

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: P881894

Luminaire Tested: **NAV-SB1C-735-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881894
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-735-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 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: 7430 lumens
Efficiency: N/A
Efficacy: 136.6 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

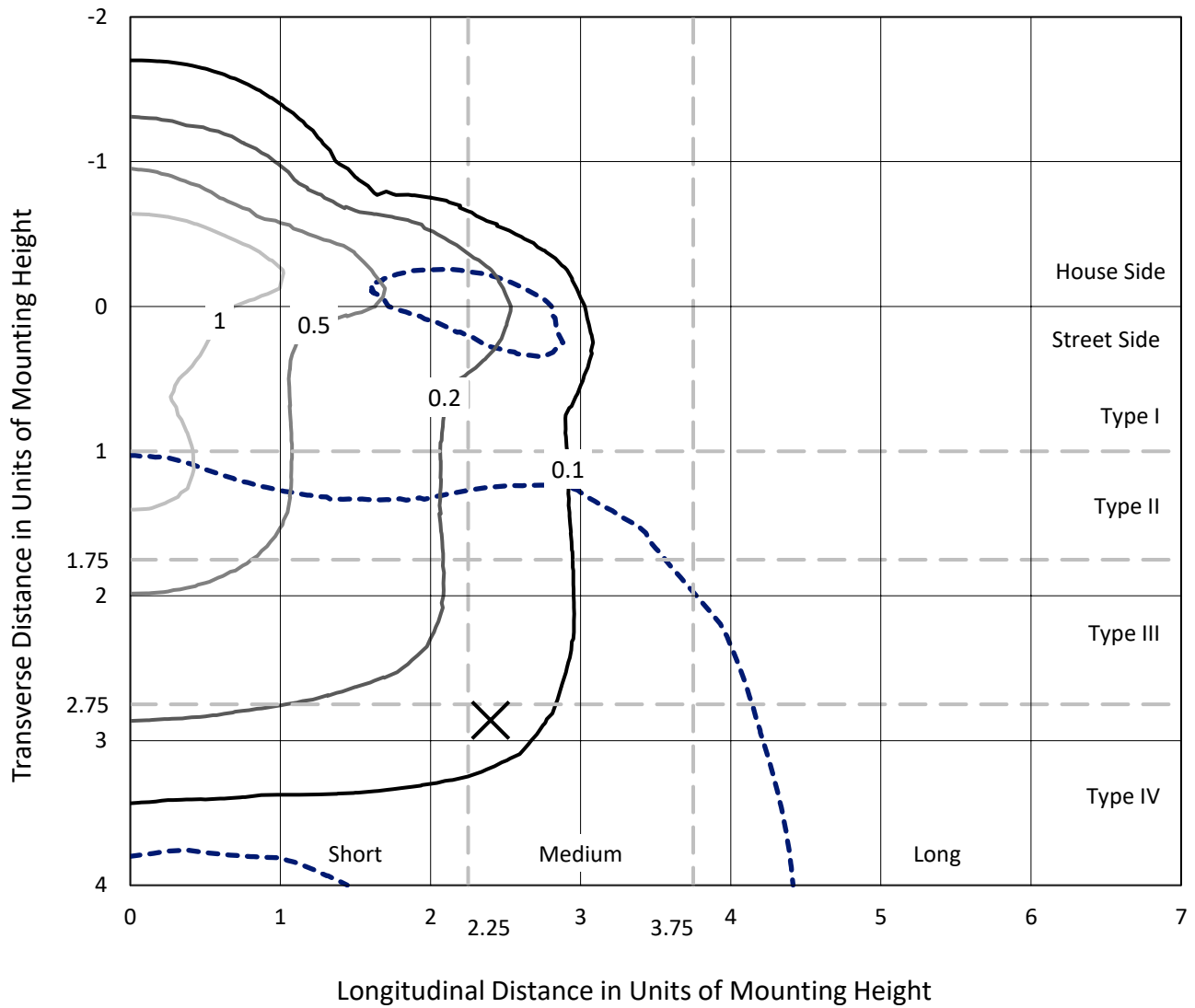
Input Watts (W): 54.4
Input Voltage (V): 120.0
Input Current (Ain): 0.437
Voltage Rise (V): NR
Power Factor: 0.993
Total Harmonic Distortion (THDi): 9.314
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P881894
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Iso-Footcandle Lines of Horizontal Illumination

