

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: P399547

Luminaire Tested: **ARCH-L-PA3-160-722-U-T3-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399547  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-160-722-U-T3-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2200K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13380 lumens  
Efficiency: N/A  
Efficacy: 82.6 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B1 - U0 - G3

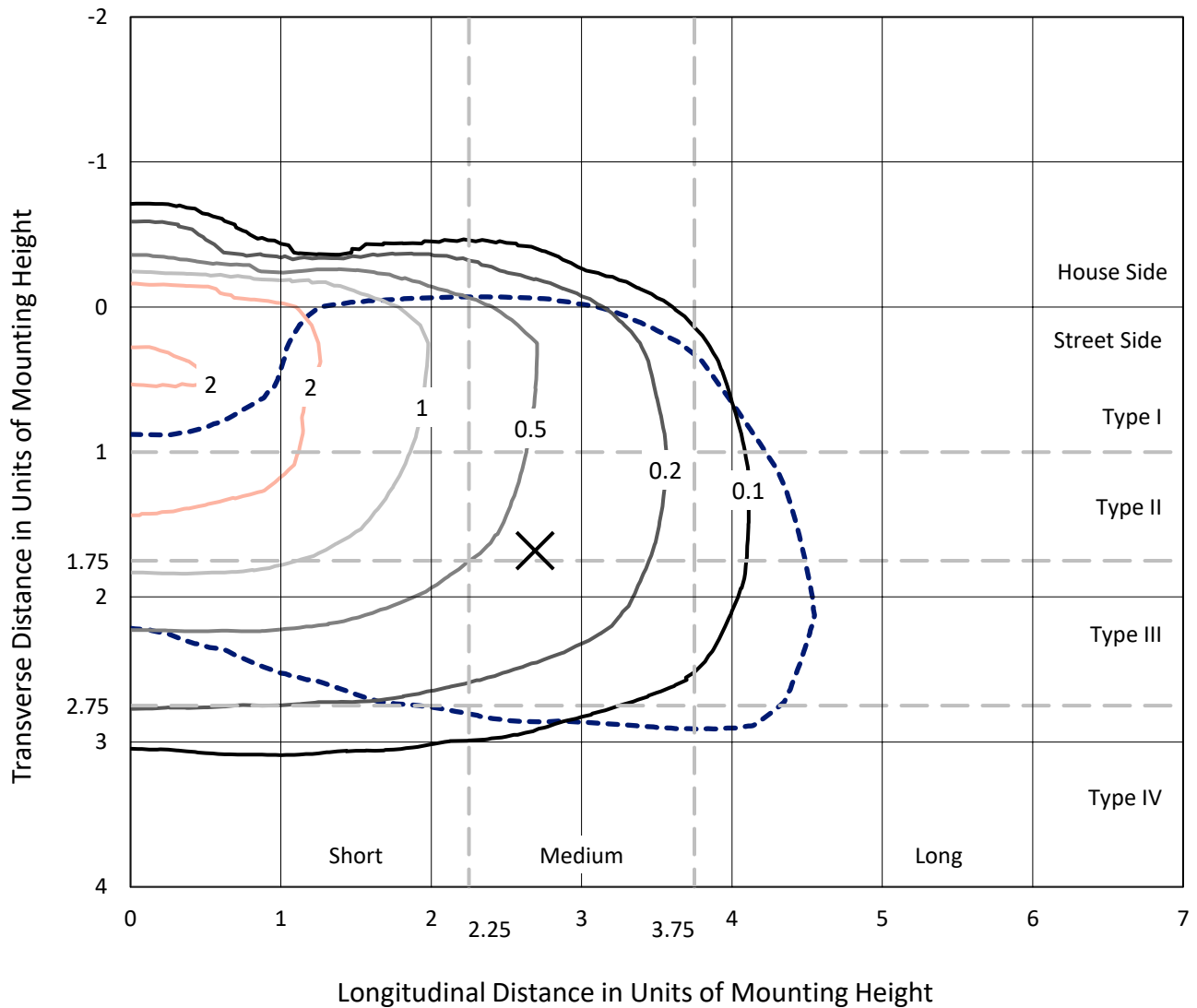
Input Watts (W): 162  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P399547  
 CATALOG NUMBER: ARCH-L-PA3-160-722-U-T3-HSS

