

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: P236988

Luminaire Tested: **ARCH-L-AF72-150-D-U-T2R-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P236988
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-AF72-150-D-U-T2R-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 665mA 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: 15992 lumens
Efficiency: N/A
Efficacy: 104.5 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

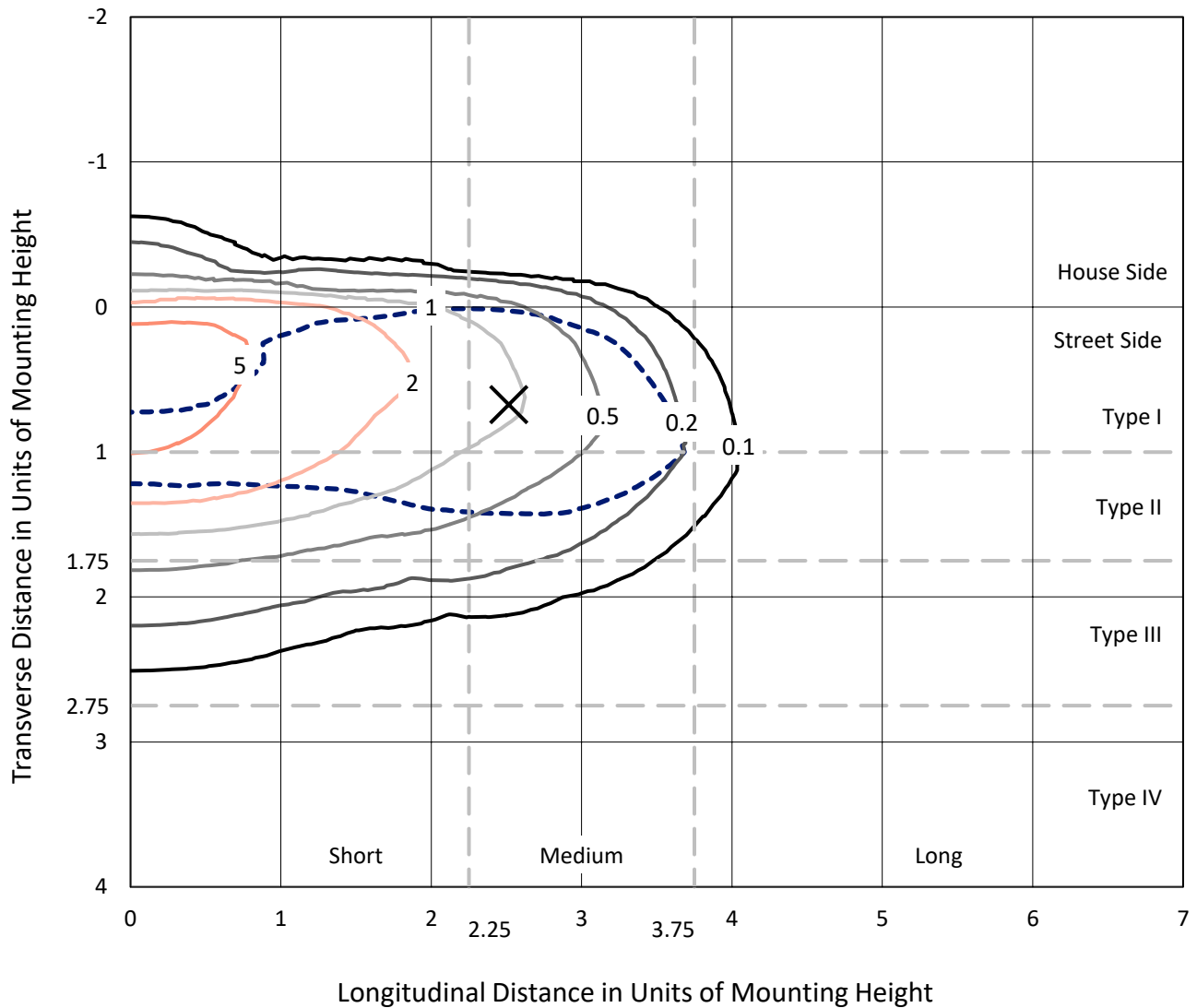
Input Watts (W): 153
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

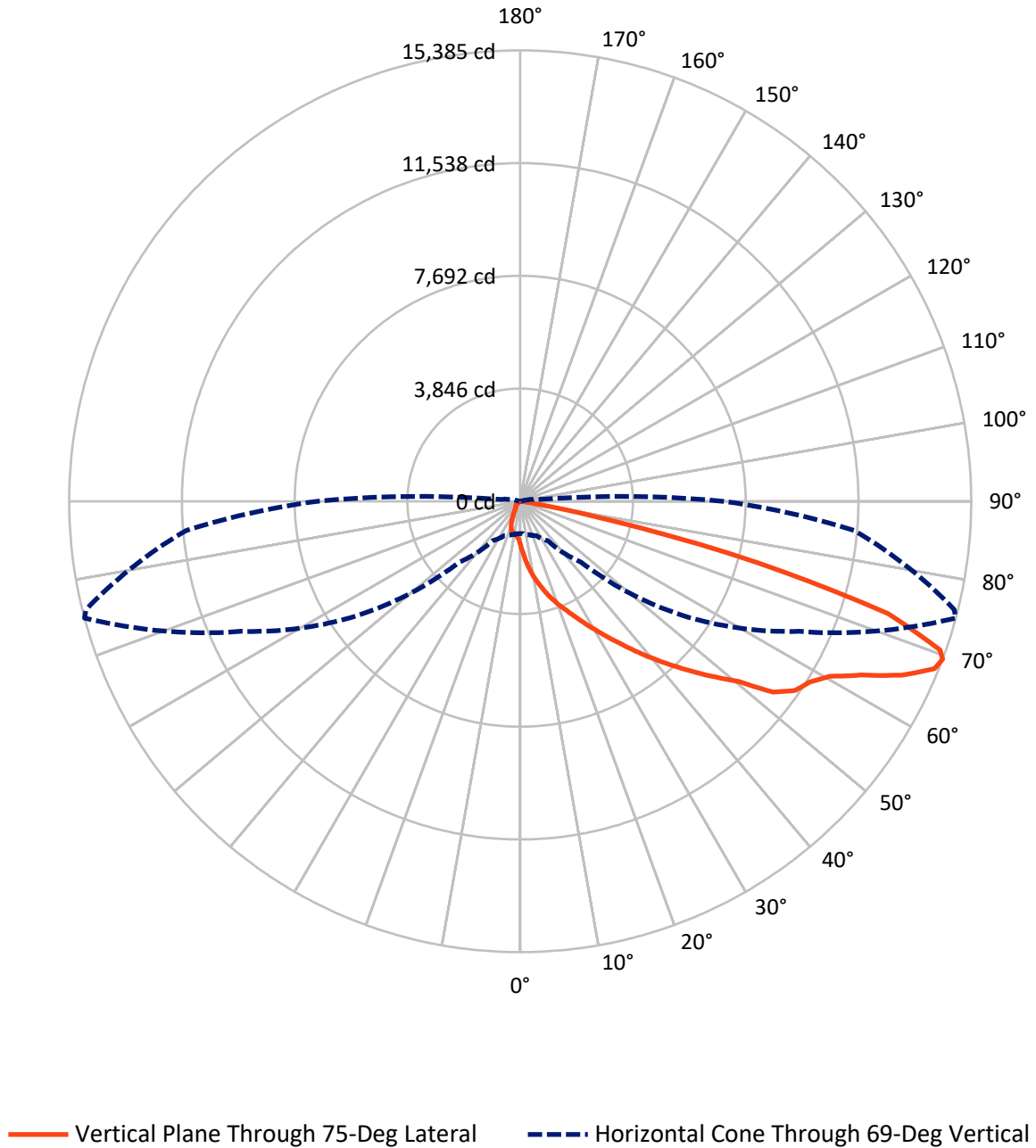
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.5 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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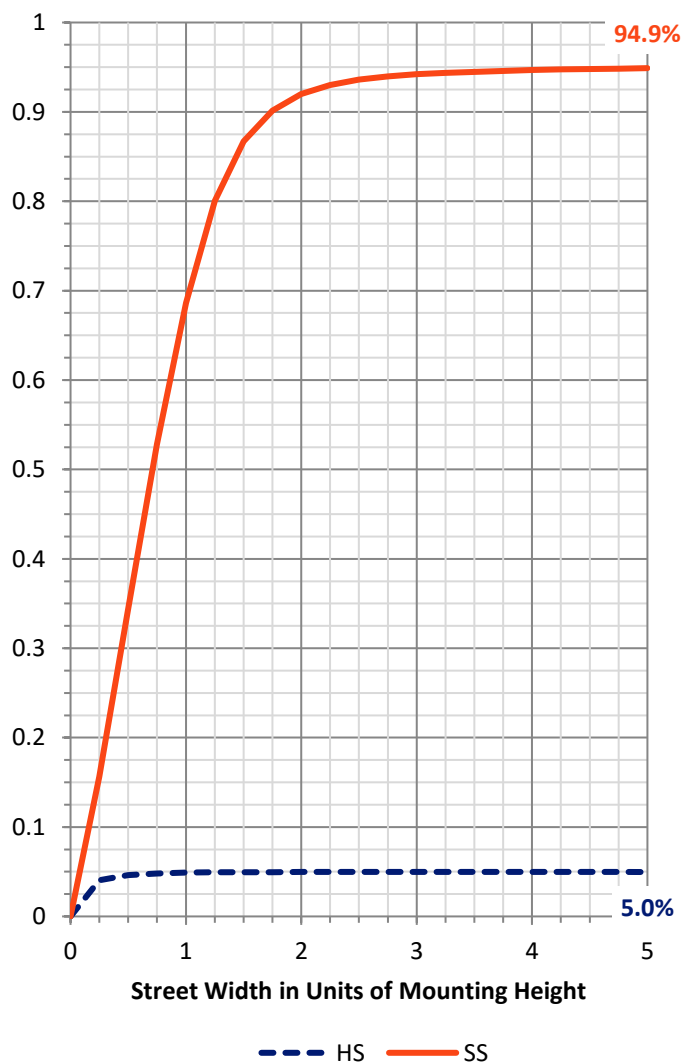
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	797.9	0.0	797.9
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	15194.1	0.0	15194.1
	% Fixture	95.0	0.0	95.0
Total	Lumens	15992.0	0.0	15992.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.5	1.1
10°-20°	620.3	3.9
20°-30°	1184.2	7.4
30°-40°	2124.3	13.3
40°-50°	3254.6	20.4
50°-60°	3782.7	23.7
60°-70°	3349.6	20.9
70°-80°	1444.8	9.0
