

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: P959297

Luminaire Tested: **NAV-SB1A-735-U-T2-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P959297  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1A-735-U-T2-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 3500K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS WITH  
HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3358.9 lumens  
Efficiency: N/A  
Efficacy: 108.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G1

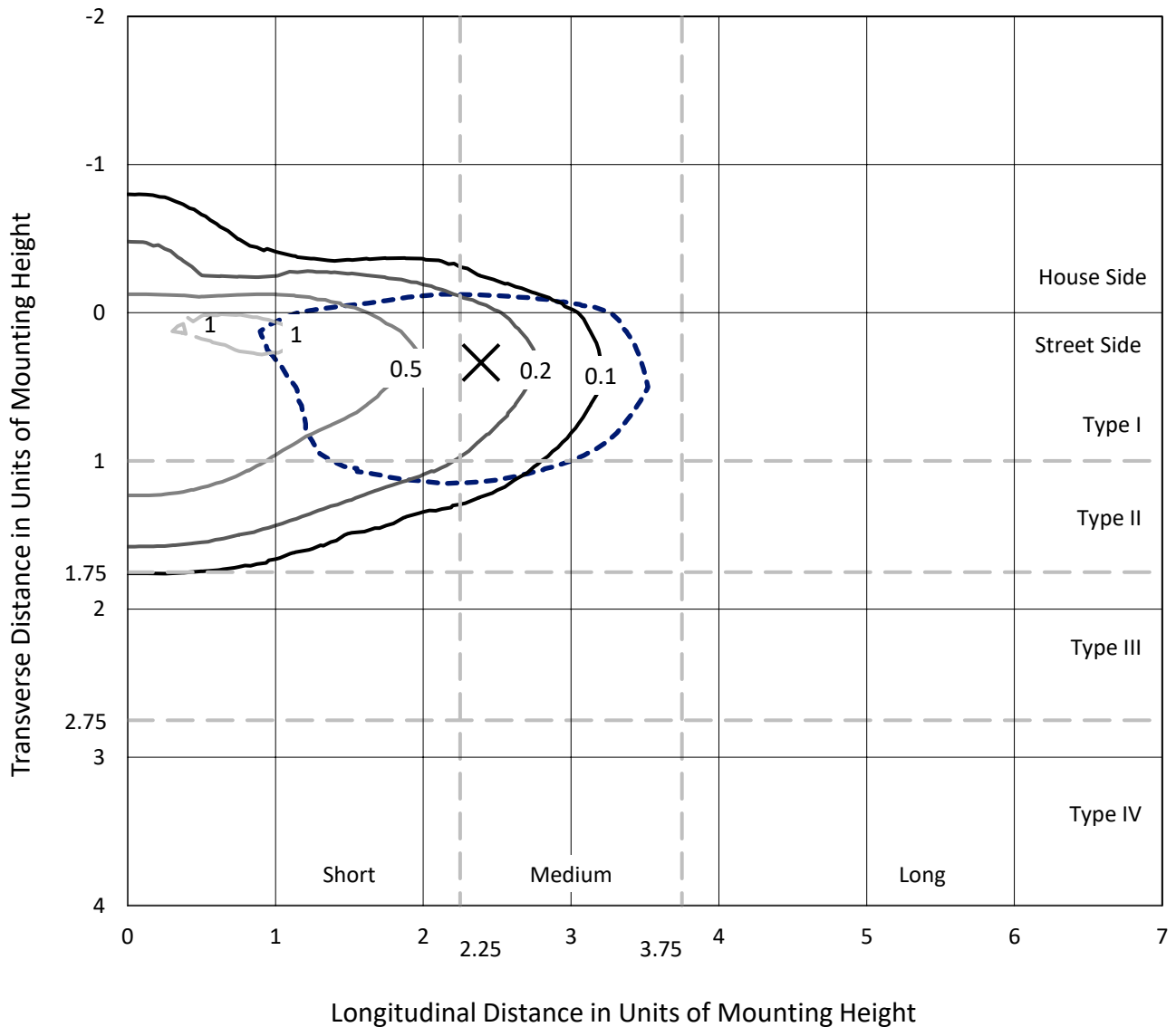
Input Watts (W): 30.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

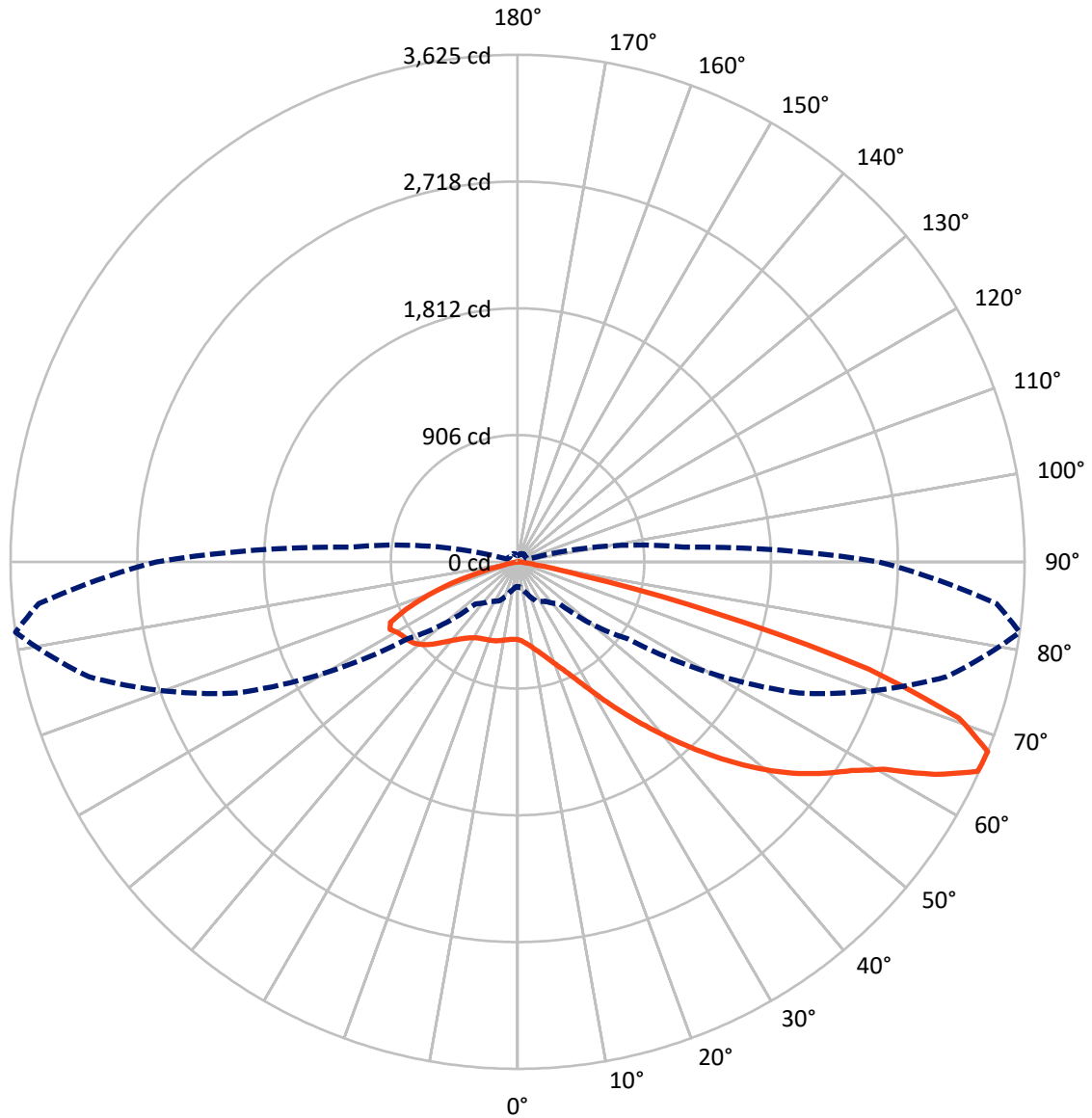
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	608.4	0.0	608.4
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	2750.5	0.0	2750.5
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	3358.9	0.0	3358.9
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.6	1.5
10°-20°	128.8	3.8
20°-30°	206.3	6.1
30°-40°	364.9	10.9
40°-50°	639.3	19.0
50°-60°	852.6	25.4
60°-70°	793.8	23.6
70°-80°	304.6	9.1
80°-90°	18.9	0.6
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°	3358.9	100.0
0°-180°	3358.9	100.0

**Coefficient of Utilization**



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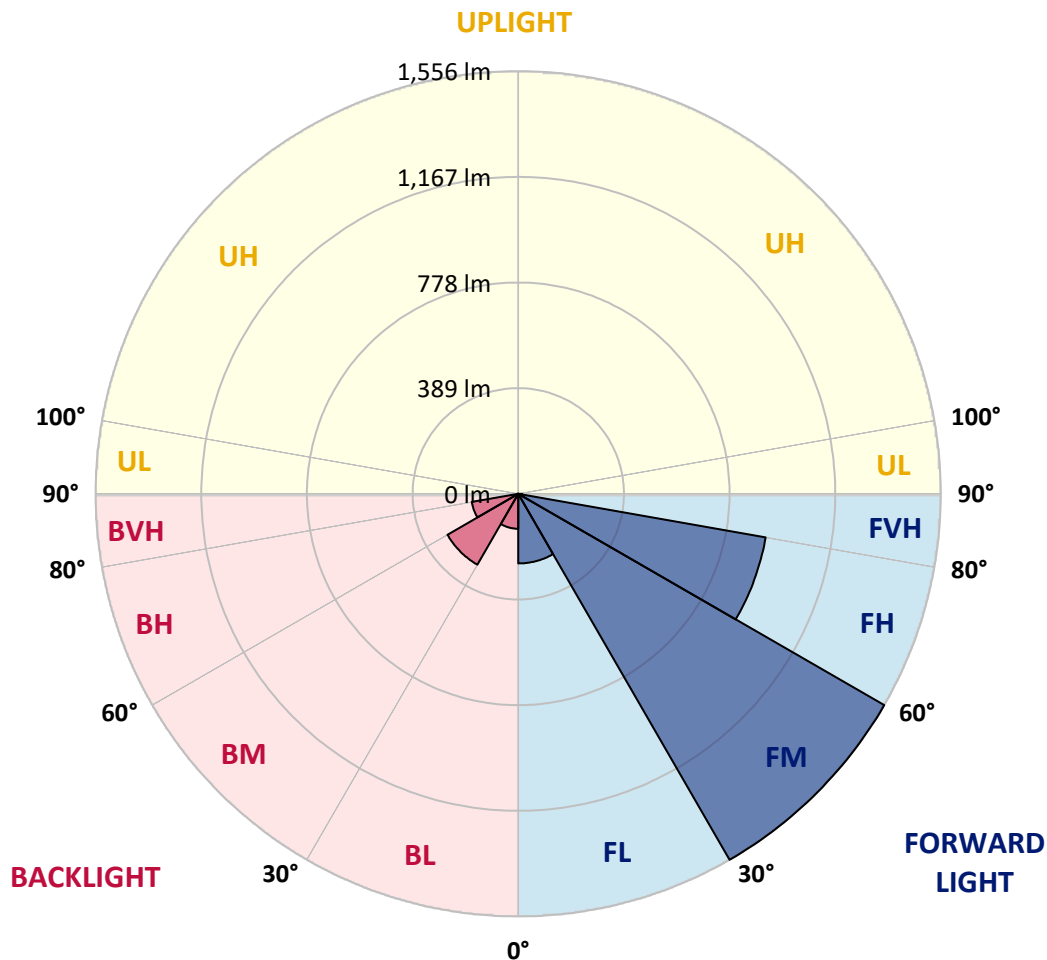
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	256.2	7.6			
