

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: P572794

Luminaire Tested: **ARCH-S-PA2-110-830-U-T4W-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P572794  
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-PA2-110-830-U-T4W-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 3000K, 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: 8759 lumens  
Efficiency: N/A  
Efficacy: 76.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

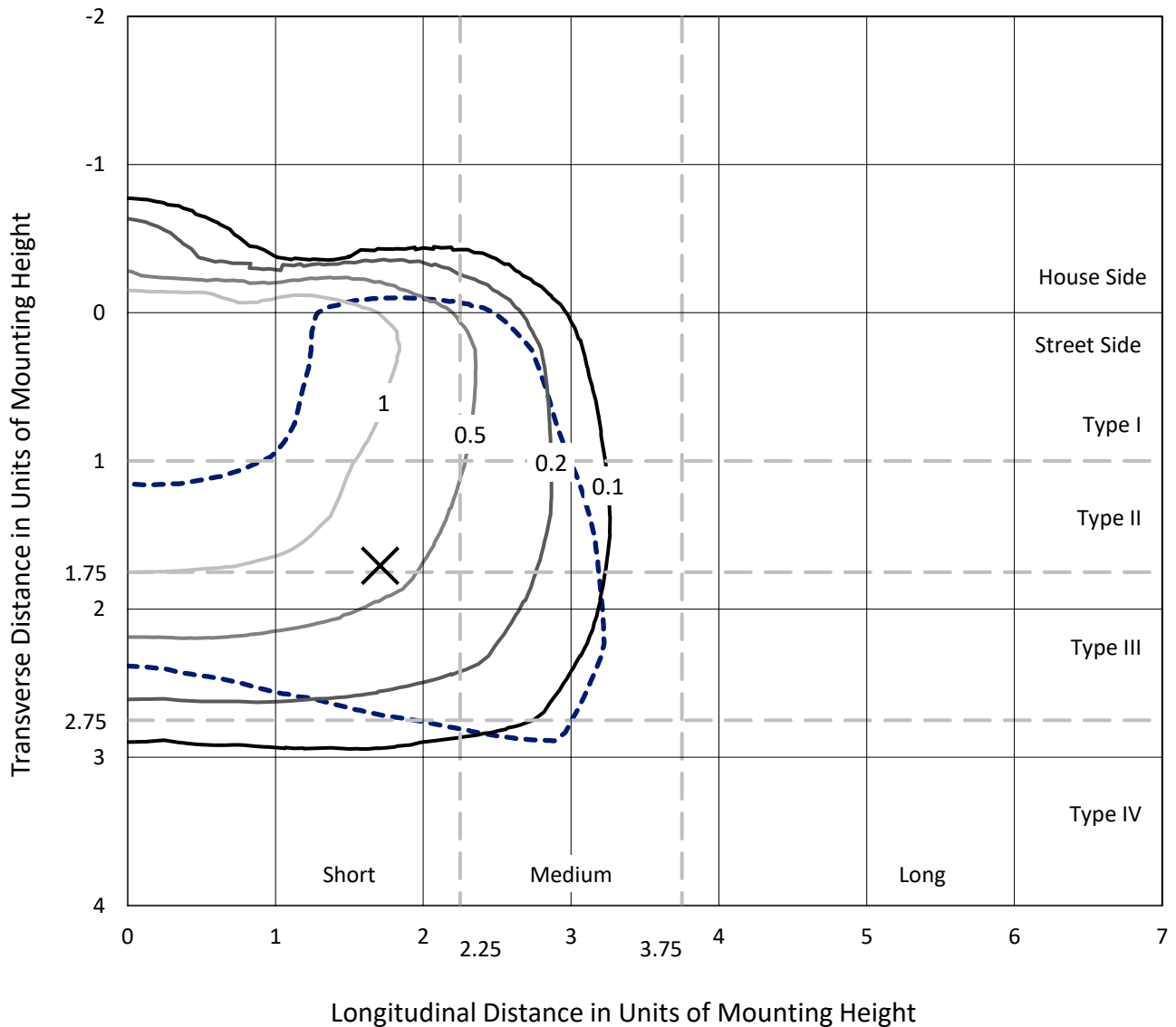
Input Watts (W): 114.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

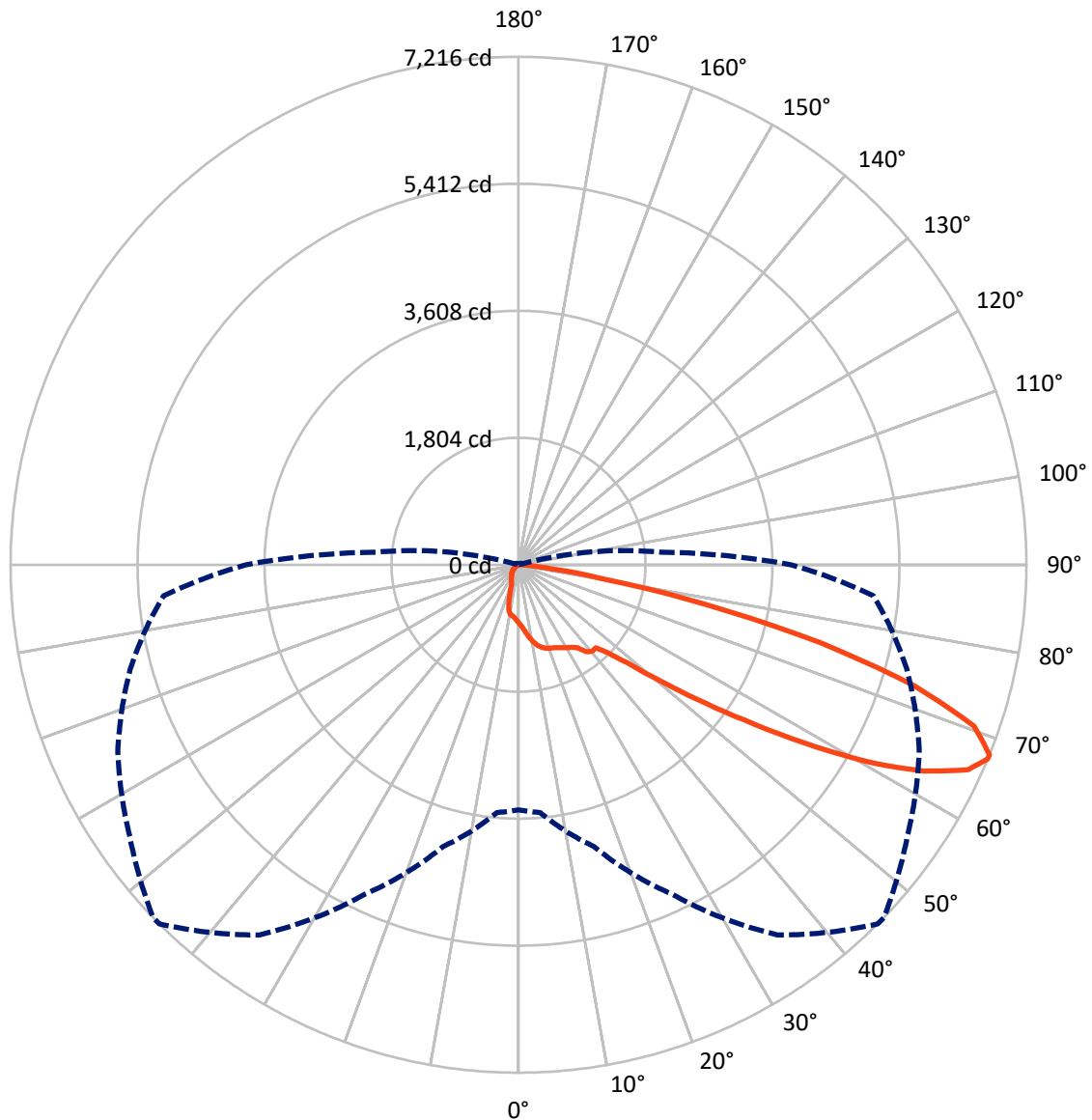
× Max cd  
 - - - 1/2 Max cd



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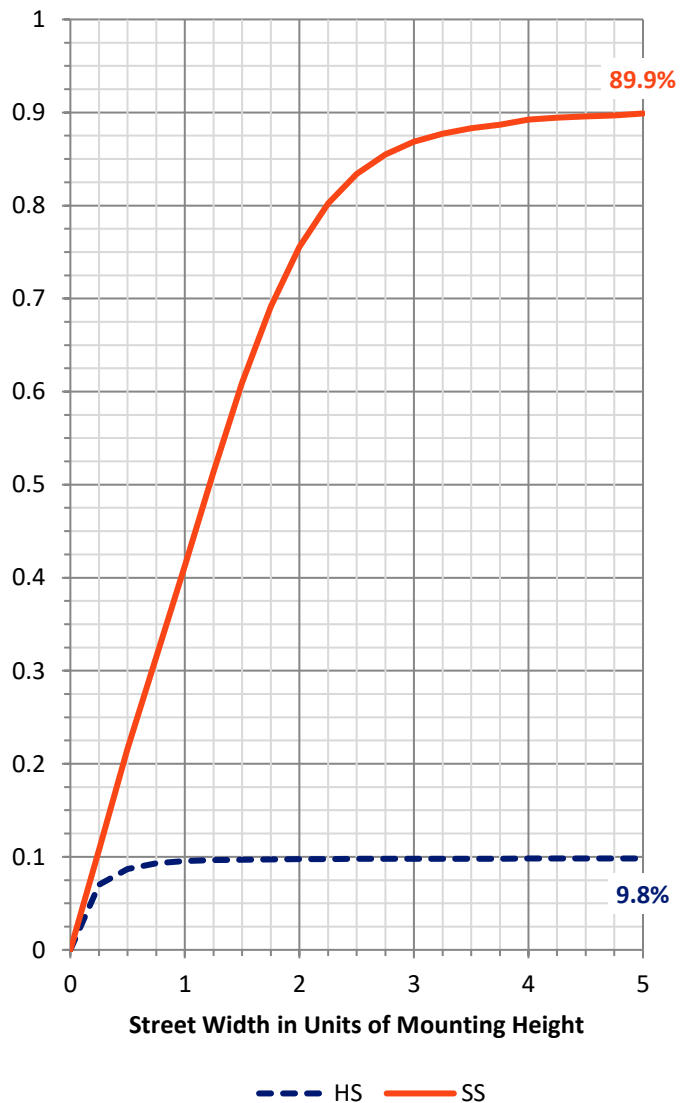
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	867.9	0.0	867.9
	% Fixture	9.9	0.0	9.9
<b>Street Side</b>	Lumens	7891.1	0.0	7891.1
	% Fixture	90.1	0.0	90.1
<b>Total</b>	Lumens	8759.0	0.0	8759.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.1	0.9
10°-20°	251.3	2.9
20°-30°	402.1	4.6
30°-40°	578.6	6.6
40°-50°	1015.2	11.6
50°-60°	2138.9	24.4
60°-70°	2957.8	33.8
70°-80°	1238.3	14.1
