

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: P882557

Luminaire Tested: **NAV-SB2C-727-U-T2**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882557  
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-SB2C-727-U-T2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

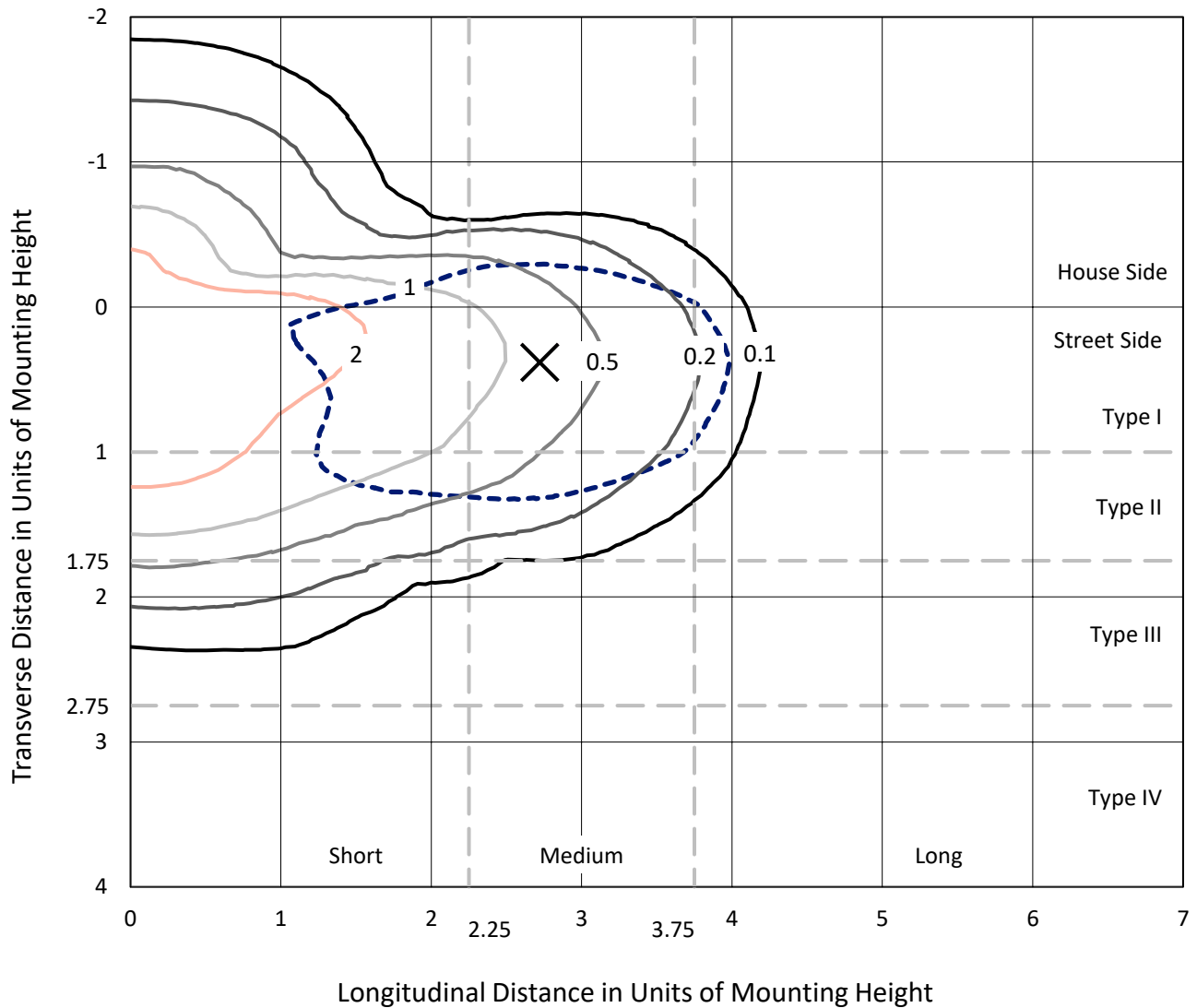
Lumens per Lamp: N/A  
Luminaire Lumens: 13706 lumens  
Efficiency: N/A  
Efficacy: 135.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 100.9  
Input Voltage (V): 120.0  
Input Current (Ain): 0.857  
Voltage Rise (V): NR  
Power Factor: 0.994  
Total Harmonic Distortion (THDi): 9.472  
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

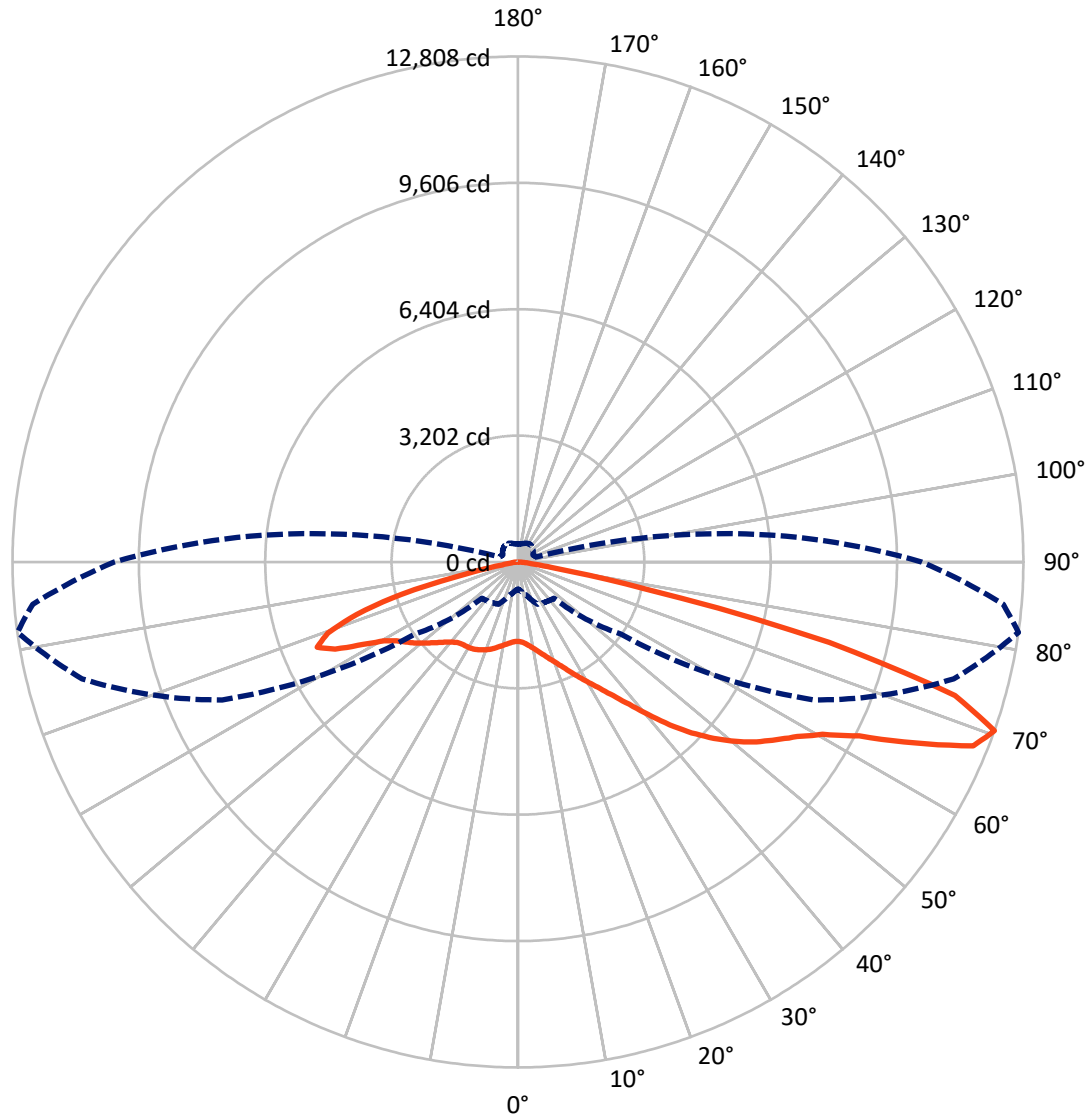
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 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
<b>House Side</b>	Lumens	3378.9	0.0	3378.9
	% Fixture	24.7	0.0	24.7
<b>Street Side</b>	Lumens	10327.1	0.0	10327.1
	% Fixture	75.3	0.0	75.3
<b>Total</b>	Lumens	13706.0	0.0	13706.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	189.7	1.4
10°-20°	545.1	4.0
20°-30°	911.9	6.7
30°-40°	1424.6	10.4
40°-50°	2268.9	16.6
50°-60°	3157.4	23.0
60°-70°	3302.8	24.1
70°-80°	1726.2	12.6
80°-90°	179.2	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°	13706.0	100.0
0°-180°	13706.0	100.0

**Coefficient of Utilization**



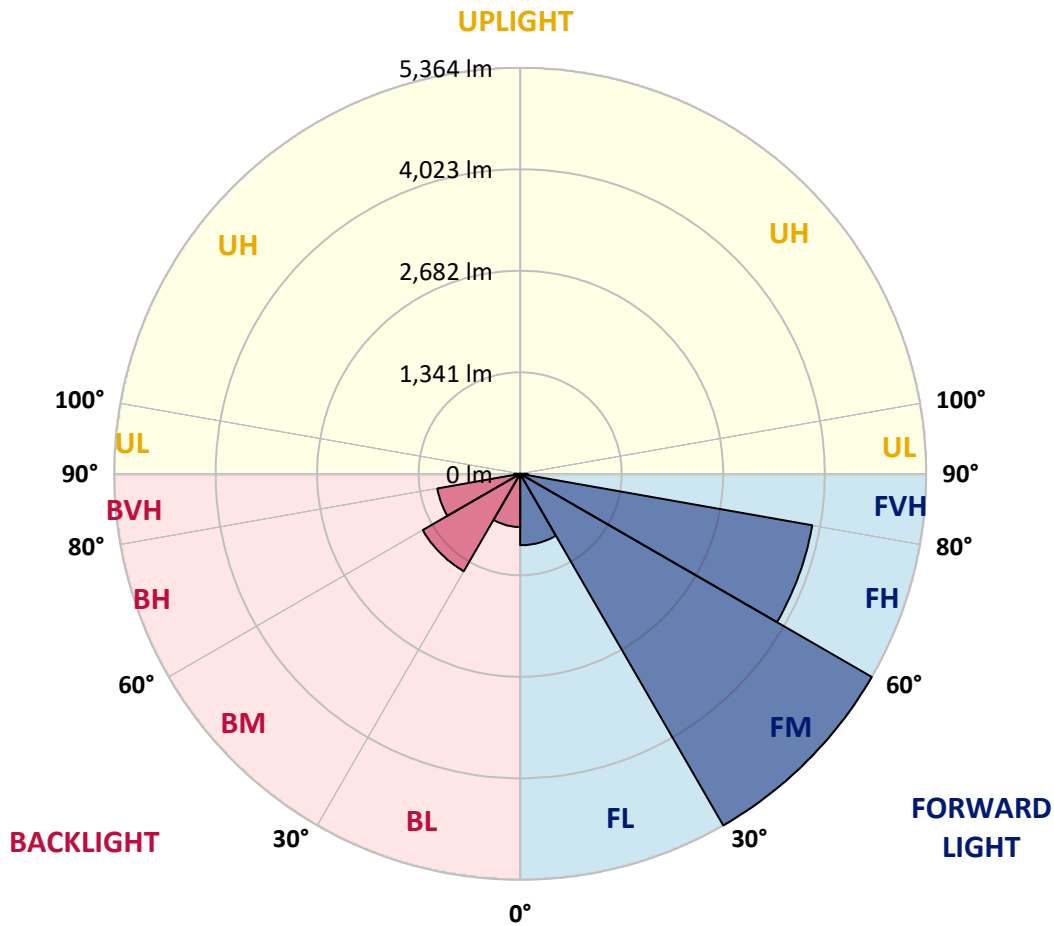
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	943.8	6.9			
FM (30°-60°)	5364.4	39.1			
