

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: P959224

Luminaire Tested: **NAV-SB1A-727-U-SL2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959224
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-11)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-727-U-SL2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3457.3 lumens
Efficiency: N/A
Efficacy: 111.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B0 - U0 - G1

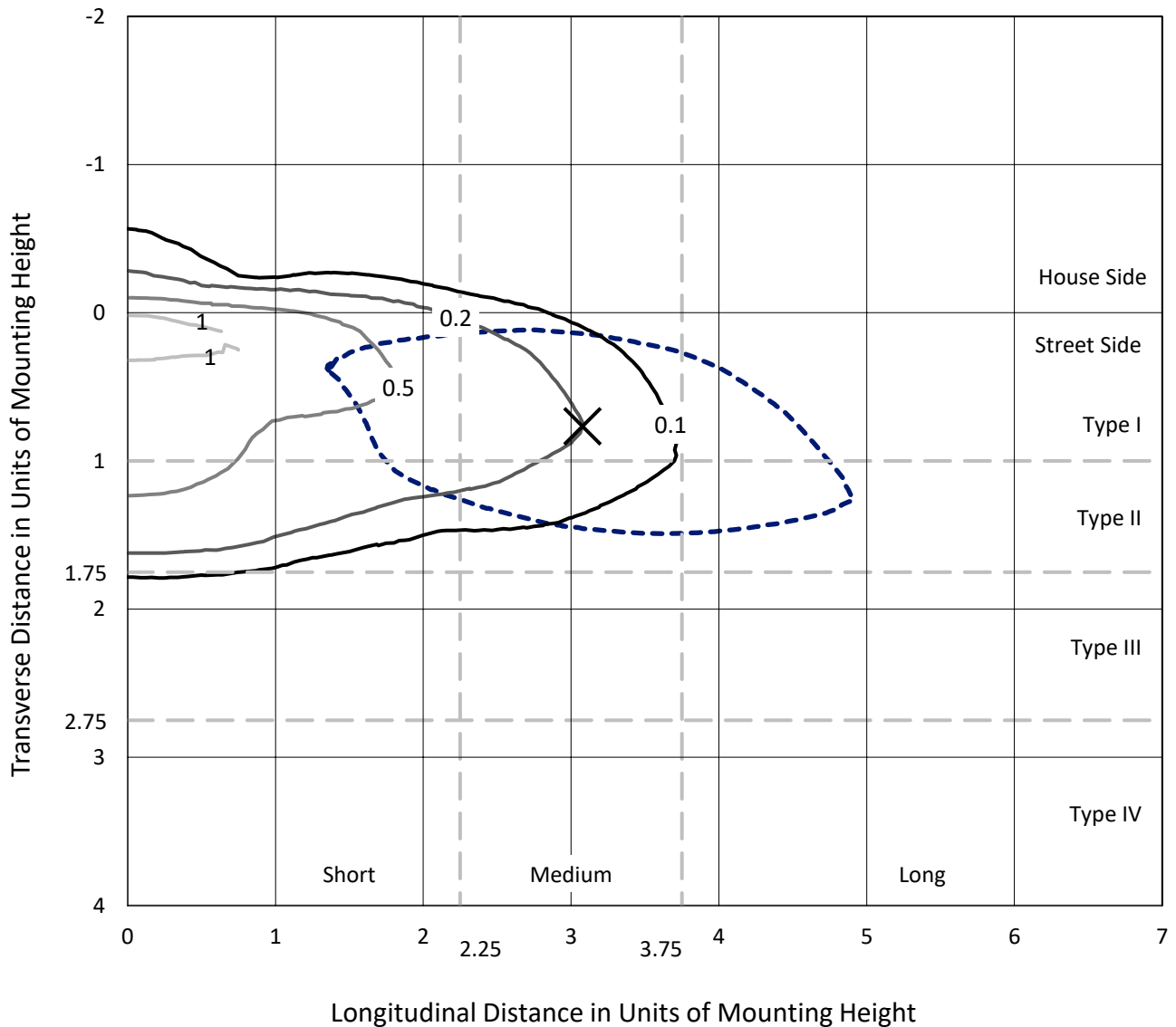
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

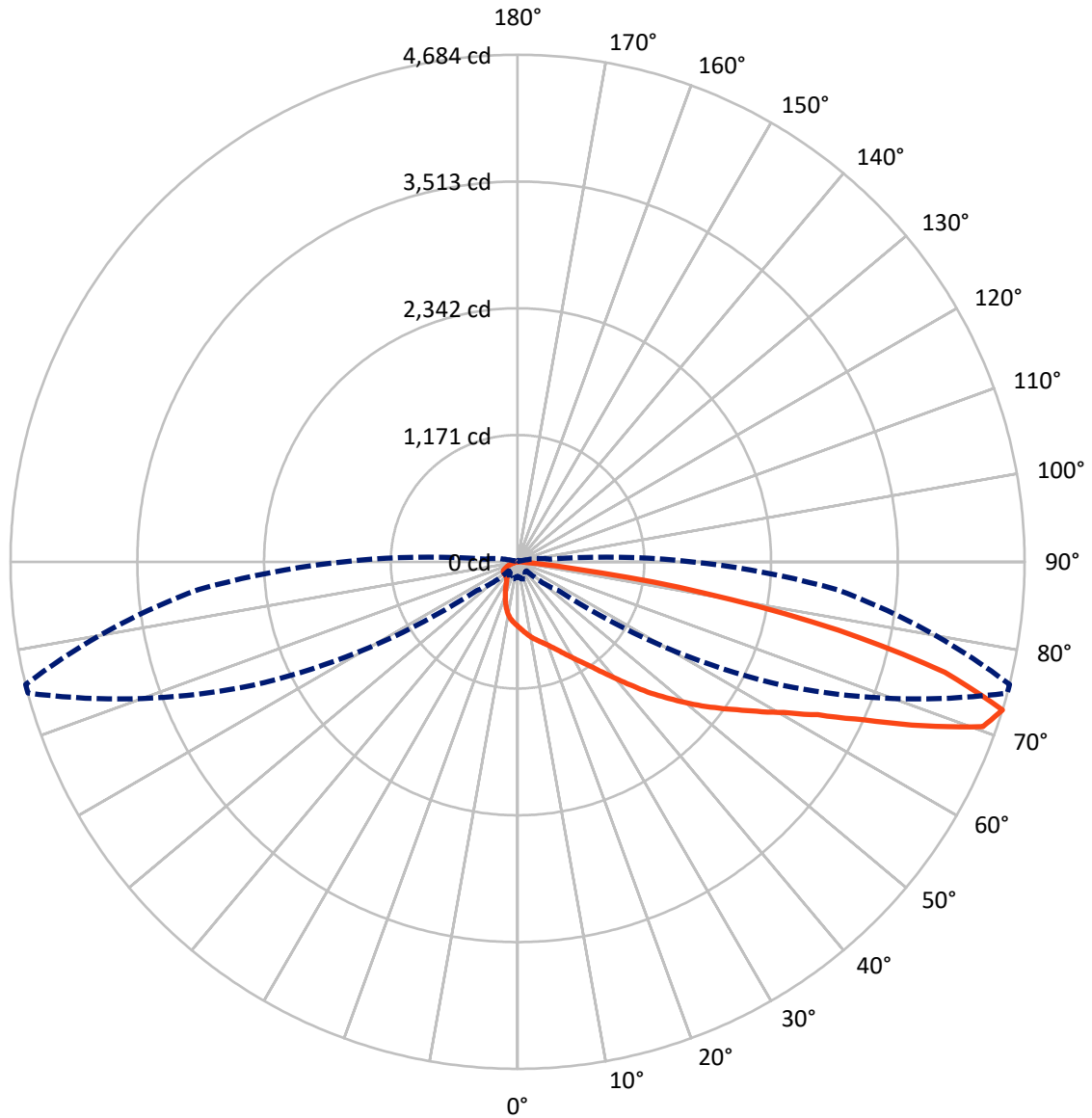
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	353.9	0.0	353.9
	% Fixture	10.2	0.0	10.2
Street Side	Lumens	3103.5	0.0	3103.5
	% Fixture	89.8	0.0	89.8
Total	Lumens	3457.3	0.0	3457.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.3	1.6
10°-20°	145.7	4.2
20°-30°	230.6	6.7
30°-40°	356.8	10.3
40°-50°	541.9	15.7
50°-60°	747.0	21.6
60°-70°	789.2	22.8
70°-80°	541.4	15.7
80°-90°	50.4	1.5
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°	3457.3	100.0
0°-180°	3457.3	100.0

Coefficient of Utilization



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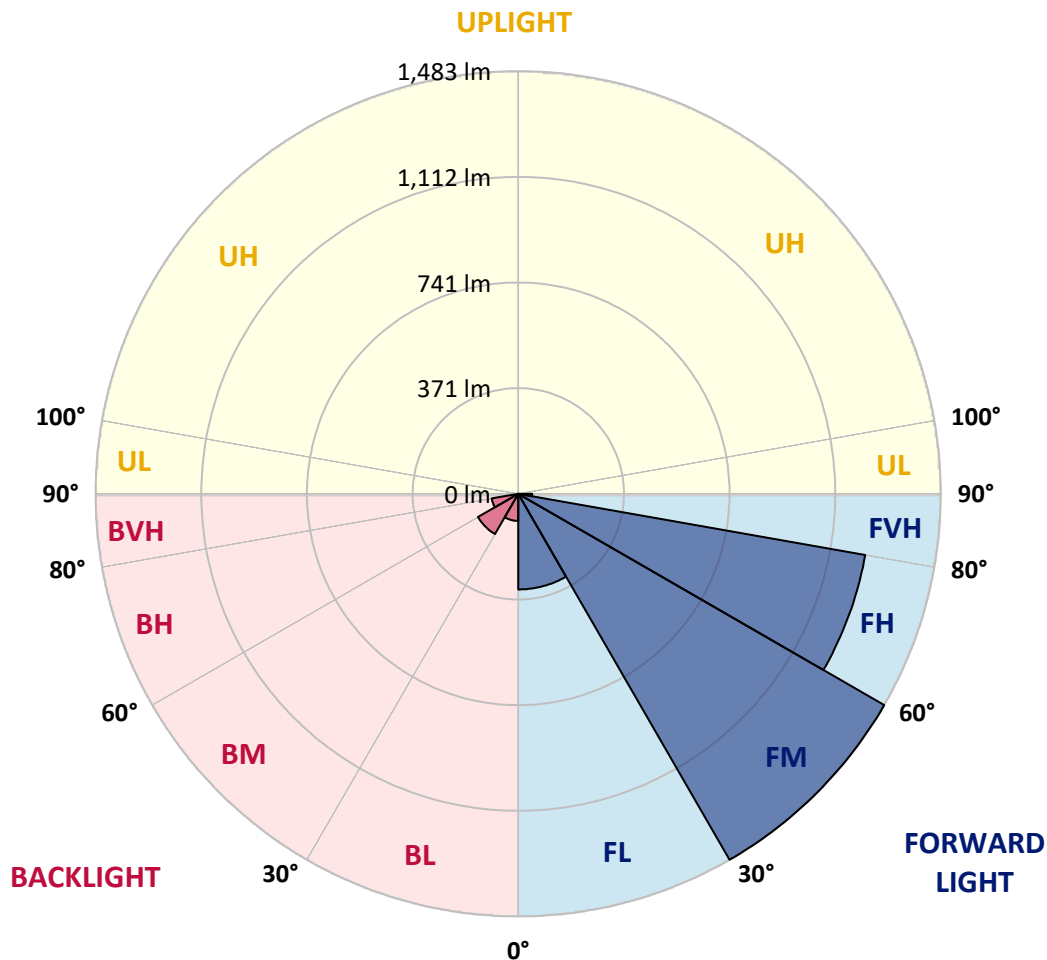
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	335.5	9.7			
FM (30°-60°)	1482.8	42.9			
FH (60°-80°)	1236.1	35.8			G1/1800
