

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: P959307

Luminaire Tested: **NAV-SB1A-735-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959307
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-735-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3481.9 lumens
Efficiency: N/A
Efficacy: 112.7 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

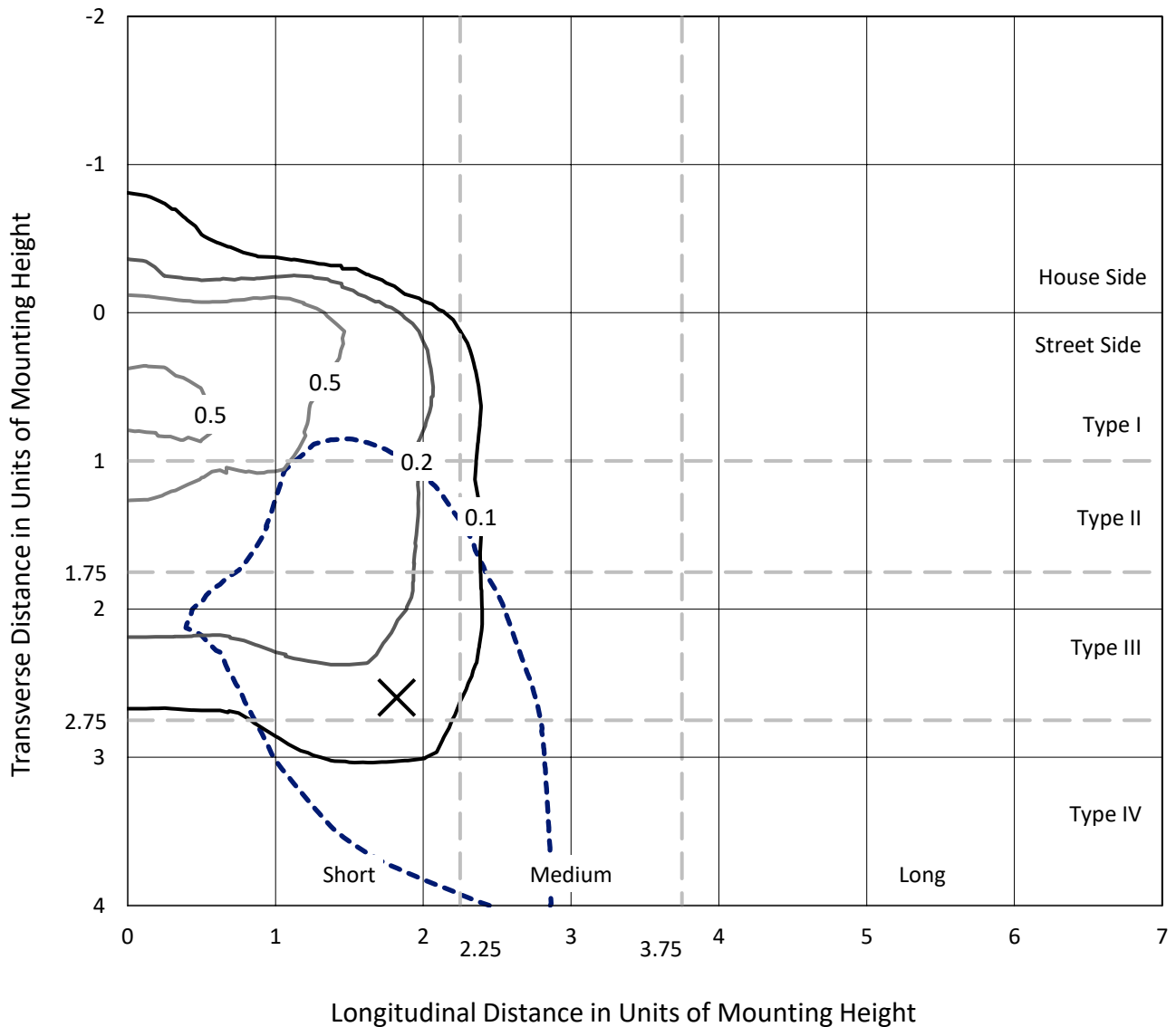
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

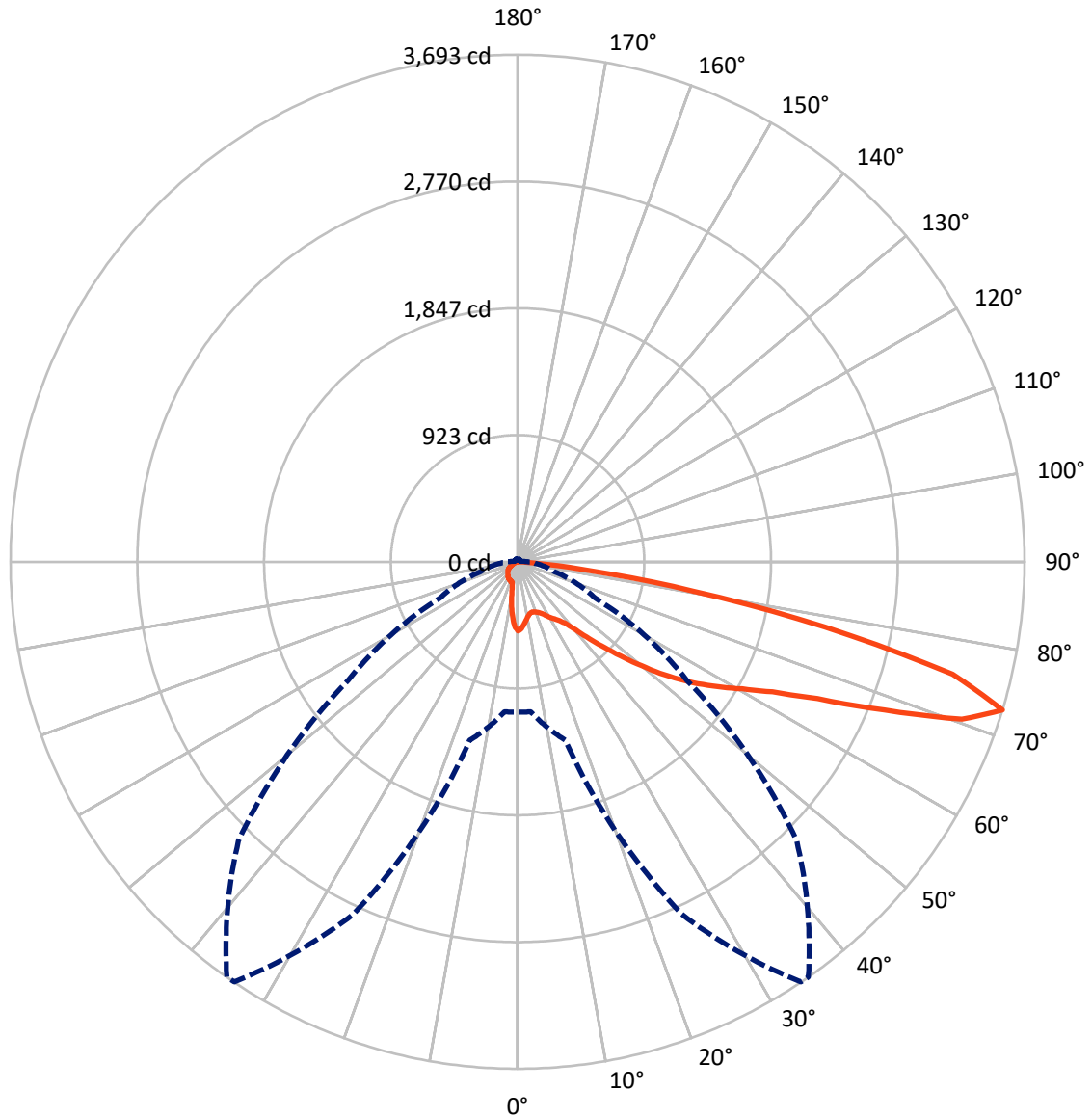
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.8 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	391.8	0.0	391.8
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	3090.0	0.0	3090.0
	% Fixture	88.7	0.0	88.7
Total	Lumens	3481.9	0.0	3481.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.5	1.2
10°-20°	97.0	2.8
20°-30°	157.6	4.5
30°-40°	262.9	7.6
40°-50°	497.5	14.3
50°-60°	790.5	22.7
60°-70°	977.9	28.1
70°-80°	607.9	17.5
80°-90°	49.1	1.4
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°	3481.9	100.0
0°-180°	3481.9	100.0

Coefficient of Utilization



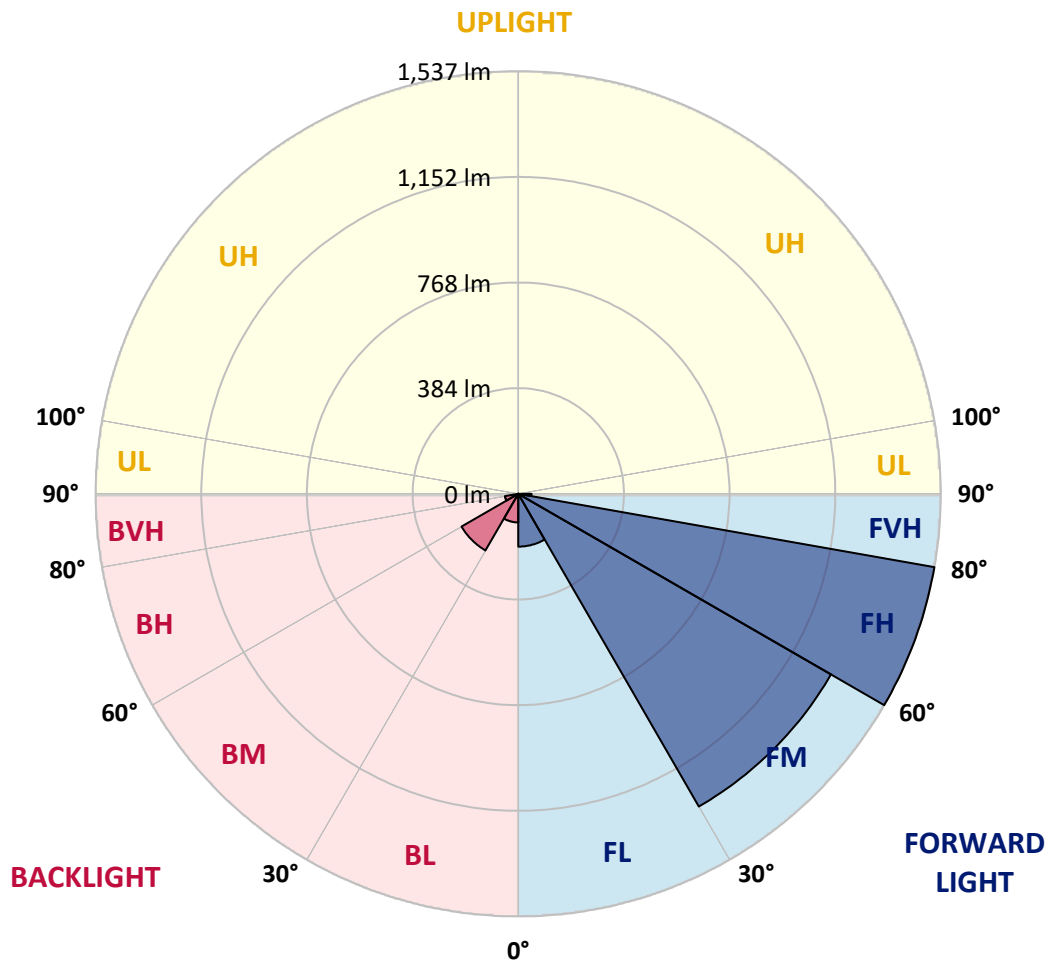
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	191.9	5.5			
FM (30°-60°)	1313.0	37.7			
FH (60°-80°)	1536.6	44.1			G1/1800
FVH (80°-90°)	48.5	1.4			G1/100
BL (0°-30°)	104.1	3.0	B0/110		
