

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: P573569

Luminaire Tested: **ARCH-S-PA2-90-740-U-T4W**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P573569
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-19)
Test Lab: INNOVATION CENTER
Issue Date: 10/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA2-90-740-U-T4W
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 910mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12793 lumens
Efficiency: N/A
Efficacy: 138.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

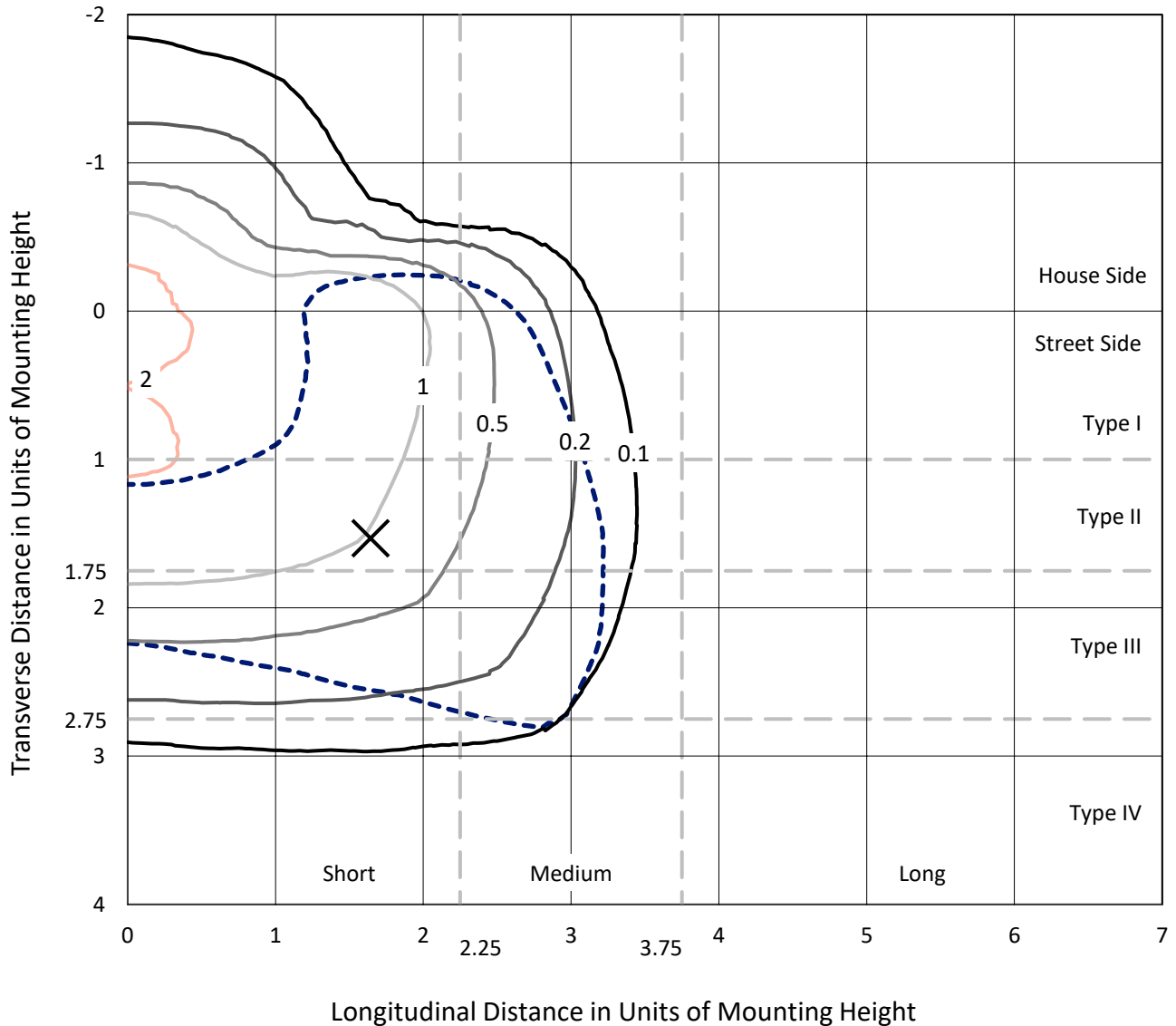
Input Watts (W): 92.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

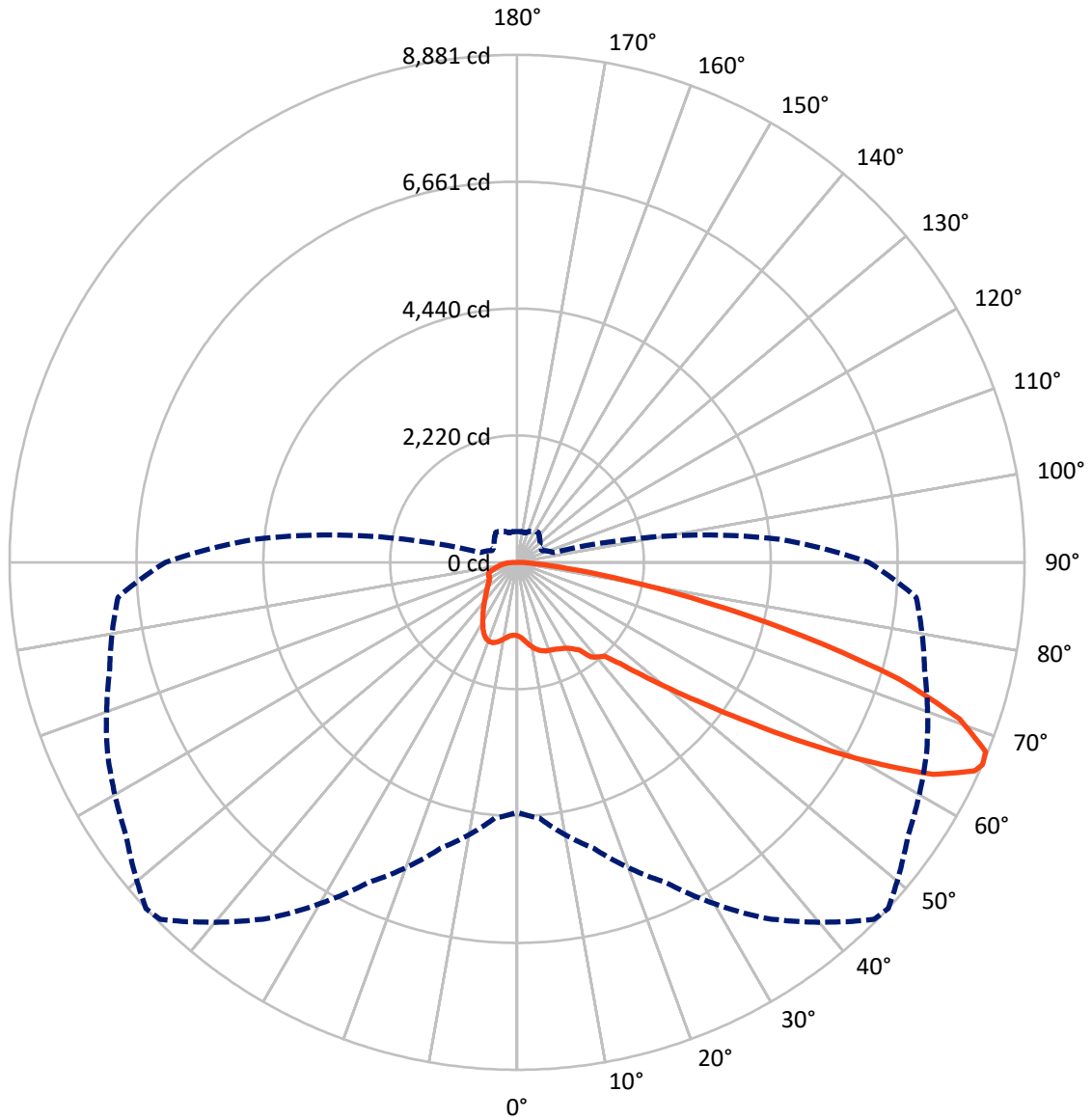
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

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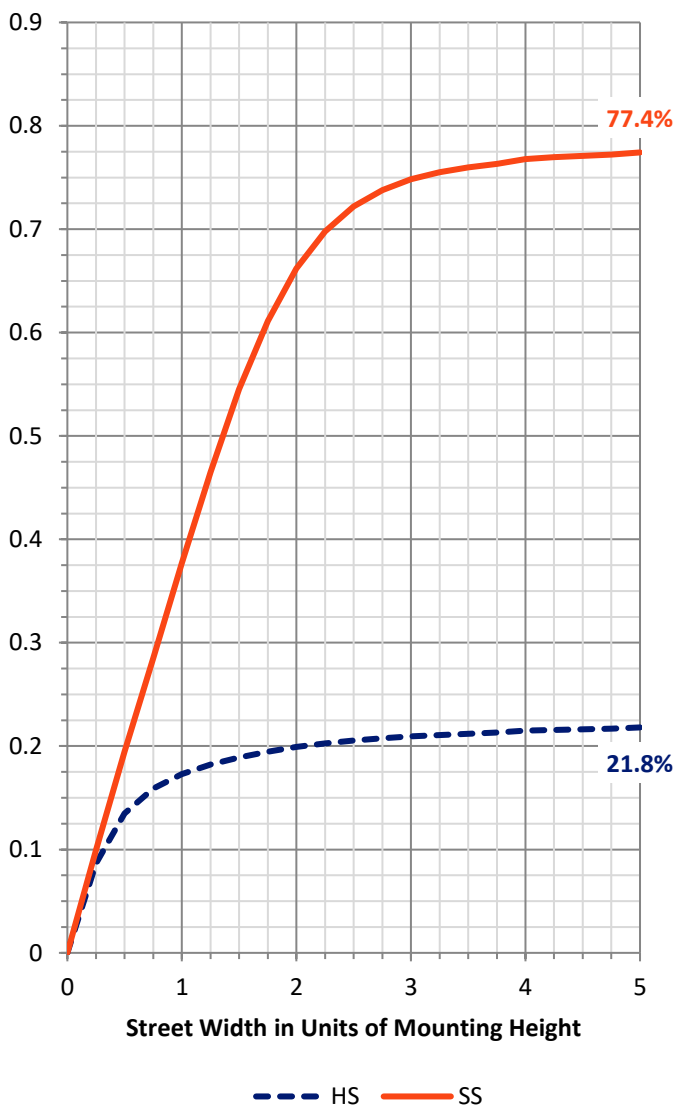
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2844.3	0.0	2844.3
	% Fixture	22.2	0.0	22.2
Street Side	Lumens	9948.7	0.0	9948.7
	% Fixture	77.8	0.0	77.8
Total	Lumens	12793.0	0.0	12793.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.9	1.0
10°-20°	429.4	3.4
20°-30°	716.1	5.6
30°-40°	1040.0	8.1
40°-50°	1590.5	12.4
50°-60°	3006.4	23.5
60°-70°	3884.7	30.4
70°-80°	1746.1	13.6
80°-90°	249.1	1.9
