

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: STREETWORKS

Report Number: P573442

Luminaire Tested: **ARCH-S-PA2-70-830-U-T4W-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573442  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-70-830-U-T4W-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 3000K, 725mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6236 lumens  
Efficiency: N/A  
Efficacy: 85.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

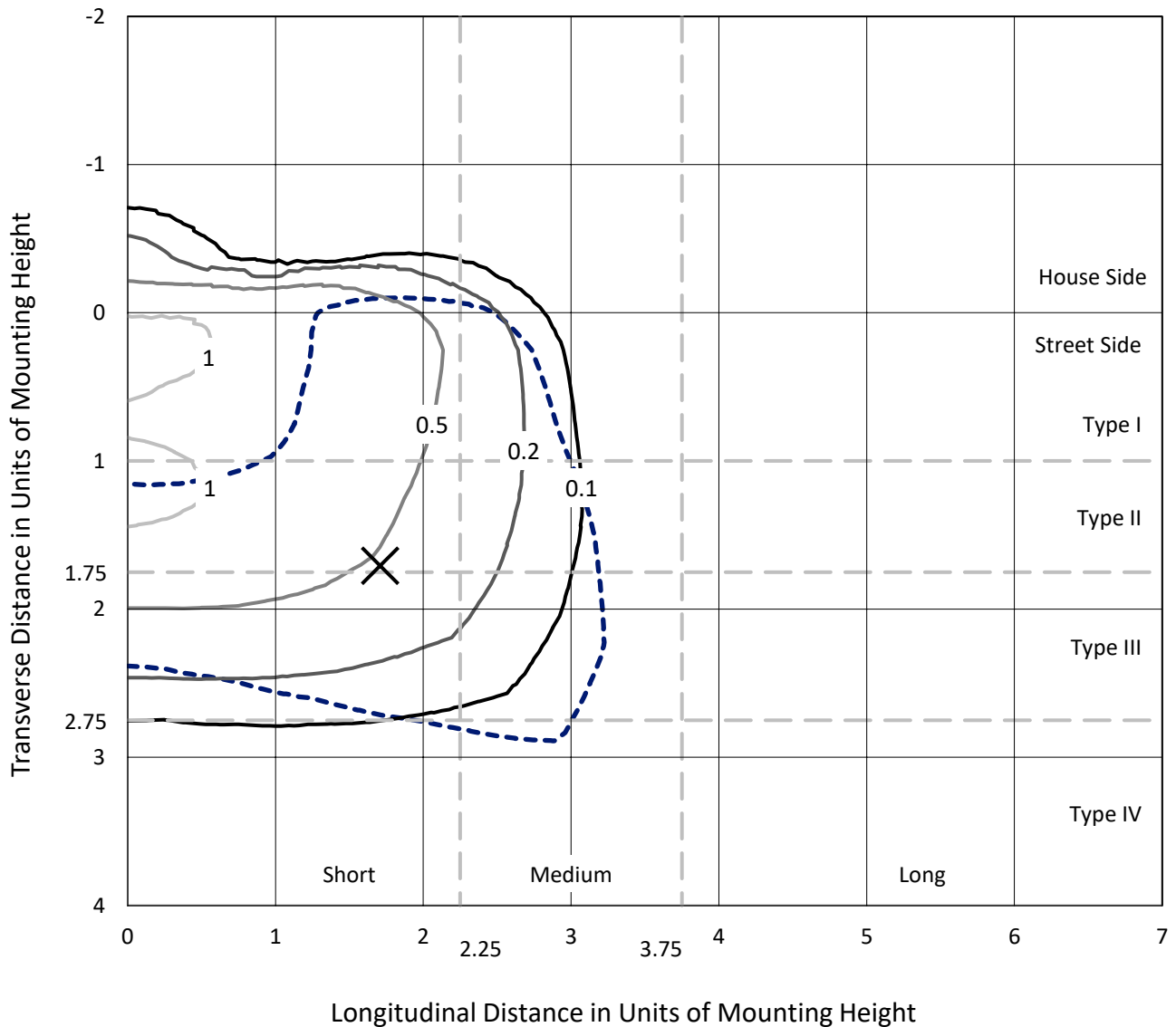
Input Watts (W): 73.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

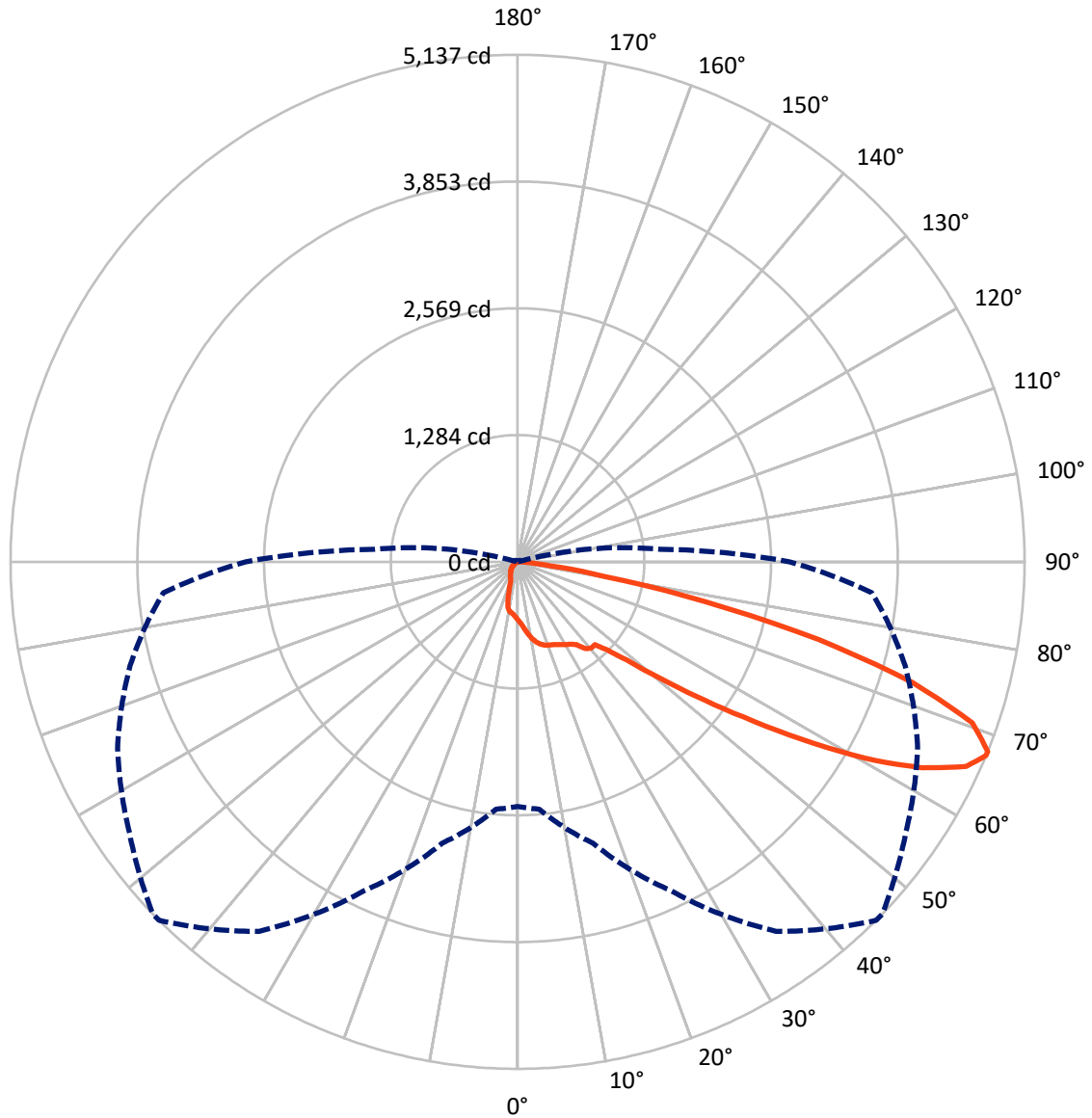
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

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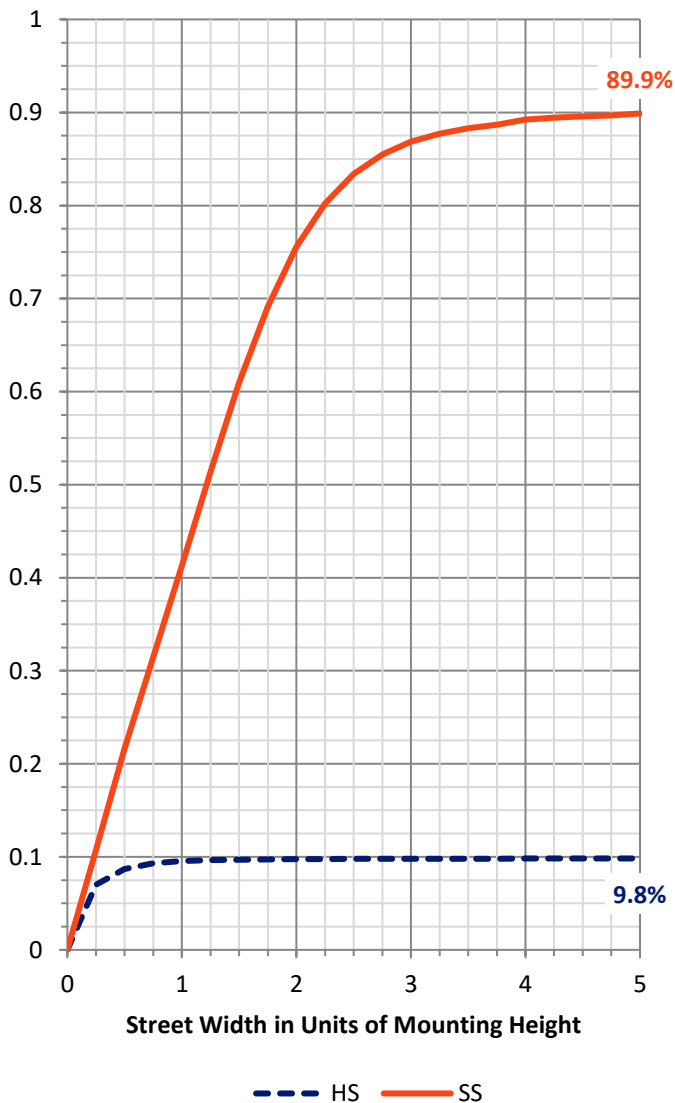
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	617.9	0.0	617.9
	% Fixture	9.9	0.0	9.9
<b>Street Side</b>	Lumens	5618.1	0.0	5618.1
	% Fixture	90.1	0.0	90.1
<b>Total</b>	Lumens	6236.0	0.0	6236.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.2	0.9
10°-20°	178.9	2.9
20°-30°	286.2	4.6
30°-40°	412.0	6.6
40°-50°	722.7	11.6
50°-60°	1522.8	24.4
60°-70°	2105.8	33.8
