

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: P882919

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

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882919
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-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: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13464 lumens
Efficiency: N/A
Efficacy: 159.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

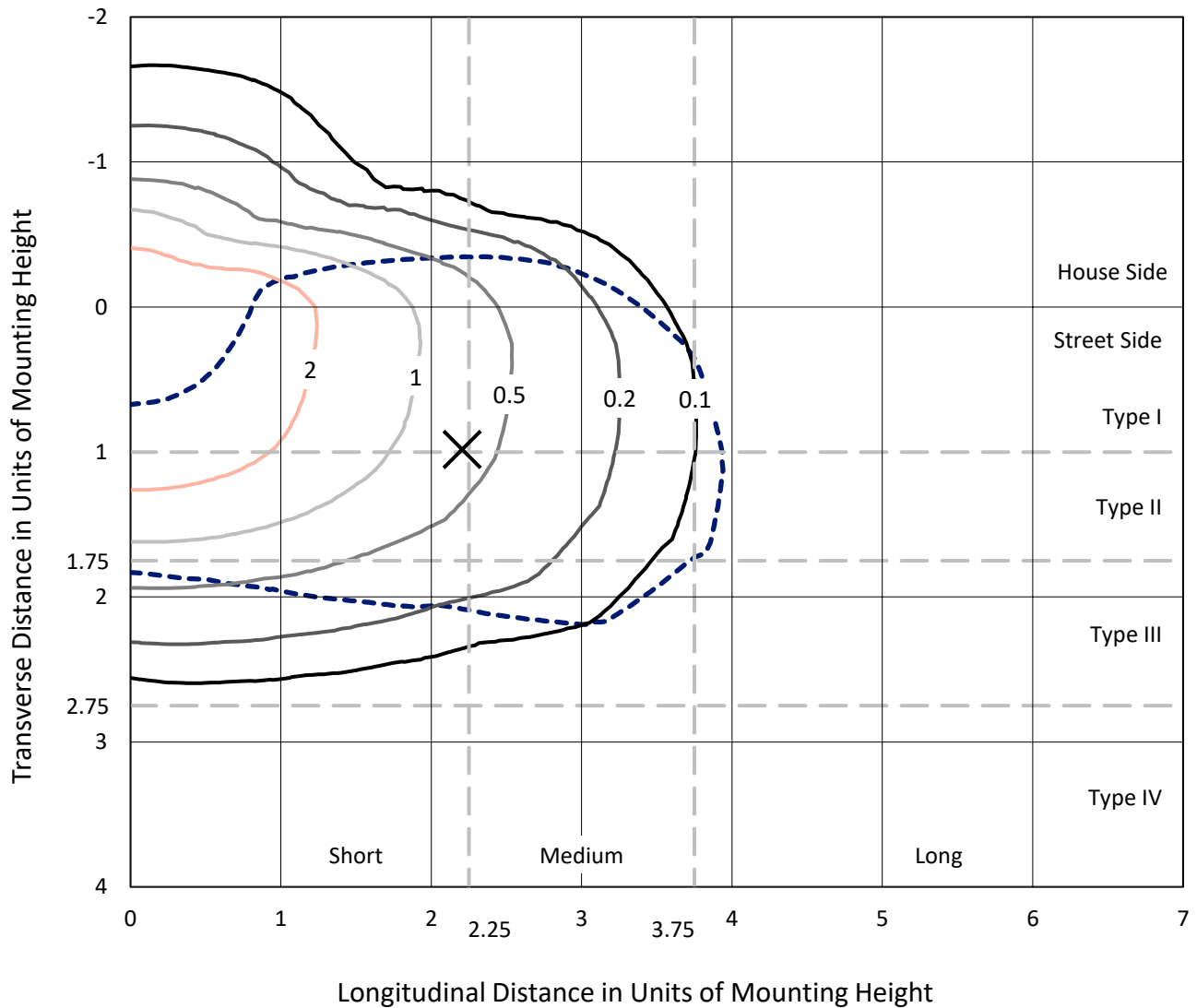
Input Watts (W): 84.7
Input Voltage (V): 120.0
Input Current (Ain): 0.717
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 11.969
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

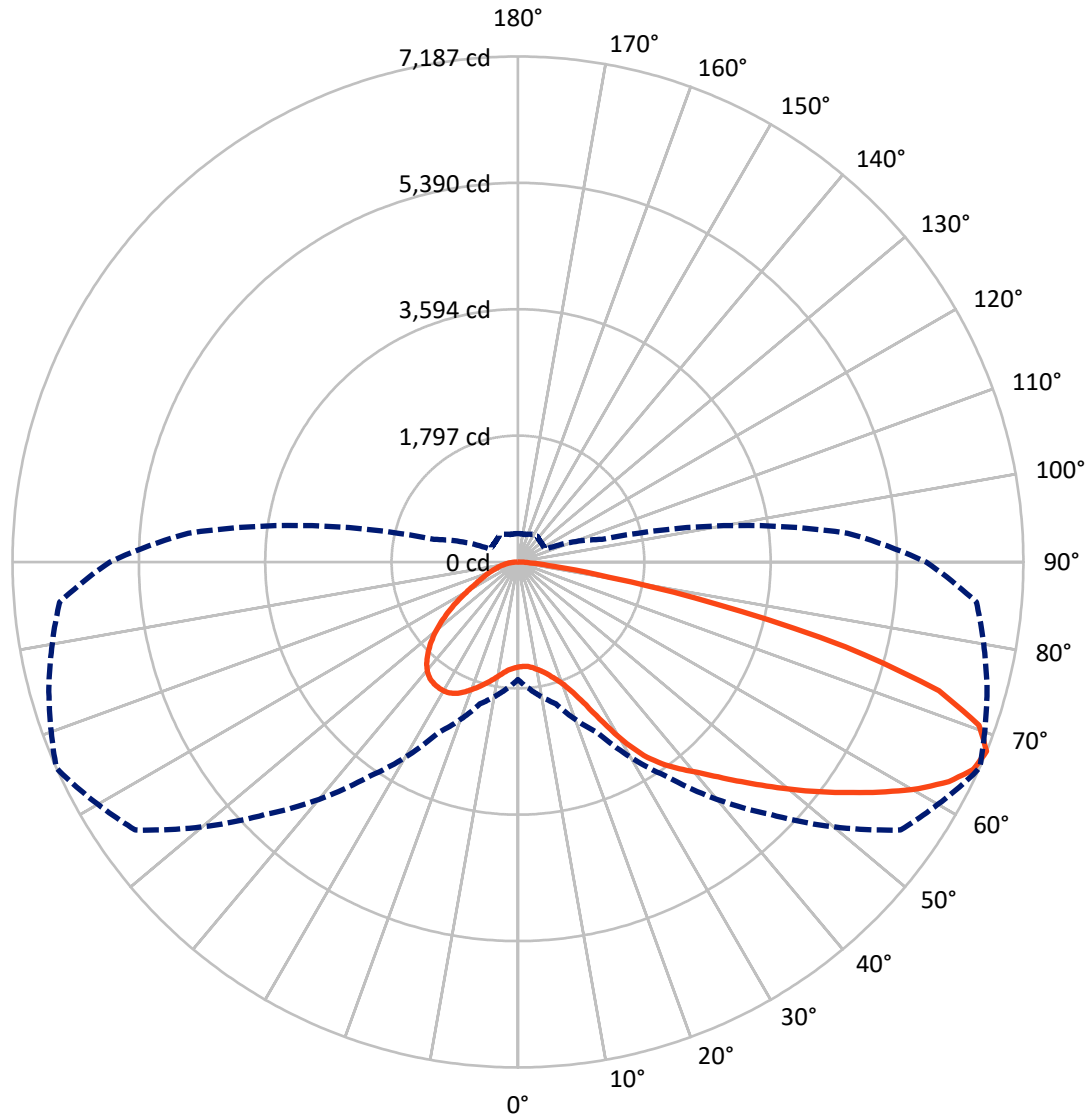
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 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
House Side	Lumens	3347.8	0.0	3347.8
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	10116.2	0.0	10116.2
	% Fixture	75.1	0.0	75.1
Total	Lumens	13464.0	0.0	13464.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.1	1.1
10°-20°	489.2	3.6
20°-30°	942.8	7.0
30°-40°	1653.1	12.3
40°-50°	2457.7	18.3
50°-60°	3115.3	23.1
60°-70°	3048.3	22.6
70°-80°	1454.1	10.8
80°-90°	155.4	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°	13464.0	100.0
0°-180°	13464.0	100.0

Coefficient of Utilization



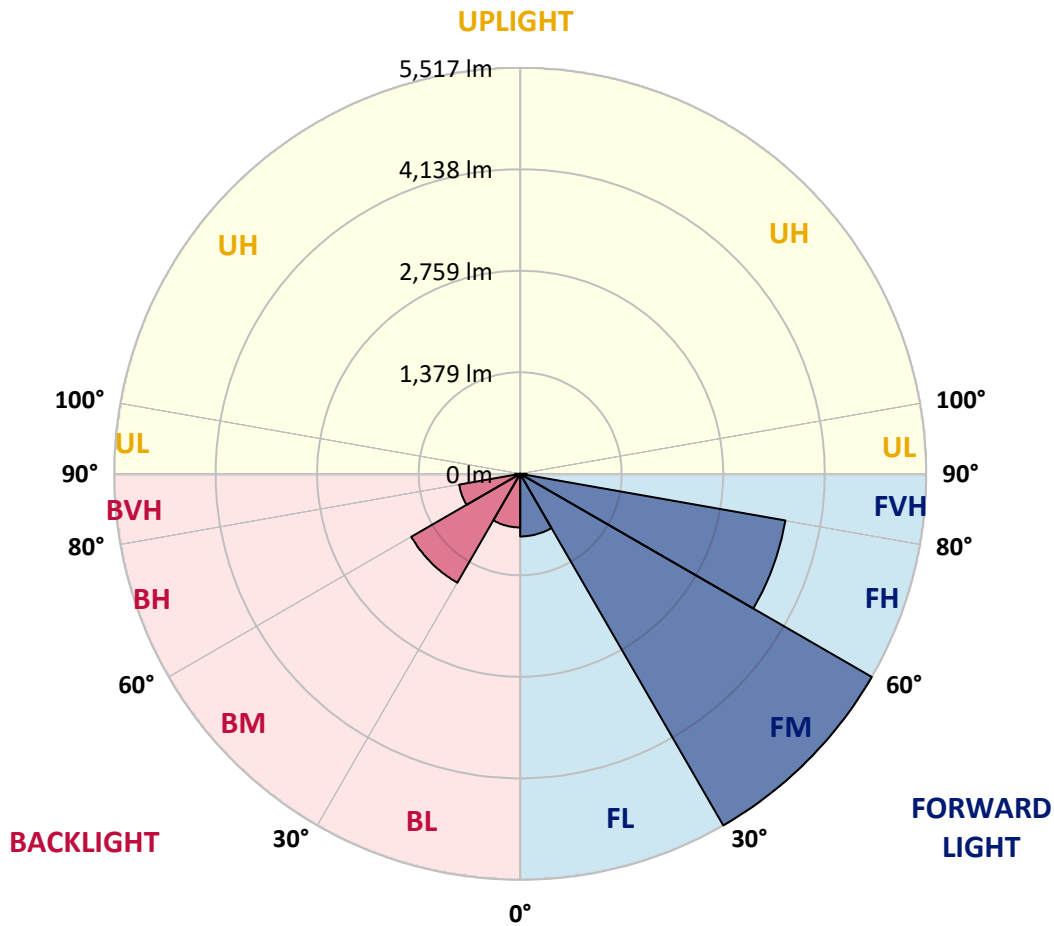
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	850.8	6.3			
FM (30°-60°)	5517.4	41.0			
FH (60°-80°)	3659.9	27.2			G2/5000
