

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: P882054

Luminaire Tested: **NAV-SB1D-730-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882054
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-730-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3000K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9938 lumens
Efficiency: N/A
Efficacy: 124.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G3

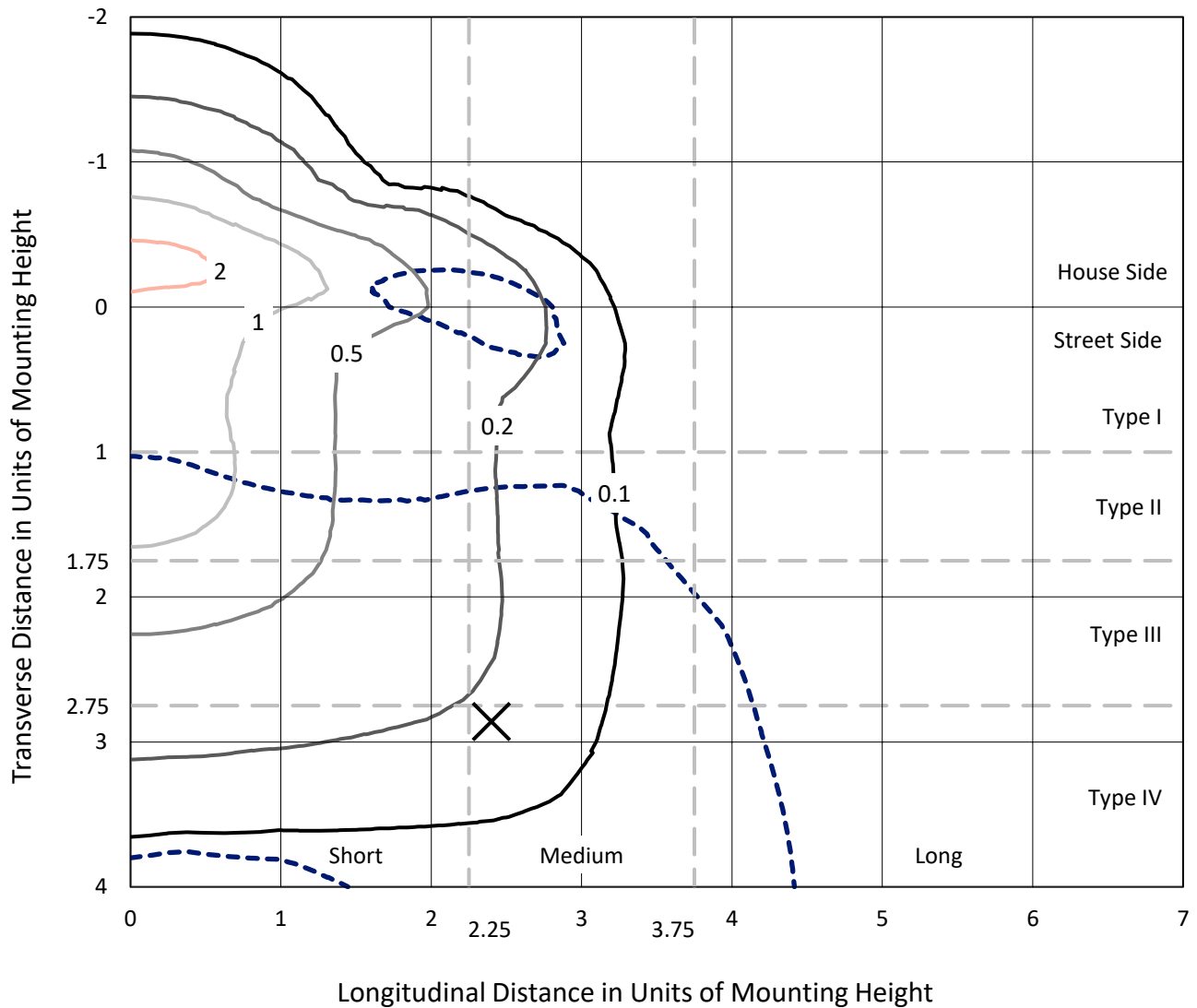
Input Watts (W): 79.6
Input Voltage (V): 120.0
Input Current (Ain): 0.638
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.673
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

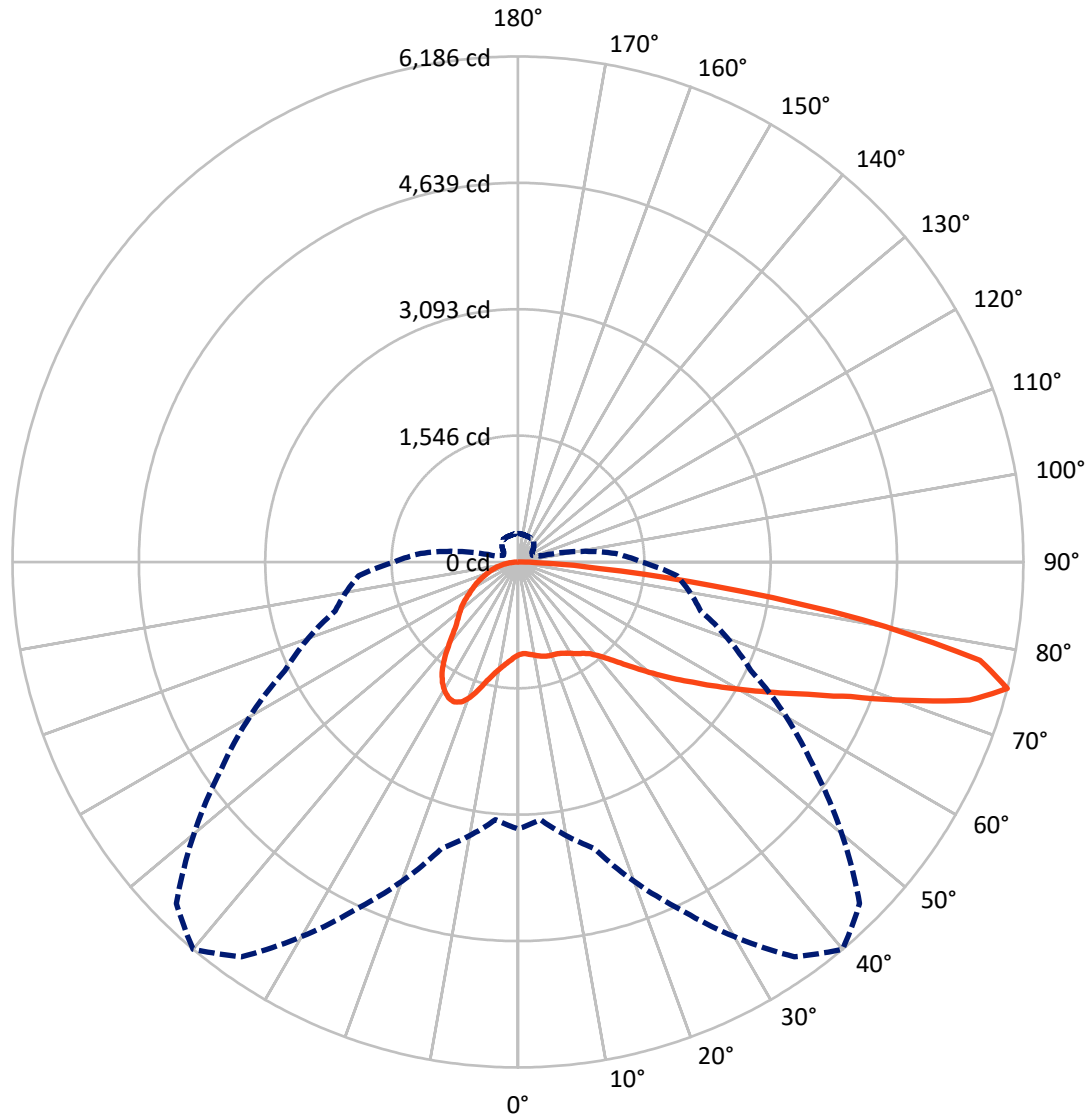
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3079.1	0.0	3079.1
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	6858.9	0.0	6858.9
	% Fixture	69.0	0.0	69.0
Total	Lumens	9938.0	0.0	9938.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.4	1.1
10°-20°	380.9	3.8
20°-30°	695.4	7.0
30°-40°	986.3	9.9
40°-50°	1331.8	13.4
50°-60°	1791.6	18.0
60°-70°	2274.0	22.9
70°-80°	2063.8	20.8
80°-90°	300.8	3.0
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°	9938.0	100.0
0°-180°	9938.0	100.0

Coefficient of Utilization



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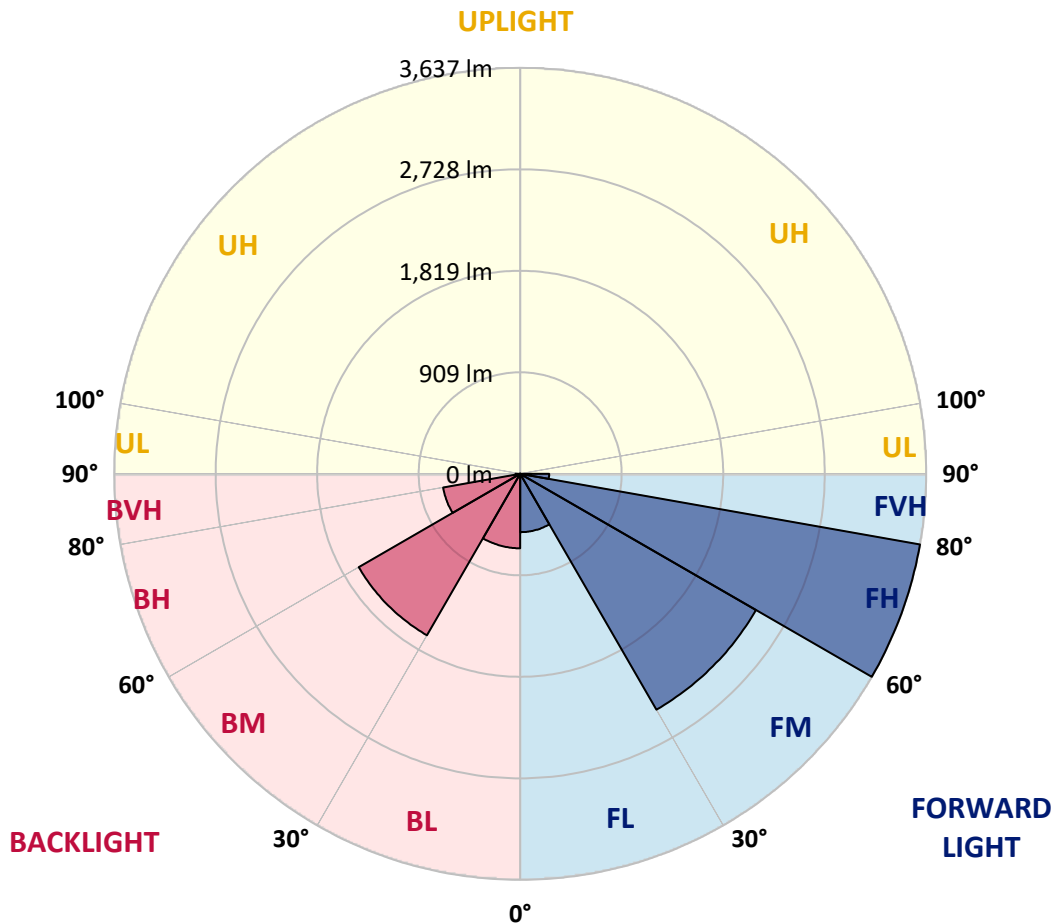
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	522.8	5.3			
FM (30°-60°)	2439.6	24.5			
FH (60°-80°)	3637.2	36.6			G2/5000
FVH (80°-90°)	259.4	2.6			G3/500
