

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: P399972

Luminaire Tested: **ARCH-L-PA3-210-830-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399972  
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-PA3-210-830-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 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: 17131 lumens  
Efficiency: N/A  
Efficacy: 81.2 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

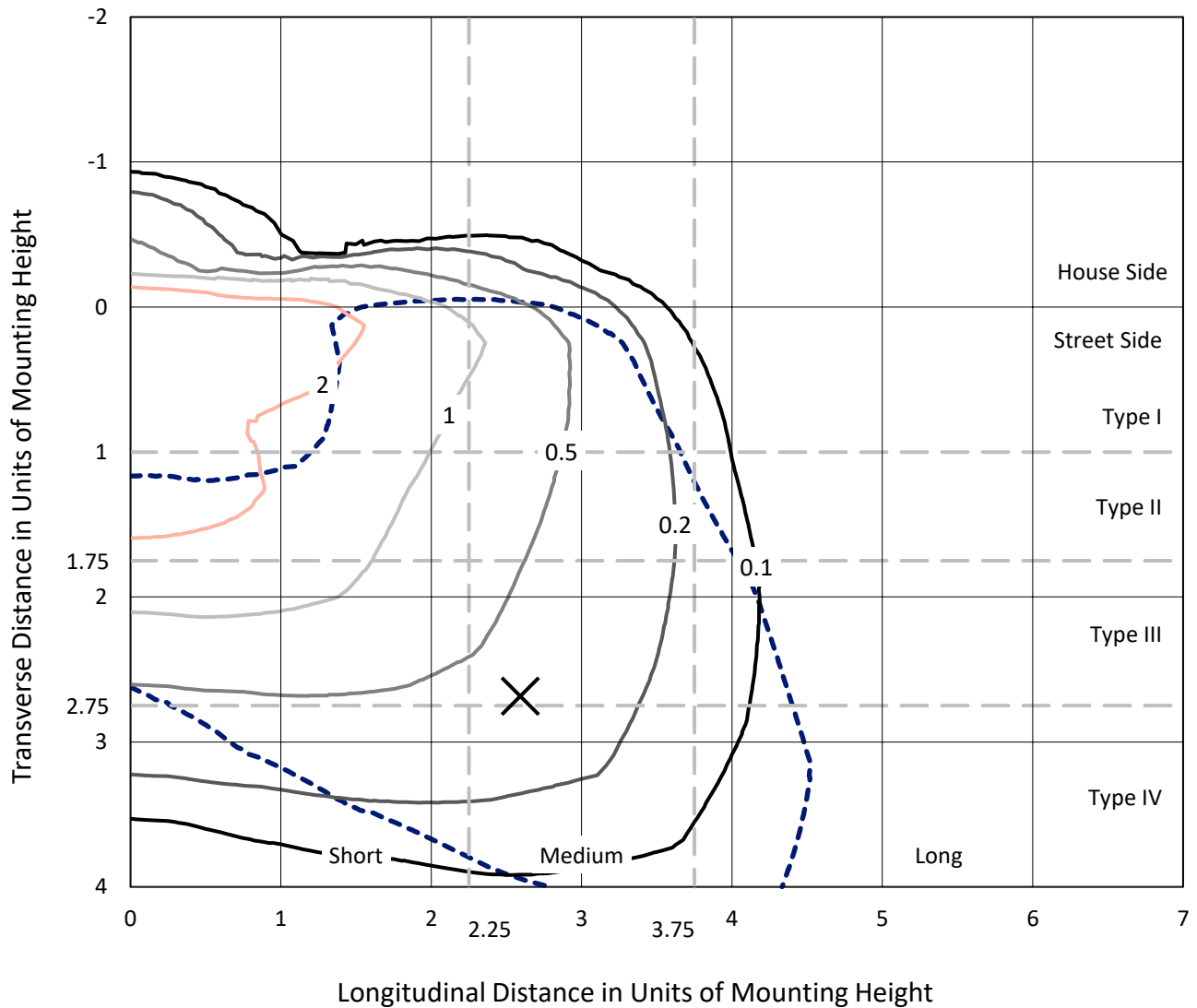
Input Watts (W): 211  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

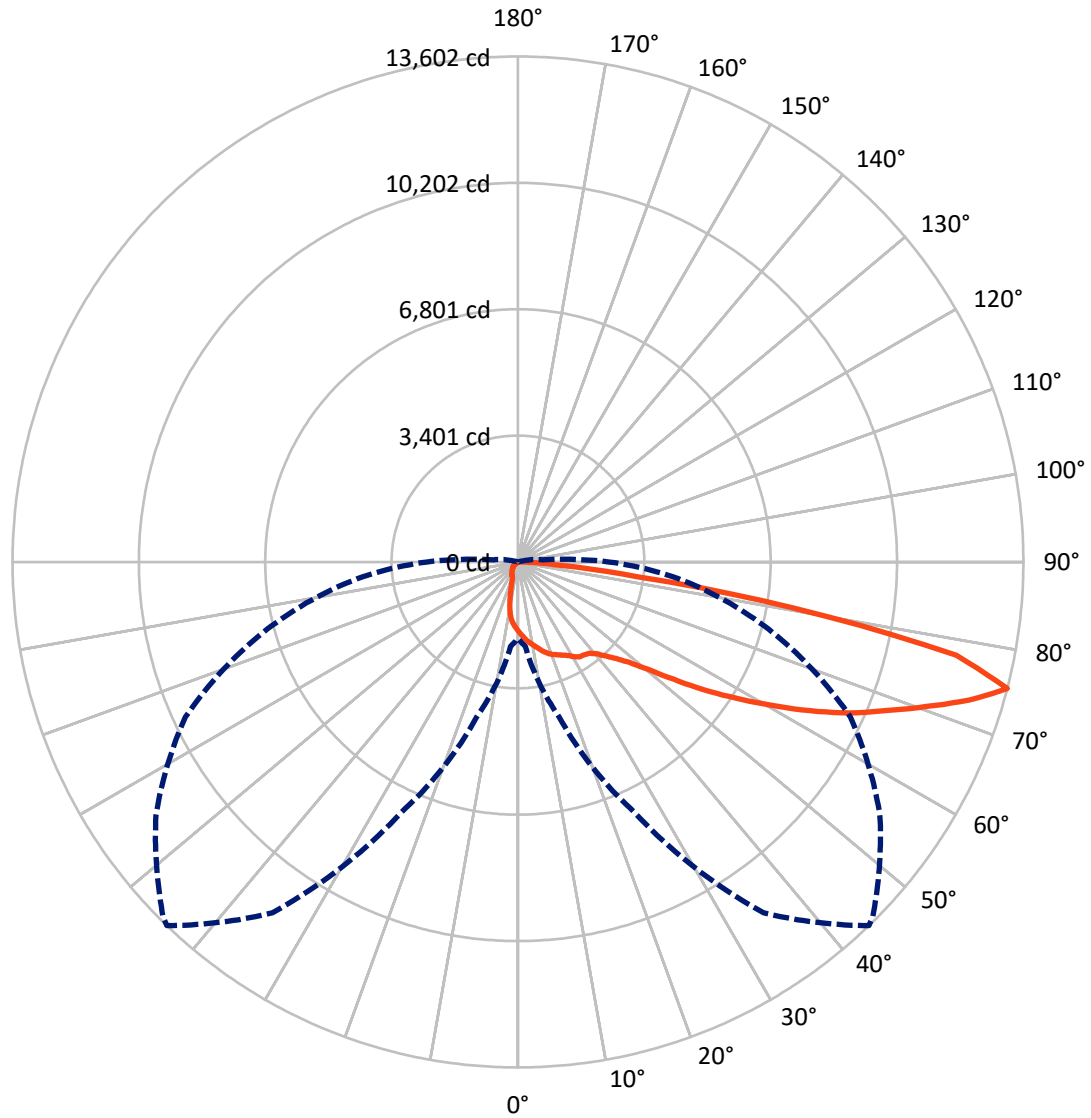
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



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

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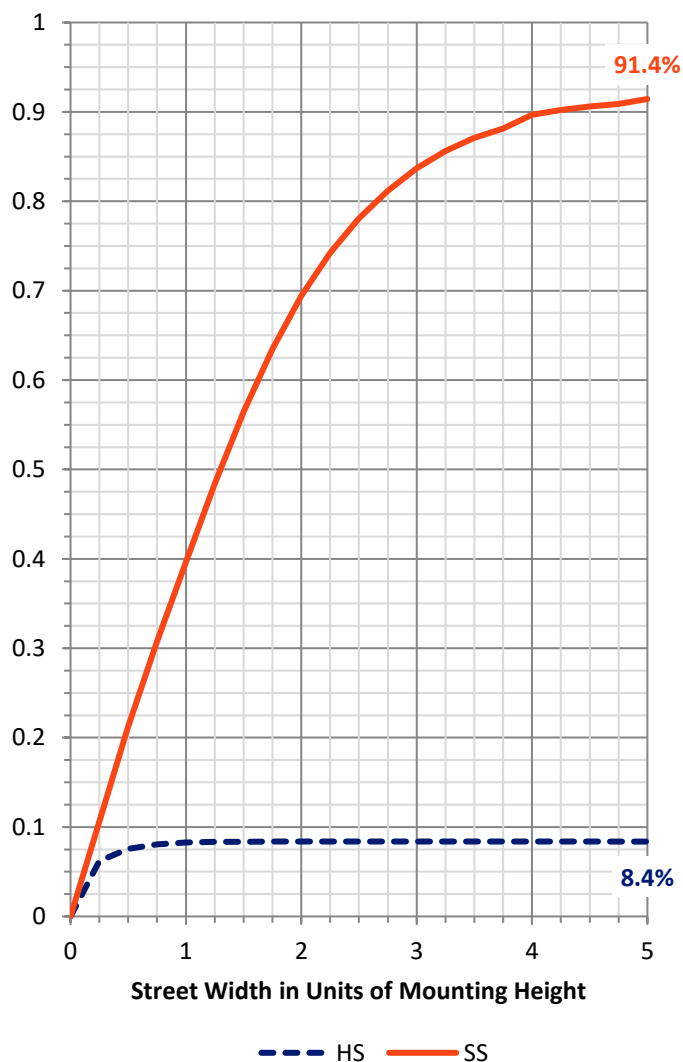
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1444.7	0.0	1444.7
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	15686.3	0.0	15686.3
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	17131.0	0.0	17131.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	175.8	1.0
10°-20°	492.8	2.9
20°-30°	813.2	4.7
30°-40°	1180.2	6.9
40°-50°	1918.6	11.2
50°-60°	3382.2	19.7
60°-70°	4860.9	28.4
