

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: P572867

Luminaire Tested: **ARCH-S-PA2-120-827-U-T4W**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P572867  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-120-827-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11451 lumens  
Efficiency: N/A  
Efficacy: 93.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2

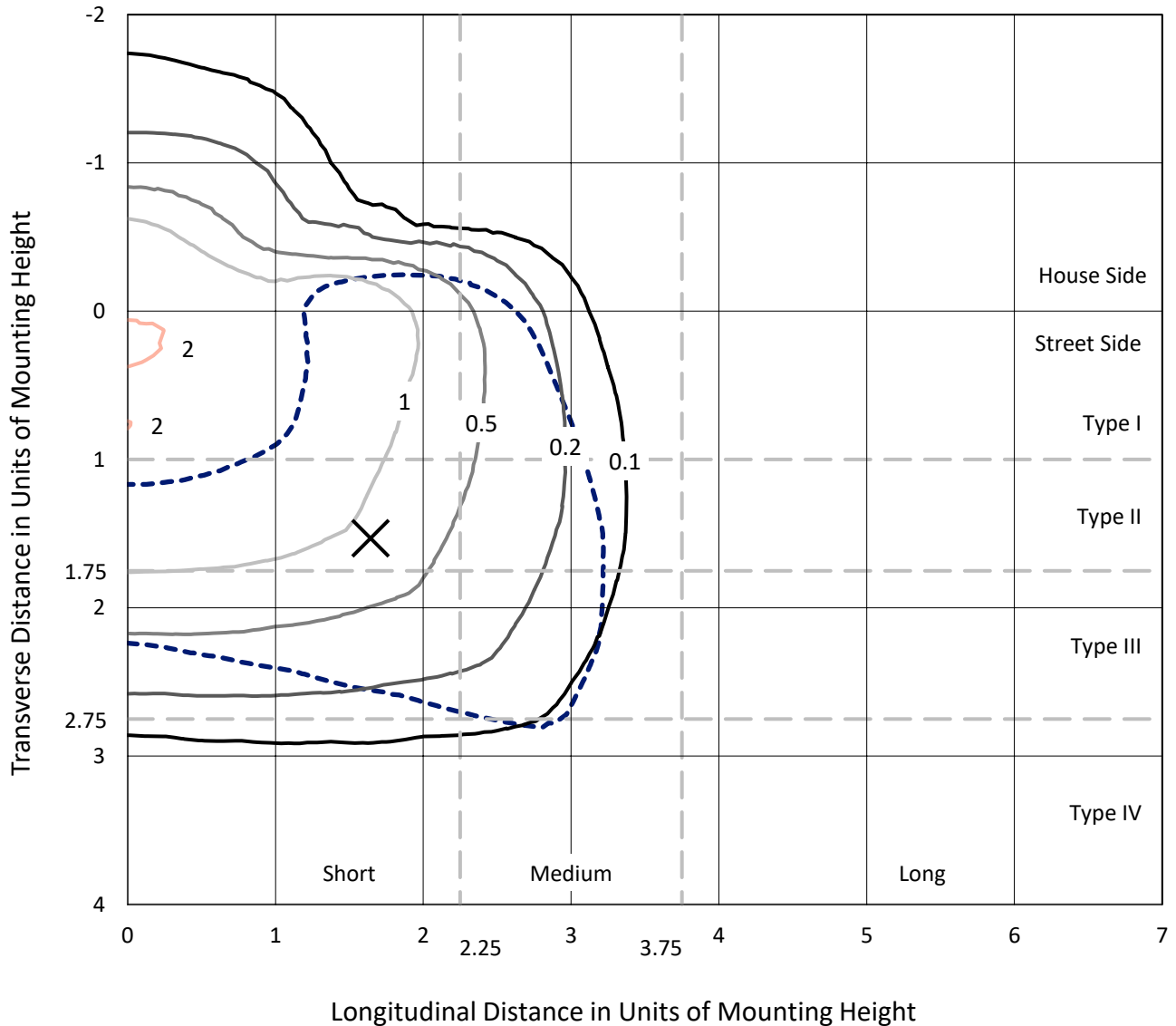
Input Watts (W): 122.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

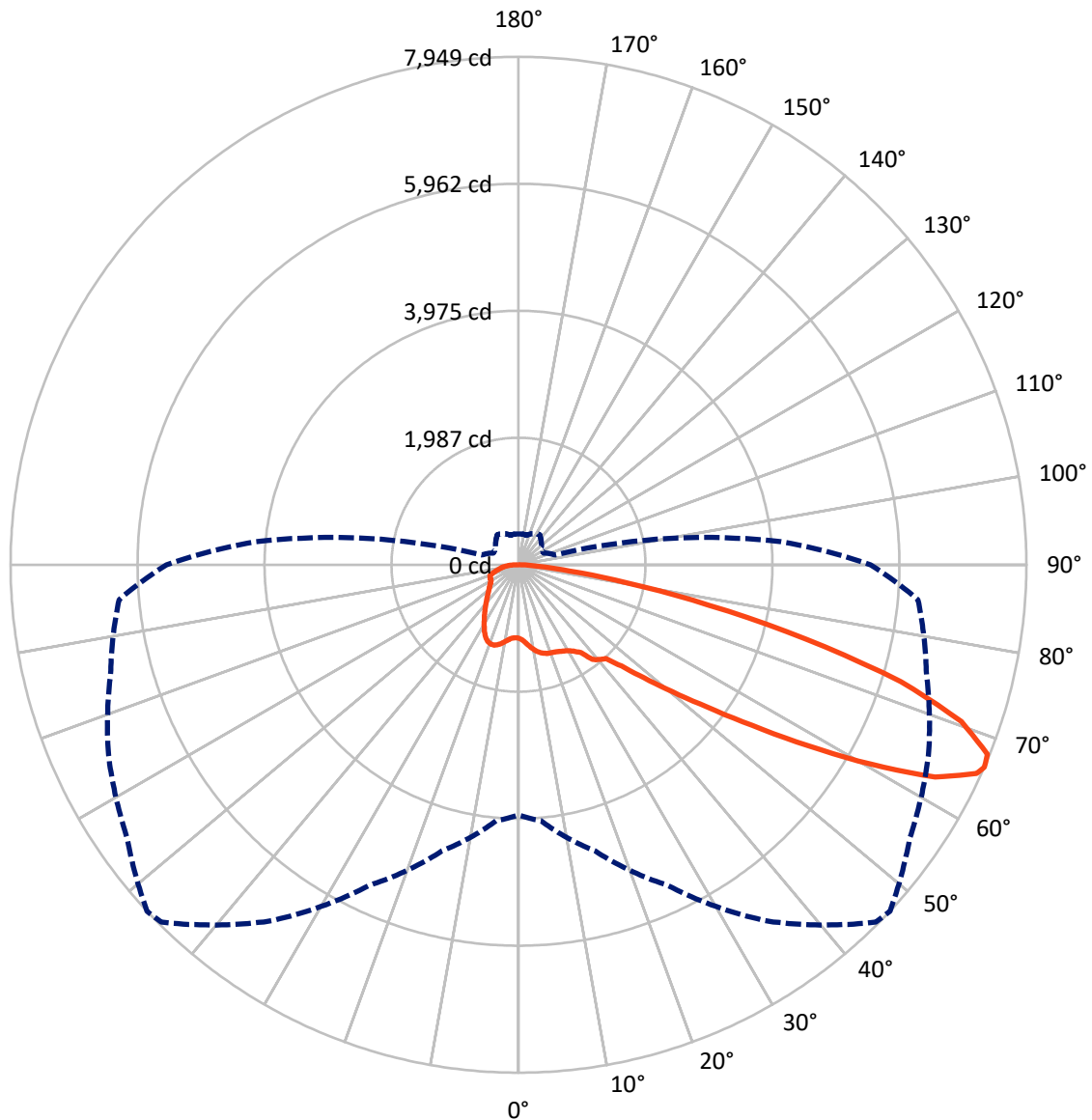
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral    - - - Horizontal Cone Through 66-Deg Vertical

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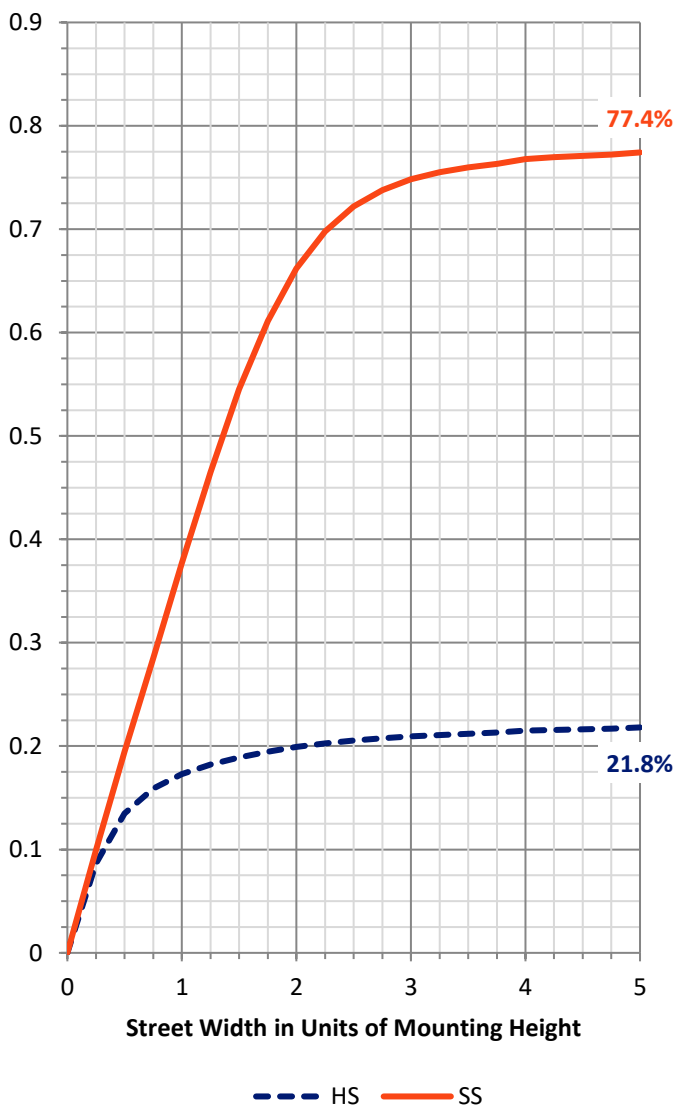
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2545.9	0.0	2545.9
	% Fixture	22.2	0.0	22.2
<b>Street Side</b>	Lumens	8905.1	0.0	8905.1
	% Fixture	77.8	0.0	77.8
<b>Total</b>	Lumens	11451.0	0.0	11451.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.1	1.0
10°-20°	384.3	3.4
20°-30°	641.0	5.6
30°-40°	930.9	8.1
40°-50°	1423.6	12.4
50°-60°	2691.0	23.5
60°-70°	3477.2	30.4
70°-80°	1563.0	13.6
80°-90°	222.9	1.9
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°	11451.0	100.0
0°-180°	11451.0	100.0

