

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: P237209

Luminaire Tested: **ARCH-L-AF72-160-D-U-T3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237209
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-AF72-160-D-U-T3-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 705mA 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: 15668.5 lumens
Efficiency: N/A
Efficacy: 96.7 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G3

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: 28.75 FT

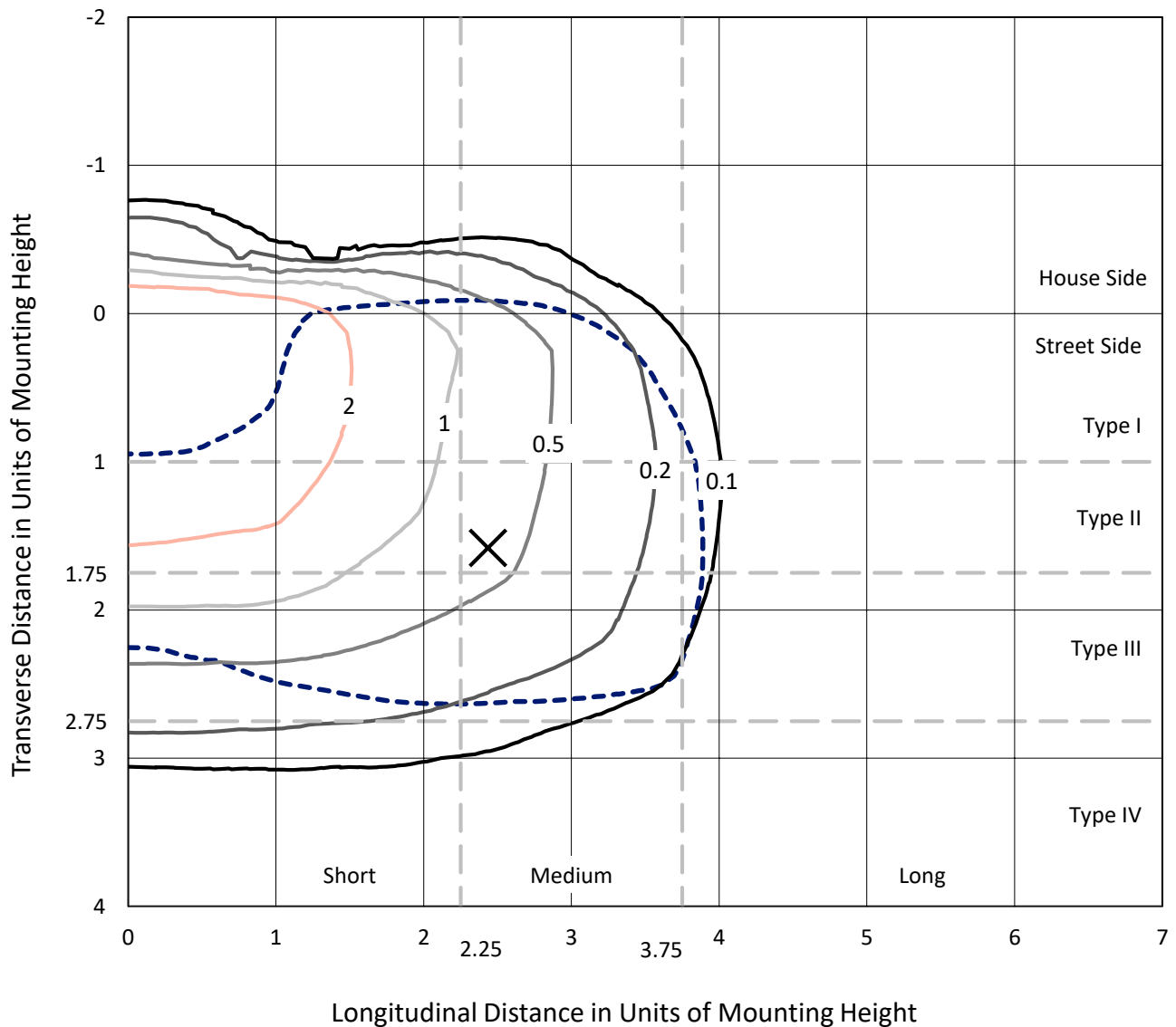


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

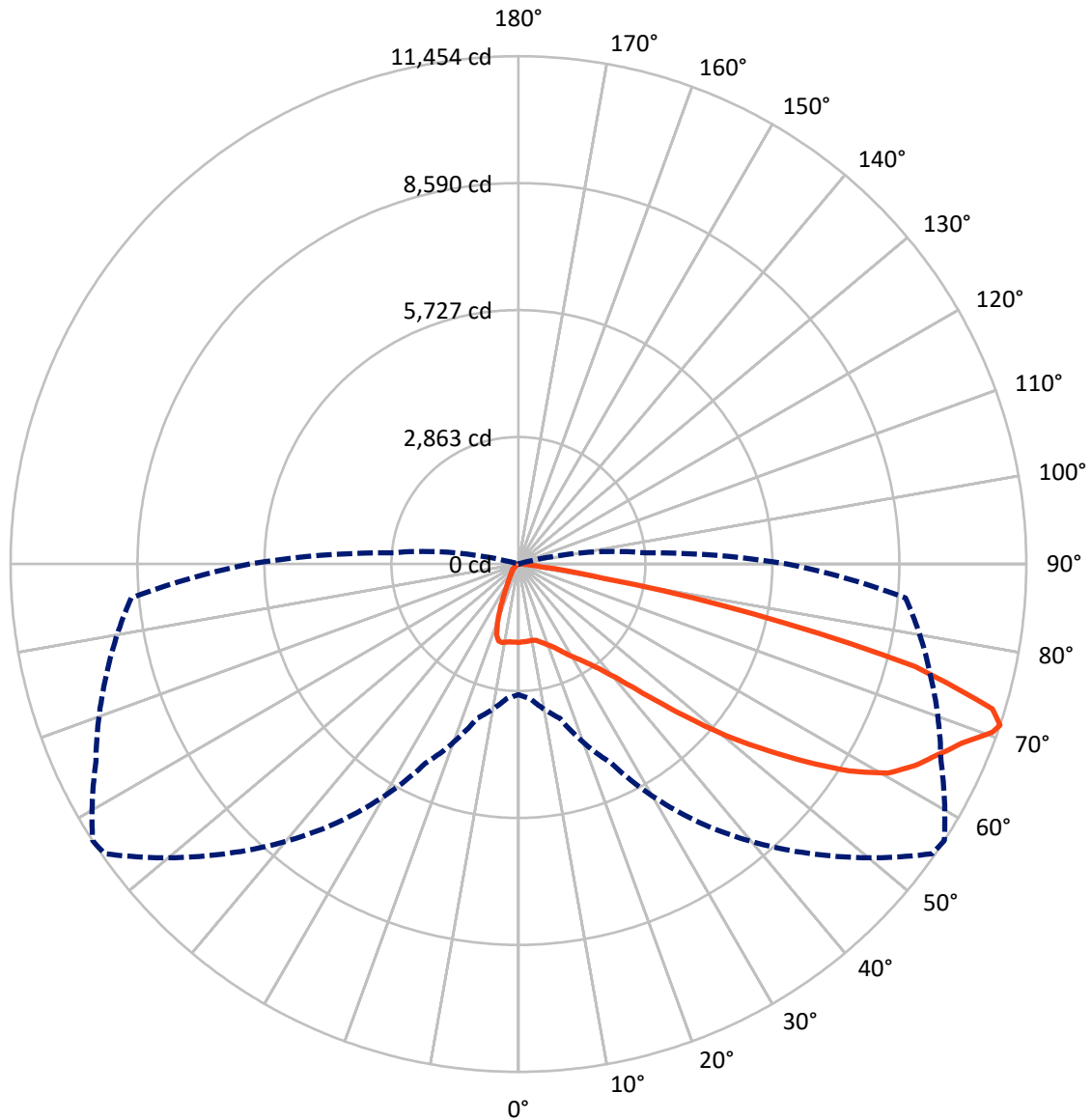


Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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



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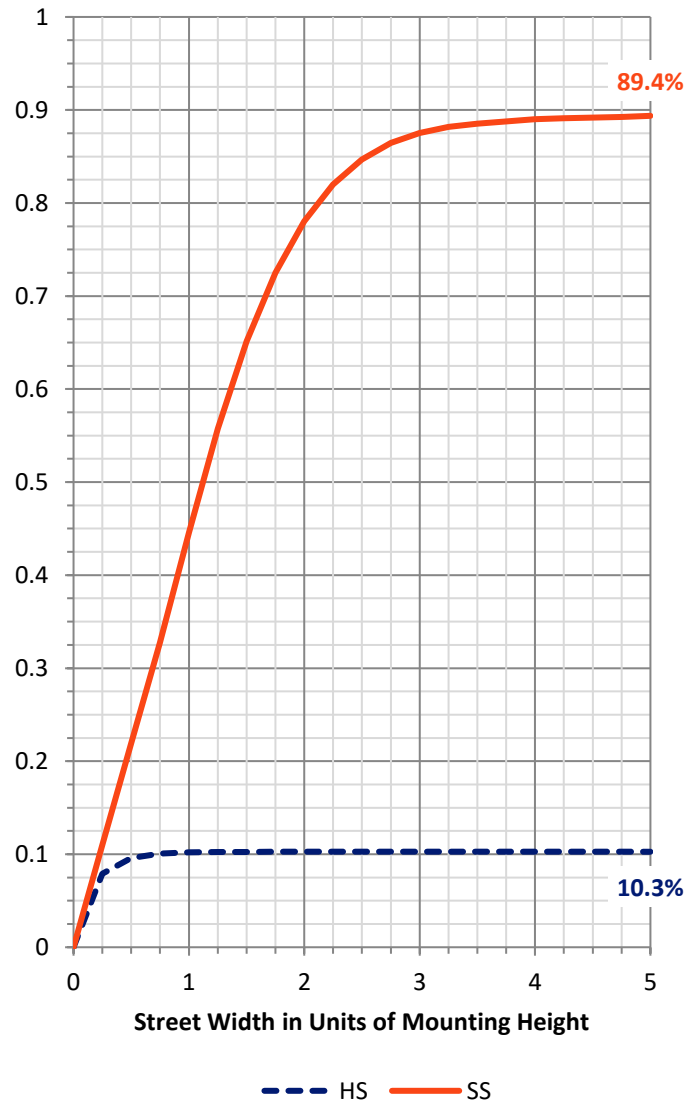
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1623.7	0.0	1623.7
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	14044.8	0.0	14044.8
	% Fixture	89.6	0.0	89.6
Total	Lumens	15668.5	0.0	15668.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.3	1.1
10°-20°	444.6	2.8
20°-30°	693.6	4.4
30°-40°	1172.4	7.5
40°-50°	2277.1	14.5
50°-60°	3823.9	24.4
60°-70°	4563.5	29.1
