

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: P237089

Luminaire Tested: **ARCH-L-AF72-160-D-U-T3**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P237089  
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-AF72-160-D-U-T3  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21456.4 lumens  
Efficiency: N/A  
Efficacy: 132.4 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): 162  
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

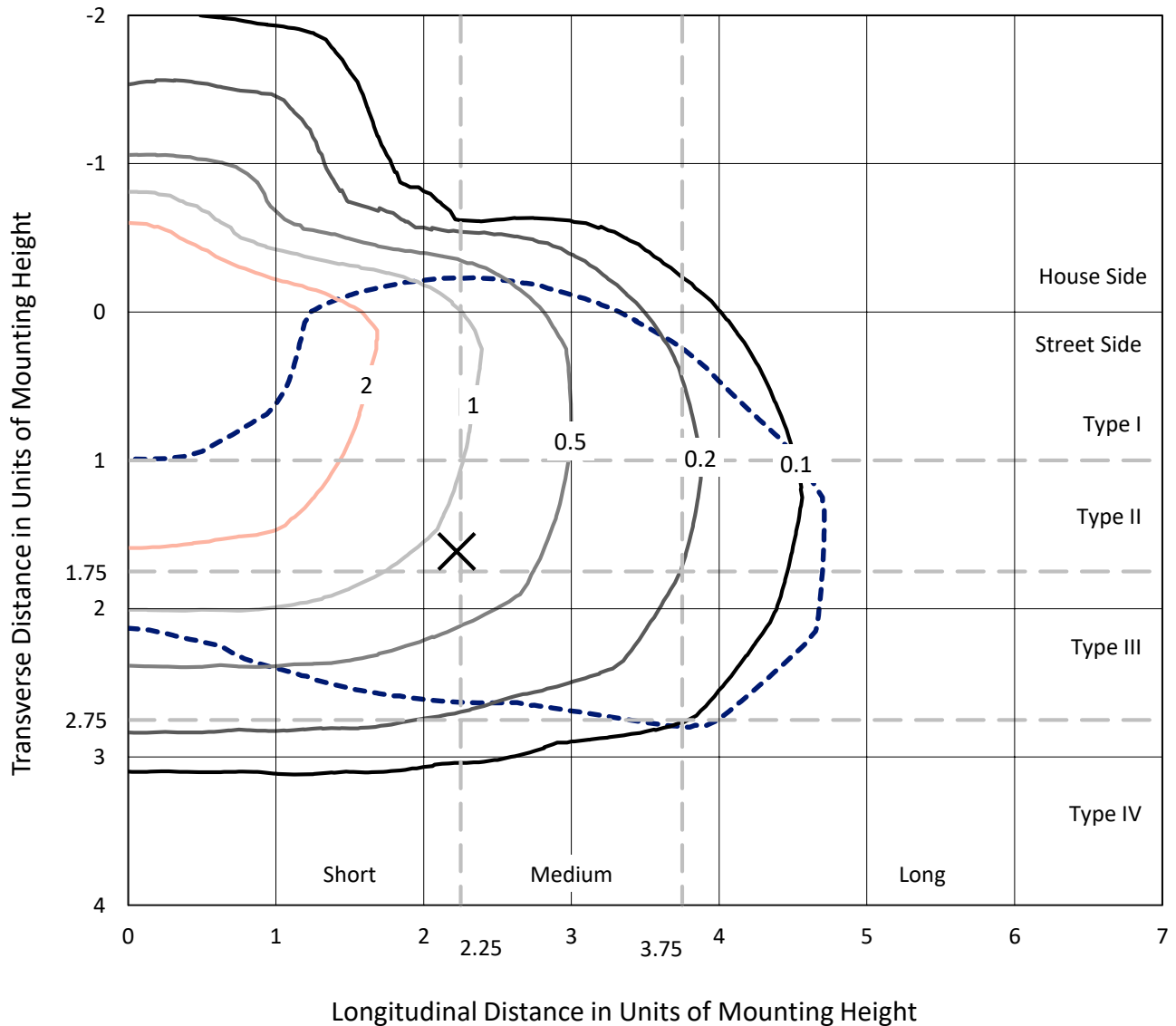


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

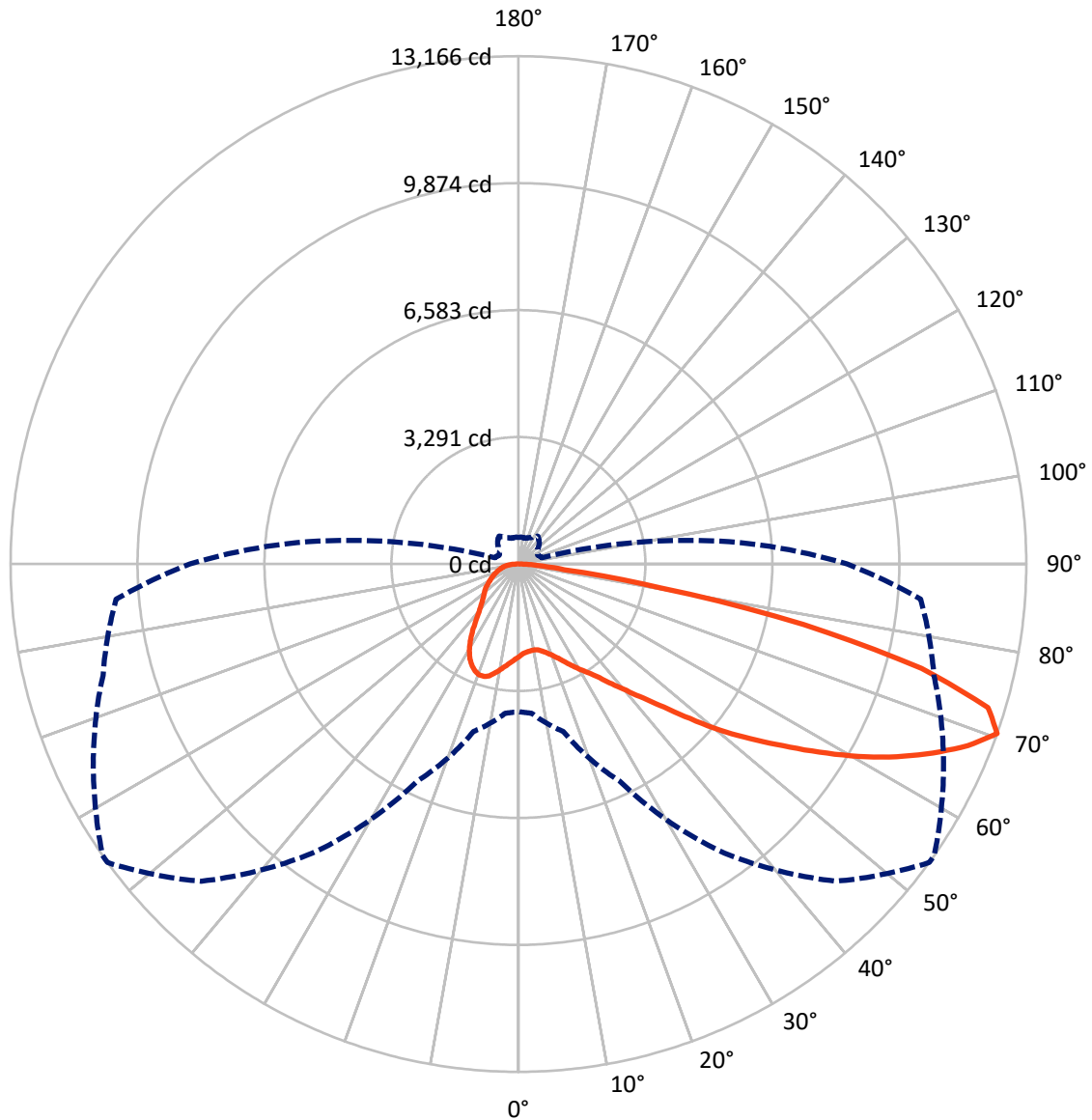


Based on 25 foot mounting height. Maximum calculated value = 4.5 fc  
 Type III - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



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



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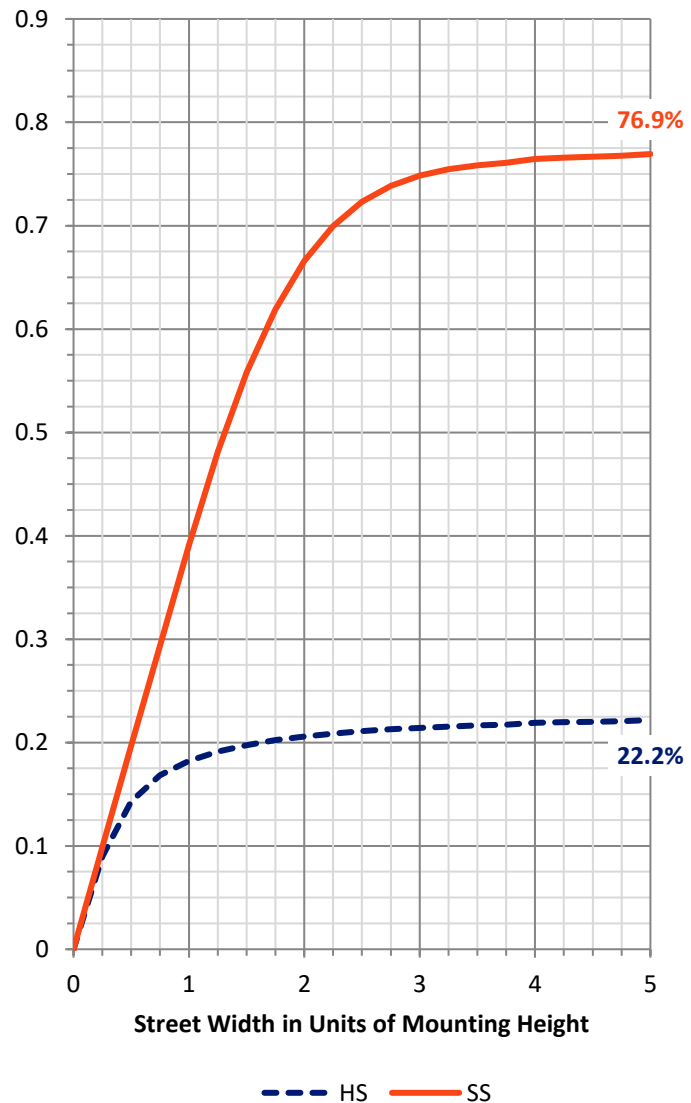
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4866.2	0.0	4866.2
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	16590.1	0.0	16590.1
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	21456.4	0.0	21456.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	235.6	1.1
10°-20°	752.7	3.5
20°-30°	1307.8	6.1
30°-40°	1911.2	8.9
40°-50°	2999.5	14.0
50°-60°	4612.6	21.5
60°-70°	5635.4	26.3
