

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: P881550

Luminaire Tested: **NAV-SB1A-730-U-T4FT-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P881550  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1A-730-U-T4FT-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 3000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD  
THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

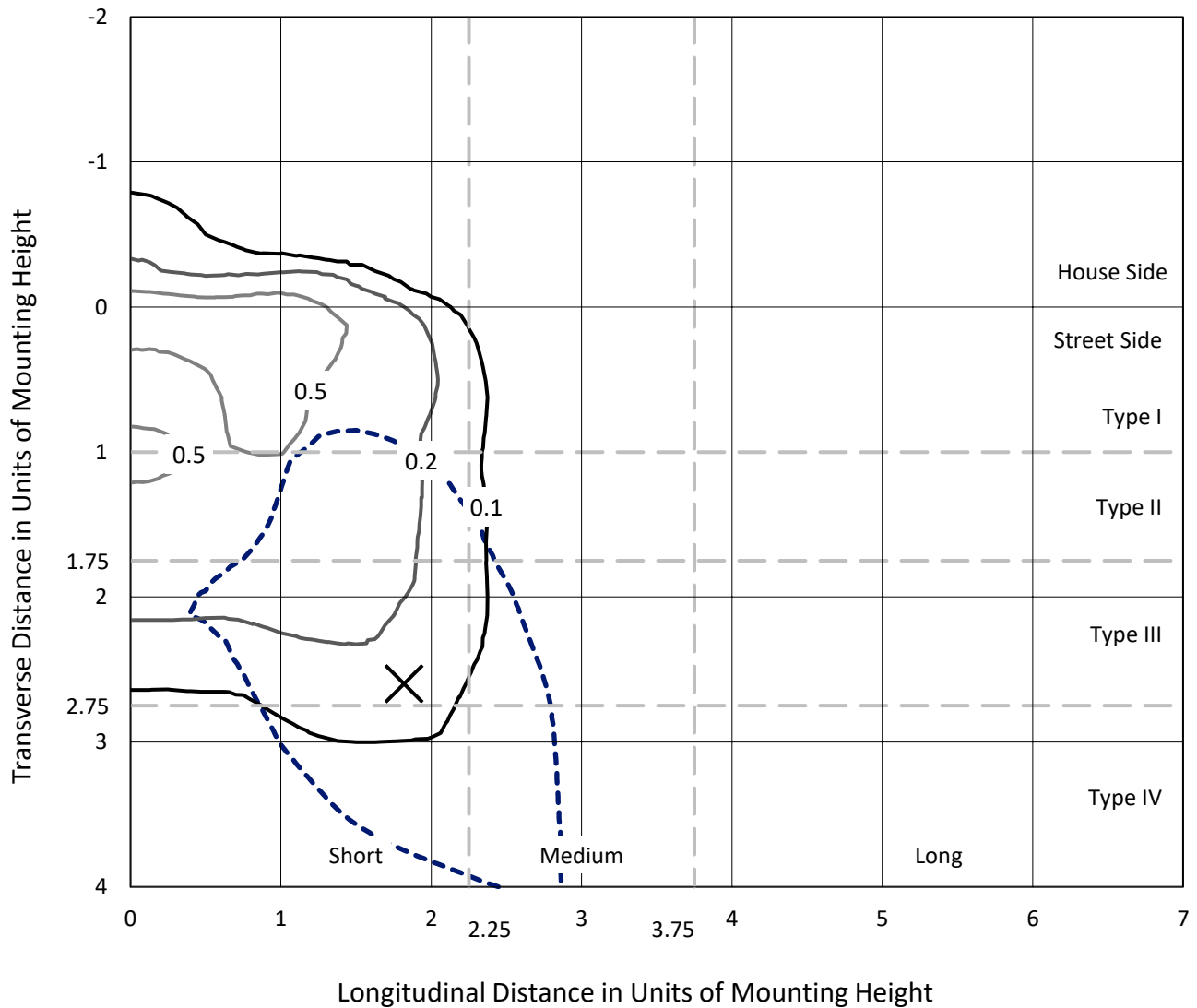
Lumens per Lamp: N/A  
Luminaire Lumens: 3346 lumens  
Efficiency: N/A  
Efficacy: 108.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 30.9  
Input Voltage (V): 120.0  
Input Current (Ain): 0.263  
Voltage Rise (V): NR  
Power Factor: 0.995  
Total Harmonic Distortion (THDi): 6.356  
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

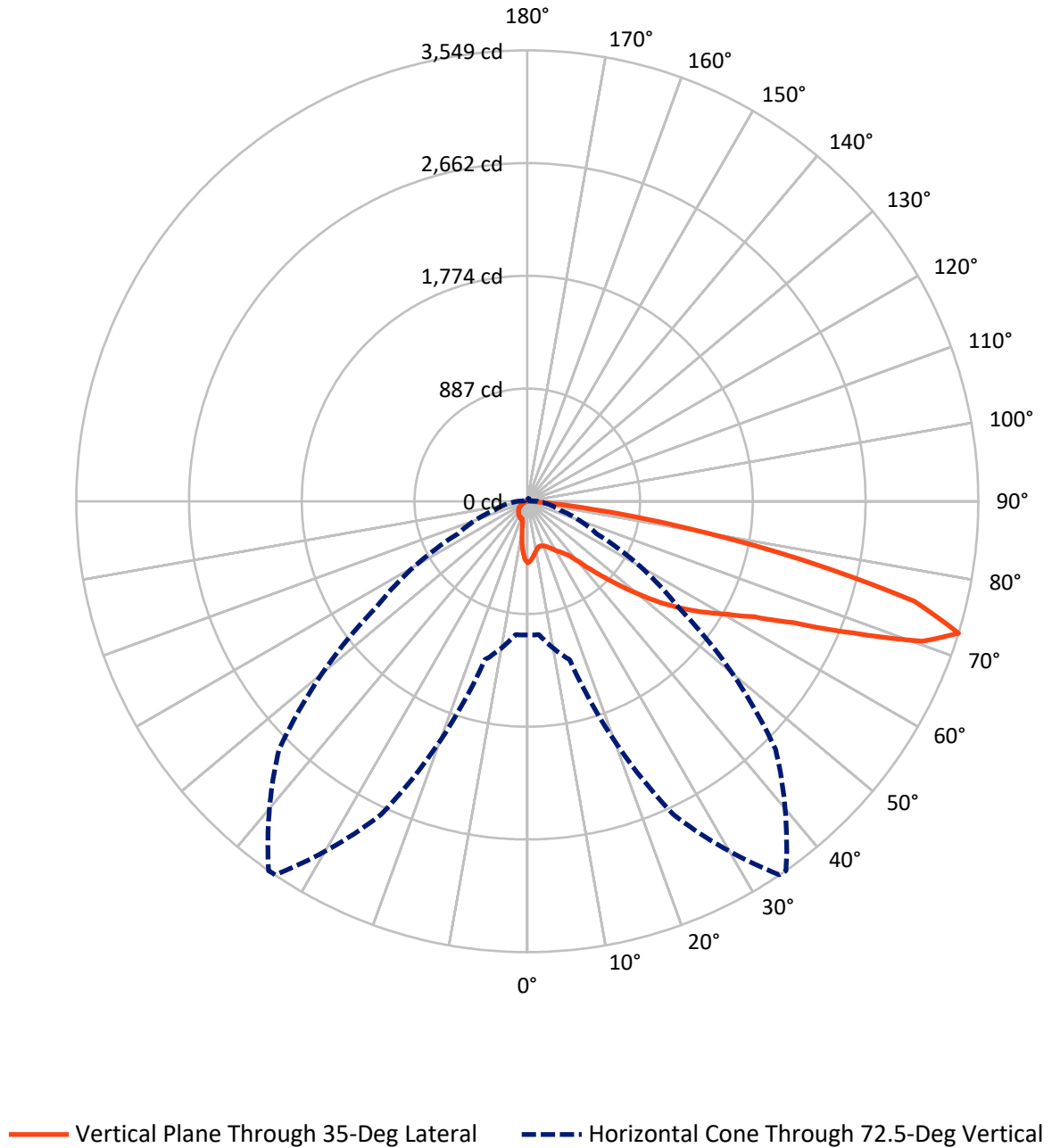
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.8 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	376.6	0.0	376.6
	% Fixture	11.3	0.0	11.3
<b>Street Side</b>	Lumens	2969.4	0.0	2969.4
	% Fixture	88.7	0.0	88.7
<b>Total</b>	Lumens	3346.0	0.0	3346.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	39.8	1.2
10°-20°	93.2	2.8
20°-30°	151.4	4.5
30°-40°	252.7	7.6
40°-50°	478.1	14.3
50°-60°	759.6	22.7
60°-70°	939.7	28.1
70°-80°	584.1	17.5
80°-90°	47.2	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°	3346.0	100.0
