

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: P509128

Luminaire Tested: **VERD-CA2-110-740-U-T4-HSS**

Issue Date: 3/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P509128  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-139-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VERD-CA2-110-740-U-T4-HSS  
Description: VERDEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 1020mA LEDS AND TYPE IV OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14571 lumens  
Efficiency: N/A  
Efficacy: 128.3 lumens/watt  
Luminous Opening: Rectangular (W 0.79' x L: 1.25' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G3

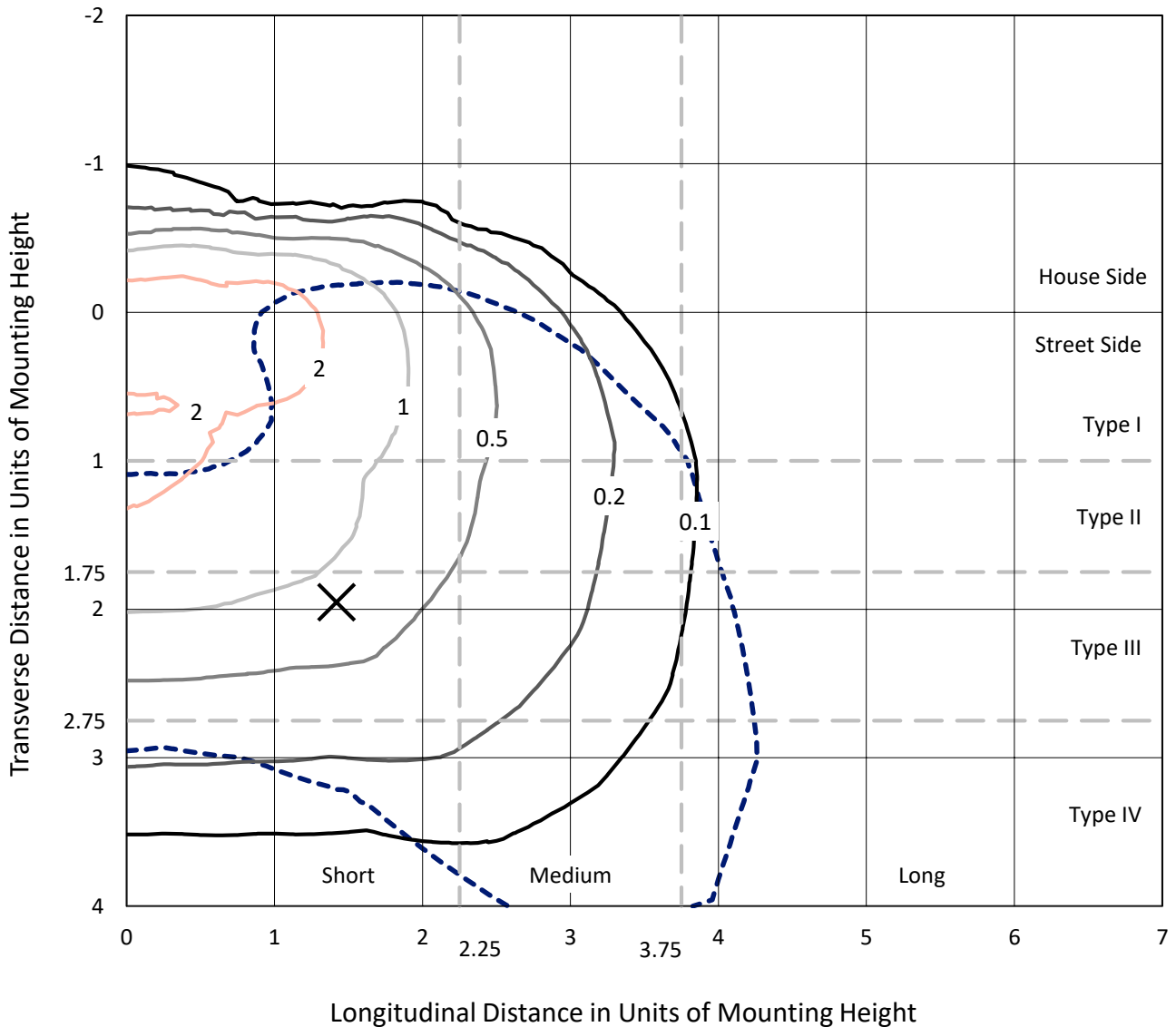
Input Watts (W): 113.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P509128  
 CATALOG NUMBER: VERD-CA2-110-740-U-T4-HSS

