

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: P572783

Luminaire Tested: **ARCH-S-PA2-110-827-U-T3-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P572783  
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-PA2-110-827-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 2700K, 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: 8226 lumens  
Efficiency: N/A  
Efficacy: 72.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

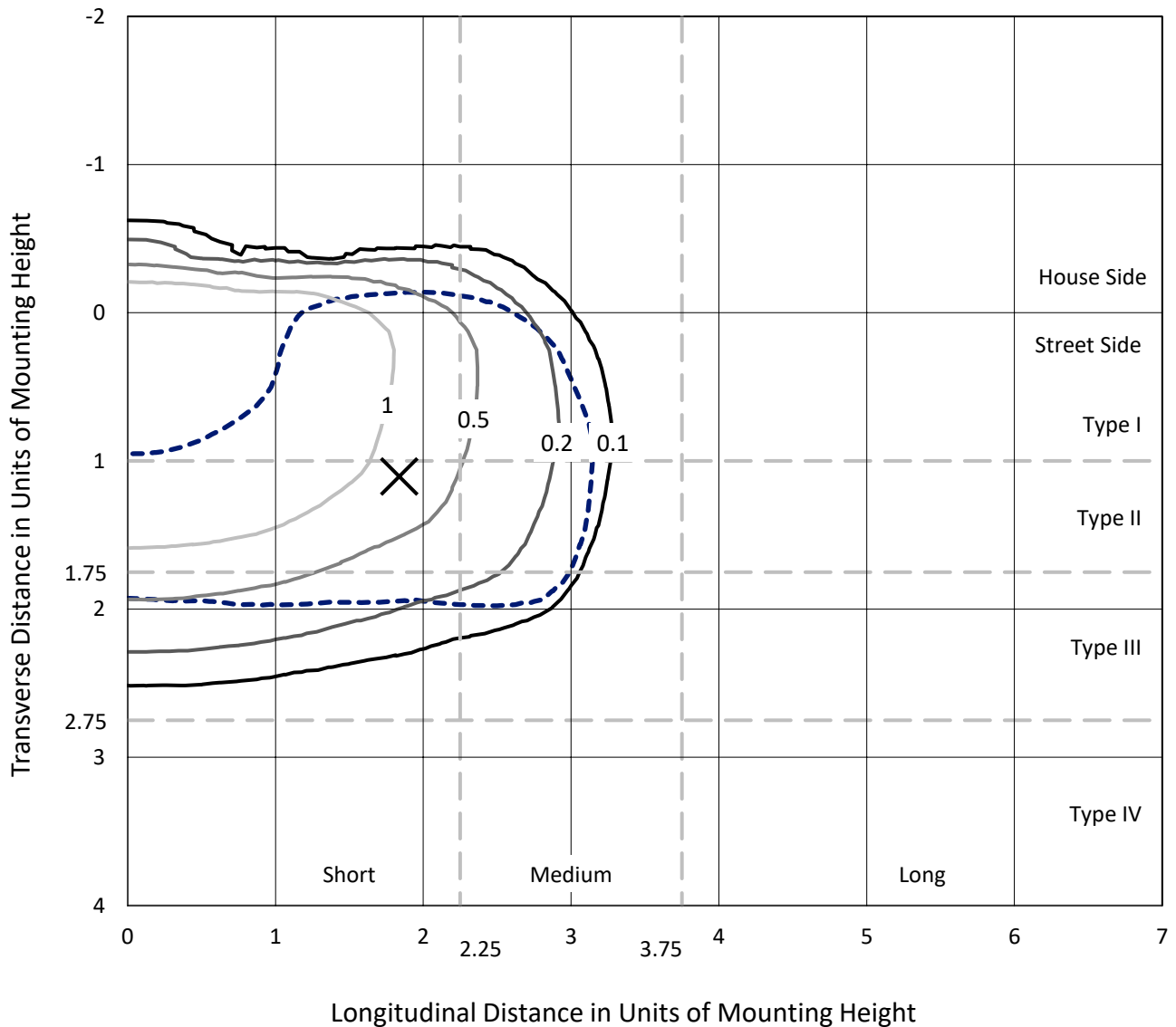
Input Watts (W): 114.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

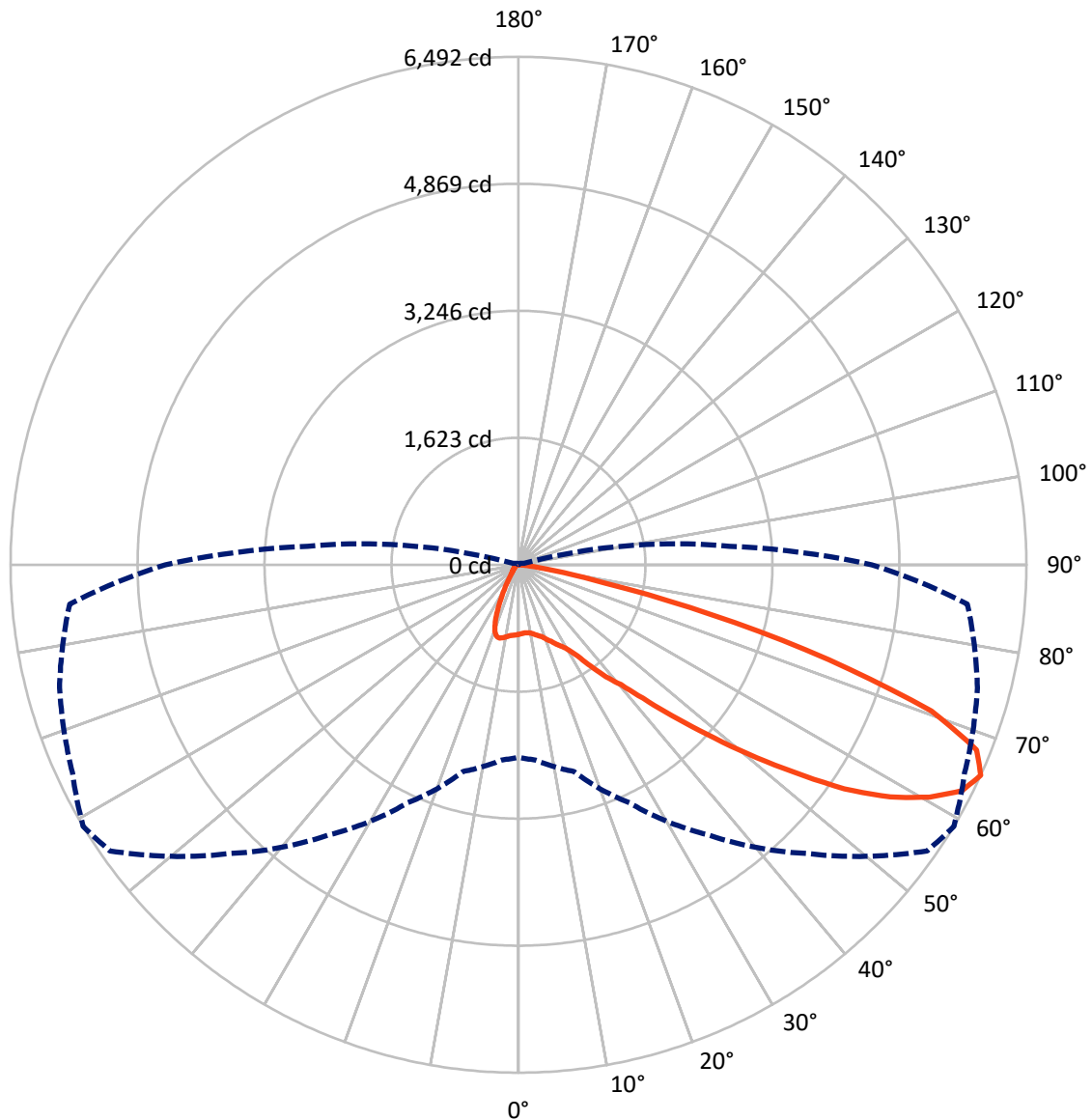
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 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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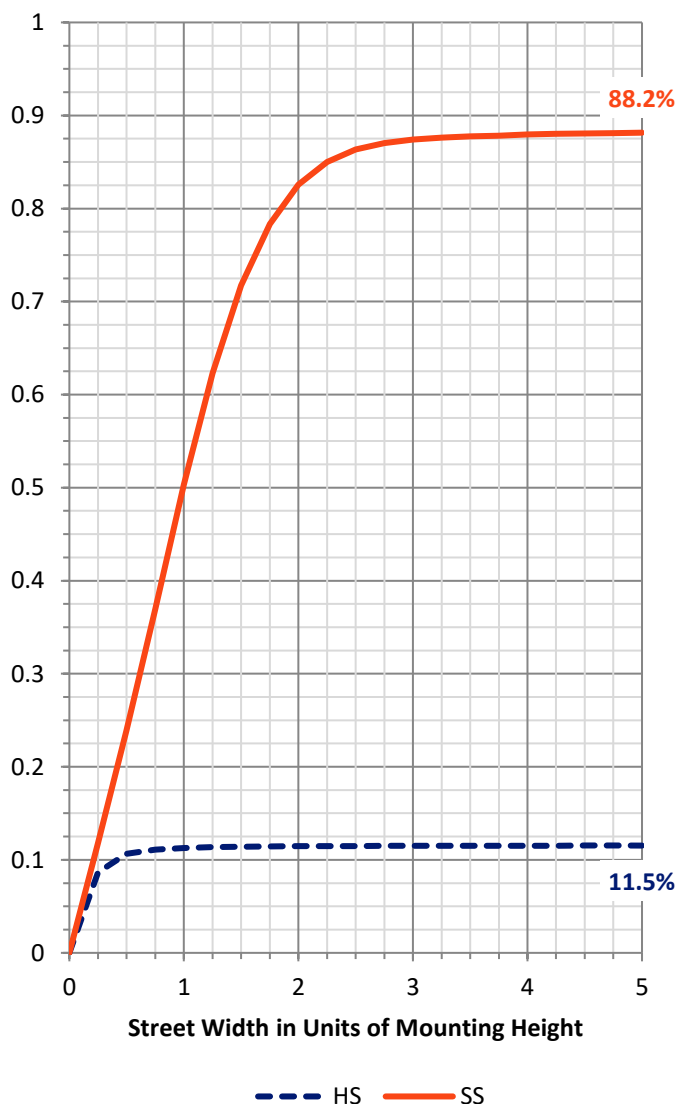
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	959.7	0.0	959.7
	% Fixture	11.7	0.0	11.7
<b>Street Side</b>	Lumens	7266.4	0.0	7266.4
	% Fixture	88.3	0.0	88.3
<b>Total</b>	Lumens	8226.0	0.0	8226.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.0	1.0
10°-20°	238.6	2.9
20°-30°	405.3	4.9
30°-40°	718.0	8.7
40°-50°	1354.3	16.5
