

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: P963455

Luminaire Tested: **NAV-SB3A-727-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963455
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-727-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12967.3 lumens
Efficiency: N/A
Efficacy: 153.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

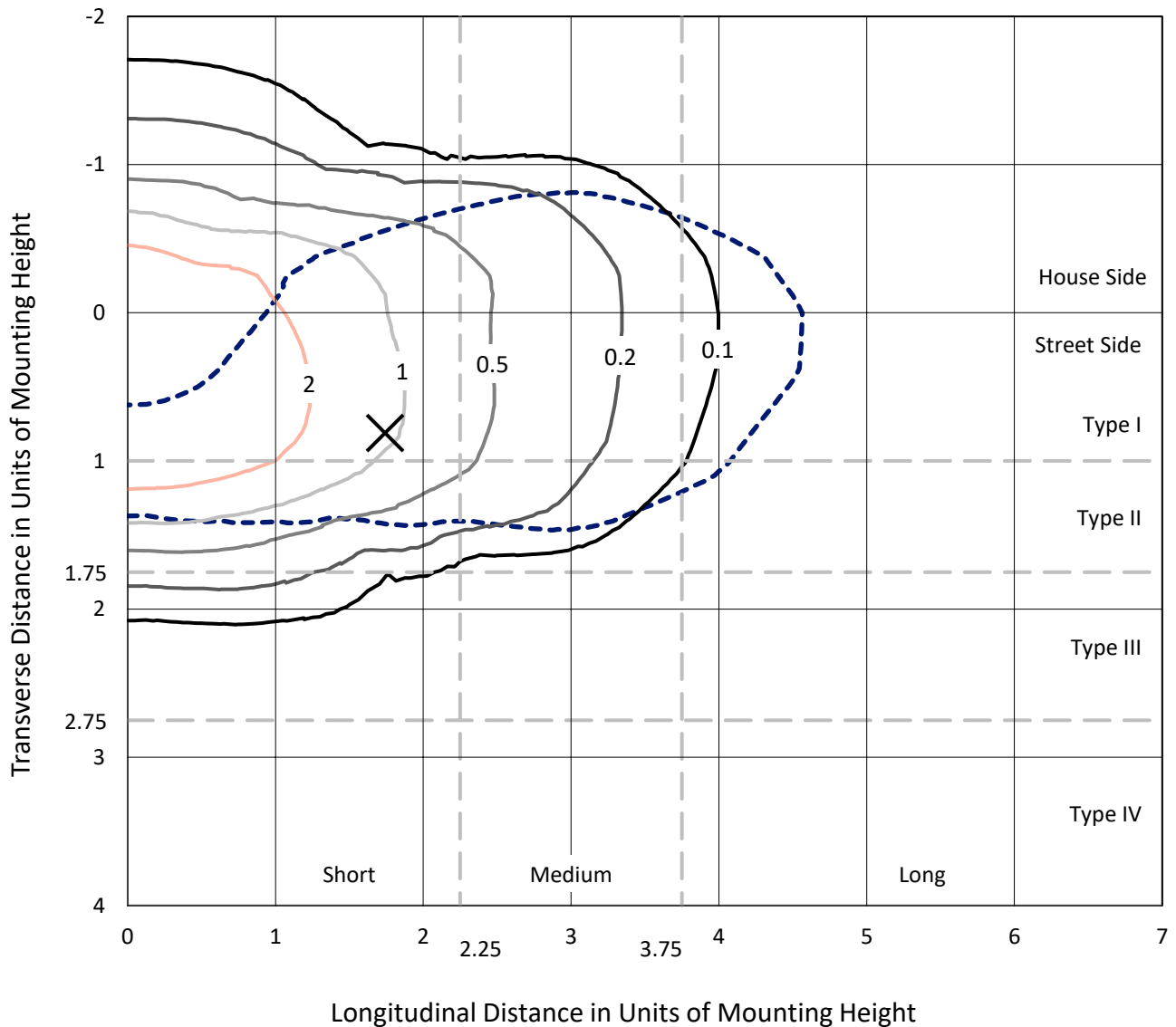
Input Watts (W): 84.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

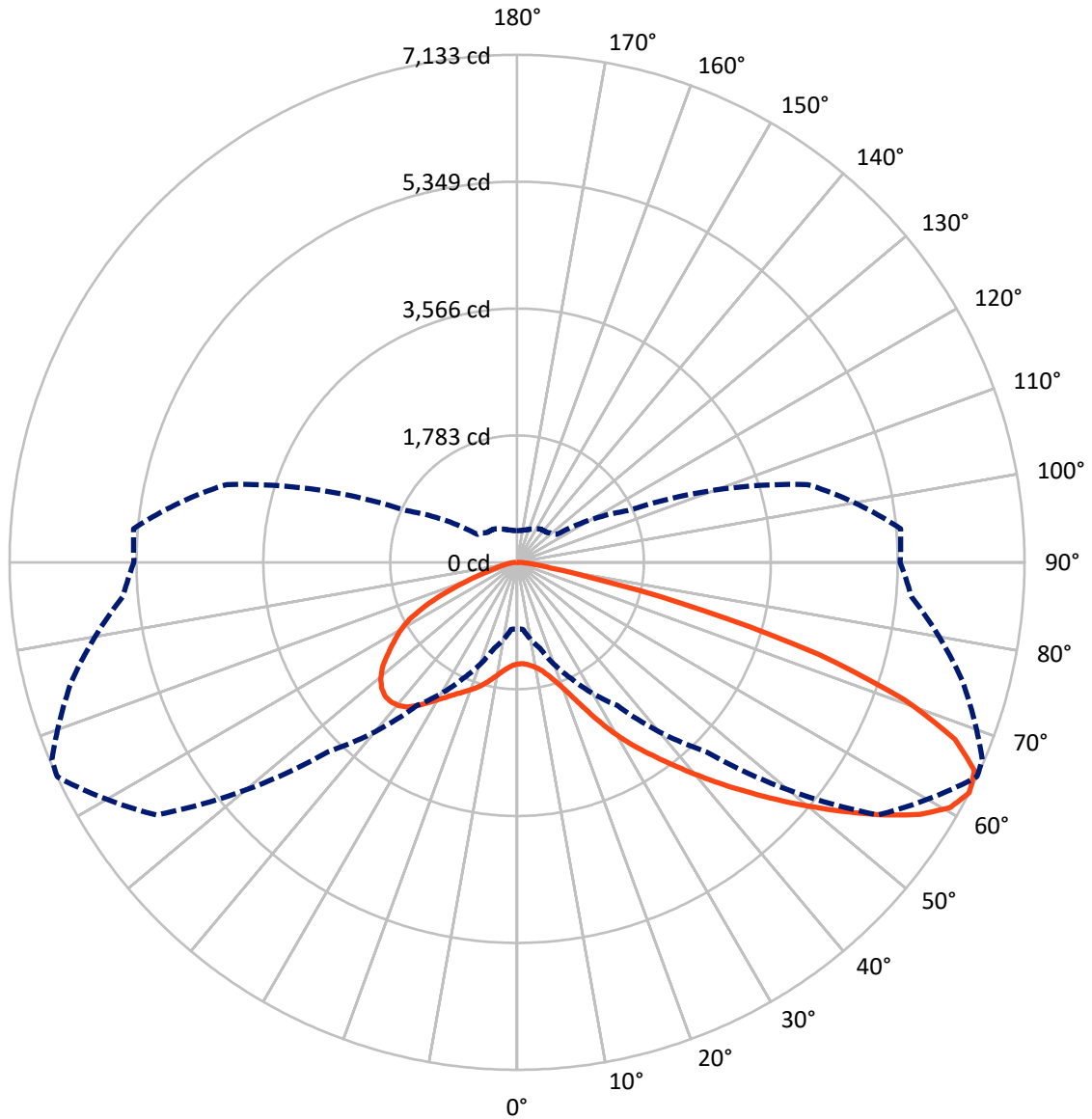
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4091.9	0.0	4091.9
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	8875.4	0.0	8875.4
	% Fixture	68.4	0.0	68.4
Total	Lumens	12967.3	0.0	12967.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.5	1.1
10°-20°	483.1	3.7
20°-30°	979.6	7.6
30°-40°	1695.1	13.1
40°-50°	2565.2	19.8
50°-60°	3007.5	23.2
60°-70°	2521.5	19.4
70°-80°	1392.0	10.7
80°-90°	180.8	1.4
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°	12967.3	100.0
0°-180°	12967.3	100.0

Coefficient of Utilization



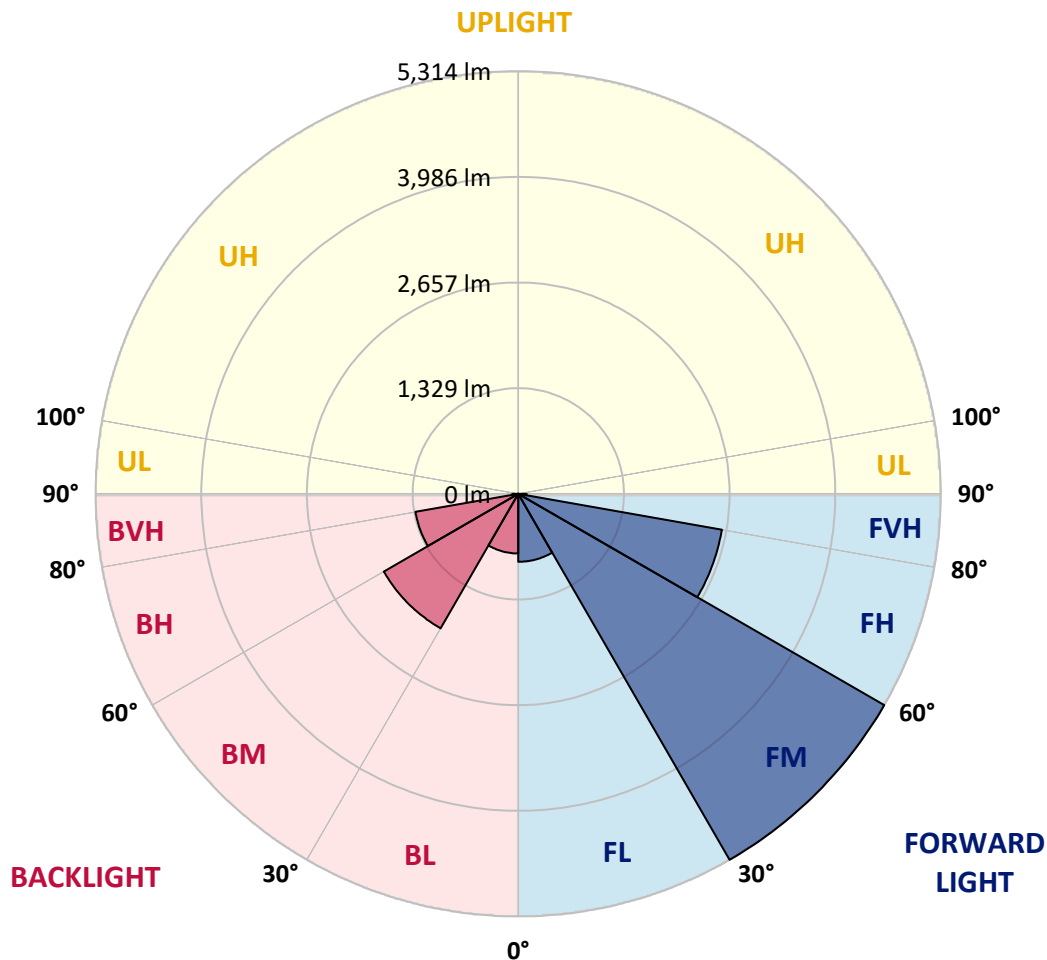
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	854.7	6.6			
FM (30°-60°)	5314.4	41.0			
FH (60°-80°)	2600.9	20.1			G2/5000
FVH (80°-90°)	105.4	0.8			G2/225
BL (0°-30°)	750.4	5.8	B2/1000		
BM (30°-60°)	1953.4	15.1	B2/2500		
BH (60°-80°)	1312.6	10.1	B3/2500		G3/2500
