

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: P881904

Luminaire Tested: **NAV-SB1C-740-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881904
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-SB1C-740-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 4000K, 615mA 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: 8010 lumens
Efficiency: N/A
Efficacy: 147.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G2

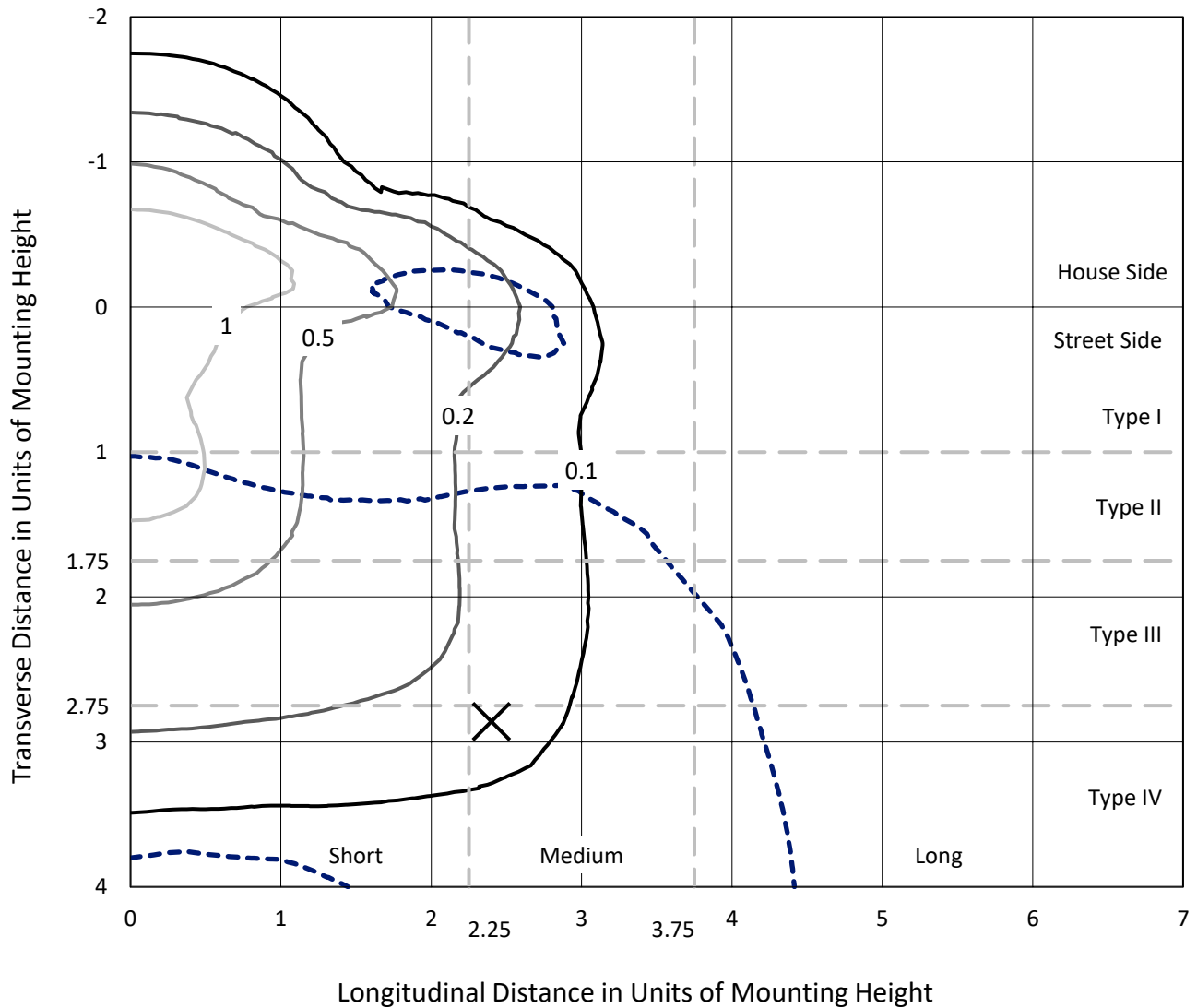
Input Watts (W): 54.4
Input Voltage (V): 120.0
Input Current (Ain): 0.437
Voltage Rise (V): NR
Power Factor: 0.993
Total Harmonic Distortion (THDi): 9.314
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

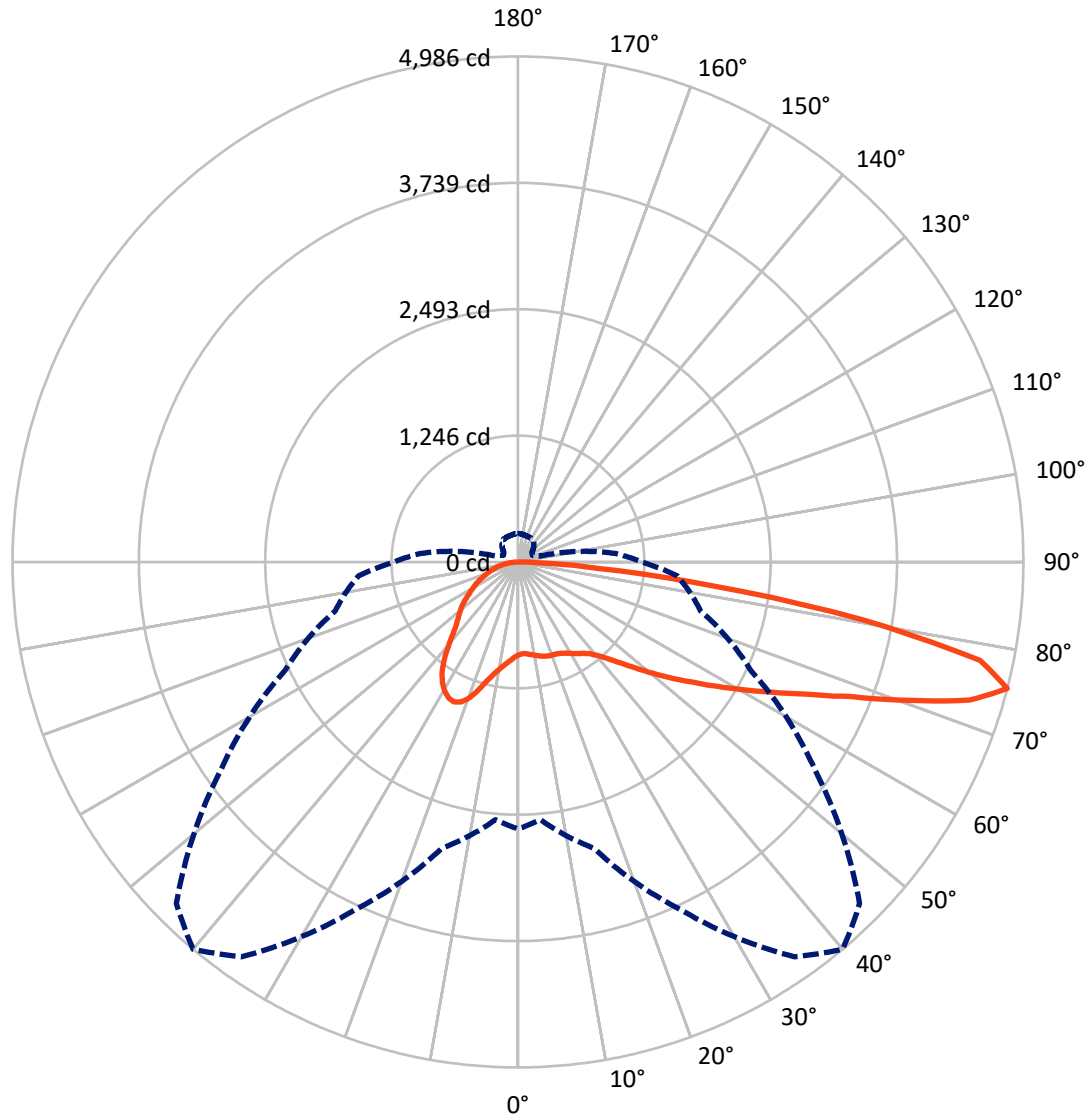
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 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	2481.8	0.0	2481.8
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	5528.2	0.0	5528.2
	% Fixture	69.0	0.0	69.0
Total	Lumens	8010.0	0.0	8010.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.4	1.1
10°-20°	307.0	3.8
20°-30°	560.5	7.0
30°-40°	795.0	9.9
40°-50°	1073.4	13.4
50°-60°	1444.0	18.0
60°-70°	1832.8	22.9
70°-80°	1663.4	20.8
80°-90°	242.5	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°	8010.0	100.0
0°-180°	8010.0	100.0

Coefficient of Utilization



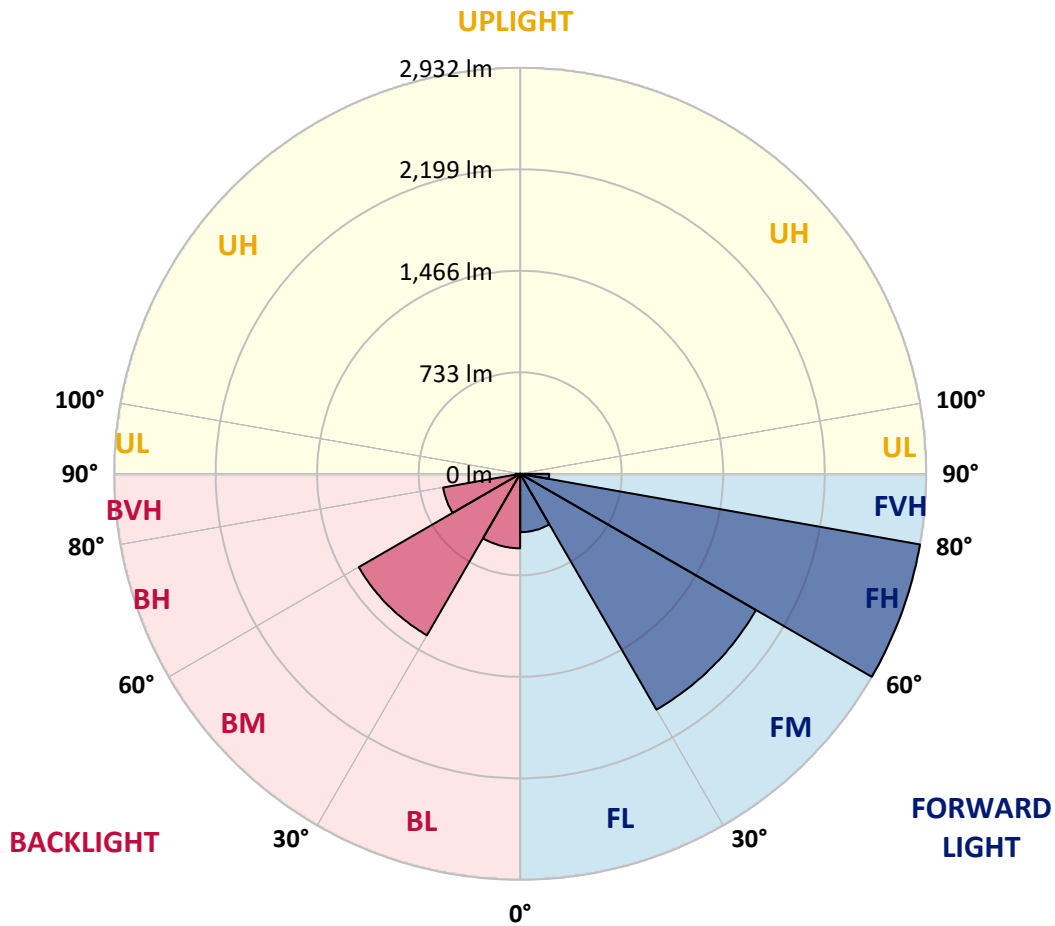
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	421.3	5.3			
FM (30°-60°)	1966.3	24.5			
FH (60°-80°)	2931.5	36.6			G2/5000