70°-80°	881.6	14.1
80°-90°	66.7	1.1
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°	6236.0	100.0
0°-180°	6236.0	100.0

**Coefficient of Utilization**

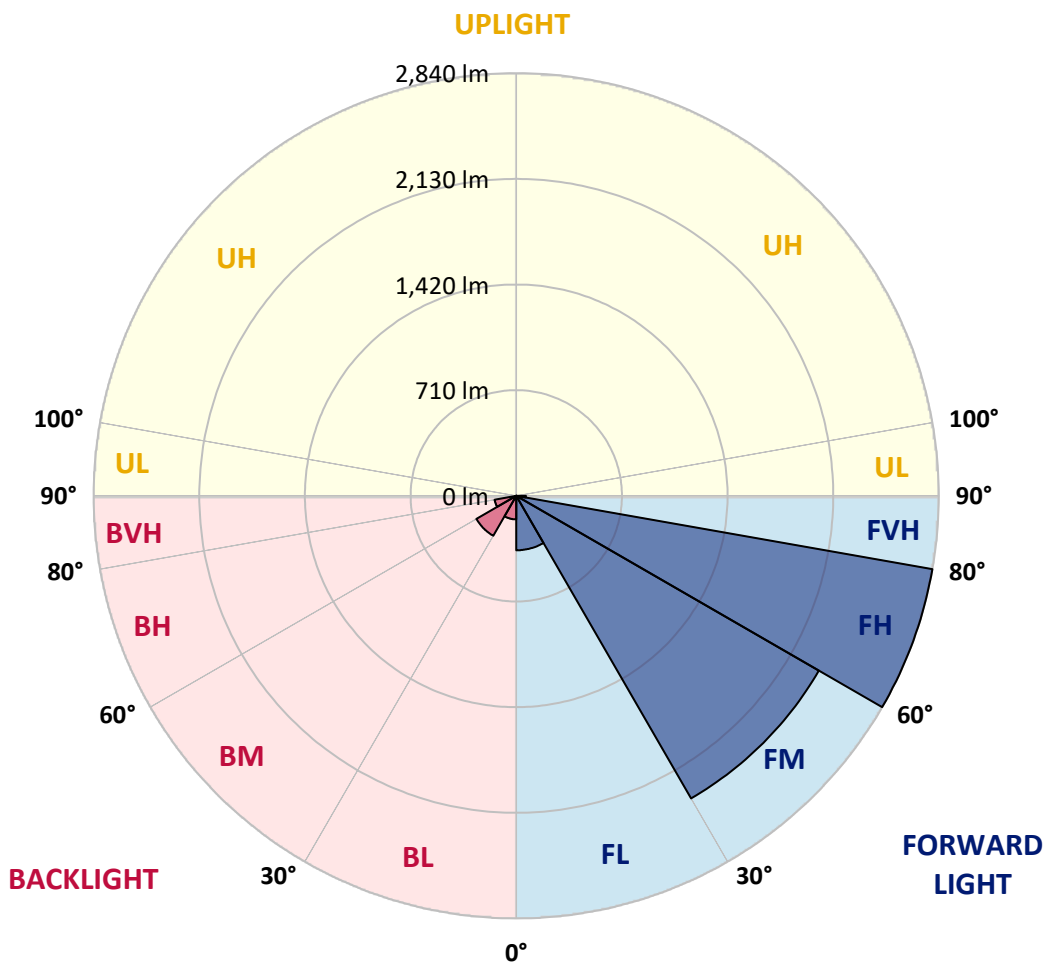


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	366.0	5.9			
FM (30°-60°)	2347.9	37.7			
FH (60°-80°)	2839.7	45.5			G2/5000
FVH (80°-90°)	64.4	1.0			G1/100
BL (0°-30°)	158.4	2.5	B1/500		
BM (30°-60°)	309.6	5.0	B1/1000		
BH (60°-80°)	147.7	2.4	B1/500		G1/500
BVH (80°-90°)	2.3	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°	46°	55°	65°	75°	85°
0°	589.8	589.8	589.8	589.8	589.8	589.8	589.8	589.8	589.8	589.8	589.8
2.5°	656.6	645.0	642.7	640.4	633.5	624.3	626.6	619.7	608.2	601.3	594.4
5°	737.2	725.7	721.1	707.2	693.4	672.7	672.7	654.3	633.5	615.1	596.7
7.5°	820.1	810.9	801.7	781.0	760.2	732.6	730.3	702.6	670.4	642.7	612.8
10°	889.2	882.3	870.8	845.5	817.8	787.9	781.0	755.6	714.2	677.3	638.1
12.5°	944.5	937.6	921.5	896.2	861.6	831.7	829.3	797.1	755.6	716.5	668.1
15°	986.0	974.5	956.1	928.4	893.9	866.2	861.6	834.0	794.8	751.0	693.4
17.5°	992.9	986.0	969.9	939.9	910.0	886.9	884.6	863.9	829.3	783.3	723.4
20°	974.5	972.2	958.4	935.3	912.3	900.8	898.5	884.6	857.0	815.5	755.6
