

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: P573406

Luminaire Tested: **ARCH-S-PA2-70-740-U-T4W-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573406  
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-PA2-70-740-U-T4W-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 725mA 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: 7848 lumens  
Efficiency: N/A  
Efficacy: 107.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

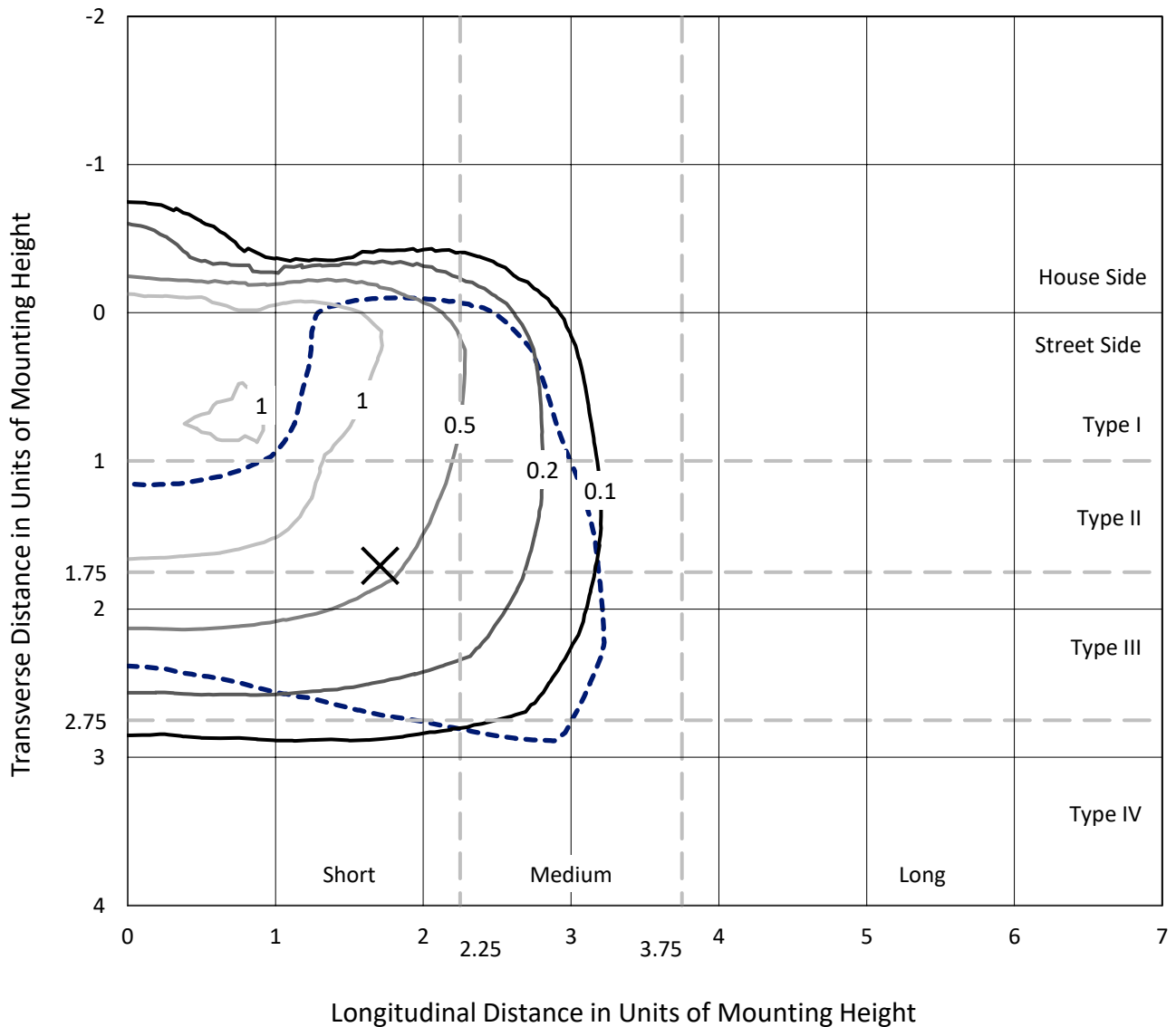
Input Watts (W): 73.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

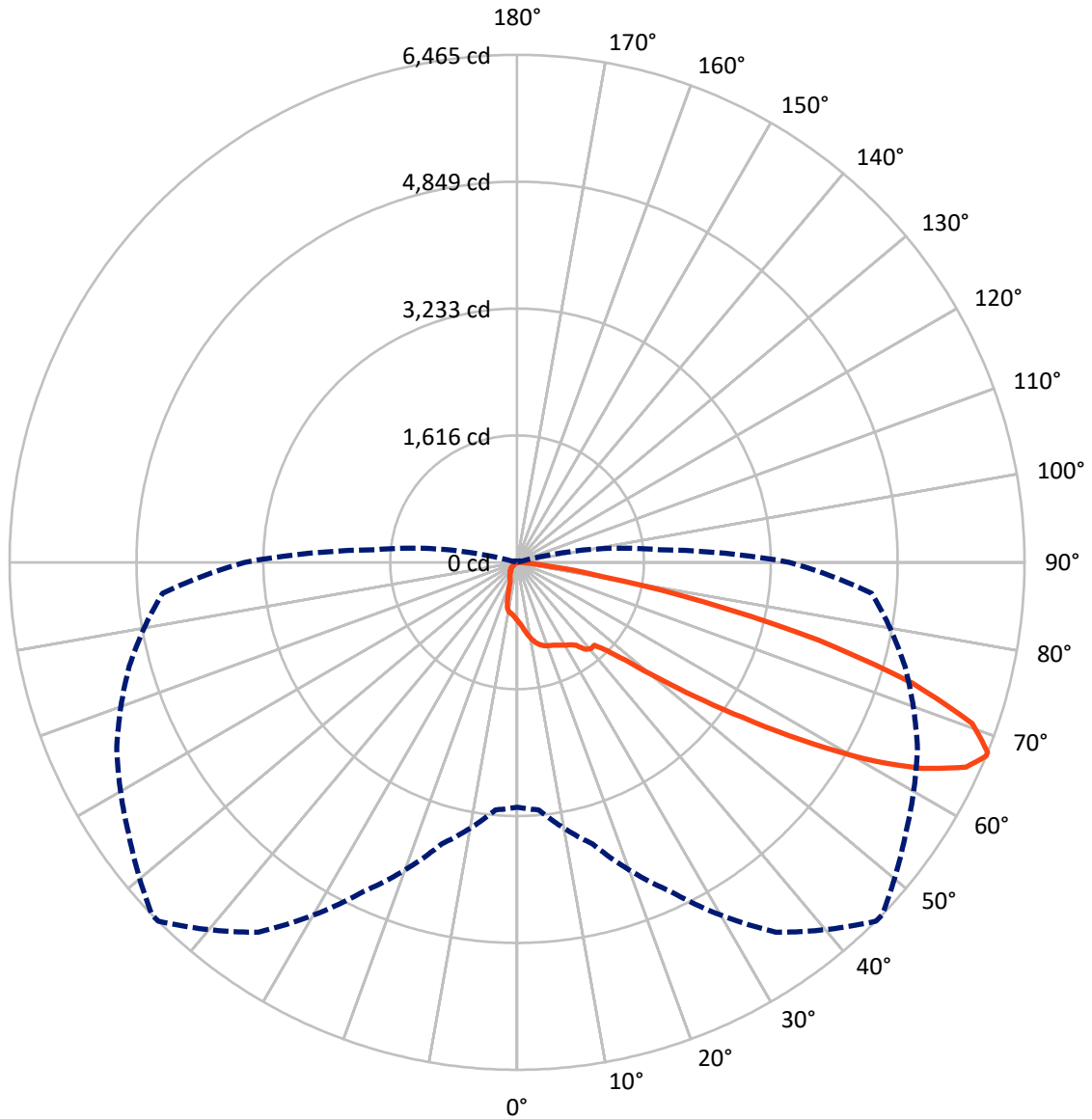
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 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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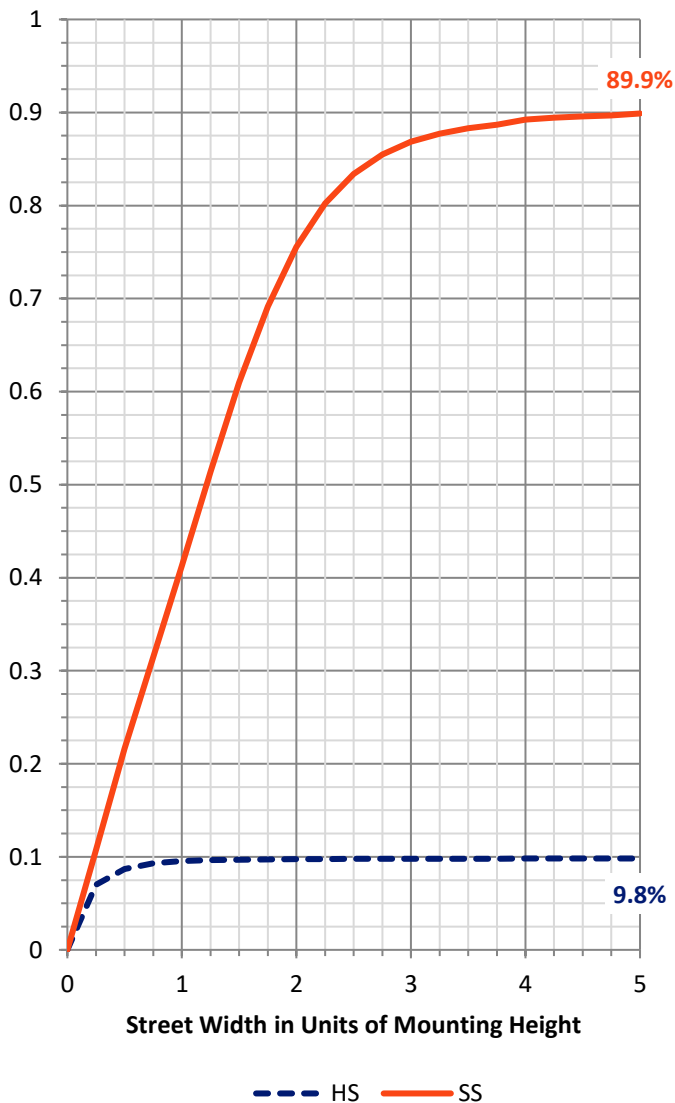
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	777.6	0.0	777.6
	% Fixture	9.9	0.0	9.9
<b>Street Side</b>	Lumens	7070.4	0.0	7070.4
	% Fixture	90.1	0.0	90.1
<b>Total</b>	Lumens	7848.0	0.0	7848.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.5	0.9
10°-20°	225.2	2.9
20°-30°	360.2	4.6
30°-40°	518.5	6.6
40°-50°	909.6	11.6
50°-60°	1916.5	24.4
60°-70°	2650.2	33.8
70°-80°	1109.5	14.1
