

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: P881956

Luminaire Tested: **NAV-SB1C-835-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881956
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1C-835-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3500K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4618 lumens
Efficiency: N/A
Efficacy: 84.9 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

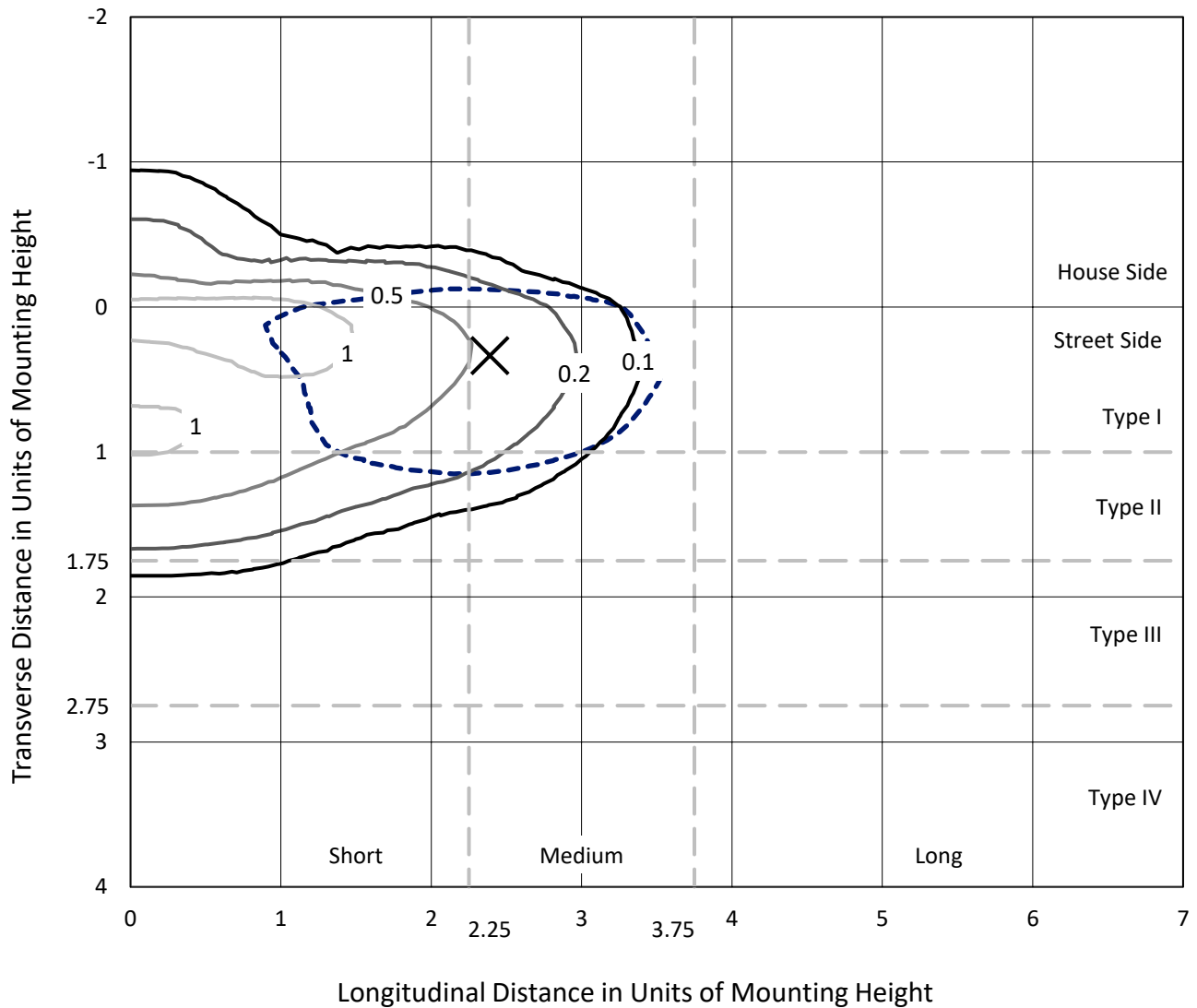
Input Watts (W): 54.4
Input Voltage (V): 120.0
Input Current (Ain): 0.437
Voltage Rise (V): NR
Power Factor: 0.993
Total Harmonic Distortion (THDi): 9.314
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

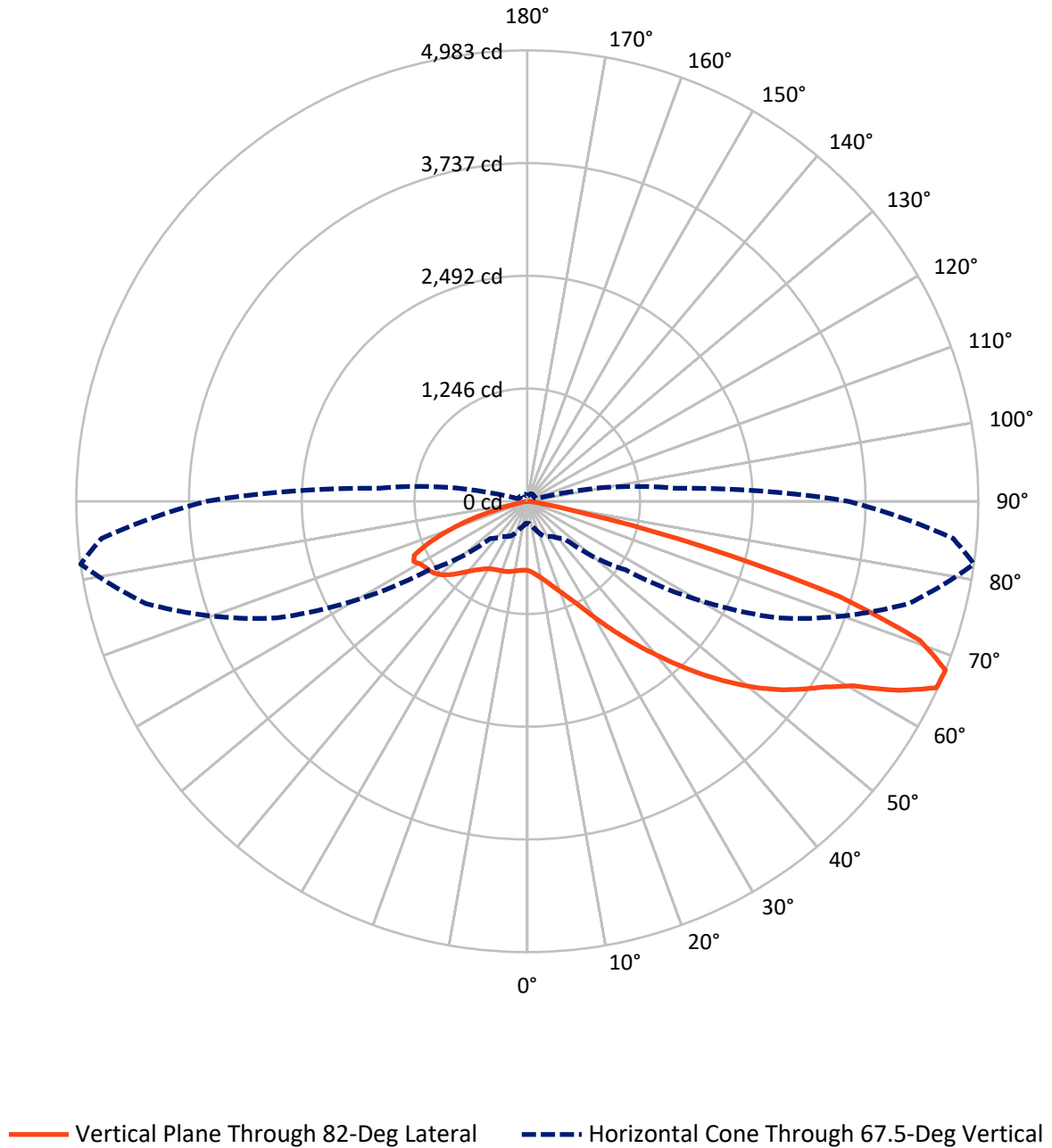
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.6 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	836.5	0.0	836.5
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	3781.5	0.0	3781.5
	% Fixture	81.9	0.0	81.9
Total	Lumens	4618.0	0.0	4618.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.2	1.5
10°-20°	177.1	3.8
20°-30°	283.7	6.1
30°-40°	501.7	10.9
40°-50°	878.9	19.0
50°-60°	1172.3	25.4
60°-70°	1091.3	23.6
70°-80°	418.8	9.1
80°-90°	26.0	0.6
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°	4618.0	100.0
0°-180°	4618.0	100.0

Coefficient of Utilization



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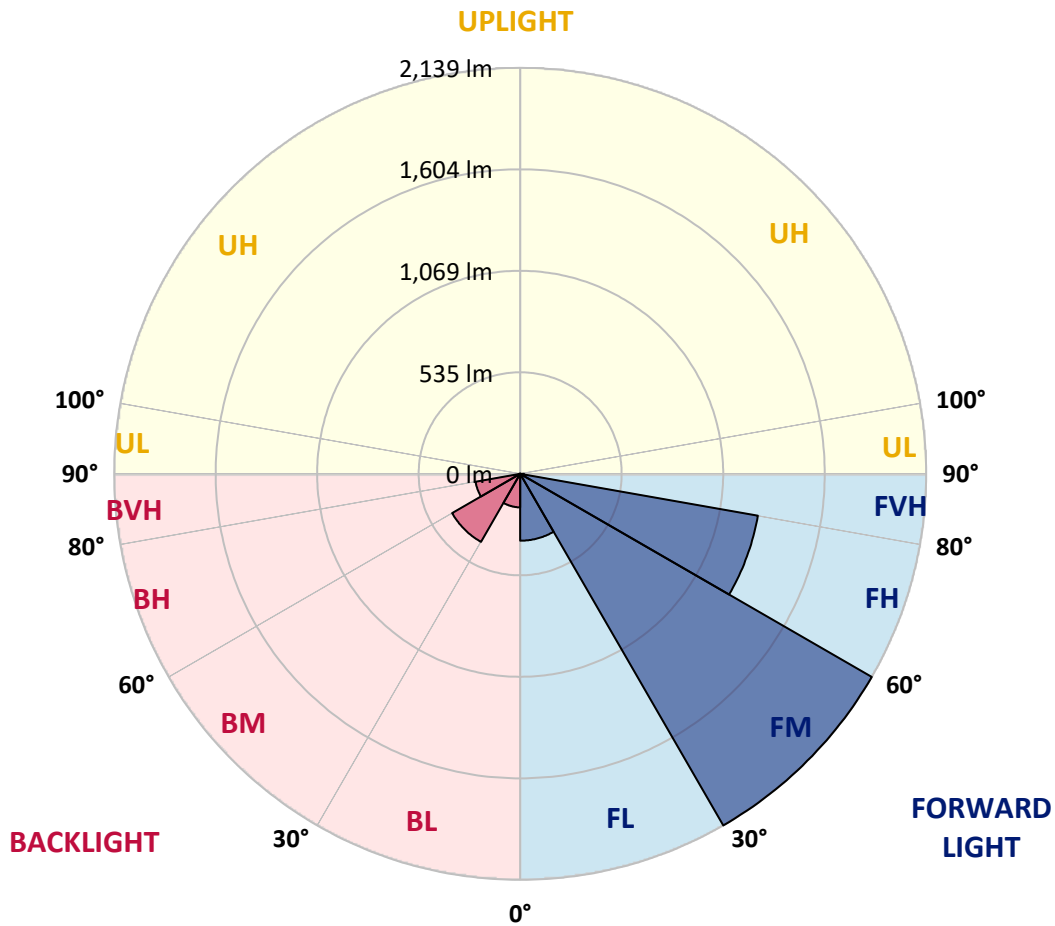
