

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: P963522

Luminaire Tested: **NAV-SB3A-735-U-T3**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P963522  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB3A-735-U-T3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

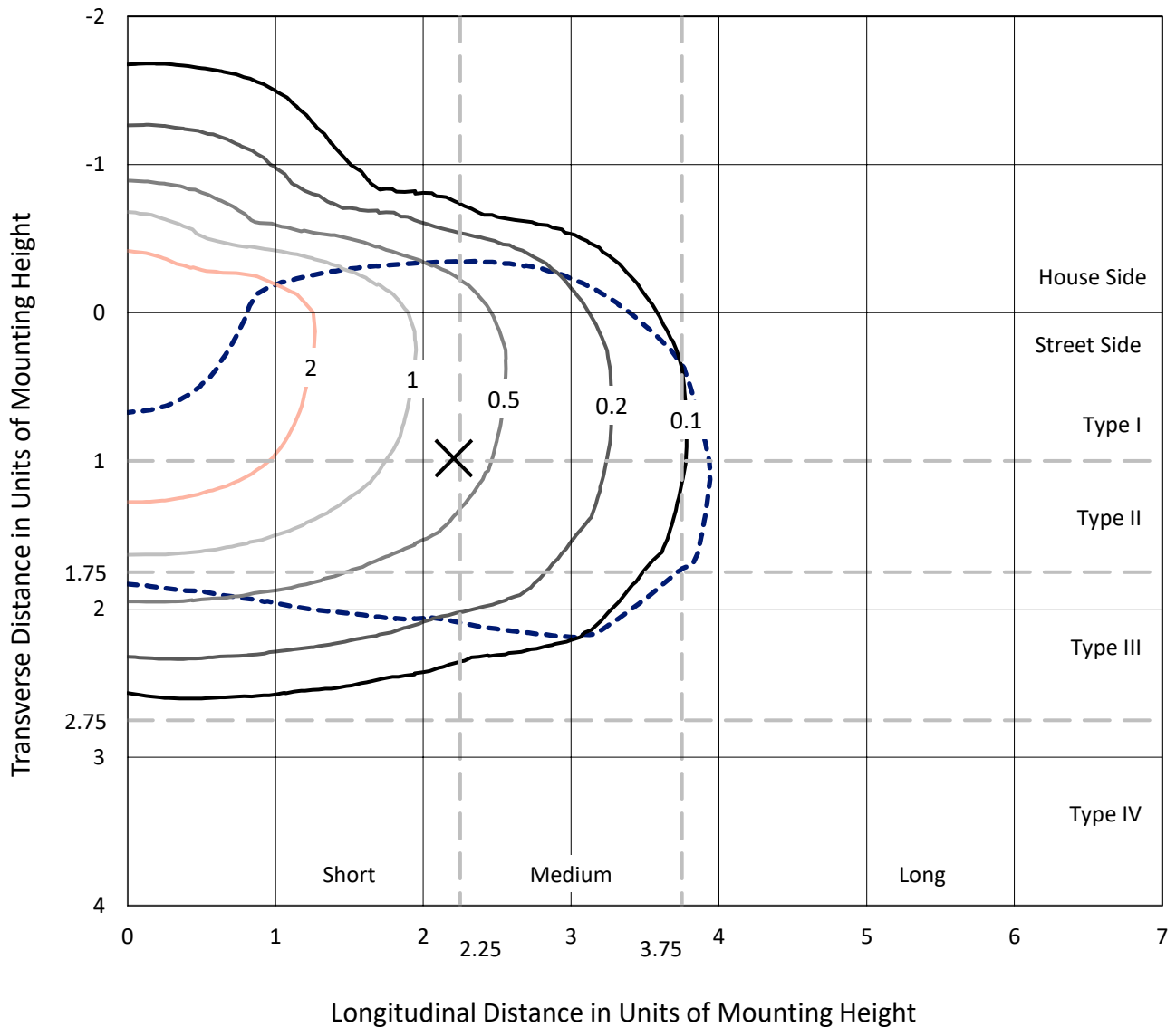
Lumens per Lamp: N/A  
Luminaire Lumens: 13804.7 lumens  
Efficiency: N/A  
Efficacy: 163.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 84.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
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

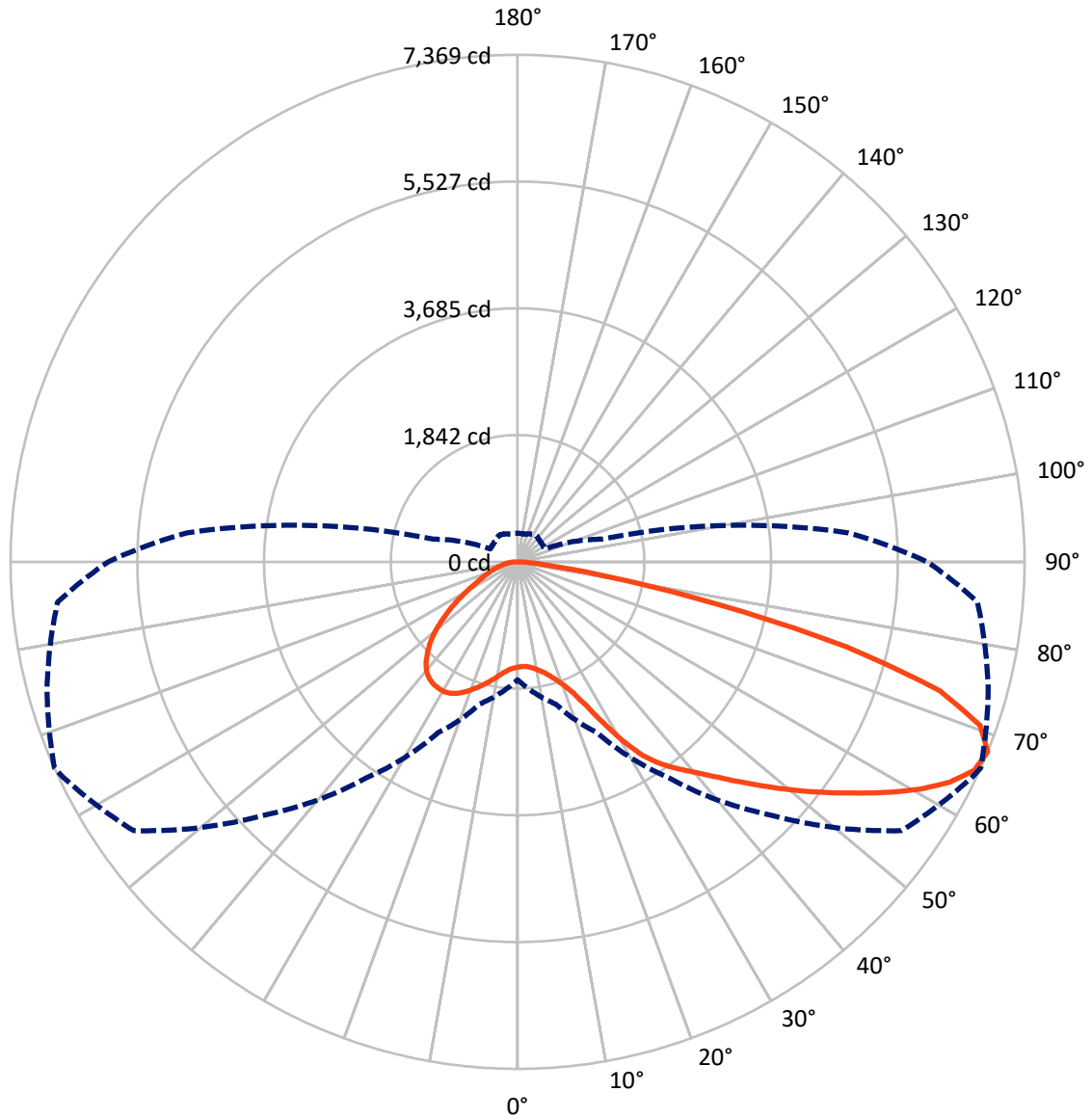
× Max cd  
 - - - 1/2 Max cd



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	3432.5	0.0	3432.5
	% Fixture	24.9	0.0	24.9
<b>Street Side</b>	Lumens	10372.2	0.0	10372.2
	% Fixture	75.1	0.0	75.1
<b>Total</b>	Lumens	13804.7	0.0	13804.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	151.8	1.1
10°-20°	501.5	3.6
20°-30°	966.7	7.0
30°-40°	1695.0	12.3
40°-50°	2519.9	18.3
50°-60°	3194.2	23.1
60°-70°	3125.4	22.6
70°-80°	1490.9	10.8
80°-90°	159.3	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°	13804.7	100.0
0°-180°	13804.7	100.0

**Coefficient of Utilization**



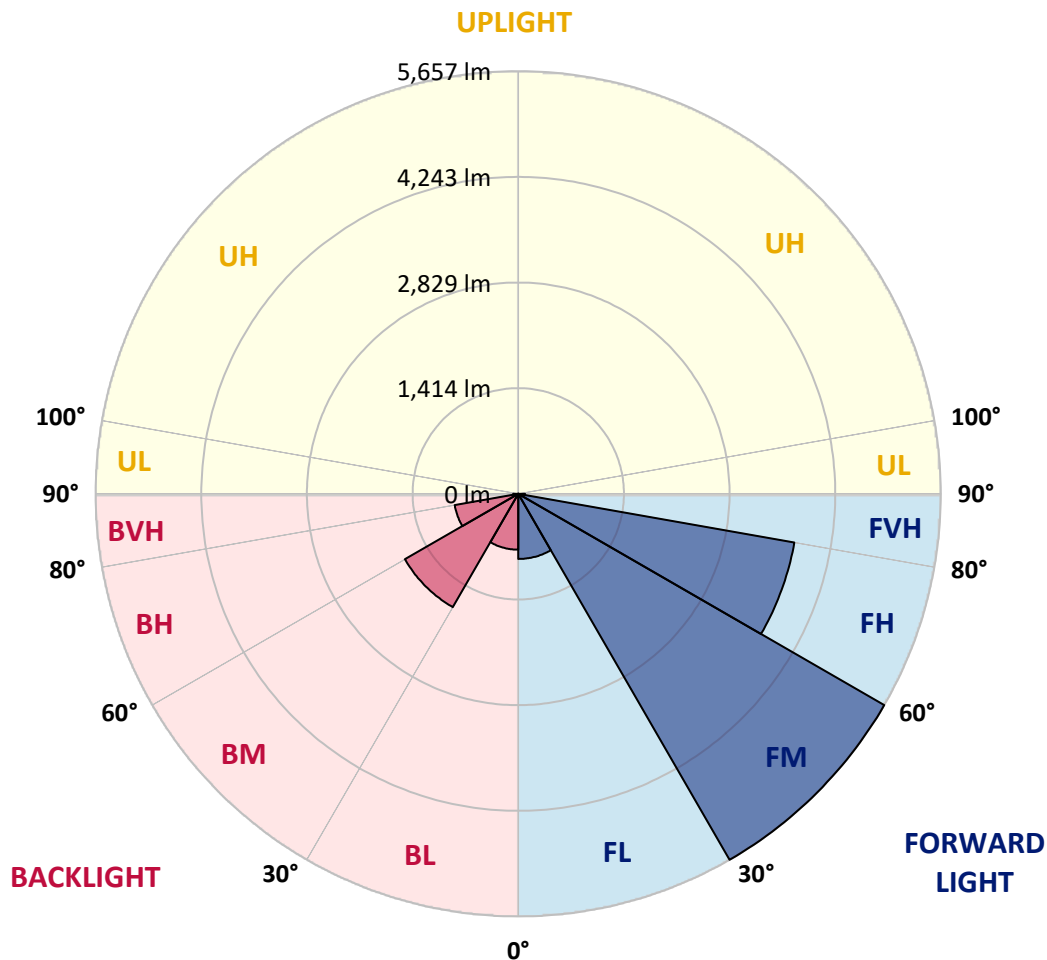
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	872.3	6.3			
FM (30°-60°)	5657.0	41.0			
FH (60°-80°)	3752.5	27.2			G2/5000
FVH (80°-90°)	90.3	0.7			G1/100
BL (0°-30°)	747.7	5.4	B2/1000		
BM (30°-60°)	1752.0	12.7	B2/2500		
