

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: P959245

Luminaire Tested: **NAV-SB1A-727-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959245
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-727-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 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: 3229.8 lumens
Efficiency: N/A
Efficacy: 104.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

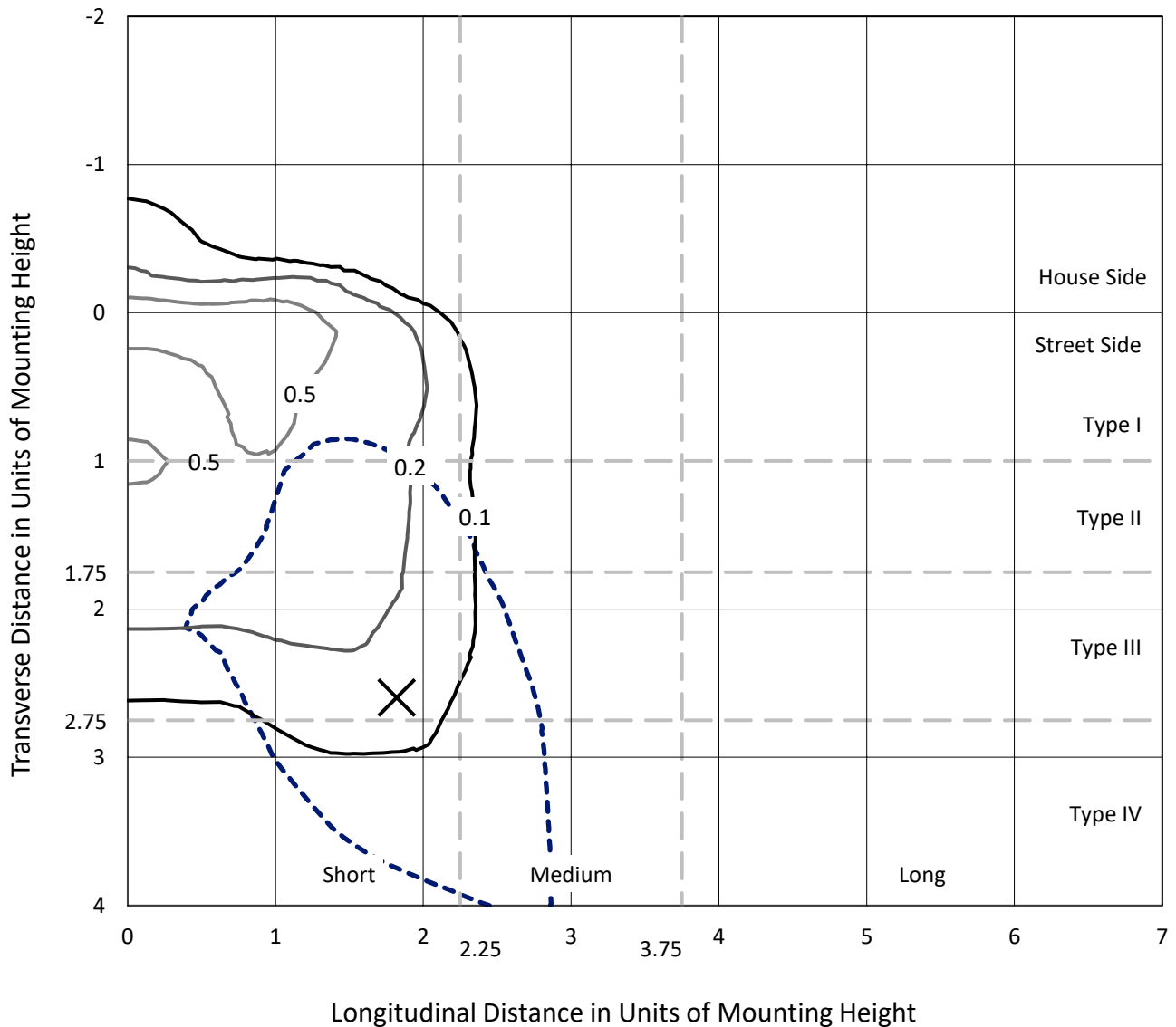
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

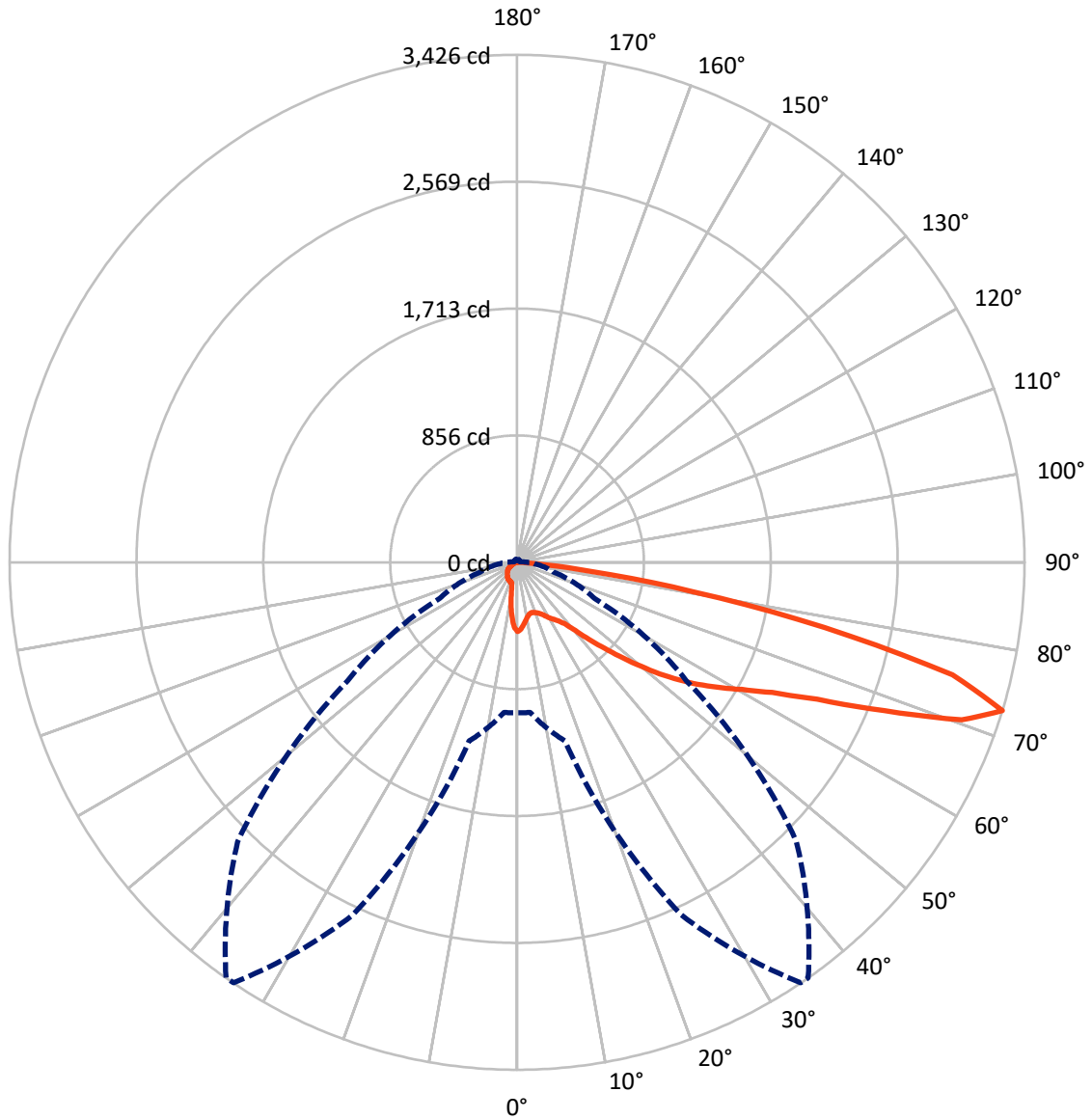
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.7 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	363.5	0.0	363.5
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	2866.3	0.0	2866.3
	% Fixture	88.7	0.0	88.7
Total	Lumens	3229.8	0.0	3229.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.5	1.2
10°-20°	90.0	2.8
20°-30°	146.2	4.5
30°-40°	243.9	7.6
40°-50°	461.5	14.3
50°-60°	733.3	22.7
60°-70°	907.1	28.1
70°-80°	563.9	17.5
80°-90°	45.6	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°	3229.8	100.0
0°-180°	3229.8	100.0

Coefficient of Utilization



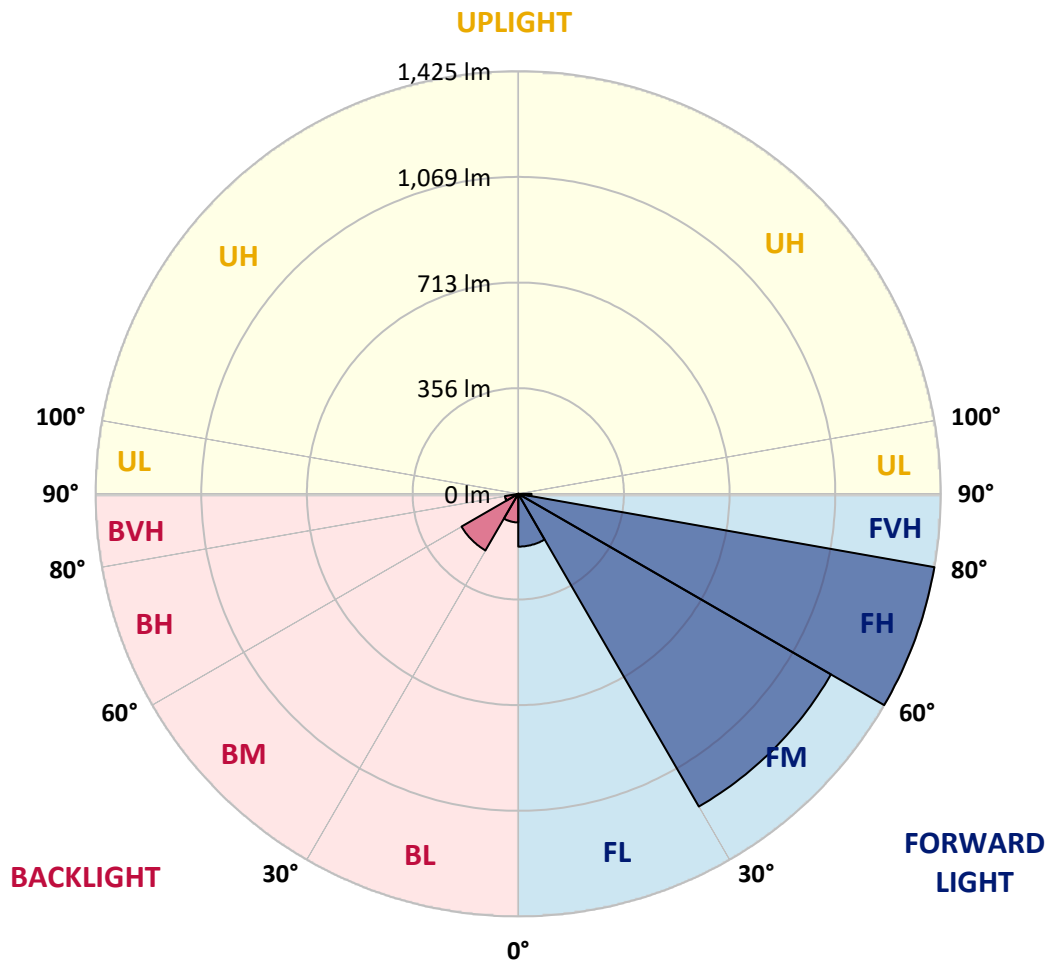
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	178.0	5.5			
FM (30°-60°)	1217.9	37.7			
FH (60°-80°)	1425.3	44.1			G1/1800
