

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: P882288

Luminaire Tested: **NAV-SB2A-830-U-T3-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882288  
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-SB2A-830-U-T3-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

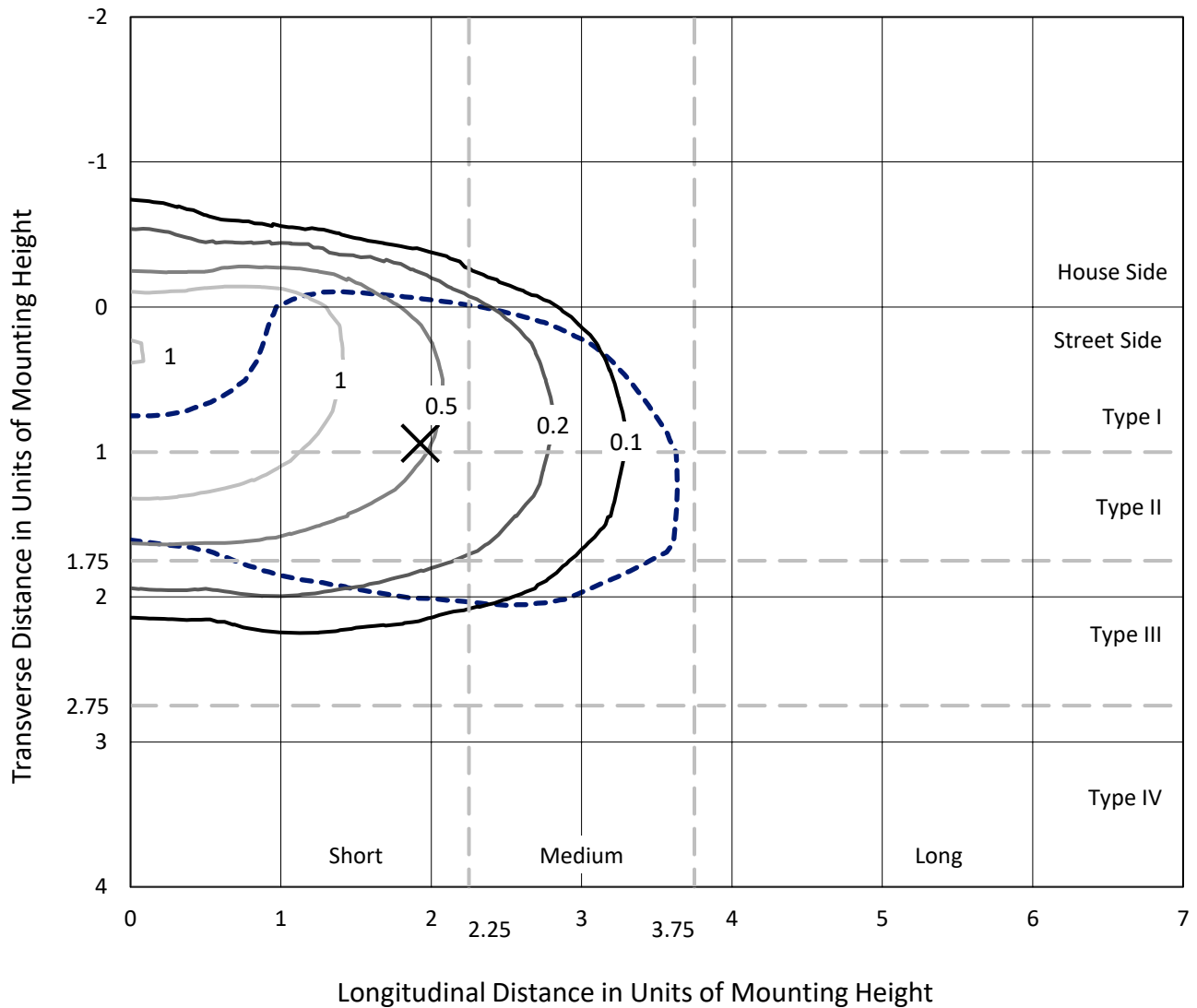
Lumens per Lamp: N/A  
Luminaire Lumens: 6274 lumens  
Efficiency: N/A  
Efficacy: 109.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 57.3  
Input Voltage (V): 120.0  
Input Current (Ain): 0.484  
Voltage Rise (V): NR  
Power Factor: 0.994  
Total Harmonic Distortion (THDi): 9.038  
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

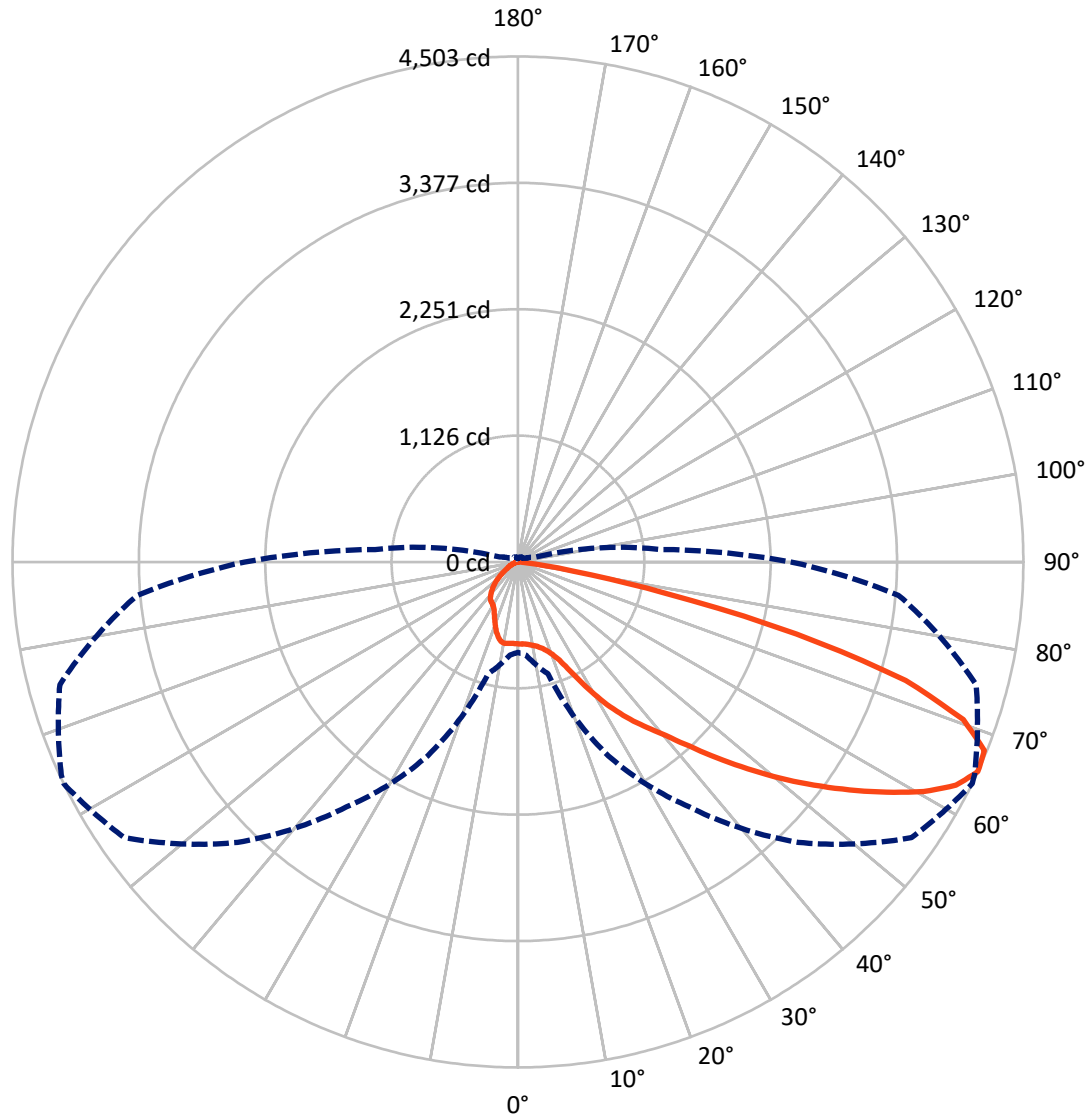
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 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	839.0	0.0	839.0
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	5435.0	0.0	5435.0
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	6274.0	0.0	6274.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.3	1.1
10°-20°	182.6	2.9
20°-30°	346.0	5.5
30°-40°	700.2	11.2
40°-50°	1192.8	19.0
50°-60°	1622.1	25.9
60°-70°	1523.2	24.3
70°-80°	610.3	9.7
80°-90°	29.6	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°	6274.0	100.0
0°-180°	6274.0	100.0

**Coefficient of Utilization**



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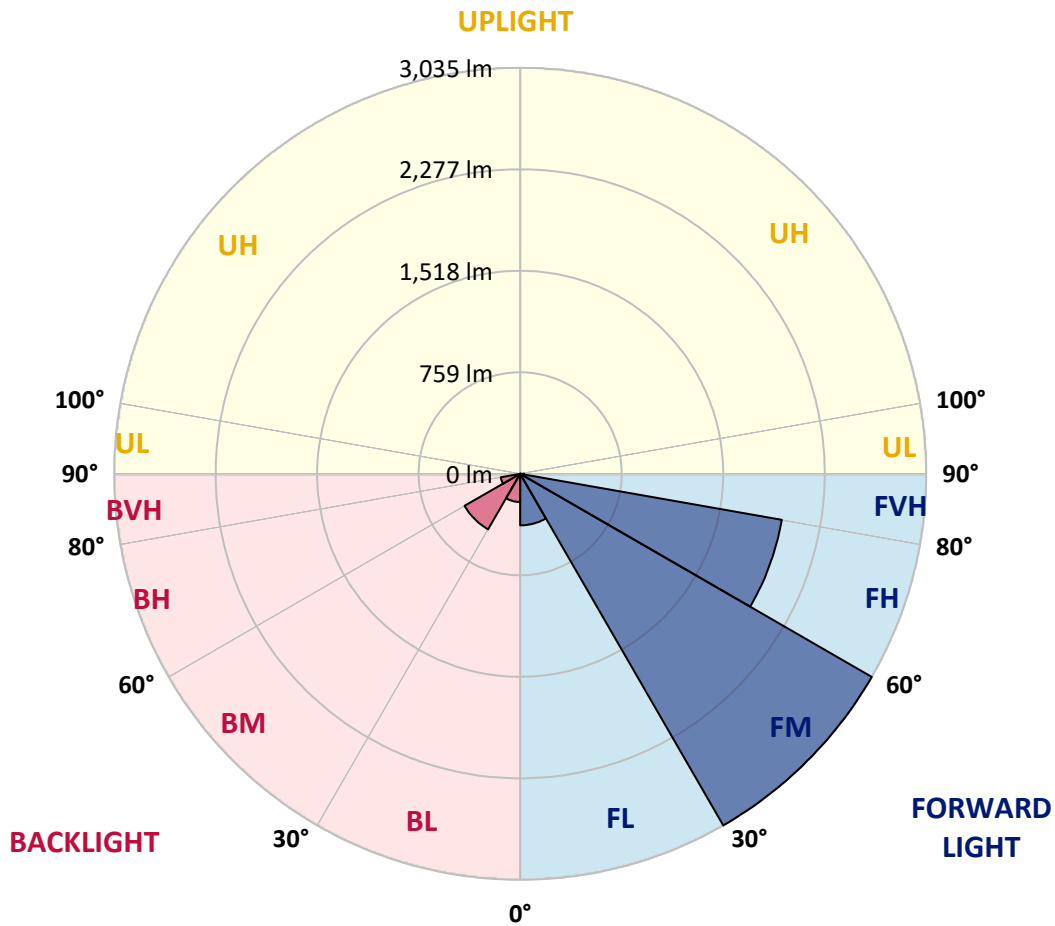
