

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: P959310

Luminaire Tested: **NAV-SB1A-735-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959310
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-735-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4589.9 lumens
Efficiency: N/A
Efficacy: 148.5 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

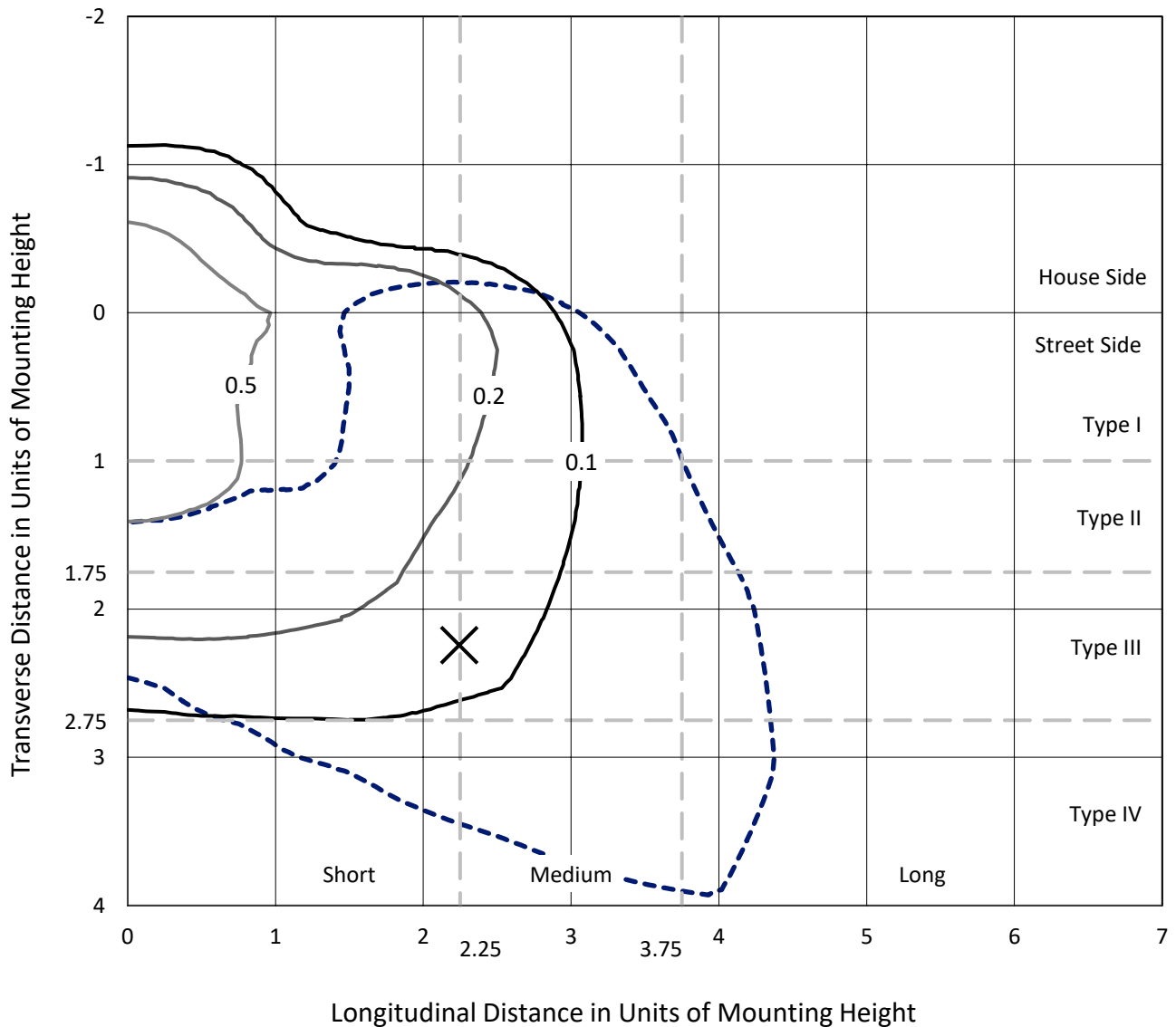
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

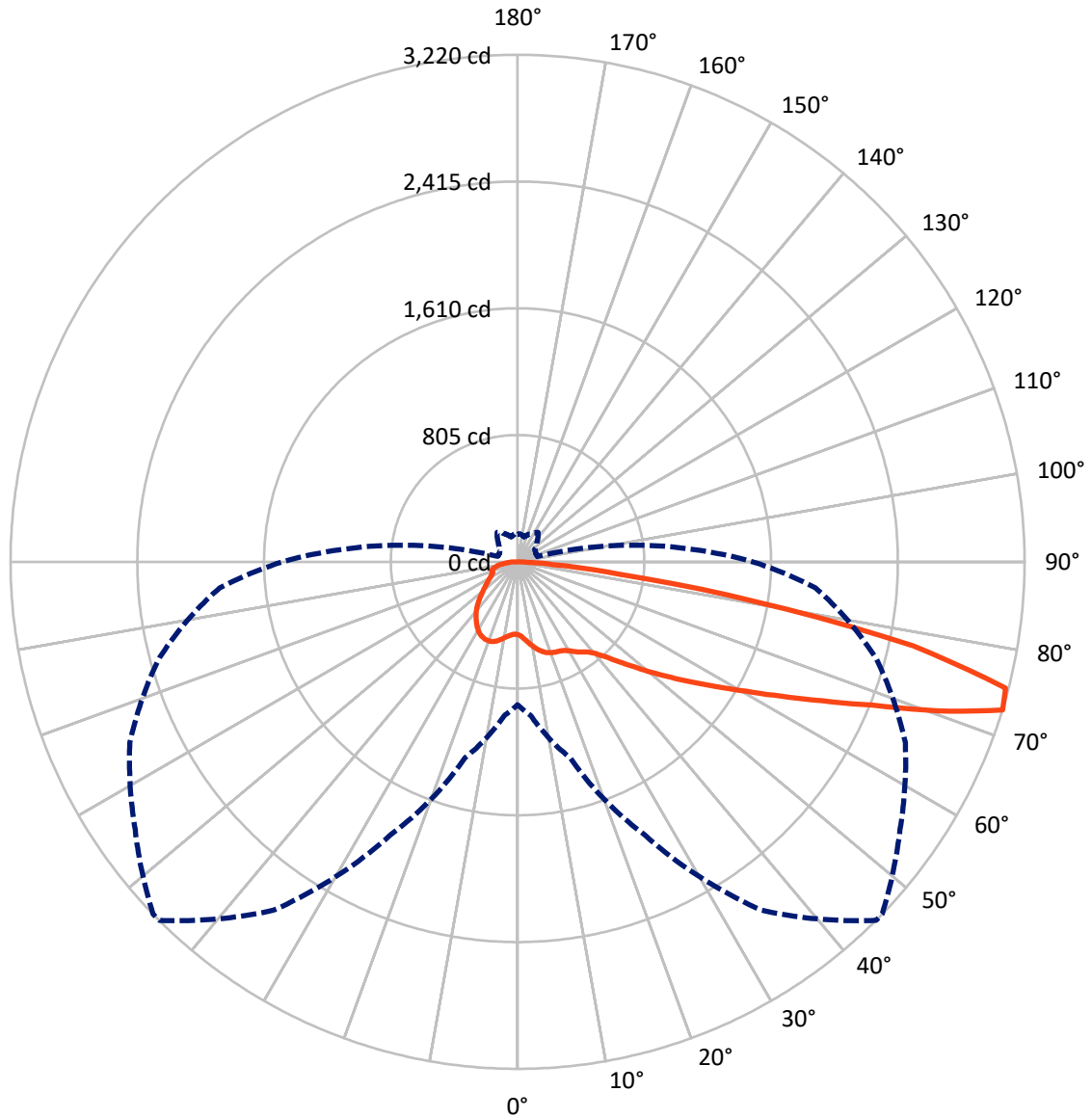
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1037.6	0.0	1037.6
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	3552.3	0.0	3552.3
	% Fixture	77.4	0.0	77.4
Total	Lumens	4589.9	0.0	4589.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.1	1.0
10°-20°	157.1	3.4
20°-30°	273.3	6.0
30°-40°	391.8	8.5
40°-50°	551.7	12.0
50°-60°	845.1	18.4
60°-70°	1224.3	26.7
70°-80°	977.6	21.3
80°-90°	121.8	2.7
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°	4589.9	100.0
0°-180°	4589.9	100.0

Coefficient of Utilization

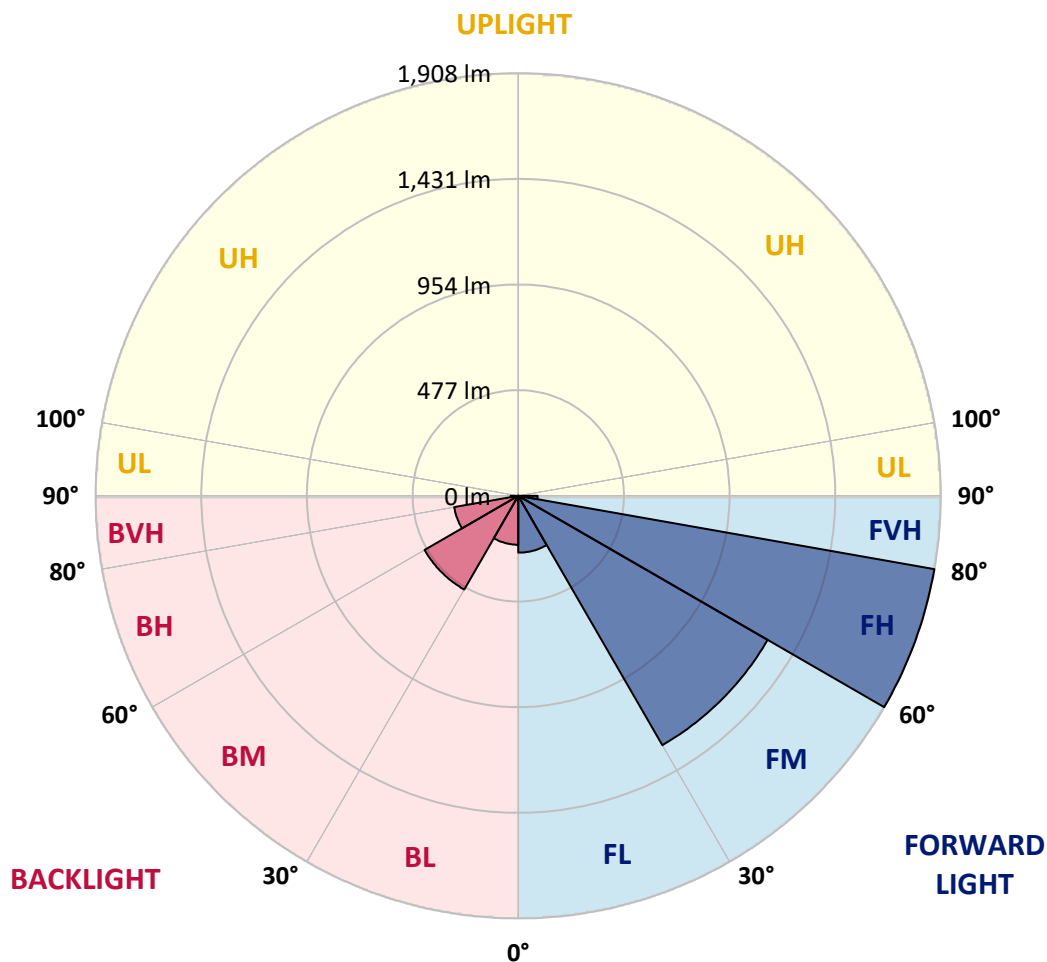


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	256.7	5.6			
FM (30°-60°)	1300.1	28.3			
FH (60°-80°)	1908.2	41.6			G2/5000
FVH (80°-90°)	87.4	1.9			G1/100
BL (0°-30°)	220.9	4.8	B1/500		
BM (30°-60°)	488.6	10.6	B1/1000		
BH (60°-80°)	293.7	6.4	B1/500		G1/500
