

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: P964079

Luminaire Tested: **NAV-SB3B-740-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964079
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-740-U-T3R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18808.7 lumens
Efficiency: N/A
Efficacy: 172.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - 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

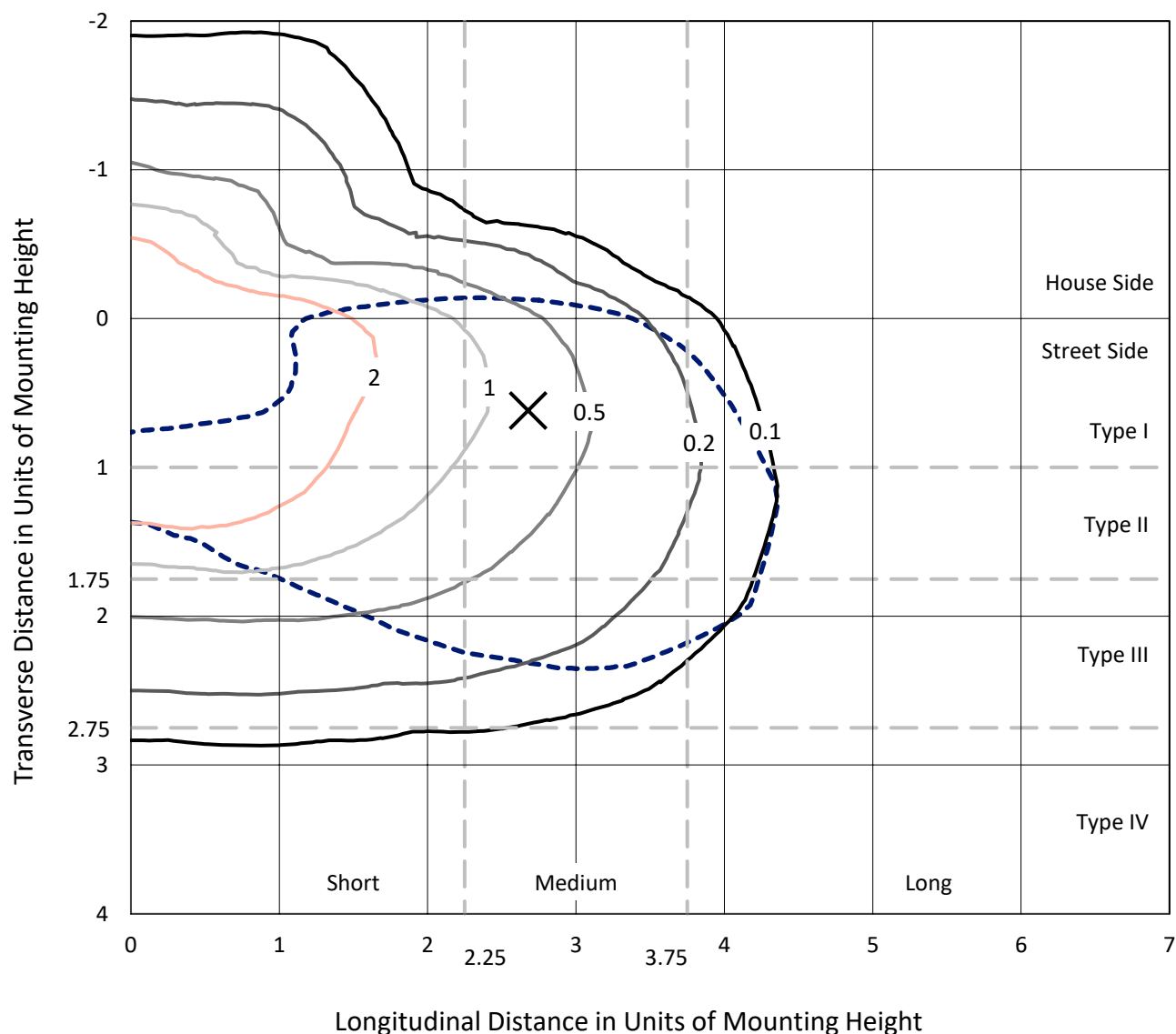


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Iso-Footcandle Lines of Horizontal Illumination

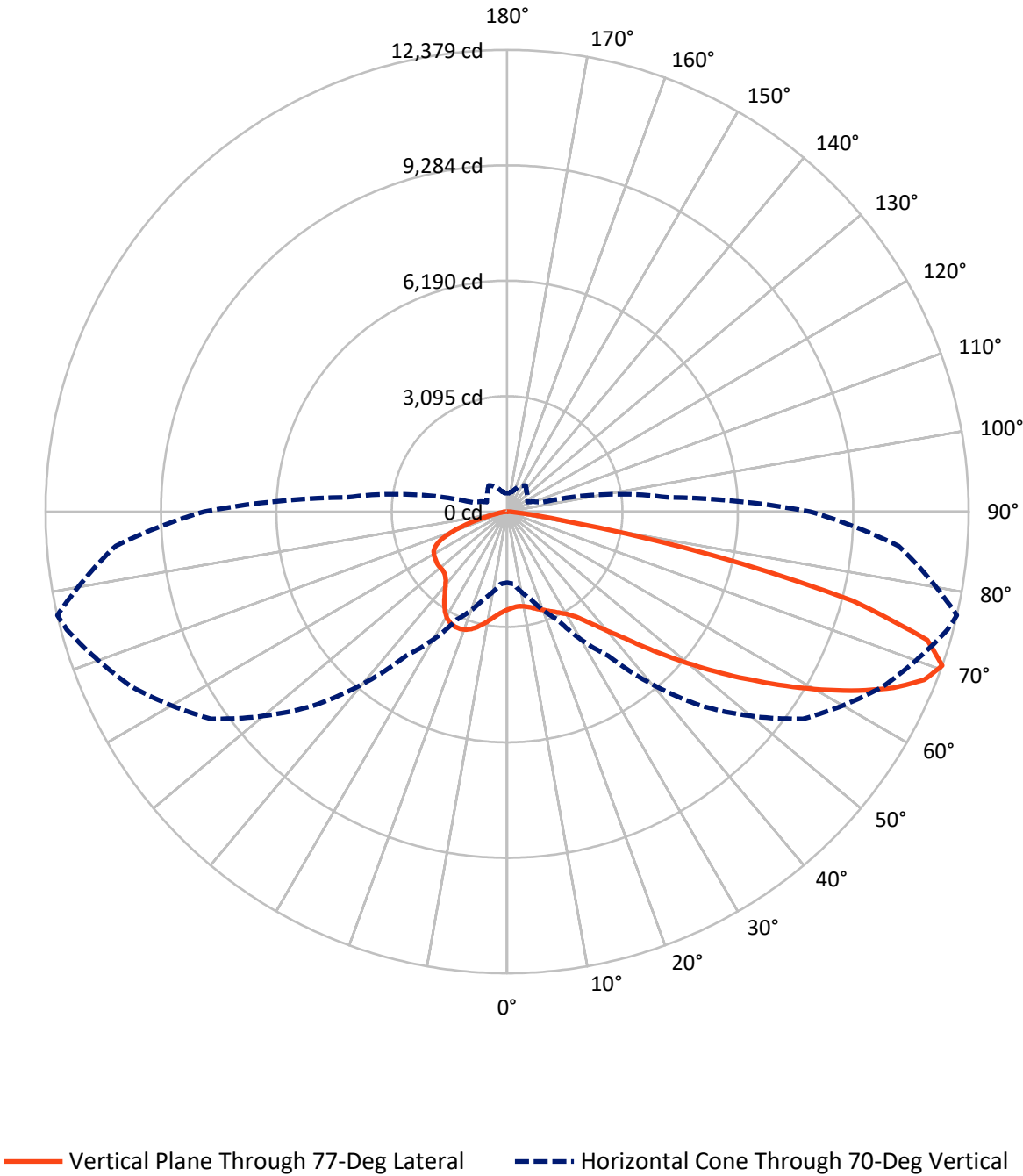
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 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	4118.8	0.0	4118.8
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	14689.9	0.0	14689.9
	% Fixture	78.1	0.0	78.1
Total	Lumens	18808.7	0.0	18808.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.3	1.3
10°-20°	722.3	3.8
20°-30°	1235.2	6.6
30°-40°	1986.3	10.6
40°-50°	3101.1	16.5
50°-60°	4142.4	22.0
60°-70°	4415.1	23.5
70°-80°	2717.9	14.5
80°-90°	238.2	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°	18808.7	100.0
0°-180°	18808.7	100.0

Coefficient of Utilization



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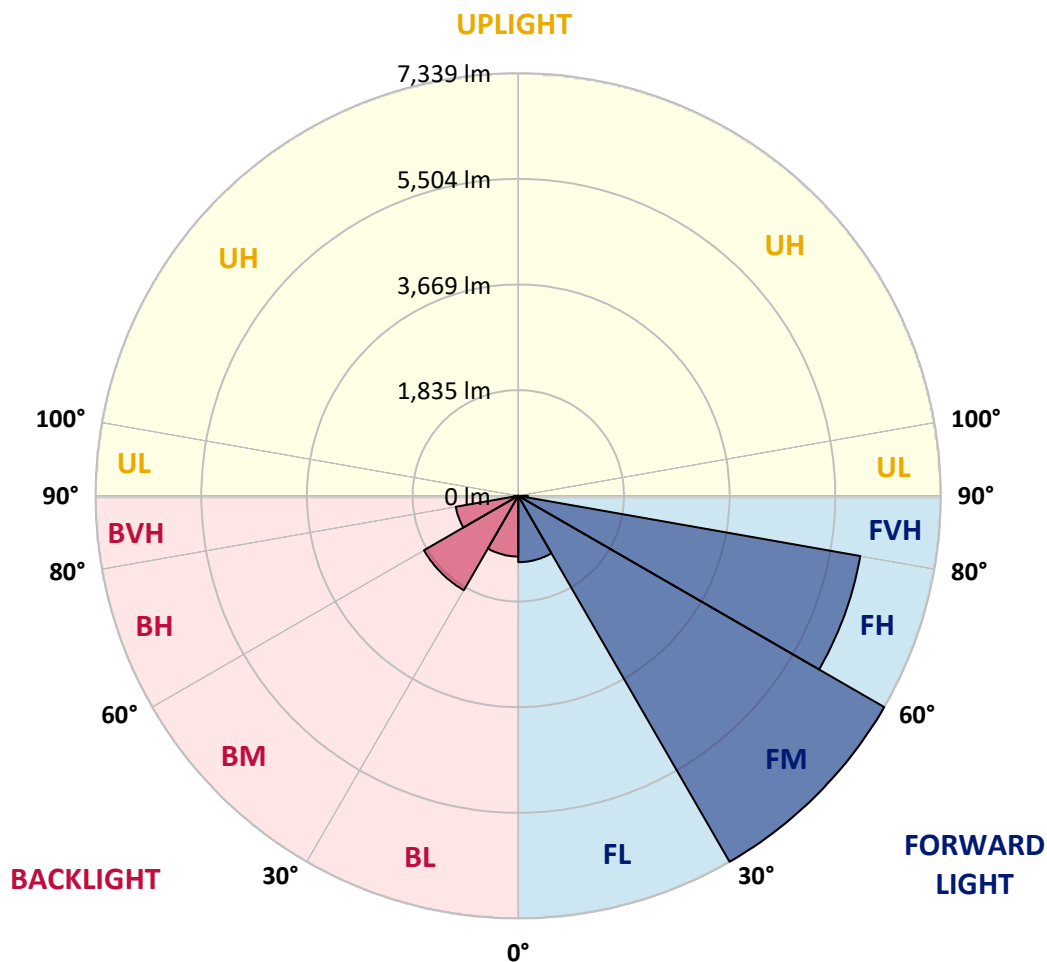
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1152.3	6.1			
FM	(30°-60°)	7338.8	39.0			
FH	(60°-80°)	6032.3	32.1			G3/7500
FVH	(80°-90°)	166.5	0.9			G2/225
BL	(0°-30°)	1055.4	5.6	B3/2500		
