

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: P882909

Luminaire Tested: **NAV-SB3A-730-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882909
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-730-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13254 lumens
Efficiency: N/A
Efficacy: 156.5 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

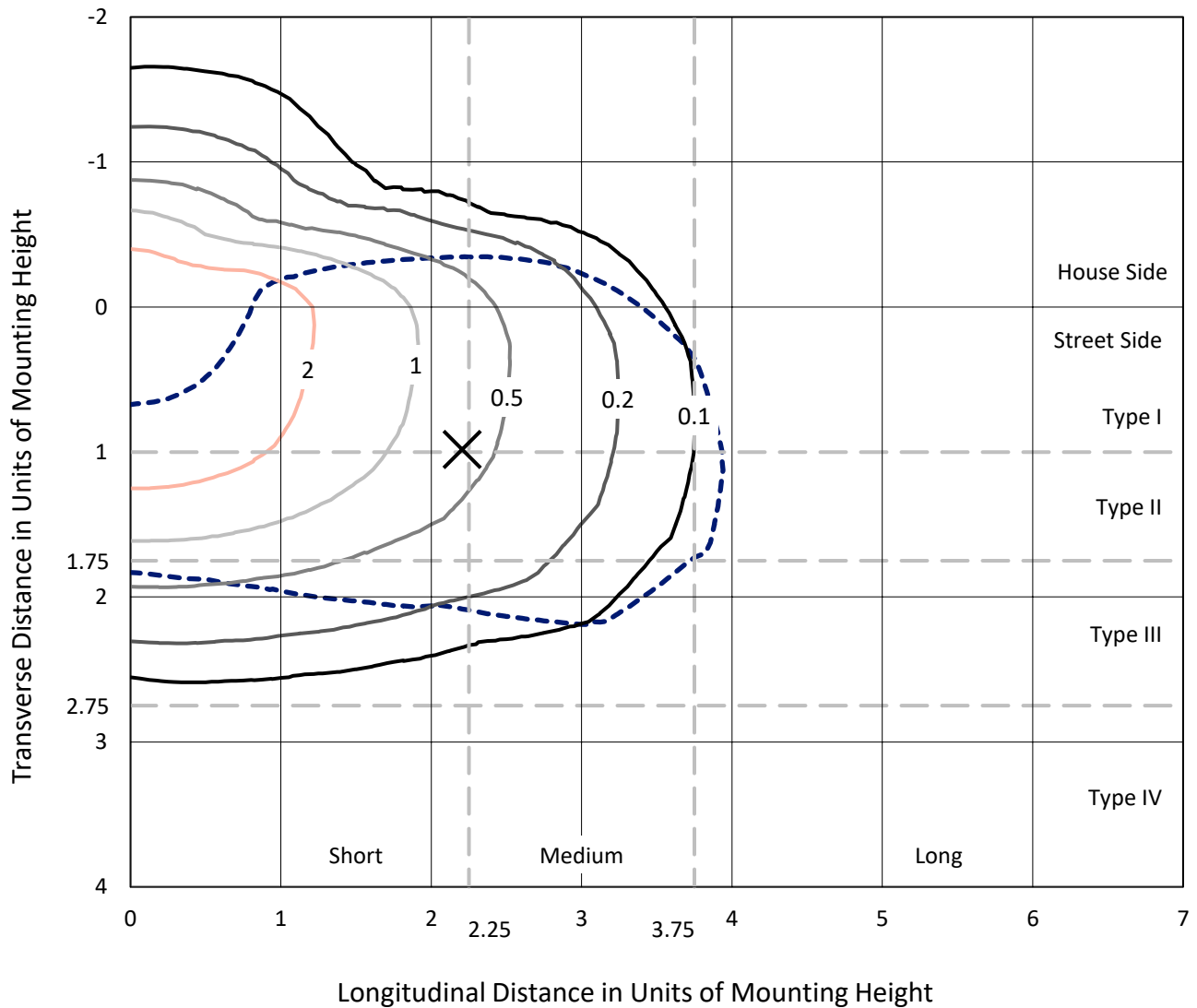
Input Watts (W): 84.7
Input Voltage (V): 120.0
Input Current (Ain): 0.717
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 11.969
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

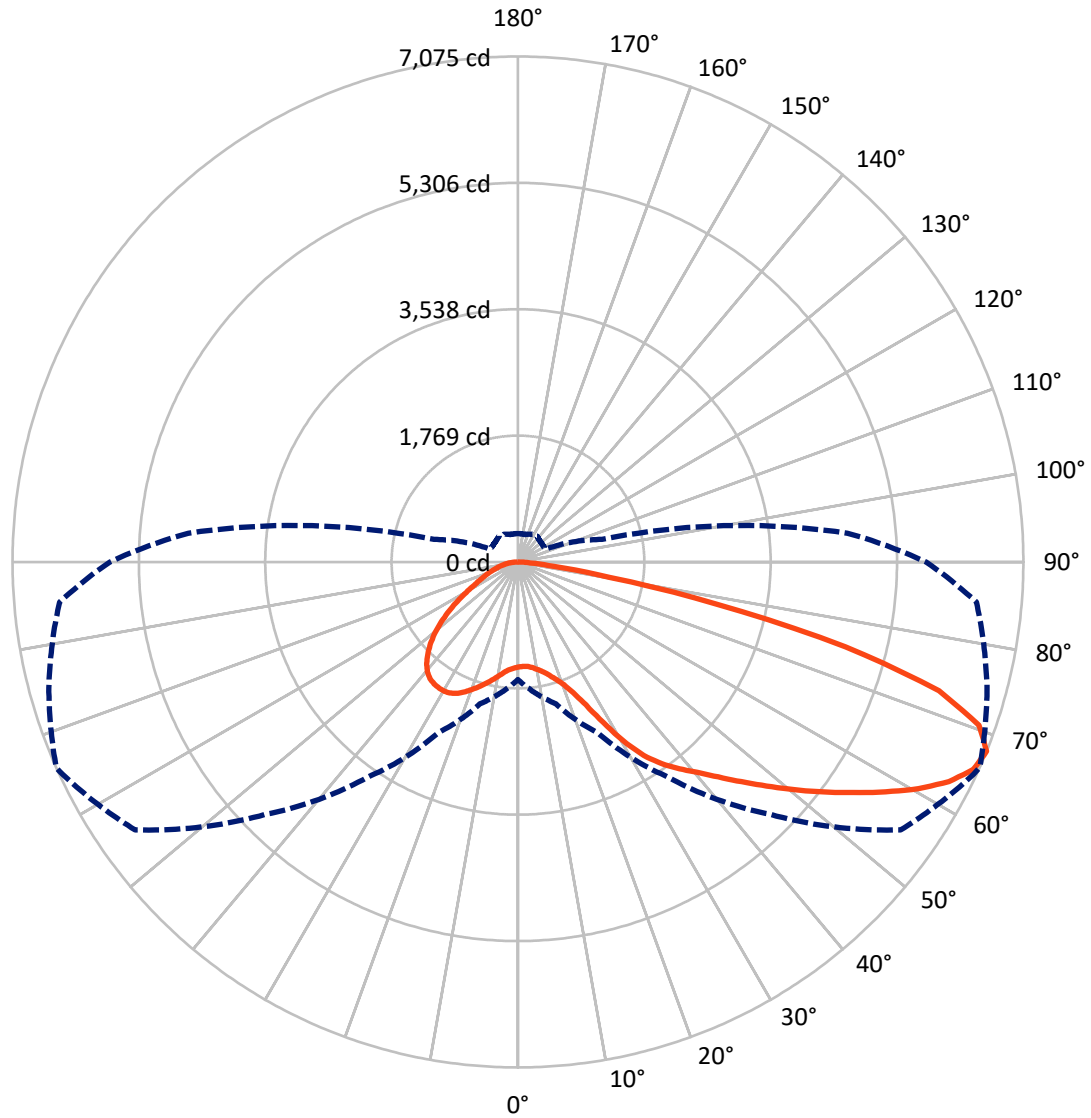
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 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	3295.6	0.0	3295.6
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	9958.4	0.0	9958.4
	% Fixture	75.1	0.0	75.1
Total	Lumens	13254.0	0.0	13254.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.7	1.1
10°-20°	481.5	3.6
20°-30°	928.1	7.0
30°-40°	1627.4	12.3
40°-50°	2419.3	18.3
50°-60°	3066.8	23.1
60°-70°	3000.7	22.6
70°-80°	1431.4	10.8
80°-90°	153.0	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°	13254.0	100.0
0°-180°	13254.0	100.0

Coefficient of Utilization



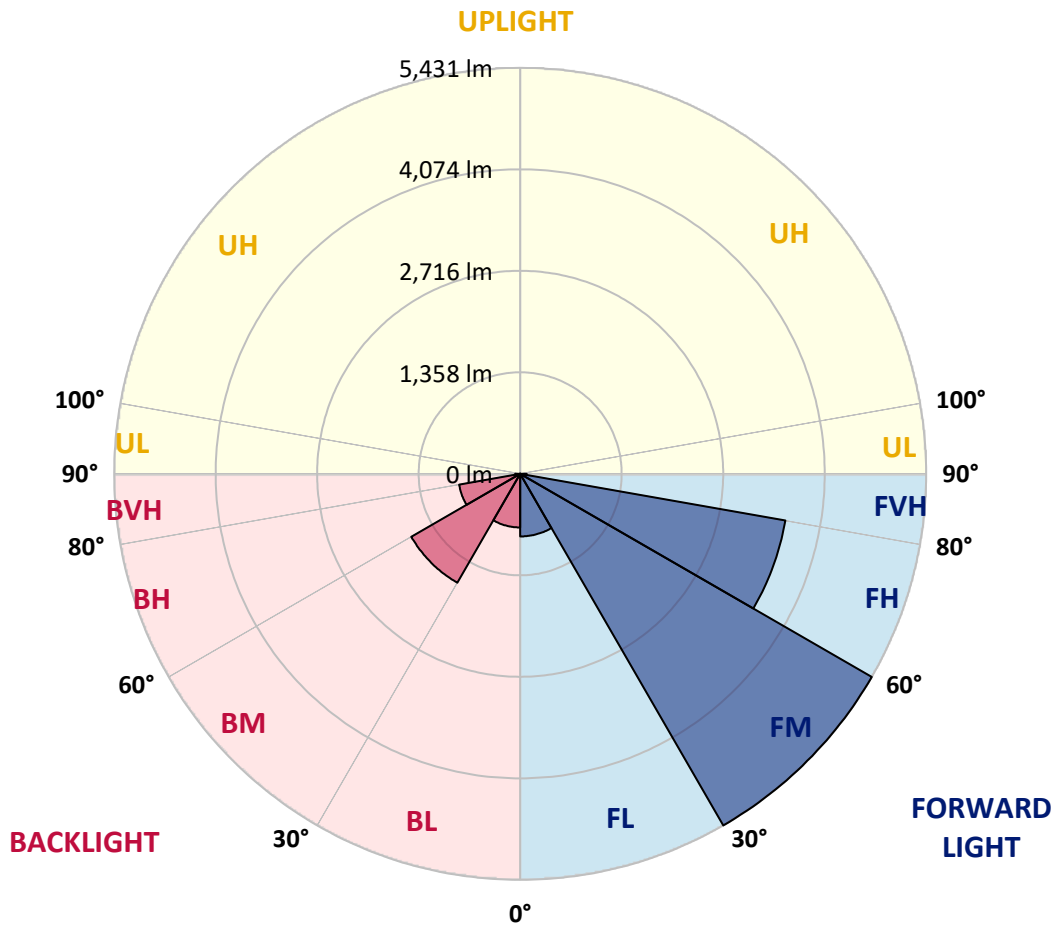
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	837.5	6.3			
FM (30°-60°)	5431.4	41.0			
FH (60°-80°)	3602.8	27.2			G2/5000
FVH (80°-90°)	86.7	0.7			G1/100
BL (0°-30°)	717.9	5.4	B2/1000		
