

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: P882739

Luminaire Tested: **NAV-SB2D-730-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882739
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-SB2D-730-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20429 lumens
Efficiency: N/A
Efficacy: 138.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

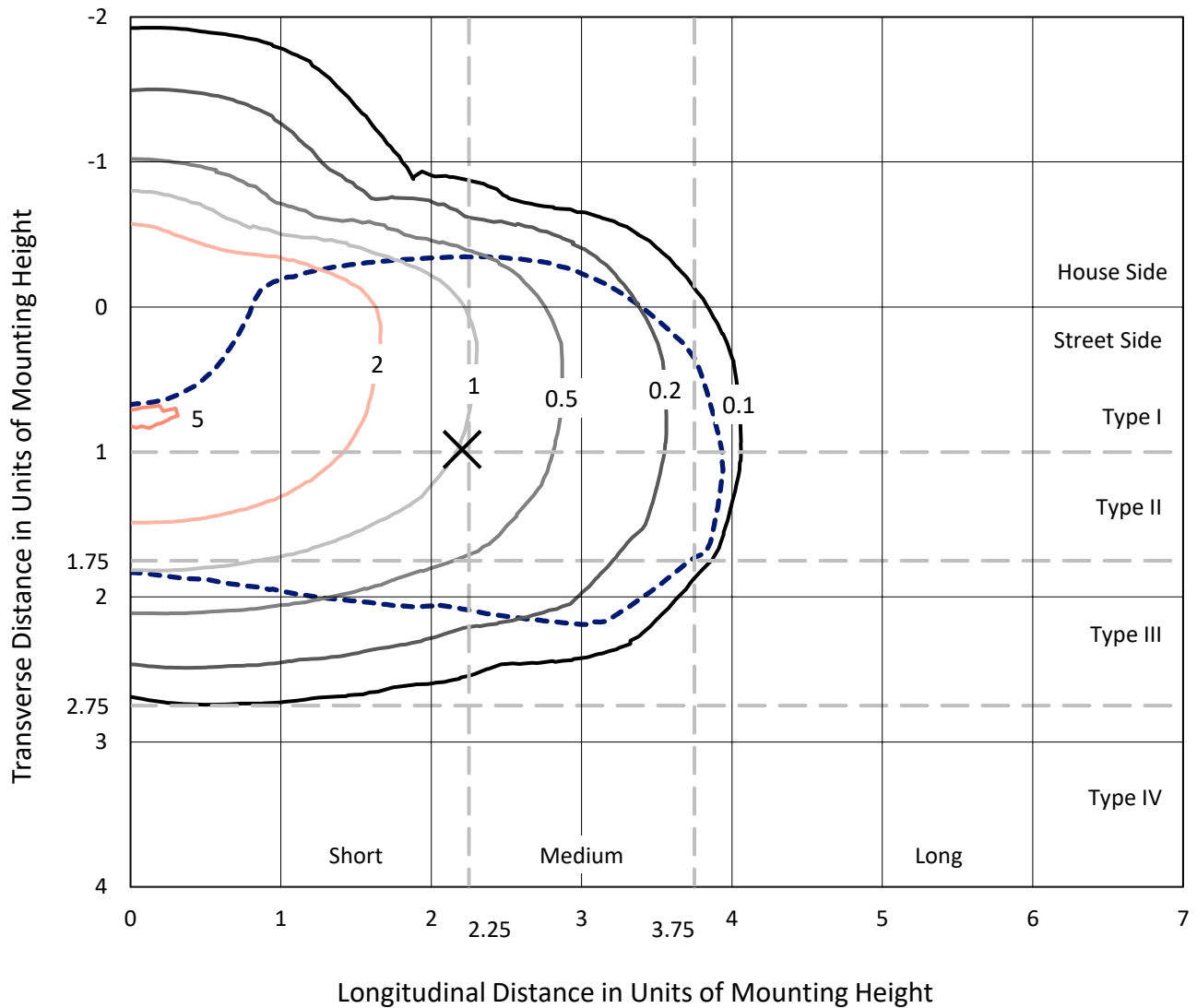
Input Watts (W): 147.6
Input Voltage (V): 120.0
Input Current (Ain): 1.234
Voltage Rise (V): NR
Power Factor: 0.999
Total Harmonic Distortion (THDi): 3.108
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

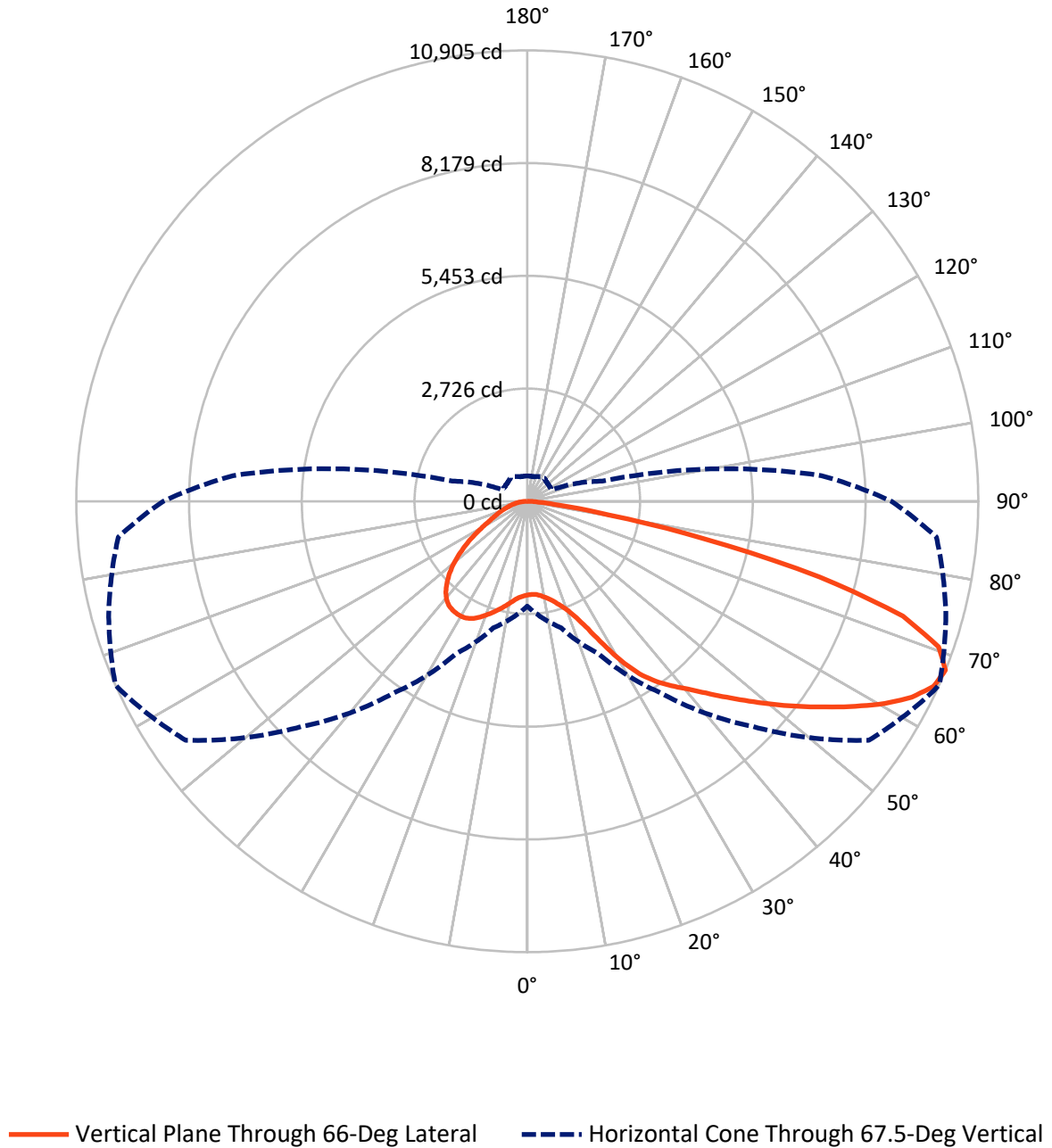
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 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	5079.6	0.0	5079.6
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	15349.4	0.0	15349.4
	% Fixture	75.1	0.0	75.1
Total	Lumens	20429.0	0.0	20429.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	224.6	1.1
10°-20°	742.2	3.6
20°-30°	1430.6	7.0
30°-40°	2508.3	12.3
40°-50°	3729.1	18.3
50°-60°	4726.9	23.1
60°-70°	4625.2	22.6
70°-80°	2206.3	10.8
80°-90°	235.8	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°	20429.0	100.0
0°-180°	20429.0	100.0

Coefficient of Utilization



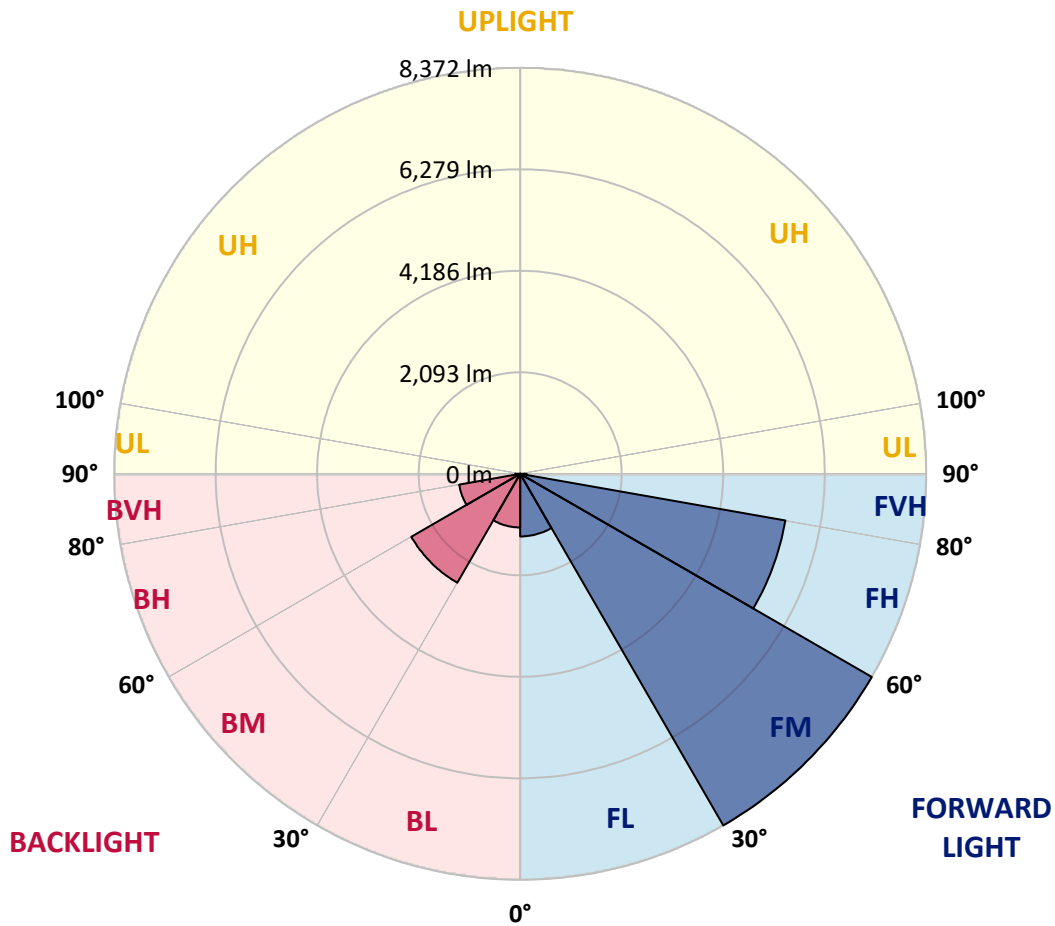
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1290.9	6.3			
FM (30°-60°)	8371.6	41.0			
FH (60°-80°)	5553.2	27.2			G3/7500
FVH (80°-90°)	133.7	0.7			G2/225
BL (0°-30°)	1106.5	5.4	B3/2500		
