

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: P400350

Luminaire Tested: **ARCH-L-PA3-270-727-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400350  
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-PA3-270-727-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 1155mA 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: 21278 lumens  
Efficiency: N/A  
Efficacy: 77.9 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

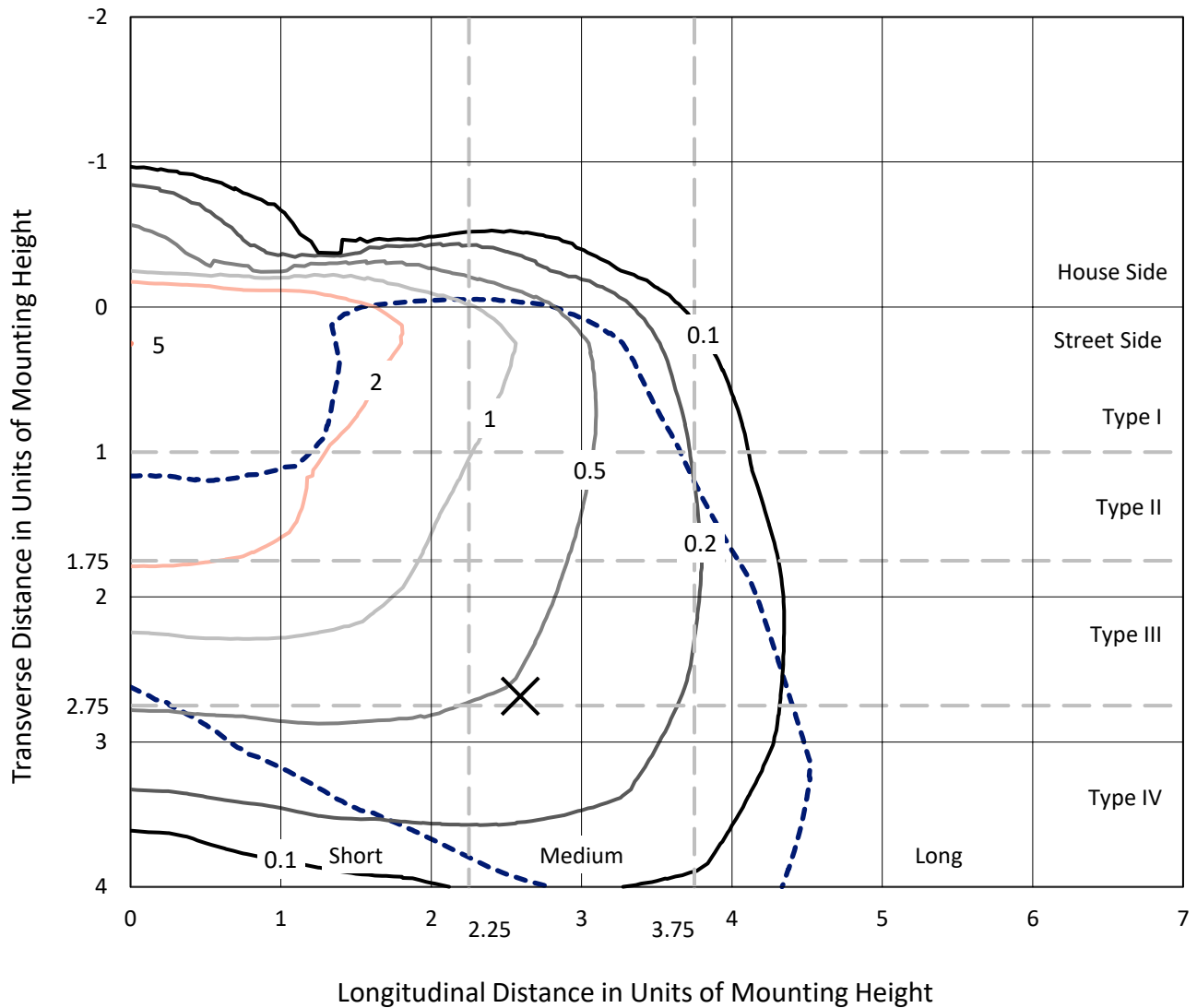
Input Watts (W): 273  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

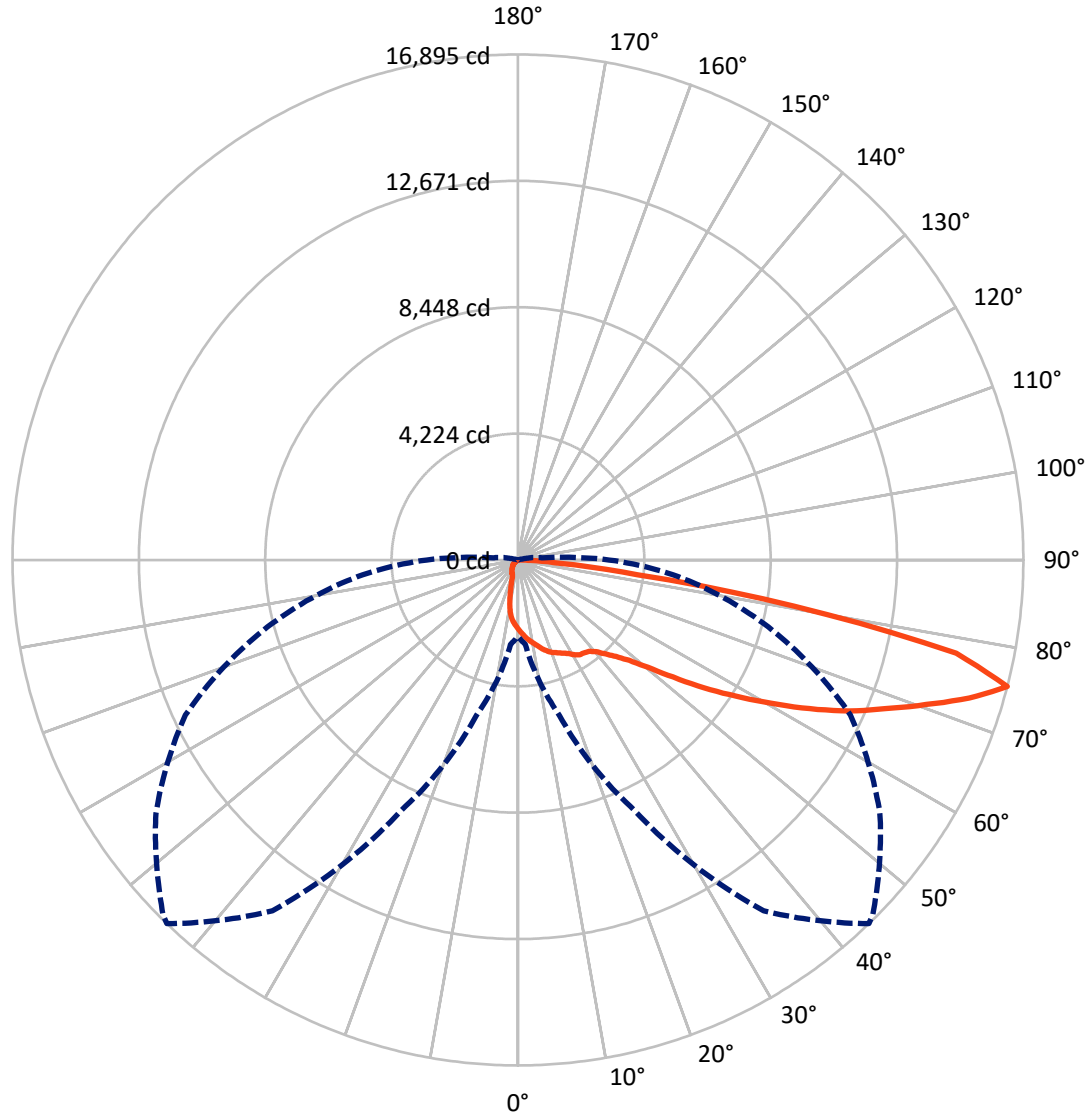
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 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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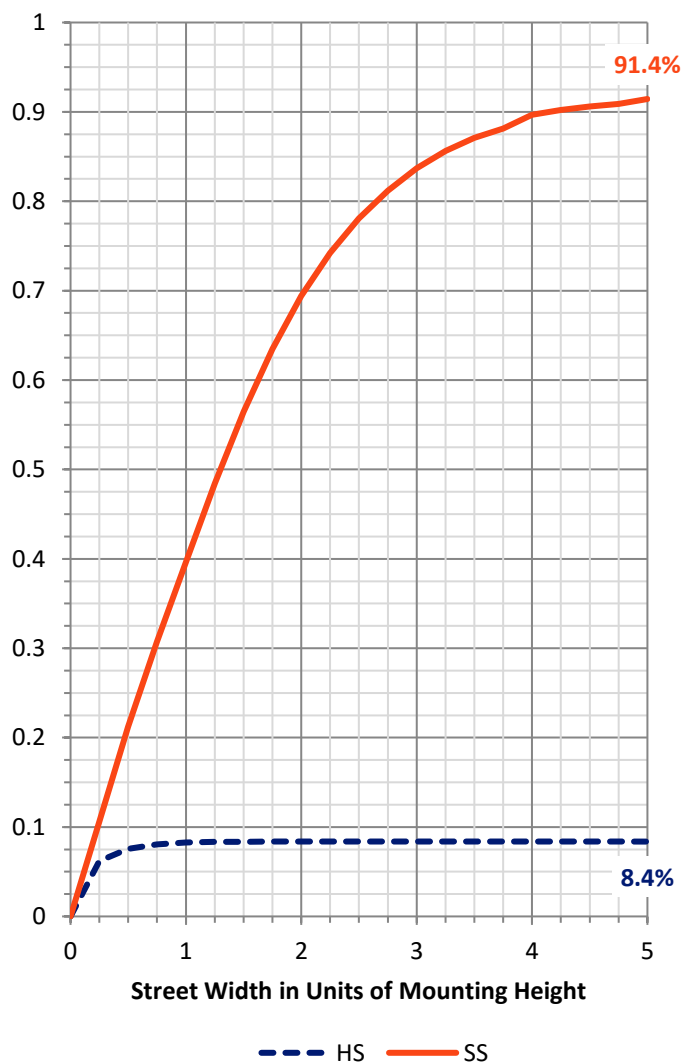
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1794.4	0.0	1794.4
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	19483.6	0.0	19483.6
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	21278.0	0.0	21278.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	218.4	1.0
10°-20°	612.0	2.9
20°-30°	1010.0	4.7
30°-40°	1465.9	6.9
40°-50°	2383.0	11.2
50°-60°	4201.0	19.7
60°-70°	6037.7	28.4
70°-80°	4834.8	22.7