BVH (80°-90°)	34.4	0.7			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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	463.0	463.0	463.0	463.0	463.0	463.0	463.0	463.0	463.0	463.0	463.0
2.5°	481.1	484.3	481.4	478.8	477.5	474.4	474.2	472.2	471.0	467.6	466.7
5°	514.8	518.9	514.0	508.7	503.9	496.2	495.2	489.6	483.4	476.1	472.0
7.5°	552.8	556.4	550.8	542.8	534.3	521.5	521.3	511.2	501.2	488.9	481.9
10°	585.9	590.7	583.2	572.4	561.7	547.1	545.5	533.9	521.3	505.3	494.7
12.5°	615.1	618.5	611.2	598.0	585.6	571.1	569.0	556.2	542.1	524.0	510.4
15°	638.4	642.7	633.0	618.8	605.7	591.4	589.5	577.9	563.9	544.8	527.4
17.5°	653.5	657.2	647.3	631.3	618.8	606.9	605.5	595.8	583.4	564.1	545.5
20°	659.4	663.3	652.8	636.6	625.0	615.8	615.1	608.1	599.6	582.0	563.1
22.5°	665.2	668.8	655.3	638.4	628.2	622.4	622.2	617.6	614.2	599.6	581.3
25°	688.6	689.6	671.5	647.1	632.5	627.5	627.2	627.0	628.4	617.0	600.9
27.5°	709.0	708.7	693.2	670.2	647.8	637.1	636.9	639.3	643.9	634.5	621.2
30°	738.7	736.1	717.6	693.7	673.1	656.7	655.3	653.1	656.7	649.2	641.4
32.5°	801.8	793.3	763.6	721.0	694.2	681.6	679.7	666.1	667.6	663.0	659.2
35°	892.3	881.1	841.4	772.7	720.3	702.4	701.4	684.3	681.4	677.2	678.8
37.5°	999.8	986.0	939.8	847.8	765.3	726.6	725.2	709.7	697.8	693.5	701.7
40°	1107.9	1090.5	1052.3	939.1	831.6	767.0	762.4	738.9	725.4	718.1	735.5