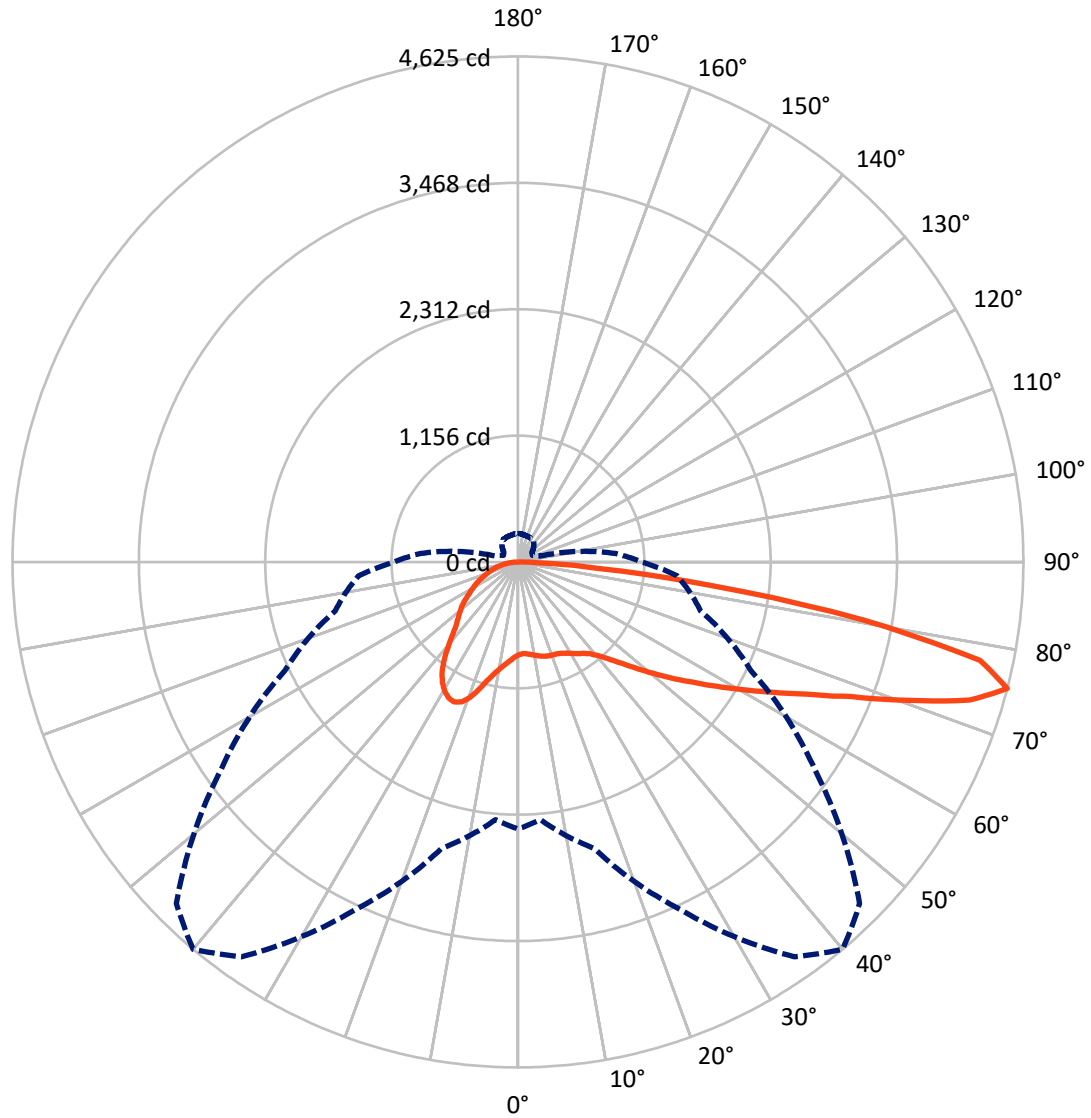
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc
 Type IV - Medium - N/A

REPORT NUMBER: P881894
CATALOG NUMBER: NAV-SB1C-735-U-SL4

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	2302.1	0.0	2302.1
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	5127.9	0.0	5127.9
	% Fixture	69.0	0.0	69.0
Total	Lumens	7430.0	0.0	7430.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.8	1.1
10°-20°	284.7	3.8
20°-30°	519.9	7.0
30°-40°	737.4	9.9
40°-50°	995.7	13.4
50°-60°	1339.5	18.0
60°-70°	1700.1	22.9
70°-80°	1542.9	20.8
80°-90°	224.9	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°	7430.0	100.0
0°-180°	7430.0	100.0



