

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: P397557

Luminaire Tested: **ARCH-S-PA1-100-740-U-T2U**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397557  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-12)  
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-T2U  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 1200mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11809 lumens  
Efficiency: N/A  
Efficacy: 123.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G3

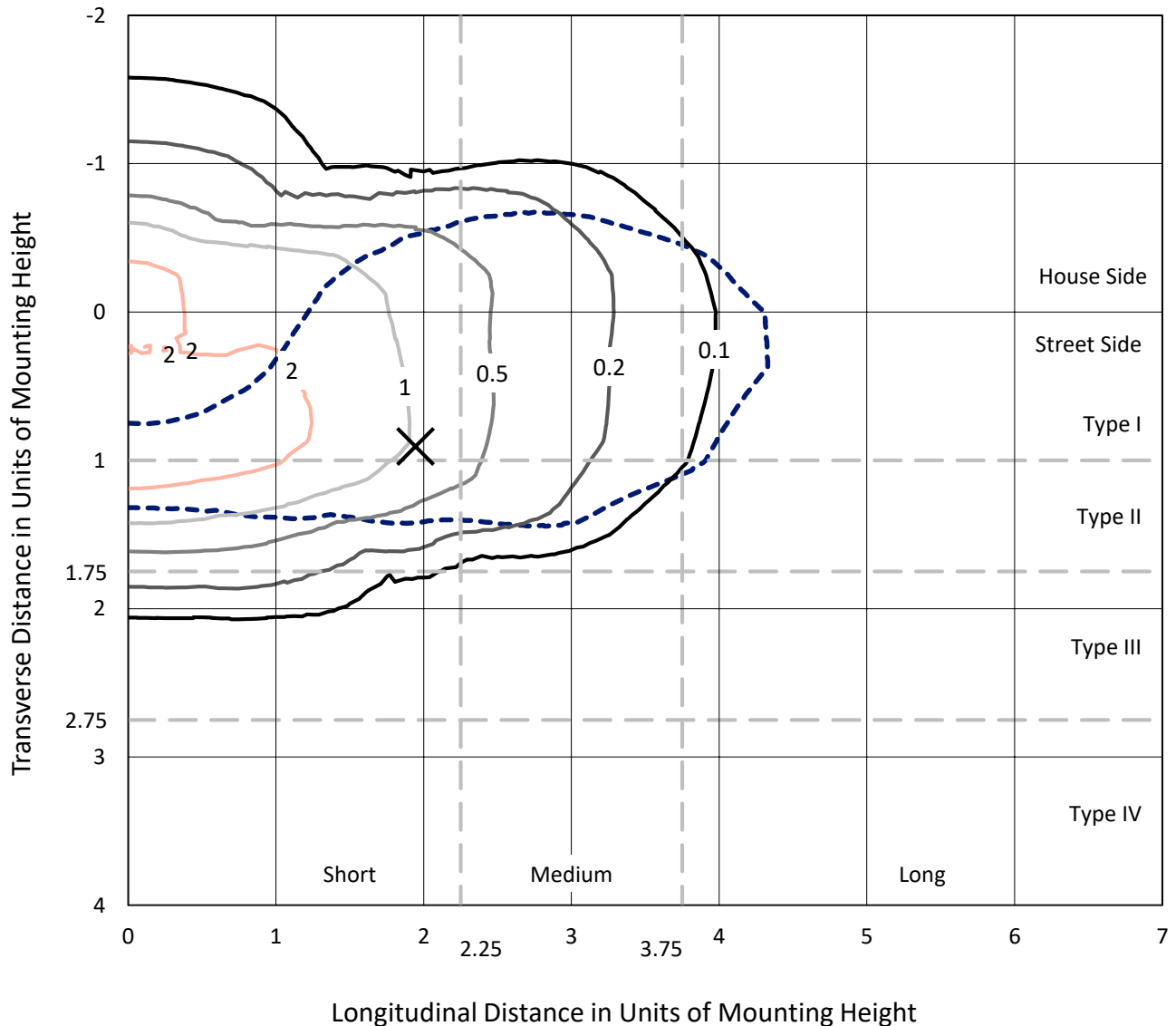
Input Watts (W): 96  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

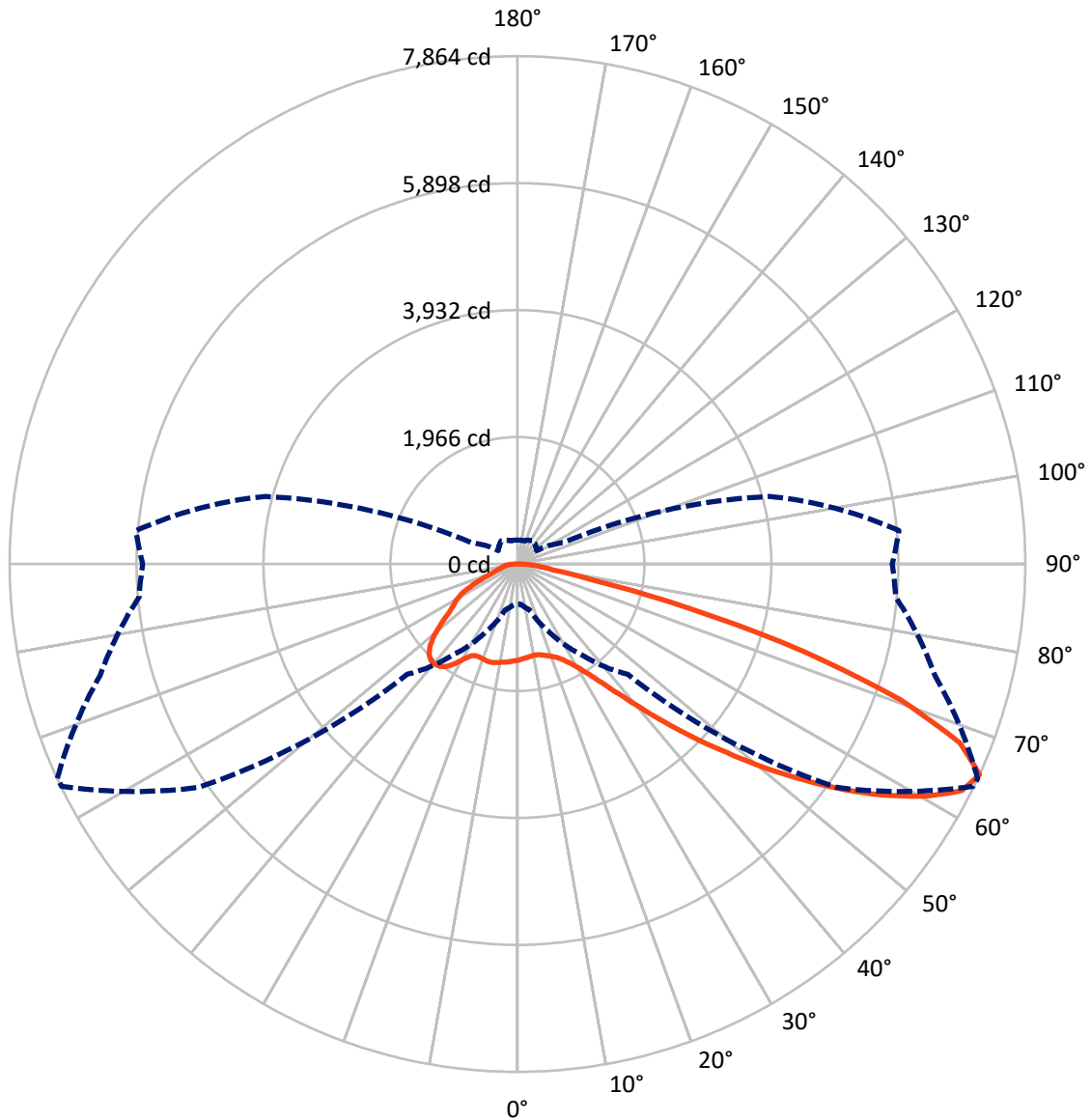
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 fc  
 Type II - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



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

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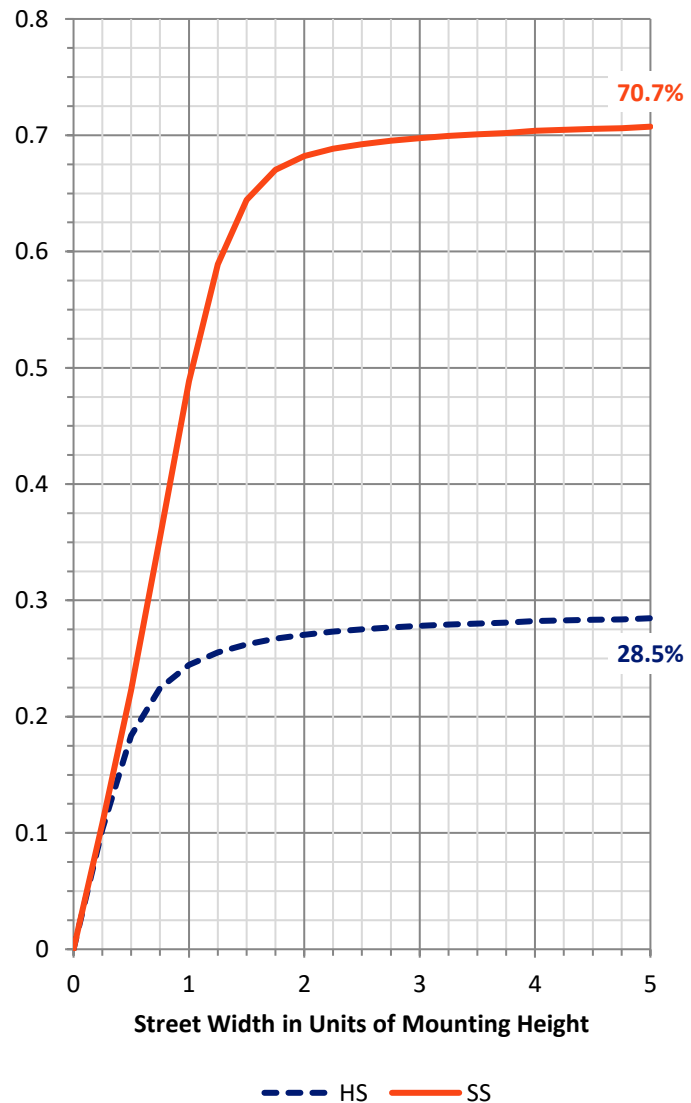
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3414.1	0.0	3414.1
	% Fixture	28.9	0.0	28.9
<b>Street Side</b>	Lumens	8394.8	0.0	8394.8
	% Fixture	71.1	0.0	71.1
<b>Total</b>	Lumens	11809.0	0.0	11809.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	142.2	1.2
10°-20°	424.4	3.6
20°-30°	753.9	6.4
30°-40°	1275.5	10.8
