

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: P883749

Luminaire Tested: **NAV-SB4B-727-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883749
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4B-727-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20695 lumens
Efficiency: N/A
Efficacy: 140.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

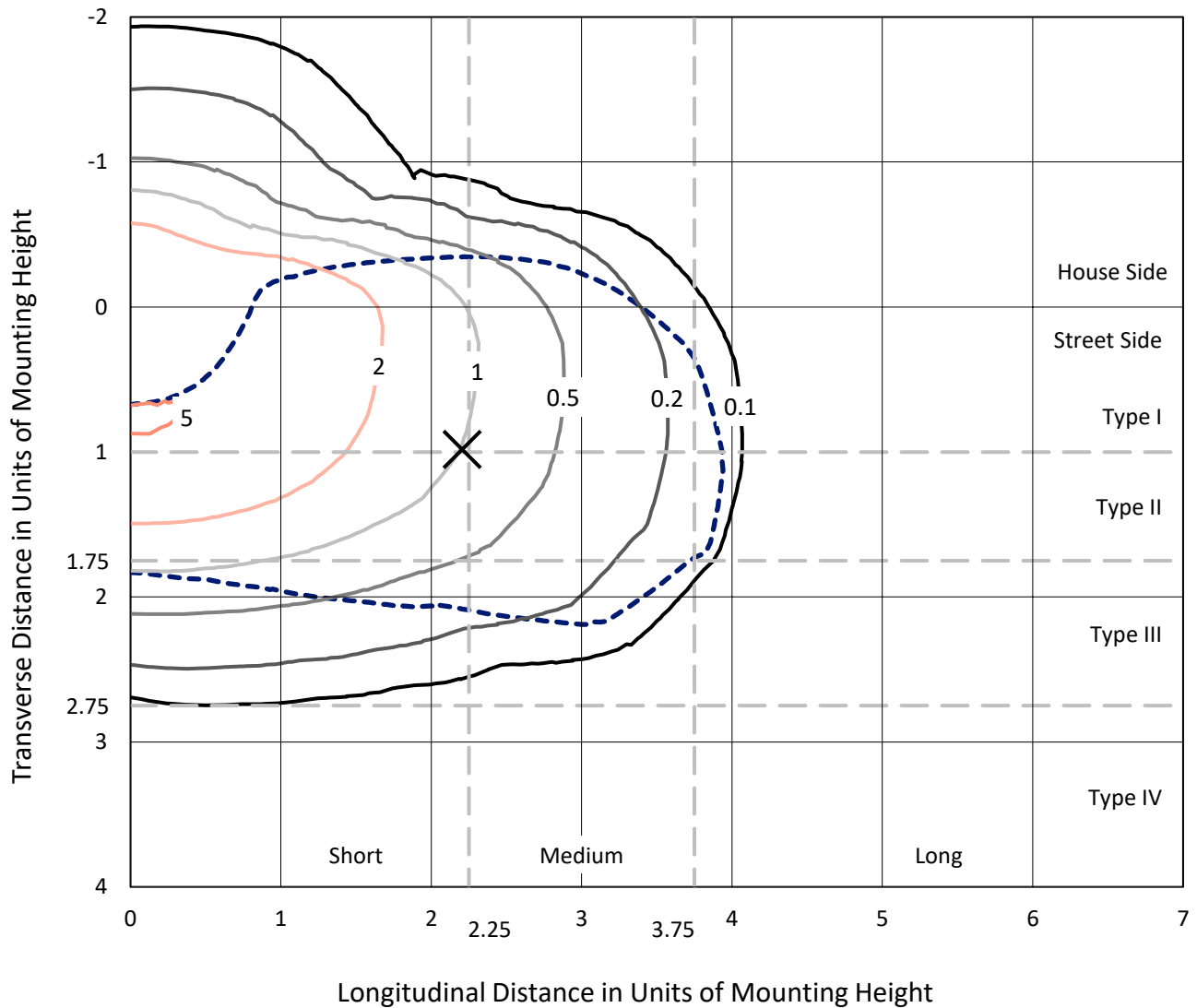
Input Watts (W): 147
Input Voltage (V): 120.0
Input Current (Ain): 1.255
Voltage Rise (V): NR
Power Factor: 0.988
Total Harmonic Distortion (THDi): 13.593
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P883749
 CATALOG NUMBER: NAV-SB4B-727-U-T3

