

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: P959291

Luminaire Tested: **NAV-SB1A-735-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959291
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-735-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4559.2 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 IV - Medium
BUG Rating: B1 - U0 - G2

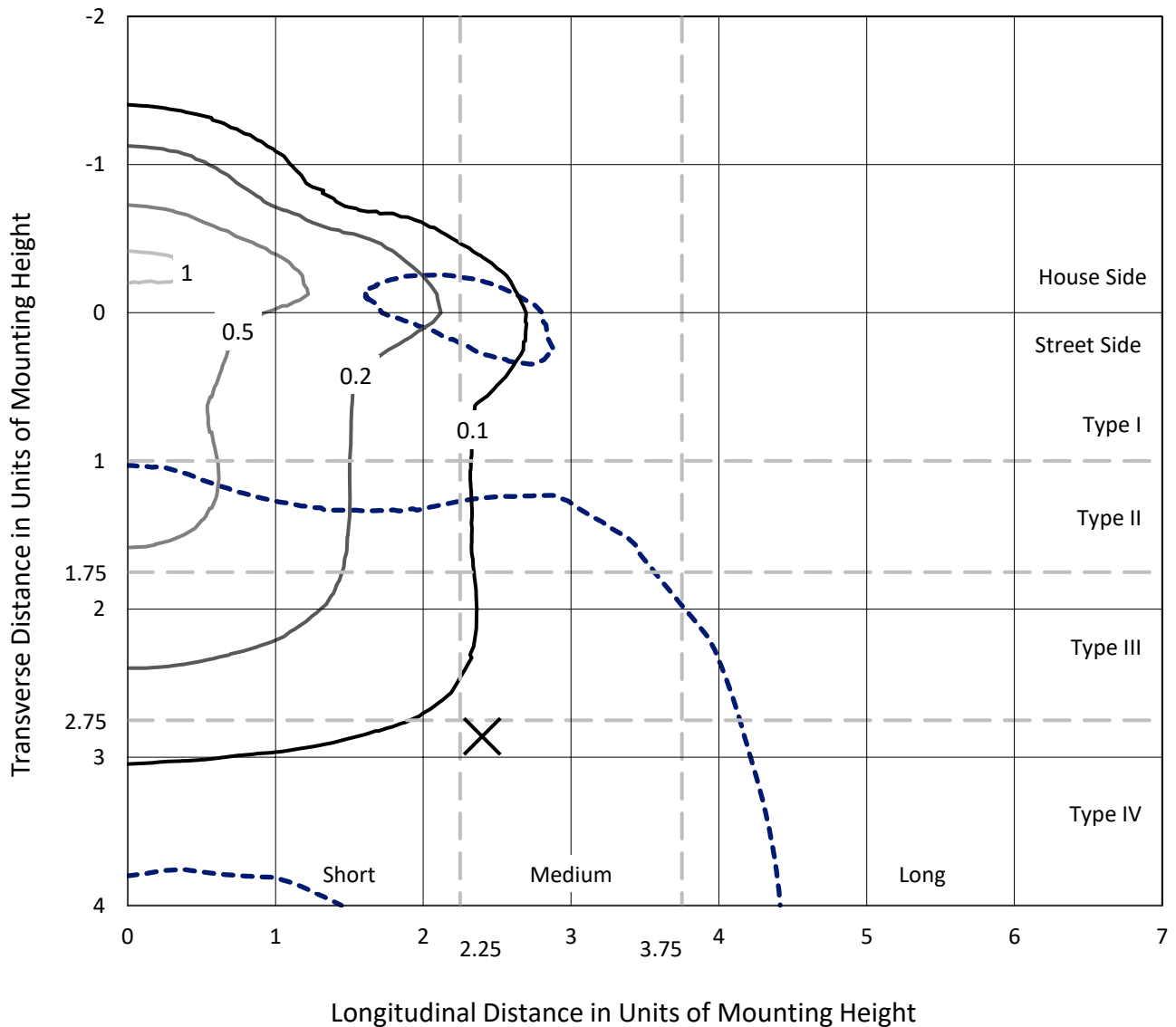
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

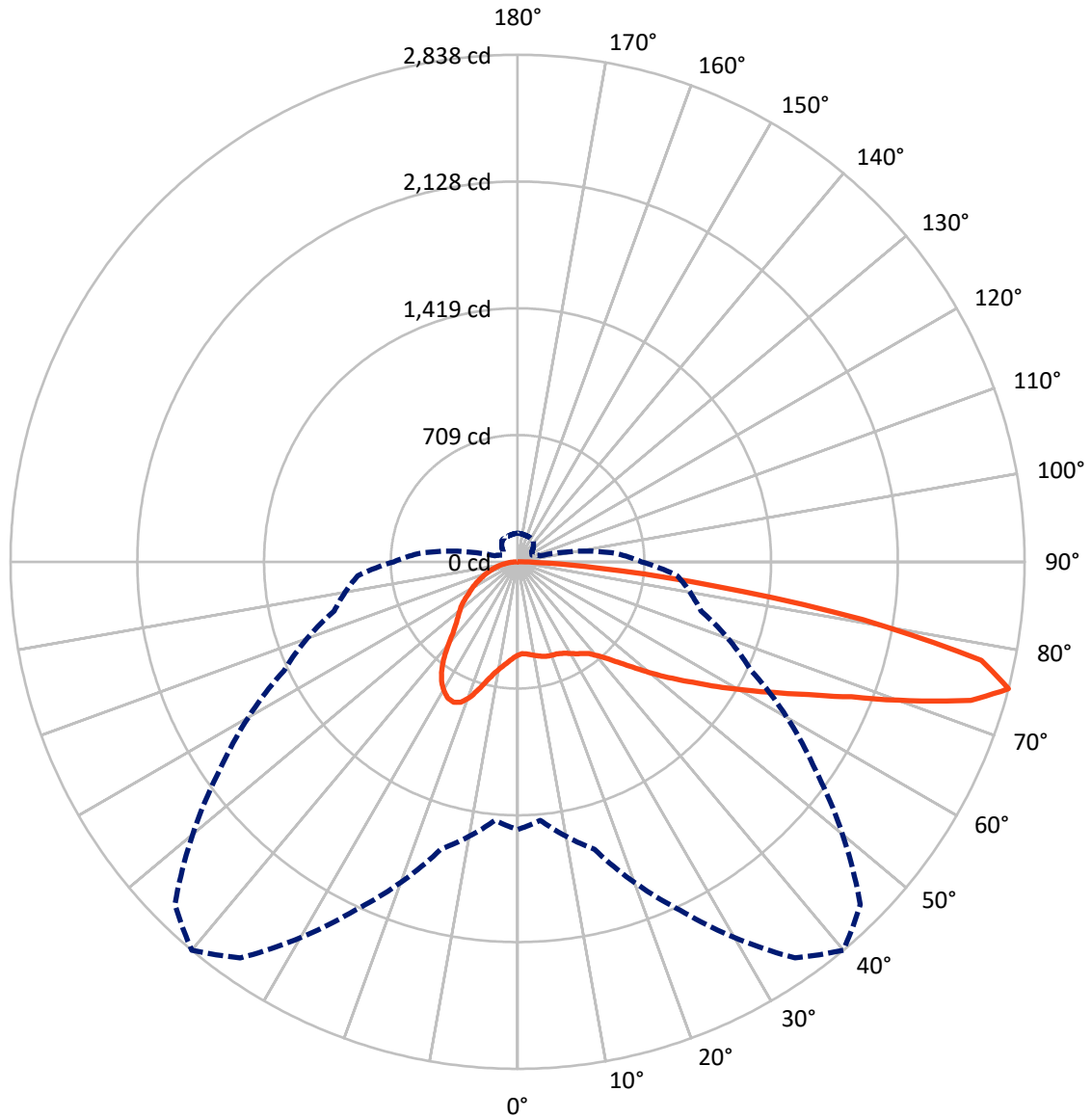
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1412.6	0.0	1412.6
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	3146.6	0.0	3146.6
	% Fixture	69.0	0.0	69.0
Total	Lumens	4559.2	0.0	4559.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.0	1.1
10°-20°	174.7	3.8
20°-30°	319.0	7.0
30°-40°	452.5	9.9
40°-50°	611.0	13.4
50°-60°	821.9	18.0
60°-70°	1043.2	22.9
70°-80°	946.8	20.8
80°-90°	138.0	3.0
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°	4559.2	100.0
0°-180°	4559.2	100.0

Coefficient of Utilization

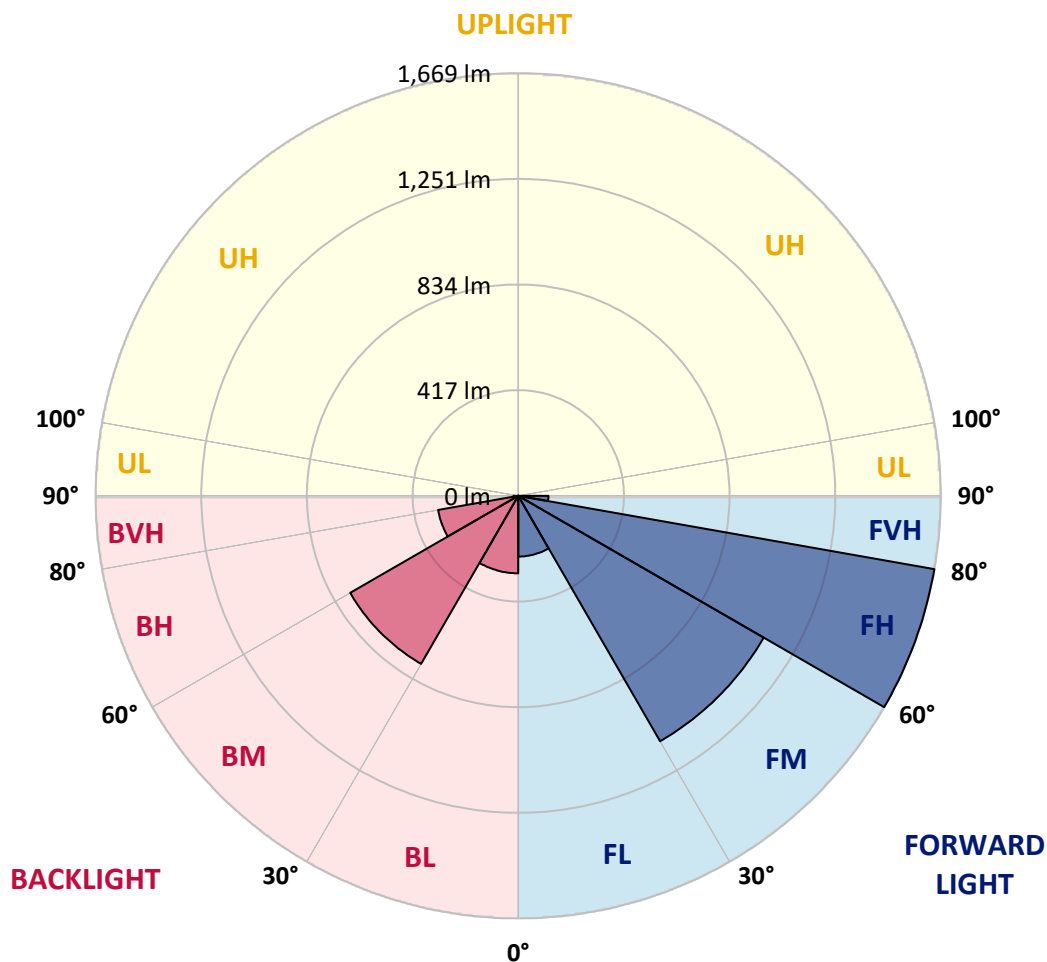


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	239.8	5.3			
FM (30°-60°)	1119.2	24.5			
FH (60°-80°)	1668.6	36.6			G1/1800
FVH (80°-90°)	119.0	2.6			G2/225
BL (0°-30°)	306.0	6.7	B1/500		
BM (30°-60°)	766.2	16.8	B1/1000		
BH (60°-80°)	321.4	7.0	B1/500		G1/500
