

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: P400495

Luminaire Tested: **ARCH-L-PA3-90-727-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400495  
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-L-PA3-90-727-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 400mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12939 lumens  
Efficiency: N/A  
Efficacy: 139.1 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B2 - U0 - G3

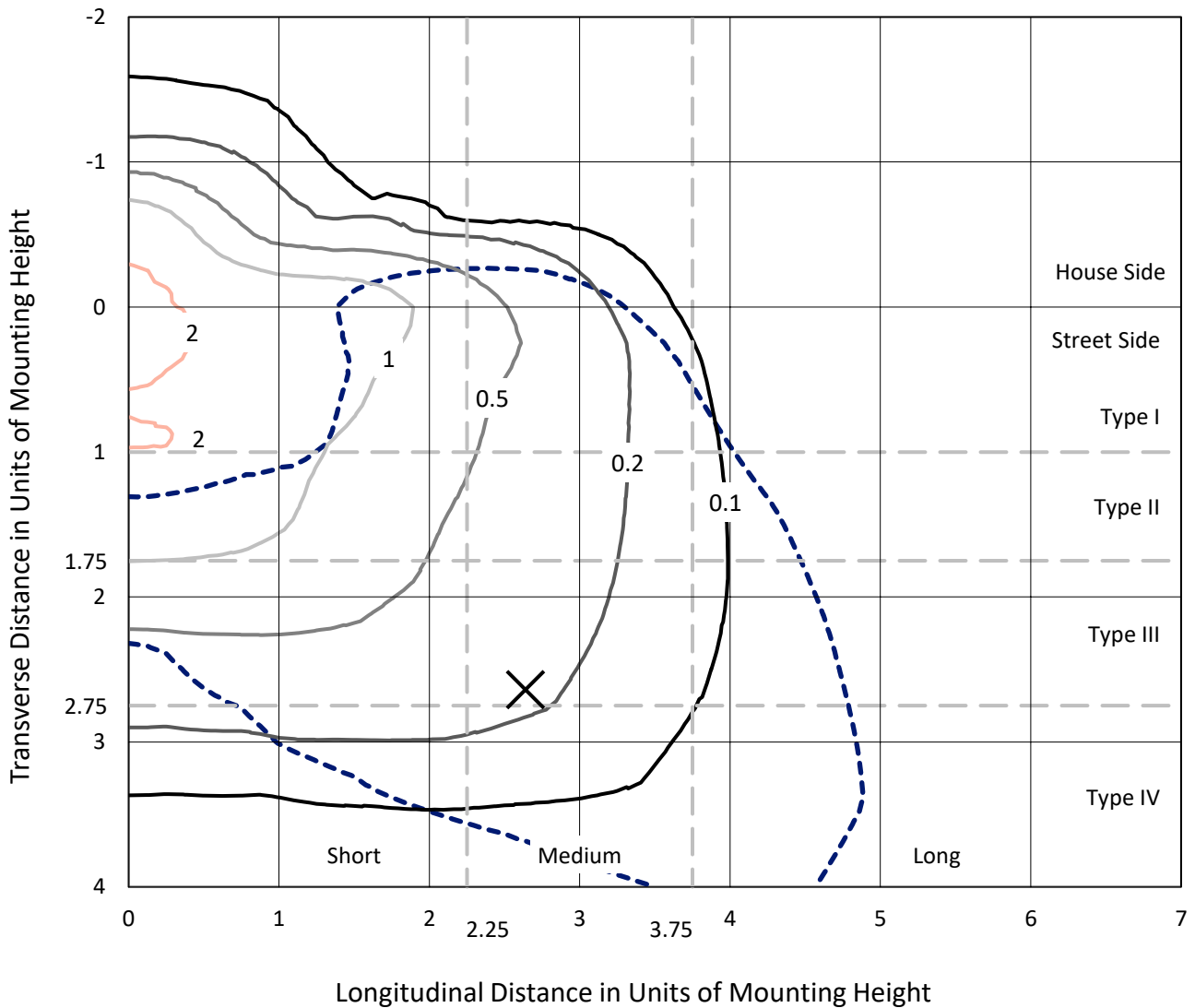
Input Watts (W): 93  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

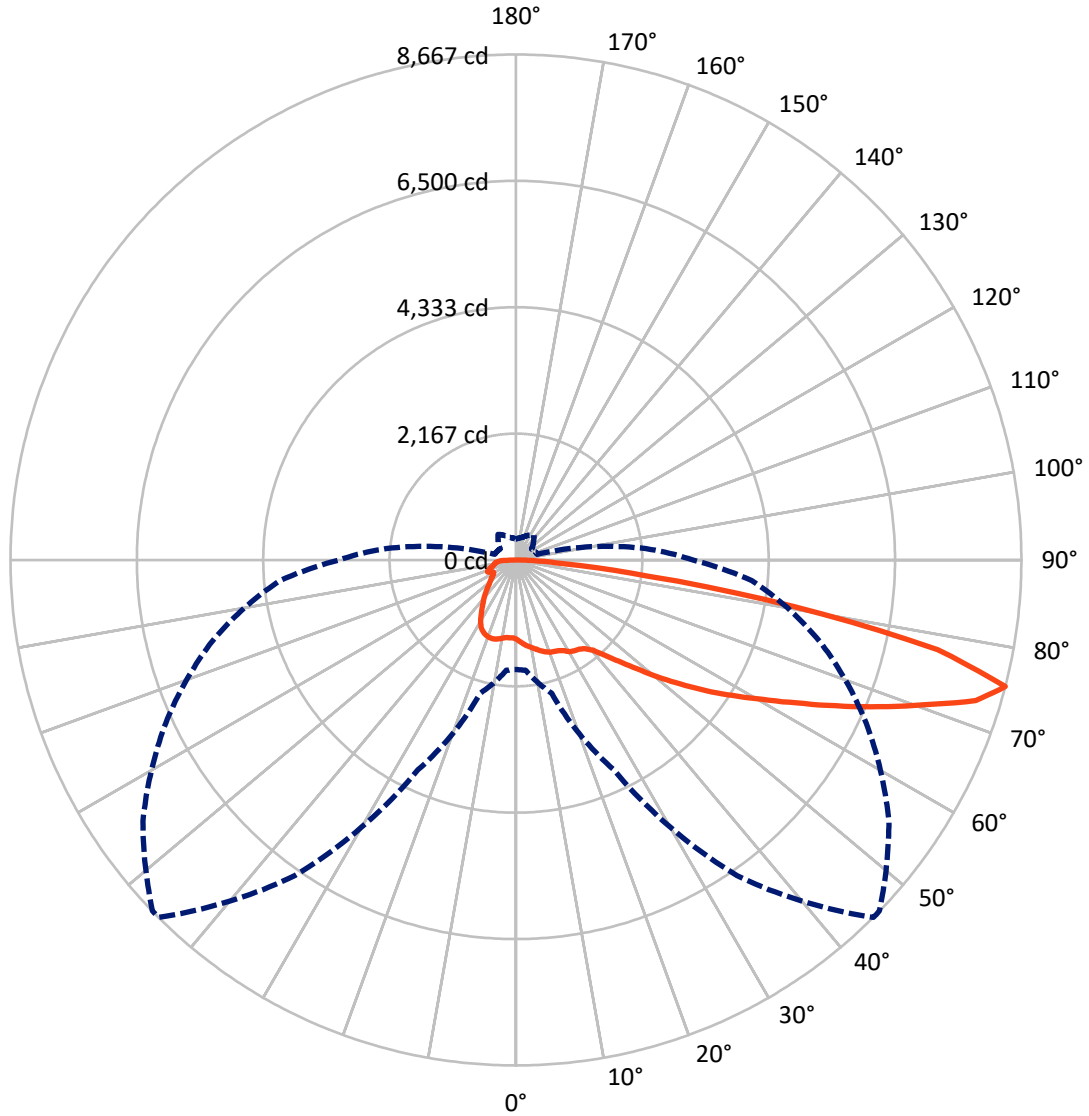
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



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

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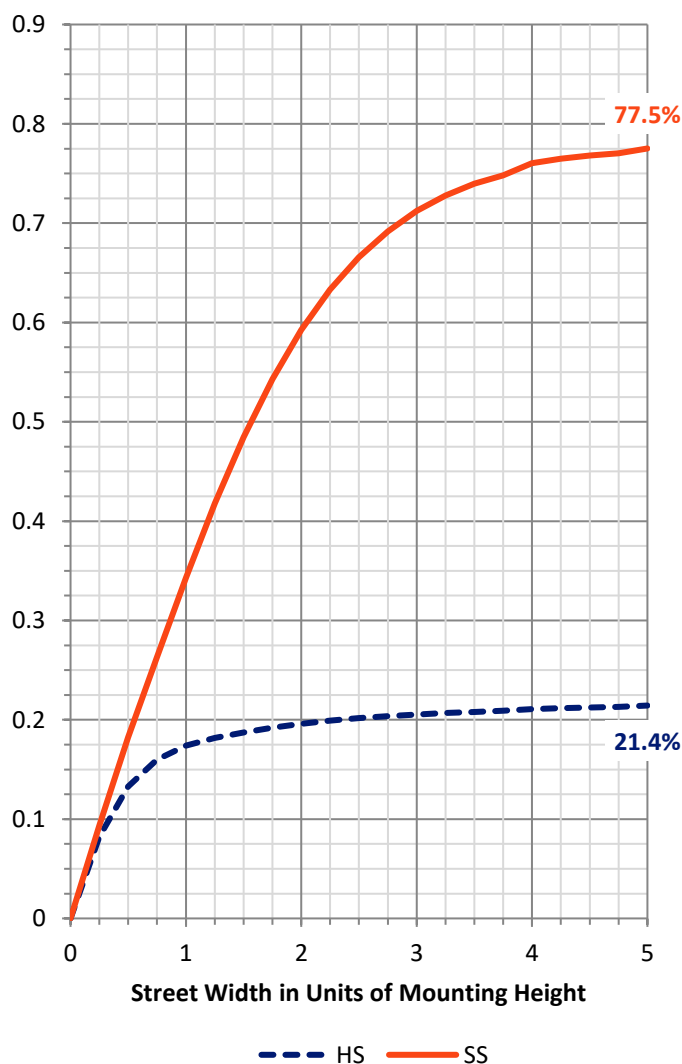
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2859.5	0.0	2859.5
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	10079.5	0.0	10079.5
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	12939.0	0.0	12939.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.4	1.0
10°-20°	427.7	3.3
20°-30°	729.1	5.6
30°-40°	1021.6	7.9
40°-50°	1500.9	11.6
50°-60°	2388.7	18.5
60°-70°	3397.9	26.3
70°-80°	2845.0	22.0
