

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: P236956

Luminaire Tested: **ARCH-L-AF72-230-D-U-T2R-7030-HSS**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P236956
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 8/23/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-230-D-U-T2R-7030-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 980mA 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: 20609.6 lumens
Efficiency: N/A
Efficacy: 90.0 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G3

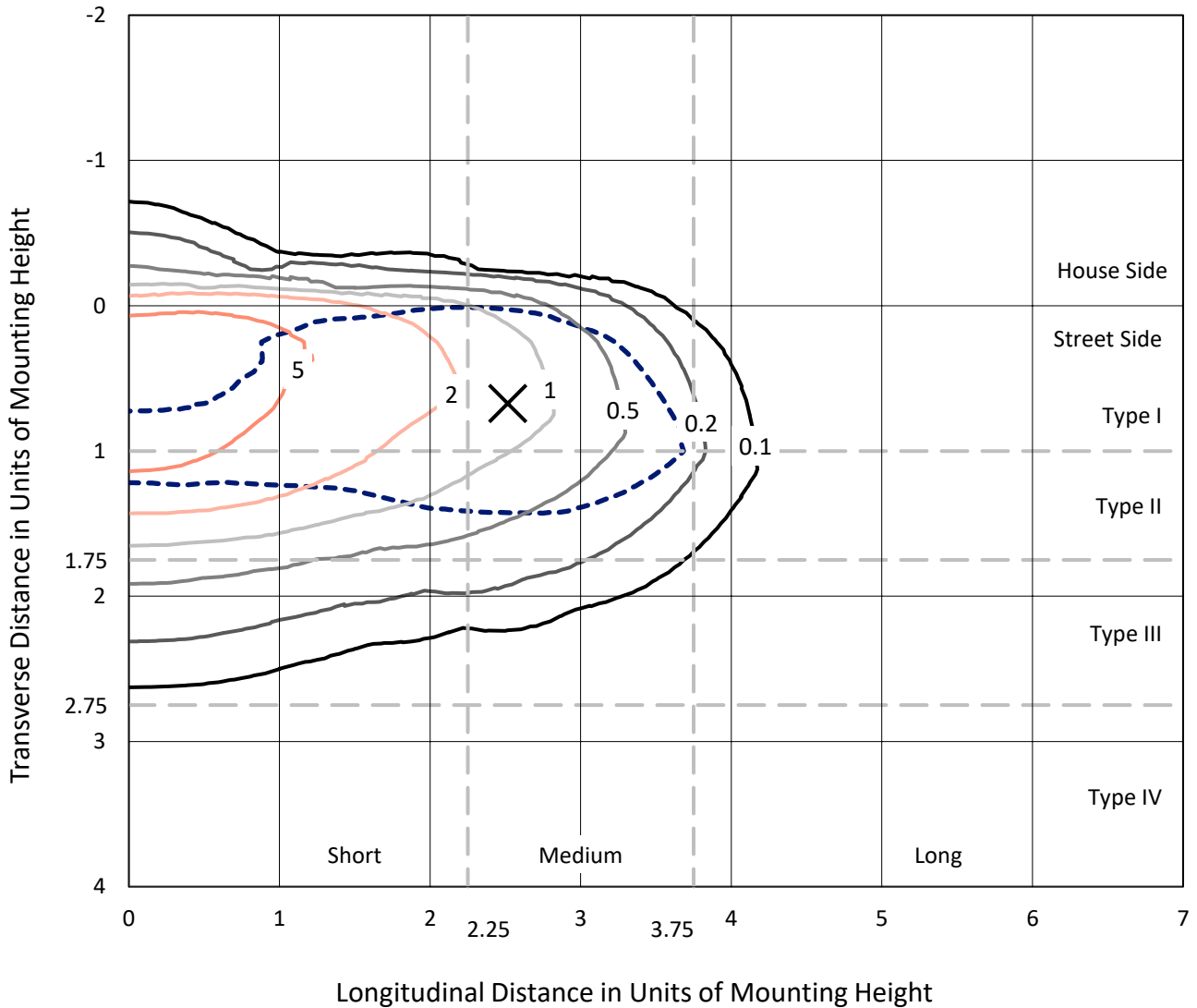
Input Watts (W): 229
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P236956
 CATALOG NUMBER: ARCH-L-AF72-230-D-U-T2R-7030-HSS

