

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: P883581

Luminaire Tested: **NAV-SB4A-727-U-T4FT**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883581  
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-SB4A-727-U-T4FT  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 70 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

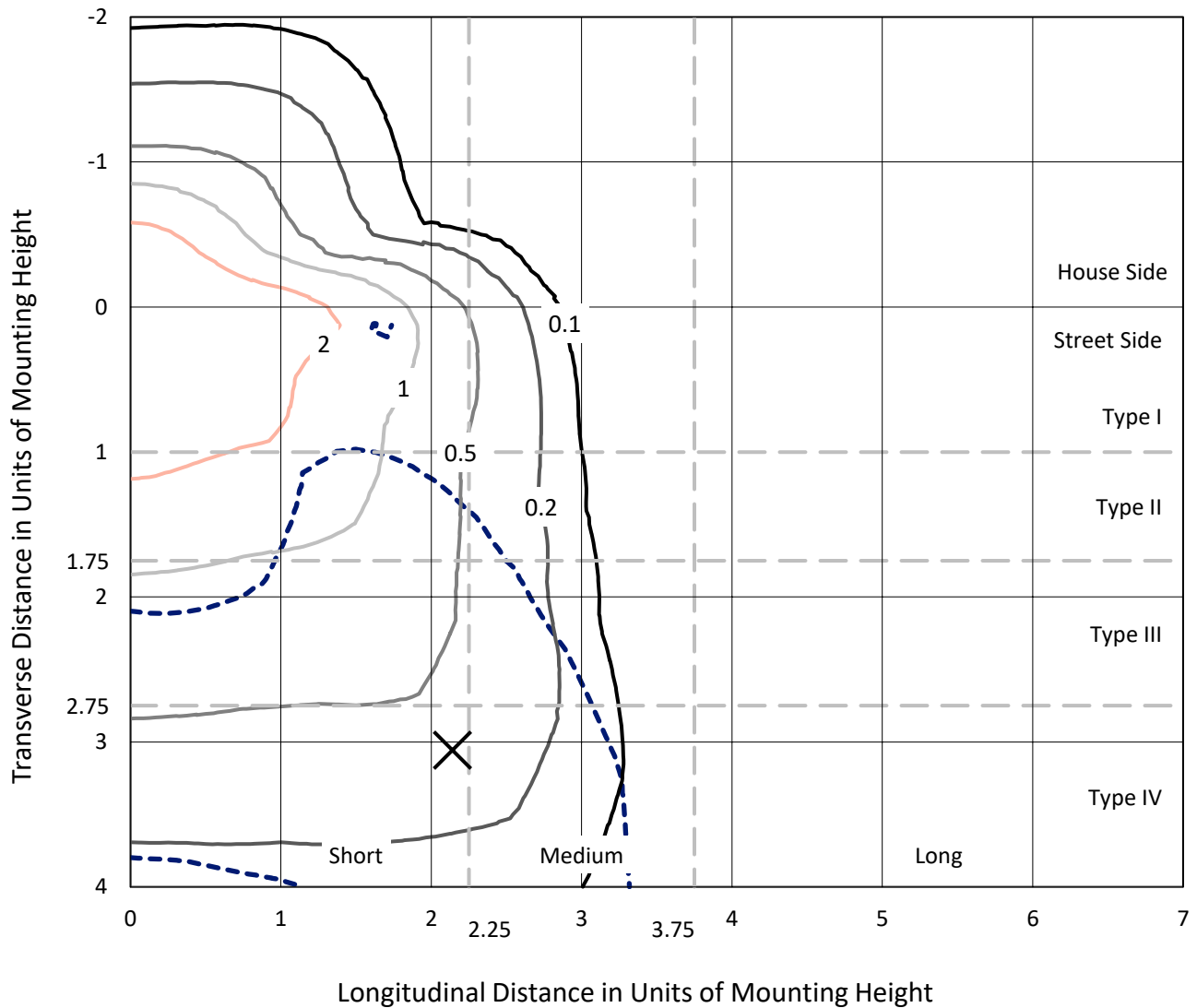
Lumens per Lamp: N/A  
Luminaire Lumens: 16283 lumens  
Efficiency: N/A  
Efficacy: 142.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G3  
  
