

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: P510158

Luminaire Tested: **VERD-M-CA4-220-722-U-T3-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510158  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VERD-M-CA4-220-722-U-T3-HSS  
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE  
(4) 70 CRI, 2200K, 1000mA LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 23748 lumens  
Efficiency: N/A  
Efficacy: 106.7 lumens/watt  
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G4

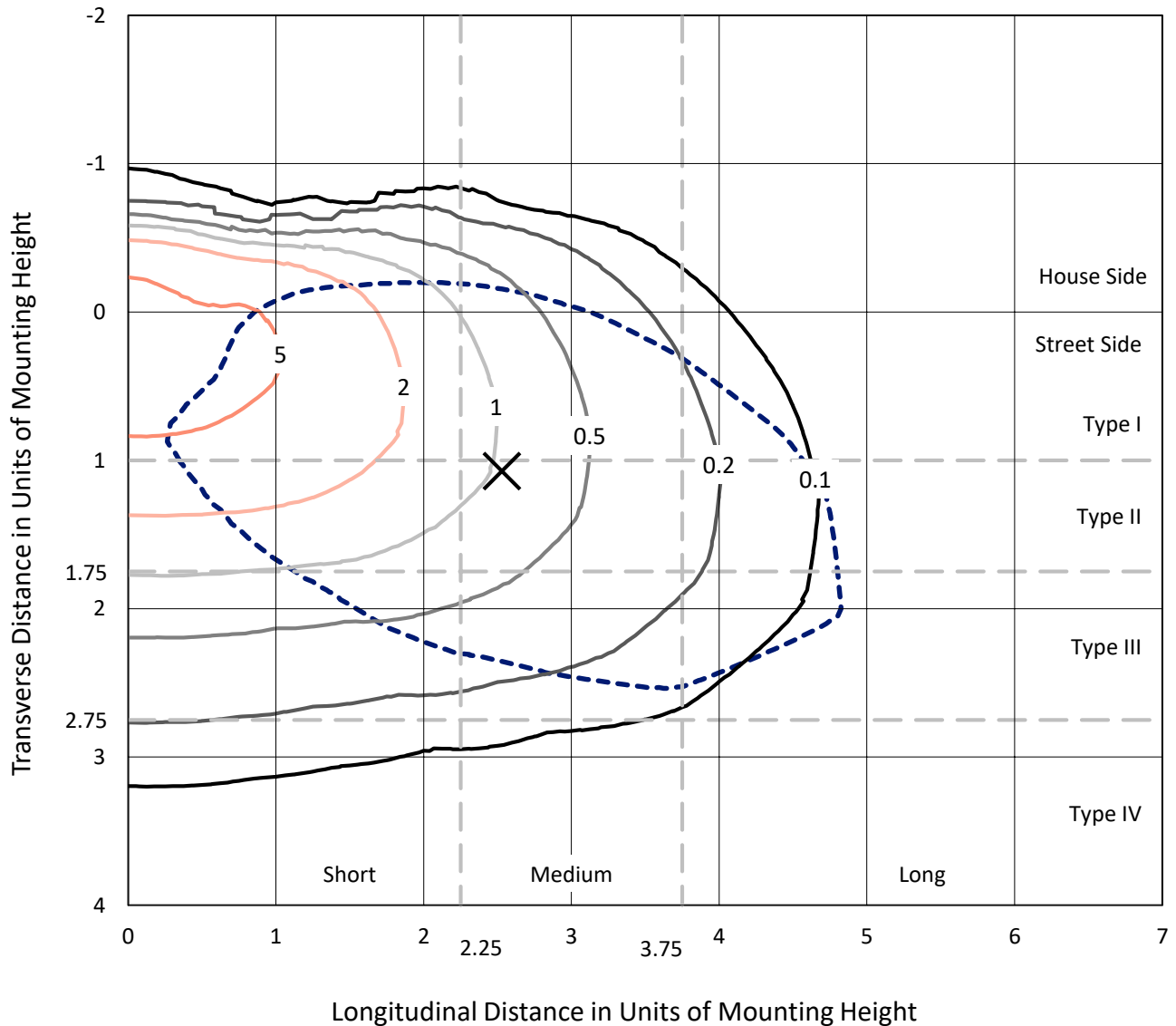
Input Watts (W): 222.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P510158  
 CATALOG NUMBER: VERD-M-CA4-220-722-U-T3-HSS

