

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: P881898

Luminaire Tested: **NAV-SB1C-735-U-T3-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P881898  
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-SB1C-735-U-T3-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 3500K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

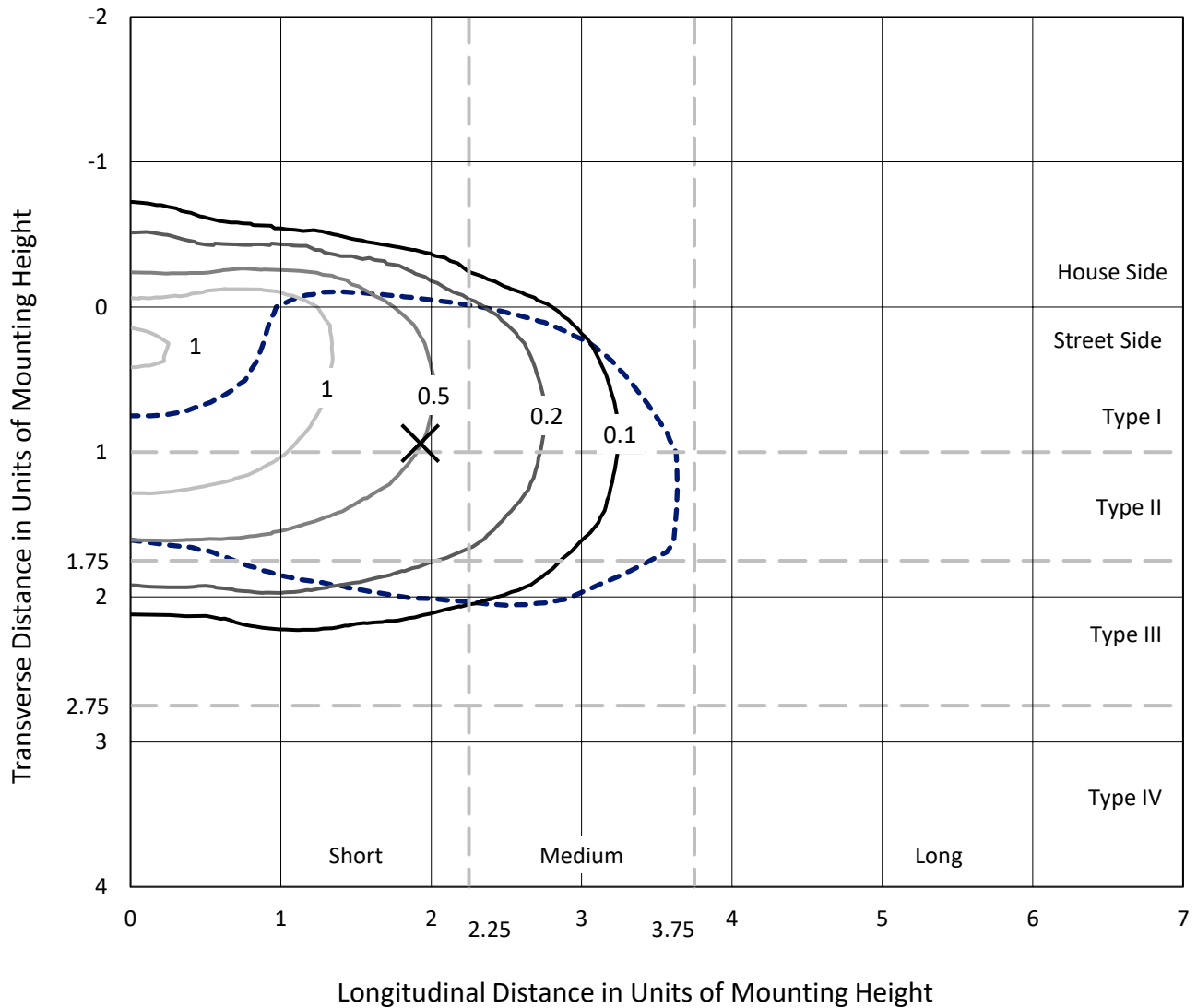
Lumens per Lamp: N/A  
Luminaire Lumens: 5878 lumens  
Efficiency: N/A  
Efficacy: 108.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 54.4  
Input Voltage (V): 120.0  
Input Current (Ain): 0.437  
Voltage Rise (V): NR  
Power Factor: 0.993  
Total Harmonic Distortion (THDi): 9.314  
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

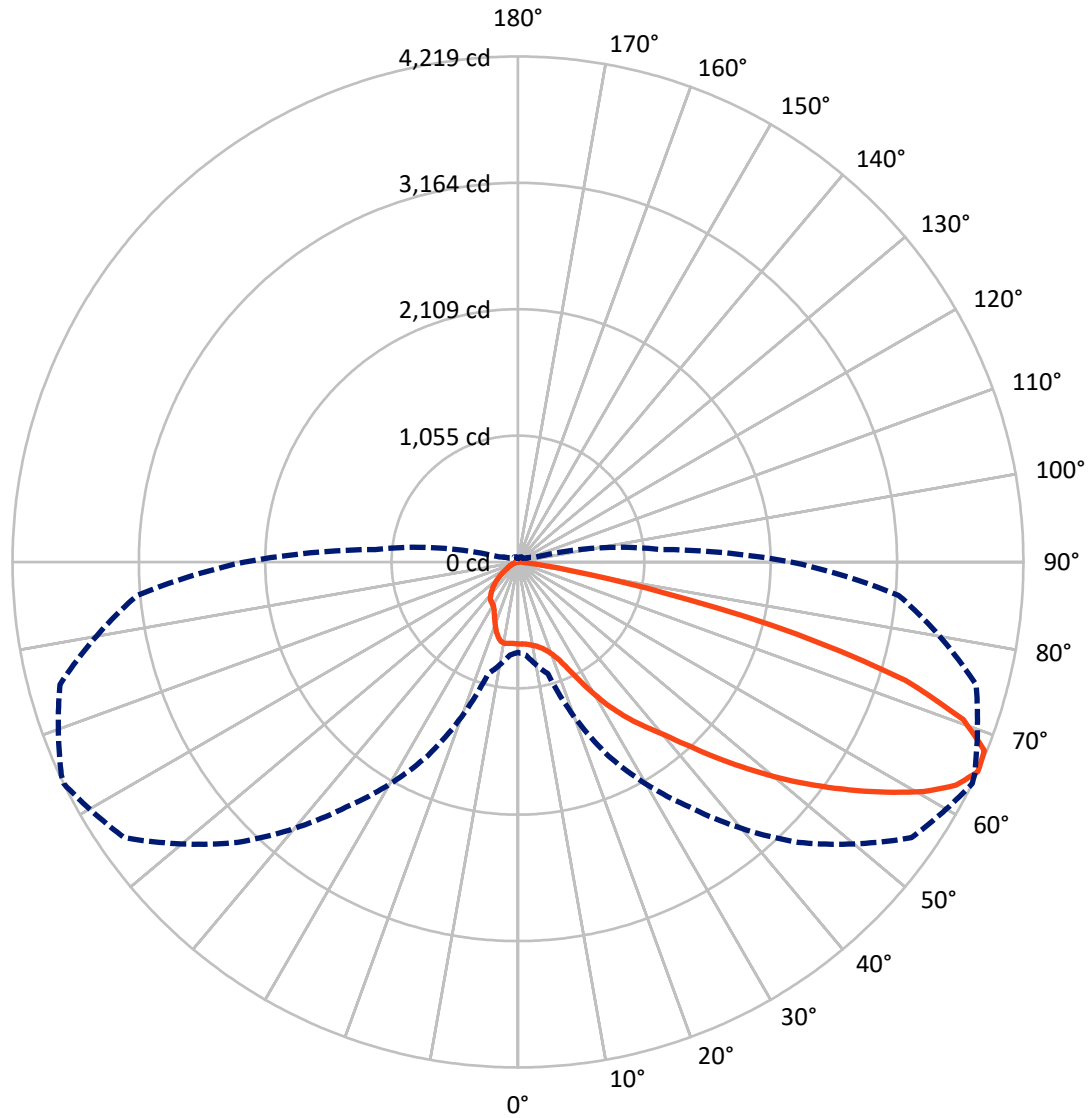
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 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	786.1	0.0	786.1
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	5091.9	0.0	5091.9
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	5878.0	0.0	5878.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.1	1.1
10°-20°	171.1	2.9
20°-30°	324.2	5.5
30°-40°	656.0	11.2
40°-50°	1117.5	19.0
50°-60°	1519.7	25.9
60°-70°	1427.1	24.3
70°-80°	571.7	9.7
80°-90°	27.7	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°	5878.0	100.0
0°-180°	5878.0	100.0