70°-80°	2405.0	15.3
80°-90°	122.2	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°	15668.5	100.0
0°-180°	15668.5	100.0



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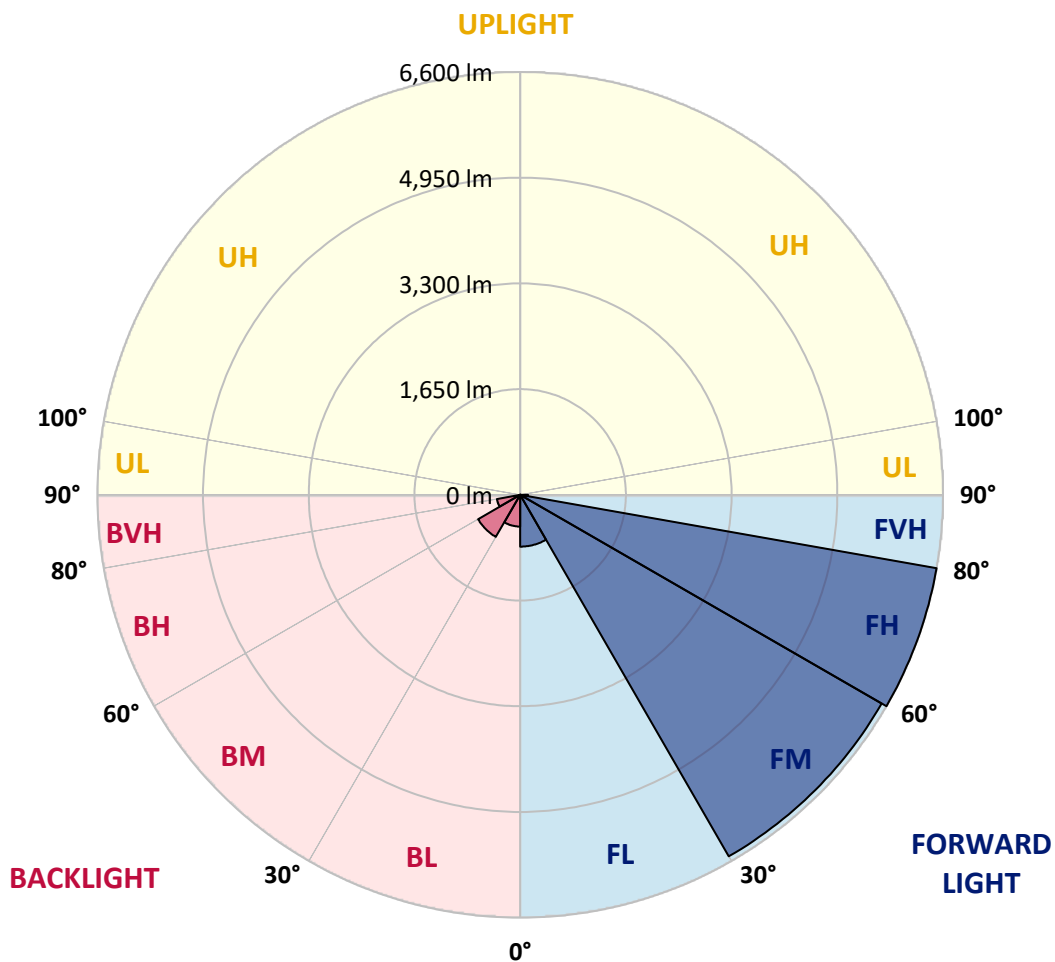
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	808.9	5.2			
FM	(30°-60°)	6515.1	41.6			
FH	(60°-80°)	6599.7	42.1			G3/7500
FVH	(80°-90°)	121.0	0.8			G2/225
BL	(0°-30°)	495.7	3.2	B1/500		
BM	(30°-60°)	758.2	4.8	B1/1000		
BH	(60°-80°)	368.7	2.4	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 III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	1770.8	1770.8	1770.8	1770.8	1770.8	1770.8	1770.8	1770.8	1770.8	1770.8	1770.8
2.5°	1745.3	1745.3	1745.3	1748.8	1752.5	1752.5	1759.8	1756.2	1756.2	1756.2	1763.5
5°	1697.8	1701.4	1705.1	1712.3	1726.9	1737.9	1756.2	1756.2	1759.8	1767.1	1770.8
7.5°	1632.0	1635.7	1646.6	1661.3	1690.4	1716.0	1745.3	1752.5	1763.5	1781.8	1789.0
10°	1591.9	1599.2	1613.8	1632.0	1664.9	1697.8	1734.3	1745.3	1778.1	1810.9	1829.2
12.5°	1581.0	1584.6	1599.2	1628.4	1668.5	1708.7	1756.2	1767.1	1814.6	1865.8	1894.9
15°	1599.2	1602.9	1610.1	1643.0	1690.4	1741.6	1803.7	1818.3	1876.7	1935.1	1971.6
17.5°	1632.0	1632.0	1639.4	1668.5	1719.7	1778.1	1858.4	1880.3	1946.1	2011.7	2051.9