FVH (80°-90°)	45.0	1.4			G1/100
BL (0°-30°)	96.6	3.0	B0/110		
BM (30°-60°)	220.7	6.8	B1/1000		
BH (60°-80°)	45.6	1.4	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°	34°	35°	45°	55°	65°	75°	85°
0°	468.1	468.1	468.1	468.1	468.1	468.1	468.1	468.1	468.1	468.1	468.1
2.5°	447.3	451.1	451.8	452.9	452.9	454.4	456.7	460.0	465.5	468.3	470.3
5°	412.3	415.1	418.6	421.5	426.9	427.6	436.9	445.9	458.4	467.9	474.5
7.5°	377.0	380.3	385.0	391.9	399.0	401.1	415.1	430.2	450.1	467.9	479.0
10°	352.2	352.4	356.6	363.5	374.8	377.5	394.5	416.0	440.9	465.0	483.3
12.5°	338.1	339.8	341.7	347.0	357.8	359.5	377.7	403.0	431.6	463.4	488.2
15°	338.1	339.4	340.5	343.2	351.9	353.3	369.4	394.7	426.9	464.1	496.3
17.5°	341.7	343.6	342.7	345.7	355.0	355.9	370.1	392.4	426.7	468.5	508.6
20°	350.2	351.7	349.7	351.7	360.9	362.7	377.5	396.9	430.7	476.4	524.0
22.5°	363.8	364.5	360.0	361.4	370.8	373.2	390.2	409.7	440.4	488.9	544.6
25°	380.8	382.2	375.4	377.0	386.0	388.8	408.5	428.9	455.8	506.2	570.8
27.5°	400.5	401.1	395.2	394.9	406.6	410.6	430.5	452.4	476.4	528.0	603.9
30°	422.9	425.1	419.3	418.4	433.1	436.3	456.0	481.5	506.7	560.7	651.1
32.5°	440.6	442.3	439.0	441.4	456.2	458.9	487.1	522.8	554.2	607.0	715.1
35°	466.2	467.2	459.6	463.8	480.9	487.5	529.4	580.6	614.1	665.2	799.0
