

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: P882468

Luminaire Tested: **NAV-SB2B-835-U-T3-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882468  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB2B-835-U-T3-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 80 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

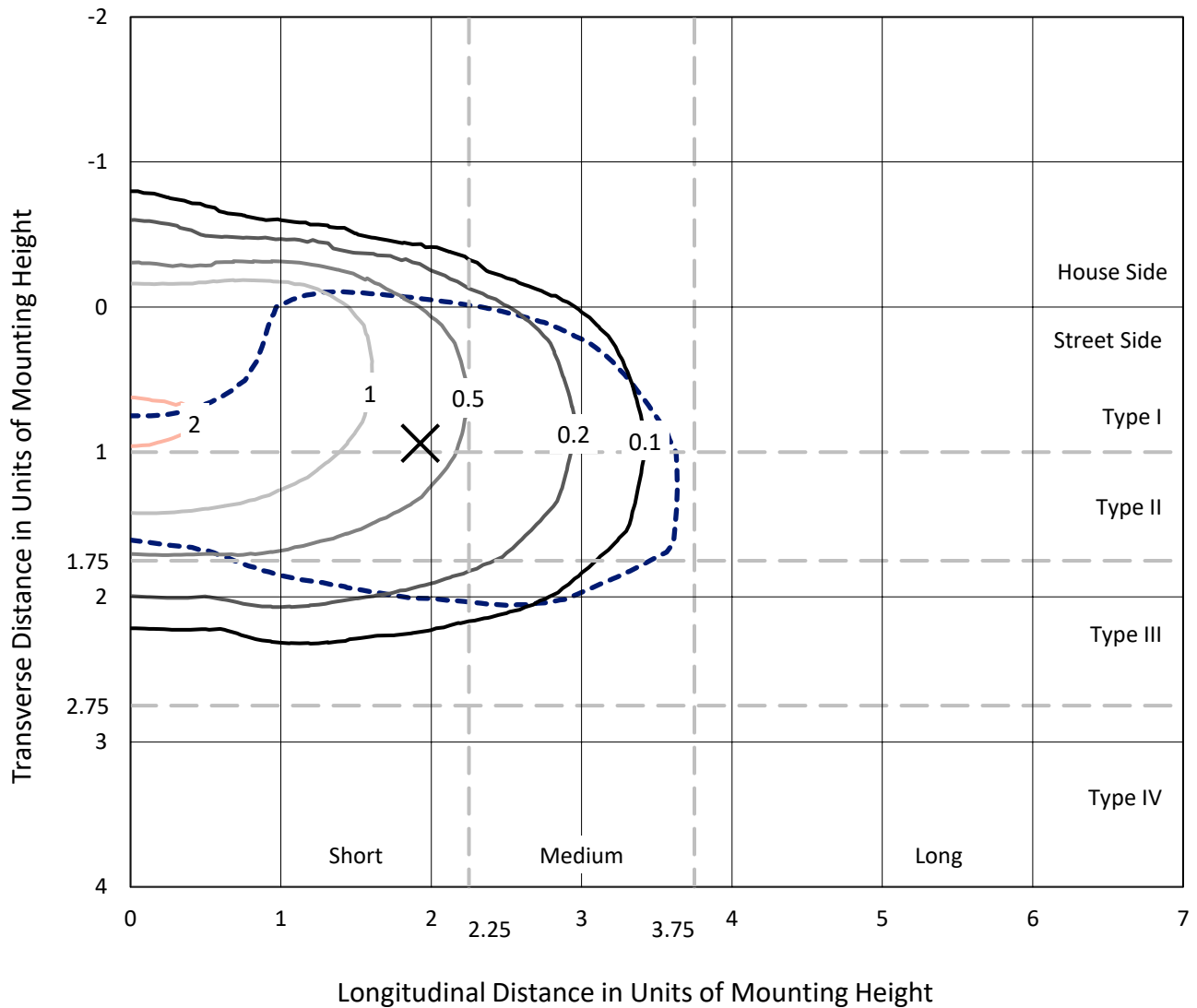
Lumens per Lamp: N/A  
Luminaire Lumens: 7594 lumens  
Efficiency: N/A  
Efficacy: 102.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 73.9  
Input Voltage (V): 120.0  
Input Current (Ain): 0.627  
Voltage Rise (V): NR  
Power Factor: 0.988  
Total Harmonic Distortion (THDi): 13.593  
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

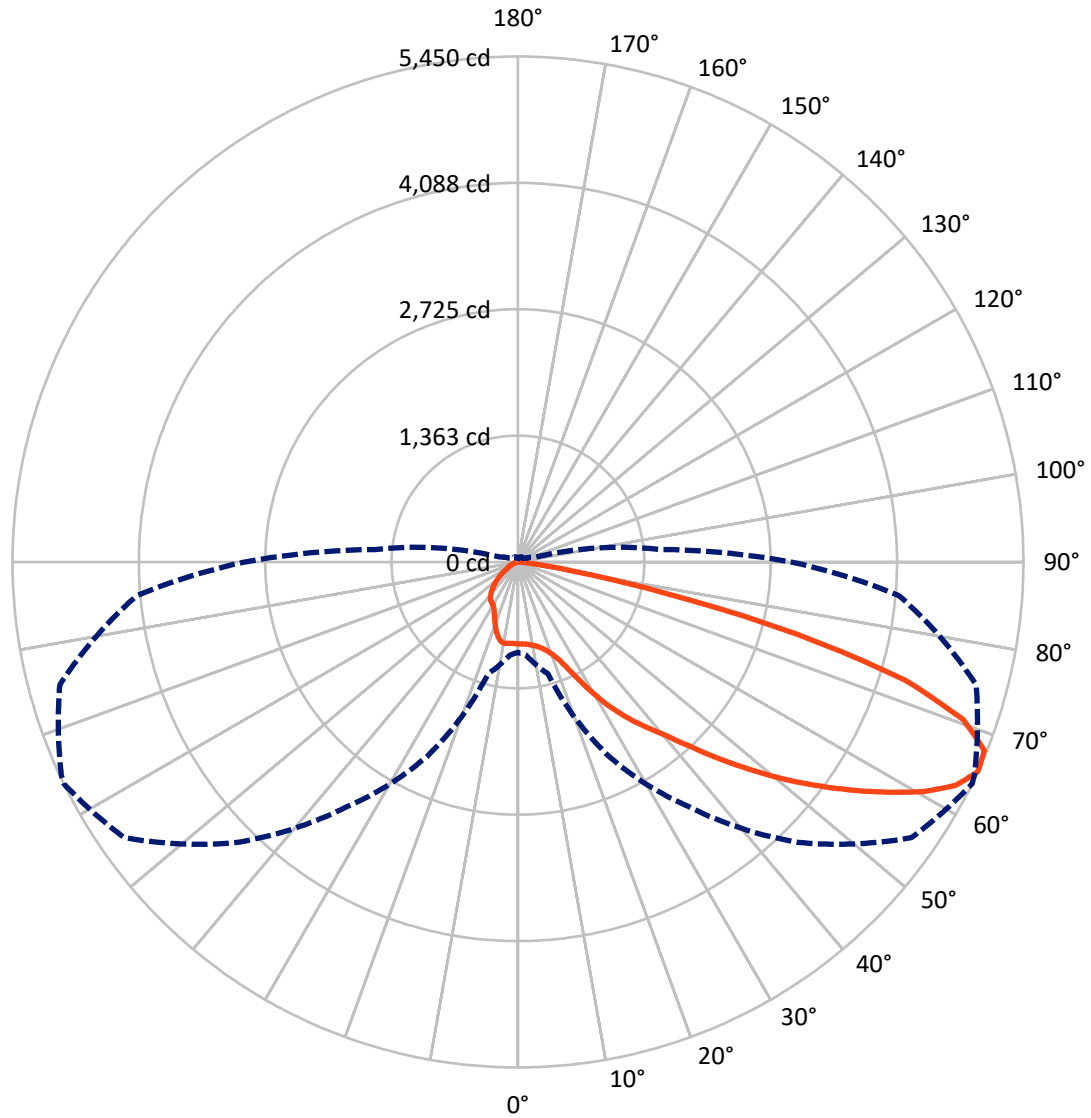
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc  
 Type III - Short - N/A

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### 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
<b>House Side</b>	Lumens	1015.6	0.0	1015.6
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	6578.5	0.0	6578.5
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	7594.0	0.0	7594.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.5	1.1
10°-20°	221.0	2.9
20°-30°	418.8	5.5
30°-40°	847.5	11.2
40°-50°	1443.7	19.0
50°-60°	1963.3	25.9
60°-70°	1843.7	24.3
70°-80°	738.7	9.7
80°-90°	35.8	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°	7594.0	100.0
0°-180°	7594.0	100.0