50°-60°	2291.5	27.9
60°-70°	2382.4	29.0
70°-80°	714.4	8.7
80°-90°	37.5	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°	8226.0	100.0
0°-180°	8226.0	100.0

**Coefficient of Utilization**

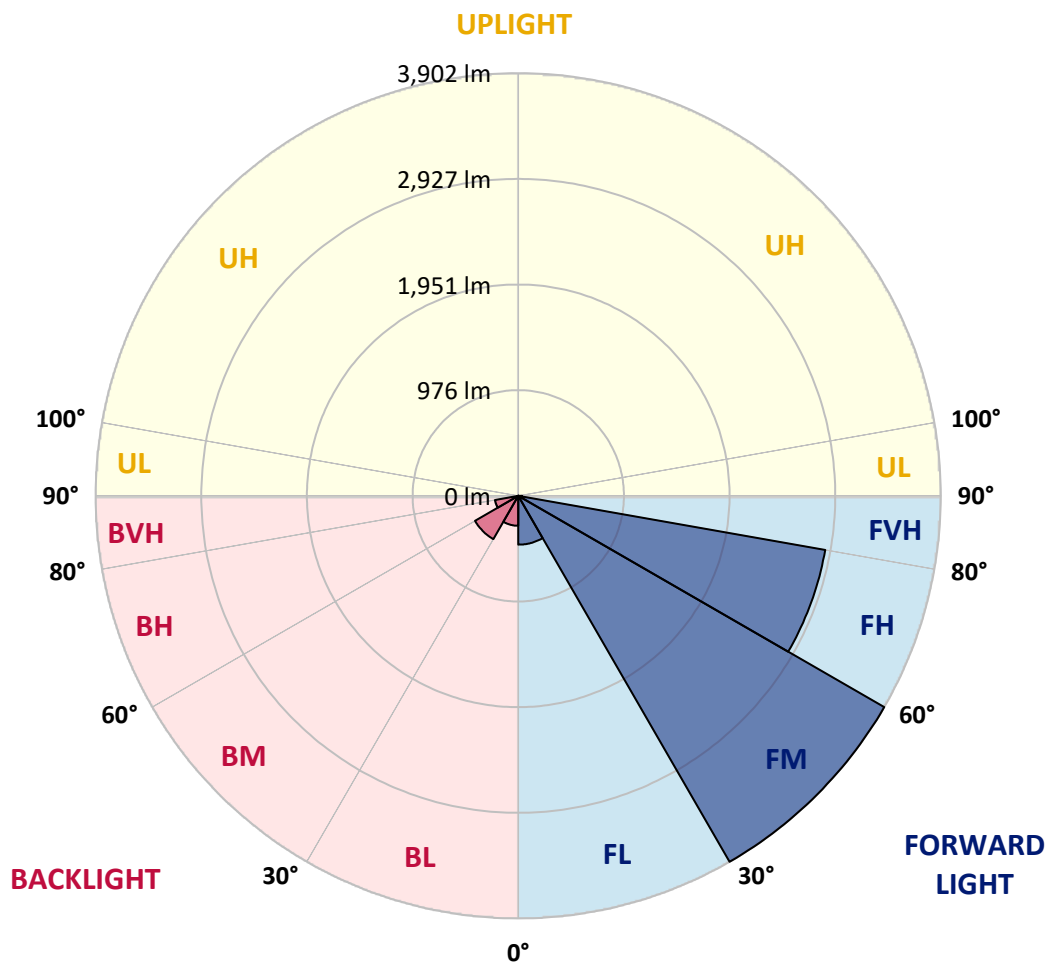


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	451.1	5.5			
FM (30°-60°)	3902.4	47.4			
FH (60°-80°)	2878.5	35.0			G2/5000
FVH (80°-90°)	34.3	0.4			G1/100
BL (0°-30°)	276.8	3.4	B1/500		
BM (30°-60°)	461.3	5.6	B1/1000		
BH (60°-80°)	218.3	2.7	B1/500		G1/500
BVH (80°-90°)	3.2	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°	888.9	888.9	888.9	888.9	888.9	888.9	888.9	888.9	888.9	888.9	888.9
2.5°	865.0	862.0	862.0	868.0	870.9	873.9	879.9	879.9	879.9	885.9	888.9
5°	823.1	823.1	826.0	832.0	844.0	853.0	870.9	873.9	876.9	891.9	897.9
7.5°	796.1	796.1	799.1	811.1	826.0	847.0	870.9	876.9	885.9	906.9	921.8
10°	793.1	790.1	796.1	808.1	826.0	853.0	879.9	888.9	906.9	933.8	954.7
12.5°	802.1	799.1	805.1	817.1	835.0	862.0	897.9	912.8	933.8	969.7	999.6
15°	808.1	805.1	811.1	826.0	847.0	879.9	921.8	939.8	966.7	1017.6	1047.5
17.5°	826.0	823.1	826.0	838.0	859.0	894.9	948.8	966.7	1011.6	1068.5	1101.4
