

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: P959299

Luminaire Tested: **NAV-SB1A-735-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959299
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-735-U-T2R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4684.2 lumens
Efficiency: N/A
Efficacy: 151.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G1

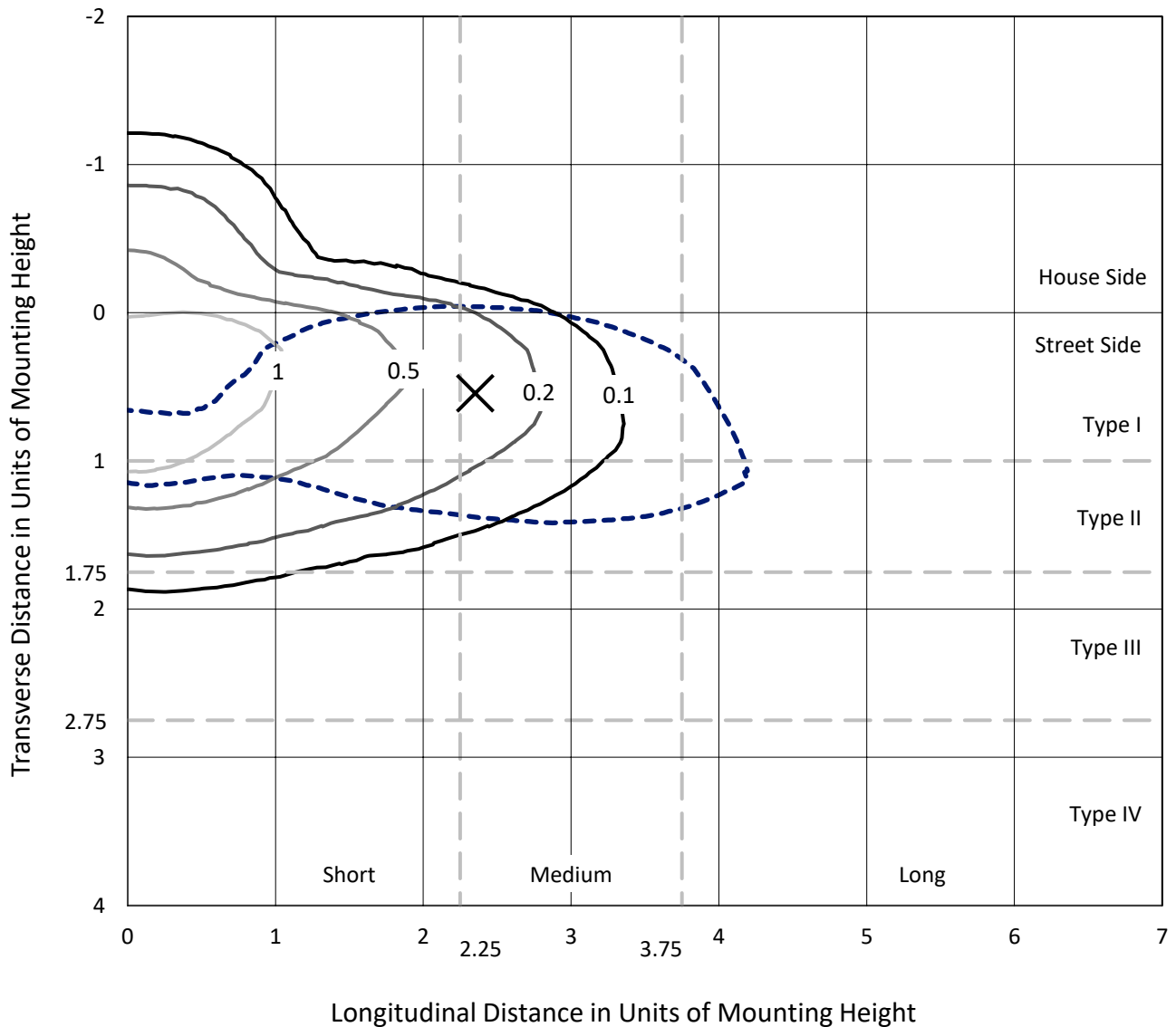
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

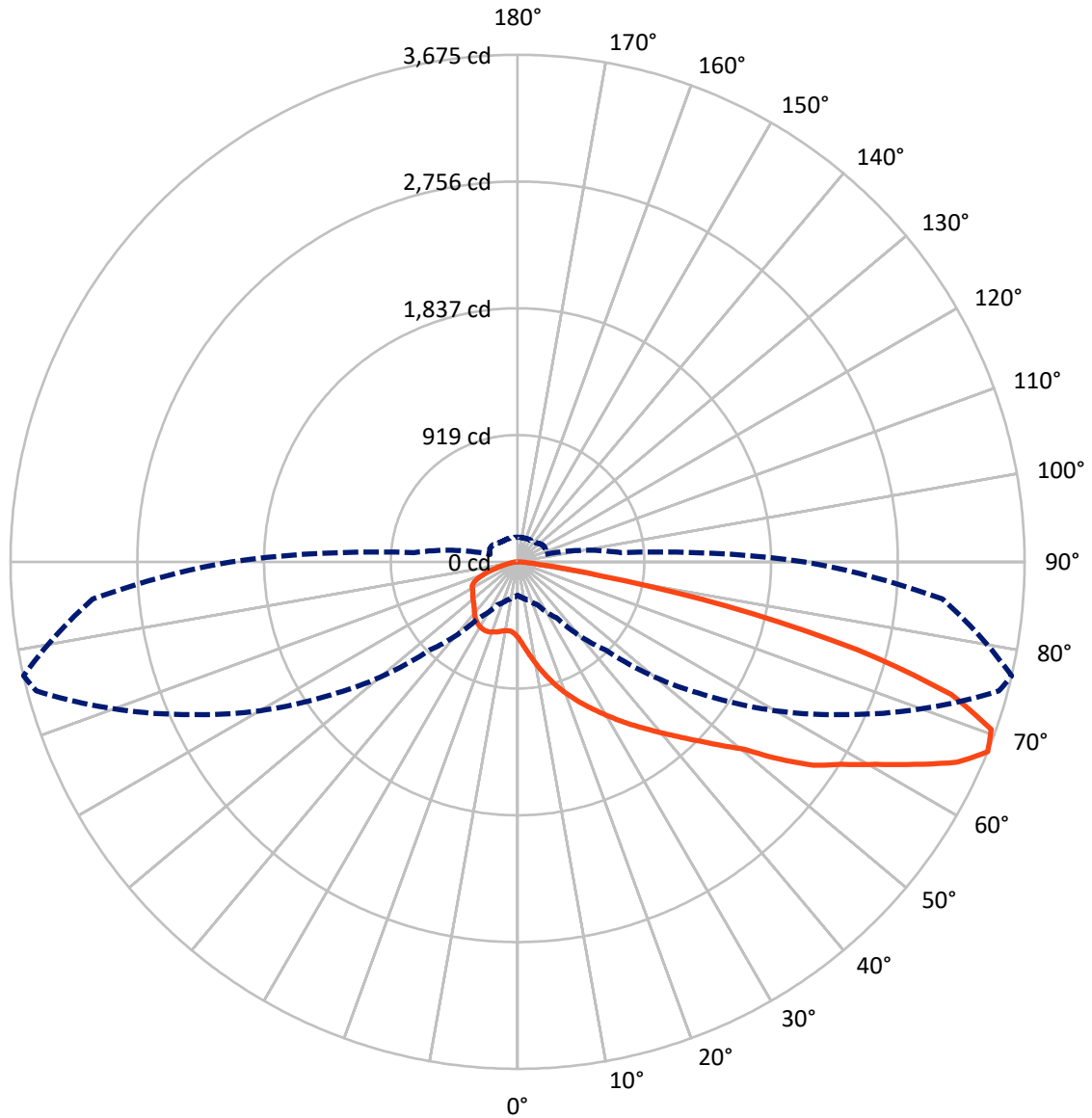
✕ Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	886.1	0.0	886.1
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	3798.2	0.0	3798.2
	% Fixture	81.1	0.0	81.1
Total	Lumens	4684.2	0.0	4684.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.9	1.3
10°-20°	211.6	4.5
20°-30°	399.6	8.5
30°-40°	643.7	13.7
40°-50°	880.5	18.8
50°-60°	993.2	21.2
60°-70°	927.1	19.8
70°-80°	508.2	10.8
80°-90°	61.3	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°	4684.2	100.0
0°-180°	4684.2	100.0

Coefficient of Utilization

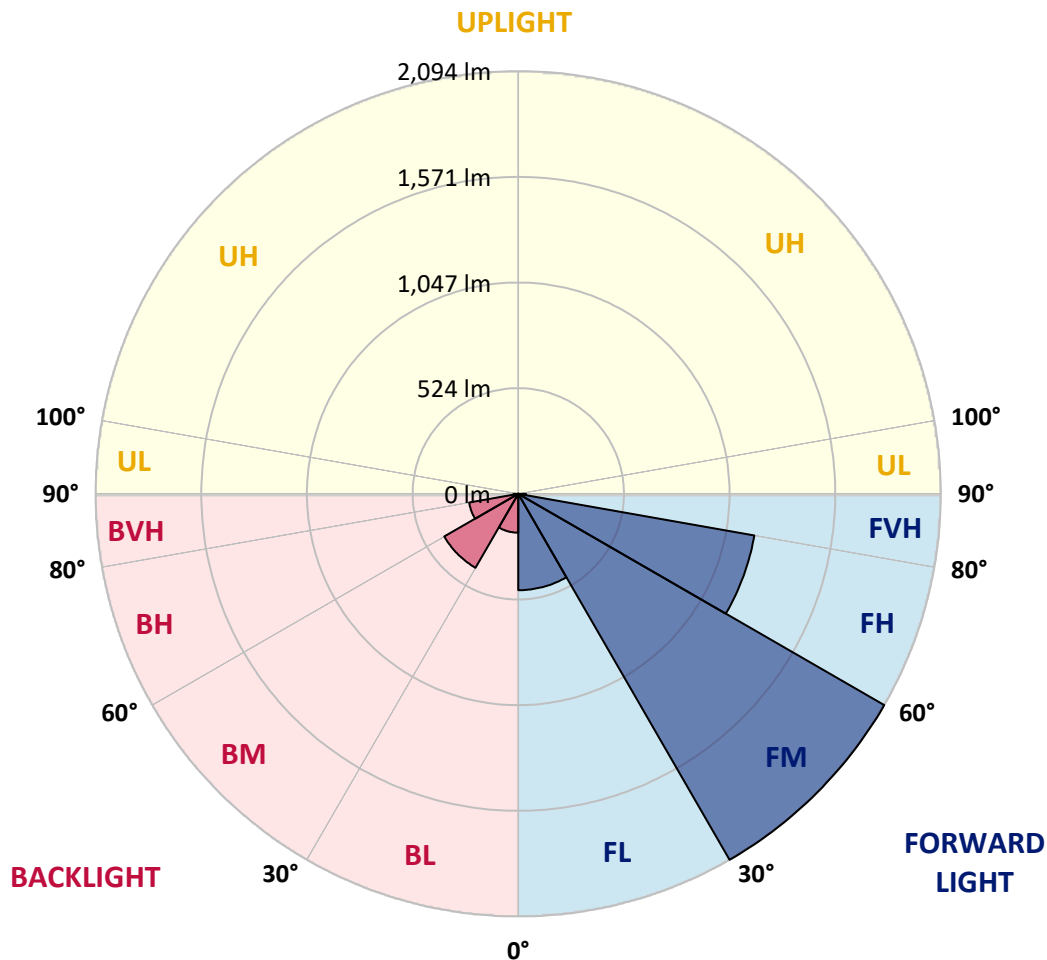


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	477.5	10.2			
FM (30°-60°)	2094.3	44.7			
FH (60°-80°)	1188.1	25.4			G1/1800
FVH (80°-90°)	38.3	0.8			G1/100
BL (0°-30°)	192.7	4.1	B1/500		
BM (30°-60°)	423.3	9.0	B1/1000		
BH (60°-80°)	247.2	5.3	B1/500		G1/500
