

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: P884999

Luminaire Tested: **NAV-SB6A-827-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884999
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-SB6A-827-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22137 lumens
Efficiency: N/A
Efficacy: 129.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

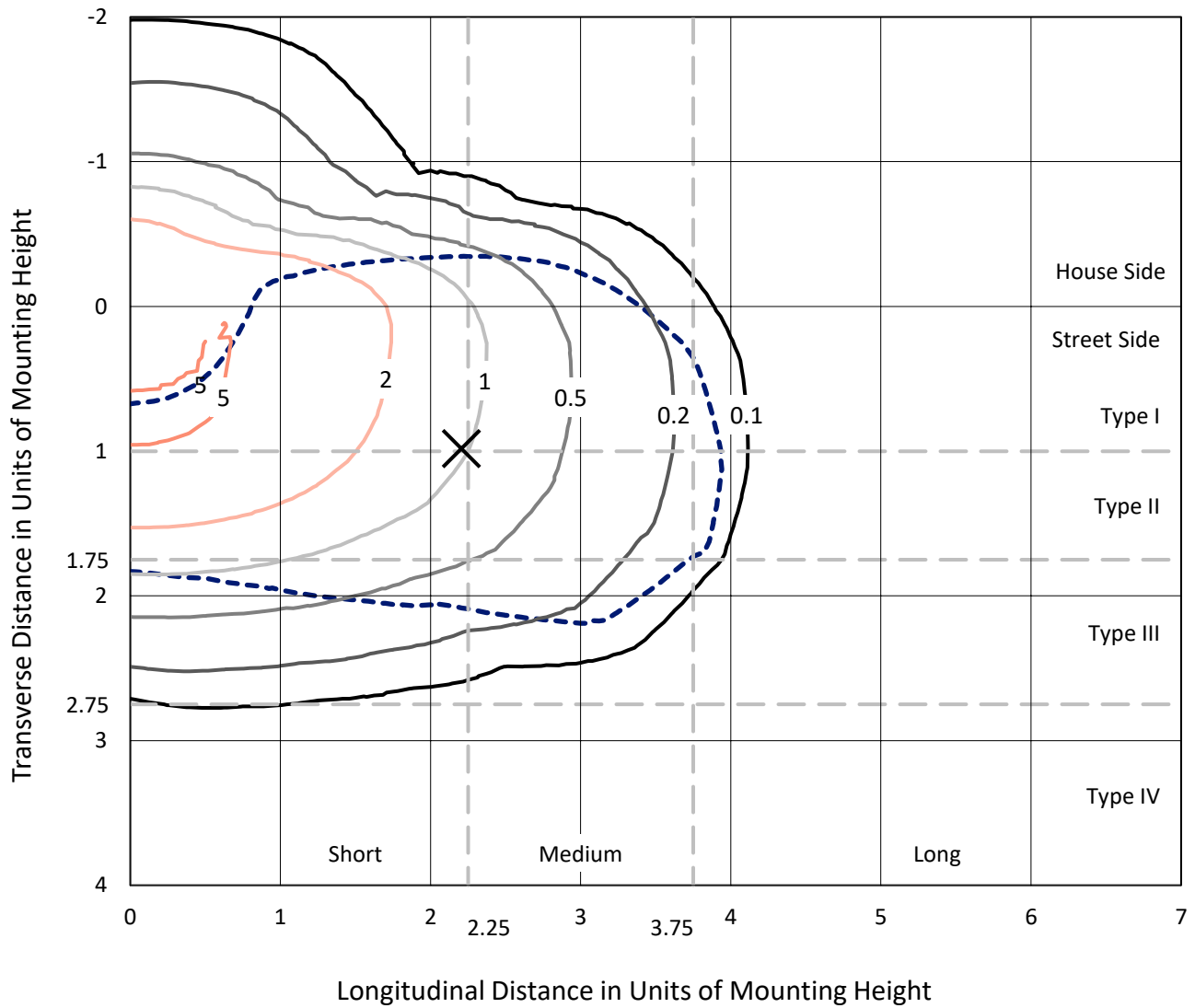
Input Watts (W): 170.9
Input Voltage (V): 120.0
Input Current (Ain): 1.434
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 11.969
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

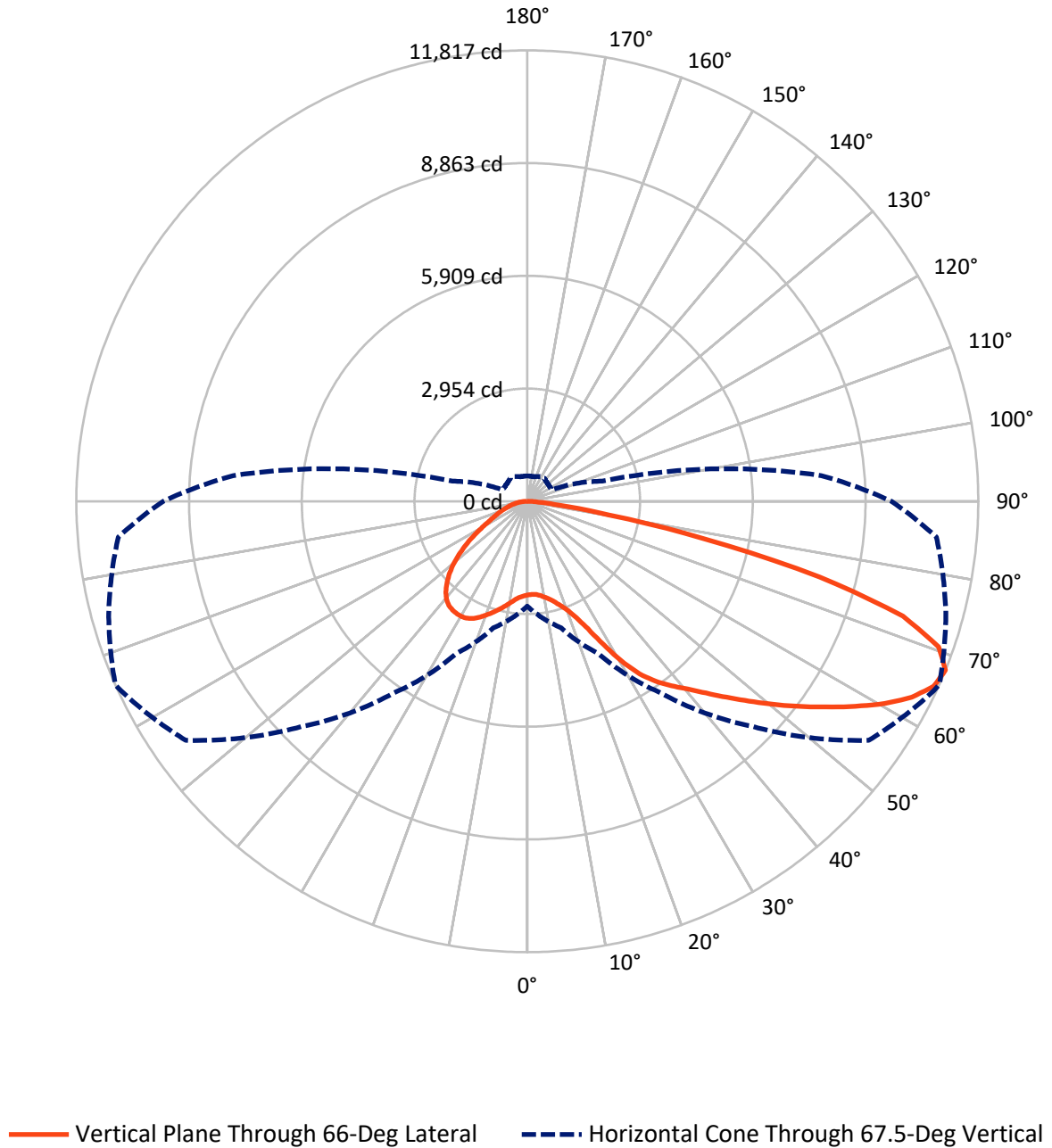
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.6 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5504.3	0.0	5504.3
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	16632.7	0.0	16632.7
	% Fixture	75.1	0.0	75.1
Total	Lumens	22137.0	0.0	22137.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.4	1.1
10°-20°	804.3	3.6
20°-30°	1550.2	7.0
30°-40°	2718.0	12.3
40°-50°	4040.8	18.3
50°-60°	5122.1	23.1
60°-70°	5011.9	22.6
70°-80°	2390.7	10.8
80°-90°	255.5	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°	22137.0	100.0
0°-180°	22137.0	100.0

Coefficient of Utilization



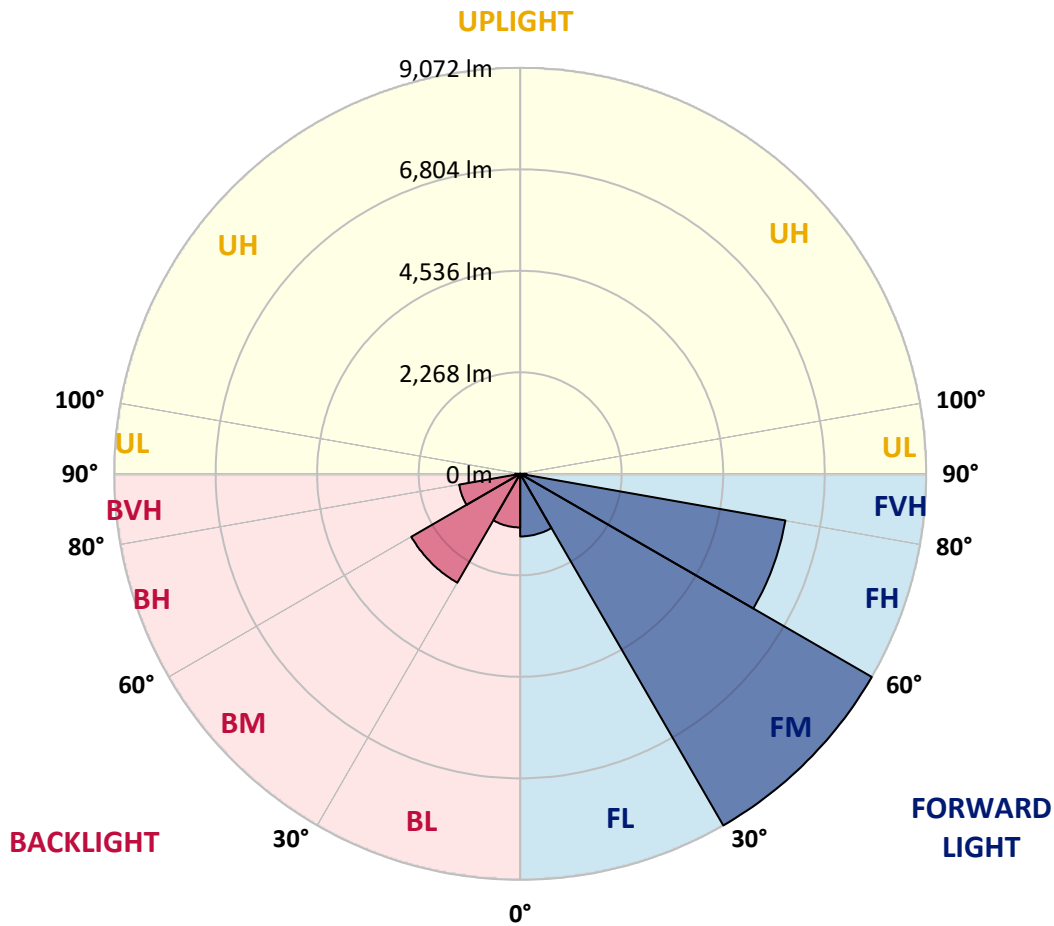
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1398.8	6.3			
FM (30°-60°)	9071.6	41.0			
FH (60°-80°)	6017.4	27.2			G3/7500
FVH (80°-90°)	144.9	0.7			G2/225
BL (0°-30°)	1199.0	5.4	B3/2500		
BM (30°-60°)	2809.5	12.7	B3/5000		