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	385.3	6.1			
FM (30°-60°)	3035.4	48.4			
FH (60°-80°)	1986.2	31.7			G2/5000
FVH (80°-90°)	28.1	0.4			G1/100
BL (0°-30°)	210.7	3.4	B1/500		
BM (30°-60°)	479.7	7.6	B1/1000		
BH (60°-80°)	147.3	2.3	B1/500		G1/500
BVH (80°-90°)	1.4	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°	729.7	729.7	729.7	729.7	729.7	729.7	729.7	729.7	729.7	729.7	729.7
2.5°	727.2	732.3	731.0	729.7	729.3	730.2	730.6	730.2	730.2	730.2	730.6
5°	713.3	717.5	717.5	720.5	724.7	729.7	733.5	734.4	735.2	736.5	736.0
7.5°	686.8	690.2	692.7	702.4	712.9	726.4	737.7	743.6	744.5	749.1	750.8
10°	668.7	673.0	677.2	687.3	702.4	722.6	741.9	756.2	758.3	769.3	774.3
12.5°	667.9	672.1	677.6	688.5	706.2	727.6	751.2	771.8	775.6	791.6	802.1
15°	676.7	681.8	686.8	700.3	719.2	745.3	770.5	796.2	800.0	822.7	834.0
17.5°	694.8	701.6	705.3	718.8	739.0	768.0	801.2	830.7	834.0	860.5	874.8
20°	730.6	738.6	739.8	750.8	770.5	801.7	841.2	877.8	882.0	912.3	928.3
22.5°	804.6	816.0	805.9	811.3	829.0	860.1	903.0	949.3	955.2	989.7	1004.0
25°	935.0	951.0	924.9	915.6	923.2	955.6	1009.4	1067.9	1074.6	1102.4	1109.5
27.5°	1191.1	1170.5	1131.0	1092.3	1069.6	1088.1	1148.6	1221.0	1229.4	1256.3	1247.9
30°	1472.5	1454.4	1401.0	1315.2	1261.4	1258.4	1314.4	1395.1	1404.8	1430.4	1404.8
32.5°	1754.3	1737.1	1679.0	1573.4	1480.1	1433.8	1472.5	1562.1	1567.1	1583.5	1545.7
