

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: P236989

Luminaire Tested: **ARCH-L-AF72-160-D-U-T2R-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P236989
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-160-D-U-T2R-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 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: 16739 lumens
Efficiency: N/A
Efficacy: 103.3 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

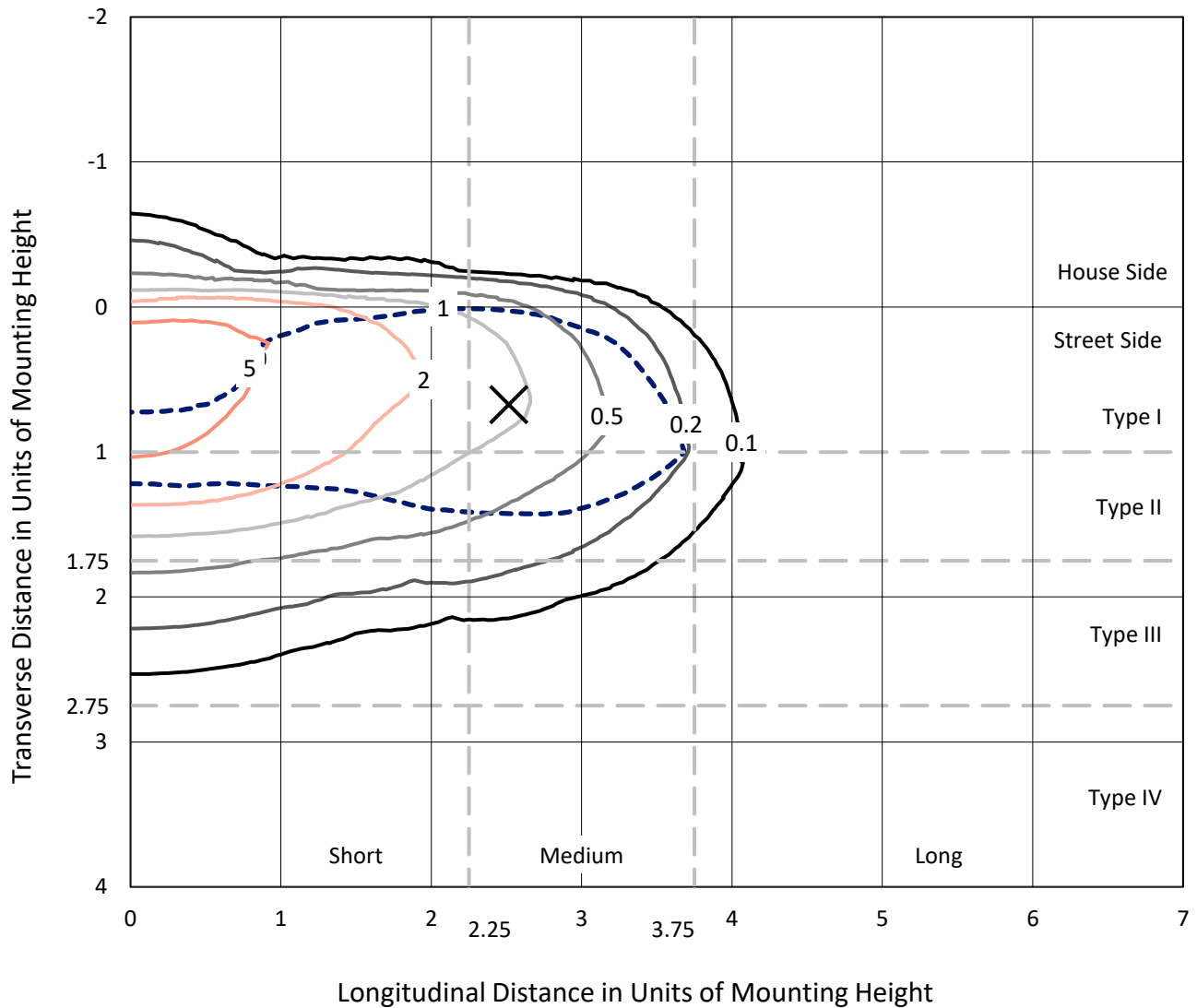
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

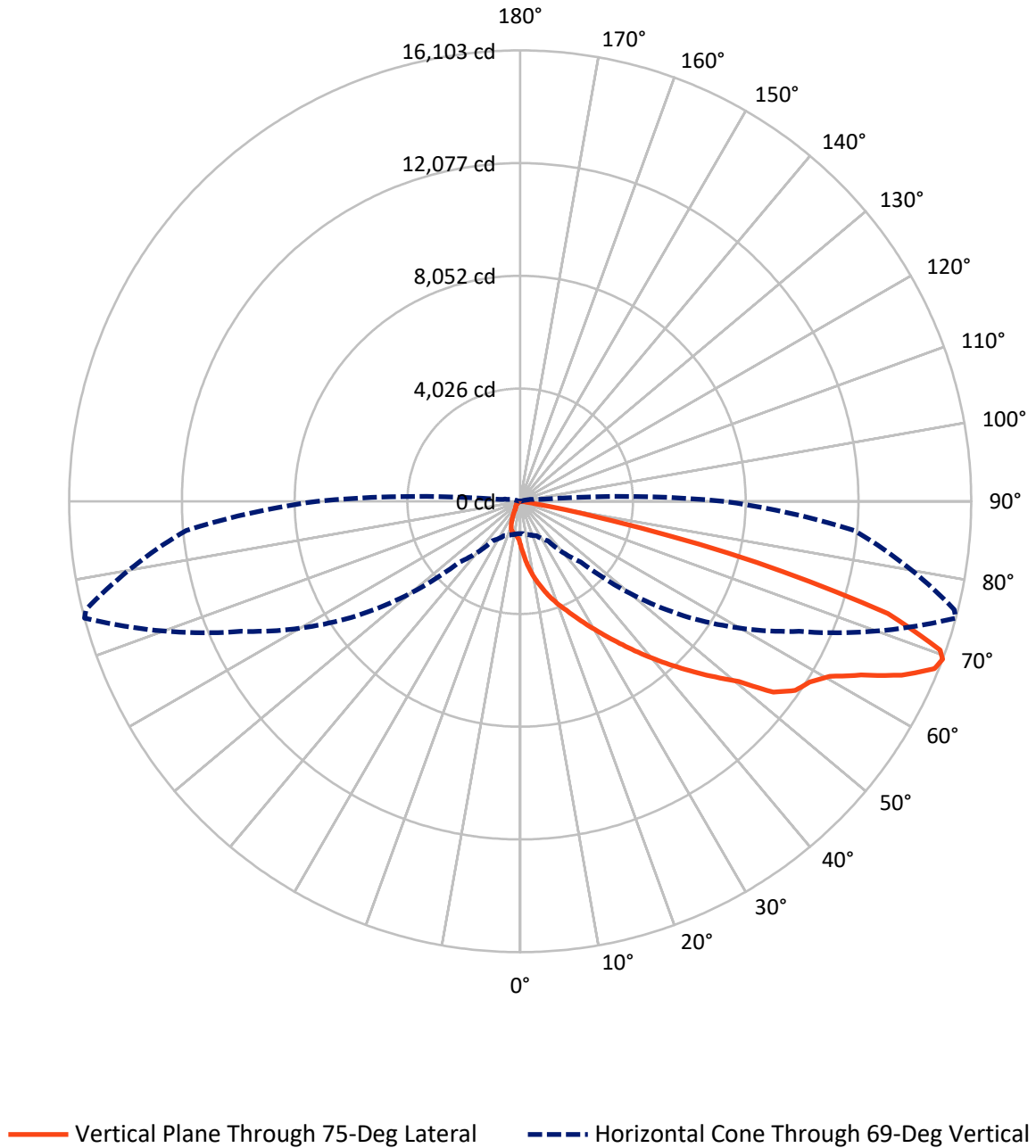
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.8 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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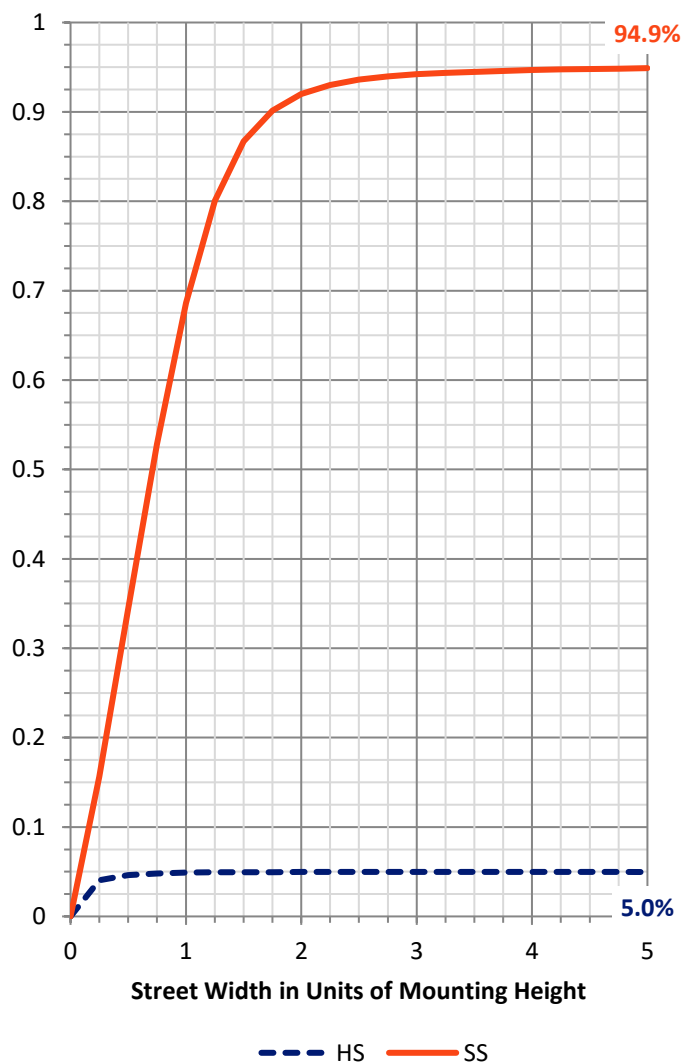
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	835.2	0.0	835.2
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	15903.8	0.0	15903.8
	% Fixture	95.0	0.0	95.0
Total	Lumens	16739.0	0.0	16739.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.6	1.1
10°-20°	649.3	3.9
20°-30°	1239.6	7.4
30°-40°	2223.5	13.3
40°-50°	3406.6	20.4
50°-60°	3959.4	23.7
60°-70°	3506.1	20.9
70°-80°	1512.3	9.0
