

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: P236990

Luminaire Tested: **ARCH-L-AF72-170-D-U-T2R-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P236990
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-AF72-170-D-U-T2R-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 750mA 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: 17542 lumens
Efficiency: N/A
Efficacy: 101.4 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

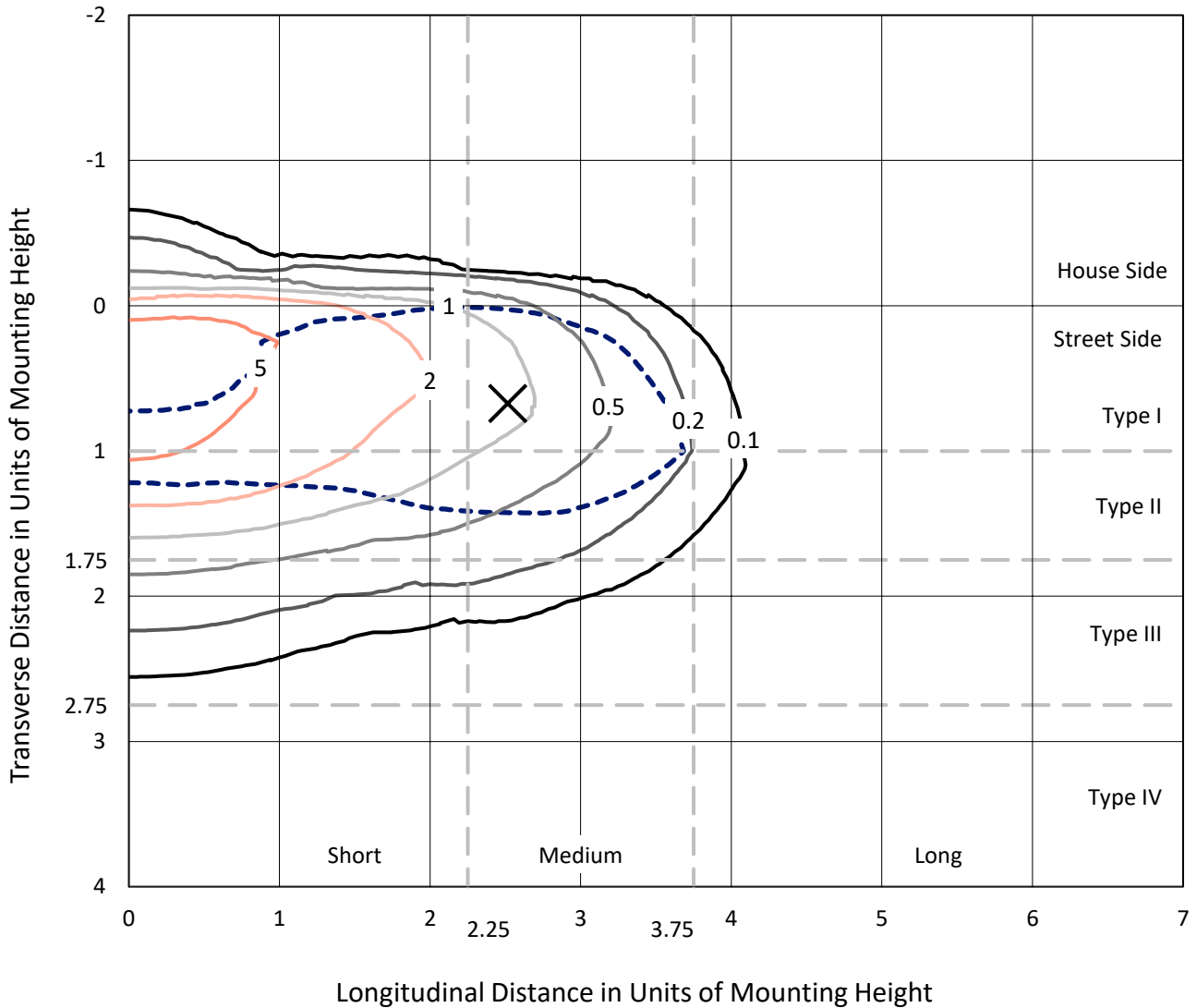
Input Watts (W): 173
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

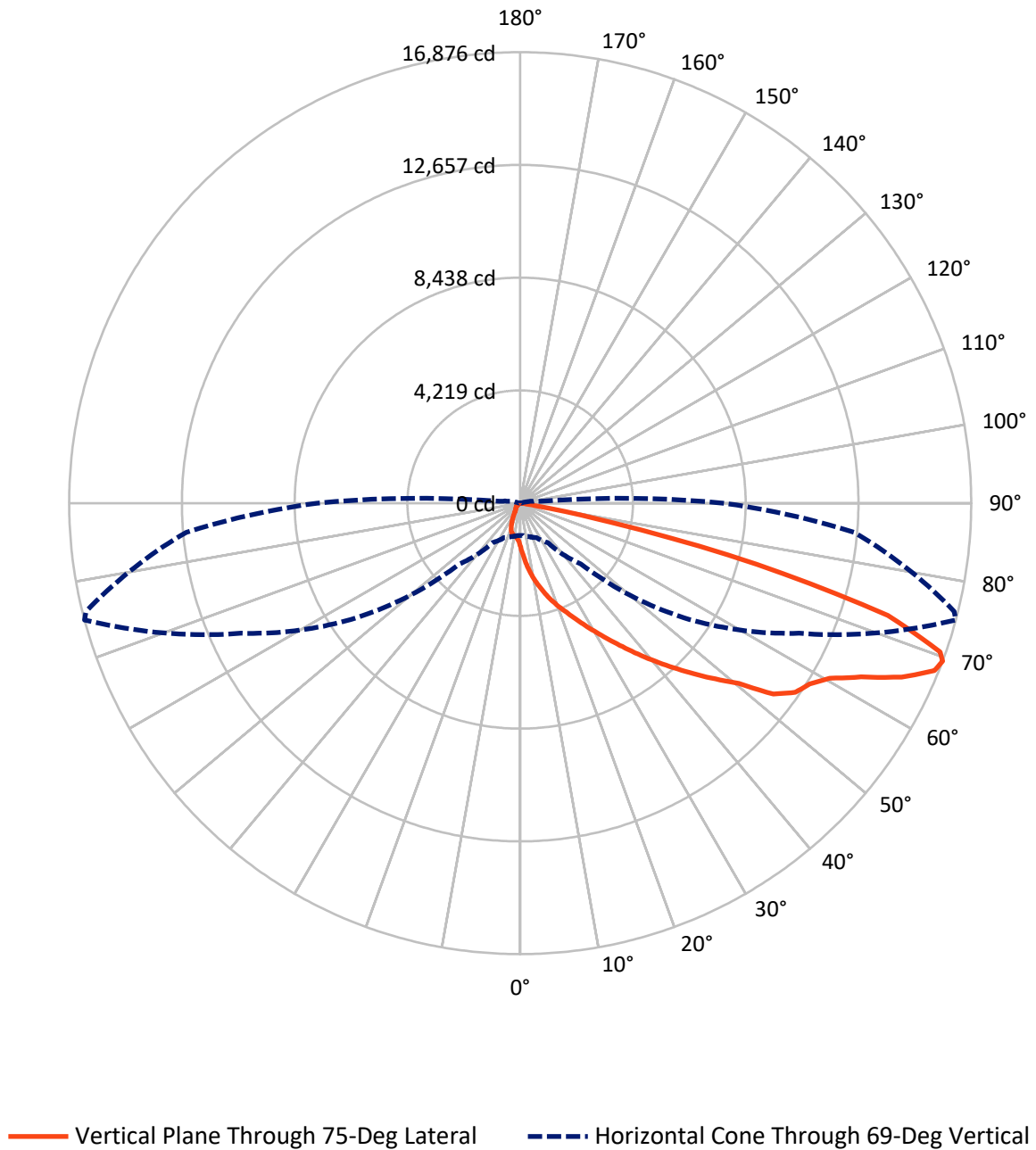
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.2 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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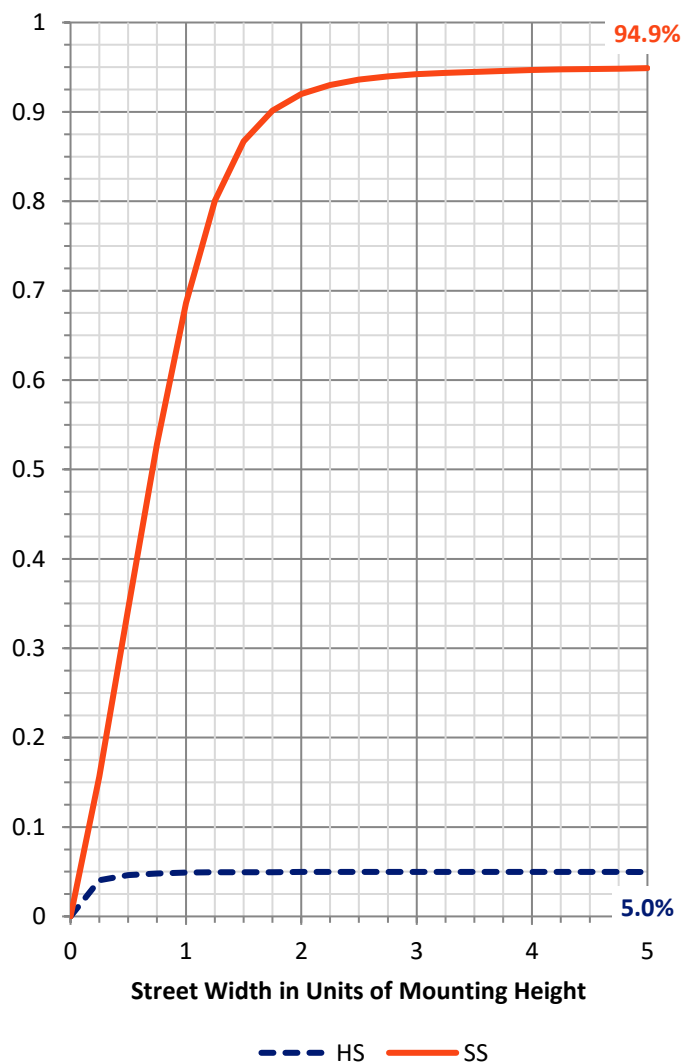
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	875.2	0.0	875.2
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	16666.8	0.0	16666.8
	% Fixture	95.0	0.0	95.0
Total	Lumens	17542.0	0.0	17542.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.3	1.1
10°-20°	680.5	3.9
20°-30°	1299.0	7.4
30°-40°	2330.2	13.3
40°-50°	3570.1	20.4
50°-60°	4149.3	23.7
60°-70°	3674.3	20.9
70°-80°	1584.9	9.0