BVH (80°-90°)	23.0	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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	549.6	549.6	549.6	549.6	549.6	549.6	549.6	549.6	549.6	549.6	549.6
2.5°	688.2	693.0	687.0	687.0	666.7	656.0	635.7	620.2	592.4	587.5	569.2
5°	813.4	819.5	811.0	807.4	783.4	761.5	727.3	693.7	644.1	639.1	595.8
7.5°	910.4	918.1	910.6	906.7	885.5	860.8	820.9	774.0	704.1	694.2	631.6
10°	989.4	990.7	988.2	989.6	973.0	952.6	911.8	857.2	769.9	756.3	674.9
12.5°	1034.1	1039.8	1044.6	1053.3	1050.4	1037.8	1001.0	935.7	839.5	822.2	722.0
15°	1055.2	1064.9	1075.7	1095.8	1112.0	1115.2	1087.1	1020.2	910.4	889.3	769.7
17.5°	1062.7	1071.8	1089.1	1118.1	1152.9	1176.4	1163.8	1102.1	980.5	956.3	819.7
20°	1100.6	1103.3	1113.8	1141.3	1179.1	1217.9	1227.3	1180.9	1049.9	1022.5	871.5
22.5°	1181.9	1176.6	1179.5	1192.1	1219.1	1256.9	1278.4	1250.6	1121.2	1089.8	923.6
25°	1316.1	1300.6	1285.1	1270.7	1284.4	1305.7	1330.1	1320.2	1196.0	1156.0	976.4
27.5°	1485.6	1466.8	1432.6	1385.0	1368.4	1375.9	1386.7	1384.8	1265.1	1224.7	1030.7
30°	1652.4	1630.5	1589.8	1520.9	1476.9	1457.0	1448.8	1443.3	1340.3	1297.2	1085.7
32.5°	1785.7	1768.2	1728.4	1651.3	1587.4	1553.6	1526.2	1506.4	1418.9	1375.9	1143.7
35°	1902.2	1886.0	1840.3	1756.1	1686.7	1650.8	1615.0	1572.7	1500.6	1457.0	1206.1
37.5°	2008.6	1992.4	1929.8	1842.2	1772.4	1747.5	1715.5	1643.8	1582.6	1541.5	1272.1