20°	906.9	903.9	885.9	879.9	882.9	915.8	984.7	1014.6	1068.5	1140.3	1164.3
22.5°	1074.5	1062.5	1029.6	975.7	939.8	951.8	1029.6	1062.5	1134.3	1215.1	1233.1
25°	1298.9	1290.0	1242.1	1149.3	1047.5	1017.6	1080.4	1125.3	1212.1	1301.9	1295.9
27.5°	1553.3	1535.4	1490.5	1361.8	1224.1	1125.3	1143.3	1182.2	1278.0	1373.8	1343.8
30°	1774.8	1768.8	1717.9	1610.2	1448.6	1301.9	1239.1	1260.0	1346.8	1448.6	1412.7
32.5°	1978.3	1960.4	1918.5	1816.7	1667.1	1517.4	1391.7	1391.7	1463.5	1583.3	1529.4
35°	2202.8	2190.8	2139.9	2038.2	1894.5	1717.9	1604.2	1592.2	1652.1	1786.8	1670.1
37.5°	2433.3	2403.3	2379.4	2274.6	2131.0	1978.3	1840.7	1813.7	1843.6	1942.4	1798.8
40°	2720.6	2720.6	2666.7	2570.9	2436.2	2274.6	2083.1	2014.2	2005.3	2134.0	2023.2
42.5°	3055.8	3046.8	3001.9	2912.1	2783.4	2633.8	2391.4	2328.5	2322.5	2478.1	2346.5
45°	3441.9	3435.9	3382.0	3307.2	3217.4	3052.8	2813.4	2750.5	2714.6	2894.2	2738.5
47.5°	3795.0	3774.1	3756.1	3765.1	3714.2	3528.7	3304.2	3229.4	3226.4	3367.0	3166.5
50°	4037.5	4025.5	4088.3	4148.2	4244.0	4127.3	3860.9	3795.0	3744.2	3929.7	3612.5
52.5°	4196.1	4190.1	4315.8	4486.4	4683.9	4675.0	4438.5	4399.6	4357.7	4408.6	4010.5