FH (60°-80°)	3918.6	28.6			G2/5000
FVH (80°-90°)	100.3	0.7			G2/225
BL (0°-30°)	702.9	5.1	B2/1000		
BM (30°-60°)	1486.6	10.8	B2/2500		
BH (60°-80°)	1110.5	8.1	B3/2500		G3/2500
BVH (80°-90°)	78.9	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°	2009.5	2009.5	2009.5	2009.5	2009.5	2009.5	2009.5	2009.5	2009.5	2009.5	2009.5
2.5°	2057.5	2069.1	2065.5	2061.8	2061.8	2056.7	2056.0	2048.7	2042.9	2033.5	2031.3
5°	2083.7	2096.0	2094.6	2097.5	2106.9	2109.1	2111.3	2106.9	2095.3	2083.7	2078.6
7.5°	2060.4	2074.2	2078.6	2096.0	2125.1	2151.3	2170.9	2178.9	2168.0	2151.3	2143.3
10°	1981.8	1997.1	2012.4	2053.8	2105.5	2167.3	2219.7	2250.9	2248.7	2232.7	2218.9
12.5°	1822.6	1838.6	1871.3	1952.0	2046.6	2155.7	2253.1	2318.6	2341.1	2329.5	2305.5
15°	1695.3	1709.1	1733.8	1816.7	1939.7	2105.5	2265.5	2392.7	2450.2	2443.7	2414.6
17.5°	1691.7	1697.5	1712.7	1752.0	1846.6	2026.9	2252.4	2465.5	2575.3	2574.6	2538.2
20°	1755.7	1757.8	1766.6	1774.6	1828.4	1967.3	2218.9	2525.8	2715.7	2715.7	2676.4
22.5°	1844.4	1842.9	1851.7	1844.4	1870.6	1962.2	2197.8	2578.9	2872.0	2883.7	2834.2
25°	1977.5	1970.2	1968.0	1951.3	1956.4	2009.5	2221.1	2639.3	3057.5	3081.5	3019.7
27.5°	2154.9	2143.3	2135.3	2096.7	2083.7	2106.9	2292.4	2712.0	3264.0	3305.5	3226.9
30°	2386.2	2365.1	2353.5	2286.6	2239.3	2242.9	2400.0	2808.8	3480.0	3546.9	3447.3
32.5°	2701.8	2669.1	2637.8	2528.0	2441.5	2413.1	2538.9	2942.6	3714.2	3821.1	3693.1
35°	3055.3	3029.1	2995.7	2826.2	2693.1	2627.7	2726.6	3129.5	3988.4	4157.9	3991.3