Iso-Footcandle Lines of Horizontal Illumination

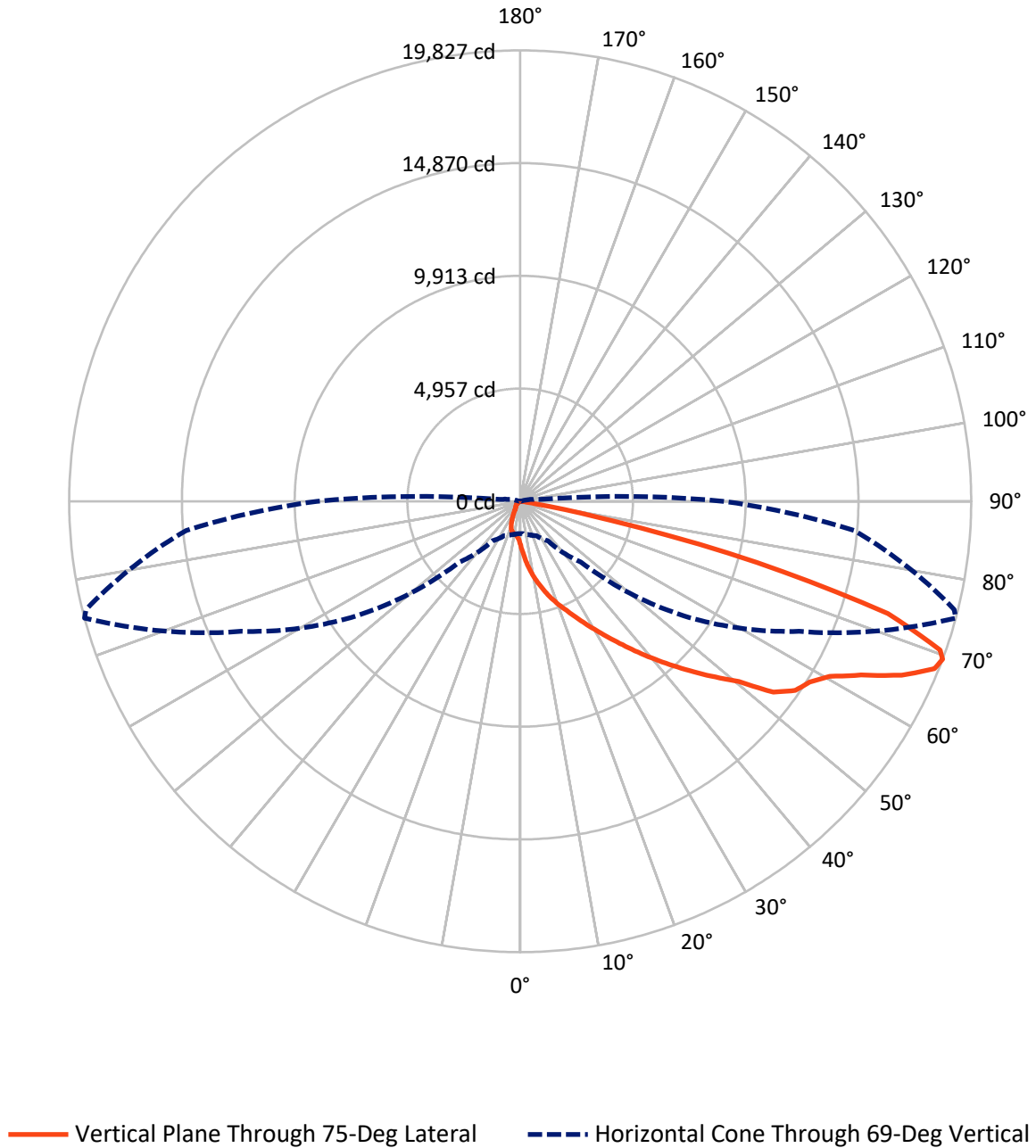
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.4 fc
 Type II - Medium - N/A

REPORT NUMBER: P236956
CATALOG NUMBER: ARCH-L-AF72-230-D-U-T2R-7030-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P236956
 CATALOG NUMBER: ARCH-L-AF72-230-D-U-T2R-7030-HSS

