

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: P881907

Luminaire Tested: **NAV-SB1C-740-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881907
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1C-740-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 4000K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8007 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 II - Medium
BUG Rating: B2 - U0 - G2

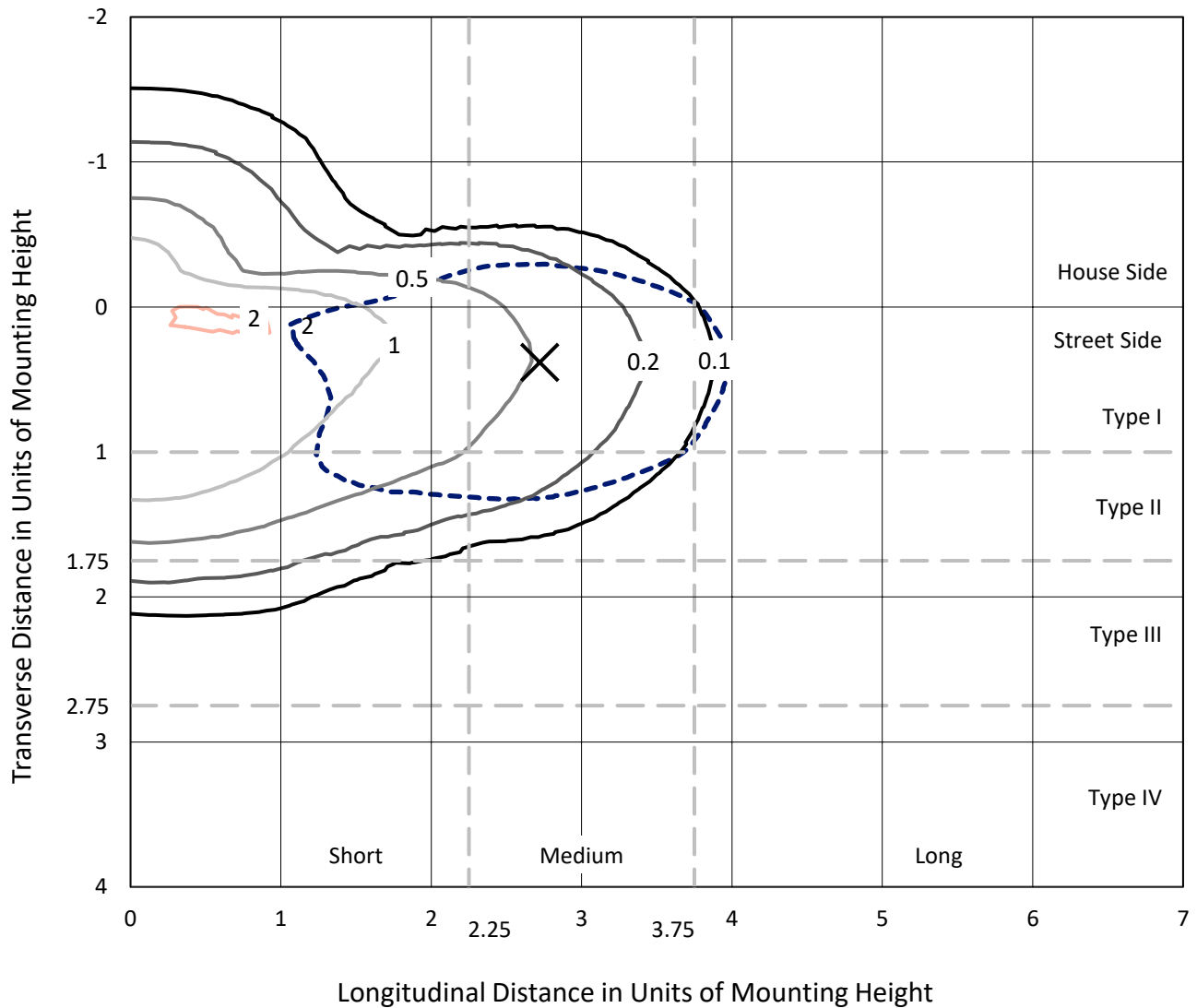
Input Watts (W): 54.4
Input Voltage (V): 120.0
Input Current (Ain): 0.437
Voltage Rise (V): NR
Power Factor: 0.993
Total Harmonic Distortion (THDi): 9.314
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

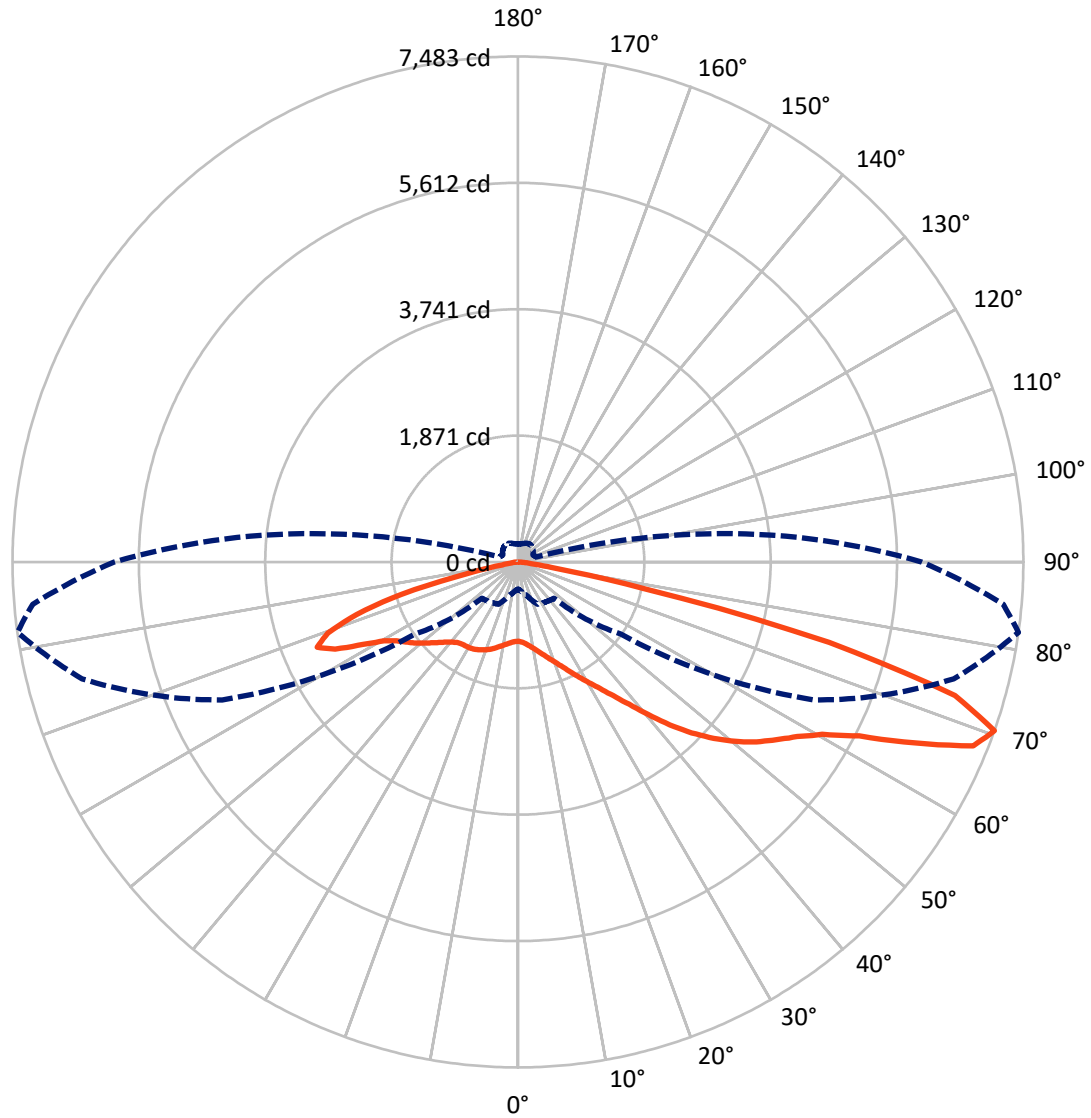
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1973.9	0.0	1973.9
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	6033.1	0.0	6033.1
	% Fixture	75.3	0.0	75.3
Total	Lumens	8007.0	0.0	8007.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.8	1.4
10°-20°	318.4	4.0
20°-30°	532.7	6.7
30°-40°	832.3	10.4
40°-50°	1325.5	16.6
50°-60°	1844.6	23.0
60°-70°	1929.5	24.1
70°-80°	1008.5	12.6
80°-90°	104.7	1.3
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°	8007.0	100.0
0°-180°	8007.0	100.0

Coefficient of Utilization

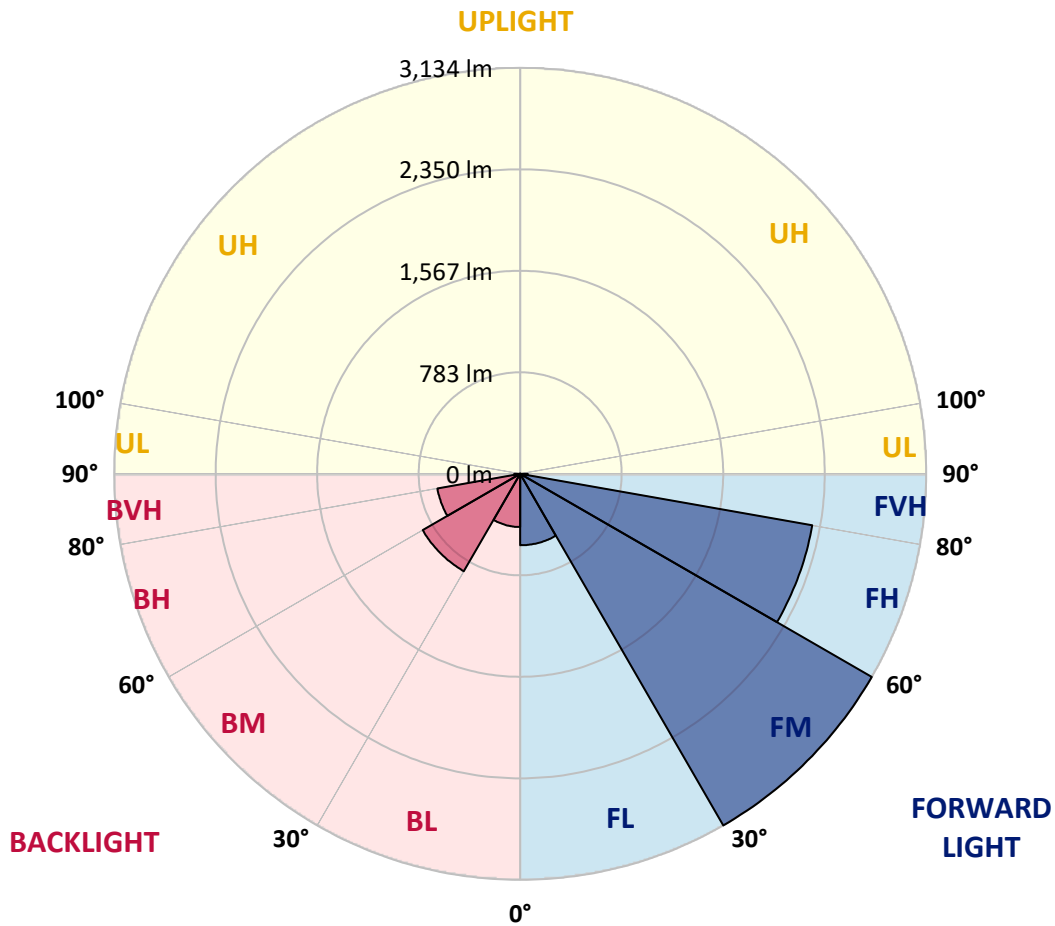


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	551.4	6.9			
FM (30°-60°)	3133.9	39.1			
FH (60°-80°)	2289.2	28.6			G2/5000
FVH (80°-90°)	58.6	0.7			G1/100
