

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: P400134

Luminaire Tested: **ARCH-L-PA3-240-727-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400134  
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-PA3-240-727-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 1030mA 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: 19776 lumens  
Efficiency: N/A  
Efficacy: 81.7 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

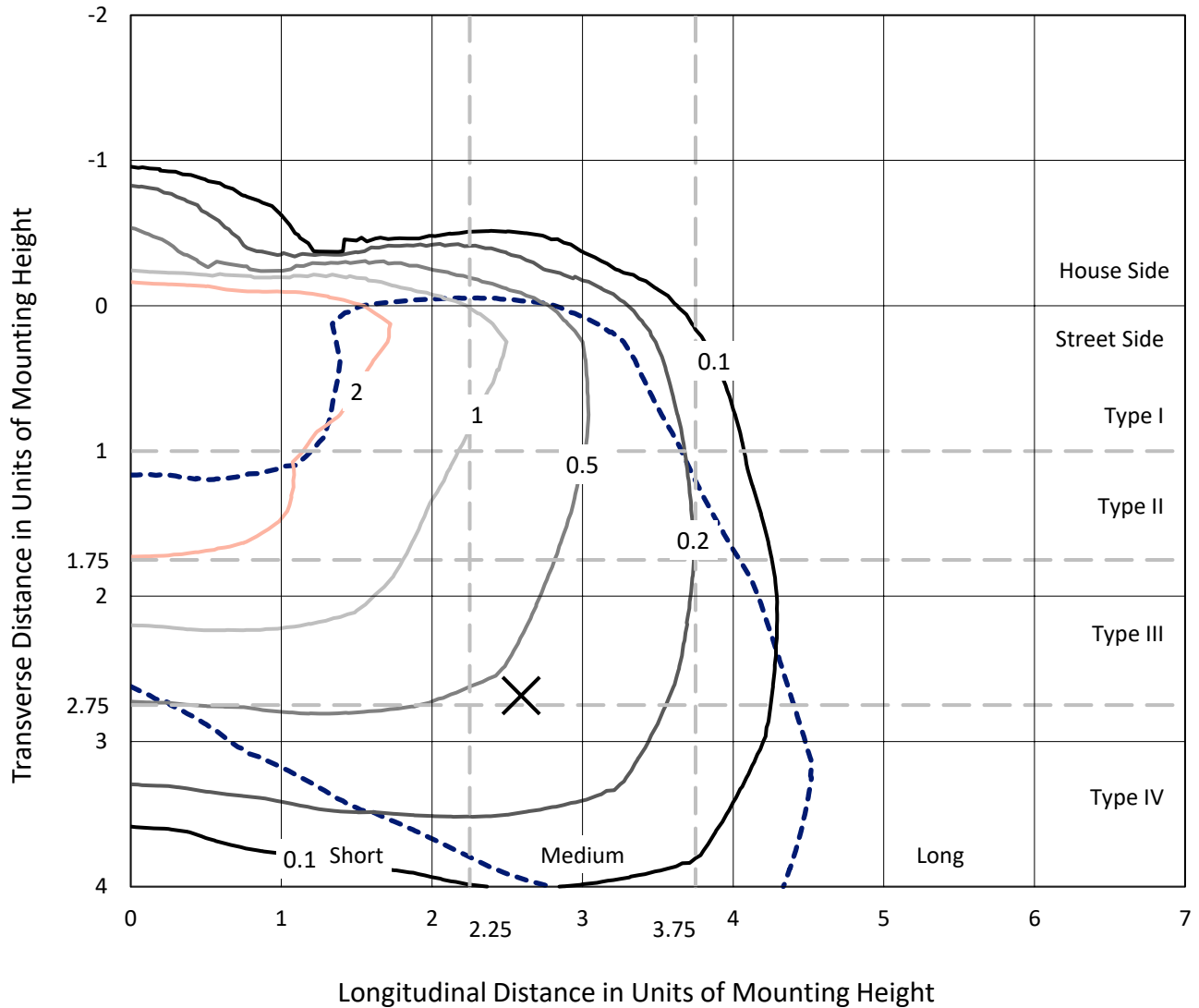
Input Watts (W): 242  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

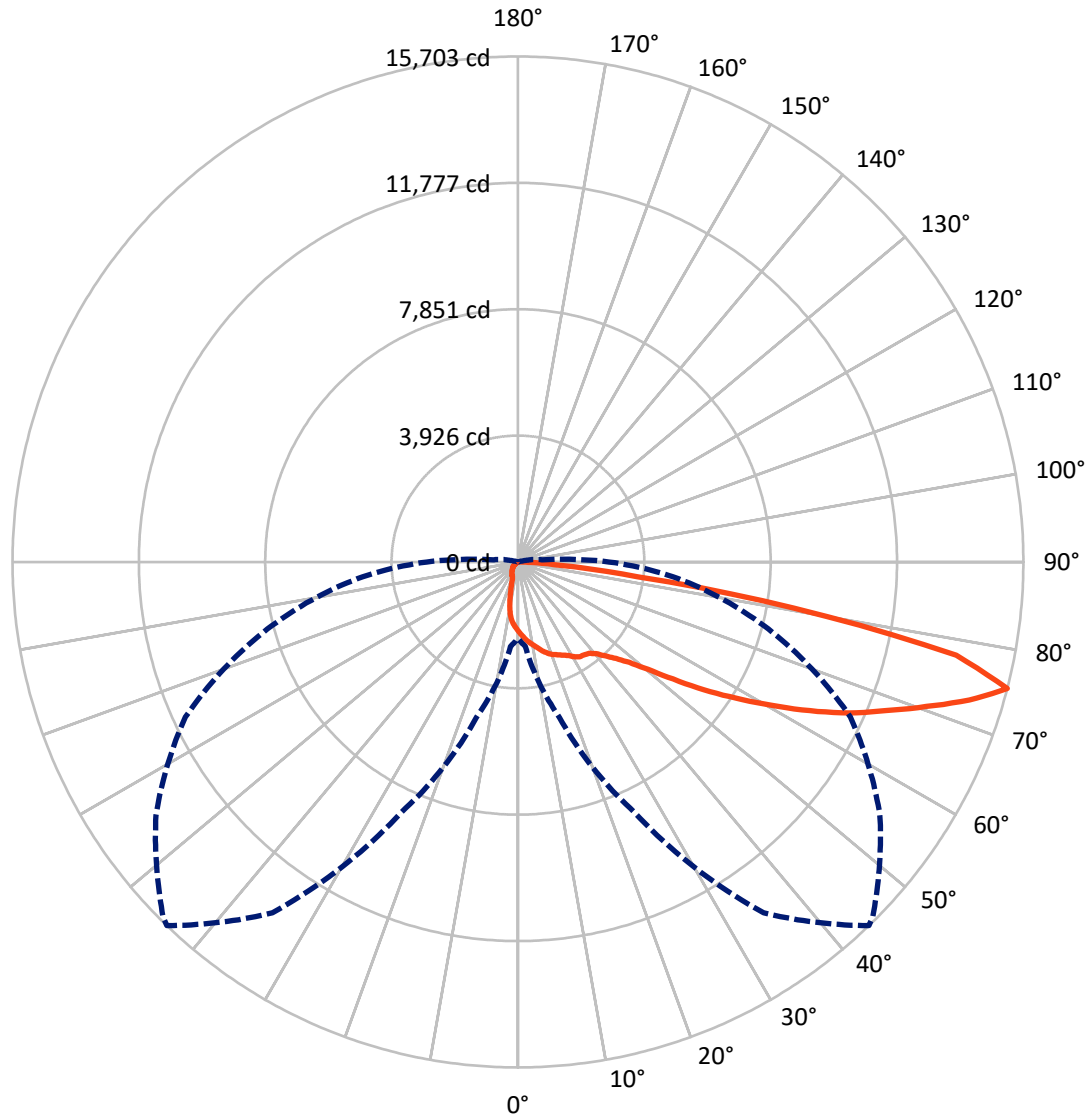
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 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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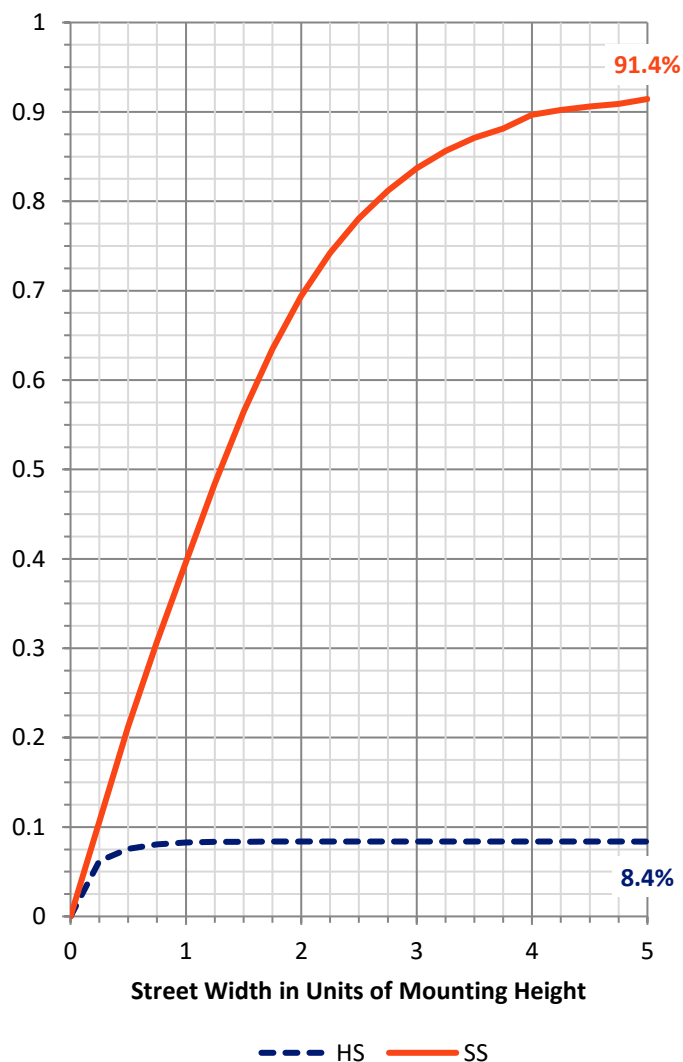
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1667.8	0.0	1667.8
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	18108.2	0.0	18108.2
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	19776.0	0.0	19776.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	203.0	1.0
10°-20°	568.8	2.9
20°-30°	938.7	4.7
30°-40°	1362.5	6.9
40°-50°	2214.8	11.2
50°-60°	3904.4	19.7
60°-70°	5611.5	28.4
70°-80°	4493.5	22.7
