

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: P961399

Luminaire Tested: **NAV-SB2A-735-U-SL4**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P961399  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB2A-735-U-SL4  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9114.3 lumens  
Efficiency: N/A  
Efficacy: 159.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B2 - U0 - G3

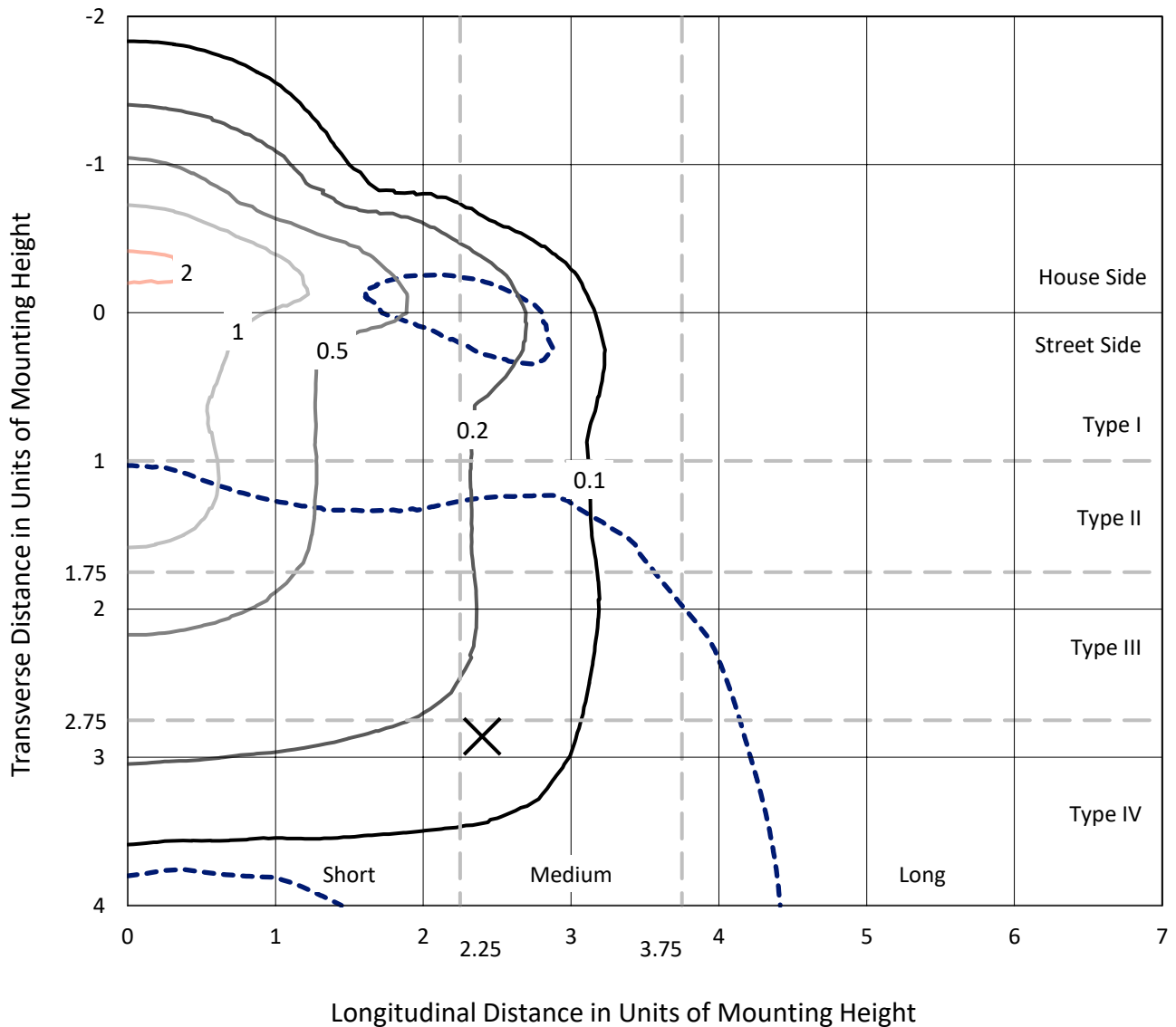
Input Watts (W): 57.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

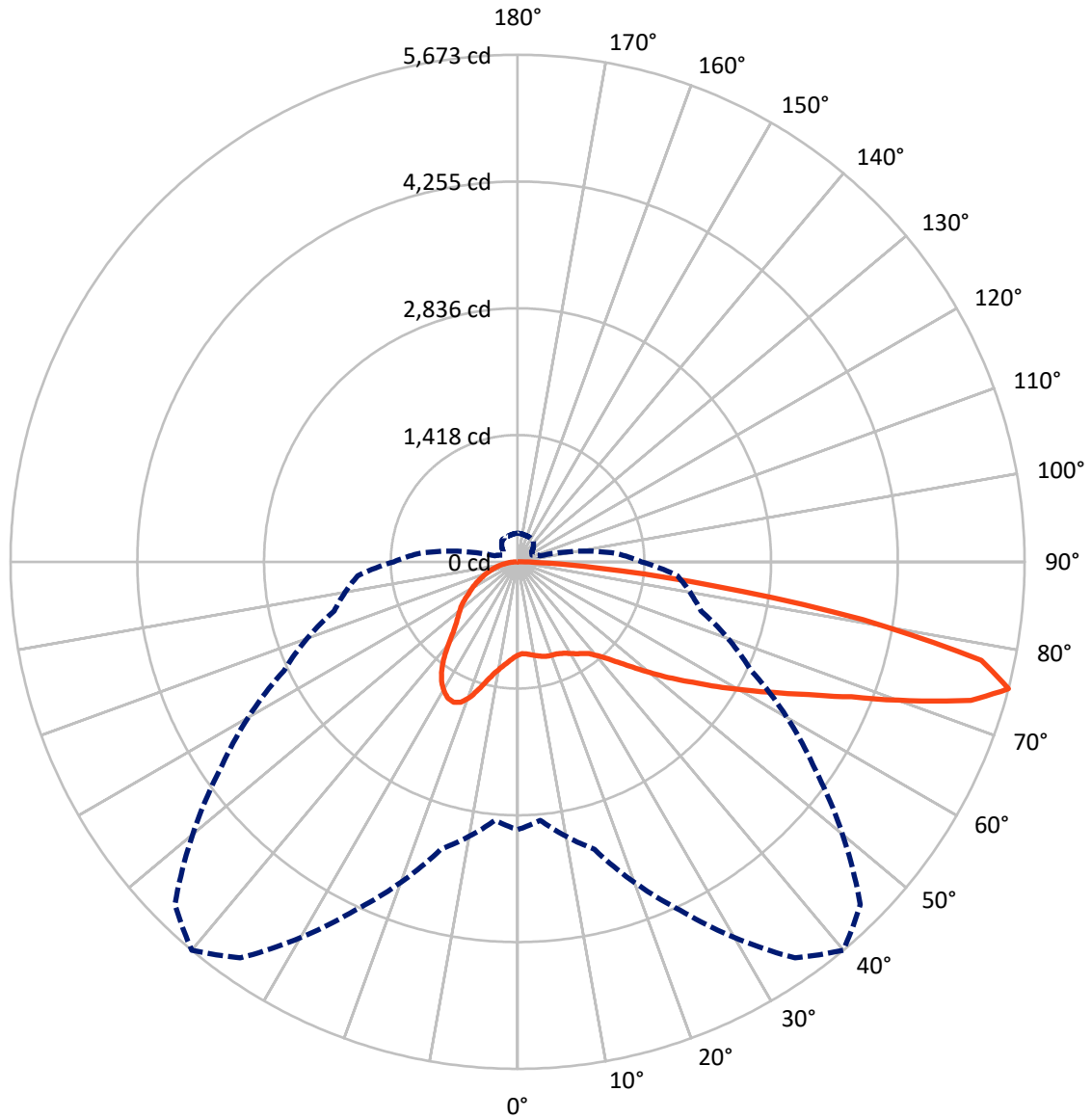
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 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
<b>House Side</b>	Lumens	2823.9	0.0	2823.9
	% Fixture	31.0	0.0	31.0
<b>Street Side</b>	Lumens	6290.4	0.0	6290.4
	% Fixture	69.0	0.0	69.0
<b>Total</b>	Lumens	9114.3	0.0	9114.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.0	1.1
10°-20°	349.3	3.8
20°-30°	637.8	7.0
30°-40°	904.5	9.9
40°-50°	1221.4	13.4
50°-60°	1643.1	18.0
60°-70°	2085.5	22.9
70°-80°	1892.7	20.8
80°-90°	275.9	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°	9114.3	100.0
0°-180°	9114.3	100.0

**Coefficient of Utilization**

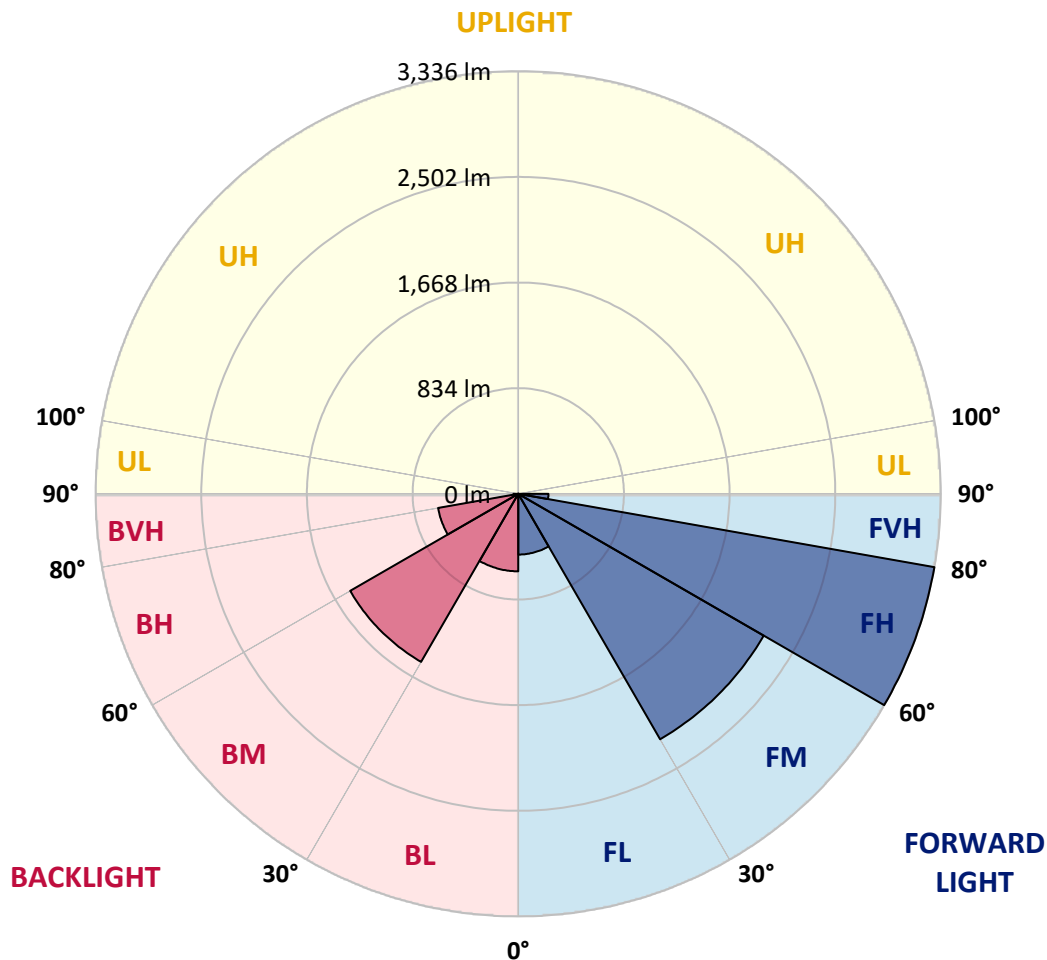


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	479.4	5.3			
FM (30°-60°)	2237.4	24.5			
FH (60°-80°)	3335.7	36.6			G2/5000
FVH (80°-90°)	237.9	2.6			G3/500
BL (0°-30°)	611.7	6.7	B2/1000		
BM (30°-60°)	1531.7	16.8	B2/2500		