80°-90°	60.6	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°	16739.0	100.0
0°-180°	16739.0	100.0

Coefficient of Utilization



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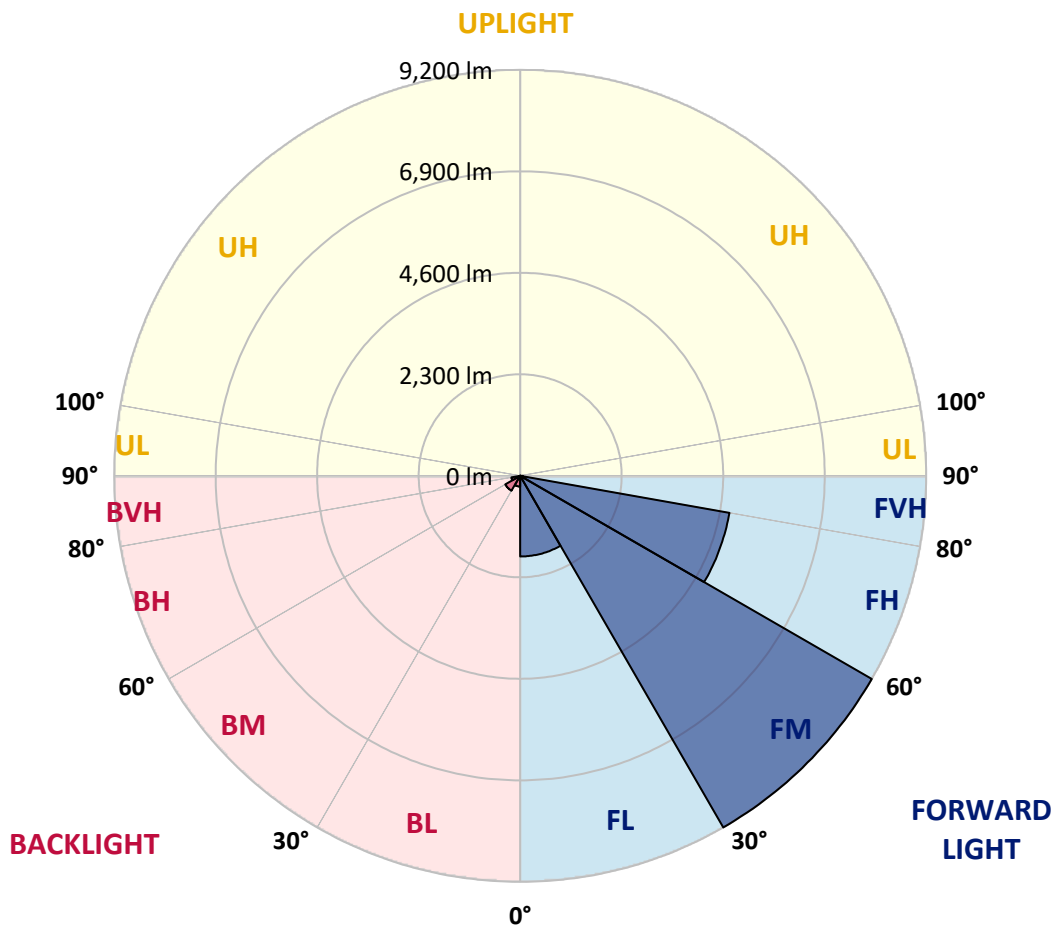
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1827.9	10.9			
FM (30°-60°)	9200.2	55.0			
FH (60°-80°)	4816.0	28.8			G2/5000
FVH (80°-90°)	59.7	0.4			G1/100
BL (0°-30°)	242.6	1.4	B1/500		
BM (30°-60°)	389.4	2.3	B1/1000		
BH (60°-80°)	202.3	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°	1557.6	1557.6	1557.6	1557.6	1557.6	1557.6	1557.6	1557.6	1557.6	1557.6	1557.6
2.5°	2565.8	2540.5	2515.2	2486.3	2421.3	2309.2	2168.3	2016.5	1828.6	1796.1	1644.3
5°	3115.1	3104.3	3079.0	3039.2	2966.9	2844.1	2685.1	2461.0	2146.6	2092.4	1770.8
7.5°	3501.8	3494.6	3472.9	3425.9	3360.9	3238.0	3071.7	2829.6	2464.6	2403.2	1929.8
10°	3848.7	3845.1	3827.0	3783.7	3718.6	3584.9	3407.8	3154.9	2768.2	2699.5	2114.1
12.5°	4163.1	4166.7	4159.5	4137.8	4090.8	3964.4	3762.0	3487.3	3060.9	2985.0	2334.5
15°	4347.4	4358.3	4387.2	4430.5	4445.0	4343.8	4134.2	3830.7	3360.9	3295.8	2587.5
17.5°	4286.0	4296.8	4387.2	4535.3	4676.3	4690.7	4502.8	4155.9	3657.2	3592.1	2836.9
20°	4137.8	4152.3	4246.2	4448.6	4723.3	4914.8	4838.9	4510.1	3939.1	3859.6	3075.4