80°-90°	57.9	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°	15992.0	100.0
0°-180°	15992.0	100.0

Coefficient of Utilization



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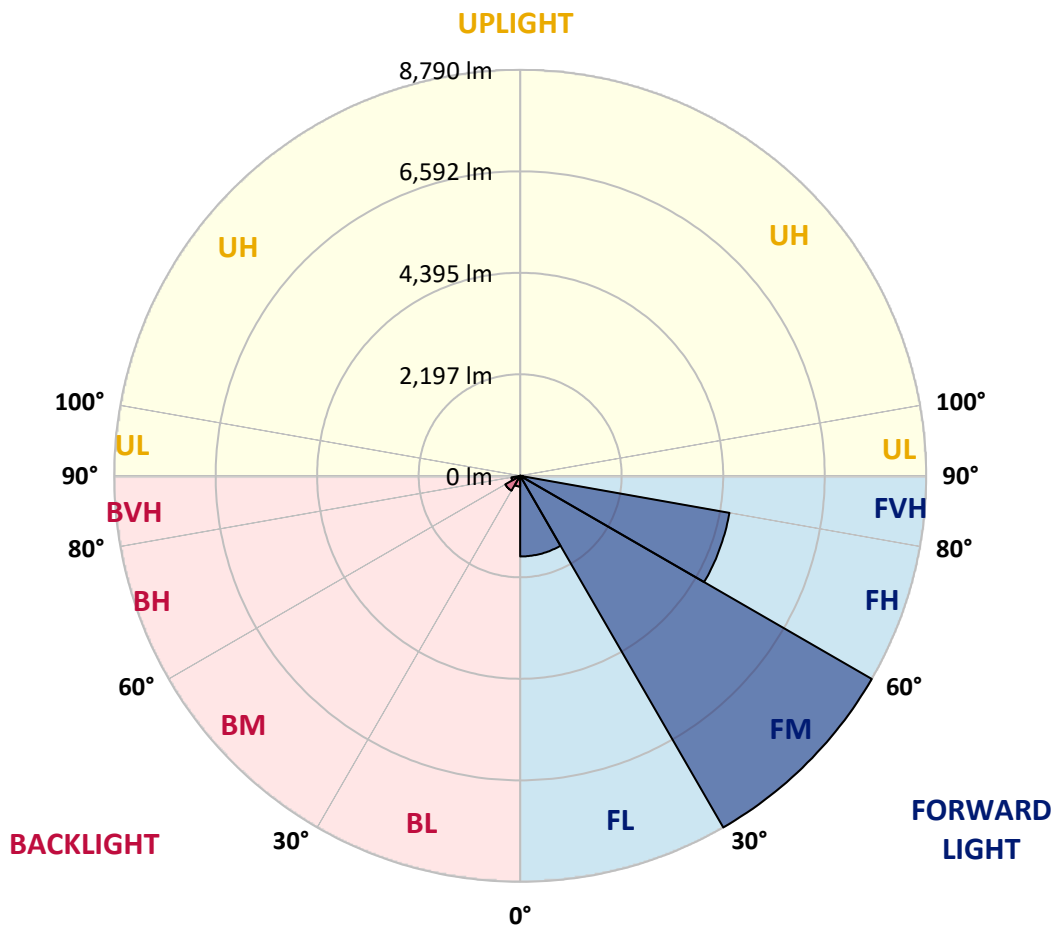
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1746.4	10.9			
FM (30°-60°)	8789.6	55.0			
FH (60°-80°)	4601.1	28.8			G2/5000
FVH (80°-90°)	57.0	0.4			G1/100
BL (0°-30°)	231.7	1.4	B1/500		
BM (30°-60°)	372.0	2.3	B1/1000		
BH (60°-80°)	193.3	1.2	B1/500		G1/500
BVH (80°-90°)	0.8	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°	1488.0	1488.0	1488.0	1488.0	1488.0	1488.0	1488.0	1488.0	1488.0	1488.0	1488.0
2.5°	2451.3	2427.1	2403.0	2375.4	2313.2	2206.2	2071.5	1926.5	1747.0	1715.9	1570.9
5°	2976.1	2965.7	2941.6	2903.6	2834.5	2717.2	2565.2	2351.2	2050.8	1999.0	1691.8
7.5°	3345.5	3338.6	3317.9	3273.0	3210.9	3093.5	2934.7	2703.3	2354.6	2295.9	1843.7
10°	3677.0	3673.5	3656.3	3614.8	3552.7	3424.9	3255.8	3014.1	2644.7	2579.1	2019.7
12.5°	3977.3	3980.8	3973.9	3953.2	3908.3	3787.4	3594.1	3331.7	2924.3	2851.8	2230.3
15°	4153.4	4163.8	4191.4	4232.8	4246.6	4150.0	3949.7	3659.7	3210.9	3148.7	2472.0
17.5°	4094.7	4105.1	4191.4	4333.0	4467.6	4481.4	4301.9	3970.4	3494.0	3431.8	2710.3