BH (60°-80°)	863.8	6.3	B2/1000		G2/1000
BVH (80°-90°)	69.0	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°	1531.1	1531.1	1531.1	1531.1	1531.1	1531.1	1531.1	1531.1	1531.1	1531.1	1531.1
2.5°	1515.2	1523.9	1521.7	1518.0	1517.3	1518.7	1521.0	1523.1	1522.4	1526.0	1531.9
5°	1510.8	1519.6	1518.7	1518.7	1521.7	1527.5	1531.1	1534.7	1531.1	1535.4	1543.4
7.5°	1513.7	1520.3	1523.1	1526.0	1533.3	1544.2	1552.9	1560.9	1556.5	1561.6	1571.7
10°	1550.7	1555.7	1558.7	1558.7	1563.7	1576.1	1584.8	1599.3	1595.7	1603.6	1616.7
12.5°	1618.2	1623.2	1623.2	1620.3	1624.0	1631.9	1634.9	1650.8	1644.3	1657.3	1670.3
15°	1700.9	1711.0	1703.0	1697.9	1699.3	1707.3	1706.6	1719.0	1712.5	1723.3	1734.9
17.5°	1792.2	1805.3	1792.2	1791.5	1788.6	1797.3	1798.1	1808.9	1797.3	1805.3	1813.2
20°	1900.4	1918.4	1907.5	1911.2	1904.7	1908.2	1911.9	1927.8	1909.8	1915.5	1913.4
22.5°	2052.7	2074.4	2062.8	2076.5	2072.2	2069.3	2068.6	2096.8	2068.6	2070.7	2049.7
25°	2274.6	2300.7	2280.3	2299.2	2299.2	2308.6	2319.6	2355.8	2308.6	2294.9	2240.4
27.5°	2602.4	2628.5	2588.6	2600.2	2596.6	2619.8	2608.2	2698.1	2647.4	2624.9	2515.4
30°	2997.0	3043.4	2968.0	2965.0	2961.4	2998.4	3015.1	3074.6	3023.0	3000.6	2868.6
32.5°	3423.5	3472.1	3382.1	3356.0	3342.2	3364.7	3350.9	3398.8	3363.2	3328.5	3165.2
35°	3874.6	3922.5	3836.9	3786.1	3731.0	3683.8	3634.5	3646.8	3613.4	3560.5	3391.5
37.5°	4301.1	4388.8	4298.1	4243.8	4142.2	4050.1	3912.3	3855.0	3823.9	3775.2	3604.8
