

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: P399666

Luminaire Tested: **ARCH-L-PA3-170-760-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399666  
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-PA3-170-760-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5700K, 750mA 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: 18829 lumens  
Efficiency: N/A  
Efficacy: 108.8 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

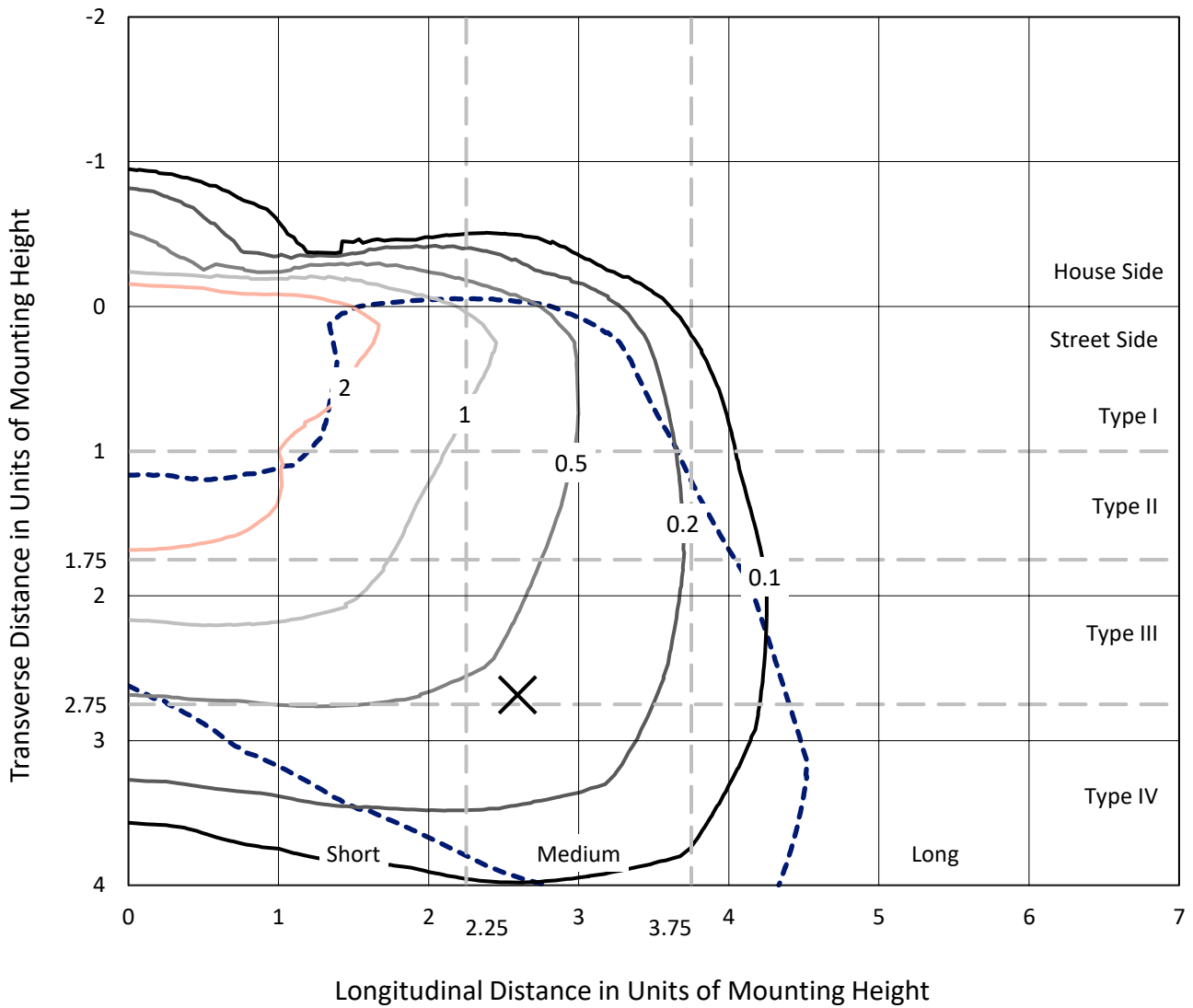
Input Watts (W): 173  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

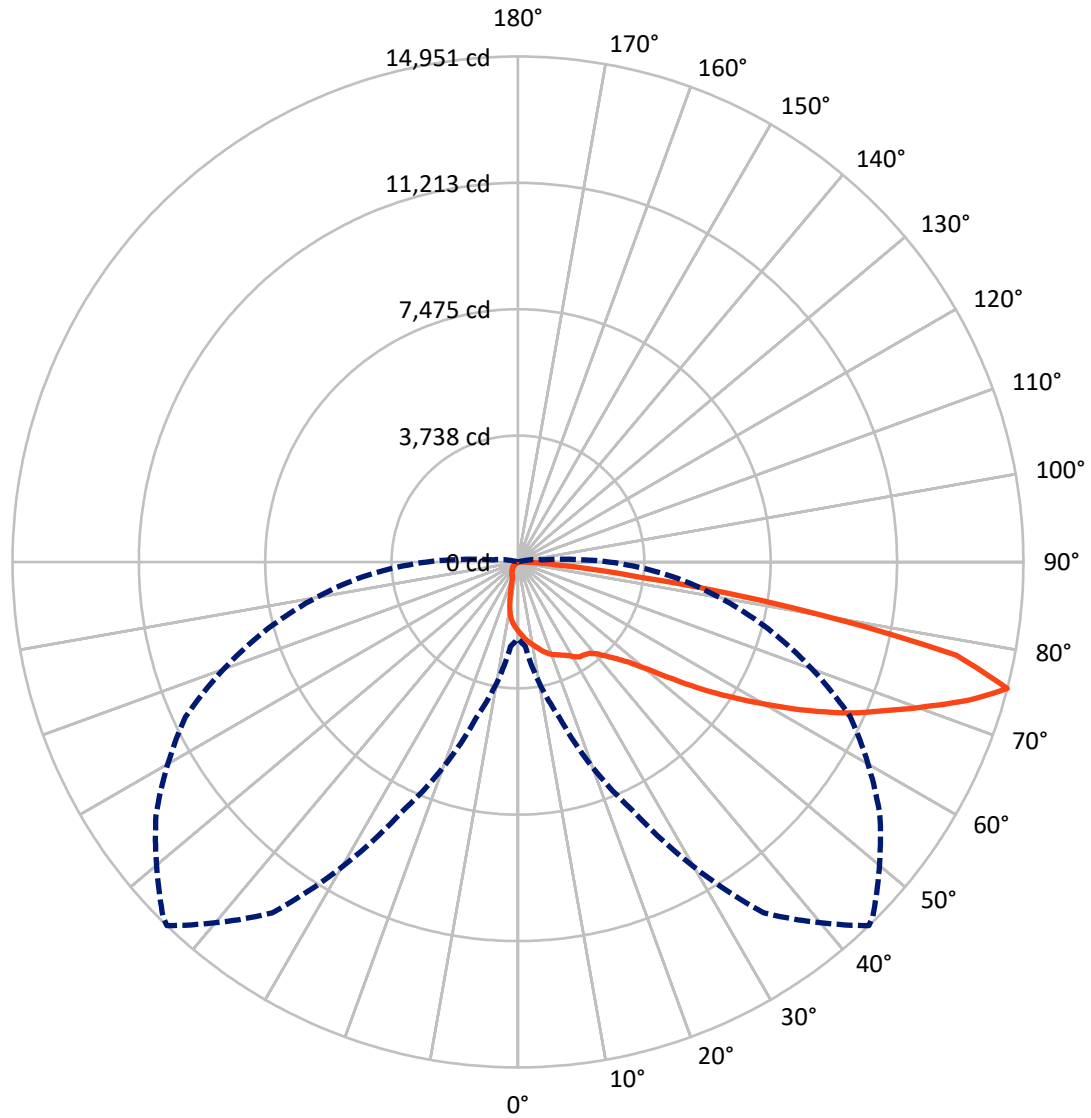
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.4 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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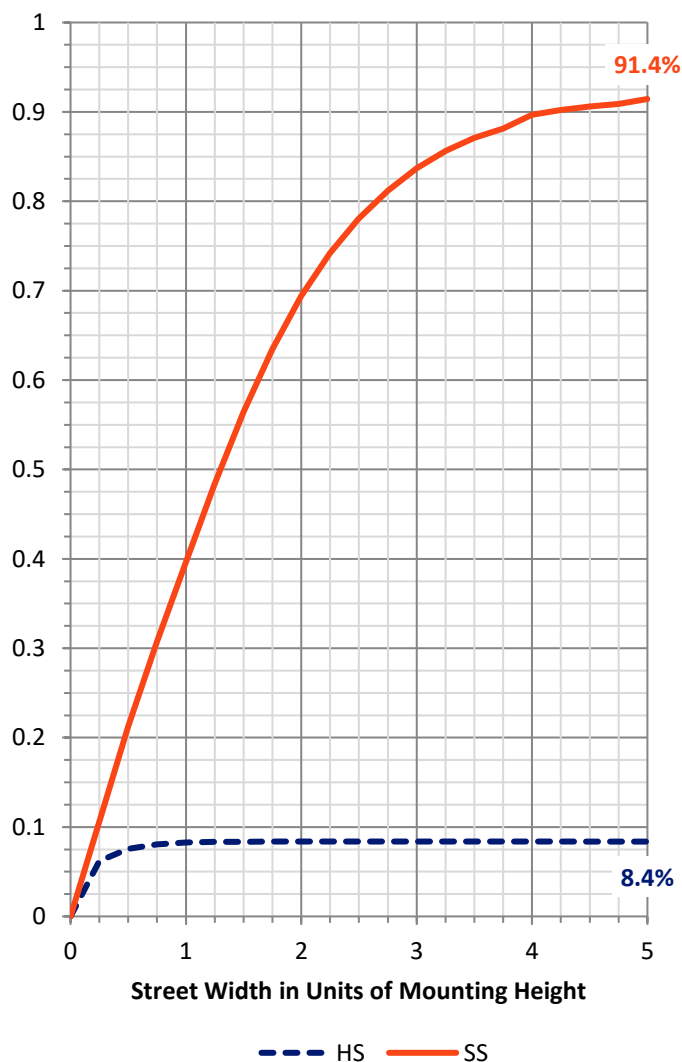
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1587.9	0.0	1587.9
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	17241.1	0.0	17241.1
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	18829.0	0.0	18829.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	193.3	1.0
10°-20°	541.6	2.9
20°-30°	893.8	4.7
30°-40°	1297.2	6.9
40°-50°	2108.7	11.2
50°-60°	3717.5	19.7
60°-70°	5342.8	28.4
