

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: P883067

Luminaire Tested: **NAV-SB3B-727-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883067
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-727-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15167 lumens
Efficiency: N/A
Efficacy: 138.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

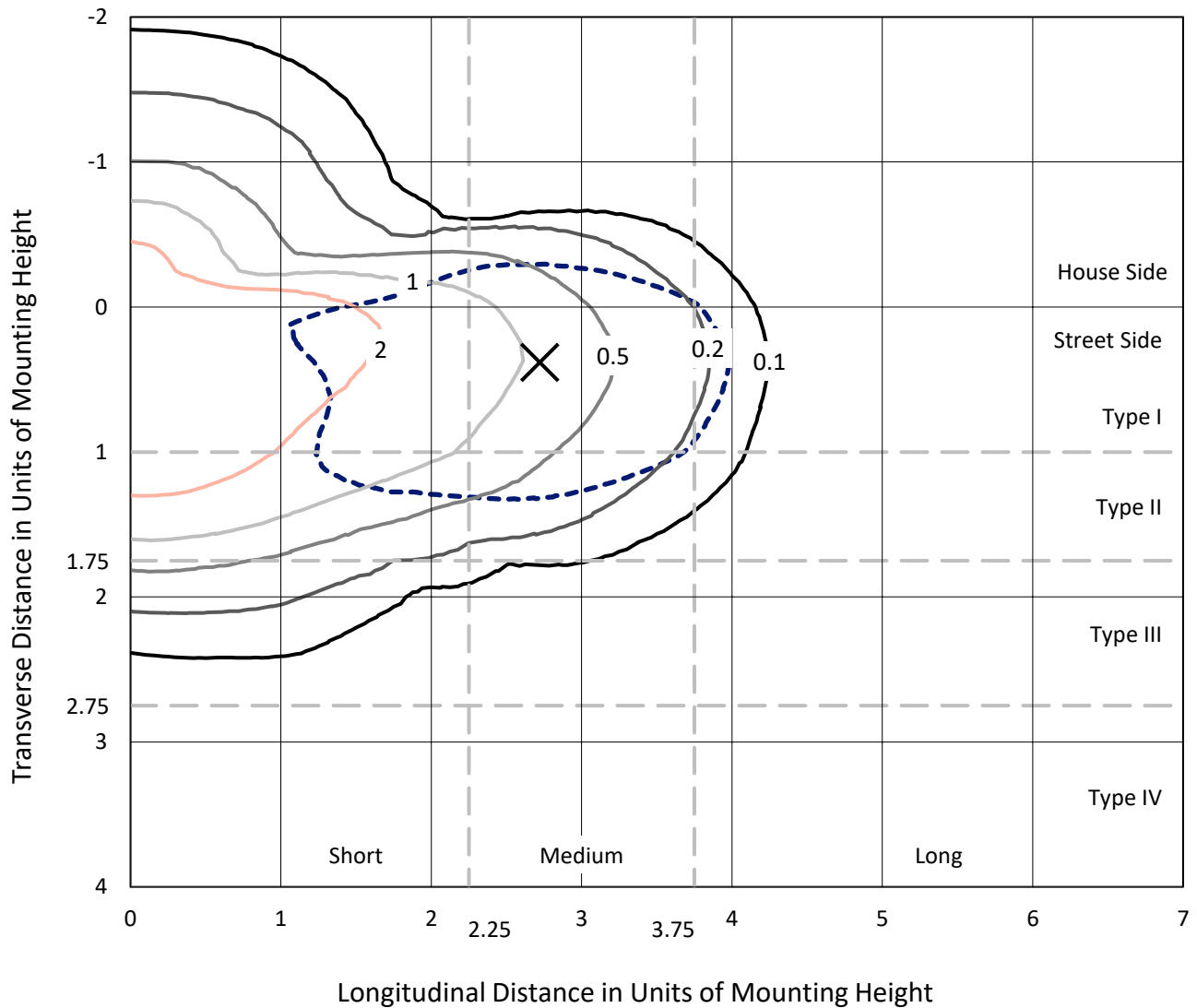
Input Watts (W): 109.2
Input Voltage (V): 120.0
Input Current (Ain): 0.919
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

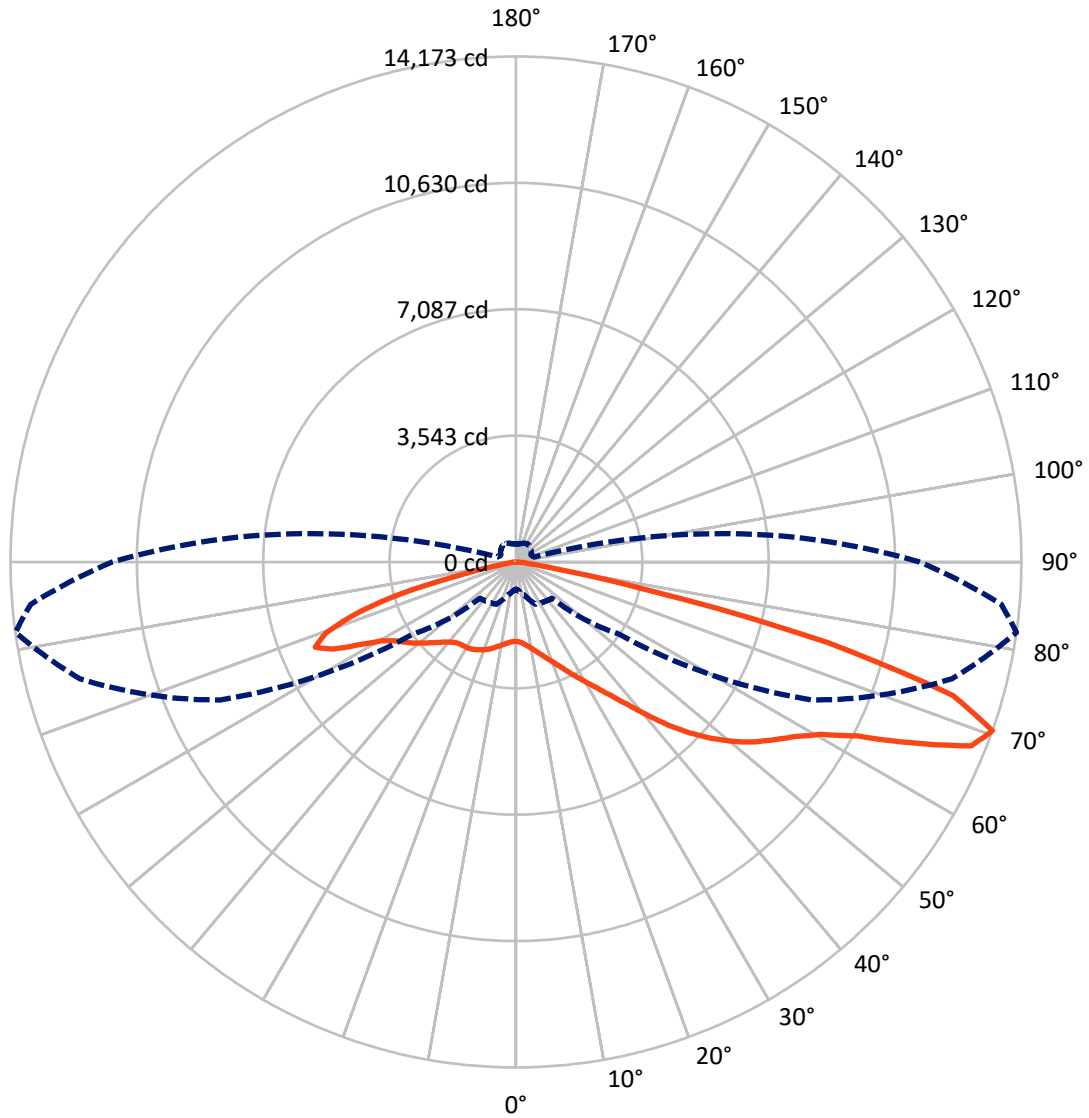
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3739.0	0.0	3739.0
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	11428.0	0.0	11428.0
	% Fixture	75.3	0.0	75.3
Total	Lumens	15167.0	0.0	15167.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	210.0	1.4
10°-20°	603.2	4.0
20°-30°	1009.1	6.7
30°-40°	1576.5	10.4
40°-50°	2510.7	16.6
50°-60°	3494.0	23.0
60°-70°	3654.9	24.1
70°-80°	1910.2	12.6
80°-90°	198.4	1.3
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°	15167.0	100.0
0°-180°	15167.0	100.0

Coefficient of Utilization



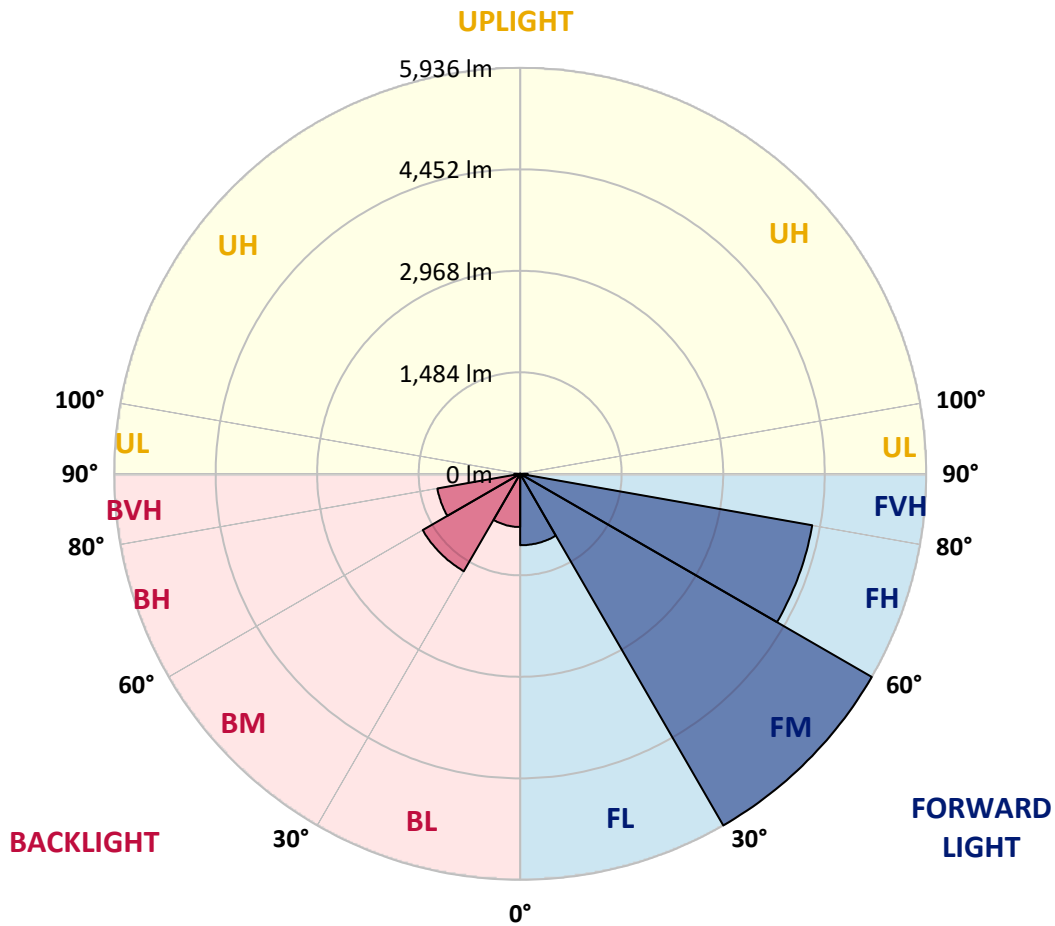
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1044.4	6.9			
FM (30°-60°)	5936.2	39.1			
FH (60°-80°)	4336.3	28.6			G2/5000
FVH (80°-90°)	111.0	0.7			G2/225
BL (0°-30°)	777.9	5.1	B2/1000		
BM (30°-60°)	1645.0	10.8	B2/2500		
BH (60°-80°)	1228.8	8.1	B3/2500		G3/2500