80°-90°	63.5	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°	17542.0	100.0
0°-180°	17542.0	100.0

Coefficient of Utilization



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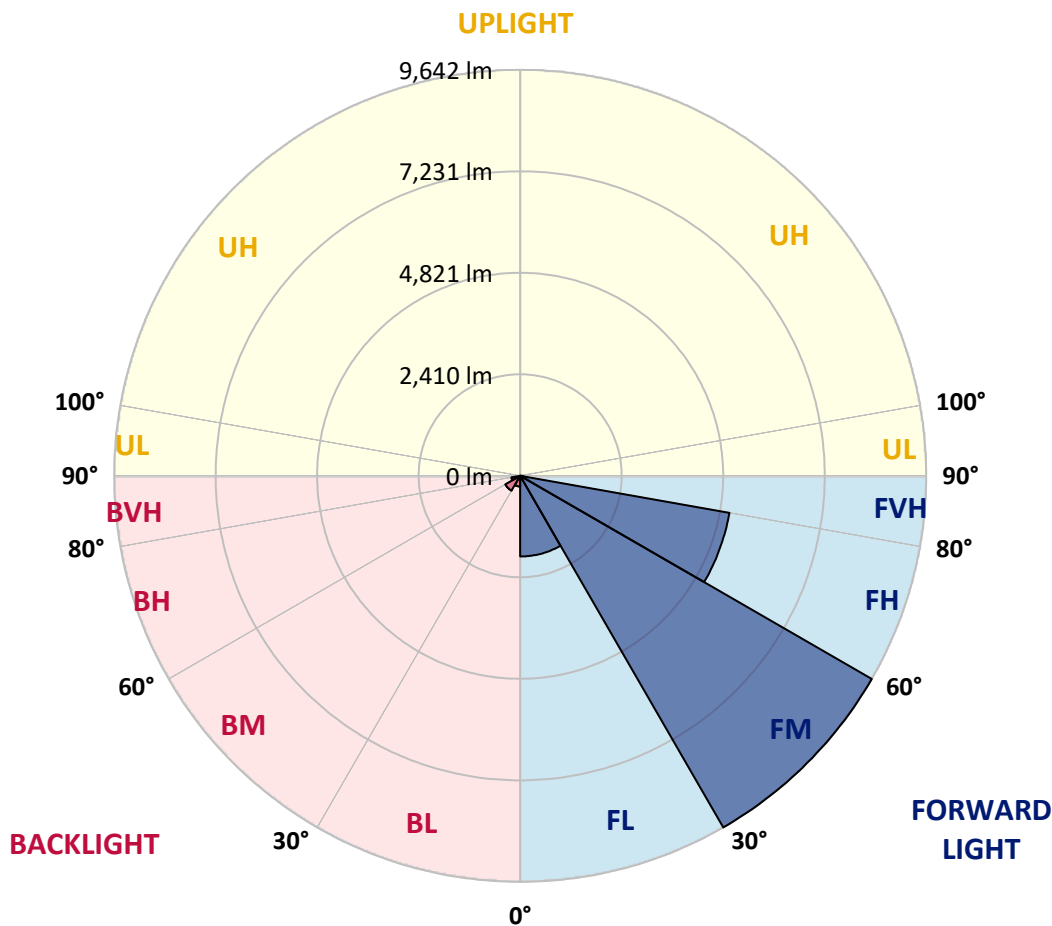
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1915.6	10.9			
FM (30°-60°)	9641.5	55.0			
FH (60°-80°)	5047.1	28.8			G3/7500
FVH (80°-90°)	62.6	0.4			G1/100
BL (0°-30°)	254.2	1.4	B1/500		
BM (30°-60°)	408.1	2.3	B1/1000		
BH (60°-80°)	212.1	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-G3

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1632.3	1632.3	1632.3	1632.3	1632.3	1632.3	1632.3	1632.3	1632.3	1632.3	1632.3
2.5°	2688.9	2662.4	2635.9	2605.6	2537.4	2420.0	2272.3	2113.2	1916.3	1882.2	1723.2
5°	3264.6	3253.2	3226.7	3185.0	3109.3	2980.5	2813.9	2579.1	2249.6	2192.8	1855.7
7.5°	3669.8	3662.2	3639.5	3590.3	3522.1	3393.3	3219.1	2965.4	2582.9	2518.5	2022.4
10°	4033.4	4029.6	4010.6	3965.2	3897.0	3756.9	3571.3	3306.2	2901.0	2829.0	2215.5
12.5°	4362.8	4366.6	4359.0	4336.3	4287.1	4154.5	3942.5	3654.6	3207.7	3128.2	2446.5
15°	4556.0	4567.3	4597.6	4643.1	4658.2	4552.2	4332.5	4014.4	3522.1	3453.9	2711.6
17.5°	4491.6	4503.0	4597.6	4752.9	4900.6	4915.8	4718.8	4355.3	3832.6	3764.5	2972.9
