

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: P882078

Luminaire Tested: **NAV-SB1D-740-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882078
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-SB1D-740-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 4000K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8612 lumens
Efficiency: N/A
Efficacy: 108.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

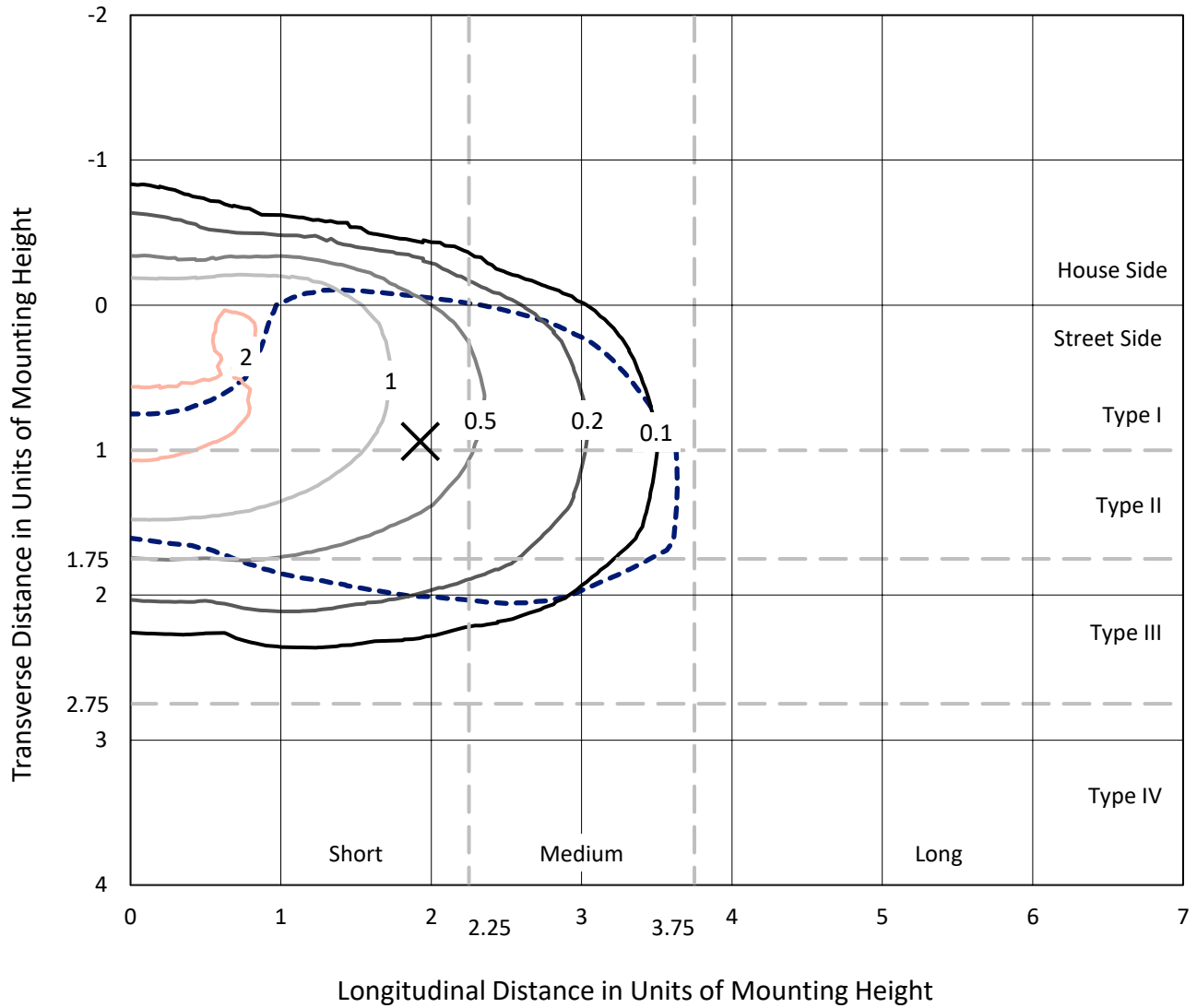
Input Watts (W): 79.6
Input Voltage (V): 120.0
Input Current (Ain): 0.638
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.673
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

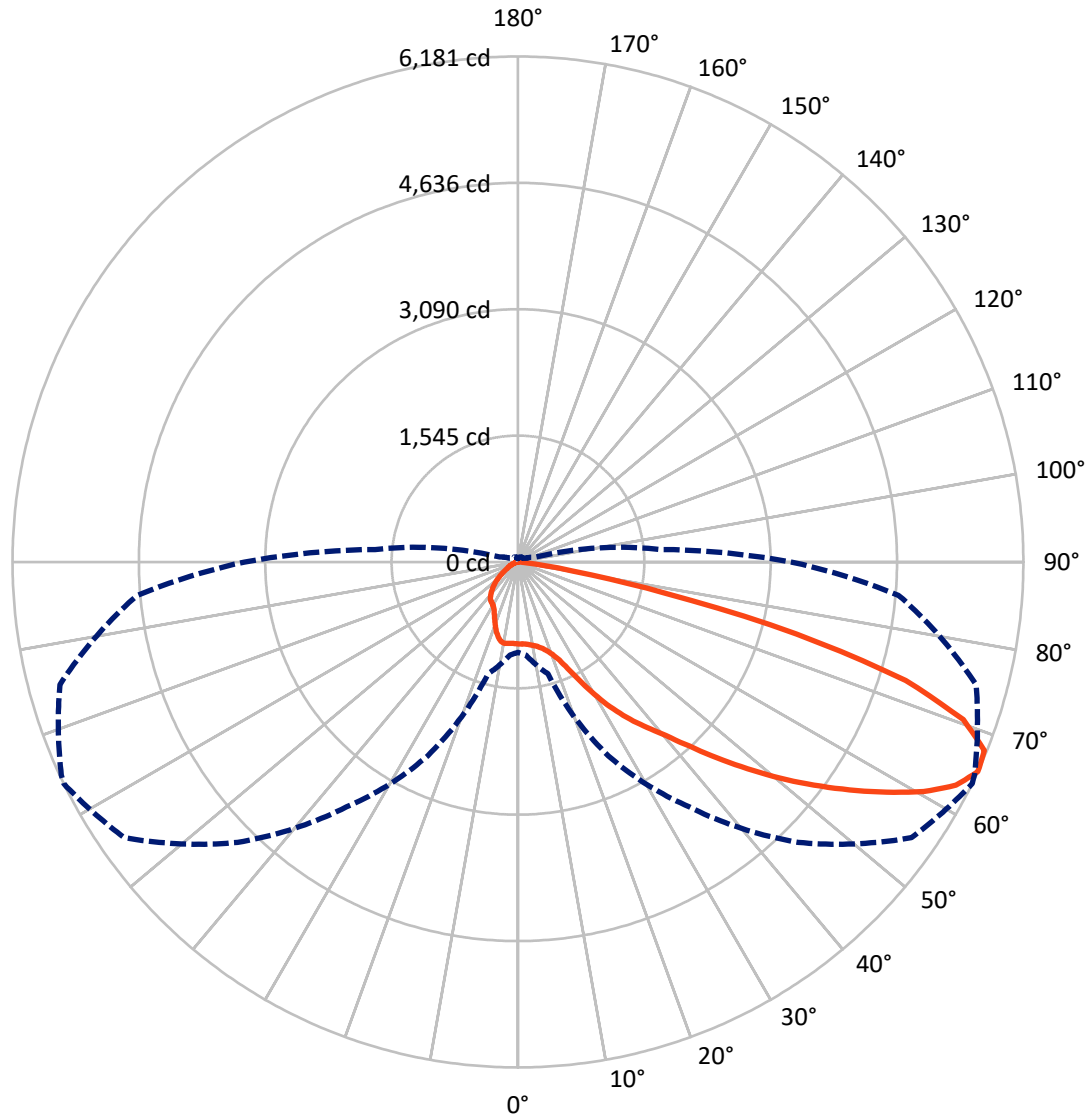
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 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
House Side	Lumens	1151.7	0.0	1151.7
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	7460.3	0.0	7460.3
	% Fixture	86.6	0.0	86.6
Total	Lumens	8612.0	0.0	8612.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.4	1.1
10°-20°	250.7	2.9
20°-30°	475.0	5.5
30°-40°	961.1	11.2
40°-50°	1637.3	19.0
50°-60°	2226.5	25.9
60°-70°	2090.8	24.3
70°-80°	837.7	9.7
80°-90°	40.6	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°	8612.0	100.0
0°-180°	8612.0	100.0

Coefficient of Utilization



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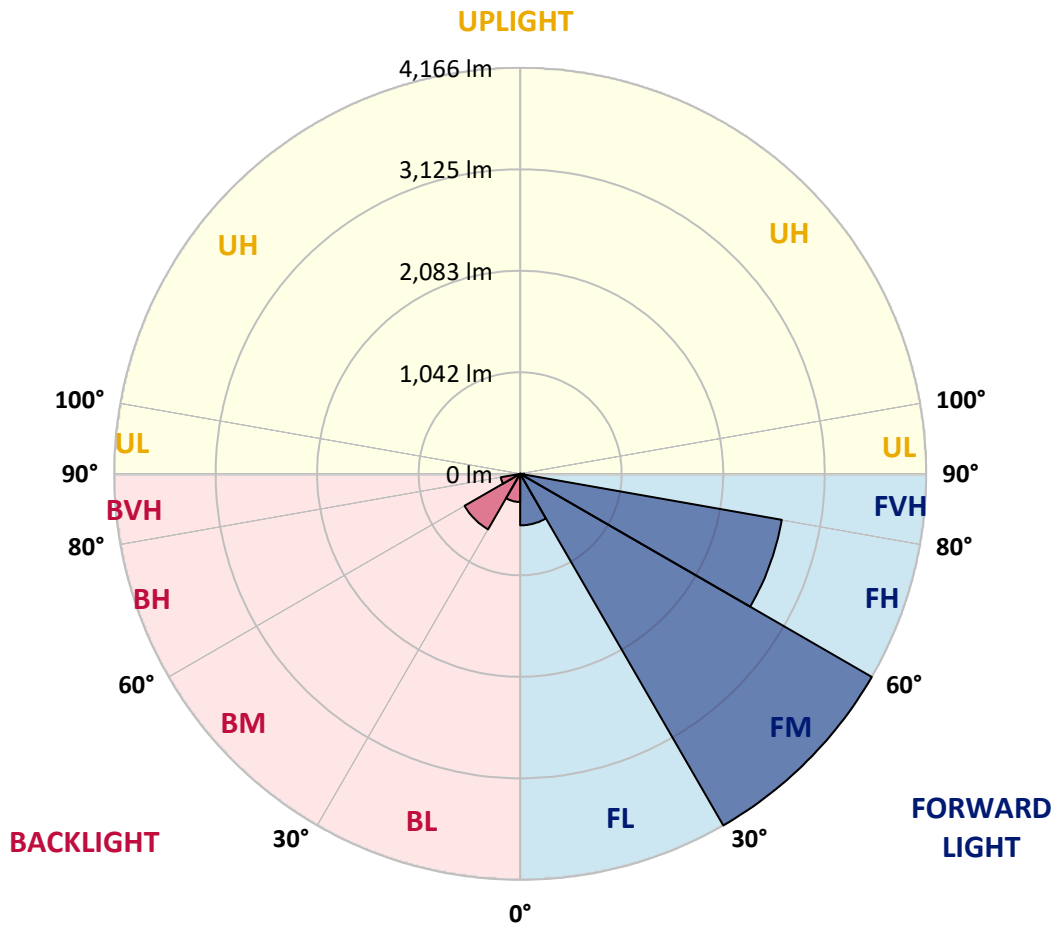