BVH (80°-90°)	75.4	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 Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	1429.0	1429.0	1429.0	1429.0	1429.0	1429.0	1429.0	1429.0	1429.0	1429.0	1429.0
2.5°	1419.5	1415.5	1418.8	1418.8	1420.2	1419.5	1424.2	1425.6	1427.6	1431.6	1431.6
5°	1405.4	1404.8	1410.8	1416.1	1421.6	1426.3	1432.3	1441.0	1442.4	1447.1	1453.1
7.5°	1400.7	1396.7	1406.1	1412.8	1425.6	1437.0	1453.1	1468.0	1474.1	1476.0	1487.5
10°	1437.0	1430.3	1439.0	1443.1	1453.9	1465.2	1484.1	1507.7	1514.3	1522.4	1535.2
12.5°	1498.9	1491.5	1504.3	1510.3	1520.4	1530.5	1543.3	1566.2	1569.6	1584.3	1596.4
15°	1583.6	1574.9	1583.0	1590.4	1607.2	1616.6	1629.4	1651.6	1651.6	1663.1	1671.8
17.5°	1698.7	1687.3	1693.3	1696.1	1706.8	1720.9	1742.4	1762.0	1772.0	1768.0	1755.9
20°	1870.3	1856.2	1856.2	1842.6	1838.6	1850.1	1878.3	1905.3	1916.0	1895.1	1865.6
22.5°	2127.9	2107.7	2096.3	2050.6	2032.4	2033.7	2062.0	2095.0	2103.7	2066.7	2000.1
25°	2455.6	2423.9	2408.4	2341.2	2300.2	2264.5	2286.7	2329.1	2341.2	2295.5	2187.8
27.5°	2783.2	2785.2	2770.4	2689.7	2621.7	2556.5	2545.1	2589.5	2602.3	2550.4	2417.3
30°	3242.7	3194.9	3166.6	3069.8	2972.9	2881.4	2834.3	2852.5	2855.9	2793.9	2639.3
32.5°	3639.0	3626.9	3566.3	3481.5	3357.1	3213.8	3135.1	3106.2	3100.7	3012.6	2828.9
35°	4090.4	4083.6	4019.7	3918.8	3784.3	3585.1	3443.2	3360.5	3353.7	3229.9	3016.7
37.5°	4549.2	4549.2	4486.6	4376.3	4237.0	3988.1	3772.1	3641.0	3619.5	3457.9	3207.7
40°	4915.2	4892.9	4904.4	4858.0	4698.5	4434.2	4137.4	3947.1	3918.2	3724.3	3410.9
