

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: P884331

Luminaire Tested: **NAV-SB5A-830-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884331
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-830-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19685 lumens
Efficiency: N/A
Efficacy: 138.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

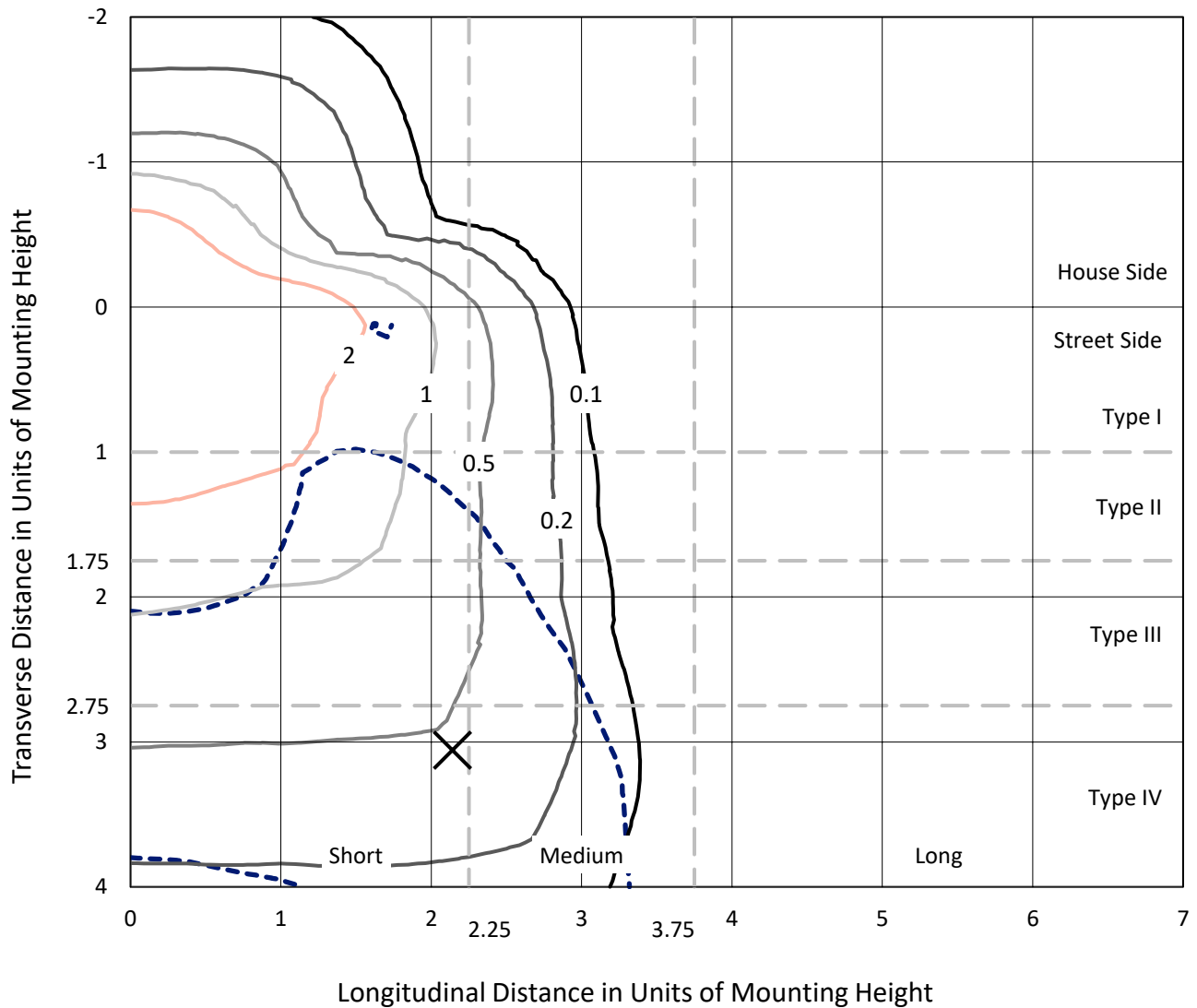
Input Watts (W): 141.7
Input Voltage (V): 120.0
Input Current (Ain): 1.201
Voltage Rise (V): NR
Power Factor: 0.992
Total Harmonic Distortion (THDi): 10.503
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P884331
 CATALOG NUMBER: NAV-SB5A-830-U-T4FT

