

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: P959780

Luminaire Tested: **NAV-SB1B-730-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959780
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-SB1B-730-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3000K, 450mA LIGHTSQUARE WITH 26 LEDS AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5872.2 lumens
Efficiency: N/A
Efficacy: 147.5 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

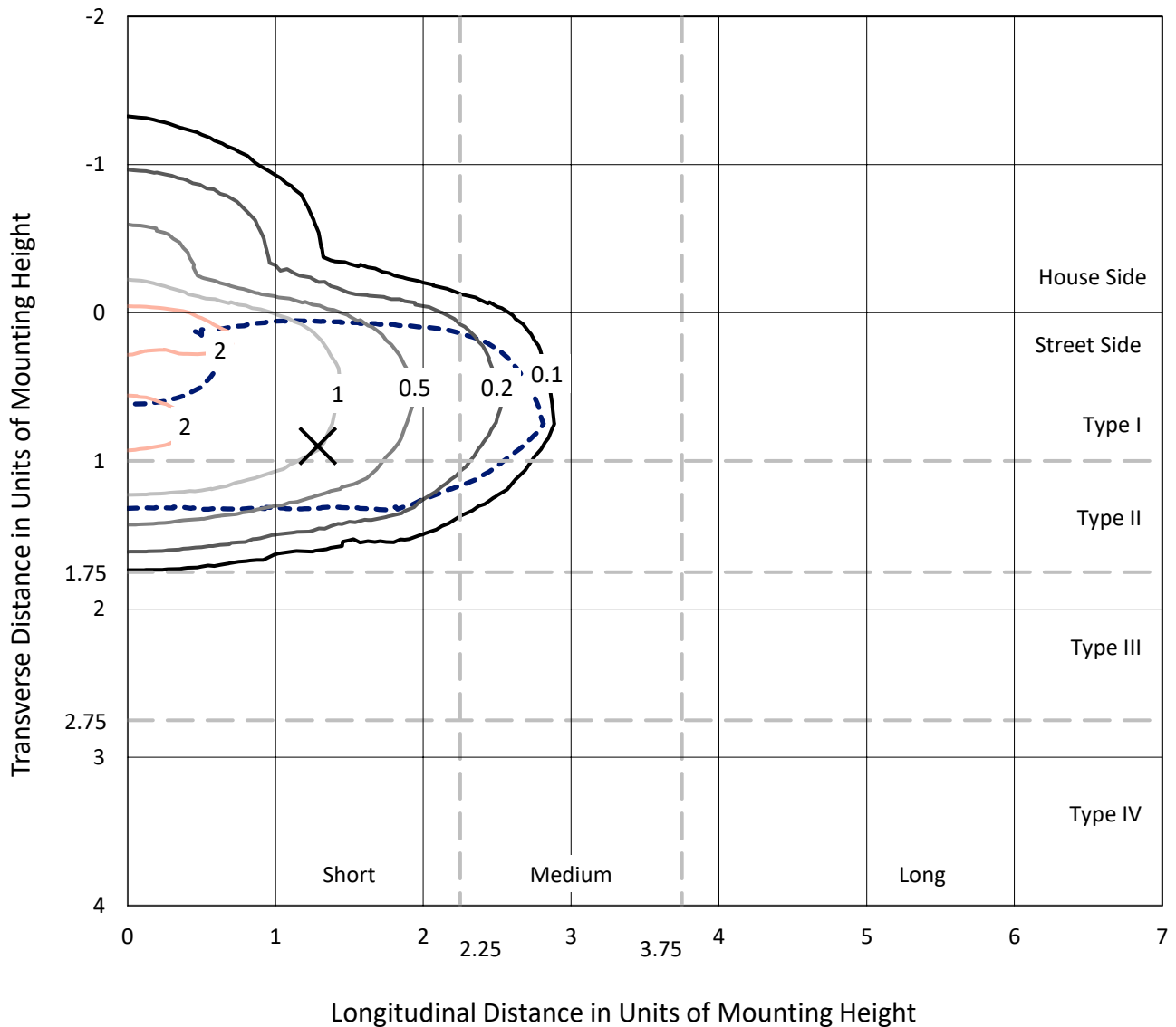
Input Watts (W): 39.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

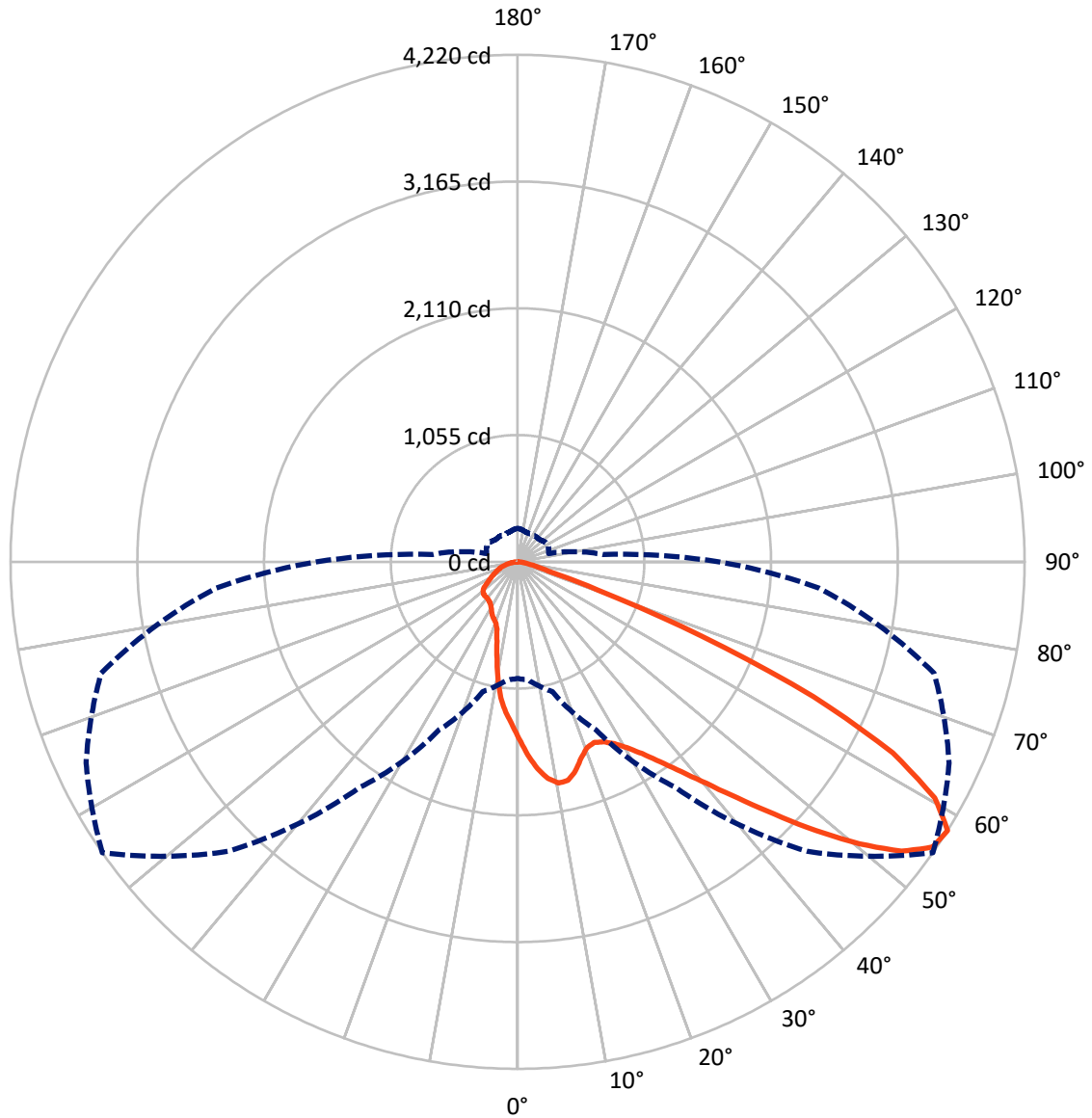
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1062.6	0.0	1062.6
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	4809.7	0.0	4809.7
	% Fixture	81.9	0.0	81.9
Total	Lumens	5872.2	0.0	5872.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.5	2.3
10°-20°	344.6	5.9
20°-30°	549.9	9.4
30°-40°	870.7	14.8
40°-50°	1332.6	22.7
50°-60°	1427.4	24.3
60°-70°	898.0	15.3
70°-80°	265.6	4.5
80°-90°	46.9	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°	5872.2	100.0
0°-180°	5872.2	100.0

Coefficient of Utilization

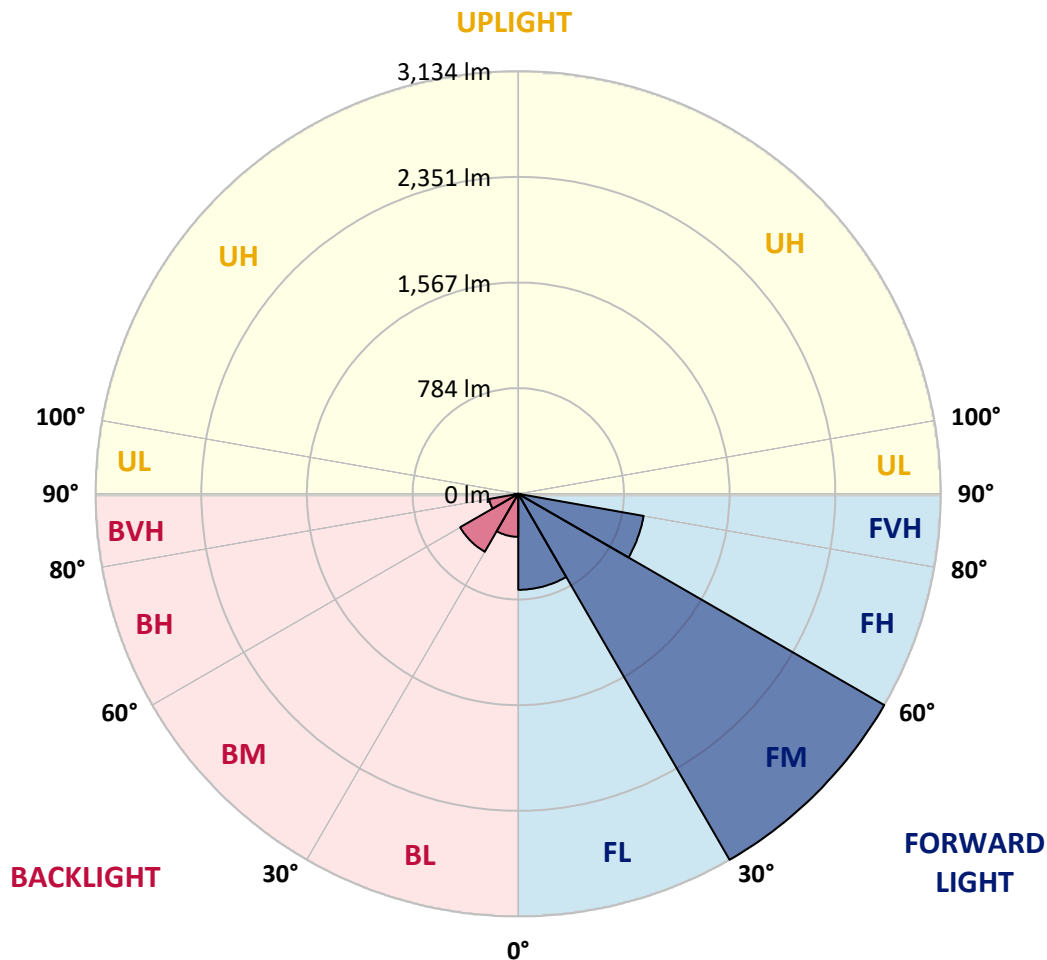


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	711.7	12.1			
FM (30°-60°)	3134.0	53.4			
FH (60°-80°)	944.1	16.1			G1/1800
FVH (80°-90°)	19.8	0.3			G1/100