BM	(30°-60°)	1891.0	10.1	B2/2500		
BH	(60°-80°)	1100.8	5.9	B3/2500		G3/2500
BVH	(80°-90°)	71.6	0.4			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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	2624.0	2624.0	2624.0	2624.0	2624.0	2624.0	2624.0	2624.0	2624.0	2624.0	2624.0
2.5°	2418.8	2417.9	2430.4	2434.3	2457.3	2473.7	2504.6	2537.3	2579.7	2584.5	2610.5
5°	2279.1	2279.1	2293.5	2309.0	2338.8	2371.6	2418.8	2475.7	2548.9	2560.4	2624.9
7.5°	2160.7	2168.4	2180.9	2210.7	2245.5	2292.6	2364.9	2445.8	2542.1	2560.4	2664.5
10°	2065.3	2074.0	2089.4	2113.4	2165.5	2231.0	2325.4	2429.5	2558.5	2587.4	2722.3
12.5°	2035.4	2044.1	2052.8	2071.1	2119.2	2196.3	2309.0	2437.1	2598.0	2626.9	2801.2
15°	2104.7	2115.4	2108.6	2103.8	2128.8	2199.1	2316.7	2465.0	2647.1	2688.6	2898.5
17.5°	2264.7	2268.5	2253.2	2207.8	2204.0	2241.6	2353.3	2503.6	2708.8	2754.1	2996.8
20°	2522.8	2516.1	2484.3	2394.7	2343.7	2336.0	2415.9	2561.4	2772.3	2820.5	3102.8
22.5°	2873.5	2865.8	2802.2	2660.6	2546.9	2471.8	2506.4	2636.5	2843.7	2897.6	3205.8
25°	3310.9	3300.2	3206.8	3014.1	2837.8	2651.9	2629.7	2735.7	2931.3	2981.4	3313.7
27.5°	3821.4	3812.7	3711.5	3457.2	3202.9	2898.5	2783.0	2852.3	3022.8	3079.6	3435.1
30°	4370.4	4395.5	4216.3	3942.8	3621.0	3220.2	2989.1	2995.9	3141.3	3192.4	3582.5
32.5°	5015.8	5059.2	4843.4	4496.6	4057.4	3570.0	3249.1	3196.2	3313.7	3356.1	3768.4
35°	5655.4	5704.5	5525.4	5142.0	4636.3	3982.2	3520.8	3426.4	3543.0	3589.2	4015.0
37.5°	6208.4	6273.9	6181.4	5848.1	5255.7	4479.2	3875.3	3697.1	3825.2	3883.0	4346.3