Iso-Footcandle Lines of Horizontal Illumination

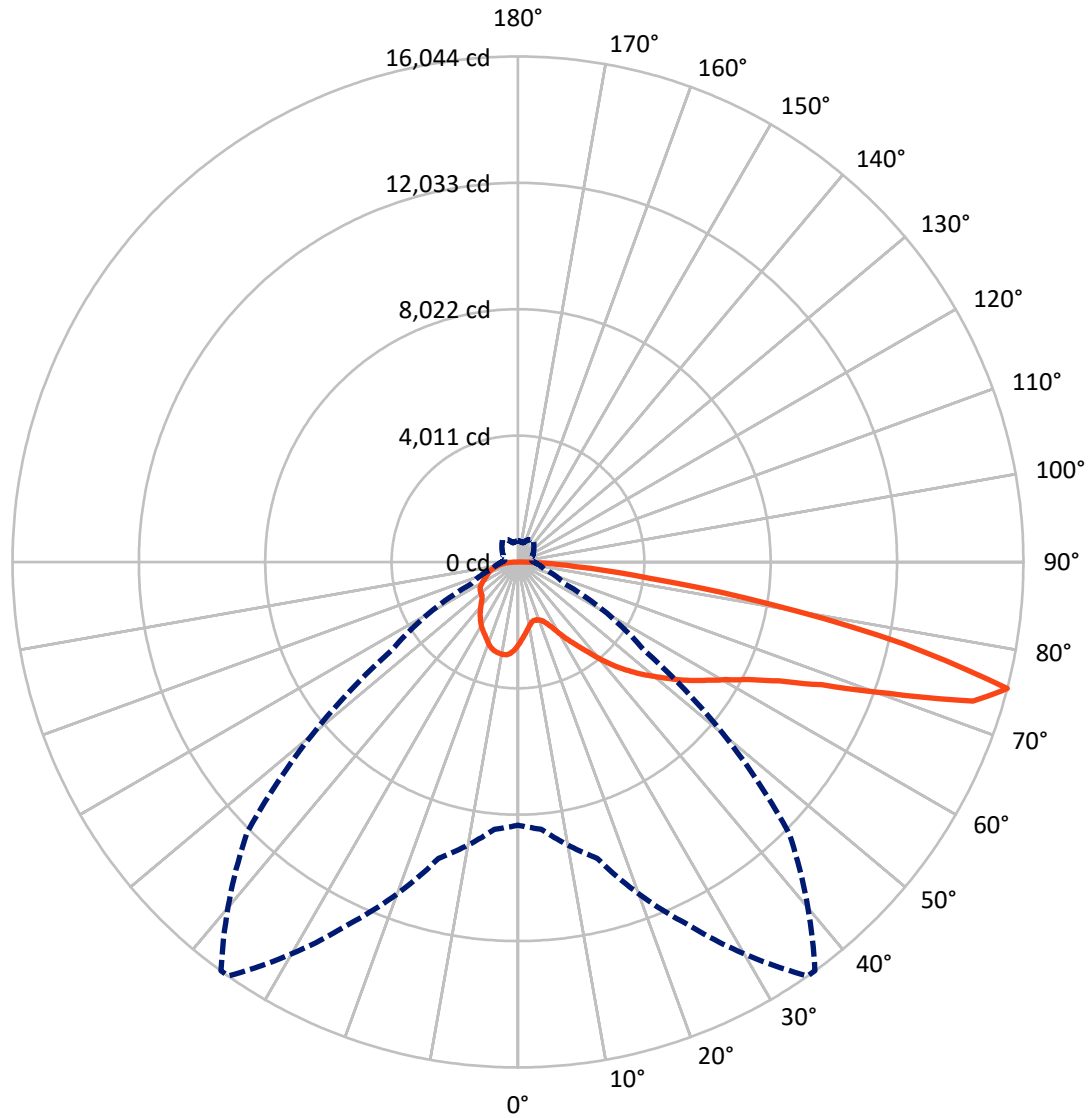
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
 Type IV - Short - N/A