70°-80°	3892.5	22.7
80°-90°	414.7	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°	17131.0	100.0
0°-180°	17131.0	100.0

**Coefficient of Utilization**



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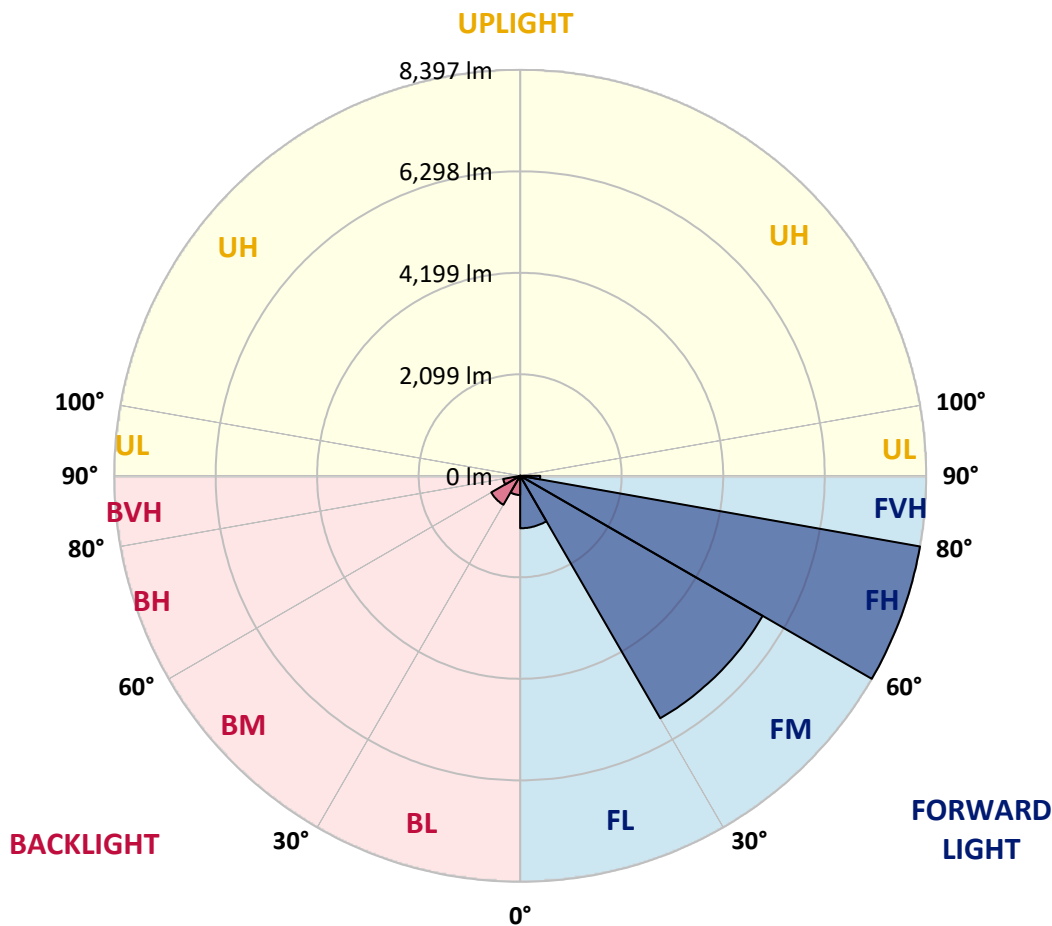
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1084.9	6.3			
FM (30°-60°)	5790.4	33.8			
FH (60°-80°)	8397.3	49.0			G4/12000
FVH (80°-90°)	413.7	2.4			G3/500
BL (0°-30°)	396.9	2.3	B1/500		
BM (30°-60°)	690.6	4.0	B1/1000		
BH (60°-80°)	356.2	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1864.6	1864.6	1864.6	1864.6	1864.6	1864.6	1864.6	1864.6	1864.6	1864.6	1864.6
2.5°	2032.1	2029.0	2019.5	2003.7	1987.9	1972.1	1968.9	1943.7	1915.2	1893.1	1874.1
5°	2212.3	2209.1	2193.3	2158.6	2123.8	2082.7	2079.6	2019.5	1965.8	1905.7	1855.2
7.5°	2398.8	2392.4	2364.0	2310.3	2250.2	2187.0	2180.7	2092.2	2013.2	1934.2	1861.5
10°	2544.1	2537.8	2496.7	2433.5	2351.3	2272.3	2262.9	2171.2	2092.2	1991.1	1893.1
12.5°	2686.4	2673.7	2620.0	2550.5	2449.3	2373.5	2364.0	2269.2	2174.4	2070.1	1950.0
15°	2819.1	2803.3	2752.7	2664.2	2556.8	2484.1	2477.8	2376.6	2278.7	2158.6	2025.8
17.5°	2910.7	2904.4	2844.4	2746.4	2642.1	2582.1	2575.7	2471.4	2373.5	2247.1	2104.8