**Coefficient of Utilization**



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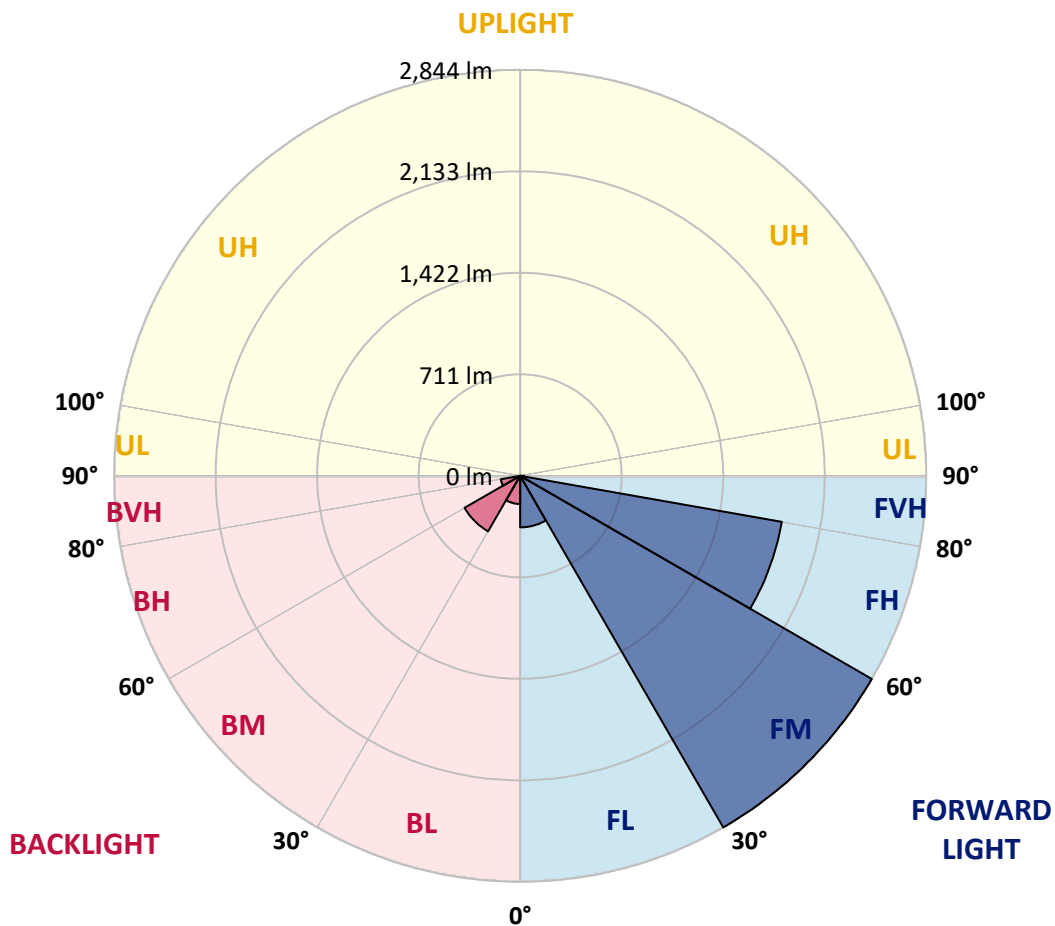
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	361.0	6.1			
FM (30°-60°)	2843.8	48.4			
FH (60°-80°)	1860.8	31.7			G2/5000
FVH (80°-90°)	26.3	0.4			G1/100
BL (0°-30°)	197.4	3.4	B1/500		
BM (30°-60°)	449.4	7.6	B1/1000		
BH (60°-80°)	138.0	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°	683.7	683.7	683.7	683.7	683.7	683.7	683.7	683.7	683.7	683.7	683.7
2.5°	681.3	686.0	684.9	683.7	683.3	684.1	684.5	684.1	684.1	684.1	684.5
5°	668.3	672.2	672.2	675.0	678.9	683.7	687.2	688.0	688.8	690.0	689.6
7.5°	643.5	646.6	649.0	658.1	667.9	680.5	691.2	696.7	697.5	701.8	703.4
10°	626.5	630.5	634.4	643.9	658.1	677.0	695.1	708.5	710.5	720.7	725.4
12.5°	625.7	629.7	634.8	645.1	661.6	681.7	703.8	723.1	726.6	741.6	751.4
15°	634.0	638.8	643.5	656.1	673.8	698.3	721.9	745.9	749.5	770.8	781.4
17.5°	651.0	657.3	660.8	673.4	692.3	719.5	750.7	778.2	781.4	806.2	819.6
20°	684.5	691.9	693.1	703.4	721.9	751.1	788.1	822.4	826.3	854.7	869.7
22.5°	753.8	764.5	755.0	760.1	776.7	805.8	846.0	889.4	894.9	927.2	940.6
25°	876.0	890.9	866.5	857.8	864.9	895.3	945.7	1000.5	1006.8	1032.8	1039.5
27.5°	1115.9	1096.6	1059.6	1023.3	1002.1	1019.4	1076.1	1143.9	1151.8	1177.0	1169.1
30°	1379.6	1362.6	1312.6	1232.2	1181.7	1179.0	1231.4	1307.1	1316.1	1340.2	1316.1
32.5°	1643.6	1627.4	1573.0	1474.1	1386.7	1343.3	1379.6	1463.5	1468.2	1483.6	1448.1
