

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: P399594

Luminaire Tested: **ARCH-L-PA3-160-760-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399594  
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-PA3-160-760-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5700K, 705mA 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: 17968 lumens  
Efficiency: N/A  
Efficacy: 110.9 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

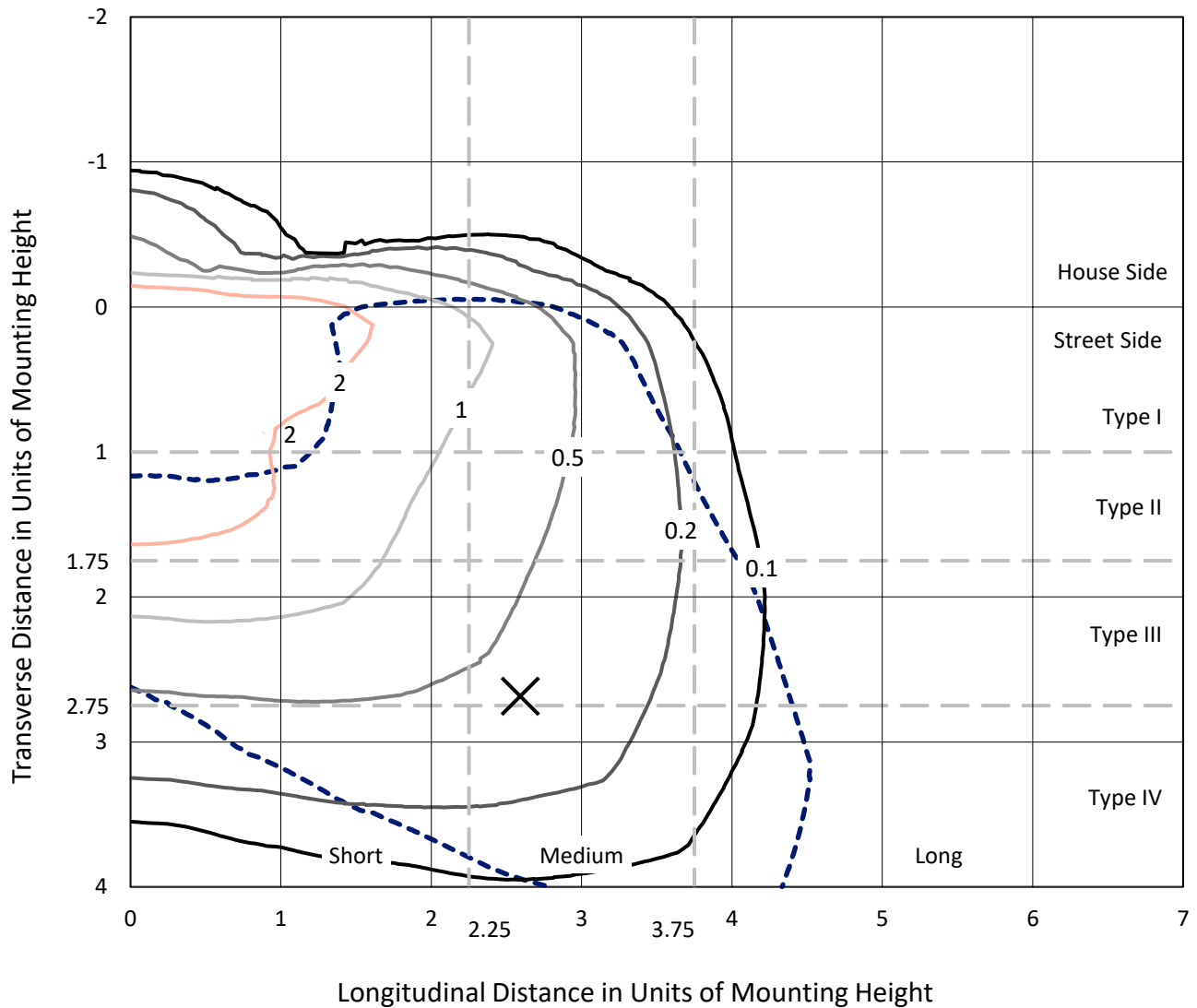
Input Watts (W): 162  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P399594  
 CATALOG NUMBER: ARCH-L-PA3-160-760-U-T4W-HSS