80°-90°	83.9	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°	7848.0	100.0
0°-180°	7848.0	100.0

**Coefficient of Utilization**



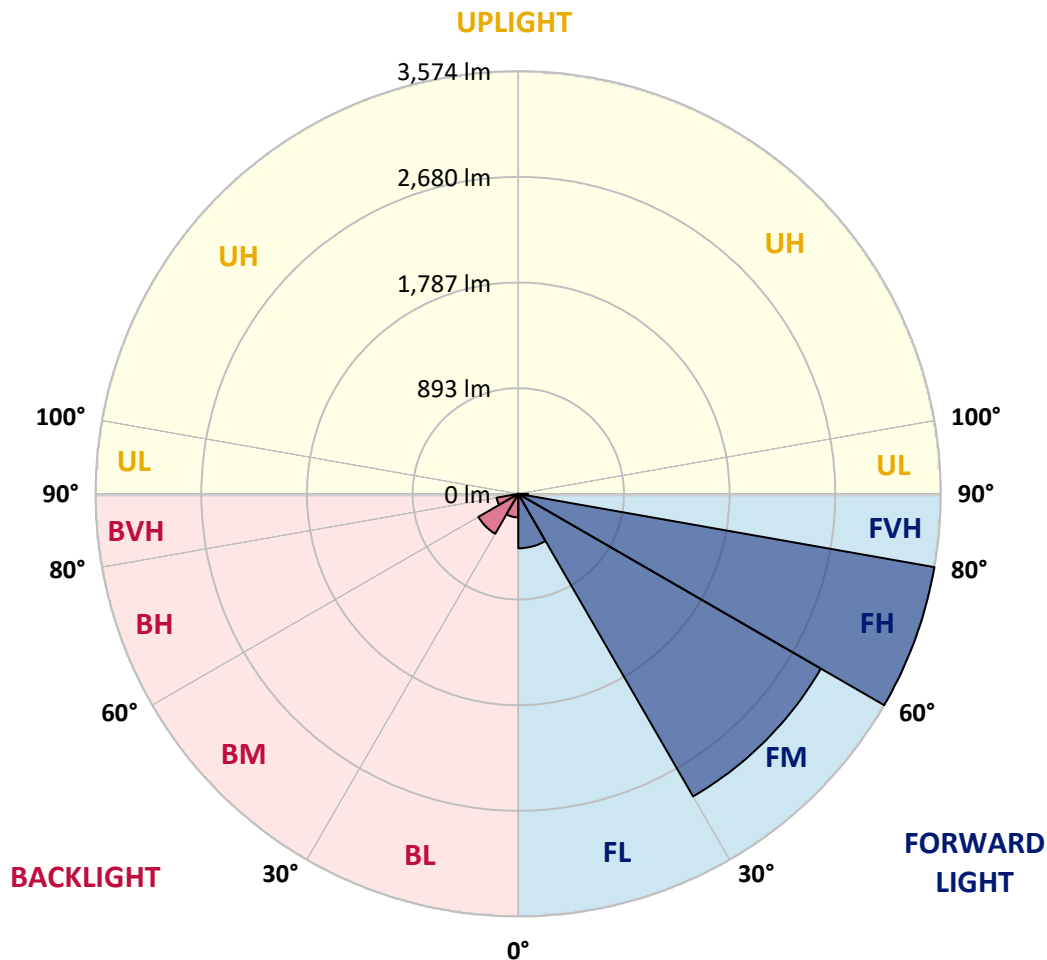
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 CATALOG NUMBER: ARCH-S-PA2-70-740-U-T4W-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	460.6	5.9			
FM (30°-60°)	2954.9	37.7			
FH (60°-80°)	3573.8	45.5			G2/5000
FVH (80°-90°)	81.1	1.0			G1/100
BL (0°-30°)	199.3	2.5	B1/500		
BM (30°-60°)	389.6	5.0	B1/1000		
BH (60°-80°)	185.9	2.4	B1/500		G1/500
BVH (80°-90°)	2.8	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°	742.2	742.2	742.2	742.2	742.2	742.2	742.2	742.2	742.2	742.2	742.2
2.5°	826.3	811.8	808.9	806.0	797.3	785.7	788.6	779.9	765.4	756.7	748.0
5°	927.8	913.3	907.5	890.1	872.7	846.6	846.6	823.4	797.3	774.1	750.9
7.5°	1032.1	1020.5	1008.9	982.8	956.8	922.0	919.1	884.3	843.7	808.9	771.2
10°	1119.1	1110.4	1095.9	1064.0	1029.2	991.5	982.8	951.0	898.8	852.4	803.1
12.5°	1188.7	1180.0	1159.7	1127.8	1084.3	1046.6	1043.7	1003.1	951.0	901.7	840.8
15°	1240.9	1226.4	1203.2	1168.4	1124.9	1090.1	1084.3	1049.5	1000.2	945.2	872.7
17.5°	1249.6	1240.9	1220.6	1182.9	1145.2	1116.2	1113.3	1087.2	1043.7	985.7	910.4