55°	4258.9	4258.9	4408.6	4722.8	5070.0	5219.7	5108.9	5055.1	4908.4	4803.7	4447.5
57.5°	4184.1	4175.1	4369.7	4779.7	5309.5	5617.7	5665.6	5602.8	5372.3	5255.6	4932.4
60°	3866.9	3872.9	4103.3	4621.1	5291.5	5779.4	6087.6	6030.8	5800.3	5626.7	5339.4
62.5°	3274.3	3325.1	3567.6	4130.2	4908.4	5650.7	6330.1	6360.0	6111.6	5896.1	5701.5
65°	2460.2	2505.1	2735.5	3358.1	4211.1	5219.7	6374.9	6491.7	6291.1	6072.7	5758.4
67.5°	1496.5	1511.4	1792.8	2262.7	3100.7	4348.7	6060.7	6315.1	6171.4	5812.3	5195.7
70°	697.4	736.3	873.9	1236.1	1963.4	3202.4	5237.6	5596.8	5435.2	4989.2	3950.7
72.5°	272.4	284.3	371.1	571.7	1041.5	2014.2	3908.8	4148.2	4037.5	3543.6	2355.4
75°	134.7	143.7	179.6	272.4	475.9	832.0	2388.4	2544.0	2361.4	1780.8	996.6
77.5°	98.8	98.8	119.7	167.6	260.4	308.3	1005.6	1128.3	1065.5	688.4	272.4
80°	65.8	71.8	83.8	113.7	164.6	149.6	380.1	451.9	377.1	212.5	95.8
82.5°	38.9	41.9	62.9	80.8	110.7	86.8	128.7	143.7	155.6	104.8	44.9
85°	21.0	21.0	41.9	59.9	59.9	38.9	44.9	50.9	59.9	62.9	23.9
87.5°	6.0	6.0	26.9	35.9	23.9	21.0	23.9	23.9	26.9	32.9	12.0
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°	888.9	888.9	888.9	888.9	888.9	888.9	888.9	888.9	888.9	888.9	888.9
