

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: P237212

Luminaire Tested: **ARCH-L-AF72-190-D-U-T3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237212
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-190-D-U-T3-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 810mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17398.4 lumens
Efficiency: N/A
Efficacy: 92.1 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B2 - U0 - G3

Input Watts (W): 189
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: 28.75 FT

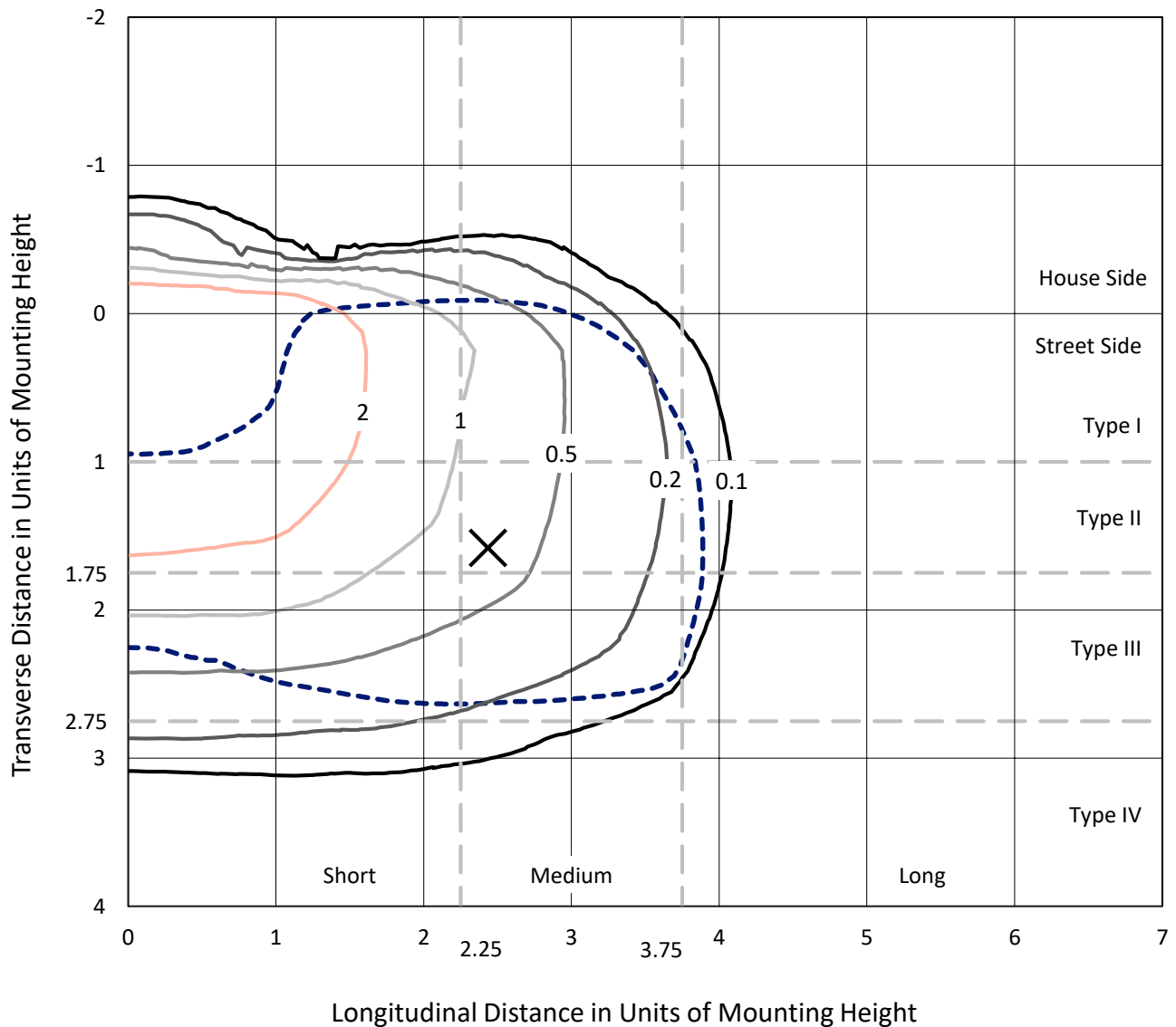


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

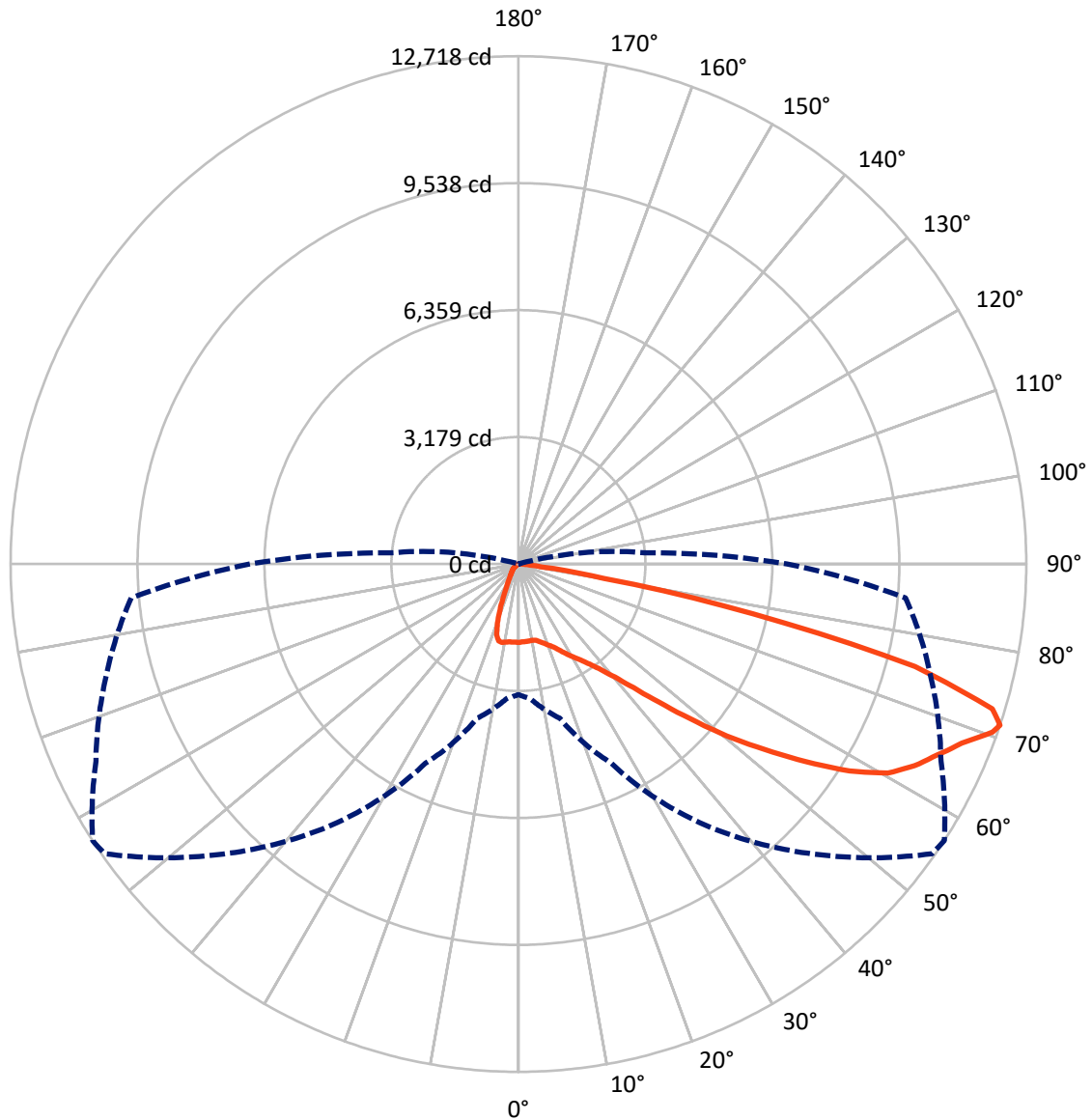


Based on 25 foot mounting height. Maximum calculated value = 3.9 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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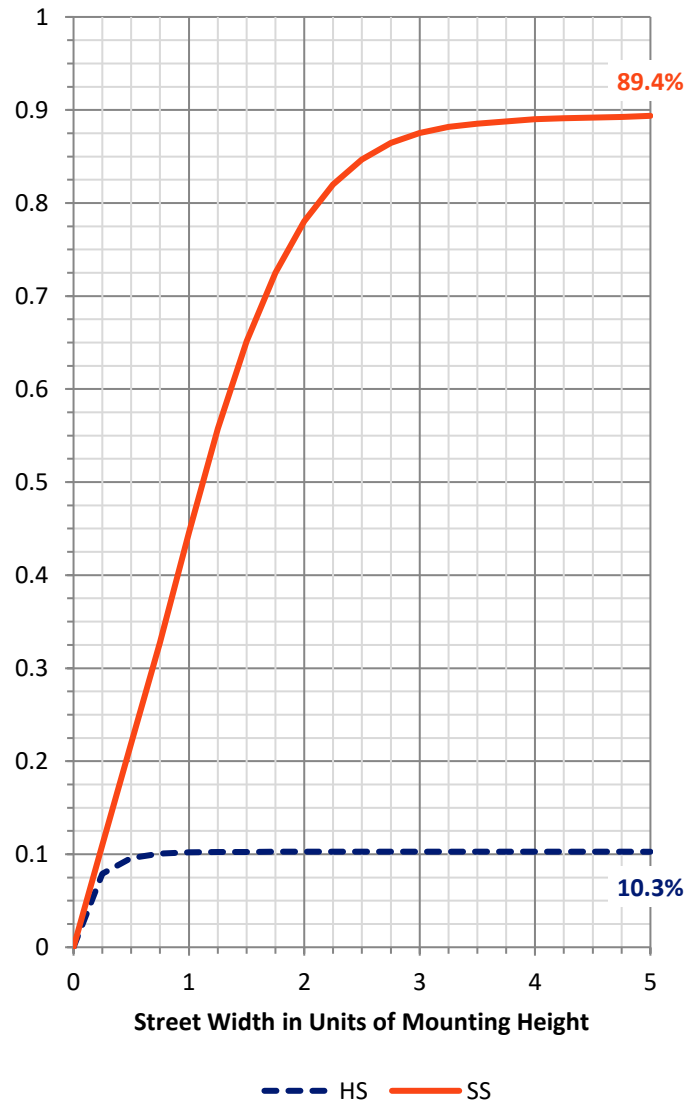
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1803.0	0.0	1803.0
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	15595.3	0.0	15595.3
	% Fixture	89.6	0.0	89.6
Total	Lumens	17398.4	0.0	17398.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.7	1.1
10°-20°	493.7	2.8
20°-30°	770.2	4.4
30°-40°	1301.8	7.5
40°-50°	2528.4	14.5
50°-60°	4246.0	24.4