20°	1653.9	1653.9	1664.9	1694.1	1752.5	1829.2	1924.2	1953.3	2026.4	2099.4	2135.9
22.5°	1675.9	1679.5	1690.4	1723.4	1789.0	1894.9	2004.5	2033.6	2117.6	2194.3	2230.9
25°	1737.9	1734.3	1737.9	1767.1	1843.8	1975.2	2114.0	2150.4	2238.1	2322.1	2340.3
27.5°	1909.5	1902.2	1854.7	1836.5	1894.9	2059.2	2252.7	2289.3	2391.5	2475.4	2475.4
30°	2303.9	2289.3	2172.4	2022.7	1975.2	2135.9	2384.2	2435.2	2566.7	2639.7	2617.8
32.5°	2804.0	2771.2	2621.5	2365.9	2176.0	2238.1	2522.9	2581.3	2749.3	2811.4	2763.9
35°	3351.7	3348.0	3161.8	2833.3	2563.1	2449.9	2701.8	2771.2	2982.9	3037.8	2961.0
37.5°	3932.2	3946.9	3822.7	3370.0	3052.3	2796.7	2939.1	3019.4	3278.7	3344.4	3271.4
40°	4578.5	4574.8	4527.4	3990.6	3640.2	3289.6	3282.3	3355.4	3669.3	3771.6	3669.3
42.5°	5396.4	5389.0	5217.5	4735.4	4352.1	3932.2	3782.6	3808.1	4158.6	4326.6	4176.8
45°	6228.7	6177.7	5980.5	5564.2	5224.7	4728.2	4443.4	4443.4	4742.8	4972.8	4739.1
47.5°	6692.5	6641.3	6561.0	6331.0	6228.7	5673.8	5254.0	5202.8	5436.5	5670.1	5341.5
50°	7302.2	7302.2	7101.4	7013.8	7189.0	6798.3	6148.4	6097.3	6210.5	6396.7	5965.8
52.5°	7784.1	7696.5	7554.1	7630.8	8131.0	7952.1	7043.0	6944.4	7032.0	7079.4	6510.0
55°	7984.9	7901.0	7890.0	8171.1	8945.2	8696.9	7959.4	7871.8	7864.4	7630.8	6984.5