BH (60°-80°)	1385.2	6.3	B3/2500		G3/2500
BVH (80°-90°)	110.6	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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2455.3	2455.3	2455.3	2455.3	2455.3	2455.3	2455.3	2455.3	2455.3	2455.3	2455.3
2.5°	2429.7	2443.7	2440.2	2434.4	2433.2	2435.5	2439.0	2442.5	2441.3	2447.1	2456.4
5°	2422.7	2436.7	2435.5	2435.5	2440.2	2449.5	2455.3	2461.1	2455.3	2462.3	2475.1
7.5°	2427.4	2437.8	2442.5	2447.1	2458.8	2476.2	2490.2	2503.0	2496.0	2504.1	2520.4
10°	2486.7	2494.8	2499.5	2499.5	2507.6	2527.4	2541.4	2564.6	2558.8	2571.6	2592.5
12.5°	2594.9	2603.0	2603.0	2598.3	2604.2	2617.0	2621.6	2647.2	2636.7	2657.7	2678.6
15°	2727.4	2743.7	2730.9	2722.8	2725.1	2737.9	2736.8	2756.5	2746.1	2763.5	2782.1
17.5°	2874.0	2894.9	2874.0	2872.8	2868.2	2882.1	2883.3	2900.7	2882.1	2894.9	2907.7
20°	3047.3	3076.4	3058.9	3064.7	3054.3	3060.1	3065.9	3091.5	3062.4	3071.7	3068.2
22.5°	3291.5	3326.4	3307.8	3329.9	3323.0	3318.3	3317.1	3362.5	3317.1	3320.6	3286.9
25°	3647.5	3689.3	3656.8	3687.0	3687.0	3702.1	3719.6	3777.7	3702.1	3680.0	3592.8
27.5°	4173.2	4215.0	4151.1	4169.7	4163.9	4201.1	4182.5	4326.7	4245.3	4209.2	4033.6
30°	4805.9	4880.3	4759.4	4754.7	4748.9	4808.2	4835.0	4930.3	4847.8	4811.7	4600.0
32.5°	5489.8	5567.7	5423.5	5381.6	5359.5	5395.6	5373.5	5450.2	5393.3	5337.4	5075.7
35°	6213.2	6290.0	6152.8	6071.3	5982.9	5907.3	5828.3	5848.0	5794.5	5709.6	5438.6
37.5°	6897.1	7037.9	6892.5	6805.2	6642.4	6494.7	6273.7	6181.8	6131.8	6053.9	5780.6
