

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: P967891

Luminaire Tested: **NAV-SB5A-830-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967891
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-830-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17374.8 lumens
Efficiency: N/A
Efficacy: 122.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G3

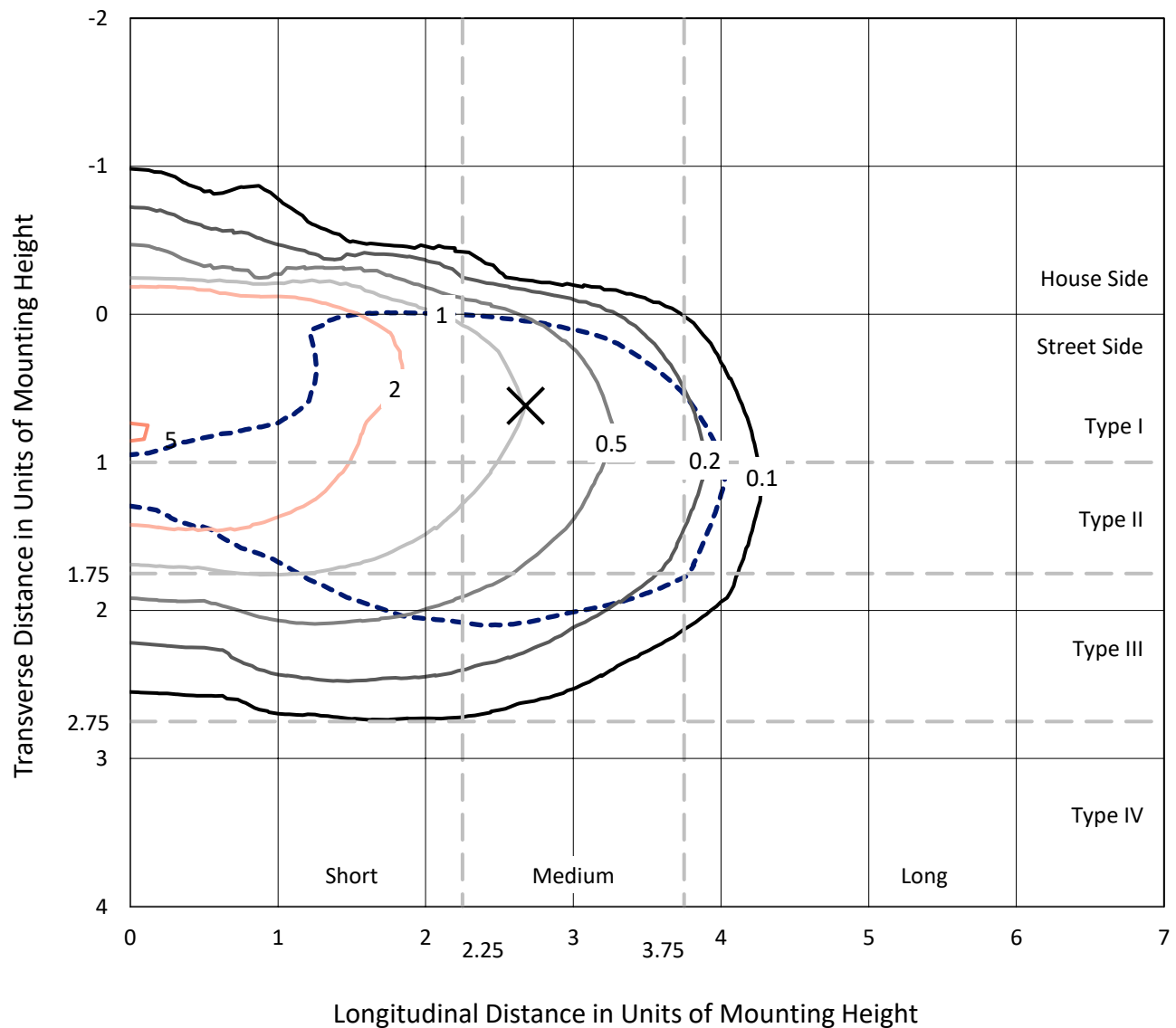
Input Watts (W): 141.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

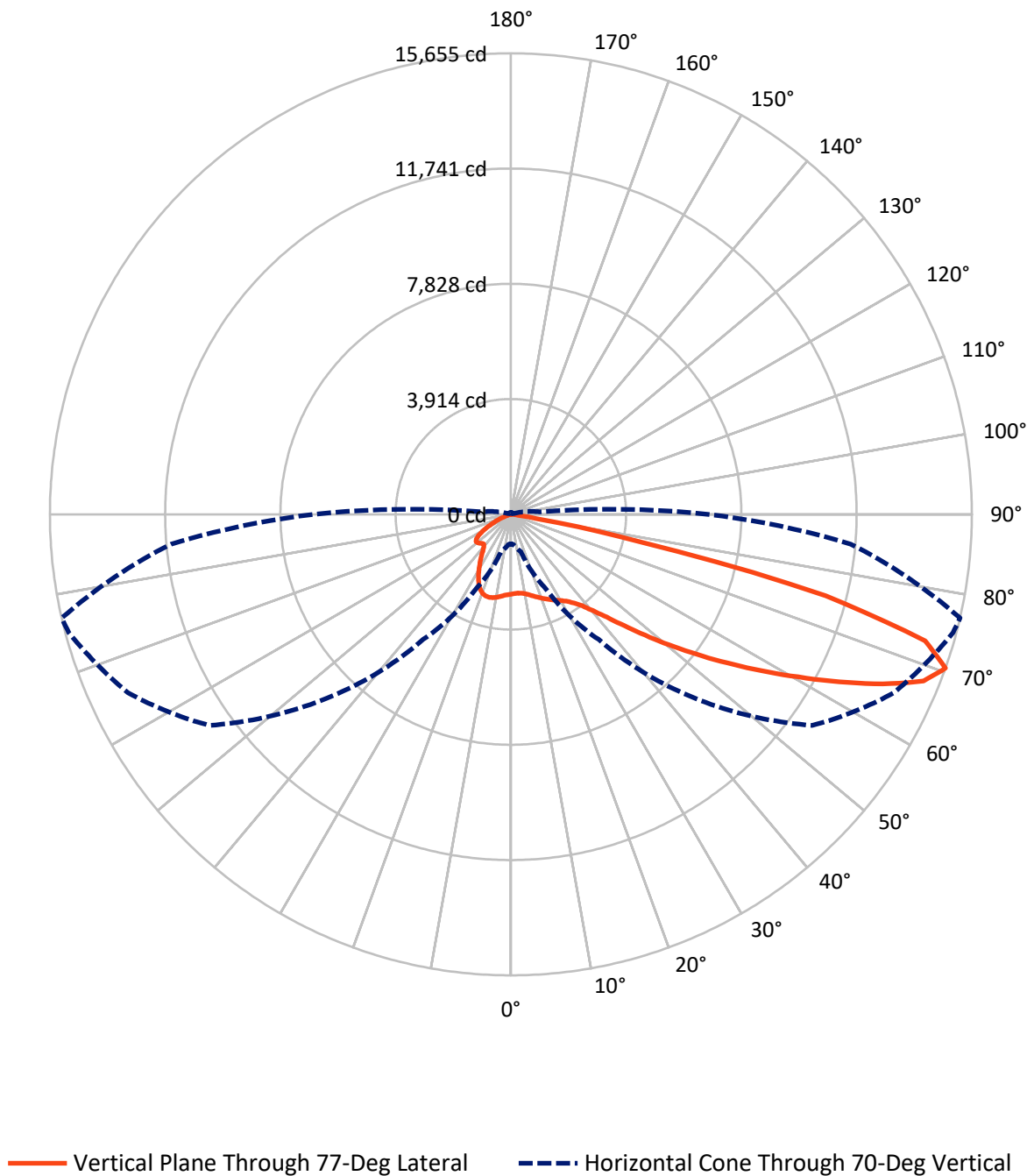
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 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	1831.5	0.0	1831.5
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	15543.2	0.0	15543.2
	% Fixture	89.5	0.0	89.5
Total	Lumens	17374.8	0.0	17374.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	233.6	1.3
10°-20°	554.5	3.2
20°-30°	857.6	4.9
30°-40°	1556.2	9.0
40°-50°	2937.5	16.9
50°-60°	4244.4	24.4
60°-70°	4518.1	26.0
70°-80°	2394.3	13.8
80°-90°	78.6	0.5
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°	17374.8	100.0
0°-180°	17374.8	100.0

Coefficient of Utilization



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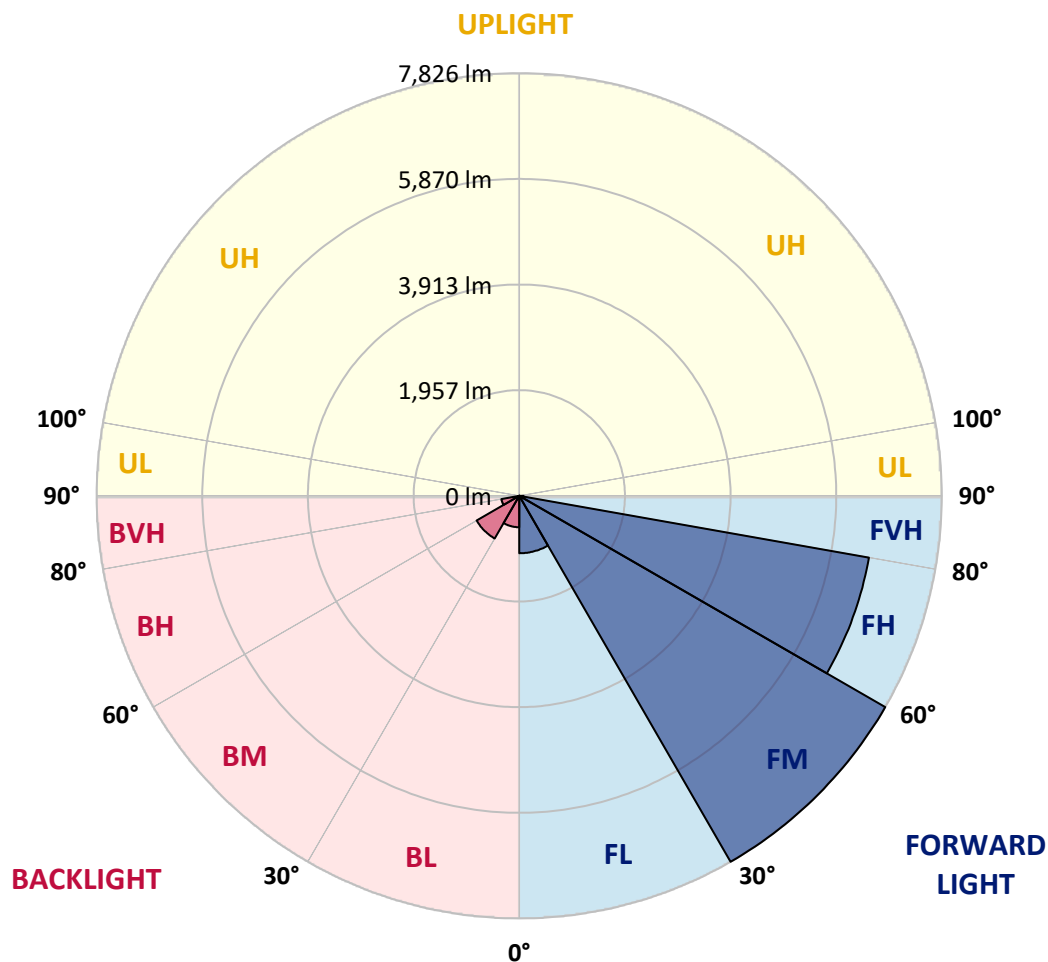
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1063.7	6.1			
FM	(30°-60°)	7826.4	45.0			
FH	(60°-80°)	6576.6	37.9			G3/7500
FVH	(80°-90°)	76.5	0.4			G1/100
BL	(0°-30°)	581.9	3.3	B2/1000		
