

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: P959755

Luminaire Tested: **NAV-SB1B-727-U-SL4-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959755
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-727-U-SL4-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3738.2 lumens
Efficiency: N/A
Efficacy: 93.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

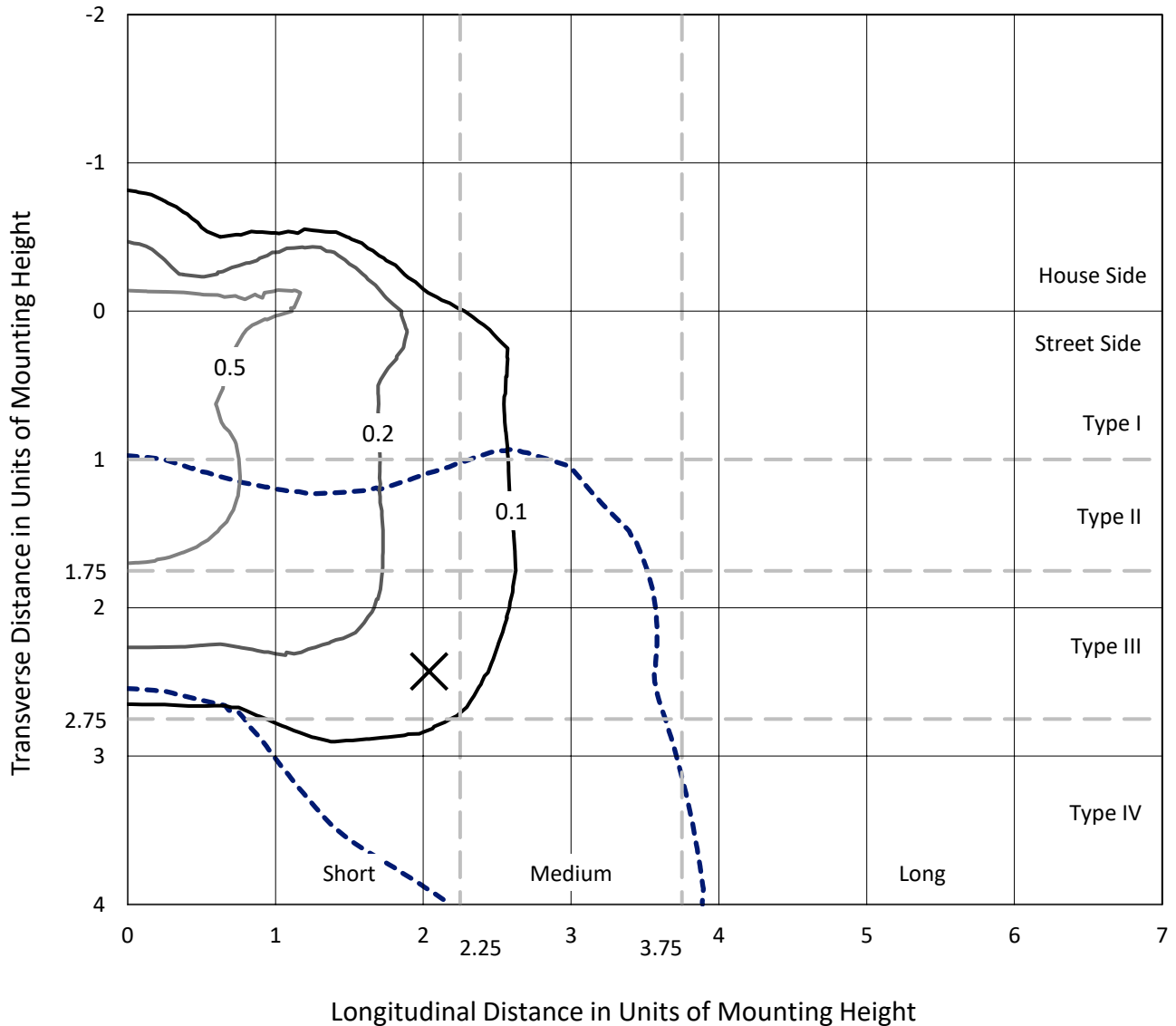
Input Watts (W): 39.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

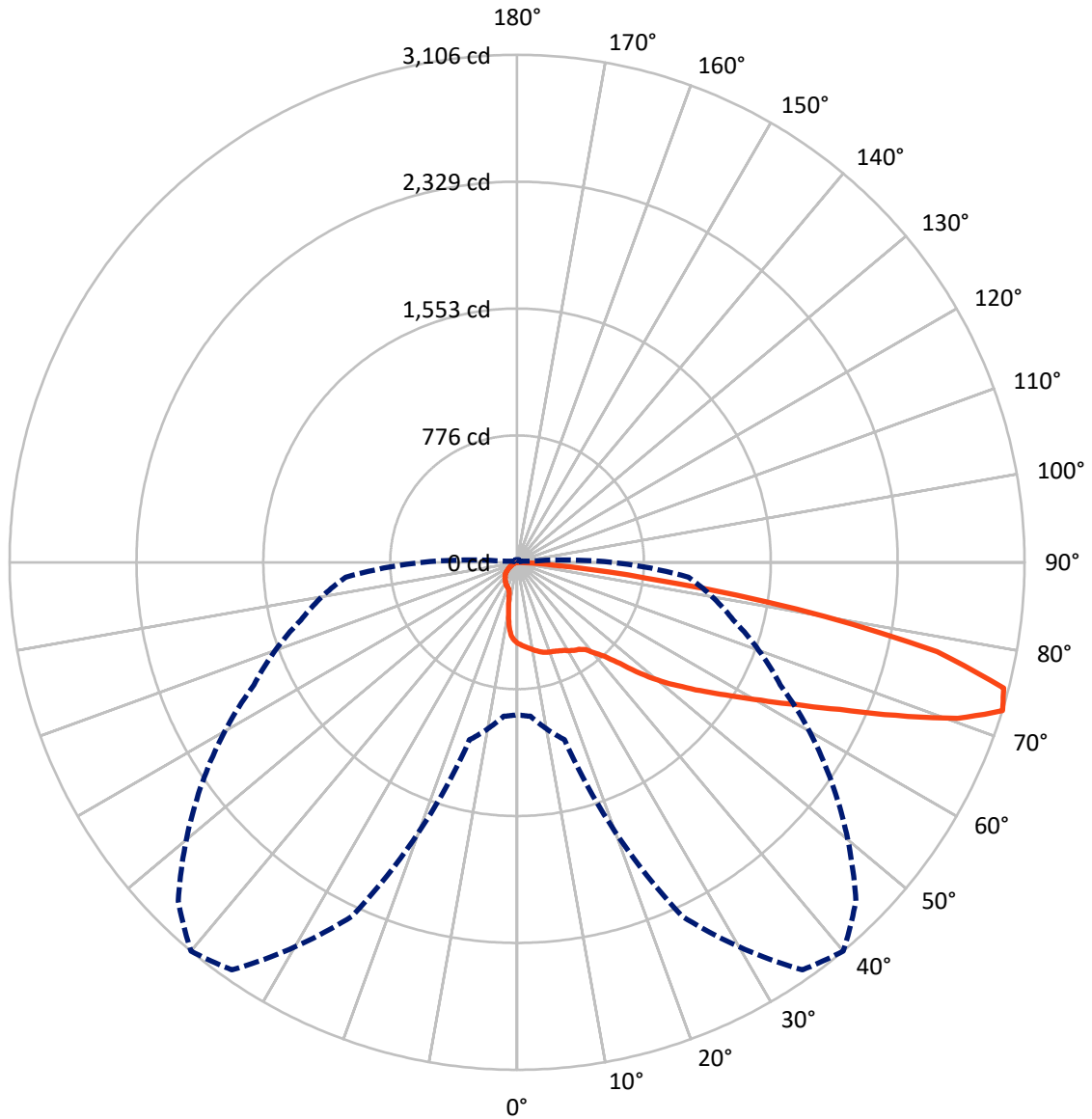
× Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	482.7	0.0	482.7
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	3255.4	0.0	3255.4
	% Fixture	87.1	0.0	87.1
Total	Lumens	3738.2	0.0	3738.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.2	1.2
10°-20°	122.8	3.3
20°-30°	198.6	5.3
30°-40°	293.3	7.8
40°-50°	493.6	13.2
50°-60°	766.4	20.5
60°-70°	958.9	25.7
70°-80°	785.1	21.0
80°-90°	74.4	2.0
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°	3738.2	100.0
0°-180°	3738.2	100.0

Coefficient of Utilization



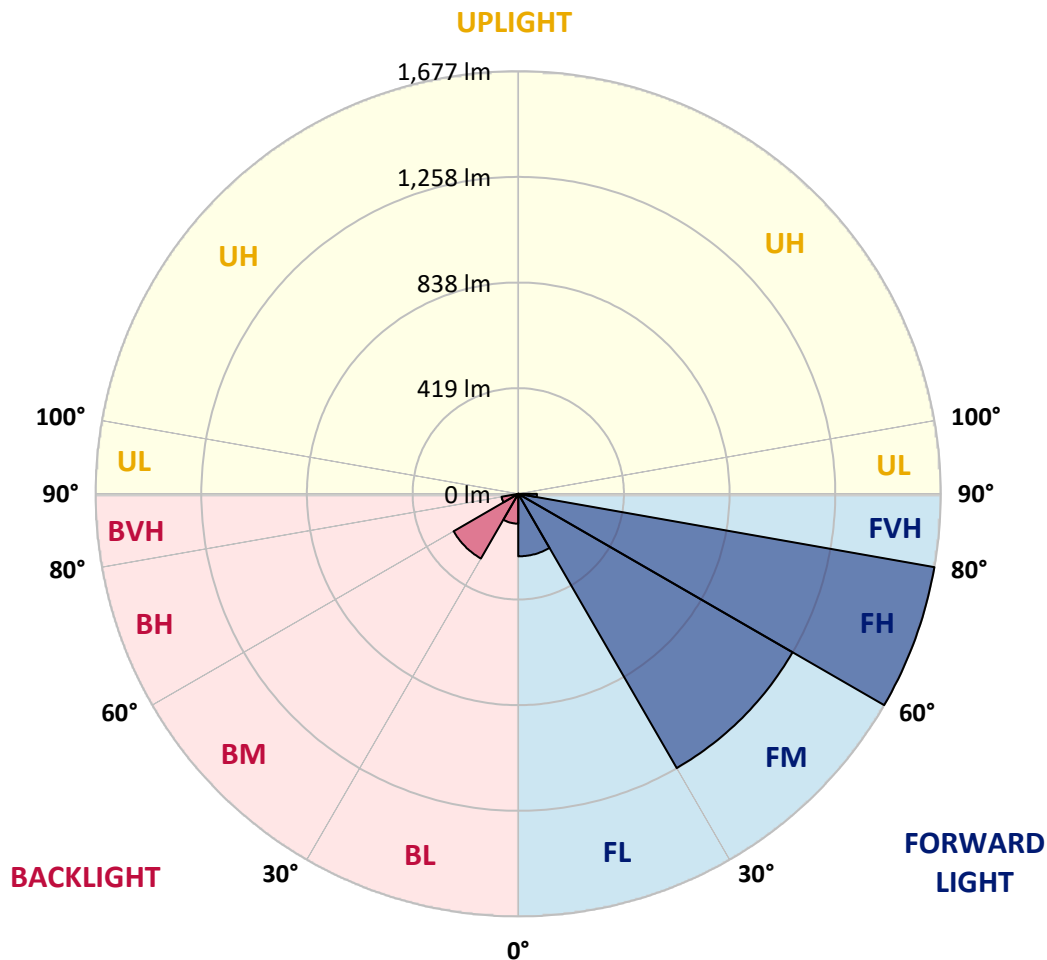
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	248.1	6.6			
FM (30°-60°)	1256.7	33.6			
FH (60°-80°)	1676.7	44.9			G1/1800
FVH (80°-90°)	73.9	2.0			G1/100
BL (0°-30°)	118.5	3.2	B1/500		