Input Watts (W): 114  
Input Voltage (V): 120.0  
Input Current (Ain): 0.952  
Voltage Rise (V): NR  
Power Factor: 0.995  
Total Harmonic Distortion (THDi): 8.206  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P883581  
 CATALOG NUMBER: NAV-SB4A-727-U-T4FT

### Iso-Footcandle Lines of Horizontal Illumination

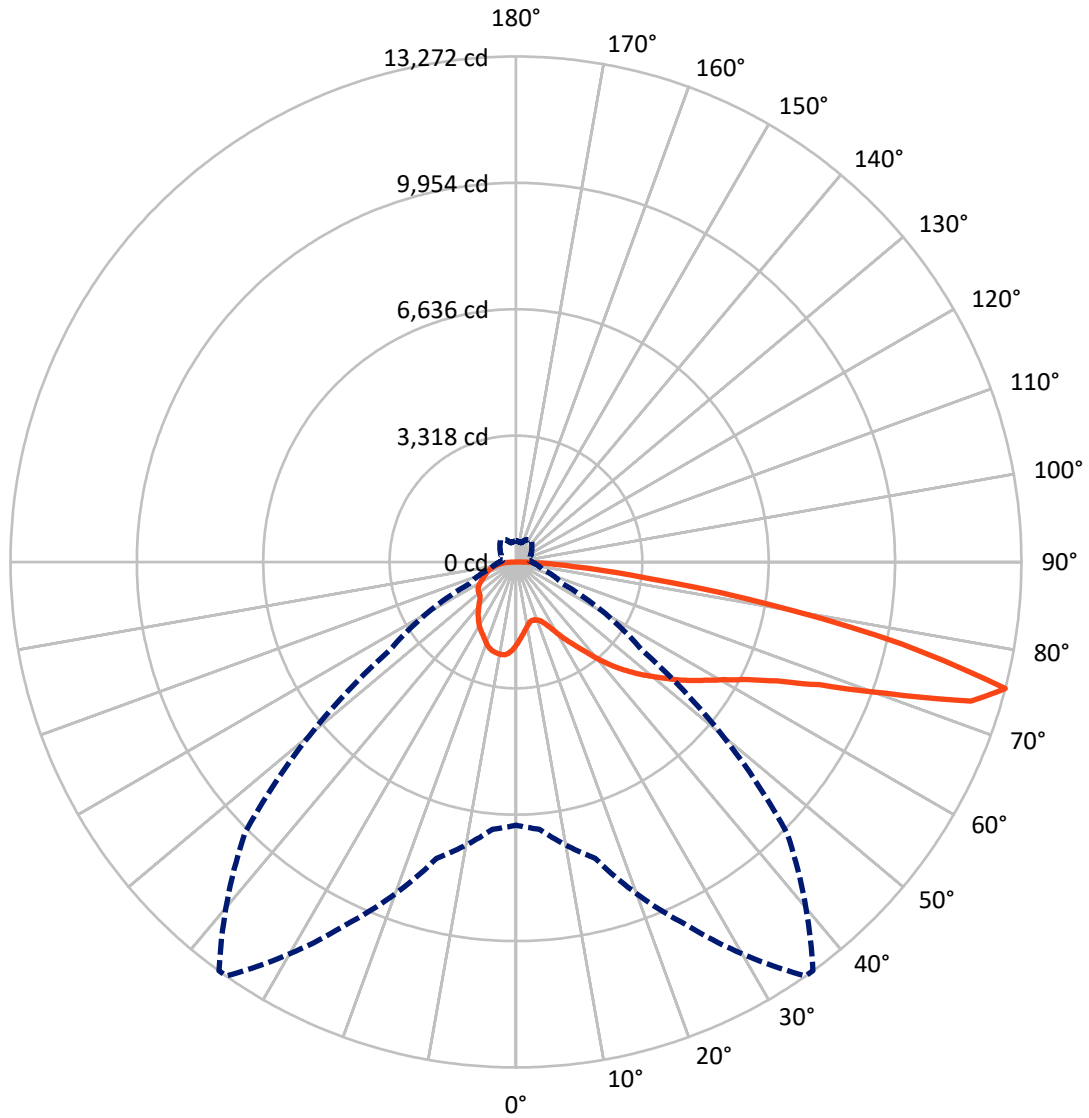
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc  
 Type IV - Short - N/A