40°	2075.8	2072.2	2013.7	1914.6	1842.0	1829.7	1819.1	1726.2	1673.5	1635.3	1344.6
42.5°	2093.0	2100.9	2054.6	1973.1	1903.9	1894.0	1918.9	1819.6	1775.5	1739.0	1426.9
45°	2051.6	2074.6	2044.2	1988.8	1947.9	1942.6	2007.5	1921.6	1888.5	1855.0	1526.0
47.5°	1947.0	1985.9	1973.3	1965.5	1959.8	1982.8	2085.3	2029.9	2016.4	1987.4	1639.2
50°	1735.6	1809.3	1831.4	1880.3	1936.3	2013.9	2156.1	2148.1	2165.8	2136.5	1776.9
52.5°	1370.3	1471.8	1599.5	1721.9	1864.3	2003.6	2234.0	2317.8	2392.4	2376.4	1996.1
55°	1131.1	1176.8	1275.0	1499.4	1724.5	1959.8	2269.0	2455.0	2617.2	2603.0	2162.1
57.5°	947.4	988.2	1048.7	1236.0	1513.2	1860.4	2290.8	2538.6	2771.3	2769.8	2326.1
60°	750.3	793.6	855.5	988.2	1266.3	1688.7	2286.0	2633.9	2967.8	2979.9	2526.1
62.5°	527.9	575.4	644.1	767.9	1014.1	1466.3	2187.4	2702.8	3199.2	3232.1	2766.7
65°	347.0	378.4	430.2	537.0	755.6	1180.2	1999.0	2711.7	3446.9	3502.4	2992.5
67.5°	243.2	255.3	285.8	343.9	498.2	905.1	1698.8	2619.2	3612.0	3674.6	3090.5
70°	189.8	195.9	211.4	234.5	312.9	608.6	1301.9	2378.3	3576.6	3641.9	2988.2
72.5°	163.9	169.7	175.6	178.5	209.9	375.8	881.8	1988.5	3244.2	3288.5	2598.2
75°	148.7	150.2	155.0	154.1	160.1	243.7	509.0	1448.8	2559.6	2544.5	1918.0
77.5°	125.0	126.9	134.9	133.8	142.2	166.6	264.2	935.0	1659.5	1555.9	1067.5
80°	105.9	106.9	115.6	114.1	123.5	120.6	134.9	476.6	703.9	596.2	307.8
82.5°	36.8	45.4	88.3	90.9	94.3	73.0	77.9	194.4	214.9	164.6	64.6