BM (30°-60°)	296.4	7.9	B1/1000		
BH (60°-80°)	67.2	1.8	B0/110		G0/110
BVH (80°-90°)	0.6	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	495.0	495.0	495.0	495.0	495.0	495.0	495.0	495.0	495.0	495.0	495.0
2.5°	509.9	511.9	510.8	508.5	507.9	506.8	505.4	504.8	502.9	501.1	499.2
5°	524.3	526.2	524.8	521.7	520.3	518.9	516.9	515.3	511.3	507.7	503.2
7.5°	540.0	541.7	540.0	535.5	533.2	531.6	528.8	526.2	521.7	516.4	510.8
10°	557.5	558.8	556.4	550.4	546.7	544.3	541.7	538.8	534.6	528.8	522.0
12.5°	573.8	575.5	571.5	564.5	560.3	557.7	554.9	552.7	548.5	542.8	535.8
15°	588.8	591.2	584.5	576.9	572.2	570.1	567.3	565.9	563.1	559.1	552.7
17.5°	599.9	601.7	594.6	585.6	580.3	578.8	576.9	577.7	577.2	575.2	571.0
20°	609.6	610.7	601.4	590.4	584.5	584.8	584.2	587.0	588.1	588.1	587.8
22.5°	621.4	621.7	609.9	596.0	589.0	591.0	591.8	594.9	597.2	599.4	604.4
25°	636.8	636.3	622.2	603.3	597.2	599.9	602.0	603.1	605.6	609.3	620.8
27.5°	660.0	658.3	640.2	615.2	607.8	610.4	614.1	613.5	612.3	615.2	634.6
30°	689.2	687.0	663.1	631.8	625.0	627.3	628.4	623.3	615.2	617.8	646.7
32.5°	735.6	731.7	698.5	650.4	640.0	642.5	641.1	630.7	618.6	621.2	658.9
35°	816.5	806.9	759.9	689.2	656.8	654.1	650.7	640.5	625.6	623.1	668.9
37.5°	988.2	971.4	891.1	765.0	695.2	676.8	666.5	656.3	633.2	623.1	680.5
40°	1181.9	1164.8	1072.1	891.6	758.8	727.9	703.0	674.9	641.1	626.7	698.5
