

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: P882559

Luminaire Tested: **NAV-SB2C-727-U-T3**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882559  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB2C-727-U-T3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

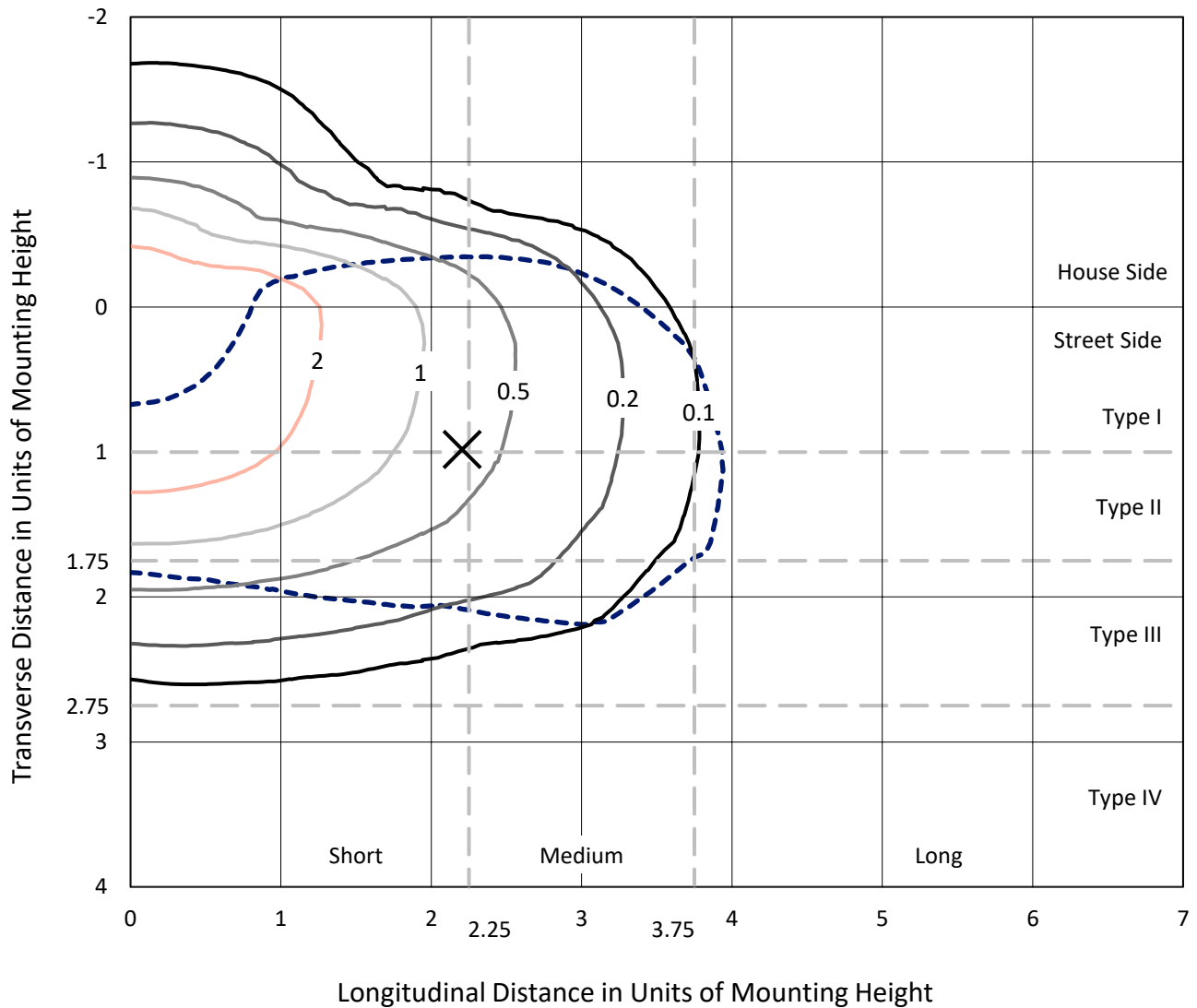
Lumens per Lamp: N/A  
Luminaire Lumens: 13842 lumens  
Efficiency: N/A  
Efficacy: 137.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 100.9  
Input Voltage (V): 120.0  
Input Current (Ain): 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

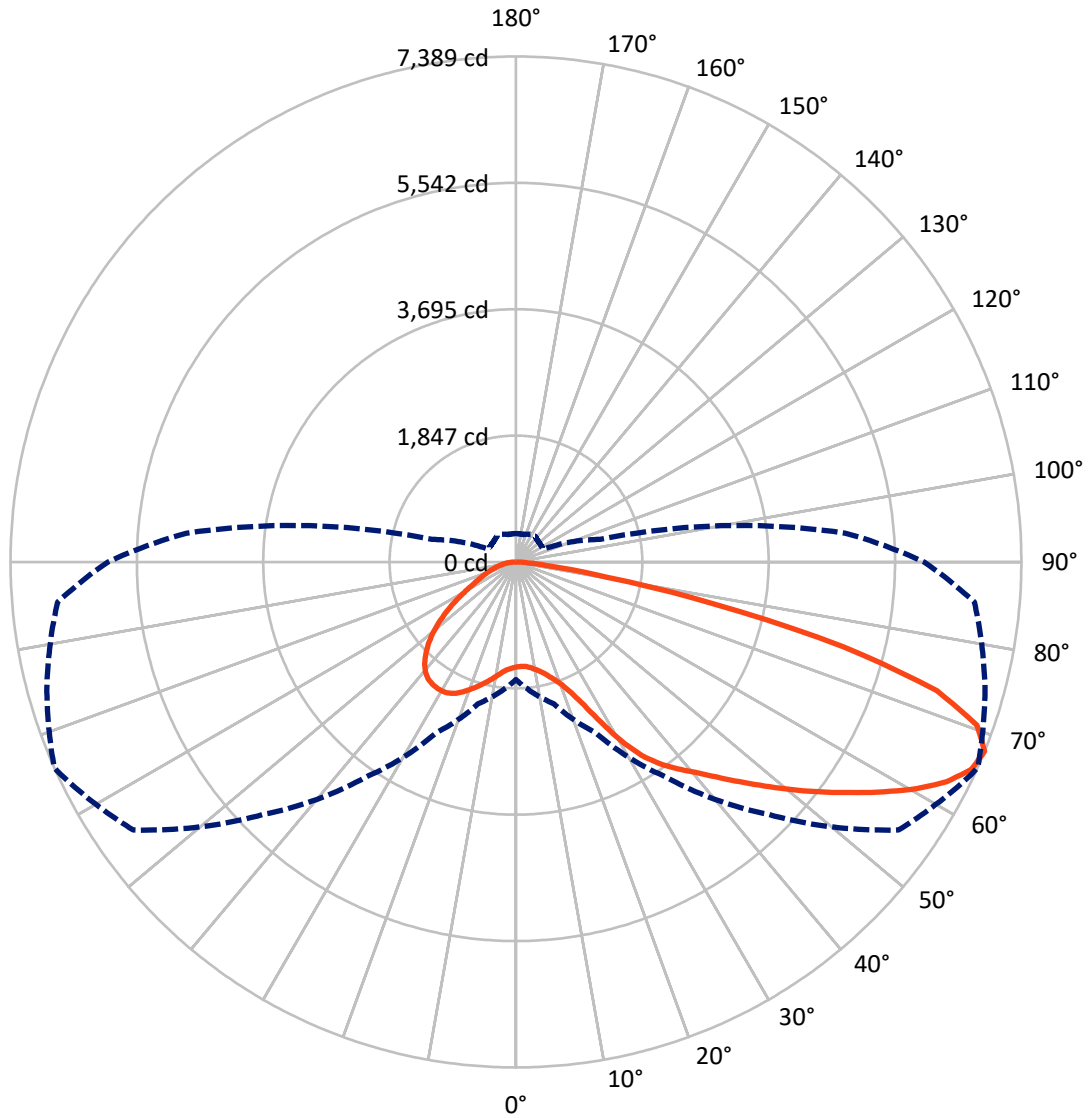
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3441.8	0.0	3441.8
	% Fixture	24.9	0.0	24.9
<b>Street Side</b>	Lumens	10400.2	0.0	10400.2
	% Fixture	75.1	0.0	75.1
<b>Total</b>	Lumens	13842.0	0.0	13842.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	152.2	1.1
10°-20°	502.9	3.6
20°-30°	969.3	7.0
30°-40°	1699.6	12.3
40°-50°	2526.7	18.3
50°-60°	3202.8	23.1
60°-70°	3133.9	22.6
70°-80°	1494.9	10.8
80°-90°	159.8	1.2
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°	13842.0	100.0
0°-180°	13842.0	100.0

**Coefficient of Utilization**



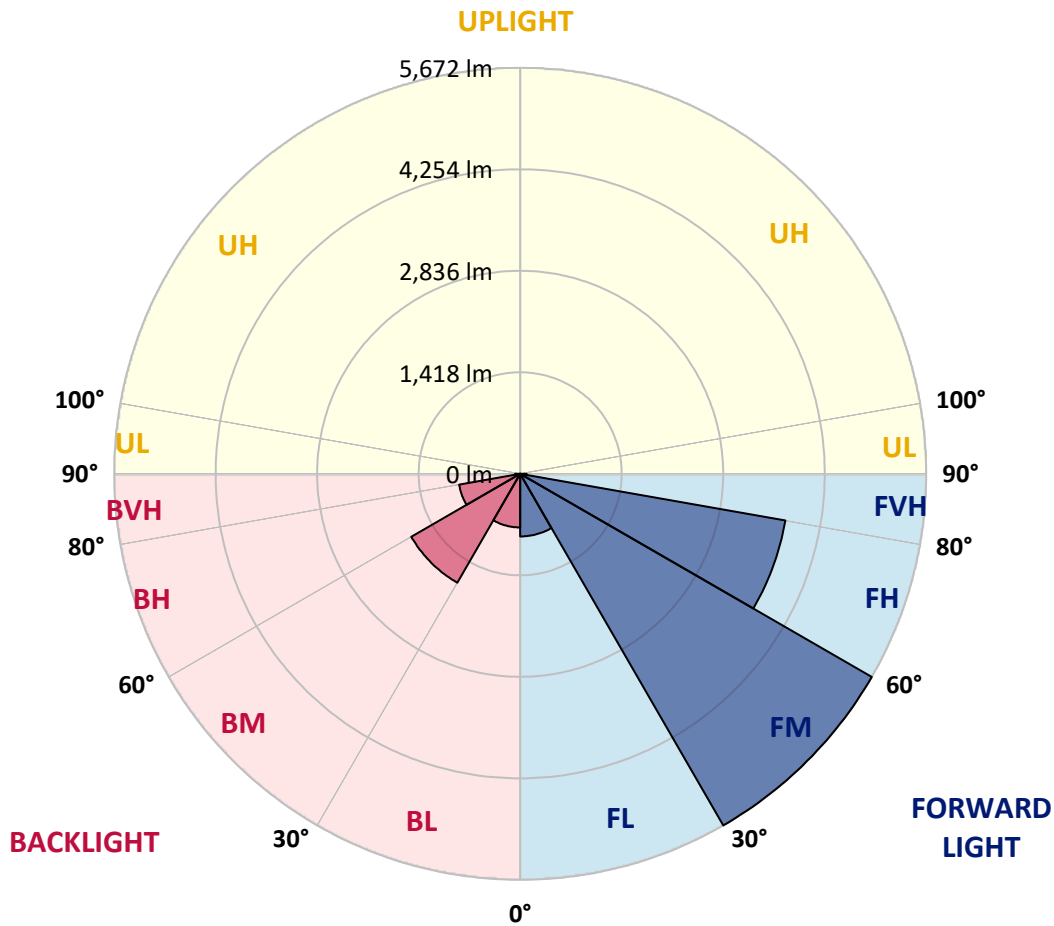
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	874.7	6.3			
FM (30°-60°)	5672.3	41.0			
FH (60°-80°)	3762.6	27.2			G2/5000
FVH (80°-90°)	90.6	0.7			G1/100
BL (0°-30°)	749.7	5.4	B2/1000		
BM (30°-60°)	1756.7	12.7	B2/2500		