42.5°	5123.1	5115.7	5184.2	5236.1	5170.8	4959.6	4539.7	4278.8	4238.4	4017.7	3645.0
45°	5169.5	5161.4	5283.9	5473.6	5565.0	5478.3	4977.1	4627.9	4578.8	4324.5	3895.9
47.5°	5062.5	5046.4	5226.0	5525.4	5818.7	5971.4	5450.6	5006.6	4935.4	4623.2	4153.6
50°	4740.9	4725.5	4997.3	5394.9	5904.1	6306.4	5964.7	5408.3	5299.4	4943.5	4414.0
52.5°	4041.9	4049.4	4475.2	5021.5	5791.8	6515.0	6407.4	5831.4	5700.2	5271.1	4658.2
55°	3148.5	3164.7	3688.1	4289.5	5342.4	6483.3	6709.4	6267.4	6136.9	5579.2	4910.5
57.5°	2254.4	2325.7	2816.2	3411.5	4479.2	5982.2	6775.4	6681.9	6555.4	5915.6	5157.4
60°	1461.2	1474.1	1978.6	2578.7	3410.9	5091.4	6641.5	6996.0	6897.1	6258.6	5363.9
62.5°	936.4	945.3	1252.7	1803.7	2454.9	3766.8	6190.7	7132.6	7102.3	6485.4	5562.4
65°	688.2	681.5	841.6	1192.2	1653.6	2323.1	5315.4	7066.7	7126.5	6627.3	5726.5
67.5°	574.5	565.1	643.8	825.4	1218.3	1319.3	3932.9	6638.1	6857.5	6611.1	5846.9
70°	523.4	515.4	563.1	612.8	950.6	883.3	1982.7	5771.0	6108.6	6427.6	5827.4
72.5°	443.3	429.3	494.5	544.3	739.3	677.4	819.4	4432.8	4844.6	5838.9	5552.9
75°	343.8	334.4	390.2	479.0	555.7	528.8	518.0	2691.8	3141.1	4515.5	4858.0
77.5°	272.4	259.7	310.8	373.4	499.9	398.9	377.4	1159.2	1604.5	2882.8	3635.0
80°	205.2	193.7	236.2	295.3	384.2	300.7	244.3	472.9	604.9	1460.5	1827.9
82.5°	146.0	135.9	164.8	216.6	258.3	269.8	150.1	265.1	298.1	563.1	408.4
85°	93.5	87.4	110.3	135.9	164.1	173.5	91.5	138.6	152.0	232.1	170.3
87.5°	51.1	41.7	59.2	63.2	76.1	69.3	43.8	50.4	54.5	84.0	72.0
