

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: P572684

Luminaire Tested: **ARCH-S-PA2-100-750-U-T3-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P572684  
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-PA2-100-750-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 1010mA 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: 10349 lumens  
Efficiency: N/A  
Efficacy: 100.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

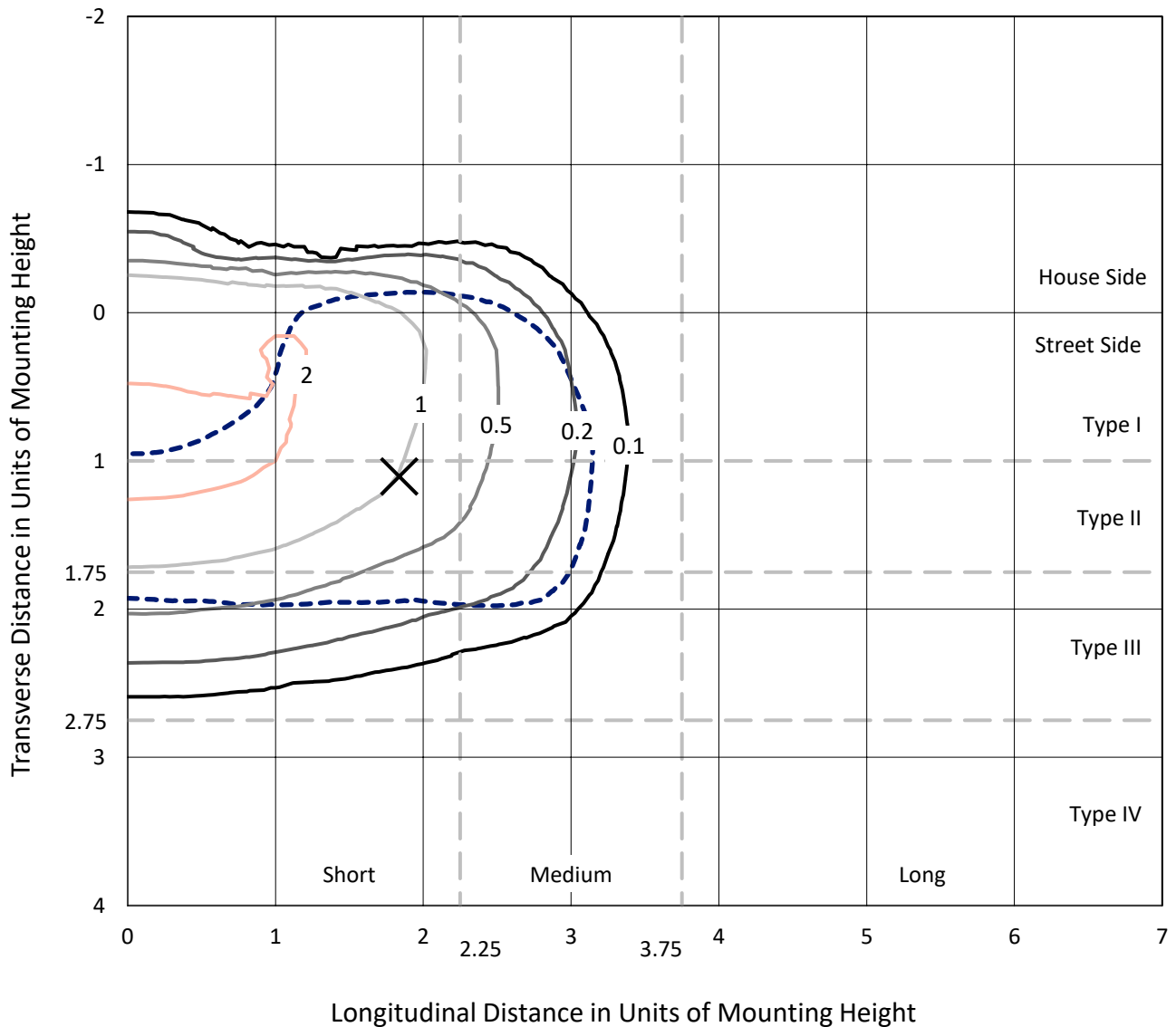
Input Watts (W): 103.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P572684  
 CATALOG NUMBER: ARCH-S-PA2-100-750-U-T3-HSS

