

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: P236969

Luminaire Tested: **ARCH-L-AF72-160-D-U-T2R-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236969
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
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-T2R-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17123.2 lumens
Efficiency: N/A
Efficacy: 105.7 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B1 - U0 - G2

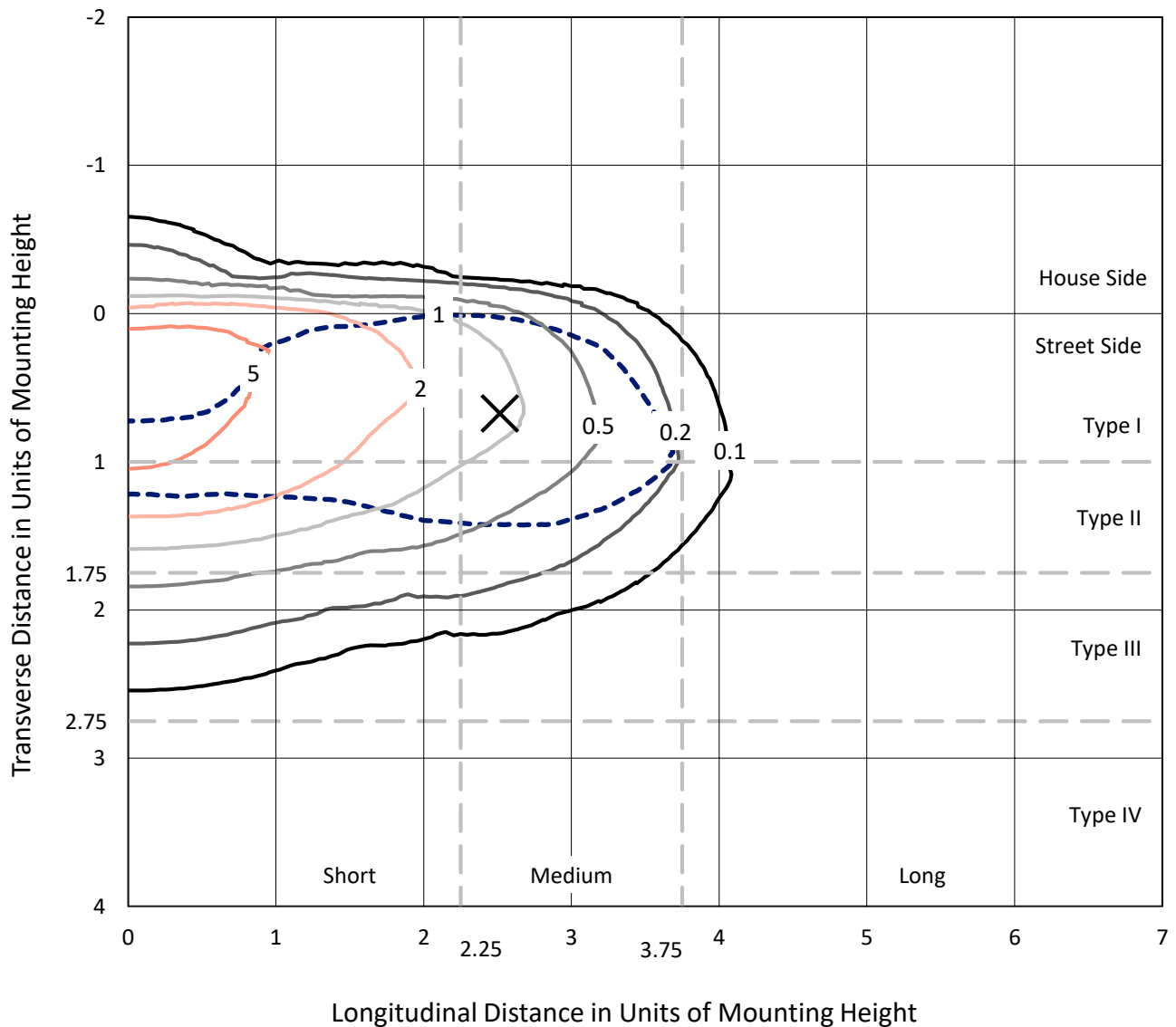
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

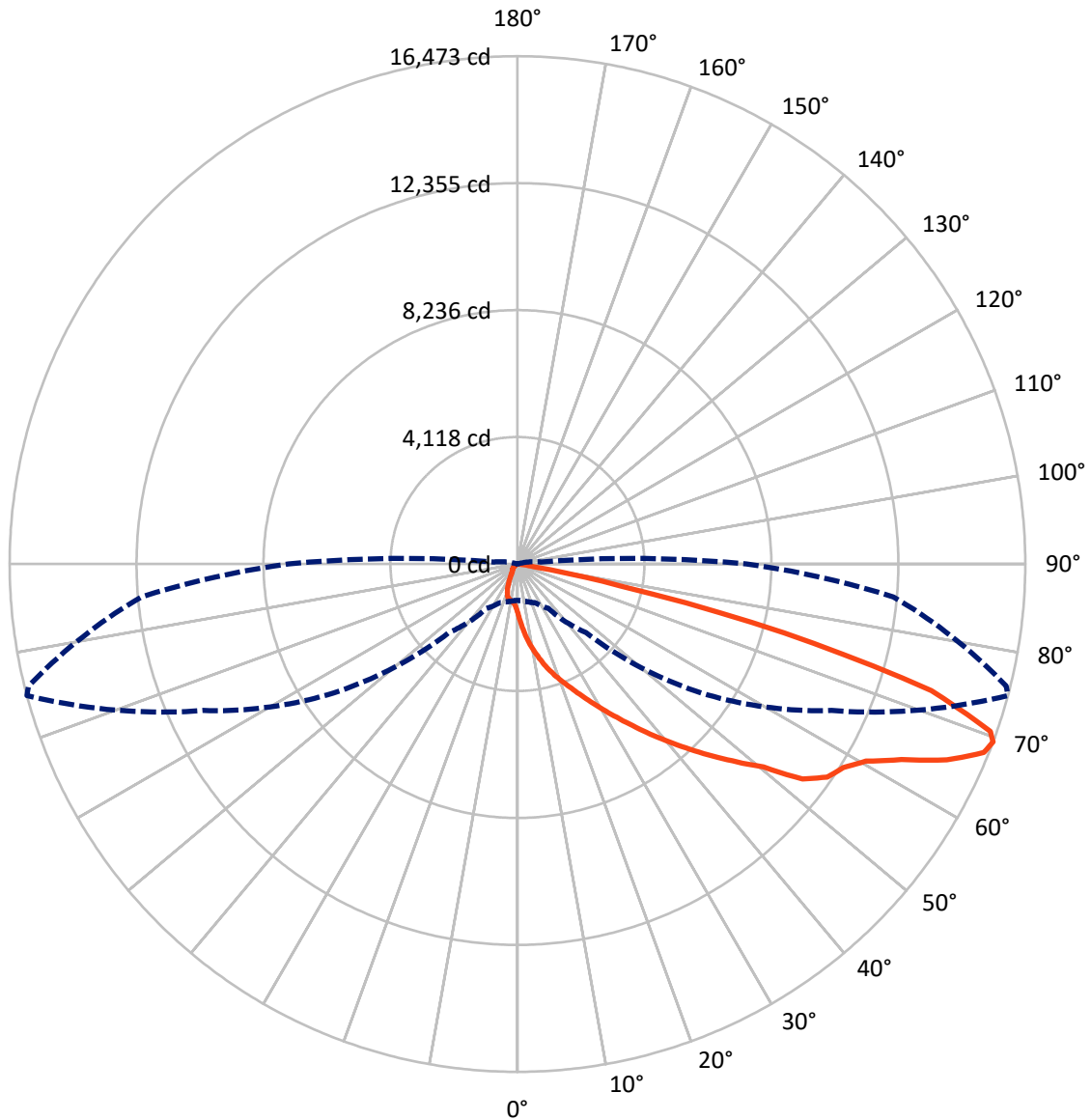
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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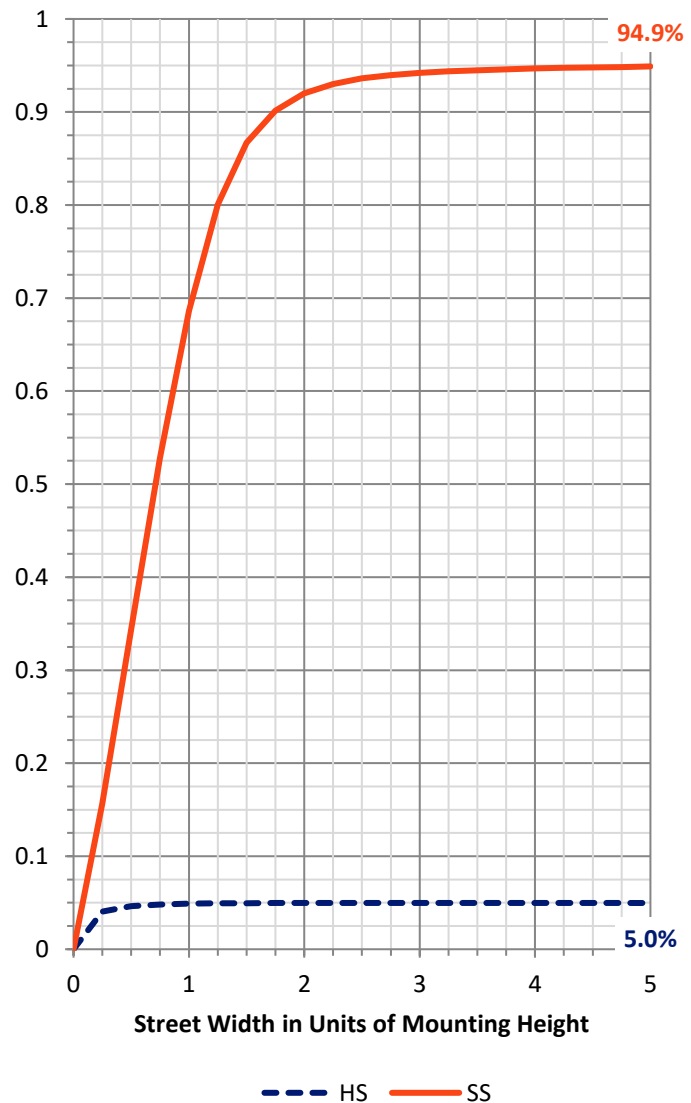
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	854.3	0.0	854.3
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	16268.9	0.0	16268.9
	% Fixture	95.0	0.0	95.0
Total	Lumens	17123.2	0.0	17123.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.8	1.1
10°-20°	664.2	3.9
20°-30°	1268.0	7.4
30°-40°	2274.6	13.3
40°-50°	3484.8	20.4
50°-60°	4050.2	23.7
60°-70°	3586.5	20.9
70°-80°	1547.0	9.0
80°-90°	62.0	0.4
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°	17123.2	100.0