42.5°	1384.1	1365.2	1270.1	1048.8	849.7	786.1	739.9	689.8	654.1	638.0	722.4
45°	1609.9	1586.3	1461.9	1212.7	981.7	882.9	799.3	720.5	676.6	657.9	755.1
47.5°	1848.1	1817.4	1653.0	1371.8	1123.9	1017.0	908.0	775.4	709.8	687.9	799.3
50°	2059.2	2028.9	1850.3	1538.1	1256.9	1144.5	1031.9	851.4	759.6	730.1	858.7
52.5°	2211.0	2188.0	2030.0	1709.8	1395.1	1264.1	1144.2	939.8	822.7	784.1	928.9
55°	2312.6	2291.5	2157.2	1872.6	1555.8	1395.9	1254.9	1035.9	898.7	848.9	1006.2
57.5°	2374.3	2362.2	2249.3	2017.9	1715.2	1540.1	1381.6	1141.4	988.2	925.2	1092.6
60°	2396.2	2386.4	2306.5	2156.4	1907.8	1713.2	1530.5	1260.5	1097.0	1011.9	1181.4
62.5°	2337.7	2339.7	2347.6	2320.5	2110.8	1915.9	1709.0	1403.5	1217.4	1110.2	1264.7
65°	2062.1	2078.4	2228.1	2502.4	2379.6	2169.9	1936.2	1578.1	1355.4	1221.9	1330.9
67.5°	1707.3	1730.9	1917.4	2608.8	2666.2	2499.6	2252.6	1800.5	1519.8	1335.7	1356.0
70°	1307.0	1332.3	1558.1	2586.6	2934.6	2860.0	2644.0	2083.5	1690.1	1414.5	1292.0
72.5°	932.7	945.8	1123.7	2388.7	3044.7	3105.5	2932.3	2351.6	1777.1	1370.8	1053.8
75°	655.5	653.2	771.2	1923.5	2873.2	3075.6	2831.3	2206.5	1608.2	1089.1	649.8
77.5°	285.5	286.1	385.2	1168.2	2293.2	2626.9	2353.5	1382.1	1121.1	577.2	274.2
80°	74.0	76.3	141.3	465.1	1380.7	1733.8	1435.3	607.6	518.0	140.7	52.4
