

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: P237096

Luminaire Tested: **ARCH-L-AF72-230-D-U-T3**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P237096  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-230-D-U-T3  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 980mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 27315.9 lumens  
Efficiency: N/A  
Efficacy: 119.3 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G4

Input Watts (W): 229  
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

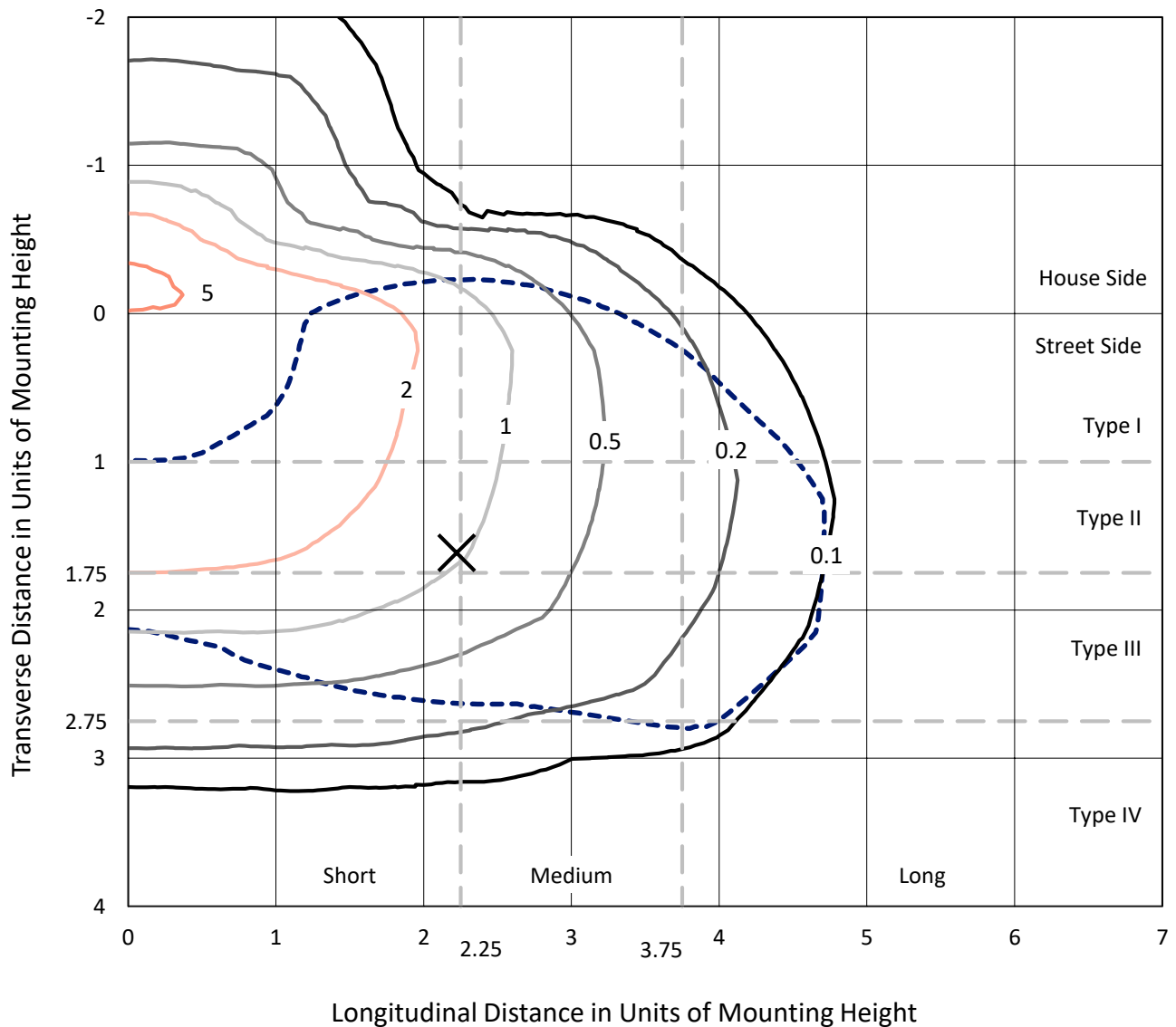


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

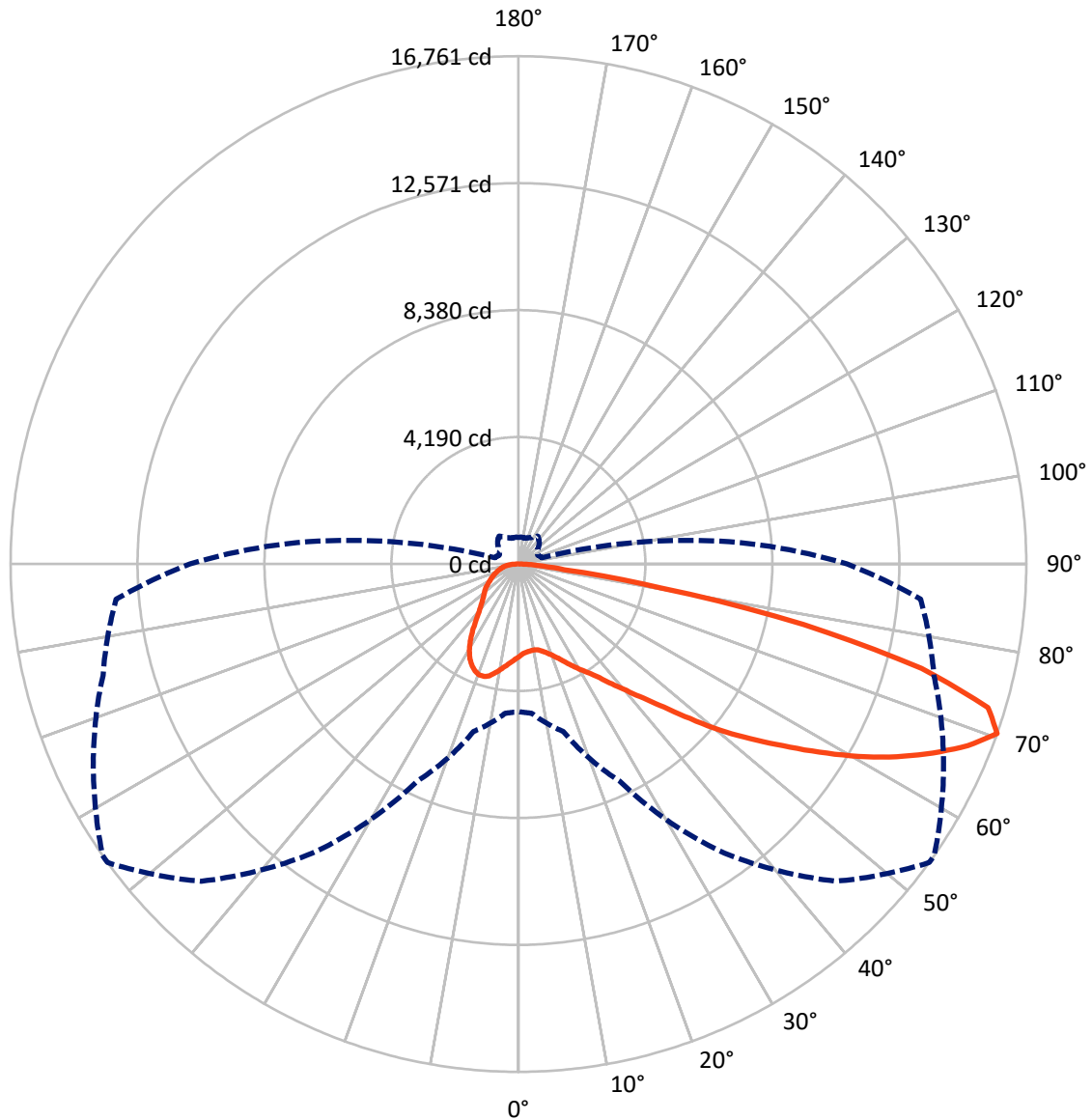


Based on 25 foot mounting height. Maximum calculated value = 5.7 fc  
 Type III - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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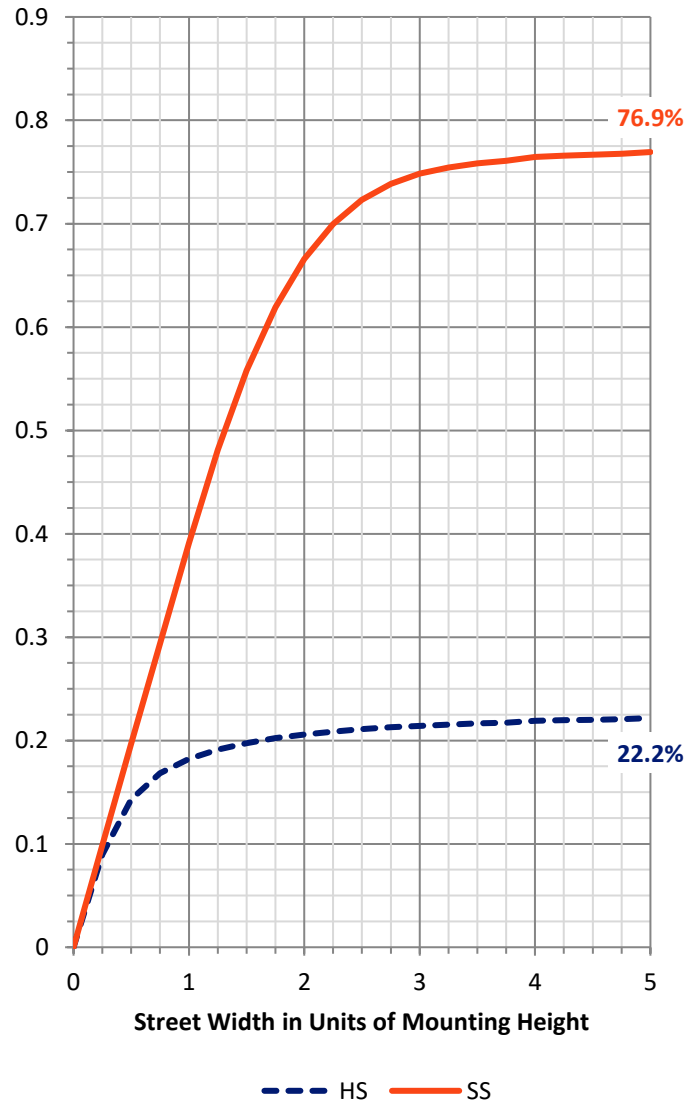
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6195.1	0.0	6195.1
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	21120.7	0.0	21120.7
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	27315.9	0.0	27315.9
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	299.9	1.1
10°-20°	958.3	3.5
20°-30°	1664.9	6.1
30°-40°	2433.1	8.9
40°-50°	3818.6	14.0
50°-60°	5872.2	21.5
60°-70°	7174.4	26.3
