

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: P883301

Luminaire Tested: **NAV-SB3C-827-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883301
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-SB3C-827-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 615mA 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: 18039 lumens
Efficiency: N/A
Efficacy: 121.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G3

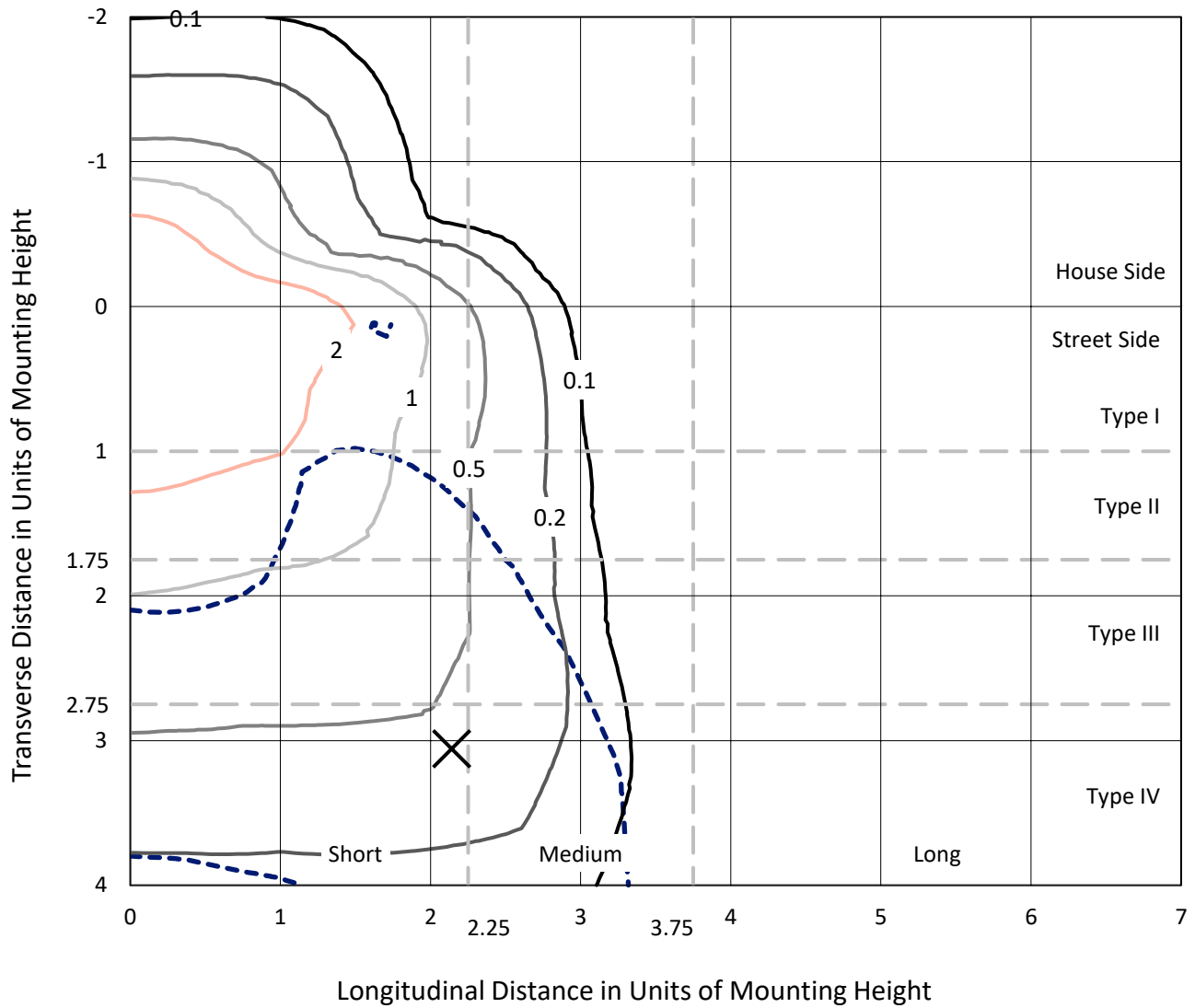
Input Watts (W): 149.1
Input Voltage (V): 120.0
Input Current (Ain): 1.259
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.297
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

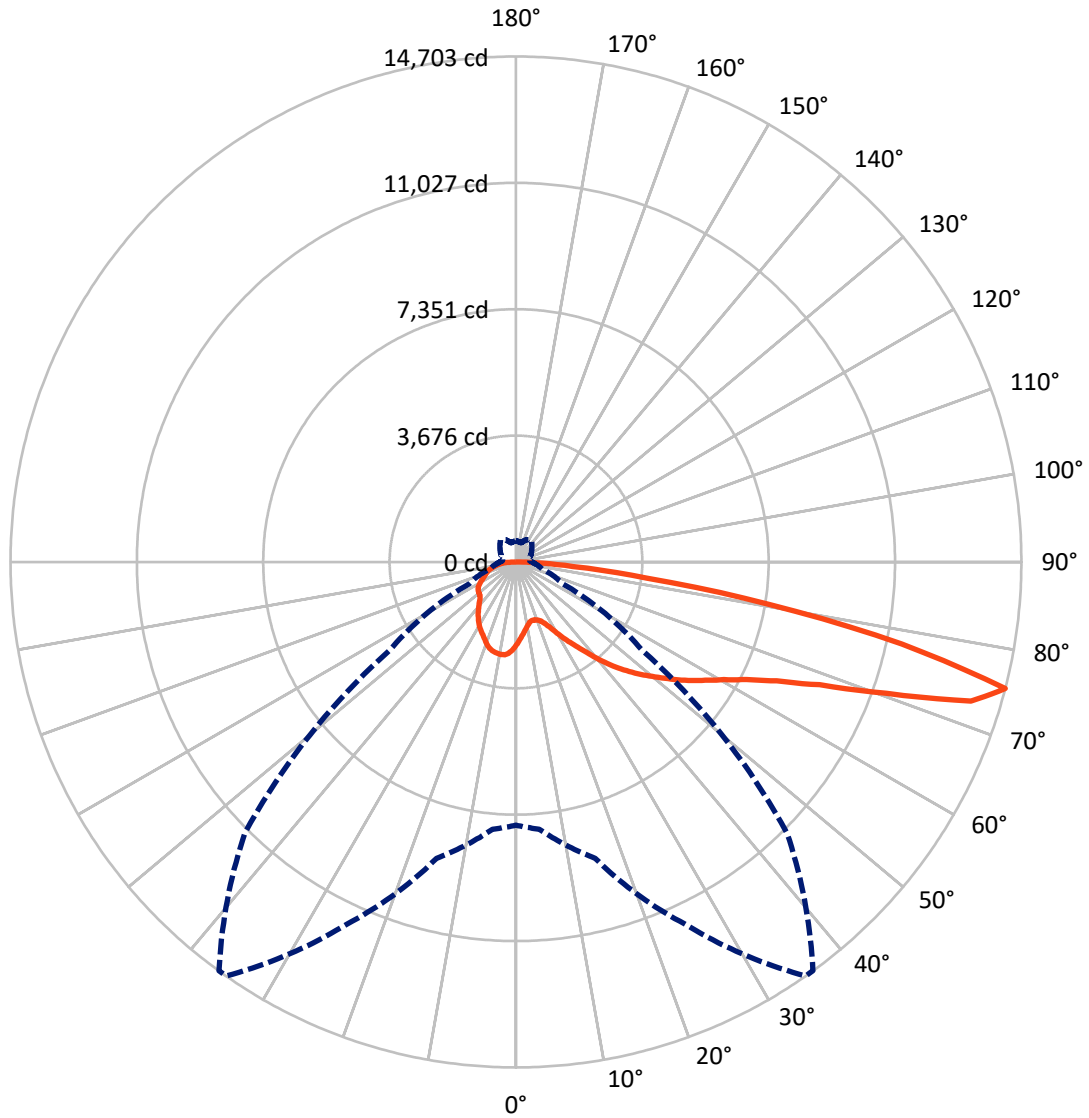
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4292.8	0.0	4292.8
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	13746.2	0.0	13746.2
	% Fixture	76.2	0.0	76.2
Total	Lumens	18039.0	0.0	18039.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	227.6	1.3
10°-20°	656.5	3.6
20°-30°	1102.4	6.1
30°-40°	1713.3	9.5
40°-50°	2543.0	14.1
50°-60°	3510.7	19.5
60°-70°	4259.3	23.6
70°-80°	3520.0	19.5
80°-90°	506.3	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°	18039.0	100.0
0°-180°	18039.0	100.0



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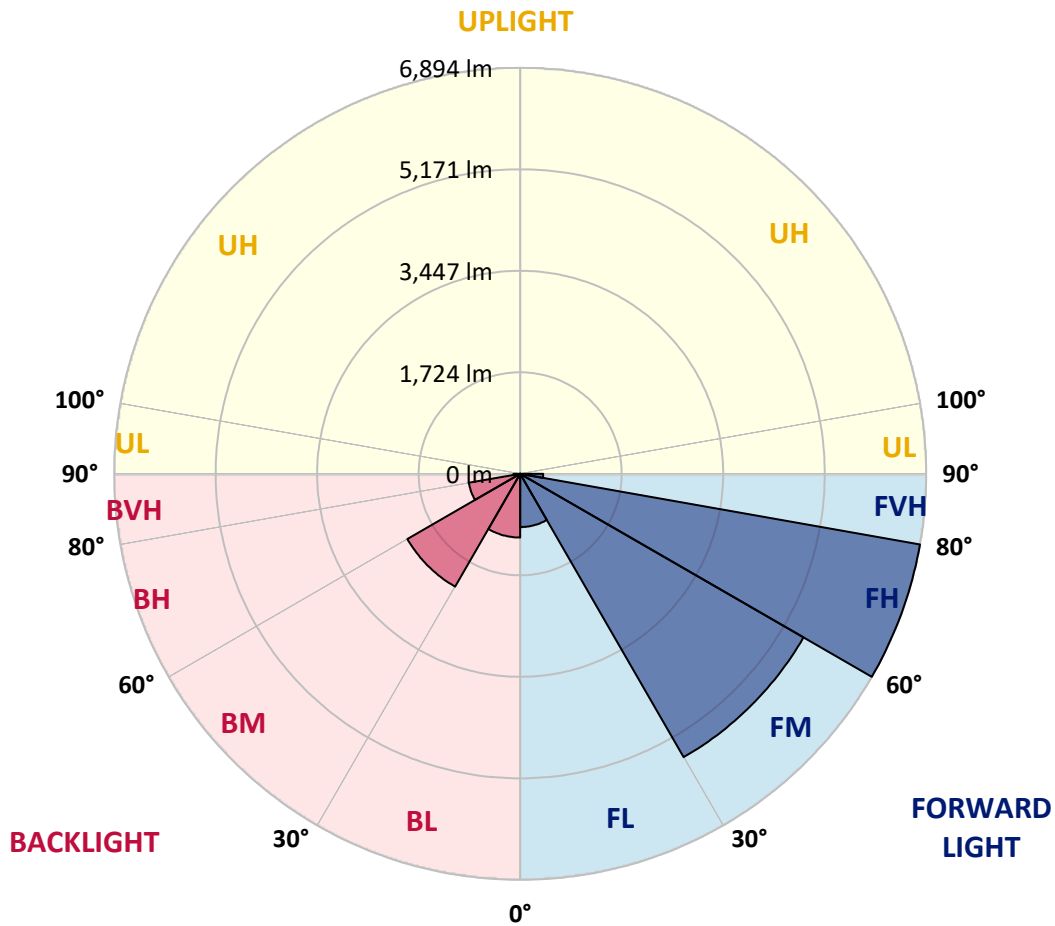
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	904.6	5.0			
FM (30°-60°)	5555.0	30.8			
FH (60°-80°)	6894.2	38.2			G3/7500
FVH (80°-90°)	392.3	2.2			G3/500
BL (0°-30°)	1081.9	6.0	B3/2500		