42.5°	1212.9	1198.3	1165.7	1041.6	913.3	825.9	815.8	775.7	765.6	758.7	790.2
45°	1305.6	1292.6	1268.7	1151.2	1009.0	906.2	896.4	830.8	827.7	827.7	873.1
47.5°	1381.1	1378.2	1352.8	1262.9	1122.0	997.6	980.5	907.4	915.9	929.0	990.9
50°	1464.8	1456.8	1429.8	1372.9	1254.7	1102.4	1088.3	1001.5	1033.2	1069.0	1161.1
52.5°	1541.7	1546.0	1515.8	1487.5	1404.6	1219.1	1194.4	1112.5	1180.9	1240.1	1360.6
55°	1620.7	1621.0	1612.5	1608.6	1561.8	1348.3	1321.1	1246.0	1354.7	1428.2	1593.2
57.5°	1694.9	1695.5	1708.1	1742.1	1744.0	1497.2	1466.5	1409.9	1548.0	1622.9	1833.0
60°	1761.3	1764.6	1799.0	1878.7	1904.3	1667.9	1638.9	1603.6	1747.7	1823.2	2085.3
62.5°	1783.5	1795.8	1872.3	1985.6	2062.7	1877.3	1848.8	1827.7	1957.5	2027.7	2296.1
65°	1745.8	1774.1	1921.8	2073.9	2225.7	2126.1	2097.8	2074.8	2175.7	2241.7	2469.2
67.5°	1653.1	1689.6	1918.9	2166.4	2423.5	2425.5	2399.1	2345.2	2409.5	2434.9	2525.5
70°	1409.2	1463.8	1749.9	2201.1	2650.5	2834.8	2809.4	2670.6	2642.9	2520.0	2366.9
72.5°	907.9	981.4	1288.5	1916.4	2701.1	3219.9	3218.5	2964.4	2716.6	2354.6	1898.3
75°	331.3	376.3	598.7	1202.9	2267.3	3200.4	3209.8	2914.1	2479.9	1818.8	1182.6
77.5°	120.6	132.0	195.4	462.3	1394.4	2567.8	2587.4	2329.7	1765.0	912.8	468.6
80°	63.3	69.6	100.1	179.4	597.5	1525.0	1555.7	1384.5	829.6	274.9	140.5
82.5°	35.1	37.9	56.1	97.5	269.2	652.1	670.5	546.9	291.8	116.5	58.0
85°	18.9	20.1	26.3	53.2	131.5	226.1	231.1	163.5	116.3	68.5	28.1
