

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: P882388

Luminaire Tested: **NAV-SB2B-727-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882388
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-727-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2700K, 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: 8157 lumens
Efficiency: N/A
Efficacy: 110.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

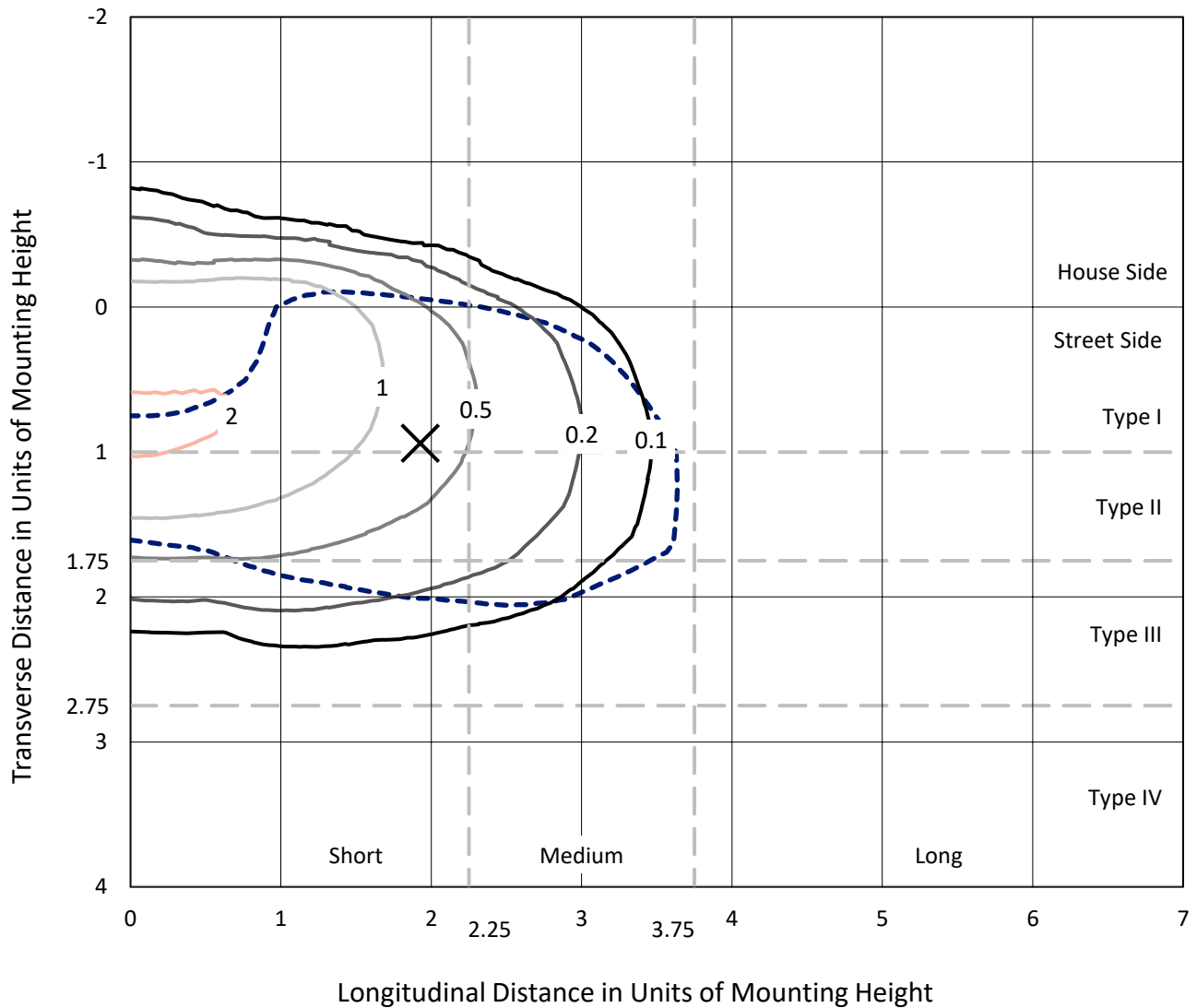
Input Watts (W): 73.9
Input Voltage (V): 120.0
Input Current (Ain): 0.627
Voltage Rise (V): NR
Power Factor: 0.988
Total Harmonic Distortion (THDi): 13.593
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

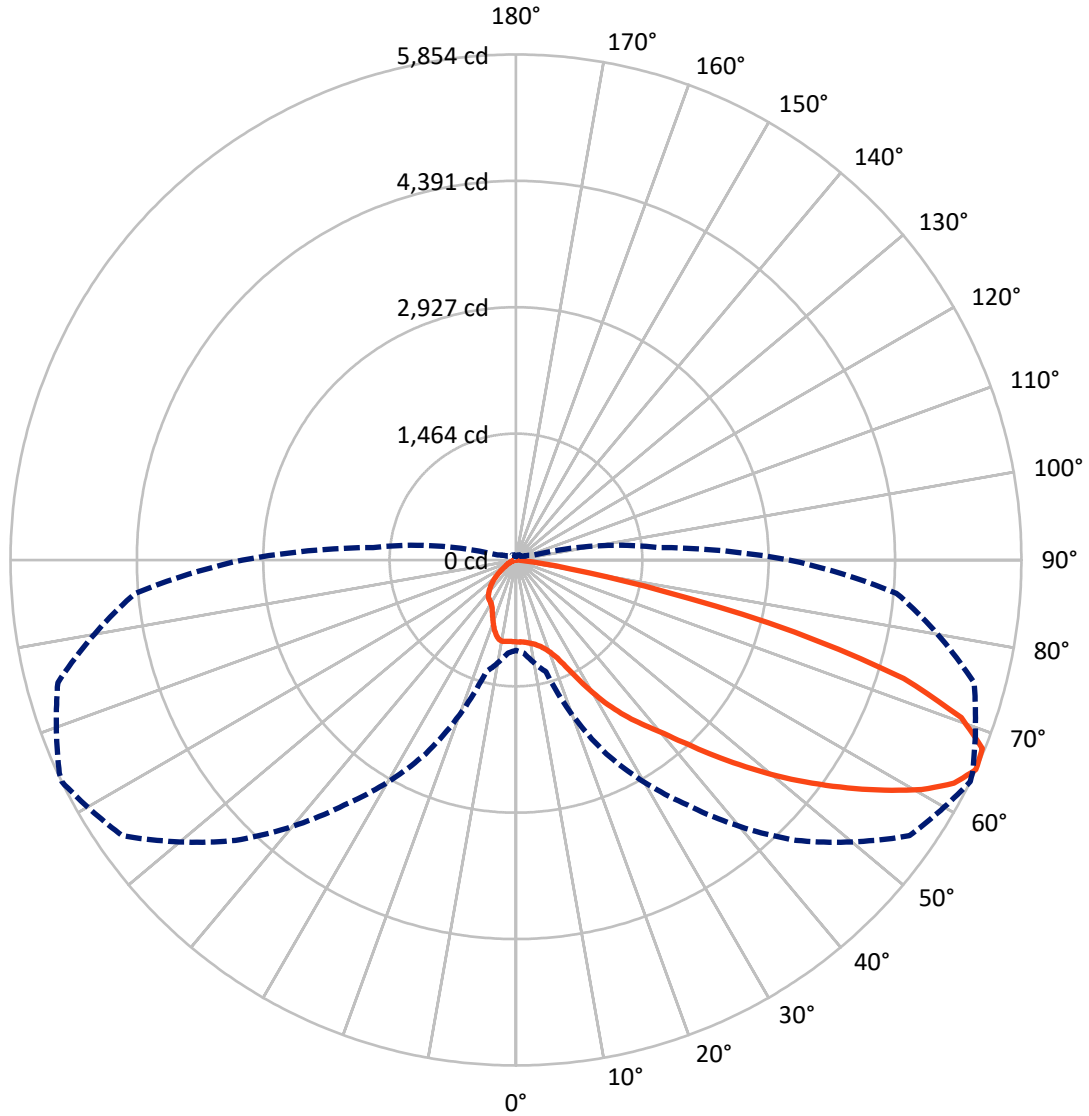
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 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	1090.8	0.0	1090.8
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	7066.2	0.0	7066.2
	% Fixture	86.6	0.0	86.6
Total	Lumens	8157.0	0.0	8157.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.5	1.1
10°-20°	237.4	2.9
20°-30°	449.9	5.5
30°-40°	910.3	11.2
40°-50°	1550.8	19.0
50°-60°	2108.9	25.9
60°-70°	1980.4	24.3
70°-80°	793.4	9.7
80°-90°	38.4	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°	8157.0	100.0
0°-180°	8157.0	100.0

Coefficient of Utilization



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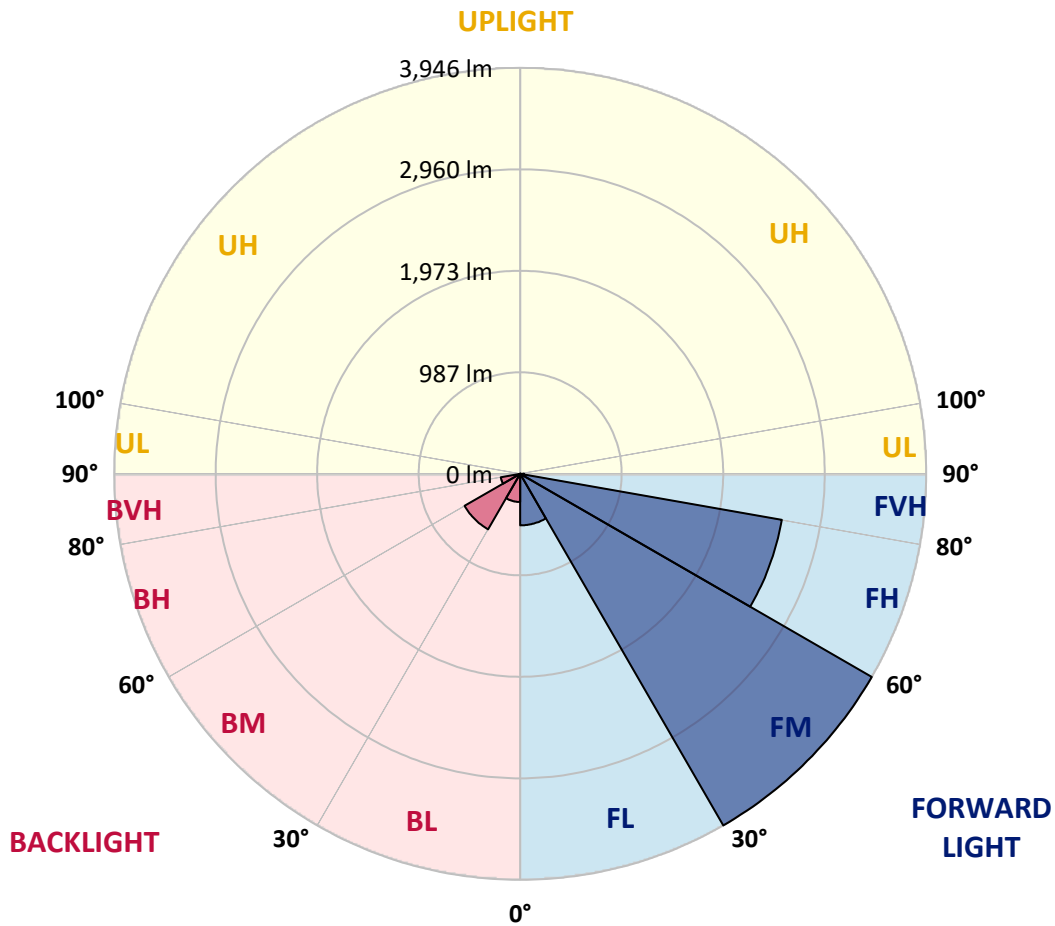