22.5°	4304.1	4304.1	4333.0	4455.8	4705.2	5005.1	5106.3	4864.2	4228.2	4130.6	3313.9
25°	4875.0	4864.2	4802.8	4752.2	4831.7	5099.1	5308.7	5225.6	4567.9	4455.8	3566.8
27.5°	5597.8	5648.4	5532.8	5348.5	5167.8	5283.4	5489.4	5583.4	4943.7	4828.1	3827.0
30°	6407.3	6429.0	6291.7	6045.9	5727.9	5615.9	5702.6	5890.5	5352.1	5225.6	4098.1
32.5°	7137.3	7119.2	7003.6	6747.0	6353.1	6111.0	5977.3	6136.3	5796.6	5652.0	4376.3
35°	7784.2	7798.6	7657.7	7361.4	6974.7	6718.1	6400.1	6414.5	6295.3	6129.0	4698.0
37.5°	8366.0	8340.7	8207.0	7910.7	7560.1	7281.9	6945.8	6703.6	6841.0	6667.5	5059.4
40°	8839.4	8814.1	8673.2	8384.1	8055.2	7827.5	7563.7	7090.3	7415.6	7216.8	5446.0
42.5°	9215.2	9186.3	9067.1	8788.8	8470.8	8268.4	8141.9	7567.3	8029.9	7831.2	5879.7
45°	9399.6	9374.3	9302.0	9092.4	8814.1	8637.0	8698.5	8116.6	8687.6	8521.4	6356.7
47.5°	9182.7	9171.9	9255.0	9218.9	9059.9	8965.9	9179.1	8716.5	9377.9	9215.2	6906.0
50°	8525.0	8543.1	8785.2	9085.2	9161.0	9273.1	9573.0	9349.0	10118.7	9945.2	7538.4
52.5°	6902.4	7025.3	7755.3	8478.0	9038.2	9461.0	10035.6	10252.4	11325.7	11155.9	8525.0
55°	5153.3	5203.9	5998.9	7234.9	8543.1	9446.5	10378.9	10783.6	11922.0	11748.5	8785.2
