

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: P237303

Luminaire Tested: **ARCH-L-AF72-100-D-U-T4W-7030**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P237303
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
Test Lab: INNOVATION CENTER-P2
Issue Date: 8/23/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-100-D-U-T4W-7030
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 440mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13560.2 lumens
Efficiency: N/A
Efficacy: 132.9 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

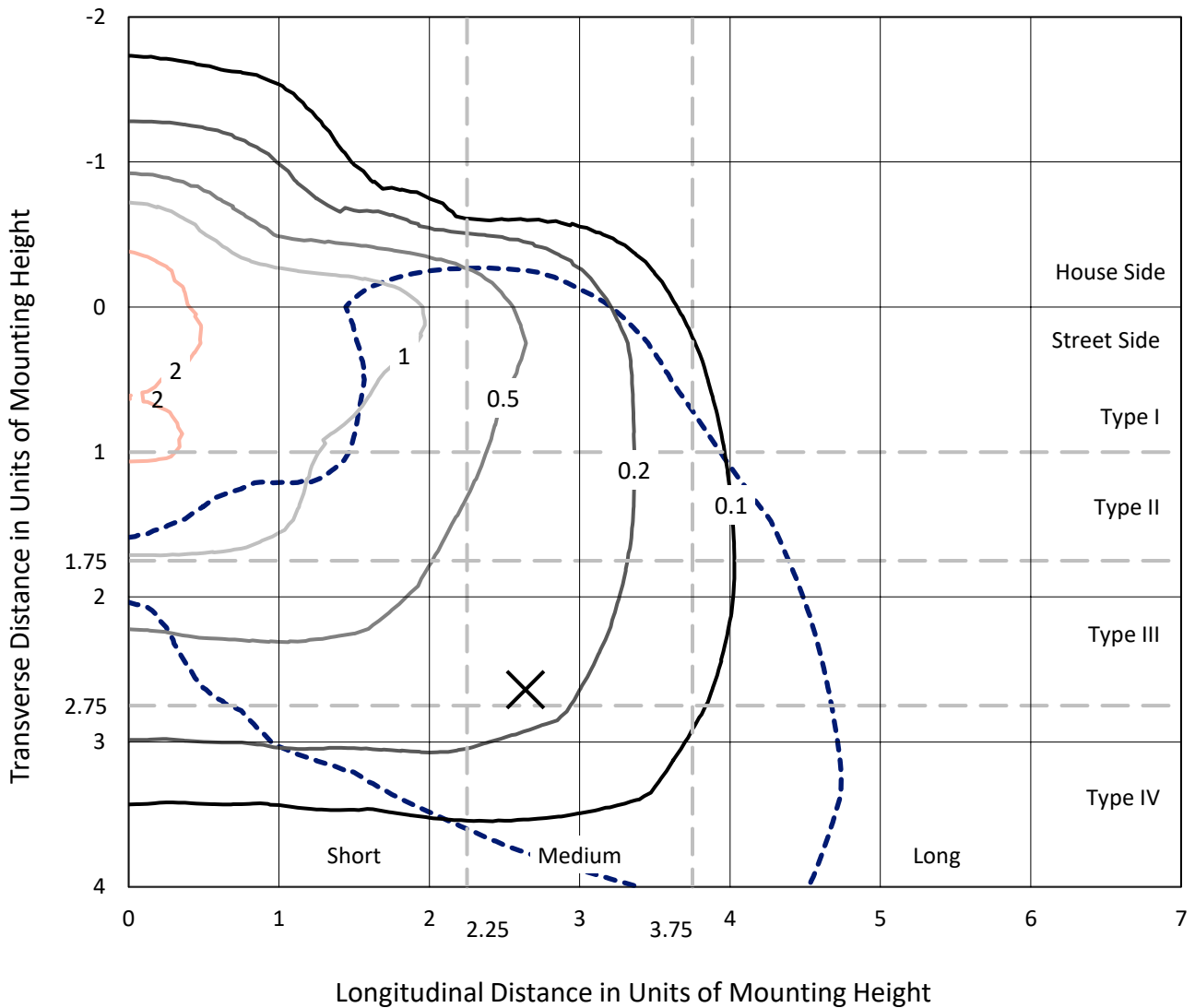
Input Watts (W): 102
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

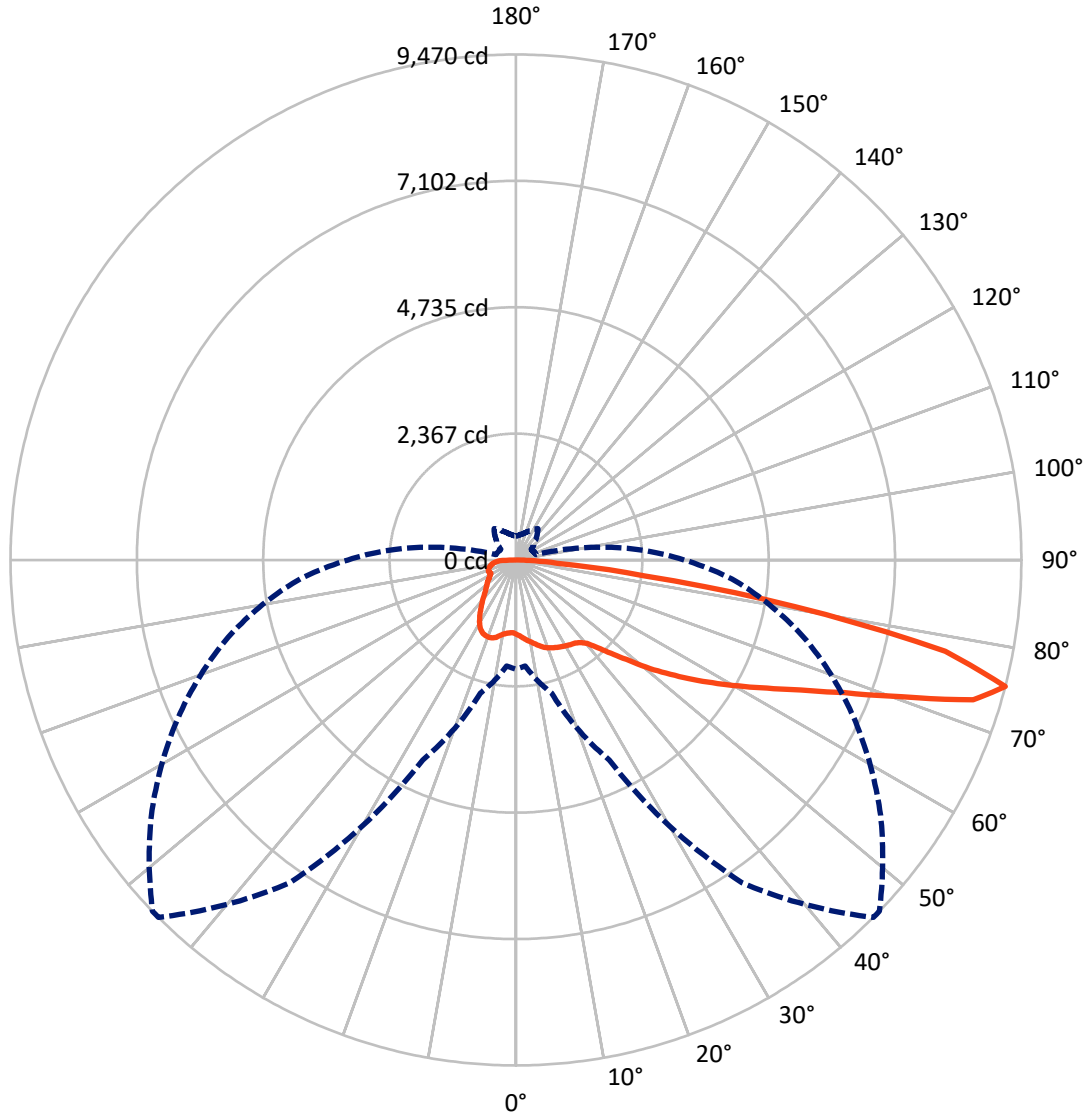
× Max cd
 - - - 1/2 Max cd



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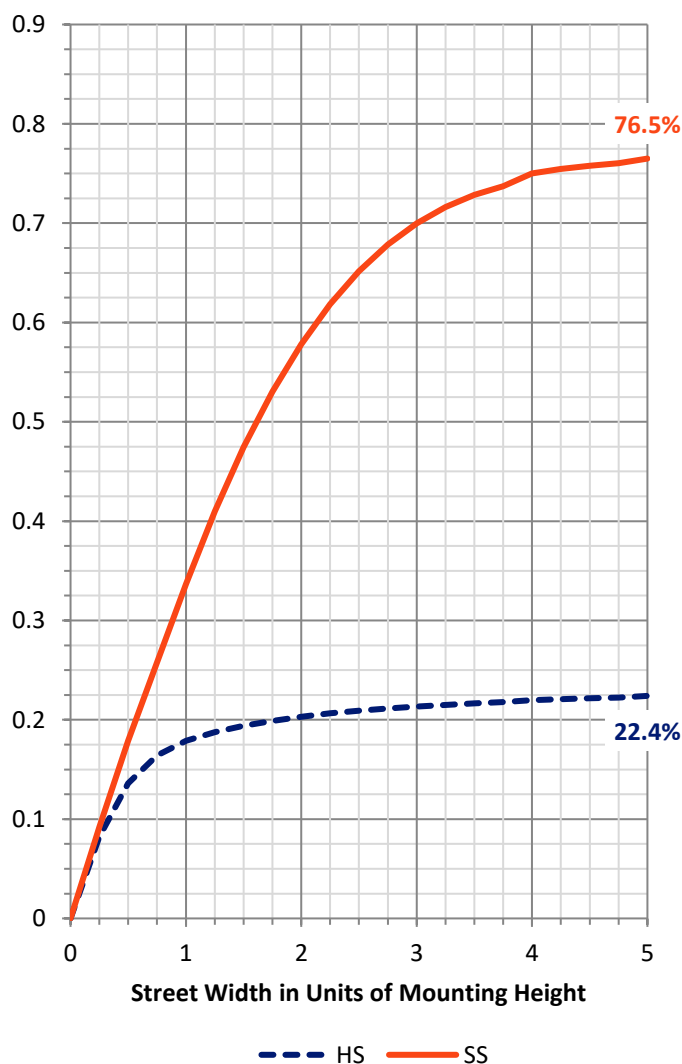
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3141.3	0.0	3141.3
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	10418.8	0.0	10418.8
	% Fixture	76.8	0.0	76.8
Total	Lumens	13560.2	0.0	13560.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.8	1.0
10°-20°	446.4	3.3
20°-30°	766.1	5.6
30°-40°	1071.4	7.9
40°-50°	1571.7	11.6
50°-60°	2448.2	18.1
60°-70°	3522.8	26.0
70°-80°	3068.8	22.6
80°-90°	527.0	3.9
