

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: P881901

Luminaire Tested: **NAV-SB1C-735-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881901
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1C-735-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7408 lumens
Efficiency: N/A
Efficacy: 136.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

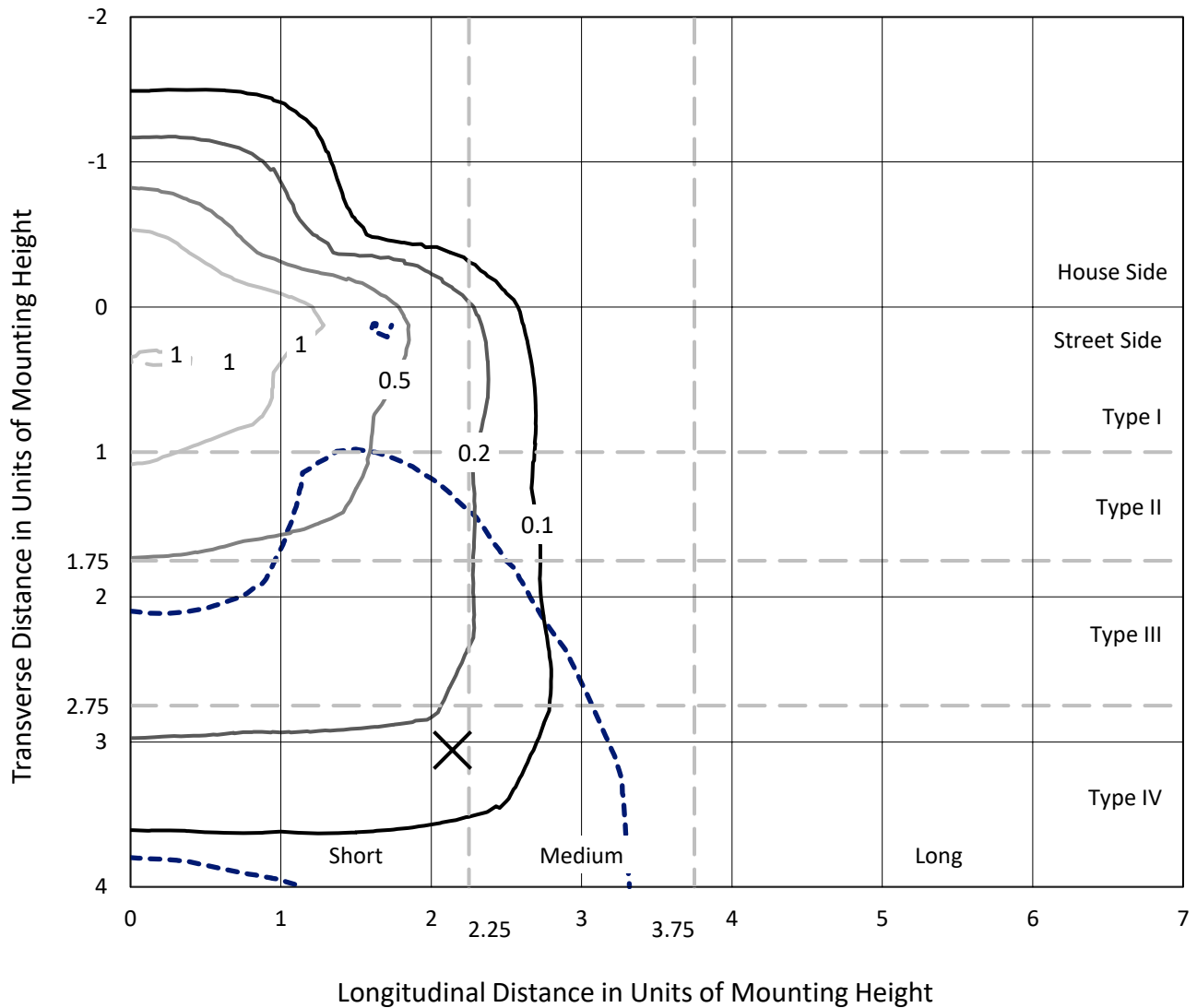
Input Watts (W): 54.4
Input Voltage (V): 120.0
Input Current (Ain): 0.437
Voltage Rise (V): NR
Power Factor: 0.993
Total Harmonic Distortion (THDi): 9.314
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P881901
 CATALOG NUMBER: NAV-SB1C-735-U-T4FT