### Iso-Footcandle Lines of Horizontal Illumination

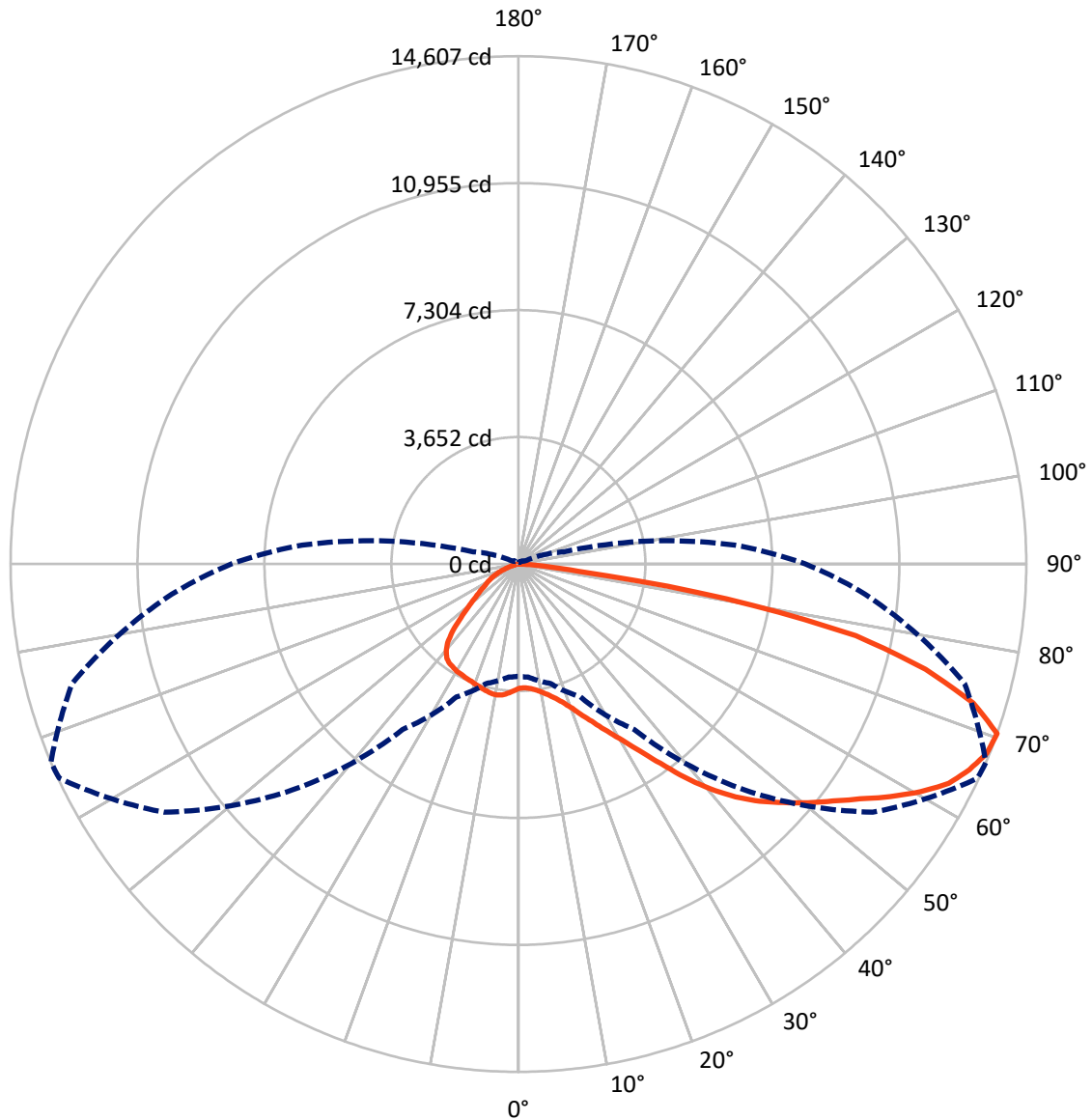
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.8 fc  
 Type III - Medium - N/A

REPORT NUMBER: P510158  
CATALOG NUMBER: VERD-M-CA4-220-722-U-T3-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P510158  
 CATALOG NUMBER: VERD-M-CA4-220-722-U-T3-HSS