BL (0°-30°)	410.6	5.1	B1/500		
BM (30°-60°)	868.4	10.8	B1/1000		
BH (60°-80°)	648.7	8.1	B2/1000		G2/1000
BVH (80°-90°)	46.1	0.6			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1173.9	1173.9	1173.9	1173.9	1173.9	1173.9	1173.9	1173.9	1173.9	1173.9	1173.9
2.5°	1202.0	1208.8	1206.6	1204.5	1204.5	1201.5	1201.1	1196.9	1193.5	1187.9	1186.7
5°	1217.3	1224.5	1223.6	1225.3	1230.9	1232.1	1233.4	1230.9	1224.1	1217.3	1214.3
7.5°	1203.7	1211.7	1214.3	1224.5	1241.5	1256.8	1268.2	1272.9	1266.5	1256.8	1252.1
10°	1157.8	1166.7	1175.6	1199.8	1230.0	1266.1	1296.7	1315.0	1313.7	1304.4	1296.3
12.5°	1064.7	1074.1	1093.2	1140.4	1195.6	1259.3	1316.3	1354.5	1367.7	1360.9	1346.8
15°	990.4	998.5	1012.9	1061.3	1133.1	1230.0	1323.5	1397.8	1431.4	1427.6	1410.6
17.5°	988.3	991.7	1000.6	1023.5	1078.8	1184.1	1315.8	1440.3	1504.5	1504.1	1482.8
20°	1025.6	1026.9	1032.0	1036.7	1068.1	1149.3	1296.3	1475.6	1586.5	1586.5	1563.5
22.5°	1077.5	1076.6	1081.7	1077.5	1092.8	1146.3	1284.0	1506.6	1677.8	1684.6	1655.7
25°	1155.2	1151.0	1149.7	1139.9	1142.9	1173.9	1297.6	1541.9	1786.2	1800.2	1764.1
27.5°	1258.9	1252.1	1247.4	1224.9	1217.3	1230.9	1339.2	1584.4	1906.8	1931.1	1885.2
30°	1394.0	1381.7	1374.9	1335.8	1308.2	1310.3	1402.1	1640.9	2033.0	2072.1	2013.9
32.5°	1578.4	1559.3	1541.0	1476.9	1426.3	1409.7	1483.2	1719.0	2169.8	2232.3	2157.5
35°	1784.9	1769.6	1750.1	1651.1	1573.3	1535.1	1592.9	1828.2	2330.0	2429.0	2331.7