BM (30°-60°)	2592.7	12.7	B3/5000		
BH (60°-80°)	1278.3	6.3	B3/2500		G3/2500
BVH (80°-90°)	102.1	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°	2265.8	2265.8	2265.8	2265.8	2265.8	2265.8	2265.8	2265.8	2265.8	2265.8	2265.8
2.5°	2242.2	2255.1	2251.9	2246.5	2245.5	2247.6	2250.8	2254.0	2253.0	2258.3	2266.9
5°	2235.8	2248.7	2247.6	2247.6	2251.9	2260.5	2265.8	2271.2	2265.8	2272.3	2284.1
7.5°	2240.1	2249.7	2254.0	2258.3	2269.1	2285.2	2298.0	2309.9	2303.4	2310.9	2326.0
10°	2294.8	2302.3	2306.6	2306.6	2314.1	2332.4	2345.3	2366.7	2361.4	2373.2	2392.5
12.5°	2394.6	2402.2	2402.2	2397.9	2403.2	2415.0	2419.3	2442.9	2433.3	2452.6	2471.9
15°	2517.0	2532.0	2520.2	2512.7	2514.9	2526.7	2525.6	2543.8	2534.2	2550.3	2567.5
17.5°	2652.3	2671.6	2652.3	2651.2	2646.9	2659.8	2660.8	2676.9	2659.8	2671.6	2683.4
20°	2812.2	2839.0	2822.9	2828.3	2818.6	2824.0	2829.4	2853.0	2826.1	2834.7	2831.5
22.5°	3037.6	3069.8	3052.6	3073.0	3066.6	3062.3	3061.2	3103.1	3061.2	3064.4	3033.3
25°	3366.0	3404.7	3374.6	3402.5	3402.5	3416.5	3432.6	3486.2	3416.5	3396.1	3315.6
27.5°	3851.2	3889.8	3830.8	3848.0	3842.6	3876.9	3859.8	3992.9	3917.7	3884.5	3722.4
30°	4435.1	4503.8	4392.2	4387.9	4382.5	4437.2	4461.9	4549.9	4473.7	4440.5	4245.1
32.5°	5066.2	5138.1	5005.0	4966.4	4946.0	4979.3	4958.9	5029.7	4977.1	4925.6	4684.1
35°	5733.8	5804.7	5678.0	5602.9	5521.3	5451.6	5378.6	5396.8	5347.4	5269.1	5019.0
37.5°	6365.0	6494.9	6360.7	6280.2	6129.9	5993.6	5789.7	5704.9	5658.7	5586.8	5334.6