40°-50°	2220.3	18.8
50°-60°	2869.4	24.3
60°-70°	2510.8	21.3
70°-80°	1365.7	11.6
80°-90°	246.8	2.1
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°	11809.0	100.0
0°-180°	11809.0	100.0



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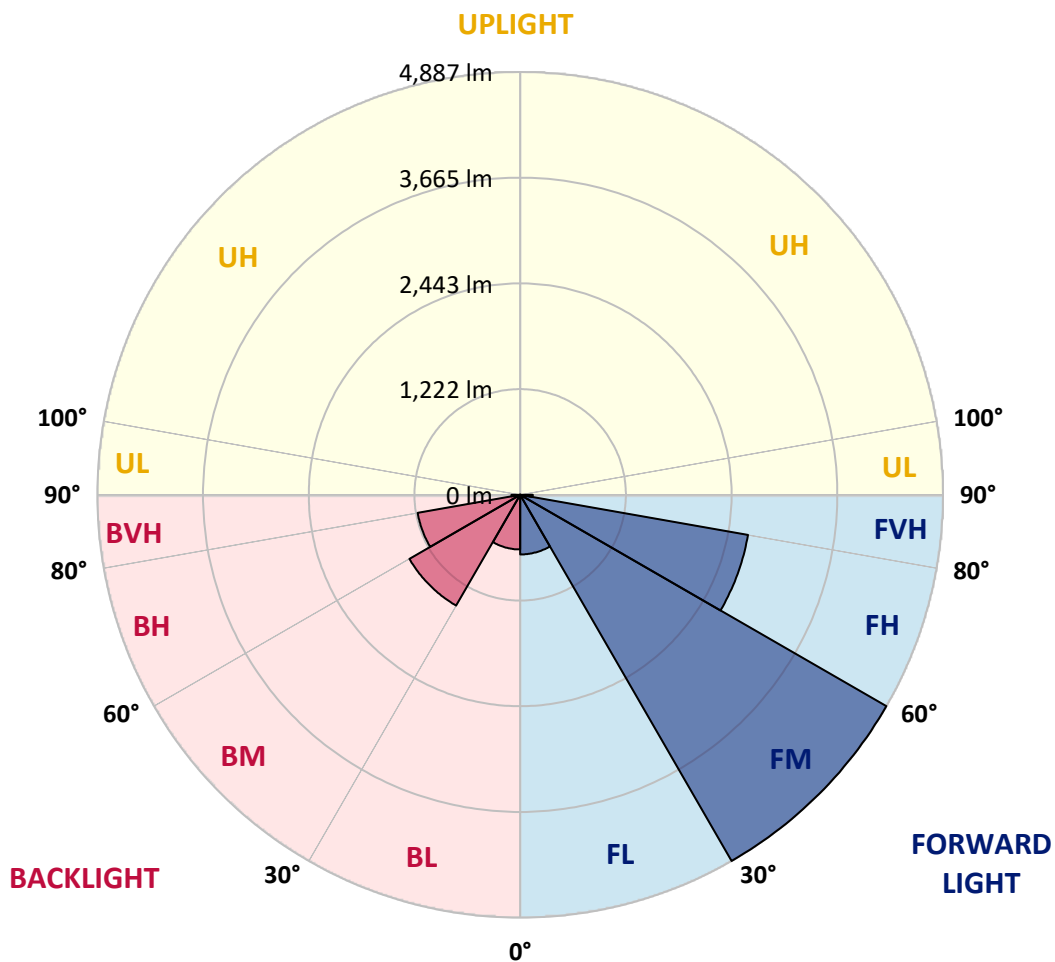
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	689.0	5.8			
FM	(30°-60°)	4886.9	41.4			
FH	(60°-80°)	2673.7	22.6			G2/5000
FVH	(80°-90°)	145.2	1.2			G2/225
BL	(0°-30°)	631.5	5.3	B2/1000		
BM	(30°-60°)	1478.2	12.5	B2/2500		
BH	(60°-80°)	1202.8	10.2	B3/2500		G3/2500
BVH	(80°-90°)	101.6	0.9			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1492.2	1492.2	1492.2	1492.2	1492.2	1492.2	1492.2	1492.2	1492.2	1492.2	1492.2
2.5°	1465.8	1464.2	1461.1	1464.2	1465.8	1468.9	1467.3	1470.4	1468.9	1473.5	1481.3
5°	1428.5	1425.3	1423.8	1431.6	1436.2	1444.0	1447.1	1458.0	1456.4	1464.2	1476.6
7.5°	1386.5	1386.5	1384.9	1394.3	1400.5	1414.5	1425.3	1444.0	1445.6	1459.5	1473.5
10°	1353.8	1355.4	1353.8	1361.6	1370.9	1388.0	1406.7	1433.1	1434.7	1454.9	1468.9
12.5°	1341.4	1341.4	1341.4	1352.3	1364.7	1388.0	1409.8	1437.8	1440.9	1462.6	1475.1
15°	1358.5	1360.1	1357.0	1367.8	1381.8	1409.8	1430.0	1459.5	1462.6	1482.9	1490.6
17.5°	1419.1	1425.3	1417.6	1423.8	1420.7	1442.4	1461.1	1490.6	1492.2	1509.3	1512.4