BH (60°-80°)	642.5	7.0	B2/1000		G2/1000
BVH (80°-90°)	38.0	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°	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2
2.5°	1026.2	1032.1	1030.6	1028.7	1028.7	1029.2	1028.7	1032.1	1035.5	1038.8	1044.2
5°	1036.9	1042.7	1039.9	1037.4	1035.5	1034.9	1033.5	1033.1	1034.9	1039.4	1046.6
7.5°	1057.7	1063.5	1059.1	1054.8	1050.9	1049.0	1047.0	1044.2	1042.7	1045.1	1055.2
10°	1080.9	1086.7	1081.4	1073.7	1067.3	1065.0	1063.0	1060.2	1058.2	1059.6	1070.7
12.5°	1104.1	1109.9	1102.7	1092.0	1083.8	1082.4	1079.9	1079.0	1078.5	1078.0	1089.2
15°	1125.9	1130.7	1121.6	1108.9	1100.2	1097.8	1095.4	1096.9	1099.3	1102.2	1114.8
17.5°	1142.8	1147.6	1134.1	1117.7	1109.5	1108.4	1107.0	1111.8	1118.6	1125.9	1141.3
20°	1158.2	1163.1	1145.6	1123.4	1113.8	1113.8	1114.3	1124.4	1134.1	1144.7	1165.9
22.5°	1180.0	1183.9	1162.6	1132.1	1118.2	1119.1	1123.0	1133.1	1145.2	1159.7	1189.2
25°	1212.4	1215.3	1189.2	1148.6	1132.6	1135.5	1138.9	1143.8	1155.4	1172.3	1212.0
27.5°	1264.6	1267.0	1232.7	1177.6	1153.4	1158.2	1163.1	1159.7	1165.0	1179.6	1230.3
30°	1338.0	1339.6	1296.0	1223.0	1188.7	1191.2	1192.1	1178.0	1167.9	1179.6	1243.3
32.5°	1425.1	1424.6	1372.9	1278.2	1228.9	1226.4	1218.2	1190.6	1167.0	1177.1	1254.9
35°	1559.9	1554.6	1487.9	1355.5	1274.3	1259.3	1239.9	1204.7	1171.8	1174.6	1265.1
37.5°	1783.3	1766.9	1674.5	1482.1	1341.9	1303.8	1275.2	1227.3	1182.4	1173.7	1277.1
40°	2035.1	2014.3	1912.9	1655.7	1443.5	1382.1	1336.2	1259.7	1199.9	1178.0	1295.1
