

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: P572731

Luminaire Tested: **ARCH-S-PA2-110-727-U-T4W-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P572731  
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-PA2-110-727-U-T4W-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 1105mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

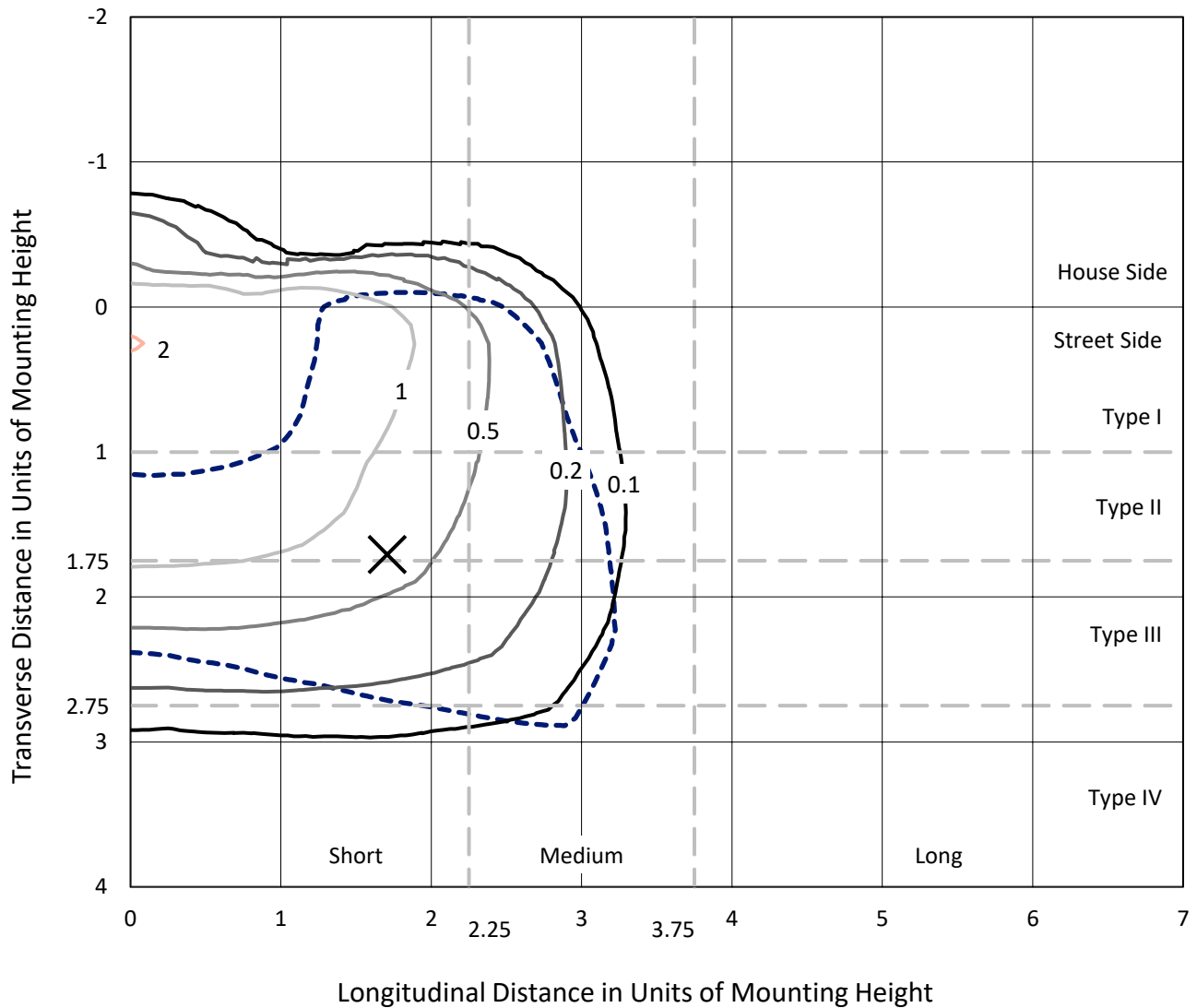
Lumens per Lamp: N/A  
Luminaire Lumens: 9218 lumens  
Efficiency: N/A  
Efficacy: 80.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 114.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

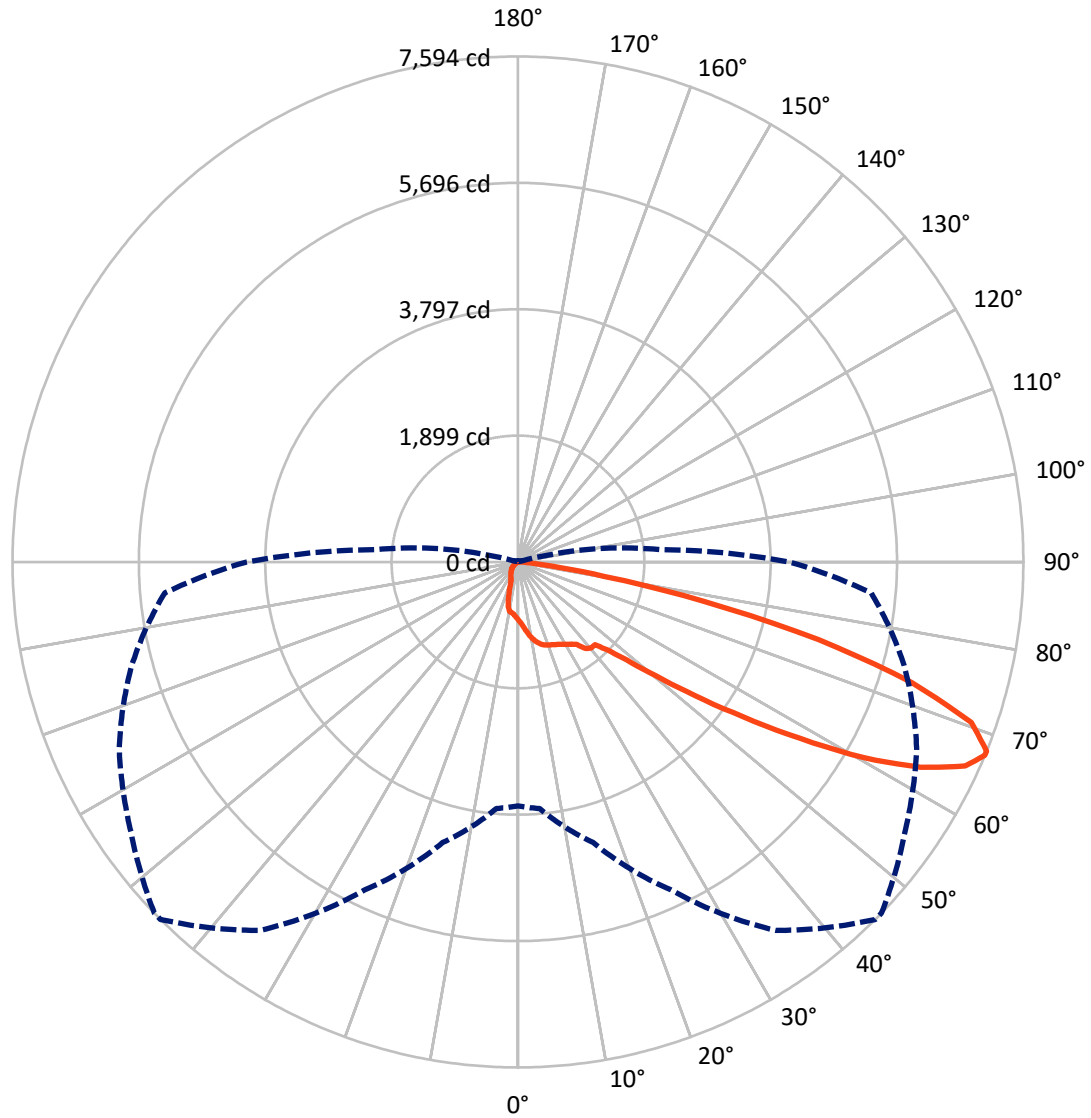
✕ Max cd  
 - - - 1/2 Max cd



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

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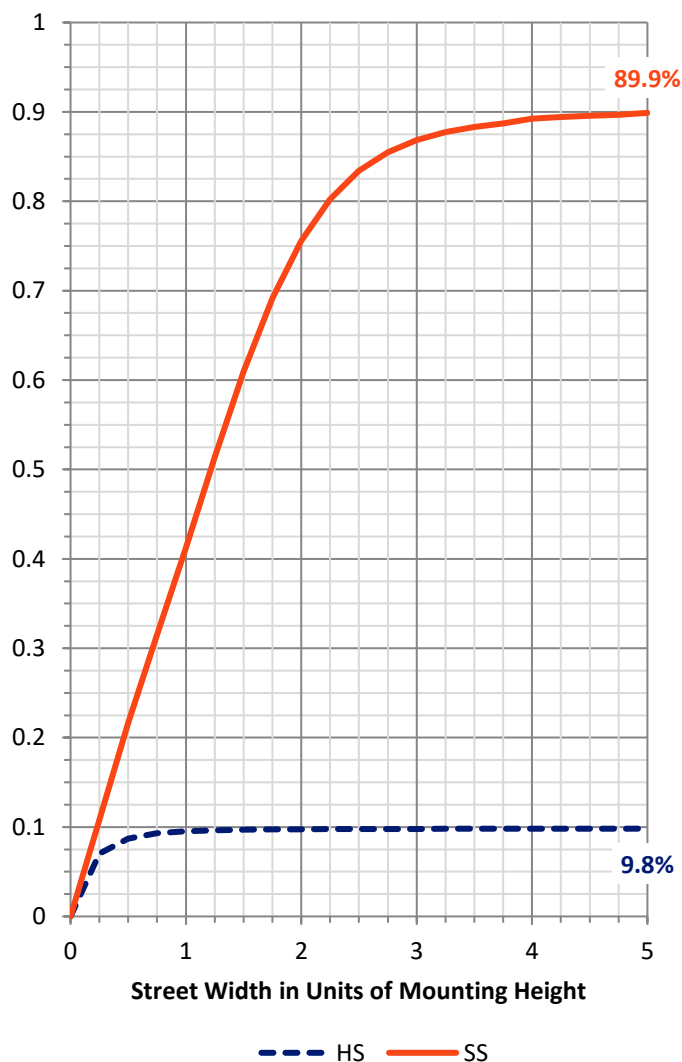
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	913.4	0.0	913.4
	% Fixture	9.9	0.0	9.9
<b>Street Side</b>	Lumens	8304.6	0.0	8304.6
	% Fixture	90.1	0.0	90.1
<b>Total</b>	Lumens	9218.0	0.0	9218.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.5	0.9
10°-20°	264.5	2.9
20°-30°	423.1	4.6
30°-40°	609.0	6.6
40°-50°	1068.3	11.6
50°-60°	2251.0	24.4
60°-70°	3112.8	33.8
70°-80°	1303.2	14.1