57.5°	8025.2	7952.1	8090.8	8583.7	9737.5	9306.6	8872.2	8806.5	8602.0	8017.8	7470.1
60°	7685.5	7722.1	8058.0	8810.1	10204.9	9836.1	9642.5	9573.2	9102.2	8346.4	8010.5
62.5°	6988.2	7075.9	7703.8	8832.1	10033.2	10051.5	10069.7	10022.3	9489.2	8645.8	8554.5
65°	6163.1	6188.6	6944.4	8529.0	9733.8	9985.7	10383.8	10380.1	9784.9	8981.7	9167.9
67.5°	5078.6	5122.5	5776.0	7506.6	9135.1	9956.6	10796.3	10785.4	10120.9	9365.1	9533.0
70°	3778.9	3833.6	4363.1	5838.1	7798.8	9591.4	11336.6	11343.9	10475.0	9657.2	9281.1
71°	2946.4	3045.0	3600.0	4958.1	7116.0	9222.7	11387.8	11453.5	10515.1	9617.0	8762.6
72.5°	1445.8	1562.7	2260.0	3490.4	5856.4	8397.5	11051.9	11179.6	10263.3	9116.7	7492.1
75°	376.0	397.9	675.5	1427.6	3139.9	5564.2	8912.4	9237.2	8390.2	6940.7	4578.5
77.5°	237.3	244.6	317.6	555.0	1175.7	2114.0	5235.7	5396.4	4793.9	3516.0	1613.8
80°	168.0	171.7	200.8	357.8	686.4	617.0	1884.0	1953.3	1734.3	931.0	288.5
82.5°	102.2	102.2	146.1	230.1	423.5	335.9	496.5	529.4	467.4	259.2	94.9
85°	58.4	62.1	91.2	157.0	200.8	164.3	186.2	197.1	200.8	171.7	40.2
87.5°	47.5	51.1	80.3	131.4	109.6	80.3	80.3	84.0	87.7	102.2	18.2
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°	1770.8	1770.8	1770.8	1770.8	1770.8	1770.8	1770.8	1770.8	1770.8	1770.8	1770.8