70°-80°	4278.4	22.7
80°-90°	455.8	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°	18829.0	100.0
0°-180°	18829.0	100.0

**Coefficient of Utilization**



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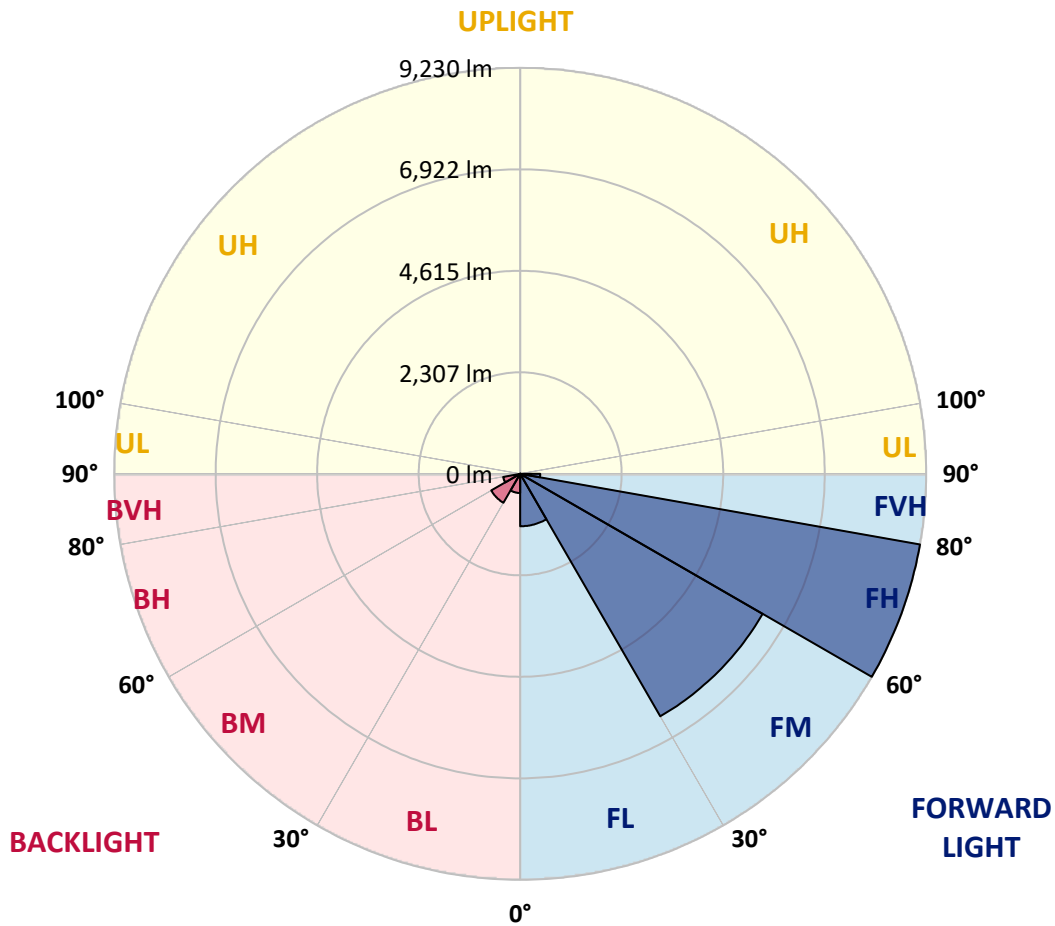
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1192.4	6.3			
FM (30°-60°)	6364.4	33.8			
FH (60°-80°)	9229.6	49.0			G4/12000
FVH (80°-90°)	454.7	2.4			G3/500
BL (0°-30°)	436.3	2.3	B1/500		
BM (30°-60°)	759.0	4.0	B1/1000		
BH (60°-80°)	391.5	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	2049.5	2049.5	2049.5	2049.5	2049.5	2049.5	2049.5	2049.5	2049.5	2049.5	2049.5
2.5°	2233.6	2230.1	2219.7	2202.3	2184.9	2167.6	2164.1	2136.3	2105.0	2080.7	2059.9
5°	2431.6	2428.1	2410.7	2372.5	2334.3	2289.1	2285.7	2219.7	2160.6	2094.6	2039.0
7.5°	2636.5	2629.6	2598.3	2539.3	2473.3	2403.8	2396.8	2299.6	2212.7	2125.9	2046.0
10°	2796.3	2789.4	2744.2	2674.7	2584.4	2497.6	2487.1	2386.4	2299.6	2188.4	2080.7
12.5°	2952.6	2938.7	2879.7	2803.3	2692.1	2608.7	2598.3	2494.1	2389.9	2275.3	2143.3
15°	3098.5	3081.1	3025.6	2928.3	2810.2	2730.3	2723.4	2612.2	2504.5	2372.5	2226.6
17.5°	3199.3	3192.3	3126.3	3018.6	2904.0	2838.0	2831.0	2716.4	2608.7	2469.8	2313.5