BL (0°-30°)	319.4	5.4	B1/500		
BM (30°-60°)	496.6	8.5	B1/1000		
BH (60°-80°)	219.4	3.7	B1/500		G1/500
BVH (80°-90°)	27.1	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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1471.4	1471.4	1471.4	1471.4	1471.4	1471.4	1471.4	1471.4	1471.4	1471.4	1471.4
2.5°	1688.2	1686.9	1693.6	1670.9	1655.4	1634.4	1606.8	1571.5	1533.6	1493.5	1476.2
5°	1840.2	1829.6	1836.6	1819.6	1802.6	1771.0	1730.0	1672.7	1602.5	1522.7	1480.2
7.5°	1816.2	1808.9	1826.9	1842.0	1854.8	1850.8	1820.8	1760.6	1670.2	1554.3	1492.6
10°	1622.9	1614.7	1639.9	1692.4	1769.5	1836.6	1873.0	1835.7	1739.4	1588.9	1504.8
12.5°	1452.2	1448.3	1465.0	1507.5	1593.2	1721.8	1866.3	1901.3	1811.4	1629.9	1521.2
15°	1379.4	1374.5	1385.2	1406.7	1461.3	1581.3	1805.6	1946.2	1882.1	1677.2	1547.2
17.5°	1363.4	1357.8	1362.4	1373.6	1408.9	1500.2	1713.9	1968.3	1955.9	1730.0	1569.2
20°	1393.1	1388.5	1389.1	1388.5	1413.1	1485.6	1650.1	1959.8	2020.3	1778.6	1590.4
22.5°	1465.0	1457.4	1457.8	1441.7	1455.0	1511.2	1633.5	1937.0	2077.6	1821.1	1606.5
25°	1582.2	1568.6	1571.2	1530.3	1526.6	1568.2	1659.6	1919.4	2134.7	1855.1	1609.6
27.5°	1742.5	1727.0	1718.8	1657.7	1628.6	1649.3	1712.8	1925.6	2188.7	1884.6	1602.0
30°	1942.8	1924.0	1907.3	1820.8	1768.0	1760.3	1795.3	1965.6	2252.4	1915.5	1588.9
32.5°	2188.4	2166.5	2136.2	2021.4	1947.1	1907.3	1902.2	2037.0	2327.2	1955.0	1582.2