### Iso-Footcandle Lines of Horizontal Illumination

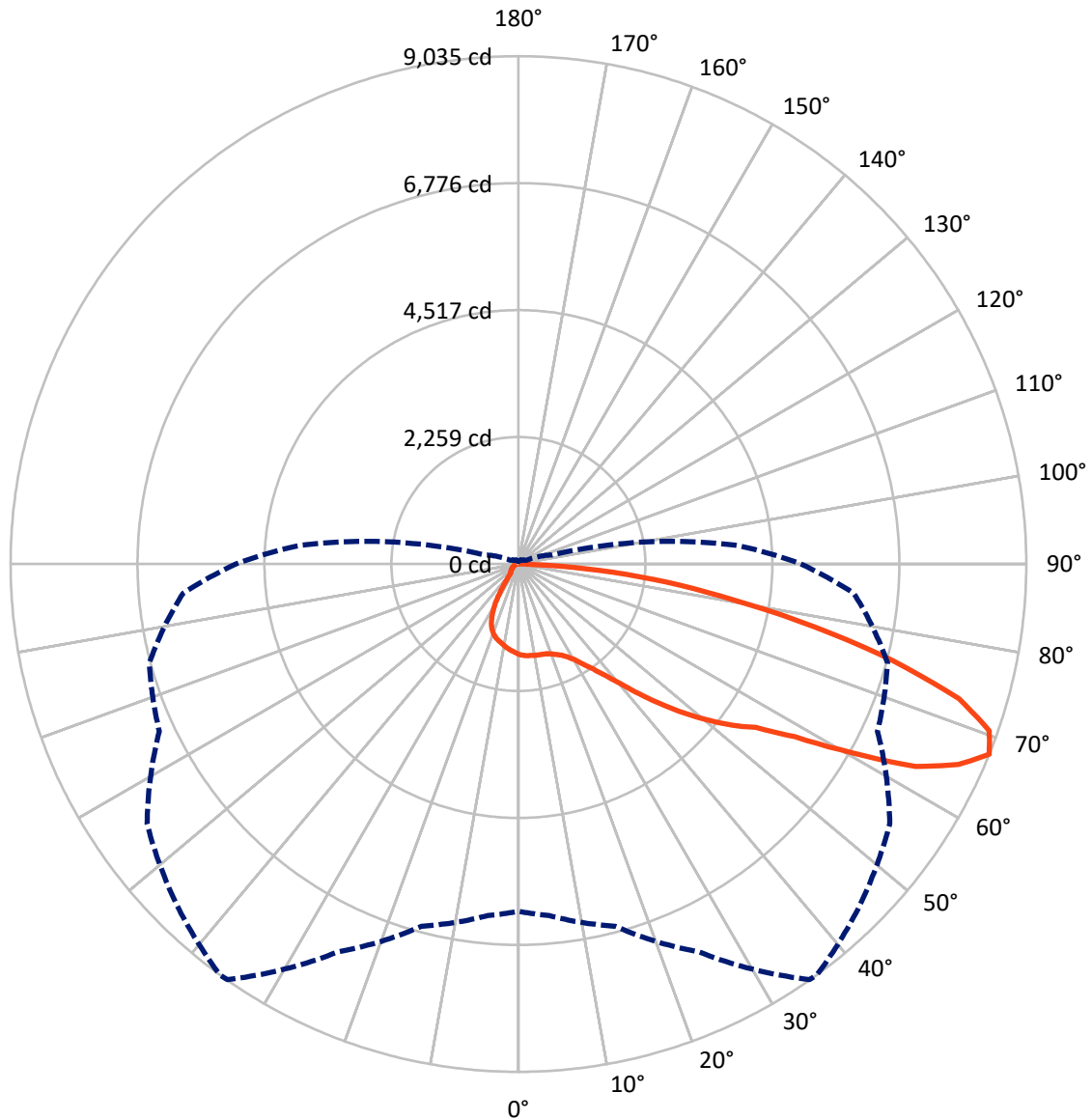
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 fc  
 Type IV - Short - N/A

REPORT NUMBER: P509128  
CATALOG NUMBER: VERD-CA2-110-740-U-T4-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P509128  
 CATALOG NUMBER: VERD-CA2-110-740-U-T4-HSS