20°	3251.4	3251.4	3188.8	3070.7	2966.5	2921.4	2910.9	2803.3	2699.0	2567.0	2403.8
22.5°	3261.8	3272.2	3223.6	3095.0	3018.6	2980.4	2973.5	2879.7	2778.9	2657.4	2504.5
25°	3282.6	3282.6	3258.3	3119.4	3063.8	3053.4	3049.9	2966.5	2876.2	2754.6	2605.3
27.5°	3306.9	3306.9	3289.6	3154.1	3133.3	3129.8	3126.3	3088.1	3015.1	2872.7	2723.4
30°	3369.5	3372.9	3359.0	3223.6	3209.7	3247.9	3254.8	3234.0	3143.7	2966.5	2844.9
32.5°	3525.8	3494.5	3456.3	3272.2	3296.5	3345.1	3348.6	3306.9	3209.7	3067.3	2990.8
35°	3918.3	3734.2	3560.5	3313.9	3324.3	3372.9	3379.9	3376.4	3317.4	3195.8	3157.6
37.5°	4283.0	4022.5	3775.9	3411.1	3376.4	3428.5	3442.4	3501.5	3456.3	3372.9	3383.4
40°	4494.9	4394.2	4220.5	3678.6	3480.6	3560.5	3574.4	3664.7	3647.4	3612.6	3678.6
42.5°	5148.0	5154.9	4967.3	4078.1	3671.7	3800.2	3817.6	3890.5	3914.8	3932.2	4092.0
45°	5905.2	5929.6	5884.4	4797.1	4032.9	4074.6	4098.9	4196.2	4286.5	4397.7	4689.5
47.5°	6815.3	6794.5	6627.8	5676.0	4661.7	4428.9	4446.3	4633.9	4790.2	5033.3	5450.2
50°	7621.2	7673.3	7357.2	6495.8	5547.5	4988.2	4970.8	5154.9	5436.3	5776.7	6301.2
52.5°	8434.1	8357.6	7930.4	7308.6	6596.5	5748.9	5696.8	5797.6	6193.6	6596.5	7134.9
55°	8649.4	8656.4	8510.5	8197.9	7471.9	6672.9	6586.1	6579.1	7072.4	7346.8	8010.3
