

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: P959241

Luminaire Tested: **NAV-SB1A-727-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959241
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-727-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3345.6 lumens
Efficiency: N/A
Efficacy: 108.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

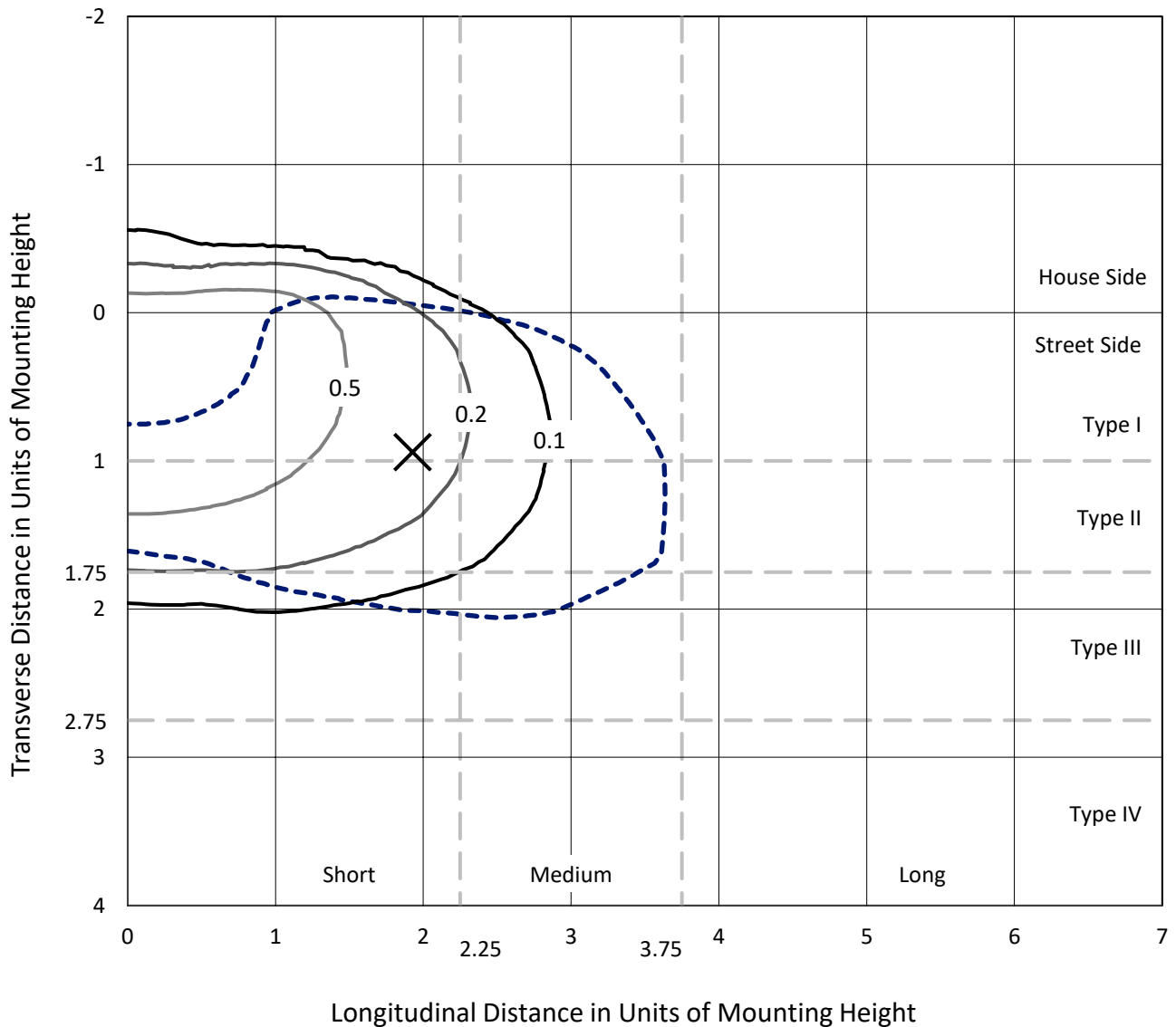
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P959241
 CATALOG NUMBER: NAV-SB1A-727-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

