

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: P572792

Luminaire Tested: **ARCH-S-PA2-110-830-U-T3-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P572792  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-110-830-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 3000K, 1105mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8892 lumens  
Efficiency: N/A  
Efficacy: 77.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

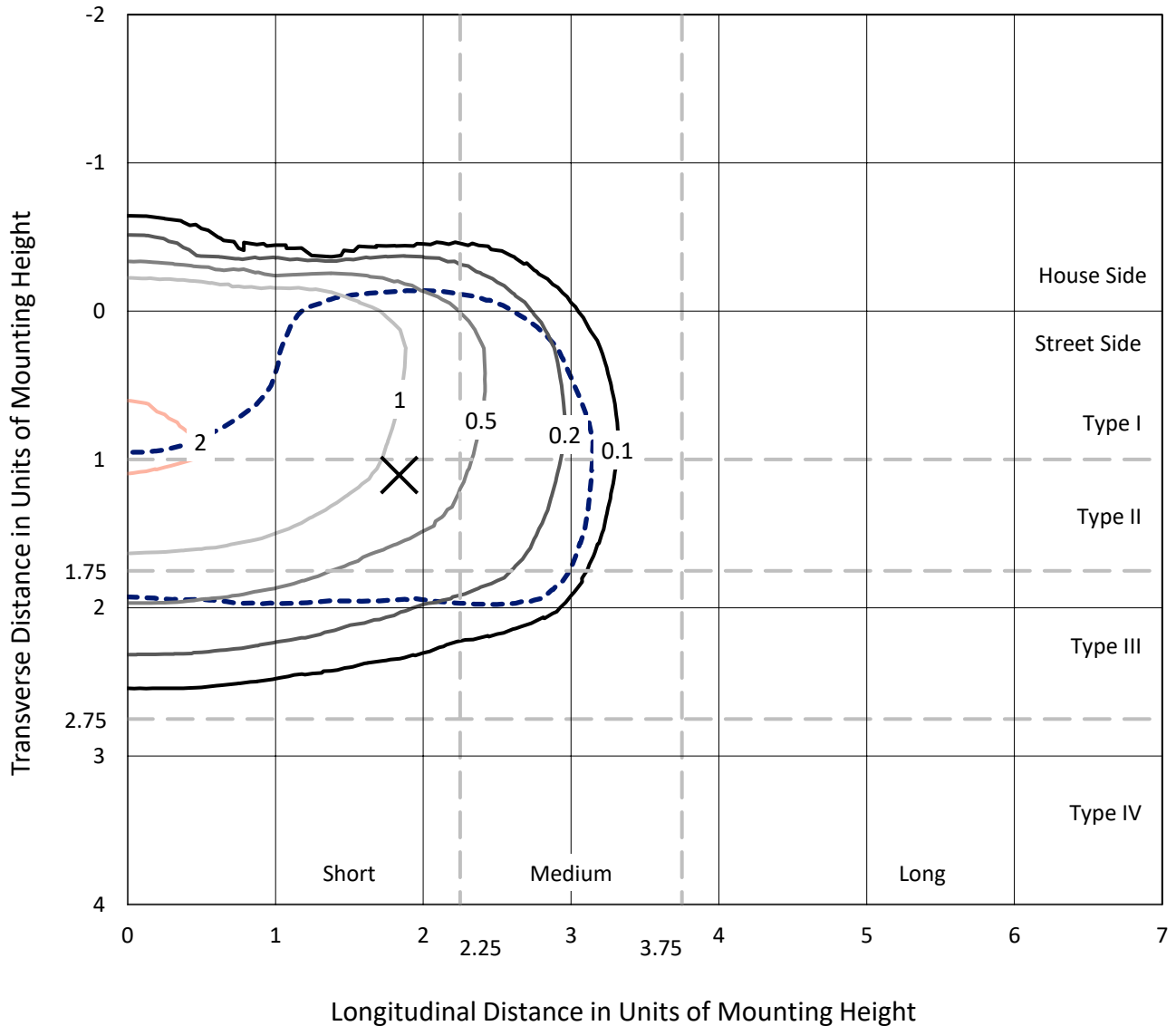
Input Watts (W): 114.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

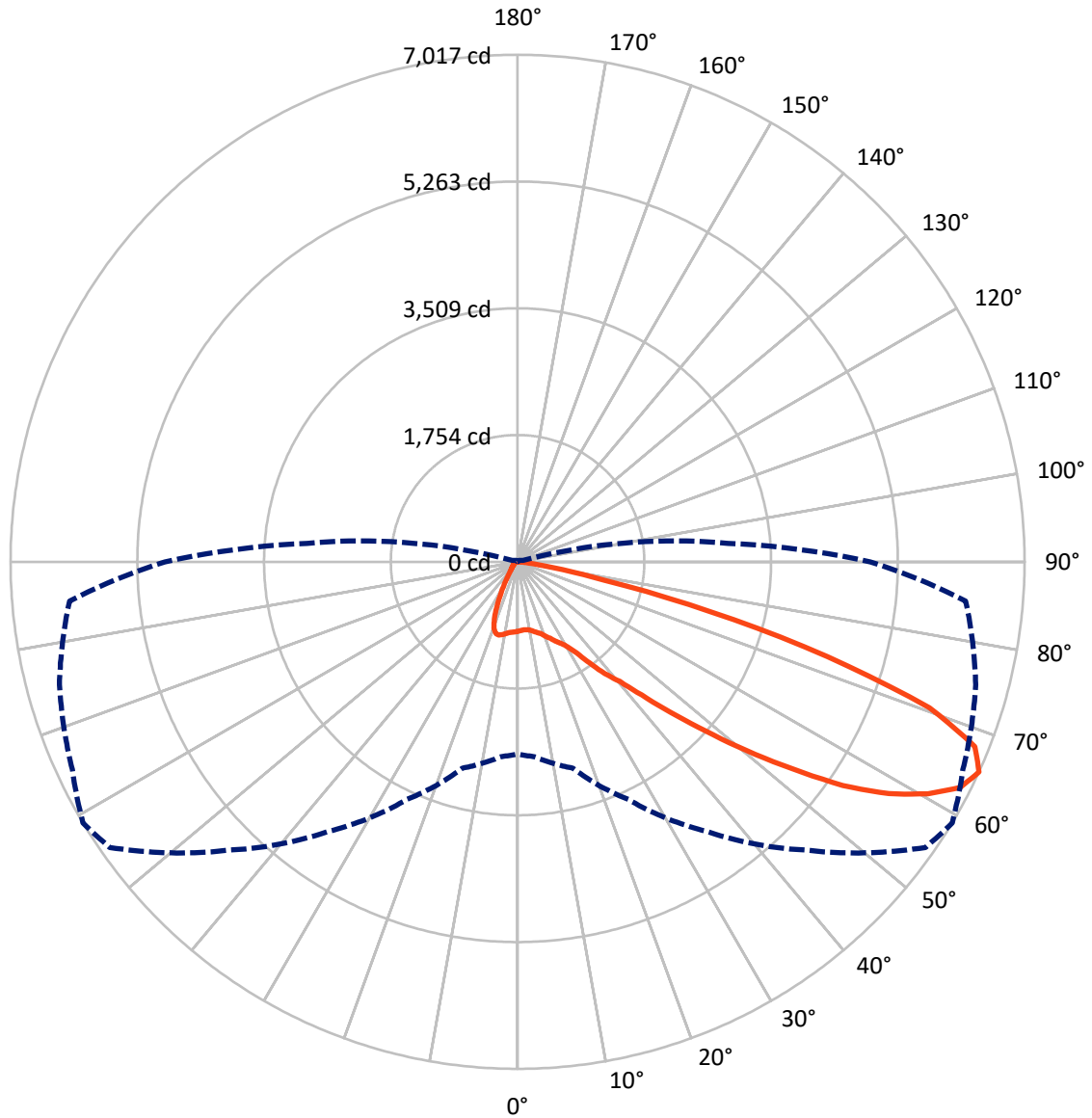
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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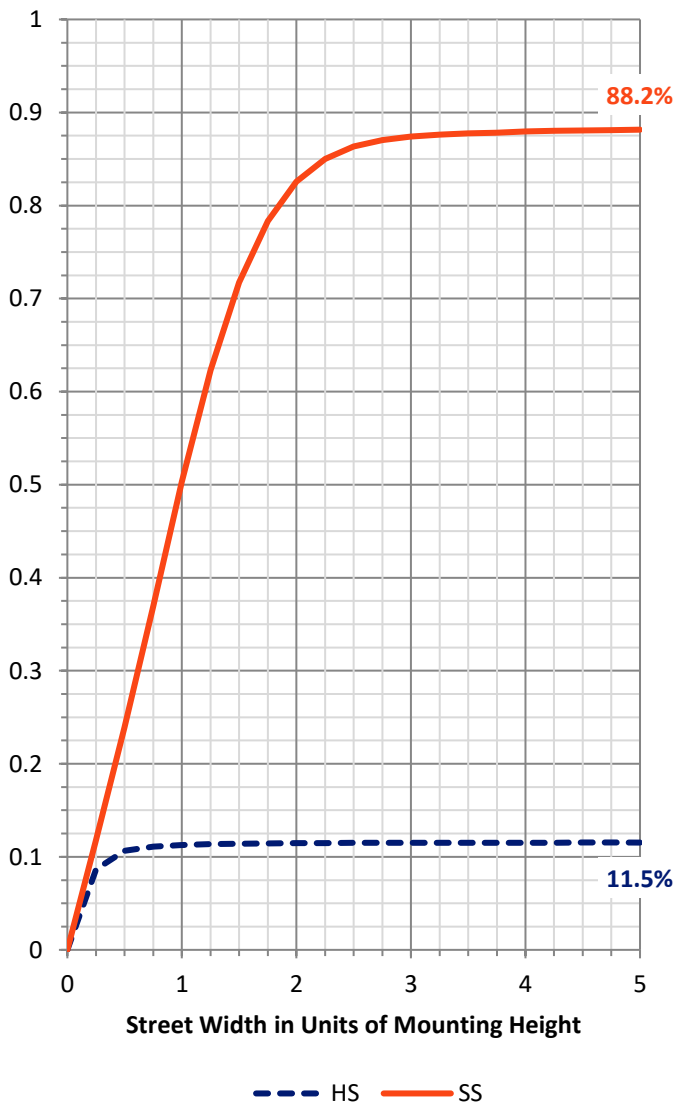
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1037.3	0.0	1037.3
	% Fixture	11.7	0.0	11.7
<b>Street Side</b>	Lumens	7854.7	0.0	7854.7
	% Fixture	88.3	0.0	88.3
<b>Total</b>	Lumens	8892.0	0.0	8892.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.8	1.0
10°-20°	258.0	2.9
20°-30°	438.1	4.9
30°-40°	776.1	8.7
40°-50°	1464.0	16.5
50°-60°	2477.0	27.9
60°-70°	2575.3	29.0
70°-80°	772.3	8.7