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°	1429.0	1429.0	1429.0	1429.0	1429.0	1429.0	1429.0	1429.0	1429.0	1429.0	1429.0
2.5°	1434.3	1436.3	1443.1	1445.0	1449.8	1455.8	1459.9	1463.9	1463.9	1468.0	1468.0
5°	1453.9	1458.6	1472.6	1480.1	1492.2	1504.3	1511.7	1520.4	1525.8	1528.5	1529.8
7.5°	1491.5	1498.9	1519.0	1531.9	1552.8	1569.6	1581.0	1593.1	1595.8	1603.2	1600.5
10°	1542.6	1551.3	1574.3	1598.5	1623.4	1644.2	1655.0	1663.8	1667.1	1668.4	1665.1
12.5°	1601.2	1614.0	1643.6	1673.1	1699.3	1717.6	1720.3	1718.2	1708.8	1700.8	1700.8
15°	1673.1	1684.6	1717.6	1749.9	1775.4	1778.8	1762.0	1751.2	1739.7	1737.7	1737.7
17.5°	1759.3	1765.4	1795.6	1827.2	1829.2	1817.8	1792.9	1782.8	1772.0	1764.6	1765.4
20°	1859.5	1857.5	1879.0	1892.5	1878.3	1843.4	1805.6	1788.8	1778.1	1769.4	1770.1
22.5°	1979.3	1963.8	1961.1	1957.7	1920.0	1846.7	1795.6	1774.1	1757.3	1745.2	1749.2
25°	2153.5	2094.3	2053.3	2030.4	1945.7	1828.6	1763.3	1715.5	1683.9	1663.1	1671.2
27.5°	2371.4	2271.9	2168.3	2112.4	1945.7	1791.6	1685.3	1607.9	1556.1	1534.5	1545.3
30°	2579.3	2475.1	2322.3	2211.3	1940.9	1731.0	1559.4	1451.8	1391.2	1369.7	1382.5
32.5°	2756.9	2643.3	2485.8	2319.7	1929.5	1632.8	1403.3	1284.3	1225.8	1200.2	1213.0
35°	2921.8	2800.7	2650.0	2438.8	1899.2	1488.8	1231.8	1141.0	1075.7	1034.7	1048.2
37.5°	3090.7	2946.7	2805.4	2546.4	1844.7	1320.6	1099.9	1022.6	945.9	890.7	905.5
40°	3274.4	3102.1	2971.6	2610.3	1755.2	1160.5	997.7	927.0	845.6	787.1	798.6