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	528.9	6.1			
FM (30°-60°)	4166.5	48.4			
FH (60°-80°)	2726.4	31.7			G2/5000
FVH (80°-90°)	38.6	0.4			G1/100
BL (0°-30°)	289.2	3.4	B1/500		
BM (30°-60°)	658.4	7.6	B1/1000		
BH (60°-80°)	202.1	2.3	B1/500		G1/500
BVH (80°-90°)	2.0	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°	1001.7	1001.7	1001.7	1001.7	1001.7	1001.7	1001.7	1001.7	1001.7	1001.7	1001.7
2.5°	998.2	1005.1	1003.4	1001.7	1001.1	1002.2	1002.8	1002.2	1002.2	1002.2	1002.8
5°	979.1	984.9	984.9	989.0	994.7	1001.7	1006.9	1008.0	1009.2	1010.9	1010.3
7.5°	942.8	947.4	950.9	964.1	978.6	997.0	1012.6	1020.7	1021.9	1028.2	1030.5
10°	918.0	923.7	929.5	943.4	964.1	991.9	1018.4	1038.0	1040.9	1055.9	1062.9
12.5°	916.8	922.6	930.1	945.1	969.3	998.8	1031.1	1059.4	1064.6	1086.5	1101.0
15°	928.9	935.8	942.8	961.3	987.2	1023.0	1057.7	1092.9	1098.1	1129.3	1144.8
17.5°	953.7	963.0	968.2	986.7	1014.4	1054.2	1099.8	1140.2	1144.8	1181.2	1200.8
20°	1002.8	1013.8	1015.5	1030.5	1057.7	1100.4	1154.7	1204.9	1210.7	1252.2	1274.2
22.5°	1104.4	1120.0	1106.2	1113.7	1137.9	1180.6	1239.5	1303.0	1311.1	1358.5	1378.1
25°	1283.4	1305.3	1269.5	1256.8	1267.2	1311.7	1385.6	1465.8	1475.1	1513.2	1523.0
27.5°	1635.0	1606.7	1552.4	1499.3	1468.1	1493.5	1576.7	1676.0	1687.5	1724.5	1712.9
30°	2021.2	1996.4	1923.1	1805.3	1731.4	1727.4	1804.2	1915.0	1928.3	1963.5	1928.3
32.5°	2408.0	2384.4	2304.7	2159.8	2031.6	1968.1	2021.2	2144.2	2151.1	2173.6	2121.7
