

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: P882068

Luminaire Tested: **NAV-SB1D-735-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882068
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-735-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 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: 7988 lumens
Efficiency: N/A
Efficacy: 100.4 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

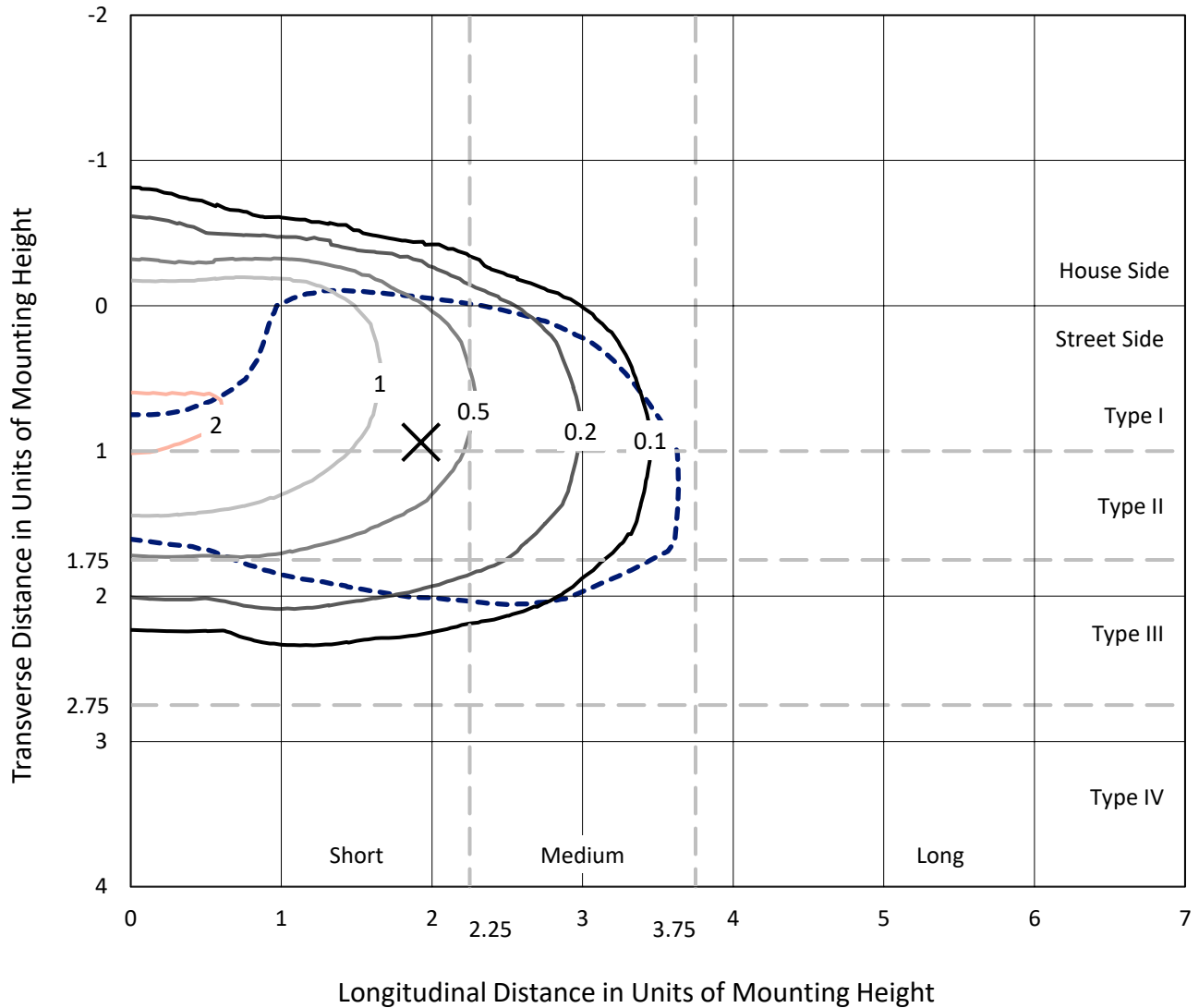
Input Watts (W): 79.6
Input Voltage (V): 120.0
Input Current (Ain): 0.638
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.673
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

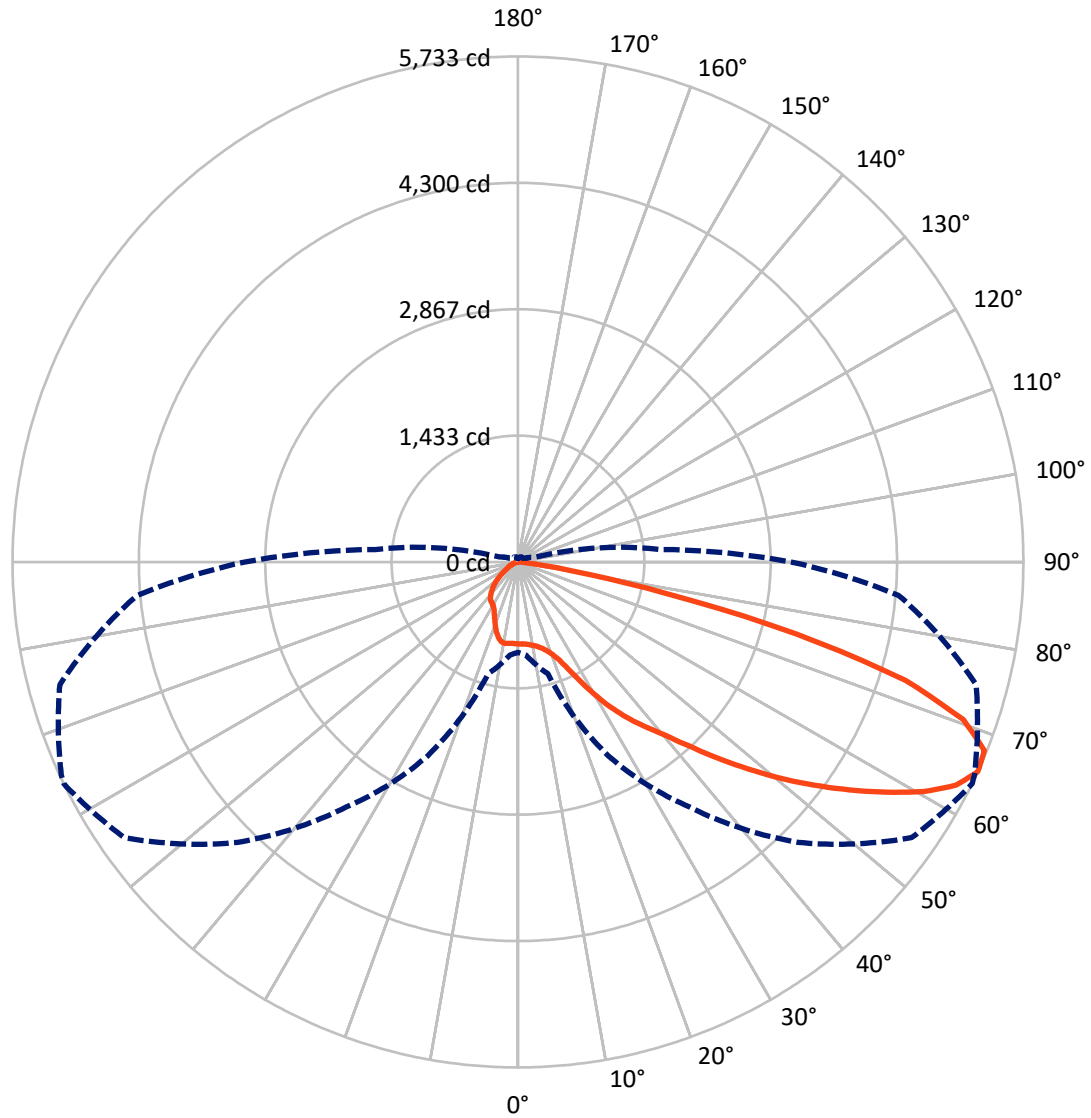
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 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	1068.2	0.0	1068.2
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	6919.8	0.0	6919.8
	% Fixture	86.6	0.0	86.6
Total	Lumens	7988.0	0.0	7988.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.7	1.1
10°-20°	232.5	2.9
20°-30°	440.5	5.5
30°-40°	891.5	11.2
40°-50°	1518.6	19.0
50°-60°	2065.2	25.9
60°-70°	1939.3	24.3
70°-80°	777.0	9.7
80°-90°	37.6	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°	7988.0	100.0
0°-180°	7988.0	100.0

Coefficient of Utilization



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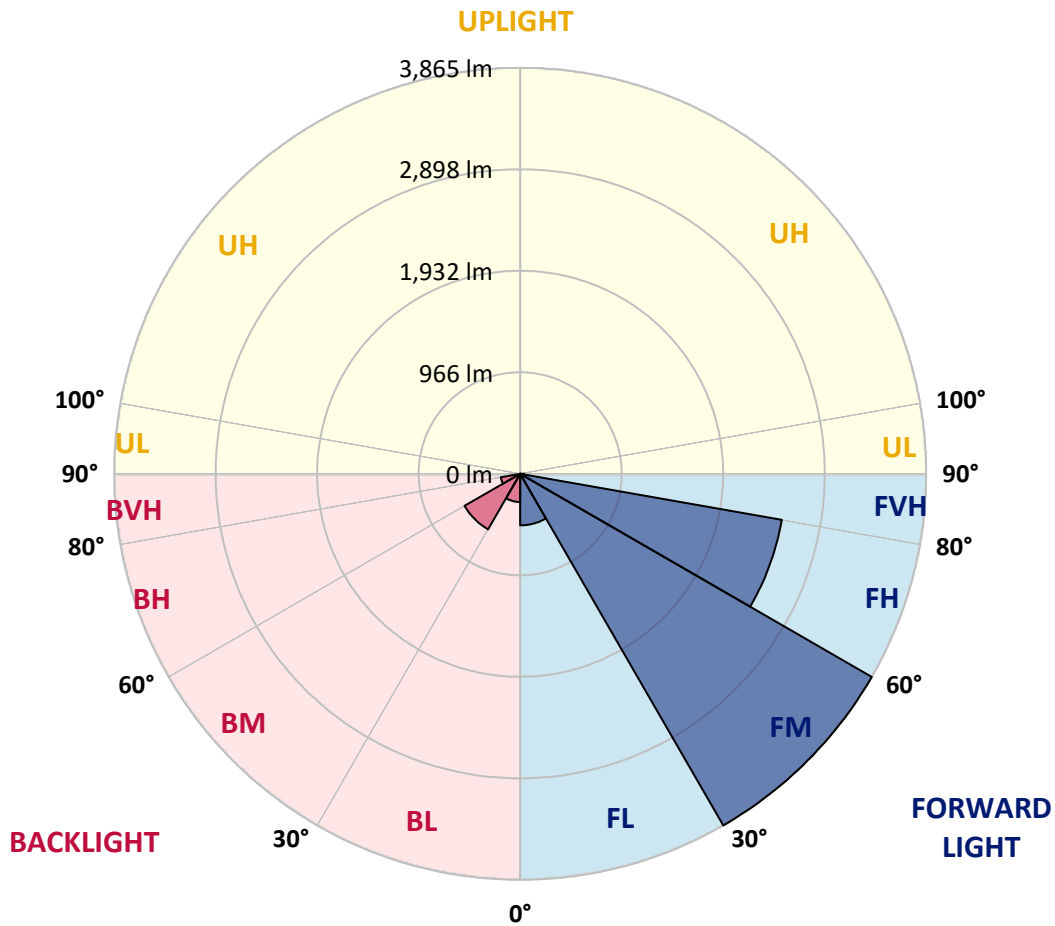