37.5°	558.7	558.7	526.5	505.5	521.8	527.8	587.4	653.1	688.0	743.3	904.5
40°	686.7	684.6	637.6	594.5	592.3	603.9	669.9	744.8	783.3	837.0	1023.3
42.5°	823.3	820.0	755.8	713.3	706.2	710.2	765.4	857.6	896.9	951.3	1151.1
45°	944.5	943.5	884.9	827.6	814.8	827.6	884.4	989.7	1017.8	1075.1	1278.7
47.5°	1046.0	1046.0	1003.2	965.8	959.2	966.8	1045.5	1136.2	1133.5	1206.9	1402.9
50°	1163.0	1161.9	1121.2	1105.2	1112.0	1122.7	1231.1	1290.5	1253.4	1336.4	1513.9
52.5°	1244.8	1250.5	1236.6	1233.9	1268.9	1287.4	1419.4	1441.5	1360.5	1459.2	1596.9
55°	1309.6	1316.3	1332.4	1350.5	1418.0	1442.2	1601.9	1584.6	1450.2	1565.7	1644.7
57.5°	1401.5	1392.1	1416.9	1452.8	1561.9	1591.0	1778.7	1719.7	1522.4	1652.1	1649.9
60°	1512.9	1514.3	1518.6	1564.0	1705.6	1742.9	1952.8	1847.6	1568.8	1705.1	1592.2
62.5°	1646.9	1649.0	1657.7	1727.5	1898.4	1933.7	2138.5	1952.1	1590.1	1690.2	1443.1
65°	1637.6	1646.7	1744.3	1983.2	2191.7	2226.4	2354.9	2025.5	1557.9	1553.9	1175.0
67.5°	1491.9	1506.5	1670.0	2288.4	2633.7	2672.6	2616.7	2040.0	1419.0	1208.4	766.5
70°	1300.6	1305.8	1502.5	2563.0	3145.6	3184.9	2850.9	1881.2	1076.8	674.0	343.4
72.5°	1015.7	1016.9	1247.6	2626.7	3423.4	3425.6	2667.0	1396.5	579.1	258.9	119.3
75°	725.6	718.5	835.6	2130.2	3011.9	3036.0	1999.5	655.1	221.3	122.4	59.4
77.5°	389.1	396.9	472.8	1263.3	2080.6	2121.9	1091.0	188.8	112.6	83.3	39.3
