

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: P882977

Luminaire Tested: **NAV-SB3A-835-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882977
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-835-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11249 lumens
Efficiency: N/A
Efficacy: 132.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

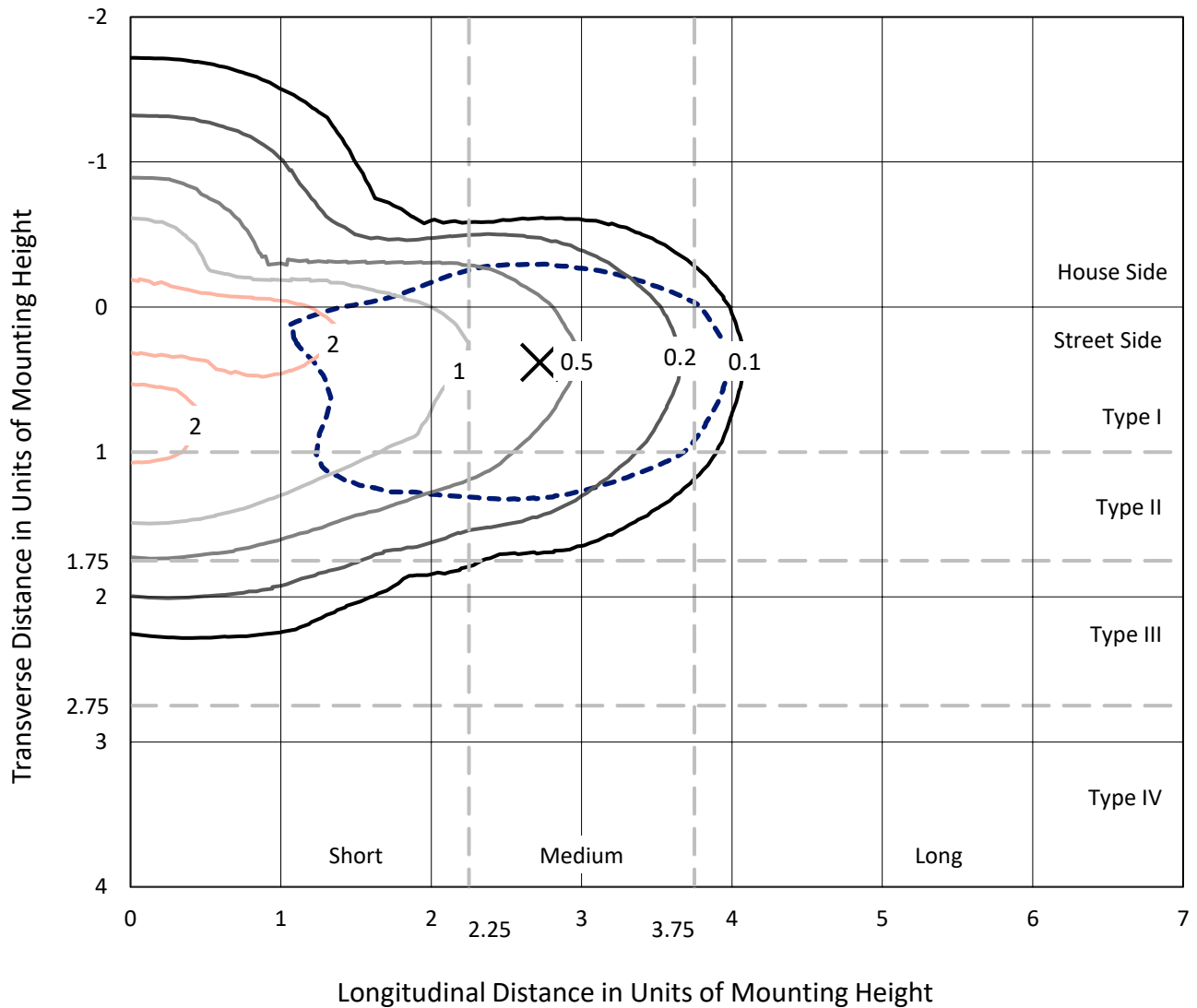
Input Watts (W): 84.7
Input Voltage (V): 120.0
Input Current (Ain): 0.717
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 11.969
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

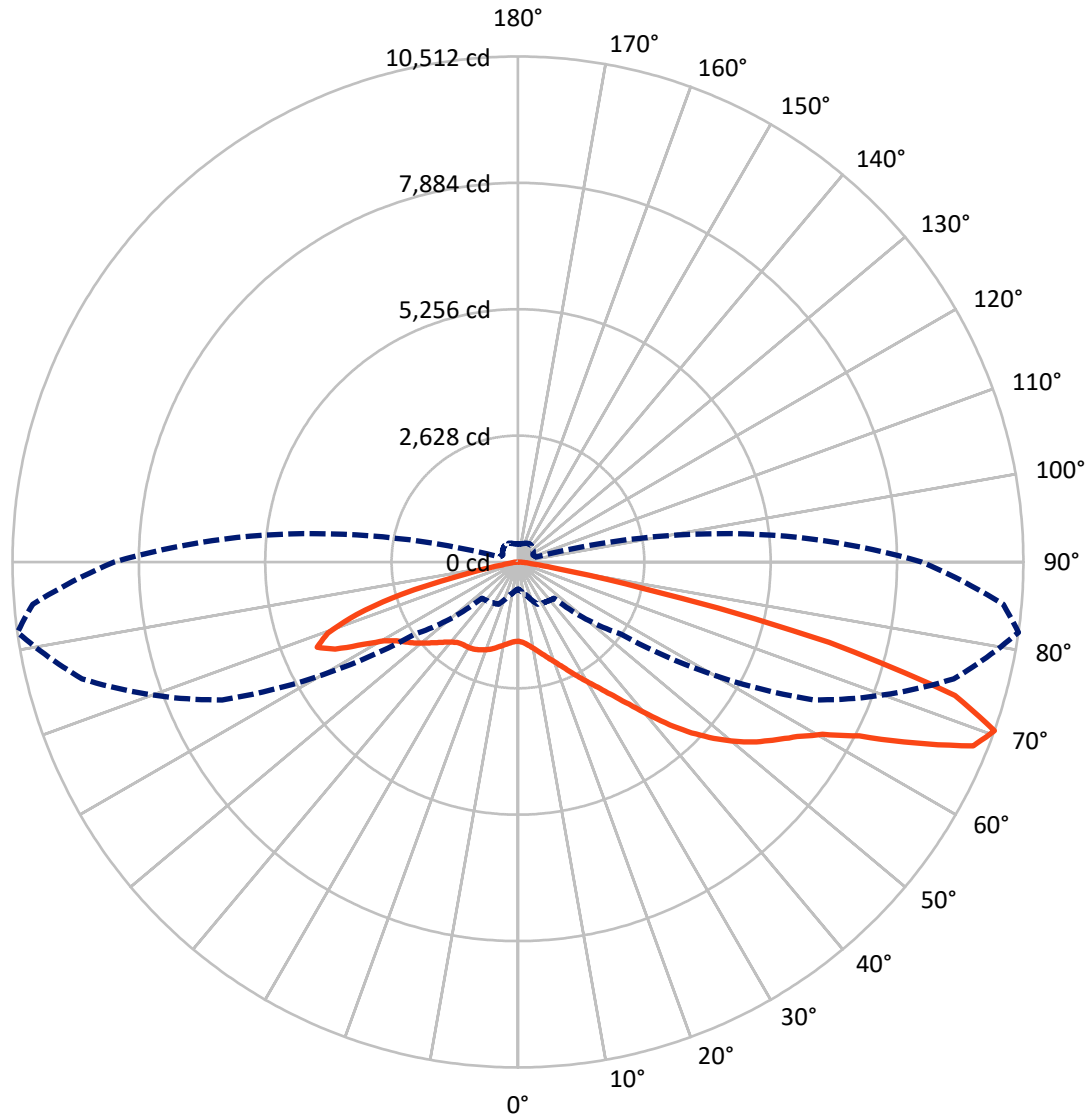
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2773.2	0.0	2773.2
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	8475.8	0.0	8475.8
	% Fixture	75.3	0.0	75.3
Total	Lumens	11249.0	0.0	11249.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.7	1.4
10°-20°	447.4	4.0
20°-30°	748.4	6.7
30°-40°	1169.2	10.4
40°-50°	1862.2	16.6
50°-60°	2591.4	23.0
60°-70°	2710.7	24.1
70°-80°	1416.8	12.6
80°-90°	147.1	1.3
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°	11249.0	100.0
0°-180°	11249.0	100.0

Coefficient of Utilization



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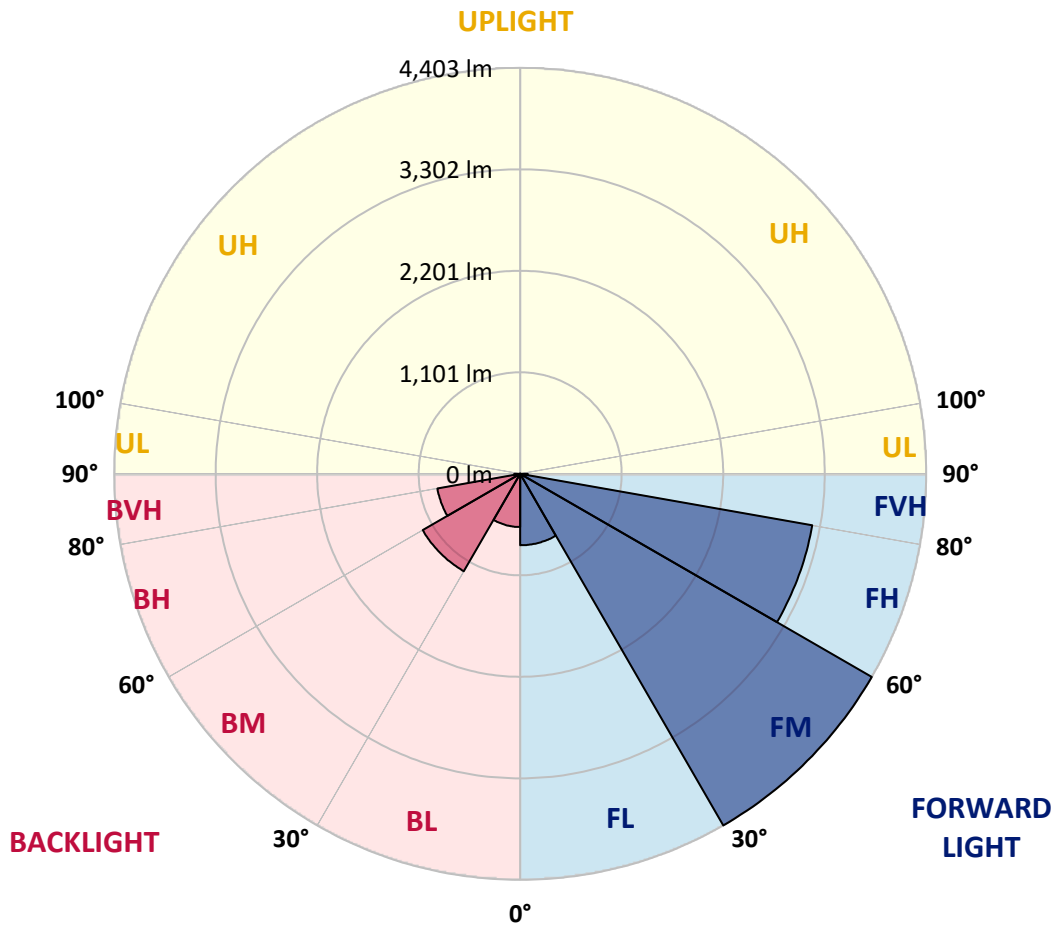
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	774.6	6.9			
FM (30°-60°)	4402.7	39.1			
FH (60°-80°)	3216.1	28.6			G2/5000
FVH (80°-90°)	82.4	0.7			G1/100
BL (0°-30°)	576.9	5.1	B2/1000		