42.5°	2333.9	2304.4	2195.1	1860.2	1572.0	1483.1	1414.0	1300.8	1225.5	1192.1	1319.3
45°	2700.8	2661.6	2506.9	2090.8	1734.0	1615.6	1523.3	1363.2	1264.6	1219.1	1355.5
47.5°	3071.6	3081.3	2861.3	2354.7	1928.3	1779.0	1660.0	1457.0	1321.6	1262.7	1414.0
50°	3465.5	3472.3	3213.7	2647.2	2148.7	1963.6	1813.7	1561.9	1401.0	1324.5	1501.5
52.5°	3773.0	3773.9	3533.7	2953.1	2378.4	2166.6	1979.6	1681.8	1492.8	1406.7	1618.0
55°	3965.4	3963.0	3758.1	3242.7	2642.3	2379.8	2163.3	1818.1	1604.9	1503.4	1764.4
57.5°	4105.1	4097.8	3912.7	3491.7	2923.7	2631.7	2371.1	1972.8	1737.4	1618.5	1957.3
60°	4158.3	4153.9	4017.6	3706.8	3219.5	2910.2	2610.9	2145.8	1887.7	1754.3	2205.3
62.5°	4178.6	4186.8	4120.6	3915.1	3536.1	3218.5	2874.4	2352.8	2056.9	1908.0	2466.9
65°	4250.2	4265.1	4251.6	4187.7	3893.9	3579.6	3223.8	2598.8	2241.6	2072.9	2739.9
67.5°	4391.8	4406.8	4412.5	4514.1	4330.8	4029.7	3659.9	2905.3	2457.6	2244.0	2945.4
70°	4388.4	4384.0	4486.5	4773.6	4878.1	4652.8	4247.7	3282.4	2715.3	2386.1	2971.5
72.5°	3994.4	3959.6	4201.8	4770.8	5333.5	5303.5	4965.6	3768.6	2937.6	2403.5	2578.5
75°	2996.7	2903.8	3331.7	4299.5	5409.3	5672.9	5421.9	4070.3	2885.0	2123.6	1794.5
77.5°	1281.6	1188.2	1692.4	3182.7	4841.4	5303.0	5003.3	3551.1	2303.0	1404.4	881.3
80°	335.5	335.0	511.5	1443.0	3292.5	3916.1	3435.6	2293.3	1315.8	501.7	243.1
82.5°	138.8	135.4	188.1	561.3	1608.8	2197.6	1793.4	1022.8	475.2	135.8	80.8
85°	51.8	51.2	91.3	193.8	567.5	906.4	656.0	261.5	118.4	66.2	36.3