BM	(30°-60°)	911.8	5.2	B1/1000		
BH	(60°-80°)	335.8	1.9	B1/500		G1/500
BVH	(80°-90°)	2.1	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	2710.1	2710.1	2710.1	2710.1	2710.1	2710.1	2710.1	2710.1	2710.1	2710.1	2710.1
2.5°	2544.5	2567.5	2564.2	2579.6	2585.0	2607.0	2628.9	2658.5	2691.5	2690.4	2712.4
5°	2400.8	2423.8	2429.2	2450.1	2476.4	2510.4	2555.4	2614.7	2676.2	2686.0	2729.9
7.5°	2230.7	2254.8	2269.0	2310.8	2359.0	2429.2	2502.7	2589.5	2691.5	2705.8	2790.3
10°	2060.6	2082.5	2101.1	2160.4	2237.3	2341.5	2461.1	2586.2	2723.3	2744.1	2863.7
12.5°	1955.3	1976.1	1996.9	2048.6	2144.0	2271.3	2433.7	2601.6	2776.0	2805.6	2963.6
15°	1918.0	1936.6	1953.0	1999.2	2088.0	2232.9	2428.1	2633.3	2842.9	2882.4	3084.3
17.5°	1923.4	1933.4	1944.3	1979.4	2066.1	2215.3	2438.1	2688.2	2921.9	2957.0	3205.0
20°	1955.3	1960.7	1961.8	1985.9	2062.8	2213.1	2457.7	2740.8	2996.5	3043.7	3324.6
22.5°	1995.9	1998.0	1995.9	2012.3	2083.6	2229.6	2484.1	2804.5	3079.9	3123.8	3445.3
25°	2185.7	2144.0	2091.3	2059.5	2118.8	2261.4	2523.7	2890.1	3170.9	3213.8	3562.7
27.5°	2774.9	2655.3	2466.6	2254.8	2191.1	2307.5	2578.5	2976.8	3263.2	3301.5	3688.9
30°	3731.7	3574.8	3254.4	2777.0	2423.8	2404.0	2649.8	3063.4	3360.8	3402.5	3823.9
32.5°	4690.6	4652.3	4282.4	3621.9	2947.2	2619.1	2768.3	3180.9	3490.3	3523.2	4006.0
35°	5660.6	5582.7	5279.9	4627.1	3753.7	3056.9	2965.8	3334.4	3660.4	3697.7	4271.5
37.5°	6403.4	6356.2	6168.7	5630.9	4710.4	3732.7	3303.8	3572.5	3907.2	3948.9	4611.7