40°	7007.9	7082.0	6980.0	6911.3	6748.2	6534.6	6208.3	6029.0	5966.8	5897.0	5683.4
42.5°	7481.3	7552.1	7497.4	7450.1	7322.4	7074.5	6652.6	6428.3	6338.1	6259.8	6078.4
45°	7856.9	7909.5	7875.2	7892.4	7837.6	7597.2	7113.1	6856.6	6763.2	6667.7	6524.9
47.5°	8008.3	8064.1	8118.8	8220.8	8314.2	8137.1	7607.9	7320.3	7221.5	7123.8	6983.2
50°	7991.1	8048.0	8206.8	8423.7	8713.5	8654.4	8129.6	7814.0	7722.8	7611.1	7481.3
52.5°	7853.7	7918.1	8122.1	8482.7	8944.2	9041.9	8660.9	8323.8	8238.0	8104.9	7975.0
55°	7493.1	7531.7	7837.6	8348.5	8999.0	9312.4	9181.5	8867.0	8781.1	8595.4	8453.7
57.5°	6824.4	6880.2	7325.6	7986.8	8861.6	9495.9	9638.7	9438.0	9355.3	9088.1	8939.9
60°	5951.7	6040.8	6550.7	7379.3	8511.7	9494.9	10054.1	9999.3	9930.7	9573.2	9418.7
62.5°	4964.3	5067.3	5557.8	6520.6	7899.9	9225.5	10313.8	10469.5	10434.1	10020.8	9823.3
65°	3812.5	3883.4	4371.8	5409.7	6947.8	8646.9	10343.9	10790.4	10796.8	10361.1	10034.8
67.5°	2538.5	2742.4	3166.4	4059.4	5672.7	7701.3	10079.8	10843.0	10905.3	10478.1	9928.5
70°	1238.6	1507.0	1922.4	2638.3	4059.4	6251.2	9389.7	10411.5	10550.0	10136.7	9295.2
72.5°	514.1	601.1	827.6	1302.0	2330.2	4218.3	8002.9	9241.6	9498.1	8981.8	7815.1
75°	346.7	375.7	473.3	667.6	1061.5	2080.2	5771.4	6890.9	7304.2	6783.6	5544.9
77.5°	267.3	285.5	344.5	466.9	631.1	786.8	3089.1	4152.8	4366.4	4042.2	2885.2
80°	210.4	224.3	257.6	340.3	447.6	420.8	1053.0	1881.6	2005.0	1681.9	927.4
82.5°	182.5	187.8	184.6	230.8	297.3	245.8	345.6	694.5	766.4	556.0	302.7
85°	132.0	147.0	153.5	142.8	157.8	124.5	141.7	245.8	270.5	241.5	170.7