**Coefficient of Utilization**



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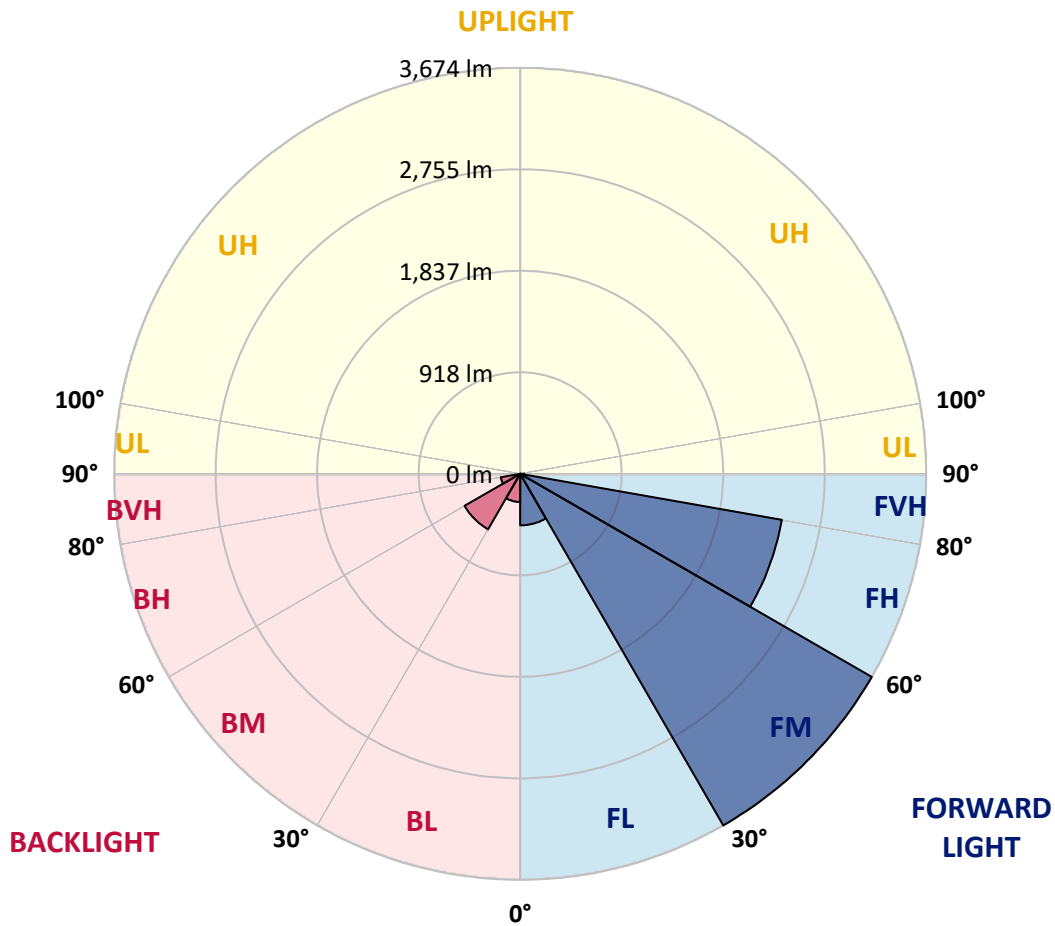
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	466.4	6.1			
FM (30°-60°)	3674.0	48.4			
FH (60°-80°)	2404.1	31.7			G2/5000
FVH (80°-90°)	34.0	0.4			G1/100
BL (0°-30°)	255.0	3.4	B1/500		
BM (30°-60°)	580.6	7.6	B1/1000		
BH (60°-80°)	178.3	2.3	B1/500		G1/500
BVH (80°-90°)	1.7	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-G2**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	883.3	883.3	883.3	883.3	883.3	883.3	883.3	883.3	883.3	883.3	883.3
2.5°	880.2	886.3	884.8	883.3	882.8	883.8	884.3	883.8	883.8	883.8	884.3
5°	863.4	868.5	868.5	872.1	877.2	883.3	887.8	888.9	889.9	891.4	890.9
7.5°	831.3	835.4	838.5	850.2	862.9	879.2	892.9	900.1	901.1	906.7	908.7
10°	809.4	814.5	819.6	831.8	850.2	874.6	898.0	915.3	917.9	931.1	937.2
12.5°	808.4	813.5	820.1	833.4	854.8	880.7	909.2	934.2	938.8	958.1	970.8
15°	819.1	825.2	831.3	847.6	870.5	902.1	932.6	963.7	968.3	995.8	1009.5
17.5°	841.0	849.2	853.7	870.0	894.5	929.6	969.8	1005.4	1009.5	1041.6	1058.9
20°	884.3	894.0	895.5	908.7	932.6	970.3	1018.2	1062.5	1067.5	1104.2	1123.5
22.5°	973.9	987.6	975.4	982.0	1003.4	1041.1	1093.0	1149.0	1156.1	1197.9	1215.2
25°	1131.7	1151.0	1119.5	1108.3	1117.4	1156.6	1221.8	1292.6	1300.7	1334.3	1343.0
27.5°	1441.7	1416.8	1368.9	1322.1	1294.6	1317.0	1390.3	1477.9	1488.1	1520.6	1510.5