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°	13560.2	100.0
0°-180°	13560.2	100.0

Coefficient of Utilization



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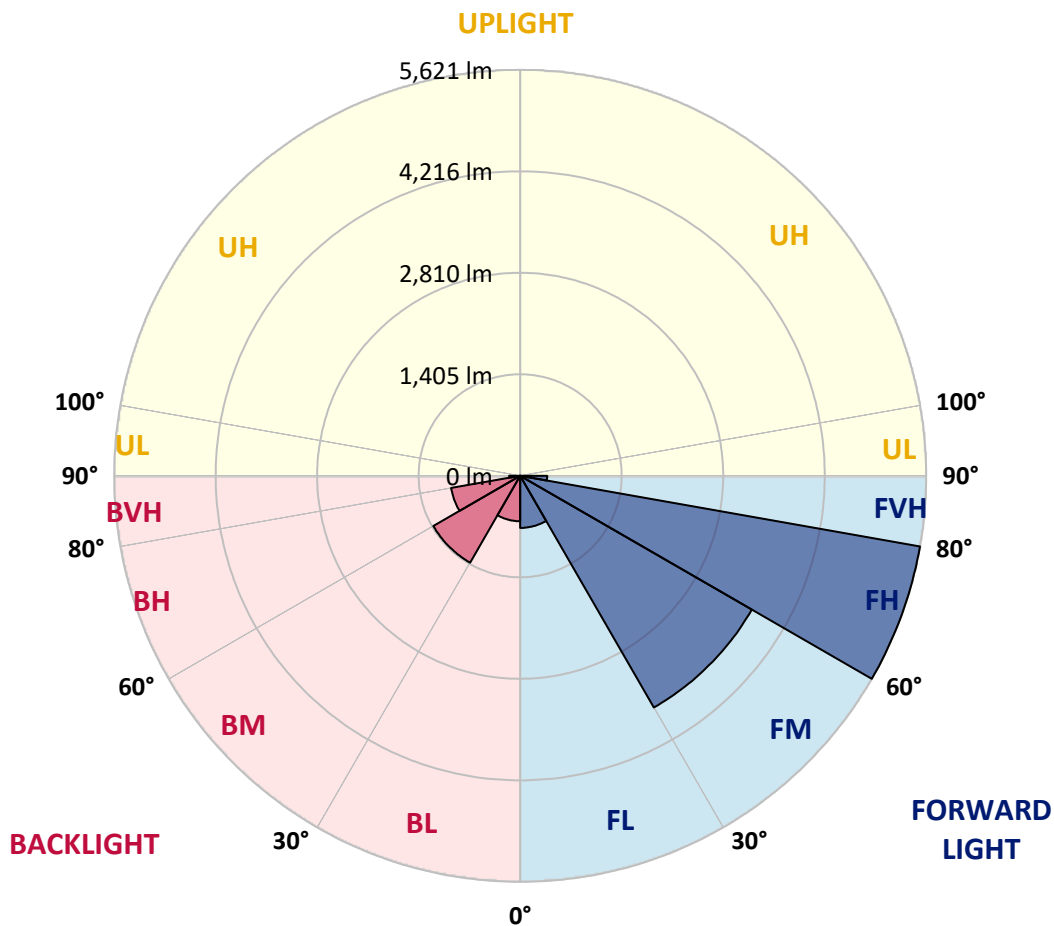
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	721.1	5.3			
FM (30°-60°)	3703.0	27.3			
FH (60°-80°)	5620.8	41.5			G3/7500
FVH (80°-90°)	373.9	2.8			G3/500
BL (0°-30°)	629.2	4.6	B2/1000		
BM (30°-60°)	1388.3	10.2	B2/2500		
BH (60°-80°)	970.8	7.2	B2/1000		G2/1000
BVH (80°-90°)	153.1	1.1			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°	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1
2.5°	1458.7	1448.1	1448.1	1440.2	1440.2	1427.0	1421.8	1419.2	1405.9	1398.0	1390.1
5°	1543.1	1529.9	1527.2	1508.8	1500.9	1471.8	1469.2	1450.8	1427.0	1403.3	1384.9
7.5°	1619.5	1611.7	1598.5	1580.0	1556.3	1519.4	1516.7	1487.7	1448.1	1416.4	1390.1
10°	1675.0	1669.7	1651.2	1627.5	1601.0	1564.1	1561.6	1529.9	1482.4	1445.5	1408.6
12.5°	1740.9	1733.1	1709.3	1677.6	1648.6	1614.3	1611.7	1585.4	1532.6	1485.1	1437.7
15°	1804.2	1793.7	1764.6	1733.1	1701.3	1672.3	1672.3	1643.4	1588.0	1532.6	1477.1
17.5°	1835.9	1830.6	1801.5	1767.3	1740.9	1719.8	1717.2	1690.8	1635.4	1577.3	1516.7
20°	1846.5	1849.1	1822.7	1785.8	1767.3	1756.8	1754.1	1735.7	1675.0	1619.5	1561.6