0°-180°	3346.0	100.0

**Coefficient of Utilization**



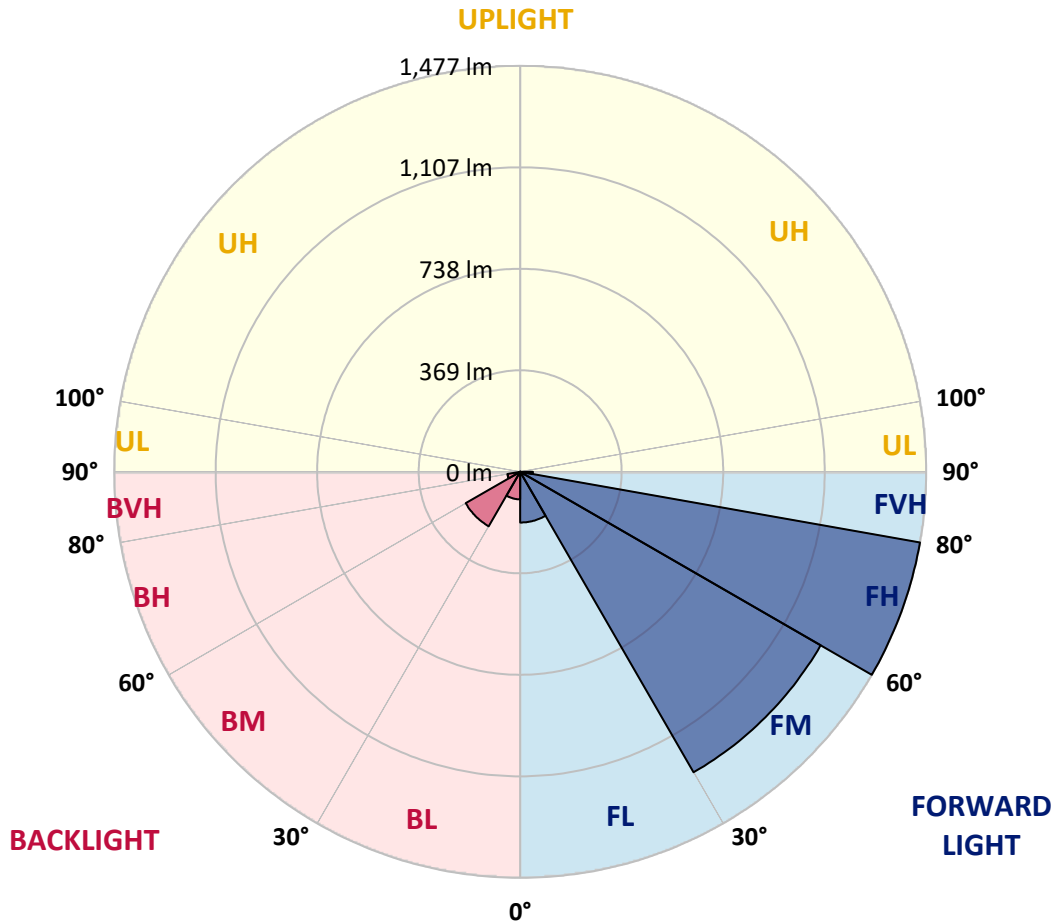
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	184.4	5.5			
FM (30°-60°)	1261.8	37.7			
FH (60°-80°)	1476.6	44.1			G1/1800
FVH (80°-90°)	46.6	1.4			G1/100
BL (0°-30°)	100.1	3.0	B0/110		
BM (30°-60°)	228.6	6.8	B1/1000		
BH (60°-80°)	47.3	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°	484.9	484.9	484.9	484.9	484.9	484.9	484.9	484.9	484.9	484.9	484.9
2.5°	463.4	467.3	468.0	469.3	469.3	470.7	473.2	476.6	482.3	485.2	487.2
5°	427.1	430.0	433.7	436.6	442.3	443.0	452.6	461.9	474.9	484.7	491.6
7.5°	390.6	394.0	398.9	406.0	413.4	415.6	430.0	445.7	466.3	484.7	496.2
10°	364.8	365.1	369.5	376.6	388.4	391.0	408.7	431.0	456.8	481.8	500.6
12.5°	350.3	352.1	354.0	359.4	370.7	372.4	391.3	417.5	447.2	480.0	505.8
15°	350.3	351.6	352.8	355.5	364.6	366.0	382.7	408.9	442.3	480.8	514.1
17.5°	354.0	356.0	355.0	358.2	367.8	368.7	383.4	406.5	442.0	485.4	526.9
20°	362.9	364.3	362.4	364.3	373.9	375.8	391.0	411.2	446.2	493.5	542.8
22.5°	376.8	377.6	372.9	374.4	384.2	386.6	404.3	424.4	456.3	506.5	564.1
25°	394.5	396.0	388.8	390.6	399.9	402.8	423.2	444.2	472.2	524.4	591.4
27.5°	414.8	415.6	409.4	409.2	421.2	425.4	446.0	468.8	493.5	547.0	625.7
30°	438.1	440.3	434.4	433.5	448.7	452.1	472.4	498.9	524.9	580.8	674.5