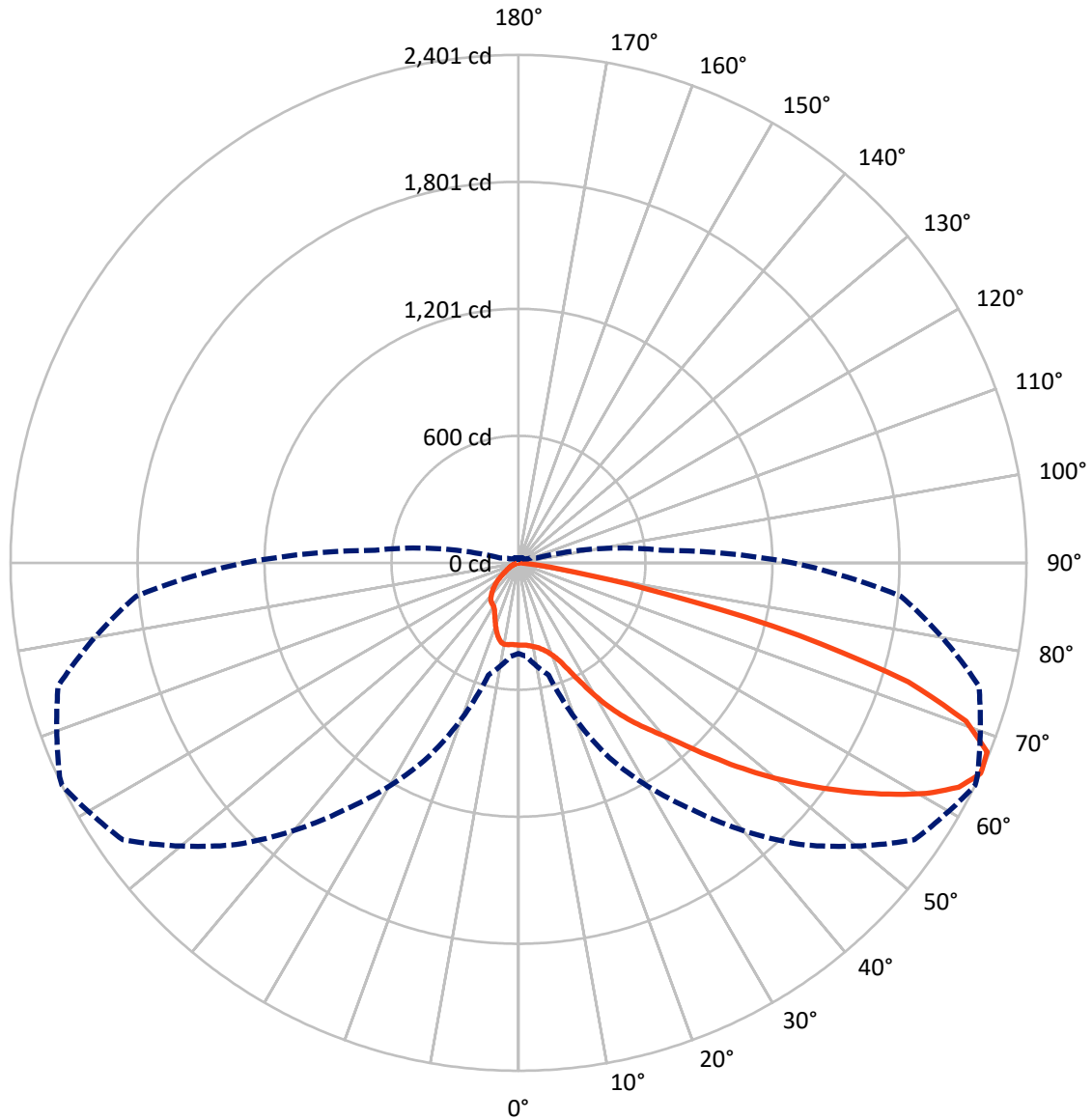
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1 fc
 Type III - Short - N/A

REPORT NUMBER: P959241
CATALOG NUMBER: NAV-SB1A-727-U-T3-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	447.4	0.0	447.4
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	2898.2	0.0	2898.2
	% Fixture	86.6	0.0	86.6
Total	Lumens	3345.6	0.0	3345.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.9	1.1
10°-20°	97.4	2.9
20°-30°	184.5	5.5
30°-40°	373.4	11.2
40°-50°	636.0	19.0
50°-60°	865.0	25.9
60°-70°	812.2	24.3
70°-80°	325.4	9.7
80°-90°	15.8	0.5
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°	3345.6	100.0
0°-180°	3345.6	100.0

