

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: P399918

Luminaire Tested: **ARCH-L-PA3-210-727-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399918  
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-PA3-210-727-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 900mA 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: 18029 lumens  
Efficiency: N/A  
Efficacy: 85.4 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

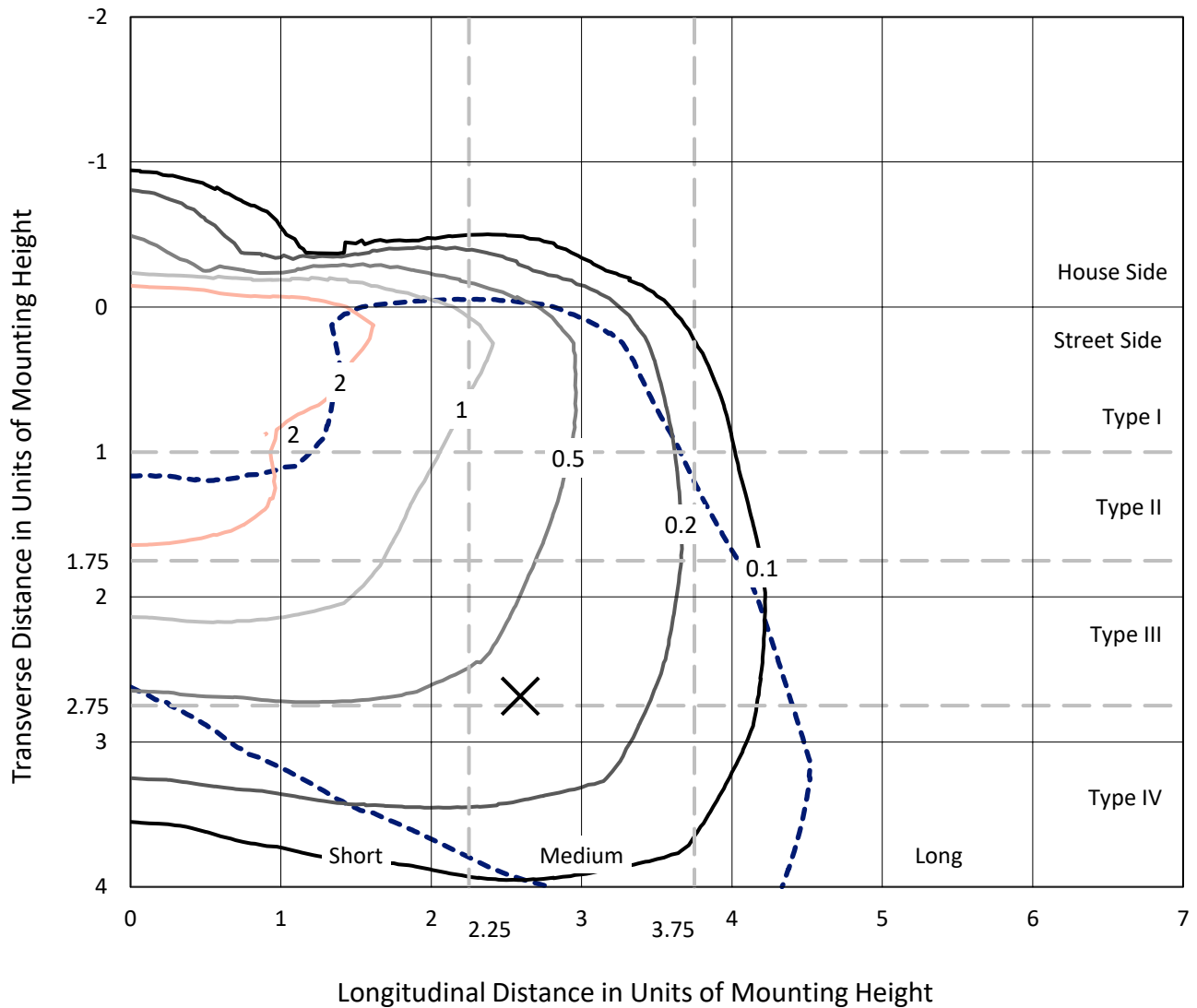
Input Watts (W): 211  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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 CATALOG NUMBER: ARCH-L-PA3-210-727-U-T4W-HSS