37.5°	1983.7	1970.6	1979.9	1846.5	1746.2	1690.6	1736.5	1974.8	2527.6	2673.7	2550.1
40°	2189.4	2179.2	2180.5	2053.0	1936.1	1873.7	1910.7	2158.8	2754.0	2964.8	2812.7
42.5°	2412.9	2405.2	2379.7	2266.7	2135.4	2077.2	2111.2	2371.2	2997.1	3296.2	3100.7
45°	2663.1	2658.4	2634.6	2505.1	2354.7	2289.2	2335.1	2605.8	3241.4	3608.0	3390.1
47.5°	2879.4	2883.2	2880.2	2771.0	2615.1	2519.1	2573.9	2850.5	3468.7	3901.2	3667.5
50°	2983.5	3003.4	3032.7	2998.8	2901.9	2804.2	2814.8	3086.7	3685.4	4176.1	3933.5
52.5°	2929.1	2966.9	3046.8	3101.2	3138.5	3118.1	3089.7	3321.2	3889.3	4424.2	4185.0
55°	2726.4	2779.5	2912.1	3043.4	3234.1	3382.4	3419.8	3581.3	4088.1	4642.6	4422.9
57.5°	2357.2	2443.4	2562.4	2828.0	3149.2	3510.3	3804.7	3942.0	4298.9	4875.9	4671.9
60°	1724.1	1839.7	1987.6	2382.7	2851.8	3441.9	4132.3	4496.0	4598.4	5177.9	4996.1
62.5°	1103.4	1174.8	1310.7	1682.9	2222.1	3091.4	4232.6	5188.6	5106.1	5673.3	5482.1
65°	755.4	801.3	925.8	1134.8	1436.5	2301.1	3964.1	5707.8	5912.5	6458.5	6313.2
67.5°	548.9	583.8	690.0	873.1	936.0	1361.7	3076.1	5684.0	6696.4	7267.5	7041.4
70°	400.2	424.9	514.1	690.0	720.2	757.5	1863.5	4831.7	6679.4	7482.5	7211.8
72.5°	296.6	313.6	373.5	535.3	582.9	511.5	922.4	3511.6	5739.6	6767.8	6550.7
75°	214.6	227.3	271.5	409.6	466.5	389.6	460.1	2052.1	4003.6	4760.7	4798.9
77.5°	164.0	173.8	202.7	300.0	373.5	292.3	285.5	944.1	1898.3	1907.7	2014.8
80°	131.7	138.1	153.8	211.2	286.4	218.8	186.1	381.1	599.9	507.7	532.8
82.5°	96.9	107.5	130.0	148.3	204.8	150.8	113.4	192.5	228.2	196.3	198.0