35°	1903.2	1886.7	1832.3	1731.1	1623.5	1525.0	1517.9	1612.4	1614.0	1630.2	1577.4
37.5°	2164.5	2150.7	2092.8	1993.5	1887.5	1751.5	1685.7	1753.5	1755.5	1771.2	1716.5
40°	2350.9	2356.8	2317.0	2240.2	2149.1	2000.6	1874.1	1903.6	1891.8	1918.2	1885.5
42.5°	2510.9	2522.7	2488.0	2449.4	2396.6	2265.8	2107.4	2102.2	2083.3	2097.5	2063.6
45°	2649.2	2659.0	2627.9	2618.8	2617.7	2525.8	2362.3	2331.6	2305.2	2302.4	2261.8
47.5°	2700.0	2718.9	2732.3	2762.7	2821.8	2783.2	2625.9	2578.3	2548.7	2527.0	2462.8
50°	2719.3	2739.4	2785.1	2873.4	3013.3	3029.8	2888.4	2834.8	2798.5	2759.1	2664.5
52.5°	2693.3	2729.2	2790.6	2939.2	3142.1	3227.6	3140.2	3093.3	3051.9	2987.7	2847.4
55°	2540.0	2575.9	2701.6	2938.4	3206.4	3366.3	3378.2	3357.3	3310.8	3209.5	2995.2
57.5°	2216.9	2270.1	2469.1	2838.3	3205.2	3485.7	3611.4	3626.4	3574.4	3429.4	3111.4
60°	1769.3	1841.4	2084.1	2616.5	3106.3	3550.4	3816.0	3890.8	3835.7	3646.1	3205.6
62.5°	1234.6	1318.1	1547.8	2268.9	2880.1	3503.9	3965.3	4103.6	4061.8	3840.0	3241.8
65°	753.0	779.8	965.0	1785.4	2495.5	3309.2	4011.4	4218.7	4204.9	3958.6	3188.2
67.5°	501.6	524.1	577.3	1224.3	1937.1	2920.3	3901.1	4198.6	4202.5	3939.3	2992.0
70°	302.2	321.5	356.2	712.0	1255.4	2311.5	3559.4	3942.4	3965.3	3681.2	2620.0
72.5°	124.5	137.5	169.0	322.7	650.2	1467.0	2834.4	3384.9	3438.1	3095.2	2010.8
75°	70.5	77.2	99.3	162.0	282.1	683.7	1716.9	2402.9	2481.3	2133.4	1209.7