80°-90°	40.5	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°	8892.0	100.0
0°-180°	8892.0	100.0

**Coefficient of Utilization**

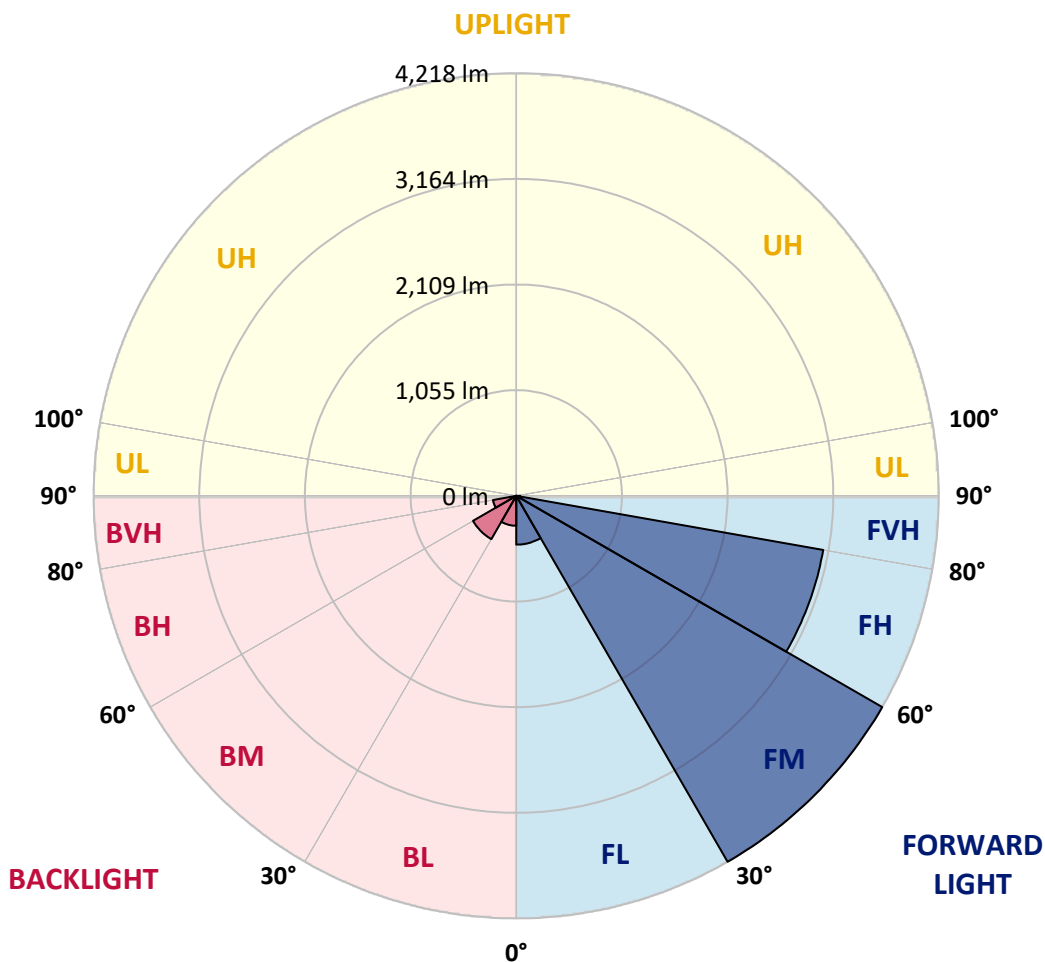


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	487.6	5.5			
FM (30°-60°)	4218.4	47.4			
FH (60°-80°)	3111.6	35.0			G2/5000
FVH (80°-90°)	37.1	0.4			G1/100
BL (0°-30°)	299.2	3.4	B1/500		
BM (30°-60°)	498.7	5.6	B1/1000		
BH (60°-80°)	236.0	2.7	B1/500		G1/500
BVH (80°-90°)	3.4	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°	59°	65°	75°	85°
0°	960.9	960.9	960.9	960.9	960.9	960.9	960.9	960.9	960.9	960.9	960.9
2.5°	935.0	931.8	931.8	938.2	941.5	944.7	951.2	951.2	951.2	957.6	960.9
5°	889.7	889.7	892.9	899.4	912.3	922.0	941.5	944.7	947.9	964.1	970.6
7.5°	860.6	860.6	863.8	876.8	892.9	915.6	941.5	947.9	957.6	980.3	996.5
10°	857.3	854.1	860.6	873.5	892.9	922.0	951.2	960.9	980.3	1009.4	1032.0
12.5°	867.0	863.8	870.3	883.2	902.6	931.8	970.6	986.8	1009.4	1048.2	1080.6
15°	873.5	870.3	876.8	892.9	915.6	951.2	996.5	1015.9	1045.0	1100.0	1132.3
17.5°	892.9	889.7	892.9	905.9	928.5	967.3	1025.6	1045.0	1093.5	1155.0	1190.6
20°	980.3	977.0	957.6	951.2	954.4	990.0	1064.4	1096.7	1155.0	1232.6	1258.5