20°	4336.3	4351.5	4449.9	4662.0	4949.9	5150.6	5071.0	4726.4	4128.0	4044.7	3222.9
22.5°	4510.5	4510.5	4540.8	4669.6	4930.9	5245.3	5351.3	5097.6	4431.0	4328.8	3472.8
25°	5108.9	5097.6	5033.2	4980.1	5063.5	5343.7	5563.4	5476.3	4787.0	4669.6	3738.0
27.5°	5866.3	5919.4	5798.2	5605.0	5415.7	5536.9	5752.7	5851.2	5180.9	5059.7	4010.6
30°	6714.7	6737.4	6593.5	6336.0	6002.7	5885.3	5976.2	6173.1	5608.8	5476.3	4294.7
32.5°	7479.7	7460.8	7339.6	7070.7	6657.9	6404.1	6264.0	6430.6	6074.6	5923.2	4586.3
35°	8157.6	8172.7	8025.0	7714.5	7309.3	7040.4	6707.1	6722.3	6597.3	6423.1	4923.3
37.5°	8767.3	8740.8	8600.7	8290.1	7922.8	7631.2	7279.0	7025.2	7169.1	6987.4	5302.1
40°	9263.5	9236.9	9089.2	8786.3	8441.6	8203.0	7926.6	7430.5	7771.3	7563.0	5707.3
42.5°	9657.3	9627.0	9502.0	9210.4	8877.2	8665.1	8532.5	7930.4	8415.1	8206.8	6161.7
45°	9850.5	9824.0	9748.2	9528.6	9236.9	9051.4	9115.8	8506.0	9104.4	8930.2	6661.7
47.5°	9623.2	9611.9	9699.0	9661.1	9494.5	9396.0	9619.4	9134.7	9827.7	9657.3	7237.3
50°	8934.0	8952.9	9206.6	9521.0	9600.5	9717.9	10032.3	9797.4	10604.1	10422.3	7900.1
52.5°	7233.5	7362.3	8127.3	8884.7	9471.7	9914.8	10517.0	10744.2	11869.0	11691.0	8934.0
55°	5400.5	5453.5	6286.7	7581.9	8952.9	9899.7	10876.8	11301.0	12493.9	12312.1	9206.6
