

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: P959284

Luminaire Tested: **NAV-SB1A-735-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959284
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-735-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 350mA LIGHTSQUARE WITH 26 LEDS AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4678.1 lumens
Efficiency: N/A
Efficacy: 151.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

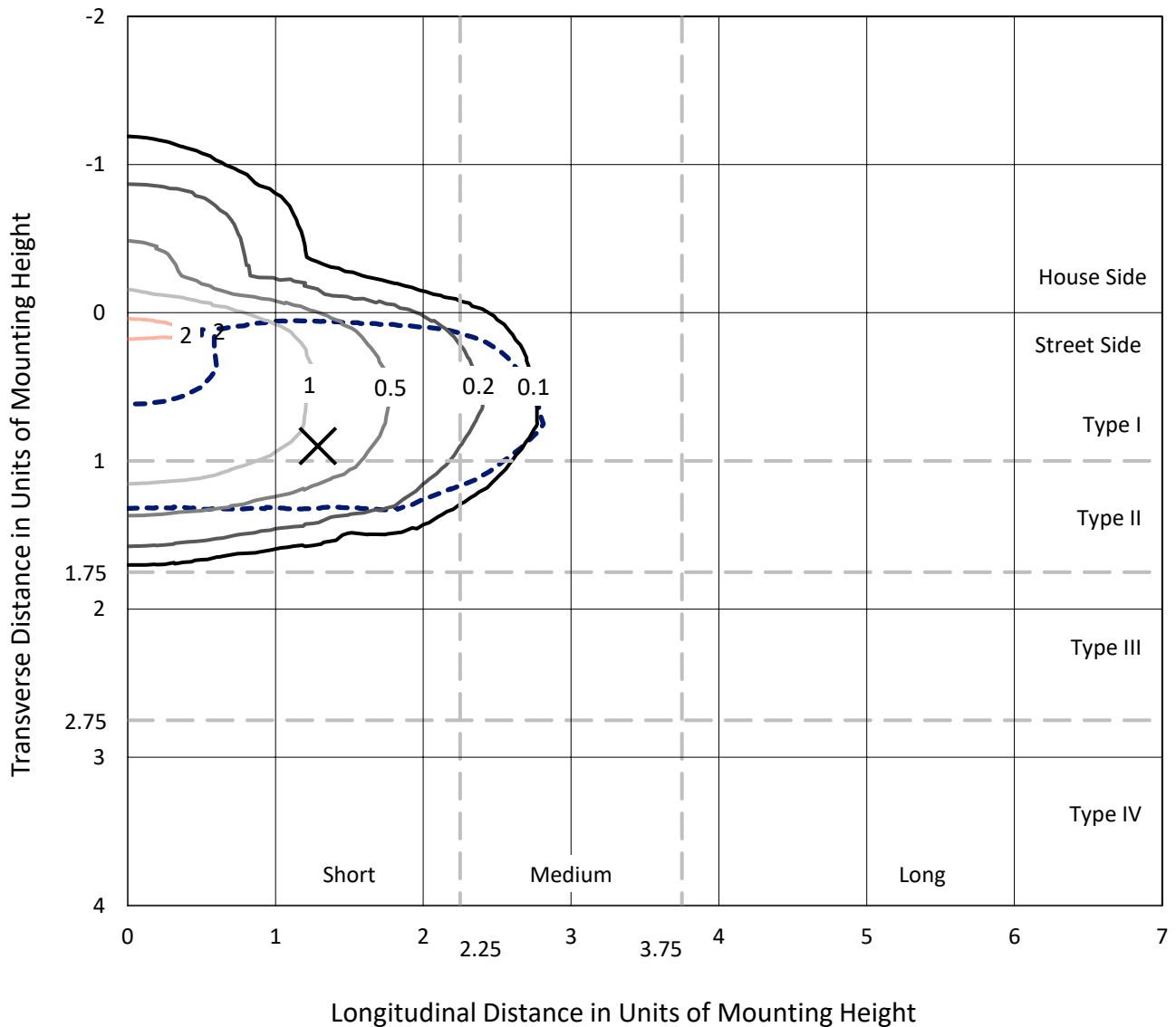
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P959284
 CATALOG NUMBER: NAV-SB1A-735-U-AFL