FVH (80°-90°)	88.1	0.7			G1/100
BL (0°-30°)	729.3	5.4	B2/1000		
BM (30°-60°)	1708.7	12.7	B2/2500		
BH (60°-80°)	842.5	6.3	B2/1000		G2/1000
BVH (80°-90°)	67.3	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°	1493.3	1493.3	1493.3	1493.3	1493.3	1493.3	1493.3	1493.3	1493.3	1493.3	1493.3
2.5°	1477.8	1486.3	1484.1	1480.6	1479.9	1481.3	1483.4	1485.6	1484.8	1488.4	1494.0
5°	1473.5	1482.0	1481.3	1481.3	1484.1	1489.8	1493.3	1496.9	1493.3	1497.6	1505.4
7.5°	1476.4	1482.7	1485.6	1488.4	1495.5	1506.1	1514.6	1522.3	1518.1	1523.0	1533.0
10°	1512.4	1517.4	1520.2	1520.2	1525.2	1537.2	1545.7	1559.8	1556.3	1564.1	1576.8
12.5°	1578.2	1583.2	1583.2	1580.3	1583.9	1591.7	1594.5	1610.1	1603.7	1616.4	1629.2
15°	1658.9	1668.8	1661.0	1656.0	1657.5	1665.2	1664.5	1676.6	1670.2	1680.8	1692.1
17.5°	1748.0	1760.7	1748.0	1747.3	1744.5	1753.0	1753.7	1764.3	1753.0	1760.7	1768.5
20°	1853.4	1871.1	1860.5	1864.0	1857.6	1861.2	1864.7	1880.3	1862.6	1868.3	1866.1
22.5°	2002.0	2023.2	2011.9	2025.3	2021.1	2018.2	2017.5	2045.1	2017.5	2019.6	1999.1
25°	2218.4	2243.9	2224.1	2242.5	2242.5	2251.7	2262.3	2297.7	2251.7	2238.2	2185.2
27.5°	2538.2	2563.6	2524.7	2536.1	2532.5	2555.2	2543.8	2631.6	2582.0	2560.1	2453.3
30°	2923.0	2968.3	2894.7	2891.9	2888.3	2924.4	2940.7	2998.7	2948.5	2926.5	2797.8
32.5°	3339.0	3386.4	3298.6	3273.2	3259.7	3281.7	3268.2	3314.9	3280.2	3246.3	3087.1
35°	3779.0	3825.7	3742.2	3692.7	3638.9	3592.9	3544.8	3556.8	3524.3	3472.7	3307.8
37.5°	4194.9	4280.5	4192.1	4139.0	4040.0	3950.2	3815.8	3759.9	3729.4	3682.1	3515.8
