

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: P397561

Luminaire Tested: **ARCH-S-PA1-100-740-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397561  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-100-740-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 1200mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11710 lumens  
Efficiency: N/A  
Efficacy: 122.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B2 - U0 - G3

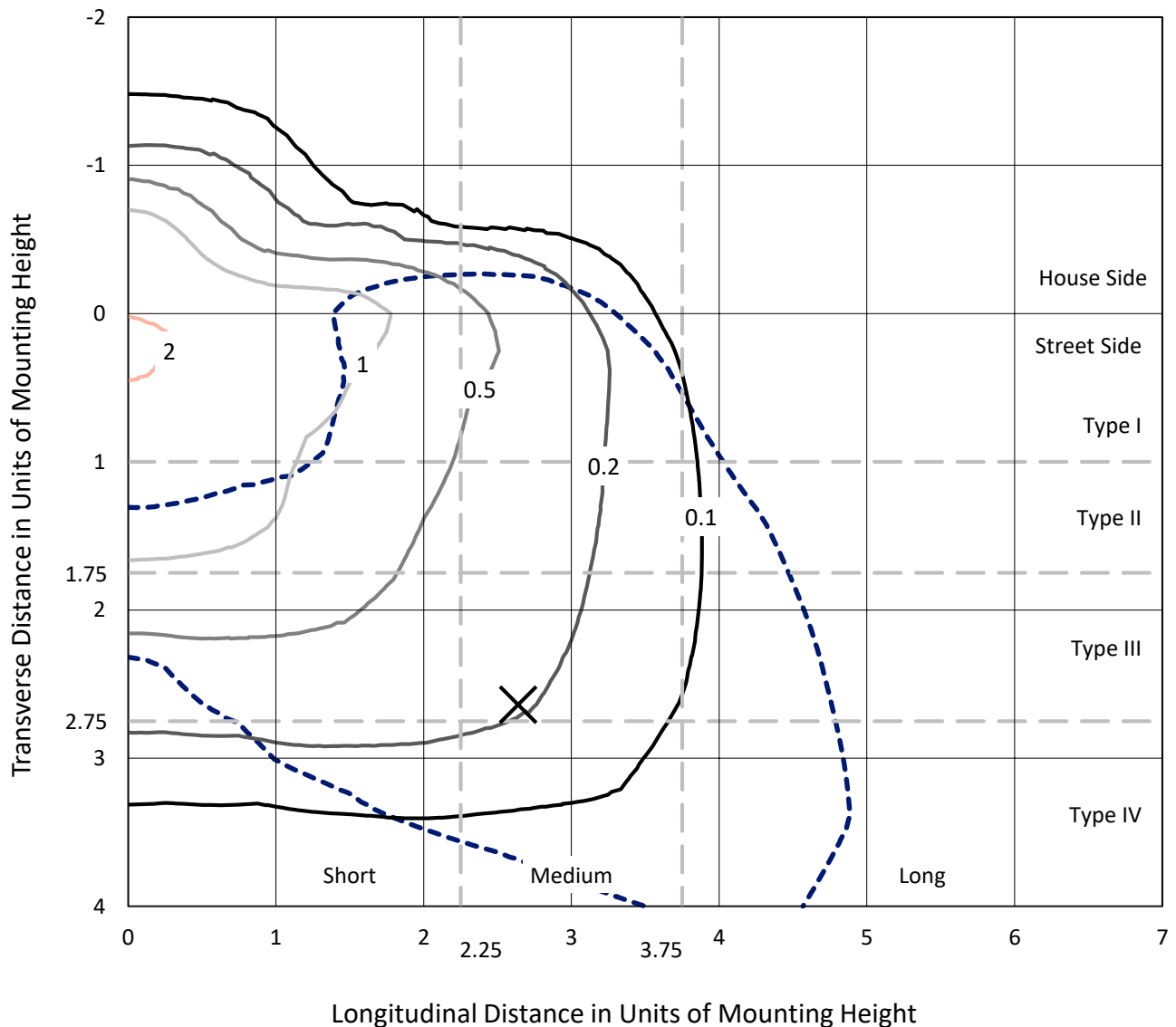
Input Watts (W): 96  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

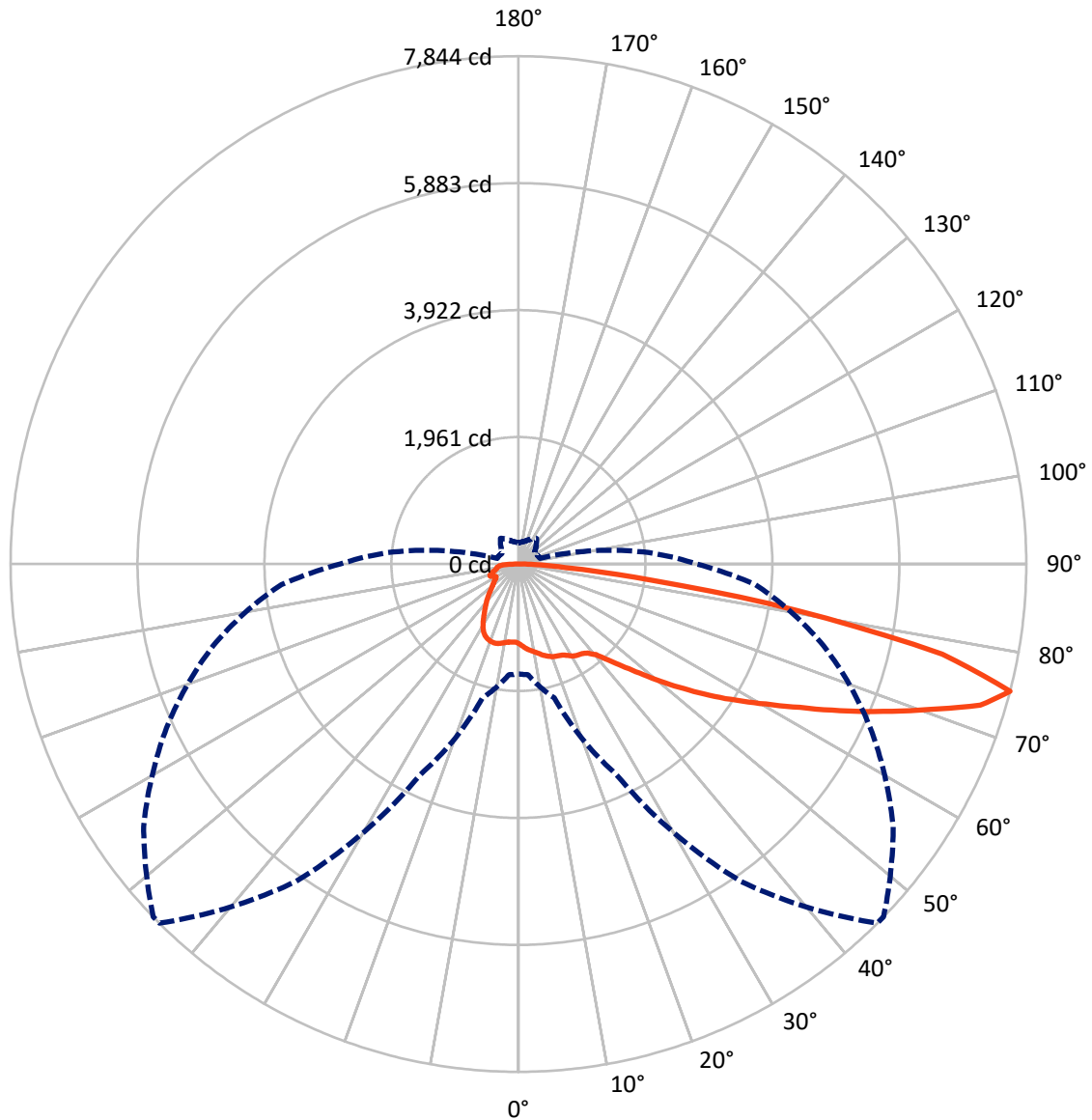
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2587.8	0.0	2587.8
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	9122.1	0.0	9122.1
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	11710.0	0.0	11710.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	121.7	1.0
10°-20°	387.1	3.3
20°-30°	659.9	5.6
30°-40°	924.6	7.9
40°-50°	1358.3	11.6
50°-60°	2161.8	18.5
60°-70°	3075.1	26.3
70°-80°	2574.8	22.0
80°-90°	446.9	3.8
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°	11710.0	100.0
0°-180°	11710.0	100.0



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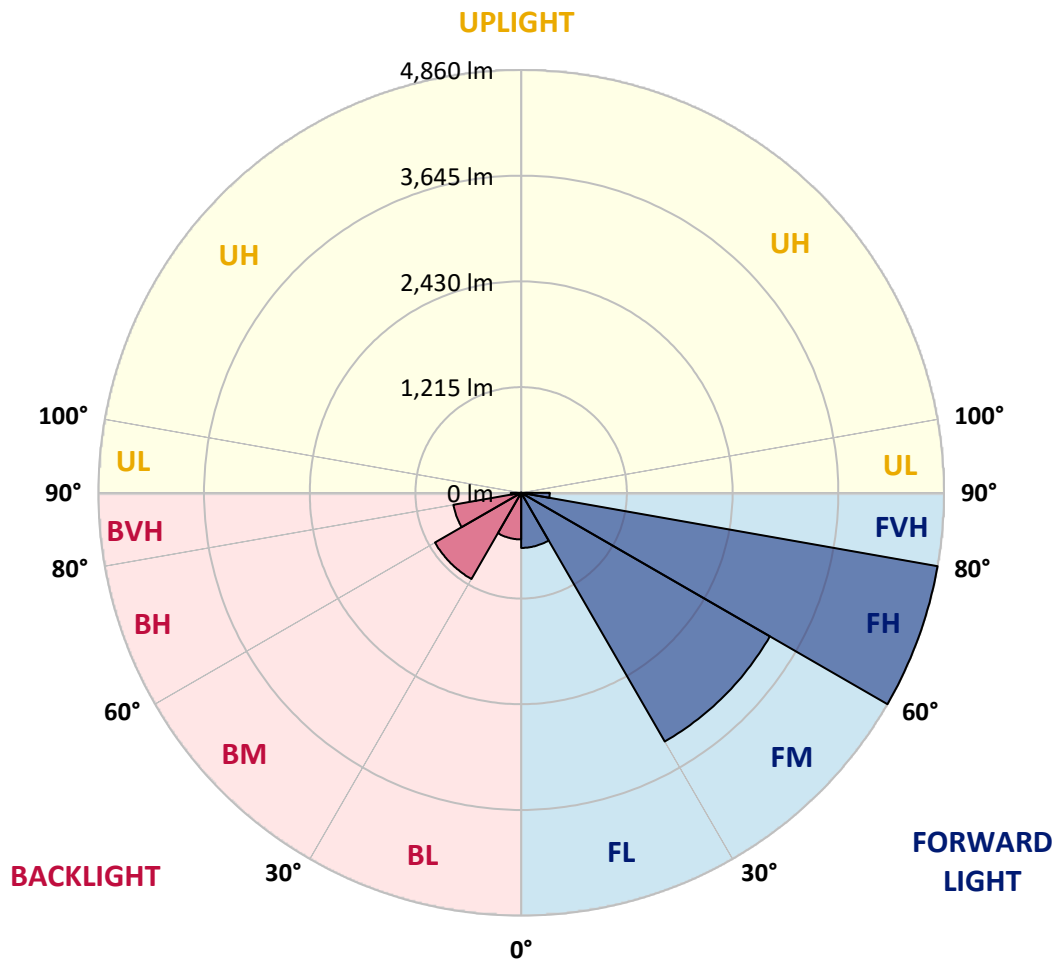
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	633.0	5.4			
FM	(30°-60°)	3300.7	28.2			
FH	(60°-80°)	4859.9	41.5			G2/5000
FVH	(80°-90°)	328.5	2.8			G3/500
BL	(0°-30°)	535.6	4.6	B2/1000		
BM	(30°-60°)	1144.0	9.8	B2/2500		