35°	2480.7	2452.2	2409.1	2260.6	2166.5	2085.2	2043.0	2139.9	2429.5	2014.4	1589.8
37.5°	2781.8	2749.7	2710.2	2533.6	2417.9	2298.0	2214.8	2279.5	2565.8	2095.2	1609.9
40°	3059.6	3023.5	2986.7	2829.5	2705.4	2560.9	2425.1	2456.2	2732.4	2191.8	1643.8
42.5°	3223.6	3196.9	3182.9	3097.9	3002.0	2855.3	2686.8	2665.6	2919.7	2302.9	1682.6
45°	3216.2	3205.4	3248.4	3283.7	3260.9	3179.5	2993.5	2897.3	3107.6	2399.1	1718.5
47.5°	3044.5	3051.7	3148.0	3345.9	3433.0	3475.6	3342.5	3124.6	3271.0	2471.1	1734.6
50°	2577.0	2583.0	2805.8	3232.6	3477.3	3716.9	3689.0	3346.5	3397.6	2515.0	1730.9
52.5°	2206.9	2210.9	2306.5	2897.0	3331.0	3838.3	4001.0	3555.7	3490.1	2527.2	1710.6
55°	1662.3	1676.0	1783.2	2272.8	2950.4	3742.1	4191.0	3771.2	3548.7	2528.4	1689.3
57.5°	971.1	985.9	1118.4	1542.7	2293.1	3406.6	4219.9	3962.4	3588.4	2518.7	1676.6
60°	475.7	482.1	539.8	810.9	1414.0	2760.3	3988.0	4055.0	3610.7	2513.5	1676.0
62.5°	320.5	319.7	322.1	400.1	696.7	1773.5	3504.7	3893.0	3598.8	2493.8	1669.9
65°	275.6	272.3	263.2	280.8	360.9	811.1	2707.8	3409.0	3508.7	2444.3	1628.3
67.5°	238.3	238.6	238.9	233.4	257.7	374.3	1654.8	2685.4	3185.0	2210.0	1468.0
70°	197.3	200.1	201.3	201.3	210.0	245.6	706.4	1840.5	2512.3	1732.8	1182.4
72.5°	179.7	173.9	174.6	171.5	171.5	187.0	284.4	1043.3	1582.8	974.8	721.6
75°	146.6	150.3	150.9	148.7	141.8	142.7	168.8	437.8	677.2	404.4	356.7