85°	17.9	19.1	45.0	63.9	63.6	36.8	37.9	69.4	67.8	53.2	21.5
87.5°	2.9	3.6	5.3	24.9	19.8	9.6	13.0	13.5	14.0	12.1	4.8
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°	549.6	549.6	549.6	549.6	549.6	549.6	549.6	549.6	549.6	549.6	549.6
2.5°	555.7	543.6	518.1	494.8	476.3	458.7	448.7	440.3	435.5	434.5	434.5
5°	570.6	545.7	499.6	460.6	435.2	416.4	406.4	400.2	397.0	395.1	394.8
7.5°	592.1	555.7	489.8	445.7	419.0	405.5	400.5	399.4	399.2	399.4	400.2
10°	621.9	571.8	488.9	442.0	419.7	412.3	412.0	412.3	413.3	413.5	413.7
12.5°	654.1	588.6	492.8	445.2	429.0	424.9	424.1	423.8	424.6	425.1	425.3
15°	689.1	610.6	499.3	451.9	439.1	434.8	434.0	432.6	432.3	432.1	431.8
17.5°	725.2	632.3	506.6	459.2	445.7	439.6	437.0	433.6	430.9	430.2	430.9
20°	761.7	653.8	511.7	462.8	446.1	437.7	432.3	426.5	421.9	419.3	420.2
22.5°	800.6	676.3	514.8	461.9	441.8	430.2	420.5	413.7	406.7	402.1	402.3
25°	838.6	695.9	514.6	456.7	433.3	418.5	406.2	397.5	387.9	383.0	383.0
27.5°	875.0	713.5	508.5	447.8	421.2	404.8	390.0	379.7	370.2	365.6	365.3
30°	912.8	728.3	499.1	434.8	406.9	388.8	372.6	363.7	355.2	350.9	350.7
32.5°	950.3	741.8	485.7	418.5	390.5	373.1	357.1	348.9	343.9	343.9	344.1
35°	989.9	751.2	468.1	399.6	373.1	356.4	343.9	339.0	338.6	335.6	334.9
37.5°	1031.8	757.3	446.6	380.4	355.9	340.2	336.3	330.6	325.7	319.4	318.5
40°	1075.7	763.3	420.8	360.3	337.8	329.1	327.4	319.7	305.9	290.4	288.2