BVH (80°-90°)	19.0	0.4			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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	521.3	521.3	521.3	521.3	521.3	521.3	521.3	521.3	521.3	521.3	521.3
2.5°	513.3	516.3	515.6	514.6	514.6	514.9	514.6	516.3	517.9	519.7	522.3
5°	518.6	521.6	520.2	519.0	517.9	517.7	517.0	516.8	517.7	519.9	523.6
7.5°	529.1	532.0	529.8	527.7	525.7	524.7	523.8	522.3	521.6	522.9	527.9
10°	540.7	543.6	540.9	537.1	533.9	532.7	531.8	530.3	529.3	530.0	535.7
12.5°	552.3	555.2	551.6	546.2	542.1	541.4	540.2	539.8	539.5	539.3	544.8
15°	563.1	565.6	561.0	554.7	550.3	549.2	548.0	548.7	549.9	551.3	557.6
17.5°	571.6	574.1	567.3	559.0	554.9	554.5	553.7	556.2	559.5	563.1	570.9
20°	579.4	581.8	573.1	562.0	557.2	557.2	557.4	562.4	567.3	572.6	583.2
22.5°	590.3	592.2	581.6	566.3	559.3	559.8	561.7	566.8	572.9	580.2	594.9
25°	606.5	607.9	594.9	574.5	566.6	568.1	569.7	572.2	577.9	586.4	606.2
27.5°	632.6	633.8	616.6	589.1	577.0	579.4	581.8	580.2	582.8	590.0	615.4
30°	669.3	670.0	648.3	611.8	594.6	595.8	596.3	589.3	584.2	590.0	622.0
32.5°	712.9	712.6	686.7	639.4	614.7	613.5	609.4	595.6	583.7	588.9	627.7
35°	780.3	777.7	744.3	678.0	637.4	630.0	620.2	602.6	586.2	587.6	632.8
37.5°	892.1	883.9	837.6	741.4	671.3	652.2	637.9	614.0	591.5	587.1	638.9
40°	1018.0	1007.7	956.8	828.2	722.0	691.4	668.4	630.2	600.1	589.3	647.8