0°-180°	17123.2	100.0



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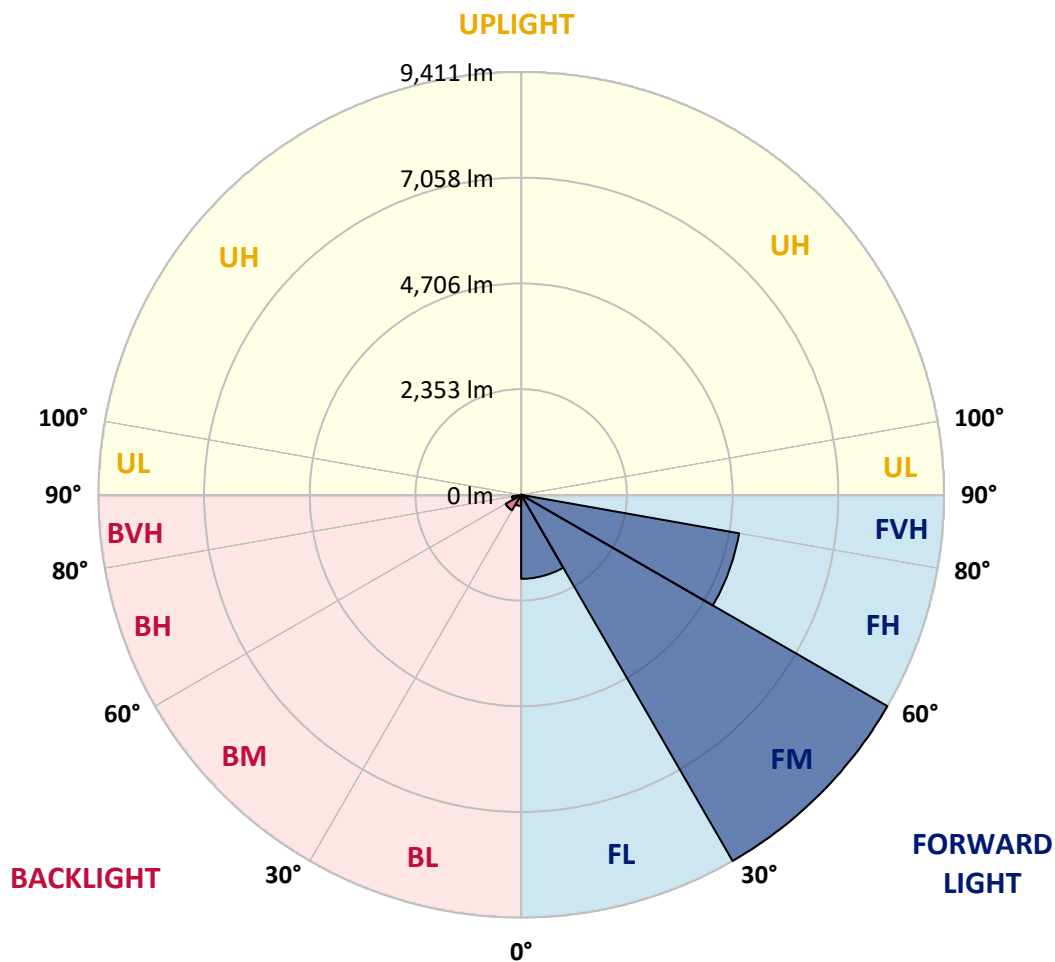
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1869.9	10.9			
FM (30°-60°)	9411.3	55.0			
FH (60°-80°)	4926.6	28.8			G2/5000
FVH (80°-90°)	61.1	0.4			G1/100
BL (0°-30°)	248.1	1.4	B1/500		
BM (30°-60°)	398.3	2.3	B1/1000		
BH (60°-80°)	207.0	1.2	B1/500		G1/500
BVH (80°-90°)	0.9	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-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1593.3	1593.3	1593.3	1593.3	1593.3	1593.3	1593.3	1593.3	1593.3	1593.3	1593.3
2.5°	2624.7	2598.8	2572.9	2543.4	2476.9	2362.2	2218.1	2062.8	1870.6	1837.3	1682.0
5°	3186.6	3175.5	3149.7	3109.0	3035.0	2909.4	2746.7	2517.5	2195.9	2140.4	1811.4
7.5°	3582.2	3574.8	3552.6	3504.5	3438.0	3312.3	3142.2	2894.5	2521.2	2458.4	1974.1
10°	3937.0	3933.3	3914.8	3870.5	3803.9	3667.2	3486.0	3227.3	2831.7	2761.5	2162.6
12.5°	4258.6	4262.3	4255.0	4232.8	4184.7	4055.4	3848.3	3567.3	3131.2	3053.5	2388.1
15°	4447.2	4458.3	4487.9	4532.2	4547.0	4443.5	4229.1	3918.6	3438.0	3371.4	2646.9
17.5°	4384.4	4395.4	4487.9	4639.4	4783.6	4798.4	4606.1	4251.3	3741.1	3674.5	2902.0