80°-90°	98.5	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°	9218.0	100.0
0°-180°	9218.0	100.0

**Coefficient of Utilization**



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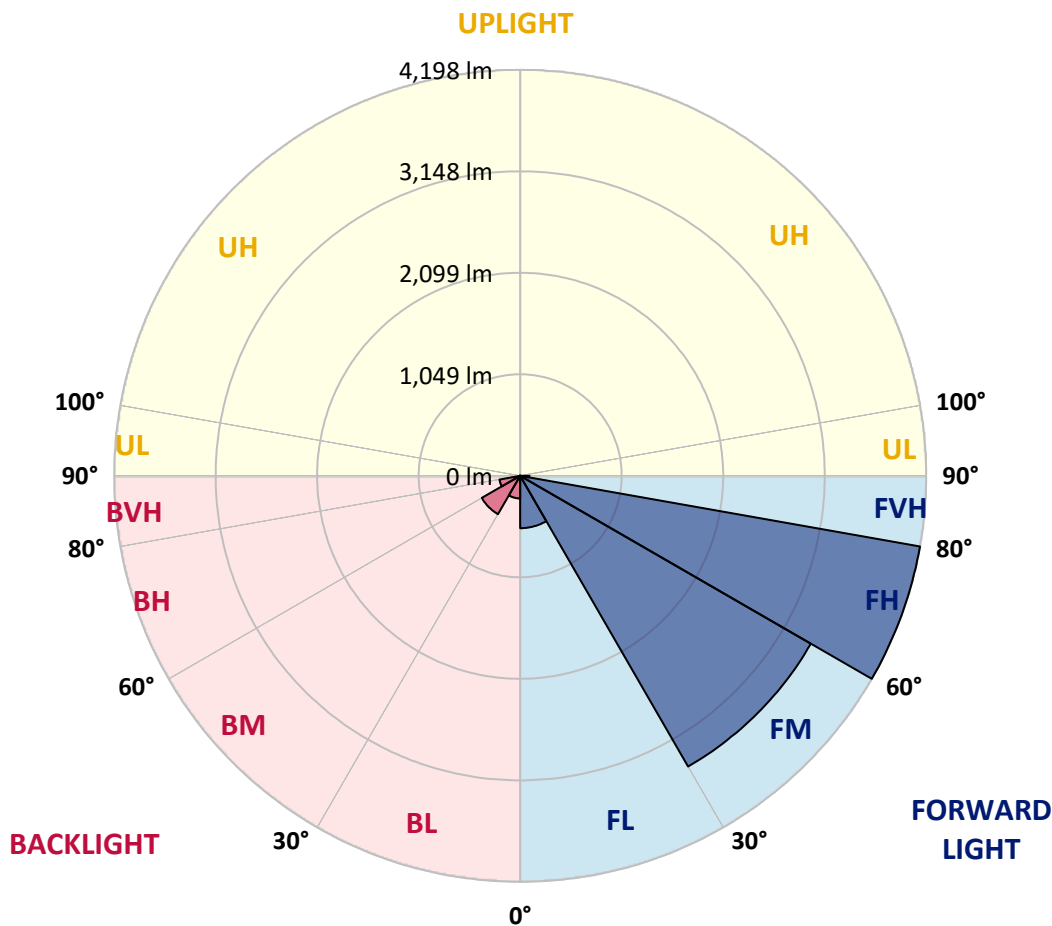
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	541.0	5.9			
FM (30°-60°)	3470.7	37.7			
FH (60°-80°)	4197.7	45.5			G2/5000
FVH (80°-90°)	95.2	1.0			G1/100
BL (0°-30°)	234.1	2.5	B1/500		
BM (30°-60°)	457.6	5.0	B1/1000		
BH (60°-80°)	218.3	2.4	B1/500		G1/500
BVH (80°-90°)	3.3	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°	871.8	871.8	871.8	871.8	871.8	871.8	871.8	871.8	871.8	871.8	871.8
2.5°	970.5	953.5	950.1	946.7	936.5	922.9	926.3	916.0	899.0	888.8	878.6
5°	1089.7	1072.7	1065.9	1045.4	1025.0	994.4	994.4	967.1	936.5	909.2	882.0
7.5°	1212.3	1198.7	1185.1	1154.4	1123.8	1082.9	1079.5	1038.6	991.0	950.1	905.8
10°	1314.5	1304.3	1287.2	1249.8	1208.9	1164.6	1154.4	1117.0	1055.7	1001.2	943.3
12.5°	1396.2	1386.0	1362.1	1324.7	1273.6	1229.3	1225.9	1178.3	1117.0	1059.1	987.6
15°	1457.5	1440.5	1413.2	1372.4	1321.3	1280.4	1273.6	1232.7	1174.9	1110.2	1025.0
17.5°	1467.7	1457.5	1433.7	1389.4	1345.1	1311.1	1307.7	1277.0	1225.9	1157.8	1069.3