### Iso-Footcandle Lines of Horizontal Illumination

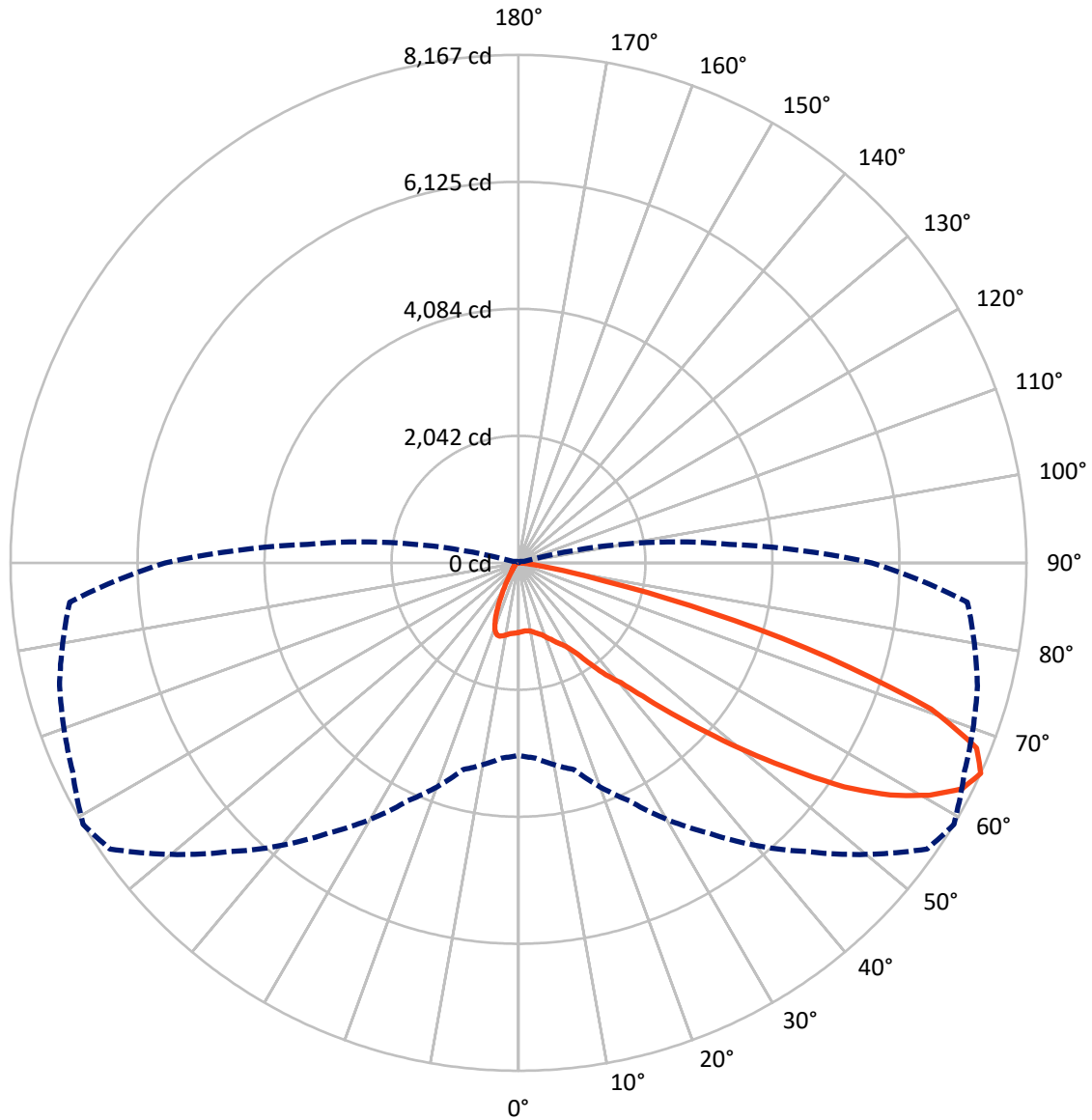
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc  
 Type III - Short - N/A

REPORT NUMBER: P572684  
CATALOG NUMBER: ARCH-S-PA2-100-750-U-T3-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P572684  
 CATALOG NUMBER: ARCH-S-PA2-100-750-U-T3-HSS