57.5°	9073.2	9090.6	9125.3	9187.9	8844.0	7596.9	7506.6	7409.3	7888.7	8048.5	8889.1
60°	9504.0	9524.8	9736.7	10073.6	9844.4	8593.9	8496.6	8267.3	8534.8	8750.2	9813.1
62.5°	9448.4	9594.3	10209.1	10879.5	10851.7	9688.1	9566.5	9014.2	9184.4	9372.0	10660.7
65°	8531.3	8687.6	10070.2	11101.8	11862.6	10768.4	10570.4	9785.3	9795.7	10021.5	11477.0
67.5°	7711.5	7881.8	9201.8	11008.1	12529.5	11737.5	11532.6	10560.0	10396.7	10771.9	11914.7
70°	7239.1	7409.3	8510.5	10716.3	12717.1	12810.9	12633.7	11445.7	11112.3	11456.2	11424.9
72.5°	5665.6	5933.0	7628.2	10160.5	12918.6	13960.7	13821.7	12567.7	11720.2	10740.6	8698.1
75°	2257.9	2504.5	4762.4	8177.0	12665.0	14950.7	14843.0	13071.4	10848.3	7669.9	4453.2
77.5°	680.8	729.5	1323.5	4043.4	9285.1	13255.5	13220.8	10990.7	7676.8	3560.5	1215.8
80°	225.8	250.1	406.4	1115.0	4237.9	8281.2	8437.5	7002.9	3487.6	816.3	246.6
82.5°	93.8	104.2	204.9	448.1	1500.6	3567.5	3515.4	3136.7	1215.8	507.2	90.3
85°	24.3	31.3	93.8	257.1	548.8	1229.7	1292.2	1052.5	687.8	420.3	27.8
87.5°	0.0	0.0	45.2	104.2	246.6	371.7	389.1	319.6	389.1	316.1	13.9
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°	2049.5	2049.5	2049.5	2049.5	2049.5	2049.5	2049.5	2049.5	2049.5	2049.5	2049.5