20°	1226.4	1223.5	1206.1	1177.1	1148.1	1133.6	1130.7	1113.3	1078.5	1026.3	951.0
22.5°	1191.6	1188.7	1177.1	1162.6	1151.0	1148.1	1148.1	1142.3	1122.0	1072.7	1003.1
25°	1168.4	1165.5	1159.7	1151.0	1151.0	1168.4	1171.3	1177.1	1159.7	1122.0	1046.6
27.5°	1171.3	1165.5	1159.7	1151.0	1162.6	1194.5	1197.4	1211.9	1197.4	1162.6	1095.9
30°	1211.9	1203.2	1185.8	1165.5	1180.0	1223.5	1226.4	1243.8	1232.2	1214.8	1151.0
32.5°	1275.7	1269.9	1235.1	1200.3	1209.0	1252.5	1258.3	1290.2	1304.7	1278.6	1200.3
35°	1368.4	1348.2	1304.7	1269.9	1264.1	1296.0	1304.7	1356.9	1394.5	1330.8	1229.3
37.5°	1443.8	1426.4	1356.9	1301.8	1333.7	1406.1	1409.0	1472.8	1440.9	1336.6	1275.7
40°	1699.0	1696.1	1574.3	1400.3	1365.5	1446.7	1458.3	1469.9	1455.4	1403.2	1377.1
42.5°	2110.7	2075.9	1939.6	1672.9	1435.1	1443.8	1449.6	1510.5	1585.9	1562.7	1571.4
45°	2557.1	2528.2	2374.5	2038.2	1672.9	1600.4	1606.2	1704.8	1849.7	1878.7	1925.1
47.5°	2968.8	2922.5	2835.5	2496.3	2078.8	1867.1	1878.7	1997.6	2238.2	2302.0	2374.5
50°	3316.7	3284.9	3203.7	2980.4	2577.4	2287.5	2299.1	2397.7	2710.8	2812.3	2905.1
52.5°	3821.2	3777.7	3621.2	3516.8	3212.4	2835.5	2809.4	2913.8	3273.3	3339.9	3464.6
55°	4285.1	4195.2	4102.4	4059.0	3931.4	3490.7	3482.0	3502.3	3800.9	3835.7	4059.0