40°	7593.8	7674.1	7563.6	7489.1	7312.4	7080.9	6727.3	6533.1	6465.6	6390.0	6158.6
42.5°	8106.7	8183.5	8124.2	8073.0	7934.6	7665.9	7208.8	6965.8	6868.1	6783.1	6586.6
45°	8513.8	8570.8	8533.6	8552.2	8492.9	8232.4	7707.8	7429.8	7328.6	7225.1	7070.4
47.5°	8677.8	8738.3	8797.6	8908.1	9009.3	8817.4	8244.0	7932.3	7825.3	7719.4	7567.1
50°	8659.2	8720.9	8893.0	9127.9	9442.0	9378.0	8809.3	8467.3	8368.4	8247.5	8106.7
52.5°	8510.3	8580.1	8801.1	9191.9	9692.0	9797.9	9385.0	9019.8	8926.7	8782.5	8641.8
55°	8119.5	8161.4	8492.9	9046.5	9751.4	10091.0	9949.1	9608.3	9515.3	9314.0	9160.5
57.5°	7394.9	7455.4	7938.1	8654.6	9602.5	10289.9	10444.6	10227.1	10137.5	9847.9	9687.4
60°	6449.3	6545.9	7098.3	7996.3	9223.3	10288.7	10894.7	10835.4	10760.9	10373.6	10206.1
62.5°	5379.3	5491.0	6022.5	7065.8	8560.4	9996.8	11176.1	11344.8	11306.4	10858.6	10644.6
65°	4131.3	4208.1	4737.3	5862.0	7528.7	9369.9	11208.7	11692.6	11699.5	11227.3	10873.7
67.5°	2750.7	2971.7	3431.1	4398.8	6146.9	8345.2	10922.6	11749.5	11817.0	11354.1	10758.6
70°	1342.2	1633.0	2083.1	2858.9	4398.8	6773.8	10174.7	11282.0	11432.0	10984.2	10072.4
72.5°	557.1	651.3	896.7	1410.8	2525.1	4570.9	8672.0	10014.2	10292.2	9732.7	8468.5
75°	375.7	407.1	512.9	723.4	1150.3	2254.1	6253.9	7467.0	7914.8	7350.7	6008.5
77.5°	289.6	309.4	373.4	505.9	683.9	852.5	3347.4	4500.0	4731.5	4380.2	3126.4
80°	228.0	243.1	279.1	368.7	485.0	455.9	1141.0	2038.9	2172.7	1822.6	1004.9
82.5°	197.7	203.5	200.1	250.1	322.2	266.3	374.5	752.5	830.4	602.5	328.0
85°	143.1	159.3	166.3	154.7	171.0	134.9	153.5	266.3	293.1	261.7	184.9