### Iso-Footcandle Lines of Horizontal Illumination

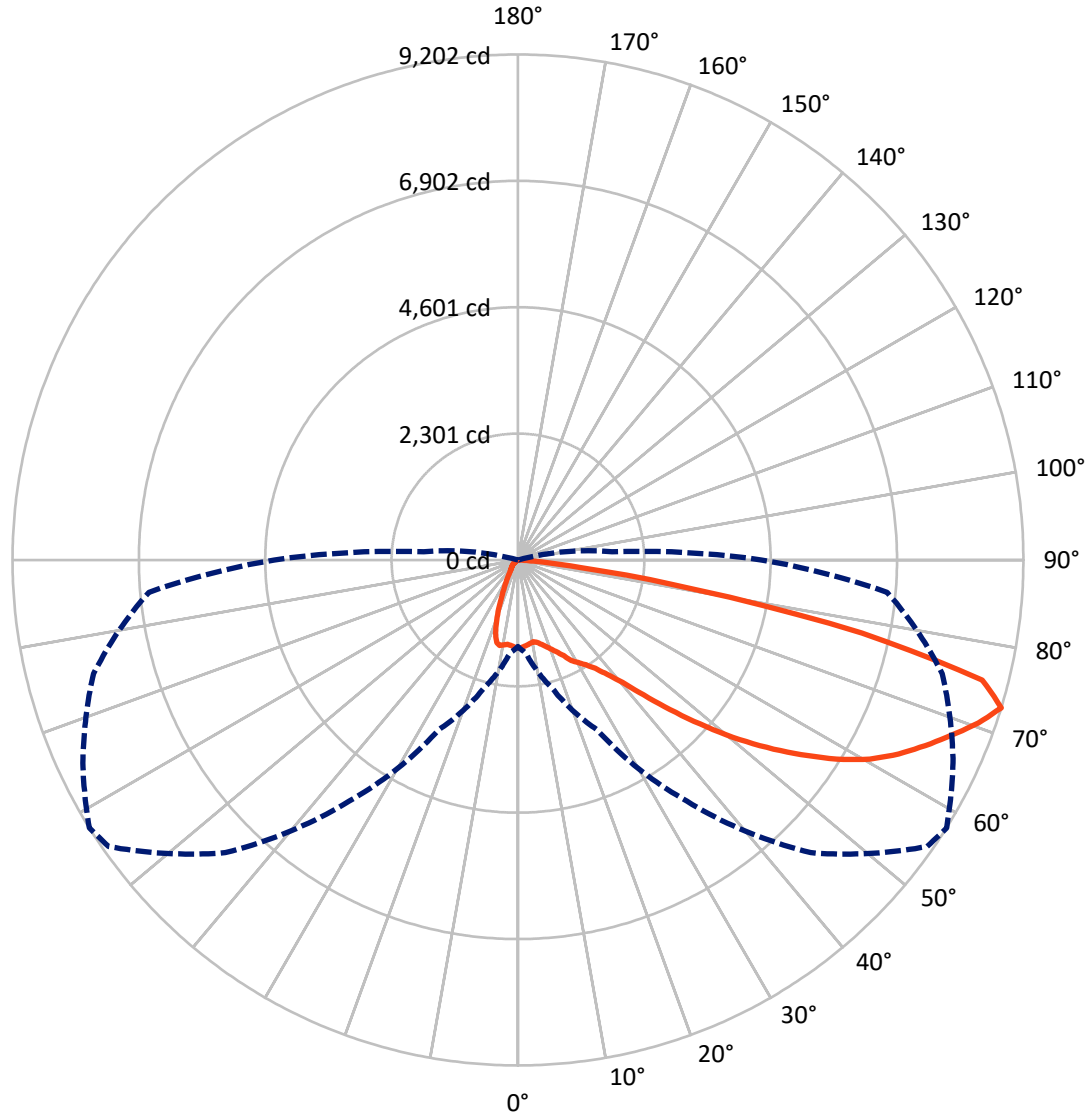
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P399547  
CATALOG NUMBER: ARCH-L-PA3-160-722-U-T3-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P399547  
 CATALOG NUMBER: ARCH-L-PA3-160-722-U-T3-HSS