### Iso-Footcandle Lines of Horizontal Illumination

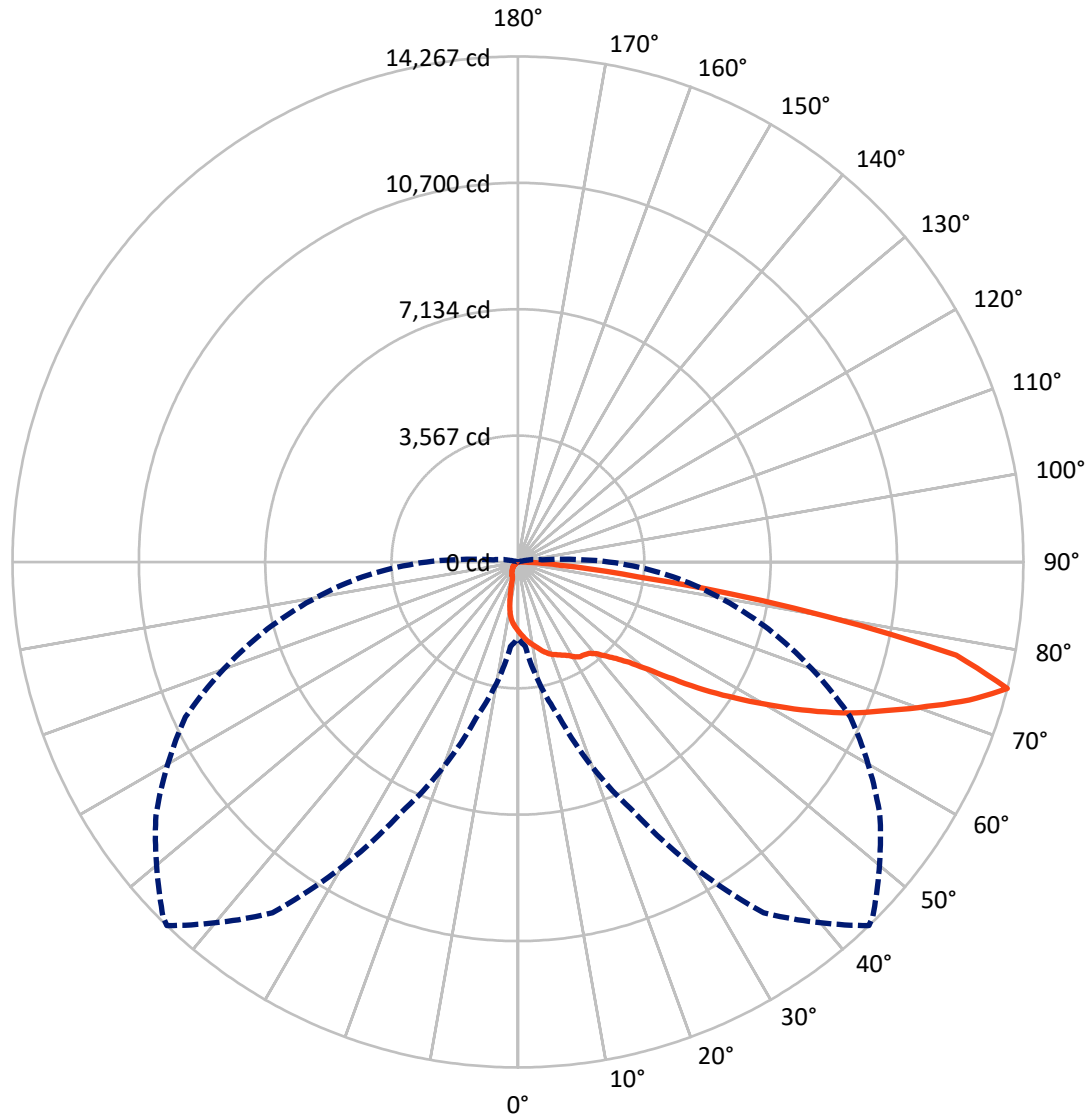
× Max cd  
 - - - 1/2 Max cd



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

REPORT NUMBER: P399594  
CATALOG NUMBER: ARCH-L-PA3-160-760-U-T4W-HSS

### Luminous Intensity Polar Plot



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

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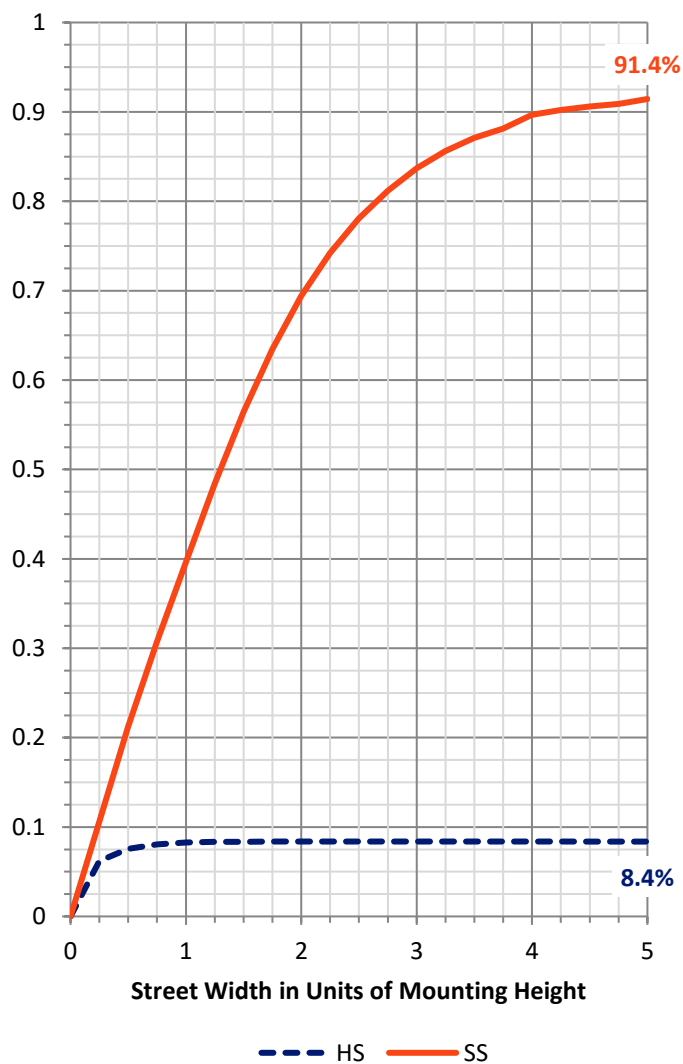
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1515.3	0.0	1515.3
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	16452.7	0.0	16452.7
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	17968.0	0.0	17968.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	184.4	1.0
10°-20°	516.8	2.9
20°-30°	852.9	4.7
30°-40°	1237.9	6.9
40°-50°	2012.3	11.2
50°-60°	3547.5	19.7
60°-70°	5098.4	28.4
70°-80°	4082.7	22.7
80°-90°	435.0	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°	17968.0	100.0
0°-180°	17968.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P399594