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°	12793.0	100.0
0°-180°	12793.0	100.0



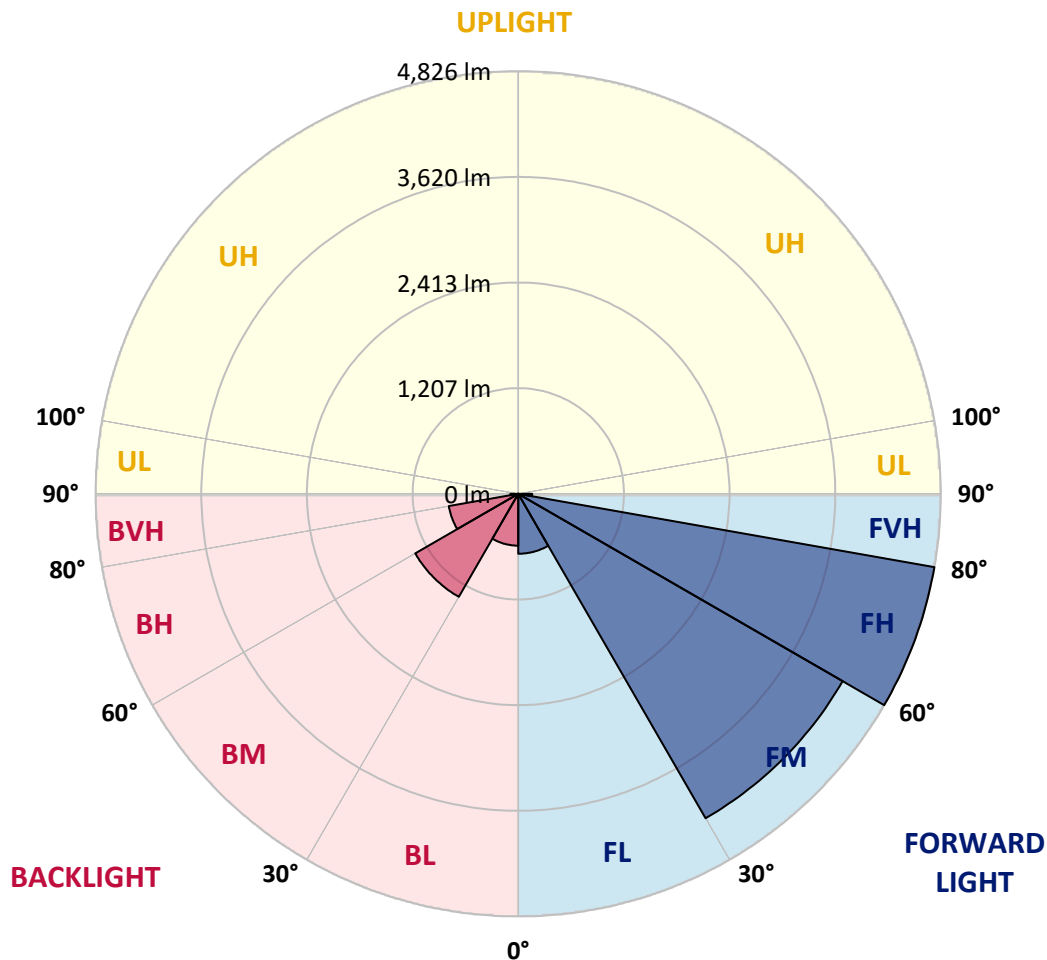
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	684.5	5.4			
FM (30°-60°)	4278.2	33.4			
FH (60°-80°)	4826.0	37.7			G2/5000
FVH (80°-90°)	160.0	1.3			G2/225
BL (0°-30°)	591.9	4.6	B2/1000		
BM (30°-60°)	1358.6	10.6	B2/2500		
BH (60°-80°)	804.8	6.3	B2/1000		G2/1000
BVH (80°-90°)	89.0	0.7			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	1286.1	1286.1	1286.1	1286.1	1286.1	1286.1	1286.1	1286.1	1286.1	1286.1	1286.1
2.5°	1359.1	1348.7	1341.7	1338.2	1331.3	1317.4	1317.4	1313.9	1300.0	1293.0	1289.6
5°	1466.8	1459.9	1442.5	1428.6	1407.7	1379.9	1376.5	1355.6	1327.8	1306.9	1293.0
7.5°	1571.1	1564.2	1546.8	1525.9	1491.2	1456.4	1446.0	1418.2	1373.0	1341.7	1317.4
10°	1661.5	1651.1	1630.2	1602.4	1564.2	1525.9	1515.5	1484.2	1439.0	1393.8	1352.1
12.5°	1720.6	1713.6	1689.3	1654.5	1612.8	1574.6	1567.6	1539.8	1494.6	1446.0	1393.8
15°	1748.4	1744.9	1717.1	1682.3	1640.6	1609.3	1605.9	1581.5	1543.3	1494.6	1435.5
17.5°	1741.4	1738.0	1713.6	1678.9	1647.6	1630.2	1630.2	1612.8	1581.5	1539.8	1477.3
20°	1706.7	1706.7	1685.8	1661.5	1644.1	1640.6	1640.6	1637.2	1616.3	1581.5	1519.0
22.5°	1671.9	1671.9	1658.0	1640.6	1637.2	1651.1	1654.5	1661.5	1654.5	1626.7	1571.1