20°	2958.1	2958.1	2901.3	2793.8	2699.0	2657.9	2648.4	2550.5	2455.6	2335.5	2187.0
22.5°	2967.6	2977.1	2932.9	2815.9	2746.4	2711.6	2705.3	2620.0	2528.3	2417.7	2278.7
25°	2986.6	2986.6	2964.5	2838.1	2787.5	2778.0	2774.8	2699.0	2616.8	2506.2	2370.3
27.5°	3008.7	3008.7	2992.9	2869.7	2850.7	2847.5	2844.4	2809.6	2743.2	2613.7	2477.8
30°	3065.6	3068.8	3056.1	2932.9	2920.2	2955.0	2961.3	2942.3	2860.2	2699.0	2588.4
32.5°	3207.8	3179.4	3144.6	2977.1	2999.2	3043.5	3046.6	3008.7	2920.2	2790.6	2721.1
35°	3564.9	3397.4	3239.4	3015.0	3024.5	3068.8	3075.1	3071.9	3018.2	2907.6	2872.8
37.5°	3896.8	3659.8	3435.4	3103.5	3071.9	3119.3	3132.0	3185.7	3144.6	3068.8	3078.2
40°	4089.6	3997.9	3839.9	3346.9	3166.7	3239.4	3252.1	3334.2	3318.4	3286.8	3346.9
42.5°	4683.7	4690.1	4519.4	3710.3	3340.6	3457.5	3473.3	3539.7	3561.8	3577.6	3723.0
45°	5372.7	5394.8	5353.7	4364.5	3669.2	3707.2	3729.3	3817.8	3900.0	4001.1	4266.6
47.5°	6200.7	6181.8	6030.1	5164.1	4241.3	4029.5	4045.3	4216.0	4358.2	4579.4	4958.7
50°	6933.9	6981.4	6693.8	5910.0	5047.2	4538.4	4522.6	4690.1	4946.0	5255.8	5733.0
52.5°	7673.5	7604.0	7215.2	6649.5	6001.6	5230.5	5183.1	5274.7	5635.0	6001.6	6491.5
55°	7869.4	7875.8	7743.0	7458.6	6798.1	6071.2	5992.1	5985.8	6434.6	6684.3	7287.9