BM (30°-60°)	237.9	6.8	B1/1000		
BH (60°-80°)	49.2	1.4	B0/110		G0/110
BVH (80°-90°)	0.7	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°	34°	35°	45°	55°	65°	75°	85°
0°	504.6	504.6	504.6	504.6	504.6	504.6	504.6	504.6	504.6	504.6	504.6
2.5°	482.2	486.3	487.1	488.3	488.3	489.8	492.4	496.0	501.8	504.9	507.0
5°	444.4	447.5	451.3	454.4	460.2	461.0	471.0	480.6	494.2	504.4	511.6
7.5°	406.4	410.0	415.1	422.5	430.2	432.4	447.5	463.8	485.2	504.4	516.4
10°	379.7	379.9	384.5	391.9	404.2	406.9	425.3	448.5	475.3	501.3	521.0
12.5°	364.6	366.3	368.4	374.0	385.7	387.6	407.2	434.5	465.4	499.6	526.3
15°	364.6	365.8	367.2	369.9	379.4	380.9	398.2	425.6	460.2	500.3	535.0
17.5°	368.4	370.4	369.4	372.8	382.7	383.8	399.0	423.0	460.0	505.1	548.3
20°	377.6	379.1	377.1	379.1	389.1	391.1	406.9	427.8	464.3	513.6	564.9
22.5°	392.2	392.9	388.1	389.6	399.7	402.3	420.7	441.7	474.8	527.1	587.0
25°	410.5	412.0	404.7	406.4	416.2	419.2	440.3	462.3	491.4	545.7	615.4
27.5°	431.7	432.4	426.1	425.8	438.3	442.7	464.1	487.8	513.6	569.2	651.1
30°	455.9	458.2	452.1	451.1	466.9	470.5	491.6	519.2	546.2	604.4	701.8
32.5°	475.1	476.8	473.2	475.8	491.9	494.7	525.1	563.5	597.5	654.4	771.0
35°	502.6	503.6	495.5	500.1	518.4	525.5	570.7	625.9	662.0	717.2	861.3
37.5°	602.4	602.4	567.6	545.0	562.5	569.0	633.2	704.2	741.7	801.3	975.1