80°-90°	478.7	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°	19776.0	100.0
0°-180°	19776.0	100.0

**Coefficient of Utilization**



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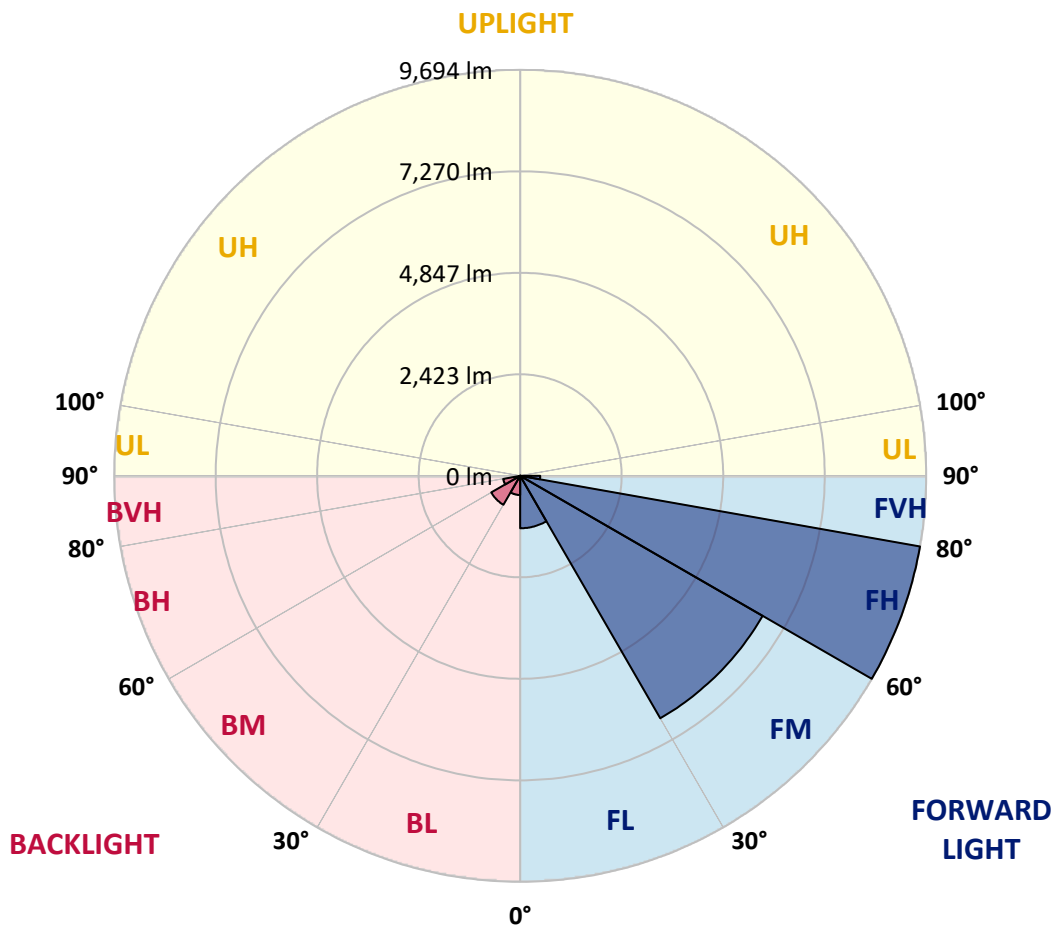
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1252.4	6.3			
FM (30°-60°)	6684.5	33.8			
FH (60°-80°)	9693.8	49.0			G4/12000
FVH (80°-90°)	477.5	2.4			G3/500
BL (0°-30°)	458.2	2.3	B1/500		
BM (30°-60°)	797.2	4.0	B1/1000		
BH (60°-80°)	411.1	2.1	B1/500		G1/500
BVH (80°-90°)	1.2	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°	2152.5	2152.5	2152.5	2152.5	2152.5	2152.5	2152.5	2152.5	2152.5	2152.5	2152.5
2.5°	2345.9	2342.3	2331.3	2313.1	2294.8	2276.6	2272.9	2243.8	2210.9	2185.4	2163.5
5°	2553.9	2550.2	2532.0	2491.8	2451.7	2404.3	2400.6	2331.3	2269.3	2200.0	2141.6
7.5°	2769.1	2761.8	2729.0	2667.0	2597.6	2524.7	2517.4	2415.2	2324.0	2232.8	2148.9
10°	2936.9	2929.6	2882.2	2809.3	2714.4	2623.2	2612.2	2506.4	2415.2	2298.5	2185.4
12.5°	3101.1	3086.5	3024.5	2944.2	2827.5	2739.9	2729.0	2619.5	2510.1	2389.7	2251.0
15°	3254.4	3236.1	3177.7	3075.6	2951.5	2867.6	2860.3	2743.6	2630.5	2491.8	2338.6
17.5°	3360.2	3352.9	3283.5	3170.4	3050.0	2980.7	2973.4	2853.0	2739.9	2594.0	2429.8