BM (30°-60°)	1682.1	12.7	B2/2500		
BH (60°-80°)	829.3	6.3	B2/1000		G2/1000
BVH (80°-90°)	66.2	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°	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0
2.5°	1454.7	1463.1	1461.0	1457.5	1456.8	1458.2	1460.3	1462.4	1461.7	1465.2	1470.7
5°	1450.5	1458.9	1458.2	1458.2	1461.0	1466.6	1470.0	1473.5	1470.0	1474.2	1481.9
7.5°	1453.3	1459.6	1462.4	1465.2	1472.1	1482.6	1490.9	1498.6	1494.4	1499.3	1509.0
10°	1488.8	1493.7	1496.5	1496.5	1501.4	1513.2	1521.6	1535.5	1532.0	1539.7	1552.2
12.5°	1553.6	1558.5	1558.5	1555.7	1559.2	1566.8	1569.6	1584.9	1578.7	1591.2	1603.7
15°	1633.0	1642.7	1635.1	1630.2	1631.6	1639.3	1638.6	1650.4	1644.1	1654.6	1665.7
17.5°	1720.7	1733.3	1720.7	1720.0	1717.3	1725.6	1726.3	1736.8	1725.6	1733.3	1740.9
20°	1824.5	1841.9	1831.5	1834.9	1828.7	1832.2	1835.6	1851.0	1833.6	1839.1	1837.0
22.5°	1970.7	1991.6	1980.5	1993.7	1989.5	1986.8	1986.1	2013.2	1986.1	1988.1	1968.0
25°	2183.8	2208.9	2189.4	2207.5	2207.5	2216.6	2227.0	2261.8	2216.6	2203.3	2151.1
27.5°	2498.6	2523.7	2485.4	2496.5	2493.0	2515.3	2504.2	2590.5	2541.8	2520.2	2415.0
30°	2877.4	2922.0	2849.6	2846.8	2843.3	2878.8	2894.8	2951.9	2902.5	2880.9	2754.2
32.5°	3286.9	3333.5	3247.2	3222.1	3208.9	3230.5	3217.2	3263.2	3229.1	3195.7	3039.0
35°	3720.0	3766.0	3683.8	3635.1	3582.1	3536.9	3489.5	3501.4	3469.3	3418.5	3256.2
37.5°	4129.5	4213.8	4126.7	4074.5	3977.0	3888.5	3756.2	3701.2	3671.3	3624.6	3461.0