42.5°	1167.5	1152.7	1098.1	930.5	786.4	741.9	707.4	650.7	612.9	596.3	659.9
45°	1351.1	1331.5	1254.1	1045.8	867.4	808.1	762.0	681.9	632.6	609.9	678.0
47.5°	1536.5	1541.3	1431.3	1177.8	964.6	889.9	830.4	728.9	661.1	631.6	707.4
50°	1733.6	1737.0	1607.6	1324.2	1074.8	982.3	907.3	781.3	700.8	662.6	751.1
52.5°	1887.3	1887.8	1767.6	1477.2	1189.7	1083.8	990.3	841.3	746.7	703.7	809.3
55°	1983.6	1982.4	1879.8	1622.1	1321.7	1190.4	1082.1	909.5	802.8	752.0	882.6
57.5°	2053.5	2049.9	1957.2	1746.6	1462.5	1316.4	1186.1	986.9	869.1	809.5	979.1
60°	2080.0	2077.9	2009.7	1854.2	1610.5	1455.7	1306.1	1073.4	944.3	877.5	1103.1
62.5°	2090.3	2094.4	2061.2	1958.5	1768.8	1610.0	1437.9	1176.9	1028.9	954.5	1234.0
65°	2126.1	2133.5	2126.8	2094.8	1947.8	1790.7	1612.6	1300.0	1121.2	1036.9	1370.6
67.5°	2196.9	2204.4	2207.2	2258.1	2166.4	2015.8	1830.8	1453.3	1229.4	1122.5	1473.3
70°	2195.1	2193.0	2244.2	2387.9	2440.1	2327.5	2124.8	1641.9	1358.2	1193.6	1486.5
72.5°	1998.1	1980.7	2101.9	2386.5	2668.0	2652.9	2483.9	1885.2	1469.5	1202.3	1289.9
75°	1499.0	1452.5	1666.5	2150.7	2705.9	2837.7	2712.1	2036.1	1443.1	1062.3	897.6
77.5°	641.0	594.4	846.5	1592.1	2421.8	2652.7	2502.7	1776.3	1152.0	702.4	440.9
80°	167.8	167.6	255.8	721.8	1647.0	1959.0	1718.6	1147.2	658.3	251.0	121.7
82.5°	69.4	67.8	94.1	280.7	804.7	1099.3	897.1	511.7	237.7	68.0	40.4
85°	25.8	25.6	45.7	97.0	283.9	453.4	328.1	130.8	59.2	33.1	18.1