40°	6644.8	6744.9	6738.1	6530.1	5985.9	5082.3	4325.2	4031.3	4175.8	4238.5	4748.0
42.5°	6999.2	7085.9	7161.1	7150.5	6747.8	5767.2	4854.0	4465.8	4575.6	4647.9	5199.8
45°	7243.9	7336.4	7498.2	7672.5	7480.9	6500.2	5459.9	4981.2	5081.3	5190.2	5738.3
47.5°	7462.6	7567.6	7777.6	8054.0	8103.1	7236.2	6123.7	5581.3	5672.8	5785.5	6278.7
50°	7481.9	7572.4	7898.0	8290.0	8545.3	7943.2	6836.4	6254.7	6340.3	6460.8	6857.7
52.5°	7016.5	7159.1	7727.5	8283.3	8748.6	8534.8	7544.4	6954.9	7051.3	7195.7	7456.8
55°	5446.4	5655.4	7227.6	8025.1	8676.3	8917.2	8217.8	7699.6	7822.8	7974.1	8059.8
57.5°	4691.2	4782.8	5737.3	7555.1	8346.9	9016.3	8786.1	8451.8	8650.3	8816.0	8697.5
60°	4216.3	4292.4	4856.9	6823.9	7913.4	8859.4	9225.4	9153.1	9496.1	9693.5	9349.6
62.5°	3707.7	3779.9	4293.4	5697.9	7358.6	8598.3	9502.8	9800.4	10363.1	10578.8	9964.2
65°	3202.9	3264.6	3756.8	4787.6	6653.4	8337.2	9646.4	10360.2	11165.4	11389.0	10474.8
67.5°	2640.4	2691.4	3156.7	4039.0	5796.1	7979.8	9717.6	10800.3	11863.9	12055.5	10727.1
70°	1905.4	1944.8	2425.6	3194.2	4720.1	7365.2	9688.7	11112.4	12226.0	12379.2	10536.4
72.5°	900.7	936.3	1500.8	2074.0	3333.9	6168.9	9104.0	10864.9	11858.0	11782.0	9368.9
75°	480.7	511.5	862.1	1137.6	1760.8	4228.8	7450.0	9359.3	9957.5	9587.5	6924.1
77.5°	325.5	349.6	533.6	683.0	804.3	2007.5	4788.5	6480.0	6234.4	5623.7	3467.8
80°	258.2	283.2	437.4	462.4	389.2	725.4	1978.6	2999.7	2154.9	1723.3	986.4
82.5°	198.4	226.4	368.0	335.2	212.0	297.7	576.0	948.8	552.0	419.9	238.9