40°	4618.7	4667.5	4600.3	4555.0	4447.5	4306.7	4091.6	3973.5	3932.5	3886.5	3745.7
42.5°	4930.6	4977.3	4941.2	4910.1	4825.9	4662.5	4384.5	4236.7	4177.2	4125.6	4006.0
45°	5178.2	5212.9	5190.2	5201.6	5165.5	5007.0	4688.0	4518.9	4457.4	4394.4	4300.3
47.5°	5278.0	5314.7	5350.8	5418.0	5479.6	5362.9	5014.1	4824.5	4759.4	4695.1	4602.4
50°	5266.6	5304.1	5408.8	5551.7	5742.7	5703.8	5357.9	5149.9	5089.8	5016.2	4930.6
52.5°	5176.1	5218.5	5352.9	5590.6	5894.8	5959.2	5708.1	5485.9	5429.3	5341.6	5256.0
55°	4938.4	4963.9	5165.5	5502.2	5930.9	6137.5	6051.2	5843.9	5787.3	5664.9	5571.5
57.5°	4497.7	4534.5	4828.1	5263.8	5840.3	6258.4	6352.5	6220.2	6165.8	5989.6	5892.0
60°	3922.6	3981.3	4317.3	4863.4	5609.7	6257.7	6626.3	6590.2	6544.9	6309.4	6207.5
62.5°	3271.8	3339.7	3663.0	4297.5	5206.5	6080.2	6797.5	6900.0	6876.7	6604.3	6474.2
65°	2512.7	2559.4	2881.3	3565.3	4579.0	5698.9	6817.3	7111.6	7115.8	6828.6	6613.5
67.5°	1673.0	1807.4	2086.8	2675.4	3738.6	5075.6	6643.3	7146.2	7187.3	6905.7	6543.5
70°	816.3	993.2	1267.0	1738.8	2675.4	4119.9	6188.4	6861.8	6953.1	6680.7	6126.1
72.5°	338.8	396.1	545.4	858.1	1535.8	2780.1	5274.4	6090.8	6259.8	5919.6	5150.6
75°	228.5	247.6	312.0	440.0	699.6	1371.0	3803.7	4541.6	4813.9	4470.8	3654.5
77.5°	176.1	188.2	227.1	307.7	416.0	518.5	2035.9	2737.0	2877.7	2664.1	1901.5
80°	138.7	147.8	169.8	224.2	295.0	277.3	694.0	1240.1	1321.4	1108.5	611.2
82.5°	120.3	123.8	121.7	152.1	196.0	162.0	227.8	457.7	505.1	366.4	199.5