22.5°	946.8	944.5	935.3	923.8	914.6	912.3	912.3	907.7	891.5	852.4	797.1
25°	928.4	926.1	921.5	914.6	914.6	928.4	930.7	935.3	921.5	891.5	831.7
27.5°	930.7	926.1	921.5	914.6	923.8	949.1	951.4	963.0	951.4	923.8	870.8
30°	963.0	956.1	942.2	926.1	937.6	972.2	974.5	988.3	979.1	965.3	914.6
32.5°	1013.6	1009.0	981.4	953.7	960.7	995.2	999.8	1025.2	1036.7	1015.9	953.7
35°	1087.4	1071.2	1036.7	1009.0	1004.4	1029.8	1036.7	1078.2	1108.1	1057.4	976.8
37.5°	1147.3	1133.4	1078.2	1034.4	1059.7	1117.3	1119.6	1170.3	1145.0	1062.0	1013.6
40°	1350.0	1347.7	1250.9	1112.7	1085.1	1149.6	1158.8	1168.0	1156.5	1115.0	1094.3
42.5°	1677.1	1649.5	1541.2	1329.3	1140.4	1147.3	1151.9	1200.2	1260.1	1241.7	1248.6
45°	2031.9	2008.9	1886.8	1619.5	1329.3	1271.7	1276.3	1354.6	1469.8	1492.8	1529.7
47.5°	2359.0	2322.2	2253.1	1983.5	1651.8	1483.6	1492.8	1587.3	1778.5	1829.2	1886.8
50°	2635.5	2610.1	2545.6	2368.2	2048.0	1817.7	1826.9	1905.2	2154.0	2234.6	2308.3
52.5°	3036.3	3001.8	2877.4	2794.4	2552.5	2253.1	2232.3	2315.3	2600.9	2653.9	2753.0
55°	3404.9	3333.5	3259.8	3225.2	3123.9	2773.7	2766.8	2782.9	3020.2	3047.8	3225.2
57.5°	3561.6	3547.8	3610.0	3725.1	3748.2	3386.5	3356.6	3294.3	3481.0	3478.6	3686.0