70°-80°	4448.2	16.3
80°-90°	646.2	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°	27315.9	100.0
0°-180°	27315.9	100.0

**Coefficient of Utilization**



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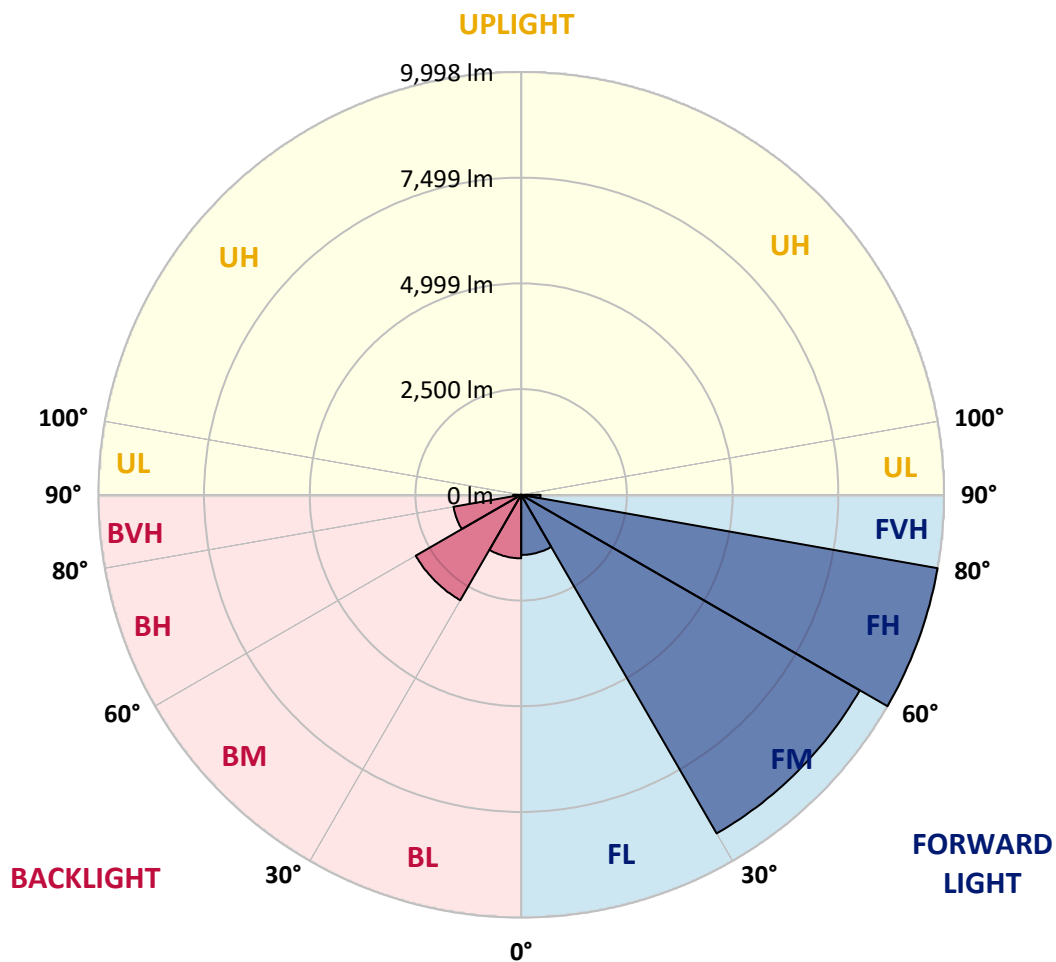
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1421.2	5.2			
FM	(30°-60°)	9245.2	33.8			
FH	(60°-80°)	9998.0	36.6			G4/12000
FVH	(80°-90°)	456.3	1.7			G3/500
BL	(0°-30°)	1501.9	5.5	B3/2500		
BM	(30°-60°)	2878.8	10.5	B3/5000		
BH	(60°-80°)	1624.5	5.9	B3/2500		G3/2500
BVH	(80°-90°)	189.9	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	3056.1	3056.1	3056.1	3056.1	3056.1	3056.1	3056.1	3056.1	3056.1	3056.1	3056.1
2.5°	2936.1	2926.0	2926.0	2941.1	2946.1	2961.0	2961.0	2966.0	2981.1	3006.0	3036.1
5°	2846.1	2841.0	2846.1	2866.0	2876.0	2906.0	2916.0	2921.0	2951.0	2991.1	3036.1
7.5°	2756.0	2751.0	2760.9	2791.0	2821.0	2866.0	2891.1	2896.1	2941.1	2996.1	3056.1
10°	2726.0	2720.9	2736.0	2760.9	2791.0	2841.0	2881.0	2886.1	2951.0	3016.1	3101.1
12.5°	2766.0	2760.9	2776.0	2801.0	2831.0	2866.0	2911.0	2916.0	3001.0	3086.1	3176.2
15°	2866.0	2866.0	2871.0	2886.1	2916.0	2946.1	2986.1	2991.1	3081.1	3181.2	3271.2
17.5°	3021.1	3011.1	3011.1	3006.0	3026.1	3041.1	3091.2	3096.1	3191.1	3281.2	3371.2
20°	3211.1	3206.1	3186.2	3161.1	3156.1	3166.1	3216.2	3221.2	3316.2	3391.2	3476.3