REPORT NUMBER: P884331
CATALOG NUMBER: NAV-SB5A-830-U-T4FT

Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P884331

CATALOG NUMBER: NAV-SB5A-830-U-T4FT

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4684.5	0.0	4684.5
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	15000.5	0.0	15000.5
	% Fixture	76.2	0.0	76.2
Total	Lumens	19685.0	0.0	19685.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	248.4	1.3
10°-20°	716.4	3.6
20°-30°	1203.0	6.1
30°-40°	1869.6	9.5
40°-50°	2775.0	14.1
50°-60°	3831.1	19.5
60°-70°	4647.9	23.6
70°-80°	3841.2	19.5
80°-90°	552.5	2.8
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°	19685.0	100.0
0°-180°	19685.0	100.0

Coefficient of Utilization



REPORT NUMBER: P884331

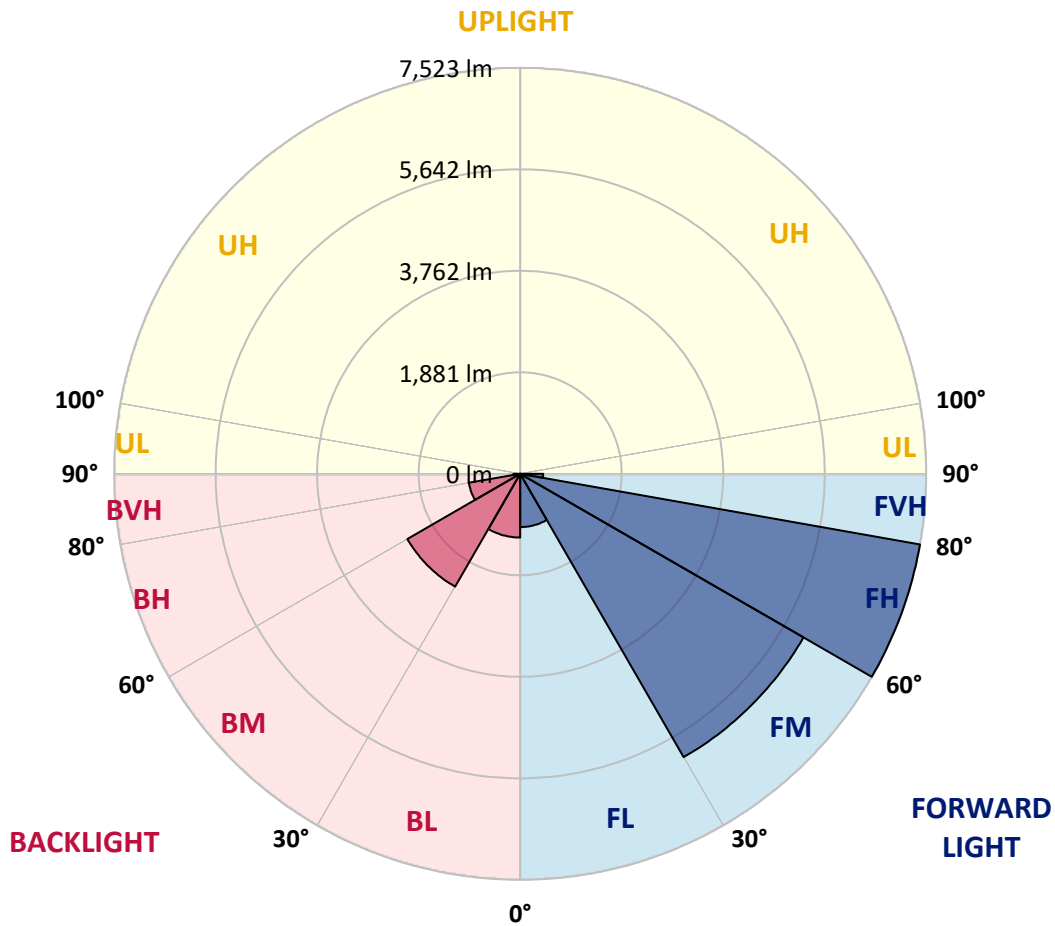
CATALOG NUMBER: NAV-SB5A-830-U-T4FT

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	987.2	5.0			
FM (30°-60°)	6061.9	30.8			
FH (60°-80°)	7523.3	38.2			G4/12000
FVH (80°-90°)	428.1	2.2			G3/500
BL (0°-30°)	1180.6	6.0	B3/2500		
BM (30°-60°)	2413.8	12.3	B2/2500		
BH (60°-80°)	965.8	4.9	B2/1000		G2/1000
BVH (80°-90°)	124.4	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Short