60°-70°	5067.3	29.1
70°-80°	2670.5	15.3
80°-90°	135.7	0.8
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°	17398.4	100.0
0°-180°	17398.4	100.0

Coefficient of Utilization



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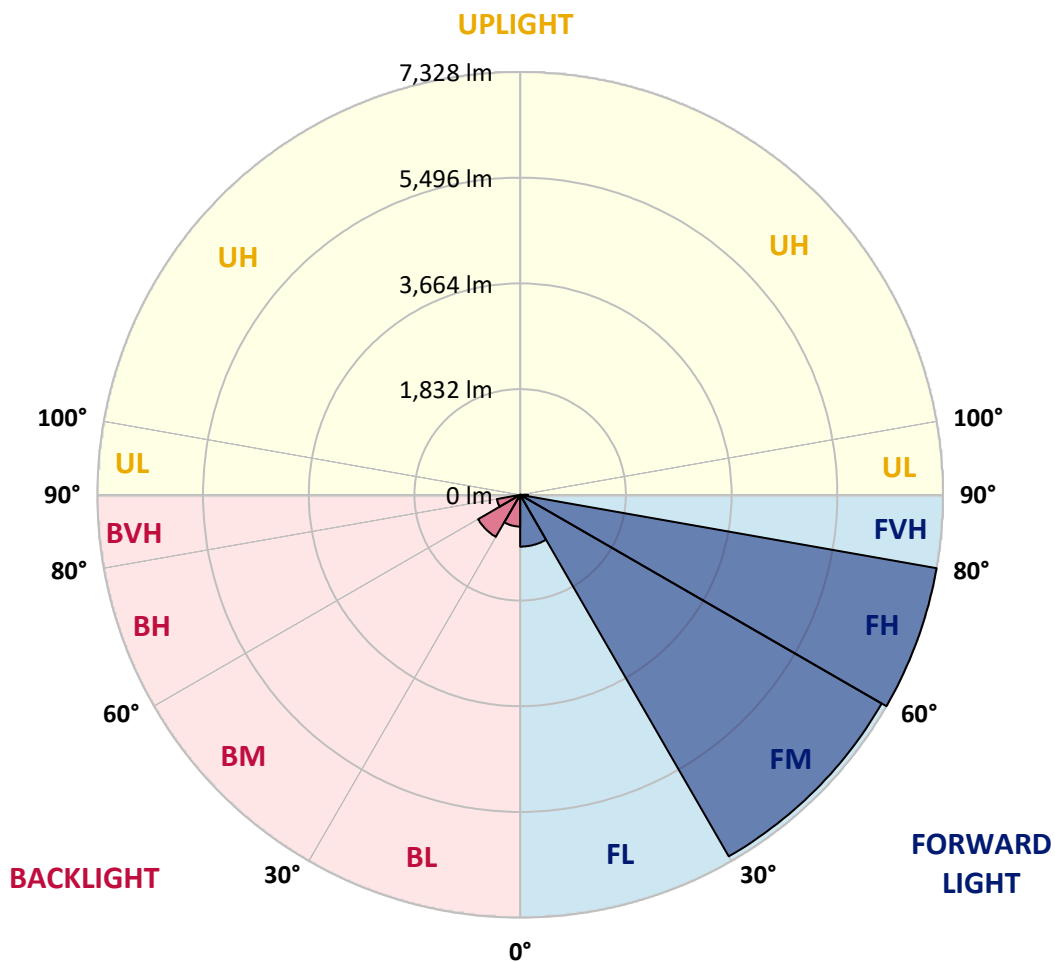
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	898.2	5.2			
FM	(30°-60°)	7234.4	41.6			
FH	(60°-80°)	7328.3	42.1			G3/7500
FVH	(80°-90°)	134.4	0.8			G2/225
BL	(0°-30°)	550.4	3.2	B2/1000		
BM	(30°-60°)	841.9	4.8	B1/1000		
BH	(60°-80°)	409.5	2.4	B1/500		G1/500
BVH	(80°-90°)	1.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	1966.3	1966.3	1966.3	1966.3	1966.3	1966.3	1966.3	1966.3	1966.3	1966.3	1966.3
2.5°	1937.9	1937.9	1937.9	1942.0	1946.0	1946.0	1954.1	1950.1	1950.1	1950.1	1958.1
5°	1885.2	1889.3	1893.3	1901.5	1917.6	1929.8	1950.1	1950.1	1954.1	1962.2	1966.3
7.5°	1812.3	1816.2	1828.4	1844.7	1877.1	1905.5	1937.9	1946.0	1958.1	1978.5	1986.6
10°	1767.7	1775.7	1791.9	1812.3	1848.7	1885.2	1925.7	1937.9	1974.4	2010.9	2031.2
12.5°	1755.5	1759.5	1775.7	1808.2	1852.8	1897.4	1950.1	1962.2	2014.9	2071.7	2104.1
15°	1775.7	1779.8	1787.9	1824.3	1877.1	1933.9	2002.7	2019.0	2083.9	2148.7	2189.2
17.5°	1812.3	1812.3	1820.3	1852.8	1909.5	1974.4	2063.6	2087.9	2160.9	2233.8	2278.4
