

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: P964187

Luminaire Tested: **NAV-SB3B-830-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964187
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-12)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-830-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15207.9 lumens
Efficiency: N/A
Efficacy: 139.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - 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



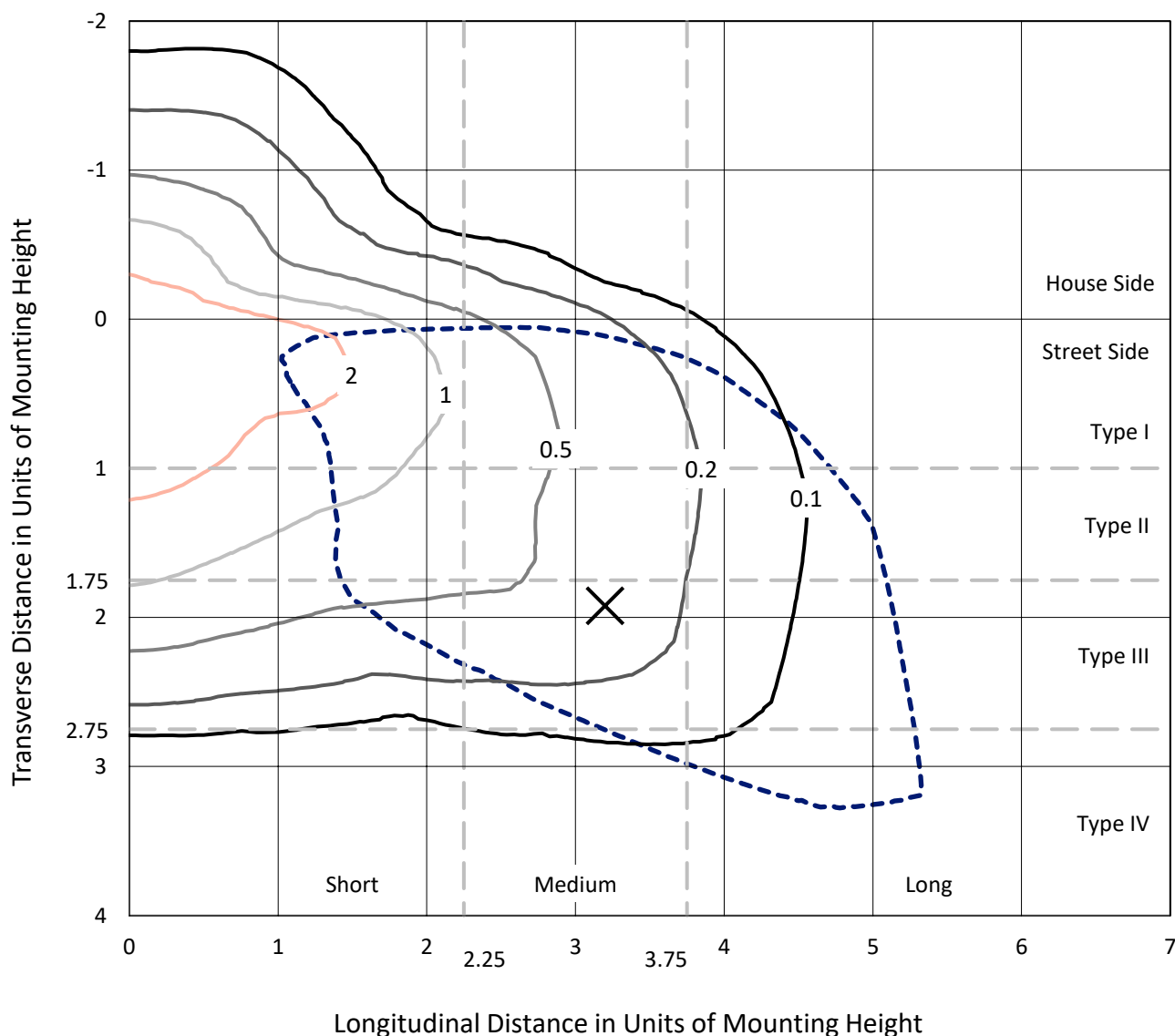
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

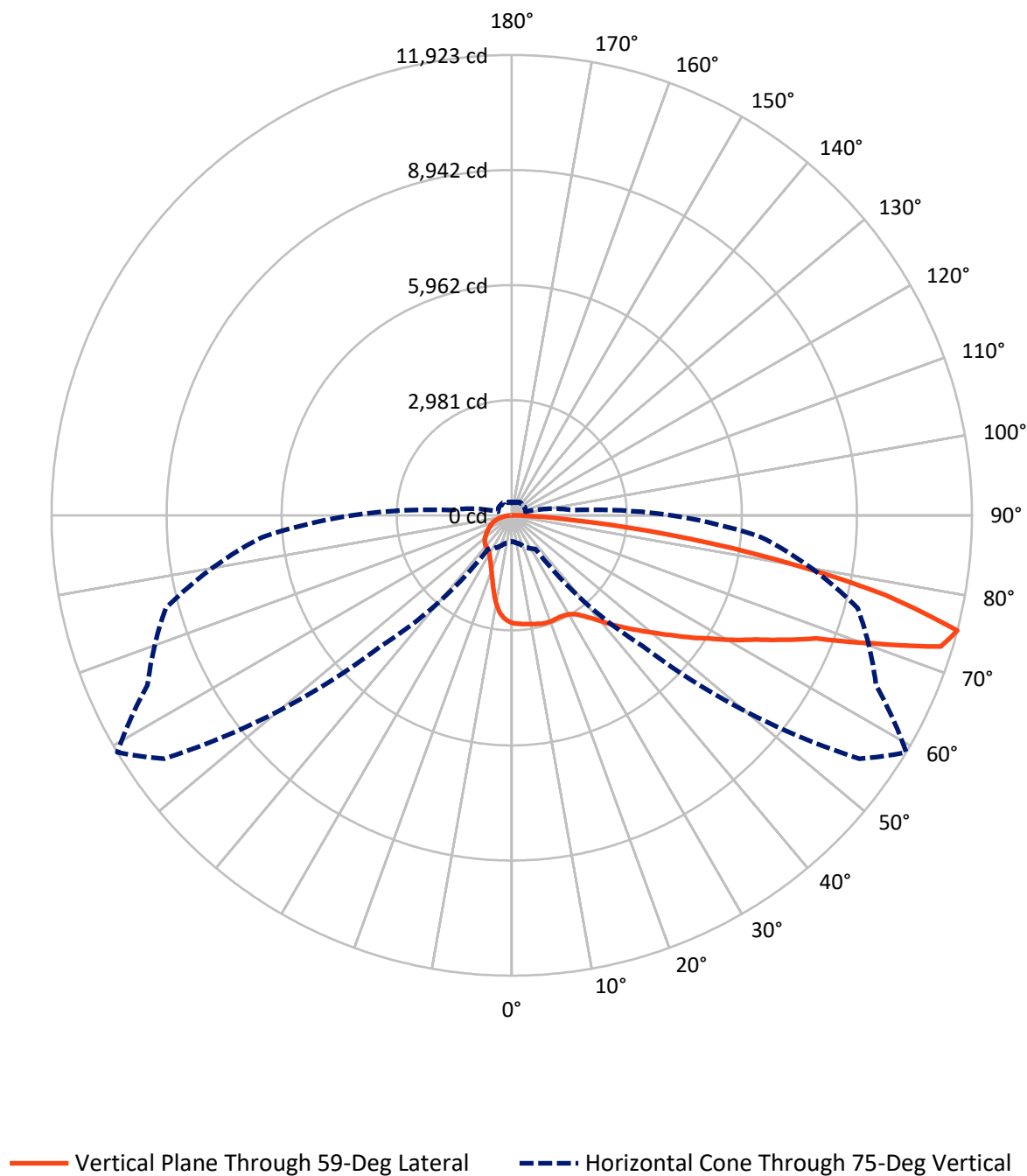
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 fc
Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2852.3	0.0	2852.3
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	12355.6	0.0	12355.6
	% Fixture	81.2	0.0	81.2
Total	Lumens	15207.9	0.0	15207.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.3	1.6
10°-20°	639.8	4.2
20°-30°	971.8	6.4
30°-40°	1444.5	9.5
40°-50°	2148.2	14.1
50°-60°	2915.9	19.2
60°-70°	3559.9	23.4
70°-80°	2793.7	18.4
80°-90°	483.9	3.2
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°	15207.9	100.0
0°-180°	15207.9	100.0

Coefficient of Utilization



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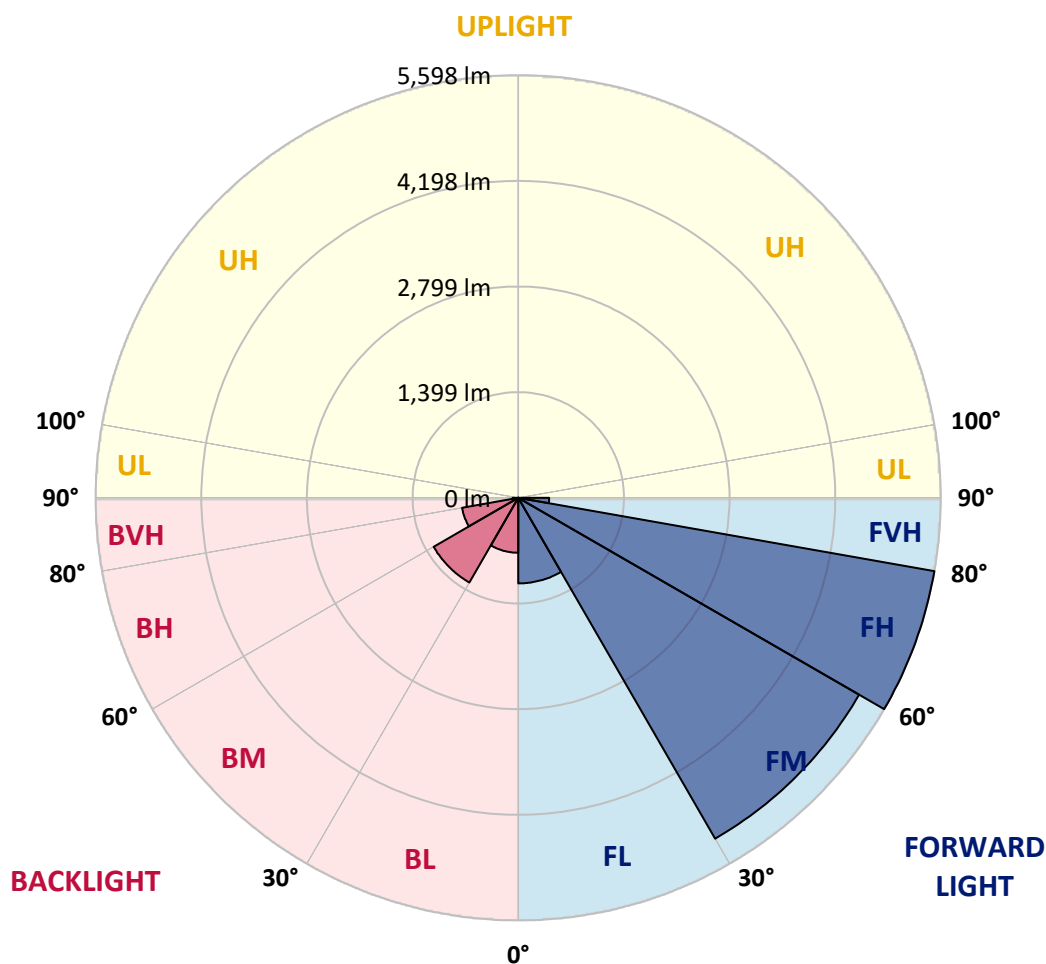
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1133.9	7.5			
FM	(30°-60°)	5213.9	34.3			
FH	(60°-80°)	5597.9	36.8			G3/7500
FVH	(80°-90°)	409.9	2.7			G3/500
BL	(0°-30°)	727.9	4.8	B2/1000		