FM (30°-60°)	1555.7	46.3			
FH (60°-80°)	924.8	27.5			G1/1800
FVH (80°-90°)	13.8	0.4			G1/100
BL (0°-30°)	128.5	3.8	B1/500		
BM (30°-60°)	301.1	9.0	B1/1000		
BH (60°-80°)	173.7	5.2	B1/500		G1/500
BVH (80°-90°)	5.2	0.2			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 II Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	556.5	556.5	556.5	556.5	556.5	556.5	556.5	556.5	556.5	556.5	556.5
2.5°	588.1	591.5	589.6	588.7	586.9	584.6	582.6	576.6	570.2	566.1	564.7
5°	600.0	603.4	603.1	604.1	605.3	606.1	605.6	598.8	589.8	582.8	578.7
7.5°	589.8	593.7	596.9	601.7	610.2	619.1	623.4	622.0	612.8	603.1	598.1
10°	561.1	565.2	572.7	584.0	601.9	621.3	637.4	644.9	639.2	628.5	621.6
12.5°	508.3	512.4	527.2	551.9	581.9	615.5	646.5	666.5	668.0	657.3	649.1
15°	449.1	453.2	468.9	499.9	545.6	599.5	651.3	689.2	702.0	692.9	683.0
17.5°	412.4	415.9	427.8	452.7	500.4	567.5	649.5	713.4	742.7	735.4	723.5
20°	401.2	404.4	409.9	427.3	467.0	534.4	638.5	736.2	786.5	782.4	769.1
22.5°	413.1	415.9	417.7	425.4	450.3	512.7	624.4	759.3	837.2	837.7	821.5
25°	440.3	443.3	441.4	446.2	457.0	505.9	619.1	786.7	901.1	906.4	888.1
27.5°	485.3	485.6	481.0	480.7	482.5	516.1	624.6	815.9	981.6	991.5	968.8
30°	575.5	571.9	554.3	535.2	526.4	546.5	640.1	850.5	1076.7	1094.3	1065.8
32.5°	714.6	709.3	676.9	631.2	585.3	595.6	668.0	889.9	1180.2	1212.1	1177.2
35°	865.5	864.1	830.2	762.3	681.9	665.5	713.2	941.7	1293.0	1343.9	1302.5