20°	4232.8	4247.6	4343.7	4550.7	4831.7	5027.6	4950.0	4613.6	4029.5	3948.2	3146.0
22.5°	4402.9	4402.9	4432.4	4558.1	4813.2	5120.0	5223.5	4975.8	4325.2	4225.4	3390.0
25°	4986.9	4975.8	4913.0	4861.3	4942.6	5216.1	5430.5	5345.5	4672.7	4558.1	3648.7
27.5°	5726.3	5778.0	5659.8	5471.3	5286.4	5404.7	5615.4	5711.5	5057.2	4938.9	3914.8
30°	6554.4	6576.6	6436.1	6184.7	5859.4	5744.8	5833.5	6025.7	5474.9	5345.5	4192.2
32.5°	7301.1	7282.6	7164.3	6901.8	6498.9	6251.3	6114.5	6277.1	5929.6	5781.7	4476.7
35°	7962.9	7977.6	7833.5	7530.4	7134.8	6872.3	6547.0	6561.7	6439.8	6269.7	4805.8
37.5°	8558.0	8532.1	8395.4	8092.3	7733.6	7449.0	7105.2	6857.5	6998.0	6820.5	5175.5
40°	9042.3	9016.4	8872.3	8576.5	8240.1	8007.1	7737.3	7253.0	7585.8	7382.4	5571.0
42.5°	9426.7	9397.1	9275.2	8990.5	8665.2	8458.2	8328.8	7741.0	8214.2	8010.9	6014.6
45°	9615.3	9589.4	9515.5	9301.1	9016.4	8835.2	8898.1	8302.9	8887.0	8717.0	6502.6
47.5°	9393.5	9382.4	9467.4	9430.5	9267.8	9171.7	9389.8	8916.6	9593.1	9426.7	7064.5
50°	8720.7	8739.2	8986.8	9293.7	9371.3	9485.9	9792.7	9563.6	10350.9	10173.5	7711.4
52.5°	7060.8	7186.5	7933.3	8672.6	9245.6	9678.1	10265.9	10487.7	11585.6	11411.9	8720.7
55°	5271.6	5323.3	6136.6	7400.9	8739.2	9663.3	10617.1	11031.1	12195.6	12018.1	8986.8