85°	87.0	96.9	101.2	94.1	104.0	82.1	93.4	162.0	178.3	159.2	112.5
87.5°	35.4	52.3	64.4	60.8	38.2	23.3	29.0	47.4	54.5	59.4	36.8
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°	1493.3	1493.3	1493.3	1493.3	1493.3	1493.3	1493.3	1493.3	1493.3	1493.3	1493.3
2.5°	1494.8	1499.7	1503.2	1507.5	1510.3	1514.6	1523.0	1528.0	1528.7	1532.2	1531.5
5°	1508.2	1515.3	1523.0	1534.4	1547.1	1557.7	1574.0	1585.3	1589.5	1593.1	1592.4
7.5°	1537.2	1547.1	1561.2	1581.1	1599.4	1613.6	1633.4	1646.8	1660.3	1665.2	1665.9
10°	1580.3	1594.5	1615.0	1641.9	1661.7	1680.1	1700.6	1711.9	1725.4	1731.0	1733.9
12.5°	1634.1	1649.0	1675.8	1713.3	1731.7	1744.5	1751.5	1748.7	1751.5	1756.5	1757.9
15°	1695.7	1711.9	1742.3	1782.7	1795.4	1784.1	1768.5	1754.4	1752.2	1753.7	1758.6
17.5°	1768.5	1780.5	1815.9	1849.9	1840.7	1794.0	1760.0	1737.4	1726.1	1722.5	1727.5
20°	1870.4	1870.4	1899.4	1920.6	1859.1	1779.8	1726.8	1690.0	1666.7	1656.7	1654.6
22.5°	1994.2	1982.9	2001.3	1986.4	1855.5	1740.2	1666.7	1603.0	1567.6	1553.5	1551.3
25°	2151.2	2137.8	2132.8	2040.9	1830.1	1677.3	1557.7	1480.6	1449.5	1441.7	1443.1
27.5°	2388.2	2354.2	2289.9	2070.6	1783.4	1578.2	1430.4	1358.9	1341.2	1342.0	1344.1
30°	2703.7	2635.8	2478.0	2075.5	1707.0	1438.2	1300.2	1249.3	1240.8	1244.3	1256.4
32.5°	2995.9	2931.5	2670.5	2052.9	1589.5	1300.9	1183.5	1149.5	1136.8	1141.0	1146.7
35°	3225.1	3207.4	2848.7	2021.1	1445.2	1172.2	1078.8	1049.8	1025.0	1019.4	1023.6
37.5°	3441.5	3434.5	2982.4	1976.5	1302.3	1080.9	994.6	956.4	920.3	900.5	901.2