BL (0°-30°)	667.0	6.7	B2/1000		
BM (30°-60°)	1670.2	16.8	B2/2500		
BH (60°-80°)	700.6	7.0	B2/1000		G2/1000
BVH (80°-90°)	41.4	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1136.4	1136.4	1136.4	1136.4	1136.4	1136.4	1136.4	1136.4	1136.4	1136.4	1136.4
2.5°	1119.0	1125.4	1123.8	1121.7	1121.7	1122.2	1121.7	1125.4	1129.0	1132.7	1138.5
5°	1130.6	1137.0	1133.8	1131.2	1129.0	1128.5	1126.9	1126.4	1128.5	1133.3	1141.2
7.5°	1153.3	1159.6	1154.9	1150.1	1145.9	1143.8	1141.7	1138.5	1137.0	1139.6	1150.7
10°	1178.6	1184.9	1179.1	1170.7	1163.8	1161.2	1159.1	1155.9	1153.8	1155.4	1167.5
12.5°	1203.9	1210.2	1202.3	1190.7	1181.8	1180.2	1177.5	1176.5	1176.0	1175.4	1187.6
15°	1227.6	1232.9	1222.9	1209.2	1199.7	1197.0	1194.4	1196.0	1198.6	1201.8	1215.5
17.5°	1246.1	1251.3	1236.6	1218.7	1209.7	1208.6	1207.1	1212.3	1219.7	1227.6	1244.5
20°	1262.9	1268.2	1249.2	1225.0	1214.4	1214.4	1215.0	1226.0	1236.6	1248.2	1271.4
22.5°	1286.6	1290.9	1267.7	1234.5	1219.2	1220.2	1224.4	1235.5	1248.7	1264.5	1296.7
25°	1322.0	1325.1	1296.7	1252.4	1235.0	1238.2	1241.8	1247.1	1259.8	1278.2	1321.4
27.5°	1378.9	1381.5	1344.1	1284.0	1257.7	1262.9	1268.2	1264.5	1270.3	1286.1	1341.5
30°	1459.0	1460.6	1413.2	1333.6	1296.1	1298.8	1299.8	1284.5	1273.5	1286.1	1355.7
32.5°	1553.9	1553.4	1497.0	1393.6	1339.9	1337.2	1328.3	1298.2	1272.4	1283.5	1368.3
35°	1700.9	1695.1	1622.4	1478.0	1389.4	1373.1	1352.0	1313.5	1277.7	1280.8	1379.4
37.5°	1944.5	1926.5	1825.9	1616.1	1463.2	1421.6	1390.5	1338.3	1289.3	1279.8	1392.6