### Iso-Footcandle Lines of Horizontal Illumination

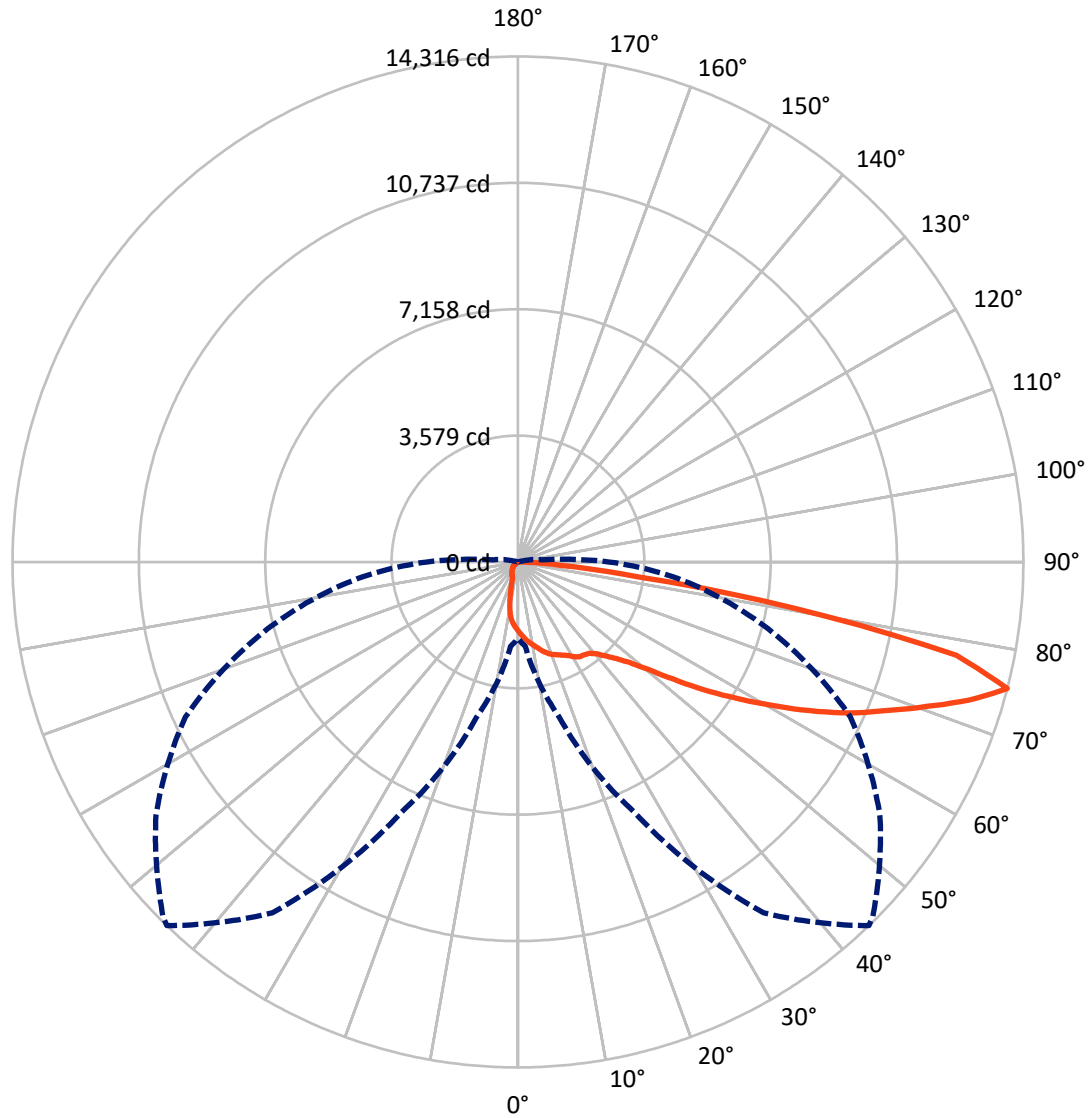
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P399918  
CATALOG NUMBER: ARCH-L-PA3-210-727-U-T4W-HSS