Iso-Footcandle Lines of Horizontal Illumination

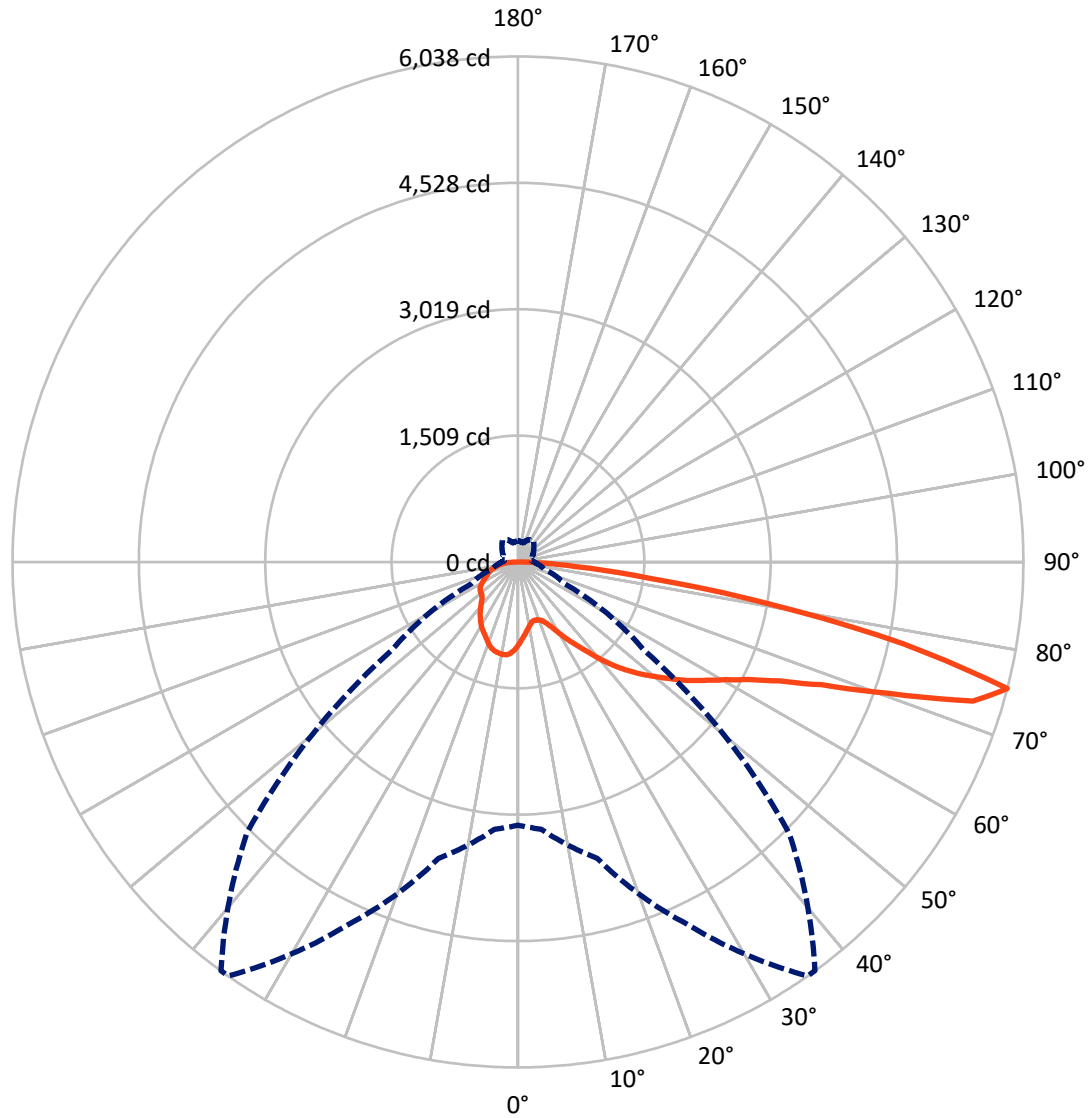
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
 Type IV - Short - N/A

REPORT NUMBER: P881901
CATALOG NUMBER: NAV-SB1C-735-U-T4FT

Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P881901

CATALOG NUMBER: NAV-SB1C-735-U-T4FT

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1762.9	0.0	1762.9
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	5645.1	0.0	5645.1
	% Fixture	76.2	0.0	76.2
Total	Lumens	7408.0	0.0	7408.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.5	1.3
10°-20°	269.6	3.6
20°-30°	452.7	6.1
30°-40°	703.6	9.5
40°-50°	1044.3	14.1
50°-60°	1441.7	19.5
60°-70°	1749.1	23.6
70°-80°	1445.5	19.5
80°-90°	207.9	2.8
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°	7408.0	100.0
0°-180°	7408.0	100.0