37.5°	3395.7	3373.1	3389.1	3160.8	2989.1	2893.8	2972.4	3380.4	4326.6	4576.8	4365.1
40°	3747.7	3730.2	3732.4	3514.2	3314.2	3207.3	3270.6	3695.3	4714.2	5075.0	4814.6
42.5°	4130.2	4117.1	4073.5	3880.0	3655.3	3555.7	3613.8	4058.9	5130.2	5642.2	5307.7
45°	4558.6	4550.6	4509.9	4288.0	4030.6	3918.6	3997.1	4460.4	5548.4	6176.1	5803.0
47.5°	4928.8	4935.3	4930.2	4743.3	4476.4	4312.0	4405.9	4879.3	5937.5	6677.9	6277.9
50°	5107.0	5141.1	5191.3	5133.1	4967.3	4800.0	4818.2	5283.7	6308.4	7148.4	6733.1
52.5°	5013.9	5078.6	5215.3	5308.4	5372.4	5337.5	5288.8	5685.1	6657.5	7573.2	7163.7
55°	4666.9	4757.9	4984.8	5209.5	5536.0	5789.9	5853.9	6130.2	6997.9	7947.0	7571.0
57.5°	4034.9	4182.6	4386.2	4840.8	5390.6	6008.8	6512.8	6747.7	7358.6	8346.3	7997.2
60°	2951.3	3149.1	3402.2	4078.6	4881.5	5891.7	7073.5	7696.1	7871.3	8863.3	8552.1
62.5°	1888.7	2010.9	2243.7	2880.8	3803.7	5291.7	7245.2	8881.5	8740.4	9711.4	9384.1
65°	1293.1	1371.6	1584.7	1942.6	2458.9	3938.9	6785.5	9770.3	10120.8	11055.4	10806.6
67.5°	939.6	999.3	1181.1	1494.6	1602.2	2330.9	5265.5	9729.5	11462.6	12440.1	12053.2
70°	685.1	727.3	880.0	1181.1	1232.7	1296.7	3189.8	8270.6	11433.5	12808.1	12344.8
72.5°	507.6	536.7	639.3	916.4	997.8	875.6	1578.9	6011.0	9824.8	11584.8	11213.2
75°	367.3	389.1	464.7	701.1	798.6	666.9	787.6	3512.8	6853.1	8149.2	8214.6
77.5°	280.7	297.5	346.9	513.5	639.3	500.4	488.7	1616.0	3249.5	3265.5	3448.8
80°	225.5	236.4	263.3	361.5	490.2	374.5	318.5	652.4	1026.9	869.1	912.0
82.5°	165.8	184.0	222.5	253.8	350.5	258.2	194.2	329.5	390.5	336.0	338.9