22.5°	3441.2	3446.2	3401.2	3346.2	3321.2	3336.1	3381.2	3386.2	3456.2	3521.3	3596.3
25°	3746.4	3731.3	3666.4	3586.3	3536.2	3536.2	3581.2	3581.2	3646.3	3686.3	3736.3
27.5°	4036.5	4006.4	3946.4	3831.4	3751.4	3766.3	3811.4	3811.4	3871.4	3886.4	3911.4
30°	4351.5	4321.6	4246.5	4101.4	3996.5	3986.4	4041.5	4036.5	4116.5	4111.4	4091.5
32.5°	4736.7	4721.7	4596.6	4411.6	4271.5	4236.6	4286.6	4291.5	4341.5	4326.6	4261.5
35°	5276.9	5271.9	5156.8	4831.7	4646.7	4581.6	4611.7	4611.7	4646.7	4606.7	4496.6
37.5°	5957.2	5967.2	5867.1	5387.0	5126.8	5016.8	5021.8	5016.8	5026.8	4981.8	4866.8
40°	6637.4	6662.4	6657.4	6077.1	5747.0	5557.0	5487.0	5477.0	5501.9	5482.0	5371.9
42.5°	7532.7	7592.8	7452.7	6927.5	6557.3	6237.2	6047.2	6022.1	6077.1	6102.2	5997.2
45°	8463.0	8443.0	8223.0	7842.8	7507.6	7097.5	6737.4	6697.4	6737.4	6812.4	6702.4
47.5°	8948.2	8933.2	8878.2	8688.1	8638.1	8168.0	7622.7	7587.7	7512.7	7617.7	7487.7
50°	9748.5	9763.5	9538.4	9518.4	9728.5	9468.4	8623.1	8543.1	8408.0	8493.0	8383.0
52.5°	10328.7	10263.7	10123.6	10298.7	10954.0	10813.8	9563.5	9528.4	9403.4	9383.3	9333.3
55°	10563.8	10563.8	10588.8	10994.0	11929.2	11744.2	10583.8	10618.8	10448.7	10308.7	10373.7
57.5°	10633.8	10663.9	10878.9	11549.1	13074.6	12469.5	11709.2	11759.2	11514.1	11234.0	11439.0