Iso-Footcandle Lines of Horizontal Illumination

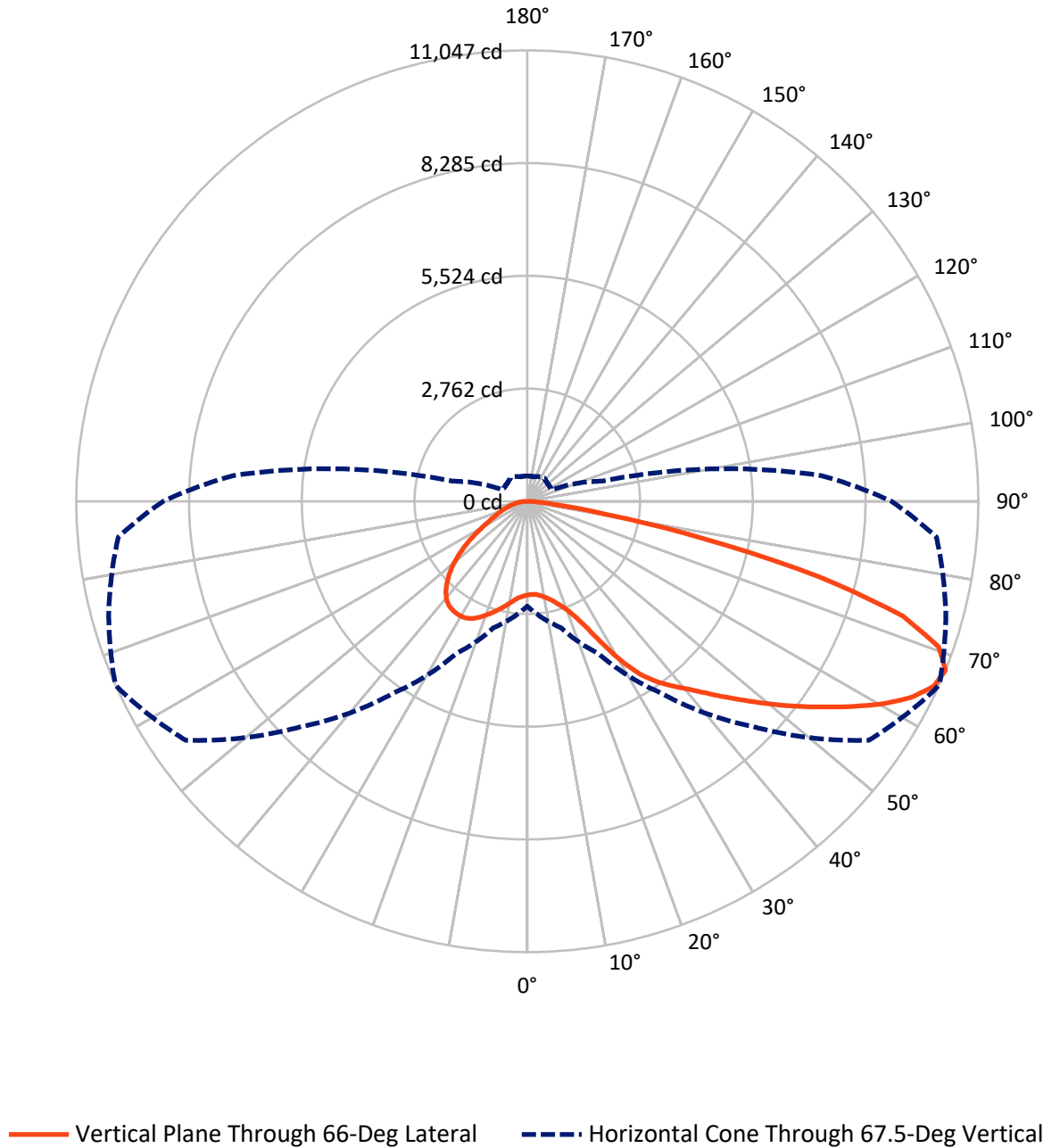
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.2 fc
 Type III - Short - N/A