20°	1440.5	1437.1	1416.6	1382.6	1348.5	1331.5	1328.1	1307.7	1266.8	1205.5	1117.0
22.5°	1399.6	1396.2	1382.6	1365.6	1351.9	1348.5	1348.5	1341.7	1317.9	1260.0	1178.3
25°	1372.4	1369.0	1362.1	1351.9	1351.9	1372.4	1375.8	1382.6	1362.1	1317.9	1229.3
27.5°	1375.8	1369.0	1362.1	1351.9	1365.6	1403.0	1406.4	1423.4	1406.4	1365.6	1287.2
30°	1423.4	1413.2	1392.8	1369.0	1386.0	1437.1	1440.5	1460.9	1447.3	1426.8	1351.9
32.5°	1498.4	1491.6	1450.7	1409.8	1420.0	1471.1	1477.9	1515.4	1532.4	1501.8	1409.8
35°	1607.3	1583.5	1532.4	1491.6	1484.7	1522.2	1532.4	1593.7	1638.0	1563.1	1443.9
37.5°	1695.9	1675.4	1593.7	1529.0	1566.5	1651.6	1655.0	1729.9	1692.5	1569.9	1498.4
40°	1995.5	1992.1	1849.1	1644.8	1603.9	1699.3	1712.9	1726.5	1709.5	1648.2	1617.6
42.5°	2479.1	2438.2	2278.2	1964.9	1685.7	1695.9	1702.7	1774.2	1862.7	1835.5	1845.7
45°	3003.5	2969.5	2789.0	2394.0	1964.9	1879.8	1886.6	2002.4	2172.6	2206.7	2261.2
47.5°	3487.1	3432.6	3330.5	2932.0	2441.7	2193.1	2206.7	2346.3	2628.9	2703.9	2789.0
50°	3895.7	3858.3	3762.9	3500.7	3027.4	2686.8	2700.5	2816.2	3184.0	3303.2	3412.2
52.5°	4488.3	4437.2	4253.3	4130.7	3773.1	3330.5	3299.8	3422.4	3844.7	3923.0	4069.4
55°	5033.1	4927.6	4818.6	4767.5	4617.7	4100.1	4089.8	4113.7	4464.4	4505.3	4767.5
