

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: P959309

Luminaire Tested: **NAV-SB1A-735-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959309
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-735-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV WIDE OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3542.4 lumens
Efficiency: N/A
Efficacy: 114.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B0 - U0 - G1

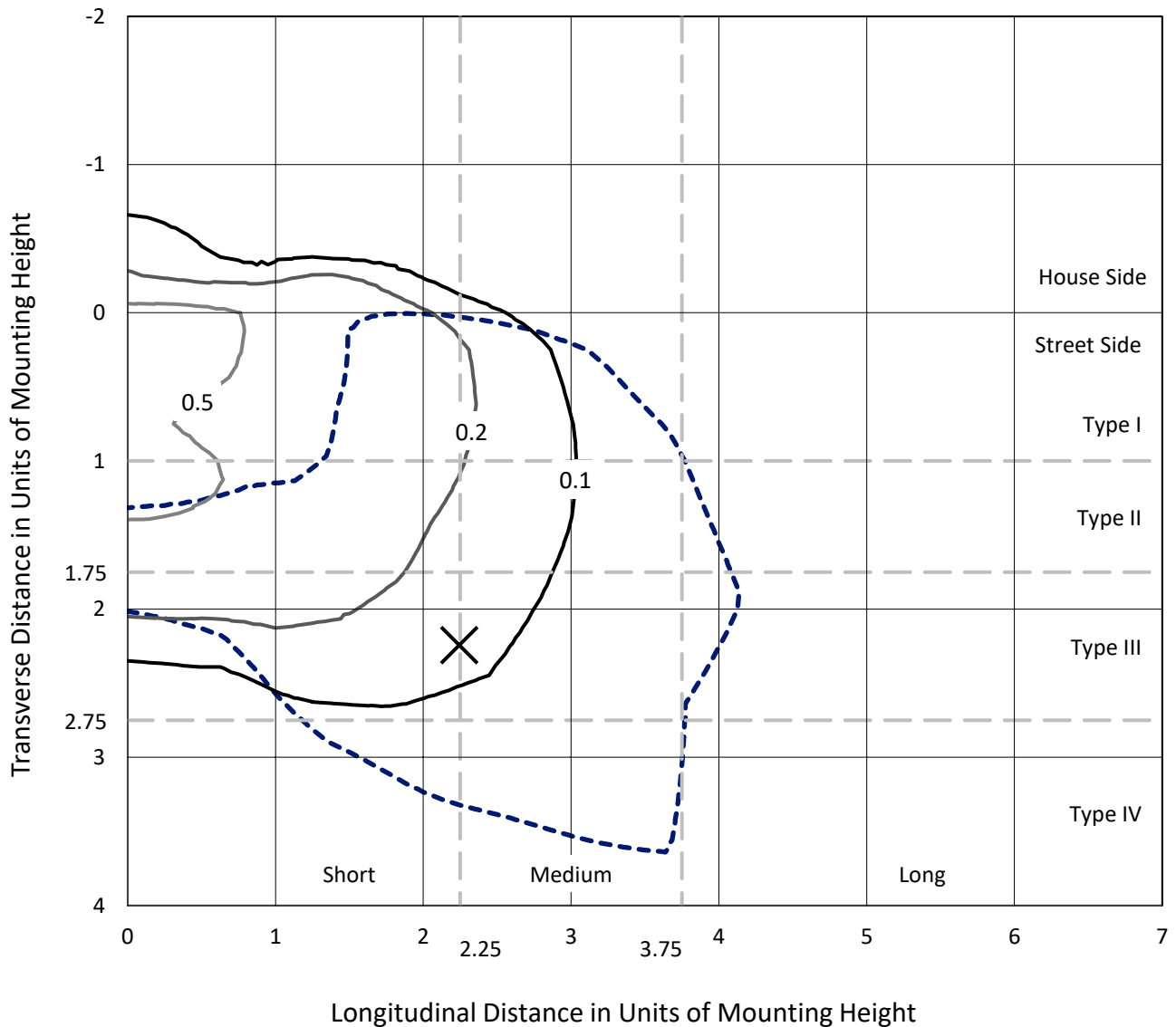
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P959309
 CATALOG NUMBER: NAV-SB1A-735-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

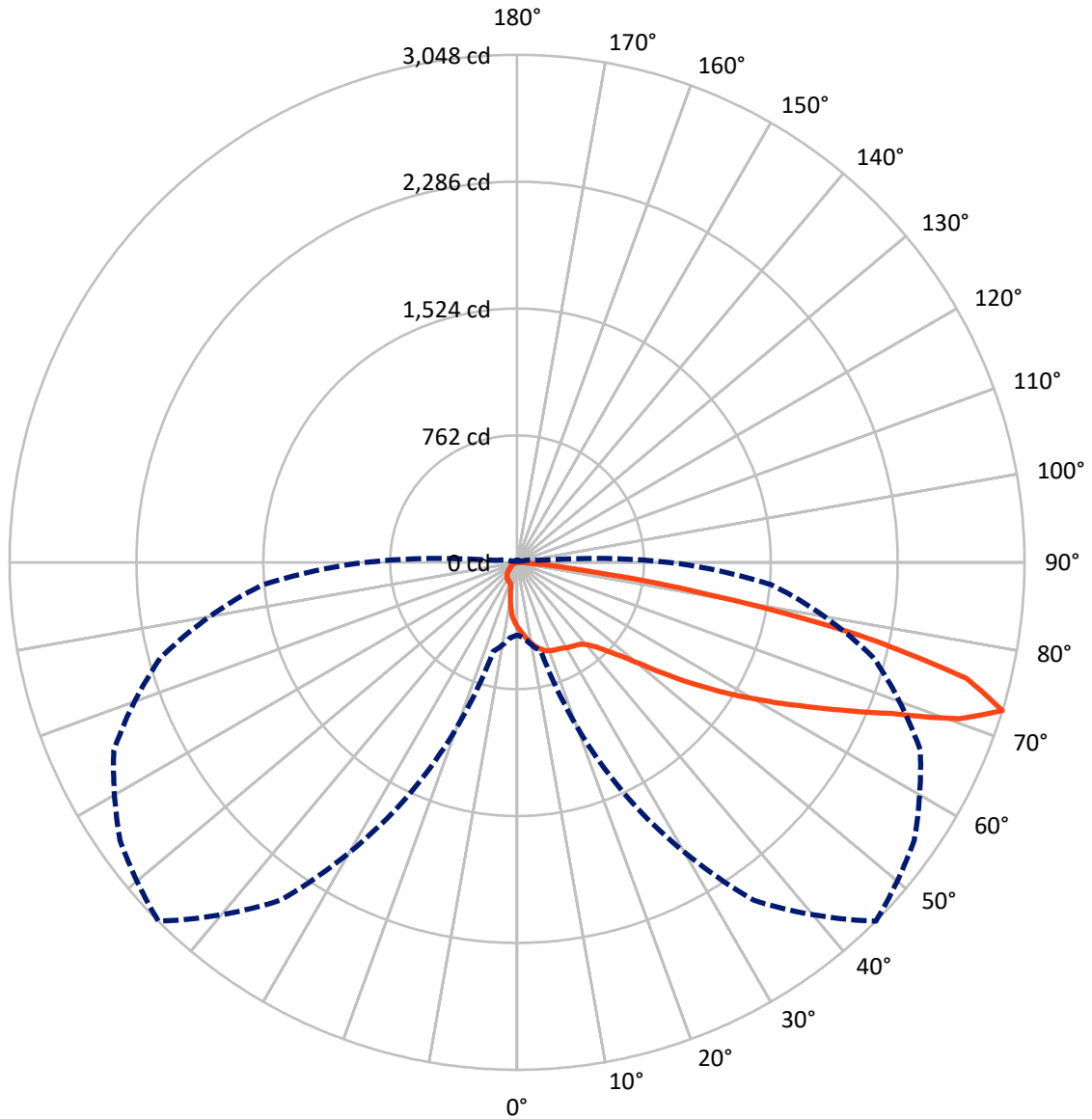
× Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P959309
CATALOG NUMBER: NAV-SB1A-735-U-T4W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P959309
 CATALOG NUMBER: NAV-SB1A-735-U-T4W-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	372.2	0.0	372.2
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	3170.2	0.0	3170.2
	% Fixture	89.5	0.0	89.5
Total	Lumens	3542.4	0.0	3542.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.6	1.0
10°-20°	106.9	3.0
20°-30°	175.5	5.0
30°-40°	248.9	7.0
40°-50°	411.4	11.6
50°-60°	739.0	20.9
60°-70°	1026.1	29.0
70°-80°	744.3	21.0
80°-90°	53.8	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°	3542.4	100.0
0°-180°	3542.4	100.0

Coefficient of Utilization



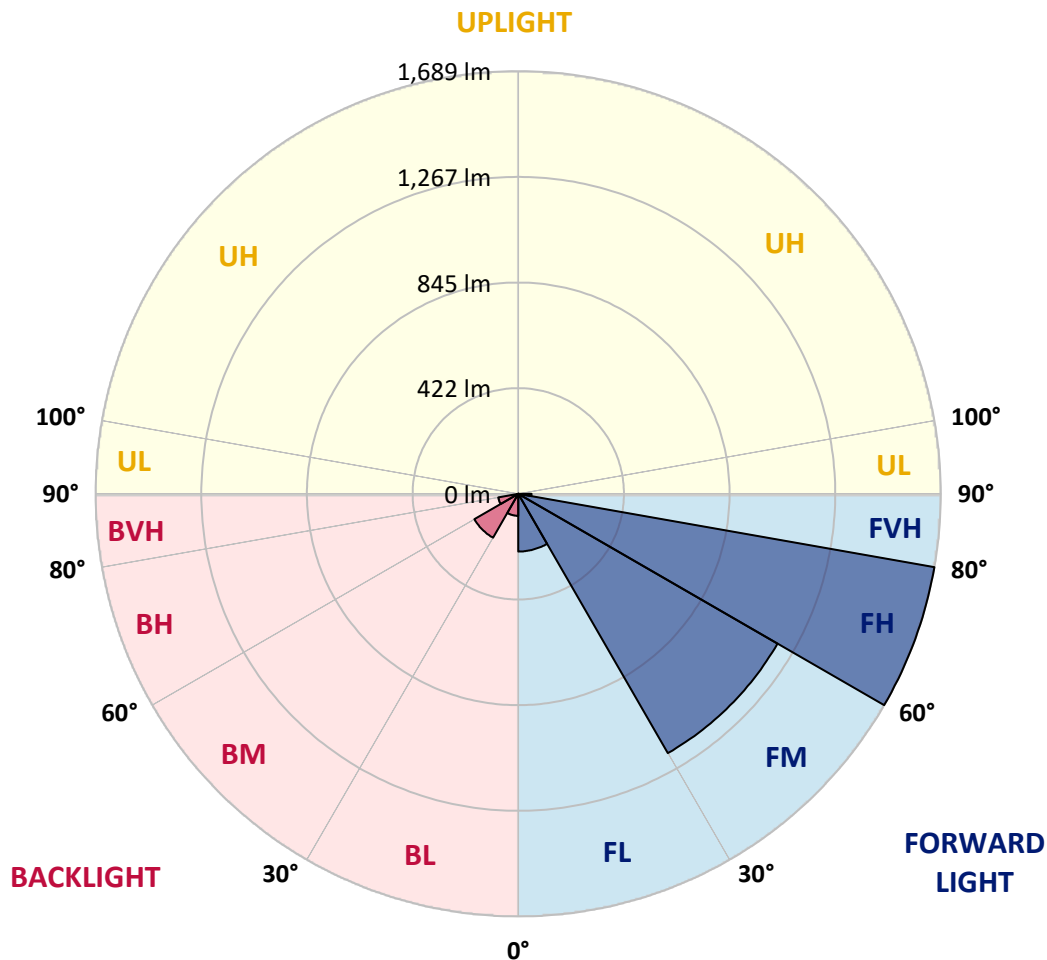