REPORT NUMBER: P883749
CATALOG NUMBER: NAV-SB4B-727-U-T3

Luminous Intensity Polar Plot



REPORT NUMBER: P883749
 CATALOG NUMBER: NAV-SB4B-727-U-T3

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5145.8	0.0	5145.8
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	15549.2	0.0	15549.2
	% Fixture	75.1	0.0	75.1
Total	Lumens	20695.0	0.0	20695.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	227.6	1.1
10°-20°	751.9	3.6
20°-30°	1449.2	7.0
30°-40°	2541.0	12.3
40°-50°	3777.6	18.3
50°-60°	4788.5	23.1
60°-70°	4685.4	22.6
70°-80°	2235.0	10.8
80°-90°	238.9	1.2
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°	20695.0	100.0
0°-180°	20695.0	100.0

Coefficient of Utilization



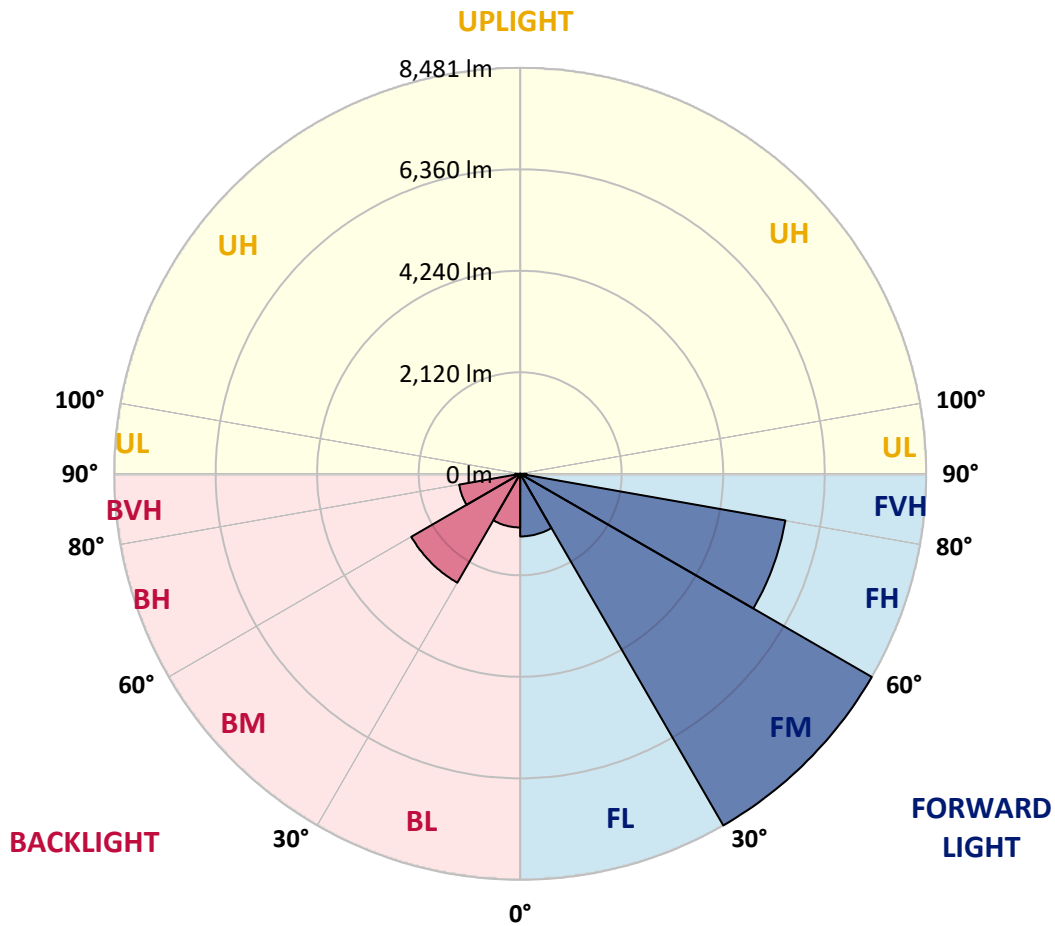
REPORT NUMBER: P883749
 CATALOG NUMBER: NAV-SB4B-727-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1307.7	6.3			
FM (30°-60°)	8480.6	41.0			
FH (60°-80°)	5625.5	27.2			G3/7500
FVH (80°-90°)	135.4	0.7			G2/225
BL (0°-30°)	1120.9	5.4	B3/2500		
BM (30°-60°)	2626.4	12.7	B3/5000		
BH (60°-80°)	1294.9	6.3	B3/2500		G3/2500
BVH (80°-90°)	103.4	0.5			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 III Short