FVH (80°-90°)	49.0	1.4			G1/100
BL (0°-30°)	95.1	2.8	B0/110		
BM (30°-60°)	162.9	4.7	B0/220		
BH (60°-80°)	94.5	2.7	B0/110		G0/110
BVH (80°-90°)	1.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	597.5	597.5	597.5	597.5	597.5	597.5	597.5	597.5	597.5	597.5	597.5
2.5°	694.5	685.4	687.2	677.9	673.7	663.4	652.6	638.5	622.8	622.8	607.5
5°	767.7	761.9	761.9	751.1	742.8	726.6	707.4	682.4	652.8	650.0	621.0
7.5°	812.5	808.9	811.2	804.9	798.2	781.4	758.5	726.0	684.0	680.4	636.9
10°	821.2	821.0	827.4	829.1	833.6	825.1	804.7	767.2	714.7	709.6	650.6
12.5°	787.4	783.2	798.6	816.8	842.3	853.8	843.3	804.9	742.8	735.6	663.4
15°	731.7	732.7	747.5	775.5	818.2	859.0	872.7	841.7	771.3	762.7	675.5
17.5°	700.0	696.6	709.4	734.5	781.6	839.3	886.3	876.0	801.6	791.9	687.9
20°	696.2	695.9	698.8	710.2	746.1	811.0	884.8	909.4	837.2	825.9	705.5
22.5°	722.6	722.1	719.7	717.4	727.3	783.4	878.0	941.3	879.9	867.7	730.7
25°	763.2	762.5	758.7	745.1	735.3	768.5	871.8	970.9	930.3	916.9	761.2
27.5°	812.7	812.3	805.3	784.7	759.8	769.9	868.6	1001.3	988.6	975.4	796.4
30°	873.5	872.7	858.2	829.1	796.6	791.2	872.9	1035.7	1049.4	1039.2	837.0
32.5°	949.8	947.3	928.4	884.5	839.0	819.7	880.9	1070.9	1121.4	1111.9	891.2
35°	1008.8	1004.9	993.9	955.2	888.1	854.6	899.7	1112.6	1208.0	1199.7	960.5
