

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: P509968

Luminaire Tested: **VERD-M-CA3-180-722-U-T4-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P509968  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VERD-M-CA3-180-722-U-T4-HSS  
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2200K, 1120mA LEDS AND TYPE IV OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18702 lumens  
Efficiency: N/A  
Efficacy: 102.1 lumens/watt  
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G4

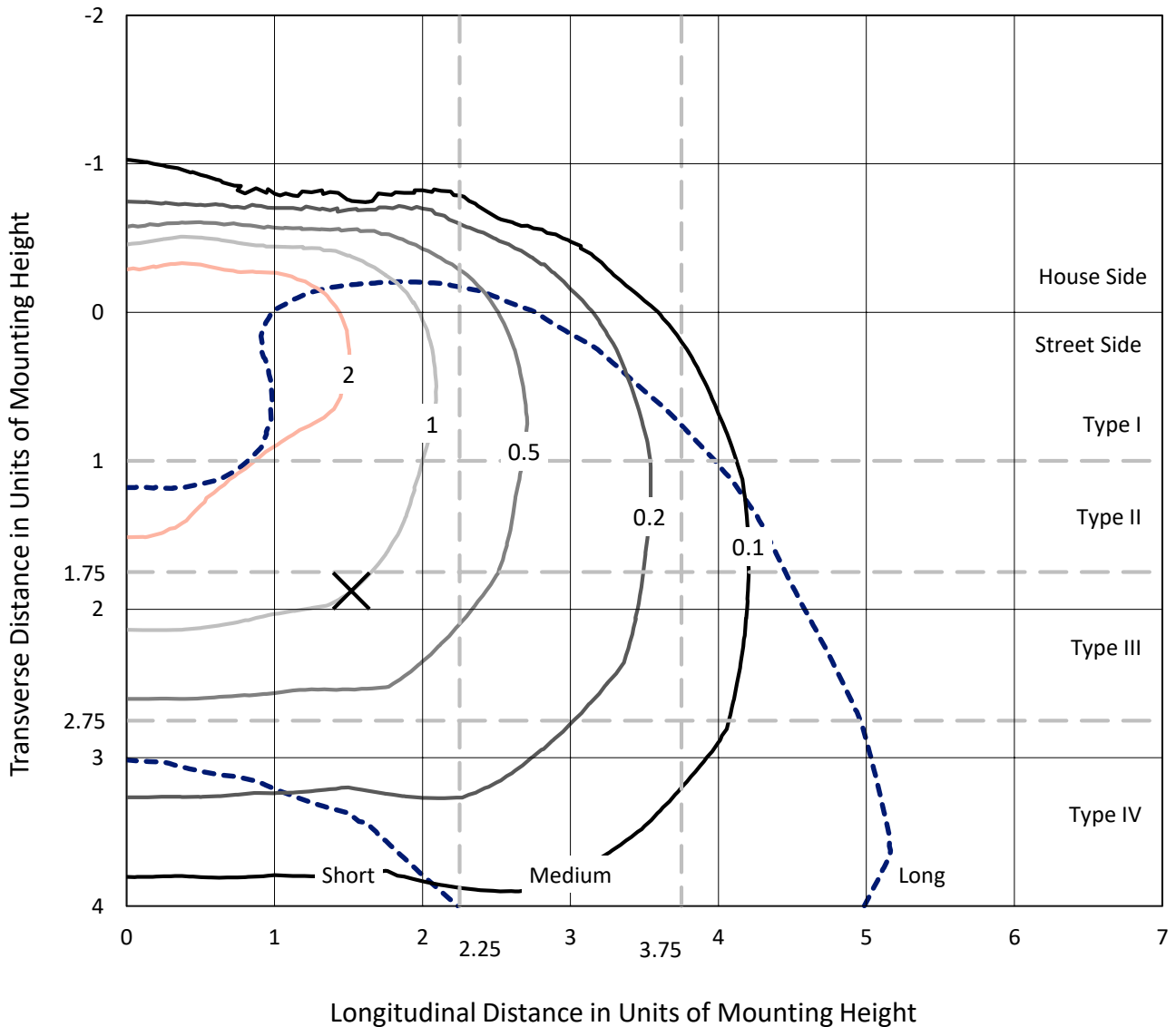
Input Watts (W): 183.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

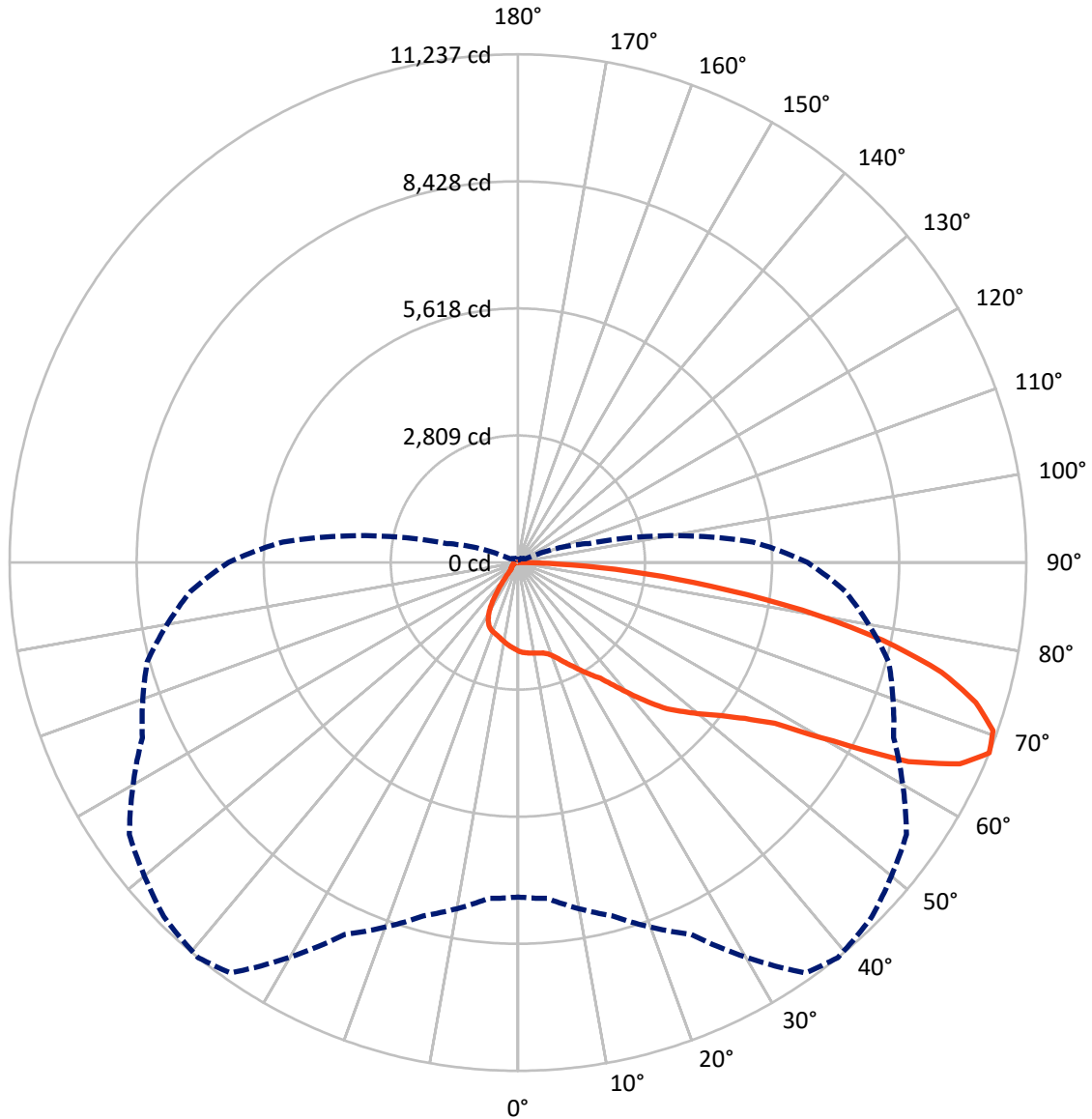
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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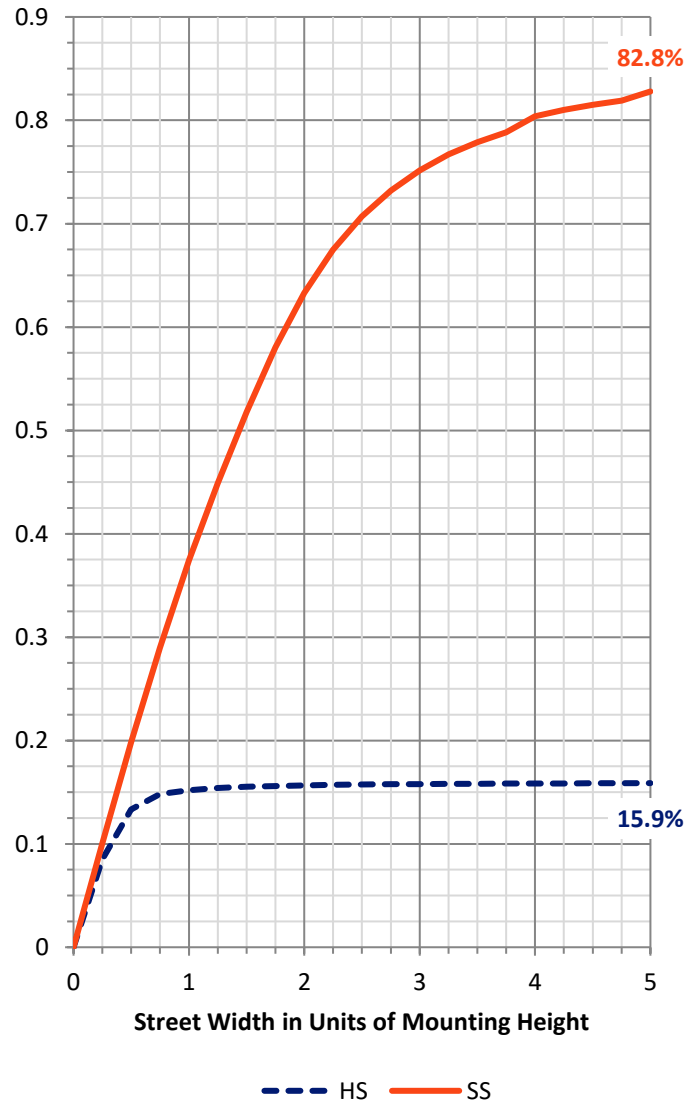
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3003.1	0.0	3003.1
	% Fixture	16.1	0.0	16.1
<b>Street Side</b>	Lumens	15698.9	0.0	15698.9
	% Fixture	83.9	0.0	83.9
<b>Total</b>	Lumens	18702.0	0.0	18702.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	184.9	1.0
10°-20°	550.2	2.9
20°-30°	974.9	5.2
30°-40°	1561.4	8.3
40°-50°	2504.8	13.4
50°-60°	3661.3	19.6
60°-70°	4878.9	26.1
70°-80°	3661.2	19.6
80°-90°	724.4	3.9