80°-90°	493.8	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°	12939.0	100.0
0°-180°	12939.0	100.0

**Coefficient of Utilization**



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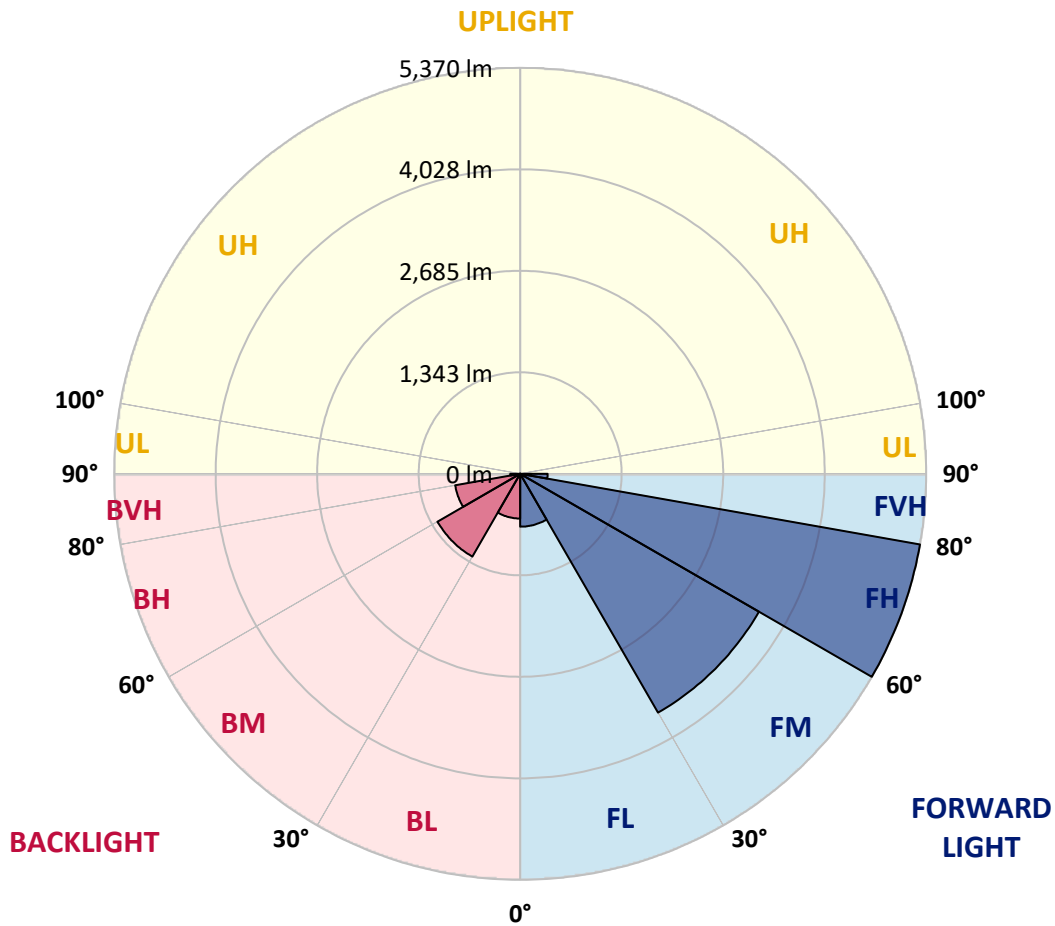
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	699.4	5.4			
FM (30°-60°)	3647.1	28.2			
FH (60°-80°)	5370.0	41.5			G3/7500
FVH (80°-90°)	363.0	2.8			G3/500
BL (0°-30°)	591.8	4.6	B2/1000		
BM (30°-60°)	1264.0	9.8	B2/2500		
BH (60°-80°)	872.9	6.7	B2/1000		G2/1000
BVH (80°-90°)	130.8	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°	1358.9	1358.9	1358.9	1358.9	1358.9	1358.9	1358.9	1358.9	1358.9	1358.9	1358.9
2.5°	1436.7	1429.8	1426.3	1426.3	1412.5	1403.8	1402.1	1390.0	1379.6	1369.3	1360.6
5°	1519.7	1514.5	1504.1	1495.5	1476.4	1452.2	1448.8	1422.8	1396.9	1372.7	1352.0
7.5°	1595.7	1585.4	1573.3	1556.0	1524.8	1492.0	1486.8	1450.5	1414.2	1377.9	1350.2
10°	1659.7	1649.3	1632.0	1607.8	1568.1	1528.3	1523.1	1485.1	1447.0	1403.8	1364.1
12.5°	1720.2	1711.6	1685.6	1652.8	1606.1	1569.8	1564.6	1531.8	1492.0	1443.6	1391.7
15°	1772.1	1763.4	1735.8	1697.7	1644.1	1616.5	1609.6	1578.4	1538.7	1486.8	1433.2
17.5°	1798.0	1798.0	1768.6	1727.1	1677.0	1656.2	1651.1	1613.0	1576.7	1526.6	1473.0
20°	1806.7	1810.1	1789.4	1739.2	1696.0	1687.4	1682.2	1651.1	1609.6	1561.2	1511.0