77.5°	126.6	126.6	127.8	126.3	120.8	106.8	112.6	169.7	230.4	165.7	178.1
80°	101.7	101.4	106.6	109.6	101.1	78.9	72.0	93.8	102.3	72.9	92.6
82.5°	49.5	52.5	73.2	83.4	76.8	57.1	44.0	58.3	54.6	32.2	41.6
85°	28.8	27.4	32.8	46.4	44.0	31.6	21.2	30.3	28.5	16.4	16.7
87.5°	9.1	8.5	6.7	15.8	12.7	8.8	5.7	8.8	7.9	3.7	3.7
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1471.4	1471.4	1471.4	1471.4	1471.4	1471.4	1471.4	1471.4	1471.4	1471.4
2.5°	1454.7	1418.9	1383.3	1350.8	1331.2	1318.4	1305.6	1291.4	1285.9	1277.7
5°	1440.1	1370.9	1309.3	1256.1	1207.9	1169.9	1131.7	1100.7	1086.8	1096.1
7.5°	1431.6	1331.5	1236.5	1139.0	1045.2	970.2	905.0	859.1	838.4	843.6
10°	1424.0	1286.8	1142.1	988.1	853.3	760.4	693.6	658.8	645.6	648.4
12.5°	1417.1	1236.8	1028.2	825.7	682.4	621.0	602.0	602.3	604.8	606.5
15°	1415.8	1176.3	901.0	683.7	590.1	586.2	606.8	619.9	626.9	628.9
17.5°	1414.0	1104.0	771.3	586.8	567.6	594.4	613.5	622.0	627.5	627.8
20°	1406.7	1012.4	651.8	540.7	562.8	585.9	597.7	604.4	609.0	610.5
22.5°	1384.3	910.4	558.5	520.0	543.4	561.9	575.8	583.4	586.2	588.0
25°	1343.9	796.2	494.3	500.3	516.4	539.8	550.9	552.5	551.6	554.3
27.5°	1291.1	673.9	454.2	473.6	494.3	514.2	520.3	519.4	517.6	520.6
30°	1227.3	564.1	428.7	443.5	471.7	489.9	495.4	493.3	489.6	493.0
32.5°	1159.9	474.2	407.6	422.6	453.3	471.1	476.6	474.5	471.7	474.5
35°	1097.1	411.3	388.3	408.6	438.7	456.2	463.2	463.5	463.5	466.9