77.5°	46.9	50.0	64.2	104.8	158.8	233.3	733.7	1251.9	1401.6	1165.2	523.7
80°	31.5	34.3	44.1	70.1	103.2	100.1	233.7	463.8	570.6	400.4	127.7
82.5°	21.3	21.7	31.5	46.1	65.4	48.5	69.0	144.2	181.3	115.8	48.5
85°	12.2	11.8	23.2	26.8	29.2	20.1	20.9	43.3	56.7	48.9	27.6
87.5°	1.6	2.4	9.1	7.1	3.9	4.3	4.3	7.5	11.0	11.8	5.9
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°	683.7	683.7	683.7	683.7	683.7	683.7	683.7	683.7	683.7	683.7	683.7
2.5°	684.5	684.1	682.9	681.7	678.9	677.4	678.2	677.4	677.0	677.4	678.9
5°	689.6	688.4	685.2	681.3	675.8	669.1	664.8	658.5	652.5	649.0	649.8
7.5°	703.4	702.2	697.9	686.8	669.1	641.1	615.5	593.0	576.1	566.2	566.6
10°	725.4	723.5	716.8	692.3	645.8	584.8	533.9	491.8	464.2	451.2	450.0
12.5°	751.4	749.1	737.3	687.2	601.7	506.4	436.2	389.3	363.7	352.3	351.1
15°	782.2	779.0	755.8	662.8	537.5	419.7	355.4	320.4	303.8	293.6	294.0
17.5°	820.4	814.9	769.6	626.1	467.7	353.5	305.8	279.4	264.8	254.9	254.2
20°	870.1	861.0	780.6	582.4	403.5	311.7	272.3	250.2	239.2	230.5	228.9
22.5°	939.4	926.4	794.0	535.1	358.2	282.9	247.5	231.3	222.2	212.4	210.8
25°	1025.3	1009.9	810.6	491.4	327.1	258.1	229.3	215.9	205.3	193.9	192.7
27.5°	1145.5	1117.9	830.3	455.5	300.3	236.8	212.8	197.8	185.6	176.1	174.2
30°	1279.5	1234.2	847.6	433.8	275.8	217.1	191.1	176.1	164.7	158.0	156.8
32.5°	1406.4	1344.9	859.0	424.4	253.8	194.7	167.5	151.3	142.6	140.7	141.9
