

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: P399999

Luminaire Tested: **ARCH-L-PA3-220-730-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399999  
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-PA3-220-730-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 945mA 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: 20321 lumens  
Efficiency: N/A  
Efficacy: 91.5 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

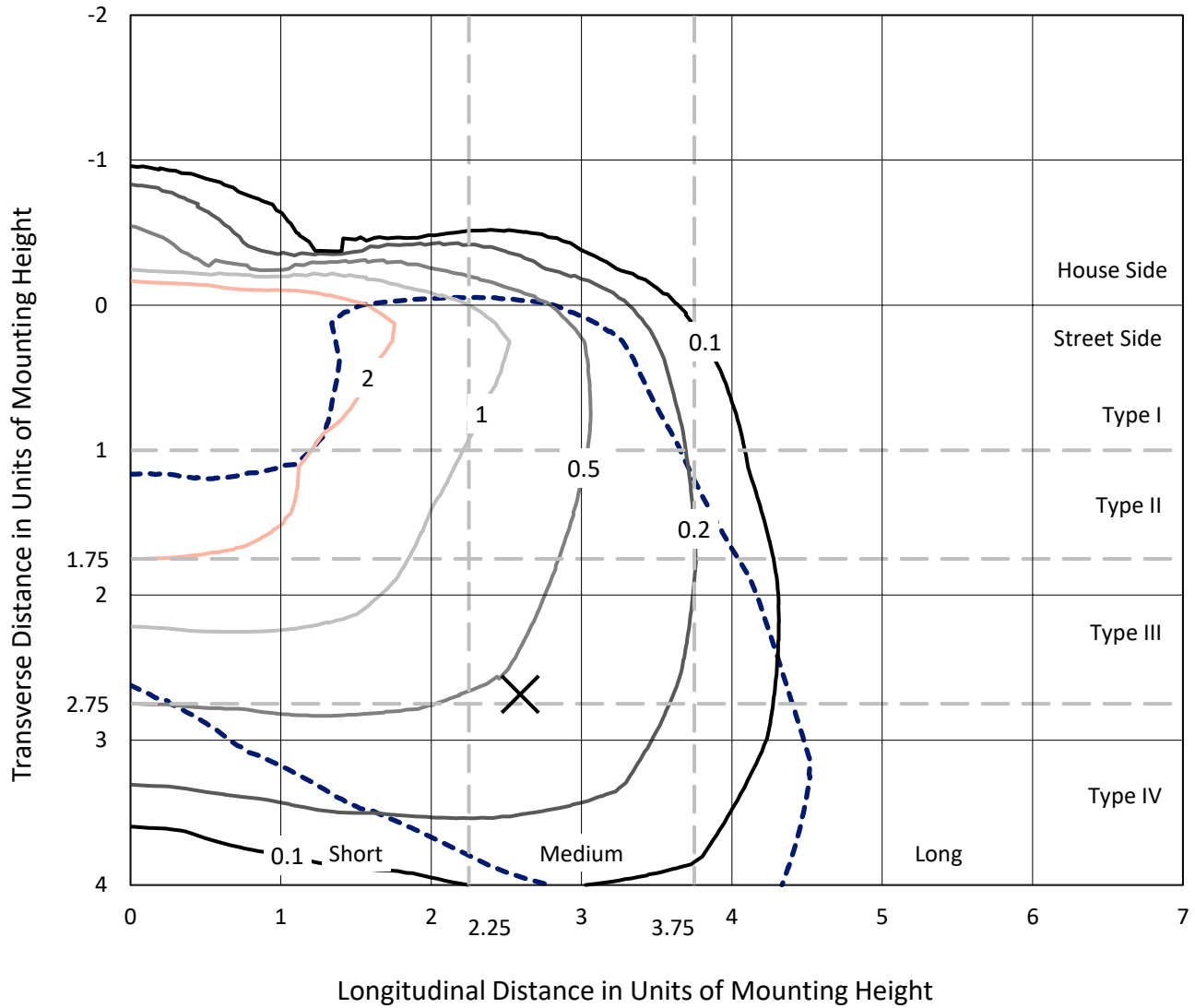
Input Watts (W): 222  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

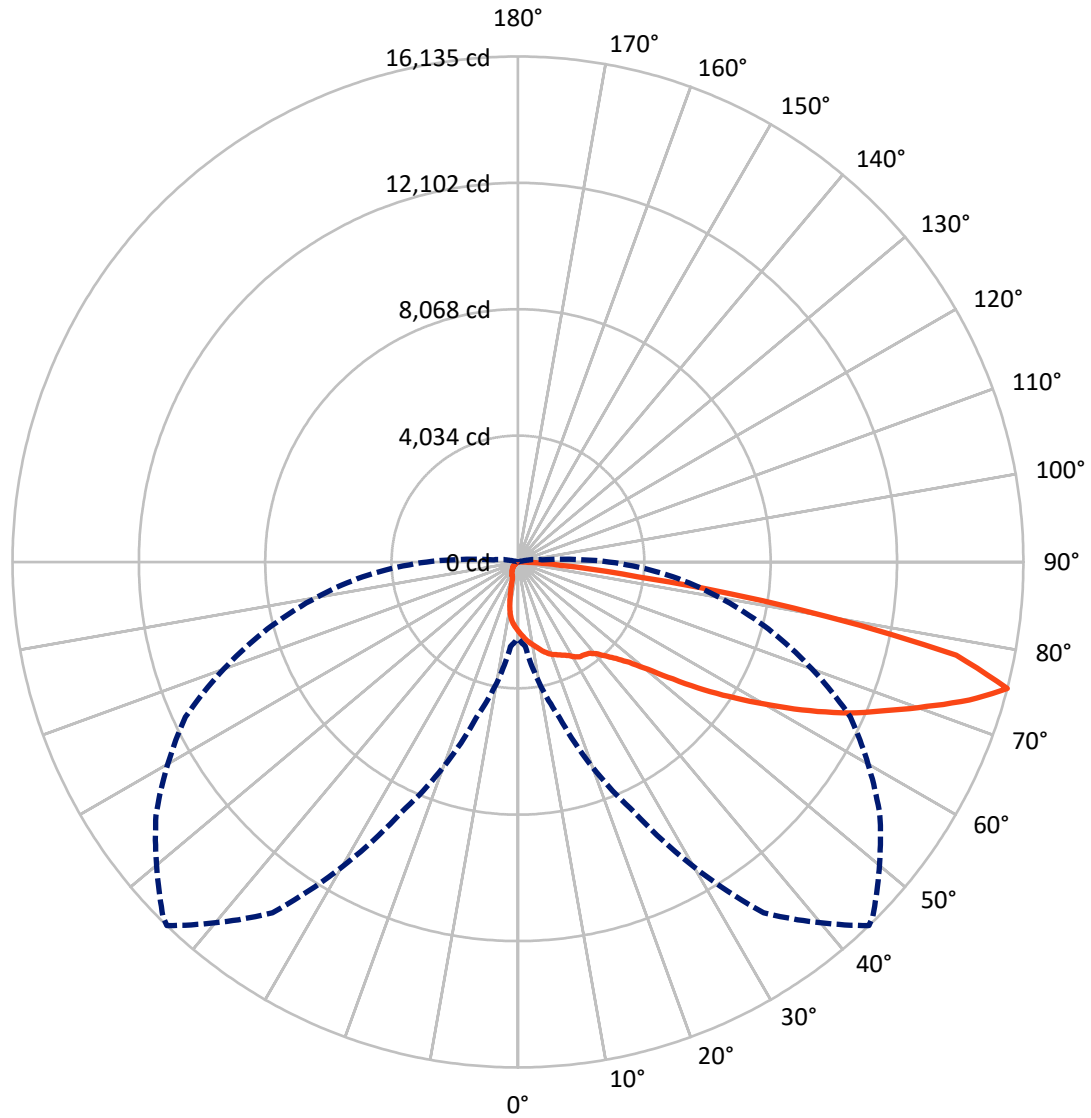
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 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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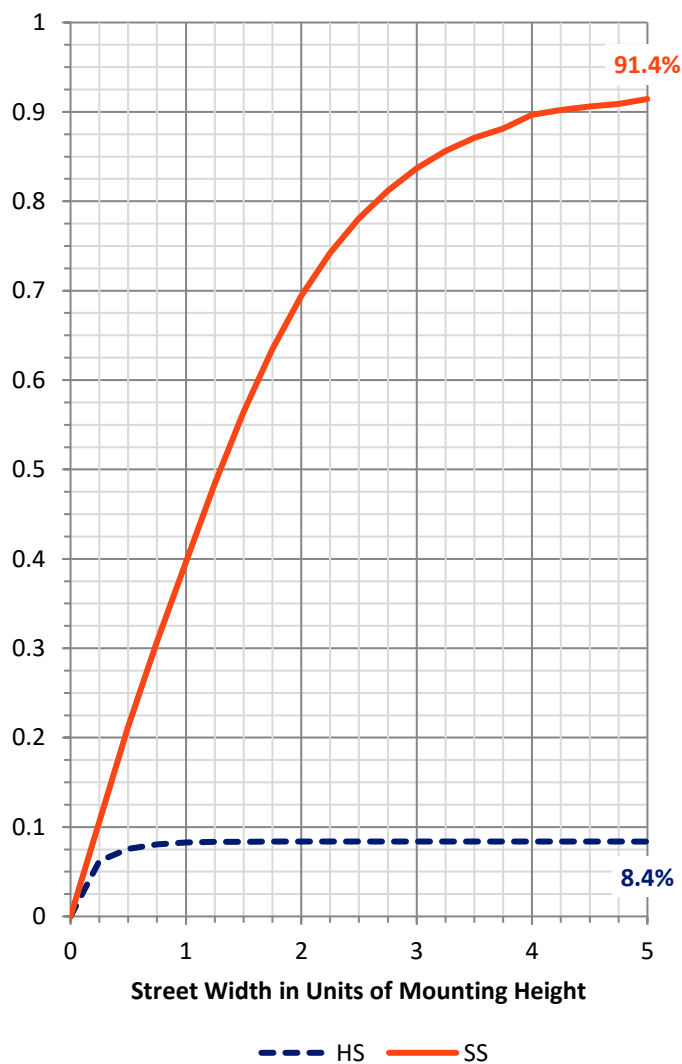
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1713.7	0.0	1713.7
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	18607.3	0.0	18607.3
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	20321.0	0.0	20321.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	208.6	1.0
10°-20°	584.5	2.9
20°-30°	964.6	4.7
30°-40°	1400.0	6.9
40°-50°	2275.8	11.2
50°-60°	4012.0	19.7
60°-70°	5766.1	28.4
70°-80°	4617.4	22.7
