

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: P399441

Luminaire Tested: **ARCH-L-PA3-140-750-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399441  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-140-750-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16203 lumens  
Efficiency: N/A  
Efficacy: 113.3 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B1 - U0 - G4

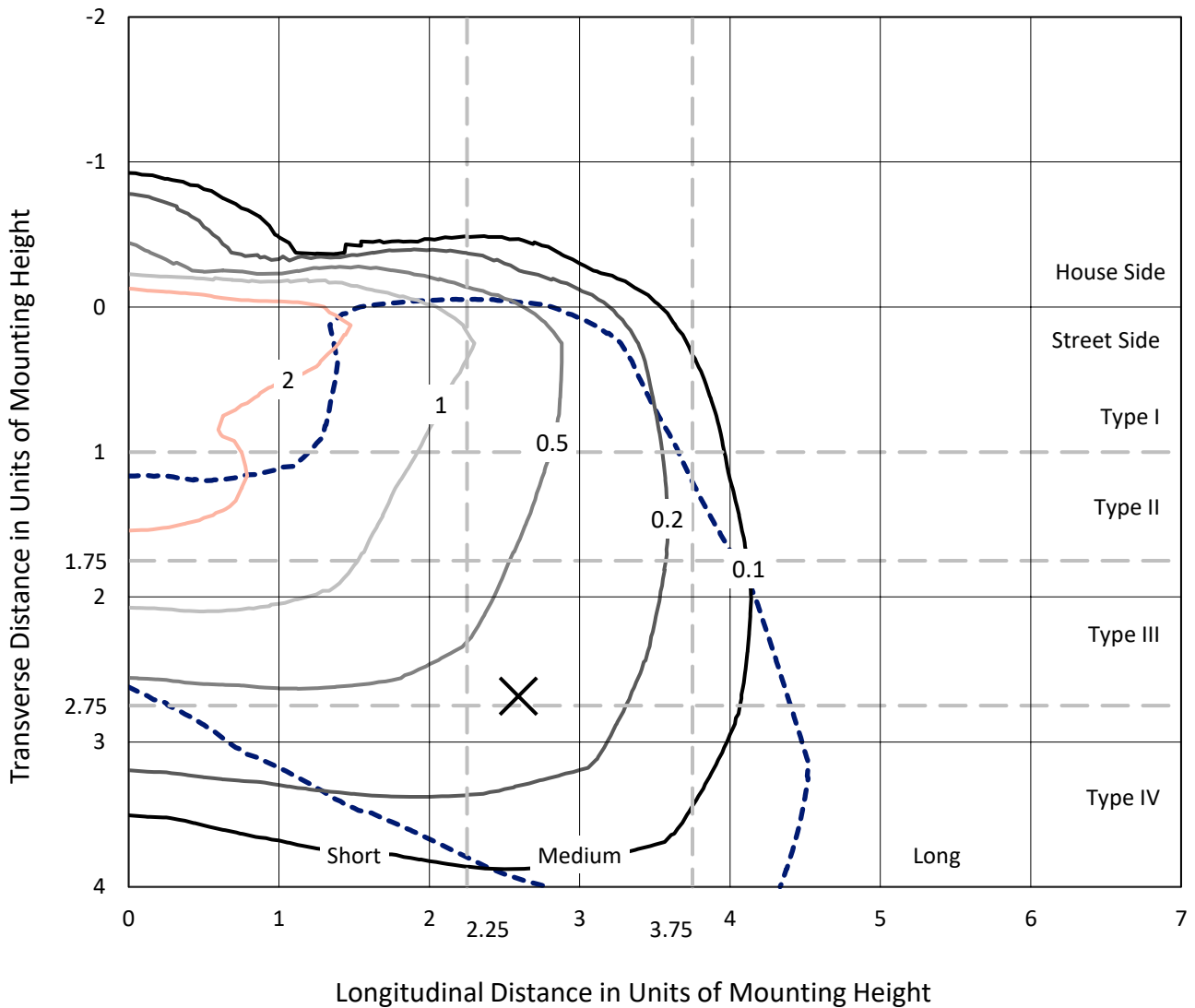
Input Watts (W): 143  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P399441  
 CATALOG NUMBER: ARCH-L-PA3-140-750-U-T4W-HSS