60°	10288.6	10378.8	10893.9	11864.3	13719.9	13239.7	12894.6	12909.6	12554.5	12144.4	12504.4
62.5°	9403.4	9513.4	10433.7	11994.3	13614.9	14030.0	14015.0	14050.0	13564.8	13054.7	13504.8
65°	8318.0	8428.0	9408.4	11629.1	13534.9	14595.3	15040.3	15135.4	14510.1	13825.0	14130.0
67.5°	6722.4	6867.5	7797.7	10398.7	13144.7	15060.4	16000.7	16100.7	15240.4	14225.1	14075.0
70°	4871.7	4941.8	5722.1	7902.8	11554.1	14805.3	16760.9	16756.0	15480.5	14195.1	13324.8
72.5°	2345.8	2400.9	3076.1	4906.8	8263.0	12564.5	16210.8	16305.8	15150.4	13759.9	11609.2
75°	965.4	1020.4	1245.4	2070.8	4336.6	8303.0	13739.9	13965.0	13759.9	12349.4	9083.3
77.5°	600.2	620.2	730.3	1070.4	1980.7	3876.4	9618.4	9923.5	10903.9	9893.6	5997.2
80°	450.2	465.1	545.2	750.2	1250.5	1430.5	4776.7	5161.8	6607.3	5677.1	2715.9
82.5°	375.1	380.1	435.2	545.2	850.3	820.3	1530.5	1705.6	3081.1	2165.8	935.3
85°	350.2	360.1	390.2	390.2	540.2	515.2	635.3	665.2	895.3	740.3	325.1
87.5°	180.0	170.0	345.1	305.1	280.1	250.1	270.1	290.1	335.1	355.2	145.1
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°	3056.1	3056.1	3056.1	3056.1	3056.1	3056.1	3056.1	3056.1	3056.1	3056.1	3056.1
2.5°	3046.0	3061.1	3086.1	3111.1	3141.1	3176.2	3196.1	3221.2	3241.1	3231.2	3226.2
5°	3061.1	3086.1	3141.1	3191.1	3251.1	3321.2	3366.2	3416.2	3456.2	3466.3	3451.2
7.5°	3086.1	3131.2	3206.1	3296.2	3376.2	3466.3	3536.2	3606.3	3656.3	3666.4	3666.4