87.5°	58.2	86.1	105.8	100.0	62.8	38.4	47.7	77.9	89.6	97.7	60.5
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°	2455.3	2455.3	2455.3	2455.3	2455.3	2455.3	2455.3	2455.3	2455.3	2455.3	2455.3
2.5°	2457.6	2465.8	2471.6	2478.5	2483.2	2490.2	2504.1	2512.3	2513.4	2519.3	2518.1
5°	2479.7	2491.3	2504.1	2522.7	2543.7	2561.1	2587.9	2606.5	2613.5	2619.3	2618.1
7.5°	2527.4	2543.7	2566.9	2599.5	2629.7	2653.0	2685.6	2707.7	2729.8	2737.9	2739.1
10°	2598.3	2621.6	2655.3	2699.5	2732.1	2762.3	2796.1	2814.7	2836.8	2846.1	2850.7
12.5°	2686.7	2711.2	2755.4	2817.0	2847.2	2868.2	2879.8	2875.2	2879.8	2888.0	2890.3
15°	2787.9	2814.7	2864.7	2931.0	2951.9	2933.3	2907.7	2884.5	2881.0	2883.3	2891.4
17.5°	2907.7	2927.5	2985.7	3041.5	3026.4	2949.6	2893.8	2856.6	2837.9	2832.1	2840.3
20°	3075.2	3075.2	3122.9	3157.8	3056.6	2926.3	2839.1	2778.6	2740.2	2724.0	2720.5
22.5°	3278.8	3260.1	3290.4	3266.0	3050.8	2861.2	2740.2	2635.6	2577.4	2554.1	2550.7
25°	3537.0	3514.9	3506.7	3355.5	3008.9	2757.7	2561.1	2434.4	2383.2	2370.4	2372.7
27.5°	3926.6	3870.8	3764.9	3404.4	2932.2	2594.9	2351.8	2234.3	2205.2	2206.4	2209.9
30°	4445.3	4333.7	4074.3	3412.5	2806.5	2364.6	2137.8	2054.0	2040.1	2045.9	2065.7
32.5°	4925.7	4819.9	4390.7	3375.3	2613.5	2138.9	1945.9	1890.0	1869.1	1876.1	1885.4
35°	5302.5	5273.5	4683.8	3323.0	2376.2	1927.2	1773.7	1726.0	1685.3	1676.0	1683.0
37.5°	5658.4	5646.8	4903.6	3249.7	2141.3	1777.2	1635.3	1572.5	1513.2	1480.6	1481.8
40°	6049.2	6037.6	5047.8	3136.9	1933.1	1646.9	1510.9	1428.3	1355.0	1295.7	1301.5