### Iso-Footcandle Lines of Horizontal Illumination

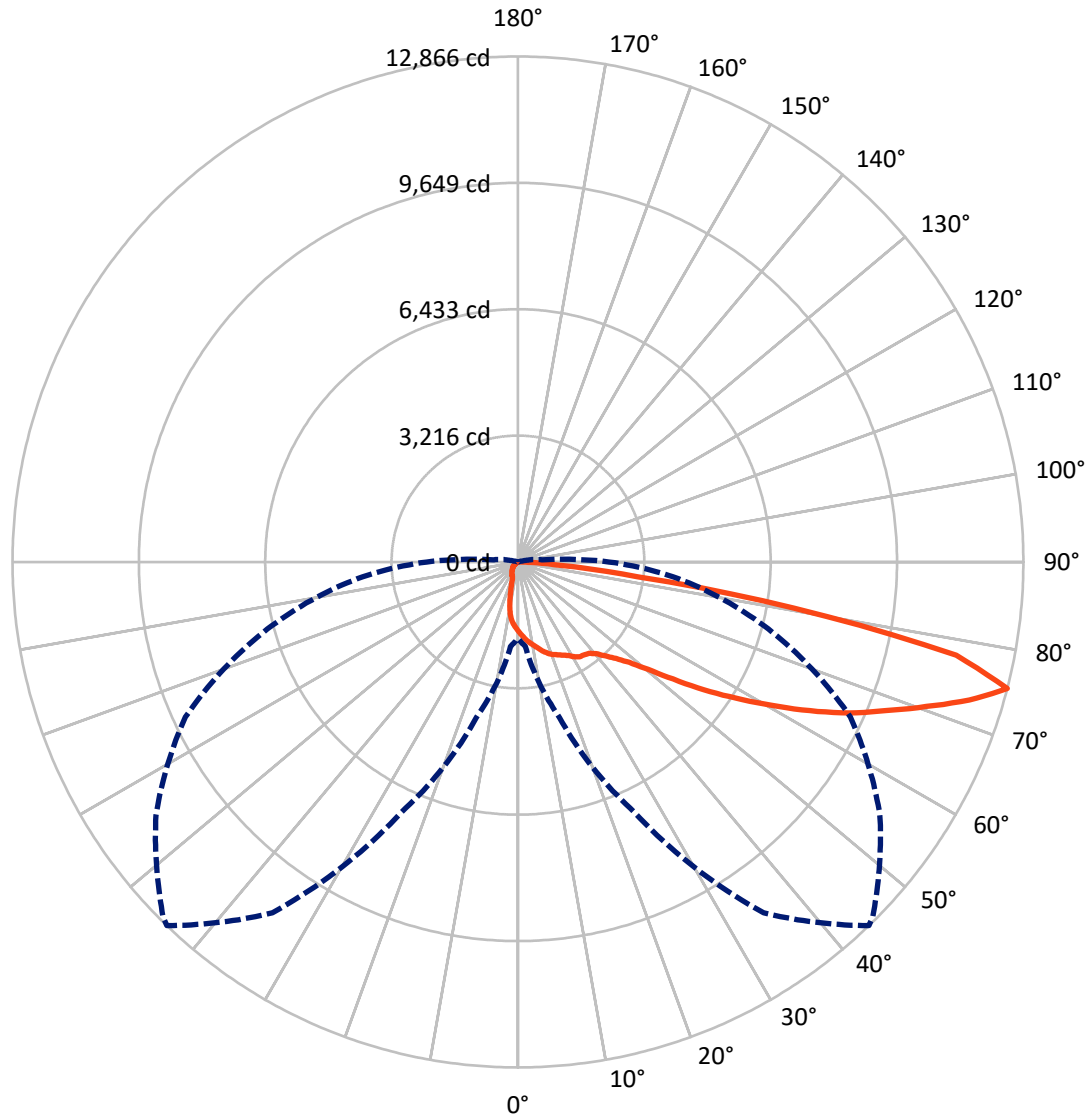
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P399441  
CATALOG NUMBER: ARCH-L-PA3-140-750-U-T4W-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P399441  
 CATALOG NUMBER: ARCH-L-PA3-140-750-U-T4W-HSS