57.5°	4283.3	4302.2	4715.0	6036.8	7884.9	9558.9	11066.2	11501.7	12766.6	12615.1	9611.9
60°	3363.0	3385.7	3684.9	4593.9	6381.4	8638.6	10793.5	11675.9	13300.6	13179.4	10320.1
62.5°	2616.9	2639.7	2821.5	3355.4	4787.0	7222.2	10244.3	11956.1	14315.6	14258.8	11479.0
65°	2026.1	2033.7	2158.7	2408.6	3382.0	5688.4	9574.0	12217.5	15686.5	15637.3	12418.2
67.5°	1495.9	1507.3	1594.4	1749.7	2283.7	4086.4	8475.7	12016.7	16720.4	16576.5	12759.0
69°	1208.1	1219.5	1295.2	1420.2	1802.7	3219.1	7472.1	11520.6	16875.7	16739.4	12543.2
70°	1033.9	1041.5	1117.2	1223.3	1537.6	2734.3	6676.8	11092.7	16671.2	16538.6	12050.8
72.5°	662.8	700.6	776.4	844.5	1018.8	1810.3	4506.7	9199.1	14383.7	14156.5	9437.7
75°	367.4	378.7	515.1	598.4	677.9	1177.8	2507.1	5737.6	9149.8	8990.8	5048.3
77.5°	303.0	310.5	363.6	454.5	454.5	659.0	946.8	2260.9	3480.4	3139.6	1367.2
80°	212.1	219.7	276.5	299.2	325.7	371.1	306.8	496.1	537.8	477.2	204.5
82.5°	147.7	155.3	189.4	246.2	261.3	174.2	113.6	147.7	155.3	155.3	79.5
85°	26.5	37.9	140.1	204.5	155.3	53.0	64.4	53.0	49.2	53.0	18.9
87.5°	0.0	0.0	87.1	98.5	83.3	22.7	26.5	18.9	11.4	15.1	7.6
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°	1632.3	1632.3	1632.3	1632.3	1632.3	1632.3	1632.3	1632.3	1632.3	1632.3	1632.3