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	500.9	6.1			
FM (30°-60°)	3946.3	48.4			
FH (60°-80°)	2582.3	31.7			G2/5000
FVH (80°-90°)	36.6	0.4			G1/100
BL (0°-30°)	273.9	3.4	B1/500		
BM (30°-60°)	623.6	7.6	B1/1000		
BH (60°-80°)	191.5	2.3	B1/500		G1/500
BVH (80°-90°)	1.9	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°	948.7	948.7	948.7	948.7	948.7	948.7	948.7	948.7	948.7	948.7	948.7
2.5°	945.5	952.0	950.4	948.7	948.2	949.3	949.8	949.3	949.3	949.3	949.8
5°	927.4	932.9	932.9	936.7	942.2	948.7	953.7	954.8	955.9	957.5	956.9
7.5°	893.0	897.3	900.6	913.2	926.9	944.4	959.1	966.8	967.9	973.9	976.1
10°	869.5	874.9	880.4	893.5	913.2	939.4	964.6	983.2	985.9	1000.1	1006.7
12.5°	868.4	873.8	880.9	895.2	918.1	946.0	976.6	1003.4	1008.3	1029.1	1042.8
15°	879.8	886.4	893.0	910.5	935.1	969.0	1001.8	1035.1	1040.1	1069.6	1084.4
17.5°	903.4	912.1	917.0	934.5	960.8	998.5	1041.7	1080.0	1084.4	1118.8	1137.4
20°	949.8	960.2	961.9	976.1	1001.8	1042.3	1093.7	1141.2	1146.7	1186.1	1206.8
22.5°	1046.1	1060.8	1047.7	1054.8	1077.8	1118.3	1174.0	1234.2	1241.8	1286.7	1305.3
25°	1215.6	1236.4	1202.5	1190.4	1200.3	1242.4	1312.4	1388.4	1397.1	1433.2	1442.5
27.5°	1548.6	1521.8	1470.4	1420.1	1390.6	1414.6	1493.4	1587.4	1598.4	1633.4	1622.4
30°	1914.4	1890.9	1821.5	1709.9	1639.9	1636.1	1708.8	1813.8	1826.4	1859.8	1826.4
32.5°	2280.8	2258.4	2182.9	2045.7	1924.3	1864.1	1914.4	2030.9	2037.5	2058.8	2009.6