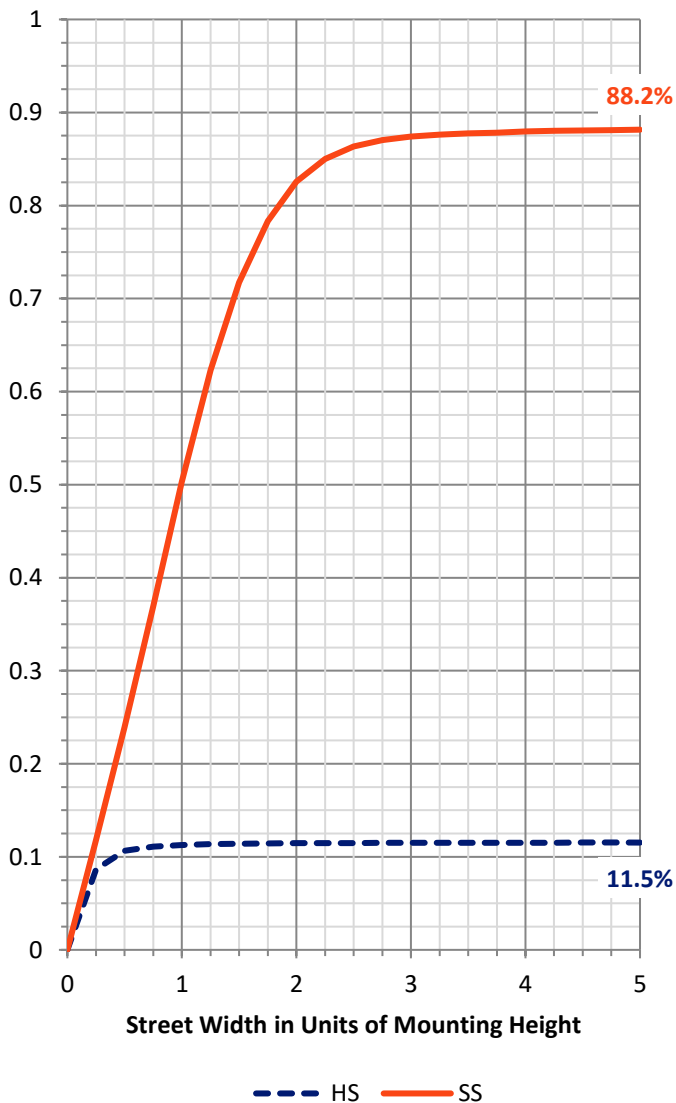
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1207.3	0.0	1207.3
	% Fixture	11.7	0.0	11.7
<b>Street Side</b>	Lumens	9141.7	0.0	9141.7
	% Fixture	88.3	0.0	88.3
<b>Total</b>	Lumens	10349.0	0.0	10349.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.7	1.0
10°-20°	300.2	2.9
20°-30°	509.9	4.9
30°-40°	903.2	8.7
40°-50°	1703.9	16.5
50°-60°	2882.9	27.9
60°-70°	2997.3	29.0
70°-80°	898.8	8.7
80°-90°	47.1	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°	10349.0	100.0
0°-180°	10349.0	100.0