80°-90°	515.1	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°	21278.0	100.0
0°-180°	21278.0	100.0

**Coefficient of Utilization**

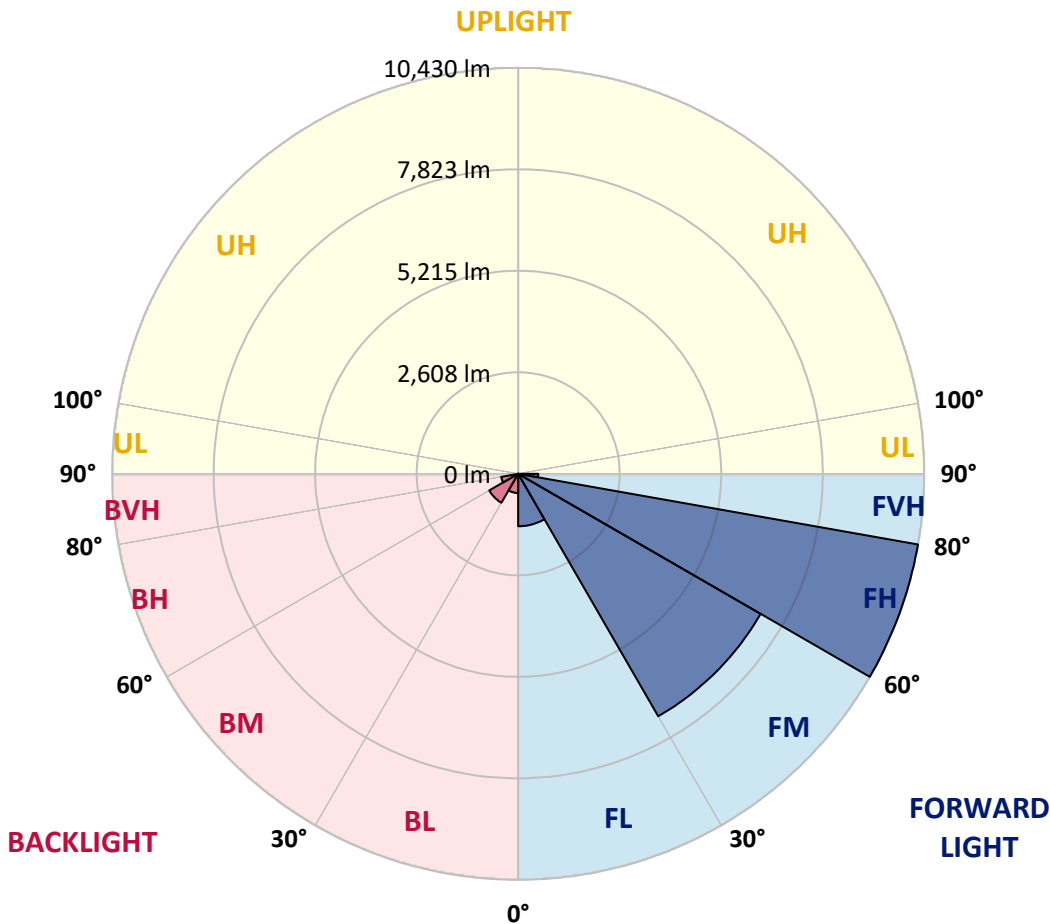


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1347.5	6.3			
FM (30°-60°)	7192.2	33.8			
FH (60°-80°)	10430.1	49.0			G4/12000
FVH (80°-90°)	513.8	2.4			G4/750
BL (0°-30°)	493.0	2.3	B1/500		
BM (30°-60°)	857.8	4.0	B1/1000		
BH (60°-80°)	442.4	2.1	B1/500		G1/500
BVH (80°-90°)	1.3	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°	2316.0	2316.0	2316.0	2316.0	2316.0	2316.0	2316.0	2316.0	2316.0	2316.0	2316.0
2.5°	2524.1	2520.2	2508.4	2488.8	2469.1	2449.5	2445.6	2414.2	2378.8	2351.4	2327.8
5°	2747.8	2743.9	2724.3	2681.1	2637.9	2586.9	2583.0	2508.4	2441.6	2367.1	2304.3
7.5°	2979.4	2971.6	2936.3	2869.5	2794.9	2716.4	2708.6	2598.7	2500.5	2402.4	2312.1
10°	3160.0	3152.2	3101.1	3022.6	2920.6	2822.4	2810.6	2696.8	2598.7	2473.0	2351.4
12.5°	3336.7	3321.0	3254.2	3167.9	3042.2	2948.0	2936.3	2818.5	2700.7	2571.2	2422.0
15°	3501.5	3481.9	3419.1	3309.2	3175.7	3085.4	3077.6	2952.0	2830.3	2681.1	2516.2
17.5°	3615.4	3607.5	3532.9	3411.2	3281.7	3207.1	3199.3	3069.7	2948.0	2791.0	2614.4
20°	3674.2	3674.2	3603.6	3470.1	3352.4	3301.3	3289.5	3167.9	3050.1	2900.9	2716.4