70°-80°	3494.0	16.3
80°-90°	507.6	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°	21456.4	100.0
0°-180°	21456.4	100.0

**Coefficient of Utilization**



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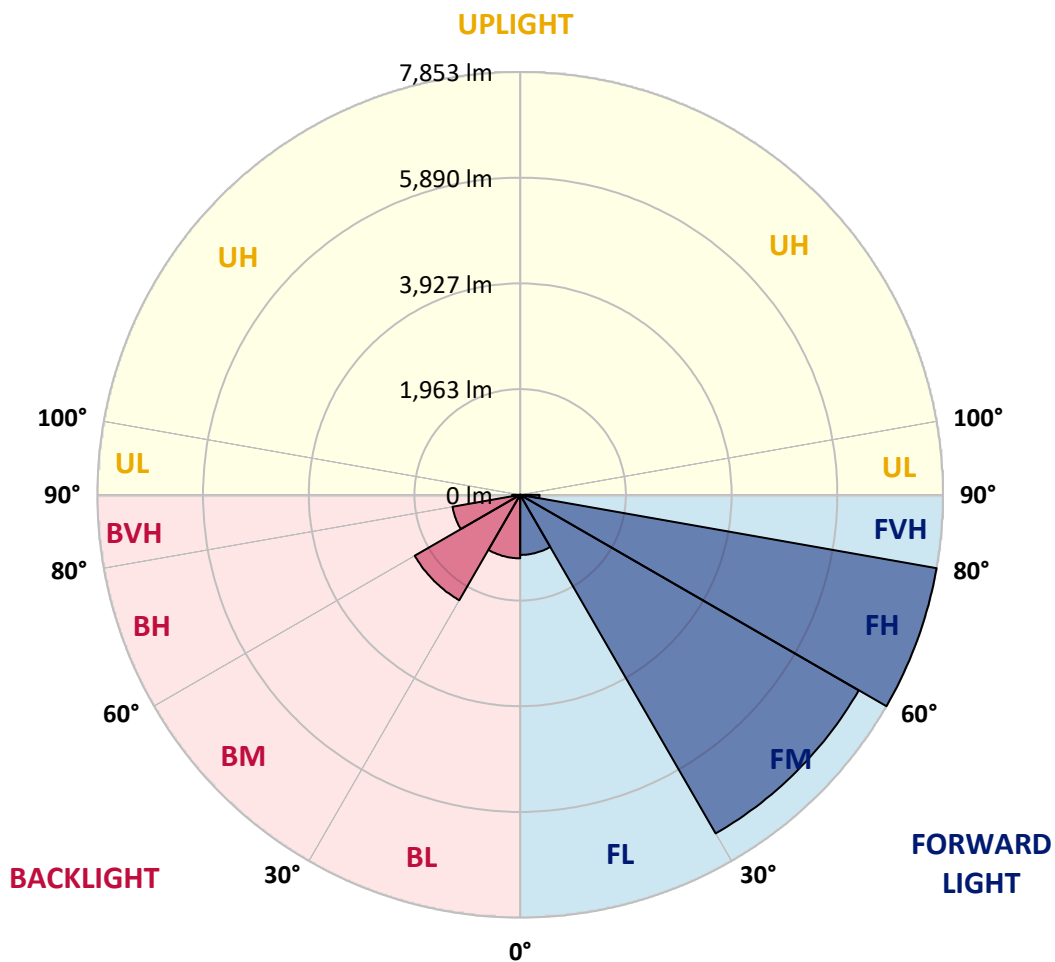
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1116.4	5.2			
FM	(30°-60°)	7262.0	33.8			
FH	(60°-80°)	7853.4	36.6			G4/12000
FVH	(80°-90°)	358.4	1.7			G3/500
BL	(0°-30°)	1179.8	5.5	B3/2500		
BM	(30°-60°)	2261.3	10.5	B2/2500		
BH	(60°-80°)	1276.1	5.9	B3/2500		G3/2500
BVH	(80°-90°)	149.2	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°	2400.6	2400.6	2400.6	2400.6	2400.6	2400.6	2400.6	2400.6	2400.6	2400.6	2400.6
2.5°	2306.2	2298.4	2298.4	2310.1	2314.1	2325.9	2325.9	2329.8	2341.6	2361.3	2384.8
5°	2235.6	2231.6	2235.6	2251.2	2259.1	2282.7	2290.5	2294.5	2318.0	2349.4	2384.8
7.5°	2164.8	2160.9	2168.8	2192.3	2215.9	2251.2	2270.8	2274.8	2310.1	2353.4	2400.6
10°	2141.2	2137.4	2149.1	2168.8	2192.3	2231.6	2263.1	2267.0	2318.0	2369.2	2435.9
12.5°	2172.6	2168.8	2180.5	2200.2	2223.7	2251.2	2286.6	2290.5	2357.3	2424.1	2494.9
15°	2251.2	2251.2	2255.2	2267.0	2290.5	2314.1	2345.5	2349.4	2420.2	2498.8	2569.4
17.5°	2373.0	2365.2	2365.2	2361.3	2376.9	2388.8	2428.1	2432.0	2506.6	2577.3	2648.0
20°	2522.3	2518.4	2502.6	2483.0	2479.1	2487.0	2526.3	2530.2	2604.8	2663.8	2730.6