87.5°	14.5	14.0	19.8	67.2	138.3	209.8	112.1	43.0	33.3	26.1	10.7
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°	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2	1042.2
2.5°	1045.6	1048.1	1052.4	1055.8	1060.2	1065.0	1071.7	1076.0	1080.5	1083.3	1081.4
5°	1050.0	1055.2	1066.4	1077.5	1090.6	1102.7	1116.6	1126.8	1135.1	1137.4	1138.5
7.5°	1059.6	1068.4	1087.2	1106.1	1126.8	1146.7	1167.0	1184.4	1198.3	1203.7	1204.2
10°	1076.6	1088.1	1114.8	1141.3	1168.9	1199.4	1225.5	1250.6	1270.4	1278.6	1279.1
12.5°	1097.8	1112.3	1147.2	1183.9	1222.1	1264.1	1298.0	1328.9	1353.5	1364.7	1364.7
15°	1125.3	1144.2	1188.7	1238.0	1294.1	1352.6	1395.6	1430.0	1457.4	1471.0	1470.1
17.5°	1155.4	1180.5	1236.6	1311.0	1391.2	1468.1	1518.4	1543.5	1572.0	1585.1	1584.6
20°	1184.4	1215.3	1295.5	1403.8	1510.6	1592.3	1632.9	1639.7	1641.6	1643.1	1647.0
22.5°	1214.3	1255.9	1369.5	1520.8	1635.4	1692.0	1697.7	1668.7	1628.1	1609.2	1614.6
25°	1247.2	1302.3	1466.2	1649.8	1742.7	1749.5	1705.0	1634.4	1557.6	1522.2	1527.6
27.5°	1279.1	1356.0	1582.2	1773.1	1820.0	1760.5	1664.9	1564.8	1472.0	1434.8	1439.1
30°	1311.0	1417.4	1710.3	1881.0	1855.4	1733.1	1601.6	1489.8	1396.6	1357.4	1361.8
32.5°	1343.4	1488.9	1857.7	1958.8	1849.0	1674.5	1522.7	1405.8	1323.6	1282.5	1287.8
35°	1380.2	1576.9	1997.4	2001.3	1807.0	1588.4	1418.8	1305.2	1233.7	1200.8	1208.1
37.5°	1428.0	1688.6	2120.7	2012.0	1733.5	1462.3	1289.8	1186.3	1127.3	1112.3	1123.0
40°	1487.5	1823.0	2215.0	1995.1	1624.7	1309.0	1148.6	1065.9	1032.6	1036.0	1047.6