57.5°	5264.7	5244.3	5336.2	5506.5	5540.5	5005.9	4961.6	4869.7	5145.5	5142.1	5448.6
60°	5411.1	5411.1	5656.3	6078.6	6351.0	5973.0	5911.7	5625.7	5724.4	5727.8	6010.5
62.5°	5319.2	5343.0	5724.4	6361.2	6909.5	6793.7	6752.8	6272.7	6265.9	6187.6	6286.3
65°	4750.5	4791.4	5404.3	6204.6	7113.8	7386.2	7369.2	6824.4	6626.8	6340.8	6119.4
67°	3875.3	3950.2	4692.6	5639.3	6882.3	7590.6	7594.0	7062.7	6630.3	6085.4	5530.3
67.5°	3664.2	3718.7	4362.3	5435.0	6756.3	7594.0	7594.0	7093.4	6609.8	6007.1	5326.0
70°	2336.1	2349.7	3051.2	4205.6	5772.1	7226.2	7253.4	6861.8	6020.7	4862.9	3739.1
72.5°	1154.4	1123.8	1610.7	2707.3	4331.6	6184.2	6255.7	5860.6	4764.1	3177.2	1975.1
75°	452.9	483.6	701.5	1440.5	2714.1	4662.0	4716.4	4263.5	3064.8	1638.0	779.8
77.5°	200.9	200.9	299.7	647.0	1426.8	2860.5	2887.8	2601.7	1617.6	674.3	238.4
80°	109.0	115.8	156.6	282.6	718.5	1314.5	1433.7	1290.6	732.2	296.3	81.7
82.5°	54.5	57.9	95.4	160.1	361.0	497.2	524.4	548.3	337.1	183.9	34.1
85°	20.4	23.8	51.1	91.9	163.5	166.9	166.9	214.5	183.9	139.6	17.0
87.5°	3.4	6.8	23.8	37.5	64.7	57.9	51.1	68.1	102.2	88.5	10.2
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°	871.8	871.8	871.8	871.8	871.8	871.8	871.8	871.8	871.8	871.8	871.8