20°	1836.5	1836.5	1848.7	1881.1	1946.0	2031.2	2136.5	2169.0	2250.1	2331.2	2371.7
22.5°	1860.8	1864.9	1877.1	1913.5	1986.6	2104.1	2225.7	2258.2	2351.5	2436.6	2477.1
25°	1929.8	1925.7	1929.8	1962.2	2047.3	2193.3	2347.4	2387.9	2485.3	2578.4	2598.7
27.5°	2120.4	2112.2	2059.5	2039.3	2104.1	2286.6	2501.4	2541.9	2655.5	2748.8	2748.8
30°	2558.2	2541.9	2412.2	2246.0	2193.3	2371.7	2647.4	2704.2	2850.0	2931.2	2906.8
32.5°	3113.7	3077.1	2910.9	2627.1	2416.3	2485.3	2801.5	2866.3	3052.8	3121.7	3069.1
35°	3721.7	3717.7	3510.9	3146.1	2846.1	2720.3	3000.1	3077.1	3312.3	3373.1	3288.0
37.5°	4366.4	4382.5	4244.7	3742.1	3389.3	3105.5	3263.6	3352.8	3640.7	3713.6	3632.5
40°	5084.0	5079.9	5027.2	4431.2	4042.0	3652.9	3644.7	3725.8	4074.4	4188.0	4074.4
42.5°	5992.0	5984.0	5793.4	5258.3	4832.6	4366.4	4200.1	4228.5	4617.7	4804.2	4638.0
45°	6916.5	6859.7	6640.8	6178.5	5801.6	5250.2	4933.9	4933.9	5266.4	5521.8	5262.4
47.5°	7431.3	7374.6	7285.4	7029.9	6916.5	6300.1	5834.0	5777.2	6036.6	6296.2	5931.3
50°	8108.3	8108.3	7885.4	7788.0	7982.7	7548.9	6827.3	6770.5	6896.1	7103.0	6624.5
52.5°	8643.5	8546.2	8388.1	8473.2	9028.7	8830.0	7820.6	7711.0	7808.4	7861.1	7228.6
55°	8866.5	8773.2	8761.1	9073.3	9932.8	9657.1	8838.1	8740.8	8732.7	8473.2	7755.6