REPORT NUMBER: P884331

CATALOG NUMBER: NAV-SB5A-830-U-T4FT

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	2623.2	2623.2	2623.2	2623.2	2623.2	2623.2	2623.2	2623.2	2623.2	2623.2	2623.2
2.5°	2418.8	2433.7	2440.1	2436.9	2452.9	2450.8	2473.1	2500.8	2539.1	2576.3	2630.6
5°	2232.6	2248.6	2262.4	2275.2	2306.0	2315.6	2350.7	2403.9	2474.2	2545.5	2634.9
7.5°	2059.2	2073.0	2094.3	2117.7	2169.8	2179.4	2237.9	2320.9	2418.8	2523.1	2646.6
10°	1917.6	1931.5	1953.8	1980.4	2045.3	2057.0	2131.5	2242.2	2369.9	2501.8	2659.3
12.5°	1857.0	1861.2	1874.0	1900.6	1957.0	1964.4	2046.4	2173.0	2322.0	2485.9	2678.5
15°	1853.8	1862.3	1863.3	1877.2	1924.0	1927.2	2002.8	2128.3	2292.2	2482.7	2707.2
17.5°	1885.7	1892.1	1882.5	1891.0	1930.4	1935.7	1995.3	2107.0	2282.6	2496.5	2756.2
20°	1970.8	1976.1	1947.4	1935.7	1964.4	1968.7	2027.2	2120.9	2292.2	2525.3	2823.2
22.5°	2151.7	2154.9	2084.7	2036.8	2038.9	2041.1	2092.1	2177.3	2329.5	2577.4	2908.4
25°	2433.7	2431.6	2319.9	2227.3	2174.1	2162.4	2196.4	2268.8	2392.2	2646.6	3018.0
27.5°	2763.6	2747.7	2635.9	2497.6	2381.6	2364.6	2357.1	2388.0	2481.6	2738.1	3152.0
30°	3136.1	3121.2	3000.9	2820.0	2659.3	2631.7	2561.4	2545.5	2614.6	2862.6	3338.3
32.5°	3544.7	3535.1	3391.5	3172.3	2957.3	2925.4	2807.3	2764.7	2819.0	3051.0	3597.9
35°	3887.4	3878.9	3759.7	3534.1	3271.2	3231.9	3111.6	3063.7	3091.4	3292.5	3937.4
37.5°	4197.1	4192.8	4090.6	3912.9	3641.6	3593.7	3458.5	3442.6	3437.2	3610.7	4349.2
40°	4484.4	4473.7	4367.3	4273.7	4072.5	4028.9	3909.7	3895.9	3855.5	4002.3	4815.3
42.5°	4802.6	4774.9	4620.6	4577.0	4522.7	4486.5	4415.2	4417.3	4327.9	4443.9	5309.1
