

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: P963460

Luminaire Tested: **NAV-SB3A-727-U-T3**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P963460  
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-727-U-T3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12804.3 lumens  
Efficiency: N/A  
Efficacy: 151.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2

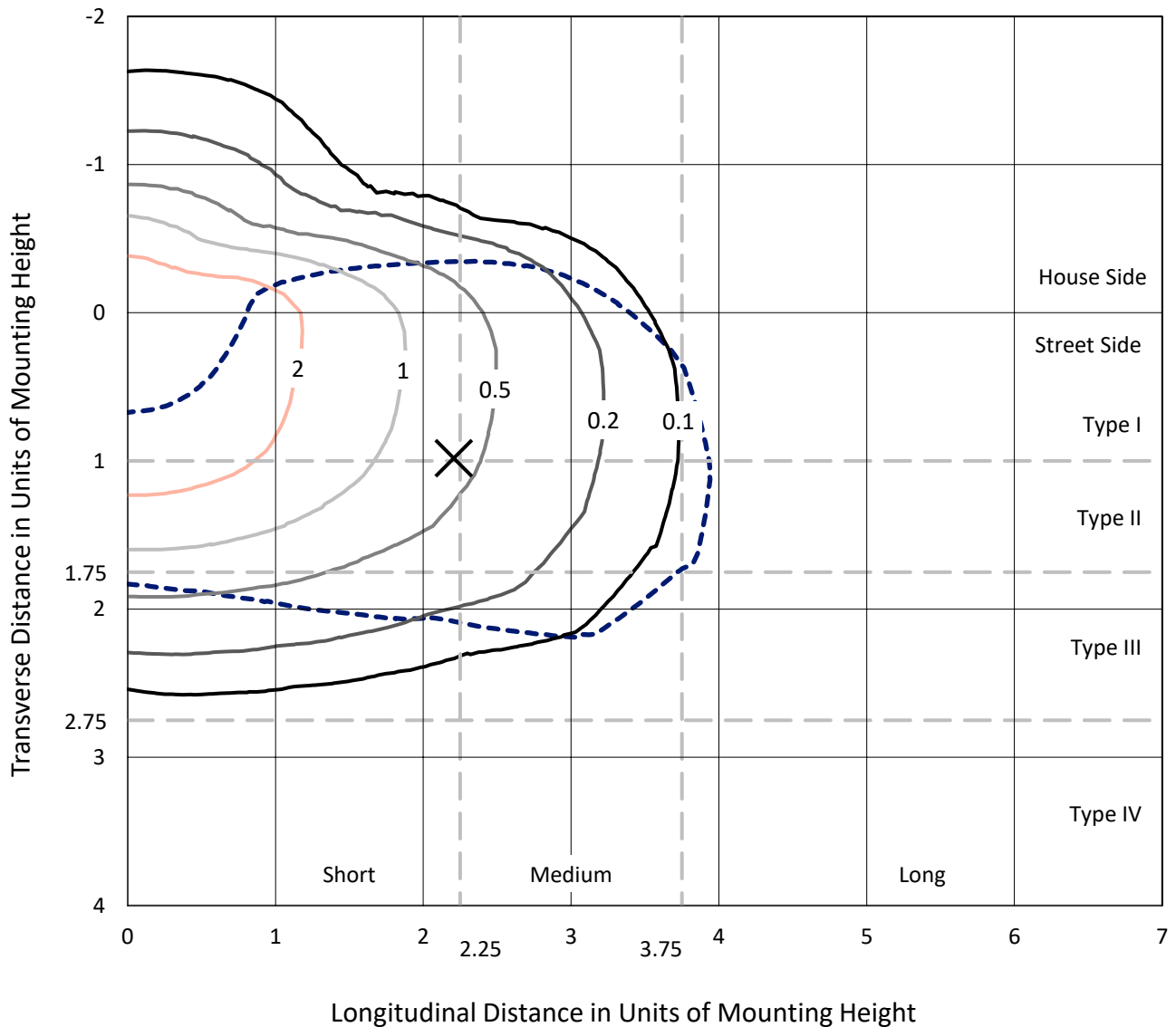
Input Watts (W): 84.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P963460  
 CATALOG NUMBER: NAV-SB3A-727-U-T3

