

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: P399709

Luminaire Tested: **ARCH-L-PA3-180-730-U-T3-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399709  
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-PA3-180-730-U-T3-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 775mA 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: 17785 lumens  
Efficiency: N/A  
Efficacy: 98.3 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B2 - U0 - G4

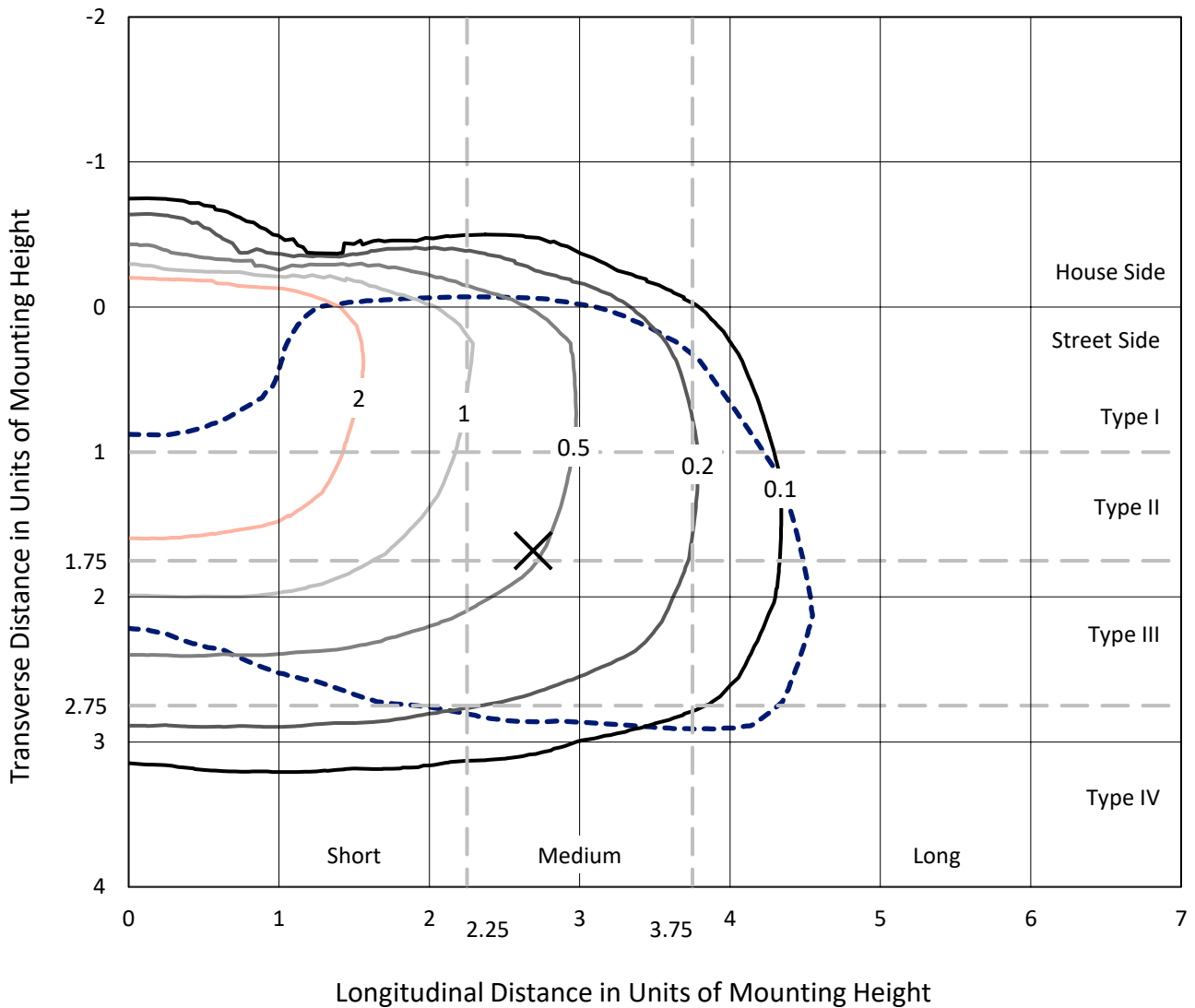
Input Watts (W): 181  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

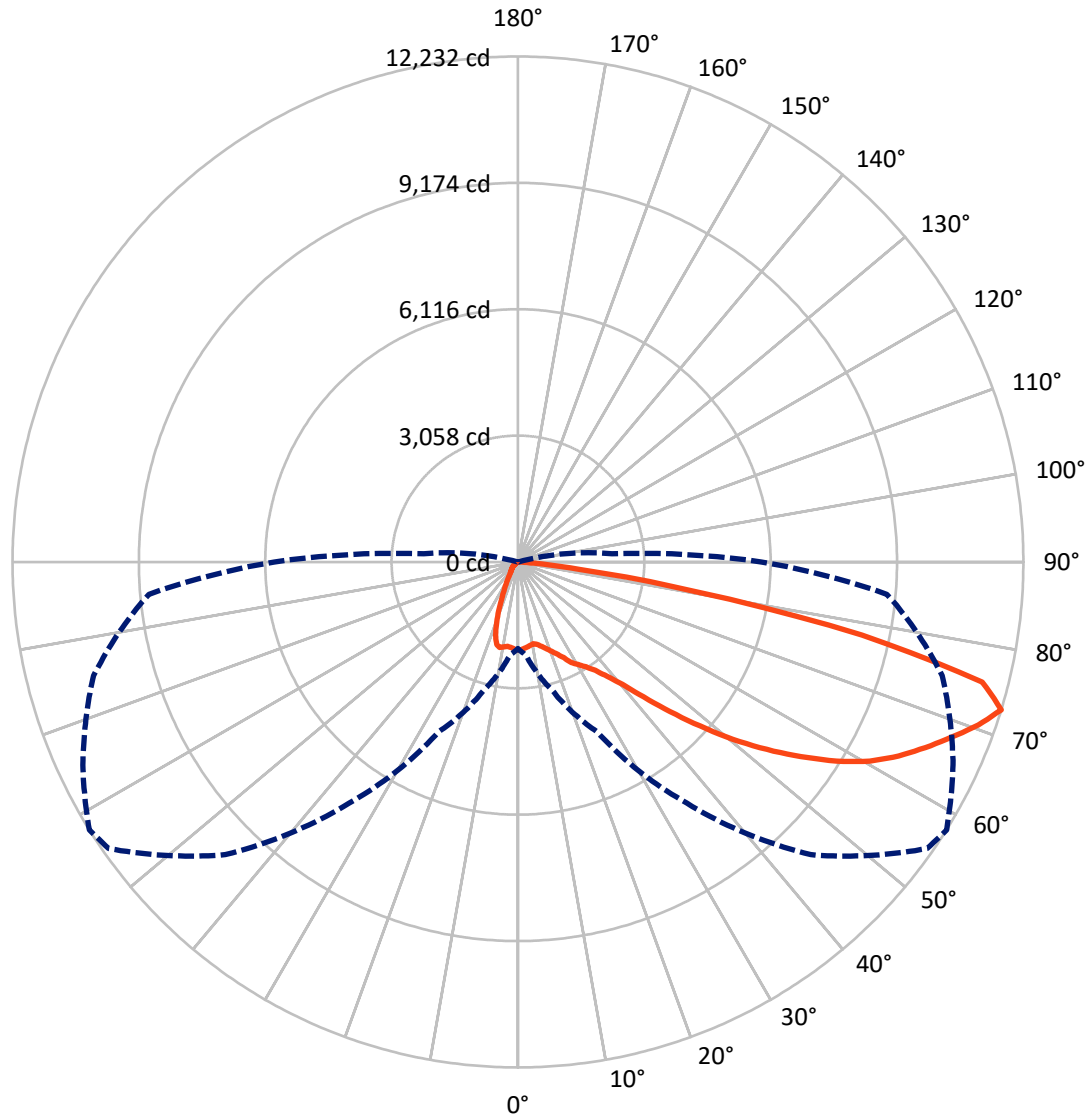
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



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

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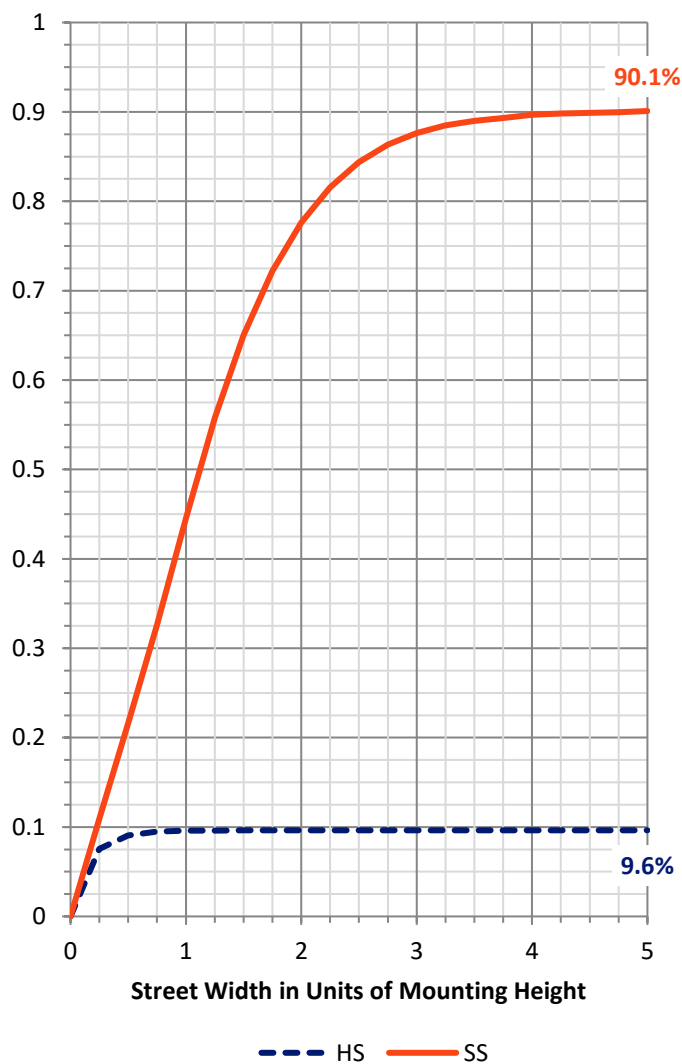
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1729.5	0.0	1729.5
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	16055.5	0.0	16055.5
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	17785.0	0.0	17785.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	195.9	1.1
10°-20°	510.1	2.9
20°-30°	801.4	4.5
30°-40°	1382.0	7.8
40°-50°	2629.4	14.8
50°-60°	4164.1	23.4