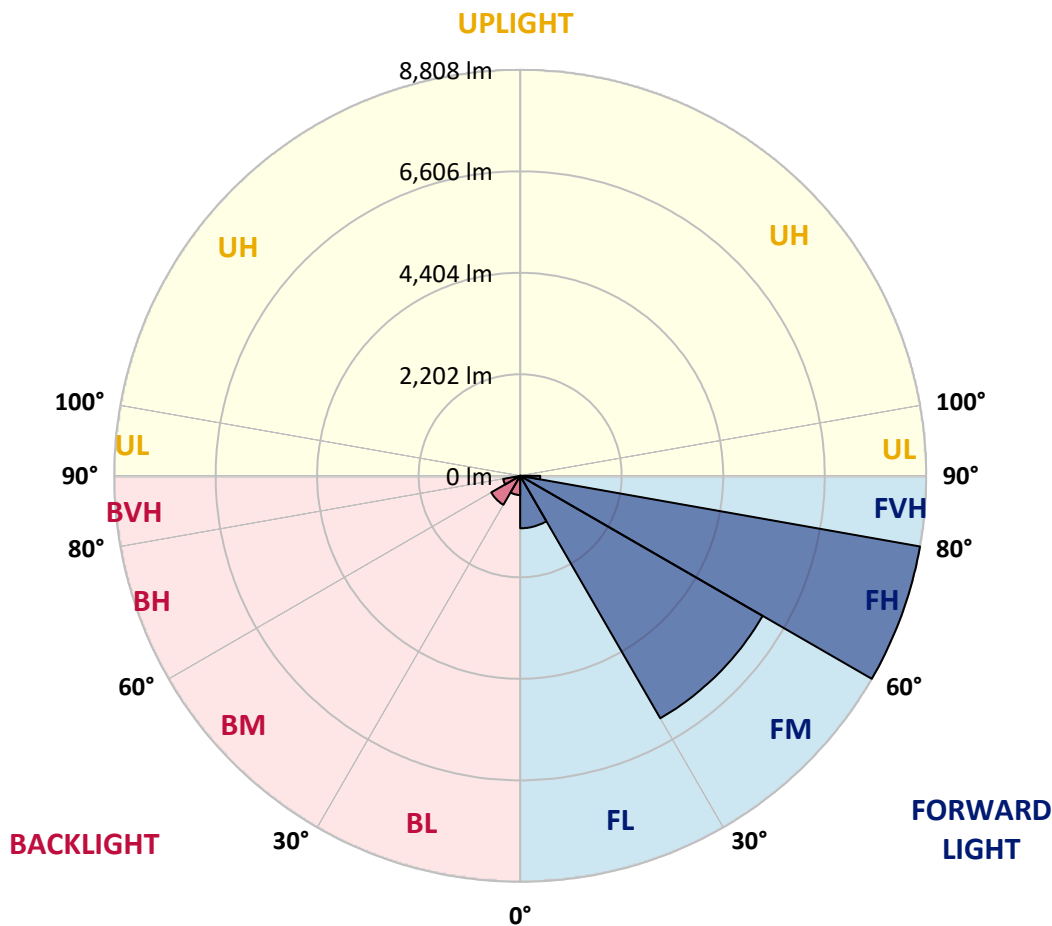
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1137.9	6.3			
FM (30°-60°)	6073.3	33.8			
FH (60°-80°)	8807.6	49.0			G4/12000
FVH (80°-90°)	433.9	2.4			G3/500
BL (0°-30°)	416.3	2.3	B1/500		
BM (30°-60°)	724.3	4.0	B1/1000		
BH (60°-80°)	373.6	2.1	B1/500		G1/500
BVH (80°-90°)	1.1	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: P399594