60°	3660.6	3660.6	3826.5	4112.2	4296.5	4040.8	3999.3	3805.8	3872.6	3874.9	4066.1
62.5°	3598.4	3614.6	3872.6	4303.4	4674.3	4596.0	4568.3	4243.5	4238.9	4185.9	4252.7
65°	3213.7	3241.4	3656.0	4197.4	4812.5	4996.8	4985.3	4616.7	4483.1	4289.6	4139.8
67°	2621.7	2672.3	3174.6	3815.0	4655.9	5135.0	5137.3	4778.0	4485.4	4116.8	3741.3
67.5°	2478.8	2515.7	2951.1	3676.8	4570.6	5137.3	5137.3	4798.7	4471.6	4063.8	3603.1
70°	1580.4	1589.6	2064.2	2845.1	3904.8	4888.5	4907.0	4642.0	4073.0	3289.7	2529.5
72.5°	781.0	760.2	1089.7	1831.5	2930.4	4183.6	4232.0	3964.7	3222.9	2149.4	1336.2
75°	306.4	327.1	474.6	974.5	1836.1	3153.8	3190.7	2884.3	2073.4	1108.1	527.6
77.5°	135.9	135.9	202.7	437.7	965.3	1935.1	1953.6	1760.1	1094.3	456.1	161.3
80°	73.7	78.3	106.0	191.2	486.1	889.2	969.9	873.1	495.3	200.4	55.3
82.5°	36.9	39.2	64.5	108.3	244.2	336.3	354.8	370.9	228.1	124.4	23.0
85°	13.8	16.1	34.6	62.2	110.6	112.9	112.9	145.1	124.4	94.5	11.5
87.5°	2.3	4.6	16.1	25.3	43.8	39.2	34.6	46.1	69.1	59.9	6.9
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°	589.8	589.8	589.8	589.8	589.8	589.8	589.8	589.8	589.8	589.8	589.8