60°-70°	4859.1	27.3
70°-80°	3043.3	17.1
80°-90°	199.8	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°	17785.0	100.0
0°-180°	17785.0	100.0

**Coefficient of Utilization**

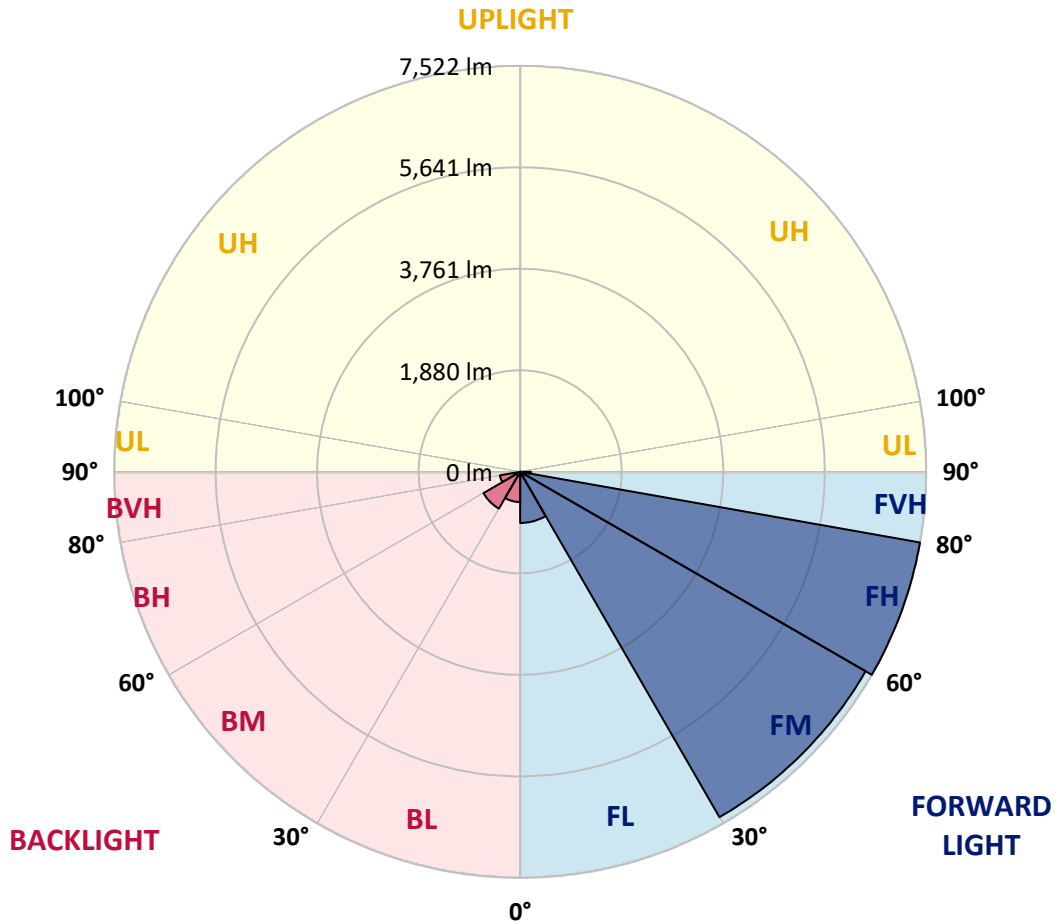


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	947.3	5.3			
FM (30°-60°)	7388.6	41.5			
FH (60°-80°)	7521.8	42.3			G4/12000
FVH (80°-90°)	197.8	1.1			G2/225
BL (0°-30°)	560.1	3.1	B2/1000		
BM (30°-60°)	786.9	4.4	B1/1000		
BH (60°-80°)	380.6	2.1	B1/500		G1/500
BVH (80°-90°)	1.9	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**  
 Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	2134.1	2134.1	2134.1	2134.1	2134.1	2134.1	2134.1	2134.1	2134.1	2134.1	2134.1
2.5°	2124.6	2115.0	2111.8	2108.6	2111.8	2115.0	2105.5	2115.0	2108.6	2111.8	2118.2
5°	2048.2	2038.7	2035.5	2038.7	2048.2	2064.1	2070.5	2080.0	2080.0	2089.6	2092.7
7.5°	1962.3	1956.0	1952.8	1959.2	1978.2	2013.2	2032.3	2045.0	2057.8	2076.8	2095.9
10°	1914.6	1911.5	1908.3	1917.8	1936.9	1968.7	1994.2	2013.2	2060.9	2115.0	2150.0
12.5°	1882.8	1882.8	1889.2	1908.3	1933.7	1959.2	2019.6	2045.0	2118.2	2200.9	2248.6
15°	1857.4	1857.4	1866.9	1901.9	1936.9	1997.3	2086.4	2115.0	2200.9	2302.7	2366.3