2.5°	1643.6	1564.1	1427.8	1329.3	1246.0	1181.6	1155.1	1113.4	1083.1	1098.3	1079.3
5°	1689.1	1549.0	1329.3	1189.2	1090.7	1007.4	939.2	886.2	844.5	837.0	829.4
7.5°	1761.0	1560.3	1272.5	1098.3	950.6	821.8	715.8	636.2	575.7	575.7	552.9
10°	1859.5	1590.6	1238.4	1007.4	787.7	613.5	507.5	431.7	401.4	397.7	390.1
12.5°	1995.8	1647.4	1211.9	890.0	613.5	446.9	382.5	356.0	344.6	340.8	337.1
15°	2181.4	1730.7	1181.6	746.1	465.8	367.4	340.8	318.1	306.8	303.0	299.2
17.5°	2359.4	1806.5	1117.2	598.4	378.7	333.3	303.0	284.0	268.9	265.1	265.1
20°	2526.1	1870.9	1007.4	465.8	340.8	299.2	268.9	246.2	231.0	227.2	227.2
22.5°	2700.3	1923.9	871.1	378.7	310.5	265.1	234.8	212.1	196.9	193.1	189.4
25°	2885.8	1961.8	715.8	337.1	280.3	234.8	200.7	181.8	170.4	166.6	162.8
27.5°	3086.6	1976.9	568.1	306.8	246.2	204.5	174.2	155.3	147.7	143.9	143.9
30°	3268.3	1961.8	439.3	272.7	215.9	178.0	151.5	136.3	128.8	125.0	125.0
32.5°	3457.7	1923.9	352.2	242.4	189.4	151.5	128.8	117.4	113.6	109.8	109.8
35°	3658.4	1874.7	303.0	215.9	162.8	132.6	113.6	106.0	102.3	98.5	98.5
37.5°	3893.2	1814.1	276.5	193.1	143.9	117.4	98.5	94.7	90.9	90.9	90.9
40°	4158.3	1738.3	257.5	174.2	128.8	102.3	87.1	83.3	79.5	79.5	79.5