20°	3414.9	3414.9	3349.2	3225.2	3115.7	3068.3	3057.3	2944.2	2834.8	2696.2	2524.7
22.5°	3425.8	3436.8	3385.7	3250.7	3170.4	3130.3	3123.0	3024.5	2918.7	2791.0	2630.5
25°	3447.7	3447.7	3422.2	3276.2	3217.9	3206.9	3203.3	3115.7	3020.9	2893.2	2736.3
27.5°	3473.3	3473.3	3455.0	3312.7	3290.8	3287.2	3283.5	3243.4	3166.8	3017.2	2860.3
30°	3538.9	3542.6	3528.0	3385.7	3371.1	3411.2	3418.5	3396.6	3301.8	3115.7	2988.0
32.5°	3703.1	3670.3	3630.1	3436.8	3462.3	3513.4	3517.0	3473.3	3371.1	3221.5	3141.3
35°	4115.4	3922.0	3739.6	3480.6	3491.5	3542.6	3549.9	3546.2	3484.2	3356.5	3316.4
37.5°	4498.4	4224.8	3965.8	3582.7	3546.2	3600.9	3615.5	3677.6	3630.1	3542.6	3553.5
40°	4721.0	4615.2	4432.8	3863.6	3655.7	3739.6	3754.2	3849.0	3830.8	3794.3	3863.6
42.5°	5406.9	5414.2	5217.2	4283.2	3856.3	3991.3	4009.6	4086.2	4111.7	4130.0	4297.8
45°	6202.2	6227.8	6180.4	5038.4	4235.8	4279.5	4305.1	4407.2	4502.1	4618.8	4925.3
47.5°	7158.1	7136.2	6961.1	5961.4	4896.1	4651.7	4669.9	4866.9	5031.1	5286.5	5724.3
50°	8004.5	8059.3	7727.3	6822.5	5826.5	5239.1	5220.8	5414.2	5709.7	6067.3	6618.2
52.5°	8858.3	8778.0	8329.2	7676.2	6928.3	6038.1	5983.3	6089.1	6505.1	6928.3	7493.8
55°	9084.5	9091.8	8938.5	8610.2	7847.7	7008.5	6917.3	6910.0	7428.1	7716.3	8413.2