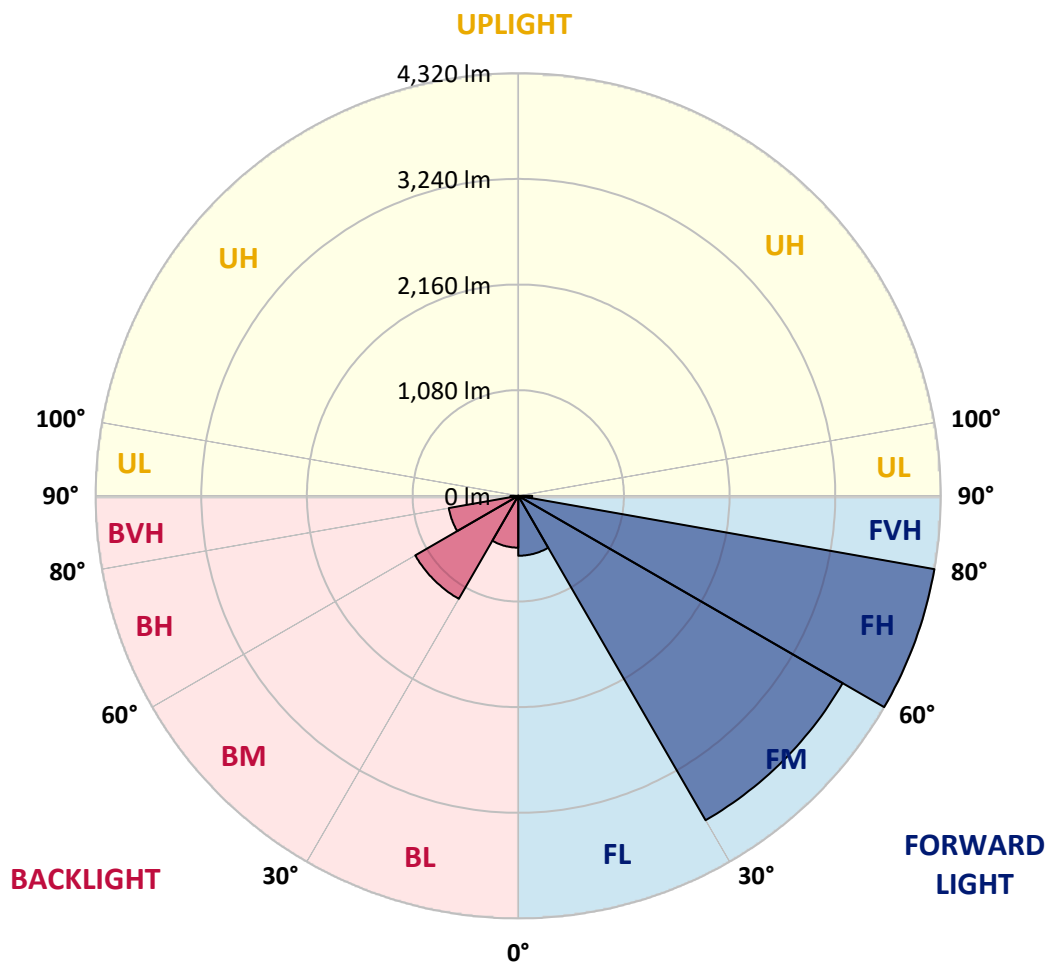


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	612.7	5.4			
FM (30°-60°)	3829.4	33.4			
FH (60°-80°)	4319.8	37.7			G2/5000
FVH (80°-90°)	143.2	1.3			G2/225
BL (0°-30°)	529.8	4.6	B2/1000		
BM (30°-60°)	1216.0	10.6	B2/2500		
BH (60°-80°)	720.4	6.3	B2/1000		G2/1000
BVH (80°-90°)	79.7	0.7			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**  
 Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	1151.2	1151.2	1151.2	1151.2	1151.2	1151.2	1151.2	1151.2	1151.2	1151.2	1151.2
2.5°	1216.5	1207.2	1201.0	1197.8	1191.6	1179.2	1179.2	1176.1	1163.6	1157.4	1154.3
5°	1313.0	1306.7	1291.2	1278.7	1260.1	1235.2	1232.1	1213.4	1188.5	1169.8	1157.4
7.5°	1406.3	1400.1	1384.5	1365.9	1334.7	1303.6	1294.3	1269.4	1229.0	1201.0	1179.2
10°	1487.2	1477.9	1459.2	1434.3	1400.1	1365.9	1356.5	1328.5	1288.1	1247.6	1210.3
12.5°	1540.1	1533.9	1512.1	1481.0	1443.6	1409.4	1403.2	1378.3	1337.9	1294.3	1247.6
15°	1565.0	1561.9	1537.0	1505.9	1468.5	1440.5	1437.4	1415.6	1381.4	1337.9	1285.0
17.5°	1558.8	1555.6	1533.9	1502.7	1474.7	1459.2	1459.2	1443.6	1415.6	1378.3	1322.3
20°	1527.6	1527.6	1509.0	1487.2	1471.6	1468.5	1468.5	1465.4	1446.7	1415.6	1359.6
22.5°	1496.5	1496.5	1484.1	1468.5	1465.4	1477.9	1481.0	1487.2	1481.0	1456.1	1406.3