87.5°	7.3	7.0	9.9	33.6	69.2	105.0	56.1	21.5	16.7	13.0	5.3
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°	521.3	521.3	521.3	521.3	521.3	521.3	521.3	521.3	521.3	521.3	521.3
2.5°	523.1	524.3	526.4	528.1	530.3	532.7	536.1	538.2	540.5	541.9	540.9
5°	525.2	527.9	533.4	539.0	545.5	551.6	558.6	563.6	567.7	569.0	569.5
7.5°	530.0	534.4	543.9	553.3	563.6	573.6	583.7	592.4	599.4	602.1	602.4
10°	538.5	544.3	557.6	570.9	584.7	599.9	612.9	625.6	635.5	639.6	639.8
12.5°	549.2	556.4	573.8	592.2	611.3	632.3	649.2	664.7	677.1	682.6	682.6
15°	562.9	572.4	594.6	619.3	647.3	676.6	698.1	715.2	729.1	735.8	735.3
17.5°	577.9	590.5	618.6	655.8	696.0	734.4	759.5	772.1	786.4	792.9	792.6
20°	592.4	607.9	648.1	702.2	755.6	796.5	816.8	820.2	821.2	821.9	823.9
22.5°	607.4	628.2	685.0	760.8	818.1	846.3	849.2	834.8	814.5	805.0	807.7
25°	623.9	651.5	733.4	825.3	871.8	875.1	852.9	817.5	779.1	761.5	764.1
27.5°	639.8	678.2	791.5	886.9	910.4	880.7	832.8	782.8	736.4	717.7	719.9
30°	655.8	709.0	855.6	940.8	928.0	866.9	801.1	745.3	698.6	679.1	681.2
32.5°	672.0	744.8	929.3	979.8	925.0	837.6	761.7	703.2	662.0	641.5	644.2
35°	690.3	788.8	999.2	1001.1	903.9	794.6	709.7	652.9	617.2	600.6	604.3
37.5°	714.3	844.7	1060.9	1006.4	867.2	731.4	645.1	593.4	564.0	556.4	561.7
40°	744.0	911.8	1108.0	997.9	812.7	654.9	574.5	533.2	516.5	518.2	524.0