57.5°	9529.6	9547.8	9584.3	9650.0	9288.8	7979.0	7884.1	7782.0	8285.5	8453.3	9336.2
60°	9982.0	10003.9	10226.4	10580.3	10339.5	9026.1	8923.9	8683.1	8964.1	9190.3	10306.7
62.5°	9923.6	10076.8	10722.6	11426.7	11397.5	10175.3	10047.6	9467.5	9646.3	9843.3	11196.9
65°	8960.4	9124.6	10576.6	11660.2	12459.2	11310.0	11102.0	10277.5	10288.4	10525.6	12054.2
67.5°	8099.4	8278.2	9664.6	11561.7	13159.7	12327.9	12112.6	11091.1	10919.6	11313.6	12513.9
70°	7603.2	7782.0	8938.5	11255.2	13356.7	13455.2	13269.1	12021.4	11671.2	12032.3	11999.5
72.5°	5950.5	6231.4	8011.8	10671.5	13568.3	14662.8	14516.9	13199.8	12309.6	11280.8	9135.5
75°	2371.4	2630.5	5001.9	8588.3	13302.0	15702.6	15589.5	13728.8	11393.9	8055.6	4677.2
77.5°	715.1	766.2	1390.0	4246.7	9752.1	13922.2	13885.7	11543.5	8062.9	3739.6	1276.9
80°	237.1	262.7	426.9	1171.1	4451.0	8697.7	8861.9	7355.1	3663.0	857.4	259.0
82.5°	98.5	109.5	215.3	470.6	1576.1	3746.9	3692.2	3294.5	1276.9	532.7	94.9
85°	25.5	32.8	98.5	270.0	576.4	1291.5	1357.2	1105.5	722.4	441.5	29.2
87.5°	0.0	0.0	47.4	109.5	259.0	390.4	408.6	335.7	408.6	332.0	14.6
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°	2152.5	2152.5	2152.5	2152.5	2152.5	2152.5	2152.5	2152.5	2152.5	2152.5	2152.5