82.5°	26.1	27.9	65.1	146.2	509.3	795.1	639.1	194.2	135.1	40.3	14.0
85°	7.6	9.0	35.0	44.8	105.3	224.7	155.2	37.7	33.2	20.8	3.7
87.5°	0.0	1.1	7.1	6.1	6.1	4.2	7.9	4.2	5.3	2.6	1.1
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°	495.0	495.0	495.0	495.0	495.0	495.0	495.0	495.0	495.0	495.0	495.0
2.5°	497.5	495.5	491.3	486.8	482.6	478.7	477.5	473.2	471.3	471.6	471.3
5°	500.0	496.4	488.2	478.4	468.2	456.6	447.1	433.6	422.0	420.7	419.8
7.5°	506.8	500.9	487.7	468.5	443.2	411.3	381.8	352.5	335.9	326.9	326.4
10°	517.2	509.3	489.0	452.4	398.7	341.8	297.0	260.1	241.3	232.6	230.8
12.5°	529.6	520.9	491.3	425.2	341.2	266.6	218.2	195.7	191.8	191.2	190.9
15°	547.0	537.5	493.8	388.3	279.0	203.0	180.7	181.0	184.1	185.8	185.5
17.5°	566.5	556.9	490.2	343.2	217.6	173.4	172.9	175.4	179.9	181.6	181.3
20°	586.2	577.2	477.2	290.3	176.0	165.2	167.5	170.4	174.9	177.1	177.1
22.5°	606.5	598.6	456.6	234.0	158.8	159.4	162.2	165.0	170.0	172.6	172.6
25°	628.1	621.4	429.4	187.5	151.5	153.1	156.8	160.2	165.5	168.6	168.6
27.5°	650.1	645.0	398.4	156.5	144.7	146.7	150.9	155.4	160.7	164.4	164.7
30°	674.0	671.2	373.6	145.0	138.3	139.9	144.7	149.8	155.7	160.2	160.7
32.5°	698.5	697.9	361.5	153.4	132.3	133.5	137.7	142.8	150.1	155.7	156.2
35°	722.7	723.9	354.4	177.4	130.4	127.3	130.1	134.6	143.3	150.4	151.5