REPORT NUMBER: P883749
 CATALOG NUMBER: NAV-SB4B-727-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2295.3	2295.3	2295.3	2295.3	2295.3	2295.3	2295.3	2295.3	2295.3	2295.3	2295.3
2.5°	2271.4	2284.5	2281.2	2275.8	2274.7	2276.9	2280.1	2283.4	2282.3	2287.7	2296.4
5°	2264.9	2278.0	2276.9	2276.9	2281.2	2289.9	2295.3	2300.8	2295.3	2301.9	2313.8
7.5°	2269.3	2279.0	2283.4	2287.7	2298.6	2314.9	2328.0	2339.9	2333.4	2341.0	2356.2
10°	2324.7	2332.3	2336.7	2336.7	2344.3	2362.8	2375.8	2397.6	2392.1	2404.1	2423.7
12.5°	2425.8	2433.4	2433.4	2429.1	2434.5	2446.5	2450.8	2474.8	2465.0	2484.5	2504.1
15°	2549.8	2565.0	2553.0	2545.4	2547.6	2559.6	2558.5	2577.0	2567.2	2583.5	2600.9
17.5°	2686.8	2706.4	2686.8	2685.7	2681.4	2694.4	2695.5	2711.8	2694.4	2706.4	2718.3
20°	2848.8	2876.0	2859.7	2865.1	2855.3	2860.8	2866.2	2890.1	2862.9	2871.6	2868.4
22.5°	3077.1	3109.8	3092.4	3113.0	3106.5	3102.1	3101.1	3143.5	3101.1	3104.3	3072.8
25°	3409.9	3449.0	3418.6	3446.8	3446.8	3461.0	3477.3	3531.6	3461.0	3440.3	3358.8
27.5°	3901.3	3940.5	3880.7	3898.1	3892.6	3927.4	3910.0	4044.9	3968.7	3935.0	3770.9
30°	4492.8	4562.4	4449.3	4445.0	4439.6	4495.0	4520.0	4609.2	4532.0	4498.3	4300.4
32.5°	5132.2	5205.0	5070.2	5031.1	5010.4	5044.1	5023.5	5095.2	5041.9	4989.7	4745.1
35°	5808.5	5880.3	5752.0	5675.9	5593.2	5522.5	5448.6	5467.1	5417.1	5337.7	5084.3
37.5°	6447.9	6579.4	6443.5	6362.0	6209.7	6071.6	5865.0	5779.1	5732.4	5659.5	5404.0
40°	7099.2	7174.2	7070.9	7001.3	6836.0	6619.7	6289.1	6107.5	6044.5	5973.8	5757.4
42.5°	7578.7	7650.4	7595.0	7547.1	7417.8	7166.6	6739.3	6512.0	6420.7	6341.3	6157.5
45°	7959.2	8012.5	7977.7	7995.1	7939.7	7696.1	7205.7	6945.9	6851.3	6754.5	6609.9
47.5°	8112.6	8169.1	8224.5	8327.8	8422.4	8243.0	7707.0	7415.6	7315.5	7216.6	7074.2
50°	8095.2	8152.8	8313.7	8533.3	8826.9	8767.1	8235.4	7915.7	7823.3	7710.2	7578.7
52.5°	7956.0	8021.2	8227.8	8593.2	9060.7	9159.6	8773.6	8432.2	8345.2	8210.4	8078.8
55°	7590.6	7629.8	7939.7	8457.2	9116.2	9433.7	9301.0	8982.4	8895.4	8707.3	8563.8