42.5°	6488.9	6420.3	5116.4	2975.2	1756.3	1536.4	1409.7	1298.0	1201.5	1146.8	1150.3
45°	6969.2	6814.6	5115.3	2769.3	1607.4	1435.3	1301.5	1143.3	1053.8	1002.6	1000.3
47.5°	7478.7	7191.4	5052.5	2541.4	1463.2	1323.6	1134.0	1013.1	953.7	922.3	915.4
50°	8004.4	7543.8	4945.5	2279.7	1315.5	1196.8	1029.3	946.8	901.4	872.3	861.9
52.5°	8498.7	7863.7	4816.4	1983.1	1165.4	1073.5	982.8	918.8	871.2	838.6	824.6
55°	8958.1	8139.3	4633.8	1679.5	1043.3	991.0	960.7	907.2	852.5	814.2	799.0
57.5°	9366.4	8318.4	4318.6	1394.5	956.1	934.0	937.5	887.4	824.6	792.1	771.1
60°	9706.0	8449.9	3852.2	1130.5	885.1	878.1	901.4	850.2	776.9	739.7	723.4
62.5°	9909.5	8447.5	3279.9	925.8	824.6	827.0	853.7	803.7	729.3	694.4	683.9
65°	9892.1	8240.5	2651.8	792.1	766.5	768.8	803.7	752.5	689.7	668.8	667.6
67.5°	9542.0	7735.7	2034.2	704.8	702.5	713.0	753.7	717.6	665.3	663.0	666.5
70°	8594.1	6687.8	1465.5	635.0	636.2	651.3	704.8	695.5	652.5	657.1	656.0
72.5°	6891.3	5099.0	984.0	561.8	562.9	587.4	658.3	678.1	639.7	701.3	710.6
75°	4589.6	3179.9	632.7	483.8	485.0	516.4	617.6	644.4	604.8	699.0	704.8
77.5°	2205.2	1429.4	458.3	407.1	407.1	436.2	533.9	576.9	515.2	543.2	497.8
80°	761.8	537.3	360.6	328.0	321.0	340.8	450.1	500.1	444.3	409.4	383.8
82.5°	300.1	279.1	289.6	254.7	231.5	244.2	350.1	412.9	326.8	295.4	294.3
85°	172.1	181.4	204.7	168.6	133.8	150.0	257.0	296.6	246.6	217.5	222.2
87.5°	46.5	64.0	94.2	87.2	60.5	64.0	122.1	164.0	141.9	109.3	112.8
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)