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°	18702.0	100.0
0°-180°	18702.0	100.0



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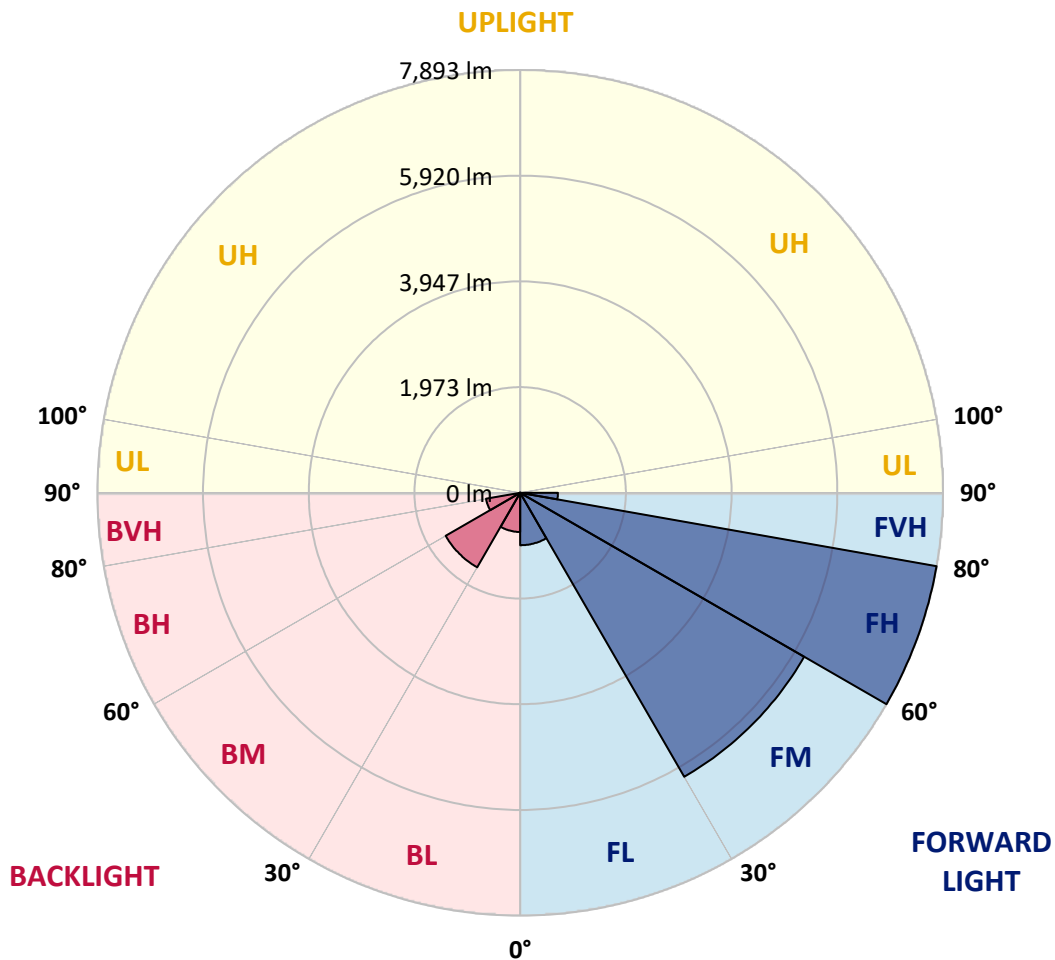
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	978.7	5.2			
FM	(30°-60°)	6121.3	32.7			
FH	(60°-80°)	7893.5	42.2			G4/12000
FVH	(80°-90°)	705.4	3.8			G4/750
BL	(0°-30°)	731.3	3.9	B2/1000		
BM	(30°-60°)	1606.2	8.6	B2/2500		
BH	(60°-80°)	646.6	3.5	B2/1000		G2/1000
BVH	(80°-90°)	19.0	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-G4**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	1958.3	1958.3	1958.3	1958.3	1958.3	1958.3	1958.3	1958.3	1958.3	1958.3	1958.3
2.5°	1960.2	1986.5	1986.5	1979.0	1983.7	1987.4	1959.2	1966.8	1963.9	1963.0	1968.6
5°	1975.2	2004.3	2002.5	1993.1	1996.8	2004.3	1978.0	1989.3	1985.5	1976.2	1978.0
7.5°	1975.2	1999.6	2005.3	1994.9	2012.8	2022.2	1994.0	2004.3	2009.0	2002.5	1995.9
10°	1967.7	1989.3	1996.8	1994.9	2018.4	2033.5	2006.2	2035.4	2039.1	2039.1	2028.8
12.5°	1964.9	1989.3	1999.6	2008.1	2035.4	2051.3	2035.4	2063.5	2082.3	2081.4	2074.8
15°	1966.8	1994.0	2010.0	2024.1	2053.2	2072.9	2066.4	2109.6	2132.1	2138.7	2138.7
17.5°	2013.7	2046.6	2054.1	2069.2	2088.9	2119.0	2110.5	2166.0	2201.7	2213.0	2228.9
