

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: P236960

Luminaire Tested: **ARCH-L-AF72-270-D-U-T2R-7030-HSS**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P236960
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-AF72-270-D-U-T2R-7030-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 1155mA 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: 22924.8 lumens
Efficiency: N/A
Efficacy: 84.0 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

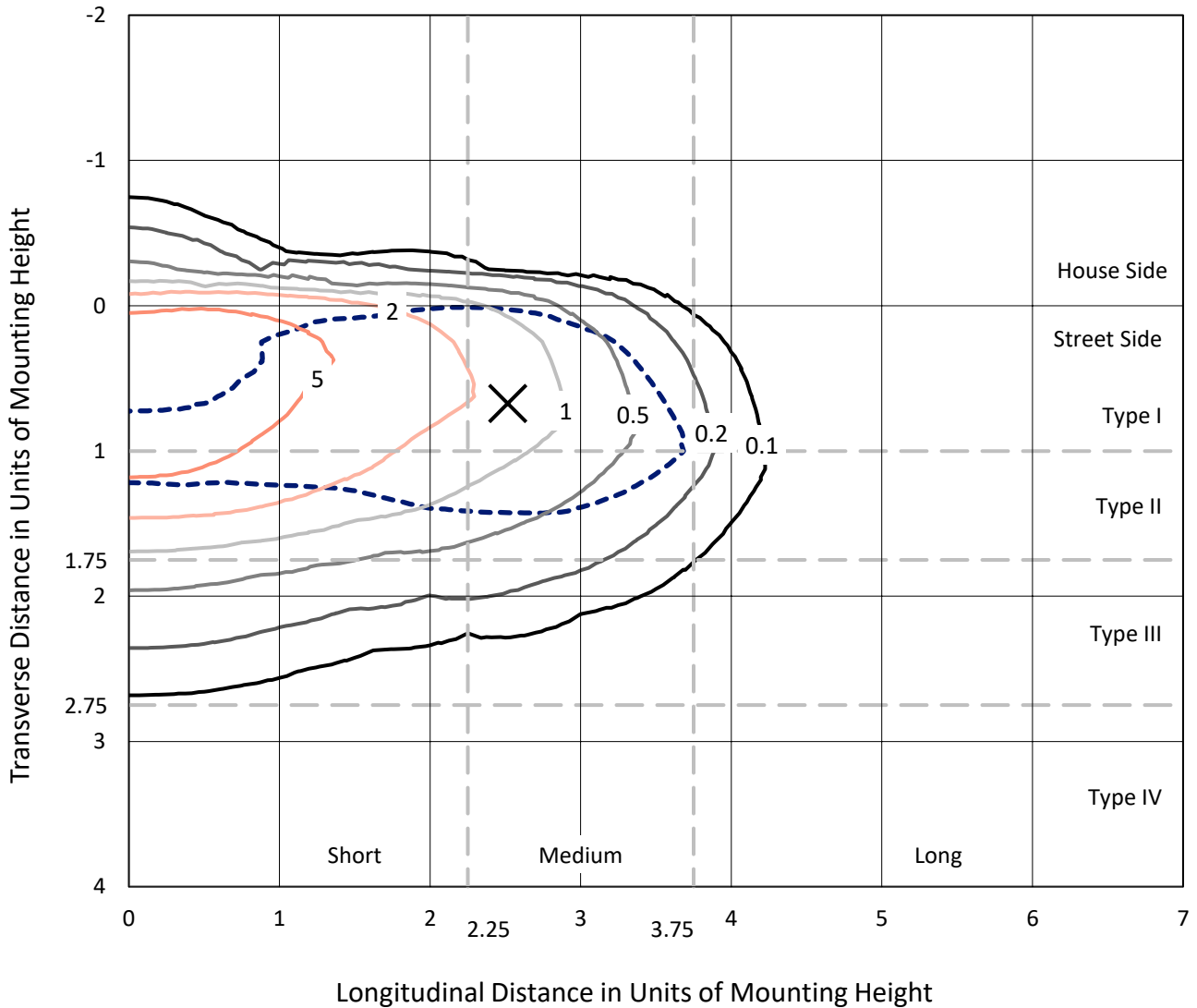
Input Watts (W): 273
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P236960
 CATALOG NUMBER: ARCH-L-AF72-270-D-U-T2R-7030-HSS