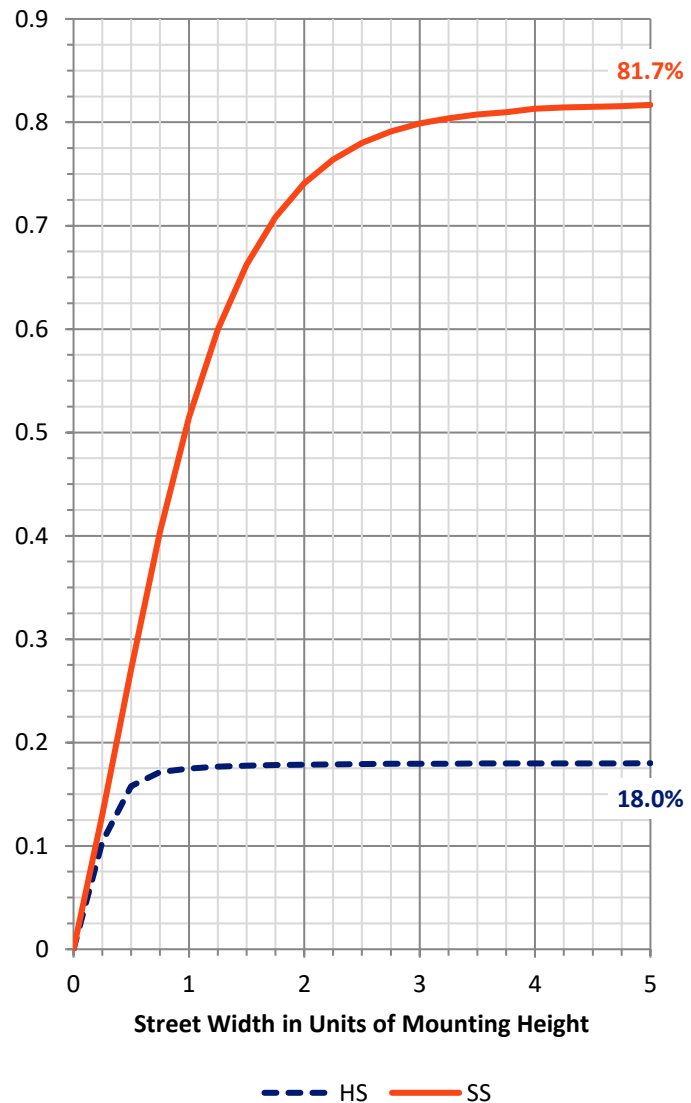
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4327.1	0.0	4327.1
	% Fixture	18.2	0.0	18.2
<b>Street Side</b>	Lumens	19420.9	0.0	19420.9
	% Fixture	81.8	0.0	81.8
<b>Total</b>	Lumens	23748.0	0.0	23748.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	355.9	1.5
10°-20°	1110.3	4.7
20°-30°	1926.5	8.1
30°-40°	2861.3	12.0
40°-50°	3925.5	16.5
50°-60°	4820.7	20.3
60°-70°	5168.3	21.8
70°-80°	3280.9	13.8
80°-90°	298.6	1.3
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°	23748.0	100.0
0°-180°	23748.0	100.0