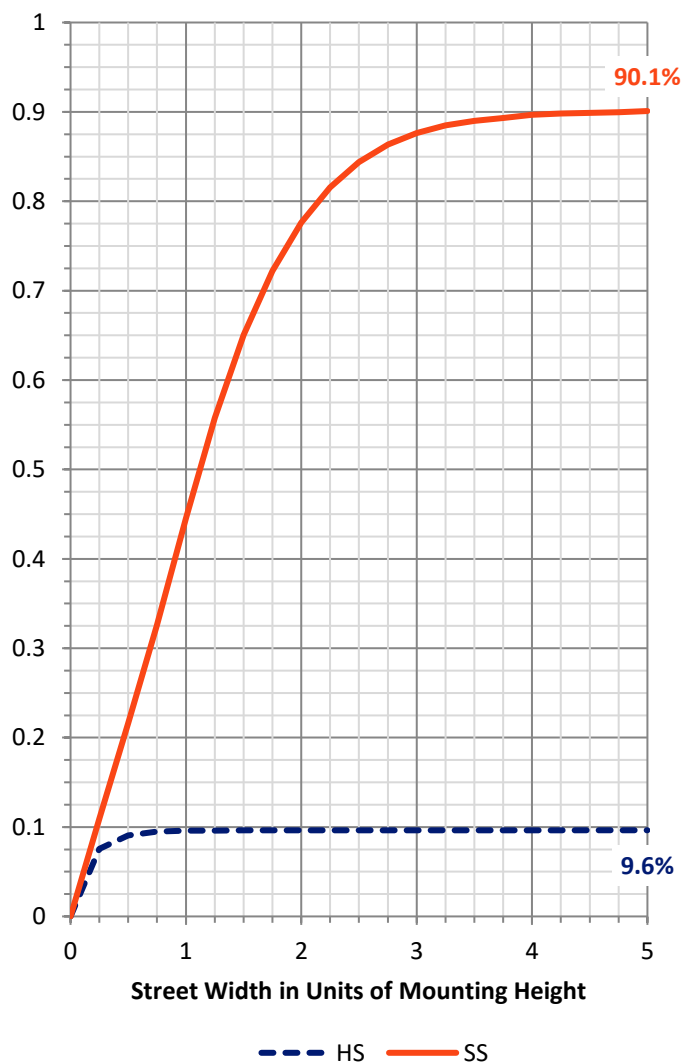
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1301.1	0.0	1301.1
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	12078.9	0.0	12078.9
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	13380.0	0.0	13380.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	147.4	1.1
10°-20°	383.8	2.9
20°-30°	602.9	4.5
30°-40°	1039.7	7.8
40°-50°	1978.1	14.8
50°-60°	3132.8	23.4
60°-70°	3655.6	27.3
70°-80°	2289.5	17.1
80°-90°	150.3	1.1
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°	13380.0	100.0
0°-180°	13380.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P399547