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	352.3	7.6			
FM (30°-60°)	2138.9	46.3			
FH (60°-80°)	1271.4	27.5			G1/1800
FVH (80°-90°)	18.9	0.4			G1/100
BL (0°-30°)	176.7	3.8	B1/500		
BM (30°-60°)	414.0	9.0	B1/1000		
BH (60°-80°)	238.8	5.2	B1/500		G1/500
BVH (80°-90°)	7.1	0.2			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°	82°	85°
0°	765.0	765.0	765.0	765.0	765.0	765.0	765.0	765.0	765.0	765.0	765.0
2.5°	808.6	813.3	810.6	809.3	806.9	803.6	801.0	792.6	784.0	778.3	776.4
5°	824.9	829.5	829.2	830.5	832.2	833.2	832.5	823.2	810.9	801.3	795.6
7.5°	810.9	816.2	820.6	827.2	838.9	851.2	857.1	855.1	842.5	829.2	822.2
10°	771.4	777.0	787.3	802.9	827.6	854.2	876.4	886.7	878.8	864.1	854.5
12.5°	698.9	704.5	724.8	758.7	800.0	846.2	888.7	916.3	918.3	903.7	892.4
15°	617.4	623.1	644.7	687.2	750.1	824.2	895.4	947.6	965.2	952.6	938.9
17.5°	566.9	571.9	588.2	622.4	687.9	780.3	893.1	980.8	1021.1	1011.1	994.8
20°	551.6	555.9	563.6	587.5	642.0	734.8	877.8	1012.1	1081.2	1075.6	1057.3
22.5°	567.9	571.9	574.2	584.8	619.1	704.9	858.5	1044.0	1151.1	1151.7	1129.4
25°	605.5	609.4	606.8	613.4	628.4	695.6	851.2	1081.6	1238.8	1246.2	1220.9
27.5°	667.3	667.6	661.3	661.0	663.3	709.5	858.8	1121.8	1349.6	1363.2	1331.9
30°	791.3	786.3	762.1	735.8	723.8	751.4	880.1	1169.3	1480.2	1504.5	1465.3
32.5°	982.5	975.2	930.6	867.8	804.6	818.9	918.3	1223.5	1622.5	1666.4	1618.5