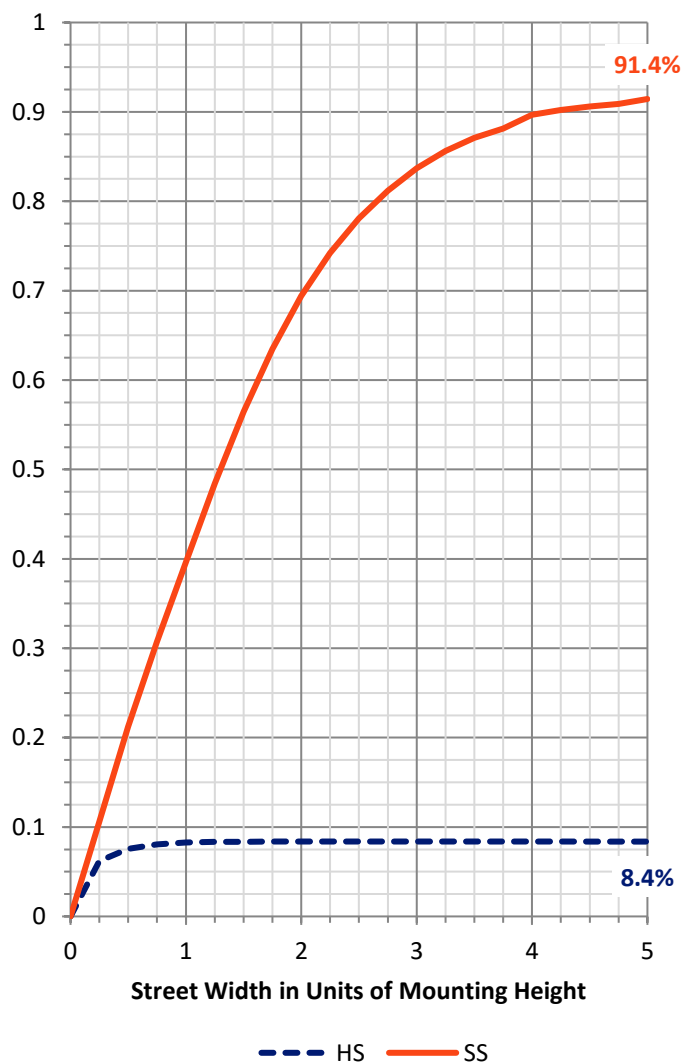
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1366.5	0.0	1366.5
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	14836.6	0.0	14836.6
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	16203.0	0.0	16203.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	166.3	1.0
10°-20°	466.1	2.9
20°-30°	769.1	4.7
30°-40°	1116.3	6.9
40°-50°	1814.6	11.2
50°-60°	3199.0	19.7
60°-70°	4597.6	28.4
70°-80°	3681.7	22.7
80°-90°	392.3	2.4
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°	16203.0	100.0
0°-180°	16203.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P399441