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	490.6	6.1			
FM (30°-60°)	3864.6	48.4			
FH (60°-80°)	2528.8	31.7			G2/5000
FVH (80°-90°)	35.8	0.4			G1/100
BL (0°-30°)	268.2	3.4	B1/500		
BM (30°-60°)	610.7	7.6	B1/1000		
BH (60°-80°)	187.5	2.3	B1/500		G1/500
BVH (80°-90°)	1.8	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°	929.1	929.1	929.1	929.1	929.1	929.1	929.1	929.1	929.1	929.1	929.1
2.5°	925.9	932.3	930.7	929.1	928.6	929.6	930.2	929.6	929.6	929.6	930.2
5°	908.2	913.6	913.6	917.3	922.7	929.1	933.9	935.0	936.0	937.7	937.1
7.5°	874.5	878.8	882.0	894.3	907.7	924.8	939.3	946.8	947.8	953.7	955.9
10°	851.4	856.8	862.2	875.0	894.3	920.0	944.6	962.8	965.5	979.4	985.9
12.5°	850.4	855.7	862.7	876.6	899.1	926.4	956.4	982.6	987.5	1007.8	1021.2
15°	861.6	868.0	874.5	891.6	915.7	948.9	981.0	1013.7	1018.5	1047.4	1061.9
17.5°	884.6	893.2	898.0	915.2	940.9	977.8	1020.1	1057.6	1061.9	1095.6	1113.8
20°	930.2	940.3	941.9	955.9	981.0	1020.7	1071.0	1117.6	1122.9	1161.5	1181.8
22.5°	1024.4	1038.9	1026.0	1033.0	1055.5	1095.1	1149.7	1208.6	1216.1	1260.0	1278.2
25°	1190.4	1210.8	1177.6	1165.8	1175.4	1216.6	1285.2	1359.6	1368.2	1403.5	1412.6
27.5°	1516.5	1490.3	1440.0	1390.7	1361.8	1385.3	1462.4	1554.5	1565.3	1599.5	1588.8
30°	1874.8	1851.7	1783.7	1674.5	1606.0	1602.2	1673.4	1776.2	1788.6	1821.2	1788.6
32.5°	2233.6	2211.6	2137.7	2003.3	1884.4	1825.5	1874.8	1988.8	1995.3	2016.1	1968.0