37.5°	1039.5	374.6	372.2	399.7	428.7	444.4	454.5	455.0	442.0	442.9
40°	985.9	359.2	364.9	394.0	418.9	434.1	434.7	400.7	376.7	376.1
42.5°	942.3	356.1	367.1	393.4	411.9	412.6	369.7	343.4	336.6	336.9
45°	901.3	355.2	371.9	393.4	401.6	356.4	327.6	320.5	321.1	323.6
47.5°	855.5	351.6	372.8	388.0	371.9	316.9	308.4	305.3	304.2	304.7
50°	805.3	338.5	361.2	377.0	320.8	299.9	289.3	288.4	289.9	290.8
52.5°	752.6	317.2	341.5	357.3	297.5	285.1	273.2	275.3	282.0	284.1
55°	717.9	292.3	315.4	317.9	281.1	271.1	261.1	265.9	278.4	282.3
57.5°	708.8	265.9	285.7	282.9	260.1	258.9	252.9	257.1	273.0	278.7
60°	706.1	242.2	256.6	254.4	239.8	245.6	244.1	246.2	251.6	253.5
62.5°	684.8	223.4	230.4	227.3	221.6	231.6	235.2	230.7	234.9	237.1
65°	630.8	208.3	204.9	202.7	205.2	214.3	221.6	212.5	216.5	222.5
67.5°	541.6	187.6	178.5	180.9	188.5	193.4	202.7	192.5	195.8	206.1
70°	438.1	161.5	153.3	160.3	167.6	177.6	179.1	172.1	180.0	191.6
72.5°	310.0	135.1	129.4	143.6	146.1	159.1	155.7	152.4	163.3	167.3
75°	214.9	109.0	105.7	116.5	125.4	136.6	134.2	138.2	161.2	163.0
77.5°	136.0	84.7	82.6	89.6	101.7	114.2	118.1	163.0	275.3	286.3
80°	78.9	63.1	60.7	66.2	76.8	88.4	113.9	200.1	181.5	179.4
82.5°	44.0	43.5	40.4	41.9	51.4	63.8	160.9	140.8	114.5	118.1
85°	20.6	25.5	21.8	20.9	28.8	74.7	107.4	80.5	53.4	52.2
87.5°	5.4	4.8	4.8	5.4	12.1	64.4	42.8	34.3	20.3	19.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)