

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: P964234

Luminaire Tested: **NAV-SB3B-835-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964234
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-SB3B-835-U-T3R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16490.2 lumens
Efficiency: N/A
Efficacy: 151.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - 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

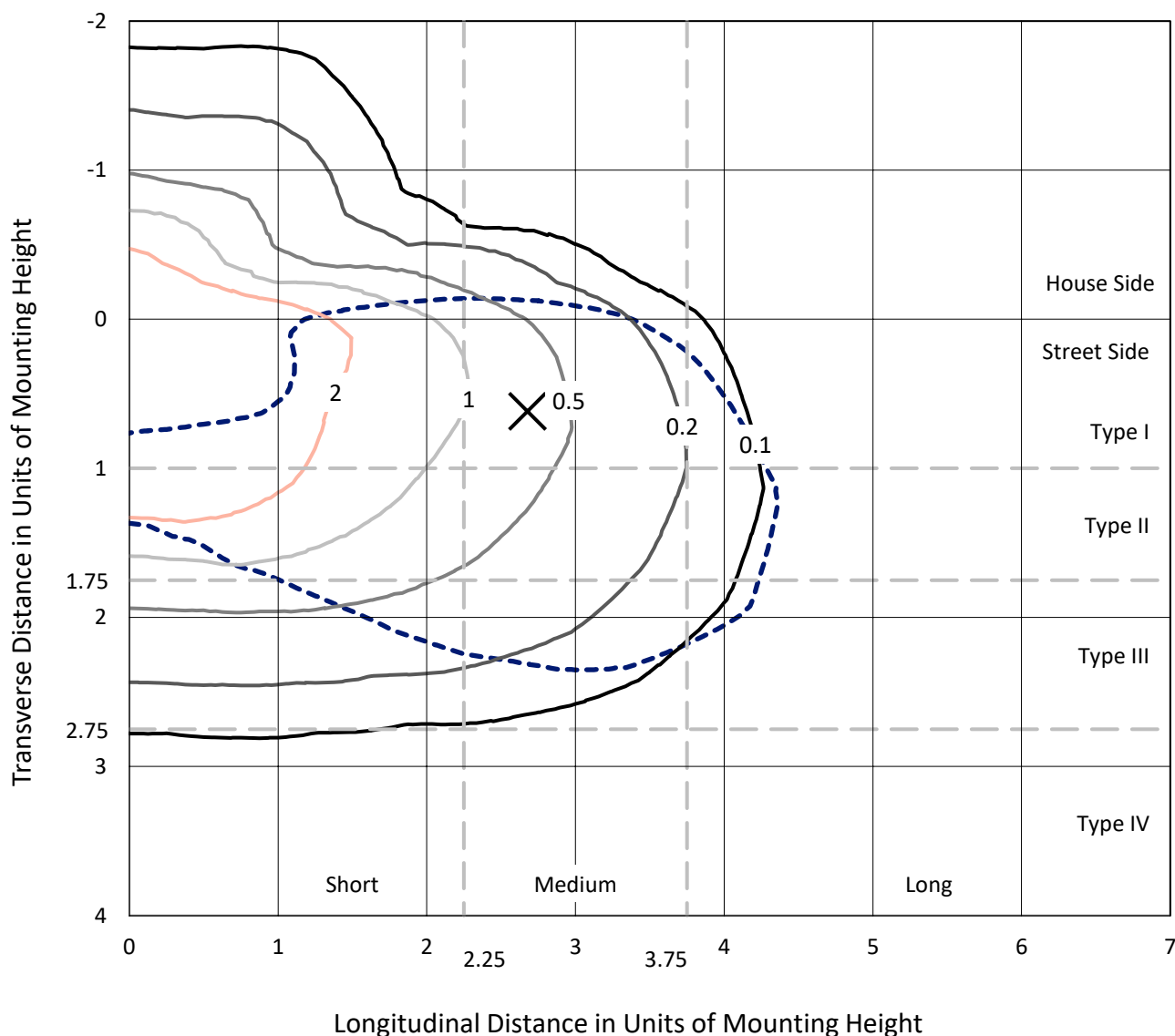


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Iso-Footcandle Lines of Horizontal Illumination

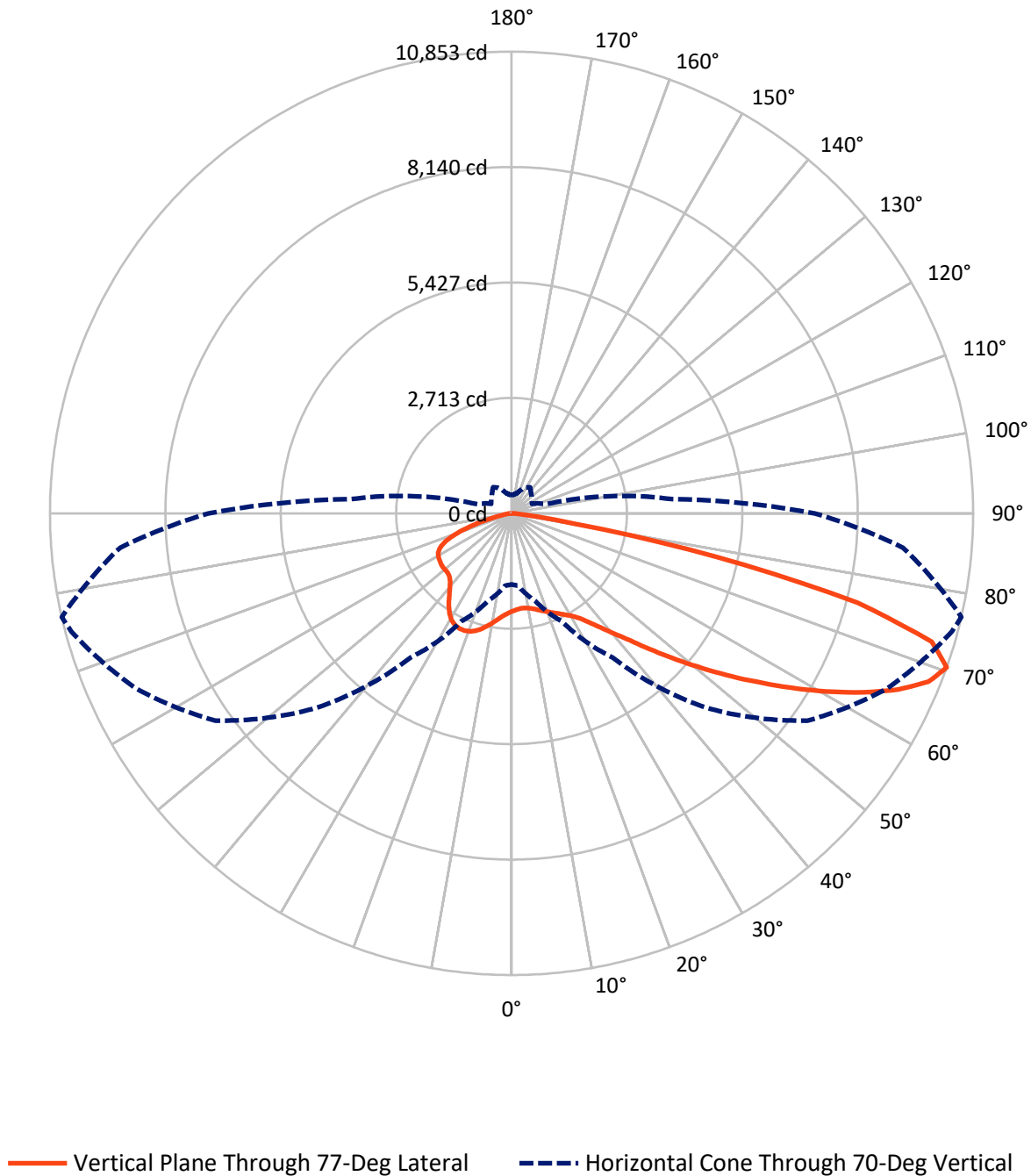
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.4 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	3611.1	0.0	3611.1
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	12879.1	0.0	12879.1
	% Fixture	78.1	0.0	78.1
Total	Lumens	16490.2	0.0	16490.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	219.4	1.3
10°-20°	633.2	3.8
20°-30°	1082.9	6.6
30°-40°	1741.5	10.6
40°-50°	2718.9	16.5
50°-60°	3631.7	22.0
60°-70°	3870.9	23.5
70°-80°	2382.9	14.5
80°-90°	208.8	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°	16490.2	100.0
0°-180°	16490.2	100.0

Coefficient of Utilization



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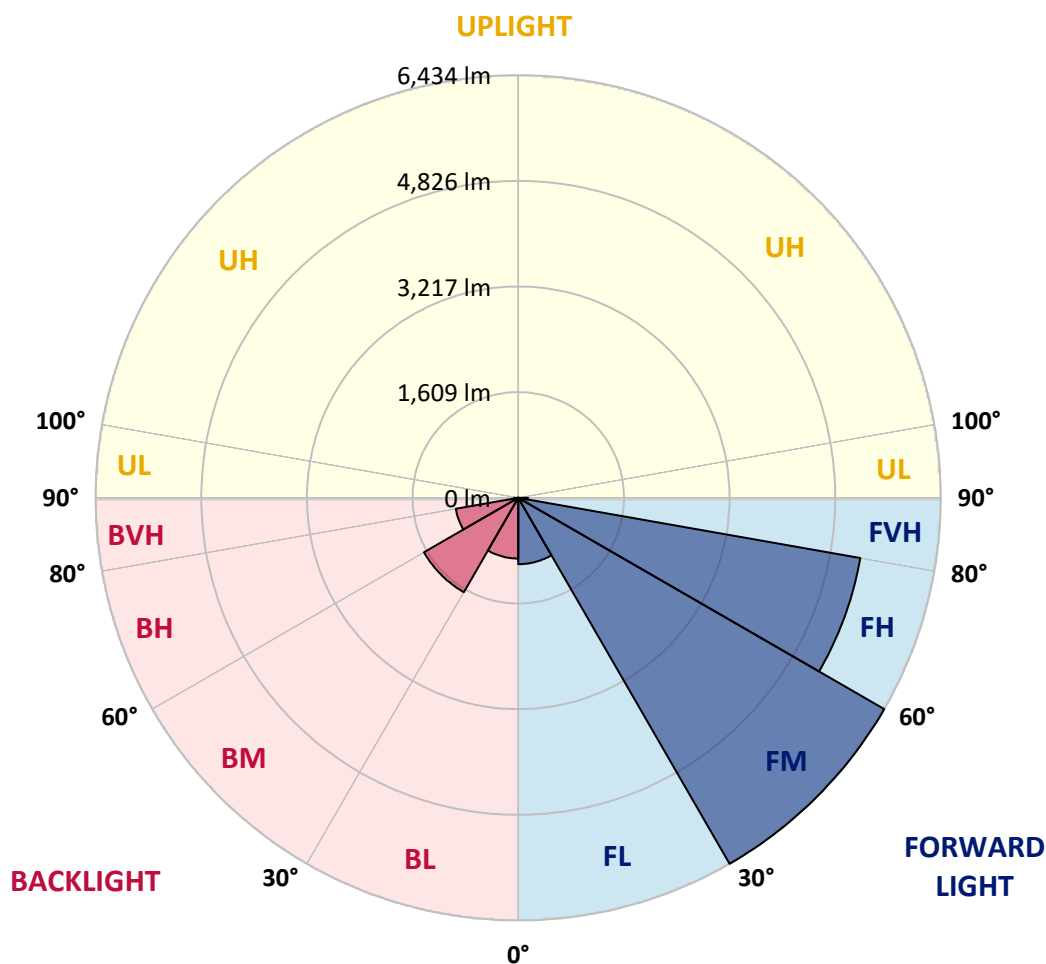
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1010.3	6.1			
FM	(30°-60°)	6434.1	39.0			
FH	(60°-80°)	5288.7	32.1			G3/7500
FVH	(80°-90°)	146.0	0.9			G2/225
BL	(0°-30°)	925.3	5.6	B2/1000		