30°	1782.3	1760.4	1695.8	1591.9	1526.7	1523.2	1590.9	1688.6	1700.3	1731.4	1700.3
32.5°	2123.4	2102.5	2032.3	1904.5	1791.5	1735.5	1782.3	1890.7	1896.8	1916.7	1870.9
35°	2458.9	2437.5	2367.2	2236.4	2097.4	1970.2	1961.0	2083.2	2085.2	2106.1	2037.9
37.5°	2796.4	2778.6	2703.7	2575.5	2438.5	2262.9	2177.9	2265.4	2268.0	2288.3	2217.6
40°	3037.2	3044.8	2993.4	2894.1	2776.5	2584.6	2421.2	2459.4	2444.1	2478.2	2436.0
42.5°	3243.9	3259.2	3214.4	3164.5	3096.2	2927.2	2722.6	2716.0	2691.5	2709.9	2666.1
45°	3422.6	3435.3	3395.1	3383.4	3381.8	3263.2	3052.0	3012.3	2978.1	2974.6	2922.1
47.5°	3488.2	3512.7	3530.0	3569.2	3645.6	3595.7	3392.5	3330.9	3292.8	3264.8	3181.8
50°	3513.2	3539.2	3598.2	3712.2	3893.0	3914.3	3731.6	3662.4	3615.5	3564.6	3442.4
52.5°	3479.6	3525.9	3605.3	3797.3	4059.4	4169.9	4056.9	3996.3	3942.9	3859.9	3678.6
55°	3281.6	3327.9	3490.3	3796.2	4142.4	4349.1	4364.4	4337.4	4277.3	4146.5	3869.5
57.5°	2864.1	2932.8	3189.9	3666.9	4140.9	4503.4	4665.8	4685.1	4617.9	4430.6	4019.7
60°	2285.8	2379.0	2692.5	3380.3	4013.1	4586.8	4930.0	5026.7	4955.4	4710.6	4141.4
62.5°	1595.0	1702.9	1999.7	2931.3	3720.9	4526.8	5122.9	5301.6	5247.6	4961.0	4188.2
65°	972.9	1007.5	1246.7	2306.7	3224.0	4275.3	5182.5	5450.3	5432.4	5114.3	4119.0
67.5°	648.1	677.1	745.8	1581.7	2502.7	3772.8	5039.9	5424.3	5429.4	5089.3	3865.5
70°	390.5	415.4	460.2	919.9	1621.9	2986.3	4598.6	5093.4	5122.9	4755.9	3384.9
72.5°	160.9	177.7	218.4	416.9	840.0	1895.3	3661.8	4373.0	4441.8	3998.9	2597.9