20°	3953.2	3967.0	4056.7	4250.1	4512.5	4695.5	4623.0	4308.8	3763.3	3687.3	2938.1
22.5°	4112.0	4112.0	4139.6	4257.0	4495.2	4781.8	4878.5	4647.1	4039.5	3946.3	3166.0
25°	4657.5	4647.1	4588.4	4540.1	4616.1	4871.5	5071.8	4992.4	4364.0	4257.0	3407.7
27.5°	5348.0	5396.3	5285.9	5109.8	4937.1	5047.6	5244.4	5334.2	4723.1	4612.6	3656.3
30°	6121.4	6142.1	6010.9	5776.1	5472.3	5365.3	5448.1	5627.7	5113.2	4992.4	3915.2
32.5°	6818.8	6801.5	6691.0	6445.9	6069.6	5838.3	5710.5	5862.4	5537.9	5399.8	4181.0
35°	7436.8	7450.6	7316.0	7032.8	6663.4	6418.3	6114.5	6128.3	6014.3	5855.5	4488.3
37.5°	7992.7	7968.5	7840.7	7557.6	7222.7	6956.9	6635.8	6404.5	6535.7	6370.0	4833.6
40°	8444.9	8420.8	8286.1	8009.9	7695.7	7478.2	7226.2	6773.9	7084.6	6894.7	5203.0
42.5°	8804.0	8776.4	8662.5	8396.6	8092.8	7899.4	7778.6	7229.6	7671.6	7481.7	5617.3
45°	8980.1	8955.9	8886.9	8686.6	8420.8	8251.6	8310.3	7754.4	8299.9	8141.1	6073.0
47.5°	8772.9	8762.6	8842.0	8807.5	8655.5	8565.8	8769.5	8327.6	8959.4	8804.0	6597.8
50°	8144.6	8161.8	8393.2	8679.7	8752.2	8859.2	9145.8	8931.8	9667.1	9501.4	7202.0
52.5°	6594.4	6711.8	7409.2	8099.7	8634.8	9038.8	9587.7	9794.9	10820.3	10658.0	8144.6
55°	4923.3	4971.7	5731.2	6912.0	8161.8	9025.0	9915.7	10302.4	11390.0	11224.2	8393.2