22.5°	3686.0	3697.8	3642.8	3497.6	3411.2	3368.1	3360.2	3254.2	3140.4	3003.0	2830.3
25°	3709.6	3709.6	3682.1	3525.1	3462.3	3450.5	3446.6	3352.4	3250.3	3112.9	2944.1
27.5°	3737.1	3737.1	3717.4	3564.3	3540.8	3536.9	3532.9	3489.7	3407.3	3246.4	3077.6
30°	3807.7	3811.6	3795.9	3642.8	3627.1	3670.3	3678.2	3654.6	3552.6	3352.4	3215.0
32.5°	3984.4	3949.0	3905.8	3697.8	3725.3	3780.2	3784.2	3737.1	3627.1	3466.2	3379.8
35°	4427.9	4219.9	4023.6	3744.9	3756.7	3811.6	3819.5	3815.6	3748.8	3611.4	3568.3
37.5°	4840.1	4545.7	4267.0	3854.8	3815.6	3874.4	3890.1	3956.9	3905.8	3811.6	3823.4
40°	5079.6	4965.7	4769.5	4157.1	3933.3	4023.6	4039.3	4141.4	4121.7	4082.5	4157.1
42.5°	5817.6	5825.4	5613.4	4608.5	4149.2	4294.5	4314.1	4396.5	4424.0	4443.6	4624.2
45°	6673.3	6700.8	6649.8	5421.1	4557.5	4604.6	4632.1	4742.0	4844.0	4969.7	5299.4
47.5°	7701.8	7678.2	7489.8	6414.2	5268.0	5005.0	5024.6	5236.6	5413.2	5688.0	6159.1
50°	8612.5	8671.4	8314.2	7340.6	6269.0	5637.0	5617.4	5825.4	6143.4	6528.1	7120.8
52.5°	9531.1	9444.7	8961.9	8259.2	7454.5	6496.7	6437.8	6551.6	6999.1	7454.5	8062.9
55°	9774.4	9782.3	9617.4	9264.1	8443.7	7540.8	7442.7	7434.8	7992.3	8302.4	9052.1