57.5°	4181.0	4199.5	4602.5	5892.6	7696.7	9330.6	10802.0	11227.1	12461.8	12313.9	9382.4
60°	3282.8	3304.9	3596.9	4484.2	6229.1	8432.3	10535.8	11397.1	12983.0	12864.7	10073.7
62.5°	2554.5	2576.6	2754.1	3275.3	4672.7	7049.8	9999.8	11670.6	13973.8	13918.3	11204.9
65°	1977.8	1985.1	2107.2	2351.2	3301.2	5552.6	9345.4	11925.8	15312.0	15264.0	12121.7
67.5°	1460.3	1471.3	1556.3	1707.9	2229.1	3988.8	8273.3	11729.9	16321.2	16180.7	12454.4
69°	1179.3	1190.4	1264.3	1386.3	1759.7	3142.2	7293.7	11245.5	16472.8	16339.7	12243.7
70°	1009.2	1016.6	1090.6	1194.1	1500.9	2669.1	6517.4	10827.8	16273.1	16143.8	11763.1
72.5°	646.9	683.9	757.8	824.4	994.4	1767.0	4399.1	8979.5	14040.3	13818.5	9212.3
75°	358.5	369.7	502.8	584.1	661.7	1149.7	2447.3	5600.6	8931.4	8776.1	4927.8
77.5°	295.7	303.1	354.9	443.7	443.7	643.2	924.2	2207.0	3397.3	3064.7	1334.5
80°	207.0	214.4	269.9	292.1	317.9	362.3	299.4	484.3	525.0	465.7	199.6
82.5°	144.1	151.6	184.8	240.3	255.1	170.0	110.9	144.1	151.6	151.6	77.6
85°	25.9	36.9	136.8	199.6	151.6	51.8	62.8	51.8	48.1	51.8	18.5
87.5°	0.0	0.0	85.0	96.2	81.3	22.2	25.9	18.5	11.0	14.8	7.4
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°	1593.3	1593.3	1593.3	1593.3	1593.3	1593.3	1593.3	1593.3	1593.3	1593.3	1593.3