57.5°	3904.8	3922.1	4298.4	5503.4	7188.2	8714.2	10088.4	10485.4	11638.6	11500.4	8762.6
60°	3065.9	3086.6	3359.3	4187.9	5817.5	7875.3	9839.8	10644.2	12125.4	12014.9	9408.2
62.5°	2385.7	2406.4	2572.2	3059.0	4364.0	6584.0	9339.2	10899.7	13050.6	12998.9	10464.7
65°	1847.1	1854.0	1968.0	2195.8	3083.1	5185.7	8728.0	11137.9	14300.5	14255.6	11320.9
67.5°	1363.8	1374.1	1453.5	1595.1	2081.9	3725.3	7726.8	10954.9	15243.0	15111.8	11631.6
69°	1101.4	1111.7	1180.8	1294.7	1643.4	2934.7	6811.9	10502.7	15384.6	15260.3	11434.9
70°	942.5	949.5	1018.5	1115.2	1401.7	2492.7	6086.8	10112.5	15198.1	15077.3	10986.0
72.5°	604.2	638.7	707.8	769.9	928.7	1650.3	4108.5	8386.2	13112.8	12905.6	8603.8
75°	334.9	345.3	469.5	545.5	618.0	1073.7	2285.6	5230.6	8341.4	8196.4	4602.3
77.5°	276.2	283.1	331.4	414.3	414.3	600.7	863.1	2061.2	3172.9	2862.2	1246.4
80°	193.3	200.2	252.0	272.8	296.9	338.4	279.7	452.3	490.3	435.0	186.4
82.5°	134.6	141.6	172.6	224.4	238.2	158.8	103.6	134.6	141.6	141.6	72.5
85°	24.2	34.5	127.7	186.4	141.6	48.3	58.7	48.3	44.9	48.3	17.3
87.5°	0.0	0.0	79.4	89.8	76.0	20.7	24.2	17.3	10.4	13.8	6.9
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°	1488.0	1488.0	1488.0	1488.0	1488.0	1488.0	1488.0	1488.0	1488.0	1488.0	1488.0