37.5°	1005.8	1005.0	985.7	905.7	808.0	763.0	785.8	1009.4	1414.0	1487.5	1438.7
40°	1134.0	1136.1	1116.8	1045.2	946.8	888.1	884.4	1093.1	1548.5	1644.0	1586.0
42.5°	1244.8	1247.1	1227.5	1174.5	1083.9	1026.3	1005.5	1195.7	1679.8	1812.1	1743.4
45°	1319.9	1335.0	1332.0	1289.7	1224.7	1164.9	1151.2	1324.3	1829.5	1990.3	1909.8
47.5°	1341.2	1354.9	1376.8	1382.5	1343.0	1284.1	1300.6	1479.3	1980.8	2168.8	2077.2
50°	1288.7	1301.5	1346.7	1407.0	1434.6	1416.4	1446.0	1645.4	2135.9	2346.7	2241.4
52.5°	1185.2	1198.3	1255.3	1350.6	1463.1	1520.2	1591.7	1809.1	2286.1	2515.4	2396.9
55°	1035.6	1049.3	1122.6	1230.4	1408.7	1563.0	1713.4	1972.6	2423.6	2666.9	2537.1
57.5°	831.9	842.0	918.2	1069.2	1271.8	1520.4	1803.1	2151.1	2553.3	2815.9	2676.2
60°	542.2	551.1	639.6	808.0	1045.0	1378.2	1821.0	2350.1	2725.5	3009.6	2863.5
62.5°	360.6	366.6	419.1	542.6	735.9	1105.2	1716.3	2509.0	2977.9	3346.7	3185.0
65°	247.4	253.5	306.0	392.1	475.4	731.0	1415.2	2488.0	3206.7	3614.5	3423.2
67.5°	176.5	181.6	226.1	307.4	344.1	424.7	959.4	2219.0	3173.8	3624.6	3436.0
70°	126.5	129.4	166.2	239.4	273.5	255.1	533.5	1697.2	2778.9	3346.9	3174.3
72.5°	88.6	89.5	115.3	182.3	220.3	186.2	253.9	1131.5	2101.8	2627.1	2460.9
75°	60.0	61.2	77.6	133.8	176.8	142.2	134.5	606.8	1233.8	1454.2	1303.5
77.5°	36.8	37.2	50.0	91.4	132.3	108.3	86.6	257.1	477.3	468.6	399.5