42.5°	4438.6	1651.2	238.6	155.3	113.6	87.1	75.7	75.7	72.0	72.0	68.2
45°	4752.9	1564.1	219.7	136.3	98.5	75.7	64.4	60.6	60.6	56.8	56.8
47.5°	5124.1	1484.6	200.7	121.2	87.1	64.4	56.8	53.0	49.2	45.4	45.4
50°	5646.7	1477.0	178.0	106.0	79.5	53.0	45.4	41.7	37.9	34.1	34.1
52.5°	6165.5	1408.8	151.5	87.1	64.4	45.4	34.1	30.3	26.5	26.5	22.7
55°	6282.9	1295.2	132.6	75.7	49.2	34.1	26.5	18.9	18.9	15.1	15.1
57.5°	6540.5	1242.2	113.6	60.6	37.9	26.5	15.1	11.4	11.4	11.4	11.4
60°	7048.0	1227.0	98.5	53.0	26.5	18.9	11.4	7.6	7.6	3.8	3.8
62.5°	7748.6	1211.9	83.3	45.4	18.9	11.4	7.6	3.8	0.0	0.0	0.0
65°	8134.9	1109.6	68.2	34.1	15.1	11.4	3.8	0.0	0.0	0.0	0.0
67.5°	8032.6	916.5	60.6	22.7	11.4	7.6	3.8	0.0	0.0	0.0	0.0
69°	7604.7	772.6	49.2	18.9	11.4	7.6	3.8	0.0	0.0	0.0	0.0
70°	7089.6	666.5	45.4	15.1	7.6	3.8	3.8	0.0	0.0	0.0	0.0
72.5°	5033.2	348.4	30.3	11.4	7.6	3.8	0.0	0.0	0.0	0.0	0.0
75°	2351.8	155.3	18.9	7.6	3.8	3.8	0.0	0.0	0.0	0.0	0.0
77.5°	518.8	72.0	11.4	7.6	3.8	0.0	0.0	0.0	0.0	0.0	0.0
80°	98.5	26.5	7.6	3.8	3.8	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	34.1	11.4	3.8	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.4	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.8	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)