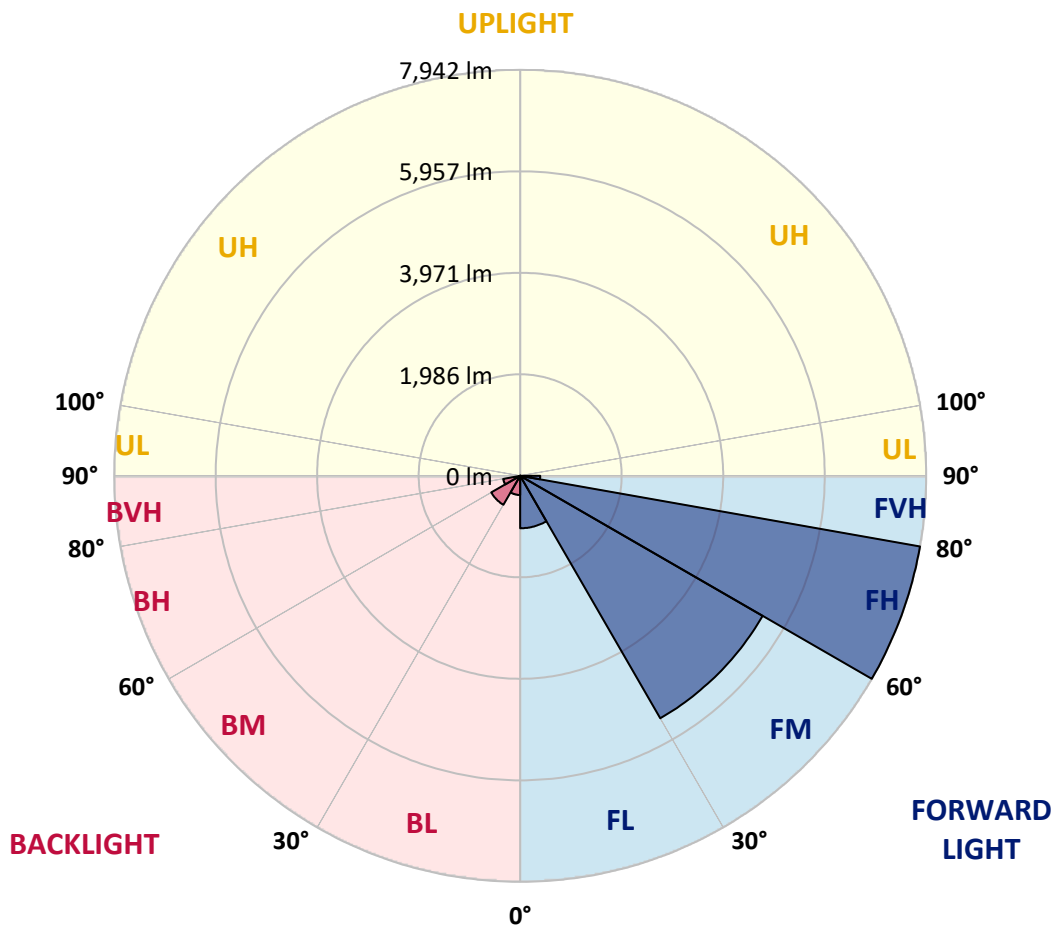
CATALOG NUMBER: ARCH-L-PA3-140-750-U-T4W-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1026.1	6.3			
FM (30°-60°)	5476.8	33.8			
FH (60°-80°)	7942.4	49.0			G4/12000
FVH (80°-90°)	391.3	2.4			G3/500
BL (0°-30°)	375.4	2.3	B1/500		
BM (30°-60°)	653.2	4.0	B1/1000		
BH (60°-80°)	336.9	2.1	B1/500		G1/500
BVH (80°-90°)	1.0	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-G4**