Iso-Footcandle Lines of Horizontal Illumination

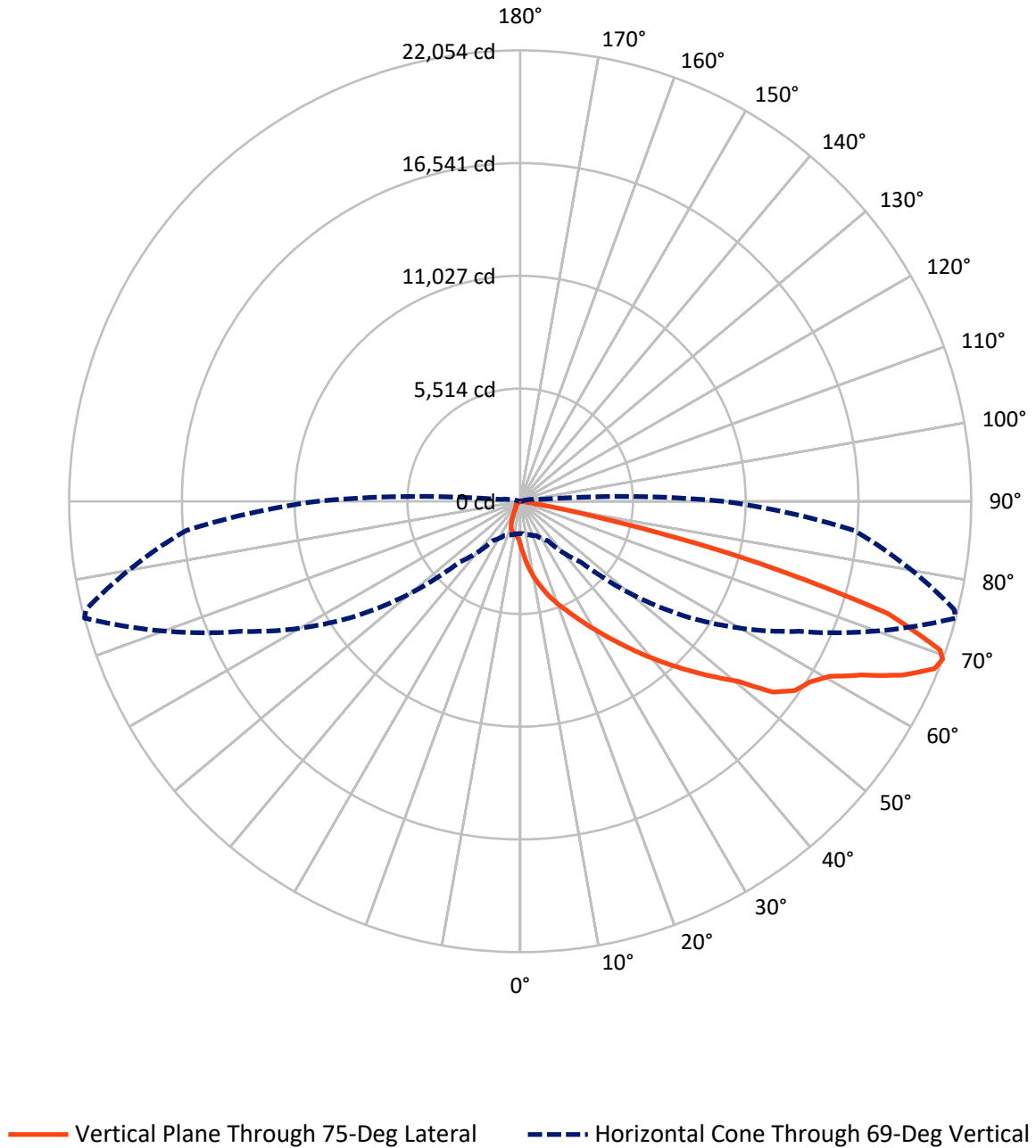
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.3 fc
 Type II - Medium - N/A

REPORT NUMBER: P236960
CATALOG NUMBER: ARCH-L-AF72-270-D-U-T2R-7030-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P236960