37.5°	753.7	756.6	354.2	203.3	135.1	121.1	123.0	126.2	133.8	141.9	143.3
40°	799.9	814.8	372.2	225.5	143.6	115.4	116.0	116.5	120.5	127.3	129.6
42.5°	861.3	904.9	437.3	240.8	147.0	110.4	108.4	105.3	104.8	108.4	110.4
45°	937.6	1013.8	551.6	249.2	143.6	104.8	99.4	91.2	88.1	90.6	90.6
47.5°	1027.4	1133.2	687.0	251.1	138.0	97.7	88.1	77.4	74.9	75.7	75.4
50°	1114.9	1222.7	806.1	234.8	128.6	88.7	75.7	66.7	65.1	65.3	65.3
52.5°	1192.4	1253.5	839.9	196.3	116.2	77.7	65.1	58.8	57.7	57.7	57.4
55°	1243.6	1220.3	749.0	150.1	100.8	66.4	55.8	52.7	52.1	51.8	51.2
57.5°	1254.3	1112.1	565.6	108.4	78.8	56.1	49.5	47.9	46.7	45.6	45.0
60°	1216.1	931.9	360.1	75.7	59.1	47.9	44.0	42.8	40.6	38.3	37.4
62.5°	1133.2	703.9	199.4	52.7	47.6	40.8	38.8	37.4	33.2	29.5	28.4
65°	1022.0	467.9	88.1	41.1	38.8	34.3	33.2	31.3	26.1	21.9	21.1
67.5°	910.2	269.5	39.7	32.9	31.3	28.2	27.3	25.9	22.2	18.3	17.7
70°	782.7	136.5	27.3	26.1	24.2	21.4	22.2	21.9	18.3	15.0	14.3
72.5°	582.8	67.9	20.6	19.7	17.4	15.2	18.3	18.0	14.3	11.3	10.7
75°	329.9	33.5	15.0	13.8	10.5	11.3	14.7	13.8	9.8	7.3	6.8
77.5°	130.9	17.2	9.8	8.4	6.1	7.6	10.7	9.3	5.0	3.1	2.8
80°	30.1	8.4	5.0	3.7	2.8	4.5	5.6	3.4	1.4	0.3	0.0
82.5°	8.4	3.7	1.6	1.4	1.4	1.6	1.4	0.5	0.0	0.0	0.0
85°	2.8	1.6	0.5	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0
87.5°	1.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)