BM	(30°-60°)	1657.9	10.1	B2/2500		
BH	(60°-80°)	965.1	5.9	B2/1000		G2/1000
BVH	(80°-90°)	62.8	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-G3

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	2300.5	2300.5	2300.5	2300.5	2300.5	2300.5	2300.5	2300.5	2300.5	2300.5	2300.5
2.5°	2120.6	2119.8	2130.8	2134.2	2154.4	2168.8	2195.9	2224.6	2261.7	2265.9	2288.7
5°	1998.2	1998.2	2010.8	2024.4	2050.5	2079.2	2120.6	2170.4	2234.7	2244.8	2301.3
7.5°	1894.3	1901.1	1912.0	1938.3	1968.6	2010.0	2073.4	2144.3	2228.8	2244.8	2336.0
10°	1810.7	1818.4	1831.8	1852.9	1898.5	1956.0	2038.7	2130.0	2243.1	2268.4	2386.7
12.5°	1784.5	1792.1	1799.7	1815.8	1858.0	1925.6	2024.4	2136.7	2277.8	2303.1	2455.9
15°	1845.3	1854.6	1848.7	1844.5	1866.4	1928.1	2031.1	2161.2	2320.8	2357.1	2541.2
17.5°	1985.5	1988.9	1975.4	1935.7	1932.3	1965.2	2063.2	2194.9	2374.8	2414.6	2627.4
20°	2211.8	2205.9	2178.1	2099.5	2054.8	2048.1	2118.2	2245.7	2430.6	2472.8	2720.2
22.5°	2519.2	2512.5	2456.8	2332.6	2233.0	2167.1	2197.5	2311.5	2493.1	2540.4	2810.7
25°	2902.7	2893.4	2811.5	2642.6	2488.0	2325.0	2305.6	2398.5	2570.0	2613.9	2905.3
27.5°	3350.3	3342.7	3254.1	3031.0	2808.1	2541.2	2439.9	2500.7	2650.1	2700.0	3011.7
30°	3831.7	3853.7	3696.6	3456.7	3174.6	2823.3	2620.6	2626.6	2754.1	2798.8	3140.8
32.5°	4397.6	4435.6	4246.4	3942.4	3557.3	3129.8	2848.7	2802.1	2905.3	2942.4	3303.9
35°	4958.3	5001.4	4844.3	4508.2	4064.7	3491.4	3086.8	3004.1	3106.3	3146.7	3520.1
37.5°	5443.1	5500.5	5419.4	5127.3	4607.8	3927.1	3397.6	3241.4	3353.7	3404.3	3810.5