80°-90°	491.9	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°	20321.0	100.0
0°-180°	20321.0	100.0

**Coefficient of Utilization**



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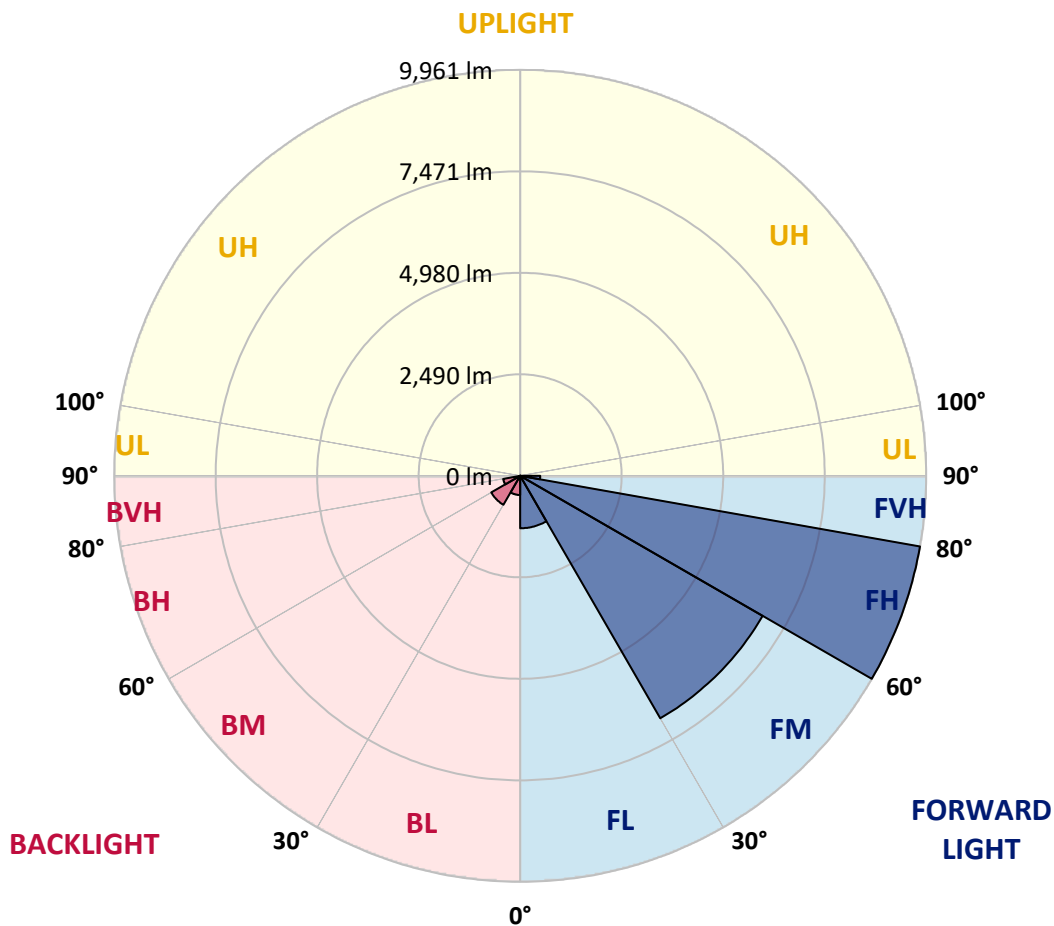
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1286.9	6.3			
FM (30°-60°)	6868.7	33.8			
FH (60°-80°)	9961.0	49.0			G4/12000
FVH (80°-90°)	490.7	2.4			G3/500
BL (0°-30°)	470.8	2.3	B1/500		
BM (30°-60°)	819.2	4.0	B1/1000		
BH (60°-80°)	422.5	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°	2211.9	2211.9	2211.9	2211.9	2211.9	2211.9	2211.9	2211.9	2211.9	2211.9	2211.9
2.5°	2410.6	2406.8	2395.6	2376.8	2358.1	2339.3	2335.6	2305.6	2271.8	2245.6	2223.1
5°	2624.2	2620.5	2601.8	2560.5	2519.3	2470.5	2466.8	2395.6	2331.8	2260.6	2200.6
7.5°	2845.4	2837.9	2804.2	2740.5	2669.2	2594.3	2586.8	2481.8	2388.1	2294.3	2208.1
10°	3017.9	3010.4	2961.6	2886.7	2789.2	2695.5	2684.2	2575.5	2481.8	2361.8	2245.6
12.5°	3186.6	3171.6	3107.9	3025.4	2905.4	2815.4	2804.2	2691.7	2579.3	2455.5	2313.1
15°	3344.0	3325.3	3265.3	3160.3	3032.9	2946.7	2939.2	2819.2	2703.0	2560.5	2403.1
17.5°	3452.8	3445.3	3374.0	3257.8	3134.1	3062.9	3055.4	2931.7	2815.4	2665.5	2496.8