45°	5062.2	5046.3	4887.7	4862.2	4920.7	4905.8	4967.5	4983.5	4810.0	4906.9	5822.0
47.5°	5341.0	5326.1	5192.0	5174.0	5332.5	5336.8	5554.9	5560.2	5280.4	5387.9	6336.0
50°	5684.8	5663.5	5530.5	5552.8	5730.5	5746.5	6145.5	6109.4	5713.5	5876.3	6845.8
52.5°	5911.4	5924.2	5895.5	5931.6	6174.3	6189.2	6726.6	6634.0	6142.3	6358.4	7345.9
55°	6078.5	6104.0	6193.4	6276.4	6642.5	6657.4	7274.6	7133.1	6497.8	6805.3	7816.3
57.5°	6293.5	6257.3	6424.3	6586.1	7087.3	7126.7	7807.8	7614.1	6812.8	7190.5	8138.7
60°	6602.1	6576.5	6706.3	6945.8	7585.3	7648.1	8371.8	8047.2	7043.7	7496.0	8201.5
62.5°	7227.8	7163.9	7184.2	7395.9	8213.2	8296.2	9008.1	8425.0	7158.6	7615.1	7865.2
65°	8163.2	8053.6	7951.4	8098.3	9097.5	9179.5	9726.4	8721.9	7116.1	7384.2	6972.4
67.5°	9341.2	9232.7	9107.1	9245.4	10400.1	10465.0	10612.9	8888.9	6780.8	6494.6	5394.2
70°	10312.8	10272.4	10422.4	10991.7	12480.5	12482.6	11749.4	8750.6	5862.5	4604.6	3121.2
72.5°	10184.0	10159.6	10950.2	12710.4	15102.6	15046.2	12825.3	7703.5	3949.1	2077.2	1169.5
75°	8354.7	8513.3	9738.1	12679.5	16044.4	16036.9	12166.6	4897.3	1633.5	860.9	604.4
77.5°	4480.1	4731.3	6322.2	9361.4	12525.2	12713.5	8553.7	1713.3	701.3	551.2	418.2
80°	1461.1	1680.3	2519.9	4766.4	8138.7	8103.6	3666.0	672.6	479.9	390.5	289.5
82.5°	620.4	645.9	1125.9	2250.7	4176.8	4111.9	1167.4	386.3	337.3	267.1	178.8
85°	242.6	271.4	497.0	1040.8	1809.1	1769.7	421.4	191.5	216.0	174.5	106.4
87.5°	79.8	96.8	177.7	356.5	562.9	542.7	103.2	66.0	93.6	79.8	38.3
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: P884331
 CATALOG NUMBER: NAV-SB5A-830-U-T4FT