20°	1538.8	1545.0	1532.6	1524.8	1496.8	1495.3	1503.1	1526.4	1526.4	1537.3	1529.5
22.5°	1723.8	1730.0	1708.2	1678.7	1611.9	1579.2	1562.1	1573.0	1571.5	1576.1	1555.9
25°	1969.4	1967.8	1941.4	1887.0	1779.7	1700.5	1658.5	1641.4	1641.4	1632.1	1607.2
27.5°	2274.0	2250.7	2204.1	2138.8	1989.6	1879.2	1789.1	1745.5	1737.8	1709.8	1663.2
30°	2598.9	2581.8	2514.9	2420.1	2247.6	2106.2	1956.9	1869.9	1865.2	1804.6	1734.7
32.5°	2981.3	2953.3	2878.7	2765.2	2558.5	2359.5	2173.0	2040.9	2033.1	1936.7	1840.4
35°	3472.4	3449.1	3304.6	3191.1	2925.3	2664.2	2443.4	2267.8	2261.6	2143.5	2020.7
37.5°	4061.5	4000.9	3861.0	3648.1	3368.3	3059.0	2779.2	2558.5	2550.7	2420.1	2264.7
40°	4586.9	4532.5	4408.2	4212.3	3912.3	3568.8	3189.5	2922.2	2914.4	2755.9	2560.0
42.5°	4975.5	4938.2	4857.4	4743.9	4529.4	4321.1	3713.4	3362.1	3348.1	3142.9	2898.9
45°	5200.9	5171.3	5124.7	5152.7	5149.6	5110.7	4338.2	3885.9	3840.8	3575.0	3276.6
47.5°	5146.5	5120.0	5138.7	5356.3	5656.3	5881.7	5065.6	4422.1	4361.5	4014.9	3679.2
50°	4753.2	4764.1	4862.0	5278.6	5951.6	6452.1	5872.4	5033.0	4952.2	4457.9	4061.5
52.5°	4036.7	4063.1	4300.9	4883.8	5919.0	6822.1	6601.3	5664.1	5556.8	4890.0	4409.7
55°	3206.6	3273.5	3581.2	4193.7	5493.1	6848.5	7151.6	6298.2	6180.1	5295.7	4712.8