80°-90°	93.6	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°	8759.0	100.0
0°-180°	8759.0	100.0

**Coefficient of Utilization**

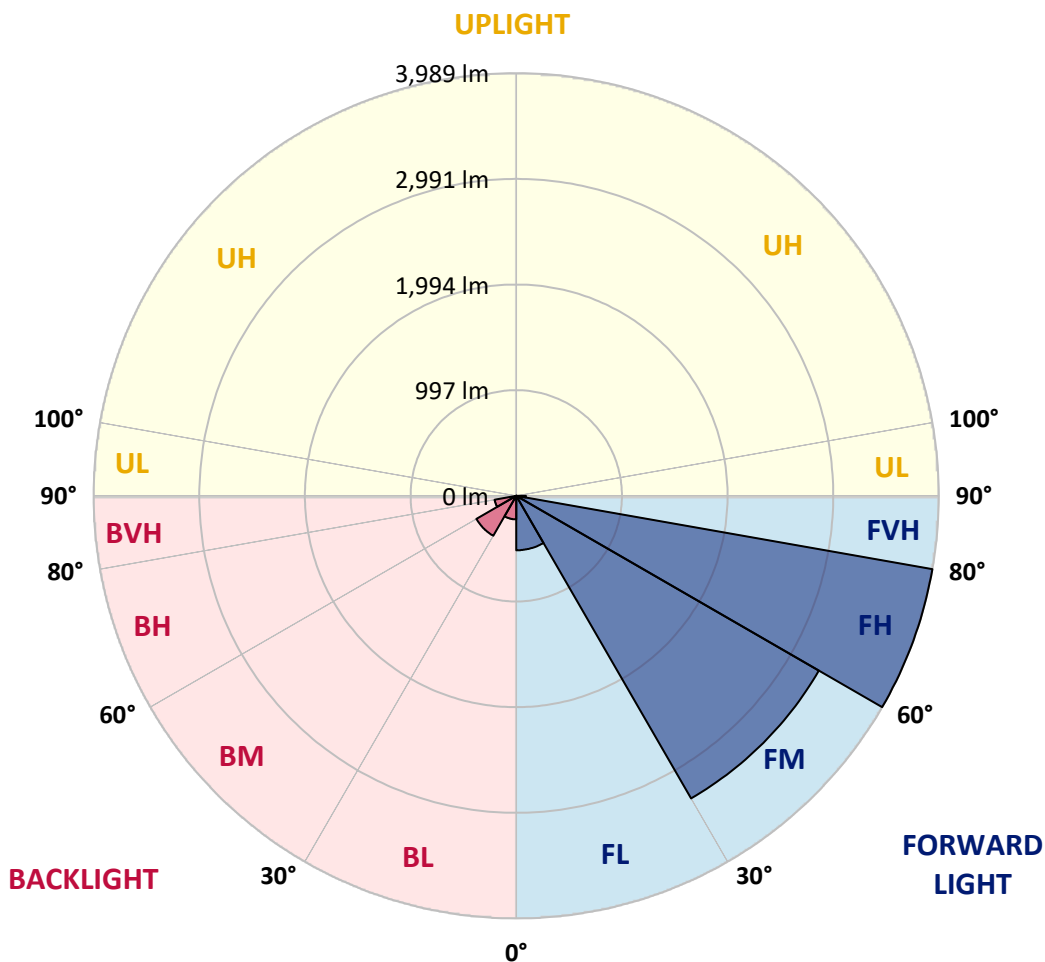


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	514.1	5.9			
FM (30°-60°)	3297.9	37.7			
FH (60°-80°)	3988.7	45.5			G2/5000
FVH (80°-90°)	90.5	1.0			G1/100
BL (0°-30°)	222.4	2.5	B1/500		
BM (30°-60°)	434.8	5.0	B1/1000		
BH (60°-80°)	207.4	2.4	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°	46°	55°	65°	75°	85°
0°	828.4	828.4	828.4	828.4	828.4	828.4	828.4	828.4	828.4	828.4	828.4
2.5°	922.2	906.0	902.8	899.6	889.8	876.9	880.1	870.4	854.3	844.5	834.8
5°	1035.5	1019.3	1012.8	993.4	974.0	944.9	944.9	919.0	889.8	864.0	838.1
7.5°	1151.9	1139.0	1126.1	1096.9	1067.8	1029.0	1025.7	986.9	941.6	902.8	860.7
10°	1249.0	1239.3	1223.1	1187.5	1148.7	1106.6	1096.9	1061.3	1003.1	951.3	896.3
12.5°	1326.7	1317.0	1294.3	1258.7	1210.2	1168.1	1164.9	1119.6	1061.3	1006.3	938.4
15°	1384.9	1368.7	1342.9	1304.0	1255.5	1216.7	1210.2	1171.4	1116.4	1054.9	974.0
17.5°	1394.6	1384.9	1362.3	1320.2	1278.1	1245.8	1242.5	1213.4	1164.9	1100.2	1016.0
20°	1368.7	1365.5	1346.1	1313.7	1281.4	1265.2	1262.0	1242.5	1203.7	1145.5	1061.3