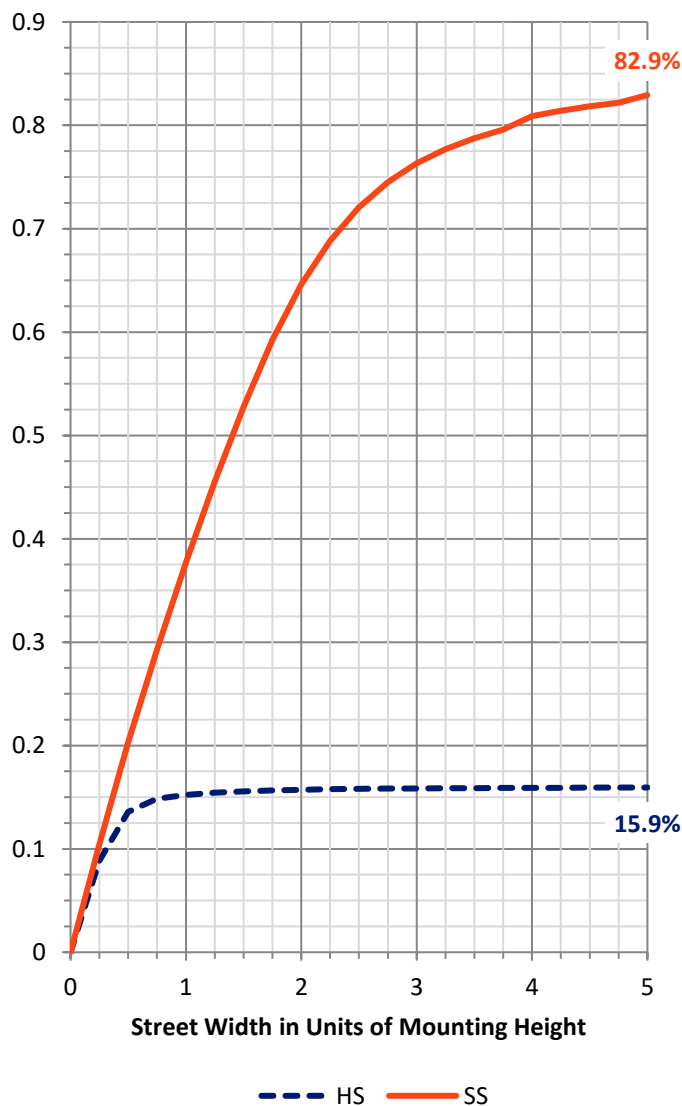
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2349.8	0.0	2349.8
	% Fixture	16.1	0.0	16.1
<b>Street Side</b>	Lumens	12221.2	0.0	12221.2
	% Fixture	83.9	0.0	83.9
<b>Total</b>	Lumens	14571.0	0.0	14571.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	152.0	1.0
10°-20°	450.2	3.1
20°-30°	744.6	5.1
30°-40°	1181.1	8.1
40°-50°	2038.7	14.0
50°-60°	3021.9	20.7
60°-70°	3906.9	26.8
70°-80°	2637.3	18.1
80°-90°	438.4	3.0
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°	14571.0	100.0
0°-180°	14571.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P509128