Coefficient of Utilization



REPORT NUMBER: P959241

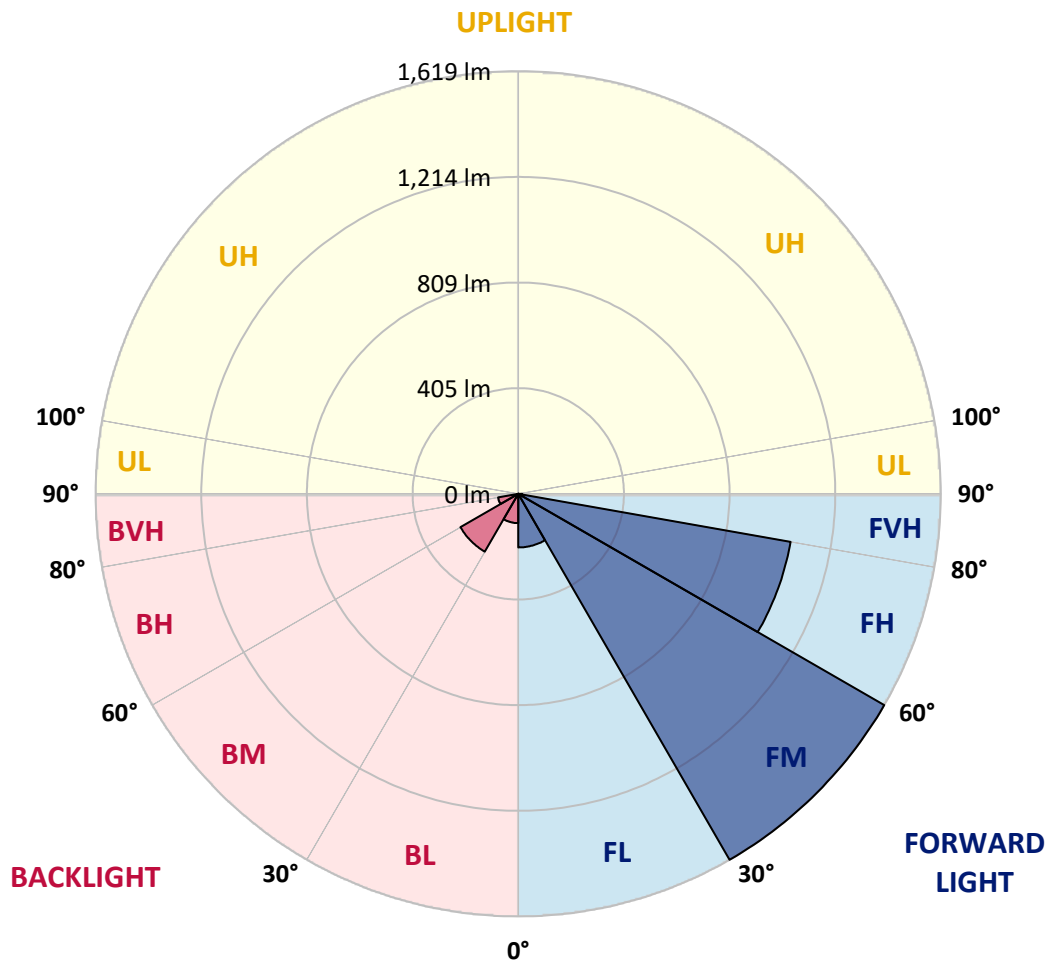
CATALOG NUMBER: NAV-SB1A-727-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	205.5	6.1			
FM (30°-60°)	1618.6	48.4			
FH (60°-80°)	1059.1	31.7			G1/1800
FVH (80°-90°)	15.0	0.4			G1/100
BL (0°-30°)	112.3	3.4	B1/500		
BM (30°-60°)	255.8	7.6	B1/1000		
BH (60°-80°)	78.5	2.3	B0/110		G0/110
BVH (80°-90°)	0.8	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 III Short