42.5°	1129.2	767.4	393.9	340.2	318.7	315.8	318.2	304.9	282.9	271.3	271.5
45°	1191.0	774.3	369.2	320.4	299.1	299.1	309.2	291.8	273.7	266.5	267.6
47.5°	1271.4	790.0	346.2	298.6	281.0	285.8	289.5	276.1	266.0	257.1	256.8
50°	1387.4	827.7	322.6	276.6	267.2	276.9	271.8	264.0	252.2	245.0	244.3
52.5°	1531.6	849.9	301.6	256.8	255.3	265.0	257.8	250.5	241.6	231.9	229.9
55°	1629.7	854.0	283.8	242.3	247.3	246.4	243.7	237.2	232.4	219.6	219.8
57.5°	1739.5	862.2	269.4	233.6	242.3	231.6	230.6	225.1	218.8	210.1	207.3
60°	1870.8	875.0	256.8	230.2	237.9	222.0	217.1	214.9	208.7	204.3	205.5
62.5°	2013.9	886.6	244.0	230.6	232.9	212.6	205.3	204.6	200.7	199.3	199.3
65°	2111.6	855.0	228.1	230.2	224.9	202.8	193.7	193.4	190.3	189.8	189.5
67.5°	2077.6	754.6	206.5	223.4	216.7	193.2	183.1	182.0	177.9	178.2	178.2
70°	1906.8	611.5	176.7	206.7	206.5	184.5	171.9	168.8	163.2	164.2	165.1
72.5°	1586.7	453.2	136.8	179.0	190.3	176.5	159.1	154.1	147.0	148.0	147.7
75°	1145.8	308.0	99.6	136.1	165.6	167.1	146.6	137.9	129.4	130.8	131.3
77.5°	586.4	174.6	73.3	93.8	130.1	151.8	135.2	123.5	121.7	135.2	133.2
80°	191.3	87.5	50.7	65.8	85.4	124.3	118.5	105.2	104.7	107.8	92.7
82.5°	57.1	37.0	32.6	43.3	47.2	95.2	102.3	79.5	68.5	72.1	74.5
85°	19.6	17.9	18.7	21.5	22.4	55.9	71.5	52.7	49.8	54.8	54.1
87.5°	4.6	6.3	5.3	4.8	4.8	13.5	27.8	22.0	30.4	20.3	19.6
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)