REPORT NUMBER: P959309
 CATALOG NUMBER: NAV-SB1A-735-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	230.8	6.5			
FM (30°-60°)	1196.8	33.8			
FH (60°-80°)	1689.3	47.7			G1/1800
FVH (80°-90°)	53.4	1.5			G1/100
BL (0°-30°)	88.2	2.5	B0/110		
BM (30°-60°)	202.4	5.7	B0/220		
BH (60°-80°)	81.2	2.3	B0/110		G0/110
BVH (80°-90°)	0.4	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 IV Short



REPORT NUMBER: P959309
 CATALOG NUMBER: NAV-SB1A-735-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	388.1	388.1	388.1	388.1	388.1	388.1	388.1	388.1	388.1	388.1	388.1
2.5°	423.8	424.6	424.1	421.2	416.4	413.7	412.3	407.4	404.3	398.7	392.9
5°	462.8	465.7	464.0	458.2	449.1	442.5	440.5	430.6	421.7	411.3	399.2
7.5°	504.1	505.6	502.5	495.0	482.6	471.5	469.8	456.0	441.8	425.8	409.4
10°	540.0	541.6	536.8	525.9	511.9	498.0	495.7	480.4	463.5	443.9	422.9
12.5°	569.9	571.6	565.3	552.3	536.8	522.5	520.1	504.1	485.5	463.7	437.7
15°	592.7	595.7	587.3	573.3	556.6	542.3	541.1	525.4	507.3	483.1	455.3
17.5°	606.0	609.1	601.1	584.1	569.9	557.8	556.4	543.4	526.3	503.2	472.4
20°	608.1	611.0	602.6	587.8	575.9	566.3	565.6	556.2	543.8	521.5	491.1
22.5°	601.6	605.2	597.5	585.6	577.4	572.4	571.3	566.0	559.0	540.2	508.5
25°	594.8	597.7	591.9	581.5	577.2	576.7	577.4	576.5	575.0	559.0	528.8
27.5°	594.3	597.5	590.9	581.1	578.6	583.7	584.5	589.0	590.2	576.2	548.4
30°	598.4	600.6	594.3	583.9	582.7	594.3	594.6	602.8	604.8	590.7	567.7