35°	2586.5	2564.0	2490.1	2352.4	2206.2	2072.4	2062.7	2191.3	2193.4	2215.4	2143.6
37.5°	2941.5	2922.7	2844.0	2709.1	2565.0	2380.3	2290.9	2383.0	2385.6	2407.1	2332.6
40°	3194.8	3202.8	3148.7	3044.3	2920.6	2718.7	2546.8	2587.0	2570.9	2606.8	2562.4
42.5°	3412.2	3428.3	3381.1	3328.6	3256.9	3079.1	2863.8	2856.9	2831.2	2850.5	2804.4
45°	3600.1	3613.5	3571.2	3558.9	3557.3	3432.5	3210.3	3168.5	3132.7	3128.9	3073.8
47.5°	3669.2	3694.9	3713.1	3754.4	3834.7	3782.2	3568.6	3503.8	3463.6	3434.1	3346.9
50°	3695.5	3722.8	3784.9	3904.8	4094.9	4117.4	3925.2	3852.4	3803.1	3749.6	3621.0
52.5°	3660.1	3708.9	3792.4	3994.3	4270.1	4386.3	4267.4	4203.7	4147.4	4060.1	3869.5
55°	3451.8	3500.5	3671.4	3993.2	4357.3	4574.8	4590.8	4562.4	4499.2	4361.6	4070.3
57.5°	3012.7	3085.0	3355.4	3857.2	4355.7	4737.0	4907.8	4928.2	4857.5	4660.4	4228.3
60°	2404.4	2502.4	2832.2	3555.7	4221.3	4824.8	5185.8	5287.5	5212.5	4955.0	4356.3
62.5°	1677.7	1791.2	2103.4	3083.4	3913.9	4761.6	5388.7	5576.7	5519.9	5218.4	4405.5
65°	1023.3	1059.7	1311.4	2426.3	3391.3	4497.1	5451.4	5733.0	5714.3	5379.6	4332.7
67.5°	681.7	712.2	784.5	1663.8	2632.5	3968.6	5301.4	5705.7	5711.1	5353.4	4066.0
70°	410.7	437.0	484.1	967.6	1706.1	3141.2	4837.1	5357.6	5388.7	5002.6	3560.5
72.5°	169.2	186.9	229.7	438.6	883.6	1993.7	3851.8	4599.9	4672.2	4206.3	2732.6
75°	95.9	105.0	134.9	220.1	383.4	929.1	2333.2	3265.5	3372.0	2899.2	1644.0
77.5°	63.7	68.0	87.3	142.4	215.8	317.0	997.1	1701.3	1904.8	1583.5	711.7