35°	1526.1	1445.0	857.8	415.3	234.1	172.2	144.2	127.7	121.0	122.2	122.2
37.5°	1664.1	1551.8	849.6	401.1	217.9	151.7	124.1	109.5	103.6	104.0	105.6
40°	1824.4	1675.1	844.4	374.3	200.2	132.8	107.6	95.8	91.4	89.8	89.4
42.5°	1995.5	1794.5	845.2	344.0	178.1	115.8	96.1	86.3	82.4	81.2	80.8
45°	2167.3	1908.4	846.4	312.5	154.9	102.8	87.9	79.6	77.2	75.7	75.7
47.5°	2328.8	2005.3	824.3	278.6	132.0	93.0	81.2	75.7	73.7	71.7	71.7
50°	2479.3	2069.9	771.2	239.2	113.9	85.1	76.1	72.1	70.1	68.2	68.2
52.5°	2596.4	2080.2	683.3	198.6	101.3	79.2	72.9	69.4	67.0	65.0	64.6
55°	2648.4	2015.9	558.4	160.8	91.4	74.1	69.7	66.2	63.4	61.5	61.1
57.5°	2635.0	1880.8	435.4	129.2	82.0	69.0	65.8	63.4	60.3	57.1	56.7
60°	2569.2	1699.9	328.2	107.6	73.3	63.4	61.5	59.5	55.2	50.4	49.6
62.5°	2455.3	1472.6	234.1	89.1	63.8	57.1	56.3	54.8	48.5	39.8	39.0
65°	2281.1	1196.3	157.6	74.1	54.8	50.0	50.4	47.7	39.4	29.6	28.8
67.5°	2026.6	874.8	100.9	60.7	45.7	41.8	42.2	40.6	33.5	25.2	24.0
70°	1702.3	579.2	65.8	46.1	36.6	32.3	34.7	35.1	28.4	20.5	19.7
72.5°	1247.9	342.0	46.1	34.3	26.8	22.5	28.4	29.2	22.9	15.4	14.6
75°	711.3	162.3	34.7	24.8	16.5	15.8	22.1	22.1	15.8	10.2	9.5
77.5°	298.7	67.8	24.4	16.2	9.5	9.1	15.0	13.8	7.9	4.7	4.7
80°	86.3	30.3	13.0	7.9	3.9	3.5	5.9	4.3	2.0	0.8	0.8
82.5°	33.9	13.4	5.1	3.2	1.6	1.6	0.8	0.0	0.0	0.0	0.0
85°	20.1	5.5	2.4	1.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.1	1.2	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)