2.5°	2145.2	2127.0	2094.2	2072.3	2043.1	2035.8	2021.2	2003.0	1999.3	1981.1	1984.7
5°	2108.8	2079.6	2021.2	1981.1	1933.6	1919.0	1893.5	1875.3	1860.7	1835.1	1838.8
7.5°	2101.5	2057.7	1977.4	1900.8	1824.2	1769.5	1692.8	1630.8	1579.7	1525.0	1536.0
10°	2127.0	2072.3	1959.2	1853.4	1714.7	1539.6	1339.0	1207.6	1141.9	1076.3	1083.6
12.5°	2178.1	2112.4	1966.5	1805.9	1525.0	1225.9	948.6	769.8	722.4	693.2	696.8
15°	2254.7	2174.4	1988.4	1714.7	1269.6	886.6	631.2	554.6	572.8	583.7	583.7
17.5°	2335.0	2243.8	2006.6	1550.6	981.4	620.2	514.4	507.1	532.7	558.2	558.2
20°	2433.5	2316.7	2010.3	1342.6	707.8	503.5	485.2	485.2	503.5	532.7	532.7
22.5°	2528.3	2397.0	1977.4	1105.5	540.0	467.0	467.0	467.0	477.9	507.1	510.8
25°	2641.4	2495.5	1908.1	853.7	463.3	445.1	445.1	448.8	456.0	481.6	485.2
27.5°	2761.8	2597.6	1791.4	623.9	423.2	419.6	423.2	426.9	430.5	456.0	463.3
30°	2900.5	2710.7	1641.8	467.0	386.7	386.7	397.7	405.0	405.0	426.9	434.2
32.5°	3061.0	2860.3	1463.0	386.7	350.2	346.6	364.8	375.8	375.8	394.0	401.3
35°	3261.6	3013.6	1247.7	342.9	321.1	313.8	321.1	339.3	346.6	361.2	364.8
37.5°	3528.0	3196.0	1017.9	317.4	299.2	284.6	284.6	288.2	302.8	317.4	321.1
40°	3867.3	3396.6	791.7	299.2	277.3	262.7	251.7	248.1	244.4	255.4	262.7