57.5°	10253.3	10273.0	10312.2	10382.9	9994.3	8585.0	8482.9	8373.0	8914.8	9095.3	10045.3
60°	10740.1	10763.6	11003.1	11383.9	11124.8	9711.6	9601.7	9342.6	9644.9	9888.3	11089.5
62.5°	10677.3	10842.2	11537.0	12294.6	12263.2	10948.1	10810.8	10186.6	10379.0	10590.9	12047.3
65°	9641.0	9817.6	11379.9	12545.8	13405.5	12169.0	11945.2	11058.1	11069.8	11325.0	12969.8
67.5°	8714.6	8906.9	10398.6	12439.8	14159.2	13264.2	13032.6	11933.4	11748.9	12172.9	13464.4
70°	8180.7	8373.0	9617.4	12110.1	14371.2	14477.1	14276.9	12934.4	12557.6	12946.2	12910.9
72.5°	6402.4	6704.7	8620.3	11482.0	14598.8	15776.5	15619.5	14202.4	13244.5	12137.6	9829.4
75°	2551.6	2830.3	5381.8	9240.6	14312.3	16895.2	16773.6	14771.6	12259.3	8667.4	5032.5
77.5°	769.4	824.3	1495.6	4569.3	10492.8	14979.6	14940.4	12420.2	8675.3	4023.6	1373.9
80°	255.2	282.6	459.3	1260.1	4789.1	9358.3	9535.0	7913.8	3941.2	922.5	278.7
82.5°	106.0	117.8	231.6	506.4	1695.8	4031.5	3972.6	3544.7	1373.9	573.1	102.1
85°	27.5	35.3	106.0	290.5	620.2	1389.6	1460.3	1189.4	777.2	475.0	31.4
87.5°	0.0	0.0	51.0	117.8	278.7	420.0	439.7	361.1	439.7	357.2	15.7
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°	2316.0	2316.0	2316.0	2316.0	2316.0	2316.0	2316.0	2316.0	2316.0	2316.0	2316.0