BH	(60°-80°)	790.0	6.7	B2/1000		G2/1000
BVH	(80°-90°)	118.3	1.0			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1229.8	1229.8	1229.8	1229.8	1229.8	1229.8	1229.8	1229.8	1229.8	1229.8	1229.8
2.5°	1300.2	1294.0	1290.8	1290.8	1278.3	1270.5	1268.9	1258.0	1248.6	1239.2	1231.4
5°	1375.3	1370.6	1361.2	1353.4	1336.2	1314.3	1311.2	1287.7	1264.2	1242.3	1223.5
7.5°	1444.2	1434.8	1423.8	1408.2	1380.0	1350.3	1345.6	1312.7	1279.9	1247.0	1222.0
10°	1502.1	1492.7	1477.0	1455.1	1419.1	1383.1	1378.4	1344.0	1309.6	1270.5	1234.5
12.5°	1556.8	1549.0	1525.5	1495.8	1453.5	1420.7	1416.0	1386.3	1350.3	1306.5	1259.5
15°	1603.8	1595.9	1570.9	1536.5	1488.0	1462.9	1456.7	1428.5	1392.5	1345.6	1297.1
17.5°	1627.2	1627.2	1600.6	1563.1	1517.7	1498.9	1494.2	1459.8	1427.0	1381.6	1333.1
20°	1635.0	1638.2	1619.4	1574.0	1534.9	1527.1	1522.4	1494.2	1456.7	1412.9	1367.5
22.5°	1639.7	1646.0	1630.4	1578.7	1545.9	1541.2	1538.0	1519.3	1489.5	1447.3	1401.9
25°	1655.4	1655.4	1644.4	1586.5	1559.9	1558.4	1558.4	1547.4	1527.1	1491.1	1445.7
27.5°	1678.9	1677.3	1663.2	1603.8	1591.2	1595.9	1594.4	1592.8	1578.7	1542.7	1494.2
30°	1718.0	1718.0	1702.3	1638.2	1630.4	1650.7	1652.3	1655.4	1633.5	1577.2	1538.0
32.5°	1777.4	1771.2	1755.5	1672.6	1660.1	1678.9	1682.0	1680.4	1661.6	1608.4	1589.7
35°	1960.5	1946.4	1890.1	1749.3	1686.7	1697.6	1699.2	1707.0	1710.2	1667.9	1658.5
37.5°	2281.2	2262.5	2176.4	1930.8	1771.2	1744.6	1743.0	1763.3	1780.6	1743.0	1743.0
40°	2630.2	2614.5	2564.4	2243.7	1927.6	1840.0	1833.8	1852.5	1874.4	1847.8	1855.7