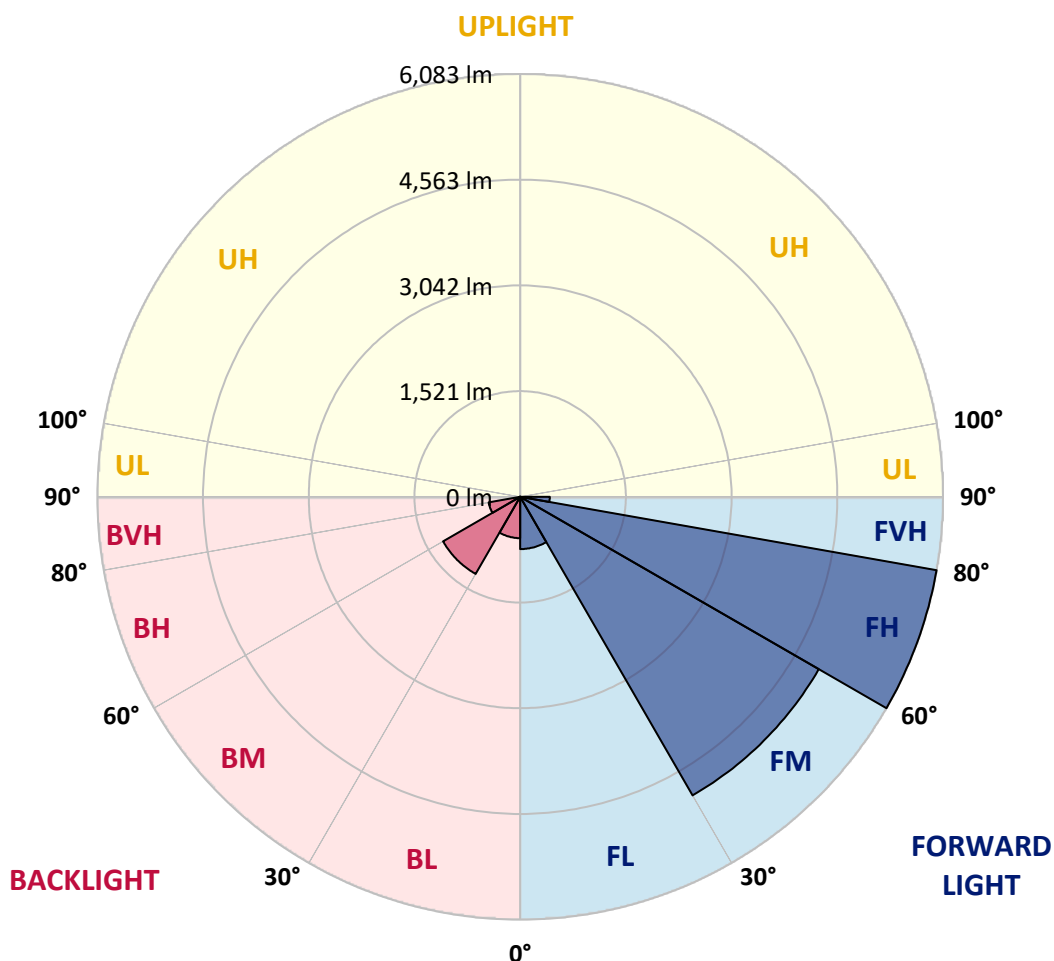
CATALOG NUMBER: VERD-CA2-110-740-U-T4-HSS

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	752.1	5.2			
FM	(30°-60°)	4959.7	34.0			
FH	(60°-80°)	6083.4	41.8			G3/7500
FVH	(80°-90°)	425.9	2.9			G3/500
BL	(0°-30°)	594.7	4.1	B2/1000		
BM	(30°-60°)	1282.0	8.8	B2/2500		
BH	(60°-80°)	460.7	3.2	B1/500		G1/500
BVH	(80°-90°)	12.4	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type IV Short