REPORT NUMBER: P883581  
CATALOG NUMBER: NAV-SB4A-727-U-T4FT

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P883581  
 CATALOG NUMBER: NAV-SB4A-727-U-T4FT

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3875.0	0.0	3875.0
	% Fixture	23.8	0.0	23.8
<b>Street Side</b>	Lumens	12408.1	0.0	12408.1
	% Fixture	76.2	0.0	76.2
<b>Total</b>	Lumens	16283.0	0.0	16283.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	205.4	1.3
10°-20°	592.6	3.6
20°-30°	995.1	6.1
30°-40°	1546.5	9.5
40°-50°	2295.4	14.1
50°-60°	3169.0	19.5
60°-70°	3844.7	23.6
70°-80°	3177.3	19.5
80°-90°	457.0	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°	16283.0	100.0
0°-180°	16283.0	100.0

**Coefficient of Utilization**



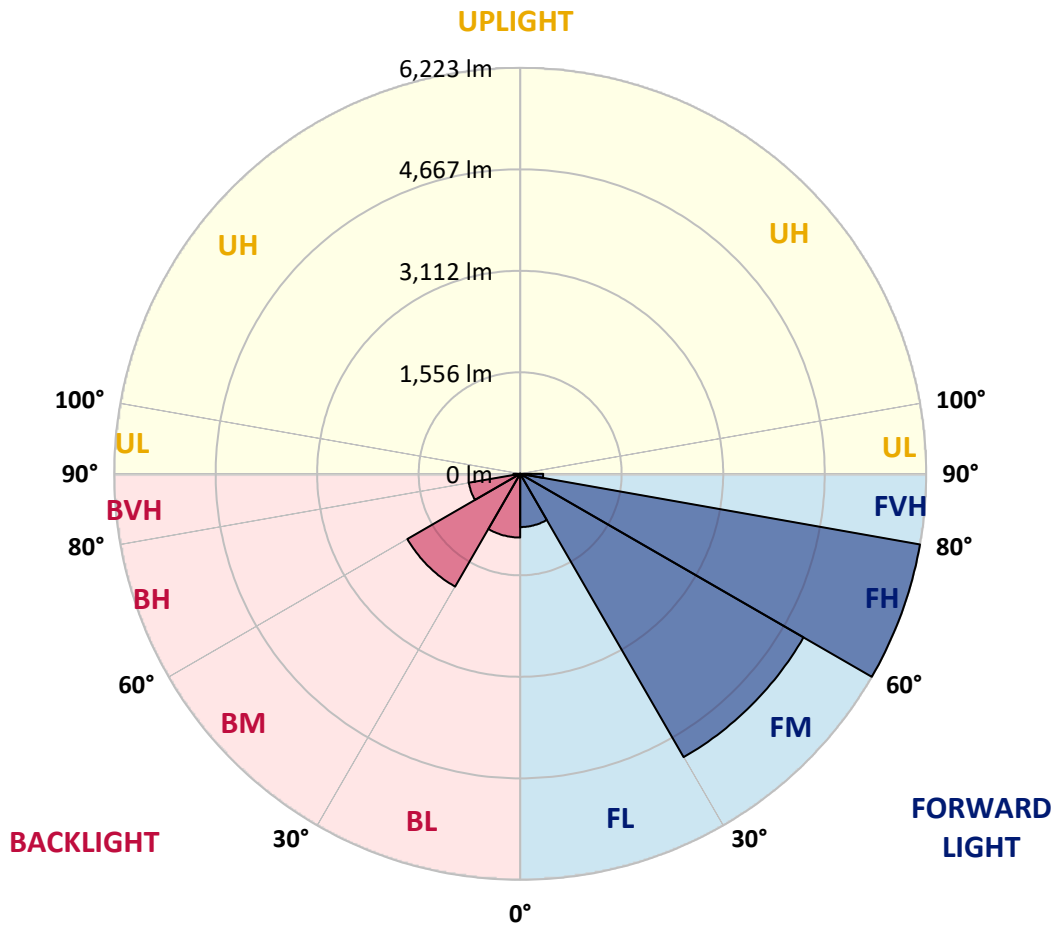
REPORT NUMBER: P883581  
 CATALOG NUMBER: NAV-SB4A-727-U-T4FT