REPORT NUMBER: P510158

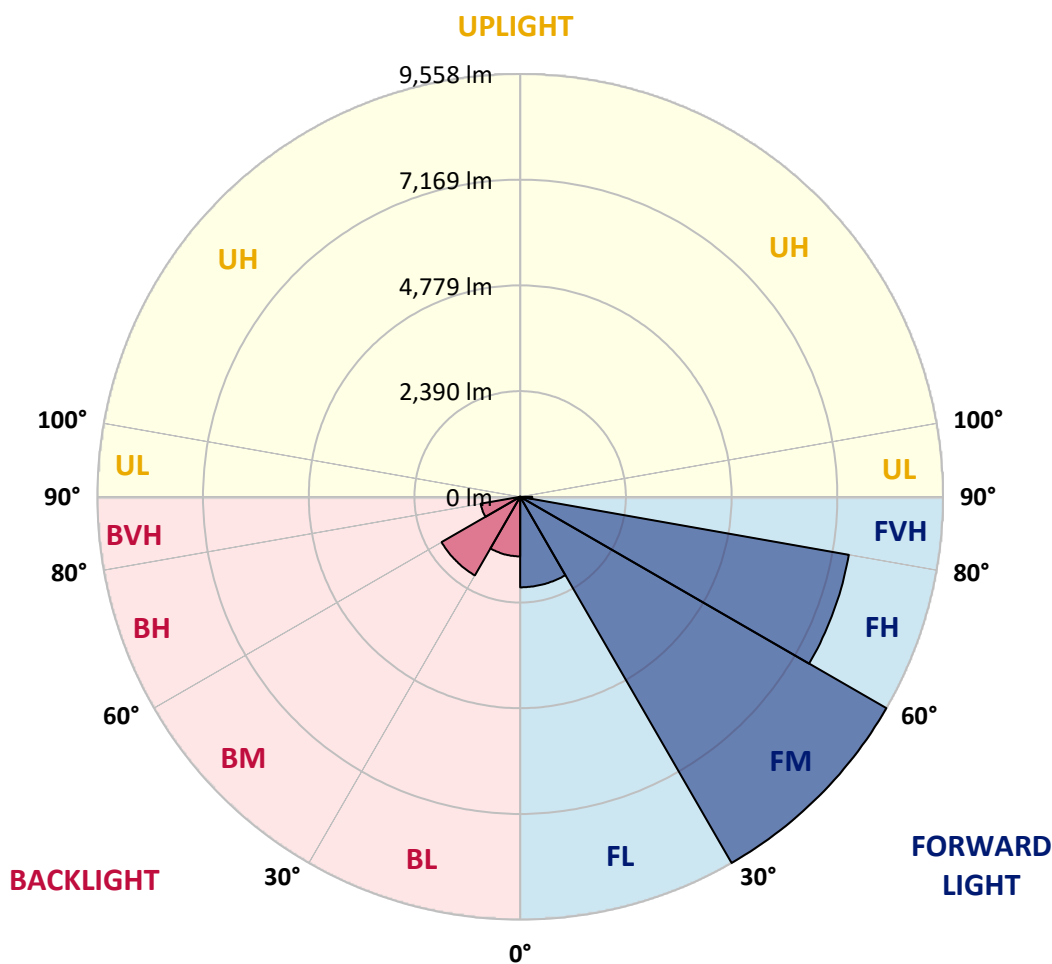
CATALOG NUMBER: VERD-M-CA4-220-722-U-T3-HSS

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2046.1	8.6			
FM	(30°-60°)	9558.3	40.2			
FH	(60°-80°)	7544.2	31.8			G4/12000
FVH	(80°-90°)	272.3	1.1			G3/500
BL	(0°-30°)	1346.7	5.7	B3/2500		
BM	(30°-60°)	2049.1	8.6	B2/2500		
BH	(60°-80°)	905.1	3.8	B2/1000		G2/1000
BVH	(80°-90°)	26.2	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type III Medium