BM (30°-60°)	1220.1	10.8	B2/2500		
BH (60°-80°)	911.4	8.1	B2/1000		G2/1000
BVH (80°-90°)	64.8	0.6			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1649.2	1649.2	1649.2	1649.2	1649.2	1649.2	1649.2	1649.2	1649.2	1649.2	1649.2
2.5°	1688.6	1698.2	1695.2	1692.2	1692.2	1688.0	1687.4	1681.5	1676.7	1668.9	1667.2
5°	1710.1	1720.3	1719.1	1721.5	1729.2	1731.0	1732.8	1729.2	1719.7	1710.1	1705.9
7.5°	1691.0	1702.4	1705.9	1720.3	1744.2	1765.6	1781.8	1788.3	1779.4	1765.6	1759.1
10°	1626.6	1639.1	1651.6	1685.7	1728.0	1778.8	1821.7	1847.4	1845.6	1832.5	1821.2
12.5°	1495.8	1509.0	1535.8	1602.1	1679.7	1769.2	1849.2	1902.9	1921.4	1911.9	1892.2
15°	1391.4	1402.7	1423.0	1491.1	1591.9	1728.0	1859.4	1963.8	2011.0	2005.6	1981.7
17.5°	1388.4	1393.2	1405.7	1437.9	1515.5	1663.6	1848.6	2023.5	2113.6	2113.0	2083.2
20°	1440.9	1442.7	1449.9	1456.4	1500.6	1614.6	1821.2	2073.0	2228.8	2228.8	2196.6
22.5°	1513.7	1512.6	1519.7	1513.7	1535.2	1610.4	1803.8	2116.6	2357.2	2366.7	2326.1
25°	1623.0	1617.0	1615.2	1601.5	1605.7	1649.2	1822.9	2166.2	2509.4	2529.1	2478.3
27.5°	1768.6	1759.1	1752.5	1720.9	1710.1	1729.2	1881.4	2225.9	2678.9	2712.9	2648.5
30°	1958.4	1941.1	1931.6	1876.7	1837.9	1840.9	1969.8	2305.2	2856.2	2911.1	2829.3
32.5°	2217.5	2190.6	2165.0	2074.8	2003.8	1980.5	2083.8	2415.1	3048.4	3136.1	3031.1
35°	2507.6	2486.1	2458.6	2319.6	2210.3	2156.6	2237.8	2568.5	3273.4	3412.5	3275.8
37.5°	2786.9	2768.4	2781.6	2594.1	2453.3	2375.1	2439.5	2774.4	3551.0	3756.3	3582.6