22.5°	1843.9	1851.7	1830.6	1791.1	1785.8	1785.8	1785.8	1764.6	1717.2	1661.9	1603.8
25°	1854.3	1864.9	1849.1	1801.5	1801.5	1812.2	1812.2	1801.5	1759.4	1711.9	1653.8
27.5°	1891.3	1899.3	1886.1	1820.0	1822.7	1838.5	1835.9	1838.5	1812.2	1767.3	1709.3
30°	1936.2	1946.7	1930.8	1849.1	1846.5	1862.4	1862.4	1875.4	1857.0	1809.6	1762.1
32.5°	2057.5	2054.8	2004.7	1880.8	1872.8	1888.6	1888.6	1901.8	1891.3	1854.3	1809.6
35°	2418.9	2379.2	2268.4	1983.6	1904.5	1912.4	1912.4	1936.2	1941.4	1912.4	1872.8
37.5°	2788.1	2774.9	2690.5	2258.0	2020.5	1962.6	1959.9	1994.2	2017.9	1994.2	1967.8
40°	3160.1	3149.5	3131.1	2624.6	2263.2	2052.2	2044.2	2073.3	2115.5	2099.6	2083.8
42.5°	3505.6	3500.3	3518.8	2985.9	2571.9	2244.7	2221.0	2186.8	2247.4	2242.1	2242.1
45°	3777.3	3790.5	3801.0	3323.5	2906.9	2492.8	2463.7	2347.7	2429.4	2450.4	2466.3
47.5°	3930.3	3940.9	3977.8	3653.3	3241.8	2780.2	2759.2	2569.2	2677.4	2740.7	2785.4
50°	4149.2	4120.1	4151.9	3975.2	3645.4	3154.8	3096.7	2867.3	3004.4	3115.2	3220.8
52.5°	4360.2	4312.8	4339.1	4347.1	4104.5	3521.4	3460.8	3218.1	3389.6	3563.6	3750.9
55°	4550.2	4547.5	4573.9	4708.4	4547.5	3914.4	3845.9	3605.9	3853.8	4041.1	4357.6
57.5°	4703.2	4729.5	4845.6	5127.9	5059.2	4341.8	4265.3	4056.9	4349.7	4537.0	5061.9