57.5°	2371.9	2471.4	2827.4	3390.0	4677.1	6430.4	7426.7	6904.4	6761.4	5698.3	5033.0
60°	1504.6	1565.2	1975.6	2639.3	3579.7	5407.6	7391.0	7420.5	7296.1	6099.3	5367.2
62.5°	960.6	990.1	1196.9	1882.3	2502.5	4004.0	7000.8	7810.6	7726.7	6464.6	5684.3
65°	617.1	629.5	735.2	1158.0	1703.6	2417.0	6029.3	7852.6	7863.5	6693.1	5880.1
67.5°	502.1	508.3	547.1	715.0	1204.6	1335.2	4199.9	7255.7	7387.8	6634.0	5813.3
70°	457.0	464.8	505.2	570.4	932.6	921.7	2033.1	6071.3	6287.4	6293.6	5516.4
72.5°	385.5	396.4	450.8	539.4	721.2	727.4	861.1	4324.2	4642.9	5625.2	5070.3
75°	321.8	328.0	374.6	475.6	610.9	581.3	604.6	2292.7	2752.8	4510.7	4596.2
77.5°	261.1	267.3	301.5	379.3	542.5	452.3	475.6	949.7	1173.5	3062.1	3756.9
80°	186.5	192.7	231.6	295.3	410.3	407.2	352.8	523.8	568.9	1655.4	2440.3
82.5°	133.7	138.3	175.6	211.4	284.4	408.8	265.8	355.9	373.0	733.7	983.9
85°	90.2	90.2	121.2	139.9	183.4	258.0	214.5	240.9	251.8	348.2	265.8
87.5°	38.9	38.9	65.3	71.5	96.4	119.7	160.1	121.2	124.3	188.1	108.8
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°	1492.2	1492.2	1492.2	1492.2	1492.2	1492.2	1492.2	1492.2	1492.2	1492.2	1492.2
2.5°	1486.0	1487.5	1490.6	1500.0	1506.2	1515.5	1520.2	1526.4	1526.4	1523.3	1524.8
5°	1482.9	1487.5	1498.4	1515.5	1526.4	1543.5	1555.9	1565.2	1568.3	1565.2	1566.8