35°	2641.2	2618.2	2542.7	2402.2	2252.9	2116.2	2106.4	2237.6	2239.8	2262.2	2188.9
37.5°	3003.7	2984.6	2904.2	2766.4	2619.3	2430.6	2339.3	2433.4	2436.1	2458.0	2382.0
40°	3262.4	3270.6	3215.3	3108.7	2982.4	2776.2	2600.7	2641.7	2625.3	2662.0	2616.6
42.5°	3484.4	3500.8	3452.7	3399.1	3325.8	3144.3	2924.4	2917.3	2891.1	2910.8	2863.7
45°	3676.3	3690.0	3646.8	3634.2	3632.6	3505.2	3278.2	3235.6	3198.9	3195.1	3138.8
47.5°	3746.9	3773.1	3791.7	3833.8	3915.8	3862.2	3644.1	3577.9	3536.9	3506.8	3417.7
50°	3773.6	3801.5	3865.0	3987.5	4181.6	4204.5	4008.2	3933.9	3883.6	3828.9	3697.6
52.5°	3737.6	3787.3	3872.6	4078.8	4360.4	4479.1	4357.7	4292.6	4235.2	4146.0	3951.4
55°	3524.8	3574.6	3749.0	4077.7	4449.5	4671.5	4687.9	4659.0	4594.4	4453.9	4156.4
57.5°	3076.4	3150.3	3426.4	3938.8	4447.9	4837.2	5011.7	5032.4	4960.3	4759.0	4317.7
60°	2455.3	2555.3	2892.2	3630.9	4310.6	4926.9	5295.5	5399.4	5322.8	5059.8	4448.4
62.5°	1713.2	1829.1	2147.9	3148.6	3996.8	4862.4	5502.7	5694.7	5636.7	5328.8	4498.7
65°	1045.0	1082.2	1339.2	2477.7	3463.1	4592.2	5566.7	5854.3	5835.2	5493.4	4424.4
67.5°	696.1	727.3	801.1	1699.0	2688.2	4052.5	5413.6	5826.4	5831.9	5466.6	4152.1
70°	419.4	446.2	494.3	988.1	1742.2	3207.7	4939.5	5471.0	5502.7	5108.5	3635.8
72.5°	172.8	190.8	234.6	447.9	902.3	2035.8	3933.3	4697.2	4771.1	4295.3	2790.5
75°	97.9	107.2	137.8	224.7	391.5	948.7	2382.5	3334.5	3443.4	2960.5	1678.8
77.5°	65.1	69.4	89.1	145.5	220.4	323.7	1018.2	1737.3	1945.1	1617.0	726.7