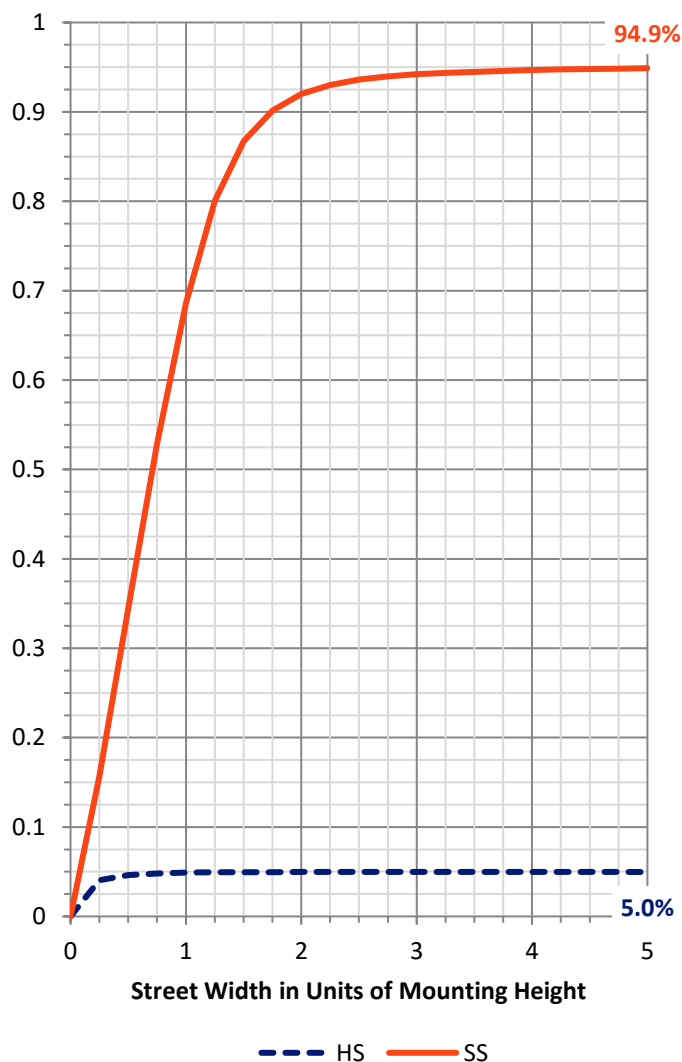
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1028.3	0.0	1028.3
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	19581.3	0.0	19581.3
	% Fixture	95.0	0.0	95.0
Total	Lumens	20609.6	0.0	20609.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.6	1.1
10°-20°	799.4	3.9
20°-30°	1526.2	7.4
30°-40°	2737.7	13.3
40°-50°	4194.4	20.4
50°-60°	4874.9	23.7
60°-70°	4316.8	20.9
70°-80°	1862.0	9.0
80°-90°	74.6	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°	20609.6	100.0
0°-180°	20609.6	100.0