REPORT NUMBER: P959241

CATALOG NUMBER: NAV-SB1A-727-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	389.1	389.1	389.1	389.1	389.1	389.1	389.1	389.1	389.1	389.1	389.1
2.5°	387.8	390.4	389.8	389.1	388.9	389.4	389.6	389.4	389.4	389.4	389.6
5°	380.4	382.6	382.6	384.2	386.4	389.1	391.1	391.5	392.1	392.7	392.5
7.5°	366.2	368.1	369.4	374.5	380.2	387.3	393.4	396.6	397.0	399.4	400.4
10°	356.6	358.9	361.1	366.4	374.5	385.3	395.6	403.2	404.4	410.2	412.9
12.5°	356.2	358.4	361.3	367.2	376.6	388.0	400.6	411.5	413.6	422.1	427.7
15°	360.9	363.6	366.2	373.4	383.6	397.4	410.9	424.6	426.6	438.7	444.7
17.5°	370.5	374.1	376.1	383.2	394.1	409.5	427.2	443.0	444.7	458.9	466.5
20°	389.6	393.8	394.5	400.4	410.9	427.5	448.5	468.1	470.3	486.5	495.0
22.5°	429.1	435.1	429.7	432.7	442.1	458.7	481.5	506.2	509.3	527.8	535.4
25°	498.6	507.1	493.2	488.3	492.3	509.5	538.2	569.5	573.1	587.8	591.6
27.5°	635.2	624.2	603.1	582.5	570.3	580.3	612.5	651.1	655.6	669.9	665.4
30°	785.3	775.5	747.1	701.3	672.6	671.1	700.9	743.9	749.1	762.8	749.1
32.5°	935.5	926.3	895.3	839.1	789.2	764.5	785.3	833.0	835.7	844.4	824.2
35°	1083.3	1073.9	1042.9	985.2	924.0	868.0	864.0	917.8	918.6	927.8	897.8
37.5°	1231.9	1224.2	1191.2	1134.7	1074.3	996.9	959.5	998.0	999.2	1008.2	976.9
40°	1338.0	1341.4	1318.8	1275.0	1223.2	1138.7	1066.7	1083.5	1076.8	1091.8	1073.2
42.5°	1429.2	1435.8	1416.1	1394.1	1364.1	1289.7	1199.5	1196.6	1185.8	1193.8	1174.5
45°	1507.9	1513.4	1495.8	1490.6	1489.9	1437.7	1344.6	1327.1	1312.0	1310.5	1287.4
47.5°	1536.8	1547.5	1555.1	1572.5	1606.1	1584.1	1494.7	1467.5	1450.7	1438.3	1401.8
50°	1547.7	1559.2	1585.3	1635.5	1715.0	1724.5	1644.0	1613.5	1592.8	1570.4	1516.6
52.5°	1533.0	1553.4	1588.3	1672.9	1788.4	1837.1	1787.3	1760.6	1737.1	1700.5	1620.6
55°	1445.8	1466.2	1537.7	1672.5	1825.0	1916.0	1922.8	1910.9	1884.5	1826.8	1704.8
57.5°	1261.8	1292.1	1405.4	1615.5	1824.3	1984.0	2055.5	2064.0	2034.4	1951.9	1770.9
60°	1007.1	1048.1	1186.2	1489.2	1768.0	2020.8	2172.0	2214.5	2183.1	2075.3	1824.5
62.5°	702.6	750.2	881.0	1291.4	1639.3	1994.3	2256.9	2335.7	2311.9	2185.6	1845.2
65°	428.6	443.8	549.3	1016.2	1420.3	1883.5	2283.2	2401.2	2393.3	2253.2	1814.7
67.5°	285.5	298.3	328.6	696.8	1102.6	1662.1	2220.4	2389.7	2391.9	2242.2	1702.9
70°	172.0	183.0	202.7	405.3	714.5	1315.6	2025.9	2243.9	2256.9	2095.2	1491.3
72.5°	70.8	78.3	96.2	183.7	370.0	835.0	1613.2	1926.6	1956.8	1761.8	1144.5
75°	40.2	44.0	56.5	92.1	160.6	389.1	977.2	1367.7	1412.3	1214.2	688.5
77.5°	26.6	28.5	36.6	59.7	90.4	132.7	417.6	712.6	797.8	663.2	298.1
80°	17.9	19.5	25.1	39.9	58.7	57.0	133.0	263.9	324.7	227.9	72.7
82.5°	12.1	12.3	17.9	26.2	37.2	27.6	39.3	82.1	103.2	65.9	27.6