BH (60°-80°)	866.1	6.3	B2/1000		G2/1000
BVH (80°-90°)	69.2	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1535.3	1535.3	1535.3	1535.3	1535.3	1535.3	1535.3	1535.3	1535.3	1535.3	1535.3
2.5°	1519.3	1528.0	1525.8	1522.2	1521.4	1522.9	1525.1	1527.3	1526.5	1530.2	1536.0
5°	1514.9	1523.6	1522.9	1522.9	1525.8	1531.6	1535.3	1538.9	1535.3	1539.6	1547.6
7.5°	1517.8	1524.4	1527.3	1530.2	1537.4	1548.4	1557.1	1565.1	1560.7	1565.8	1576.0
10°	1554.9	1560.0	1562.9	1562.9	1568.0	1580.4	1589.1	1603.6	1600.0	1608.0	1621.1
12.5°	1622.5	1627.6	1627.6	1624.7	1628.4	1636.4	1639.3	1655.3	1648.7	1661.8	1674.9
15°	1705.4	1715.6	1707.6	1702.5	1704.0	1712.0	1711.3	1723.6	1717.1	1728.0	1739.6
17.5°	1797.1	1810.2	1797.1	1796.3	1793.4	1802.2	1802.9	1813.8	1802.2	1810.2	1818.2
20°	1905.4	1923.6	1912.7	1916.3	1909.8	1913.4	1917.1	1933.1	1914.9	1920.7	1918.5
22.5°	2058.2	2080.0	2068.3	2082.2	2077.8	2074.9	2074.2	2102.5	2074.2	2076.3	2055.3
25°	2280.7	2306.9	2286.5	2305.4	2305.4	2314.9	2325.8	2362.2	2314.9	2301.1	2246.5
27.5°	2609.4	2635.6	2595.6	2607.3	2603.6	2626.9	2615.3	2705.4	2654.5	2632.0	2522.2
30°	3005.1	3051.6	2976.0	2973.1	2969.4	3006.5	3023.2	3082.9	3031.2	3008.7	2876.3
32.5°	3432.7	3481.4	3391.2	3365.1	3351.2	3373.8	3360.0	3408.0	3372.3	3337.4	3173.8
35°	3885.1	3933.1	3847.2	3796.3	3741.1	3693.8	3644.3	3656.7	3623.2	3570.2	3400.7
37.5°	4312.7	4400.7	4309.8	4255.2	4153.4	4061.1	3922.9	3865.4	3834.2	3785.4	3614.5
40°	4748.3	4798.5	4729.4	4682.9	4572.3	4427.6	4206.5	4085.1	4042.9	3995.6	3850.9