2.5°	1604.4	1526.8	1393.7	1297.6	1216.2	1153.4	1127.5	1086.9	1057.3	1072.1	1053.5
5°	1648.8	1512.0	1297.6	1160.7	1064.7	983.4	916.8	865.0	824.4	817.0	809.6
7.5°	1719.0	1523.1	1242.1	1072.1	927.9	802.2	698.7	621.0	561.9	561.9	539.7
10°	1815.1	1552.6	1208.8	983.4	769.0	598.8	495.4	421.5	391.9	388.2	380.7
12.5°	1948.2	1608.1	1182.9	868.7	598.8	436.2	373.4	347.5	336.4	332.7	329.0
15°	2129.4	1689.4	1153.4	728.2	454.7	358.5	332.7	310.6	299.4	295.7	292.1
17.5°	2303.1	1763.4	1090.6	584.1	369.7	325.3	295.7	277.2	262.5	258.8	258.8
20°	2465.7	1826.2	983.4	454.7	332.7	292.1	262.5	240.3	225.5	221.8	221.8
22.5°	2635.8	1877.9	850.3	369.7	303.1	258.8	229.2	207.0	192.2	188.5	184.8
25°	2816.9	1915.0	698.7	329.0	273.5	229.2	195.9	177.5	166.3	162.6	159.0
27.5°	3012.9	1929.7	554.5	299.4	240.3	199.6	170.0	151.6	144.1	140.5	140.5
30°	3190.3	1915.0	428.8	266.2	210.7	173.7	147.9	133.1	125.7	122.0	122.0
32.5°	3375.1	1877.9	343.8	236.6	184.8	147.9	125.7	114.6	110.9	107.2	107.2
35°	3571.1	1829.9	295.7	210.7	159.0	129.4	110.9	103.5	99.8	96.2	96.2
37.5°	3800.3	1770.7	269.9	188.5	140.5	114.6	96.2	92.4	88.7	88.7	88.7
40°	4059.1	1696.8	251.3	170.0	125.7	99.8	85.0	81.3	77.6	77.6	77.6