42.5°	782.8	987.1	1141.1	976.2	737.1	575.7	512.6	494.3	502.2	509.0	515.3
45°	833.0	1065.2	1161.6	939.2	651.5	508.8	476.1	480.5	486.6	487.3	492.1
47.5°	897.4	1144.3	1175.3	883.3	564.2	461.7	452.9	453.9	452.6	447.6	451.5
50°	977.6	1221.2	1187.3	809.3	489.9	432.1	420.6	417.2	400.5	384.0	386.2
52.5°	1069.1	1291.8	1192.4	717.5	432.1	407.4	388.6	367.4	336.1	331.1	332.7
55°	1170.7	1357.1	1179.4	604.5	383.6	375.8	347.3	321.6	318.3	313.9	314.6
57.5°	1292.0	1427.4	1152.7	478.6	333.7	338.8	311.0	313.9	307.8	301.0	299.8
60°	1424.7	1500.2	1106.1	363.7	282.2	292.6	301.6	301.3	299.6	294.1	292.1
62.5°	1544.3	1548.1	1014.1	278.6	237.0	256.8	281.3	281.0	279.5	276.4	275.2
65°	1615.3	1540.9	860.9	219.4	199.8	227.3	253.7	255.6	255.8	255.6	255.6
67.5°	1602.8	1455.9	650.5	174.6	169.0	197.3	226.3	229.0	230.9	231.4	231.9
70°	1460.5	1269.6	424.1	139.3	141.7	171.0	200.5	203.2	204.8	206.7	207.8
72.5°	1138.5	933.4	242.8	112.6	117.8	148.2	174.9	177.9	179.0	182.6	184.0
75°	693.7	548.9	131.1	88.8	96.8	126.7	149.4	153.0	154.8	159.1	159.6
77.5°	329.8	237.7	74.7	69.2	77.9	103.5	126.2	130.4	125.8	128.1	126.2
80°	111.5	88.3	47.2	52.7	59.4	80.8	101.1	105.2	95.5	95.0	94.1
82.5°	38.9	35.8	30.0	35.1	38.4	57.8	76.4	81.7	71.1	70.8	67.4
85°	15.3	14.6	16.7	19.1	23.0	35.6	50.3	53.0	43.8	35.3	34.8
87.5°	3.2	3.4	4.1	4.3	7.0	12.3	18.1	22.2	17.6	15.0	13.7
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)