22.5°	1811.8	1818.8	1801.5	1744.4	1708.1	1702.9	1699.5	1678.7	1645.9	1599.2	1549.1
25°	1829.1	1829.1	1817.0	1753.1	1723.7	1721.9	1721.9	1709.8	1687.4	1647.6	1597.5
27.5°	1855.1	1853.3	1837.8	1772.1	1758.2	1763.4	1761.7	1760.0	1744.4	1704.6	1651.1
30°	1898.3	1898.3	1881.0	1810.1	1801.5	1823.9	1825.7	1829.1	1804.9	1742.7	1699.5
32.5°	1964.0	1957.1	1939.8	1848.1	1834.3	1855.1	1858.5	1856.8	1836.0	1777.3	1756.5
35°	2166.3	2150.7	2088.5	1932.9	1863.7	1875.8	1877.5	1886.2	1889.6	1843.0	1832.6
37.5°	2520.7	2499.9	2404.8	2133.4	1957.1	1927.7	1925.9	1948.4	1967.4	1925.9	1925.9
40°	2906.2	2888.9	2833.6	2479.2	2129.9	2033.1	2026.2	2047.0	2071.2	2041.8	2050.4
42.5°	3238.1	3252.0	3257.2	2845.7	2389.3	2230.2	2211.2	2181.8	2219.8	2193.9	2228.5
45°	3487.1	3480.2	3575.3	3220.9	2724.7	2477.4	2451.5	2372.0	2420.4	2418.7	2494.7
47.5°	3751.6	3739.5	3779.3	3573.5	3106.7	2780.0	2740.2	2622.7	2695.3	2745.4	2871.6
50°	4002.3	4005.8	4019.6	3851.9	3521.7	3148.2	3098.1	2940.8	3044.5	3150.0	3328.0
52.5°	4329.0	4304.8	4287.6	4176.9	3986.7	3532.0	3499.2	3319.4	3464.6	3589.1	3826.0
55°	4614.3	4598.7	4588.4	4583.2	4375.7	3955.6	3921.0	3734.3	3943.5	4031.7	4380.9
57.5°	4918.6	4909.9	4965.3	5053.4	4970.5	4386.1	4349.8	4170.0	4403.4	4465.6	4982.6