80°	42.8	46.6	60.0	95.3	140.3	136.0	317.5	630.3	775.4	544.1	173.5
82.5°	28.9	29.5	42.8	62.7	88.9	65.9	93.7	196.0	246.3	157.4	65.9
85°	16.6	16.1	31.6	36.4	39.6	27.3	28.4	58.9	77.1	66.4	37.5
87.5°	2.1	3.2	12.3	9.6	5.4	5.9	5.9	10.2	15.0	16.1	8.0
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°	929.1	929.1	929.1	929.1	929.1	929.1	929.1	929.1	929.1	929.1	929.1
2.5°	930.2	929.6	928.0	926.4	922.7	920.5	921.6	920.5	920.0	920.5	922.7
5°	937.1	935.5	931.2	925.9	918.4	909.3	903.4	894.8	886.8	882.0	883.0
7.5°	955.9	954.3	948.4	933.4	909.3	871.3	836.4	805.9	782.9	769.5	770.0
10°	985.9	983.2	974.1	940.9	877.7	794.7	725.6	668.3	630.8	613.1	611.5
12.5°	1021.2	1018.0	1001.9	933.9	817.7	688.1	592.8	529.1	494.3	478.7	477.1
15°	1063.0	1058.7	1027.1	900.7	730.4	570.3	483.0	435.4	412.9	398.9	399.5
17.5°	1114.9	1107.4	1045.8	850.9	635.6	480.3	415.5	379.7	359.9	346.5	345.4
20°	1182.4	1170.1	1060.8	791.5	548.3	423.6	370.0	340.0	325.0	313.3	311.1
22.5°	1276.6	1259.0	1079.0	727.2	486.8	384.5	336.3	314.3	302.0	288.6	286.5
25°	1393.4	1372.5	1101.5	667.8	444.5	350.8	311.7	293.5	279.0	263.5	261.9
27.5°	1556.7	1519.2	1128.3	619.0	408.0	321.8	289.2	268.8	252.2	239.4	236.7
30°	1738.8	1677.2	1151.9	589.6	374.8	295.1	259.7	239.4	223.8	214.7	213.1
32.5°	1911.2	1827.7	1167.4	576.7	344.9	264.5	227.6	205.6	193.8	191.2	192.8
35°	2074.0	1963.7	1165.8	564.4	318.1	234.0	196.0	173.5	164.4	166.0	166.0