40°	4546.6	4594.7	4528.5	4483.9	4378.1	4239.5	4027.8	3911.5	3871.1	3825.9	3687.3
42.5°	4853.7	4899.7	4864.2	4833.5	4750.7	4589.8	4316.1	4170.6	4112.1	4061.2	3943.6
45°	5097.5	5131.6	5109.3	5120.4	5084.9	4928.9	4614.9	4448.4	4387.8	4325.9	4233.3
47.5°	5195.6	5231.9	5267.4	5333.5	5394.1	5279.2	4935.9	4749.3	4685.2	4621.8	4530.6
50°	5184.5	5221.4	5324.5	5465.1	5653.2	5614.9	5274.3	5069.6	5010.4	4938.0	4853.7
52.5°	5095.4	5137.1	5269.5	5503.4	5802.9	5866.2	5619.0	5400.4	5344.7	5258.3	5174.1
55°	4861.4	4886.5	5084.9	5416.4	5838.4	6041.7	5956.8	5752.7	5697.0	5576.6	5484.6
57.5°	4427.5	4463.8	4752.7	5181.7	5749.3	6160.8	6253.4	6123.2	6069.6	5896.2	5800.1
60°	3861.4	3919.2	4250.0	4787.6	5522.2	6160.1	6522.9	6487.4	6442.8	6211.0	6110.7
62.5°	3220.7	3287.6	3605.8	4230.5	5125.3	5985.3	6691.4	6792.4	6769.4	6501.3	6373.2
65°	2473.5	2519.5	2836.3	3509.7	4507.6	5610.0	6710.9	7000.6	7004.8	6722.1	6510.4
67.5°	1646.9	1779.2	2054.3	2633.7	3680.3	4996.5	6539.6	7034.8	7075.2	6798.0	6441.5
70°	803.6	977.7	1247.2	1711.7	2633.7	4055.7	6091.9	6754.8	6844.7	6576.5	6030.6
72.5°	333.6	390.0	536.9	844.7	1511.8	2736.7	5192.2	5995.8	6162.2	5827.3	5070.3
75°	224.9	243.7	307.1	433.1	688.7	1349.6	3744.4	4470.7	4738.8	4401.1	3597.5
77.5°	173.4	185.2	223.5	302.9	409.5	510.4	2004.2	2694.3	2832.8	2622.5	1871.9
80°	136.5	145.5	167.1	220.8	290.4	273.0	683.1	1220.7	1300.8	1091.2	601.7
82.5°	118.4	121.9	119.8	149.7	192.9	159.5	224.2	450.6	497.2	360.7	196.4
85°	85.7	95.4	99.6	92.6	102.4	80.8	91.9	159.5	175.5	156.7	110.7