17.5°	1838.3	1844.7	1851.0	1886.0	1952.8	2054.6	2159.5	2200.9	2305.8	2417.2	2487.1
20°	1841.5	1847.8	1851.0	1886.0	1981.4	2121.4	2254.9	2302.7	2423.5	2541.2	2611.2
22.5°	1860.6	1870.1	1873.3	1921.0	2032.3	2191.3	2363.1	2417.2	2547.6	2671.6	2725.7
25°	1940.1	1946.4	1927.4	1968.7	2105.5	2299.5	2503.0	2560.3	2690.7	2805.2	2849.7
27.5°	2210.4	2216.8	2111.8	2064.1	2162.7	2388.5	2674.8	2754.3	2916.5	2992.8	2999.2
30°	2795.6	2802.0	2595.3	2369.4	2299.5	2464.9	2770.2	2881.5	3091.4	3177.3	3139.1
32.5°	3549.4	3543.0	3260.0	2926.0	2623.9	2598.4	2906.9	3024.6	3253.6	3336.3	3307.7
35°	4306.3	4315.9	4074.2	3571.7	3139.1	2849.7	3081.9	3218.6	3495.3	3613.0	3562.1
37.5°	4824.8	4888.4	4783.4	4239.6	3772.0	3314.0	3364.9	3511.2	3857.9	4016.9	3908.8
40°	5556.3	5540.4	5285.9	4885.2	4471.7	4001.0	3822.9	3892.9	4290.4	4503.5	4335.0
42.5°	6539.0	6507.2	6074.7	5683.5	5222.3	4837.5	4474.9	4462.2	4786.6	5034.7	4789.8
45°	7429.6	7381.9	7086.1	6707.6	6201.9	5759.8	5270.0	5158.7	5384.5	5594.4	5308.2
47.5°	8138.8	8059.3	7849.4	7649.0	7525.0	6838.0	6103.3	5934.7	6049.2	6205.1	5801.2
50°	8978.5	8759.0	8453.7	8332.8	8590.4	8059.3	6904.8	6742.6	6736.2	6825.3	6310.0
52.5°	9360.1	8962.5	8790.8	8892.6	9347.4	9194.7	7769.9	7537.7	7445.5	7455.0	6783.9