22.5°	1161.5	1148.5	1112.9	1054.7	1015.9	1028.8	1112.9	1148.5	1226.2	1313.5	1332.9
25°	1404.1	1394.4	1342.6	1242.3	1132.3	1100.0	1167.9	1216.5	1310.3	1407.3	1400.9
27.5°	1679.1	1659.7	1611.2	1472.0	1323.2	1216.5	1235.9	1277.9	1381.5	1485.0	1452.6
30°	1918.5	1912.0	1857.0	1740.6	1565.9	1407.3	1339.4	1362.0	1455.9	1565.9	1527.0
32.5°	2138.5	2119.1	2073.8	1963.8	1802.0	1640.3	1504.4	1504.4	1582.0	1711.4	1653.2
35°	2381.1	2368.2	2313.2	2203.2	2047.9	1857.0	1734.1	1721.2	1785.9	1931.4	1805.3
37.5°	2630.3	2597.9	2572.0	2458.8	2303.5	2138.5	1989.7	1960.6	1992.9	2099.7	1944.4
40°	2940.8	2940.8	2882.6	2779.1	2633.5	2458.8	2251.7	2177.3	2167.6	2306.7	2187.0
42.5°	3303.2	3293.5	3245.0	3147.9	3008.8	2847.0	2585.0	2517.0	2510.6	2678.8	2536.4
45°	3720.5	3714.1	3655.8	3575.0	3477.9	3300.0	3041.1	2973.2	2934.4	3128.5	2960.3
47.5°	4102.3	4079.6	4060.2	4069.9	4014.9	3814.4	3571.7	3490.8	3487.6	3639.7	3422.9
50°	4364.4	4351.4	4419.4	4484.1	4587.6	4461.4	4173.5	4102.3	4047.3	4247.9	3904.9
52.5°	4535.8	4529.3	4665.2	4849.6	5063.2	5053.5	4797.9	4755.8	4710.5	4765.5	4335.2
55°	4603.8	4603.8	4765.5	5105.2	5480.5	5642.3	5522.6	5464.3	5305.8	5192.6	4807.6