57.5°	4482.2	4464.9	4543.1	4688.1	4717.1	4261.9	4224.2	4145.9	4380.8	4377.9	4638.8
60°	4606.9	4606.9	4815.7	5175.2	5407.1	5085.3	5033.1	4789.6	4873.6	4876.5	5117.2
62.5°	4528.6	4548.9	4873.6	5415.8	5882.6	5784.0	5749.2	5340.4	5334.6	5267.9	5352.0
65°	4044.5	4079.3	4601.1	5282.4	6056.5	6288.5	6274.0	5810.1	5642.0	5398.4	5210.0
67°	3299.4	3363.1	3995.2	4801.2	5859.4	6462.4	6465.3	6013.1	5644.9	5181.0	4708.4
67.5°	3119.6	3166.0	3713.9	4627.2	5752.1	6465.3	6465.3	6039.2	5627.5	5114.3	4534.4
70°	1988.9	2000.5	2597.7	3580.6	4914.2	6152.2	6175.4	5842.0	5125.9	4140.1	3183.4
72.5°	982.8	956.8	1371.3	2304.9	3687.9	5265.0	5325.9	4989.6	4056.1	2705.0	1681.6
75°	385.6	411.7	597.2	1226.4	2310.7	3969.1	4015.5	3629.9	2609.3	1394.5	663.9
77.5°	171.1	171.1	255.1	550.9	1214.8	2435.4	2458.6	2215.0	1377.1	574.1	202.9
80°	92.8	98.6	133.4	240.6	611.7	1119.1	1220.6	1098.8	623.3	252.2	69.6
82.5°	46.4	49.3	81.2	136.3	307.3	423.3	446.5	466.8	287.0	156.6	29.0
85°	17.4	20.3	43.5	78.3	139.2	142.1	142.1	182.7	156.6	118.9	14.5
87.5°	2.9	5.8	20.3	31.9	55.1	49.3	43.5	58.0	87.0	75.4	8.7
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°	742.2	742.2	742.2	742.2	742.2	742.2	742.2	742.2	742.2	742.2	742.2