40°	3075.8	3061.5	3063.3	2884.2	2720.1	2632.3	2684.3	3032.9	3869.1	4165.2	3951.5
42.5°	3389.8	3379.1	3343.3	3184.5	3000.0	2918.3	2966.0	3331.3	4210.6	4630.8	4356.2
45°	3741.4	3734.8	3701.4	3519.3	3308.0	3216.1	3280.6	3660.8	4553.8	5068.9	4762.7
47.5°	4045.2	4050.6	4046.4	3893.0	3673.9	3539.0	3616.0	4004.6	4873.1	5480.8	5152.5
50°	4191.5	4219.5	4260.7	4212.9	4076.9	3939.6	3954.5	4336.5	5177.5	5867.0	5526.1
52.5°	4115.1	4168.2	4280.4	4356.8	4409.3	4380.7	4340.7	4666.0	5464.1	6215.6	5879.5
55°	3830.3	3904.9	4091.2	4275.6	4543.6	4751.9	4804.5	5031.3	5743.4	6522.4	6213.8
57.5°	3311.6	3432.8	3599.9	3973.0	4424.2	4931.6	5345.3	5538.1	6039.5	6850.1	6563.5
60°	2422.2	2584.6	2792.3	3347.4	4006.4	4835.5	5805.5	6316.4	6460.3	7274.5	7019.0
62.5°	1550.2	1650.4	1841.4	2364.3	3121.8	4343.1	5946.4	7289.4	7173.6	7970.5	7701.8
65°	1061.3	1125.8	1300.7	1594.3	2018.1	3232.8	5569.1	8018.8	8306.5	9073.5	8869.4
67.5°	771.2	820.1	969.4	1226.6	1315.0	1913.1	4321.6	7985.4	9407.8	10210.0	9892.5
70°	562.3	596.9	722.3	969.4	1011.8	1064.3	2618.0	6788.0	9383.9	10512.1	10131.8
72.5°	416.6	440.5	524.7	752.1	819.0	718.7	1295.9	4933.4	8063.6	9508.1	9203.1
75°	301.4	319.3	381.4	575.4	655.4	547.4	646.4	2883.0	5624.6	6688.3	6742.0
77.5°	230.4	244.1	284.7	421.4	524.7	410.7	401.1	1326.3	2667.0	2680.1	2830.5
80°	185.0	194.0	216.1	296.7	402.3	307.4	261.4	535.4	842.8	713.3	748.5
82.5°	136.1	151.0	182.7	208.3	287.7	211.9	159.4	270.4	320.5	275.8	278.2