FVH (80°-90°)	209.1	2.6			G2/225
BL (0°-30°)	537.6	6.7	B2/1000		
BM (30°-60°)	1346.1	16.8	B2/2500		
BH (60°-80°)	564.7	7.0	B2/1000		G2/1000
BVH (80°-90°)	33.4	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-G2

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	916.0	916.0	916.0	916.0	916.0	916.0	916.0	916.0	916.0	916.0	916.0
2.5°	901.9	907.0	905.8	904.1	904.1	904.1	904.1	907.0	910.0	913.0	917.7
5°	911.3	916.4	913.8	911.7	910.0	910.0	908.3	907.9	909.6	913.4	919.8
7.5°	929.5	934.6	930.8	927.0	923.6	921.9	920.2	917.7	916.4	918.5	927.4
10°	949.9	955.0	950.4	943.6	938.0	935.9	934.2	931.7	930.0	931.2	941.0
12.5°	970.3	975.4	969.1	959.7	952.5	951.2	949.1	948.2	947.8	947.4	957.2
15°	989.5	993.7	985.6	974.6	966.9	964.8	962.7	964.0	966.1	968.6	979.7
17.5°	1004.3	1008.6	996.7	982.2	975.0	974.2	972.9	977.1	983.1	989.5	1003.0
20°	1017.9	1022.2	1006.9	987.3	978.8	978.8	979.3	988.2	996.7	1006.0	1024.7
22.5°	1037.0	1040.4	1021.7	995.0	982.7	983.5	986.9	995.8	1006.4	1019.2	1045.1
25°	1065.5	1068.0	1045.1	1009.4	995.4	997.9	1000.9	1005.2	1015.4	1030.2	1065.1
27.5°	1111.4	1113.5	1083.3	1034.9	1013.7	1017.9	1022.2	1019.2	1023.9	1036.6	1081.2
30°	1176.0	1177.2	1139.0	1074.8	1044.7	1046.8	1047.7	1035.3	1026.4	1036.6	1092.7
32.5°	1252.4	1252.0	1206.5	1123.3	1079.9	1077.8	1070.6	1046.4	1025.6	1034.5	1102.9
35°	1371.0	1366.3	1307.7	1191.3	1119.9	1106.7	1089.7	1058.7	1029.8	1032.4	1111.8
37.5°	1567.2	1552.8	1471.6	1302.6	1179.4	1145.8	1120.7	1078.7	1039.2	1031.5	1122.4