### Luminous Intensity Polar Plot



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

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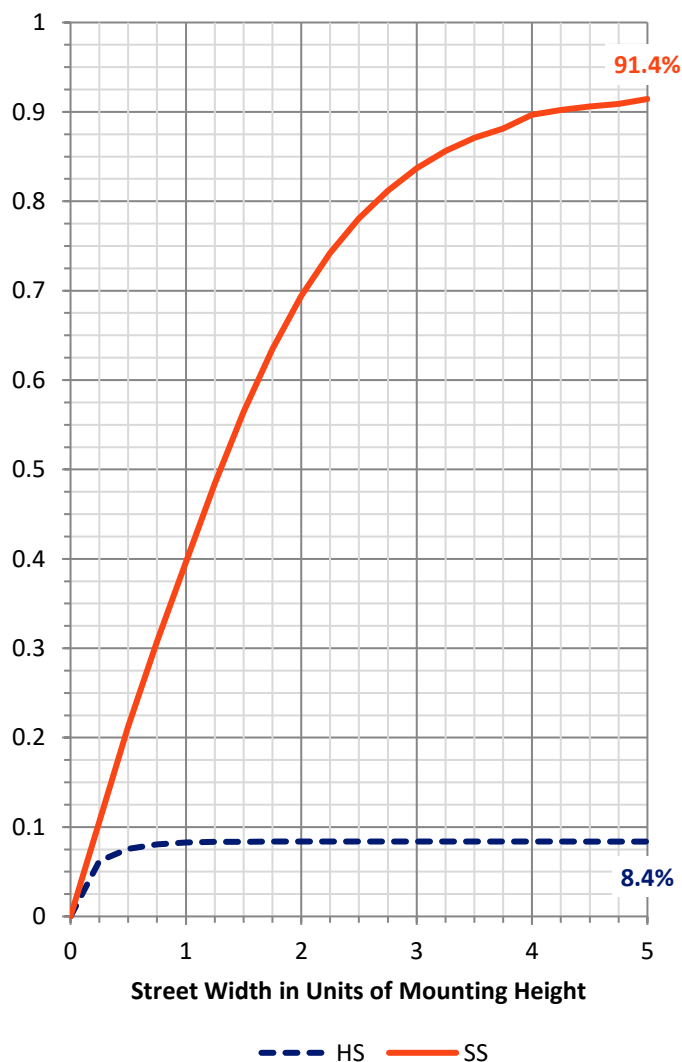
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1520.4	0.0	1520.4
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	16508.6	0.0	16508.6
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	18029.0	0.0	18029.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	185.1	1.0
10°-20°	518.6	2.9
20°-30°	855.8	4.7
30°-40°	1242.1	6.9
40°-50°	2019.1	11.2
50°-60°	3559.5	19.7
60°-70°	5115.8	28.4
70°-80°	4096.6	22.7
80°-90°	436.5	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°	18029.0	100.0
0°-180°	18029.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P399918