REPORT NUMBER: P510158

CATALOG NUMBER: VERD-M-CA4-220-722-U-T3-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	3572.2	3572.2	3572.2	3572.2	3572.2	3572.2	3572.2	3572.2	3572.2	3572.2	3572.2
2.5°	3540.1	3573.4	3553.8	3551.6	3574.5	3552.7	3567.6	3564.2	3561.9	3565.3	3589.5
5°	3633.1	3672.2	3645.8	3637.7	3650.4	3611.3	3607.9	3599.8	3597.5	3598.7	3633.1
7.5°	3763.0	3808.9	3798.6	3777.9	3771.0	3706.7	3695.2	3666.5	3657.3	3659.6	3694.0
10°	3967.5	4013.4	3992.8	3946.8	3918.1	3844.5	3803.2	3766.4	3748.0	3750.3	3787.1
12.5°	4229.5	4273.1	4238.7	4154.8	4138.7	4020.3	3956.0	3877.9	3865.2	3846.8	3885.9
15°	4476.5	4514.4	4498.3	4420.2	4376.5	4236.4	4118.0	4021.5	4010.0	3992.8	3991.6
17.5°	4750.0	4787.9	4758.0	4700.5	4643.1	4476.5	4349.0	4224.9	4195.0	4180.1	4126.1
20°	5041.8	5101.5	5095.8	5048.7	4979.8	4784.4	4604.0	4463.9	4431.7	4404.1	4290.4
22.5°	5342.8	5421.0	5403.7	5378.5	5349.7	5130.3	4920.0	4758.0	4733.9	4675.3	4496.0
25°	5676.0	5730.1	5717.4	5730.1	5710.5	5516.3	5286.5	5088.9	5056.7	5001.6	4727.0
27.5°	5998.9	6055.2	6077.0	6050.6	6063.3	5924.2	5651.9	5475.0	5444.0	5342.8	5005.0
30°	6290.8	6360.9	6391.9	6403.4	6445.9	6302.3	6101.2	5886.3	5876.0	5772.6	5371.6
32.5°	6524.0	6602.1	6678.0	6727.4	6795.2	6732.0	6532.1	6402.2	6403.4	6310.3	5921.9
35°	6692.9	6782.5	6892.8	7023.8	7166.3	7139.9	7021.5	7023.8	7042.2	7073.2	6624.0
37.5°	6880.2	6952.6	7082.4	7265.1	7482.3	7537.4	7521.3	7704.0	7793.7	7848.8	7241.0
40°	6991.6	7065.2	7227.2	7473.1	7789.1	7921.2	8069.4	8390.0	8507.2	8449.7	7768.4
42.5°	6868.7	6934.2	7215.7	7640.8	8040.7	8340.6	8606.0	9074.8	9159.8	8972.5	8213.0
45°	6709.0	6794.0	7090.5	7686.8	8263.6	8751.9	9164.4	9671.1	9734.3	9468.9	8606.0
47.5°	6578.0	6652.7	6998.5	7637.4	8469.3	9173.6	9655.0	10234.1	10250.2	9922.7	9012.7
50°	6410.3	6501.0	6861.8	7576.5	8593.4	9547.0	10104.3	10759.2	10794.8	10392.7	9357.4
52.5°	6234.5	6322.9	6696.4	7476.5	8683.0	9857.2	10570.8	11317.6	11321.1	10890.2	9725.1
55°	5974.8	6069.0	6482.6	7331.8	8710.6	10062.9	11039.6	11887.5	11923.1	11394.6	10058.3
57.5°	5700.2	5780.6	6225.3	7106.5	8608.3	10257.1	11521.0	12520.6	12618.3	11963.4	10344.4
60°	5335.9	5416.4	5886.3	6811.3	8391.1	10475.4	12072.5	13283.6	13293.9	12424.1	10552.4
62.5°	4944.1	5014.2	5446.2	6348.2	8054.5	10559.3	12545.9	13893.7	13892.5	12834.3	10655.8
65°	4478.8	4507.5	4947.6	5779.5	7531.7	10436.3	12755.0	14295.8	14256.8	13129.6	10621.3
67.5°	3927.3	3958.3	4291.5	5072.8	6773.3	9956.1	12662.0	14490.0	14529.1	13392.7	10472.0
70°	3228.7	3265.5	3556.1	4215.7	5807.0	9189.7	12443.6	14573.9	14607.2	13287.0	10011.2
72.5°	2383.0	2432.4	2610.5	3137.9	4407.6	7721.3	11432.5	13655.8	13674.2	12404.6	9051.8
75°	1479.9	1570.7	1738.4	2085.4	2859.9	5415.2	9772.2	12208.1	12093.2	11064.8	7490.3
77.5°	591.7	606.7	690.5	976.6	1394.9	2819.6	7083.6	9704.4	9923.9	8853.0	5357.8
80°	344.7	342.4	361.9	455.0	598.6	964.0	2755.3	5444.0	6067.9	4862.6	2410.6
82.5°	278.1	267.7	267.7	291.8	287.2	405.6	903.1	1590.2	1744.2	1547.7	686.0
85°	145.9	142.5	116.0	143.6	143.6	202.2	347.0	450.4	475.7	414.8	257.4
87.5°	36.8	36.8	36.8	44.8	35.6	42.5	58.6	71.2	73.5	59.7	37.9
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: P510158