57.5°	4522.9	4513.2	4723.5	5166.7	5739.3	6072.6	6124.3	6056.4	5807.3	5681.1	5331.7
60°	4179.9	4186.4	4435.5	4995.2	5719.9	6247.3	6580.5	6519.0	6269.9	6082.3	5771.7
62.5°	3539.4	3594.4	3856.4	4464.6	5305.8	6108.2	6842.6	6874.9	6606.4	6373.4	6163.1
65°	2659.4	2707.9	2957.0	3629.9	4552.0	5642.3	6891.1	7017.3	6800.5	6564.3	6224.6
67.5°	1617.6	1633.8	1937.9	2445.8	3351.7	4700.8	6551.4	6826.4	6671.1	6282.9	5616.4
70°	753.8	795.9	944.7	1336.2	2122.3	3461.7	5661.7	6049.9	5875.2	5393.2	4270.5
72.5°	294.4	307.3	401.2	617.9	1125.9	2177.3	4225.2	4484.1	4364.4	3830.5	2546.1
75°	145.6	155.3	194.1	294.4	514.4	899.4	2581.7	2750.0	2552.6	1925.0	1077.3
77.5°	106.8	106.8	129.4	181.2	281.5	333.2	1087.0	1219.7	1151.7	744.1	294.4
80°	71.2	77.6	90.6	122.9	177.9	161.8	410.9	488.5	407.6	229.7	103.5
82.5°	42.1	45.3	67.9	87.4	119.7	93.8	139.1	155.3	168.2	113.2	48.5
85°	22.6	22.6	45.3	64.7	64.7	42.1	48.5	55.0	64.7	67.9	25.9
87.5°	6.5	6.5	29.1	38.8	25.9	22.6	25.9	25.9	29.1	35.6	12.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P572792

CATALOG NUMBER: ARCH-S-PA2-110-830-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	960.9	960.9	960.9	960.9	960.9	960.9	960.9	960.9	960.9	960.9	960.9