55°	8898.9	8854.4	8946.6	9264.7	9859.4	9770.4	8600.0	8313.7	8177.0	8005.2	7238.7
57.5°	8374.2	8510.9	8876.7	9484.1	10508.3	10371.5	9417.4	9092.9	8841.7	8447.3	7744.4
60°	7890.7	8030.7	8635.0	9535.0	10864.5	10950.3	10098.0	9789.5	9417.4	8898.9	8301.0
62.5°	7156.0	7264.2	8113.4	9461.9	10708.6	11287.5	10571.9	10339.7	9993.0	9328.3	8940.3
65°	6329.1	6399.1	7238.7	8876.7	10403.3	11249.3	10963.1	10832.7	10495.5	9776.7	9573.2
67.5°	5422.7	5505.4	6205.1	7823.9	9805.4	11071.2	11332.0	11319.3	10934.4	10272.9	10031.2
70°	4379.5	4385.9	4964.7	6488.1	8762.2	10715.0	11790.0	11818.6	11354.3	10645.0	10050.3
72.5°	2095.9	2267.7	3218.6	4529.0	7121.1	10015.3	12088.9	12232.1	11618.2	10632.3	8965.7
75°	480.3	496.2	938.2	2153.2	4175.9	7687.2	11341.5	11608.7	10975.8	9194.7	6316.4
77.5°	174.9	184.5	264.0	629.7	1606.1	3972.4	8116.5	8507.7	8113.4	5944.3	2986.5
80°	117.7	114.5	136.8	279.9	737.9	1125.9	4150.5	4382.7	4001.0	2029.1	715.6
82.5°	60.4	63.6	95.4	155.8	496.2	391.2	1386.7	1507.5	1240.4	407.1	133.6
85°	28.6	28.6	54.1	98.6	209.9	136.8	308.5	372.1	333.9	178.1	44.5
87.5°	28.6	28.6	50.9	63.6	108.1	57.2	76.3	95.4	89.1	95.4	15.9
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°	2134.1	2134.1	2134.1	2134.1	2134.1	2134.1	2134.1	2134.1	2134.1	2134.1	2134.1