CATALOG NUMBER: ARCH-L-PA3-160-760-U-T4W-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1955.7	1955.7	1955.7	1955.7	1955.7	1955.7	1955.7	1955.7	1955.7	1955.7	1955.7
2.5°	2131.4	2128.1	2118.2	2101.6	2085.0	2068.5	2065.1	2038.6	2008.8	1985.6	1965.7
5°	2320.4	2317.1	2300.5	2264.0	2227.6	2184.5	2181.2	2118.2	2061.8	1998.8	1945.8
7.5°	2516.0	2509.3	2479.5	2423.1	2360.2	2293.9	2287.2	2194.4	2111.5	2028.7	1952.4
10°	2668.4	2661.8	2618.7	2552.4	2466.2	2383.4	2373.4	2277.3	2194.4	2088.3	1985.6
12.5°	2817.6	2804.3	2748.0	2675.1	2569.0	2489.4	2479.5	2380.0	2280.6	2171.2	2045.2
15°	2956.8	2940.3	2887.2	2794.4	2681.7	2605.5	2598.8	2492.8	2390.0	2264.0	2124.8
17.5°	3053.0	3046.3	2983.3	2880.6	2771.2	2708.2	2701.6	2592.2	2489.4	2356.8	2207.7
20°	3102.7	3102.7	3043.0	2930.3	2830.9	2787.8	2777.8	2675.1	2575.6	2449.7	2293.9
22.5°	3112.6	3122.6	3076.2	2953.5	2880.6	2844.1	2837.5	2748.0	2651.9	2535.8	2390.0
25°	3132.5	3132.5	3109.3	2976.7	2923.7	2913.7	2910.4	2830.9	2744.7	2628.7	2486.1
27.5°	3155.7	3155.7	3139.1	3009.9	2990.0	2986.7	2983.3	2946.9	2877.3	2741.4	2598.8
30°	3215.4	3218.7	3205.4	3076.2	3062.9	3099.4	3106.0	3086.1	2999.9	2830.9	2714.8
32.5°	3364.6	3334.7	3298.3	3122.6	3145.8	3192.2	3195.5	3155.7	3062.9	2927.0	2854.1
35°	3739.1	3563.4	3397.7	3162.3	3172.3	3218.7	3225.3	3222.0	3165.7	3049.6	3013.2
37.5°	4087.2	3838.6	3603.2	3255.2	3222.0	3271.7	3285.0	3341.3	3298.3	3218.7	3228.6
40°	4289.4	4193.3	4027.5	3510.4	3321.5	3397.7	3411.0	3497.1	3480.6	3447.4	3510.4
42.5°	4912.6	4919.2	4740.2	3891.6	3503.8	3626.4	3643.0	3712.6	3735.8	3752.4	3904.9
45°	5635.2	5658.4	5615.3	4577.8	3848.5	3888.3	3911.5	4004.3	4090.5	4196.6	4475.0
47.5°	6503.7	6483.8	6324.7	5416.4	4448.5	4226.4	4243.0	4422.0	4571.1	4803.2	5201.0
50°	7272.7	7322.5	7020.8	6198.7	5293.8	4760.1	4743.5	4919.2	5187.7	5512.6	6013.1
52.5°	8048.4	7975.5	7567.8	6974.4	6294.9	5486.0	5436.3	5532.4	5910.3	6294.9	6808.7
55°	8253.9	8260.6	8121.3	7823.0	7130.2	6367.8	6284.9	6278.3	6749.0	7010.9	7644.0
57.5°	8658.3	8674.9	8708.1	8767.7	8439.6	7249.5	7163.3	7070.5	7528.0	7680.5	8482.6
60°	9069.4	9089.3	9291.5	9613.0	9394.2	8200.9	8108.1	7889.3	8144.5	8350.1	9364.4
62.5°	9016.3	9155.6	9742.3	10382.0	10355.5	9245.1	9129.0	8602.0	8764.4	8943.4	10173.2
65°	8141.2	8290.4	9609.7	10594.2	11320.1	10276.0	10087.0	9337.9	9347.8	9563.3	10952.2
67.5°	7358.9	7521.3	8781.0	10504.7	11956.6	11200.8	11005.2	10077.1	9921.3	10279.3	11369.9
70°	6908.1	7070.5	8121.3	10226.2	12135.6	12225.1	12056.0	10922.4	10604.1	10932.3	10902.5
72.5°	5406.5	5661.7	7279.4	9695.9	12327.8	13322.3	13189.7	11993.0	11184.2	10249.4	8300.3
75°	2154.6	2390.0	4544.6	7803.1	12085.9	14267.0	14164.3	12473.7	10352.2	7319.1	4249.6
77.5°	649.7	696.1	1262.9	3858.5	8860.5	12649.4	12616.2	10488.1	7325.8	3397.7	1160.2
80°	215.5	238.7	387.8	1064.1	4044.1	7902.6	8051.7	6682.7	3328.1	779.0	235.4
82.5°	89.5	99.4	195.6	427.6	1432.0	3404.3	3354.6	2993.3	1160.2	484.0	86.2
85°	23.2	29.8	89.5	245.3	523.7	1173.4	1233.1	1004.4	656.3	401.1	26.5
87.5°	0.0	0.0	43.1	99.4	235.4	354.7	371.3	305.0	371.3	301.6	13.3
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: P399594