2.5°	871.8	865.0	851.3	841.1	834.3	827.5	820.7	820.7	817.3	817.3	820.7
5°	871.8	858.2	830.9	813.9	800.3	790.0	783.2	783.2	779.8	783.2	786.6
7.5°	888.8	868.4	830.9	800.3	783.2	766.2	759.4	756.0	756.0	759.4	756.0
10°	916.0	888.8	841.1	800.3	776.4	752.6	715.1	681.1	650.4	636.8	633.4
12.5°	950.1	916.0	858.2	810.5	773.0	691.3	589.1	524.4	483.6	463.1	456.3
15°	987.6	946.7	878.6	824.1	721.9	568.7	435.9	364.4	340.5	343.9	347.3
17.5°	1028.4	984.2	909.2	817.3	619.8	422.3	320.1	303.1	313.3	323.5	323.5
20°	1069.3	1021.6	939.9	766.2	487.0	313.3	286.1	289.5	299.7	309.9	309.9
22.5°	1123.8	1072.7	970.5	677.7	361.0	272.4	272.4	279.2	286.1	296.3	296.3
25°	1181.7	1130.6	991.0	568.7	269.0	255.4	258.8	265.6	272.4	282.6	282.6
27.5°	1243.0	1191.9	987.6	439.3	235.0	235.0	238.4	248.6	255.4	265.6	265.6
30°	1311.1	1266.8	950.1	320.1	217.9	214.5	214.5	224.8	235.0	241.8	245.2
32.5°	1369.0	1331.5	885.4	241.8	204.3	197.5	194.1	197.5	207.7	214.5	217.9
35°	1416.6	1403.0	790.0	207.7	190.7	180.5	173.7	170.3	173.7	173.7	177.1
37.5°	1505.2	1508.6	677.7	194.1	180.5	166.9	153.2	143.0	136.2	132.8	129.4
40°	1672.0	1668.6	558.5	183.9	170.3	153.2	132.8	119.2	102.2	95.4	95.4
42.5°	1907.0	1855.9	425.7	173.7	160.1	139.6	112.4	91.9	74.9	71.5	71.5