57.5°	4087.2	4105.3	4499.2	5760.4	7524.0	9121.3	10559.6	10975.2	12182.2	12037.6	9171.9
60°	3209.1	3230.8	3516.2	4383.6	6089.3	8243.1	10299.4	11141.4	12691.7	12576.1	9847.7
62.5°	2497.2	2518.8	2692.3	3201.8	4567.9	6891.6	9775.4	11408.8	13660.3	13606.0	10953.5
65°	1933.4	1940.6	2059.9	2298.4	3227.1	5428.0	9135.7	11658.2	14968.5	14921.5	11849.7
67.5°	1427.5	1438.3	1521.4	1669.6	2179.1	3899.3	8087.7	11466.7	15955.0	15817.7	12175.0
69°	1152.8	1163.7	1235.9	1355.2	1720.2	3071.7	7130.1	10993.2	16103.2	15973.1	11969.0
70°	986.6	993.8	1066.1	1167.3	1467.2	2609.2	6371.2	10584.9	15908.0	15781.6	11499.2
72.5°	632.4	668.6	740.8	805.9	972.1	1727.4	4300.4	8778.0	13725.3	13508.5	9005.6
75°	350.5	361.4	491.5	571.0	646.9	1123.9	2392.4	5474.9	8731.0	8579.2	4817.2
77.5°	289.1	296.3	346.9	433.7	433.7	628.8	903.5	2157.5	3321.1	2995.9	1304.6
80°	202.4	209.6	263.8	285.5	310.8	354.2	292.7	473.4	513.2	455.3	195.1
82.5°	140.9	148.2	180.7	234.9	249.4	166.2	108.4	140.9	148.2	148.2	75.9
85°	25.3	36.1	133.7	195.1	148.2	50.6	61.4	50.6	47.0	50.6	18.1
87.5°	0.0	0.0	83.1	94.0	79.5	21.7	25.3	18.1	10.8	14.5	7.2
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°	1557.6	1557.6	1557.6	1557.6	1557.6	1557.6	1557.6	1557.6	1557.6	1557.6	1557.6