BM (30°-60°)	2211.9	12.3	B2/2500		
BH (60°-80°)	885.1	4.9	B2/1000		G2/1000
BVH (80°-90°)	114.0	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-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	2403.8	2403.8	2403.8	2403.8	2403.8	2403.8	2403.8	2403.8	2403.8	2403.8	2403.8
2.5°	2216.6	2230.2	2236.1	2233.2	2247.8	2245.8	2266.3	2291.7	2326.8	2360.9	2410.6
5°	2045.9	2060.6	2073.2	2084.9	2113.2	2122.0	2154.2	2202.9	2267.3	2332.6	2414.5
7.5°	1887.0	1899.7	1919.2	1940.6	1988.4	1997.2	2050.8	2126.9	2216.6	2312.2	2425.3
10°	1757.3	1770.0	1790.4	1814.8	1874.3	1885.0	1953.3	2054.7	2171.7	2292.6	2437.0
12.5°	1701.7	1705.6	1717.3	1741.7	1793.4	1800.2	1875.3	1991.3	2127.8	2278.0	2454.5
15°	1698.8	1706.6	1707.5	1720.2	1763.1	1766.1	1835.3	1950.4	2100.5	2275.1	2480.9
17.5°	1728.0	1733.9	1725.1	1732.9	1769.0	1773.9	1828.5	1930.9	2091.8	2287.8	2525.7
20°	1806.0	1810.9	1784.6	1773.9	1800.2	1804.1	1857.7	1943.5	2100.5	2314.1	2587.2
22.5°	1971.8	1974.7	1910.4	1866.5	1868.4	1870.4	1917.2	1995.2	2134.7	2361.9	2665.2
25°	2230.2	2228.3	2125.9	2041.1	1992.3	1981.6	2012.8	2079.1	2192.2	2425.3	2765.6
27.5°	2532.5	2517.9	2415.5	2288.7	2182.5	2166.9	2160.0	2188.3	2274.1	2509.1	2888.5
30°	2873.9	2860.2	2750.0	2584.2	2437.0	2411.6	2347.3	2332.6	2396.0	2623.2	3059.1
32.5°	3248.3	3239.5	3107.9	2907.0	2710.0	2680.8	2572.5	2533.5	2583.3	2795.8	3297.1
35°	3562.3	3554.5	3445.3	3238.6	2997.7	2961.6	2851.4	2807.5	2832.9	3017.2	3608.2
37.5°	3846.1	3842.2	3748.6	3585.7	3337.1	3293.2	3169.3	3154.7	3149.8	3308.8	3985.6