2.5°	1498.4	1425.9	1301.6	1211.8	1135.9	1077.2	1053.0	1015.1	987.4	1001.2	984.0
5°	1539.8	1412.1	1211.8	1084.1	994.3	918.4	856.2	807.9	769.9	763.0	756.1
7.5°	1605.4	1422.5	1160.1	1001.2	866.6	749.2	652.5	580.0	524.8	524.8	504.1
10°	1695.2	1450.1	1129.0	918.4	718.1	559.3	462.6	393.6	366.0	362.5	355.6
12.5°	1819.5	1501.9	1104.8	811.3	559.3	407.4	348.7	324.5	314.2	310.7	307.3
15°	1988.7	1577.8	1077.2	680.2	424.7	334.9	310.7	290.0	279.7	276.2	272.8
17.5°	2150.9	1646.9	1018.5	545.5	345.3	303.8	276.2	258.9	245.1	241.7	241.7
20°	2302.9	1705.6	918.4	424.7	310.7	272.8	245.1	224.4	210.6	207.2	207.2
22.5°	2461.7	1753.9	794.1	345.3	283.1	241.7	214.1	193.3	179.5	176.1	172.6
25°	2630.8	1788.4	652.5	307.3	255.5	214.1	183.0	165.7	155.4	151.9	148.5
27.5°	2813.8	1802.2	517.9	279.7	224.4	186.4	158.8	141.6	134.6	131.2	131.2
30°	2979.6	1788.4	400.5	248.6	196.8	162.3	138.1	124.3	117.4	113.9	113.9
32.5°	3152.2	1753.9	321.1	221.0	172.6	138.1	117.4	107.0	103.6	100.1	100.1
35°	3335.2	1709.0	276.2	196.8	148.5	120.8	103.6	96.7	93.2	89.8	89.8
37.5°	3549.2	1653.8	252.0	176.1	131.2	107.0	89.8	86.3	82.9	82.9	82.9
40°	3790.9	1584.7	234.8	158.8	117.4	93.2	79.4	76.0	72.5	72.5	72.5