2.5°	1763.5	1763.5	1767.1	1763.5	1763.5	1763.5	1767.1	1767.1	1767.1	1774.4	1778.1
5°	1770.8	1770.8	1770.8	1767.1	1763.5	1763.5	1770.8	1774.4	1774.4	1785.4	1785.4
7.5°	1789.0	1789.0	1781.8	1774.4	1767.1	1756.2	1759.8	1763.5	1759.8	1763.5	1763.5
10°	1829.2	1829.2	1818.3	1803.7	1781.8	1748.8	1705.1	1650.3	1599.2	1581.0	1573.6
12.5°	1894.9	1891.2	1869.3	1843.8	1796.3	1683.2	1518.9	1325.3	1164.7	1120.8	1106.3
15°	1968.0	1960.7	1935.1	1891.2	1763.5	1464.0	1120.8	872.6	719.2	682.7	675.5
17.5°	2044.6	2033.6	1997.1	1909.5	1613.8	1088.0	722.9	547.7	463.7	456.3	460.0
20°	2125.0	2110.3	2059.2	1873.0	1303.4	726.6	467.4	423.5	416.2	416.2	419.9
22.5°	2216.2	2197.9	2128.6	1741.6	949.3	481.9	401.6	397.9	394.3	390.7	390.7
25°	2322.1	2300.2	2194.3	1504.2	653.6	394.3	383.4	372.5	365.1	357.8	354.1
27.5°	2449.9	2420.7	2245.4	1212.2	449.1	368.8	361.4	343.2	328.6	313.9	313.9
30°	2577.6	2541.2	2230.9	912.8	365.1	343.2	328.6	306.7	284.8	270.2	266.6
32.5°	2712.8	2676.2	2135.9	613.4	332.3	313.9	295.7	262.9	237.3	219.1	215.4
35°	2913.6	2884.4	1949.6	405.3	299.4	277.5	252.0	219.1	186.2	168.0	164.3
37.5°	3213.0	3176.5	1719.7	310.4	262.9	230.1	208.1	171.7	138.7	120.5	116.8
40°	3614.6	3505.0	1445.8	273.8	230.1	189.9	160.6	124.2	98.6	87.7	87.7
42.5°	4081.9	3822.7	1150.1	248.3	204.5	157.0	116.8	84.0	69.4	65.7	65.7