2.5°	891.9	891.9	894.9	894.9	897.9	897.9	897.9	897.9	900.9	903.9	903.9
5°	900.9	903.9	903.9	903.9	903.9	897.9	894.9	891.9	891.9	894.9	894.9
7.5°	924.8	927.8	924.8	918.8	909.9	897.9	885.9	885.9	882.9	885.9	882.9
10°	960.7	960.7	957.7	942.8	927.8	903.9	879.9	862.0	850.0	847.0	841.0
12.5°	1005.6	1005.6	996.6	969.7	942.8	897.9	835.0	775.2	727.3	706.3	700.3
15°	1050.5	1050.5	1038.5	999.6	945.8	838.0	706.3	580.6	508.8	478.9	460.9
17.5°	1104.4	1098.4	1077.5	1023.6	912.8	718.3	505.8	377.1	320.2	293.3	293.3
20°	1161.3	1155.3	1116.4	1026.6	829.0	514.8	329.2	260.4	245.4	239.4	239.4
22.5°	1224.1	1209.1	1149.3	1002.6	652.5	350.2	248.4	230.5	224.5	221.5	221.5
25°	1275.0	1251.0	1173.2	936.8	466.9	245.4	218.5	212.5	200.5	197.5	191.5
27.5°	1313.9	1278.0	1182.2	796.1	308.3	203.5	194.5	182.6	170.6	158.6	158.6
30°	1364.8	1319.9	1188.2	619.5	209.5	176.6	167.6	152.6	137.7	125.7	125.7
32.5°	1466.5	1400.7	1191.2	434.0	173.6	155.6	137.7	119.7	104.8	98.8	95.8
35°	1577.3	1487.5	1158.3	281.3	152.6	131.7	110.7	95.8	80.8	77.8	77.8
37.5°	1700.0	1616.2	1086.4	191.5	134.7	110.7	89.8	74.8	65.8	62.9	62.9
40°	1906.5	1807.7	966.7	152.6	116.7	92.8	74.8	62.9	56.9	53.9	53.9