60°	4882.6	4924.8	5117.2	5483.9	5526.2	4790.3	4711.0	4560.7	4858.8	5048.8	5876.9
62.5°	4943.2	5003.8	5399.5	5858.5	6014.1	5280.8	5209.6	5109.4	5394.2	5565.6	6689.4
65°	4539.6	4655.6	5555.2	6051.1	6539.0	5871.7	5811.1	5724.0	5927.1	6040.5	7240.7
67.5°	4428.9	4481.6	5251.8	6328.1	7032.4	6631.4	6570.8	6420.4	6425.6	6378.1	7420.2
70°	4273.2	4331.2	4940.6	6536.4	7739.3	7670.6	7596.8	7153.6	6881.9	6594.5	7066.6
72.5°	3640.1	3621.6	4257.4	5974.6	8079.5	8957.9	8870.9	7942.4	7219.7	6407.2	5964.0
75°	2044.2	1991.5	2582.4	4133.4	7377.8	9469.6	9467.0	8340.7	6982.2	5581.5	4059.5
77.5°	593.5	577.7	852.0	1733.1	4966.9	8227.2	8327.5	7522.9	5826.9	4009.4	2228.9
80°	279.6	284.8	366.7	572.4	2120.7	5309.9	5597.4	4953.7	3481.9	1849.1	920.6
82.5°	176.8	179.4	250.6	369.3	896.8	2411.0	2648.3	2228.9	1379.5	799.2	406.2
85°	110.8	110.8	166.2	242.7	535.5	770.3	836.2	759.7	590.9	435.2	221.6
87.5°	60.6	60.6	100.2	139.9	292.9	247.9	255.8	303.3	369.3	266.4	110.8
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°	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1
2.5°	1387.5	1382.2	1374.3	1371.6	1369.0	1366.4	1369.0	1374.3	1369.0	1369.0	1371.6
5°	1379.5	1374.3	1363.8	1363.8	1366.4	1369.0	1382.2	1390.1	1392.7	1392.7	1392.7
7.5°	1379.5	1371.6	1363.8	1366.4	1371.6	1382.2	1403.3	1416.4	1427.0	1429.6	1429.6