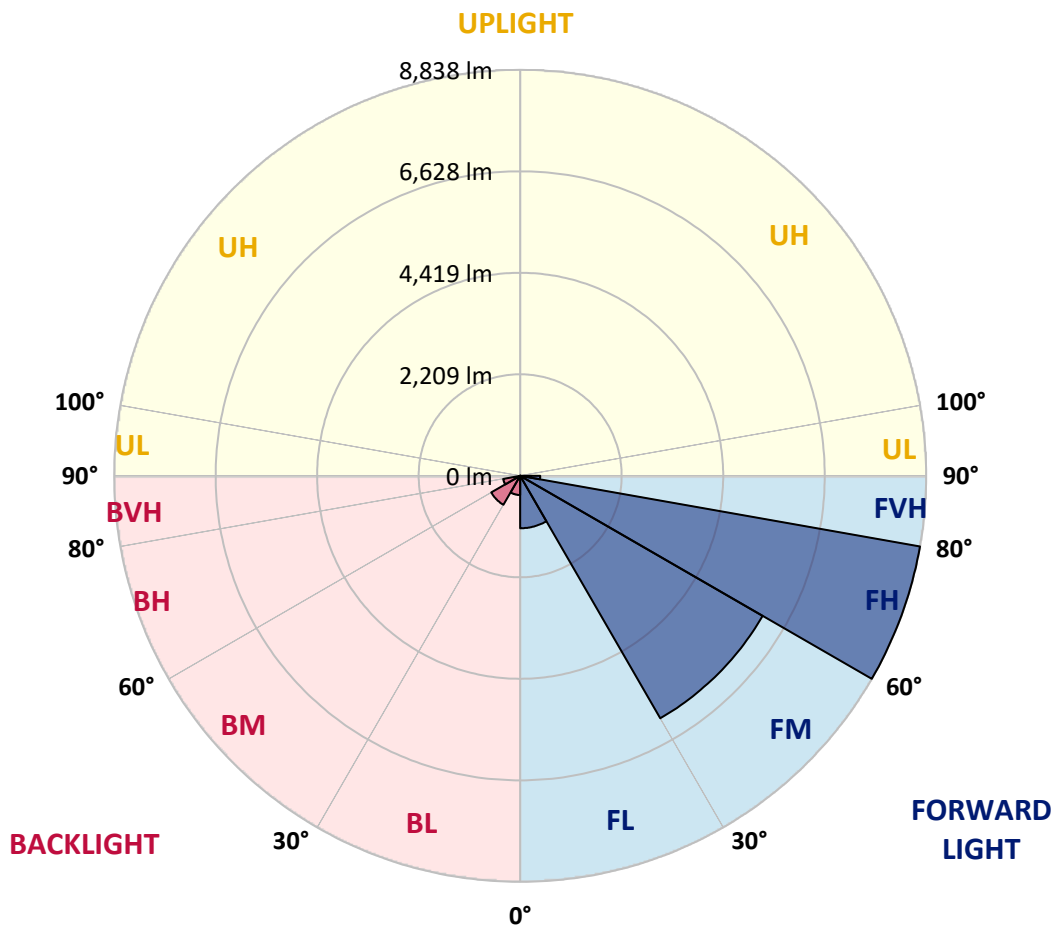
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1141.7	6.3			
FM (30°-60°)	6094.0	33.8			
FH (60°-80°)	8837.5	49.0			G4/12000
FVH (80°-90°)	435.4	2.4			G3/500
BL (0°-30°)	417.7	2.3	B1/500		
BM (30°-60°)	726.8	4.0	B1/1000		
BH (60°-80°)	374.8	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: P399918