### Iso-Footcandle Lines of Horizontal Illumination

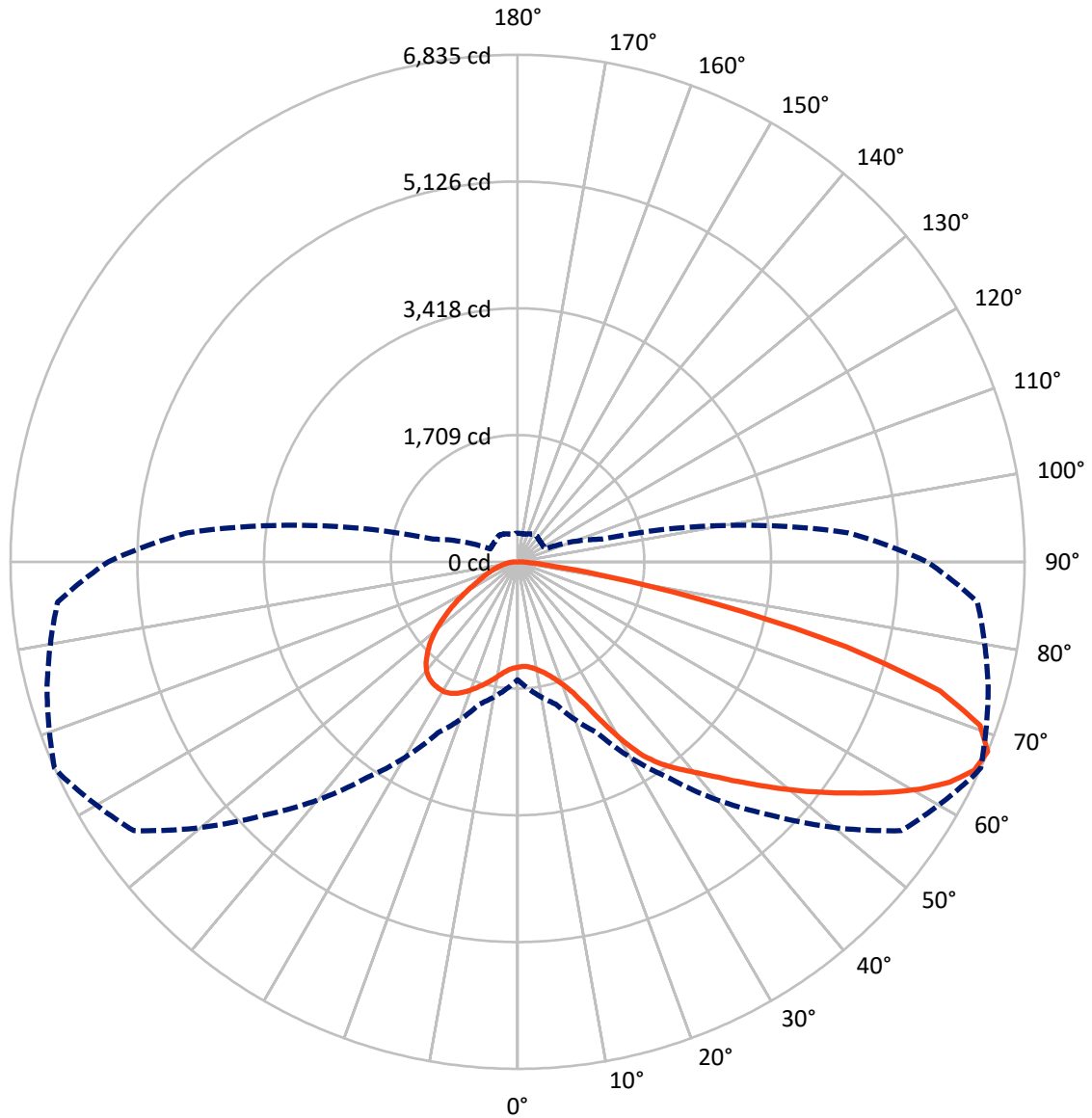
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 fc  
 Type III - Short - N/A