75°	91.1	99.8	128.3	209.2	364.5	883.3	2218.1	3104.4	3205.7	2756.2	1562.9
77.5°	60.6	64.7	83.0	135.4	205.2	301.4	947.9	1617.4	1810.8	1505.4	676.6
80°	40.7	44.3	57.0	90.6	133.4	129.3	301.9	599.2	737.2	517.2	164.9
82.5°	27.5	28.0	40.7	59.6	84.5	62.6	89.1	186.3	234.2	149.7	62.6
85°	15.8	15.3	30.0	34.6	37.7	26.0	27.0	56.0	73.3	63.1	35.6
87.5°	2.0	3.1	11.7	9.2	5.1	5.6	5.6	9.7	14.3	15.3	7.6
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°	883.3	883.3	883.3	883.3	883.3	883.3	883.3	883.3	883.3	883.3	883.3
2.5°	884.3	883.8	882.2	880.7	877.2	875.1	876.1	875.1	874.6	875.1	877.2
5°	890.9	889.4	885.3	880.2	873.1	864.4	858.8	850.7	843.0	838.5	839.5
7.5°	908.7	907.2	901.6	887.3	864.4	828.3	795.2	766.2	744.3	731.6	732.1
10°	937.2	934.7	926.0	894.5	834.4	755.5	689.8	635.3	599.7	582.9	581.4
12.5°	970.8	967.8	952.5	887.8	777.4	654.2	563.6	503.0	469.9	455.1	453.6
15°	1010.5	1006.5	976.4	856.3	694.4	542.2	459.2	413.9	392.5	379.3	379.8
17.5°	1059.9	1052.8	994.2	808.9	604.3	456.6	395.0	360.9	342.1	329.4	328.4
20°	1124.1	1112.3	1008.5	752.4	521.3	402.7	351.8	323.3	309.0	297.8	295.8
22.5°	1213.7	1196.9	1025.8	691.3	462.8	365.5	319.7	298.8	287.1	274.4	272.4
25°	1324.6	1304.8	1047.2	634.8	422.5	333.5	296.3	279.0	265.2	250.5	248.9
27.5°	1479.9	1444.3	1072.6	588.5	387.9	306.0	274.9	255.6	239.8	227.6	225.0
30°	1653.0	1594.5	1095.0	560.5	356.4	280.5	246.9	227.6	212.8	204.1	202.6
32.5°	1816.9	1737.5	1109.8	548.3	327.9	251.5	216.4	195.5	184.3	181.7	183.3