25°	1678.9	1675.4	1658.0	1637.2	1640.6	1671.9	1678.9	1696.2	1692.8	1671.9	1623.2
27.5°	1755.3	1751.9	1706.7	1665.0	1661.5	1699.7	1706.7	1731.0	1731.0	1713.6	1682.3
30°	1946.5	1953.5	1870.0	1765.8	1713.6	1738.0	1744.9	1772.7	1786.6	1793.6	1769.2
32.5°	2238.5	2228.1	2102.9	1932.6	1817.9	1793.6	1804.0	1828.3	1877.0	1890.9	1831.8
35°	2533.9	2540.9	2419.2	2203.7	1984.7	1894.4	1887.4	1922.2	1995.2	1932.6	1828.3
37.5°	2808.5	2798.1	2655.6	2422.7	2203.7	2099.4	2102.9	2089.0	2026.5	1901.3	1852.7
40°	3107.5	3079.7	2961.5	2662.5	2384.5	2210.7	2179.4	2061.2	2009.1	1956.9	1950.0
42.5°	3402.9	3406.4	3309.1	3013.6	2600.0	2290.6	2242.0	2120.3	2155.1	2144.6	2137.7
45°	3774.8	3774.8	3677.5	3402.9	2940.6	2589.6	2523.5	2377.5	2433.1	2474.8	2558.3
47.5°	4115.5	4094.6	4066.8	3833.9	3385.5	2978.9	2951.0	2784.2	2930.2	3058.8	3229.1
50°	4477.0	4449.2	4431.8	4289.3	3969.5	3569.8	3486.3	3312.5	3632.3	3872.2	4188.5
52.5°	5040.1	4991.4	4901.0	4821.1	4696.0	4233.7	4129.4	4000.8	4414.4	4716.8	5363.3
55°	5547.5	5505.8	5418.9	5478.0	5460.6	5040.1	4949.7	4828.0	5276.4	5644.9	6385.2
57.5°	5735.2	5738.7	5856.9	6173.2	6340.1	6096.7	5968.1	5846.5	6225.3	6395.7	7063.0
60°	5822.1	5811.7	6117.6	6632.0	7174.3	7247.3	7083.9	6833.6	6976.1	6986.6	7636.6