40°	740.4	738.1	687.4	640.9	638.6	651.1	722.3	802.9	844.5	902.4	1103.2
42.5°	887.5	884.1	814.9	769.0	761.3	765.7	825.1	924.6	967.0	1025.6	1241.0
45°	1018.2	1017.2	954.0	892.2	878.4	892.2	953.5	1066.9	1097.4	1159.1	1378.4
47.5°	1127.7	1127.7	1081.5	1041.2	1034.0	1042.2	1127.2	1224.9	1222.1	1301.1	1512.4
50°	1253.7	1252.7	1208.8	1191.5	1198.8	1210.3	1327.2	1391.2	1351.2	1440.7	1632.1
52.5°	1342.0	1348.1	1333.0	1330.2	1368.0	1388.0	1530.2	1554.0	1466.8	1573.2	1721.6
55°	1411.9	1419.0	1436.3	1456.0	1528.8	1554.7	1727.0	1708.4	1563.4	1688.0	1773.1
57.5°	1510.8	1500.7	1527.5	1566.2	1683.9	1715.2	1917.6	1854.0	1641.2	1781.0	1778.8
60°	1631.1	1632.6	1637.1	1686.1	1838.7	1879.0	2105.4	1991.8	1691.2	1838.2	1716.6
62.5°	1775.4	1777.8	1787.2	1862.4	2046.6	2084.6	2305.3	2104.5	1714.2	1822.1	1555.7
65°	1765.5	1775.2	1880.6	2137.9	2362.7	2400.2	2538.8	2183.7	1679.6	1675.2	1266.7
67.5°	1608.3	1624.1	1800.4	2467.1	2839.4	2881.2	2821.0	2199.2	1529.7	1302.7	826.4
70°	1402.2	1407.8	1619.8	2763.1	3391.2	3433.5	3073.6	2028.1	1160.8	726.6	370.2
72.5°	1095.0	1096.3	1345.0	2831.7	3690.7	3693.0	2875.3	1505.5	624.3	279.1	128.5
75°	782.3	774.6	900.9	2296.4	3247.0	3273.0	2155.6	706.2	238.5	131.9	64.1
77.5°	419.4	427.8	509.7	1361.9	2243.1	2287.5	1176.2	203.6	121.5	89.8	42.3
80°	129.6	136.7	209.0	623.5	1270.6	1297.3	436.0	90.6	84.7	64.1	27.8