40°	1788.6	1770.3	1681.1	1455.1	1268.6	1214.6	1174.3	1107.1	1054.5	1035.3	1138.1
42.5°	2051.1	2025.2	1929.2	1634.8	1381.6	1303.4	1242.7	1143.2	1077.0	1047.7	1159.4
45°	2373.6	2339.2	2203.2	1837.4	1523.9	1419.8	1338.7	1198.0	1111.4	1071.4	1191.3
47.5°	2699.4	2707.9	2514.6	2069.4	1694.7	1563.4	1458.9	1280.5	1161.5	1109.7	1242.7
50°	3045.7	3051.6	2824.3	2326.4	1888.4	1725.7	1594.0	1372.7	1231.2	1164.1	1319.6
52.5°	3315.9	3316.7	3105.6	2595.3	2090.2	1904.1	1739.7	1478.0	1311.9	1236.3	1421.9
55°	3485.0	3482.8	3302.7	2849.8	2322.2	2091.5	1901.2	1597.8	1410.5	1321.3	1550.7
57.5°	3607.7	3601.4	3438.7	3068.6	2569.4	2312.8	2083.8	1733.8	1526.9	1422.4	1720.2
60°	3654.5	3650.6	3530.8	3257.7	2829.4	2557.5	2294.6	1885.9	1659.0	1541.7	1938.1
62.5°	3672.3	3679.5	3621.3	3440.8	3107.7	2828.6	2526.1	2067.7	1807.7	1676.8	2168.0
65°	3735.2	3748.4	3736.5	3680.4	3422.1	3145.9	2833.3	2283.9	1970.0	1821.7	2408.0
67.5°	3859.7	3872.8	3877.9	3967.2	3806.1	3541.5	3216.5	2553.3	2159.9	1972.1	2588.5
70°	3856.7	3852.9	3942.9	4195.3	4287.1	4089.1	3733.1	2884.7	2386.3	2097.0	2611.5
72.5°	3510.4	3479.9	3692.7	4192.7	4687.3	4660.9	4364.0	3312.0	2581.8	2112.3	2266.1
75°	2633.6	2552.0	2928.0	3778.5	4754.0	4985.5	4765.0	3577.1	2535.4	1866.3	1577.0
77.5°	1126.2	1044.3	1487.4	2797.1	4254.8	4660.5	4397.1	3120.9	2023.9	1234.2	774.5
80°	294.8	294.4	449.5	1268.1	2893.6	3441.6	3019.3	2015.4	1156.4	441.0	213.7
82.5°	121.9	119.0	165.3	493.2	1413.9	1931.3	1576.2	899.0	417.6	119.4	70.9