**Coefficient of Utilization**



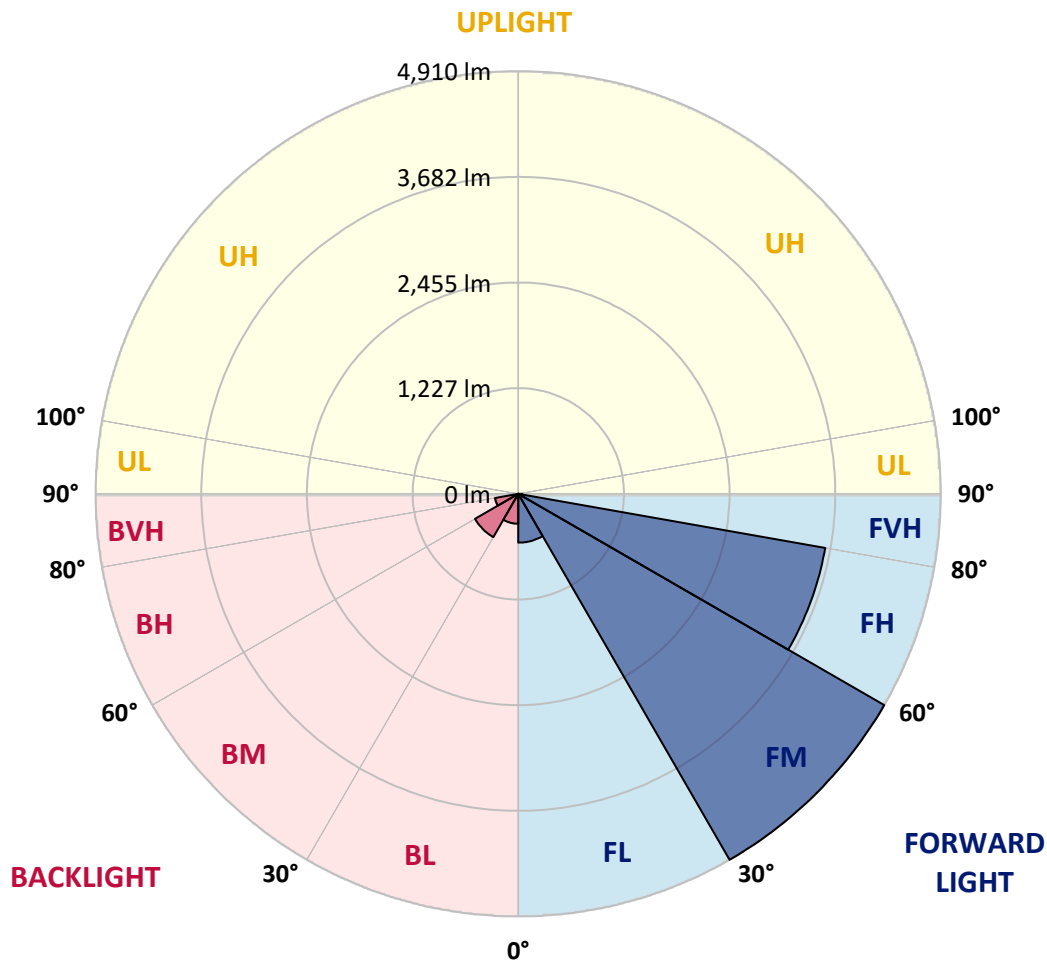
REPORT NUMBER: P572684  
 CATALOG NUMBER: ARCH-S-PA2-100-750-U-T3-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	567.5	5.5			
FM (30°-60°)	4909.6	47.4			
FH (60°-80°)	3621.4	35.0			G2/5000
FVH (80°-90°)	43.2	0.4			G1/100
BL (0°-30°)	348.3	3.4	B1/500		
BM (30°-60°)	580.4	5.6	B1/1000		
BH (60°-80°)	274.7	2.7	B1/500		G1/500
BVH (80°-90°)	4.0	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