85°	55.2	62.5	78.6	106.2	130.9	92.2	65.0	85.4	106.2	87.1	77.8
87.5°	19.5	25.5	27.6	41.6	56.9	38.2	25.1	24.6	34.8	25.9	21.7
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°	1173.9	1173.9	1173.9	1173.9	1173.9	1173.9	1173.9	1173.9	1173.9	1173.9	1173.9
2.5°	1182.4	1180.3	1171.8	1160.3	1148.4	1137.0	1133.1	1125.1	1119.5	1116.6	1120.0
5°	1206.2	1199.4	1179.4	1154.0	1127.2	1098.3	1077.9	1059.2	1045.6	1032.9	1038.0
7.5°	1240.2	1228.3	1193.9	1149.3	1101.7	1053.7	1018.0	990.8	972.5	960.6	963.2
10°	1279.7	1261.5	1208.8	1142.1	1068.6	999.7	957.7	934.3	922.8	916.5	918.2
12.5°	1325.2	1299.3	1224.1	1125.5	1018.0	939.4	910.5	903.7	904.1	904.6	905.4
15°	1381.3	1345.2	1236.4	1089.4	952.1	893.1	888.0	899.0	910.5	916.0	915.6
17.5°	1444.6	1393.6	1238.5	1029.9	887.6	863.3	879.5	903.3	920.7	928.3	930.0
20°	1512.6	1442.9	1223.2	945.8	834.5	839.1	868.0	898.6	917.7	927.5	930.0
22.5°	1590.3	1495.6	1186.7	857.4	791.1	812.8	846.8	876.5	896.5	906.3	908.8
25°	1679.1	1554.6	1129.3	783.0	753.7	783.0	817.0	841.7	857.8	866.7	869.3
27.5°	1777.7	1616.2	1052.8	724.0	721.0	752.5	780.5	799.6	808.1	814.9	817.5
30°	1876.7	1672.3	960.2	679.4	692.5	722.3	742.3	750.8	753.3	754.6	757.5
32.5°	1983.7	1720.7	862.9	642.4	665.4	693.0	704.9	708.7	696.8	688.7	691.3
35°	2113.3	1772.6	767.7	613.1	638.6	662.4	666.2	662.8	648.8	632.2	633.1
37.5°	2273.5	1837.2	691.7	592.3	613.5	629.2	624.6	623.7	625.0	605.4	606.7
40°	2469.8	1921.3	636.0	576.1	593.1	596.5	583.4	590.6	596.9	567.2	568.1