22.5°	2703.0	2707.0	2671.6	2628.4	2608.7	2620.6	2655.9	2659.9	2714.8	2766.0	2824.9
25°	2942.7	2931.0	2879.8	2817.0	2777.7	2777.7	2813.1	2813.1	2864.2	2895.6	2934.8
27.5°	3170.6	3147.0	3099.8	3009.5	2946.6	2958.5	2993.8	2993.8	3040.9	3052.7	3072.3
30°	3418.1	3394.6	3335.6	3221.7	3139.1	3131.4	3174.5	3170.6	3233.4	3229.6	3213.8
32.5°	3720.7	3708.8	3610.6	3465.2	3355.3	3327.8	3367.0	3370.9	3410.2	3398.4	3347.4
35°	4145.0	4141.0	4050.7	3795.2	3649.9	3598.8	3622.4	3622.4	3649.9	3618.5	3532.0
37.5°	4679.3	4687.2	4608.6	4231.4	4027.1	3940.6	3944.6	3940.6	3948.5	3913.2	3822.8
40°	5213.6	5233.2	5229.3	4773.6	4514.3	4364.9	4310.0	4302.1	4321.8	4306.0	4219.6
42.5°	5916.8	5964.0	5854.0	5441.5	5150.8	4899.3	4750.0	4730.3	4773.6	4793.2	4710.7
45°	6647.6	6631.9	6459.0	6160.4	5897.2	5575.1	5292.1	5260.7	5292.1	5351.2	5264.7
47.5°	7028.7	7016.9	6973.8	6824.4	6785.1	6415.8	5987.6	5960.1	5901.2	5983.6	5881.6
50°	7657.4	7669.2	7492.3	7476.6	7641.6	7437.4	6773.4	6710.5	6604.4	6671.2	6584.7
52.5°	8113.1	8062.1	7952.0	8089.5	8604.2	8494.2	7512.0	7484.5	7386.3	7370.6	7331.3
55°	8297.8	8297.8	8317.4	8635.6	9370.3	9225.0	8313.5	8340.9	8207.4	8097.4	8148.4
57.5°	8352.8	8376.3	8545.3	9071.7	10270.0	9794.7	9197.5	9236.7	9044.2	8824.3	8985.3