40°	4735.5	4785.6	4716.6	4670.2	4560.0	4415.7	4195.2	4074.1	4031.9	3984.8	3840.5
42.5°	5055.4	5103.3	5066.3	5034.4	4948.1	4780.5	4495.4	4343.8	4283.0	4230.0	4107.4
45°	5309.3	5344.8	5321.6	5333.2	5296.2	5133.7	4806.6	4633.3	4570.2	4505.6	4409.1
47.5°	5411.5	5449.2	5486.2	5555.1	5618.2	5498.5	5141.0	4946.5	4879.8	4813.9	4718.9
50°	5399.9	5438.3	5545.7	5692.2	5888.0	5848.1	5493.5	5280.3	5218.6	5143.1	5055.4
52.5°	5307.0	5350.6	5488.4	5732.1	6044.0	6110.0	5852.5	5624.8	5566.8	5476.8	5389.0
55°	5063.4	5089.4	5296.2	5641.4	6081.0	6292.8	6204.3	5991.7	5933.7	5808.3	5712.5
57.5°	4611.5	4649.2	4950.2	5397.0	5988.2	6416.8	6513.3	6377.7	6321.8	6141.2	6041.0
60°	4021.8	4082.1	4426.6	4986.5	5751.7	6416.1	6793.9	6757.0	6710.6	6469.0	6364.5
62.5°	3354.5	3424.2	3755.6	4406.3	5338.3	6234.0	6969.5	7074.7	7050.7	6771.5	6638.0
65°	2576.3	2624.2	2954.2	3655.6	4694.9	5843.1	6989.8	7291.5	7295.8	7001.4	6780.9
67.5°	1715.3	1853.2	2139.7	2743.1	3833.3	5204.1	6811.3	7327.0	7369.1	7080.5	6709.1
70°	837.0	1018.3	1299.0	1782.8	2743.1	4224.2	6345.0	7035.5	7129.1	6849.8	6281.2
72.5°	347.4	406.2	559.2	879.8	1574.6	2850.4	5407.9	6244.9	6418.2	6069.3	5281.0
75°	234.3	253.9	319.9	451.1	717.3	1405.7	3900.0	4656.5	4935.7	4583.9	3746.9
77.5°	180.6	192.9	232.8	315.5	426.5	531.7	2087.4	2806.2	2950.6	2731.5	1949.7
80°	142.2	151.6	174.0	229.9	302.5	284.3	711.6	1271.5	1354.8	1136.5	626.7
82.5°	123.3	126.9	124.7	155.9	200.9	166.0	233.6	469.2	517.8	375.7	204.5
85°	89.2	99.3	103.7	96.5	106.6	84.2	95.7	166.0	182.8	163.2	115.3