85°	45.5	45.0	80.3	170.4	498.8	796.6	576.5	229.8	104.1	58.2	31.9
87.5°	12.7	12.3	17.4	59.1	121.5	184.4	98.6	37.8	29.3	22.9	9.3
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°	916.0	916.0	916.0	916.0	916.0	916.0	916.0	916.0	916.0	916.0	916.0
2.5°	918.9	921.1	924.9	927.8	931.7	935.9	941.9	945.7	949.5	952.1	950.4
5°	922.8	927.4	937.2	947.0	958.4	969.1	981.4	990.3	997.5	999.6	1000.5
7.5°	931.2	938.9	955.5	972.0	990.3	1007.7	1025.6	1040.9	1053.2	1057.9	1058.3
10°	946.1	956.3	979.7	1003.0	1027.3	1054.0	1077.0	1099.1	1116.5	1123.7	1124.1
12.5°	964.8	977.6	1008.1	1040.4	1074.0	1111.0	1140.7	1167.9	1189.6	1199.3	1199.3
15°	989.0	1005.6	1044.7	1088.0	1137.3	1188.7	1226.5	1256.7	1280.9	1292.8	1291.9
17.5°	1015.4	1037.5	1086.7	1152.2	1222.7	1290.2	1334.4	1356.5	1381.6	1393.0	1392.6
20°	1040.9	1068.0	1138.6	1233.7	1327.6	1399.4	1435.1	1441.1	1442.8	1444.0	1447.4
22.5°	1067.2	1103.7	1203.6	1336.5	1437.2	1486.9	1492.0	1466.5	1430.9	1414.3	1419.0
25°	1096.1	1144.5	1288.5	1450.0	1531.5	1537.5	1498.4	1436.4	1368.8	1337.8	1342.5
27.5°	1124.1	1191.7	1390.5	1558.3	1599.5	1547.3	1463.1	1375.2	1293.6	1260.9	1264.7
30°	1152.2	1245.6	1503.1	1653.1	1630.5	1523.0	1407.5	1309.4	1227.4	1192.9	1196.8
32.5°	1180.6	1308.5	1632.7	1721.5	1625.0	1471.6	1338.2	1235.4	1163.2	1127.1	1131.8
35°	1212.9	1385.8	1755.4	1758.8	1588.1	1396.0	1246.9	1147.1	1084.2	1055.3	1061.7
37.5°	1255.0	1484.0	1863.8	1768.2	1523.5	1285.1	1133.5	1042.6	990.7	977.6	986.9