22.5°	1329.9	1326.7	1313.7	1297.6	1284.6	1281.4	1281.4	1274.9	1252.3	1197.2	1119.6
25°	1304.0	1300.8	1294.3	1284.6	1284.6	1304.0	1307.3	1313.7	1294.3	1252.3	1168.1
27.5°	1307.3	1300.8	1294.3	1284.6	1297.6	1333.2	1336.4	1352.6	1336.4	1297.6	1223.1
30°	1352.6	1342.9	1323.4	1300.8	1317.0	1365.5	1368.7	1388.2	1375.2	1355.8	1284.6
32.5°	1423.8	1417.3	1378.5	1339.6	1349.3	1397.9	1404.3	1439.9	1456.1	1427.0	1339.6
35°	1527.3	1504.6	1456.1	1417.3	1410.8	1446.4	1456.1	1514.4	1556.4	1485.2	1372.0
37.5°	1611.4	1592.0	1514.4	1452.9	1488.5	1569.4	1572.6	1643.8	1608.2	1491.7	1423.8
40°	1896.2	1892.9	1757.0	1562.9	1524.1	1614.7	1627.6	1640.6	1624.4	1566.1	1537.0
42.5°	2355.7	2316.8	2164.8	1867.1	1601.7	1611.4	1617.9	1685.9	1770.0	1744.1	1753.8
45°	2854.0	2821.6	2650.1	2274.8	1867.1	1786.2	1792.6	1902.7	2064.4	2096.8	2148.6
47.5°	3313.5	3261.7	3164.6	2786.0	2320.1	2083.9	2096.8	2229.5	2498.0	2569.2	2650.1
50°	3701.8	3666.2	3575.6	3326.4	2876.6	2553.0	2566.0	2676.0	3025.5	3138.7	3242.3
52.5°	4264.8	4216.3	4041.5	3925.0	3585.3	3164.6	3135.5	3252.0	3653.2	3727.6	3866.8
55°	4782.5	4682.2	4578.7	4530.1	4387.7	3895.9	3886.2	3908.9	4242.1	4281.0	4530.1
57.5°	5002.6	4983.1	5070.5	5232.3	5264.7	4756.6	4714.6	4627.2	4889.3	4886.1	5177.3