80°	43.7	47.6	61.2	97.3	143.3	138.9	324.3	643.6	791.8	555.6	177.2
82.5°	29.5	30.1	43.7	64.0	90.8	67.3	95.7	200.1	251.5	160.8	67.3
85°	17.0	16.4	32.3	37.2	40.5	27.9	29.0	60.2	78.7	67.8	38.3
87.5°	2.2	3.3	12.6	9.8	5.5	6.0	6.0	10.4	15.3	16.4	8.2
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°	948.7	948.7	948.7	948.7	948.7	948.7	948.7	948.7	948.7	948.7	948.7
2.5°	949.8	949.3	947.7	946.0	942.2	940.0	941.1	940.0	939.4	940.0	942.2
5°	956.9	955.3	950.9	945.5	937.8	928.5	922.5	913.7	905.5	900.6	901.7
7.5°	976.1	974.4	968.4	953.1	928.5	889.7	854.1	823.0	799.5	785.8	786.3
10°	1006.7	1004.0	994.7	960.8	896.2	811.5	740.9	682.4	644.2	626.1	624.5
12.5°	1042.8	1039.5	1023.1	953.7	835.0	702.7	605.3	540.3	504.7	488.9	487.2
15°	1085.5	1081.1	1048.8	919.8	745.9	582.4	493.2	444.6	421.6	407.4	407.9
17.5°	1138.5	1130.8	1068.0	868.9	649.1	490.5	424.3	387.7	367.5	353.8	352.7
20°	1207.4	1194.8	1083.3	808.2	560.0	432.5	377.9	347.2	331.9	319.9	317.7
22.5°	1303.6	1285.6	1101.9	742.6	497.1	392.6	343.4	321.0	308.4	294.7	292.6
25°	1422.8	1401.5	1124.8	681.9	453.9	358.2	318.3	299.7	284.9	269.0	267.4
27.5°	1589.6	1551.3	1152.2	632.1	416.7	328.6	295.3	274.5	257.6	244.4	241.7
30°	1775.5	1712.7	1176.2	602.1	382.8	301.3	265.2	244.4	228.6	219.3	217.6
32.5°	1951.6	1866.3	1192.1	588.9	352.2	270.1	232.4	210.0	198.0	195.2	196.9
35°	2117.9	2005.2	1190.4	576.4	324.8	239.0	200.1	177.2	167.9	169.5	169.5