40°	5825.7	5913.5	5907.6	5725.1	5248.0	4455.8	3792.0	3534.4	3661.1	3716.0	4162.7
42.5°	6136.5	6212.4	6278.3	6269.0	5916.0	5056.3	4255.7	3915.3	4011.5	4074.9	4558.8
45°	6351.0	6432.1	6573.9	6726.8	6558.7	5699.0	4786.9	4367.1	4455.0	4550.4	5030.9
47.5°	6542.7	6634.7	6818.8	7061.2	7104.3	6344.2	5368.7	4893.2	4973.5	5072.3	5504.8
50°	6559.6	6638.9	6924.4	7268.2	7491.9	6964.1	5993.7	5483.6	5558.8	5664.4	6012.3
52.5°	6151.6	6276.6	6774.9	7262.2	7670.2	7482.6	6614.4	6097.6	6182.1	6308.8	6537.6
55°	4775.1	4958.3	6336.5	7035.9	7606.8	7817.9	7204.8	6750.4	6858.5	6991.1	7066.2
57.5°	4112.9	4193.2	5030.1	6623.8	7318.0	7904.9	7703.1	7410.0	7584.0	7729.2	7625.4
60°	3696.6	3763.3	4258.2	5982.7	6937.9	7767.2	8088.2	8024.8	8325.5	8498.6	8197.1
62.5°	3250.7	3314.0	3764.1	4995.4	6451.5	7538.4	8331.4	8592.4	9085.6	9274.8	8736.0
65°	2808.1	2862.1	3293.7	4197.4	5833.3	7309.5	8457.3	9083.0	9789.1	9985.0	9183.6
67.5°	2314.9	2359.7	2767.6	3541.2	5081.6	6996.1	8519.7	9469.1	10401.4	10569.5	9404.8
70°	1670.5	1705.1	2126.6	2800.5	4138.2	6457.4	8494.4	9742.6	10718.9	10853.2	9237.6
72.5°	789.7	820.9	1315.8	1818.4	2923.0	5408.4	7981.8	9525.6	10396.3	10329.6	8214.0
75°	421.4	448.4	755.8	997.4	1543.9	3707.5	6531.7	8205.5	8730.0	8405.7	6070.6
77.5°	285.5	306.6	467.9	598.8	705.2	1760.0	4198.2	5681.3	5465.9	4930.5	3040.4
80°	226.3	248.3	383.5	405.4	341.2	635.9	1734.7	2629.9	1889.3	1510.8	864.8
82.5°	173.9	198.4	322.6	293.9	185.8	261.0	505.0	831.9	483.9	368.2	209.4