60°	5141.6	5146.8	5298.9	5523.7	5466.6	4852.9	4809.7	4650.6	4851.2	4906.5	5584.2
62.5°	5143.3	5195.2	5547.9	5950.7	6016.4	5390.6	5340.4	5167.5	5311.0	5311.0	6123.6
65°	4652.3	4711.1	5502.9	6056.2	6573.1	6030.2	5981.8	5710.4	5764.0	5691.4	6630.1
67.5°	4163.1	4232.2	4977.4	6064.8	6963.8	6714.9	6657.8	6253.3	6161.6	5978.4	6984.6
70°	3838.1	3886.5	4508.8	5952.4	7198.9	7430.6	7387.4	6768.5	6474.6	6218.7	6910.2
72.5°	3231.2	3213.9	3808.7	5418.2	7330.3	8243.2	8206.9	7328.6	6746.0	6104.6	5893.7
75°	1875.8	1896.6	2363.3	3969.4	6607.7	8666.7	8663.3	7807.5	6626.7	5392.3	4061.1
77.5°	541.1	556.7	776.3	1744.4	4178.6	7392.6	7629.4	7140.2	5601.5	3843.2	2105.7
80°	236.9	249.0	337.1	580.9	1799.7	4828.7	5036.1	4828.7	3378.2	1763.4	826.4
82.5°	140.0	148.7	219.6	359.6	862.7	2297.6	2577.7	2251.0	1457.4	748.6	342.3
85°	79.5	83.0	126.2	228.2	542.9	803.9	902.5	845.4	710.6	425.3	179.8
87.5°	36.3	38.0	62.2	107.2	304.3	271.4	281.8	373.4	411.5	259.3	89.9
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°	1358.9	1358.9	1358.9	1358.9	1358.9	1358.9	1358.9	1358.9	1358.9	1358.9	1358.9
2.5°	1357.1	1352.0	1341.6	1338.1	1332.9	1334.7	1336.4	1336.4	1338.1	1332.9	1332.9
5°	1343.3	1334.7	1324.3	1324.3	1324.3	1338.1	1350.2	1357.1	1360.6	1360.6	1357.1
7.5°	1338.1	1327.8	1315.7	1319.1	1322.6	1339.9	1362.3	1384.8	1391.7	1391.7	1388.3