80°	120.2	126.9	193.8	578.4	1178.5	1203.4	404.5	84.0	78.6	59.4	25.8
82.5°	37.8	39.3	90.4	243.0	489.1	500.5	117.2	47.6	53.7	39.3	15.2
85°	10.9	11.2	40.3	90.6	121.0	123.3	32.9	18.4	30.7	24.4	7.8
87.5°	1.2	3.8	15.2	15.2	10.7	10.5	3.6	4.0	8.7	3.1	1.4
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°	468.1	468.1	468.1	468.1	468.1	468.1	468.1	468.1	468.1	468.1	468.1
2.5°	469.0	469.2	466.2	461.0	455.3	450.6	444.6	439.9	436.6	435.7	437.4
5°	472.3	470.7	462.0	446.1	427.1	410.8	392.6	378.2	368.7	364.7	366.1
7.5°	477.3	472.6	453.5	422.2	386.0	353.8	321.1	295.8	279.7	271.7	272.9
10°	481.5	472.1	439.2	387.7	332.3	283.5	239.5	209.0	191.9	183.9	184.1
12.5°	485.6	471.9	420.8	346.7	271.7	212.1	171.1	156.0	151.2	149.5	149.1
15°	493.2	472.6	397.6	299.8	211.4	160.2	145.3	145.0	146.1	145.5	145.3
17.5°	503.6	473.3	371.4	250.1	163.1	141.2	140.5	142.7	144.1	143.4	143.2
20°	517.1	476.1	343.4	200.9	140.1	136.5	138.2	140.1	141.2	140.1	139.9
22.5°	536.0	481.1	312.8	161.4	132.7	133.7	135.1	137.2	138.5	136.8	136.5
25°	559.2	488.9	282.8	140.3	129.3	130.4	132.5	134.9	136.3	134.7	134.4
27.5°	589.3	501.4	255.1	135.6	125.7	126.4	129.5	133.0	134.9	132.7	132.7
30°	632.8	522.0	231.2	137.8	123.5	121.9	126.2	131.1	133.2	131.3	131.1
32.5°	690.5	551.1	216.6	141.0	122.6	116.6	120.7	127.1	130.6	129.5	129.5