10°	1392.7	1382.2	1376.8	1382.2	1398.0	1405.9	1427.0	1448.1	1461.4	1466.6	1466.6
12.5°	1416.4	1405.9	1405.9	1416.4	1437.7	1448.1	1466.6	1482.4	1498.3	1506.1	1506.1
15°	1456.1	1442.9	1445.5	1464.0	1487.7	1498.3	1511.5	1516.7	1529.9	1540.4	1540.4
17.5°	1493.0	1479.8	1485.1	1506.1	1522.0	1527.2	1535.2	1532.6	1537.9	1545.7	1548.4
20°	1535.2	1522.0	1524.6	1537.9	1540.4	1535.2	1535.2	1527.2	1524.6	1537.9	1543.1
22.5°	1577.3	1564.1	1561.6	1553.6	1540.4	1527.2	1519.4	1511.5	1506.1	1519.4	1524.6
25°	1627.5	1609.1	1595.8	1561.6	1527.2	1503.5	1493.0	1487.7	1485.1	1498.3	1503.5
27.5°	1682.9	1664.4	1624.9	1551.1	1495.6	1456.1	1448.1	1448.1	1453.3	1461.4	1466.6
30°	1735.7	1717.2	1646.0	1527.2	1440.2	1382.2	1374.3	1382.2	1395.4	1403.3	1411.2
32.5°	1788.5	1770.0	1659.2	1490.3	1358.4	1284.6	1279.3	1292.5	1313.7	1318.9	1324.1
35°	1859.6	1841.1	1675.0	1437.7	1255.6	1176.5	1171.1	1179.1	1197.6	1205.4	1213.4
37.5°	1959.9	1949.3	1698.8	1379.5	1160.7	1073.6	1057.7	1052.5	1063.0	1060.4	1071.0
40°	2091.8	2099.6	1740.9	1303.0	1068.3	978.6	944.3	928.4	918.0	896.8	907.4
42.5°	2284.3	2289.6	1788.5	1216.0	989.2	889.0	844.1	815.1	794.0	759.7	765.0
45°	2566.6	2521.7	1843.9	1123.7	918.0	817.7	765.0	730.6	701.7	672.6	675.2