40°	2219.1	2196.4	2085.7	1805.3	1573.9	1507.0	1456.9	1373.6	1308.3	1284.5	1412.1
42.5°	2544.8	2512.7	2393.6	2028.3	1714.1	1617.1	1541.8	1418.4	1336.2	1299.8	1438.5
45°	2944.9	2902.2	2733.5	2279.7	1890.7	1761.6	1660.9	1486.4	1378.9	1329.3	1478.0
47.5°	3349.2	3359.7	3119.9	2567.5	2102.6	1939.7	1810.1	1588.7	1441.1	1376.8	1541.8
50°	3778.8	3786.1	3504.1	2886.4	2343.0	2141.1	1977.7	1703.1	1527.5	1444.2	1637.2
52.5°	4114.0	4115.1	3853.1	3220.0	2593.3	2362.5	2158.5	1833.8	1627.7	1533.9	1764.2
55°	4323.8	4321.2	4097.7	3535.8	2881.1	2594.9	2358.8	1982.4	1750.0	1639.3	1923.9
57.5°	4476.1	4468.2	4266.3	3807.2	3187.9	2869.5	2585.4	2151.1	1894.4	1764.7	2134.2
60°	4534.1	4529.4	4380.7	4041.8	3510.5	3173.1	2846.9	2339.8	2058.3	1912.8	2404.6
62.5°	4556.2	4565.2	4493.0	4269.0	3855.7	3509.4	3134.1	2565.4	2242.8	2080.5	2689.8
65°	4634.2	4650.6	4635.8	4566.3	4245.8	3903.2	3515.2	2833.7	2444.2	2260.2	2987.6
67.5°	4788.7	4805.0	4811.4	4922.0	4722.3	4393.9	3990.7	3167.9	2679.8	2446.8	3211.6
70°	4785.0	4780.3	4892.0	5205.1	5318.9	5073.3	4631.6	3579.0	2960.7	2601.8	3240.1
72.5°	4355.4	4317.5	4581.5	5201.9	5815.5	5782.8	5414.4	4109.3	3203.2	2620.7	2811.5
75°	3267.5	3166.3	3632.8	4688.0	5898.2	6185.5	5911.9	4438.2	3145.7	2315.5	1956.6
77.5°	1397.3	1295.6	1845.4	3470.4	5278.9	5782.3	5455.5	3872.1	2511.1	1531.2	960.9
80°	365.8	365.3	557.7	1573.4	3590.1	4270.0	3746.1	2500.6	1434.8	547.1	265.1
82.5°	151.3	147.6	205.0	612.0	1754.2	2396.2	1955.5	1115.3	518.1	148.1	88.0
85°	56.4	55.9	99.6	211.4	618.8	988.3	715.3	285.2	129.1	72.2	39.5