REPORT NUMBER: P881894

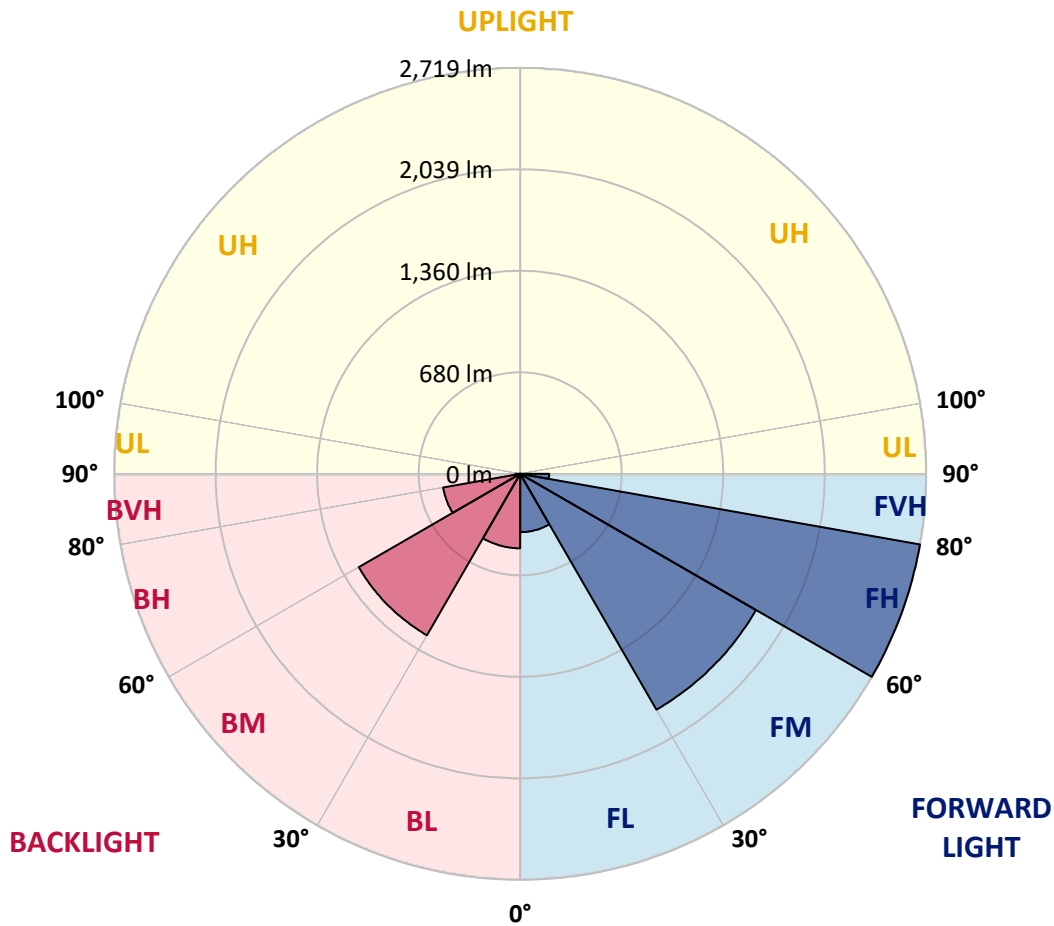
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	390.8	5.3			
FM (30°-60°)	1823.9	24.5			
FH (60°-80°)	2719.3	36.6			G2/5000
FVH (80°-90°)	193.9	2.6			G2/225
BL (0°-30°)	498.6	6.7	B1/500		
BM (30°-60°)	1248.7	16.8	B2/2500		
BH (60°-80°)	523.8	7.0	B2/1000		G2/1000
BVH (80°-90°)	31.0	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-G2