Coefficient of Utilization



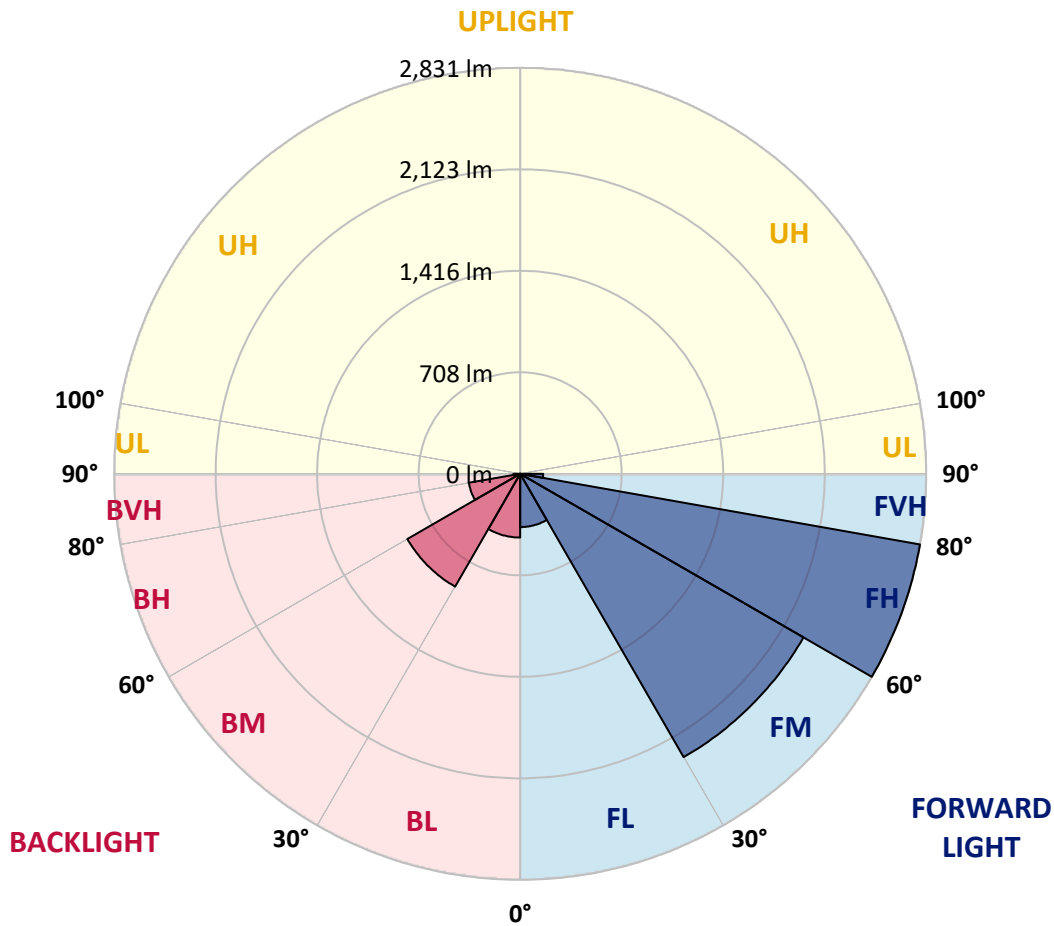
REPORT NUMBER: P881901
 CATALOG NUMBER: NAV-SB1C-735-U-T4FT

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	371.5	5.0			
FM (30°-60°)	2281.3	30.8			
FH (60°-80°)	2831.2	38.2			G2/5000
FVH (80°-90°)	161.1	2.2			G2/225
BL (0°-30°)	444.3	6.0	B1/500		
BM (30°-60°)	908.4	12.3	B1/1000		
BH (60°-80°)	363.5	4.9	B1/500		G1/500
BVH (80°-90°)	46.8	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Short