37.5°	1059.4	1055.6	1046.6	1014.9	958.6	899.3	930.1	1168.2	1310.2	1306.2	1045.1
40°	1114.2	1107.9	1103.6	1069.6	1018.6	963.7	973.3	1233.3	1427.9	1428.3	1146.7
42.5°	1156.3	1153.8	1154.4	1128.1	1076.8	1040.0	1030.7	1306.6	1569.0	1573.3	1268.9
45°	1192.5	1190.4	1198.7	1180.3	1135.3	1090.0	1098.0	1389.6	1723.3	1732.0	1405.7
47.5°	1220.3	1222.5	1234.4	1222.5	1196.1	1125.1	1157.6	1479.1	1885.5	1886.5	1547.0
50°	1248.0	1249.0	1268.7	1262.9	1252.1	1169.8	1212.7	1579.1	2056.4	2058.3	1679.2
52.5°	1256.9	1255.4	1286.9	1301.2	1301.6	1225.0	1283.7	1688.1	2223.8	2230.4	1815.1
55°	1212.0	1215.8	1266.5	1324.8	1347.9	1301.2	1379.8	1826.0	2402.4	2405.1	1949.5
57.5°	992.6	1013.7	1125.9	1261.1	1377.7	1410.4	1517.6	1987.3	2608.5	2606.1	2086.0
60°	602.4	627.5	761.6	1057.7	1280.3	1520.1	1720.9	2237.1	2833.6	2826.7	2223.8
62.5°	336.8	344.5	387.3	633.1	973.7	1450.4	1919.3	2558.0	3136.0	3112.4	2359.5
65°	248.3	250.7	260.9	310.2	478.6	1115.5	1875.7	2941.7	3560.7	3518.8	2522.1
67.5°	215.8	218.2	228.1	234.8	213.7	586.0	1545.5	3154.5	4100.1	4045.2	2742.2
70°	181.6	183.0	199.0	203.5	152.9	222.9	992.8	3088.8	4599.4	4560.1	2978.3
72.5°	135.5	140.8	163.9	174.7	122.7	118.4	467.4	2700.7	4683.8	4684.4	2962.4
75°	91.9	96.9	123.3	143.8	94.6	83.0	188.6	2016.7	4078.6	4078.6	2596.8
77.5°	62.8	66.8	85.9	112.9	71.8	57.0	97.8	1279.9	2926.1	3029.0	1850.9