40°	4109.4	4099.7	4002.1	3916.3	3732.0	3692.0	3582.8	3570.1	3533.1	3667.7	4412.7
42.5°	4401.0	4375.6	4234.2	4194.2	4144.5	4111.4	4046.0	4048.0	3966.1	4072.4	4865.2
45°	4638.9	4624.3	4479.0	4455.6	4509.2	4495.6	4552.1	4566.8	4407.8	4496.6	5335.2
47.5°	4894.4	4880.8	4757.9	4741.3	4886.6	4890.5	5090.4	5095.3	4838.8	4937.3	5806.2
50°	5209.4	5189.9	5068.0	5088.5	5251.3	5266.0	5631.7	5598.5	5235.7	5384.9	6273.3
52.5°	5417.1	5428.8	5402.5	5435.7	5658.0	5671.6	6164.1	6079.3	5628.7	5826.7	6731.7
55°	5570.2	5593.6	5675.5	5751.6	6087.1	6100.7	6666.3	6536.6	5954.4	6236.3	7162.7
57.5°	5767.2	5734.1	5887.2	6035.4	6494.7	6530.8	7154.9	6977.4	6243.1	6589.3	7458.2
60°	6050.0	6026.6	6145.6	6365.0	6951.1	7008.6	7671.7	7374.3	6454.7	6869.2	7515.7
62.5°	6623.4	6564.9	6583.4	6777.5	7526.4	7602.5	8254.9	7720.5	6560.0	6978.4	7207.6
65°	7480.6	7380.2	7286.5	7421.1	8336.8	8411.9	8913.1	7992.6	6521.0	6766.8	6389.4
67.5°	8560.1	8460.7	8345.6	8472.4	9530.4	9589.9	9725.5	8145.7	6213.8	5951.5	4943.2
70°	9450.5	9413.4	9550.9	10072.6	11436.9	11438.9	10767.0	8018.9	5372.3	4219.6	2860.2
72.5°	9332.5	9310.0	10034.6	11647.6	13839.8	13788.1	11752.9	7059.3	3618.9	1903.6	1071.7
75°	7656.1	7801.4	8923.9	11619.3	14702.8	14696.0	11149.2	4487.8	1496.9	788.9	553.9
77.5°	4105.5	4335.7	5793.5	8578.7	11477.9	11650.5	7838.5	1570.0	642.6	505.1	383.2
80°	1338.9	1539.8	2309.2	4367.8	7458.2	7426.0	3359.5	616.3	439.8	357.9	265.2
82.5°	568.5	591.9	1031.7	2062.5	3827.6	3768.1	1069.8	354.0	309.1	244.8	163.8
85°	222.3	248.7	455.4	953.7	1657.8	1621.7	386.2	175.5	198.0	159.9	97.5