BM	(30°-60°)	1294.7	8.5	B2/2500		
BH	(60°-80°)	755.7	5.0	B2/1000		G2/1000
BVH	(80°-90°)	74.1	0.5			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 IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	2791.4	2791.4	2791.4	2791.4	2791.4	2791.4	2791.4	2791.4	2791.4	2791.4	2791.4
2.5°	2815.1	2805.3	2815.1	2811.1	2809.4	2806.1	2807.0	2812.7	2809.4	2813.4	2799.6
5°	2796.3	2790.6	2800.4	2797.9	2808.6	2810.2	2820.8	2827.4	2831.5	2832.3	2821.6
7.5°	2765.2	2759.5	2773.3	2784.8	2807.8	2814.2	2836.4	2847.0	2852.8	2862.5	2847.0
10°	2651.5	2649.0	2683.3	2726.7	2780.7	2814.2	2847.9	2865.8	2874.8	2901.1	2883.0
12.5°	2450.3	2453.5	2498.5	2582.0	2689.9	2797.9	2860.9	2887.1	2901.1	2933.8	2925.6
15°	2258.0	2257.2	2306.2	2395.4	2546.8	2725.9	2867.4	2912.4	2936.2	2984.5	2977.9
17.5°	2146.8	2143.5	2177.8	2245.7	2386.4	2615.5	2851.1	2926.4	2977.1	3037.6	3032.0
20°	2126.3	2119.7	2137.7	2171.3	2271.1	2494.4	2808.6	2926.4	3009.8	3088.3	3085.0
22.5°	2200.7	2190.1	2182.7	2178.6	2222.8	2394.6	2760.3	2916.5	3058.1	3161.2	3155.5
25°	2350.4	2334.0	2296.4	2259.6	2246.5	2349.6	2717.8	2914.1	3130.0	3259.3	3238.1
27.5°	2592.5	2572.1	2496.1	2407.7	2328.3	2372.5	2698.9	2928.8	3209.5	3363.2	3320.7
30°	2892.9	2870.7	2775.0	2639.2	2496.9	2457.6	2722.7	2972.2	3310.9	3501.5	3418.1
32.5°	3162.0	3137.4	3055.6	2917.4	2725.1	2604.8	2797.9	3054.8	3470.4	3693.8	3564.5
35°	3400.8	3372.2	3298.7	3170.9	3004.9	2811.9	2933.8	3201.3	3697.1	4006.3	3763.3
37.5°	3634.9	3601.3	3521.2	3386.2	3270.0	3087.5	3121.1	3389.4	3998.1	4385.9	4026.7