20°	2145.3	2170.7	2180.1	2172.5	2181.0	2199.8	2182.9	2236.4	2290.0	2320.1	2346.4
22.5°	2313.5	2332.3	2323.8	2316.3	2311.6	2316.3	2295.6	2331.4	2391.5	2434.7	2479.8
25°	2441.3	2482.6	2476.1	2455.4	2448.8	2454.5	2428.1	2472.3	2527.7	2572.9	2640.5
27.5°	2596.3	2621.7	2603.9	2596.3	2601.0	2600.1	2584.1	2626.4	2677.2	2733.5	2833.1
30°	2764.5	2786.2	2768.3	2760.8	2769.2	2774.9	2757.0	2831.3	2884.8	2945.9	3074.6
32.5°	3040.8	3092.5	3043.6	2945.9	2947.8	2956.2	2958.1	3057.7	3155.5	3203.4	3373.5
35°	3434.5	3475.9	3411.0	3292.6	3145.1	3139.5	3154.5	3303.0	3499.4	3717.4	3916.6
37.5°	3802.0	3862.1	3803.8	3665.7	3486.2	3443.0	3365.0	3541.7	3850.8	4319.7	4567.8
40°	4242.7	4287.8	4172.2	4051.9	3872.4	3811.4	3686.4	3799.1	4222.9	4948.4	5119.4
42.5°	4596.9	4624.2	4528.3	4402.4	4246.4	4200.4	4071.6	4082.0	4620.4	5499.0	5609.0
45°	4924.9	4954.0	4875.1	4768.0	4669.3	4613.8	4519.9	4570.6	5086.5	6079.7	6013.0
47.5°	5173.9	5203.0	5140.1	5064.0	4961.5	4923.9	4925.8	5108.1	5656.9	6544.0	6375.7
50°	5581.7	5570.4	5406.0	5323.3	5243.4	5263.2	5283.8	5543.2	6232.0	6942.4	6711.2
52.5°	6293.1	6237.6	5898.4	5682.3	5583.6	5617.4	5651.3	5996.1	6885.1	7306.0	6968.7
55°	7097.4	7041.0	6752.6	6290.2	6029.0	6083.5	6054.4	6444.3	7433.8	7655.6	7181.1
57.5°	7695.1	7788.1	7678.1	7426.3	6772.3	6700.9	6636.0	6897.3	7877.4	8005.2	7385.0