87.5°	73.1	88.7	162.9	326.7	515.9	497.3	94.6	60.5	85.8	73.1	35.1
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°	2403.8	2403.8	2403.8	2403.8	2403.8	2403.8	2403.8	2403.8	2403.8	2403.8	2403.8
2.5°	2424.3	2439.9	2458.4	2485.7	2509.1	2528.6	2549.1	2561.8	2566.7	2581.3	2580.3
5°	2441.9	2476.0	2521.8	2566.7	2610.6	2636.9	2660.3	2672.0	2682.7	2690.5	2692.5
7.5°	2471.1	2515.0	2587.2	2645.7	2682.7	2704.2	2719.8	2715.9	2719.8	2721.7	2724.7
10°	2496.5	2557.9	2643.7	2699.3	2727.6	2728.6	2724.7	2711.0	2704.2	2705.1	2707.1
12.5°	2526.7	2595.0	2687.6	2734.4	2742.2	2720.8	2704.2	2680.8	2672.0	2668.1	2666.1
15°	2567.6	2645.7	2735.4	2752.9	2733.4	2706.1	2677.8	2639.8	2620.3	2604.7	2609.6
17.5°	2617.4	2703.2	2772.4	2759.8	2717.8	2673.0	2627.1	2569.6	2529.6	2513.0	2514.0
20°	2686.6	2763.7	2800.7	2745.1	2681.7	2613.5	2535.5	2465.3	2428.2	2411.6	2409.7
22.5°	2770.5	2844.6	2828.0	2719.8	2630.1	2520.8	2423.3	2371.6	2353.1	2341.4	2343.4
25°	2870.9	2934.3	2847.5	2682.7	2545.2	2398.0	2322.9	2306.3	2297.5	2288.7	2288.7
27.5°	3001.6	3035.7	2862.2	2628.1	2412.6	2267.3	2240.0	2242.9	2240.0	2225.4	2228.3
30°	3174.2	3167.4	2875.8	2539.4	2260.5	2149.3	2151.2	2163.9	2165.9	2156.1	2161.0
32.5°	3401.4	3332.2	2882.6	2424.3	2115.2	2045.9	2047.9	2061.5	2071.3	2054.7	2062.5
35°	3676.4	3524.3	2871.9	2280.0	2003.0	1947.4	1932.8	1936.7	1939.6	1924.0	1934.8
37.5°	3997.3	3739.8	2824.1	2120.0	1910.4	1850.9	1819.7	1793.4	1777.8	1763.1	1772.9
40°	4349.3	3974.8	2736.4	1964.0	1807.0	1748.5	1701.7	1652.0	1599.3	1579.8	1588.6