2.5°	742.2	736.4	724.8	716.1	710.3	704.5	698.7	698.7	695.8	695.8	698.7
5°	742.2	730.6	707.4	692.9	681.3	672.6	666.8	666.8	663.9	666.8	669.7
7.5°	756.7	739.3	707.4	681.3	666.8	652.3	646.5	643.6	643.6	646.5	643.6
10°	779.9	756.7	716.1	681.3	661.0	640.7	608.8	579.9	553.8	542.2	539.3
12.5°	808.9	779.9	730.6	690.0	658.1	588.5	501.6	446.5	411.7	394.3	388.5
15°	840.8	806.0	748.0	701.6	614.6	484.2	371.1	310.2	289.9	292.8	295.7
17.5°	875.6	837.9	774.1	695.8	527.7	359.5	272.5	258.0	266.7	275.4	275.4
20°	910.4	869.8	800.2	652.3	414.6	266.7	243.5	246.4	255.1	263.8	263.8
22.5°	956.8	913.3	826.3	577.0	307.3	231.9	231.9	237.7	243.5	252.2	252.2
25°	1006.0	962.6	843.7	484.2	229.0	217.4	220.3	226.1	231.9	240.6	240.6
27.5°	1058.2	1014.7	840.8	374.0	200.0	200.0	202.9	211.6	217.4	226.1	226.1
30°	1116.2	1078.5	808.9	272.5	185.6	182.7	182.7	191.4	200.0	205.8	208.7
32.5°	1165.5	1133.6	753.8	205.8	174.0	168.2	165.3	168.2	176.9	182.7	185.6
35°	1206.1	1194.5	672.6	176.9	162.4	153.7	147.9	145.0	147.9	147.9	150.8
37.5°	1281.5	1284.4	577.0	165.3	153.7	142.1	130.5	121.8	116.0	113.1	110.2
40°	1423.5	1420.6	475.5	156.6	145.0	130.5	113.1	101.5	87.0	81.2	81.2
42.5°	1623.6	1580.1	362.4	147.9	136.3	118.9	95.7	78.3	63.8	60.9	60.9