35°	2031.5	2013.8	1955.8	1847.7	1732.8	1627.7	1620.1	1721.1	1722.8	1740.0	1683.6
37.5°	2310.3	2295.6	2233.8	2127.8	2014.6	1869.5	1799.3	1871.6	1873.7	1890.6	1832.1
40°	2509.3	2515.6	2473.1	2391.1	2293.9	2135.4	2000.3	2031.9	2019.3	2047.5	2012.5
42.5°	2680.0	2692.6	2655.6	2614.4	2558.1	2418.4	2249.3	2243.9	2223.7	2238.8	2202.7
45°	2827.7	2838.2	2804.9	2795.3	2794.0	2696.0	2521.5	2488.7	2460.5	2457.5	2414.2
47.5°	2881.9	2902.1	2916.4	2948.8	3011.9	2970.7	2802.8	2751.9	2720.4	2697.3	2628.7
50°	2902.5	2924.0	2972.8	3067.0	3216.3	3234.0	3083.0	3025.8	2987.1	2945.0	2844.1
52.5°	2874.8	2913.0	2978.6	3137.2	3353.8	3445.1	3351.7	3301.7	3257.5	3188.9	3039.2
55°	2711.2	2749.4	2883.6	3136.4	3422.4	3593.1	3605.8	3583.5	3533.8	3425.7	3196.9
57.5°	2366.3	2423.0	2635.4	3029.5	3421.1	3720.6	3854.7	3870.7	3815.2	3660.4	3321.0
60°	1888.5	1965.4	2224.5	2792.7	3315.5	3789.6	4073.0	4152.9	4094.1	3891.8	3421.5
62.5°	1317.7	1406.9	1652.1	2421.8	3074.1	3739.9	4232.4	4380.1	4335.5	4098.7	3460.2
65°	803.8	832.4	1030.0	1905.7	2663.6	3532.2	4281.7	4502.9	4488.2	4225.3	3403.0
67.5°	535.4	559.4	616.2	1306.8	2067.6	3117.0	4163.9	4481.4	4485.6	4204.7	3193.6
70°	322.6	343.2	380.2	760.0	1340.0	2467.2	3799.2	4208.0	4232.4	3929.2	2796.5
72.5°	132.9	146.8	180.4	344.5	694.0	1565.9	3025.3	3612.9	3669.7	3303.8	2146.3
75°	75.3	82.4	106.0	172.9	301.1	729.7	1832.5	2564.8	2648.5	2277.1	1291.2