85°	106.4	132.6	253.4	187.5	104.8	119.1	171.5	231.4	147.8	123.3	75.1
87.5°	54.0	76.1	128.3	68.4	47.3	27.9	45.6	45.6	38.8	33.8	19.5
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°	2300.5	2300.5	2300.5	2300.5	2300.5	2300.5	2300.5	2300.5	2300.5	2300.5	2300.5
2.5°	2309.0	2325.8	2354.6	2381.6	2402.7	2423.0	2443.3	2454.3	2457.6	2471.2	2478.8
5°	2336.0	2367.2	2423.0	2475.4	2508.3	2528.6	2542.9	2551.3	2553.1	2557.3	2564.0
7.5°	2385.8	2435.7	2513.4	2565.7	2590.2	2588.5	2582.6	2561.5	2553.1	2545.5	2547.1
10°	2455.9	2521.8	2617.2	2653.5	2638.4	2597.9	2545.5	2483.8	2455.1	2427.2	2418.8
12.5°	2542.9	2626.6	2720.2	2718.6	2643.4	2539.5	2418.0	2323.4	2263.4	2220.3	2210.2
15°	2648.5	2744.7	2816.6	2759.1	2594.5	2407.8	2229.6	2106.3	2052.3	2004.9	1999.9
17.5°	2757.5	2860.5	2893.4	2746.5	2471.2	2212.7	2010.8	1913.8	1860.5	1835.2	1842.7
20°	2863.8	2966.0	2939.0	2673.8	2283.6	1991.5	1811.6	1758.4	1747.3	1753.3	1750.7
22.5°	2976.2	3067.4	2948.3	2533.6	2044.7	1765.0	1666.2	1668.0	1692.5	1710.2	1714.4
25°	3091.0	3152.7	2923.8	2331.0	1787.9	1598.7	1574.2	1601.3	1649.4	1684.0	1693.3
27.5°	3201.7	3228.6	2870.6	2080.1	1567.4	1479.6	1483.9	1539.6	1612.2	1660.4	1672.2
30°	3326.6	3296.3	2768.4	1798.1	1414.6	1377.5	1413.0	1477.9	1550.6	1593.7	1603.8
32.5°	3467.7	3354.5	2606.3	1537.1	1306.5	1295.5	1353.8	1396.0	1428.1	1440.7	1447.5
35°	3643.4	3436.4	2398.5	1353.8	1209.4	1235.5	1291.3	1270.2	1257.6	1250.8	1257.6
37.5°	3871.4	3547.1	2155.3	1234.7	1130.9	1192.5	1215.3	1149.4	1099.6	1075.1	1081.0