42.5°	2202.8	2032.2	817.1	131.7	101.8	77.8	59.9	50.9	47.9	44.9	44.9
45°	2544.0	2283.6	643.5	119.7	89.8	65.8	50.9	44.9	41.9	38.9	38.9
47.5°	2936.1	2544.0	508.8	104.8	77.8	56.9	44.9	38.9	35.9	32.9	32.9
50°	3307.2	2747.5	383.1	92.8	68.8	47.9	38.9	35.9	32.9	29.9	29.9
52.5°	3612.5	2885.2	290.3	80.8	59.9	41.9	35.9	32.9	26.9	26.9	26.9
55°	3980.6	2992.9	221.5	71.8	53.9	38.9	32.9	26.9	23.9	21.0	21.0
57.5°	4300.8	3031.8	161.6	62.9	47.9	35.9	29.9	23.9	18.0	15.0	15.0
60°	4516.3	2998.9	116.7	53.9	41.9	29.9	23.9	18.0	12.0	9.0	9.0
62.5°	4669.0	2927.1	89.8	47.9	35.9	26.9	21.0	15.0	9.0	6.0	6.0
65°	4516.3	2705.6	71.8	41.9	29.9	23.9	15.0	12.0	6.0	3.0	3.0
67.5°	3905.8	2268.6	56.9	35.9	26.9	21.0	15.0	9.0	3.0	0.0	0.0
70°	2807.4	1619.2	47.9	32.9	23.9	18.0	12.0	6.0	3.0	0.0	0.0
72.5°	1565.3	835.0	44.9	29.9	23.9	18.0	12.0	6.0	3.0	0.0	0.0
75°	634.5	287.3	41.9	29.9	23.9	15.0	12.0	6.0	3.0	0.0	0.0
77.5°	185.6	98.8	35.9	26.9	23.9	18.0	12.0	6.0	3.0	0.0	0.0
80°	65.8	44.9	26.9	23.9	18.0	15.0	12.0	9.0	3.0	0.0	0.0
82.5°	29.9	18.0	12.0	9.0	9.0	9.0	9.0	6.0	3.0	0.0	0.0
85°	12.0	9.0	6.0	3.0	3.0	3.0	3.0	3.0	3.0	0.0	0.0
87.5°	9.0	6.0	3.0	3.0	3.0	3.0	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)