60°	8081.7	8152.4	8557.1	9319.3	10776.9	10399.7	10128.6	10140.4	9861.5	9539.3	9822.2
62.5°	7386.3	7472.7	8195.6	9421.4	10694.3	11020.5	11008.7	11036.2	10655.1	10254.4	10607.9
65°	6533.7	6620.1	7390.2	9134.6	10631.5	11464.4	11814.1	11888.7	11397.6	10859.3	11099.0
67.5°	5280.4	5394.3	6125.1	8168.2	10325.1	11829.8	12568.5	12647.0	11971.3	11173.7	11055.8
70°	3826.8	3881.7	4494.6	6207.6	9075.7	11629.4	13165.6	13161.7	12159.8	11150.2	10466.5
72.5°	1842.6	1885.8	2416.2	3854.2	6490.5	9869.3	12733.5	12808.1	11900.5	10808.3	9118.9
75°	758.3	801.5	978.2	1626.6	3406.3	6521.9	10792.6	10969.4	10808.3	9700.3	7134.8
77.5°	471.5	487.1	573.6	840.8	1555.8	3044.9	7555.2	7794.9	8565.0	7771.3	4710.7
80°	353.6	365.4	428.2	589.3	982.2	1123.6	3752.1	4054.6	5190.0	4459.2	2133.4
82.5°	294.7	298.6	341.8	428.2	667.9	644.4	1202.3	1339.8	2420.2	1701.2	734.7
85°	275.1	282.8	306.5	306.5	424.3	404.7	499.0	522.5	703.3	581.4	255.3
87.5°	141.5	133.6	271.1	239.7	220.0	196.4	212.2	227.9	263.2	279.0	114.0
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°	2400.6	2400.6	2400.6	2400.6	2400.6	2400.6	2400.6	2400.6	2400.6	2400.6	2400.6
2.5°	2392.7	2404.4	2424.1	2443.7	2467.4	2494.9	2510.5	2530.2	2545.9	2538.0	2534.2
5°	2404.4	2424.1	2467.4	2506.6	2553.8	2608.7	2644.1	2683.4	2714.8	2722.7	2710.9
7.5°	2424.1	2459.5	2518.4	2589.1	2652.0	2722.7	2777.7	2832.8	2872.0	2879.8	2879.8