37.5°	2261.4	2108.8	1154.5	545.1	296.1	206.2	168.7	148.9	140.8	141.4	143.5
40°	2479.4	2276.4	1147.6	508.7	272.0	180.5	146.2	130.1	124.2	122.1	121.6
42.5°	2711.8	2438.7	1148.6	467.5	242.0	157.4	130.7	117.3	111.9	110.3	109.8
45°	2945.2	2593.4	1150.2	424.6	210.5	139.8	119.4	108.2	105.0	102.8	102.8
47.5°	3164.8	2725.1	1120.3	378.6	179.4	126.4	110.3	102.8	100.1	97.5	97.5
50°	3369.3	2813.0	1048.0	325.0	154.8	115.7	103.4	98.0	95.3	92.6	92.6
52.5°	3528.4	2826.9	928.6	269.9	137.6	107.6	99.1	94.2	91.0	88.4	87.8
55°	3599.1	2739.6	758.8	218.5	124.2	100.7	94.8	90.0	86.2	83.5	83.0
57.5°	3580.9	2555.9	591.7	175.6	111.4	93.7	89.4	86.2	81.9	77.6	77.1
60°	3491.4	2310.1	446.1	146.2	99.6	86.2	83.5	80.9	75.0	68.5	67.5
62.5°	3336.7	2001.2	318.1	121.0	86.8	77.6	76.6	74.4	65.9	54.1	53.0
65°	3100.0	1625.8	214.2	100.7	74.4	68.0	68.5	64.8	53.5	40.2	39.1
67.5°	2754.1	1188.8	137.1	82.5	62.1	56.8	57.3	55.2	45.5	34.3	32.7
70°	2313.3	787.2	89.4	62.7	49.8	43.9	47.1	47.7	38.6	27.8	26.8
72.5°	1695.9	464.8	62.7	46.6	36.4	30.5	38.6	39.6	31.1	20.9	19.8
75°	966.6	220.6	47.1	33.7	22.5	21.4	30.0	30.0	21.4	13.9	12.9
77.5°	405.9	92.1	33.2	22.0	12.9	12.3	20.3	18.7	10.7	6.4	6.4
80°	117.3	41.2	17.7	10.7	5.4	4.8	8.0	5.9	2.7	1.1	1.1
82.5°	46.1	18.2	7.0	4.3	2.1	2.1	1.1	0.0	0.0	0.0	0.0
85°	27.3	7.5	3.2	1.6	0.5	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.0	1.6	1.1	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)