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	816.6	5.0			
FM (30°-60°)	5014.3	30.8			
FH (60°-80°)	6223.1	38.2			G3/7500
FVH (80°-90°)	354.1	2.2			G3/500
BL (0°-30°)	976.5	6.0	B2/1000		
BM (30°-60°)	1996.6	12.3	B2/2500		
BH (60°-80°)	798.9	4.9	B2/1000		G2/1000
BVH (80°-90°)	102.9	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type IV Short



REPORT NUMBER: P883581  
 CATALOG NUMBER: NAV-SB4A-727-U-T4FT

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	2169.8	2169.8	2169.8	2169.8	2169.8	2169.8	2169.8	2169.8	2169.8	2169.8	2169.8
2.5°	2000.8	2013.1	2018.4	2015.8	2029.0	2027.2	2045.7	2068.6	2100.3	2131.1	2176.0
5°	1846.8	1860.0	1871.4	1882.0	1907.5	1915.4	1944.5	1988.5	2046.6	2105.6	2179.5
7.5°	1703.3	1714.7	1732.3	1751.7	1794.8	1802.8	1851.2	1919.8	2000.8	2087.1	2189.2
10°	1586.2	1597.7	1616.1	1638.1	1691.8	1701.5	1763.1	1854.7	1960.3	2069.5	2199.7
12.5°	1536.0	1539.6	1550.1	1572.1	1618.8	1624.9	1692.7	1797.5	1920.7	2056.3	2215.6
15°	1533.4	1540.4	1541.3	1552.8	1591.5	1594.1	1656.6	1760.5	1896.1	2053.6	2239.4
17.5°	1559.8	1565.1	1557.2	1564.2	1596.8	1601.2	1650.5	1742.9	1888.1	2065.1	2279.9
20°	1630.2	1634.6	1610.9	1601.2	1624.9	1628.5	1676.9	1754.3	1896.1	2088.8	2335.3
22.5°	1779.9	1782.5	1724.4	1684.8	1686.6	1688.3	1730.6	1801.0	1926.9	2132.0	2405.7
25°	2013.1	2011.4	1918.9	1842.4	1798.4	1788.7	1816.8	1876.7	1978.8	2189.2	2496.4
27.5°	2286.0	2272.8	2180.4	2066.0	1970.0	1955.9	1949.8	1975.3	2052.7	2264.9	2607.3
30°	2594.1	2581.8	2482.3	2332.7	2199.7	2176.9	2118.8	2105.6	2162.8	2367.9	2761.3
32.5°	2932.1	2924.2	2805.4	2624.0	2446.2	2419.8	2322.1	2286.9	2331.8	2523.7	2976.1
35°	3215.6	3208.5	3109.9	2923.3	2705.9	2673.3	2573.9	2534.2	2557.1	2723.5	3256.9
37.5°	3471.7	3468.2	3383.7	3236.7	3012.2	2972.6	2860.8	2847.6	2843.2	2986.7	3597.6