2.5°	1568.4	1492.5	1362.4	1268.5	1188.9	1127.5	1102.2	1062.5	1033.6	1048.0	1029.9
5°	1611.8	1478.1	1268.5	1134.7	1040.8	961.3	896.2	845.6	805.9	798.7	791.4
7.5°	1680.4	1488.9	1214.2	1048.0	907.1	784.2	683.0	607.1	549.3	549.3	527.6
10°	1774.4	1517.8	1181.7	961.3	751.7	585.4	484.3	412.0	383.1	379.5	372.2
12.5°	1904.5	1572.0	1156.4	849.2	585.4	426.4	365.0	339.7	328.9	325.2	321.6
15°	2081.6	1651.5	1127.5	711.9	444.5	350.5	325.2	303.6	292.7	289.1	285.5
17.5°	2251.4	1723.8	1066.1	571.0	361.4	318.0	289.1	271.0	256.6	253.0	253.0
20°	2410.4	1785.2	961.3	444.5	325.2	285.5	256.6	234.9	220.4	216.8	216.8
22.5°	2576.7	1835.8	831.2	361.4	296.3	253.0	224.1	202.4	187.9	184.3	180.7
25°	2753.7	1872.0	683.0	321.6	267.4	224.1	191.5	173.5	162.6	159.0	155.4
27.5°	2945.3	1886.4	542.1	292.7	234.9	195.1	166.2	148.2	140.9	137.3	137.3
30°	3118.7	1872.0	419.2	260.2	206.0	169.8	144.6	130.1	122.9	119.3	119.3
32.5°	3299.4	1835.8	336.1	231.3	180.7	144.6	122.9	112.0	108.4	104.8	104.8
35°	3491.0	1788.8	289.1	206.0	155.4	126.5	108.4	101.2	97.6	94.0	94.0
37.5°	3715.0	1731.0	263.8	184.3	137.3	112.0	94.0	90.3	86.7	86.7	86.7
40°	3968.0	1658.7	245.7	166.2	122.9	97.6	83.1	79.5	75.9	75.9	75.9