CATALOG NUMBER: ARCH-L-AF72-270-D-U-T2R-7030-HSS

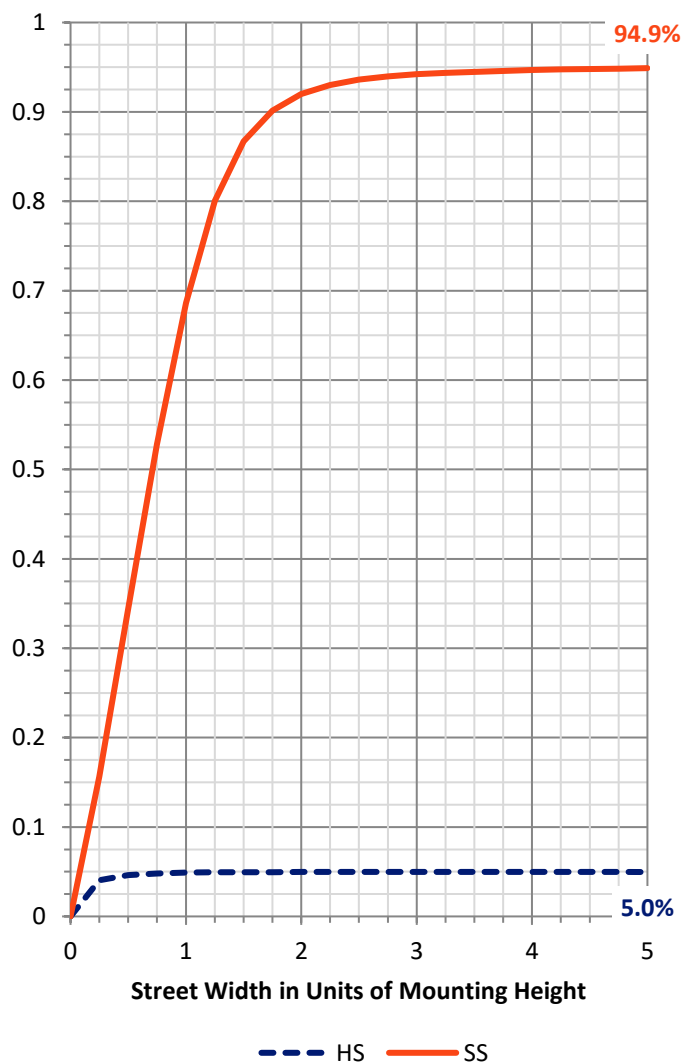
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1143.8	0.0	1143.8
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	21781.0	0.0	21781.0
	% Fixture	95.0	0.0	95.0
Total	Lumens	22924.8	0.0	22924.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	248.7	1.1
10°-20°	889.2	3.9
20°-30°	1697.6	7.4
30°-40°	3045.2	13.3
40°-50°	4665.6	20.4
50°-60°	5422.5	23.7
60°-70°	4801.7	20.9
70°-80°	2071.2	9.0
80°-90°	83.0	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°	22924.8	100.0
0°-180°	22924.8	100.0