BVH (80°-90°)	87.3	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2223.7	2223.7	2223.7	2223.7	2223.7	2223.7	2223.7	2223.7	2223.7	2223.7	2223.7
2.5°	2276.8	2289.7	2285.6	2281.6	2281.6	2276.0	2275.2	2267.1	2260.7	2250.2	2247.8
5°	2305.8	2319.4	2317.8	2321.1	2331.5	2333.9	2336.3	2331.5	2318.6	2305.8	2300.1
7.5°	2280.0	2295.3	2300.1	2319.4	2351.6	2380.6	2402.3	2411.2	2399.1	2380.6	2371.8
10°	2193.1	2210.0	2226.9	2272.8	2329.9	2398.3	2456.3	2490.9	2488.5	2470.7	2455.5
12.5°	2016.8	2034.5	2070.8	2160.1	2264.7	2385.4	2493.3	2565.7	2590.7	2577.8	2551.2
15°	1876.0	1891.3	1918.7	2010.4	2146.4	2329.9	2507.0	2647.8	2711.4	2704.1	2671.9
17.5°	1872.0	1878.4	1895.3	1938.8	2043.4	2243.0	2492.5	2728.3	2849.8	2849.0	2808.8
20°	1942.8	1945.2	1954.9	1963.7	2023.3	2177.0	2455.5	2795.1	3005.1	3005.1	2961.7
22.5°	2041.0	2039.4	2049.0	2041.0	2070.0	2171.4	2432.1	2853.8	3178.2	3191.0	3136.3
25°	2188.3	2180.2	2177.8	2159.3	2164.9	2223.7	2457.9	2920.6	3383.4	3410.0	3341.5
27.5°	2384.6	2371.8	2362.9	2320.2	2305.8	2331.5	2536.7	3001.1	3612.0	3657.8	3570.9
30°	2640.6	2617.2	2604.3	2530.3	2478.0	2482.0	2655.9	3108.2	3851.0	3925.0	3814.8
32.5°	2989.8	2953.6	2919.0	2797.5	2701.7	2670.3	2809.6	3256.2	4110.1	4228.4	4086.8
35°	3381.0	3352.0	3315.0	3127.5	2980.2	2907.8	3017.2	3463.1	4413.5	4601.1	4416.8
37.5°	3757.6	3732.7	3750.4	3497.7	3307.7	3202.3	3289.2	3740.7	4787.8	5064.6	4830.4
40°	4147.2	4127.8	4130.3	3888.8	3667.5	3549.2	3619.2	4089.2	5216.7	5615.9	5327.8