85°	7.0	6.8	13.2	15.3	16.6	11.5	11.9	24.7	32.3	27.8	15.7
87.5°	0.9	1.3	5.1	4.0	2.3	2.5	2.5	4.3	6.3	6.8	3.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P959241
 CATALOG NUMBER: NAV-SB1A-727-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	389.1	389.1	389.1	389.1	389.1	389.1	389.1	389.1	389.1	389.1	389.1
2.5°	389.6	389.4	388.7	388.0	386.4	385.5	386.0	385.5	385.3	385.5	386.4
5°	392.5	391.9	390.0	387.8	384.7	380.8	378.3	374.7	371.5	369.4	369.8
7.5°	400.4	399.6	397.2	390.9	380.8	364.9	350.3	337.5	327.9	322.3	322.6
10°	412.9	411.7	408.0	394.1	367.6	332.8	303.9	279.9	264.2	256.8	256.1
12.5°	427.7	426.4	419.6	391.1	342.5	288.2	248.3	221.6	207.0	200.5	199.9
15°	445.2	443.4	430.2	377.2	306.0	238.8	202.3	182.3	172.9	167.1	167.3
17.5°	467.0	463.8	438.0	356.4	266.2	201.2	174.0	159.0	150.7	145.1	144.6
20°	495.2	490.1	444.3	331.5	229.7	177.4	155.0	142.4	136.1	131.2	130.3
22.5°	534.6	527.3	451.9	304.5	203.9	161.0	140.8	131.6	126.5	120.8	120.0
25°	583.5	574.8	461.4	279.7	186.1	146.9	130.5	122.9	116.8	110.4	109.7
27.5°	652.0	636.3	472.5	259.2	170.9	134.8	121.2	112.5	105.7	100.2	99.1
30°	728.3	702.4	482.5	246.9	157.0	123.6	108.8	100.2	93.8	89.9	89.3
32.5°	800.4	765.5	488.9	241.6	144.4	110.8	95.3	86.1	81.2	80.1	80.8
35°	868.7	822.5	488.3	236.4	133.2	98.0	82.1	72.7	68.9	69.5	69.5
37.5°	947.1	883.2	483.6	228.3	124.0	86.3	70.6	62.3	58.9	59.2	60.1
40°	1038.4	953.5	480.6	213.1	114.0	75.5	61.2	54.5	52.1	51.1	50.9
42.5°	1135.8	1021.4	481.0	195.8	101.4	65.9	54.7	49.1	46.8	46.2	46.0
45°	1233.6	1086.2	481.7	177.8	88.1	58.5	50.0	45.3	44.0	43.0	43.0
47.5°	1325.5	1141.3	469.2	158.6	75.1	52.9	46.2	43.0	41.9	40.8	40.8
50°	1411.2	1178.1	438.9	136.1	64.8	48.5	43.3	41.0	39.9	38.8	38.8
52.5°	1477.7	1184.0	388.9	113.1	57.6	45.1	41.5	39.5	38.1	37.0	36.8
55°	1507.4	1147.4	317.9	91.5	52.1	42.1	39.7	37.7	36.1	35.0	34.7
57.5°	1499.8	1070.5	247.8	73.6	46.6	39.3	37.4	36.1	34.3	32.5	32.3
60°	1462.3	967.6	186.9	61.2	41.7	36.1	35.0	33.8	31.4	28.7	28.3
62.5°	1397.5	838.1	133.2	50.7	36.3	32.5	32.1	31.2	27.6	22.7	22.2
65°	1298.4	680.9	89.7	42.1	31.2	28.5	28.7	27.2	22.4	16.8	16.4
67.5°	1153.4	497.9	57.4	34.5	26.0	23.8	24.0	23.1	19.1	14.3	13.6
70°	968.9	329.7	37.4	26.2	20.8	18.3	19.8	20.0	16.2	11.7	11.2
72.5°	710.3	194.6	26.2	19.5	15.3	12.8	16.2	16.6	13.0	8.7	8.3
75°	404.9	92.5	19.8	14.1	9.4	9.0	12.6	12.6	9.0	5.8	5.4
77.5°	170.0	38.5	13.9	9.2	5.4	5.1	8.5	7.9	4.5	2.7	2.7
80°	49.1	17.2	7.4	4.5	2.3	2.0	3.4	2.5	1.1	0.4	0.4
82.5°	19.3	7.6	2.9	1.8	0.9	0.9	0.4	0.0	0.0	0.0	0.0
85°	11.5	3.2	1.3	0.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.9	0.7	0.4	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)