Coefficient of Utilization



REPORT NUMBER: P236956

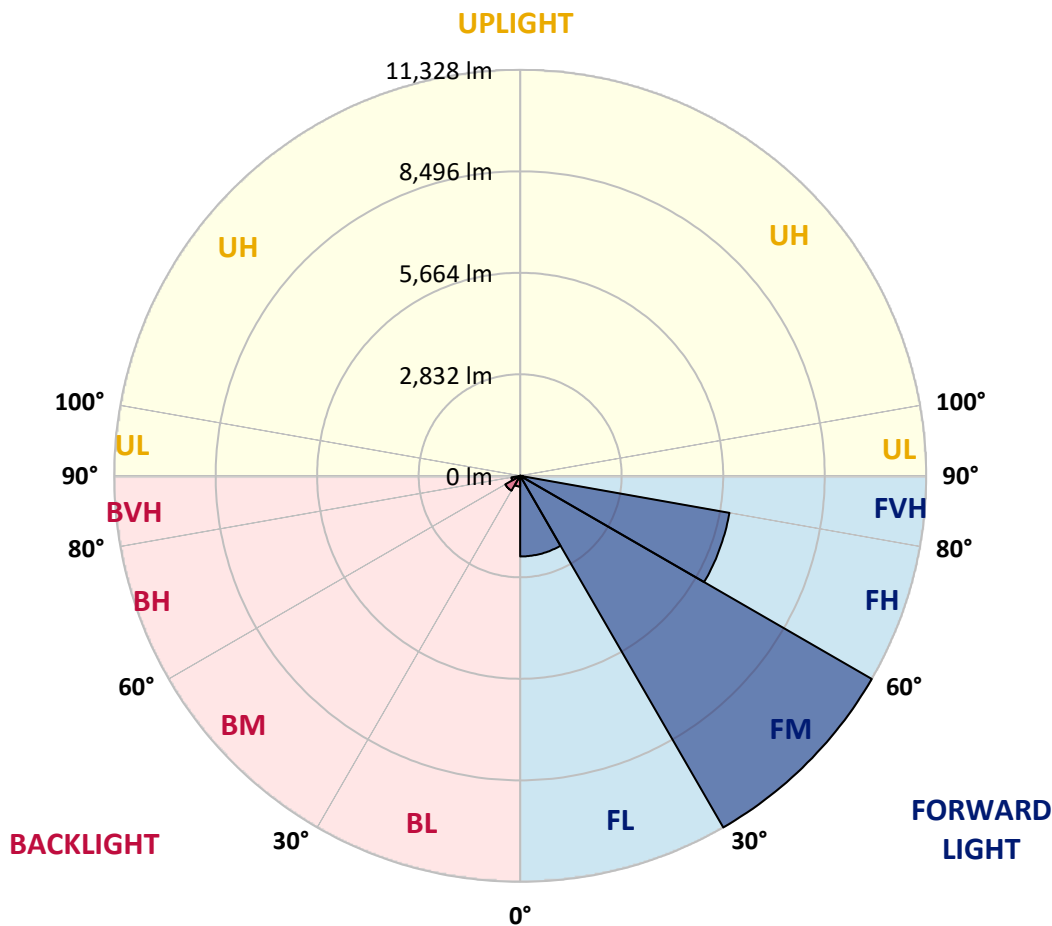
CATALOG NUMBER: ARCH-L-AF72-230-D-U-T2R-7030-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2250.6	10.9			
FM (30°-60°)	11327.5	55.0			
FH (60°-80°)	5929.6	28.8			G3/7500
FVH (80°-90°)	73.5	0.4			G1/100
BL (0°-30°)	298.7	1.4	B1/500		
BM (30°-60°)	479.4	2.3	B1/1000		
BH (60°-80°)	249.1	1.2	B1/500		G1/500
BVH (80°-90°)	1.1	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-G3