REPORT NUMBER: P881901
 CATALOG NUMBER: NAV-SB1C-735-U-T4FT

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	987.2	987.2	987.2	987.2	987.2	987.2	987.2	987.2	987.2	987.2	987.2
2.5°	910.3	915.9	918.3	917.1	923.1	922.3	930.7	941.1	955.5	969.5	990.0
5°	840.2	846.2	851.4	856.2	867.8	871.4	884.6	904.7	931.1	957.9	991.6
7.5°	774.9	780.1	788.1	796.9	816.6	820.2	842.2	873.4	910.3	949.5	996.0
10°	721.7	726.9	735.3	745.3	769.7	774.1	802.1	843.8	891.9	941.5	1000.8
12.5°	698.8	700.4	705.2	715.2	736.5	739.3	770.1	817.8	873.8	935.5	1008.0
15°	697.6	700.8	701.2	706.4	724.1	725.3	753.7	800.9	862.6	934.3	1018.8
17.5°	709.6	712.0	708.4	711.6	726.5	728.5	750.9	792.9	859.0	939.5	1037.2
20°	741.7	743.7	732.9	728.5	739.3	740.9	762.9	798.1	862.6	950.3	1062.5
22.5°	809.8	811.0	784.5	766.5	767.3	768.1	787.3	819.4	876.6	969.9	1094.5
25°	915.9	915.1	873.0	838.2	818.2	813.8	826.6	853.8	900.3	996.0	1135.7
27.5°	1040.0	1034.0	992.0	939.9	896.3	889.9	887.0	898.7	933.9	1030.4	1186.2
30°	1180.2	1174.6	1129.3	1061.3	1000.8	990.4	963.9	957.9	984.0	1077.3	1256.3
32.5°	1334.0	1330.4	1276.3	1193.8	1112.9	1100.9	1056.4	1040.4	1060.9	1148.2	1354.0
35°	1462.9	1459.7	1414.9	1330.0	1231.1	1216.2	1171.0	1153.0	1163.4	1239.1	1481.8
37.5°	1579.5	1577.9	1539.4	1472.5	1370.4	1352.4	1301.5	1295.5	1293.5	1358.8	1636.7
40°	1687.6	1683.6	1643.5	1608.3	1532.6	1516.2	1471.3	1466.1	1450.9	1506.2	1812.1
42.5°	1807.3	1796.9	1738.9	1722.4	1702.0	1688.4	1661.6	1662.4	1628.7	1672.4	1998.0
45°	1905.1	1899.0	1839.4	1829.8	1851.8	1846.2	1869.4	1875.4	1810.1	1846.6	2191.0
47.5°	2010.0	2004.4	1953.9	1947.1	2006.8	2008.4	2090.5	2092.5	1987.1	2027.6	2384.4
50°	2139.3	2131.3	2081.3	2089.7	2156.5	2162.6	2312.7	2299.1	2150.1	2211.4	2576.2
52.5°	2224.6	2229.4	2218.6	2232.2	2323.5	2329.2	2531.4	2496.5	2311.5	2392.8	2764.5
55°	2287.5	2297.1	2330.8	2362.0	2499.8	2505.4	2737.6	2684.4	2445.3	2561.0	2941.5
57.5°	2368.4	2354.8	2417.7	2478.5	2667.2	2682.0	2938.3	2865.4	2563.8	2706.0	3062.8
60°	2484.5	2474.9	2523.8	2613.9	2854.6	2878.2	3150.5	3028.4	2650.7	2820.9	3086.4
62.5°	2720.0	2696.0	2703.6	2783.3	3090.9	3122.1	3390.0	3170.5	2694.0	2865.8	2959.9
65°	3072.0	3030.8	2992.3	3047.6	3423.6	3454.5	3660.3	3282.3	2678.0	2778.9	2623.9
67.5°	3515.4	3474.5	3427.2	3479.3	3913.8	3938.3	3993.9	3345.2	2551.8	2444.1	2030.0
70°	3881.0	3865.8	3922.2	4136.5	4696.7	4697.5	4421.6	3293.1	2206.2	1732.8	1174.6
72.5°	3832.5	3823.3	4120.9	4783.3	5683.5	5662.3	4826.5	2899.0	1486.2	781.7	440.1
75°	3144.1	3203.8	3664.7	4771.6	6037.9	6035.1	4578.6	1843.0	614.7	324.0	227.5
77.5°	1686.0	1780.5	2379.2	3523.0	4713.6	4784.5	3219.0	644.8	263.9	207.4	157.4
80°	549.8	632.3	948.3	1793.7	3062.8	3049.6	1379.6	253.1	180.6	147.0	108.9
82.5°	233.5	243.1	423.7	847.0	1571.9	1547.4	439.3	145.4	126.9	100.5	67.3
85°	91.3	102.1	187.0	391.7	680.8	666.0	158.6	72.1	81.3	65.7	40.0
87.5°	30.0	36.4	66.9	134.2	211.9	204.2	38.8	24.8	35.2	30.0	14.4
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: P881901
 CATALOG NUMBER: NAV-SB1C-735-U-T4FT