20°	3509.0	3509.0	3441.5	3314.0	3201.6	3152.8	3141.6	3025.4	2912.9	2770.5	2594.3
22.5°	3520.2	3531.5	3479.0	3340.3	3257.8	3216.6	3209.1	3107.9	2999.1	2867.9	2703.0
25°	3542.7	3542.7	3516.5	3366.5	3306.5	3295.3	3291.6	3201.6	3104.1	2972.9	2811.7
27.5°	3569.0	3569.0	3550.2	3404.0	3381.5	3377.8	3374.0	3332.8	3254.1	3100.4	2939.2
30°	3636.5	3640.2	3625.2	3479.0	3464.0	3505.2	3512.7	3490.2	3392.8	3201.6	3070.4
32.5°	3805.2	3771.4	3730.2	3531.5	3557.7	3610.2	3614.0	3569.0	3464.0	3310.3	3227.8
35°	4228.8	4030.1	3842.6	3576.5	3587.7	3640.2	3647.7	3644.0	3580.2	3449.0	3407.8
37.5°	4622.4	4341.3	4075.1	3681.4	3644.0	3700.2	3715.2	3778.9	3730.2	3640.2	3651.4
40°	4851.1	4742.4	4554.9	3970.1	3756.4	3842.6	3857.6	3955.1	3936.4	3898.9	3970.1
42.5°	5555.9	5563.4	5361.0	4401.2	3962.6	4101.3	4120.1	4198.8	4225.0	4243.8	4416.2
45°	6373.2	6399.4	6350.7	5177.3	4352.5	4397.5	4423.7	4528.7	4626.2	4746.1	5061.0
47.5°	7355.4	7332.9	7152.9	6125.7	5031.1	4779.9	4798.6	5001.1	5169.8	5432.2	5882.1
50°	8225.1	8281.4	7940.2	7010.5	5987.0	5383.5	5364.7	5563.4	5867.1	6234.5	6800.5
52.5°	9102.4	9019.9	8558.8	7887.7	7119.2	6204.5	6148.2	6257.0	6684.3	7119.2	7700.3
55°	9334.8	9342.3	9184.9	8847.5	8063.9	7201.7	7108.0	7100.5	7632.8	7929.0	8645.0