57.5°	6913.2	6969.8	7421.0	8090.8	8977.0	9619.6	9764.2	9560.9	9477.1	9206.4	9056.4
60°	6029.2	6119.5	6636.0	7475.4	8622.5	9618.5	10185.0	10129.5	10060.0	9697.9	9541.3
62.5°	5028.9	5133.3	5630.2	6605.5	8002.7	9345.6	10448.1	10605.8	10569.9	10151.3	9951.2
65°	3862.2	3934.0	4428.7	5480.1	7038.3	8759.5	10478.6	10930.9	10937.4	10496.0	10165.4
67.5°	2571.5	2778.1	3207.6	4112.3	5746.5	7801.6	10211.1	10984.2	11047.3	10614.5	10057.8
70°	1254.8	1526.6	1947.4	2672.7	4112.3	6332.6	9511.9	10547.1	10687.3	10268.7	9416.3
72.5°	520.8	608.9	838.3	1318.9	2360.6	4273.2	8107.1	9361.9	9621.8	9098.8	7916.8
75°	351.2	380.6	479.5	676.3	1075.4	2107.2	5846.6	6980.6	7399.3	6871.9	5617.1
77.5°	270.7	289.2	349.0	473.0	639.3	797.0	3129.3	4206.9	4423.2	4094.9	2922.7
80°	213.1	227.3	261.0	344.7	453.4	426.2	1066.7	1906.1	2031.1	1703.8	939.5
82.5°	184.8	190.3	187.0	233.8	301.2	249.0	350.1	703.5	776.4	563.2	306.6
85°	133.7	149.0	155.5	144.6	159.8	126.1	143.5	249.0	274.0	244.6	172.9
87.5°	54.4	80.5	98.9	93.5	58.7	35.9	44.6	72.9	83.7	91.3	56.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P883749
 CATALOG NUMBER: NAV-SB4B-727-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2295.3	2295.3	2295.3	2295.3	2295.3	2295.3	2295.3	2295.3	2295.3	2295.3	2295.3
2.5°	2297.5	2305.1	2310.6	2317.1	2321.4	2328.0	2341.0	2348.6	2349.7	2355.2	2354.1
5°	2318.2	2329.1	2341.0	2358.4	2378.0	2394.3	2419.3	2436.7	2443.2	2448.7	2447.6
7.5°	2362.8	2378.0	2399.7	2430.2	2458.4	2480.2	2510.6	2531.3	2552.0	2559.6	2560.7
10°	2429.1	2450.8	2482.4	2523.7	2554.1	2582.4	2613.9	2631.3	2652.0	2660.7	2665.0
12.5°	2511.7	2534.6	2575.9	2633.5	2661.8	2681.4	2692.2	2687.9	2692.2	2699.8	2702.0
15°	2606.3	2631.3	2678.1	2740.1	2759.6	2742.2	2718.3	2696.6	2693.3	2695.5	2703.1
17.5°	2718.3	2736.8	2791.2	2843.4	2829.2	2757.5	2705.3	2670.5	2653.1	2647.6	2655.3
20°	2874.9	2874.9	2919.5	2952.1	2857.5	2735.7	2654.2	2597.6	2561.7	2546.5	2543.3
22.5°	3065.2	3047.8	3076.1	3053.2	2852.1	2674.8	2561.7	2463.9	2409.5	2387.8	2384.5