42.5°	2930.6	2943.1	2947.8	2575.4	2162.3	2018.4	2001.2	1974.6	2009.0	1985.5	2016.8
45°	3155.9	3149.6	3235.7	2914.9	2465.9	2242.1	2218.7	2146.7	2190.5	2188.9	2257.8
47.5°	3395.3	3384.3	3420.3	3234.1	2811.7	2515.9	2480.0	2373.6	2439.3	2484.6	2598.9
50°	3622.1	3625.3	3637.8	3486.0	3187.2	2849.2	2803.8	2661.5	2755.3	2850.8	3011.9
52.5°	3917.9	3896.0	3880.3	3780.2	3608.1	3196.6	3166.8	3004.1	3135.5	3248.2	3462.5
55°	4176.0	4161.9	4152.6	4147.9	3960.1	3579.9	3548.6	3379.6	3568.9	3648.7	3964.8
57.5°	4451.4	4443.6	4493.6	4573.4	4498.3	3969.5	3936.6	3773.9	3985.1	4041.5	4509.3
60°	4653.2	4657.9	4795.6	4999.0	4947.4	4391.9	4352.8	4208.9	4390.4	4440.4	5053.8
62.5°	4654.8	4701.7	5020.9	5385.5	5444.9	4878.5	4833.2	4676.7	4806.6	4806.6	5542.0
65°	4210.4	4263.6	4980.2	5480.9	5948.8	5457.5	5413.7	5168.0	5216.5	5150.8	6000.4
67.5°	3767.7	3830.2	4504.6	5488.8	6302.4	6077.1	6025.4	5659.3	5576.4	5410.5	6321.1
70°	3473.5	3517.3	4080.6	5387.1	6515.2	6724.8	6685.7	6125.6	5859.6	5628.0	6253.9
72.5°	2924.3	2908.7	3446.9	4903.6	6634.1	7460.2	7427.3	6632.5	6105.2	5524.7	5333.9
75°	1697.6	1716.4	2138.9	3592.4	5980.1	7843.5	7840.4	7065.9	5997.3	4880.1	3675.3
77.5°	489.7	503.8	702.5	1578.7	3781.7	6690.4	6904.8	6462.0	5069.4	3478.2	1905.7
80°	214.4	225.3	305.1	525.7	1628.8	4370.0	4557.8	4370.0	3057.3	1595.9	747.9
82.5°	126.7	134.6	198.7	325.4	780.8	2079.4	2332.9	2037.2	1319.0	677.5	309.8
85°	72.0	75.1	114.2	206.5	491.3	727.6	816.7	765.1	643.1	384.9	162.7