42.5°	4570.5	4556.0	4507.7	4293.6	4044.9	3934.7	3999.1	4491.6	5677.1	6243.7	5873.5
45°	5044.5	5035.7	4990.6	4745.1	4460.2	4336.3	4423.2	4935.9	6139.8	6834.4	6421.5
47.5°	5454.2	5461.4	5455.8	5248.9	4953.6	4771.7	4875.5	5399.4	6570.4	7389.7	6947.1
50°	5651.3	5689.2	5744.7	5680.3	5496.8	5311.7	5331.8	5846.9	6980.9	7910.4	7450.9
52.5°	5548.3	5619.9	5771.2	5874.3	5945.1	5906.5	5852.5	6291.1	7367.2	8380.4	7927.3
55°	5164.4	5265.0	5516.1	5764.8	6126.2	6407.0	6477.9	6783.7	7743.8	8794.1	8378.0
57.5°	4465.0	4628.4	4853.8	5356.8	5965.2	6649.3	7207.0	7467.0	8143.0	9235.9	8849.6
60°	3265.9	3484.8	3764.9	4513.3	5401.8	6519.7	7827.5	8516.4	8710.4	9808.1	9463.7
62.5°	2090.1	2225.3	2482.8	3187.8	4209.1	5855.7	8017.5	9828.3	9672.1	10746.5	10384.4
65°	1430.9	1517.9	1753.7	2149.6	2721.0	4358.8	7508.8	10811.7	11199.6	12233.8	11958.6
67.5°	1039.8	1105.8	1307.0	1653.9	1773.0	2579.4	5826.8	10766.7	12684.5	13766.2	13338.0
70°	758.1	804.8	973.8	1307.0	1364.1	1435.0	3529.9	9152.2	12652.3	14173.4	13660.7
72.5°	561.8	593.9	707.4	1014.1	1104.2	969.0	1747.2	6651.7	10872.1	12819.7	12408.5
75°	406.4	430.6	514.3	775.8	883.7	738.0	871.6	3887.2	7583.7	9017.8	9090.3
77.5°	310.7	329.2	383.9	568.2	707.4	553.7	540.8	1788.3	3595.9	3613.6	3816.4
80°	249.5	261.6	291.3	400.0	542.4	414.5	352.5	721.9	1136.4	961.7	1009.2
82.5°	183.5	203.6	246.3	280.9	387.9	285.7	214.9	364.6	432.2	371.8	375.0
85°	104.6	118.3	148.9	201.2	247.9	174.6	123.1	161.8	201.2	165.0	147.3
87.5°	37.0	48.3	52.3	78.9	107.8	72.4	47.5	46.7	66.0	49.1	41.0