45°	2329.3	2118.1	320.1	166.9	149.8	122.6	91.9	68.1	57.9	54.5	54.5
47.5°	2795.8	2421.2	255.4	156.6	139.6	109.0	71.5	54.5	44.3	44.3	44.3
50°	3310.0	2710.7	214.5	146.4	122.6	91.9	57.9	44.3	40.9	37.5	40.9
52.5°	3871.9	2938.8	187.3	132.8	105.6	74.9	47.7	40.9	34.1	34.1	34.1
55°	4375.9	3092.1	156.6	115.8	88.5	61.3	44.3	34.1	30.6	27.2	23.8
57.5°	4832.2	3173.8	126.0	98.8	68.1	51.1	37.5	27.2	23.8	17.0	17.0
60°	5067.2	3098.9	98.8	78.3	54.5	40.9	30.6	23.8	17.0	10.2	10.2
62.5°	5104.6	2904.8	78.3	61.3	47.7	34.1	23.8	17.0	10.2	6.8	6.8
65°	4777.7	2564.2	64.7	51.1	37.5	27.2	20.4	13.6	6.8	3.4	3.4
67°	4192.0	2206.7	57.9	44.3	34.1	23.8	17.0	10.2	6.8	3.4	0.0
67.5°	4076.2	2142.0	54.5	44.3	34.1	23.8	17.0	10.2	6.8	3.4	0.0
70°	2676.6	1481.3	51.1	40.9	30.6	20.4	13.6	10.2	3.4	0.0	0.0
72.5°	1460.9	745.8	47.7	37.5	27.2	20.4	13.6	6.8	3.4	0.0	0.0
75°	534.6	282.6	40.9	34.1	23.8	20.4	13.6	6.8	3.4	0.0	0.0
77.5°	180.5	98.8	37.5	34.1	27.2	20.4	13.6	6.8	3.4	0.0	0.0
80°	61.3	44.3	30.6	27.2	20.4	17.0	13.6	6.8	3.4	0.0	0.0
82.5°	23.8	13.6	10.2	10.2	10.2	13.6	13.6	10.2	3.4	0.0	0.0
85°	10.2	6.8	3.4	3.4	3.4	3.4	3.4	3.4	3.4	0.0	0.0
87.5°	10.2	6.8	3.4	3.4	3.4	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)