40°	3709.4	3700.6	3612.6	3535.1	3368.7	3332.6	3234.0	3222.6	3189.2	3310.6	3983.1
42.5°	3972.6	3949.7	3822.1	3786.0	3741.1	3711.1	3652.2	3653.9	3580.0	3675.9	4391.6
45°	4187.4	4174.2	4043.0	4021.9	4070.3	4058.0	4109.0	4122.2	3978.7	4058.8	4815.9
47.5°	4418.0	4405.7	4294.7	4279.8	4410.9	4414.5	4594.9	4599.3	4367.8	4456.7	5241.0
50°	4702.3	4684.7	4574.7	4593.2	4740.2	4753.4	5083.5	5053.5	4726.1	4860.7	5662.7
52.5°	4889.8	4900.4	4876.6	4906.5	5107.2	5119.5	5564.1	5487.5	5080.8	5259.5	6076.4
55°	5028.0	5049.1	5123.1	5191.7	5494.5	5506.9	6017.4	5900.3	5374.8	5629.2	6465.4
57.5°	5205.8	5175.9	5314.1	5447.9	5862.5	5895.0	6458.4	6298.2	5635.4	5947.9	6732.2
60°	5461.1	5440.0	5547.3	5745.4	6274.4	6326.4	6924.9	6656.5	5826.4	6200.5	6784.1
62.5°	5978.7	5925.9	5942.6	6117.7	6793.8	6862.4	7451.3	6969.0	5921.5	6299.1	6505.9
65°	6752.4	6661.7	6577.2	6698.7	7525.3	7593.0	8045.5	7214.5	5886.2	6108.1	5767.4
67.5°	7726.8	7637.1	7533.2	7647.6	8602.7	8656.4	8778.7	7352.7	5609.0	5372.2	4462.0
70°	8530.5	8497.1	8621.2	9092.1	10323.6	10325.3	9718.9	7238.3	4849.3	3808.8	2581.8
72.5°	8424.0	8403.8	9057.8	10513.7	12492.5	12445.9	10608.8	6372.1	3266.6	1718.3	967.4
75°	6910.9	7042.0	8055.2	10488.2	13271.6	13265.4	10063.9	4050.9	1351.2	712.1	500.0
77.5°	3705.9	3913.6	5229.6	7743.6	10360.6	10516.4	7075.5	1417.2	580.1	456.0	345.9
80°	1208.6	1389.9	2084.4	3942.6	6732.2	6703.1	3032.5	556.3	397.0	323.1	239.4
82.5°	513.2	534.3	931.3	1861.7	3455.0	3401.3	965.6	319.5	279.0	220.9	147.9
85°	200.7	224.5	411.1	860.9	1496.4	1463.9	348.6	158.4	178.7	144.4	88.0
87.5°	66.0	80.1	147.0	294.9	465.7	448.9	85.4	54.6	77.5	66.0	31.7
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: P883581  
 CATALOG NUMBER: NAV-SB4A-727-U-T4FT