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°	2223.7	2223.7	2223.7	2223.7	2223.7	2223.7	2223.7	2223.7	2223.7	2223.7	2223.7
2.5°	2239.8	2235.7	2219.6	2197.9	2175.4	2153.7	2146.4	2131.1	2120.7	2115.0	2121.5
5°	2284.8	2272.0	2234.1	2185.8	2135.1	2080.4	2041.8	2006.4	1980.6	1956.5	1966.1
7.5°	2349.2	2326.7	2261.5	2177.0	2086.9	1995.9	1928.3	1876.8	1842.2	1819.7	1824.5
10°	2424.1	2389.5	2289.7	2163.3	2024.1	1893.7	1814.0	1769.8	1748.0	1736.0	1739.2
12.5°	2510.2	2461.1	2318.6	2131.9	1928.3	1779.4	1724.7	1711.8	1712.6	1713.4	1715.0
15°	2616.4	2548.0	2342.0	2063.5	1803.6	1691.7	1682.0	1703.0	1724.7	1735.2	1734.4
17.5°	2736.3	2639.8	2346.0	1950.8	1681.2	1635.4	1665.9	1711.0	1744.0	1758.5	1761.7
20°	2865.1	2733.1	2317.0	1791.5	1580.6	1589.5	1644.2	1702.2	1738.4	1756.9	1761.7
22.5°	3012.4	2832.9	2247.8	1624.1	1498.5	1539.6	1604.0	1660.3	1698.1	1716.6	1721.5
25°	3180.6	2944.8	2139.2	1483.3	1427.7	1483.3	1547.6	1594.3	1624.9	1641.8	1646.6
27.5°	3367.3	3061.5	1994.3	1371.4	1365.8	1425.3	1478.4	1514.6	1530.7	1543.6	1548.4
30°	3554.8	3167.7	1818.9	1286.9	1311.8	1368.2	1406.0	1422.1	1426.9	1429.3	1435.0
32.5°	3757.6	3259.5	1634.6	1216.9	1260.3	1312.6	1335.2	1342.4	1319.9	1304.6	1309.4
35°	4003.1	3357.6	1454.3	1161.3	1209.6	1254.7	1261.9	1255.5	1228.9	1197.5	1199.2
37.5°	4306.5	3480.0	1310.2	1121.9	1162.1	1191.9	1183.1	1181.5	1183.9	1146.8	1149.3
40°	4678.3	3639.3	1204.8	1091.3	1123.5	1129.9	1105.0	1118.7	1130.7	1074.4	1076.0