32.5°	607.4	609.8	603.5	588.2	586.6	602.8	603.5	614.4	617.6	606.2	588.0
35°	628.4	631.3	624.0	600.3	594.3	610.8	612.9	625.8	632.0	622.6	609.1
37.5°	680.9	672.4	662.6	624.8	612.0	623.3	627.0	642.0	653.1	642.2	634.3
40°	811.2	784.6	753.7	666.4	642.9	650.2	653.1	668.1	683.3	672.7	668.8
42.5°	1006.9	975.4	925.6	762.1	689.6	693.2	695.4	708.5	730.0	721.5	722.5
45°	1181.1	1169.8	1119.0	925.6	776.8	759.0	761.7	768.4	800.1	796.9	803.2
47.5°	1315.1	1308.6	1269.5	1113.3	924.3	839.5	847.0	850.1	895.8	906.9	923.9
50°	1418.1	1415.7	1380.7	1280.0	1117.0	958.3	960.8	954.1	1022.5	1050.1	1082.3
52.5°	1515.4	1523.6	1497.6	1435.0	1322.9	1113.7	1113.3	1081.3	1173.6	1215.2	1270.2
55°	1603.1	1606.0	1608.6	1593.2	1529.8	1290.7	1286.1	1233.9	1349.0	1391.9	1451.5
57.5°	1685.5	1686.7	1710.4	1742.1	1745.3	1480.7	1472.3	1409.7	1540.5	1571.1	1607.7
60°	1740.9	1746.5	1796.5	1884.6	1923.0	1676.8	1672.3	1608.4	1735.3	1749.6	1742.8
62.5°	1661.1	1694.9	1821.2	1995.8	2090.8	1894.2	1892.0	1832.1	1940.4	1928.7	1870.7
65°	1344.6	1401.9	1623.9	2070.9	2255.4	2136.9	2140.1	2076.2	2151.0	2113.2	1974.8
67.5°	940.5	1001.0	1263.6	2077.0	2439.4	2422.1	2440.2	2340.1	2374.6	2290.1	1999.4
70°	650.5	681.6	852.6	1946.9	2582.8	2814.8	2814.2	2664.1	2597.1	2370.5	1873.7
72.5°	437.4	453.6	553.7	1544.6	2477.4	3048.0	3034.0	2911.7	2672.1	2217.0	1530.8
75°	184.5	196.3	256.2	868.1	1960.0	2788.6	2750.6	2573.2	2374.2	1745.8	955.1