85°	77.6	87.7	110.4	149.2	183.8	129.5	91.3	120.0	149.2	122.4	109.2
87.5°	27.5	35.8	38.8	58.5	80.0	53.7	35.2	34.6	48.9	36.4	30.4
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°	1649.2	1649.2	1649.2	1649.2	1649.2	1649.2	1649.2	1649.2	1649.2	1649.2	1649.2
2.5°	1661.2	1658.2	1646.3	1630.1	1613.4	1597.3	1591.9	1580.6	1572.8	1568.7	1573.4
5°	1694.6	1685.1	1657.0	1621.2	1583.6	1543.0	1514.3	1488.1	1469.0	1451.1	1458.2
7.5°	1742.4	1725.6	1677.3	1614.6	1547.8	1480.3	1430.2	1392.0	1366.3	1349.6	1353.2
10°	1797.9	1772.2	1698.2	1604.5	1501.2	1404.5	1345.4	1312.6	1296.5	1287.5	1289.9
12.5°	1861.7	1825.3	1719.7	1581.2	1430.2	1319.8	1279.2	1269.6	1270.2	1270.8	1272.0
15°	1940.5	1889.8	1737.0	1530.5	1337.7	1254.7	1247.5	1263.0	1279.2	1286.9	1286.3
17.5°	2029.5	1957.8	1740.0	1446.9	1246.9	1212.9	1235.6	1269.0	1293.5	1304.2	1306.6
20°	2125.0	2027.1	1718.5	1328.7	1172.3	1178.9	1219.5	1262.5	1289.3	1303.0	1306.6
22.5°	2234.2	2101.1	1667.2	1204.6	1111.4	1141.9	1189.6	1231.4	1259.5	1273.2	1276.8
25°	2359.0	2184.1	1586.6	1100.1	1058.9	1100.1	1147.8	1182.5	1205.1	1217.7	1221.3
27.5°	2497.4	2270.6	1479.1	1017.1	1012.9	1057.1	1096.5	1123.4	1135.3	1144.9	1148.4
30°	2636.5	2349.4	1349.0	954.4	973.0	1014.7	1042.8	1054.7	1058.3	1060.1	1064.3
32.5°	2786.9	2417.5	1212.3	902.5	934.8	973.5	990.3	995.6	978.9	967.6	971.2
35°	2969.0	2490.3	1078.6	861.3	897.1	930.6	935.9	931.2	911.5	888.2	889.4
37.5°	3194.0	2581.0	971.8	832.1	861.9	884.0	877.4	876.3	878.0	850.6	852.4