85°	121.4	151.2	288.9	213.8	119.4	135.8	195.6	263.9	168.6	140.6	85.7
87.5°	61.6	86.7	146.4	78.0	53.9	31.8	52.0	52.0	44.3	38.5	22.1
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°	2624.0	2624.0	2624.0	2624.0	2624.0	2624.0	2624.0	2624.0	2624.0	2624.0	2624.0
2.5°	2633.6	2652.9	2685.6	2716.5	2740.5	2763.7	2786.8	2799.3	2803.2	2818.5	2827.3
5°	2664.5	2700.1	2763.7	2823.4	2861.0	2884.0	2900.4	2910.1	2912.0	2916.8	2924.5
7.5°	2721.3	2778.2	2866.7	2926.5	2954.4	2952.5	2945.7	2921.7	2912.0	2903.3	2905.3
10°	2801.2	2876.4	2985.2	3026.6	3009.3	2963.1	2903.3	2833.0	2800.3	2768.5	2758.9
12.5°	2900.4	2995.9	3102.8	3100.8	3015.0	2896.6	2757.9	2650.0	2581.6	2532.5	2520.9
15°	3020.9	3130.7	3212.6	3147.1	2959.2	2746.3	2543.0	2402.4	2340.8	2286.9	2281.0
17.5°	3145.1	3262.7	3300.2	3132.6	2818.5	2523.9	2293.5	2182.8	2122.2	2093.3	2101.9
20°	3266.5	3383.0	3352.3	3049.8	2604.7	2271.4	2066.3	2005.5	1993.0	1999.8	1996.9
22.5°	3394.6	3498.6	3362.8	2889.9	2332.1	2013.3	1900.6	1902.5	1930.4	1950.7	1955.5
25°	3525.6	3595.9	3334.9	2658.6	2039.2	1823.5	1795.6	1826.3	1881.3	1920.7	1931.4
27.5°	3651.9	3682.6	3274.3	2372.6	1787.9	1687.7	1692.5	1756.0	1839.0	1893.8	1907.3
30°	3794.3	3759.7	3157.6	2050.8	1613.6	1571.1	1611.6	1685.7	1768.6	1817.7	1829.3
32.5°	3955.3	3826.2	2972.7	1753.2	1490.2	1477.6	1544.2	1592.3	1628.9	1643.4	1651.1
35°	4155.7	3919.6	2735.7	1544.2	1379.4	1409.3	1472.8	1448.7	1434.3	1426.6	1434.3
37.5°	4415.7	4045.8	2458.3	1408.4	1289.9	1360.2	1386.2	1311.1	1254.2	1226.3	1233.0