77.5°	58.5	63.6	101.1	310.7	1079.6	2096.1	2055.9	1607.0	1591.2	875.8	349.1
80°	27.8	32.4	56.8	124.7	424.9	1140.0	1134.5	729.0	684.5	236.5	70.1
82.5°	12.1	14.2	31.5	66.7	190.0	406.7	414.9	248.0	205.3	89.7	21.5
85°	3.9	5.1	14.6	30.7	80.3	101.1	99.8	59.0	82.7	48.9	7.5
87.5°	0.0	0.0	4.8	7.0	8.2	5.8	6.6	5.1	23.0	13.5	2.7
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: P959309
 CATALOG NUMBER: NAV-SB1A-735-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	388.1	388.1	388.1	388.1	388.1	388.1	388.1	388.1	388.1	388.1	388.1
2.5°	390.0	386.1	379.4	373.1	367.6	361.9	358.5	353.7	353.2	353.2	354.4
5°	392.7	386.4	374.3	361.5	346.8	332.7	318.7	305.1	300.8	297.7	299.1
7.5°	400.4	390.5	371.4	347.0	318.9	288.2	266.7	243.4	234.5	229.7	230.4
10°	411.5	398.0	369.0	326.2	280.7	238.9	208.2	183.1	173.3	169.2	169.2
12.5°	423.8	407.1	364.6	300.3	238.9	188.8	158.9	147.3	145.8	145.8	145.8
15°	438.6	418.3	357.1	269.9	195.2	149.4	138.8	139.3	140.7	141.7	141.7
17.5°	453.9	430.2	345.3	235.7	156.4	134.5	134.7	135.4	136.6	137.6	137.6
20°	470.3	442.0	329.5	199.5	134.2	130.1	130.8	131.5	132.5	132.9	133.2
22.5°	487.9	453.2	311.0	163.9	126.7	126.5	126.7	127.4	128.6	128.6	129.1
25°	506.8	465.5	289.7	138.1	122.8	122.8	123.3	123.8	124.7	124.7	125.0
27.5°	526.1	476.8	267.2	124.5	119.4	119.2	119.2	119.9	120.4	120.6	120.8
30°	547.5	490.2	244.7	121.7	116.7	115.6	114.9	115.3	115.8	116.0	116.5