40°	7059.6	7037.6	6974.0	6619.6	5780.2	4617.1	3829.3	3941.2	4249.5	4299.0	5028.5
42.5°	7575.3	7626.8	7663.0	7564.3	6882.9	5626.5	4535.9	4459.2	4726.9	4777.3	5559.6
45°	8103.0	8120.6	8266.5	8409.1	7978.0	6682.1	5332.6	5065.9	5320.5	5383.0	6196.0
47.5°	8442.1	8512.3	8769.1	9020.3	8898.5	7728.9	6188.3	5782.4	6008.4	6125.8	6909.2
50°	8467.3	8600.1	8953.4	9391.2	9568.9	8725.1	7118.8	6598.7	6839.0	6968.5	7670.7
52.5°	8047.1	8253.3	8800.9	9441.7	9931.0	9568.9	8081.1	7415.1	7723.4	7892.4	8460.8
55°	6169.7	6439.7	8227.1	9167.3	9945.3	10208.6	9018.2	8265.4	8708.7	8899.6	9314.4
57.5°	5375.3	5511.3	6468.2	8691.2	9680.8	10466.5	9865.2	9075.1	9780.7	10017.7	10120.8
60°	4472.3	4651.1	5424.7	7912.1	9322.1	10491.7	10613.5	10119.7	10942.7	11209.3	10860.4
62.5°	3039.3	3233.6	4002.7	6573.5	8831.6	10479.6	11226.8	11195.0	12234.1	12520.5	11486.9
65°	1882.8	2004.6	2511.6	5367.6	8145.8	10492.8	11868.7	12500.7	13596.8	13887.6	11971.8
67.5°	1487.9	1543.8	1808.2	4121.2	6964.1	10196.5	12509.5	13728.5	14879.5	15109.9	12120.0
70°	999.6	1033.6	1315.6	2762.8	5181.1	8829.3	12497.4	14345.2	15540.0	15655.2	11580.1
72.5°	526.6	553.0	769.2	1279.4	3129.3	6276.2	10534.4	13607.8	14882.8	14709.5	9898.1
75°	263.3	307.2	517.9	649.5	1336.4	3500.2	6541.7	10728.7	11714.0	11042.5	6350.8
77.5°	199.7	241.4	427.9	427.9	465.2	1178.4	2770.5	5851.5	5397.2	4494.2	1864.2
80°	127.3	164.6	374.1	323.7	194.2	299.5	722.0	1639.3	1146.6	872.3	339.1