10°	3146.1	3196.1	3296.2	3416.2	3511.3	3606.3	3686.3	3741.3	3786.4	3806.4	3806.4
12.5°	3231.2	3291.1	3411.2	3556.3	3661.3	3751.4	3796.4	3821.3	3841.4	3861.3	3866.3
15°	3331.2	3396.2	3541.3	3696.3	3806.4	3851.4	3851.4	3846.4	3846.4	3856.4	3866.3
17.5°	3431.2	3501.3	3651.3	3816.3	3886.4	3861.3	3826.3	3811.4	3801.4	3796.4	3811.4
20°	3536.2	3606.3	3756.4	3911.4	3891.4	3786.4	3736.3	3701.3	3671.3	3656.3	3676.3
22.5°	3651.3	3716.3	3871.4	3976.4	3826.3	3666.4	3571.3	3516.3	3466.3	3436.2	3456.2
25°	3786.4	3851.4	4001.5	3996.5	3711.4	3486.2	3336.1	3246.1	3191.1	3161.1	3161.1
27.5°	3946.4	4001.5	4146.5	3946.4	3551.3	3246.1	3026.1	2941.1	2926.0	2901.0	2901.0
30°	4111.4	4156.5	4281.6	3831.4	3331.2	2931.1	2691.0	2651.0	2656.0	2630.9	2635.9
32.5°	4281.6	4326.6	4361.6	3661.3	3046.0	2575.9	2415.9	2385.8	2380.8	2360.9	2340.8
35°	4521.6	4586.6	4371.6	3431.2	2701.0	2280.8	2165.8	2135.7	2105.7	2035.8	2035.8
37.5°	4886.7	4956.8	4346.5	3146.1	2345.8	2050.7	1945.7	1905.7	1855.6	1785.7	1760.6
40°	5387.0	5387.0	4291.5	2826.0	2060.7	1865.7	1765.6	1715.6	1660.6	1590.6	1575.5
42.5°	5977.1	5837.1	4206.5	2500.9	1850.6	1740.7	1650.6	1595.6	1530.5	1450.5	1440.5
45°	6667.4	6287.3	4086.5	2210.8	1695.6	1665.6	1610.5	1515.5	1405.5	1320.4	1305.5
47.5°	7337.6	6692.3	3971.4	2005.7	1565.5	1635.6	1590.6	1430.5	1280.4	1160.4	1145.4