62.5°	5634.4	5662.3	6082.8	6823.2	7674.8	8199.7	8175.3	7737.4	7605.3	7459.3	7789.5
65°	4921.9	4960.1	5578.8	6482.6	7754.7	8776.7	8801.0	8290.0	7921.6	7514.9	7355.0
66°	4379.6	4494.3	5182.6	6187.1	7608.8	8835.8	8880.9	8349.1	7907.7	7382.8	7010.9
67.5°	3674.0	3667.1	4435.3	5537.1	7202.1	8783.6	8842.7	8265.7	7720.0	6993.5	6322.7
70°	2248.9	2318.4	2978.9	4132.9	5961.2	8133.6	8213.6	7678.3	6910.1	5922.9	4675.1
72.5°	1154.0	1268.7	1703.2	2686.9	4327.5	6722.4	6993.5	6447.8	5648.3	4285.8	2853.7
75°	611.8	604.8	802.9	1456.4	2763.3	5043.5	5186.1	4835.0	3903.4	2554.8	1452.9
77.5°	326.7	344.1	420.6	747.3	1519.0	3222.2	3402.9	3117.9	2224.6	1306.9	695.2
80°	222.5	232.9	285.0	420.6	823.8	1748.4	1915.2	1661.5	1164.4	618.7	326.7
82.5°	142.5	149.5	194.7	260.7	493.6	848.1	893.3	851.6	570.0	351.1	198.1
85°	86.9	90.4	118.2	166.8	309.4	344.1	358.0	361.5	319.8	229.4	107.8
87.5°	41.7	45.2	66.0	83.4	146.0	125.1	114.7	118.2	177.3	135.6	48.7
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°	1286.1	1286.1	1286.1	1286.1	1286.1	1286.1	1286.1	1286.1	1286.1	1286.1	1286.1
2.5°	1286.1	1282.6	1275.7	1272.2	1275.7	1275.7	1275.7	1279.1	1286.1	1286.1	1289.6
5°	1286.1	1279.1	1272.2	1272.2	1279.1	1286.1	1293.0	1306.9	1313.9	1317.4	1317.4
7.5°	1303.5	1296.5	1289.6	1289.6	1300.0	1313.9	1327.8	1345.2	1362.6	1376.5	1376.5