57.5°	8255.0	8270.8	8302.4	8359.3	8046.4	6911.8	6829.7	6741.2	7177.3	7322.7	8087.5
60°	8646.9	8665.9	8858.6	9165.2	8956.6	7818.9	7730.4	7521.8	7765.1	7961.1	8928.2
62.5°	8596.3	8729.1	9288.5	9898.4	9873.1	8814.4	8703.8	8201.3	8356.1	8526.8	9699.3
65°	7762.0	7904.2	9162.0	10100.7	10792.8	9797.3	9617.1	8902.9	8912.4	9117.8	10442.0
67.5°	7016.1	7171.0	8371.9	10015.4	11399.6	10679.0	10492.6	9607.7	9459.1	9800.4	10840.2
70°	6586.3	6741.2	7743.0	9749.9	11570.3	11655.6	11494.4	10413.6	10110.2	10423.0	10394.6
72.5°	5154.6	5398.0	6940.3	9244.2	11753.6	12701.7	12575.3	11434.4	10663.2	9772.0	7913.7
75°	2054.3	2278.7	4332.9	7439.6	11522.9	13602.4	13504.5	11892.6	9870.0	6978.2	4051.7
77.5°	619.4	663.7	1204.1	3678.7	8447.8	12060.1	12028.5	9999.6	6984.5	3239.4	1106.1
80°	205.4	227.5	369.8	1014.5	3855.7	7534.4	7676.6	6371.4	3173.1	742.7	224.4
82.5°	85.3	94.8	186.5	407.7	1365.3	3245.7	3198.3	2853.9	1106.1	461.4	82.2
85°	22.1	28.4	85.3	233.9	499.3	1118.8	1175.7	957.6	625.8	382.4	25.3
87.5°	0.0	0.0	41.1	94.8	224.4	338.2	354.0	290.8	354.0	287.6	12.6
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°	1864.6	1864.6	1864.6	1864.6	1864.6	1864.6	1864.6	1864.6	1864.6	1864.6	1864.6