87.5°	5.5	6.8	8.7	16.9	51.5	50.7	52.0	32.4	45.9	34.5	9.2
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°	463.0	463.0	463.0	463.0	463.0	463.0	463.0	463.0	463.0	463.0	463.0
2.5°	465.2	464.5	461.9	460.6	459.2	458.9	460.1	460.3	460.6	460.8	461.9
5°	469.6	467.2	464.7	463.3	463.8	464.0	466.4	468.1	469.3	470.3	470.8
7.5°	478.1	476.1	472.0	471.7	472.4	474.7	477.8	481.6	483.8	485.5	486.1
10°	490.6	487.0	482.2	482.9	484.3	487.5	493.9	497.1	500.7	503.9	503.2
12.5°	503.4	500.3	494.7	495.2	497.6	503.2	509.4	513.3	515.8	518.1	519.2
15°	520.1	514.6	508.5	508.5	512.8	518.9	521.8	524.9	526.3	529.0	530.0
17.5°	537.3	530.0	522.0	521.5	526.8	529.8	531.5	532.0	532.4	535.4	536.3
20°	554.4	546.4	535.0	534.1	535.4	534.8	534.6	534.1	534.8	538.4	540.0
22.5°	571.3	562.2	546.4	542.1	538.7	534.1	533.9	533.6	534.1	537.7	540.2
25°	591.2	580.0	559.0	546.0	534.6	528.3	529.0	529.3	529.8	532.7	536.6
27.5°	612.7	600.3	570.6	544.8	524.2	519.9	518.6	519.4	521.1	525.6	530.2
30°	634.3	619.7	581.3	540.0	511.2	505.1	501.2	503.0	508.3	512.8	517.9
32.5°	653.8	639.3	589.8	529.3	494.5	485.0	480.0	482.2	487.5	489.1	495.2
35°	676.8	660.3	593.4	512.4	476.3	461.9	455.1	451.9	454.6	452.8	458.2
37.5°	702.4	685.2	592.9	490.2	455.1	438.4	429.0	417.1	411.5	405.7	409.4
40°	740.4	715.8	587.1	463.3	428.7	413.5	396.6	376.5	363.9	352.5	353.2