77.5°	50.1	53.4	68.6	111.9	169.5	249.0	783.1	1336.2	1496.1	1243.7	559.0
80°	33.6	36.6	47.1	74.9	110.2	106.8	249.4	495.0	609.0	427.3	136.3
82.5°	22.7	23.1	33.6	49.2	69.8	51.7	73.6	153.9	193.5	123.7	51.7
85°	13.0	12.6	24.8	28.6	31.1	21.5	22.3	46.3	60.6	52.2	29.4
87.5°	1.7	2.5	9.7	7.6	4.2	4.6	4.6	8.0	11.8	12.6	6.3
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°	729.7	729.7	729.7	729.7	729.7	729.7	729.7	729.7	729.7	729.7	729.7
2.5°	730.6	730.2	728.9	727.6	724.7	723.0	723.8	723.0	722.6	723.0	724.7
5°	736.0	734.8	731.4	727.2	721.3	714.2	709.5	702.8	696.5	692.7	693.6
7.5°	750.8	749.5	744.9	733.1	714.2	684.3	657.0	633.0	614.9	604.4	604.8
10°	774.3	772.2	765.1	739.0	689.4	624.2	569.9	524.9	495.5	481.6	480.3
12.5°	802.1	799.6	786.9	733.5	642.2	540.5	465.6	415.5	388.2	376.0	374.7
15°	834.9	831.5	806.7	707.4	573.7	447.9	379.4	341.9	324.3	313.3	313.8
17.5°	875.7	869.8	821.4	668.3	499.2	377.3	326.4	298.2	282.6	272.1	271.3
20°	928.7	919.0	833.2	621.6	430.7	332.7	290.6	267.1	255.3	246.0	244.4
22.5°	1002.7	988.8	847.5	571.2	382.3	302.0	264.1	246.9	237.2	226.7	225.0
25°	1094.4	1078.0	865.2	524.5	349.1	275.5	244.8	230.5	219.1	206.9	205.7
27.5°	1222.7	1193.2	886.2	486.2	320.5	252.8	227.1	211.1	198.1	188.0	185.9
30°	1365.7	1317.3	904.7	463.1	294.4	231.7	204.0	188.0	175.8	168.7	167.4
32.5°	1501.1	1435.5	916.9	453.0	270.9	207.8	178.8	161.5	152.3	150.2	151.4
35°	1629.0	1542.3	915.6	443.3	249.8	183.8	153.9	136.3	129.1	130.4	130.4