87.5°	34.8	51.5	63.4	59.9	37.6	23.0	28.6	46.7	53.6	58.5	36.2
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°	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0	1470.0
2.5°	1471.4	1476.3	1479.8	1484.0	1486.8	1490.9	1499.3	1504.2	1504.9	1508.3	1507.6
5°	1484.7	1491.6	1499.3	1510.4	1523.0	1533.4	1549.4	1560.6	1564.8	1568.2	1567.5
7.5°	1513.2	1523.0	1536.9	1556.4	1574.5	1588.4	1607.9	1621.2	1634.4	1639.3	1640.0
10°	1555.7	1569.6	1589.8	1616.3	1635.8	1653.9	1674.1	1685.2	1698.5	1704.0	1706.8
12.5°	1608.6	1623.2	1649.7	1686.6	1704.7	1717.3	1724.2	1721.4	1724.2	1729.1	1730.5
15°	1669.2	1685.2	1715.2	1754.9	1767.4	1756.3	1740.9	1727.0	1724.9	1726.3	1731.2
17.5°	1740.9	1752.8	1787.6	1821.0	1812.0	1766.0	1732.6	1710.3	1699.2	1695.7	1700.5
20°	1841.2	1841.2	1869.8	1890.7	1830.1	1752.1	1699.8	1663.6	1640.7	1630.9	1628.8
22.5°	1963.1	1951.9	1970.0	1955.4	1826.6	1713.1	1640.7	1578.0	1543.2	1529.2	1527.1
25°	2117.7	2104.4	2099.6	2009.0	1801.5	1651.1	1533.4	1457.5	1426.9	1419.2	1420.6
27.5°	2351.0	2317.5	2254.2	2038.3	1755.6	1553.6	1408.1	1337.7	1320.3	1321.0	1323.1
30°	2661.5	2594.7	2439.4	2043.2	1680.3	1415.7	1279.9	1229.8	1221.4	1224.9	1236.8
32.5°	2949.1	2885.8	2628.8	2020.9	1564.8	1280.6	1165.0	1131.6	1119.1	1123.2	1128.8
35°	3174.8	3157.4	2804.3	1989.5	1422.7	1153.9	1062.0	1033.4	1009.0	1003.5	1007.7
37.5°	3387.9	3380.9	2935.9	1945.7	1282.0	1064.1	979.1	941.5	906.0	886.5	887.2
40°	3621.8	3614.9	3022.3	1878.1	1157.4	986.1	904.6	855.1	811.3	775.8	779.2