85°	94.5	106.9	134.5	181.8	224.0	157.8	111.3	146.2	181.8	149.1	133.1
87.5°	33.5	43.6	47.3	71.3	97.5	65.5	42.9	42.2	59.6	44.4	37.1
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°	2009.5	2009.5	2009.5	2009.5	2009.5	2009.5	2009.5	2009.5	2009.5	2009.5	2009.5
2.5°	2024.0	2020.4	2005.8	1986.2	1965.8	1946.2	1939.7	1925.8	1916.4	1911.3	1917.1
5°	2064.7	2053.1	2018.9	1975.3	1929.5	1880.0	1845.1	1813.1	1789.8	1768.0	1776.7
7.5°	2122.9	2102.6	2043.7	1967.3	1885.8	1803.7	1742.6	1696.0	1664.7	1644.4	1648.7
10°	2190.6	2159.3	2069.1	1954.9	1829.1	1711.3	1639.3	1599.3	1579.6	1568.7	1571.6
12.5°	2268.4	2224.0	2095.3	1926.6	1742.6	1608.0	1558.6	1546.9	1547.6	1548.4	1549.8
15°	2364.4	2302.6	2116.4	1864.7	1629.8	1528.7	1520.0	1538.9	1558.6	1568.0	1567.3
17.5°	2472.7	2385.5	2120.0	1762.9	1519.3	1477.8	1505.5	1546.2	1576.0	1589.1	1592.0
20°	2589.1	2469.8	2093.8	1618.9	1428.4	1436.4	1485.8	1538.2	1570.9	1587.6	1592.0
22.5°	2722.2	2560.0	2031.3	1467.6	1354.2	1391.3	1449.5	1500.4	1534.6	1551.3	1555.6
25°	2874.2	2661.1	1933.1	1340.4	1290.2	1340.4	1398.6	1440.7	1468.4	1483.6	1488.0
27.5°	3042.9	2766.6	1802.2	1239.3	1234.2	1288.0	1336.0	1368.7	1383.3	1394.9	1399.3
30°	3212.4	2862.6	1643.6	1162.9	1185.5	1236.4	1270.6	1285.1	1289.5	1291.6	1296.7
32.5°	3395.7	2945.5	1477.1	1099.6	1138.9	1186.2	1206.6	1213.1	1192.7	1178.9	1183.3
35°	3617.5	3034.2	1314.2	1049.5	1093.1	1133.8	1140.4	1134.6	1110.6	1082.2	1083.6
37.5°	3891.7	3144.8	1184.0	1013.8	1050.2	1077.1	1069.1	1067.6	1069.8	1036.4	1038.6