Iso-Footcandle Lines of Horizontal Illumination

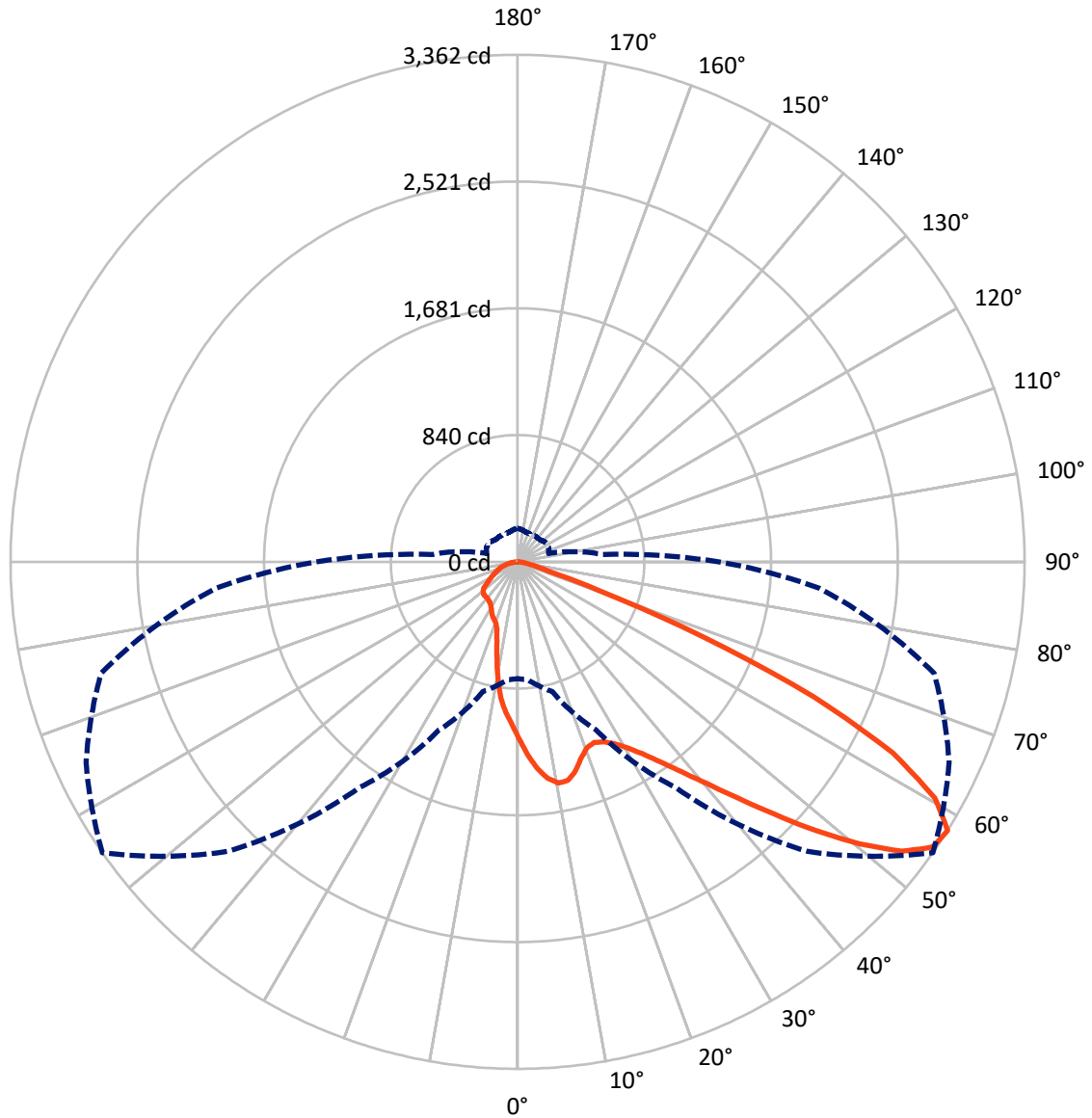
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc
 Type II - Short - N/A

REPORT NUMBER: P959284
CATALOG NUMBER: NAV-SB1A-735-U-AFL

Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

REPORT NUMBER: P959284
 CATALOG NUMBER: NAV-SB1A-735-U-AFL

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	846.5	0.0	846.5
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	3831.6	0.0	3831.6
	% Fixture	81.9	0.0	81.9
Total	Lumens	4678.1	0.0	4678.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.8	2.3
10°-20°	274.5	5.9
20°-30°	438.1	9.4
30°-40°	693.6	14.8
40°-50°	1061.6	22.7
50°-60°	1137.1	24.3
60°-70°	715.4	15.3
70°-80°	211.6	4.5
80°-90°	37.4	0.8
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°	4678.1	100.0
0°-180°	4678.1	100.0