35°	2788.5	2764.2	2684.6	2536.2	2378.6	2234.3	2223.9	2362.4	2364.7	2388.4	2311.0
37.5°	3171.3	3151.1	3066.2	2920.7	2765.4	2566.2	2469.8	2569.1	2572.0	2595.1	2514.8
40°	3444.3	3453.0	3394.7	3282.1	3148.7	2931.1	2745.8	2789.1	2771.8	2810.4	2762.5
42.5°	3678.7	3696.1	3645.3	3588.7	3511.3	3319.6	3087.6	3080.0	3052.3	3073.1	3023.5
45°	3881.4	3895.8	3850.2	3836.9	3835.2	3700.7	3461.1	3416.1	3377.4	3373.3	3313.9
47.5°	3955.9	3983.6	4003.2	4047.7	4134.2	4077.7	3847.3	3777.5	3734.2	3702.4	3608.3
50°	3984.1	4013.6	4080.6	4209.9	4414.8	4439.1	4231.8	4153.3	4100.2	4042.5	3903.9
52.5°	3946.0	3998.6	4088.6	4306.3	4603.6	4728.9	4600.7	4532.0	4471.4	4377.3	4171.8
55°	3721.5	3774.0	3958.2	4305.1	4697.7	4932.1	4949.4	4918.8	4850.7	4702.3	4388.3
57.5°	3248.1	3326.0	3617.5	4158.5	4696.0	5107.0	5291.2	5313.2	5236.9	5024.5	4558.6
60°	2592.2	2697.9	3053.5	3833.5	4551.1	5201.7	5590.8	5700.5	5619.7	5342.0	4696.6
62.5°	1808.8	1931.2	2267.7	3324.3	4219.7	5133.6	5809.7	6012.3	5951.1	5626.1	4749.7
65°	1103.3	1142.5	1413.9	2615.9	3656.2	4848.4	5877.2	6180.9	6160.7	5799.8	4671.2
67.5°	734.9	767.8	845.8	1793.8	2838.1	4278.6	5715.6	6151.4	6157.2	5771.6	4383.7
70°	442.8	471.1	521.9	1043.2	1839.4	3386.6	5215.0	5776.2	5809.7	5393.4	3838.7
72.5°	182.4	201.5	247.7	472.8	952.6	2149.4	4152.7	4959.3	5037.2	4534.9	2946.1
75°	103.3	113.2	145.5	237.3	413.4	1001.7	2515.4	3520.5	3635.4	3125.7	1772.4
77.5°	68.7	73.3	94.1	153.6	232.7	341.8	1075.0	1834.2	2053.6	1707.2	767.3