35°	766.3	595.4	210.8	144.8	121.9	111.2	114.1	121.0	127.1	128.2	128.2
37.5°	858.1	656.9	212.5	146.5	119.7	106.7	108.1	114.1	122.1	125.9	126.9
40°	962.5	728.7	222.0	144.8	117.4	102.9	103.2	107.7	114.8	120.4	122.4
42.5°	1070.2	812.4	239.5	138.7	115.2	99.6	98.9	102.0	106.7	110.8	112.4
45°	1172.6	898.6	256.8	130.2	112.6	96.4	94.7	95.8	96.8	98.4	99.4
47.5°	1262.1	959.2	251.8	122.4	109.1	92.6	89.7	89.2	86.4	86.1	85.9
50°	1323.9	972.4	223.7	114.5	103.9	88.3	83.7	81.0	76.0	73.6	73.8
52.5°	1343.5	920.1	182.7	106.7	95.3	82.6	76.2	71.8	65.6	63.4	63.1
55°	1317.4	817.6	146.1	97.3	83.5	75.0	68.0	62.0	57.0	54.4	54.4
57.5°	1253.8	687.3	115.5	86.1	71.0	66.5	59.4	53.5	49.2	46.6	46.1
60°	1148.2	545.7	91.3	72.9	60.6	57.3	49.9	46.1	42.3	39.3	38.5
62.5°	988.0	389.5	71.8	57.7	50.6	46.8	42.6	39.8	35.3	31.0	30.3
65°	771.0	238.3	55.4	42.3	40.7	38.8	36.2	33.6	28.2	23.9	23.2
67.5°	486.4	112.9	39.6	32.0	32.2	31.3	30.0	27.9	23.9	20.1	19.7
70°	214.1	54.6	26.0	24.4	23.9	23.9	24.8	24.2	20.4	16.8	16.1
72.5°	72.9	29.3	19.4	18.4	17.3	17.0	20.8	20.1	16.3	13.0	12.3
75°	38.1	19.7	14.2	13.2	10.5	12.5	16.6	15.6	11.6	8.5	7.8
77.5°	24.8	13.9	9.7	8.5	5.9	8.3	12.3	10.9	6.9	4.3	3.8
80°	15.6	9.2	5.6	4.0	2.9	4.5	6.7	4.7	2.6	0.9	0.7
82.5°	8.3	4.7	2.2	1.4	1.2	1.4	1.6	1.2	0.5	0.0	0.0
85°	3.3	1.6	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)