25°	1502.7	1499.6	1484.1	1465.4	1468.5	1496.5	1502.7	1518.3	1515.2	1496.5	1453.0
27.5°	1571.2	1568.1	1527.6	1490.3	1487.2	1521.4	1527.6	1549.4	1549.4	1533.9	1505.9
30°	1742.3	1748.5	1673.9	1580.5	1533.9	1555.6	1561.9	1586.8	1599.2	1605.4	1583.6
32.5°	2003.7	1994.3	1882.3	1729.9	1627.2	1605.4	1614.8	1636.5	1680.1	1692.5	1639.6
35°	2268.1	2274.3	2165.5	1972.6	1776.5	1695.6	1689.4	1720.5	1785.9	1729.9	1636.5
37.5°	2513.9	2504.6	2377.0	2168.6	1972.6	1879.2	1882.3	1869.9	1813.9	1701.9	1658.3
40°	2781.5	2756.6	2650.8	2383.2	2134.3	1978.8	1950.8	1845.0	1798.3	1751.7	1745.4
42.5°	3045.9	3049.1	2961.9	2697.5	2327.2	2050.3	2006.8	1897.9	1929.0	1919.7	1913.4
45°	3378.9	3378.9	3291.7	3045.9	2632.1	2317.9	2258.8	2128.1	2177.9	2215.2	2289.9
47.5°	3683.8	3665.1	3640.2	3431.7	3030.4	2666.4	2641.5	2492.1	2622.8	2737.9	2890.4
50°	4007.3	3982.4	3966.9	3839.3	3553.1	3195.3	3120.6	2965.1	3251.3	3466.0	3749.1
52.5°	4511.4	4467.8	4386.9	4315.3	4203.3	3789.5	3696.2	3581.1	3951.3	4222.0	4800.7
55°	4965.6	4928.3	4850.5	4903.4	4887.8	4511.4	4430.5	4321.6	4722.9	5052.7	5715.4
57.5°	5133.6	5136.7	5242.5	5525.6	5675.0	5457.2	5342.1	5233.2	5572.3	5724.8	6322.1
60°	5211.4	5202.1	5475.9	5936.3	6421.7	6487.0	6340.8	6116.8	6244.3	6253.7	6835.5