2.5°	2118.2	2115.0	2111.8	2118.2	2115.0	2121.4	2121.4	2127.7	2127.7	2121.4	2118.2
5°	2089.6	2083.2	2076.8	2076.8	2073.7	2080.0	2099.1	2115.0	2118.2	2108.6	2105.5
7.5°	2092.7	2092.7	2086.4	2073.7	2051.4	2051.4	2051.4	2070.5	2080.0	2073.7	2070.5
10°	2150.0	2153.2	2137.3	2108.6	2070.5	2035.5	1968.7	1870.1	1777.9	1752.4	1742.9
12.5°	2248.6	2251.8	2220.0	2169.1	2089.6	1882.8	1628.4	1393.0	1211.8	1160.9	1151.3
15°	2366.3	2369.4	2312.2	2229.5	1987.8	1507.5	1129.1	861.9	702.9	664.7	661.5
17.5°	2487.1	2480.8	2394.9	2235.9	1685.6	1068.6	687.0	550.2	508.9	499.3	502.5
20°	2604.8	2585.7	2468.0	2118.2	1297.6	699.7	502.5	470.7	461.2	454.8	454.8
22.5°	2712.9	2674.8	2528.5	1886.0	909.6	502.5	448.4	442.1	429.4	419.8	416.6
25°	2821.1	2767.0	2566.6	1583.9	610.6	438.9	423.0	410.3	394.4	381.7	378.5
27.5°	2951.5	2875.1	2547.6	1202.2	458.0	407.1	394.4	375.3	353.0	333.9	327.6
30°	3075.5	2989.6	2439.4	830.1	391.2	375.3	356.2	327.6	299.0	276.7	270.3
32.5°	3231.4	3132.8	2245.4	543.9	340.3	327.6	308.5	273.5	235.4	209.9	203.5
35°	3454.0	3342.7	1997.3	381.7	299.0	276.7	251.3	213.1	171.7	152.7	149.5
37.5°	3765.7	3616.2	1685.6	308.5	264.0	232.2	194.0	155.8	127.2	111.3	108.1
40°	4147.3	3918.3	1339.0	273.5	235.4	194.0	146.3	111.3	92.2	79.5	79.5