42.5°	4235.4	1575.6	227.7	148.2	108.4	83.1	72.3	72.3	68.7	68.7	65.0
45°	4535.3	1492.5	209.6	130.1	94.0	72.3	61.4	57.8	57.8	54.2	54.2
47.5°	4889.5	1416.6	191.5	115.6	83.1	61.4	54.2	50.6	47.0	43.4	43.4
50°	5388.2	1409.4	169.8	101.2	75.9	50.6	43.4	39.8	36.1	32.5	32.5
52.5°	5883.3	1344.3	144.6	83.1	61.4	43.4	32.5	28.9	25.3	25.3	21.7
55°	5995.3	1235.9	126.5	72.3	47.0	32.5	25.3	18.1	18.1	14.5	14.5
57.5°	6241.1	1185.3	108.4	57.8	36.1	25.3	14.5	10.8	10.8	10.8	10.8
60°	6725.3	1170.9	94.0	50.6	25.3	18.1	10.8	7.2	7.2	3.6	3.6
62.5°	7393.9	1156.4	79.5	43.4	18.1	10.8	7.2	3.6	0.0	0.0	0.0
65°	7762.5	1058.9	65.0	32.5	14.5	10.8	3.6	0.0	0.0	0.0	0.0
67.5°	7664.9	874.5	57.8	21.7	10.8	7.2	3.6	0.0	0.0	0.0	0.0
69°	7256.6	737.2	47.0	18.1	10.8	7.2	3.6	0.0	0.0	0.0	0.0
70°	6765.1	636.0	43.4	14.5	7.2	3.6	3.6	0.0	0.0	0.0	0.0
72.5°	4802.8	332.5	28.9	10.8	7.2	3.6	0.0	0.0	0.0	0.0	0.0
75°	2244.2	148.2	18.1	7.2	3.6	3.6	0.0	0.0	0.0	0.0	0.0
77.5°	495.1	68.7	10.8	7.2	3.6	0.0	0.0	0.0	0.0	0.0	0.0
80°	94.0	25.3	7.2	3.6	3.6	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	32.5	10.8	3.6	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	10.8	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.6	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)