25°	3306.6	3285.9	3278.3	3136.9	2812.9	2578.1	2394.3	2275.8	2227.9	2216.0	2218.1
27.5°	3670.8	3618.6	3519.7	3182.6	2741.2	2425.8	2198.6	2088.8	2061.6	2062.7	2065.9
30°	4155.8	4051.4	3808.9	3190.2	2623.7	2210.5	1998.5	1920.2	1907.2	1912.6	1931.1
32.5°	4604.8	4505.9	4104.7	3155.4	2443.2	1999.6	1819.1	1766.9	1747.3	1753.9	1762.6
35°	4957.1	4929.9	4378.7	3106.5	2221.4	1801.7	1658.2	1613.6	1575.5	1566.8	1573.4
37.5°	5289.8	5279.0	4584.2	3038.0	2001.8	1661.4	1528.8	1470.1	1414.6	1384.2	1385.3
40°	5655.2	5644.3	4719.0	2932.5	1807.1	1539.7	1412.4	1335.2	1266.7	1211.3	1216.7
42.5°	6066.2	6002.0	4783.2	2781.4	1641.9	1436.4	1317.8	1213.5	1123.2	1072.1	1075.4
45°	6515.3	6370.7	4782.1	2588.9	1502.7	1341.8	1216.7	1068.8	985.1	937.3	935.1
47.5°	6991.5	6722.9	4723.4	2375.8	1367.9	1237.4	1060.1	947.1	891.6	862.3	855.7
50°	7483.0	7052.4	4623.3	2131.2	1229.8	1118.9	962.3	885.1	842.7	815.5	805.7
52.5°	7945.1	7351.4	4502.6	1853.9	1089.5	1003.6	918.8	859.0	814.4	784.0	770.9
55°	8374.6	7609.1	4331.9	1570.1	975.3	926.4	898.1	848.1	797.0	761.1	747.0
57.5°	8756.3	7776.6	4037.2	1303.7	893.8	873.1	876.4	829.6	770.9	740.5	720.9
60°	9073.8	7899.4	3601.2	1056.9	827.5	820.9	842.7	794.8	726.3	691.5	676.3
62.5°	9264.0	7897.3	3066.3	865.5	770.9	773.1	798.1	751.3	681.8	649.1	639.3
65°	9247.7	7703.7	2479.1	740.5	716.5	718.7	751.3	703.5	644.8	625.2	624.1
67.5°	8920.4	7231.8	1901.7	658.9	656.7	666.5	704.6	670.9	622.0	619.8	623.0
70°	8034.3	6252.1	1370.0	593.7	594.8	608.9	658.9	650.2	610.0	614.3	613.3
72.5°	6442.4	4766.8	919.9	525.2	526.3	549.1	615.4	633.9	598.0	655.7	664.4
75°	4290.6	2972.8	591.5	452.3	453.4	482.8	577.4	602.4	565.4	653.5	658.9
77.5°	2061.6	1336.3	428.4	380.6	380.6	407.7	499.1	539.3	481.7	507.8	465.4
80°	712.2	502.3	337.1	306.6	300.1	318.6	420.8	467.6	415.4	382.7	358.8
82.5°	280.5	261.0	270.7	238.1	216.4	228.3	327.3	386.0	305.5	276.2	275.1
85°	160.9	169.6	191.4	157.7	125.0	140.3	240.3	277.3	230.5	203.3	207.7
87.5°	43.5	59.8	88.1	81.5	56.5	59.8	114.2	153.3	132.7	102.2	105.5
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)