40°	3469.8	2699.2	893.6	809.4	833.3	838.1	819.5	829.7	838.6	796.9	798.1
42.5°	3776.0	2841.9	844.0	793.9	809.4	798.1	769.4	780.7	779.6	724.6	724.0
45°	4088.2	2997.1	826.7	782.5	787.3	764.6	733.0	736.0	710.9	661.4	663.2
47.5°	4398.6	3163.6	837.5	773.0	759.9	734.2	709.7	696.6	659.6	622.6	622.6
50°	4703.0	3338.5	876.9	753.9	722.3	707.3	689.4	666.1	626.7	595.1	592.7
52.5°	4985.3	3514.6	921.0	722.3	675.1	684.1	672.7	645.8	607.1	574.8	575.4
55°	5252.7	3690.7	938.3	678.7	630.9	663.8	657.2	607.6	561.1	534.8	532.4
57.5°	5544.0	3902.6	919.2	623.2	595.1	640.5	615.4	560.5	533.6	513.9	512.1
60°	5947.5	4235.0	878.0	554.5	561.1	605.9	562.9	540.2	510.9	488.9	487.7
62.5°	6617.9	4855.2	811.8	486.5	521.1	554.5	537.8	515.1	485.3	463.8	463.8
65°	7608.7	5717.1	687.0	433.4	476.3	504.4	510.9	488.3	457.2	434.5	435.7
67.5°	8444.4	6257.9	519.9	389.2	430.4	463.8	482.3	460.2	427.4	405.3	405.9
70°	8398.4	5865.2	396.9	345.6	389.8	423.8	447.7	430.4	395.2	374.3	376.0
72.5°	7459.5	4906.5	321.1	301.4	348.6	382.0	410.7	397.5	361.7	341.4	341.4
75°	5480.2	3482.9	256.7	256.7	297.3	338.4	370.1	361.7	328.9	314.6	310.4
77.5°	2310.0	1461.2	201.2	213.1	247.1	290.7	330.1	333.1	304.4	322.3	292.5
80°	614.2	402.9	153.4	167.7	194.0	240.0	287.1	285.9	254.9	238.2	221.5
82.5°	234.0	158.8	109.2	118.2	140.3	183.8	227.4	234.6	203.5	176.1	176.1
85°	90.1	68.0	67.5	71.0	81.8	121.8	171.9	177.9	153.4	130.1	134.3
87.5°	23.3	20.3	25.1	23.9	37.6	65.1	98.5	102.1	93.7	54.3	77.6
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)