10°	2471.2	2510.5	2589.1	2683.4	2758.1	2832.8	2895.6	2938.8	2974.1	2989.9	2989.9
12.5°	2538.0	2585.2	2679.5	2793.5	2875.9	2946.6	2982.0	3001.6	3017.4	3033.0	3037.0
15°	2616.6	2667.7	2781.6	2903.4	2989.9	3025.3	3025.3	3021.3	3021.3	3029.2	3037.0
17.5°	2695.2	2750.2	2868.0	2997.8	3052.7	3033.0	3005.5	2993.8	2985.9	2982.0	2993.8
20°	2777.7	2832.8	2950.6	3072.3	3056.7	2974.1	2934.8	2907.3	2883.8	2872.0	2887.7
22.5°	2868.0	2919.2	3040.9	3123.5	3005.5	2879.8	2805.2	2762.0	2722.7	2699.2	2714.8
25°	2974.1	3025.3	3143.1	3139.1	2915.2	2738.4	2620.6	2549.8	2506.6	2483.0	2483.0
27.5°	3099.8	3143.1	3257.1	3099.8	2789.5	2549.8	2376.9	2310.1	2298.4	2278.7	2278.7
30°	3229.6	3264.8	3363.2	3009.5	2616.6	2302.4	2113.7	2082.3	2086.2	2066.6	2070.6
32.5°	3363.2	3398.4	3426.0	2875.9	2392.7	2023.4	1897.7	1874.0	1870.2	1854.4	1838.8
35°	3551.7	3602.7	3433.8	2695.2	2121.6	1791.6	1701.2	1677.6	1654.0	1599.1	1599.1
37.5°	3838.5	3893.6	3414.2	2471.2	1842.6	1610.8	1528.3	1496.9	1457.6	1402.6	1382.9
40°	4231.4	4231.4	3370.9	2219.8	1618.7	1465.5	1386.9	1347.6	1304.4	1249.3	1237.6
42.5°	4695.0	4585.0	3304.1	1964.5	1453.7	1367.3	1296.5	1253.3	1202.3	1139.4	1131.5
45°	5237.2	4938.6	3209.9	1736.6	1331.9	1308.4	1265.1	1190.4	1104.0	1037.2	1025.4