45°	4578.5	4118.4	854.4	230.1	178.9	124.2	84.0	58.4	51.1	47.5	47.5
47.5°	5089.6	4359.4	595.2	208.1	149.7	94.9	58.4	43.8	36.5	32.8	32.8
50°	5567.9	4516.4	419.9	186.2	127.8	69.4	43.8	32.8	25.6	25.6	25.6
52.5°	5900.2	4501.8	303.0	160.6	98.6	47.5	29.3	21.9	21.9	21.9	21.9
55°	6192.2	4447.1	237.3	138.7	76.7	32.8	21.9	18.2	18.2	14.6	14.6
57.5°	6440.5	4359.4	200.8	113.1	54.7	25.6	14.6	14.6	10.9	10.9	10.9
60°	6652.2	4249.8	168.0	94.9	36.5	18.2	10.9	7.3	7.3	3.7	7.3
62.5°	6940.7	4180.5	146.1	73.0	25.6	10.9	7.3	3.7	3.7	0.0	0.0
65°	7152.5	4049.0	124.2	51.1	14.6	7.3	3.7	3.7	0.0	0.0	0.0
67.5°	7159.8	3811.7	91.2	29.3	10.9	7.3	3.7	0.0	0.0	0.0	0.0
70°	6582.9	3249.5	58.4	14.6	7.3	3.7	3.7	0.0	0.0	0.0	0.0
71°	6053.5	2877.0	47.5	10.9	7.3	3.7	0.0	0.0	0.0	0.0	0.0
72.5°	4987.4	2114.0	36.5	10.9	3.7	3.7	0.0	0.0	0.0	0.0	0.0
75°	2749.3	766.7	18.2	7.3	3.7	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	879.9	233.6	10.9	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	149.7	36.5	7.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	51.1	14.6	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.6	7.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.3	3.7	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)