42.5°	5069.1	5117.1	5080.0	5048.0	4961.4	4793.4	4507.6	4355.6	4294.5	4241.4	4118.5
45°	5323.6	5359.2	5336.0	5347.6	5310.5	5147.6	4819.6	4645.8	4582.5	4517.8	4421.1
47.5°	5426.1	5464.0	5501.0	5570.1	5633.4	5513.4	5154.9	4960.0	4893.1	4826.9	4731.6
50°	5414.5	5453.0	5560.7	5707.6	5904.0	5864.0	5508.3	5294.5	5232.7	5157.1	5069.1
52.5°	5321.4	5365.0	5503.2	5747.6	6060.3	6126.5	5868.3	5640.0	5581.8	5491.6	5403.6
55°	5077.1	5103.2	5310.5	5656.7	6097.4	6309.8	6221.0	6008.0	5949.8	5824.0	5728.0
57.5°	4624.0	4661.8	4963.6	5411.6	6004.3	6434.1	6530.9	6394.9	6338.9	6157.8	6057.4
60°	4032.7	4093.1	4438.5	5000.0	5767.2	6433.4	6812.3	6775.2	6728.7	6486.5	6381.8
62.5°	3363.6	3433.4	3765.8	4418.1	5352.7	6250.9	6988.3	7093.8	7069.8	6789.8	6655.9
65°	2583.3	2631.3	2962.2	3665.4	4707.6	5858.9	7008.7	7311.2	7315.6	7020.3	6799.2
67.5°	1720.0	1858.2	2145.4	2750.5	3843.6	5218.1	6829.8	7346.9	7389.0	7099.6	6727.2
70°	839.3	1021.1	1302.5	1787.6	2750.5	4235.6	6362.1	7054.5	7148.3	6868.3	6298.1
72.5°	348.4	407.3	560.7	882.2	1578.9	2858.2	5422.5	6261.8	6435.6	6085.8	5295.2
75°	234.9	254.5	320.7	452.4	719.3	1409.4	3910.5	4669.1	4949.1	4596.3	3757.1
77.5°	181.1	193.5	233.5	316.4	427.6	533.1	2093.1	2813.8	2958.5	2738.9	1954.9
80°	142.5	152.0	174.5	230.5	303.3	285.1	713.4	1274.9	1358.5	1139.6	628.4
82.5°	123.6	127.3	125.1	156.4	201.5	166.5	234.2	470.5	519.3	376.7	205.1
85°	89.5	99.6	104.0	96.7	106.9	84.4	96.0	166.5	183.3	163.6	115.6