Type II Medium





REPORT NUMBER: P236956

CATALOG NUMBER: ARCH-L-AF72-230-D-U-T2R-7030-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1917.7	1917.7	1917.7	1917.7	1917.7	1917.7	1917.7	1917.7	1917.7	1917.7	1917.7
2.5°	3159.1	3128.0	3096.9	3061.2	2981.1	2843.2	2669.6	2482.8	2251.4	2211.4	2024.5
5°	3835.4	3822.1	3791.0	3742.0	3653.0	3501.8	3305.9	3030.1	2643.0	2576.3	2180.3
7.5°	4311.5	4302.6	4276.0	4218.1	4137.9	3986.8	3782.0	3484.0	3034.5	2958.8	2376.1
10°	4738.7	4734.2	4712.0	4658.6	4578.5	4413.8	4195.9	3884.3	3408.3	3323.7	2602.9
12.5°	5125.8	5130.3	5121.3	5094.6	5036.8	4881.0	4631.8	4293.7	3768.7	3675.3	2874.4
15°	5352.7	5366.0	5401.7	5455.0	5472.8	5348.2	5090.2	4716.4	4137.9	4057.9	3185.8
17.5°	5277.0	5290.5	5401.7	5584.0	5757.6	5775.3	5544.1	5116.8	4502.8	4422.7	3492.8
20°	5094.6	5112.5	5228.0	5477.2	5815.5	6051.3	5957.8	5552.9	4849.9	4752.0	3786.5
22.5°	5299.3	5299.3	5334.9	5486.1	5793.2	6162.4	6287.1	5988.9	5205.8	5085.7	4080.2
25°	6002.2	5988.9	5913.3	5851.1	5948.9	6278.1	6536.2	6433.9	5624.1	5486.1	4391.5
27.5°	6892.2	6954.5	6812.1	6585.2	6362.7	6505.1	6758.7	6874.4	6086.9	5944.5	4712.0
30°	7888.8	7915.7	7746.5	7444.0	7052.3	6914.5	7021.2	7252.6	6589.7	6433.9	5045.7
32.5°	8787.6	8765.5	8623.1	8307.1	7822.1	7524.0	7359.3	7555.2	7137.0	6958.9	5388.3
35°	9584.1	9601.9	9428.4	9063.5	8587.4	8271.6	7880.0	7897.8	7751.0	7546.3	5784.3
37.5°	10300.5	10269.3	10104.8	9739.8	9308.3	8965.6	8551.8	8253.8	8422.8	8209.2	6229.2
40°	10883.4	10852.1	10678.7	10322.7	9917.8	9637.5	9312.7	8729.9	9130.2	8885.5	6705.4
42.5°	11346.1	11310.5	11163.7	10821.0	10429.6	10180.3	10024.6	9317.2	9886.7	9641.9	7239.3
45°	11573.1	11541.8	11452.9	11194.8	10852.1	10634.2	10709.8	9993.5	10696.5	10491.8	7826.6
47.5°	11306.0	11292.7	11395.0	11350.5	11154.9	11039.1	11301.6	10732.1	11546.3	11346.1	8502.9
50°	10496.2	10518.5	10816.6	11186.0	11279.4	11417.3	11786.6	11510.7	12458.5	12244.9	9281.6
52.5°	8498.4	8649.7	9548.5	10438.4	11128.0	11648.6	12356.1	12623.0	13944.5	13735.4	10496.2
55°	6344.9	6407.2	7386.0	8907.8	10518.5	11630.8	12778.9	13277.1	14678.8	14465.2	10816.6
57.5°	5032.4	5054.6	5539.6	7092.4	9263.8	11230.4	13001.3	13512.9	14999.1	14821.1	11292.7
60°	3951.2	3977.8	4329.3	5397.2	7497.4	10149.2	12680.9	13717.6	15626.5	15484.1	12124.7
62.5°	3074.5	3101.3	3314.8	3942.2	5624.1	8485.1	12035.8	14046.9	16819.0	16752.1	13486.3
65°	2380.4	2389.4	2536.2	2829.9	3973.3	6683.1	11248.2	14353.9	18429.7	18371.8	14589.7
67.5°	1757.6	1770.9	1873.2	2055.6	2683.0	4801.0	9957.9	14118.2	19644.4	19475.3	14990.2
69°	1419.4	1432.7	1521.8	1668.5	2118.0	3782.0	8778.8	13535.2	19826.7	19666.5	14736.6
70°	1214.8	1223.6	1312.6	1437.2	1806.5	3212.5	7844.4	13032.5	19586.5	19430.7	14158.2
72.5°	778.7	823.2	912.1	992.2	1196.9	2126.8	5294.8	10807.7	16899.0	16632.1	11088.0
75°	431.6	444.9	605.1	703.0	796.5	1383.8	2945.5	6741.0	10749.9	10562.9	5931.1
77.5°	355.9	364.8	427.1	533.9	533.9	774.2	1112.4	2656.3	4089.0	3688.6	1606.2
80°	249.2	258.1	324.8	351.5	382.6	436.1	360.4	582.9	631.8	560.6	240.3
82.5°	173.5	182.5	222.5	289.2	307.0	204.7	133.6	173.5	182.5	182.5	93.4
85°	31.1	44.5	164.7	240.3	182.5	62.3	75.6	62.3	57.8	62.3	22.3
87.5°	0.0	0.0	102.3	115.7	97.9	26.7	31.1	22.3	13.3	17.8	8.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P236956