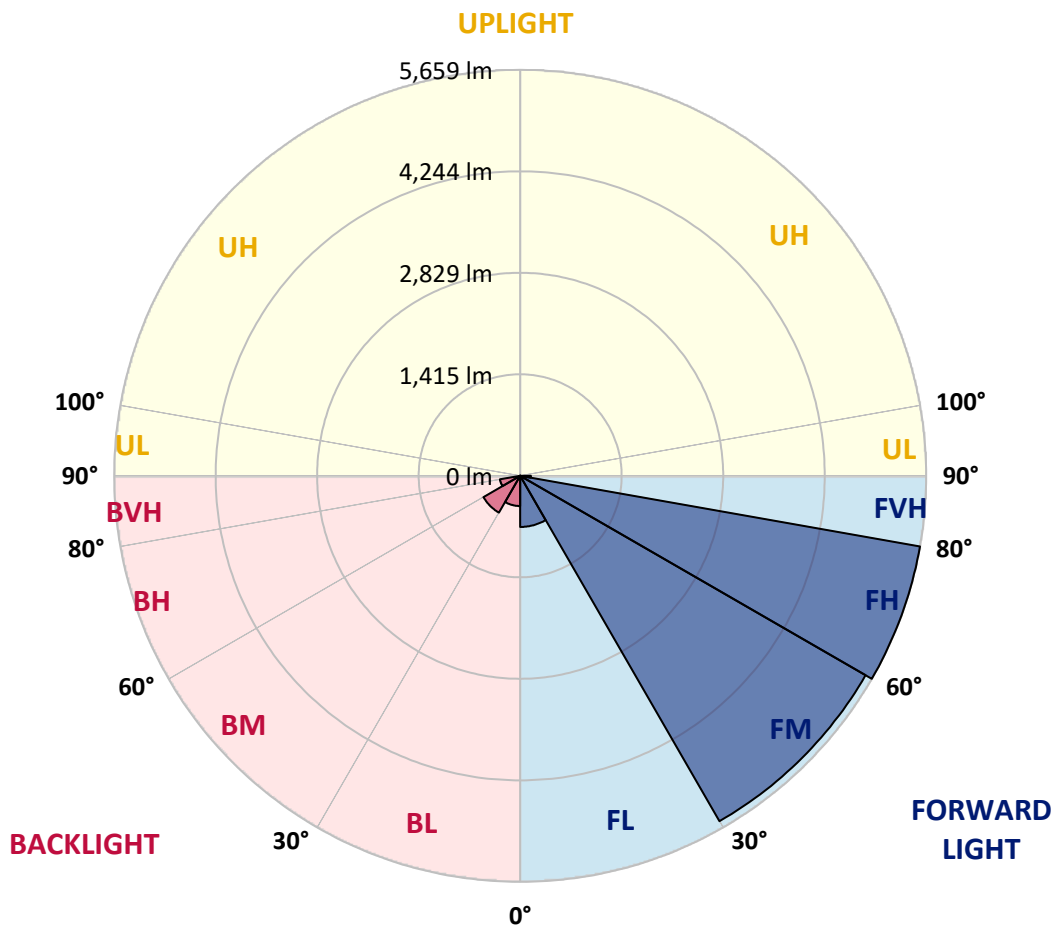
CATALOG NUMBER: ARCH-L-PA3-160-722-U-T3-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	712.7	5.3			
FM (30°-60°)	5558.6	41.5			
FH (60°-80°)	5658.8	42.3			G3/7500
FVH (80°-90°)	148.8	1.1			G2/225
BL (0°-30°)	421.3	3.1	B1/500		
BM (30°-60°)	592.0	4.4	B1/1000		
BH (60°-80°)	286.3	2.1	B1/500		G1/500
BVH (80°-90°)	1.5	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G3**