62.5°	5043.4	5068.3	5444.7	6107.4	6869.7	7339.5	7317.7	6925.7	6807.5	6676.8	6972.4
65°	4405.6	4439.8	4993.6	5802.5	6941.3	7856.0	7877.8	7420.4	7090.6	6726.6	6583.5
66°	3920.2	4022.9	4638.9	5538.1	6810.6	7908.9	7949.3	7473.3	7078.2	6608.4	6275.5
67.5°	3288.6	3282.4	3970.0	4956.3	6446.6	7862.2	7915.1	7398.6	6910.2	6259.9	5659.4
70°	2013.0	2075.2	2666.4	3699.3	5335.8	7280.4	7352.0	6872.8	6185.2	5301.6	4184.7
72.5°	1032.9	1135.6	1524.5	2405.0	3873.5	6017.2	6259.9	5771.4	5055.8	3836.2	2554.4
75°	547.6	541.4	718.7	1303.6	2473.5	4514.5	4642.0	4327.8	3494.0	2286.8	1300.5
77.5°	292.5	308.0	376.5	668.9	1359.6	2884.2	3045.9	2790.8	1991.2	1169.8	622.3
80°	199.1	208.5	255.1	376.5	737.4	1565.0	1714.3	1487.2	1042.3	553.8	292.5
82.5°	127.6	133.8	174.2	233.3	441.8	759.2	799.6	762.3	510.2	314.2	177.3
85°	77.8	80.9	105.8	149.3	276.9	308.0	320.5	323.6	286.2	205.3	96.4
87.5°	37.3	40.4	59.1	74.7	130.7	112.0	102.7	105.8	158.7	121.3	43.6
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°	1151.2	1151.2	1151.2	1151.2	1151.2	1151.2	1151.2	1151.2	1151.2	1151.2	1151.2
2.5°	1151.2	1148.1	1141.8	1138.7	1141.8	1141.8	1141.8	1145.0	1151.2	1151.2	1154.3
5°	1151.2	1145.0	1138.7	1138.7	1145.0	1151.2	1157.4	1169.8	1176.1	1179.2	1179.2
7.5°	1166.7	1160.5	1154.3	1154.3	1163.6	1176.1	1188.5	1204.1	1219.6	1232.1	1232.1
