

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: P960290

Luminaire Tested: **NAV-SB1C-727-U-T2R-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P960290  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1C-727-U-T2R-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 2700K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE II ROADWAY  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6030.1 lumens  
Efficiency: N/A  
Efficacy: 110.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G1

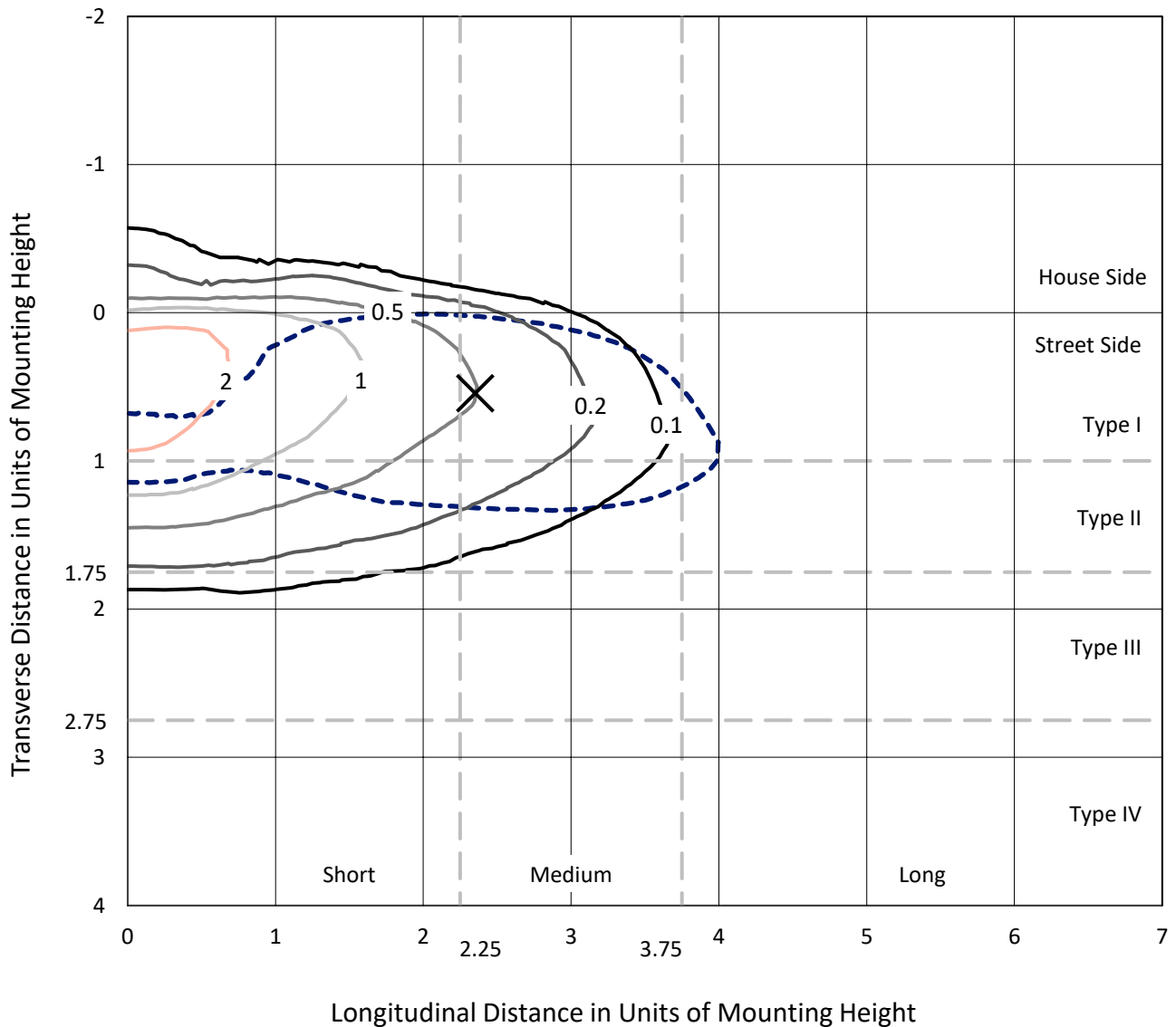
Input Watts (W): 54.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

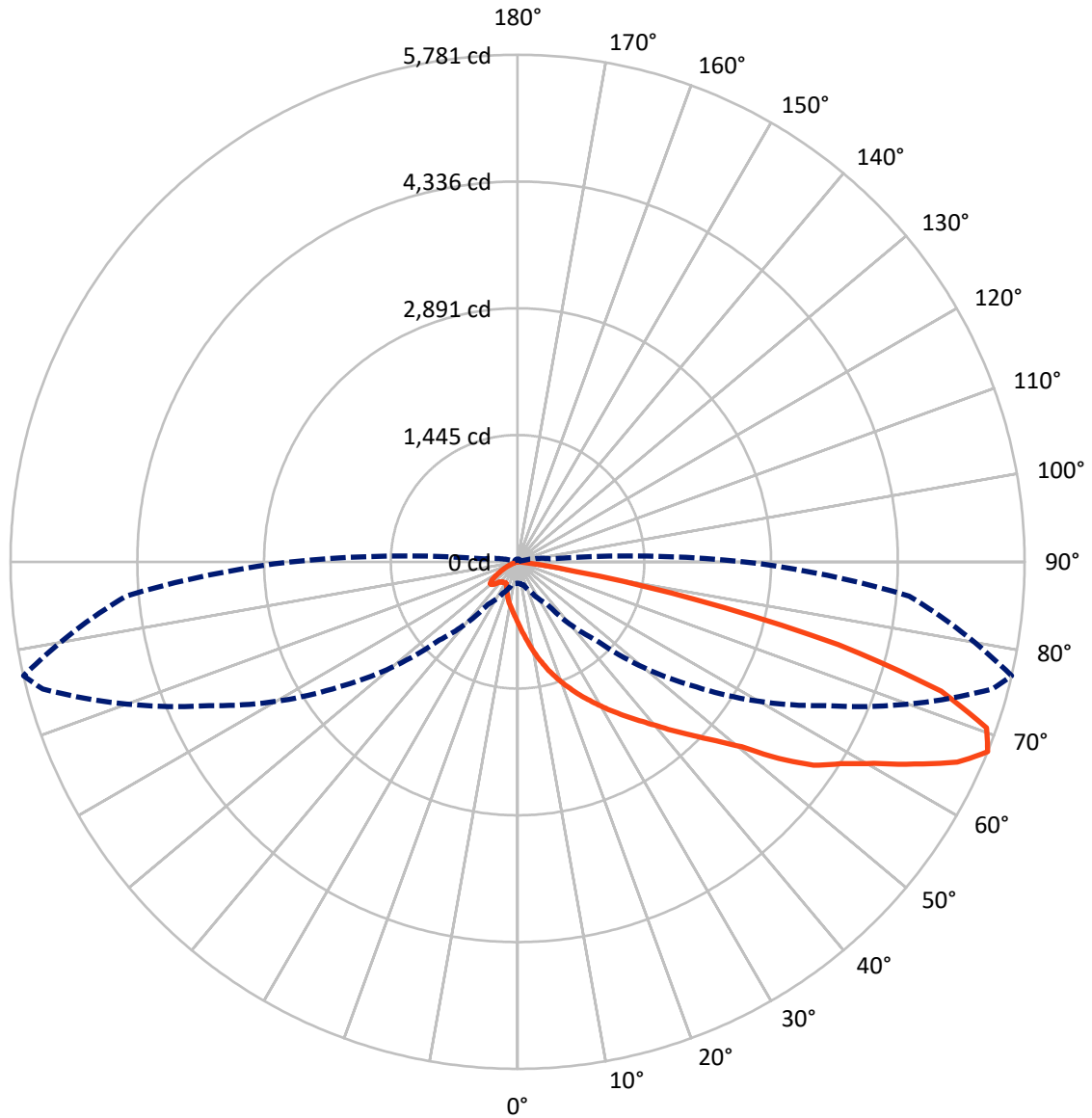
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	443.6	0.0	443.6
	% Fixture	7.4	0.0	7.4
<b>Street Side</b>	Lumens	5586.4	0.0	5586.4
	% Fixture	92.6	0.0	92.6
<b>Total</b>	Lumens	6030.1	0.0	6030.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.0	1.2
10°-20°	248.5	4.1
20°-30°	479.6	8.0
30°-40°	832.6	13.8
40°-50°	1208.9	20.0
50°-60°	1388.3	23.0
60°-70°	1205.3	20.0
70°-80°	567.7	9.4
80°-90°	28.1	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°	6030.1	100.0
0°-180°	6030.1	100.0

**Coefficient of Utilization**

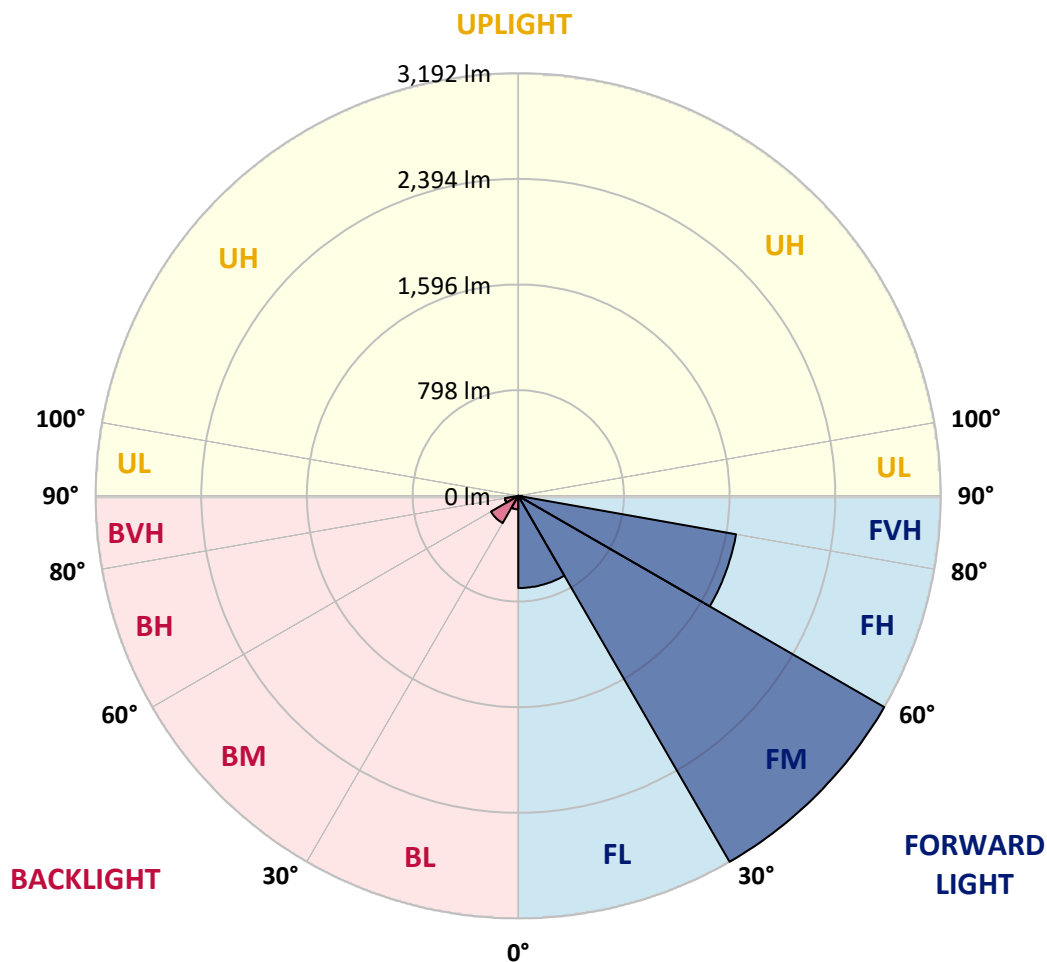


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	696.4	11.5			
FM (30°-60°)	3192.2	52.9			
FH (60°-80°)	1670.3	27.7			G1/1800