2.5°	2308.2	2288.6	2253.2	2229.7	2198.3	2190.4	2174.7	2155.1	2151.2	2131.5	2135.5
5°	2268.9	2237.5	2174.7	2131.5	2080.5	2064.8	2037.3	2017.7	2002.0	1974.5	1978.4
7.5°	2261.1	2214.0	2127.6	2045.2	1962.7	1903.9	1821.4	1754.7	1699.7	1640.8	1652.6
10°	2288.6	2229.7	2108.0	1994.1	1845.0	1656.6	1440.6	1299.3	1228.7	1158.0	1165.9
12.5°	2343.5	2272.8	2115.8	1943.1	1640.8	1319.0	1020.6	828.3	777.2	745.8	749.8
15°	2425.9	2339.6	2139.4	1845.0	1366.1	953.9	679.1	596.7	616.3	628.1	628.1
17.5°	2512.3	2414.2	2159.0	1668.3	1056.0	667.3	553.5	545.6	573.1	600.6	600.6
20°	2618.3	2492.7	2162.9	1444.6	761.5	541.7	522.1	522.1	541.7	573.1	573.1
22.5°	2720.4	2579.0	2127.6	1189.4	581.0	502.5	502.5	502.5	514.2	545.6	549.6
25°	2842.0	2685.0	2053.0	918.6	498.5	478.9	478.9	482.8	490.7	518.2	522.1
27.5°	2971.6	2794.9	1927.4	671.3	455.4	451.4	455.4	459.3	463.2	490.7	498.5
30°	3120.8	2916.6	1766.5	502.5	416.1	416.1	427.9	435.7	435.7	459.3	467.1
32.5°	3293.5	3077.6	1574.1	416.1	376.8	372.9	392.5	404.3	404.3	424.0	431.8
35°	3509.4	3242.4	1342.5	369.0	345.4	337.6	345.4	365.1	372.9	388.6	392.5
37.5°	3795.9	3438.7	1095.2	341.5	321.9	306.2	306.2	310.1	325.8	341.5	345.4
40°	4161.0	3654.6	851.8	321.9	298.3	282.6	270.9	266.9	263.0	274.8	282.6