Coefficient of Utilization



REPORT NUMBER: P236960

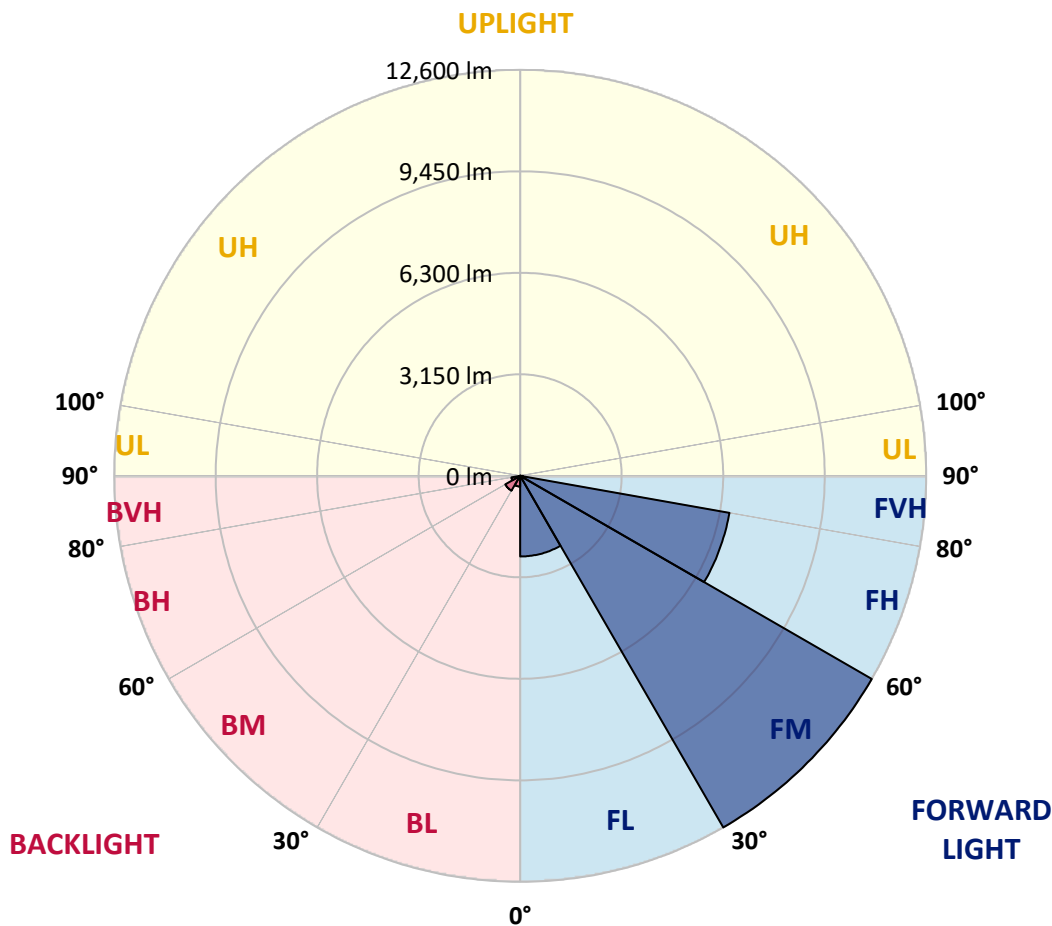
CATALOG NUMBER: ARCH-L-AF72-270-D-U-T2R-7030-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2503.4	10.9			
FM (30°-60°)	12600.0	55.0			
FH (60°-80°)	6595.8	28.8			G3/7500
FVH (80°-90°)	81.8	0.4			G1/100
BL (0°-30°)	332.2	1.4	B1/500		
BM (30°-60°)	533.3	2.3	B1/1000		
BH (60°-80°)	277.1	1.2	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-G3