57.5°	8911.1	8830.0	8984.1	9531.3	10812.5	10334.1	9851.6	9778.7	9551.6	8902.9	8294.8
60°	8534.1	8574.6	8947.5	9782.8	11331.4	10921.9	10707.1	10630.1	10107.1	9267.8	8894.9
62.5°	7759.7	7857.0	8554.3	9807.0	11140.9	11161.1	11181.5	11128.7	10536.8	9600.3	9498.9
65°	6843.4	6871.9	7711.0	9470.6	10808.4	11088.2	11530.1	11526.0	10865.2	9973.3	10180.0
67.5°	5639.3	5688.0	6413.7	8335.4	10143.6	11055.7	11988.2	11976.1	11238.1	10399.0	10585.5
70°	4196.0	4256.9	4844.7	6482.6	8659.7	10650.4	12588.2	12596.3	11631.5	10723.3	10305.7
71°	3271.7	3381.2	3997.4	5505.6	7901.6	10240.9	12645.0	12717.9	11676.1	10678.7	9730.0
72.5°	1605.4	1735.2	2509.5	3875.8	6502.9	9324.6	12272.0	12413.9	11396.3	10123.3	8319.1
75°	417.6	441.9	750.0	1585.2	3486.6	6178.5	9896.2	10257.0	9316.5	7707.0	5084.0
77.5°	263.5	271.6	352.7	616.2	1305.5	2347.4	5813.7	5992.0	5323.1	3904.2	1791.9
80°	186.5	190.6	223.0	397.3	762.2	685.2	2091.9	2169.0	1925.7	1033.8	320.3
82.5°	113.5	113.5	162.1	255.4	470.3	373.0	551.4	587.9	518.9	287.9	105.4
85°	64.9	68.9	101.4	174.3	223.0	182.4	206.7	218.9	223.0	190.6	44.6
87.5°	52.7	56.8	89.2	146.0	121.6	89.2	89.2	93.3	97.3	113.5	20.3
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°	1966.3	1966.3	1966.3	1966.3	1966.3	1966.3	1966.3	1966.3	1966.3	1966.3	1966.3