32.5°	456.5	458.2	454.8	457.2	472.7	475.4	504.6	541.6	574.2	628.9	740.9
35°	483.0	484.0	476.1	480.5	498.2	505.1	548.4	601.4	636.2	689.2	827.7
37.5°	578.8	578.8	545.5	523.7	540.6	546.7	608.5	676.7	712.7	770.1	937.0
40°	711.5	709.3	660.5	615.9	613.7	625.7	694.1	771.6	811.5	867.2	1060.1
42.5°	852.9	849.5	783.1	738.9	731.6	735.8	792.9	888.5	929.2	985.6	1192.5
45°	978.5	977.5	916.7	857.4	844.1	857.4	916.2	1025.3	1054.5	1113.8	1324.7
47.5°	1083.7	1083.7	1039.3	1000.5	993.7	1001.5	1083.2	1177.1	1174.4	1250.4	1453.4
50°	1204.8	1203.8	1161.6	1144.9	1152.1	1163.1	1275.4	1336.9	1298.4	1384.5	1568.4
52.5°	1289.6	1295.5	1281.0	1278.3	1314.6	1333.7	1470.5	1493.3	1409.5	1511.7	1654.4
55°	1356.8	1363.6	1380.3	1399.2	1469.1	1494.1	1659.6	1641.7	1502.4	1622.0	1703.9
57.5°	1451.9	1442.1	1467.8	1505.1	1618.1	1648.3	1842.7	1781.7	1577.2	1711.5	1709.3
60°	1567.4	1568.8	1573.3	1620.3	1766.9	1805.7	2023.1	1914.0	1625.2	1766.5	1649.5
62.5°	1706.1	1708.3	1717.4	1789.7	1966.8	2003.3	2215.4	2022.4	1647.3	1751.0	1495.1
65°	1696.6	1705.9	1807.2	2054.5	2270.5	2306.6	2439.7	2098.4	1614.0	1609.8	1217.3
67.5°	1545.6	1560.8	1730.2	2370.8	2728.5	2768.7	2710.9	2113.4	1470.0	1251.8	794.1
70°	1347.5	1352.9	1556.6	2655.2	3258.8	3299.5	2953.6	1948.9	1115.5	698.2	355.7
72.5°	1052.3	1053.5	1292.5	2721.1	3546.6	3548.8	2763.1	1446.8	599.9	268.2	123.6
75°	751.7	744.3	865.7	2206.8	3120.3	3145.3	2071.4	678.6	229.2	126.8	61.5