57.5°	9792.2	9810.9	9848.4	9915.9	9544.8	8198.9	8101.4	7996.4	8513.8	8686.3	9593.5
60°	10257.0	10279.5	10508.2	10871.9	10624.4	9274.8	9169.9	8922.4	9211.1	9443.5	10590.7
62.5°	10197.1	10354.5	11018.1	11741.6	11711.6	10455.7	10324.5	9728.5	9912.1	10114.6	11505.4
65°	9207.4	9376.1	10868.1	11981.6	12802.6	11621.7	11408.0	10560.7	10572.0	10815.6	12386.4
67.5°	8322.6	8506.3	9930.9	11880.3	13522.4	12667.6	12446.4	11396.7	11220.5	11625.4	12858.8
70°	7812.8	7996.4	9184.9	11565.4	13724.8	13826.0	13634.8	12352.7	11992.8	12363.9	12330.2
72.5°	6114.5	6403.2	8232.6	10965.6	13942.2	15066.9	14917.0	13563.6	12648.9	11591.7	9387.3
75°	2436.8	2703.0	5139.8	8825.0	13668.6	16135.4	16019.1	14107.2	11707.9	8277.6	4806.1
77.5°	734.8	787.3	1428.3	4363.7	10020.9	14305.9	14268.4	11861.6	8285.1	3842.6	1312.1
80°	243.7	269.9	438.6	1203.4	4573.7	8937.4	9106.1	7557.8	3763.9	881.0	266.2
82.5°	101.2	112.5	221.2	483.6	1619.5	3850.1	3793.9	3385.3	1312.1	547.3	97.5
85°	26.2	33.7	101.2	277.4	592.3	1327.1	1394.6	1135.9	742.3	453.6	30.0
87.5°	0.0	0.0	48.7	112.5	266.2	401.1	419.9	344.9	419.9	341.2	15.0
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°	2211.9	2211.9	2211.9	2211.9	2211.9	2211.9	2211.9	2211.9	2211.9	2211.9	2211.9