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2623.2	2623.2	2623.2	2623.2	2623.2	2623.2	2623.2	2623.2	2623.2	2623.2	2623.2
2.5°	2645.5	2662.5	2682.8	2712.5	2738.1	2759.4	2781.7	2795.6	2800.9	2816.8	2815.8
5°	2664.7	2701.9	2751.9	2800.9	2848.8	2877.5	2903.0	2915.8	2927.5	2936.0	2938.2
7.5°	2696.6	2744.5	2823.2	2887.1	2927.5	2950.9	2967.9	2963.7	2967.9	2970.1	2973.3
10°	2724.3	2791.3	2884.9	2945.6	2976.5	2977.5	2973.3	2958.4	2950.9	2952.0	2954.1
12.5°	2757.2	2831.7	2932.8	2983.9	2992.4	2969.0	2950.9	2925.4	2915.8	2911.5	2909.4
15°	2801.9	2887.1	2985.0	3004.1	2982.8	2953.0	2922.2	2880.7	2859.4	2842.4	2847.7
17.5°	2856.2	2949.9	3025.4	3011.6	2965.8	2916.9	2866.9	2804.1	2760.4	2742.3	2743.4
20°	2931.8	3015.8	3056.3	2995.6	2926.4	2852.0	2766.8	2690.2	2649.8	2631.7	2629.5
22.5°	3023.3	3104.2	3086.1	2967.9	2870.0	2750.9	2644.4	2588.0	2567.8	2555.1	2557.2
25°	3132.9	3202.1	3107.4	2927.5	2777.5	2616.8	2534.8	2516.7	2507.2	2497.6	2497.6
27.5°	3275.5	3312.7	3123.3	2867.9	2632.7	2474.2	2444.4	2447.6	2444.4	2428.4	2431.6
30°	3463.8	3456.4	3138.2	2771.1	2466.7	2345.4	2347.5	2361.4	2363.5	2352.9	2358.2
32.5°	3711.8	3636.2	3145.7	2645.5	2308.2	2232.6	2234.7	2249.6	2260.3	2242.2	2250.7
35°	4011.9	3845.9	3134.0	2488.0	2185.8	2125.1	2109.2	2113.4	2116.6	2099.6	2111.3
37.5°	4362.0	4081.1	3081.8	2313.5	2084.7	2019.8	1985.7	1957.0	1940.0	1924.0	1934.6
40°	4746.2	4337.5	2986.0	2143.2	1971.9	1908.0	1857.0	1802.7	1745.2	1723.9	1733.5
42.5°	5148.4	4601.4	2870.0	1980.4	1842.1	1789.9	1735.6	1656.9	1570.7	1527.1	1532.4
45°	5565.6	4871.7	2756.2	1819.7	1709.0	1686.7	1623.9	1529.2	1435.6	1380.2	1376.0
47.5°	5974.2	5127.1	2589.1	1658.0	1584.5	1609.0	1560.1	1472.8	1368.5	1281.3	1271.7
50°	6364.8	5366.6	2315.6	1494.1	1483.4	1585.6	1538.8	1413.2	1294.0	1182.3	1172.7
52.5°	6752.1	5560.2	1965.5	1345.1	1429.2	1579.2	1511.1	1372.8	1227.0	1109.9	1097.2
55°	7080.9	5660.3	1628.2	1217.4	1350.4	1524.9	1478.1	1324.9	1132.3	1007.8	997.1
57.5°	7268.2	5579.4	1347.2	1091.8	1241.9	1435.6	1421.7	1222.7	1019.5	923.7	910.9
60°	7187.4	5251.6	1117.4	982.2	1138.7	1338.7	1323.8	1121.6	933.3	842.8	830.0
62.5°	6741.5	4627.0	935.4	886.4	1045.0	1239.7	1225.9	1043.9	867.3	780.0	766.2
65°	5843.3	3763.9	793.9	806.6	950.3	1120.6	1140.8	979.0	815.1	730.0	716.2
67.5°	4456.7	2726.4	683.2	737.5	857.7	1003.5	1062.0	932.2	771.5	690.6	677.9
70°	2540.2	1548.4	589.5	670.4	775.8	895.0	1001.4	895.0	724.7	657.7	649.1
72.5°	963.1	710.9	509.7	603.4	697.0	803.4	934.3	836.4	670.4	620.4	611.9
75°	514.0	433.1	428.9	524.6	606.6	714.1	850.3	779.0	630.0	655.5	676.8
77.5°	350.1	306.5	358.6	449.1	507.6	615.1	760.9	691.7	545.9	543.8	501.2
80°	242.6	217.1	291.6	361.8	392.7	517.2	664.0	593.8	444.8	415.0	396.9
82.5°	145.8	141.5	218.2	270.3	277.7	399.1	550.2	498.0	363.9	317.1	319.2
85°	79.8	84.1	139.4	158.6	161.8	278.8	431.0	385.2	279.9	235.2	237.3
87.5°	22.3	28.7	51.1	62.8	77.7	144.7	256.5	228.8	140.5	97.9	97.9
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)