2.5°	2042.5	2025.1	1993.9	1973.0	1945.3	1938.3	1924.4	1907.0	1903.6	1886.2	1889.7
5°	2007.8	1980.0	1924.4	1886.2	1841.0	1827.2	1802.8	1785.5	1771.6	1747.3	1750.7
7.5°	2000.8	1959.1	1882.7	1809.8	1736.8	1684.7	1611.8	1552.7	1504.1	1452.0	1462.4
10°	2025.1	1973.0	1865.4	1764.6	1632.6	1465.9	1274.8	1149.8	1087.3	1024.7	1031.7
12.5°	2073.8	2011.3	1872.3	1719.5	1452.0	1167.2	903.2	732.9	687.8	660.0	663.5
15°	2146.7	2070.3	1893.2	1632.6	1208.8	844.1	600.9	528.0	545.4	555.8	555.8
17.5°	2223.1	2136.3	1910.5	1476.3	934.4	590.5	489.8	482.8	507.2	531.5	531.5
20°	2316.9	2205.8	1914.0	1278.3	673.9	479.4	462.0	462.0	479.4	507.2	507.2
22.5°	2407.3	2282.2	1882.7	1052.5	514.1	444.6	444.6	444.6	455.1	482.8	486.3
25°	2514.9	2376.0	1816.7	812.8	441.2	423.8	423.8	427.3	434.2	458.5	462.0
27.5°	2629.6	2473.3	1705.6	594.0	402.9	399.5	402.9	406.4	409.9	434.2	441.2
30°	2761.6	2580.9	1563.2	444.6	368.2	368.2	378.6	385.6	385.6	406.4	413.4
32.5°	2914.4	2723.4	1392.9	368.2	333.5	330.0	347.4	357.8	357.8	375.2	382.1
35°	3105.5	2869.3	1188.0	326.5	305.7	298.7	305.7	323.1	330.0	343.9	347.4
37.5°	3359.0	3042.9	969.2	302.2	284.8	270.9	270.9	274.4	288.3	302.2	305.7
40°	3682.1	3234.0	753.8	284.8	264.0	250.1	239.7	236.2	232.7	243.2	250.1