40°	3679.2	3672.1	3070.1	1907.9	1175.7	1001.7	918.9	868.7	824.1	788.1	791.6
42.5°	3946.6	3904.9	3111.9	1809.5	1068.2	934.5	857.4	789.5	730.8	697.5	699.6
45°	4238.8	4144.7	3111.2	1684.3	977.6	872.9	791.6	695.4	640.9	609.8	608.4
47.5°	4548.6	4373.9	3073.0	1545.7	889.9	805.0	689.7	616.2	580.1	561.0	556.7
50°	4868.4	4588.2	3007.9	1386.5	800.1	727.9	626.1	575.8	548.2	530.6	524.2
52.5°	5169.0	4782.8	2929.4	1206.1	708.8	652.9	597.8	558.9	529.8	510.0	501.6
55°	5448.4	4950.4	2818.3	1021.5	634.5	602.7	584.3	551.8	518.5	495.2	486.0
57.5°	5696.7	5059.4	2626.6	848.2	581.5	568.0	570.2	539.8	501.6	481.7	469.0
60°	5903.3	5139.3	2342.9	687.6	538.3	534.1	548.2	517.1	472.5	449.9	440.0
62.5°	6027.1	5137.9	1994.9	563.1	501.6	503.0	519.2	488.8	443.5	422.3	416.0
65°	6016.5	5012.0	1612.9	481.7	466.2	467.6	488.8	457.7	419.5	406.8	406.1
67.5°	5803.6	4705.0	1237.3	428.7	427.3	433.6	458.4	436.5	404.6	403.2	405.3
70°	5227.0	4067.6	891.3	386.2	387.0	396.1	428.7	423.0	396.9	399.7	399.0
72.5°	4191.4	3101.3	598.5	341.7	342.4	357.2	400.4	412.4	389.1	426.6	432.2
75°	2791.4	1934.0	384.8	294.3	295.0	314.1	375.6	391.9	367.9	425.2	428.7
77.5°	1341.2	869.4	278.7	247.6	247.6	265.3	324.7	350.9	313.4	330.4	302.8
80°	463.4	326.8	219.3	199.5	195.2	207.3	273.8	304.2	270.2	249.0	233.4
82.5°	182.5	169.8	176.1	154.9	140.8	148.6	212.9	251.1	198.8	179.7	179.0
85°	104.7	110.4	124.5	102.6	81.4	91.3	156.3	180.4	150.0	132.3	135.1
87.5°	28.3	38.9	57.3	53.1	36.8	38.9	74.3	99.7	86.3	66.5	68.6
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)