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2169.8	2169.8	2169.8	2169.8	2169.8	2169.8	2169.8	2169.8	2169.8	2169.8	2169.8
2.5°	2188.3	2202.4	2219.1	2243.8	2264.9	2282.5	2301.0	2312.4	2316.8	2330.0	2329.1
5°	2204.1	2235.0	2276.3	2316.8	2356.4	2380.2	2401.3	2411.9	2421.6	2428.6	2430.4
7.5°	2230.6	2270.2	2335.3	2388.1	2421.6	2440.9	2455.0	2451.5	2455.0	2456.8	2459.4
10°	2253.4	2308.9	2386.4	2436.5	2462.1	2462.9	2459.4	2447.1	2440.9	2441.8	2443.6
12.5°	2280.7	2342.3	2426.0	2468.2	2475.3	2455.9	2440.9	2419.8	2411.9	2408.4	2406.6
15°	2317.7	2388.1	2469.1	2484.9	2467.3	2442.7	2417.2	2382.8	2365.2	2351.2	2355.6
17.5°	2362.6	2440.1	2502.6	2491.1	2453.3	2412.8	2371.4	2319.5	2283.4	2268.4	2269.3
20°	2425.1	2494.6	2528.1	2477.9	2420.7	2359.1	2288.7	2225.3	2191.8	2176.9	2175.1
22.5°	2500.8	2567.7	2552.7	2455.0	2374.0	2275.5	2187.4	2140.8	2124.0	2113.5	2115.2
25°	2591.5	2648.7	2570.3	2421.6	2297.5	2164.5	2096.8	2081.8	2073.9	2066.0	2066.0
27.5°	2709.4	2740.2	2583.5	2372.3	2177.7	2046.6	2021.9	2024.6	2021.9	2008.7	2011.4
30°	2865.2	2859.1	2595.9	2292.2	2040.4	1940.1	1941.8	1953.3	1955.0	1946.2	1950.6
32.5°	3070.3	3007.8	2602.0	2188.3	1909.3	1846.8	1848.5	1860.9	1869.7	1854.7	1861.7
35°	3318.5	3181.2	2592.3	2058.0	1808.0	1757.9	1744.7	1748.2	1750.8	1736.7	1746.4
37.5°	3608.2	3375.8	2549.2	1913.7	1724.4	1670.7	1642.5	1618.8	1604.7	1591.5	1600.3
40°	3925.9	3587.9	2470.0	1772.8	1631.1	1578.3	1536.0	1491.1	1443.6	1426.0	1433.9
42.5°	4258.7	3806.2	2374.0	1638.1	1523.7	1480.6	1435.7	1370.6	1299.3	1263.2	1267.6
45°	4603.7	4029.8	2279.9	1505.2	1413.7	1395.2	1343.3	1264.9	1187.5	1141.7	1138.2
47.5°	4941.7	4241.1	2141.7	1371.4	1310.7	1330.9	1290.4	1218.3	1132.0	1059.8	1051.9
50°	5264.8	4439.1	1915.4	1235.9	1227.1	1311.6	1272.8	1169.0	1070.4	978.0	970.0
52.5°	5585.2	4599.3	1625.8	1112.6	1182.2	1306.3	1250.0	1135.5	1014.9	918.1	907.5
55°	5857.2	4682.1	1346.8	1007.0	1117.0	1261.4	1222.7	1095.9	936.6	833.6	824.8
57.5°	6012.1	4615.2	1114.4	903.1	1027.3	1187.5	1176.0	1011.4	843.3	764.1	753.5
60°	5945.2	4344.0	924.3	812.5	941.9	1107.4	1095.0	927.8	772.0	697.2	686.6
62.5°	5576.4	3827.3	773.7	733.2	864.4	1025.5	1014.0	863.5	717.4	645.2	633.8
65°	4833.5	3113.4	656.7	667.2	786.1	926.9	943.6	809.8	674.3	603.9	592.4
67.5°	3686.5	2255.2	565.1	610.0	709.5	830.1	878.5	771.1	638.2	571.3	560.7
70°	2101.2	1280.8	487.7	554.6	641.7	740.3	828.3	740.3	599.5	544.0	537.0
72.5°	796.6	588.0	421.6	499.1	576.6	664.6	772.9	691.9	554.6	513.2	506.1
75°	425.2	358.3	354.7	434.0	501.7	590.6	703.3	644.3	521.1	542.2	559.8
77.5°	289.6	253.5	296.6	371.5	419.9	508.8	629.4	572.2	451.6	449.8	414.6
80°	200.7	179.6	241.2	299.3	324.8	427.8	549.3	491.2	367.9	343.3	328.3
82.5°	120.6	117.1	180.5	223.6	229.7	330.1	455.1	412.0	301.0	262.3	264.1
85°	66.0	69.5	115.3	131.2	133.8	230.6	356.5	318.7	231.5	194.5	196.3
87.5°	18.5	23.8	42.3	51.9	64.3	119.7	212.1	189.3	116.2	81.0	81.0
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)