42.5°	4620.3	3898.0	635.9	302.3	278.7	255.2	239.5	223.8	204.1	200.2	204.1
45°	5209.1	4196.3	471.1	286.6	266.9	231.6	204.1	176.6	141.3	129.5	133.5
47.5°	5903.9	4506.4	369.0	270.9	259.1	204.1	168.8	121.7	86.4	78.5	82.4
50°	6641.9	4804.8	314.0	251.2	243.4	176.6	121.7	74.6	51.0	51.0	55.0
52.5°	7270.0	4973.6	286.6	235.5	219.8	145.2	78.5	43.2	31.4	31.4	35.3
55°	7878.4	5063.9	266.9	219.8	188.4	102.1	43.2	27.5	19.6	19.6	19.6
57.5°	8506.5	5103.1	243.4	200.2	149.2	62.8	23.6	15.7	11.8	11.8	11.8
60°	9063.9	5028.5	208.1	164.9	98.1	31.4	11.8	11.8	7.9	3.9	3.9
62.5°	9531.1	4887.2	145.2	117.8	58.9	15.7	7.9	3.9	0.0	0.0	0.0
65°	9817.6	4659.5	94.2	78.5	35.3	11.8	3.9	0.0	0.0	0.0	0.0
67.5°	9735.2	4231.7	58.9	51.0	15.7	7.9	3.9	0.0	0.0	0.0	0.0
70°	8785.2	3470.1	43.2	31.4	11.8	3.9	0.0	0.0	0.0	0.0	0.0
72.5°	6331.8	2347.4	31.4	19.6	7.9	0.0	0.0	0.0	0.0	0.0	0.0
75°	3046.2	836.1	19.6	15.7	3.9	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	745.8	184.5	11.8	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	164.9	35.3	7.9	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	55.0	15.7	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	19.6	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	11.8	3.9	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)