87.5°	53.7	79.4	97.7	92.3	58.0	35.4	44.0	71.9	82.6	90.2	55.8
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°	2265.8	2265.8	2265.8	2265.8	2265.8	2265.8	2265.8	2265.8	2265.8	2265.8	2265.8
2.5°	2268.0	2275.5	2280.9	2287.3	2291.6	2298.0	2310.9	2318.4	2319.5	2324.9	2323.8
5°	2288.4	2299.1	2310.9	2328.1	2347.4	2363.5	2388.2	2405.4	2411.8	2417.2	2416.1
7.5°	2332.4	2347.4	2368.9	2398.9	2426.8	2448.3	2478.4	2498.8	2519.2	2526.7	2527.7
10°	2397.9	2419.3	2450.5	2491.2	2521.3	2549.2	2580.3	2597.5	2617.9	2626.5	2630.8
12.5°	2479.4	2502.0	2542.8	2599.7	2627.6	2646.9	2657.6	2653.3	2657.6	2665.1	2667.3
15°	2572.8	2597.5	2643.7	2704.8	2724.2	2707.0	2683.4	2661.9	2658.7	2660.8	2668.4
17.5°	2683.4	2701.6	2755.3	2806.8	2792.9	2722.0	2670.5	2636.2	2619.0	2613.6	2621.1
20°	2837.9	2837.9	2882.0	2914.2	2820.8	2700.6	2620.1	2564.2	2528.8	2513.8	2510.6
22.5°	3025.8	3008.6	3036.5	3014.0	2815.4	2640.4	2528.8	2432.2	2378.5	2357.1	2353.9
25°	3264.1	3243.7	3236.2	3096.6	2776.8	2544.9	2363.5	2246.5	2199.3	2187.5	2189.6
27.5°	3623.6	3572.1	3474.4	3141.7	2705.9	2394.6	2170.3	2061.9	2035.1	2036.1	2039.4
30°	4102.4	3999.3	3760.0	3149.2	2590.0	2182.1	1972.8	1895.5	1882.7	1888.0	1906.3
32.5°	4545.6	4448.0	4051.9	3114.9	2411.8	1973.9	1795.7	1744.2	1724.9	1731.3	1739.9
35°	4893.4	4866.6	4322.4	3066.6	2192.9	1778.5	1636.9	1592.9	1555.3	1546.7	1553.1
37.5°	5221.9	5211.1	4525.3	2998.9	1976.0	1640.1	1509.1	1451.2	1396.4	1366.4	1367.5
40°	5582.5	5571.8	4658.3	2894.8	1783.9	1519.9	1394.3	1318.1	1250.5	1195.7	1201.1