10°	1338.2	1327.8	1320.8	1324.3	1341.7	1359.1	1376.5	1397.3	1414.7	1432.1	1432.1
12.5°	1376.5	1366.0	1355.6	1362.6	1386.9	1407.7	1425.1	1435.5	1452.9	1466.8	1466.8
15°	1414.7	1397.3	1393.8	1407.7	1432.1	1446.0	1452.9	1452.9	1459.9	1473.8	1473.8
17.5°	1456.4	1439.0	1435.5	1449.5	1470.3	1470.3	1456.4	1446.0	1442.5	1452.9	1456.4
20°	1498.1	1480.7	1480.7	1491.2	1487.7	1463.4	1439.0	1421.6	1407.7	1418.2	1421.6
22.5°	1550.3	1532.9	1525.9	1512.0	1480.7	1432.1	1393.8	1373.0	1362.6	1369.5	1376.5
25°	1602.4	1588.5	1571.1	1522.4	1449.5	1373.0	1324.3	1306.9	1310.4	1324.3	1331.3
27.5°	1668.4	1661.5	1619.8	1515.5	1393.8	1289.6	1240.9	1237.4	1251.3	1272.2	1282.6
30°	1748.4	1738.0	1665.0	1494.6	1317.4	1192.2	1157.5	1164.4	1185.3	1202.7	1213.1
32.5°	1804.0	1797.0	1685.8	1446.0	1223.5	1105.3	1077.5	1077.5	1088.0	1112.3	1122.7
35°	1821.4	1849.2	1699.7	1373.0	1112.3	1028.9	1001.1	983.7	983.7	1004.5	1011.5
37.5°	1880.5	1943.0	1706.7	1275.7	1021.9	959.4	924.6	893.3	882.9	879.4	879.4
40°	2016.0	2089.0	1703.2	1150.5	935.0	889.8	848.1	813.4	785.6	747.3	750.8
42.5°	2252.4	2308.0	1692.8	1018.4	858.5	827.3	785.6	743.8	698.7	656.9	653.5
45°	2707.7	2624.3	1665.0	903.7	789.0	771.7	733.4	684.8	629.1	590.9	590.9
47.5°	3427.2	3197.8	1647.6	796.0	726.5	723.0	688.2	636.1	580.5	552.7	549.2