REPORT NUMBER: P963460  
CATALOG NUMBER: NAV-SB3A-727-U-T3

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P963460  
 CATALOG NUMBER: NAV-SB3A-727-U-T3

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3183.7	0.0	3183.7
	% Fixture	24.9	0.0	24.9
<b>Street Side</b>	Lumens	9620.5	0.0	9620.5
	% Fixture	75.1	0.0	75.1
<b>Total</b>	Lumens	12804.3	0.0	12804.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	140.8	1.1
10°-20°	465.2	3.6
20°-30°	896.6	7.0
30°-40°	1572.1	12.3
40°-50°	2337.3	18.3
50°-60°	2962.7	23.1
60°-70°	2898.9	22.6
70°-80°	1382.8	10.8
80°-90°	147.8	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°	12804.3	100.0
0°-180°	12804.3	100.0

**Coefficient of Utilization**



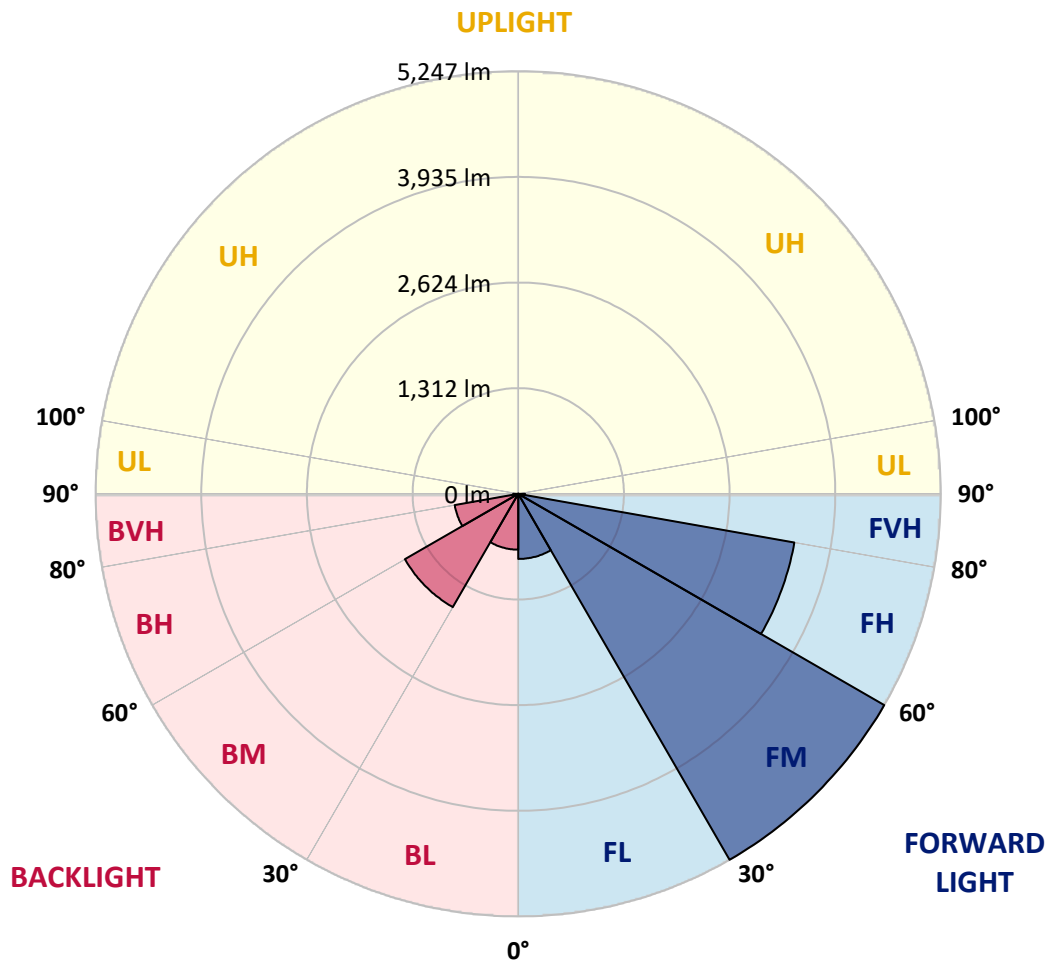
REPORT NUMBER: P963460  
 CATALOG NUMBER: NAV-SB3A-727-U-T3