REPORT NUMBER: P572684

CATALOG NUMBER: ARCH-S-PA2-100-750-U-T3-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1118.3	1118.3	1118.3	1118.3	1118.3	1118.3	1118.3	1118.3	1118.3	1118.3	1118.3
2.5°	1088.2	1084.4	1084.4	1092.0	1095.7	1099.5	1107.0	1107.0	1107.0	1114.5	1118.3
5°	1035.5	1035.5	1039.2	1046.8	1061.8	1073.1	1095.7	1099.5	1103.3	1122.1	1129.6
7.5°	1001.6	1001.6	1005.4	1020.4	1039.2	1065.6	1095.7	1103.3	1114.5	1140.9	1159.7
10°	997.8	994.1	1001.6	1016.6	1039.2	1073.1	1107.0	1118.3	1140.9	1174.8	1201.2
12.5°	1009.1	1005.4	1012.9	1027.9	1050.5	1084.4	1129.6	1148.4	1174.8	1220.0	1257.6
15°	1016.6	1012.9	1020.4	1039.2	1065.6	1107.0	1159.7	1182.3	1216.2	1280.2	1317.9
17.5°	1039.2	1035.5	1039.2	1054.3	1080.7	1125.8	1193.6	1216.2	1272.7	1344.2	1385.7
20°	1140.9	1137.1	1114.5	1107.0	1110.8	1152.2	1238.8	1276.5	1344.2	1434.6	1464.7
22.5°	1351.8	1336.7	1295.3	1227.5	1182.3	1197.4	1295.3	1336.7	1427.1	1528.7	1551.3
25°	1634.2	1622.9	1562.6	1445.9	1317.9	1280.2	1359.3	1415.8	1525.0	1637.9	1630.4
27.5°	1954.2	1931.6	1875.1	1713.2	1540.0	1415.8	1438.4	1487.3	1607.8	1728.3	1690.6
30°	2232.9	2225.3	2161.3	2025.8	1822.4	1637.9	1558.9	1585.2	1694.4	1822.4	1777.3
32.5°	2488.9	2466.3	2413.6	2285.6	2097.3	1909.0	1750.9	1750.9	1841.3	1991.9	1924.1
35°	2771.3	2756.2	2692.2	2564.2	2383.5	2161.3	2018.2	2003.2	2078.5	2247.9	2101.1
37.5°	3061.2	3023.6	2993.5	2861.7	2680.9	2488.9	2315.7	2281.8	2319.5	2443.7	2263.0
40°	3422.7	3422.7	3354.9	3234.4	3065.0	2861.7	2620.7	2534.1	2522.8	2684.7	2545.4
42.5°	3844.4	3833.1	3776.7	3663.7	3501.8	3313.5	3008.5	2929.5	2921.9	3117.7	2952.0
45°	4330.2	4322.6	4254.9	4160.7	4047.8	3840.7	3539.4	3460.4	3415.2	3641.1	3445.3
47.5°	4774.5	4748.1	4725.5	4736.8	4672.8	4439.4	4157.0	4062.8	4059.1	4236.0	3983.8
50°	5079.5	5064.4	5143.5	5218.8	5339.3	5192.4	4857.3	4774.5	4710.5	4943.9	4544.8
52.5°	5279.0	5271.5	5429.7	5644.3	5892.8	5881.5	5584.0	5535.1	5482.4	5546.4	5045.6
55°	5358.1	5358.1	5546.4	5941.7	6378.5	6566.8	6427.5	6359.7	6175.2	6043.4	5595.3
57.5°	5264.0	5252.7	5497.4	6013.3	6679.8	7067.6	7127.8	7048.8	6758.8	6612.0	6205.3
60°	4864.8	4872.4	5162.3	5813.7	6657.2	7270.9	7658.7	7587.2	7297.3	7078.9	6717.4
62.5°	4119.3	4183.3	4488.3	5196.2	6175.2	7109.0	7963.7	8001.4	7688.9	7417.8	7173.0
65°	3095.1	3151.6	3441.5	4224.7	5297.9	6566.8	8020.2	8167.1	7914.8	7639.9	7244.6
67.5°	1882.7	1901.5	2255.5	2846.6	3900.9	5471.1	7624.9	7944.9	7764.2	7312.3	6536.7
70°	877.3	926.3	1099.5	1555.1	2470.1	4028.9	6589.4	7041.2	6837.9	6276.9	4970.3
72.5°	342.6	357.7	466.9	719.2	1310.3	2534.1	4917.6	5218.8	5079.5	4458.2	2963.3
75°	169.4	180.7	225.9	342.6	598.7	1046.8	3004.8	3200.6	2970.9	2240.4	1253.9
77.5°	124.3	124.3	150.6	210.9	327.6	387.8	1265.2	1419.5	1340.5	866.0	342.6
80°	82.8	90.4	105.4	143.1	207.1	188.3	478.2	568.6	474.4	267.3	120.5
82.5°	48.9	52.7	79.1	101.7	139.3	109.2	161.9	180.7	195.8	131.8	56.5
85°	26.4	26.4	52.7	75.3	75.3	48.9	56.5	64.0	75.3	79.1	30.1
87.5°	7.5	7.5	33.9	45.2	30.1	26.4	30.1	30.1	33.9	41.4	15.1
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: P572684