80°	27.8	30.2	55.4	81.9	54.5	36.8	55.4	700.9	1769.5	1747.7	725.5
82.5°	13.6	15.7	35.5	51.1	35.3	22.7	29.1	333.2	573.5	545.0	113.3
85°	2.7	3.6	19.1	21.7	16.4	10.0	11.0	102.5	69.1	78.9	24.0
87.5°	0.0	0.0	5.8	4.0	1.8	2.3	2.3	9.2	5.4	6.3	6.3
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°	597.5	597.5	597.5	597.5	597.5	597.5	597.5	597.5	597.5	597.5	597.5
2.5°	599.5	591.2	573.0	555.0	536.7	519.9	508.2	496.5	489.3	486.3	486.7
5°	604.1	587.3	549.2	509.3	469.9	431.3	402.3	375.3	366.6	352.6	353.4
7.5°	611.6	584.2	524.1	456.8	392.7	336.2	295.4	262.8	249.8	237.3	237.1
10°	616.5	578.4	491.0	401.0	314.2	250.7	211.7	188.2	179.7	172.0	171.8
12.5°	618.6	567.6	452.8	338.5	244.5	191.1	167.8	156.7	153.9	151.2	151.2
15°	620.3	557.1	410.2	278.1	193.1	159.9	150.7	147.1	145.1	143.3	143.3
17.5°	621.9	543.7	361.5	226.1	163.1	147.4	142.9	139.1	137.5	135.5	135.5
20°	627.3	530.6	318.1	186.5	146.7	138.4	133.5	129.4	128.0	126.7	126.9
22.5°	637.3	520.1	275.8	159.9	136.8	129.1	122.9	118.4	117.6	116.6	115.9
25°	649.4	507.1	236.2	142.7	127.2	118.6	111.7	107.8	107.0	107.2	106.7
27.5°	664.9	492.7	202.0	131.6	118.6	108.8	101.0	98.0	98.5	99.3	98.9
30°	682.0	479.5	175.4	124.0	111.0	100.0	92.1	90.2	91.7	93.1	92.7
32.5°	707.4	467.8	156.7	118.0	104.2	92.9	86.6	84.2	85.9	87.7	87.2
35°	741.9	462.0	146.3	112.9	98.5	87.2	81.0	79.1	81.0	81.4	81.2