Type IV Medium





REPORT NUMBER: P399441

CATALOG NUMBER: ARCH-L-PA3-140-750-U-T4W-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1763.6	1763.6	1763.6	1763.6	1763.6	1763.6	1763.6	1763.6	1763.6	1763.6	1763.6
2.5°	1922.1	1919.1	1910.1	1895.2	1880.2	1865.3	1862.3	1838.4	1811.5	1790.5	1772.6
5°	2092.4	2089.5	2074.5	2041.6	2008.8	1969.9	1966.9	1910.1	1859.3	1802.5	1754.7
7.5°	2268.8	2262.8	2235.9	2185.1	2128.3	2068.5	2062.6	1978.9	1904.1	1829.4	1760.6
10°	2406.3	2400.3	2361.5	2301.7	2224.0	2149.2	2140.3	2053.6	1978.9	1883.2	1790.5
12.5°	2540.8	2528.9	2478.1	2412.3	2316.6	2244.9	2235.9	2146.3	2056.6	1957.9	1844.3
15°	2666.4	2651.4	2603.6	2519.9	2418.3	2349.5	2343.5	2247.9	2155.2	2041.6	1916.1
17.5°	2753.1	2747.1	2690.3	2597.6	2499.0	2442.2	2436.2	2337.6	2244.9	2125.3	1990.8
20°	2797.9	2797.9	2744.1	2642.5	2552.8	2513.9	2505.0	2412.3	2322.6	2209.0	2068.5
22.5°	2806.9	2815.8	2774.0	2663.4	2597.6	2564.7	2558.8	2478.1	2391.4	2286.7	2155.2
25°	2824.8	2824.8	2803.9	2684.3	2636.5	2627.5	2624.5	2552.8	2475.1	2370.4	2241.9
27.5°	2845.7	2845.7	2830.8	2714.2	2696.3	2693.3	2690.3	2657.4	2594.6	2472.1	2343.5
30°	2899.5	2902.5	2890.6	2774.0	2762.0	2794.9	2800.9	2783.0	2705.2	2552.8	2448.2
32.5°	3034.1	3007.1	2974.3	2815.8	2836.8	2878.6	2881.6	2845.7	2762.0	2639.5	2573.7
35°	3371.8	3213.4	3063.9	2851.7	2860.7	2902.5	2908.5	2905.5	2854.7	2750.1	2717.2
37.5°	3685.7	3461.5	3249.3	2935.4	2905.5	2950.4	2962.3	3013.1	2974.3	2902.5	2911.5
40°	3868.0	3781.4	3631.9	3165.6	2995.2	3063.9	3075.9	3153.6	3138.7	3108.8	3165.6
42.5°	4430.0	4436.0	4274.6	3509.3	3159.6	3270.2	3285.1	3347.9	3368.8	3383.8	3521.3
45°	5081.7	5102.6	5063.7	4128.1	3470.5	3506.3	3527.3	3611.0	3688.7	3784.3	4035.4
47.5°	5864.8	5846.9	5703.4	4884.4	4011.5	3811.2	3826.2	3987.6	4122.1	4331.4	4690.1
50°	6558.3	6603.2	6331.2	5589.8	4773.8	4292.5	4277.6	4436.0	4678.1	4971.1	5422.4
52.5°	7257.8	7192.0	6824.4	6289.3	5676.5	4947.1	4902.3	4989.0	5329.8	5676.5	6139.8
55°	7443.1	7449.1	7323.6	7054.5	6429.8	5742.3	5667.5	5661.6	6086.0	6322.2	6893.1
57.5°	7807.8	7822.8	7852.7	7906.5	7610.5	6537.4	6459.7	6376.0	6788.5	6926.0	7649.4
60°	8178.5	8196.4	8378.8	8668.7	8471.4	7395.3	7311.6	7114.3	7344.5	7529.8	8444.5
62.5°	8130.7	8256.2	8785.3	9362.2	9338.3	8336.9	8232.3	7757.0	7903.5	8064.9	9173.9
65°	7341.5	7476.0	8665.7	9553.5	10208.2	9266.6	9096.2	8420.6	8429.6	8623.9	9876.4
67.5°	6636.1	6782.5	7918.4	9472.8	10782.1	10100.5	9924.2	9087.2	8946.7	9269.5	10253.0
70°	6229.5	6376.0	7323.6	9221.7	10943.5	11024.2	10871.8	9849.5	9562.5	9858.4	9831.5
72.5°	4875.4	5105.6	6564.3	8743.4	11116.9	12013.6	11894.1	10815.0	10085.6	9242.6	7485.0
75°	1943.0	2155.2	4098.2	7036.6	10898.7	12865.6	12772.9	11248.4	9335.3	6600.2	3832.2
77.5°	585.9	627.7	1138.9	3479.4	7990.2	11406.8	11376.9	9457.9	6606.2	3063.9	1046.2
80°	194.3	215.2	349.7	959.5	3646.8	7126.3	7260.8	6026.3	3001.2	702.5	212.2
82.5°	80.7	89.7	176.4	385.6	1291.3	3069.9	3025.1	2699.3	1046.2	436.4	77.7
85°	20.9	26.9	80.7	221.2	472.3	1058.2	1112.0	905.7	591.9	361.7	23.9
87.5°	0.0	0.0	38.9	89.7	212.2	319.8	334.8	275.0	334.8	272.0	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: P399441