42.5°	4560.8	4201.4	985.9	251.3	206.7	159.0	108.1	79.5	66.8	60.4	57.2
45°	4987.0	4452.7	664.7	232.2	181.3	120.9	76.3	54.1	44.5	44.5	41.3
47.5°	5429.1	4621.2	429.4	209.9	152.7	89.1	50.9	38.2	31.8	31.8	31.8
50°	5868.0	4710.3	305.3	190.8	124.0	60.4	38.2	28.6	25.4	25.4	25.4
52.5°	6186.0	4653.0	244.9	165.4	95.4	44.5	28.6	22.3	19.1	19.1	19.1
55°	6462.7	4554.4	213.1	143.1	70.0	31.8	22.3	19.1	15.9	15.9	15.9
57.5°	6745.8	4427.2	190.8	120.9	50.9	22.3	15.9	12.7	12.7	12.7	12.7
60°	7003.4	4210.9	165.4	95.4	35.0	15.9	12.7	9.5	9.5	9.5	9.5
62.5°	7254.6	4026.5	143.1	73.2	25.4	12.7	6.4	6.4	3.2	3.2	3.2
65°	7397.8	3778.4	114.5	47.7	15.9	9.5	3.2	3.2	0.0	0.0	0.0
67.5°	7353.2	3482.6	79.5	28.6	9.5	6.4	3.2	0.0	0.0	0.0	0.0
70°	7044.7	3085.1	47.7	15.9	9.5	6.4	3.2	0.0	0.0	0.0	0.0
72.5°	5899.8	2283.6	28.6	12.7	6.4	3.2	0.0	0.0	0.0	0.0	0.0
75°	3940.6	1049.6	15.9	9.5	3.2	3.2	0.0	0.0	0.0	0.0	0.0
77.5°	1803.3	314.9	9.5	6.4	3.2	0.0	0.0	0.0	0.0	0.0	0.0
80°	362.6	82.7	6.4	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	76.3	15.9	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.9	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.4	3.2	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)