CATALOG NUMBER: ARCH-L-PA3-210-727-U-T4W-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1962.4	1962.4	1962.4	1962.4	1962.4	1962.4	1962.4	1962.4	1962.4	1962.4	1962.4
2.5°	2138.7	2135.3	2125.4	2108.7	2092.1	2075.5	2072.1	2045.5	2015.6	1992.3	1972.4
5°	2328.3	2324.9	2308.3	2271.7	2235.1	2191.9	2188.6	2125.4	2068.8	2005.6	1952.4
7.5°	2524.5	2517.8	2487.9	2431.4	2368.2	2301.6	2295.0	2201.9	2118.7	2035.6	1959.1
10°	2677.5	2670.8	2627.6	2561.1	2474.6	2391.5	2381.5	2285.0	2201.9	2095.4	1992.3
12.5°	2827.2	2813.9	2757.3	2684.1	2577.7	2497.9	2487.9	2388.1	2288.3	2178.6	2052.2
15°	2966.9	2950.2	2897.0	2803.9	2690.8	2614.3	2607.6	2501.2	2398.1	2271.7	2132.0
17.5°	3063.3	3056.7	2993.5	2890.4	2780.6	2717.4	2710.8	2601.0	2497.9	2364.8	2215.2
20°	3113.2	3113.2	3053.3	2940.3	2840.5	2797.2	2787.3	2684.1	2584.4	2458.0	2301.6
22.5°	3123.2	3133.2	3086.6	2963.5	2890.4	2853.8	2847.1	2757.3	2660.9	2544.5	2398.1
25°	3143.1	3143.1	3119.9	2986.8	2933.6	2923.6	2920.3	2840.5	2754.0	2637.6	2494.6
27.5°	3166.4	3166.4	3149.8	3020.1	3000.1	2996.8	2993.5	2956.9	2887.0	2750.7	2607.6
30°	3226.3	3229.6	3216.3	3086.6	3073.3	3109.9	3116.5	3096.6	3010.1	2840.5	2724.1
32.5°	3376.0	3346.0	3309.5	3133.2	3156.5	3203.0	3206.3	3166.4	3073.3	2936.9	2863.8
35°	3751.8	3575.5	3409.2	3173.1	3183.1	3229.6	3236.3	3233.0	3176.4	3060.0	3023.4
37.5°	4101.1	3851.6	3615.5	3266.2	3233.0	3282.8	3296.1	3352.7	3309.5	3229.6	3239.6
40°	4303.9	4207.5	4041.2	3522.3	3332.7	3409.2	3422.5	3509.0	3492.4	3459.1	3522.3
42.5°	4929.3	4935.9	4756.3	3904.8	3515.7	3638.7	3655.4	3725.2	3748.5	3765.1	3918.1
45°	5654.3	5677.6	5634.4	4593.3	3861.6	3901.5	3924.8	4017.9	4104.4	4210.8	4490.2
47.5°	6525.8	6505.8	6346.2	5434.8	4463.6	4240.8	4257.4	4437.0	4586.7	4819.5	5218.6
50°	7297.4	7347.3	7044.6	6219.8	5311.8	4776.3	4759.6	4935.9	5205.3	5531.3	6033.5
52.5°	8075.7	8002.6	7593.4	6998.1	6316.2	5504.7	5454.8	5551.2	5930.4	6316.2	6831.8
55°	8281.9	8288.6	8148.9	7849.6	7154.4	6389.4	6306.3	6299.6	6771.9	7034.7	7669.9
57.5°	8687.7	8704.4	8737.6	8797.5	8468.2	7274.1	7187.7	7094.5	7553.5	7706.5	8511.4
60°	9100.2	9120.1	9323.0	9645.6	9426.1	8228.7	8135.6	7916.1	8172.2	8378.4	9396.2
62.5°	9046.9	9186.6	9775.4	10417.3	10390.7	9276.4	9160.0	8631.2	8794.2	8973.8	10207.7
65°	8168.9	8318.5	9642.3	10630.2	11358.6	10310.9	10121.3	9369.6	9379.6	9595.7	10989.4
67.5°	7383.9	7546.9	8810.8	10540.4	11997.2	11238.8	11042.6	10111.3	9955.0	10314.2	11408.5
70°	6931.6	7094.5	8148.9	10261.0	12176.8	12266.6	12097.0	10959.4	10640.1	10969.4	10939.5
72.5°	5424.8	5680.9	7304.1	9728.8	12369.7	13367.5	13234.5	12033.8	11222.2	10284.2	8328.5
75°	2162.0	2398.1	4560.1	7829.6	12126.9	14315.5	14212.3	12516.0	10387.4	7344.0	4264.0
77.5°	651.9	698.5	1267.2	3871.6	8890.6	12692.3	12659.1	10523.7	7350.6	3409.2	1164.1
80°	216.2	239.5	389.2	1067.7	4057.8	7929.4	8079.1	6705.4	3339.4	781.6	236.2
82.5°	89.8	99.8	196.2	429.1	1436.9	3415.9	3366.0	3003.5	1164.1	485.6	86.5
85°	23.3	29.9	89.8	246.1	525.5	1177.4	1237.3	1007.8	658.6	402.5	26.6
87.5°	0.0	0.0	43.2	99.8	236.2	355.9	372.5	306.0	372.5	302.7	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: P399918