42.5°	5091.2	3831.7	1138.0	1070.4	1091.3	1076.0	1037.4	1052.7	1051.1	977.0	976.2
45°	5512.1	4040.9	1114.7	1055.1	1061.5	1031.0	988.3	992.3	958.5	891.7	894.1
47.5°	5930.6	4265.5	1129.1	1042.2	1024.5	989.9	956.9	939.2	889.3	839.4	839.4
50°	6341.0	4501.3	1182.3	1016.5	973.8	953.7	929.5	898.2	845.0	802.4	799.2
52.5°	6721.7	4738.7	1241.8	973.8	910.2	922.3	907.0	870.8	818.5	775.0	775.8
55°	7082.3	4976.1	1265.2	915.1	850.7	894.9	886.1	819.3	756.5	721.1	717.9
57.5°	7475.0	5261.8	1239.4	840.2	802.4	863.6	829.8	755.7	719.5	692.9	690.5
60°	8019.1	5710.1	1183.9	747.7	756.5	816.9	758.9	728.3	688.9	659.1	657.5
62.5°	8922.9	6546.3	1094.5	655.9	702.6	747.7	725.1	694.5	654.3	625.3	625.3
65°	10258.8	7708.4	926.3	584.3	642.2	680.1	688.9	658.3	616.5	585.9	587.5
67.5°	11385.6	8437.6	701.0	524.7	580.3	625.3	650.3	620.5	576.2	546.5	547.3
70°	11323.6	7908.0	535.2	466.0	525.5	571.4	603.6	580.3	532.8	504.6	507.0
72.5°	10057.6	6615.5	433.0	406.4	470.0	515.1	553.7	536.0	487.7	460.3	460.3
75°	7388.9	4696.0	346.1	346.1	400.8	456.3	499.0	487.7	443.4	424.1	418.5
77.5°	3114.6	1970.2	271.2	287.3	333.2	391.9	445.1	449.1	410.4	434.6	394.4
80°	828.1	543.2	206.8	226.1	261.6	323.5	387.1	385.5	343.7	321.1	298.6
82.5°	315.5	214.1	147.3	159.4	189.1	247.9	306.6	316.3	274.4	237.4	237.4
85°	121.5	91.7	90.9	95.8	110.3	164.2	231.8	239.8	206.8	175.4	181.1
87.5°	31.4	27.4	33.8	32.2	50.7	87.7	132.8	137.6	126.4	73.2	104.6
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)