FVH (80°-90°)	27.6	0.5			G1/100
BL (0°-30°)	102.7	1.7	B0/110		
BM (30°-60°)	237.7	3.9	B1/1000		
BH (60°-80°)	102.7	1.7	B0/110		G0/110
BVH (80°-90°)	0.5	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-G1**  
 Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	695.4	695.4	695.4	695.4	695.4	695.4	695.4	695.4	695.4	695.4	695.4
2.5°	962.7	968.7	960.1	943.6	918.9	902.8	863.5	826.5	785.3	772.1	730.9
5°	1173.5	1178.8	1169.0	1151.1	1118.1	1086.7	1034.9	957.5	877.0	851.2	778.1
7.5°	1329.6	1332.7	1328.9	1312.4	1281.0	1245.4	1187.8	1096.0	976.6	948.1	836.2
10°	1442.0	1451.7	1450.6	1444.2	1423.3	1394.4	1333.0	1228.6	1088.1	1051.4	901.7
12.5°	1516.5	1527.4	1533.7	1548.0	1546.8	1528.5	1474.6	1364.2	1199.4	1156.3	975.5
15°	1538.2	1549.9	1574.2	1607.1	1636.3	1645.7	1607.9	1497.0	1321.8	1266.8	1051.0
17.5°	1525.9	1543.9	1573.1	1625.1	1689.2	1731.4	1727.3	1625.4	1433.1	1370.1	1125.2
20°	1553.2	1570.4	1593.3	1637.1	1711.6	1788.4	1819.1	1748.3	1543.4	1477.5	1203.1
22.5°	1704.5	1701.5	1703.8	1710.8	1755.4	1831.5	1894.7	1859.9	1652.8	1585.5	1285.5
25°	1944.1	1930.7	1907.8	1869.3	1858.0	1894.7	1960.6	1958.8	1768.1	1695.9	1369.7
27.5°	2219.0	2216.8	2163.2	2070.3	2017.9	2003.7	2035.1	2055.0	1882.4	1805.2	1454.4
30°	2482.2	2488.2	2415.9	2312.6	2216.4	2160.6	2132.1	2146.4	1998.4	1923.2	1541.6
32.5°	2711.4	2717.8	2639.2	2518.2	2399.1	2331.7	2271.8	2236.5	2125.0	2043.0	1637.4