42.5°	4088.5	3449.4	562.7	267.5	246.6	225.8	211.9	198.0	180.6	177.2	180.6
45°	4609.6	3713.4	416.8	253.6	236.2	204.9	180.6	156.3	125.1	114.6	118.1
47.5°	5224.4	3987.8	326.5	239.7	229.3	180.6	149.4	107.7	76.4	69.5	72.9
50°	5877.4	4251.8	277.9	222.3	215.4	156.3	107.7	66.0	45.2	45.2	48.6
52.5°	6433.2	4401.1	253.6	208.4	194.5	128.5	69.5	38.2	27.8	27.8	31.3
55°	6971.7	4481.0	236.2	194.5	166.7	90.3	38.2	24.3	17.4	17.4	17.4
57.5°	7527.4	4515.8	215.4	177.2	132.0	55.6	20.8	13.9	10.4	10.4	10.4
60°	8020.7	4449.8	184.1	145.9	86.8	27.8	10.4	10.4	6.9	3.5	3.5
62.5°	8434.1	4324.7	128.5	104.2	52.1	13.9	6.9	3.5	0.0	0.0	0.0
65°	8687.6	4123.2	83.4	69.5	31.3	10.4	3.5	0.0	0.0	0.0	0.0
67.5°	8614.7	3744.6	52.1	45.2	13.9	6.9	3.5	0.0	0.0	0.0	0.0
70°	7774.1	3070.7	38.2	27.8	10.4	3.5	0.0	0.0	0.0	0.0	0.0
72.5°	5603.0	2077.3	27.8	17.4	6.9	0.0	0.0	0.0	0.0	0.0	0.0
75°	2695.6	739.9	17.4	13.9	3.5	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	660.0	163.3	10.4	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	145.9	31.3	6.9	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	48.6	13.9	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	17.4	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.4	3.5	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)