87.5°	32.9	34.4	56.3	97.0	275.4	245.6	255.0	338.0	372.4	234.7	81.4
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°	1229.8	1229.8	1229.8	1229.8	1229.8	1229.8	1229.8	1229.8	1229.8	1229.8	1229.8
2.5°	1228.2	1223.5	1214.2	1211.0	1206.3	1207.9	1209.5	1209.5	1211.0	1206.3	1206.3
5°	1215.7	1207.9	1198.5	1198.5	1198.5	1211.0	1222.0	1228.2	1231.4	1231.4	1228.2
7.5°	1211.0	1201.6	1190.7	1193.8	1196.9	1212.6	1232.9	1253.3	1259.5	1259.5	1256.4
10°	1220.4	1211.0	1203.2	1207.9	1215.7	1228.2	1243.9	1262.7	1278.3	1279.9	1278.3
12.5°	1242.3	1231.4	1223.5	1232.9	1242.3	1250.1	1258.0	1265.8	1286.1	1289.3	1289.3
15°	1278.3	1267.4	1258.0	1265.8	1268.9	1268.9	1268.9	1268.9	1289.3	1292.4	1292.4
17.5°	1314.3	1304.9	1295.5	1297.1	1287.7	1275.2	1270.5	1268.9	1279.9	1289.3	1290.8
20°	1348.7	1340.9	1331.5	1315.9	1292.4	1268.9	1261.1	1261.1	1267.4	1281.4	1281.4
22.5°	1386.3	1376.9	1361.2	1325.2	1286.1	1253.3	1245.5	1250.1	1258.0	1276.7	1275.2
25°	1428.5	1416.0	1389.4	1322.1	1265.8	1226.7	1228.2	1242.3	1256.4	1276.7	1276.7
27.5°	1475.5	1458.2	1405.0	1297.1	1220.4	1182.9	1196.9	1229.8	1250.1	1272.1	1275.2
30°	1527.1	1511.4	1417.6	1253.3	1146.9	1112.5	1146.9	1200.1	1231.4	1251.7	1256.4
32.5°	1589.7	1577.2	1428.5	1196.9	1051.4	1021.7	1071.8	1137.5	1187.6	1211.0	1215.7
35°	1667.9	1655.4	1442.6	1132.8	962.3	931.0	976.3	1043.6	1109.3	1139.1	1148.4
37.5°	1769.6	1750.8	1455.1	1064.0	887.2	851.2	873.1	934.1	993.5	1034.2	1045.2
40°	1899.5	1869.7	1466.1	985.7	821.4	780.8	788.6	818.3	852.7	888.7	902.8