87.5°	15.8	15.3	21.6	73.3	150.8	228.8	122.3	46.9	36.4	28.5	11.6
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°	1136.4	1136.4	1136.4	1136.4	1136.4	1136.4	1136.4	1136.4	1136.4	1136.4	1136.4
2.5°	1140.1	1142.7	1147.5	1151.2	1155.9	1161.2	1168.6	1173.3	1178.1	1181.2	1179.1
5°	1144.9	1150.7	1162.8	1174.9	1189.1	1202.3	1217.6	1228.7	1237.6	1240.3	1241.3
7.5°	1155.4	1164.9	1185.4	1206.0	1228.7	1250.3	1272.4	1291.4	1306.7	1312.5	1313.0
10°	1173.8	1186.5	1215.5	1244.5	1274.5	1307.7	1336.2	1363.6	1385.2	1394.2	1394.7
12.5°	1197.0	1212.9	1250.8	1290.9	1332.5	1378.4	1415.3	1449.0	1475.9	1488.0	1488.0
15°	1227.1	1247.6	1296.1	1349.9	1411.0	1474.8	1521.7	1559.2	1589.2	1604.0	1602.9
17.5°	1259.8	1287.2	1348.3	1429.5	1517.0	1600.8	1655.6	1683.0	1714.1	1728.4	1727.8
20°	1291.4	1325.1	1412.6	1530.7	1647.2	1736.3	1780.5	1787.9	1790.0	1791.6	1795.8
22.5°	1324.1	1369.4	1493.3	1658.3	1783.2	1844.8	1851.2	1819.5	1775.3	1754.7	1760.5
25°	1359.9	1420.0	1598.7	1799.0	1900.2	1907.6	1859.1	1782.1	1698.3	1659.8	1665.6
27.5°	1394.7	1478.5	1725.2	1933.4	1984.5	1919.7	1815.3	1706.2	1605.0	1564.4	1569.2
30°	1429.5	1545.5	1864.9	2050.9	2023.0	1889.6	1746.3	1624.5	1522.8	1480.1	1484.8
32.5°	1464.8	1623.5	2025.6	2135.8	2016.2	1825.9	1660.4	1532.8	1443.2	1398.4	1404.2
35°	1504.9	1719.4	2178.0	2182.2	1970.3	1732.0	1547.0	1423.2	1345.2	1309.3	1317.2
37.5°	1557.0	1841.2	2312.4	2193.8	1890.2	1594.5	1406.3	1293.5	1229.2	1212.9	1224.4