35°	2905.0	2911.4	2821.1	2687.4	2560.4	2499.5	2431.7	2335.5	2252.3	2176.0	1744.2
37.5°	3078.0	3076.1	2955.2	2820.4	2695.6	2647.4	2611.8	2457.1	2383.4	2309.6	1862.5
40°	3180.2	3188.1	3084.7	2936.1	2815.2	2779.9	2777.6	2608.0	2534.6	2463.2	1992.1
42.5°	3210.2	3224.0	3149.1	3027.0	2917.4	2879.1	2938.0	2771.3	2710.6	2641.0	2138.5
45°	3156.3	3169.7	3135.7	3051.0	2987.0	2962.2	3075.7	2940.5	2898.6	2829.7	2303.6
47.5°	2998.9	3015.9	3024.1	3006.1	3005.3	3030.4	3199.3	3118.8	3121.8	3051.4	2495.0
50°	2694.5	2723.0	2798.7	2862.3	2960.8	3084.3	3319.5	3312.0	3373.5	3312.8	2744.3
52.5°	2141.1	2181.5	2442.2	2616.3	2837.6	3074.3	3451.7	3622.0	3814.9	3726.2	3096.0
55°	1720.6	1720.6	1932.5	2258.3	2597.1	3007.6	3509.4	3823.6	4115.6	4094.7	3343.4
57.5°	1402.7	1419.5	1554.7	1842.6	2249.4	2848.8	3545.0	3950.0	4357.9	4342.5	3585.3
60°	865.7	902.1	1157.4	1441.7	1853.5	2566.1	3522.5	4078.2	4651.9	4664.2	3876.7
62.5°	487.5	501.0	614.9	1037.2	1441.3	2186.0	3350.6	4149.7	5027.7	5080.2	4177.0
65°	336.6	343.4	387.1	645.5	999.1	1740.4	3014.7	4105.1	5404.4	5510.4	4431.6
67.5°	244.6	247.8	275.2	394.3	592.8	1261.9	2488.2	3880.4	5604.1	5781.2	4480.3
70°	188.0	190.2	210.0	259.1	350.1	778.9	1807.1	3433.7	5459.5	5671.0	4230.9
72.5°	152.7	155.0	170.4	191.7	232.2	460.5	1095.3	2788.5	4821.4	5049.9	3601.8
75°	128.8	131.8	145.7	159.5	181.9	295.8	513.7	1941.9	3625.8	3775.6	2504.7