42.5°	4294.1	3622.8	591.0	280.9	259.0	237.1	222.6	208.0	189.7	186.1	189.7
45°	4841.4	3900.1	437.8	266.3	248.1	215.3	189.7	164.2	131.3	120.4	124.0
47.5°	5487.2	4188.3	342.9	251.7	240.8	189.7	156.9	113.1	80.3	73.0	76.6
50°	6173.1	4465.6	291.9	233.5	226.2	164.2	113.1	69.3	47.4	47.4	51.1
52.5°	6756.8	4622.5	266.3	218.9	204.3	135.0	73.0	40.1	29.2	29.2	32.8
55°	7322.3	4706.4	248.1	204.3	175.1	94.9	40.1	25.5	18.2	18.2	18.2
57.5°	7906.0	4742.9	226.2	186.1	138.6	58.4	21.9	14.6	10.9	10.9	10.9
60°	8424.1	4673.6	193.4	153.2	91.2	29.2	10.9	10.9	7.3	3.6	3.6
62.5°	8858.3	4542.2	135.0	109.5	54.7	14.6	7.3	3.6	0.0	0.0	0.0
65°	9124.6	4330.6	87.6	73.0	32.8	10.9	3.6	0.0	0.0	0.0	0.0
67.5°	9048.0	3933.0	54.7	47.4	14.6	7.3	3.6	0.0	0.0	0.0	0.0
70°	8165.1	3225.2	40.1	29.2	10.9	3.6	0.0	0.0	0.0	0.0	0.0
72.5°	5884.8	2181.7	29.2	18.2	7.3	0.0	0.0	0.0	0.0	0.0	0.0
75°	2831.1	777.1	18.2	14.6	3.6	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	693.2	171.5	10.9	7.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	153.2	32.8	7.3	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	51.1	14.6	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	18.2	7.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.9	3.6	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)