77.5°	403.1	411.2	489.9	1308.7	2155.5	2198.2	1130.2	195.6	116.7	86.3	40.7
80°	124.5	131.4	200.8	599.2	1220.9	1246.7	419.0	87.0	81.4	61.5	26.7
82.5°	39.2	40.7	93.7	251.8	506.8	518.5	121.4	49.3	55.7	40.7	15.7
85°	11.3	11.5	41.7	93.9	125.3	127.7	34.1	19.1	31.9	25.3	8.1
87.5°	1.2	3.9	15.7	15.7	11.0	10.8	3.7	4.2	9.1	3.2	1.5
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°	484.9	484.9	484.9	484.9	484.9	484.9	484.9	484.9	484.9	484.9	484.9
2.5°	485.9	486.2	483.0	477.6	471.7	466.8	460.7	455.8	452.3	451.4	453.1
5°	489.4	487.6	478.6	462.1	442.5	425.6	406.7	391.8	382.0	377.8	379.3
7.5°	494.5	489.6	469.7	437.4	399.9	366.5	332.7	306.5	289.8	281.5	282.7
10°	498.9	489.1	455.0	401.6	344.2	293.7	248.1	216.5	198.8	190.5	190.7
12.5°	503.1	488.9	435.9	359.2	281.5	219.7	177.3	161.6	156.7	154.9	154.5
15°	510.9	489.6	411.9	310.6	218.9	166.0	150.5	150.3	151.3	150.8	150.5
17.5°	521.7	490.3	384.7	259.1	168.9	146.4	145.6	147.8	149.3	148.6	148.3
20°	535.7	493.3	355.7	208.1	145.1	141.5	143.2	145.1	146.4	145.1	144.9
22.5°	555.3	498.4	324.1	167.2	137.5	138.5	140.0	142.2	143.4	141.7	141.5
25°	579.3	506.5	293.0	145.4	133.9	135.1	137.3	139.7	141.2	139.5	139.3
27.5°	610.5	519.5	264.3	140.5	130.2	130.9	134.1	137.8	139.7	137.5	137.5
30°	655.6	540.8	239.5	142.7	128.0	126.3	130.7	135.8	138.0	136.1	135.8
32.5°	715.4	571.0	224.3	146.1	127.0	120.9	125.0	131.7	135.3	134.1	134.1