60°	5141.7	5141.7	5374.7	5775.9	6034.8	5675.6	5617.4	5345.5	5439.4	5442.6	5711.2
62.5°	5054.3	5077.0	5439.4	6044.5	6565.4	6455.4	6416.6	5960.3	5953.9	5879.5	5973.3
65°	4513.9	4552.8	5135.2	5895.6	6759.6	7018.5	7002.3	6484.5	6296.9	6025.1	5814.7
67°	3682.3	3753.5	4458.9	5358.5	6539.6	7212.6	7215.8	6711.1	6300.1	5782.4	5254.9
67.5°	3481.7	3533.5	4145.1	5164.3	6419.8	7215.8	7215.8	6740.2	6280.7	5708.0	5060.8
70°	2219.8	2232.7	2899.3	3996.2	5484.7	6866.4	6892.3	6520.1	5720.9	4620.7	3552.9
72.5°	1096.9	1067.8	1530.5	2572.5	4115.9	5876.2	5944.2	5568.8	4526.9	3019.0	1876.8
75°	430.4	459.5	666.6	1368.7	2578.9	4429.8	4481.6	4051.2	2912.2	1556.4	741.0
77.5°	190.9	190.9	284.8	614.8	1355.8	2718.1	2744.0	2472.2	1537.0	640.7	226.5
80°	103.5	110.0	148.8	268.6	682.8	1249.0	1362.3	1226.4	695.7	281.5	77.7
82.5°	51.8	55.0	90.6	152.1	343.0	472.4	498.3	521.0	320.3	174.7	32.4
85°	19.4	22.7	48.5	87.4	155.3	158.6	158.6	203.9	174.7	132.7	16.2
87.5°	3.2	6.5	22.7	35.6	61.5	55.0	48.5	64.7	97.1	84.1	9.7
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°	828.4	828.4	828.4	828.4	828.4	828.4	828.4	828.4	828.4	828.4	828.4