42.5°	792.1	758.0	576.5	433.8	398.9	384.7	361.7	338.2	318.5	299.6	297.9
45°	869.3	813.4	563.1	402.3	366.8	352.8	327.9	301.6	279.0	254.8	251.9
47.5°	980.5	887.9	550.5	366.5	332.9	320.1	297.7	273.3	246.6	223.1	220.5
50°	1133.2	994.8	538.9	331.8	299.6	289.9	272.0	247.1	220.3	201.4	200.2
52.5°	1327.7	1140.1	534.1	298.2	268.3	264.8	250.5	227.2	201.9	185.9	184.7
55°	1550.8	1313.9	534.1	266.0	241.1	242.3	232.4	210.8	188.8	174.6	173.1
57.5°	1778.7	1489.9	524.5	236.3	217.8	222.9	216.7	197.8	177.9	163.2	160.8
60°	1988.5	1637.4	485.2	209.2	197.3	205.3	201.2	185.0	160.8	148.4	146.6
62.5°	2149.8	1720.6	409.8	187.7	180.4	189.5	187.4	168.0	157.6	152.6	150.9
65°	2230.6	1707.0	313.3	168.5	166.2	180.4	175.8	175.1	166.9	161.0	159.1
67.5°	2181.0	1590.5	227.2	154.5	157.8	171.9	189.5	192.5	177.2	165.8	163.9
70°	1963.6	1379.6	169.2	141.2	147.5	172.2	216.2	201.4	173.8	160.5	158.4
72.5°	1493.8	1028.8	131.3	127.2	134.0	173.3	228.1	197.3	164.2	177.4	176.0
75°	854.2	564.9	105.5	110.0	117.1	162.1	222.0	186.7	156.7	163.0	163.0
77.5°	325.7	217.1	87.0	93.1	94.1	141.4	212.3	185.9	149.1	145.5	132.7
80°	113.0	84.9	72.1	74.0	72.8	125.8	203.6	161.7	122.1	109.3	105.7
82.5°	46.2	42.3	57.1	54.6	51.8	97.7	164.4	132.2	99.8	88.3	87.3
85°	20.1	26.9	37.7	33.1	30.0	67.8	131.8	111.9	84.4	72.8	72.6
87.5°	4.1	10.1	16.0	15.0	15.5	45.2	93.6	79.5	59.8	44.7	35.1
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)