Type II Medium





REPORT NUMBER: P236960

CATALOG NUMBER: ARCH-L-AF72-270-D-U-T2R-7030-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2133.2	2133.2	2133.2	2133.2	2133.2	2133.2	2133.2	2133.2	2133.2	2133.2	2133.2
2.5°	3514.0	3479.4	3444.7	3405.1	3316.0	3162.6	2969.5	2761.7	2504.3	2459.8	2252.0
5°	4266.2	4251.4	4216.8	4162.3	4063.4	3895.1	3677.3	3370.4	2939.8	2865.7	2425.1
7.5°	4795.8	4786.0	4756.3	4691.9	4602.9	4434.5	4206.9	3875.3	3375.4	3291.3	2642.9
10°	5271.0	5266.1	5241.2	5181.9	5092.8	4909.7	4667.2	4320.7	3791.2	3697.2	2895.4
12.5°	5701.5	5706.5	5696.7	5666.9	5602.6	5429.4	5152.2	4776.0	4192.1	4088.2	3197.3
15°	5954.0	5968.9	6008.3	6067.8	6087.6	5949.0	5662.1	5246.2	4602.9	4513.7	3543.8
17.5°	5869.9	5884.7	6008.3	6211.4	6404.3	6424.2	6166.8	5691.7	5008.7	4919.6	3885.2
20°	5666.9	5686.7	5815.5	6092.7	6468.7	6731.0	6627.1	6176.8	5394.6	5285.9	4211.8
22.5°	5894.6	5894.6	5934.2	6102.4	6444.0	6854.7	6993.3	6661.7	5790.6	5657.0	4538.5
25°	6676.7	6661.7	6577.6	6508.3	6617.2	6983.5	7270.5	7156.7	6255.8	6102.4	4885.0
27.5°	7666.4	7735.8	7577.3	7325.0	7077.5	7235.8	7517.9	7646.6	6770.6	6612.3	5241.2
30°	8775.0	8804.7	8616.7	8280.1	7844.6	7691.2	7810.0	8067.3	7329.8	7156.7	5612.5
32.5°	9774.9	9750.1	9591.8	9240.3	8700.9	8369.3	8186.1	8403.9	7938.7	7740.7	5993.6
35°	10660.8	10680.5	10487.6	10081.7	9552.1	9200.7	8765.3	8785.0	8621.6	8394.0	6434.1
37.5°	11457.6	11422.9	11239.8	10834.0	10354.0	9972.8	9512.5	9180.9	9369.0	9131.5	6929.0
40°	12105.9	12071.3	11878.3	11482.4	11031.9	10720.2	10358.9	9710.5	10155.9	9883.7	7458.6
42.5°	12620.6	12581.1	12417.8	12036.6	11601.1	11323.9	11150.8	10363.8	10997.3	10725.1	8052.5
45°	12873.2	12838.4	12739.4	12452.4	12071.3	11828.9	11913.0	11116.1	11898.2	11670.4	8705.8
47.5°	12576.2	12561.3	12675.1	12625.7	12407.8	12279.2	12571.2	11937.6	12843.4	12620.6	9458.1
50°	11675.3	11700.1	12031.7	12442.6	12546.5	12699.9	13110.7	12803.8	13858.0	13620.5	10324.2
52.5°	9453.1	9621.4	10621.2	11611.0	12378.2	12957.3	13744.2	14041.1	15511.1	15278.5	11675.3
55°	7057.7	7127.0	8215.9	9908.5	11700.1	12937.4	14214.3	14768.7	16327.7	16090.2	12031.7
57.5°	5597.7	5622.4	6161.9	7889.2	10304.5	12492.0	14461.8	15031.1	16684.0	16486.0	12561.3
60°	4395.0	4424.7	4815.6	6003.5	8339.5	11289.3	14105.5	15258.6	17381.8	17223.5	13486.9
62.5°	3420.0	3449.7	3687.2	4385.1	6255.8	9438.3	13387.9	15624.9	18708.3	18634.0	15001.3
65°	2647.9	2657.7	2821.1	3147.8	4419.7	7433.8	12511.9	15966.4	20500.0	20435.7	16228.8
67.5°	1954.9	1969.8	2083.7	2286.6	2984.4	5340.3	11076.4	15704.1	21851.1	21663.1	16674.2
69°	1578.8	1593.6	1692.7	1856.0	2355.8	4206.9	9764.9	15055.7	22054.0	21875.9	16392.0
70°	1351.2	1361.1	1460.0	1598.6	2009.4	3573.5	8725.6	14496.4	21786.8	21613.5	15748.6
72.5°	866.1	915.6	1014.6	1103.7	1331.4	2365.8	5889.6	12021.8	18797.4	18500.5	12333.6
75°	480.0	495.0	673.1	782.0	885.9	1539.3	3276.4	7498.1	11957.5	11749.6	6597.4
77.5°	395.9	405.8	475.2	594.0	594.0	861.2	1237.4	2954.7	4548.4	4102.9	1786.7
80°	277.2	287.1	361.3	391.0	425.7	485.0	400.9	648.4	702.7	623.7	267.2
82.5°	193.1	202.9	247.5	321.7	341.6	227.7	148.5	193.1	202.9	202.9	103.9
85°	34.6	49.5	183.1	267.2	202.9	69.3	84.1	69.3	64.4	69.3	24.7
87.5°	0.0	0.0	113.8	128.7	108.9	29.7	34.6	24.7	14.9	19.7	10.0
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: P236960