42.5°	3885.1	3844.0	3063.3	1781.3	1051.5	919.9	844.0	777.2	719.4	686.6	688.7
45°	4172.7	4080.1	3062.6	1658.1	962.4	859.3	779.2	684.5	630.9	600.3	598.9
47.5°	4477.7	4305.7	3025.0	1521.6	876.0	792.5	679.0	606.5	571.0	552.2	548.0
50°	4792.4	4516.7	2961.0	1364.9	787.6	716.6	616.3	566.8	539.7	522.3	516.0
52.5°	5088.4	4708.2	2883.7	1187.3	697.8	642.8	588.4	550.1	521.6	502.1	493.7
55°	5363.5	4873.2	2774.4	1005.6	624.6	593.3	575.2	543.2	510.4	487.5	478.4
57.5°	5607.9	4980.5	2585.6	835.0	572.4	559.2	561.3	531.3	493.7	474.2	461.7
60°	5811.2	5059.2	2306.4	676.9	529.9	525.8	539.7	509.0	465.2	442.9	433.1
62.5°	5933.1	5057.8	1963.8	554.3	493.7	495.1	511.1	481.2	436.6	415.7	409.5
65°	5922.7	4933.8	1587.7	474.2	458.9	460.3	481.2	450.6	412.9	400.4	399.7
67.5°	5713.0	4631.6	1218.0	422.0	420.6	426.9	451.2	429.7	398.3	396.9	399.0
70°	5145.5	4004.1	877.4	380.2	380.9	390.0	422.0	416.4	390.7	393.5	392.8
72.5°	4126.0	3052.9	589.1	336.3	337.0	351.7	394.1	406.0	383.0	419.9	425.5
75°	2747.9	1903.9	378.8	289.7	290.4	309.2	369.8	385.8	362.1	418.5	422.0
77.5°	1320.3	855.8	274.4	243.7	243.7	261.1	319.6	345.4	308.5	325.2	298.0
80°	456.1	321.7	215.9	196.4	192.2	204.0	269.5	299.4	266.0	245.1	229.8
82.5°	179.7	167.1	173.4	152.5	138.6	146.2	209.6	247.2	195.7	176.9	176.2
85°	103.1	108.6	122.6	101.0	80.1	89.8	153.9	177.6	147.6	130.2	133.0
87.5°	27.9	38.3	56.4	52.2	36.2	38.3	73.1	98.2	85.0	65.5	67.5
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)