10°	1348.5	1338.1	1329.5	1334.7	1343.3	1357.1	1374.4	1395.2	1412.5	1414.2	1412.5
12.5°	1372.7	1360.6	1352.0	1362.3	1372.7	1381.4	1390.0	1398.6	1421.1	1424.6	1424.6
15°	1412.5	1400.4	1390.0	1398.6	1402.1	1402.1	1402.1	1402.1	1424.6	1428.0	1428.0
17.5°	1452.2	1441.9	1431.5	1433.2	1422.8	1409.0	1403.8	1402.1	1414.2	1424.6	1426.3
20°	1490.3	1481.6	1471.3	1454.0	1428.0	1402.1	1393.5	1393.5	1400.4	1415.9	1415.9
22.5°	1531.8	1521.4	1504.1	1464.3	1421.1	1384.8	1376.2	1381.4	1390.0	1410.7	1409.0
25°	1578.4	1564.6	1535.2	1460.9	1398.6	1355.4	1357.1	1372.7	1388.3	1410.7	1410.7
27.5°	1630.3	1611.3	1552.5	1433.2	1348.5	1307.0	1322.6	1358.9	1381.4	1405.6	1409.0
30°	1687.4	1670.1	1566.3	1384.8	1267.2	1229.2	1267.2	1326.0	1360.6	1383.1	1388.3
32.5°	1756.5	1742.7	1578.4	1322.6	1161.8	1128.9	1184.3	1256.9	1312.2	1338.1	1343.3
35°	1843.0	1829.1	1594.0	1251.7	1063.2	1028.7	1078.8	1153.1	1225.8	1258.6	1269.0
37.5°	1955.3	1934.6	1607.8	1175.6	980.3	940.5	964.7	1032.1	1097.8	1142.8	1154.9
40°	2098.8	2066.0	1619.9	1089.2	907.6	862.7	871.3	904.2	942.2	982.0	997.5
42.5°	2301.1	2235.4	1621.7	997.5	833.3	791.8	788.4	798.7	798.7	798.7	803.9
45°	2582.9	2458.4	1625.1	911.1	757.2	714.0	703.6	700.2	674.3	624.1	620.7