2.5°	1958.1	1958.1	1962.2	1958.1	1958.1	1958.1	1962.2	1962.2	1962.2	1970.3	1974.4
5°	1966.3	1966.3	1966.3	1962.2	1958.1	1958.1	1966.3	1970.3	1970.3	1982.5	1982.5
7.5°	1986.6	1986.6	1978.5	1970.3	1962.2	1950.1	1954.1	1958.1	1954.1	1958.1	1958.1
10°	2031.2	2031.2	2019.0	2002.7	1978.5	1942.0	1893.3	1832.5	1775.7	1755.5	1747.3
12.5°	2104.1	2100.0	2075.8	2047.3	1994.7	1868.9	1686.5	1471.6	1293.3	1244.6	1228.5
15°	2185.2	2177.0	2148.7	2100.0	1958.1	1625.8	1244.6	968.9	798.7	758.1	750.0
17.5°	2270.3	2258.2	2217.7	2120.4	1791.9	1208.1	802.7	608.1	514.9	506.8	510.9
20°	2359.5	2343.3	2286.6	2079.8	1447.4	806.8	518.9	470.3	462.2	462.2	466.3
22.5°	2460.9	2440.7	2363.6	1933.9	1054.0	535.1	446.0	441.9	437.8	433.8	433.8
25°	2578.4	2554.1	2436.6	1670.3	725.7	437.8	425.6	413.5	405.4	397.3	393.2
27.5°	2720.3	2687.9	2493.3	1346.0	498.7	409.5	401.4	381.0	364.9	348.6	348.6
30°	2862.2	2821.7	2477.1	1013.5	405.4	381.0	364.9	340.5	316.2	300.0	295.9
32.5°	3012.3	2971.7	2371.7	681.1	369.0	348.6	328.4	292.0	263.5	243.3	239.2
35°	3235.2	3202.8	2165.0	450.0	332.5	308.1	279.8	243.3	206.7	186.5	182.4
37.5°	3567.6	3527.1	1909.5	344.6	292.0	255.4	231.1	190.6	154.1	133.8	129.7
40°	4013.6	3892.0	1605.4	304.0	255.4	210.8	178.4	137.8	109.5	97.3	97.3