CATALOG NUMBER: ARCH-L-AF72-230-D-U-T2R-7030-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1917.7	1917.7	1917.7	1917.7	1917.7	1917.7	1917.7	1917.7	1917.7	1917.7	1917.7
2.5°	1931.0	1837.6	1677.4	1561.8	1463.8	1388.2	1357.1	1308.2	1272.6	1290.4	1268.1
5°	1984.4	1819.8	1561.8	1397.1	1281.4	1183.6	1103.4	1041.1	992.2	983.4	974.5
7.5°	2069.1	1833.2	1495.0	1290.4	1116.8	965.6	841.0	747.6	676.4	676.4	649.6
10°	2184.6	1868.8	1455.0	1183.6	925.5	720.8	596.2	507.3	471.7	467.2	458.4
12.5°	2344.8	1935.5	1423.8	1045.6	720.8	525.0	449.4	418.3	405.0	400.4	395.9
15°	2562.9	2033.5	1388.2	876.6	547.3	431.6	400.4	373.7	360.4	355.9	351.5
17.5°	2772.0	2122.4	1312.6	703.0	444.9	391.5	355.9	333.7	315.9	311.5	311.5
20°	2967.8	2198.1	1183.6	547.3	400.4	351.5	315.9	289.2	271.4	266.9	266.9
22.5°	3172.5	2260.3	1023.3	444.9	364.8	311.5	275.9	249.2	231.4	226.9	222.5
25°	3390.6	2304.9	841.0	395.9	329.3	275.9	235.8	213.6	200.3	195.8	191.3
27.5°	3626.4	2322.7	667.5	360.4	289.2	240.3	204.7	182.5	173.5	169.2	169.2
30°	3839.9	2304.9	516.1	320.3	253.6	209.1	178.0	160.2	151.4	146.9	146.9
32.5°	4062.4	2260.3	413.8	284.7	222.5	178.0	151.4	137.8	133.6	129.0	129.0
35°	4298.2	2202.4	355.9	253.6	191.3	155.7	133.6	124.5	120.1	115.7	115.7
37.5°	4574.0	2131.3	324.8	226.9	169.2	137.8	115.7	111.2	106.7	106.7	106.7
40°	4885.5	2042.3	302.5	204.7	151.4	120.1	102.3	97.9	93.4	93.4	93.4
42.5°	5214.7	1940.0	280.4	182.5	133.6	102.3	88.9	88.9	84.5	84.5	80.1
45°	5584.0	1837.6	258.1	160.2	115.7	88.9	75.6	71.2	71.2	66.7	66.7
47.5°	6020.0	1744.3	235.8	142.4	102.3	75.6	66.7	62.3	57.8	53.4	53.4
50°	6634.1	1735.2	209.1	124.5	93.4	62.3	53.4	48.9	44.5	40.1	40.1
52.5°	7243.7	1655.2	178.0	102.3	75.6	53.4	40.1	35.6	31.1	31.1	26.7
55°	7381.7	1521.8	155.7	88.9	57.8	40.1	31.1	22.3	22.3	17.8	17.8
57.5°	7684.2	1459.3	133.6	71.2	44.5	31.1	17.8	13.3	13.3	13.3	13.3
60°	8280.4	1441.6	115.7	62.3	31.1	22.3	13.3	8.8	8.8	4.5	4.5
62.5°	9103.6	1423.8	97.9	53.4	22.3	13.3	8.8	4.5	0.0	0.0	0.0
65°	9557.5	1303.7	80.1	40.1	17.8	13.3	4.5	0.0	0.0	0.0	0.0
67.5°	9437.3	1076.8	71.2	26.7	13.3	8.8	4.5	0.0	0.0	0.0	0.0
69°	8934.4	907.7	57.8	22.3	13.3	8.8	4.5	0.0	0.0	0.0	0.0
70°	8329.4	783.1	53.4	17.8	8.8	4.5	4.5	0.0	0.0	0.0	0.0
72.5°	5913.3	409.4	35.6	13.3	8.8	4.5	0.0	0.0	0.0	0.0	0.0
75°	2763.0	182.5	22.3	8.8	4.5	4.5	0.0	0.0	0.0	0.0	0.0
77.5°	609.5	84.5	13.3	8.8	4.5	0.0	0.0	0.0	0.0	0.0	0.0
80°	115.7	31.1	8.8	4.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	40.1	13.3	4.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.3	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.5	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)