Coefficient of Utilization

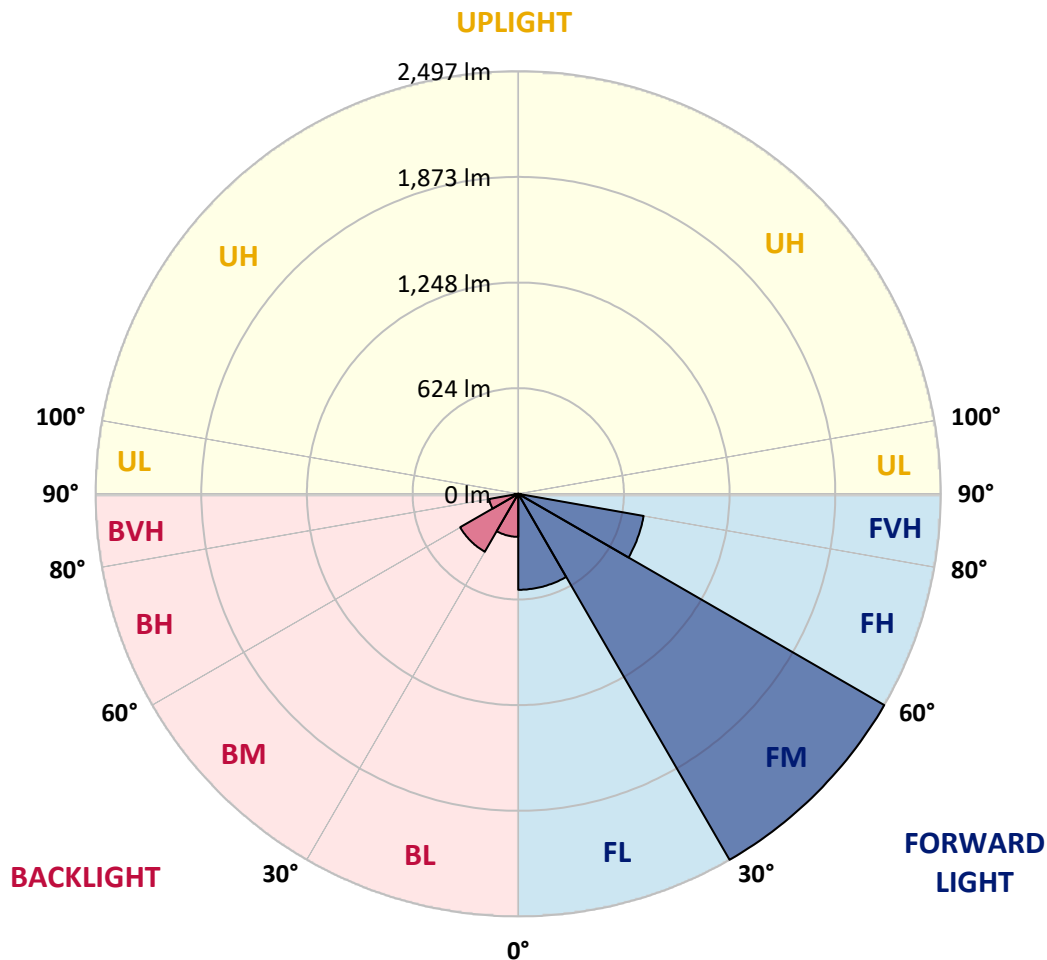


REPORT NUMBER: P959284
 CATALOG NUMBER: NAV-SB1A-735-U-AFL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	567.0	12.1			
FM (30°-60°)	2496.7	53.4			
FH (60°-80°)	752.1	16.1			G1/1800
FVH (80°-90°)	15.8	0.3			G1/100
BL (0°-30°)	254.4	5.4	B1/500		
BM (30°-60°)	395.6	8.5	B1/1000		
BH (60°-80°)	174.8	3.7	B1/500		G1/500
BVH (80°-90°)	21.6	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1
 Type II Short