40°	3896.6	3848.4	3751.0	3617.6	3504.8	3410.7	3367.3	3620.1	4304.1	4809.6	4355.6
42.5°	4150.2	4104.4	3988.3	3874.6	3733.0	3706.0	3652.9	3890.1	4638.6	5275.2	4689.4
45°	4423.5	4368.7	4228.0	4084.0	3994.8	3902.4	3929.3	4160.1	4966.7	5749.6	5039.5
47.5°	4679.5	4618.2	4452.1	4291.8	4242.7	4067.6	4183.0	4457.0	5307.9	6230.7	5386.4
50°	4817.8	4757.3	4619.1	4474.2	4435.8	4271.4	4457.8	4783.5	5665.4	6710.2	5719.4
52.5°	4933.2	4867.7	4686.9	4606.8	4595.3	4493.1	4796.6	5156.6	6022.9	7133.9	6040.9
55°	5055.9	4983.1	4752.4	4680.4	4732.7	4741.8	5198.3	5579.5	6400.8	7547.1	6344.4
57.5°	5197.5	5105.0	4815.3	4742.6	4866.9	5033.0	5659.6	6018.0	6772.3	7929.9	6614.4
60°	5330.8	5237.5	4936.5	4841.6	5011.7	5370.9	6189.0	6548.9	7192.8	8271.0	6869.7
62.5°	5357.0	5280.1	5033.0	5032.1	5208.0	5765.2	6815.6	7084.8	7560.1	8608.2	7098.7
65°	4903.7	4855.4	4709.1	5024.9	5489.5	6333.0	7513.5	7770.4	8027.3	8902.6	7299.9
67.5°	3732.2	3738.8	3728.1	4337.6	5262.0	7148.7	8523.9	8504.2	8604.1	9233.2	7531.5
70°	1706.5	1745.1	1995.4	2994.2	4215.7	7242.6	10194.4	9940.0	9328.0	9661.0	7731.9
72.5°	922.0	951.5	1053.7	1450.5	2534.5	6439.4	11442.9	11623.7	10291.0	9949.0	7511.8
75°	676.6	692.9	764.1	922.0	1064.4	4785.9	10995.4	11923.1	10411.2	9277.4	6486.8
77.5°	506.5	513.7	571.8	730.6	544.9	2523.0	8785.7	9874.5	8912.5	7622.3	4791.7
80°	367.4	375.6	418.9	548.2	382.0	922.8	6032.7	6931.0	6103.9	4858.7	2388.0
82.5°	253.6	256.9	275.7	373.1	266.7	358.3	3423.0	4064.3	3407.4	1705.0	644.6