2.5°	828.4	821.9	809.0	799.2	792.8	786.3	779.8	779.8	776.6	776.6	779.8
5°	828.4	815.4	789.5	773.4	760.4	750.7	744.2	744.2	741.0	744.2	747.5
7.5°	844.5	825.1	789.5	760.4	744.2	728.1	721.6	718.3	718.3	721.6	718.3
10°	870.4	844.5	799.2	760.4	737.8	715.1	679.5	647.2	618.0	605.1	601.9
12.5°	902.8	870.4	815.4	770.1	734.5	656.9	559.8	498.3	459.5	440.1	433.6
15°	938.4	899.6	834.8	783.1	686.0	540.4	414.2	346.2	323.6	326.8	330.1
17.5°	977.2	935.1	864.0	776.6	588.9	401.2	304.2	288.0	297.7	307.4	307.4
20°	1016.0	970.7	893.1	728.1	462.7	297.7	271.8	275.0	284.8	294.5	294.5
22.5°	1067.8	1019.3	922.2	643.9	343.0	258.9	258.9	265.3	271.8	281.5	281.5
25°	1122.8	1074.3	941.6	540.4	255.6	242.7	245.9	252.4	258.9	268.6	268.6
27.5°	1181.1	1132.5	938.4	417.4	223.3	223.3	226.5	236.2	242.7	252.4	252.4
30°	1245.8	1203.7	902.8	304.2	207.1	203.9	203.9	213.6	223.3	229.7	233.0
32.5°	1300.8	1265.2	841.3	229.7	194.1	187.7	184.4	187.7	197.4	203.9	207.1
35°	1346.1	1333.2	750.7	197.4	181.2	171.5	165.0	161.8	165.0	165.0	168.3
37.5°	1430.2	1433.5	643.9	184.4	171.5	158.6	145.6	135.9	129.4	126.2	123.0
40°	1588.8	1585.5	530.7	174.7	161.8	145.6	126.2	113.3	97.1	90.6	90.6
42.5°	1812.0	1763.5	404.5	165.0	152.1	132.7	106.8	87.4	71.2	68.0	68.0