45°	1983.1	1803.3	272.5	142.1	127.6	104.4	78.3	58.0	49.3	46.4	46.4
47.5°	2380.3	2061.4	217.4	133.4	118.9	92.8	60.9	46.4	37.7	37.7	37.7
50°	2818.1	2307.8	182.7	124.7	104.4	78.3	49.3	37.7	34.8	31.9	34.8
52.5°	3296.5	2502.1	159.5	113.1	89.9	63.8	40.6	34.8	29.0	29.0	29.0
55°	3725.5	2632.5	133.4	98.6	75.4	52.2	37.7	29.0	26.1	23.2	20.3
57.5°	4114.0	2702.1	107.3	84.1	58.0	43.5	31.9	23.2	20.3	14.5	14.5
60°	4314.1	2638.3	84.1	66.7	46.4	34.8	26.1	20.3	14.5	8.7	8.7
62.5°	4346.0	2473.1	66.7	52.2	40.6	29.0	20.3	14.5	8.7	5.8	5.8
65°	4067.7	2183.1	55.1	43.5	31.9	23.2	17.4	11.6	5.8	2.9	2.9
67°	3569.0	1878.7	49.3	37.7	29.0	20.3	14.5	8.7	5.8	2.9	0.0
67.5°	3470.4	1823.6	46.4	37.7	29.0	20.3	14.5	8.7	5.8	2.9	0.0
70°	2278.8	1261.2	43.5	34.8	26.1	17.4	11.6	8.7	2.9	0.0	0.0
72.5°	1243.8	634.9	40.6	31.9	23.2	17.4	11.6	5.8	2.9	0.0	0.0
75°	455.2	240.6	34.8	29.0	20.3	17.4	11.6	5.8	2.9	0.0	0.0
77.5°	153.7	84.1	31.9	29.0	23.2	17.4	11.6	5.8	2.9	0.0	0.0
80°	52.2	37.7	26.1	23.2	17.4	14.5	11.6	5.8	2.9	0.0	0.0
82.5°	20.3	11.6	8.7	8.7	8.7	11.6	11.6	8.7	2.9	0.0	0.0
85°	8.7	5.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9	0.0	0.0
87.5°	8.7	5.8	2.9	2.9	2.9	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)