82.5°	40.8	42.3	97.5	262.0	527.4	539.6	126.3	51.2	57.9	42.3	16.3
85°	11.7	12.0	43.4	97.7	130.4	132.9	35.5	19.9	33.2	26.2	8.4
87.5°	1.2	4.1	16.3	16.3	11.5	11.3	3.8	4.3	9.4	3.3	1.5
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°	504.6	504.6	504.6	504.6	504.6	504.6	504.6	504.6	504.6	504.6	504.6
2.5°	505.6	505.9	502.6	497.0	490.9	485.7	479.4	474.3	470.7	469.7	471.5
5°	509.2	507.5	498.0	480.9	460.5	442.9	423.2	407.7	397.5	393.2	394.7
7.5°	514.6	509.5	488.8	455.2	416.2	381.4	346.2	318.9	301.6	292.8	294.2
10°	519.2	509.0	473.6	417.9	358.2	305.7	258.2	225.3	206.9	198.2	198.5
12.5°	523.6	508.7	453.7	373.7	292.8	228.6	184.5	168.1	163.1	161.2	160.7
15°	531.7	509.5	428.7	323.3	227.9	172.7	156.6	156.4	157.4	156.9	156.6
17.5°	542.9	510.2	400.3	269.7	175.8	152.3	151.6	153.9	155.4	154.6	154.4
20°	557.5	513.3	370.2	216.6	151.1	147.2	149.0	151.1	152.3	151.1	150.8
22.5°	577.9	518.6	337.3	174.0	143.1	144.1	145.7	148.0	149.2	147.5	147.2
25°	602.9	527.1	304.8	151.3	139.3	140.5	142.9	145.4	147.0	145.1	144.9
27.5°	635.3	540.6	275.0	146.2	135.5	136.2	139.6	143.4	145.4	143.1	143.1
30°	682.2	562.8	249.3	148.5	133.1	131.4	136.0	141.3	143.6	141.6	141.3
32.5°	744.5	594.2	233.5	152.0	132.1	125.8	130.1	137.0	140.8	139.6	139.6
35°	826.2	642.0	227.3	156.1	131.4	119.9	123.0	130.4	137.0	138.3	138.3