REPORT NUMBER: P509128

CATALOG NUMBER: VERD-CA2-110-740-U-T4-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	1610.4	1610.4	1610.4	1610.4	1610.4	1610.4	1610.4	1610.4	1610.4	1610.4	1610.4
2.5°	1617.3	1633.0	1631.3	1629.5	1629.5	1627.8	1617.3	1606.9	1612.1	1610.4	1608.6
5°	1624.3	1640.0	1638.3	1636.5	1636.5	1638.3	1622.6	1610.4	1613.9	1617.3	1615.6
7.5°	1627.8	1641.7	1638.3	1636.5	1634.8	1640.0	1627.8	1629.5	1633.0	1633.0	1633.0
10°	1633.0	1643.5	1643.5	1645.2	1647.0	1652.2	1647.0	1652.2	1666.1	1662.7	1671.4
12.5°	1619.1	1631.3	1636.5	1645.2	1653.9	1657.4	1662.7	1676.6	1694.0	1702.7	1711.4
15°	1613.9	1626.1	1634.8	1645.2	1659.2	1662.7	1676.6	1701.0	1721.9	1739.3	1758.5
17.5°	1631.3	1645.2	1657.4	1664.4	1671.4	1676.6	1690.5	1721.9	1758.5	1789.9	1817.8
20°	1664.4	1678.3	1692.3	1699.3	1704.5	1708.0	1718.4	1748.0	1795.1	1843.9	1884.0
22.5°	1702.7	1716.7	1732.4	1737.6	1749.8	1749.8	1751.5	1781.2	1838.7	1904.9	1953.7
25°	1744.6	1753.3	1767.2	1775.9	1793.4	1796.8	1802.1	1828.2	1899.7	1974.6	2051.3
27.5°	1793.4	1810.8	1824.7	1835.2	1870.0	1871.8	1868.3	1901.4	1971.1	2063.5	2171.6
30°	1882.2	1901.4	1915.4	1932.8	1978.1	1976.4	1999.0	2033.9	2074.0	2175.0	2319.7
32.5°	2023.4	2025.2	2032.1	2054.8	2119.3	2126.2	2169.8	2232.6	2312.7	2377.2	2530.6
35°	2281.4	2272.6	2251.7	2248.2	2291.8	2295.3	2380.7	2513.1	2687.4	2901.8	3138.8
37.5°	2582.9	2605.5	2581.1	2506.2	2513.1	2514.9	2616.0	2785.0	3109.2	3646.0	3870.8
40°	3112.7	3124.9	2973.3	2854.7	2812.9	2793.7	2846.0	3102.2	3517.0	4215.9	4374.5
42.5°	3579.8	3579.8	3438.6	3255.6	3149.3	3163.2	3147.5	3402.0	3935.3	4710.8	4768.4
45°	4046.8	4031.1	3902.2	3748.8	3562.3	3550.1	3510.0	3705.2	4320.5	5066.4	5068.1
47.5°	4482.5	4519.1	4325.7	4156.6	3966.7	3957.9	3886.5	4038.1	4689.9	5378.3	5331.3
50°	4940.9	4991.4	4749.2	4559.2	4353.6	4365.8	4306.5	4412.8	5057.7	5669.4	5584.0
52.5°	5592.7	5498.6	5209.3	4946.1	4733.5	4768.4	4707.4	4770.1	5439.3	5901.2	5723.4
55°	6291.6	6124.3	5883.8	5442.8	5134.3	5130.9	5085.6	5160.5	5824.5	6166.1	5882.0
57.5°	6666.3	6716.8	6661.1	6303.8	5805.3	5796.6	5524.7	5533.5	6178.3	6392.7	6103.4
60°	7093.3	7156.0	7278.0	7054.9	6805.7	6812.7	6134.7	5932.6	6551.3	6573.9	6120.8
62.5°	7319.8	7326.8	7607.4	7685.8	7888.0	7933.3	7419.2	6420.6	6798.7	6713.3	6150.4
65°	6919.0	6931.2	7471.5	7867.1	8541.6	8602.6	8381.2	7365.2	6983.5	6786.5	6122.5
67.5°	6178.3	6277.6	6671.5	7616.1	9026.1	9034.8	8588.6	8064.0	7048.0	6797.0	5988.3
70°	5177.9	5143.1	5641.5	6776.1	8951.1	8886.6	8498.0	8144.2	7000.9	6654.1	5376.6
72.5°	3839.4	3787.1	4301.3	5448.1	8074.5	8196.5	8091.9	7675.4	6823.1	6120.8	4364.0
75°	2628.2	2689.2	3151.0	4107.8	6706.4	6891.1	7353.0	7312.9	6070.2	5073.4	2987.2
77.5°	1798.6	1824.7	2220.4	3056.9	5315.6	5387.1	6152.2	5908.2	4463.4	3117.9	996.9
80°	1171.2	1162.5	1518.0	2176.8	3896.9	3888.2	4393.7	3738.4	2405.1	1063.1	137.7
82.5°	653.6	691.9	909.8	1430.9	2633.4	2661.3	2743.2	2044.3	925.4	123.7	87.1
85°	367.7	383.4	522.8	810.4	1380.3	1450.0	1223.5	751.2	165.6	68.0	50.5
87.5°	87.1	83.7	167.3	310.2	230.1	249.2	118.5	34.9	17.4	12.2	12.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P509128