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	987.2	987.2	987.2	987.2	987.2	987.2	987.2	987.2	987.2	987.2	987.2
2.5°	995.6	1002.0	1009.6	1020.8	1030.4	1038.4	1046.8	1052.0	1054.0	1060.1	1059.7
5°	1002.8	1016.8	1035.6	1054.0	1072.1	1082.9	1092.5	1097.3	1101.7	1104.9	1105.7
7.5°	1014.8	1032.8	1062.5	1086.5	1101.7	1110.5	1116.9	1115.3	1116.9	1117.7	1118.9
10°	1025.2	1050.4	1085.7	1108.5	1120.1	1120.5	1118.9	1113.3	1110.5	1110.9	1111.7
12.5°	1037.6	1065.7	1103.7	1122.9	1126.1	1117.3	1110.5	1100.9	1097.3	1095.7	1094.9
15°	1054.4	1086.5	1123.3	1130.5	1122.5	1111.3	1099.7	1084.1	1076.1	1069.7	1071.7
17.5°	1074.9	1110.1	1138.5	1133.3	1116.1	1097.7	1078.9	1055.2	1038.8	1032.0	1032.4
20°	1103.3	1134.9	1150.2	1127.3	1101.3	1073.3	1041.2	1012.4	997.2	990.4	989.6
22.5°	1137.7	1168.2	1161.4	1116.9	1080.1	1035.2	995.2	974.0	966.3	961.5	962.3
25°	1179.0	1205.0	1169.4	1101.7	1045.2	984.8	953.9	947.1	943.5	939.9	939.9
27.5°	1232.7	1246.7	1175.4	1079.3	990.8	931.1	919.9	921.1	919.9	913.9	915.1
30°	1303.5	1300.7	1181.0	1042.8	928.3	882.6	883.4	888.6	889.5	885.4	887.4
32.5°	1396.9	1368.4	1183.8	995.6	868.6	840.2	841.0	846.6	850.6	843.8	847.0
35°	1509.8	1447.3	1179.4	936.3	822.6	799.7	793.7	795.3	796.5	790.1	794.5
37.5°	1641.5	1535.8	1159.8	870.6	784.5	760.1	747.3	736.5	730.1	724.1	728.1
40°	1786.1	1632.3	1123.7	806.6	742.1	718.0	698.8	678.4	656.8	648.8	652.4
42.5°	1937.5	1731.6	1080.1	745.3	693.2	673.6	653.2	623.5	591.1	574.7	576.7
45°	2094.5	1833.4	1037.2	684.8	643.2	634.7	611.1	575.5	540.2	519.4	517.8
47.5°	2248.3	1929.5	974.4	623.9	596.3	605.5	587.1	554.3	515.0	482.2	478.6
50°	2395.2	2019.6	871.4	562.3	558.3	596.7	579.1	531.8	487.0	444.9	441.3
52.5°	2541.0	2092.5	739.7	506.2	537.8	594.3	568.7	516.6	461.7	417.7	412.9
55°	2664.7	2130.1	612.7	458.1	508.2	573.9	556.3	498.6	426.1	379.2	375.2
57.5°	2735.2	2099.7	507.0	410.9	467.4	540.2	535.0	460.1	383.7	347.6	342.8
60°	2704.8	1976.3	420.5	369.6	428.5	503.8	498.2	422.1	351.2	317.2	312.4
62.5°	2537.0	1741.3	352.0	333.6	393.3	466.6	461.3	392.9	326.4	293.5	288.3
65°	2199.0	1416.5	298.8	303.6	357.6	421.7	429.3	368.4	306.8	274.7	269.5
67.5°	1677.2	1026.0	257.1	277.5	322.8	377.6	399.7	350.8	290.3	259.9	255.1
70°	955.9	582.7	221.9	252.3	291.9	336.8	376.8	336.8	272.7	247.5	244.3
72.5°	362.4	267.5	191.8	227.1	262.3	302.4	351.6	314.8	252.3	233.5	230.3
75°	193.4	163.0	161.4	197.4	228.3	268.7	320.0	293.1	237.1	246.7	254.7
77.5°	131.8	115.3	135.0	169.0	191.0	231.5	286.3	260.3	205.4	204.6	188.6
80°	91.3	81.7	109.7	136.2	147.8	194.6	249.9	223.5	167.4	156.2	149.4
82.5°	54.9	53.3	82.1	101.7	104.5	150.2	207.0	187.4	137.0	119.3	120.1
85°	30.0	31.6	52.5	59.7	60.9	104.9	162.2	145.0	105.3	88.5	89.3
87.5°	8.4	10.8	19.2	23.6	29.2	54.5	96.5	86.1	52.9	36.8	36.8
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)