87.5°	36.3	53.7	66.0	62.4	39.2	24.0	29.7	48.6	55.9	60.9	37.7
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°	1531.1	1531.1	1531.1	1531.1	1531.1	1531.1	1531.1	1531.1	1531.1	1531.1	1531.1
2.5°	1532.6	1537.6	1541.3	1545.6	1548.6	1552.9	1561.6	1566.7	1567.4	1571.0	1570.3
5°	1546.3	1553.6	1561.6	1573.2	1586.3	1597.2	1613.8	1625.4	1629.7	1633.4	1632.6
7.5°	1576.1	1586.3	1600.7	1621.0	1639.9	1654.5	1674.7	1688.5	1702.3	1707.3	1708.1
10°	1620.3	1634.9	1655.9	1683.5	1703.8	1722.6	1743.6	1755.2	1769.0	1774.8	1777.8
12.5°	1675.5	1690.7	1718.2	1756.6	1775.5	1788.6	1795.9	1792.9	1795.9	1800.9	1802.4
15°	1738.6	1755.2	1786.5	1827.8	1840.8	1829.2	1813.2	1798.8	1796.6	1798.1	1803.1
17.5°	1813.2	1825.6	1861.9	1896.7	1887.2	1839.4	1804.6	1781.3	1769.8	1766.1	1771.2
20°	1917.7	1917.7	1947.5	1969.2	1906.1	1824.9	1770.5	1732.8	1708.8	1698.6	1696.5
22.5°	2044.7	2033.1	2051.8	2036.7	1902.5	1784.2	1708.8	1643.6	1607.3	1592.7	1590.6
25°	2205.7	2191.9	2186.8	2092.5	1876.4	1719.7	1597.2	1518.0	1486.1	1478.2	1479.6
27.5°	2448.6	2413.8	2347.9	2123.0	1828.5	1618.2	1466.6	1393.3	1375.1	1375.9	1378.1
30°	2772.1	2702.5	2540.8	2128.0	1750.2	1474.6	1333.1	1280.9	1272.2	1275.8	1288.1
32.5°	3071.7	3005.7	2738.1	2104.8	1629.7	1333.8	1213.4	1178.6	1165.5	1169.9	1175.7
35°	3306.6	3288.5	2920.8	2072.2	1481.8	1201.8	1106.1	1076.4	1050.9	1045.2	1049.5
37.5°	3528.7	3521.4	3057.9	2026.5	1335.3	1108.2	1019.8	980.6	943.6	923.3	924.0
40°	3772.3	3765.0	3147.9	1956.1	1205.5	1027.0	942.2	890.7	845.0	808.0	811.6