7.5°	1481.3	1489.1	1507.7	1532.6	1548.1	1569.9	1587.0	1597.9	1605.6	1602.5	1604.1
10°	1476.6	1489.1	1512.4	1543.5	1566.8	1588.6	1604.1	1608.8	1613.4	1610.3	1608.8
12.5°	1482.9	1496.8	1521.7	1559.0	1585.4	1602.5	1607.2	1599.4	1588.6	1582.3	1580.8
15°	1495.3	1509.3	1534.1	1573.0	1596.3	1602.5	1591.7	1566.8	1541.9	1527.9	1526.4
17.5°	1512.4	1521.7	1541.9	1576.1	1594.8	1587.0	1565.2	1535.7	1517.1	1506.2	1507.7
20°	1523.3	1523.3	1538.8	1565.2	1580.8	1574.6	1548.1	1515.5	1486.0	1472.0	1467.3
22.5°	1538.8	1531.0	1532.6	1555.9	1577.7	1568.3	1512.4	1454.9	1412.9	1397.4	1395.8
25°	1580.8	1559.0	1545.0	1559.0	1610.3	1534.1	1422.2	1355.4	1316.5	1302.5	1304.1
27.5°	1632.1	1602.5	1573.0	1596.3	1636.7	1456.4	1307.2	1231.0	1207.7	1196.9	1201.5
30°	1683.4	1644.5	1605.6	1689.6	1618.1	1335.2	1159.5	1084.9	1064.7	1057.0	1063.2
32.5°	1778.2	1714.5	1667.8	1813.9	1560.6	1196.9	999.5	931.1	912.4	903.1	900.0
35°	1936.7	1855.9	1809.3	1922.7	1479.7	1043.0	853.3	805.2	784.9	764.7	761.6
37.5°	2165.2	2067.3	2025.3	1984.9	1366.3	890.6	741.4	708.8	679.3	648.2	646.6
40°	2438.8	2311.3	2280.2	2012.9	1209.3	747.6	663.7	632.6	595.3	565.8	567.3
42.5°	2754.3	2591.1	2524.3	2005.1	1015.0	671.5	607.8	573.6	540.9	514.5	512.9
45°	3091.6	2906.6	2752.8	1950.7	822.3	618.6	573.6	533.1	500.5	471.0	467.9