85°	153.0	157.0	165.2	217.6	151.4	170.1	1477.5	1528.2	1018.5	407.4	200.4
87.5°	63.0	67.0	73.6	91.6	59.8	47.5	243.7	306.0	190.6	119.4	62.2
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°	2791.4	2791.4	2791.4	2791.4	2791.4	2791.4	2791.4	2791.4	2791.4	2791.4	2791.4
2.5°	2795.5	2789.7	2774.2	2752.9	2733.3	2708.8	2698.1	2689.1	2680.9	2665.4	2658.0
5°	2812.7	2797.1	2755.4	2701.4	2640.0	2573.0	2507.5	2462.5	2424.0	2395.4	2371.6
7.5°	2838.8	2809.4	2733.3	2622.9	2482.1	2338.1	2208.1	2115.6	2046.1	2020.7	1976.5
10°	2865.8	2830.6	2698.1	2503.4	2260.4	2038.7	1866.1	1771.2	1715.5	1697.6	1669.7
12.5°	2897.8	2846.2	2643.3	2337.3	2012.6	1769.6	1619.0	1563.4	1534.7	1525.0	1527.5
15°	2944.4	2859.2	2560.7	2129.5	1776.1	1573.2	1475.9	1437.5	1422.7	1421.9	1425.2
17.5°	2979.6	2861.7	2432.2	1907.0	1594.5	1454.6	1374.4	1359.7	1369.5	1384.3	1390.0
20°	3018.8	2839.7	2263.7	1704.2	1466.9	1350.7	1317.1	1327.0	1350.7	1372.0	1379.3
22.5°	3046.6	2799.6	2059.9	1546.2	1356.4	1291.0	1289.3	1309.7	1322.9	1333.5	1339.3
25°	3071.2	2731.6	1844.0	1413.7	1265.6	1255.0	1272.9	1266.4	1257.5	1266.4	1272.1
27.5°	3089.1	2624.5	1651.0	1297.5	1201.8	1230.4	1219.8	1205.1	1204.3	1209.2	1217.4
30°	3083.4	2481.3	1492.2	1187.1	1156.8	1184.6	1159.3	1156.8	1154.4	1156.8	1165.8
32.5°	3083.4	2318.5	1370.3	1111.0	1128.2	1117.6	1115.1	1109.4	1099.5	1098.7	1109.4
35°	3100.6	2155.7	1265.6	1070.1	1104.4	1079.1	1080.8	1066.8	1046.3	1036.6	1046.3
37.5°	3135.8	2024.8	1161.7	1050.4	1062.7	1061.9	1055.3	1031.7	995.7	964.5	975.2