35°	1190.0	1188.0	1141.4	1048.0	937.6	915.0	980.5	1294.7	1777.8	1847.6	1790.8
37.5°	1382.8	1381.8	1355.2	1245.2	1110.8	1049.0	1080.2	1387.8	1944.0	2045.1	1977.9
40°	1559.0	1562.0	1535.4	1437.0	1301.7	1220.9	1215.9	1502.8	2128.9	2260.2	2180.4
42.5°	1711.3	1714.6	1687.7	1614.9	1490.2	1411.1	1382.5	1643.8	2309.4	2491.3	2396.9
45°	1814.7	1835.3	1831.3	1773.1	1683.7	1601.6	1582.6	1820.7	2515.2	2736.3	2625.6
47.5°	1844.0	1862.9	1892.8	1900.8	1846.3	1765.5	1788.1	2033.8	2723.4	2981.7	2855.7
50°	1771.8	1789.4	1851.6	1934.4	1972.3	1947.4	1987.9	2262.2	2936.5	3226.4	3081.5
52.5°	1629.5	1647.5	1725.9	1856.9	2011.5	2090.0	2188.4	2487.3	3143.0	3458.2	3295.3
55°	1423.7	1442.6	1543.4	1691.7	1936.7	2148.8	2355.7	2712.1	3332.2	3666.6	3488.1
57.5°	1143.7	1157.7	1262.4	1469.9	1748.5	2090.3	2479.0	2957.4	3510.4	3871.4	3679.3
60°	745.4	757.7	879.4	1110.8	1436.7	1894.8	2503.6	3231.1	3747.1	4137.8	3936.9
62.5°	495.7	504.0	576.2	746.1	1011.7	1519.5	2359.6	3449.5	4094.2	4601.2	4378.8
65°	340.1	348.4	420.6	539.0	653.7	1005.1	1945.7	3420.6	4408.7	4969.3	4706.3
67.5°	242.7	249.7	310.9	422.6	473.1	583.8	1319.0	3050.9	4363.5	4983.3	4723.9
70°	173.9	177.9	228.4	329.2	376.0	350.8	733.5	2333.4	3820.6	4601.6	4364.2
72.5°	121.7	123.0	158.6	250.7	302.9	256.0	349.1	1555.7	2889.6	3611.8	3383.4
75°	82.5	84.1	106.7	183.9	243.0	195.5	184.9	834.2	1696.3	1999.2	1792.1
77.5°	50.5	51.2	68.8	125.7	181.9	149.0	119.0	353.4	656.3	644.4	549.3