CATALOG NUMBER: ARCH-L-PA3-140-750-U-T4W-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1763.6	1763.6	1763.6	1763.6	1763.6	1763.6	1763.6	1763.6	1763.6	1763.6	1763.6
2.5°	1757.7	1742.7	1715.8	1697.9	1674.0	1668.0	1656.0	1641.1	1638.1	1623.1	1626.1
5°	1727.8	1703.9	1656.0	1623.1	1584.3	1572.3	1551.4	1536.5	1524.5	1503.6	1506.6
7.5°	1721.8	1685.9	1620.2	1557.4	1494.6	1449.8	1387.0	1336.2	1294.3	1249.5	1258.5
10°	1742.7	1697.9	1605.2	1518.5	1404.9	1261.4	1097.0	989.4	935.6	881.8	887.8
12.5°	1784.6	1730.8	1611.2	1479.7	1249.5	1004.4	777.2	630.7	591.9	568.0	570.9
15°	1847.3	1781.6	1629.1	1404.9	1040.2	726.4	517.1	454.4	469.3	478.3	478.3
17.5°	1913.1	1838.4	1644.1	1270.4	804.1	508.2	421.5	415.5	436.4	457.3	457.3
20°	1993.8	1898.1	1647.1	1100.0	579.9	412.5	397.6	397.6	412.5	436.4	436.4
22.5°	2071.5	1963.9	1620.2	905.7	442.4	382.6	382.6	382.6	391.6	415.5	418.5
25°	2164.2	2044.6	1563.4	699.5	379.6	364.7	364.7	367.7	373.7	394.6	397.6
27.5°	2262.8	2128.3	1467.7	511.2	346.7	343.8	346.7	349.7	352.7	373.7	379.6
30°	2376.4	2221.0	1345.1	382.6	316.9	316.9	325.8	331.8	331.8	349.7	355.7
32.5°	2507.9	2343.5	1198.7	316.9	287.0	284.0	298.9	307.9	307.9	322.8	328.8
35°	2672.4	2469.1	1022.3	281.0	263.1	257.1	263.1	278.0	284.0	295.9	298.9
37.5°	2890.6	2618.5	834.0	260.1	245.1	233.2	233.2	236.1	248.1	260.1	263.1
40°	3168.6	2783.0	648.7	245.1	227.2	215.2	206.3	203.3	200.3	209.2	215.2
42.5°	3518.3	2968.3	484.3	230.2	212.2	194.3	182.3	170.4	155.4	152.4	155.4
45°	3966.7	3195.5	358.7	218.2	203.3	176.4	155.4	134.5	107.6	98.6	101.6
47.5°	4495.8	3431.6	281.0	206.3	197.3	155.4	128.5	92.7	65.8	59.8	62.8
50°	5057.7	3658.8	239.1	191.3	185.3	134.5	92.7	56.8	38.9	38.9	41.8
52.5°	5536.0	3787.3	218.2	179.4	167.4	110.6	59.8	32.9	23.9	23.9	26.9
55°	5999.3	3856.1	203.3	167.4	143.5	77.7	32.9	20.9	14.9	14.9	14.9
57.5°	6477.6	3886.0	185.3	152.4	113.6	47.8	17.9	12.0	9.0	9.0	9.0
60°	6902.1	3829.2	158.4	125.5	74.7	23.9	9.0	9.0	6.0	3.0	3.0
62.5°	7257.8	3721.6	110.6	89.7	44.8	12.0	6.0	3.0	0.0	0.0	0.0
65°	7476.0	3548.2	71.7	59.8	26.9	9.0	3.0	0.0	0.0	0.0	0.0
67.5°	7413.2	3222.4	44.8	38.9	12.0	6.0	3.0	0.0	0.0	0.0	0.0
70°	6689.9	2642.5	32.9	23.9	9.0	3.0	0.0	0.0	0.0	0.0	0.0
72.5°	4821.6	1787.5	23.9	14.9	6.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	2319.6	636.7	14.9	12.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	568.0	140.5	9.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	125.5	26.9	6.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	41.8	12.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.9	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.0	3.0	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)