37.5°	784.2	461.6	141.8	108.5	93.1	82.5	75.5	74.9	76.3	76.5	76.1
40°	839.0	464.4	138.4	105.4	87.4	77.2	70.6	70.0	70.4	72.0	71.8
42.5°	908.3	476.6	133.7	101.4	81.4	71.8	66.6	65.1	64.8	66.6	66.4
45°	995.3	503.3	127.4	94.9	76.1	67.2	62.1	60.4	59.7	60.1	60.8
47.5°	1090.2	536.0	121.2	88.8	72.3	63.7	58.5	56.3	55.1	55.1	55.1
50°	1182.1	573.0	116.8	82.5	69.5	60.4	54.7	52.5	50.6	50.2	50.0
52.5°	1273.2	609.4	113.5	76.3	66.4	56.1	51.1	48.7	46.6	45.7	45.3
55°	1356.2	643.9	107.6	70.2	62.3	51.6	47.6	45.1	42.6	41.0	40.4
57.5°	1435.8	672.6	96.9	64.0	56.1	47.4	43.8	41.0	38.1	36.1	35.3
60°	1508.2	687.4	83.4	57.2	49.8	42.8	39.5	37.0	33.2	29.8	28.9
62.5°	1563.4	681.5	68.9	49.6	43.3	38.8	34.5	32.1	27.6	23.6	21.9
65°	1619.9	649.7	54.9	41.5	37.9	33.4	28.9	26.4	21.3	17.0	15.9
67.5°	1693.2	581.8	43.3	34.5	32.7	26.4	22.7	21.1	17.5	13.4	12.6
70°	1740.3	451.9	33.6	28.1	27.0	19.3	17.5	17.2	13.9	10.4	9.2
72.5°	1611.2	296.2	25.8	21.3	19.3	12.6	13.4	13.4	10.0	7.0	6.0
75°	1344.9	173.3	18.7	15.3	11.0	8.1	9.2	9.2	6.3	3.4	2.7
77.5°	960.5	92.4	12.3	9.4	5.6	3.6	4.9	4.7	2.0	0.2	0.0
80°	367.4	31.9	5.8	3.8	1.5	0.7	0.4	0.2	0.2	0.0	0.0
82.5°	56.1	8.3	1.1	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	10.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.3	0.0	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)