42.5°	3488.9	3288.4	3156.6	2643.3	1632.8	1046.8	931.1	861.8	785.2	737.4	746.7
45°	3713.0	3493.6	3325.4	2642.6	1496.2	993.6	909.6	840.9	756.1	706.4	714.4
47.5°	3947.8	3708.2	3471.5	2599.5	1377.8	1001.0	897.5	795.9	702.3	653.9	660.6
50°	4183.2	3943.1	3612.7	2518.8	1327.4	984.9	852.4	732.7	622.3	578.6	581.3
52.5°	4416.6	4192.7	3734.5	2403.7	1276.2	925.1	794.5	650.6	589.4	559.0	559.0
55°	4651.4	4439.5	3867.0	2236.2	1148.4	855.1	697.6	619.6	563.1	535.6	532.8
57.5°	4886.9	4724.7	3992.8	2068.8	987.6	769.0	644.5	581.9	536.9	513.3	509.3
60°	5131.8	5051.1	4122.7	1914.7	828.8	658.7	605.5	551.7	505.9	479.7	477.6
62.5°	5384.1	5410.4	4224.2	1716.2	682.9	591.3	570.5	515.4	470.9	446.1	445.4
65°	5638.4	5756.8	4290.9	1441.0	553.7	527.5	532.8	475.6	430.6	409.1	408.4
67.5°	5830.1	6006.4	4272.0	1090.5	454.1	466.9	485.7	433.9	391.5	374.7	375.4
70°	5851.6	5976.8	4086.4	746.7	380.1	407.6	433.3	392.9	349.1	337.0	337.7
72.5°	5565.0	5573.1	3568.9	487.8	321.5	357.9	378.1	351.2	308.8	296.6	296.0
75°	4813.6	4609.0	2620.4	321.5	269.1	307.5	326.3	307.5	266.4	269.1	259.7
77.5°	3647.1	3264.2	1591.1	228.8	224.7	258.3	283.9	270.5	235.4	264.3	232.8
80°	1879.0	1766.0	709.7	170.9	177.6	206.5	233.5	216.0	186.3	177.6	162.2
82.5°	430.6	500.5	279.8	122.5	128.5	148.7	178.2	162.2	133.9	113.1	111.7
85°	150.7	164.8	123.8	76.7	75.3	92.9	121.1	108.3	90.8	72.7	76.7
87.5°	47.8	62.5	46.4	31.0	32.3	41.7	55.9	51.1	42.3	27.6	28.9
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)