42.5°	5988.2	5924.9	4721.7	2745.6	1620.8	1417.9	1300.9	1197.9	1108.8	1058.3	1061.5
45°	6431.5	6288.8	4720.6	2555.7	1483.4	1324.5	1201.1	1055.1	972.5	925.2	923.1
47.5°	6901.7	6636.5	4662.6	2345.3	1350.3	1221.5	1046.5	934.9	880.1	851.2	844.7
50°	7386.8	6961.8	4563.9	2103.8	1214.0	1104.5	949.9	873.7	831.8	805.0	795.4
52.5°	7843.0	7256.9	4444.8	1830.1	1075.5	990.7	907.0	847.9	803.9	773.9	761.0
55°	8267.0	7511.3	4276.2	1549.9	962.8	914.5	886.6	837.2	786.8	751.3	737.4
57.5°	8643.7	7676.6	3985.4	1286.9	882.3	861.9	865.1	819.0	761.0	731.0	711.6
60°	8957.1	7797.9	3554.9	1043.3	816.8	810.4	831.8	784.6	717.0	682.7	667.6
62.5°	9145.0	7795.8	3026.9	854.4	761.0	763.2	787.8	741.7	673.0	640.8	631.1
65°	9128.9	7604.7	2447.2	731.0	707.3	709.5	741.7	694.5	636.5	617.2	616.1
67.5°	8805.8	7138.9	1877.3	650.5	648.3	658.0	695.5	662.3	614.0	611.8	615.0
70°	7931.0	6171.8	1352.4	586.1	587.1	601.1	650.5	641.9	602.2	606.4	605.4
72.5°	6359.6	4705.6	908.1	518.4	519.5	542.0	607.5	625.8	590.3	647.2	655.8
75°	4235.4	2934.5	583.9	446.5	447.6	476.6	569.9	594.6	558.1	645.1	650.5
77.5°	2035.1	1319.1	422.9	375.7	375.7	402.5	492.7	532.4	475.5	501.3	459.4
80°	703.0	495.9	332.7	302.7	296.2	314.5	415.4	461.5	410.0	377.8	354.2
82.5°	276.9	257.6	267.3	235.1	213.6	225.4	323.1	381.0	301.6	272.6	271.6
85°	158.9	167.4	188.9	155.6	123.4	138.5	237.2	273.7	227.6	200.7	205.0
87.5°	42.9	59.0	86.9	80.5	55.8	59.0	112.7	151.3	130.9	100.9	104.1
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)