CATALOG NUMBER: ARCH-L-AF72-270-D-U-T2R-7030-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2133.2	2133.2	2133.2	2133.2	2133.2	2133.2	2133.2	2133.2	2133.2	2133.2	2133.2
2.5°	2148.0	2044.0	1865.9	1737.2	1628.3	1544.2	1509.5	1455.2	1415.5	1435.3	1410.5
5°	2207.4	2024.2	1737.2	1554.1	1425.4	1316.5	1227.4	1158.1	1103.7	1093.8	1083.9
7.5°	2301.4	2039.1	1662.9	1435.3	1242.3	1074.0	935.4	831.5	752.2	752.2	722.6
10°	2430.2	2078.6	1618.4	1316.5	1029.4	801.8	663.2	564.3	524.7	519.6	509.8
12.5°	2608.2	2153.0	1583.8	1163.1	801.8	584.0	499.9	465.2	450.3	445.4	440.6
15°	2850.8	2261.7	1544.2	975.0	608.8	480.0	445.4	415.7	400.9	395.9	391.0
17.5°	3083.4	2360.8	1460.0	782.0	495.0	435.5	395.9	371.2	351.4	346.5	346.5
20°	3301.2	2444.9	1316.5	608.8	445.4	391.0	351.4	321.7	301.9	296.9	296.9
22.5°	3528.8	2514.3	1138.4	495.0	405.8	346.5	306.9	277.2	257.5	252.4	247.5
25°	3771.3	2563.8	935.4	440.6	366.2	306.9	262.3	237.5	222.7	217.8	212.8
27.5°	4033.7	2583.6	742.4	400.9	321.7	267.2	227.7	202.9	193.1	188.0	188.0
30°	4271.3	2563.8	574.1	356.3	282.1	232.6	198.0	178.2	168.3	163.4	163.4
32.5°	4518.8	2514.3	460.3	316.8	247.5	198.0	168.3	153.4	148.5	143.5	143.5
35°	4780.9	2449.9	395.9	282.1	212.8	173.1	148.5	138.5	133.7	128.7	128.7
37.5°	5087.8	2370.7	361.3	252.4	188.0	153.4	128.7	123.7	118.8	118.8	118.8
40°	5434.3	2271.7	336.5	227.7	168.3	133.7	113.8	108.9	103.9	103.9	103.9
42.5°	5800.6	2157.9	311.8	202.9	148.5	113.8	99.0	99.0	94.1	94.1	89.0
45°	6211.4	2044.0	287.1	178.2	128.7	99.0	84.1	79.2	79.2	74.2	74.2
47.5°	6696.4	1940.1	262.3	158.4	113.8	84.1	74.2	69.3	64.4	59.4	59.4
50°	7379.4	1930.2	232.6	138.5	103.9	69.3	59.4	54.4	49.5	44.6	44.6
52.5°	8057.5	1841.1	198.0	113.8	84.1	59.4	44.6	39.6	34.6	34.6	29.7
55°	8210.9	1692.7	173.1	99.0	64.4	44.6	34.6	24.7	24.7	19.7	19.7
57.5°	8547.5	1623.4	148.5	79.2	49.5	34.6	19.7	14.9	14.9	14.9	14.9
60°	9210.7	1603.6	128.7	69.3	34.6	24.7	14.9	10.0	10.0	4.9	4.9
62.5°	10126.2	1583.8	108.9	59.4	24.7	14.9	10.0	4.9	0.0	0.0	0.0
65°	10631.0	1450.1	89.0	44.6	19.7	14.9	4.9	0.0	0.0	0.0	0.0
67.5°	10497.4	1197.7	79.2	29.7	14.9	10.0	4.9	0.0	0.0	0.0	0.0
69°	9938.1	1009.7	64.4	24.7	14.9	10.0	4.9	0.0	0.0	0.0	0.0
70°	9265.0	871.2	59.4	19.7	10.0	4.9	4.9	0.0	0.0	0.0	0.0
72.5°	6577.6	455.3	39.6	14.9	10.0	4.9	0.0	0.0	0.0	0.0	0.0
75°	3073.5	202.9	24.7	10.0	4.9	4.9	0.0	0.0	0.0	0.0	0.0
77.5°	678.1	94.1	14.9	10.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0
80°	128.7	34.6	10.0	4.9	4.9	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	44.6	14.9	4.9	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.9	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.9	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)