60°	8214.7	8344.4	8540.8	8472.2	8194.0	8008.0	7413.2	7426.3	8304.0	8247.6	7465.8
62.5°	8722.1	8798.3	9134.7	9208.9	9553.8	9687.2	9083.0	8110.4	8716.5	8415.8	7520.3
65°	8214.7	8312.4	8897.9	9438.2	10552.6	10731.2	10518.8	9348.9	9020.0	8515.4	7457.3
67.5°	7394.4	7453.6	8086.0	9068.9	11075.1	11236.7	11071.3	10485.9	9161.9	8485.3	7261.9
70°	6322.2	6415.2	7036.3	8353.8	11056.3	11142.8	10999.0	10623.1	9108.3	8312.4	6768.5
72.5°	5228.4	5281.0	5807.2	7121.9	10516.0	10588.3	10512.2	10412.6	8927.9	7830.4	5820.4
75°	3929.8	3941.0	4480.4	5624.0	9298.2	9675.9	9768.9	10049.9	8237.3	6712.2	4304.7
77.5°	2634.9	2746.7	3264.5	4298.1	7633.0	8237.3	8678.0	8882.8	6882.2	5009.4	2289.1
80°	1414.2	1442.4	2000.6	3050.2	5800.7	6378.6	6796.7	6800.5	4813.1	2481.7	511.2
82.5°	655.0	627.7	1007.3	1930.1	4018.1	4275.6	4555.6	3816.1	1927.3	423.8	130.6
85°	290.4	306.3	455.7	940.6	2229.9	2488.3	2452.6	1689.5	338.3	114.6	79.9
87.5°	108.1	113.7	176.7	379.6	795.9	868.3	780.9	325.1	44.2	40.4	24.4
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°	1958.3	1958.3	1958.3	1958.3	1958.3	1958.3	1958.3	1958.3	1958.3	1958.3	1958.3
2.5°	1962.1	1962.1	1960.2	1934.8	1929.2	1917.0	1906.6	1914.1	1905.7	1911.3	1905.7
5°	1970.5	1965.8	1954.5	1924.5	1910.4	1883.1	1862.5	1867.1	1855.9	1855.9	1854.9