42.5°	4532.6	4244.7	1277.1	275.7	227.0	174.3	129.7	93.3	77.0	72.9	72.9
45°	5084.0	4573.1	948.7	255.4	198.7	137.8	93.3	64.9	56.8	52.7	52.7
47.5°	5651.5	4840.7	660.8	231.1	166.2	105.4	64.9	48.7	40.5	36.5	36.5
50°	6182.6	5015.0	466.3	206.7	141.9	77.0	48.7	36.5	28.3	28.3	28.3
52.5°	6551.6	4998.9	336.4	178.4	109.5	52.7	32.4	24.3	24.3	24.3	24.3
55°	6875.9	4938.0	263.5	154.1	85.1	36.5	24.3	20.3	20.3	16.3	16.3
57.5°	7151.6	4840.7	223.0	125.7	60.8	28.3	16.3	16.3	12.2	12.2	12.2
60°	7386.7	4719.1	186.5	105.4	40.5	20.3	12.2	8.1	8.1	4.1	8.1
62.5°	7707.0	4642.0	162.1	81.1	28.3	12.2	8.1	4.1	4.1	0.0	0.0
65°	7942.1	4496.1	137.8	56.8	16.3	8.1	4.1	4.1	0.0	0.0	0.0
67.5°	7950.3	4232.6	101.4	32.4	12.2	8.1	4.1	0.0	0.0	0.0	0.0
70°	7309.7	3608.3	64.9	16.3	8.1	4.1	4.1	0.0	0.0	0.0	0.0
71°	6721.8	3194.7	52.7	12.2	8.1	4.1	0.0	0.0	0.0	0.0	0.0
72.5°	5538.1	2347.4	40.5	12.2	4.1	4.1	0.0	0.0	0.0	0.0	0.0
75°	3052.8	851.4	20.3	8.1	4.1	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	977.0	259.4	12.2	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	166.2	40.5	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	56.8	16.3	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	16.3	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.1	4.1	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)