2.5°	2204.4	2185.6	2151.9	2129.4	2099.4	2091.9	2076.9	2058.2	2054.4	2035.7	2039.4
5°	2166.9	2136.9	2076.9	2035.7	1986.9	1971.9	1945.7	1926.9	1912.0	1885.7	1889.5
7.5°	2159.4	2114.4	2031.9	1953.2	1874.5	1818.2	1739.5	1675.8	1623.3	1567.0	1578.3
10°	2185.6	2129.4	2013.2	1904.5	1762.0	1582.0	1375.9	1240.9	1173.4	1105.9	1113.4
12.5°	2238.1	2170.6	2020.7	1855.7	1567.0	1259.6	974.7	791.0	742.3	712.3	716.0
15°	2316.8	2234.4	2043.2	1762.0	1304.6	911.0	648.6	569.8	588.6	599.8	599.8
17.5°	2399.3	2305.6	2061.9	1593.3	1008.5	637.3	528.6	521.1	547.3	573.6	573.6
20°	2500.5	2380.6	2065.7	1379.6	727.3	517.4	498.6	498.6	517.4	547.3	547.3
22.5°	2598.0	2463.0	2031.9	1135.9	554.8	479.9	479.9	479.9	491.1	521.1	524.8
25°	2714.2	2564.3	1960.7	877.2	476.1	457.4	457.4	461.1	468.6	494.9	498.6
27.5°	2837.9	2669.2	1840.7	641.1	434.9	431.1	434.9	438.6	442.4	468.6	476.1
30°	2980.4	2785.4	1687.0	479.9	397.4	397.4	408.6	416.1	416.1	438.6	446.1
32.5°	3145.3	2939.2	1503.3	397.4	359.9	356.1	374.9	386.1	386.1	404.9	412.4
35°	3351.5	3096.6	1282.1	352.4	329.9	322.4	329.9	348.6	356.1	371.1	374.9
37.5°	3625.2	3284.1	1045.9	326.2	307.4	292.4	292.4	296.2	311.2	326.2	329.9
40°	3973.9	3490.2	813.5	307.4	284.9	269.9	258.7	254.9	251.2	262.4	269.9