7.5°	1990.2	1980.9	1961.1	1913.2	1886.9	1847.4	1815.5	1805.1	1793.9	1780.7	1778.8
10°	2022.2	2009.0	1982.7	1917.0	1866.2	1813.6	1758.1	1736.5	1708.3	1687.7	1683.9
12.5°	2066.4	2046.6	2010.9	1931.0	1864.3	1780.7	1706.5	1664.2	1630.3	1600.3	1593.7
15°	2130.3	2110.5	2068.2	1959.2	1865.3	1749.7	1652.0	1581.5	1523.2	1495.0	1496.0
17.5°	2223.3	2209.2	2144.4	2018.4	1883.1	1733.7	1606.9	1495.0	1404.8	1357.8	1351.3
20°	2342.6	2333.2	2254.3	2096.4	1924.5	1736.5	1558.0	1402.9	1270.5	1168.0	1145.5
22.5°	2481.7	2467.6	2370.8	2164.1	1956.4	1729.0	1504.4	1301.5	1102.2	968.8	942.5
25°	2636.8	2629.2	2477.9	2223.3	1960.2	1697.1	1427.4	1169.9	919.9	777.1	754.6
27.5°	2835.0	2790.9	2574.7	2255.2	1951.7	1634.1	1317.4	989.5	731.1	632.4	608.0
30°	3052.1	2962.8	2668.7	2279.7	1910.4	1533.6	1160.5	780.9	544.1	456.7	444.5
32.5°	3292.6	3159.2	2757.0	2277.8	1837.1	1378.5	956.6	542.2	367.4	331.7	319.5
35°	3727.7	3501.3	2863.2	2246.8	1714.0	1194.3	675.6	353.3	272.5	250.9	248.1
37.5°	4331.9	3947.6	3006.0	2187.6	1555.2	980.1	440.7	241.5	233.0	234.0	233.0
40°	4827.2	4445.6	3204.3	2098.3	1355.0	700.1	264.1	215.2	219.9	222.7	223.6
42.5°	5312.0	4851.6	3449.6	1986.5	1145.5	454.8	214.2	205.8	202.0	206.7	208.6
45°	5702.0	5205.8	3680.7	1855.9	900.2	268.7	207.7	190.8	184.2	186.1	188.9