2.5°	1858.3	1842.5	1814.1	1795.1	1769.8	1763.5	1750.9	1735.1	1731.9	1716.1	1719.3
5°	1826.7	1801.4	1750.9	1716.1	1675.0	1662.4	1640.3	1624.5	1611.8	1589.7	1592.8
7.5°	1820.4	1782.5	1712.9	1646.6	1580.2	1532.8	1466.4	1412.7	1368.5	1321.1	1330.5
10°	1842.5	1795.1	1697.1	1605.5	1485.4	1333.7	1159.9	1046.1	989.2	932.3	938.6
12.5°	1886.8	1829.9	1703.5	1564.4	1321.1	1061.9	821.7	666.8	625.8	600.5	603.6
15°	1953.1	1883.6	1722.4	1485.4	1099.8	768.0	546.8	480.4	496.2	505.7	505.7
17.5°	2022.7	1943.7	1738.2	1343.2	850.2	537.3	445.6	439.3	461.4	483.5	483.5
20°	2108.0	2006.9	1741.4	1163.0	613.1	436.1	420.3	420.3	436.1	461.4	461.4
22.5°	2190.2	2076.4	1712.9	957.6	467.7	404.5	404.5	404.5	414.0	439.3	442.5
25°	2288.1	2161.7	1652.9	739.5	401.4	385.6	385.6	388.7	395.1	417.2	420.3
27.5°	2392.4	2250.2	1551.8	540.4	366.6	363.4	366.6	369.8	372.9	395.1	401.4
30°	2512.5	2348.2	1422.2	404.5	335.0	335.0	344.5	350.8	350.8	369.8	376.1
32.5°	2651.6	2477.8	1267.3	335.0	303.4	300.2	316.0	325.5	325.5	341.3	347.6
35°	2825.4	2610.5	1080.9	297.1	278.1	271.8	278.1	293.9	300.2	312.9	316.0
37.5°	3056.1	2768.5	881.8	275.0	259.2	246.5	246.5	249.7	262.3	275.0	278.1
40°	3350.0	2942.3	685.8	259.2	240.2	227.5	218.1	214.9	211.7	221.2	227.5