42.5°	2082.5	2023.1	1467.6	902.8	754.2	716.6	713.5	722.9	722.9	722.9	727.6
45°	2337.6	2224.9	1470.8	824.6	685.3	646.2	636.8	633.7	610.2	564.8	561.7
47.5°	2659.9	2489.3	1484.8	758.8	613.3	578.9	566.4	553.9	510.1	463.1	453.7
50°	3073.0	2796.0	1513.0	696.3	552.3	528.8	513.2	483.5	435.0	399.0	389.6
52.5°	3548.6	3160.6	1539.6	630.5	506.9	491.3	472.5	436.5	384.9	363.0	359.9
55°	4094.7	3567.4	1592.8	572.7	467.8	456.9	439.7	405.2	366.1	350.5	348.9
57.5°	4653.2	4022.7	1667.9	521.0	430.3	424.0	424.0	394.3	369.3	363.0	363.0
60°	5191.5	4413.8	1610.0	472.5	395.9	399.0	428.7	420.9	402.1	409.9	414.6
62.5°	5609.2	4643.8	1306.5	433.4	370.8	399.0	475.7	475.7	453.7	450.6	450.6
65°	5787.6	4640.7	918.4	403.7	361.4	438.1	530.4	505.4	447.5	425.6	420.9
67.5°	5742.2	4437.3	633.7	383.3	358.3	478.8	555.4	485.0	419.3	400.5	386.5
70°	5343.2	4007.0	488.2	364.6	353.6	461.6	547.6	461.6	397.4	380.2	367.7
72.5°	4310.6	3213.8	405.2	345.8	334.8	427.1	521.0	439.7	380.2	361.4	348.9
75°	2749.1	2021.5	342.7	320.8	298.8	383.3	485.0	417.8	361.4	336.4	327.0
77.5°	1322.1	871.5	298.8	291.0	269.1	355.2	449.1	389.6	336.4	316.1	309.8
80°	535.1	399.0	259.7	261.3	247.2	338.0	424.0	363.0	311.4	289.5	278.5
82.5°	278.5	231.6	219.0	225.3	225.3	322.3	405.2	341.1	289.5	280.1	244.1
85°	150.2	143.9	169.0	181.5	195.6	291.0	377.1	317.6	264.4	226.9	219.0
87.5°	73.5	93.9	95.4	109.5	136.1	233.1	317.6	266.0	220.6	183.1	179.9
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)