10°	1197.8	1188.5	1182.3	1185.4	1201.0	1216.5	1232.1	1250.7	1266.3	1281.8	1281.8
12.5°	1232.1	1222.7	1213.4	1219.6	1241.4	1260.1	1275.6	1285.0	1300.5	1313.0	1313.0
15°	1266.3	1250.7	1247.6	1260.1	1281.8	1294.3	1300.5	1300.5	1306.7	1319.2	1319.2
17.5°	1303.6	1288.1	1285.0	1297.4	1316.1	1316.1	1303.6	1294.3	1291.2	1300.5	1303.6
20°	1341.0	1325.4	1325.4	1334.7	1331.6	1309.8	1288.1	1272.5	1260.1	1269.4	1272.5
22.5°	1387.6	1372.1	1365.9	1353.4	1325.4	1281.8	1247.6	1229.0	1219.6	1225.8	1232.1
25°	1434.3	1421.9	1406.3	1362.7	1297.4	1229.0	1185.4	1169.8	1173.0	1185.4	1191.6
27.5°	1493.4	1487.2	1449.9	1356.5	1247.6	1154.3	1110.7	1107.6	1120.1	1138.7	1148.1
30°	1565.0	1555.6	1490.3	1337.9	1179.2	1067.2	1036.1	1042.3	1060.9	1076.5	1085.8
32.5°	1614.8	1608.5	1509.0	1294.3	1095.2	989.4	964.5	964.5	973.8	995.6	1004.9
35°	1630.3	1655.2	1521.4	1229.0	995.6	920.9	896.0	880.5	880.5	899.2	905.4
37.5°	1683.2	1739.2	1527.6	1141.8	914.7	858.7	827.6	799.6	790.3	787.2	787.2
40°	1804.5	1869.9	1524.5	1029.8	836.9	796.5	759.2	728.0	703.1	668.9	672.0
42.5°	2016.1	2065.9	1515.2	911.6	768.5	740.5	703.1	665.8	625.4	588.0	584.9
45°	2423.7	2349.0	1490.3	808.9	706.3	690.7	656.5	612.9	563.1	528.9	528.9
47.5°	3067.7	2862.4	1474.7	712.5	650.3	647.1	616.0	569.4	519.6	494.7	491.6