77.5°	71.5	65.9	118.3	132.2	153.5	187.3	240.4	1142.9	2030.6	2072.2	1111.4
80°	44.6	46.0	94.0	106.4	118.0	94.4	110.1	439.9	704.0	668.8	215.4
82.5°	2.7	5.9	72.3	76.8	80.9	40.5	41.6	149.4	169.6	155.8	38.2
85°	0.0	0.0	32.9	26.5	28.1	11.6	12.0	34.8	22.9	24.7	7.5
87.5°	0.0	0.0	0.0	0.7	0.0	1.1	2.3	3.0	1.1	1.5	2.7
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°	695.4	695.4	695.4	695.4	695.4	695.4	695.4	695.4	695.4	695.4	695.4
2.5°	704.7	678.6	625.4	573.3	530.9	491.7	463.6	437.0	423.5	422.7	422.0
5°	726.1	671.1	564.7	470.7	395.0	334.4	295.1	267.0	252.8	247.8	247.1
7.5°	756.0	673.2	511.5	380.8	291.7	239.6	217.2	208.2	205.2	201.8	201.1
10°	793.9	678.6	463.9	306.7	229.9	203.7	194.7	191.0	188.7	186.4	185.7
12.5°	836.2	683.4	416.8	254.6	202.2	188.7	182.3	177.8	174.9	172.2	171.5
15°	877.3	686.3	367.7	218.3	188.0	177.1	170.4	165.5	161.4	158.4	158.1
17.5°	918.2	690.4	321.6	196.6	176.4	165.5	158.8	152.7	149.4	146.1	145.7
20°	963.5	689.7	278.2	181.2	164.7	153.9	146.8	141.1	137.8	134.1	133.7
22.5°	1005.4	686.0	240.1	168.1	152.7	142.3	134.4	128.8	125.5	122.5	122.1
25°	1053.7	683.0	208.2	156.1	141.6	131.1	122.5	117.2	113.5	110.8	110.5
27.5°	1100.1	678.6	185.0	145.2	130.7	120.5	112.3	106.4	103.0	101.1	101.1
30°	1145.8	677.4	176.4	134.8	121.0	110.8	102.6	97.0	94.4	93.6	93.3
32.5°	1200.9	680.4	180.1	131.1	111.9	101.9	94.0	89.9	87.2	87.2	87.2