80°	28.6	28.6	43.9	78.1	124.0	96.1	83.5	150.3	207.8	182.5	160.9
82.5°	16.0	16.3	31.9	48.5	82.1	56.9	45.9	69.5	89.8	79.5	69.2
85°	6.6	7.3	19.6	22.9	39.2	28.3	18.6	29.3	33.2	29.6	21.6
87.5°	0.7	1.0	6.0	4.3	4.7	5.7	2.7	5.7	4.7	4.7	3.3
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°	765.0	765.0	765.0	765.0	765.0	765.0	765.0	765.0	765.0	765.0	765.0
2.5°	770.0	765.0	752.4	737.8	718.5	709.2	696.6	687.9	680.6	681.3	674.6
5°	785.0	772.4	744.1	708.9	665.0	633.7	600.5	577.5	558.9	554.9	545.9
7.5°	805.6	785.7	736.1	672.6	598.5	542.3	492.1	459.8	436.9	429.6	422.3
10°	832.2	803.3	725.8	627.1	520.3	448.9	395.0	369.7	354.1	348.8	344.8
12.5°	863.1	823.6	712.2	571.5	439.9	371.1	336.8	324.2	319.2	317.5	316.5
15°	902.0	848.8	691.6	505.7	371.7	323.5	308.9	307.2	307.9	307.2	306.9
17.5°	948.2	876.4	658.0	437.9	325.8	299.2	293.9	295.2	296.9	296.6	295.9
20°	998.8	903.7	615.1	377.7	294.6	281.9	279.0	280.3	281.6	280.9	280.6
22.5°	1056.3	933.0	567.6	330.8	273.6	266.0	262.7	263.0	263.0	261.7	261.0
25°	1125.1	965.2	517.7	297.6	257.7	251.7	247.7	246.4	244.4	240.4	239.7
27.5°	1207.3	999.4	469.8	274.3	245.0	239.4	234.7	231.4	226.4	219.8	219.1
30°	1299.7	1041.0	429.2	259.7	235.1	229.4	224.1	219.1	211.8	203.5	202.8
32.5°	1408.4	1085.6	399.6	250.0	226.1	220.1	213.8	207.8	199.8	191.5	191.8
35°	1538.1	1139.4	382.4	243.4	219.1	211.1	204.1	197.5	191.5	184.2	183.5
37.5°	1678.7	1196.6	377.0	240.1	214.5	202.2	194.2	189.5	188.9	184.5	184.2