42.5°	4717.9	4216.7	2630.1	1814.8	1688.0	1640.3	1590.5	1518.4	1439.4	1399.4	1404.3
45°	5100.2	4464.4	2525.7	1667.6	1566.1	1545.7	1488.1	1401.3	1315.5	1264.8	1260.9
47.5°	5474.7	4698.4	2372.6	1519.3	1452.0	1474.5	1429.6	1349.6	1254.1	1174.1	1165.3
50°	5832.6	4917.8	2122.0	1369.2	1359.4	1453.0	1410.1	1295.0	1185.8	1083.4	1074.6
52.5°	6187.5	5095.3	1801.2	1232.6	1309.7	1447.2	1384.8	1258.0	1124.4	1017.1	1005.4
55°	6488.8	5187.0	1492.0	1115.6	1237.5	1397.4	1354.5	1214.1	1037.6	923.5	913.7
57.5°	6660.5	5112.9	1234.6	1000.5	1138.0	1315.5	1302.8	1120.5	934.2	846.5	834.8
60°	6586.4	4812.5	1023.9	900.1	1043.4	1226.8	1213.1	1027.8	855.2	772.3	760.6
62.5°	6177.8	4240.1	857.2	812.3	957.6	1136.1	1123.4	956.7	794.8	714.8	702.1
65°	5354.7	3449.2	727.5	739.2	870.8	1026.9	1045.4	897.2	747.0	669.0	656.3
67.5°	4084.1	2498.4	626.1	675.8	786.0	919.6	973.2	854.3	707.0	632.9	621.2
70°	2327.8	1418.9	540.2	614.4	710.9	820.1	917.6	820.1	664.1	602.7	594.9
72.5°	882.5	651.4	467.1	552.9	638.7	736.3	856.2	766.5	614.4	568.5	560.7
75°	471.0	396.9	393.0	480.8	555.9	654.3	779.2	713.8	577.3	600.7	620.2
77.5°	320.8	280.9	328.6	411.5	465.2	563.7	697.3	633.9	500.3	498.3	459.3
80°	222.3	198.9	267.2	331.6	359.8	473.9	608.5	544.2	407.6	380.3	363.7
82.5°	133.6	129.7	199.9	247.7	254.5	365.7	504.2	456.4	333.5	290.6	292.6
85°	73.1	77.0	127.7	145.3	148.2	255.5	394.9	353.0	256.5	215.5	217.5
87.5°	20.5	26.3	46.8	57.5	71.2	132.6	235.0	209.7	128.7	89.7	89.7
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)