87.5°	36.4	53.8	66.2	62.5	39.3	24.0	29.8	48.7	56.0	61.1	37.8
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°	1535.3	1535.3	1535.3	1535.3	1535.3	1535.3	1535.3	1535.3	1535.3	1535.3	1535.3
2.5°	1536.7	1541.8	1545.4	1549.8	1552.7	1557.1	1565.8	1570.9	1571.6	1575.3	1574.5
5°	1550.5	1557.8	1565.8	1577.4	1590.5	1601.4	1618.2	1629.8	1634.2	1637.8	1637.1
7.5°	1580.4	1590.5	1605.1	1625.4	1644.4	1658.9	1679.3	1693.1	1706.9	1712.0	1712.7
10°	1624.7	1639.3	1660.4	1688.0	1708.4	1727.3	1748.3	1760.0	1773.8	1779.6	1782.5
12.5°	1680.0	1695.3	1722.9	1761.4	1780.3	1793.4	1800.7	1797.8	1800.7	1805.8	1807.3
15°	1743.3	1760.0	1791.3	1832.7	1845.8	1834.2	1818.2	1803.6	1801.4	1802.9	1808.0
17.5°	1818.2	1830.5	1866.9	1901.8	1892.3	1844.3	1809.4	1786.2	1774.5	1770.9	1776.0
20°	1922.9	1922.9	1952.7	1974.5	1911.3	1829.8	1775.3	1737.4	1713.4	1703.3	1701.1
22.5°	2050.2	2038.5	2057.4	2042.2	1907.6	1789.1	1713.4	1648.0	1611.6	1597.1	1594.9
25°	2211.6	2197.8	2192.7	2098.2	1881.4	1724.4	1601.4	1522.2	1490.2	1482.2	1483.6
27.5°	2455.3	2420.3	2354.2	2128.7	1833.4	1622.5	1470.5	1397.1	1378.9	1379.6	1381.8
30°	2779.6	2709.8	2547.6	2133.8	1754.9	1478.5	1336.7	1284.4	1275.6	1279.3	1291.6
32.5°	3080.0	3013.8	2745.4	2110.5	1634.2	1337.4	1216.7	1181.8	1168.7	1173.1	1178.9
35°	3315.6	3297.4	2928.7	2077.8	1485.8	1205.1	1109.1	1079.3	1053.8	1048.0	1052.4
37.5°	3538.2	3530.9	3066.2	2032.0	1338.9	1111.3	1022.5	983.3	946.2	925.8	926.5
40°	3782.5	3775.2	3156.3	1961.4	1208.7	1029.8	944.7	893.1	847.3	810.2	813.8