80°	46.2	50.2	64.7	102.8	151.3	146.6	342.4	679.5	836.0	586.6	187.1
82.5°	31.2	31.8	46.2	67.5	95.8	71.0	101.0	211.3	265.6	169.7	71.0
85°	17.9	17.3	34.1	39.3	42.7	29.4	30.6	63.5	83.1	71.6	40.4
87.5°	2.3	3.5	13.3	10.4	5.8	6.4	6.4	11.0	16.2	17.3	8.7
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°	1001.7	1001.7	1001.7	1001.7	1001.7	1001.7	1001.7	1001.7	1001.7	1001.7	1001.7
2.5°	1002.8	1002.2	1000.5	998.8	994.7	992.4	993.6	992.4	991.9	992.4	994.7
5°	1010.3	1008.6	1004.0	998.2	990.1	980.3	974.0	964.7	956.1	950.9	952.0
7.5°	1030.5	1028.8	1022.4	1006.3	980.3	939.3	901.8	868.9	844.1	829.6	830.2
10°	1062.9	1060.0	1050.2	1014.4	946.2	856.8	782.3	720.5	680.1	661.0	659.3
12.5°	1101.0	1097.5	1080.2	1006.9	881.6	741.9	639.1	570.4	532.9	516.1	514.4
15°	1146.0	1141.4	1107.3	971.1	787.5	614.9	520.8	469.4	445.1	430.1	430.7
17.5°	1202.0	1193.9	1127.5	917.4	685.3	517.9	448.0	409.3	388.0	373.5	372.4
20°	1274.7	1261.5	1143.7	853.3	591.2	456.7	398.9	366.6	350.4	337.7	335.4
22.5°	1376.4	1357.3	1163.3	784.0	524.8	414.5	362.6	338.9	325.6	311.2	308.9
25°	1502.2	1479.7	1187.6	719.9	479.2	378.2	336.0	316.4	300.8	284.0	282.3
27.5°	1678.3	1637.9	1216.4	667.4	439.9	347.0	311.8	289.8	271.9	258.1	255.2
30°	1874.6	1808.2	1241.8	635.6	404.1	318.1	280.0	258.1	241.3	231.5	229.8
32.5°	2060.5	1970.4	1258.6	621.8	371.8	285.2	245.4	221.7	209.0	206.1	207.8
35°	2236.0	2117.1	1256.8	608.5	342.9	252.3	211.3	187.1	177.2	179.0	179.0