40°	4227.7	3288.8	1088.7	986.2	1015.3	1021.1	998.6	1010.9	1021.8	970.9	972.4
42.5°	4600.8	3462.6	1028.4	967.3	986.2	972.4	937.5	951.3	949.8	882.9	882.2
45°	4981.1	3651.7	1007.3	953.5	959.3	931.6	893.1	896.7	866.2	805.8	808.0
47.5°	5359.3	3854.6	1020.4	941.8	925.8	894.6	864.7	848.7	803.6	758.6	758.6
50°	5730.2	4067.7	1068.4	918.6	880.0	861.8	840.0	811.6	763.6	725.1	722.2
52.5°	6074.2	4282.2	1122.2	880.0	822.6	833.5	819.6	786.9	739.6	700.4	701.1
55°	6400.1	4496.8	1143.3	826.9	768.7	808.7	800.7	740.4	683.6	651.6	648.7
57.5°	6755.0	4754.9	1120.0	759.3	725.1	780.4	749.8	682.9	650.2	626.2	624.0
60°	7246.6	5160.0	1069.8	675.6	683.6	738.2	685.8	658.2	622.6	595.6	594.2
62.5°	8063.3	5915.7	989.1	592.7	634.9	675.6	655.3	627.6	591.3	565.1	565.1
65°	9270.6	6965.9	837.1	528.0	580.4	614.6	622.6	594.9	557.1	529.5	530.9
67.5°	10288.8	7624.8	633.5	474.2	524.4	565.1	587.6	560.7	520.7	493.8	494.5
70°	10232.8	7146.2	483.6	421.1	474.9	516.4	545.5	524.4	481.5	456.0	458.2
72.5°	9088.8	5978.2	391.3	367.3	424.7	465.5	500.4	484.4	440.7	416.0	416.0
75°	6677.1	4243.7	312.7	312.7	362.2	412.4	450.9	440.7	400.7	383.3	378.2
77.5°	2814.6	1780.4	245.1	259.6	301.1	354.2	402.2	405.8	370.9	392.7	356.4
80°	748.4	490.9	186.9	204.4	236.4	292.4	349.8	348.4	310.5	290.2	269.8
82.5°	285.1	193.5	133.1	144.0	170.9	224.0	277.1	285.8	248.0	214.5	214.5
85°	109.8	82.9	82.2	86.5	99.6	148.4	209.5	216.7	186.9	158.5	163.6
87.5°	28.4	24.7	30.5	29.1	45.8	79.3	120.0	124.4	114.2	66.2	94.5
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)