45°	2213.3	2012.7	304.2	158.6	142.4	116.5	87.4	64.7	55.0	51.8	51.8
47.5°	2656.6	2300.7	242.7	148.8	132.7	103.5	68.0	51.8	42.1	42.1	42.1
50°	3145.2	2575.7	203.9	139.1	116.5	87.4	55.0	42.1	38.8	35.6	38.8
52.5°	3679.1	2792.5	178.0	126.2	100.3	71.2	45.3	38.8	32.4	32.4	32.4
55°	4158.0	2938.1	148.8	110.0	84.1	58.2	42.1	32.4	29.1	25.9	22.7
57.5°	4591.6	3015.8	119.7	93.8	64.7	48.5	35.6	25.9	22.7	16.2	16.2
60°	4814.9	2944.6	93.8	74.4	51.8	38.8	29.1	22.7	16.2	9.7	9.7
62.5°	4850.5	2760.1	74.4	58.2	45.3	32.4	22.7	16.2	9.7	6.5	6.5
65°	4539.8	2436.6	61.5	48.5	35.6	25.9	19.4	12.9	6.5	3.2	3.2
67°	3983.3	2096.8	55.0	42.1	32.4	22.7	16.2	9.7	6.5	3.2	0.0
67.5°	3873.3	2035.3	51.8	42.1	32.4	22.7	16.2	9.7	6.5	3.2	0.0
70°	2543.3	1407.6	48.5	38.8	29.1	19.4	12.9	9.7	3.2	0.0	0.0
72.5°	1388.2	708.6	45.3	35.6	25.9	19.4	12.9	6.5	3.2	0.0	0.0
75°	508.0	268.6	38.8	32.4	22.7	19.4	12.9	6.5	3.2	0.0	0.0
77.5°	171.5	93.8	35.6	32.4	25.9	19.4	12.9	6.5	3.2	0.0	0.0
80°	58.2	42.1	29.1	25.9	19.4	16.2	12.9	6.5	3.2	0.0	0.0
82.5°	22.7	12.9	9.7	9.7	9.7	12.9	12.9	9.7	3.2	0.0	0.0
85°	9.7	6.5	3.2	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	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)