Type IV Medium





REPORT NUMBER: P399547

CATALOG NUMBER: ARCH-L-PA3-160-722-U-T3-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1605.5	1605.5	1605.5	1605.5	1605.5	1605.5	1605.5	1605.5	1605.5	1605.5	1605.5
2.5°	1598.3	1591.2	1588.8	1586.4	1588.8	1591.2	1584.0	1591.2	1586.4	1588.8	1593.6
5°	1540.9	1533.7	1531.3	1533.7	1540.9	1552.9	1557.7	1564.8	1564.8	1572.0	1574.4
7.5°	1476.3	1471.5	1469.1	1473.9	1488.3	1514.6	1529.0	1538.5	1548.1	1562.4	1576.8
10°	1440.4	1438.0	1435.6	1442.8	1457.2	1481.1	1500.2	1514.6	1550.5	1591.2	1617.5
12.5°	1416.5	1416.5	1421.3	1435.6	1454.8	1473.9	1519.4	1538.5	1593.6	1655.8	1691.7
15°	1397.4	1397.4	1404.5	1430.8	1457.2	1502.6	1569.6	1591.2	1655.8	1732.3	1780.2
17.5°	1383.0	1387.8	1392.6	1418.9	1469.1	1545.7	1624.7	1655.8	1734.7	1818.5	1871.1
20°	1385.4	1390.2	1392.6	1418.9	1490.7	1595.9	1696.4	1732.3	1823.3	1911.8	1964.4
22.5°	1399.7	1406.9	1409.3	1445.2	1529.0	1648.6	1777.8	1818.5	1916.6	2009.9	2050.6
25°	1459.6	1464.3	1450.0	1481.1	1584.0	1729.9	1883.1	1926.1	2024.2	2110.4	2143.9
27.5°	1662.9	1667.7	1588.8	1552.9	1627.1	1796.9	2012.3	2072.1	2194.1	2251.6	2256.3
30°	2103.2	2108.0	1952.5	1782.6	1729.9	1854.4	2084.1	2167.8	2325.7	2390.3	2361.6
32.5°	2670.3	2665.5	2452.5	2201.3	1974.0	1954.9	2187.0	2275.5	2447.8	2510.0	2488.4
35°	3239.7	3246.9	3065.1	2687.0	2361.6	2143.9	2318.6	2421.4	2629.6	2718.1	2679.9
37.5°	3629.8	3677.6	3598.7	3189.5	2837.8	2493.2	2531.5	2641.6	2902.4	3022.0	2940.7
40°	4180.1	4168.1	3976.7	3675.2	3364.2	3010.0	2876.1	2928.7	3227.8	3388.1	3261.3
42.5°	4919.4	4895.5	4570.1	4275.8	3928.9	3639.3	3366.6	3357.0	3601.1	3787.7	3603.4
45°	5589.4	5553.5	5331.0	5046.3	4665.8	4333.2	3964.7	3881.0	4050.9	4208.8	3993.5
47.5°	6123.0	6063.2	5905.2	5754.5	5661.2	5144.4	4591.6	4464.8	4551.0	4668.2	4364.3
50°	6754.7	6589.6	6359.9	6268.9	6462.8	6063.2	5194.6	5072.6	5067.8	5134.8	4747.2
52.5°	7041.8	6742.7	6613.5	6690.1	7032.2	6917.4	5845.4	5670.8	5601.4	5608.5	5103.7
55°	6694.8	6661.3	6730.7	6970.0	7417.4	7350.5	6469.9	6254.6	6151.7	6022.5	5445.8
57.5°	6300.0	6402.9	6678.1	7135.1	7905.6	7802.7	7084.9	6840.8	6651.8	6355.1	5826.3
60°	5936.4	6041.6	6496.2	7173.4	8173.5	8238.2	7596.9	7364.8	7084.9	6694.8	6245.0
62.5°	5383.6	5465.0	6103.8	7118.4	8056.3	8491.8	7953.4	7778.7	7517.9	7017.9	6725.9
65°	4761.5	4814.2	5445.8	6678.1	7826.6	8463.1	8247.7	8149.6	7896.0	7355.2	7202.1
67.5°	4079.6	4141.8	4668.2	5886.1	7376.8	8329.1	8525.3	8515.7	8226.2	7728.5	7546.7
70°	3294.8	3299.6	3735.0	4881.2	6592.0	8061.1	8869.8	8891.4	8542.0	8008.5	7561.0
72.5°	1576.8	1706.0	2421.4	3407.2	5357.3	7534.7	9094.7	9202.4	8740.6	7998.9	6745.1
75°	361.3	373.3	705.9	1619.9	3141.6	5783.2	8532.5	8733.4	8257.3	6917.4	4752.0
77.5°	131.6	138.8	198.6	473.8	1208.3	2988.5	6106.2	6400.5	6103.8	4472.0	2246.8
80°	88.5	86.1	102.9	210.6	555.1	847.0	3122.5	3297.2	3010.0	1526.6	538.4
82.5°	45.5	47.9	71.8	117.2	373.3	294.3	1043.2	1134.2	933.2	306.3	100.5
85°	21.5	21.5	40.7	74.2	157.9	102.9	232.1	279.9	251.2	134.0	33.5
87.5°	21.5	21.5	38.3	47.9	81.4	43.1	57.4	71.8	67.0	71.8	12.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P399547