42.5°	4057.4	4014.5	3199.2	1860.3	1098.2	960.7	881.4	811.6	751.3	717.1	719.3
45°	4357.8	4261.1	3198.5	1731.6	1005.1	897.4	813.8	714.9	658.9	626.9	625.4
47.5°	4676.3	4496.7	3159.2	1589.1	914.9	827.6	709.1	633.4	596.4	576.7	572.4
50°	5005.1	4717.1	3092.3	1425.4	822.5	748.4	643.6	592.0	563.6	545.5	538.9
52.5°	5314.1	4917.1	3011.6	1240.0	728.7	671.3	614.5	574.5	544.7	524.4	515.6
55°	5601.4	5089.4	2897.4	1050.2	652.4	619.6	600.7	567.3	533.1	509.1	499.6
57.5°	5856.7	5201.4	2700.3	872.0	597.8	584.0	586.2	554.9	515.6	495.3	482.2
60°	6069.0	5283.6	2408.7	706.9	553.5	549.1	563.6	531.6	485.8	462.5	452.4
62.5°	6196.3	5282.1	2050.9	578.9	515.6	517.1	533.8	502.5	456.0	434.2	427.6
65°	6185.4	5152.7	1658.2	495.3	479.3	480.7	502.5	470.5	431.3	418.2	417.5
67.5°	5966.5	4837.1	1272.0	440.7	439.3	445.8	471.3	448.7	416.0	414.5	416.7
70°	5373.8	4181.8	916.4	397.1	397.8	407.3	440.7	434.9	408.0	410.9	410.2
72.5°	4309.1	3188.3	615.3	351.3	352.0	367.3	411.6	424.0	400.0	438.5	444.4
75°	2869.8	1988.3	395.6	302.5	303.3	322.9	386.2	402.9	378.2	437.1	440.7
77.5°	1378.9	893.8	286.5	254.5	254.5	272.7	333.8	360.7	322.2	339.6	311.3
80°	476.4	336.0	225.5	205.1	200.7	213.1	281.5	312.7	277.8	256.0	240.0
82.5°	187.6	174.5	181.1	159.3	144.7	152.7	218.9	258.2	204.4	184.7	184.0
85°	107.6	113.5	128.0	105.5	83.6	93.8	160.7	185.5	154.2	136.0	138.9
87.5°	29.1	40.0	58.9	54.5	37.8	40.0	76.4	102.5	88.7	68.4	70.5
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)