37.5°	1776.2	1656.3	906.8	428.2	232.6	161.9	132.5	116.9	110.6	111.0	112.7
40°	1947.4	1787.9	901.3	399.6	213.7	141.7	114.8	102.2	97.6	95.9	95.5
42.5°	2129.9	1915.4	902.2	367.2	190.1	123.7	102.6	92.1	87.9	86.6	86.2
45°	2313.3	2036.9	903.4	333.5	165.3	109.8	93.8	85.0	82.4	80.8	80.8
47.5°	2485.7	2140.4	879.9	297.4	140.9	99.3	86.6	80.8	78.7	76.5	76.5
50°	2646.4	2209.4	823.1	255.3	121.6	90.8	81.2	77.0	74.9	72.8	72.8
52.5°	2771.3	2220.3	729.3	212.0	108.1	84.5	77.8	74.0	71.5	69.4	69.0
55°	2826.8	2151.8	596.0	171.6	97.6	79.1	74.4	70.7	67.7	65.6	65.2
57.5°	2812.5	2007.5	464.8	138.0	87.5	73.6	70.2	67.7	64.4	61.0	60.6
60°	2742.3	1814.4	350.4	114.8	78.2	67.7	65.6	63.5	58.9	53.8	53.0
62.5°	2620.7	1571.8	249.8	95.1	68.1	61.0	60.1	58.5	51.7	42.5	41.6
65°	2434.8	1276.9	168.2	79.1	58.5	53.4	53.8	50.9	42.1	31.5	30.7
67.5°	2163.1	933.7	107.7	64.8	48.8	44.6	45.0	43.3	35.8	26.9	25.7
70°	1817.0	618.3	70.2	49.2	39.1	34.5	37.0	37.4	30.3	21.9	21.0
72.5°	1332.0	365.1	49.2	36.6	28.6	24.0	30.3	31.1	24.4	16.4	15.6
75°	759.2	173.3	37.0	26.5	17.7	16.8	23.6	23.6	16.8	10.9	10.1
77.5°	318.8	72.3	26.1	17.2	10.1	9.7	16.0	14.7	8.4	5.0	5.0
80°	92.1	32.4	13.9	8.4	4.2	3.8	6.3	4.6	2.1	0.8	0.8
82.5°	36.2	14.3	5.5	3.4	1.7	1.7	0.8	0.0	0.0	0.0	0.0
85°	21.5	5.9	2.5	1.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.5	1.3	0.8	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)