Type IV Medium



REPORT NUMBER: P881894

CATALOG NUMBER: NAV-SB1C-735-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	849.6	849.6	849.6	849.6	849.6	849.6	849.6	849.6	849.6	849.6	849.6
2.5°	836.6	841.4	840.2	838.6	838.6	839.0	838.6	841.4	844.1	846.9	851.2
5°	845.3	850.0	847.7	845.7	844.1	843.7	842.5	842.1	843.7	847.3	853.2
7.5°	862.2	867.0	863.4	859.9	856.7	855.1	853.6	851.2	850.0	852.0	860.3
10°	881.2	885.9	881.6	875.2	870.1	868.2	866.6	864.2	862.6	863.8	872.9
12.5°	900.1	904.8	898.9	890.2	883.5	882.3	880.4	879.6	879.2	878.8	887.9
15°	917.8	921.7	914.3	904.0	896.9	894.9	893.0	894.2	896.1	898.5	908.7
17.5°	931.6	935.5	924.5	911.1	904.4	903.6	902.4	906.4	911.9	917.8	930.4
20°	944.2	948.1	934.0	915.8	908.0	908.0	908.3	916.6	924.5	933.2	950.5
22.5°	961.9	965.1	947.8	922.9	911.5	912.3	915.4	923.7	933.6	945.4	969.4
25°	988.3	990.7	969.4	936.3	923.3	925.7	928.4	932.4	941.8	955.6	988.0
27.5°	1030.9	1032.9	1004.9	960.0	940.3	944.2	948.1	945.4	949.7	961.5	1002.9
30°	1090.8	1092.0	1056.5	997.0	969.0	971.0	971.8	960.4	952.1	961.5	1013.6
32.5°	1161.7	1161.3	1119.2	1041.9	1001.7	999.8	993.1	970.6	951.3	959.6	1023.0
35°	1271.7	1267.4	1213.0	1105.0	1038.8	1026.6	1010.8	982.0	955.2	957.6	1031.3
37.5°	1453.8	1440.4	1365.1	1208.2	1094.0	1062.8	1039.6	1000.6	963.9	956.8	1041.2
40°	1659.1	1642.1	1559.4	1349.7	1176.7	1126.7	1089.2	1027.0	978.1	960.4	1055.7
42.5°	1902.6	1878.6	1789.5	1516.4	1281.5	1209.0	1152.7	1060.5	999.0	971.8	1075.4
45°	2201.7	2169.8	2043.7	1704.4	1413.6	1317.0	1241.7	1111.3	1030.9	993.9	1105.0
47.5°	2504.0	2511.8	2332.5	1919.5	1572.0	1450.2	1353.3	1187.7	1077.4	1029.3	1152.7
50°	2825.1	2830.7	2619.8	2158.0	1751.7	1600.7	1478.6	1273.3	1142.0	1079.8	1224.0
52.5°	3075.8	3076.6	2880.7	2407.4	1938.9	1766.3	1613.7	1371.0	1216.9	1146.8	1319.0
55°	3232.6	3230.6	3063.6	2643.5	2154.0	1940.0	1763.5	1482.1	1308.3	1225.6	1438.4
57.5°	3346.5	3340.6	3189.7	2846.4	2383.4	2145.4	1932.9	1608.2	1416.3	1319.4	1595.6
60°	3389.9	3386.3	3275.2	3021.8	2624.6	2372.3	2128.4	1749.3	1538.9	1430.1	1797.8
62.5°	3406.4	3413.1	3359.1	3191.6	2882.7	2623.8	2343.2	1918.0	1676.8	1555.4	2011.0
65°	3464.7	3476.9	3465.9	3413.9	3174.3	2918.1	2628.1	2118.6	1827.3	1689.8	2233.6
67.5°	3580.2	3592.4	3597.1	3679.9	3530.5	3285.0	2983.6	2368.4	2003.5	1829.3	2401.1
70°	3577.4	3573.9	3657.4	3891.5	3976.6	3793.0	3462.8	2675.8	2213.5	1945.2	2422.4
72.5°	3256.3	3227.9	3425.3	3889.1	4347.9	4323.4	4048.0	3072.2	2394.8	1959.4	2102.0
75°	2442.9	2367.2	2716.0	3504.9	4409.7	4624.5	4420.0	3318.1	2351.9	1731.2	1462.8
77.5°	1044.7	968.6	1379.7	2594.6	3946.7	4323.0	4078.7	2894.9	1877.4	1144.8	718.4
80°	273.5	273.1	416.9	1176.3	2684.1	3192.4	2800.7	1869.5	1072.7	409.1	198.2
82.5°	113.1	110.3	153.3	457.5	1311.5	1791.5	1462.0	833.9	387.4	110.7	65.8
85°	42.2	41.8	74.5	158.0	462.6	738.9	534.8	213.2	96.5	54.0	29.6
87.5°	11.8	11.4	16.2	54.8	112.7	171.0	91.4	35.1	27.2	21.3	8.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P881894