80°	20.8	20.8	31.9	56.8	90.2	69.9	60.7	109.3	151.2	132.7	117.1
82.5°	11.6	11.9	23.2	35.3	59.8	41.3	33.4	50.5	65.3	57.8	50.3
85°	4.8	5.3	14.2	16.7	28.5	20.6	13.5	21.3	24.2	21.5	15.7
87.5°	0.5	0.7	4.3	3.2	3.4	4.1	1.9	4.1	3.4	3.4	2.5
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°	556.5	556.5	556.5	556.5	556.5	556.5	556.5	556.5	556.5	556.5	556.5
2.5°	560.1	556.5	547.2	536.6	522.6	515.9	506.7	500.4	495.1	495.5	490.7
5°	570.9	561.8	541.2	515.6	483.7	460.9	436.8	420.0	406.5	403.6	397.1
7.5°	586.0	571.4	535.5	489.2	435.3	394.4	357.9	334.5	317.8	312.4	307.1
10°	605.3	584.2	527.9	456.1	378.4	326.5	287.3	269.0	257.6	253.7	250.8
12.5°	627.8	599.0	518.0	415.7	319.9	269.9	245.0	235.7	232.2	230.9	230.2
15°	656.1	617.4	503.0	367.9	270.4	235.3	224.7	223.4	224.0	223.4	223.2
17.5°	689.7	637.4	478.6	318.5	237.0	217.6	213.8	214.7	216.0	215.8	215.2
20°	726.5	657.3	447.4	274.7	214.2	205.1	203.0	203.9	204.8	204.4	204.1
22.5°	768.3	678.6	412.8	240.7	199.1	193.4	191.1	191.3	191.3	190.3	189.8
25°	818.4	702.0	376.6	216.5	187.5	183.1	180.2	179.2	177.7	174.9	174.4
27.5°	878.1	726.9	341.7	199.5	178.2	174.1	170.8	168.3	164.7	159.9	159.4
30°	945.4	757.2	312.2	188.9	171.0	166.9	163.0	159.4	154.1	148.0	147.5
32.5°	1024.4	789.6	290.7	181.8	164.4	160.1	155.5	151.2	145.3	139.3	139.5
35°	1118.7	828.8	278.1	177.0	159.4	153.5	148.5	143.6	139.3	134.0	133.5
37.5°	1221.0	870.3	274.3	174.6	156.0	147.0	141.2	137.9	137.4	134.2	134.0