CATALOG NUMBER: VERD-CA2-110-740-U-T4-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1610.4	1610.4	1610.4	1610.4	1610.4	1610.4	1610.4	1610.4	1610.4	1610.4	1610.4
2.5°	1608.6	1605.1	1601.7	1594.7	1589.5	1573.8	1575.5	1586.0	1575.5	1592.9	1582.5
5°	1612.1	1606.9	1598.2	1577.3	1561.6	1549.4	1545.9	1544.1	1530.2	1545.9	1538.9
7.5°	1626.1	1620.8	1601.7	1579.0	1556.3	1519.7	1514.5	1507.5	1481.4	1491.9	1483.1
10°	1659.2	1652.2	1619.1	1587.7	1552.9	1504.1	1476.2	1455.3	1425.6	1429.1	1420.4
12.5°	1701.0	1694.0	1655.7	1603.4	1554.6	1486.6	1437.8	1397.7	1354.2	1354.2	1345.5
15°	1749.8	1742.8	1699.3	1638.3	1561.6	1472.7	1399.5	1335.0	1265.3	1256.6	1246.1
17.5°	1816.0	1805.6	1755.0	1676.6	1580.7	1460.5	1361.1	1265.3	1159.0	1125.9	1108.4
20°	1884.0	1871.8	1828.2	1730.6	1606.9	1448.3	1305.4	1174.7	1037.0	969.0	956.8
22.5°	1971.1	1967.6	1913.6	1777.7	1615.6	1422.1	1235.7	1073.6	888.8	794.7	775.6
25°	2074.0	2068.7	1985.1	1814.3	1605.1	1369.9	1136.3	928.9	721.5	627.4	606.5
27.5°	2196.0	2182.0	2046.1	1823.0	1575.5	1287.9	1009.1	742.4	533.3	453.1	437.4
30°	2324.9	2304.0	2110.6	1824.7	1516.3	1186.9	841.8	545.5	378.2	320.7	320.7
32.5°	2541.0	2469.6	2173.3	1800.3	1430.9	1042.2	641.4	367.7	264.9	242.3	242.3
35°	3004.6	2833.8	2272.6	1769.0	1319.3	862.7	435.7	249.2	221.3	221.3	219.6
37.5°	3700.0	3382.8	2441.7	1716.7	1167.7	641.4	287.6	205.7	210.9	210.9	210.9
40°	4144.4	3811.5	2671.7	1634.8	993.4	435.7	205.7	195.2	198.7	202.2	202.2
42.5°	4559.2	4184.5	2901.8	1521.5	801.7	278.9	191.7	183.0	184.7	184.7	186.5
45°	4822.4	4461.6	3072.6	1401.2	590.8	198.7	188.2	172.5	167.3	167.3	170.8
47.5°	5066.4	4642.9	3147.5	1242.6	381.7	186.5	179.5	160.3	153.4	151.6	151.6
50°	5310.4	4829.4	3189.4	1054.4	238.8	179.5	165.6	146.4	139.4	137.7	137.7
52.5°	5418.4	4888.6	3095.2	841.8	177.8	172.5	155.1	134.2	123.7	123.7	123.7
55°	5531.7	4998.4	2936.7	603.0	169.1	160.3	142.9	120.3	111.5	115.0	115.0
57.5°	5657.2	4920.0	2767.6	392.1	167.3	144.7	127.2	108.1	101.1	104.6	106.3
60°	5618.9	4939.2	2525.3	263.2	160.3	132.5	115.0	95.9	90.6	90.6	90.6
62.5°	5618.9	4791.0	2128.0	200.4	146.4	122.0	106.3	88.9	80.2	76.7	73.2
65°	5470.7	4440.7	1554.6	174.3	130.7	113.3	95.9	78.4	68.0	62.7	61.0
67.5°	5022.8	3860.3	625.7	158.6	120.3	104.6	88.9	71.5	59.3	52.3	50.5
70°	4269.9	2849.5	179.5	141.2	122.0	97.6	83.7	62.7	52.3	43.6	41.8
72.5°	3165.0	1505.8	146.4	111.5	108.1	83.7	78.4	59.3	45.3	36.6	34.9
75°	1598.2	205.7	125.5	80.2	83.7	87.1	74.9	52.3	41.8	29.6	27.9
77.5°	165.6	122.0	109.8	54.0	59.3	61.0	64.5	48.8	36.6	24.4	22.7
80°	102.8	92.4	108.1	47.1	34.9	41.8	43.6	38.3	29.6	19.2	19.2
82.5°	73.2	78.4	80.2	29.6	26.1	24.4	22.7	22.7	26.1	17.4	17.4
85°	50.5	52.3	33.1	19.2	17.4	15.7	13.9	13.9	12.2	13.9	12.2
87.5°	12.2	10.5	10.5	10.5	8.7	8.7	7.0	7.0	7.0	7.0	8.7
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)