CATALOG NUMBER: NAV-SB1C-735-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	849.6	849.6	849.6	849.6	849.6	849.6	849.6	849.6	849.6	849.6	849.6
2.5°	852.4	854.4	857.9	860.7	864.2	868.2	873.7	877.2	880.8	883.1	881.6
5°	855.9	860.3	869.3	878.4	889.0	898.9	910.3	918.6	925.3	927.3	928.1
7.5°	863.8	870.9	886.3	901.6	918.6	934.8	951.3	965.5	976.9	981.3	981.6
10°	877.6	887.1	908.7	930.4	952.9	977.7	999.0	1019.5	1035.6	1042.3	1042.7
12.5°	894.9	906.8	935.1	965.1	996.2	1030.5	1058.1	1083.3	1103.4	1112.5	1112.5
15°	917.4	932.8	969.0	1009.2	1054.9	1102.6	1137.7	1165.7	1188.1	1199.2	1198.4
17.5°	941.8	962.3	1008.0	1068.7	1134.2	1196.8	1237.8	1258.3	1281.5	1292.2	1291.8
20°	965.5	990.7	1056.1	1144.4	1231.5	1298.1	1331.2	1336.7	1338.3	1339.5	1342.6
22.5°	989.9	1023.8	1116.4	1239.8	1333.2	1379.3	1384.0	1360.4	1327.3	1311.9	1316.2
25°	1016.7	1061.6	1195.2	1345.0	1420.6	1426.2	1389.9	1332.4	1269.7	1240.9	1245.3
27.5°	1042.7	1105.4	1289.8	1445.5	1483.7	1435.2	1357.2	1275.6	1200.0	1169.6	1173.2
30°	1068.7	1155.4	1394.2	1533.4	1512.5	1412.8	1305.6	1214.5	1138.5	1106.6	1110.1
32.5°	1095.1	1213.8	1514.4	1596.8	1507.3	1365.1	1241.3	1146.0	1079.0	1045.5	1049.8
35°	1125.1	1285.5	1628.3	1631.5	1473.1	1294.9	1156.6	1064.0	1005.7	978.9	984.8
37.5°	1164.1	1376.5	1728.8	1640.1	1413.2	1192.1	1051.4	967.1	919.0	906.8	915.4
40°	1212.6	1486.1	1805.7	1626.4	1324.5	1067.2	936.3	868.9	841.7	844.5	854.0
42.5°	1275.6	1608.6	1859.7	1590.9	1201.1	938.3	835.4	805.5	818.5	829.5	839.8
45°	1357.6	1735.9	1893.1	1530.6	1061.6	829.1	775.9	783.0	792.9	794.1	801.9
47.5°	1462.4	1864.8	1915.2	1439.6	919.4	752.3	738.1	739.7	737.7	729.4	735.7
50°	1593.3	1990.1	1934.9	1319.0	798.4	704.2	685.3	679.8	652.6	625.8	629.3
52.5°	1742.2	2105.2	1943.2	1169.2	704.2	664.0	633.3	598.6	547.8	539.5	542.3
55°	1907.7	2211.6	1921.9	985.2	625.0	612.4	565.9	524.1	518.6	511.5	512.7
57.5°	2105.6	2326.2	1878.6	779.9	543.8	552.1	506.8	511.5	501.7	490.6	488.7
60°	2321.9	2444.9	1802.5	592.7	459.9	476.8	491.4	491.0	488.3	479.2	476.0
62.5°	2516.6	2522.9	1652.8	454.0	386.2	418.5	458.3	457.9	455.6	450.4	448.5
65°	2632.4	2511.1	1402.9	357.4	325.5	370.4	413.4	416.5	416.9	416.5	416.5
67.5°	2611.9	2372.7	1060.1	284.5	275.5	321.6	368.9	373.2	376.3	377.1	377.9
70°	2380.2	2068.9	691.2	227.0	230.9	278.6	326.7	331.0	333.8	336.9	338.5
72.5°	1855.3	1521.1	395.7	183.6	191.9	241.6	284.9	290.0	291.6	297.5	299.9
75°	1130.6	894.6	213.6	144.6	157.6	206.5	243.5	249.5	252.2	259.3	260.1
77.5°	537.5	387.4	121.8	112.7	126.9	168.7	205.7	212.4	204.9	208.9	205.7
80°	181.7	143.8	76.8	85.9	96.9	131.6	164.7	171.4	155.7	154.9	153.3
82.5°	63.4	58.3	48.9	57.1	62.7	94.2	124.5	133.2	115.9	115.5	109.9
85°	24.8	23.6	27.2	31.1	37.4	57.9	82.0	86.3	71.3	57.5	56.7
87.5°	5.1	5.5	6.7	7.1	11.4	20.1	29.6	36.3	28.8	24.4	22.5
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)