CATALOG NUMBER: ARCH-S-PA2-100-750-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1118.3	1118.3	1118.3	1118.3	1118.3	1118.3	1118.3	1118.3	1118.3	1118.3	1118.3
2.5°	1122.1	1122.1	1125.8	1125.8	1129.6	1129.6	1129.6	1129.6	1133.4	1137.1	1137.1
5°	1133.4	1137.1	1137.1	1137.1	1137.1	1129.6	1125.8	1122.1	1122.1	1125.8	1125.8
7.5°	1163.5	1167.3	1163.5	1156.0	1144.7	1129.6	1114.5	1114.5	1110.8	1114.5	1110.8
10°	1208.7	1208.7	1204.9	1186.1	1167.3	1137.1	1107.0	1084.4	1069.4	1065.6	1058.1
12.5°	1265.2	1265.2	1253.9	1220.0	1186.1	1129.6	1050.5	975.2	915.0	888.6	881.1
15°	1321.6	1321.6	1306.6	1257.6	1189.9	1054.3	888.6	730.5	640.1	602.5	579.9
17.5°	1389.4	1381.9	1355.5	1287.8	1148.4	903.7	636.3	474.4	402.9	369.0	369.0
20°	1461.0	1453.4	1404.5	1291.5	1043.0	647.6	414.2	327.6	308.8	301.2	301.2
22.5°	1540.0	1521.2	1445.9	1261.4	820.8	440.5	312.5	289.9	282.4	278.6	278.6
25°	1604.0	1573.9	1476.0	1178.6	587.4	308.8	274.9	267.3	252.3	248.5	241.0
27.5°	1653.0	1607.8	1487.3	1001.6	387.8	256.0	244.7	229.7	214.6	199.6	199.6
30°	1717.0	1660.5	1494.8	779.4	263.6	222.2	210.9	192.0	173.2	158.1	158.1
32.5°	1845.0	1762.2	1498.6	546.0	218.4	195.8	173.2	150.6	131.8	124.3	120.5
35°	1984.3	1871.4	1457.2	353.9	192.0	165.7	139.3	120.5	101.7	97.9	97.9
37.5°	2138.7	2033.3	1366.8	241.0	169.4	139.3	113.0	94.1	82.8	79.1	79.1
40°	2398.5	2274.3	1216.2	192.0	146.8	116.7	94.1	79.1	71.5	67.8	67.8
42.5°	2771.3	2556.7	1027.9	165.7	128.0	97.9	75.3	64.0	60.2	56.5	56.5
45°	3200.6	2873.0	809.6	150.6	113.0	82.8	64.0	56.5	52.7	48.9	48.9
47.5°	3693.8	3200.6	640.1	131.8	97.9	71.5	56.5	48.9	45.2	41.4	41.4
50°	4160.7	3456.6	482.0	116.7	86.6	60.2	48.9	45.2	41.4	37.7	37.7
52.5°	4544.8	3629.8	365.2	101.7	75.3	52.7	45.2	41.4	33.9	33.9	33.9
55°	5007.9	3765.4	278.6	90.4	67.8	48.9	41.4	33.9	30.1	26.4	26.4
57.5°	5410.8	3814.3	203.3	79.1	60.2	45.2	37.7	30.1	22.6	18.8	18.8
60°	5681.9	3772.9	146.8	67.8	52.7	37.7	30.1	22.6	15.1	11.3	11.3
62.5°	5874.0	3682.5	113.0	60.2	45.2	33.9	26.4	18.8	11.3	7.5	7.5
65°	5681.9	3403.9	90.4	52.7	37.7	30.1	18.8	15.1	7.5	3.8	3.8
67.5°	4913.8	2854.1	71.5	45.2	33.9	26.4	18.8	11.3	3.8	0.0	0.0
70°	3531.9	2037.1	60.2	41.4	30.1	22.6	15.1	7.5	3.8	0.0	0.0
72.5°	1969.3	1050.5	56.5	37.7	30.1	22.6	15.1	7.5	3.8	0.0	0.0
75°	798.3	361.5	52.7	37.7	30.1	18.8	15.1	7.5	3.8	0.0	0.0
77.5°	233.5	124.3	45.2	33.9	30.1	22.6	15.1	7.5	3.8	0.0	0.0
80°	82.8	56.5	33.9	30.1	22.6	18.8	15.1	11.3	3.8	0.0	0.0
82.5°	37.7	22.6	15.1	11.3	11.3	11.3	11.3	7.5	3.8	0.0	0.0
85°	15.1	11.3	7.5	3.8	3.8	3.8	3.8	3.8	3.8	0.0	0.0
87.5°	11.3	7.5	3.8	3.8	3.8	3.8	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)