47.5°	3464.7	3257.9	2964.2	1845.0	679.3	581.3	553.4	495.8	466.3	447.7	447.7
50°	3840.8	3593.7	3158.4	1684.9	595.3	553.4	523.8	475.6	452.3	436.8	436.8
52.5°	4162.6	3943.4	3318.5	1493.7	542.5	530.0	503.6	466.3	441.4	427.4	425.9
55°	4475.0	4268.3	3461.5	1304.1	498.9	498.9	498.9	458.5	430.6	418.1	416.6
57.5°	4785.9	4610.2	3610.8	1179.8	460.1	472.5	489.6	449.2	421.2	410.3	408.8
60°	5137.1	5020.6	3783.3	1092.7	425.9	444.5	477.2	438.3	405.7	396.4	394.8
62.5°	5510.2	5510.2	3940.3	969.9	394.8	421.2	458.5	424.3	391.7	383.9	382.4
65°	5802.4	5928.3	4041.3	786.5	363.7	397.9	436.8	405.7	373.0	371.5	368.4
67.5°	5836.6	6034.0	3977.6	593.8	335.7	373.0	415.0	385.5	354.4	354.4	349.7
70°	5591.0	5791.5	3778.6	444.5	315.5	348.2	387.0	360.6	331.1	334.2	326.4
72.5°	5180.7	5230.4	3284.4	351.3	292.2	321.8	352.8	332.6	306.2	306.2	295.3
75°	4639.7	4363.1	2385.9	293.8	264.2	290.7	318.6	301.5	278.2	270.5	264.2
77.5°	3693.1	3161.6	1386.5	253.4	240.9	261.1	279.8	267.3	247.1	230.0	230.0
80°	2250.7	1852.8	612.4	219.2	212.9	228.5	240.9	226.9	209.8	192.7	188.1
82.5°	856.4	715.0	296.9	188.1	186.5	195.8	205.2	191.2	178.8	171.0	147.7
85°	234.7	216.1	203.6	157.0	153.9	152.3	163.2	157.0	139.9	115.0	102.6
87.5°	88.6	101.0	110.4	96.4	102.6	94.8	108.8	99.5	88.6	57.5	51.3
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)