37.5°	925.1	708.3	229.1	158.0	129.0	115.1	116.6	123.0	131.6	135.7	136.7
40°	1037.6	785.6	239.3	156.1	126.6	111.0	111.2	116.1	123.7	129.9	131.9
42.5°	1153.7	875.9	258.2	149.5	124.2	107.4	106.6	110.0	115.1	119.4	121.2
45°	1264.1	968.7	276.9	140.3	121.5	103.8	102.1	103.3	104.3	106.1	107.1
47.5°	1360.6	1034.0	271.4	131.9	117.6	99.7	96.7	96.1	93.2	92.9	92.7
50°	1427.2	1048.4	241.1	123.5	112.0	95.1	90.3	87.2	81.9	79.3	79.6
52.5°	1448.3	992.0	197.0	115.1	102.8	89.1	82.1	77.3	70.6	68.4	68.2
55°	1420.3	881.5	157.4	104.9	90.1	80.9	73.2	66.8	61.5	58.6	58.6
57.5°	1351.7	740.9	124.5	92.9	76.6	71.6	64.1	57.7	53.1	50.2	49.7
60°	1237.9	588.3	98.5	78.6	65.3	61.7	53.8	49.7	45.7	42.3	41.6
62.5°	1065.2	419.9	77.3	62.2	54.6	50.5	45.9	42.8	38.0	33.4	32.7
65°	831.2	256.9	59.7	45.7	43.9	41.8	39.1	36.2	30.3	25.7	25.0
67.5°	524.3	121.7	42.6	34.4	34.7	33.7	32.4	30.1	25.7	21.7	21.2
70°	230.9	58.9	28.1	26.2	25.7	25.7	26.8	26.0	21.9	18.1	17.3
72.5°	78.6	31.7	20.9	19.9	18.7	18.3	22.4	21.7	17.6	14.0	13.2
75°	41.1	21.2	15.3	14.2	11.3	13.5	17.8	16.8	12.5	9.2	8.4
77.5°	26.8	15.1	10.5	9.2	6.4	8.9	13.2	11.7	7.4	4.6	4.1
80°	16.8	9.9	6.1	4.3	3.1	4.8	7.2	5.1	2.8	1.0	0.7
82.5°	8.9	5.1	2.3	1.5	1.2	1.5	1.7	1.2	0.5	0.0	0.0
85°	3.6	1.7	0.7	0.5	0.2	0.0	0.5	0.2	0.0	0.0	0.0
87.5°	1.2	0.2	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)