REPORT NUMBER: P959284
 CATALOG NUMBER: NAV-SB1A-735-U-AFL

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1172.2	1172.2	1172.2	1172.2	1172.2	1172.2	1172.2	1172.2	1172.2	1172.2	1172.2
2.5°	1344.8	1343.9	1349.2	1331.1	1318.8	1302.1	1280.0	1251.9	1221.8	1189.8	1176.1
5°	1466.1	1457.6	1463.1	1449.6	1436.0	1410.9	1378.2	1332.5	1276.6	1213.1	1179.2
7.5°	1446.9	1441.1	1455.4	1467.5	1477.6	1474.5	1450.6	1402.6	1330.6	1238.2	1189.1
10°	1292.8	1286.4	1306.4	1348.3	1409.7	1463.1	1492.1	1462.4	1385.7	1265.8	1198.7
12.5°	1156.9	1153.8	1167.1	1201.0	1269.2	1371.7	1486.8	1514.6	1443.0	1298.4	1211.9
15°	1098.9	1095.0	1103.5	1120.6	1164.2	1259.7	1438.5	1550.4	1499.4	1336.2	1232.7
17.5°	1086.1	1081.7	1085.4	1094.3	1122.4	1195.1	1365.4	1568.0	1558.1	1378.2	1250.1
20°	1109.8	1106.2	1106.7	1106.2	1125.8	1183.6	1314.7	1561.3	1609.5	1417.0	1267.0
22.5°	1167.1	1161.0	1161.3	1148.5	1159.1	1203.9	1301.3	1543.1	1655.2	1450.8	1279.8
25°	1260.4	1249.6	1251.7	1219.1	1216.2	1249.4	1322.1	1529.1	1700.6	1477.8	1282.2
27.5°	1388.2	1375.8	1369.3	1320.7	1297.4	1313.8	1364.5	1534.0	1743.6	1501.3	1276.1
30°	1547.7	1532.8	1519.5	1450.6	1408.5	1402.4	1430.2	1565.9	1794.5	1526.0	1265.8
32.5°	1743.4	1726.0	1701.8	1610.4	1551.1	1519.5	1515.4	1622.7	1853.9	1557.4	1260.4
35°	1976.3	1953.5	1919.2	1800.9	1726.0	1661.2	1627.6	1704.7	1935.4	1604.8	1266.5
37.5°	2216.2	2190.5	2159.2	2018.3	1926.2	1830.6	1764.4	1816.0	2044.0	1669.1	1282.5
40°	2437.4	2408.6	2379.4	2254.2	2155.3	2040.2	1932.0	1956.7	2176.8	1746.1	1309.5
42.5°	2568.0	2546.8	2535.6	2467.9	2391.5	2274.7	2140.5	2123.6	2325.9	1834.5	1340.5
45°	2562.3	2553.6	2587.9	2615.9	2597.8	2533.0	2384.8	2308.1	2475.7	1911.2	1369.0
47.5°	2425.4	2431.2	2507.9	2665.5	2734.9	2768.8	2662.8	2489.2	2605.8	1968.5	1381.8
50°	2053.0	2057.8	2235.3	2575.3	2770.3	2961.0	2938.8	2666.0	2706.6	2003.6	1378.9
52.5°	1758.2	1761.3	1837.5	2307.9	2653.6	3057.8	3187.4	2832.6	2780.4	2013.3	1362.7
55°	1324.3	1335.2	1420.5	1810.7	2350.4	2981.1	3338.8	3004.4	2827.1	2014.2	1345.8
57.5°	773.7	785.5	890.9	1229.0	1826.9	2713.9	3361.8	3156.7	2858.7	2006.5	1335.7
60°	378.9	384.1	430.0	646.0	1126.5	2199.0	3177.0	3230.5	2876.4	2002.4	1335.2
62.5°	255.4	254.6	256.6	318.8	555.0	1412.8	2792.0	3101.3	2866.9	1986.7	1330.3
65°	219.6	216.9	209.7	223.7	287.5	646.2	2157.2	2715.8	2795.2	1947.3	1297.2
67.5°	189.8	190.0	190.3	185.9	205.3	298.2	1318.3	2139.3	2537.4	1760.5	1169.5
70°	157.2	159.4	160.3	160.3	167.4	195.7	562.7	1466.3	2001.4	1380.4	942.0
72.5°	143.2	138.6	139.1	136.6	136.6	148.9	226.6	831.2	1261.0	776.5	574.8
75°	116.8	119.7	120.2	118.5	113.0	113.7	134.5	348.7	539.6	322.2	284.1
77.5°	100.9	100.9	101.8	100.7	96.2	85.2	89.7	135.2	183.6	132.0	142.0
80°	81.0	80.8	84.9	87.3	80.6	62.8	57.3	74.7	81.5	58.0	73.8
82.5°	39.5	41.8	58.3	66.5	61.2	45.5	35.1	46.4	43.6	25.6	33.1
85°	23.0	21.7	26.1	37.0	35.1	25.1	16.9	24.2	22.8	13.0	13.3
87.5°	7.3	6.8	5.3	12.6	10.1	7.0	4.6	7.0	6.3	2.9	2.9
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: P959284
 CATALOG NUMBER: NAV-SB1A-735-U-AFL