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	809.1	6.3			
FM (30°-60°)	5247.1	41.0			
FH (60°-80°)	3480.6	27.2			G2/5000
FVH (80°-90°)	83.8	0.7			G1/100
BL (0°-30°)	693.5	5.4	B2/1000		
BM (30°-60°)	1625.0	12.7	B2/2500		
BH (60°-80°)	801.2	6.3	B2/1000		G2/1000
BVH (80°-90°)	64.0	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



REPORT NUMBER: P963460  
 CATALOG NUMBER: NAV-SB3A-727-U-T3

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1420.1	1420.1	1420.1	1420.1	1420.1	1420.1	1420.1	1420.1	1420.1	1420.1	1420.1
2.5°	1405.4	1413.5	1411.4	1408.0	1407.4	1408.8	1410.7	1412.8	1412.1	1415.4	1420.9
5°	1401.4	1409.4	1408.8	1408.8	1411.4	1416.8	1420.1	1423.5	1420.1	1424.2	1431.6
7.5°	1404.0	1410.1	1412.8	1415.4	1422.2	1432.2	1440.3	1447.7	1443.7	1448.4	1457.9
10°	1438.3	1443.0	1445.8	1445.8	1450.5	1461.9	1470.0	1483.4	1480.0	1487.5	1499.6
12.5°	1500.9	1505.6	1505.6	1503.0	1506.2	1513.7	1516.4	1531.1	1525.1	1537.2	1549.3
15°	1577.6	1587.0	1579.6	1574.9	1576.2	1583.6	1583.0	1594.4	1588.3	1598.5	1609.2
17.5°	1662.3	1674.4	1662.3	1661.7	1659.0	1667.1	1667.8	1677.8	1667.1	1674.4	1681.8
20°	1762.6	1779.4	1769.4	1772.6	1766.6	1770.0	1773.4	1788.1	1771.3	1776.7	1774.7
22.5°	1903.8	1924.0	1913.3	1926.1	1922.1	1919.3	1918.7	1944.9	1918.7	1920.6	1901.2
25°	2109.8	2133.9	2115.1	2132.6	2132.6	2141.3	2151.5	2185.1	2141.3	2128.6	2078.1
27.5°	2413.8	2438.1	2401.1	2411.8	2408.4	2430.0	2419.2	2502.6	2455.5	2434.7	2333.1
30°	2779.8	2822.8	2752.8	2750.2	2746.8	2781.1	2796.6	2851.8	2804.0	2783.2	2660.7
32.5°	3175.3	3220.4	3137.0	3112.8	3100.0	3120.8	3108.1	3152.5	3119.5	3087.2	2935.9
35°	3593.9	3638.2	3558.8	3511.8	3460.6	3416.8	3371.1	3382.6	3351.6	3302.6	3145.7
37.5°	3989.4	4070.8	3986.7	3936.2	3842.0	3756.6	3628.8	3575.6	3546.7	3501.6	3343.6
40°	4392.3	4438.8	4374.9	4331.9	4229.6	4095.7	3891.2	3778.8	3739.8	3696.0	3562.2
42.5°	4689.1	4733.4	4699.1	4669.5	4589.4	4434.0	4169.7	4029.1	3972.6	3923.5	3809.7
45°	4924.5	4957.4	4935.9	4946.6	4912.4	4761.7	4458.2	4297.5	4239.0	4179.1	4089.6
47.5°	5019.3	5054.4	5088.6	5152.6	5211.1	5100.1	4768.4	4588.1	4526.2	4465.0	4376.9