42.5°	4046.5	4003.6	3190.6	1855.4	1095.2	958.2	879.0	809.4	749.3	715.1	717.3
45°	4346.0	4249.5	3189.9	1726.9	1002.3	895.0	811.6	713.0	657.1	625.2	623.8
47.5°	4663.8	4484.6	3150.7	1584.8	912.5	825.4	707.1	631.7	594.7	575.1	570.8
50°	4991.5	4704.3	3084.0	1421.6	820.3	746.3	641.9	590.4	562.1	544.0	537.4
52.5°	5299.9	4903.8	3003.5	1236.7	726.7	669.4	612.8	573.0	543.2	523.0	514.2
55°	5586.4	5075.7	2889.6	1047.3	650.6	618.0	599.1	565.7	531.7	507.7	498.3
57.5°	5840.9	5187.4	2693.1	869.6	596.2	582.4	584.6	553.4	514.2	493.9	480.8
60°	6052.7	5269.3	2402.2	705.0	552.0	547.7	562.1	530.2	484.5	461.2	451.1
62.5°	6179.6	5267.9	2045.4	577.4	514.2	515.7	532.4	501.2	454.8	433.0	426.5
65°	6168.8	5138.8	1653.7	493.9	478.0	479.4	501.2	469.2	430.1	417.1	416.4
67.5°	5950.4	4824.1	1268.5	439.5	438.1	444.6	470.0	447.5	414.9	413.4	415.6
70°	5359.3	4170.5	913.9	396.1	396.8	406.2	439.5	433.8	406.9	409.8	409.1
72.5°	4297.4	3179.8	613.6	350.3	351.1	366.2	410.5	422.8	398.9	437.4	443.2
75°	2862.1	1983.0	394.5	301.8	302.5	322.1	385.1	401.8	377.2	435.9	439.5
77.5°	1375.1	891.4	285.8	253.9	253.9	272.0	332.9	359.8	321.3	338.8	310.5
80°	475.1	335.1	224.9	204.5	200.2	212.5	280.6	311.9	277.1	255.3	239.3
82.5°	187.2	174.0	180.6	158.9	144.3	152.3	218.3	257.5	203.8	184.2	183.5
85°	107.3	113.2	127.6	105.2	83.4	93.6	160.3	184.9	153.8	135.6	138.6
87.5°	29.0	39.9	58.7	54.4	37.7	39.9	76.2	102.3	88.5	68.2	70.3
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)