CATALOG NUMBER: ARCH-L-PA3-210-727-U-T4W-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1962.4	1962.4	1962.4	1962.4	1962.4	1962.4	1962.4	1962.4	1962.4	1962.4	1962.4
2.5°	1955.7	1939.1	1909.2	1889.2	1862.6	1856.0	1842.6	1826.0	1822.7	1806.1	1809.4
5°	1922.5	1895.9	1842.6	1806.1	1762.8	1749.5	1726.2	1709.6	1696.3	1673.0	1676.3
7.5°	1915.8	1875.9	1802.7	1732.9	1663.0	1613.1	1543.3	1486.8	1440.2	1390.3	1400.3
10°	1939.1	1889.2	1786.1	1689.6	1563.3	1403.6	1220.7	1100.9	1041.1	981.2	987.8
12.5°	1985.7	1925.8	1792.8	1646.4	1390.3	1117.6	864.8	701.8	658.6	632.0	635.3
15°	2055.5	1982.3	1812.7	1563.3	1157.5	808.2	575.4	505.6	522.2	532.2	532.2
17.5°	2128.7	2045.5	1829.3	1413.6	894.7	565.4	469.0	462.3	485.6	508.9	508.9
20°	2218.5	2112.1	1832.7	1224.0	645.3	459.0	442.4	442.4	459.0	485.6	485.6
22.5°	2305.0	2185.2	1802.7	1007.8	492.3	425.7	425.7	425.7	435.7	462.3	465.7
25°	2408.1	2275.0	1739.5	778.3	422.4	405.8	405.8	409.1	415.8	439.0	442.4
27.5°	2517.8	2368.2	1633.1	568.8	385.8	382.5	385.8	389.2	392.5	415.8	422.4
30°	2644.2	2471.3	1496.7	425.7	352.6	352.6	362.5	369.2	369.2	389.2	395.8
32.5°	2790.6	2607.6	1333.8	352.6	319.3	316.0	332.6	342.6	342.6	359.2	365.9
35°	2973.5	2747.3	1137.5	312.7	292.7	286.0	292.7	309.3	316.0	329.3	332.6
37.5°	3216.3	2913.6	928.0	289.4	272.7	259.4	259.4	262.8	276.1	289.4	292.7
40°	3525.6	3096.6	721.8	272.7	252.8	239.5	229.5	226.2	222.8	232.8	239.5
42.5°	3914.8	3302.8	538.8	256.1	236.2	216.2	202.9	189.6	173.0	169.6	173.0
45°	4413.7	3555.6	399.1	242.8	226.2	196.2	173.0	149.7	119.7	109.8	113.1
47.5°	5002.4	3818.3	312.7	229.5	219.5	173.0	143.0	103.1	73.2	66.5	69.8
50°	5627.7	4071.1	266.1	212.9	206.2	149.7	103.1	63.2	43.2	43.2	46.6
52.5°	6159.9	4214.1	242.8	199.6	186.3	123.1	66.5	36.6	26.6	26.6	29.9
55°	6675.4	4290.6	226.2	186.3	159.7	86.5	36.6	23.3	16.6	16.6	16.6
57.5°	7207.6	4323.9	206.2	169.6	126.4	53.2	20.0	13.3	10.0	10.0	10.0
60°	7679.9	4260.7	176.3	139.7	83.2	26.6	10.0	10.0	6.7	3.3	3.3
62.5°	8075.7	4141.0	123.1	99.8	49.9	13.3	6.7	3.3	0.0	0.0	0.0
65°	8318.5	3948.1	79.8	66.5	29.9	10.0	3.3	0.0	0.0	0.0	0.0
67.5°	8248.7	3585.5	49.9	43.2	13.3	6.7	3.3	0.0	0.0	0.0	0.0
70°	7443.8	2940.3	36.6	26.6	10.0	3.3	0.0	0.0	0.0	0.0	0.0
72.5°	5365.0	1989.0	26.6	16.6	6.7	0.0	0.0	0.0	0.0	0.0	0.0
75°	2581.0	708.5	16.6	13.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	632.0	156.3	10.0	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	139.7	29.9	6.7	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	46.6	13.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	16.6	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.0	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)