42.5°	4332.6	1611.8	232.9	151.6	110.9	85.0	74.0	74.0	70.3	70.3	66.5
45°	4639.4	1526.8	214.4	133.1	96.2	74.0	62.8	59.1	59.1	55.4	55.4
47.5°	5001.7	1449.1	195.9	118.3	85.0	62.8	55.4	51.8	48.1	44.4	44.4
50°	5511.9	1441.7	173.7	103.5	77.6	51.8	44.4	40.7	36.9	33.2	33.2
52.5°	6018.3	1375.2	147.9	85.0	62.8	44.4	33.2	29.6	25.9	25.9	22.2
55°	6132.9	1264.3	129.4	74.0	48.1	33.2	25.9	18.5	18.5	14.8	14.8
57.5°	6384.3	1212.5	110.9	59.1	36.9	25.9	14.8	11.0	11.0	11.0	11.0
60°	6879.7	1197.8	96.2	51.8	25.9	18.5	11.0	7.4	7.4	3.7	3.7
62.5°	7563.6	1182.9	81.3	44.4	18.5	11.0	7.4	3.7	0.0	0.0	0.0
65°	7940.7	1083.2	66.5	33.2	14.8	11.0	3.7	0.0	0.0	0.0	0.0
67.5°	7840.8	894.6	59.1	22.2	11.0	7.4	3.7	0.0	0.0	0.0	0.0
69°	7423.1	754.1	48.1	18.5	11.0	7.4	3.7	0.0	0.0	0.0	0.0
70°	6920.4	650.6	44.4	14.8	7.4	3.7	3.7	0.0	0.0	0.0	0.0
72.5°	4913.0	340.1	29.6	11.0	7.4	3.7	0.0	0.0	0.0	0.0	0.0
75°	2295.7	151.6	18.5	7.4	3.7	3.7	0.0	0.0	0.0	0.0	0.0
77.5°	506.5	70.3	11.0	7.4	3.7	0.0	0.0	0.0	0.0	0.0	0.0
80°	96.2	25.9	7.4	3.7	3.7	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	33.2	11.0	3.7	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.7	0.0	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)