42.5°	4046.4	1505.3	217.5	141.6	103.6	79.4	69.1	69.1	65.6	65.6	62.1
45°	4333.0	1425.9	200.2	124.3	89.8	69.1	58.7	55.2	55.2	51.8	51.8
47.5°	4671.3	1353.4	183.0	110.5	79.4	58.7	51.8	48.3	44.9	41.4	41.4
50°	5147.8	1346.5	162.3	96.7	72.5	48.3	41.4	38.0	34.5	31.1	31.1
52.5°	5620.8	1284.3	138.1	79.4	58.7	41.4	31.1	27.6	24.2	24.2	20.7
55°	5727.8	1180.8	120.8	69.1	44.9	31.1	24.2	17.3	17.3	13.8	13.8
57.5°	5962.6	1132.4	103.6	55.2	34.5	24.2	13.8	10.4	10.4	10.4	10.4
60°	6425.2	1118.6	89.8	48.3	24.2	17.3	10.4	6.9	6.9	3.5	3.5
62.5°	7063.9	1104.8	76.0	41.4	17.3	10.4	6.9	3.5	0.0	0.0	0.0
65°	7416.1	1011.6	62.1	31.1	13.8	10.4	3.5	0.0	0.0	0.0	0.0
67.5°	7322.9	835.5	55.2	20.7	10.4	6.9	3.5	0.0	0.0	0.0	0.0
69°	6932.7	704.3	44.9	17.3	10.4	6.9	3.5	0.0	0.0	0.0	0.0
70°	6463.2	607.6	41.4	13.8	6.9	3.5	3.5	0.0	0.0	0.0	0.0
72.5°	4588.4	317.6	27.6	10.4	6.9	3.5	0.0	0.0	0.0	0.0	0.0
75°	2144.0	141.6	17.3	6.9	3.5	3.5	0.0	0.0	0.0	0.0	0.0
77.5°	473.0	65.6	10.4	6.9	3.5	0.0	0.0	0.0	0.0	0.0	0.0
80°	89.8	24.2	6.9	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	31.1	10.4	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	10.4	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.5	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)