2.5°	964.1	964.1	967.3	967.3	970.6	970.6	970.6	970.6	973.8	977.0	977.0
5°	973.8	977.0	977.0	977.0	977.0	970.6	967.3	964.1	964.1	967.3	967.3
7.5°	999.7	1002.9	999.7	993.2	983.5	970.6	957.6	957.6	954.4	957.6	954.4
10°	1038.5	1038.5	1035.3	1019.1	1002.9	977.0	951.2	931.8	918.8	915.6	909.1
12.5°	1087.0	1087.0	1077.3	1048.2	1019.1	970.6	902.6	837.9	786.2	763.5	757.0
15°	1135.6	1135.6	1122.6	1080.6	1022.3	905.9	763.5	627.6	550.0	517.6	498.2
17.5°	1193.8	1187.3	1164.7	1106.5	986.8	776.5	546.8	407.6	346.2	317.1	317.1
20°	1255.3	1248.8	1206.7	1109.7	896.2	556.5	355.9	281.5	265.3	258.8	258.8
22.5°	1323.2	1307.0	1242.3	1083.8	705.3	378.5	268.5	249.1	242.6	239.4	239.4
25°	1378.2	1352.3	1268.2	1012.6	504.7	265.3	236.2	229.7	216.8	213.5	207.1
27.5°	1420.3	1381.5	1277.9	860.6	333.2	220.0	210.3	197.4	184.4	171.5	171.5
30°	1475.3	1426.7	1284.4	669.7	226.5	190.9	181.2	165.0	148.8	135.9	135.9
32.5°	1585.3	1514.1	1287.6	469.1	187.6	168.2	148.8	129.4	113.2	106.8	103.5
35°	1705.0	1607.9	1252.0	304.1	165.0	142.4	119.7	103.5	87.4	84.1	84.1
37.5°	1837.6	1747.0	1174.4	207.1	145.6	119.7	97.1	80.9	71.2	67.9	67.9
40°	2060.9	1954.1	1045.0	165.0	126.2	100.3	80.9	67.9	61.5	58.2	58.2