40°	1832.7	1264.4	381.0	238.1	209.5	193.5	184.9	183.9	185.5	177.9	178.2
42.5°	1995.6	1344.9	387.7	235.7	202.5	184.9	176.5	176.5	175.2	164.6	164.6
45°	2171.8	1437.7	394.3	230.1	194.2	176.2	169.9	167.6	161.9	151.6	151.3
47.5°	2349.3	1532.1	399.3	219.8	184.2	168.9	163.2	157.9	149.6	140.3	140.0
50°	2517.9	1616.9	394.0	204.5	172.9	161.9	155.9	148.6	139.6	133.3	132.3
52.5°	2668.5	1690.4	371.4	186.5	160.9	154.6	149.3	141.6	134.3	127.7	127.0
55°	2799.5	1749.9	331.5	169.6	150.3	148.3	143.0	133.3	123.4	117.7	117.0
57.5°	2925.2	1795.1	281.6	155.6	140.6	141.3	133.3	124.7	115.4	109.4	108.7
60°	3092.4	1855.6	231.1	142.6	130.3	132.3	123.7	117.4	105.7	98.1	97.1
62.5°	3359.8	1949.7	183.5	126.7	118.4	119.0	115.4	107.7	93.8	84.8	84.1
65°	3571.9	1915.1	144.6	109.4	104.7	105.7	105.7	97.4	82.5	72.1	71.2
67.5°	3547.9	1639.8	115.4	92.4	91.8	92.4	94.8	87.8	73.1	64.8	63.5
70°	3268.3	1304.3	92.4	76.8	79.8	78.1	84.8	80.1	65.8	57.5	56.5
72.5°	2666.9	939.6	70.5	63.5	61.2	63.8	76.5	72.1	54.9	45.6	44.6
75°	1558.4	501.4	52.5	50.2	44.2	53.2	67.8	61.5	41.9	33.6	32.6
77.5°	507.4	174.9	38.6	36.9	32.9	42.9	57.9	51.9	34.2	26.6	25.6
80°	136.0	52.9	26.3	24.3	21.3	31.9	45.9	41.2	24.6	17.3	17.0
82.5°	54.5	22.3	15.3	13.6	11.6	21.9	36.2	33.2	18.3	11.0	11.0
85°	17.6	7.3	5.7	4.3	5.3	13.6	21.6	22.6	13.0	5.7	4.3
87.5°	2.3	1.0	1.0	1.3	1.0	2.3	6.6	6.3	3.7	0.7	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)