47.5°	5763.6	5256.8	3119.5	1575.4	1229.7	1284.7	1249.3	1123.6	1005.8	911.4	899.7
50°	6341.2	5539.7	3013.4	1441.8	1151.1	1269.1	1229.7	1025.4	895.8	829.0	821.1
52.5°	6918.7	5826.5	2899.6	1300.5	1084.3	1237.6	1182.6	954.7	891.8	801.5	789.7
55°	7527.7	6160.4	2766.0	1143.2	1005.8	1174.8	1119.7	950.8	919.3	801.5	774.0
57.5°	8121.0	6529.8	2549.8	990.1	919.3	1080.4	1096.2	927.2	860.4	793.6	762.2
60°	8777.1	6922.6	2192.3	860.4	844.8	1001.9	1064.7	876.2	793.6	770.1	754.3
62.5°	9303.5	7276.2	1713.0	770.1	781.8	939.0	1025.4	844.8	766.1	746.4	742.6
65°	9531.4	7284.1	1229.7	691.5	719.0	880.0	986.1	817.2	742.6	734.7	730.8
67.5°	9291.8	6883.3	864.4	616.8	652.2	825.1	935.1	789.7	719.0	722.9	715.0
70°	8517.8	6038.7	632.6	546.2	589.3	766.1	880.0	754.3	691.5	699.3	687.5
72.5°	7127.0	4706.8	506.9	487.1	538.3	703.3	825.1	715.0	648.2	652.2	628.6
75°	5264.7	3119.5	424.3	436.1	479.4	644.4	754.3	664.0	601.1	585.4	569.7
77.5°	3131.4	1603.0	349.6	381.0	428.2	573.6	675.8	601.1	550.0	522.5	510.8
80°	1292.6	648.2	286.8	322.1	373.3	510.8	597.2	526.5	491.1	463.6	447.8
82.5°	514.6	318.2	227.9	263.2	314.4	444.0	522.5	463.6	428.2	408.6	365.4
85°	196.4	157.1	153.2	184.6	235.7	341.8	432.2	388.9	361.4	310.4	298.6
87.5°	78.6	70.7	70.7	90.3	133.6	216.0	310.4	271.1	282.8	223.9	227.9
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)