32.5°	569.2	503.0	224.6	122.8	114.1	111.9	109.6	109.1	109.1	110.0	110.7
35°	593.4	516.9	209.1	126.9	112.6	106.6	102.8	100.6	100.9	102.3	103.0
37.5°	622.4	533.9	197.8	130.6	111.7	100.6	94.3	91.6	90.0	91.6	91.1
40°	660.3	558.8	189.5	133.5	110.5	93.6	85.1	80.8	77.6	78.6	78.1
42.5°	716.2	598.0	186.4	133.8	107.8	85.4	75.6	69.9	65.3	65.5	64.6
45°	794.6	659.9	202.6	130.6	102.0	76.4	65.8	58.0	55.1	54.4	53.4
47.5°	901.9	750.0	240.1	124.0	93.6	67.8	56.1	49.6	47.4	46.2	45.4
50°	1045.7	865.8	281.7	116.7	85.1	59.4	48.1	44.0	42.5	41.3	41.1
52.5°	1212.6	983.4	315.8	109.6	76.7	52.3	43.0	40.6	39.5	38.4	38.2
55°	1365.6	1064.4	313.9	101.8	68.5	46.4	39.5	37.9	36.5	35.6	35.1
57.5°	1460.9	1075.7	258.7	93.4	59.0	41.8	36.0	35.1	33.4	32.2	31.9
60°	1504.7	1011.0	181.3	82.2	49.6	37.5	32.4	31.9	29.7	28.1	27.6
62.5°	1512.7	890.5	120.8	68.5	41.3	33.4	28.8	28.1	25.1	22.2	20.8
65°	1480.3	718.3	83.6	53.4	35.3	29.0	24.7	23.2	20.1	17.1	16.2
67.5°	1377.7	504.4	58.3	38.4	30.0	23.0	19.6	19.1	16.7	14.2	13.5
70°	1189.8	287.5	38.9	28.8	23.7	15.7	15.5	16.0	13.5	11.6	10.7
72.5°	912.2	131.5	24.2	21.0	16.2	10.7	12.3	12.6	10.4	8.7	7.7
75°	537.0	56.4	15.3	13.5	8.2	7.0	8.9	9.2	7.0	5.5	4.8
77.5°	182.8	21.3	9.6	8.0	4.1	3.9	5.8	5.8	3.9	2.2	1.7
80°	41.6	8.0	4.8	3.2	1.9	1.7	1.9	1.7	0.9	0.2	0.0
82.5°	11.9	3.2	1.9	1.2	0.7	0.7	0.2	0.0	0.0	0.0	0.0
85°	3.4	1.4	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.4	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)