42.5°	4412.5	3722.7	607.3	288.7	266.2	243.7	228.7	213.7	194.9	191.2	194.9
45°	4974.8	4007.6	449.9	273.7	254.9	221.2	194.9	168.7	135.0	123.7	127.5
47.5°	5638.4	4303.8	352.4	258.7	247.4	194.9	161.2	116.2	82.5	75.0	78.7
50°	6343.2	4588.7	299.9	239.9	232.4	168.7	116.2	71.2	48.7	48.7	52.5
52.5°	6943.0	4749.9	273.7	224.9	209.9	138.7	75.0	41.2	30.0	30.0	33.7
55°	7524.1	4836.1	254.9	209.9	179.9	97.5	41.2	26.2	18.7	18.7	18.7
57.5°	8123.9	4873.6	232.4	191.2	142.5	60.0	22.5	15.0	11.2	11.2	11.2
60°	8656.3	4802.4	198.7	157.5	93.7	30.0	11.2	11.2	7.5	3.7	3.7
62.5°	9102.4	4667.4	138.7	112.5	56.2	15.0	7.5	3.7	0.0	0.0	0.0
65°	9376.1	4450.0	90.0	75.0	33.7	11.2	3.7	0.0	0.0	0.0	0.0
67.5°	9297.3	4041.3	56.2	48.7	15.0	7.5	3.7	0.0	0.0	0.0	0.0
70°	8390.1	3314.0	41.2	30.0	11.2	3.7	0.0	0.0	0.0	0.0	0.0
72.5°	6047.0	2241.9	30.0	18.7	7.5	0.0	0.0	0.0	0.0	0.0	0.0
75°	2909.2	798.5	18.7	15.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	712.3	176.2	11.2	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	157.5	33.7	7.5	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	52.5	15.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	18.7	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	11.2	3.7	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)