40°	4145.8	3709.3	1921.4	1142.7	1081.0	1155.4	1115.6	1036.3	972.9	938.3	940.8
42.5°	4450.8	3879.0	1724.6	1073.4	1053.2	1124.9	1042.1	947.6	845.4	834.5	845.4
45°	4770.9	4053.8	1590.3	1020.2	1039.7	1098.8	999.9	847.1	774.5	819.2	842.9
47.5°	5090.9	4214.3	1509.2	980.5	1032.9	1069.2	962.8	791.3	739.8	804.8	835.3
50°	5447.3	4357.8	1472.9	951.8	1025.3	1057.4	907.0	776.9	703.5	746.6	778.7
52.5°	5801.2	4469.3	1445.9	923.1	1014.3	1048.1	880.0	760.0	659.6	662.2	679.9
55°	6154.2	4542.0	1416.3	885.1	989.8	1027.8	877.5	741.5	626.7	614.8	623.3
57.5°	6530.9	4583.3	1380.0	842.9	947.6	976.3	874.9	727.1	616.5	597.1	599.6
60°	6914.2	4644.2	1332.7	791.3	891.0	914.6	869.0	722.1	610.6	577.7	580.2
62.5°	7258.0	4665.3	1276.1	742.3	818.4	853.8	856.4	717.9	594.6	538.0	538.0
65°	7483.5	4574.1	1177.3	686.6	739.8	791.3	831.9	703.5	565.8	509.2	509.2
67.5°	7474.2	4313.9	1022.7	614.8	663.8	722.1	796.4	679.1	531.3	473.8	476.3
70°	7126.2	3800.4	826.8	531.3	580.2	647.8	750.8	642.7	489.8	434.9	440.0
72.5°	6112.0	2974.4	600.4	433.3	483.1	570.9	691.7	598.8	447.6	400.3	397.8
75°	4366.3	1882.5	407.0	332.7	375.9	483.9	618.2	547.2	408.8	402.0	379.2
77.5°	2230.4	899.4	269.4	243.2	261.8	381.7	519.4	489.0	414.7	331.9	295.6
80°	725.5	331.9	169.7	165.5	173.9	254.2	402.0	401.2	314.2	225.5	199.4
82.5°	231.4	142.7	110.6	106.4	102.2	159.6	280.3	317.5	212.0	142.7	141.9
85°	92.0	85.3	65.0	60.0	43.0	75.1	147.0	211.2	158.0	103.0	105.6
87.5°	33.8	33.8	17.7	12.7	9.3	25.3	39.7	63.3	90.4	53.2	52.4
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)