CATALOG NUMBER: ARCH-L-PA3-160-722-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1605.5	1605.5	1605.5	1605.5	1605.5	1605.5	1605.5	1605.5	1605.5	1605.5	1605.5
2.5°	1593.6	1591.2	1588.8	1593.6	1591.2	1595.9	1595.9	1600.7	1600.7	1595.9	1593.6
5°	1572.0	1567.2	1562.4	1562.4	1560.1	1564.8	1579.2	1591.2	1593.6	1586.4	1584.0
7.5°	1574.4	1574.4	1569.6	1560.1	1543.3	1543.3	1543.3	1557.7	1564.8	1560.1	1557.7
10°	1617.5	1619.9	1607.9	1586.4	1557.7	1531.3	1481.1	1406.9	1337.5	1318.4	1311.2
12.5°	1691.7	1694.0	1670.1	1631.8	1572.0	1416.5	1225.1	1048.0	911.6	873.3	866.2
15°	1780.2	1782.6	1739.5	1677.3	1495.5	1134.2	849.4	648.4	528.8	500.1	497.7
17.5°	1871.1	1866.3	1801.7	1682.1	1268.1	804.0	516.8	413.9	382.8	375.7	378.1
20°	1959.6	1945.3	1856.8	1593.6	976.2	526.4	378.1	354.1	346.9	342.2	342.2
22.5°	2041.0	2012.3	1902.2	1418.9	684.3	378.1	337.4	332.6	323.0	315.8	313.4
25°	2122.3	2081.7	1930.9	1191.6	459.4	330.2	318.2	308.7	296.7	287.1	284.7
27.5°	2220.4	2163.0	1916.6	904.5	344.6	306.3	296.7	282.3	265.6	251.2	246.5
30°	2313.8	2249.2	1835.2	624.5	294.3	282.3	268.0	246.5	224.9	208.2	203.4
32.5°	2431.0	2356.8	1689.3	409.2	256.0	246.5	232.1	205.8	177.1	157.9	153.1
35°	2598.5	2514.8	1502.6	287.1	224.9	208.2	189.0	160.3	129.2	114.9	112.5
37.5°	2833.0	2720.5	1268.1	232.1	198.6	174.7	146.0	117.2	95.7	83.7	81.4
40°	3120.1	2947.8	1007.3	205.8	177.1	146.0	110.1	83.7	69.4	59.8	59.8
42.5°	3431.2	3160.8	741.7	189.0	155.5	119.6	81.4	59.8	50.2	45.5	43.1
45°	3751.8	3349.8	500.1	174.7	136.4	90.9	57.4	40.7	33.5	33.5	31.1
47.5°	4084.4	3476.6	323.0	157.9	114.9	67.0	38.3	28.7	23.9	23.9	23.9
50°	4414.6	3543.6	229.7	143.6	93.3	45.5	28.7	21.5	19.1	19.1	19.1
52.5°	4653.9	3500.6	184.2	124.4	71.8	33.5	21.5	16.7	14.4	14.4	14.4
55°	4862.0	3426.4	160.3	107.7	52.6	23.9	16.7	14.4	12.0	12.0	12.0
57.5°	5075.0	3330.7	143.6	90.9	38.3	16.7	12.0	9.6	9.6	9.6	9.6
60°	5268.8	3168.0	124.4	71.8	26.3	12.0	9.6	7.2	7.2	7.2	7.2
62.5°	5457.8	3029.2	107.7	55.0	19.1	9.6	4.8	4.8	2.4	2.4	2.4
65°	5565.5	2842.6	86.1	35.9	12.0	7.2	2.4	2.4	0.0	0.0	0.0
67.5°	5532.0	2620.0	59.8	21.5	7.2	4.8	2.4	0.0	0.0	0.0	0.0
70°	5299.9	2320.9	35.9	12.0	7.2	4.8	2.4	0.0	0.0	0.0	0.0
72.5°	4438.5	1718.0	21.5	9.6	4.8	2.4	0.0	0.0	0.0	0.0	0.0
75°	2964.6	789.6	12.0	7.2	2.4	2.4	0.0	0.0	0.0	0.0	0.0
77.5°	1356.7	236.9	7.2	4.8	2.4	0.0	0.0	0.0	0.0	0.0	0.0
80°	272.8	62.2	4.8	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	57.4	12.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.8	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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)