40°	1333.0	919.7	277.2	173.1	152.3	140.7	134.5	133.8	135.0	129.4	129.7
42.5°	1451.5	978.3	282.0	171.5	147.3	134.5	128.4	128.4	127.4	119.7	119.7
45°	1579.6	1045.7	286.8	167.4	141.2	128.1	123.6	121.9	117.8	110.3	110.1
47.5°	1708.8	1114.4	290.5	159.9	134.0	122.9	118.7	114.9	108.9	102.1	101.8
50°	1831.4	1176.1	286.6	148.7	125.8	117.8	113.5	108.1	101.6	97.0	96.2
52.5°	1940.9	1229.5	270.1	135.7	117.1	112.4	108.5	103.0	97.7	92.9	92.4
55°	2036.3	1272.7	241.1	123.3	109.3	107.8	104.0	97.0	89.7	85.6	85.1
57.5°	2127.7	1305.6	204.8	113.2	102.3	102.8	97.0	90.7	83.9	79.5	79.1
60°	2249.3	1349.7	168.1	103.7	94.8	96.2	90.0	85.4	76.9	71.3	70.6
62.5°	2443.7	1418.1	133.5	92.1	86.1	86.6	83.9	78.3	68.2	61.7	61.2
65°	2598.1	1393.0	105.2	79.5	76.2	76.9	76.9	70.8	60.0	52.5	51.8
67.5°	2580.6	1192.7	83.9	67.2	66.7	67.2	68.9	63.9	53.2	47.2	46.2
70°	2377.2	948.7	67.2	55.9	58.0	56.8	61.7	58.3	47.9	41.8	41.1
72.5°	1939.7	683.5	51.2	46.2	44.5	46.4	55.7	52.5	39.9	33.1	32.4
75°	1133.4	364.7	38.2	36.5	32.2	38.6	49.3	44.7	30.4	24.4	23.7
77.5°	369.0	127.2	28.1	26.9	24.0	31.2	42.1	37.7	24.9	19.4	18.7
80°	98.9	38.4	19.1	17.6	15.5	23.2	33.4	30.0	17.9	12.6	12.3
82.5°	39.7	16.2	11.2	9.9	8.5	16.0	26.3	24.2	13.3	8.0	8.0
85°	12.8	5.3	4.1	3.2	3.9	9.9	15.7	16.4	9.4	4.1	3.2
87.5°	1.7	0.7	0.7	0.9	0.7	1.7	4.8	4.6	2.7	0.5	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)