82.5°	74.6	107.5	311.6	213.9	108.6	110.8	204.1	348.9	297.4	231.5	104.2
85°	29.6	70.2	213.9	84.5	42.7	27.5	61.4	74.6	61.4	46.1	26.3
87.5°	0.0	16.5	37.3	0.0	3.3	2.2	4.4	5.5	5.5	4.4	8.8
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°	2710.1	2710.1	2710.1	2710.1	2710.1	2710.1	2710.1	2710.1	2710.1	2710.1	2710.1
2.5°	2722.2	2724.4	2731.0	2732.1	2716.8	2697.0	2689.3	2686.0	2672.9	2671.8	2673.9
5°	2755.1	2765.0	2755.1	2726.6	2658.5	2563.1	2490.8	2431.5	2377.7	2361.2	2351.4
7.5°	2821.0	2830.8	2801.2	2689.3	2518.1	2328.3	2157.1	2036.5	1927.8	1887.2	1870.7
10°	2915.3	2928.5	2835.3	2609.2	2306.4	2001.3	1711.6	1507.6	1348.5	1283.7	1256.3
12.5°	3033.8	3039.3	2853.9	2487.4	2030.9	1595.4	1185.0	966.7	825.1	772.4	756.0
15°	3164.4	3156.7	2856.1	2321.7	1655.7	1127.9	773.6	635.3	578.2	560.7	560.7
17.5°	3301.5	3269.7	2812.2	2082.5	1244.2	771.3	573.9	540.9	531.1	526.6	525.6
20°	3436.5	3365.2	2732.1	1769.9	893.2	576.0	521.2	511.3	505.8	503.6	501.4
22.5°	3559.4	3437.6	2595.0	1406.6	648.4	509.1	492.6	483.9	474.0	469.7	468.5
25°	3679.0	3479.3	2401.8	1067.6	519.0	476.2	463.0	446.6	433.4	427.9	425.7
27.5°	3795.3	3505.6	2160.4	790.0	463.0	445.5	421.4	398.3	388.4	386.2	384.1
30°	3919.3	3514.4	1886.1	589.2	429.1	407.0	372.0	345.6	340.1	341.2	341.2
32.5°	4070.7	3527.5	1609.7	482.8	400.5	361.0	319.3	291.8	287.5	291.8	290.8
35°	4251.8	3553.9	1343.0	444.3	375.3	313.9	268.9	245.8	241.4	244.7	243.5