40°	3220.9	1986.3	1090.5	1041.4	1043.0	1052.9	1035.8	989.9	908.0	857.4	863.9
42.5°	3354.2	2051.0	1075.0	1019.4	1030.0	1039.9	1006.2	900.0	841.8	811.6	811.6
45°	3523.5	2163.9	1108.5	987.5	998.9	1016.1	916.2	865.5	839.4	840.2	844.3
47.5°	3738.0	2282.5	1170.8	959.6	953.9	963.7	856.6	825.4	789.5	798.5	821.3
50°	3985.8	2402.8	1229.6	922.0	904.0	872.1	818.2	788.6	742.8	721.6	727.3
52.5°	4254.2	2518.9	1253.4	876.2	850.0	813.2	791.9	755.9	700.3	665.1	664.3
55°	4508.6	2624.5	1227.1	821.3	796.0	767.4	764.1	742.0	682.3	633.2	633.2
57.5°	4749.1	2712.9	1161.7	765.8	741.2	724.1	746.1	735.4	660.2	597.3	594.0
60°	4952.8	2773.3	1066.8	709.3	692.1	683.2	716.7	713.4	629.1	558.7	556.3
62.5°	5114.9	2797.1	962.1	655.3	651.2	634.9	675.8	675.8	589.9	521.1	518.6
65°	5241.6	2774.2	855.8	602.1	610.3	585.8	625.9	620.9	548.2	487.6	484.3
67.5°	5353.7	2698.9	737.9	549.8	568.6	537.5	573.5	562.0	502.4	454.1	450.8
70°	5403.6	2523.9	603.7	497.4	520.3	490.1	521.1	499.9	450.8	418.1	411.5
72.5°	5002.7	2097.7	475.3	442.6	462.3	437.7	464.7	440.1	395.1	380.4	368.2
75°	4138.8	1574.0	365.7	382.8	397.6	378.7	396.8	378.7	337.8	348.5	318.3
77.5°	3005.7	1062.7	279.8	319.9	326.5	316.6	332.2	311.7	274.9	272.4	260.1
80°	1494.7	622.6	219.2	252.8	250.3	243.7	261.8	251.9	220.9	234.0	231.5
82.5°	432.8	266.7	159.5	177.5	172.6	174.2	187.4	192.3	287.9	285.6	292.0
85°	135.8	104.8	95.7	99.0	94.1	96.6	110.5	219.2	202.8	118.6	128.4
87.5°	35.2	36.0	23.7	25.3	26.1	31.1	35.2	133.4	63.9	41.7	44.2
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)