47.5°	2941.2	2803.9	1904.5	1047.2	846.8	759.7	712.2	672.6	638.3	614.6	617.2
50°	3402.8	3154.8	1965.1	976.0	775.5	714.9	672.6	630.4	596.1	572.4	569.8
52.5°	4012.1	3576.8	2004.7	896.8	704.2	675.2	638.3	598.7	556.5	527.5	524.9
55°	4645.1	4067.5	2039.0	801.9	635.7	630.4	612.0	567.2	517.1	480.0	474.8
57.5°	5341.4	4592.3	2065.3	709.5	582.9	593.5	588.3	535.5	480.0	445.8	443.1
60°	5974.6	5135.7	1981.0	627.8	535.5	556.5	561.8	517.1	488.0	495.9	498.6
62.5°	6612.9	5555.2	1659.2	567.2	503.8	532.8	577.7	575.0	561.8	575.0	577.7
65°	6842.4	5642.2	1176.5	517.1	472.1	543.3	627.8	622.6	561.8	538.1	532.8
67.5°	6713.1	5383.8	791.4	477.5	448.4	556.5	680.5	622.6	540.8	509.0	498.6
70°	6098.6	4748.0	580.2	437.9	427.3	554.0	709.5	619.8	530.2	495.9	482.7
72.5°	4864.1	3663.9	466.9	401.0	395.6	540.8	725.4	614.6	519.6	482.7	466.9
75°	3149.5	2279.0	393.0	364.1	348.2	519.6	717.5	598.7	506.4	459.0	448.4
77.5°	1461.4	981.2	335.0	321.8	303.3	488.0	693.7	567.2	477.5	432.5	419.4
80°	680.5	464.3	282.2	279.6	271.7	461.6	662.1	530.2	443.1	406.2	385.1
82.5°	364.1	279.6	229.5	229.5	237.4	429.9	622.6	485.3	398.2	379.9	324.5
85°	192.6	160.9	166.2	179.4	203.1	379.9	569.8	437.9	348.2	290.2	282.2
87.5°	97.6	102.9	102.9	121.4	155.5	308.6	469.5	361.4	295.4	237.4	232.1
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)