2.5°	589.8	585.2	575.9	569.0	564.4	559.8	555.2	555.2	552.9	552.9	555.2
5°	589.8	580.5	562.1	550.6	541.4	534.5	529.9	529.9	527.6	529.9	532.2
7.5°	601.3	587.5	562.1	541.4	529.9	518.3	513.7	511.4	511.4	513.7	511.4
10°	619.7	601.3	569.0	541.4	525.3	509.1	483.8	460.7	440.0	430.8	428.5
12.5°	642.7	619.7	580.5	548.3	522.9	467.7	398.5	354.8	327.1	313.3	308.7
15°	668.1	640.4	594.4	557.5	488.4	384.7	294.9	246.5	230.4	232.7	235.0
17.5°	695.7	665.8	615.1	552.9	419.3	285.7	216.6	205.0	211.9	218.9	218.9
20°	723.4	691.1	635.8	518.3	329.4	211.9	193.5	195.8	202.7	209.6	209.6
22.5°	760.2	725.7	656.6	458.4	244.2	184.3	184.3	188.9	193.5	200.4	200.4
25°	799.4	764.8	670.4	384.7	182.0	172.8	175.1	179.7	184.3	191.2	191.2
27.5°	840.9	806.3	668.1	297.2	159.0	159.0	161.3	168.2	172.8	179.7	179.7
30°	886.9	857.0	642.7	216.6	147.4	145.1	145.1	152.0	159.0	163.6	165.9
32.5°	926.1	900.8	599.0	163.6	138.2	133.6	131.3	133.6	140.5	145.1	147.4
35°	958.4	949.1	534.5	140.5	129.0	122.1	117.5	115.2	117.5	117.5	119.8
37.5°	1018.3	1020.6	458.4	131.3	122.1	112.9	103.7	96.8	92.1	89.8	87.5
40°	1131.1	1128.8	377.8	124.4	115.2	103.7	89.8	80.6	69.1	64.5	64.5
42.5°	1290.1	1255.5	288.0	117.5	108.3	94.5	76.0	62.2	50.7	48.4	48.4