42.5°	3719.8	3138.3	512.0	243.4	224.4	205.4	192.8	180.1	164.3	161.2	164.3
45°	4193.9	3378.5	379.2	230.7	214.9	186.5	164.3	142.2	113.8	104.3	107.5
47.5°	4753.3	3628.2	297.1	218.1	208.6	164.3	135.9	98.0	69.5	63.2	66.4
50°	5347.4	3868.3	252.8	202.3	195.9	142.2	98.0	60.0	41.1	41.1	44.2
52.5°	5853.1	4004.2	230.7	189.6	177.0	116.9	63.2	34.8	25.3	25.3	28.4
55°	6343.0	4076.9	214.9	177.0	151.7	82.2	34.8	22.1	15.8	15.8	15.8
57.5°	6848.6	4108.5	195.9	161.2	120.1	50.6	19.0	12.6	9.5	9.5	9.5
60°	7297.4	4048.5	167.5	132.7	79.0	25.3	9.5	9.5	6.3	3.2	3.2
62.5°	7673.5	3934.7	116.9	94.8	47.4	12.6	6.3	3.2	0.0	0.0	0.0
65°	7904.2	3751.4	75.8	63.2	28.4	9.5	3.2	0.0	0.0	0.0	0.0
67.5°	7837.8	3406.9	47.4	41.1	12.6	6.3	3.2	0.0	0.0	0.0	0.0
70°	7073.0	2793.8	34.8	25.3	9.5	3.2	0.0	0.0	0.0	0.0	0.0
72.5°	5097.7	1889.9	25.3	15.8	6.3	0.0	0.0	0.0	0.0	0.0	0.0
75°	2452.5	673.2	15.8	12.6	3.2	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	600.5	148.5	9.5	6.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	132.7	28.4	6.3	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	44.2	12.6	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.8	6.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.5	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)