50°	3951.3	3571.7	1499.6	644.0	600.5	609.8	584.9	541.4	500.9	479.1	476.0
52.5°	4965.6	4334.0	1527.6	600.5	563.1	581.8	569.4	528.9	488.5	469.8	466.7
55°	5749.6	4953.2	1487.2	560.0	525.8	553.8	553.8	516.5	482.2	463.6	463.6
57.5°	6300.3	5202.1	1347.2	522.7	494.7	528.9	538.3	510.2	479.1	472.9	472.9
60°	6536.8	5189.6	1101.4	488.5	472.9	504.0	528.9	504.0	485.4	500.9	504.0
62.5°	6409.2	4918.9	855.6	463.6	457.4	497.8	538.3	528.9	507.1	519.6	525.8
65°	5833.7	4442.9	644.0	441.8	438.7	500.9	563.1	544.5	491.6	494.7	497.8
66°	5510.1	4122.4	591.1	435.6	432.5	504.0	575.6	538.3	479.1	485.4	482.2
67.5°	4819.4	3618.4	519.6	423.1	420.0	504.0	591.1	525.8	463.6	472.9	463.6
70°	3534.4	2560.6	444.9	407.6	401.4	494.7	588.0	500.9	429.4	423.1	407.6
72.5°	2050.3	1549.4	395.1	388.9	373.4	435.6	550.7	460.5	392.0	373.4	357.8
75°	1008.1	787.2	351.6	367.1	326.7	382.7	497.8	426.2	360.9	336.0	326.7
77.5°	463.6	398.2	317.4	336.0	289.3	329.8	454.2	388.9	320.5	283.1	273.8
80°	252.0	248.9	267.6	280.0	242.7	289.3	401.4	339.1	270.7	230.2	217.8
82.5°	155.6	158.7	196.0	214.7	189.8	252.0	354.7	283.1	205.3	161.8	164.9
85°	80.9	90.2	130.7	143.1	124.5	186.7	267.6	189.8	115.1	84.0	84.0
87.5°	28.0	37.3	65.3	77.8	68.4	112.0	168.0	90.2	24.9	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)