50°	5008.6	5044.2	5143.9	5279.7	5461.3	5424.3	5095.4	4897.6	4840.4	4770.5	4689.1
52.5°	4922.5	4962.8	5090.7	5316.7	5606.0	5667.2	5428.4	5217.1	5163.3	5079.9	4998.5
55°	4696.4	4720.6	4912.4	5232.6	5640.3	5836.8	5754.7	5557.5	5503.7	5387.3	5298.5
57.5°	4277.3	4312.3	4591.5	5005.9	5554.2	5951.8	6041.2	5915.5	5863.6	5696.1	5603.3
60°	3730.4	3786.2	4105.7	4625.1	5334.9	5951.2	6301.6	6267.3	6224.2	6000.2	5903.4
62.5°	3111.5	3176.1	3483.5	4086.9	4951.4	5782.2	6464.4	6561.9	6539.8	6280.8	6157.0
65°	2389.6	2434.0	2740.1	3390.6	4354.7	5419.7	6483.2	6763.2	6767.2	6494.0	6289.5
67.5°	1591.0	1718.8	1984.6	2544.4	3555.4	4826.9	6317.8	6796.1	6835.1	6567.4	6222.9
70°	776.3	944.5	1204.9	1653.6	2544.4	3918.1	5885.1	6525.7	6612.4	6353.4	5826.0
72.5°	322.3	376.7	518.6	816.0	1460.5	2643.9	5016.0	5792.4	5953.1	5629.5	4898.3
75°	217.3	235.4	296.6	418.4	665.3	1303.8	3617.3	4319.0	4578.1	4251.8	3475.4
77.5°	167.5	179.0	216.0	292.6	395.5	493.1	1936.1	2602.9	2736.7	2533.6	1808.3
80°	131.8	140.6	161.4	213.3	280.5	263.7	660.0	1179.4	1256.6	1054.2	581.3
82.5°	114.4	117.8	115.7	144.6	186.3	154.1	216.6	435.3	480.3	348.5	189.7
85°	82.7	92.1	96.2	89.5	98.9	78.0	88.8	154.1	169.5	151.4	107.0
87.5°	33.6	49.8	61.2	57.8	36.3	22.2	27.6	45.1	51.8	56.5	35.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P963460  
 CATALOG NUMBER: NAV-SB3A-727-U-T3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1420.1	1420.1	1420.1	1420.1	1420.1	1420.1	1420.1	1420.1	1420.1	1420.1	1420.1
2.5°	1421.5	1426.2	1429.6	1433.7	1436.3	1440.3	1448.4	1453.1	1453.8	1457.1	1456.5
5°	1434.3	1441.0	1448.4	1459.2	1471.3	1481.4	1496.9	1507.7	1511.7	1515.1	1514.3
7.5°	1461.9	1471.3	1484.7	1503.6	1521.1	1534.5	1553.4	1566.2	1578.9	1583.6	1584.3
10°	1503.0	1516.4	1535.9	1561.5	1580.2	1597.8	1617.2	1628.0	1640.8	1646.3	1648.9
12.5°	1554.0	1568.1	1593.8	1629.3	1646.9	1659.0	1665.7	1663.1	1665.7	1670.4	1671.8
15°	1612.5	1628.0	1657.0	1695.4	1707.4	1696.7	1681.8	1668.4	1666.3	1667.8	1672.5
17.5°	1681.8	1693.3	1726.9	1759.2	1750.5	1706.1	1673.8	1652.3	1641.5	1638.2	1642.9
20°	1778.8	1778.8	1806.4	1826.6	1768.0	1692.6	1642.2	1607.2	1585.0	1575.5	1573.6