47.5°	2939.0	2750.6	1640.7	838.5	677.7	639.7	625.8	612.0	563.6	511.7	501.4
50°	3395.5	3089.5	1671.8	769.3	610.3	584.4	567.1	534.2	480.6	440.9	430.5
52.5°	3921.0	3492.3	1701.2	696.7	560.1	542.9	522.1	482.3	425.3	401.1	397.6
55°	4524.4	3941.8	1760.0	632.8	516.9	504.8	485.8	447.8	404.6	387.3	385.5
57.5°	5141.6	4444.9	1843.0	575.7	475.4	468.5	468.5	435.7	408.0	401.1	401.1
60°	5736.3	4877.1	1779.0	522.1	437.4	440.9	473.7	465.1	444.3	453.0	458.1
62.5°	6197.9	5131.2	1443.6	478.9	409.7	440.9	525.6	525.6	501.4	497.9	497.9
65°	6395.0	5127.8	1014.8	446.0	399.4	484.1	586.1	558.4	494.5	470.2	465.1
67.5°	6344.9	4903.0	700.2	423.6	395.9	529.0	613.7	535.9	463.3	442.6	427.0
70°	5904.0	4427.6	539.4	402.8	390.7	510.0	605.1	510.0	439.1	420.1	406.3
72.5°	4763.0	3551.1	447.8	382.1	370.0	472.0	575.7	485.8	420.1	399.4	385.5
75°	3037.6	2233.7	378.6	354.4	330.2	423.6	535.9	461.6	399.4	371.7	361.3
77.5°	1460.9	963.0	330.2	321.6	297.4	392.4	496.2	430.5	371.7	349.2	342.3
80°	591.3	440.9	287.0	288.7	273.2	373.4	468.5	401.1	344.0	319.8	307.7
82.5°	307.7	255.9	242.0	249.0	249.0	356.1	447.8	376.9	319.8	309.5	269.7
85°	166.0	159.1	186.7	200.5	216.1	321.6	416.7	351.0	292.2	250.7	242.0
87.5°	81.3	103.7	105.5	121.0	150.4	257.6	351.0	293.9	243.8	202.3	198.8
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)