40°	1621.9	1987.7	2415.2	2175.3	1771.6	1427.4	1252.4	1162.3	1125.9	1129.6	1142.2
42.5°	1706.2	2151.6	2487.4	2127.9	1606.6	1255.0	1117.4	1077.4	1094.8	1109.5	1123.2
45°	1815.9	2321.9	2532.2	2047.2	1420.0	1109.0	1037.9	1047.3	1060.5	1062.1	1072.6
47.5°	1956.1	2494.2	2561.7	1925.5	1229.7	1006.2	987.3	989.4	986.7	975.7	984.1
50°	2131.1	2661.8	2588.1	1764.2	1067.9	941.9	916.6	909.2	872.9	837.0	841.8
52.5°	2330.3	2815.8	2599.1	1563.9	941.9	888.2	847.0	800.7	732.7	721.6	725.3
55°	2551.7	2958.1	2570.7	1317.7	836.0	819.1	756.9	701.0	693.7	684.2	685.8
57.5°	2816.3	3111.5	2512.7	1043.1	727.4	738.5	677.8	684.2	671.0	656.2	653.6
60°	3105.7	3270.1	2410.9	792.8	615.1	637.8	657.3	656.8	653.1	641.0	636.7
62.5°	3366.0	3374.5	2210.6	607.2	516.6	559.8	613.0	612.5	609.3	602.5	599.8
65°	3521.0	3358.7	1876.5	478.1	435.4	495.5	552.9	557.1	557.7	557.1	557.1
67.5°	3493.6	3173.7	1417.9	380.6	368.4	430.1	493.4	499.2	503.4	504.4	505.5
70°	3183.7	2767.3	924.5	303.6	308.9	372.7	437.0	442.8	446.5	450.7	452.8
72.5°	2481.6	2034.6	529.2	245.6	256.7	323.1	381.1	387.9	390.1	398.0	401.1
75°	1512.2	1196.5	285.7	193.4	210.8	276.2	325.7	333.7	337.3	346.8	347.9
77.5°	719.0	518.1	162.9	150.8	169.7	225.6	275.1	284.1	274.1	279.4	275.1
80°	243.0	192.4	102.8	114.9	129.7	176.1	220.3	229.3	208.2	207.1	205.0
82.5°	84.9	78.0	65.4	76.4	83.8	126.0	166.6	178.2	155.0	154.4	147.1
85°	33.2	31.6	36.4	41.6	50.1	77.5	109.6	115.4	95.4	77.0	75.9
87.5°	6.9	7.4	9.0	9.5	15.3	26.9	39.5	48.5	38.5	32.7	30.0
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)