50°	8072.9	7052.5	3836.4	1835.7	1465.5	1615.5	1565.5	1305.5	1140.4	1055.4	1045.4
52.5°	8808.1	7417.6	3691.3	1655.5	1380.5	1575.5	1505.6	1215.5	1135.4	1020.4	1005.4
55°	9583.4	7842.8	3521.3	1455.6	1280.4	1495.6	1425.5	1210.5	1170.5	1020.4	985.3
57.5°	10338.7	8313.0	3246.1	1260.5	1170.5	1375.5	1395.5	1180.4	1095.4	1010.4	970.4
60°	11174.0	8813.1	2791.0	1095.4	1075.4	1275.4	1355.5	1115.4	1010.4	980.4	960.3
62.5°	11844.2	9263.3	2180.8	980.4	995.3	1195.4	1305.5	1075.4	975.4	950.3	945.3
65°	12134.3	9273.4	1565.5	880.4	915.3	1120.4	1255.5	1040.3	945.3	935.3	930.4
67.5°	11829.2	8763.1	1100.4	785.3	830.3	1050.4	1190.4	1005.4	915.3	920.3	910.3
70°	10843.9	7687.8	805.3	695.3	750.2	975.4	1120.4	960.3	880.4	890.3	875.3
72.5°	9073.3	5992.1	645.3	620.2	685.3	895.3	1050.4	910.3	825.3	830.3	800.3
75°	6702.4	3971.4	540.2	555.2	610.2	820.3	960.3	845.3	765.3	745.2	725.3
77.5°	3986.4	2040.7	445.2	485.2	545.2	730.3	860.3	765.3	700.2	665.2	650.2
80°	1645.6	825.3	365.1	410.1	475.2	650.2	760.3	670.2	625.2	590.2	570.2
82.5°	655.2	405.2	290.1	335.1	400.2	565.2	665.2	590.2	545.2	520.2	465.1
85°	250.1	200.1	195.1	235.1	300.1	435.2	550.2	495.2	460.1	395.2	380.1
87.5°	100.0	90.0	90.0	115.1	170.0	275.1	395.2	345.1	360.1	285.1	290.1
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)