42.5°	2381.1	2196.7	883.2	142.4	110.0	84.1	64.7	55.0	51.8	48.5	48.5
45°	2750.0	2468.5	695.6	129.4	97.1	71.2	55.0	48.5	45.3	42.1	42.1
47.5°	3173.8	2750.0	550.0	113.2	84.1	61.5	48.5	42.1	38.8	35.6	35.6
50°	3575.0	2970.0	414.1	100.3	74.4	51.8	42.1	38.8	35.6	32.4	32.4
52.5°	3904.9	3118.8	313.8	87.4	64.7	45.3	38.8	35.6	29.1	29.1	29.1
55°	4302.9	3235.2	239.4	77.6	58.2	42.1	35.6	29.1	25.9	22.6	22.6
57.5°	4649.1	3277.3	174.7	67.9	51.8	38.8	32.4	25.9	19.4	16.2	16.2
60°	4882.0	3241.7	126.2	58.2	45.3	32.4	25.9	19.4	12.9	9.7	9.7
62.5°	5047.0	3164.1	97.1	51.8	38.8	29.1	22.6	16.2	9.7	6.5	6.5
65°	4882.0	2924.7	77.6	45.3	32.4	25.9	16.2	12.9	6.5	3.2	3.2
67.5°	4222.0	2452.3	61.5	38.8	29.1	22.6	16.2	9.7	3.2	0.0	0.0
70°	3034.7	1750.3	51.8	35.6	25.9	19.4	12.9	6.5	3.2	0.0	0.0
72.5°	1692.0	902.6	48.5	32.4	25.9	19.4	12.9	6.5	3.2	0.0	0.0
75°	685.9	310.6	45.3	32.4	25.9	16.2	12.9	6.5	3.2	0.0	0.0
77.5°	200.6	106.8	38.8	29.1	25.9	19.4	12.9	6.5	3.2	0.0	0.0
80°	71.2	48.5	29.1	25.9	19.4	16.2	12.9	9.7	3.2	0.0	0.0
82.5°	32.4	19.4	12.9	9.7	9.7	9.7	9.7	6.5	3.2	0.0	0.0
85°	12.9	9.7	6.5	3.2	3.2	3.2	3.2	3.2	3.2	0.0	0.0
87.5°	9.7	6.5	3.2	3.2	3.2	3.2	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)