815.0	8799.4	5895.2	4630.3	3138.5
72.5°	10240.9	10216.2	11011.3	12781.2	15186.8	15130.1	12896.9	7746.4	3971.2	2088.8	1176.1
75°	8401.3	8560.8	9792.4	12750.2	16133.9	16126.3	12234.4	4924.6	1642.6	865.7	607.8
77.5°	4505.1	4757.6	6357.5	9413.6	12595.1	12784.4	8601.5	1722.8	705.2	554.3	420.6
80°	1469.2	1689.7	2534.0	4793.0	8184.1	8148.7	3686.5	676.3	482.6	392.7	291.1
82.5°	623.9	649.5	1132.1	2263.3	4200.1	4134.8	1173.9	388.5	339.2	268.5	179.8
85°	244.0	272.9	499.7	1046.5	1819.2	1779.6	423.7	192.6	217.2	175.5	107.0
87.5°	80.3	97.4	178.7	358.4	566.1	545.7	103.8	66.3	94.2	80.3	38.5
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°	2637.8	2637.8	2637.8	2637.8	2637.8	2637.8	2637.8	2637.8	2637.8	2637.8	2637.8
2.5°	2660.3	2677.4	2697.7	2727.7	2753.4	2774.8	2797.2	2811.2	2816.5	2832.6	2831.5
5°	2679.6	2717.0	2767.3	2816.5	2864.7	2893.6	2919.2	2932.1	2943.8	2952.4	2954.6
7.5°	2711.6	2759.8	2838.9	2903.2	2943.8	2967.4	2984.5	2980.2	2984.5	2986.6	2989.8
10°	2739.4	2806.9	2901.1	2962.0	2993.1	2994.1	2989.8	2974.9	2967.4	2968.4	2970.6
12.5°	2772.6	2847.6	2949.2	3000.6	3009.1	2985.6	2967.4	2941.7	2932.1	2927.8	2925.7
15°	2817.5	2903.2	3001.6	3020.9	2999.5	2969.5	2938.5	2896.8	2875.3	2858.2	2863.5
17.5°	2872.2	2966.4	3042.3	3028.4	2982.3	2933.1	2882.8	2819.7	2775.8	2757.7	2758.7
20°	2948.1	3032.7	3073.4	3012.4	2942.8	2867.8	2782.3	2705.2	2664.6	2646.3	2644.2
22.5°	3040.1	3121.4	3103.3	2984.5	2886.1	2766.2	2659.2	2602.5	2582.2	2569.3	2571.4
25°	3150.3	3219.9	3124.7	2943.8	2792.9	2631.4	2549.0	2530.8	2521.2	2511.6	2511.6
27.5°	3293.7	3331.2	3140.7	2883.9	2647.5	2488.0	2458.1	2461.2	2458.1	2442.0	2445.1
30°	3483.2	3475.7	3155.7	2786.6	2480.5	2358.5	2360.7	2374.5	2376.7	2366.0	2371.3
32.5°	3732.5	3656.5	3163.3	2660.3	2321.0	2245.1	2247.2	2262.2	2272.9	2254.7	2263.3
35°	4034.3	3867.3	3151.5	2501.9	2198.0	2137.0	2120.9	2125.2	2128.4	2111.3	2123.1
37.5°	4386.3	4103.8	3099.0	2326.4	2096.3	2031.0	1996.8	1967.9	1950.8	1934.7	1945.4
40°	4772.6	4361.7	3002.7	2155.2	1982.9	1918.7	1867.3	1812.7	1755.0	1733.6	1743.2
42.5°	5177.2	4627.1	2886.1	1991.5	1852.4	1799.9	1745.4	1666.1	1579.4	1535.6	1541.0
45°	5596.6	4898.9	2771.6	1829.8	1718.6	1696.1	1632.9	1537.7	1443.6	1388.0	1383.6
47.5°	6007.5	5155.8	2603.5	1667.2	1593.4	1618.0	1568.8	1481.0	1376.2	1288.4	1278.8
50°	6400.3	5396.5	2328.5	1502.4	1491.7	1594.5	1547.3	1421.1	1301.2	1188.9	1179.3
52.5°	6789.8	5591.3	1976.5	1352.6	1437.2	1588.0	1519.6	1380.5	1233.8	1116.1	1103.3
55°	7120.5	5691.8	1637.2	1224.2	1357.9	1533.4	1486.4	1332.3	1138.6	1013.4	1002.7
57.5°	7308.8	5610.5	1354.7	1097.9	1248.8	1443.6	1429.7	1229.6	1025.1	928.9	916.0
60°	7227.5	5280.9	1123.6	987.7	1145.0	1346.1	1331.2	1127.9	938.5	847.5	834.7
62.5°	6779.0	4652.8	940.6	891.4	1050.8	1246.7	1232.8	1049.8	872.2	784.4	770.5
65°	5875.9	3784.9	798.3	811.2	955.6	1126.8	1147.2	984.5	819.7	734.1	720.2
67.5°	4481.6	2741.6	687.0	741.6	862.5	1009.1	1067.9	937.4	775.8	694.5	681.6
70°	2554.3	1557.0	592.9	674.1	780.1	900.0	1007.0	900.0	728.8	661.3	652.7
72.5°	968.4	714.8	512.6	606.7	700.9	807.9	939.5	841.1	674.1	623.9	615.3
75°	516.9	435.5	431.2	527.6	610.0	718.0	855.1	783.3	633.4	659.2	680.6
77.5°	352.1	308.2	360.6	451.6	510.4	618.5	765.2	695.6	549.0	546.8	504.0
80°	244.0	218.3	293.3	363.9	394.8	520.1	667.8	597.2	447.3	417.4	399.1
82.5°	146.6	142.4	219.4	271.8	279.3	401.3	553.2	500.8	365.9	318.9	321.0
85°	80.3	84.6	140.2	159.5	162.7	280.3	433.4	387.3	281.5	236.5	238.6
87.5°	22.4	28.9	51.4	63.1	78.1	145.5	257.9	230.1	141.2	98.4	98.4
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)