40°	4728.7	4230.8	2191.4	1303.3	1233.0	1317.7	1272.5	1181.9	1109.7	1070.2	1073.1
42.5°	5076.5	4424.4	1967.1	1224.4	1201.2	1283.1	1188.7	1080.8	964.2	951.7	964.2
45°	5441.6	4623.8	1813.8	1163.7	1185.8	1253.3	1140.5	966.2	883.3	934.4	961.3
47.5°	5806.7	4806.8	1721.4	1118.4	1178.1	1219.5	1098.2	902.6	843.9	918.0	952.7
50°	6213.2	4970.5	1680.0	1085.6	1169.4	1206.0	1034.5	886.2	802.4	851.6	888.2
52.5°	6616.8	5097.7	1649.1	1052.9	1156.9	1195.5	1003.8	866.9	752.3	755.2	775.4
55°	7019.5	5180.6	1615.4	1009.5	1128.9	1172.3	1000.8	845.7	714.7	701.3	710.9
57.5°	7449.1	5227.7	1574.0	961.3	1080.8	1113.6	997.9	829.4	703.2	681.0	684.0
60°	7886.5	5297.1	1520.1	902.6	1016.3	1043.2	991.2	823.6	696.5	658.9	661.7
62.5°	8278.5	5321.2	1455.5	846.8	933.5	973.9	976.7	818.8	678.1	613.6	613.6
65°	8535.7	5217.1	1342.9	783.2	843.9	902.6	948.8	802.4	645.4	580.9	580.9
67.5°	8525.1	4920.5	1166.6	701.3	757.2	823.6	908.4	774.5	605.9	540.4	543.2
70°	8128.2	4334.8	943.1	605.9	661.7	738.8	856.4	733.1	558.7	496.1	501.8
72.5°	6971.3	3392.6	684.9	494.2	551.0	651.2	788.9	683.0	510.6	456.6	453.7
75°	4980.2	2147.2	464.3	379.6	428.7	552.0	705.1	624.2	466.3	458.5	432.6
77.5°	2544.0	1025.9	307.3	277.5	298.6	435.4	592.4	557.7	472.9	378.5	337.1
80°	827.5	378.5	193.6	188.8	198.4	290.0	458.5	457.6	358.3	257.2	227.3
82.5°	263.9	162.8	126.2	121.4	116.5	182.0	319.8	362.2	241.8	162.8	161.8
85°	105.0	97.3	74.2	68.4	49.1	85.7	167.6	240.8	180.1	117.6	120.4
87.5°	38.5	38.5	20.2	14.5	10.6	28.9	45.3	72.3	103.1	60.7	59.8
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)