37.5°	4497.5	3596.7	1094.0	436.6	354.4	274.3	226.0	207.4	207.4	208.5	207.4
40°	4824.5	3710.8	871.1	431.2	343.5	244.7	191.0	183.3	186.5	188.7	188.7
42.5°	5222.8	3953.3	720.9	424.7	331.4	231.5	173.3	170.0	175.6	177.7	177.7
45°	5669.4	4260.5	668.2	413.7	320.4	240.3	165.6	161.3	167.9	169.0	170.0
47.5°	6131.3	4561.1	661.6	401.6	309.4	253.5	163.5	153.6	161.3	162.4	163.5
50°	6598.7	4757.5	668.2	382.9	291.8	253.5	164.6	146.0	152.5	155.8	156.9
52.5°	7069.4	4847.5	663.8	342.3	261.2	238.1	164.6	139.3	146.0	148.1	148.1
55°	7525.9	4830.0	596.9	282.0	221.6	210.6	160.2	133.9	138.3	139.3	139.3
57.5°	7886.9	4585.3	472.9	219.5	180.0	175.6	146.0	127.3	130.6	129.5	129.5
60°	8075.6	4047.6	337.9	169.0	141.6	138.3	128.3	118.5	120.7	115.2	114.1
62.5°	8077.8	3336.7	226.0	133.9	113.1	109.7	109.7	106.4	104.2	93.3	90.0
65°	7905.5	2547.7	150.4	106.4	91.0	85.6	92.1	91.0	83.4	68.1	65.8
67.5°	7514.9	1669.9	114.1	83.4	70.2	66.9	73.5	76.8	71.3	57.1	56.0
70°	6711.7	972.1	94.4	64.8	52.7	49.4	59.2	65.8	59.2	46.1	43.9
72.5°	5575.0	524.5	76.8	48.3	36.2	32.9	47.2	53.8	47.2	34.0	32.9
75°	3617.5	280.8	59.2	31.8	18.7	20.8	35.2	39.5	32.9	21.9	19.8
77.5°	1214.6	124.0	37.3	15.4	8.8	8.8	20.8	24.2	15.4	7.7	6.6
80°	271.0	51.6	15.4	6.6	3.3	3.3	4.4	4.4	2.2	0.0	0.0
82.5°	88.9	20.8	6.6	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	34.0	7.7	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	13.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)