40°	1307.2	1602.1	1946.6	1753.3	1427.9	1150.5	1009.4	936.8	907.5	910.4	920.6
42.5°	1375.2	1734.2	2004.8	1715.1	1294.9	1011.5	900.7	868.4	882.4	894.3	905.3
45°	1463.6	1871.4	2040.9	1650.1	1144.5	893.9	836.5	844.2	854.8	856.1	864.5
47.5°	1576.6	2010.3	2064.7	1551.9	991.2	811.0	795.7	797.4	795.3	786.4	793.2
50°	1717.6	2145.4	2086.0	1421.9	860.7	759.2	738.8	732.8	703.5	674.6	678.5
52.5°	1878.2	2269.5	2094.9	1260.5	759.2	715.9	682.7	645.3	590.5	581.6	584.6
55°	2056.6	2384.2	2071.9	1062.1	673.8	660.2	610.1	565.0	559.1	551.4	552.7
57.5°	2269.9	2507.8	2025.2	840.8	586.3	595.2	546.3	551.4	540.8	528.9	526.8
60°	2503.2	2635.7	1943.2	639.0	495.8	514.1	529.8	529.4	526.4	516.6	513.2
62.5°	2713.0	2719.8	1781.8	489.4	416.3	451.2	494.1	493.7	491.1	485.6	483.5
65°	2837.9	2707.1	1512.4	385.3	350.9	399.3	445.7	449.1	449.5	449.1	449.1
67.5°	2815.8	2558.0	1142.8	306.7	297.0	346.7	397.6	402.3	405.7	406.6	407.4
70°	2566.0	2230.4	745.2	244.7	249.0	300.4	352.2	356.9	359.8	363.2	364.9
72.5°	2000.1	1639.9	426.5	198.0	206.9	260.4	307.2	312.7	314.4	320.8	323.3
75°	1218.9	964.4	230.3	155.9	169.9	222.6	262.6	268.9	271.9	279.5	280.4
77.5°	579.5	417.6	131.3	121.5	136.8	181.8	221.8	229.0	220.9	225.2	221.8
80°	195.9	155.1	82.8	92.6	104.5	141.9	177.6	184.8	167.8	167.0	165.3
82.5°	68.4	62.9	52.7	61.6	67.5	101.5	134.2	143.6	124.9	124.5	118.5
85°	26.8	25.5	29.3	33.6	40.4	62.5	88.4	93.0	76.9	62.0	61.2
87.5°	5.5	5.9	7.2	7.6	12.3	21.7	31.9	39.1	31.0	26.3	24.2
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)