35°	793.9	616.8	218.4	150.0	126.3	115.2	118.2	125.3	131.7	132.9	132.9
37.5°	889.0	680.6	220.2	151.8	124.1	110.6	112.0	118.2	126.5	130.4	131.4
40°	997.1	754.9	230.0	150.0	121.6	106.6	106.9	111.6	118.9	124.8	126.8
42.5°	1108.7	841.7	248.1	143.7	119.4	103.2	102.5	105.7	110.6	114.7	116.5
45°	1214.8	930.9	266.0	134.8	116.7	99.8	98.1	99.3	100.3	102.0	103.0
47.5°	1307.5	993.7	260.9	126.8	113.0	95.9	92.9	92.4	89.5	89.2	89.0
50°	1371.5	1007.4	231.7	118.7	107.6	91.4	86.8	83.8	78.7	76.2	76.5
52.5°	1391.8	953.2	189.3	110.6	98.8	85.6	78.9	74.3	67.9	65.7	65.5
55°	1364.9	847.1	151.3	100.8	86.5	77.7	70.4	64.2	59.1	56.4	56.4
57.5°	1298.9	712.0	119.6	89.2	73.6	68.9	61.5	55.4	51.0	48.3	47.8
60°	1189.6	565.4	94.6	75.5	62.8	59.3	51.7	47.8	43.9	40.7	40.0
62.5°	1023.6	403.6	74.3	59.8	52.5	48.5	44.1	41.2	36.5	32.1	31.4
65°	798.8	246.9	57.4	43.9	42.2	40.2	37.5	34.8	29.2	24.8	24.0
67.5°	503.8	116.9	40.9	33.1	33.3	32.4	31.1	28.9	24.8	20.8	20.3
70°	221.9	56.6	27.0	25.3	24.8	24.8	25.7	25.0	21.1	17.4	16.7
72.5°	75.5	30.4	20.1	19.1	17.9	17.7	21.6	20.8	16.9	13.5	12.7
75°	39.5	20.3	14.7	13.7	10.8	13.0	17.2	16.2	12.0	8.8	8.1
77.5°	25.7	14.5	10.1	8.8	6.1	8.6	12.7	11.3	7.1	4.4	3.9
80°	16.2	9.6	5.9	4.2	2.9	4.7	6.9	4.9	2.7	1.0	0.7
82.5°	8.6	4.9	2.2	1.5	1.2	1.5	1.7	1.2	0.5	0.0	0.0
85°	3.4	1.7	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)