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1172.2	1172.2	1172.2	1172.2	1172.2	1172.2	1172.2	1172.2	1172.2	1172.2
2.5°	1158.9	1130.4	1102.1	1076.1	1060.5	1050.3	1040.2	1028.8	1024.4	1017.9
5°	1147.3	1092.1	1043.0	1000.7	962.3	932.0	901.6	876.9	865.8	873.3
7.5°	1140.5	1060.7	985.0	907.3	832.6	773.0	720.9	684.4	668.0	672.1
10°	1134.5	1025.1	909.8	787.2	679.8	605.8	552.6	524.8	514.3	516.6
12.5°	1128.9	985.2	819.1	657.8	543.7	494.8	479.6	479.8	481.7	483.2
15°	1127.9	937.2	717.8	544.6	470.2	467.0	483.4	493.8	499.4	501.1
17.5°	1126.5	879.6	614.5	467.5	452.2	473.6	488.7	495.5	499.9	500.1
20°	1120.6	806.6	519.3	430.7	448.3	466.8	476.2	481.5	485.1	486.4
22.5°	1102.8	725.3	445.0	414.3	432.9	447.6	458.8	464.8	467.0	468.4
25°	1070.6	634.4	393.7	398.5	411.3	430.0	438.9	440.1	439.4	441.6
27.5°	1028.5	536.9	361.8	377.3	393.7	409.7	414.5	413.8	412.4	414.7
30°	977.7	449.4	341.4	353.3	375.8	390.3	394.7	393.0	390.1	392.8
32.5°	924.0	377.7	324.8	336.6	361.1	375.4	379.7	378.0	375.8	378.0
35°	874.0	327.7	309.3	325.5	349.4	363.5	369.0	369.3	369.3	372.0
37.5°	828.1	298.4	296.5	318.5	341.4	354.0	362.0	362.5	352.1	352.8
40°	785.5	286.1	290.7	313.9	333.7	345.8	346.3	319.2	300.1	299.6
42.5°	750.7	283.7	292.3	313.4	328.2	328.6	294.6	273.5	268.2	268.4
45°	718.0	282.9	296.2	313.4	319.9	283.9	261.0	255.4	255.8	257.8
47.5°	681.5	280.0	296.9	309.0	296.2	252.5	245.7	243.3	242.3	242.8
50°	641.5	269.7	287.8	300.3	255.6	238.9	230.4	229.7	230.9	231.6
52.5°	599.5	252.8	272.0	284.6	237.0	227.0	217.6	219.4	224.7	226.3
55°	571.9	232.9	251.2	253.2	224.0	216.0	208.0	211.9	221.8	224.9
57.5°	564.7	211.9	227.6	225.4	207.3	206.3	201.4	204.8	217.4	222.0
60°	562.5	193.0	204.4	202.6	191.1	195.7	194.4	196.1	200.5	201.9
62.5°	545.6	178.0	183.6	181.1	176.5	184.5	187.5	183.8	187.2	188.9
65°	502.6	165.9	163.3	161.5	163.5	170.8	176.5	169.3	172.4	177.2
67.5°	431.4	149.4	142.2	144.1	150.2	154.1	161.5	153.3	156.0	164.2
70°	349.0	128.6	122.1	127.7	133.5	141.4	142.7	137.1	143.4	152.6
72.5°	246.9	107.6	103.0	114.4	116.3	126.7	124.0	121.4	130.1	133.2
75°	171.2	86.8	84.2	92.9	99.8	108.9	106.9	110.1	128.4	129.9
77.5°	108.3	67.4	65.8	71.3	81.0	90.9	94.1	129.9	219.4	228.1
80°	62.8	50.3	48.4	52.7	61.2	70.4	90.7	159.4	144.6	142.9
82.5°	35.1	34.5	32.2	33.4	40.9	50.7	128.1	112.2	91.1	94.1
85°	16.4	20.3	17.4	16.7	23.0	59.4	85.6	64.1	42.5	41.6
87.5°	4.3	3.9	3.9	4.3	9.6	51.2	34.1	27.4	16.2	15.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)