42.5°	2687.8	2022.8	600.8	565.1	576.1	568.1	547.7	555.7	554.9	515.8	515.4
45°	2910.0	2133.3	588.5	557.0	560.4	544.3	521.7	523.9	506.0	470.8	472.0
47.5°	3130.9	2251.8	596.1	550.2	540.9	522.6	505.2	495.8	469.5	443.1	443.1
50°	3347.6	2376.3	624.1	536.6	514.1	503.5	490.7	474.2	446.1	423.6	421.9
52.5°	3548.5	2501.7	655.6	514.1	480.5	486.9	478.8	459.7	432.1	409.2	409.6
55°	3738.9	2627.0	667.9	483.1	449.1	472.5	467.8	432.5	399.4	380.7	379.0
57.5°	3946.2	2777.8	654.3	443.6	423.6	455.9	438.0	399.0	379.8	365.8	364.5
60°	4233.4	3014.5	625.0	394.7	399.4	431.2	400.7	384.5	363.7	348.0	347.1
62.5°	4710.6	3455.9	577.8	346.3	370.9	394.7	382.8	366.7	345.4	330.1	330.1
65°	5415.9	4069.4	489.0	308.5	339.0	359.0	363.7	347.5	325.5	309.3	310.2
67.5°	6010.7	4454.4	370.1	277.0	306.3	330.1	343.3	327.6	304.2	288.5	288.9
70°	5978.0	4174.8	282.5	246.0	277.4	301.7	318.7	306.3	281.3	266.4	267.7
72.5°	5309.6	3492.5	228.6	214.6	248.1	271.9	292.3	283.0	257.5	243.0	243.0
75°	3900.8	2479.1	182.7	182.7	211.6	240.9	263.4	257.5	234.1	223.9	220.9
77.5°	1644.3	1040.1	143.2	151.7	175.9	206.9	235.0	237.1	216.7	229.4	208.2
80°	437.2	286.8	109.2	119.4	138.1	170.8	204.4	203.5	181.4	169.5	157.6
82.5°	166.6	113.0	77.8	84.1	99.8	130.9	161.9	167.0	144.9	125.3	125.3
85°	64.2	48.4	48.0	50.6	58.2	86.7	122.4	126.6	109.2	92.6	95.6
87.5°	16.6	14.4	17.8	17.0	26.8	46.3	70.1	72.7	66.7	38.7	55.2
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)