47.5°	6014.0	5487.7	3819.8	1703.6	657.8	203.0	202.0	177.6	168.2	166.3	165.4
50°	6308.1	5729.2	3909.1	1519.5	419.1	195.5	187.0	162.6	151.3	149.4	149.4
52.5°	6508.2	5887.1	3939.2	1301.5	250.0	190.8	176.7	150.3	135.3	138.1	140.0
55°	6703.7	6046.9	3877.1	1017.7	191.7	178.5	165.4	135.3	123.1	134.4	138.1
57.5°	6796.7	6070.4	3737.1	707.6	186.1	161.6	149.4	121.2	111.8	118.4	118.4
60°	6871.9	6054.4	3541.7	448.2	181.4	150.3	136.3	109.9	98.7	94.9	92.1
62.5°	6822.1	5990.5	3148.9	292.2	168.2	137.2	124.0	101.5	85.5	75.2	74.2
65°	6715.9	5765.0	2513.7	230.2	156.0	130.6	112.8	91.1	75.2	63.0	62.0
67.5°	6403.0	5216.2	1626.6	190.8	149.4	125.9	104.3	84.6	66.7	54.5	53.6
70°	5653.1	4213.5	499.0	171.0	155.0	121.2	102.4	77.1	59.2	47.9	46.0
72.5°	4470.1	2815.3	185.1	141.9	133.4	116.5	99.6	69.5	50.7	40.4	38.5
75°	2879.2	919.9	156.9	109.9	113.7	110.9	92.1	63.9	43.2	32.9	31.9
77.5°	815.6	192.6	142.8	80.8	100.5	107.1	80.8	53.6	38.5	28.2	27.3
80°	171.0	137.2	130.6	57.3	75.2	69.5	54.5	41.3	36.6	24.4	24.4
82.5°	111.8	109.0	111.8	39.5	49.8	50.7	43.2	35.7	31.9	22.6	22.6
85°	78.9	99.6	53.6	28.2	23.5	21.6	25.4	31.0	28.2	18.8	18.8
87.5°	27.3	16.0	11.3	11.3	10.3	10.3	12.2	14.1	15.0	15.0	14.1
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)