35°	1259.6	679.7	185.7	134.4	106.0	92.9	86.9	84.3	81.6	81.6	81.6
37.5°	1333.4	680.7	190.2	140.0	103.7	85.4	82.0	78.6	77.2	77.2	77.2
40°	1443.5	717.8	188.0	144.9	103.0	80.2	73.4	72.3	71.1	71.1	71.1
42.5°	1578.3	798.4	191.0	145.2	102.6	76.4	67.4	69.6	67.0	66.6	66.3
45°	1725.9	886.3	210.0	137.5	102.2	74.5	64.4	67.0	62.9	62.9	62.9
47.5°	1872.3	973.5	229.5	126.2	101.1	74.1	61.8	60.3	59.1	59.6	59.6
50°	2074.1	1044.7	237.0	110.8	98.5	73.4	56.9	57.3	56.6	57.3	57.3
52.5°	2293.8	1059.7	228.1	93.6	91.0	71.1	53.5	55.0	54.6	55.5	55.5
55°	2430.9	1043.6	188.4	77.9	79.3	62.1	50.2	53.2	53.2	53.2	53.2
57.5°	2572.4	975.1	133.7	63.2	65.9	50.9	47.2	51.2	50.9	50.5	50.5
60°	2674.3	864.3	87.9	52.1	52.4	41.9	43.8	48.3	48.0	46.0	46.0
62.5°	2750.4	741.8	56.6	44.2	40.1	37.8	40.1	43.8	42.3	38.2	37.4
65°	2741.8	572.2	43.5	37.8	32.9	32.9	34.8	38.2	33.7	27.0	26.2
67.5°	2581.9	387.1	36.0	31.9	27.7	27.4	28.8	31.9	28.8	22.9	22.1
70°	2296.1	253.2	28.8	24.7	22.1	20.2	23.2	27.4	24.3	18.3	17.6
72.5°	1863.7	154.3	21.7	17.9	16.1	13.1	18.3	22.4	19.5	13.5	12.7
75°	1205.7	78.6	15.0	11.6	8.6	7.9	13.5	16.8	13.5	8.2	7.1
77.5°	461.4	32.9	8.2	5.2	4.5	3.8	7.5	10.1	5.6	1.8	1.5
80°	88.8	13.8	4.1	2.7	2.3	1.5	1.1	0.7	0.0	0.0	0.0
82.5°	15.4	4.5	1.5	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.2	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.8	0.0	0.0	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)