35°	1971.7	1866.8	1108.3	536.6	302.4	222.5	186.3	164.9	156.3	157.8	157.8
37.5°	2149.9	2004.8	1097.6	518.2	281.5	196.0	160.4	141.5	133.9	134.4	136.4
40°	2357.1	2164.1	1091.0	483.6	258.6	171.6	139.0	123.7	118.1	116.1	115.6
42.5°	2578.0	2318.4	1092.0	444.4	230.1	149.7	124.2	111.5	106.4	104.9	104.4
45°	2800.0	2465.5	1093.5	403.7	200.1	132.9	113.5	102.8	99.8	97.7	97.7
47.5°	3008.7	2590.7	1065.0	359.9	170.5	120.1	104.9	97.7	95.2	92.7	92.7
50°	3203.2	2674.2	996.3	309.0	147.1	110.0	98.3	93.2	90.6	88.1	88.1
52.5°	3354.4	2687.5	882.8	256.6	130.8	102.3	94.2	89.6	86.5	84.0	83.5
55°	3421.6	2604.5	721.4	207.7	118.1	95.7	90.1	85.5	82.0	79.4	78.9
57.5°	3404.2	2429.9	562.5	167.0	105.9	89.1	85.0	82.0	77.9	73.8	73.3
60°	3319.2	2196.2	424.1	139.0	94.7	82.0	79.4	76.9	71.3	65.2	64.1
62.5°	3172.1	1902.4	302.4	115.1	82.5	73.8	72.8	70.8	62.6	51.4	50.4
65°	2947.1	1545.6	203.6	95.7	70.8	64.7	65.2	61.6	50.9	38.2	37.2
67.5°	2618.2	1130.2	130.3	78.4	59.1	54.0	54.5	52.4	43.3	32.6	31.1
70°	2199.2	748.4	85.0	59.6	47.3	41.7	44.8	45.3	36.7	26.5	25.5
72.5°	1612.3	441.9	59.6	44.3	34.6	29.0	36.7	37.7	29.5	19.9	18.8
75°	918.9	209.7	44.8	32.1	21.4	20.4	28.5	28.5	20.4	13.2	12.2
77.5°	385.9	87.6	31.6	20.9	12.2	11.7	19.3	17.8	10.2	6.1	6.1
80°	111.5	39.2	16.8	10.2	5.1	4.6	7.6	5.6	2.5	1.0	1.0
82.5°	43.8	17.3	6.6	4.1	2.0	2.0	1.0	0.0	0.0	0.0	0.0
85°	26.0	7.1	3.1	1.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.6	1.5	1.0	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)