37.5°	2438.1	2273.5	1244.7	587.7	319.3	222.3	181.9	160.5	151.8	152.4	154.7
40°	2673.0	2454.2	1237.2	548.5	293.3	194.6	157.6	140.3	133.9	131.6	131.1
42.5°	2923.6	2629.2	1238.4	504.0	261.0	169.7	140.9	126.4	120.7	118.9	118.4
45°	3175.3	2796.0	1240.1	457.8	226.9	150.7	128.7	116.6	113.2	110.8	110.8
47.5°	3412.0	2938.0	1207.8	408.2	193.4	136.2	118.9	110.8	108.0	105.1	105.1
50°	3632.6	3032.7	1129.8	350.4	166.8	124.7	111.4	105.7	102.8	99.9	99.9
52.5°	3804.0	3047.7	1001.1	291.0	148.4	116.0	106.8	101.6	98.1	95.3	94.7
55°	3880.2	2953.6	818.1	235.6	133.9	108.5	102.2	97.0	92.9	90.1	89.5
57.5°	3860.6	2755.6	637.9	189.4	120.1	101.0	96.4	92.9	88.3	83.7	83.1
60°	3764.2	2490.6	480.9	157.6	107.4	92.9	90.1	87.2	80.8	73.9	72.7
62.5°	3597.3	2157.5	342.9	130.5	93.5	83.7	82.6	80.2	71.0	58.3	57.2
65°	3342.2	1752.8	230.9	108.5	80.2	73.3	73.9	69.9	57.7	43.3	42.1
67.5°	2969.2	1281.7	147.8	88.9	67.0	61.2	61.8	59.5	49.1	36.9	35.2
70°	2494.1	848.7	96.4	67.5	53.7	47.3	50.8	51.4	41.6	30.0	28.9
72.5°	1828.4	501.1	67.5	50.2	39.3	32.9	41.6	42.7	33.5	22.5	21.4
75°	1042.1	237.9	50.8	36.4	24.2	23.1	32.3	32.3	23.1	15.0	13.9
77.5°	437.6	99.3	35.8	23.7	13.9	13.3	21.9	20.2	11.5	6.9	6.9
80°	126.4	44.5	19.1	11.5	5.8	5.2	8.7	6.4	2.9	1.2	1.2
82.5°	49.7	19.6	7.5	4.6	2.3	2.3	1.2	0.0	0.0	0.0	0.0
85°	29.4	8.1	3.5	1.7	0.6	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.5	1.7	1.2	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)