45°	1575.8	1432.9	216.6	112.9	101.4	82.9	62.2	46.1	39.2	36.9	36.9
47.5°	1891.4	1638.0	172.8	106.0	94.5	73.7	48.4	36.9	29.9	29.9	29.9
50°	2239.2	1833.8	145.1	99.1	82.9	62.2	39.2	29.9	27.6	25.3	27.6
52.5°	2619.4	1988.1	126.7	89.8	71.4	50.7	32.3	27.6	23.0	23.0	23.0
55°	2960.3	2091.8	106.0	78.3	59.9	41.5	29.9	23.0	20.7	18.4	16.1
57.5°	3269.0	2147.1	85.2	66.8	46.1	34.6	25.3	18.4	16.1	11.5	11.5
60°	3428.0	2096.4	66.8	53.0	36.9	27.6	20.7	16.1	11.5	6.9	6.9
62.5°	3453.3	1965.1	53.0	41.5	32.3	23.0	16.1	11.5	6.9	4.6	4.6
65°	3232.1	1734.7	43.8	34.6	25.3	18.4	13.8	9.2	4.6	2.3	2.3
67°	2835.9	1492.8	39.2	29.9	23.0	16.1	11.5	6.9	4.6	2.3	0.0
67.5°	2757.6	1449.1	36.9	29.9	23.0	16.1	11.5	6.9	4.6	2.3	0.0
70°	1810.7	1002.1	34.6	27.6	20.7	13.8	9.2	6.9	2.3	0.0	0.0
72.5°	988.3	504.5	32.3	25.3	18.4	13.8	9.2	4.6	2.3	0.0	0.0
75°	361.7	191.2	27.6	23.0	16.1	13.8	9.2	4.6	2.3	0.0	0.0
77.5°	122.1	66.8	25.3	23.0	18.4	13.8	9.2	4.6	2.3	0.0	0.0
80°	41.5	29.9	20.7	18.4	13.8	11.5	9.2	4.6	2.3	0.0	0.0
82.5°	16.1	9.2	6.9	6.9	6.9	9.2	9.2	6.9	2.3	0.0	0.0
85°	6.9	4.6	2.3	2.3	2.3	2.3	2.3	2.3	2.3	0.0	0.0
87.5°	6.9	4.6	2.3	2.3	2.3	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)