CATALOG NUMBER: ARCH-L-PA3-160-760-U-T4W-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1955.7	1955.7	1955.7	1955.7	1955.7	1955.7	1955.7	1955.7	1955.7	1955.7	1955.7
2.5°	1949.1	1932.5	1902.7	1882.8	1856.3	1849.7	1836.4	1819.8	1816.5	1800.0	1803.3
5°	1916.0	1889.5	1836.4	1800.0	1756.9	1743.6	1720.4	1703.8	1690.6	1667.4	1670.7
7.5°	1909.3	1869.6	1796.6	1727.0	1657.4	1607.7	1538.1	1481.7	1435.3	1385.6	1395.5
10°	1932.5	1882.8	1780.1	1683.9	1558.0	1398.9	1216.5	1097.2	1037.5	977.9	984.5
12.5°	1979.0	1919.3	1786.7	1640.8	1385.6	1113.8	861.9	699.4	656.3	629.8	633.1
15°	2048.6	1975.6	1806.6	1558.0	1153.6	805.5	573.5	503.9	520.4	530.4	530.4
17.5°	2121.5	2038.6	1823.2	1408.8	891.7	563.5	467.4	460.8	484.0	507.2	507.2
20°	2211.0	2104.9	1826.5	1219.9	643.1	457.4	440.9	440.9	457.4	484.0	484.0
22.5°	2297.2	2177.8	1796.6	1004.4	490.6	424.3	424.3	424.3	434.2	460.8	464.1
25°	2399.9	2267.3	1733.7	775.7	421.0	404.4	404.4	407.7	414.4	437.6	440.9
27.5°	2509.3	2360.2	1627.6	566.8	384.5	381.2	384.5	387.8	391.1	414.4	421.0
30°	2635.3	2462.9	1491.7	424.3	351.4	351.4	361.3	367.9	367.9	387.8	394.5
32.5°	2781.1	2598.8	1329.2	351.4	318.2	314.9	331.5	341.4	341.4	358.0	364.6
35°	2963.5	2738.0	1133.7	311.6	291.7	285.1	291.7	308.3	314.9	328.2	331.5
37.5°	3205.4	2903.8	924.8	288.4	271.8	258.6	258.6	261.9	275.1	288.4	291.7
40°	3513.7	3086.1	719.3	271.8	251.9	238.7	228.7	225.4	222.1	232.0	238.7
42.5°	3901.6	3291.6	537.0	255.2	235.4	215.5	202.2	188.9	172.4	169.1	172.4
45°	4398.8	3543.6	397.8	242.0	225.4	195.6	172.4	149.2	119.3	109.4	112.7
47.5°	4985.5	3805.4	311.6	228.7	218.8	172.4	142.5	102.8	72.9	66.3	69.6
50°	5608.7	4057.3	265.2	212.1	205.5	149.2	102.8	63.0	43.1	43.1	46.4
52.5°	6139.1	4199.9	242.0	198.9	185.6	122.6	66.3	36.5	26.5	26.5	29.8
55°	6652.9	4276.1	225.4	185.6	159.1	86.2	36.5	23.2	16.6	16.6	16.6
57.5°	7183.2	4309.3	205.5	169.1	126.0	53.0	19.9	13.3	9.9	9.9	9.9
60°	7653.9	4246.3	175.7	139.2	82.9	26.5	9.9	9.9	6.6	3.3	3.3
62.5°	8048.4	4127.0	122.6	99.4	49.7	13.3	6.6	3.3	0.0	0.0	0.0
65°	8290.4	3934.7	79.6	66.3	29.8	9.9	3.3	0.0	0.0	0.0	0.0
67.5°	8220.8	3573.4	49.7	43.1	13.3	6.6	3.3	0.0	0.0	0.0	0.0
70°	7418.6	2930.3	36.5	26.5	9.9	3.3	0.0	0.0	0.0	0.0	0.0
72.5°	5346.8	1982.3	26.5	16.6	6.6	0.0	0.0	0.0	0.0	0.0	0.0
75°	2572.3	706.1	16.6	13.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	629.8	155.8	9.9	6.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	139.2	29.8	6.6	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	46.4	13.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	16.6	6.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.9	3.3	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)