37.5°	2309.2	2153.4	1179.0	556.7	302.4	210.5	172.3	152.0	143.8	144.4	146.5
40°	2531.8	2324.6	1171.8	519.5	277.8	184.3	149.3	132.9	126.9	124.7	124.1
42.5°	2769.1	2490.2	1172.9	477.4	247.2	160.8	133.4	119.8	114.3	112.6	112.1
45°	3007.5	2648.3	1174.6	433.6	214.9	142.7	121.9	110.5	107.2	105.0	105.0
47.5°	3231.7	2782.8	1144.0	386.6	183.2	129.1	112.6	105.0	102.3	99.5	99.5
50°	3440.6	2872.5	1070.1	331.9	158.0	118.1	105.5	100.1	97.3	94.6	94.6
52.5°	3603.0	2886.7	948.2	275.6	140.5	109.9	101.2	96.2	93.0	90.2	89.7
55°	3675.2	2797.6	774.9	223.1	126.9	102.8	96.8	91.9	88.0	85.3	84.8
57.5°	3656.6	2610.0	604.2	179.4	113.7	95.7	91.3	88.0	83.7	79.3	78.7
60°	3565.3	2359.0	455.5	149.3	101.7	88.0	85.3	82.6	76.6	70.0	68.9
62.5°	3407.3	2043.5	324.8	123.6	88.6	79.3	78.2	76.0	67.3	55.2	54.1
65°	3165.6	1660.2	218.7	102.8	76.0	69.4	70.0	66.2	54.7	41.0	39.9
67.5°	2812.3	1214.0	140.0	84.2	63.4	58.0	58.5	56.3	46.5	35.0	33.4
70°	2362.3	803.8	91.3	64.0	50.9	44.8	48.1	48.7	39.4	28.4	27.3
72.5°	1731.8	474.6	64.0	47.6	37.2	31.2	39.4	40.5	31.7	21.3	20.2
75°	987.0	225.3	48.1	34.5	23.0	21.9	30.6	30.6	21.9	14.2	13.1
77.5°	414.5	94.1	33.9	22.4	13.1	12.6	20.8	19.1	10.9	6.6	6.6
80°	119.8	42.1	18.0	10.9	5.5	4.9	8.2	6.0	2.7	1.1	1.1
82.5°	47.0	18.6	7.1	4.4	2.2	2.2	1.1	0.0	0.0	0.0	0.0
85°	27.9	7.7	3.3	1.6	0.5	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.1	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)