42.5°	1564.8	1973.3	2281.2	1951.5	1473.4	1151.0	1024.8	988.1	1004.1	1017.6	1030.1
45°	1665.3	2129.4	2322.3	1877.6	1302.3	1017.1	951.8	960.5	972.6	974.1	983.7
47.5°	1794.0	2287.5	2349.4	1765.9	1127.8	922.8	905.4	907.3	905.0	894.8	902.5
50°	1954.5	2441.2	2373.6	1618.0	979.4	863.9	840.6	833.8	800.5	767.6	772.0
52.5°	2137.1	2582.4	2383.7	1434.3	863.9	814.6	776.8	734.3	672.0	661.7	665.1
55°	2340.2	2712.9	2357.6	1208.5	766.7	751.2	694.1	643.0	636.2	627.5	628.9
57.5°	2582.9	2853.6	2304.4	956.6	667.1	677.2	621.7	627.5	615.4	601.9	599.4
60°	2848.3	2999.0	2211.1	727.0	564.2	585.0	602.8	602.3	598.9	587.8	583.9
62.5°	3087.1	3094.8	2027.4	556.9	473.8	513.4	562.2	561.7	558.8	552.6	550.1
65°	3229.2	3080.3	1721.0	438.5	399.3	454.4	507.1	511.0	511.5	511.0	511.0
67.5°	3204.0	2910.6	1300.4	349.0	337.9	394.4	452.4	457.8	461.7	462.6	463.6
70°	2919.8	2537.9	847.9	278.5	283.3	341.7	400.8	406.1	409.5	413.3	415.2
72.5°	2275.9	1866.0	485.3	225.3	235.4	296.3	349.5	355.8	357.7	365.0	367.9
75°	1386.9	1097.4	262.0	177.4	193.3	253.3	298.8	306.0	309.3	318.1	319.1
77.5°	659.4	475.2	149.3	138.3	155.7	206.9	252.4	260.6	251.3	256.2	252.4
80°	222.8	176.4	94.3	105.4	118.9	161.4	202.0	210.3	191.0	189.9	188.1
82.5°	77.8	71.5	60.0	70.1	76.9	115.5	152.7	163.4	142.2	141.7	134.9
85°	30.4	29.0	33.3	38.2	45.9	71.0	100.6	105.9	87.5	70.6	69.6
87.5°	6.3	6.8	8.2	8.7	14.0	24.7	36.3	44.5	35.3	29.9	27.6
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)