22.5°	1896.5	1885.7	1903.2	1889.1	1764.6	1655.0	1585.0	1524.5	1490.8	1477.3	1475.3
25°	2045.8	2033.1	2028.4	1940.8	1740.3	1595.1	1481.4	1408.0	1378.4	1371.0	1372.4
27.5°	2271.2	2238.9	2177.7	1969.1	1696.0	1500.9	1360.3	1292.3	1275.5	1276.2	1278.2
30°	2571.2	2506.6	2356.6	1973.8	1623.3	1367.7	1236.5	1188.1	1180.0	1183.4	1194.8
32.5°	2849.1	2787.9	2539.6	1952.3	1511.7	1237.2	1125.6	1093.2	1081.1	1085.2	1090.5
35°	3067.0	3050.2	2709.2	1922.1	1374.4	1114.8	1025.9	998.4	974.8	969.4	973.4
37.5°	3272.9	3266.2	2836.3	1879.6	1238.5	1028.0	945.9	909.6	875.2	856.4	857.1
40°	3498.9	3492.2	2919.7	1814.4	1118.1	952.6	873.9	826.2	783.7	749.5	752.8
42.5°	3753.2	3713.6	2959.4	1720.9	1015.9	888.7	815.4	750.8	694.9	663.3	665.3
45°	4031.1	3941.6	2958.8	1601.8	929.8	830.1	752.8	661.3	609.5	579.9	578.6
47.5°	4325.7	4159.6	2922.4	1470.0	846.3	765.6	655.9	586.0	551.7	533.5	529.4
50°	4629.8	4363.4	2860.5	1318.6	760.9	692.3	595.4	547.7	521.4	504.6	498.5
52.5°	4915.8	4548.4	2785.8	1147.1	674.0	620.9	568.5	531.5	503.9	485.0	476.9
55°	5181.5	4707.8	2680.2	971.5	603.4	573.2	555.7	524.7	493.1	470.9	462.2
57.5°	5417.6	4811.5	2497.9	806.6	553.0	540.2	542.2	513.3	476.9	458.2	446.1
60°	5614.0	4887.5	2228.1	653.9	512.0	507.9	521.4	491.8	449.4	427.8	418.4
62.5°	5731.8	4886.2	1897.2	535.5	476.9	478.4	493.8	464.8	421.8	401.6	395.5
65°	5721.7	4766.4	1533.8	458.2	443.3	444.6	464.8	435.3	398.9	386.8	386.1
67.5°	5519.2	4474.4	1176.6	407.6	406.3	412.4	435.9	415.1	384.8	383.5	385.5
70°	4970.9	3868.2	847.7	367.4	368.0	376.7	407.6	402.3	377.4	380.1	379.5
72.5°	3986.0	2949.3	569.2	324.9	325.6	339.8	380.8	392.2	370.0	405.7	411.0
75°	2654.6	1839.3	365.9	279.8	280.5	298.7	357.2	372.7	349.8	404.4	407.6
77.5°	1275.5	826.8	265.1	235.4	235.4	252.3	308.8	333.6	298.1	314.2	287.9
80°	440.6	310.8	208.6	189.7	185.6	197.1	260.3	289.3	257.0	236.8	222.0
82.5°	173.5	161.4	167.5	147.3	133.9	141.2	202.5	238.8	189.0	170.9	170.3
85°	99.5	105.0	118.4	97.6	77.4	86.8	148.7	171.6	142.6	125.8	128.5
87.5°	27.0	37.0	54.5	50.4	35.0	37.0	70.6	94.8	82.1	63.2	65.3
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)