50°	4414.4	3990.3	1675.4	719.5	670.9	681.3	653.5	604.8	559.6	535.3	531.8
52.5°	5547.5	4841.9	1706.7	670.9	629.1	650.0	636.1	590.9	545.7	524.9	521.4
55°	6423.5	5533.6	1661.5	625.7	587.4	618.7	618.7	577.0	538.8	517.9	517.9
57.5°	7038.7	5811.7	1505.1	584.0	552.7	590.9	601.3	570.0	535.3	528.3	528.3
60°	7302.9	5797.8	1230.5	545.7	528.3	563.1	590.9	563.1	542.2	559.6	563.1
62.5°	7160.4	5495.4	955.9	517.9	511.0	556.1	601.3	590.9	566.6	580.5	587.4
65°	6517.3	4963.6	719.5	493.6	490.1	559.6	629.1	608.3	549.2	552.7	556.1
66°	6155.8	4605.6	660.4	486.6	483.2	563.1	643.0	601.3	535.3	542.2	538.8
67.5°	5384.2	4042.5	580.5	472.7	469.2	563.1	660.4	587.4	517.9	528.3	517.9
70°	3948.6	2860.7	497.1	455.3	448.4	552.7	656.9	559.6	479.7	472.7	455.3
72.5°	2290.6	1731.0	441.4	434.5	417.1	486.6	615.2	514.4	438.0	417.1	399.7
75°	1126.2	879.4	392.8	410.2	365.0	427.5	556.1	476.2	403.2	375.4	365.0
77.5°	517.9	444.9	354.5	375.4	323.3	368.4	507.5	434.5	358.0	316.3	305.9
80°	281.5	278.1	298.9	312.8	271.1	323.3	448.4	378.9	302.4	257.2	243.3
82.5°	173.8	177.3	219.0	239.8	212.0	281.5	396.3	316.3	229.4	180.7	184.2
85°	90.4	100.8	146.0	159.9	139.0	208.6	298.9	212.0	128.6	93.8	93.8
87.5°	31.3	41.7	73.0	86.9	76.5	125.1	187.7	100.8	27.8	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)