CATALOG NUMBER: VERD-M-CA4-220-722-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3572.2	3572.2	3572.2	3572.2	3572.2	3572.2	3572.2	3572.2	3572.2	3572.2	3572.2
2.5°	3598.7	3609.0	3649.2	3643.5	3650.4	3650.4	3661.9	3674.5	3712.4	3690.6	3681.4
5°	3640.0	3660.7	3711.3	3729.6	3757.2	3760.7	3783.6	3791.7	3833.1	3810.1	3810.1
7.5°	3719.3	3743.4	3790.5	3797.4	3810.1	3788.2	3794.0	3768.7	3796.3	3768.7	3769.9
10°	3808.9	3825.0	3857.2	3811.2	3791.7	3740.0	3728.5	3666.5	3688.3	3652.7	3643.5
12.5°	3895.1	3889.4	3865.2	3783.6	3729.6	3644.6	3609.0	3525.1	3520.5	3473.4	3464.2
15°	3976.7	3936.5	3858.3	3731.9	3640.0	3521.7	3436.7	3344.7	3312.6	3258.6	3254.0
17.5°	4076.6	4007.7	3868.7	3682.5	3532.0	3359.7	3239.0	3135.6	3069.0	3019.6	3018.4
20°	4198.4	4092.7	3873.3	3626.2	3420.6	3200.0	3031.1	2900.1	2804.7	2742.7	2741.5
22.5°	4351.3	4207.6	3915.8	3561.9	3278.1	3006.9	2796.7	2570.3	2439.3	2312.9	2290.0
25°	4530.5	4323.7	3952.6	3528.6	3137.9	2805.9	2493.3	2162.4	1959.0	1857.9	1820.0
27.5°	4782.1	4516.7	4006.6	3465.4	3005.8	2557.7	2102.7	1741.9	1497.1	1411.0	1411.0
30°	5072.8	4760.3	4107.7	3427.5	2821.9	2209.5	1674.1	1286.9	1059.4	929.5	926.1
32.5°	5516.3	5051.0	4199.6	3345.9	2599.0	1830.4	1211.0	829.6	646.9	566.5	561.9
35°	6154.0	5604.8	4347.8	3264.3	2276.2	1362.7	768.7	475.7	368.8	322.9	320.6
37.5°	6767.6	6132.2	4667.2	3102.3	1817.7	856.0	426.3	274.6	225.2	219.5	217.2
40°	7199.6	6587.2	4892.4	2855.3	1291.5	453.9	247.0	198.8	195.3	193.0	191.9
42.5°	7670.7	6925.0	5052.1	2540.4	766.4	263.1	201.1	179.2	173.5	171.2	171.2
45°	8053.3	7250.2	5082.0	2090.0	386.1	217.2	183.8	163.2	156.3	160.9	162.0
47.5°	8406.1	7557.0	4980.9	1571.8	260.8	202.2	172.3	151.7	147.1	158.6	158.6
50°	8707.1	7816.6	4748.8	1173.1	244.7	190.7	160.9	140.2	139.0	149.4	150.5
52.5°	9007.0	8025.7	4383.4	885.9	232.1	178.1	149.4	129.8	126.4	133.3	134.4
55°	9244.8	8100.4	4112.3	659.5	222.9	166.6	139.0	119.5	111.5	110.3	112.6
57.5°	9375.8	8034.9	3846.8	484.9	212.6	156.3	128.7	105.7	93.1	93.1	93.1
60°	9378.1	7955.7	3563.0	383.8	201.1	144.8	117.2	90.8	78.1	75.8	75.8
62.5°	9352.8	7814.3	3150.6	333.2	188.4	135.6	102.3	77.0	67.8	64.3	64.3
65°	9241.4	7547.8	2650.7	285.0	173.5	128.7	87.3	68.9	60.9	56.3	56.3
67.5°	8894.4	7048.0	2040.6	248.2	159.7	113.8	79.3	62.0	54.0	49.4	48.3
70°	8257.8	6240.2	1346.6	211.4	145.9	101.1	72.4	56.3	48.3	43.7	42.5
72.5°	7190.4	5078.6	676.8	179.2	125.2	93.1	65.5	49.4	41.4	36.8	36.8
75°	5634.7	3525.1	368.8	142.5	98.8	81.6	57.4	41.4	35.6	32.2	32.2
77.5°	3455.0	1747.6	251.6	110.3	74.7	66.6	46.0	34.5	31.0	29.9	29.9
80°	1260.5	572.2	168.9	78.1	56.3	51.7	36.8	29.9	28.7	28.7	28.7
82.5°	455.0	290.7	113.8	52.9	35.6	39.1	29.9	25.3	24.1	25.3	26.4
85°	187.3	127.5	41.4	29.9	19.5	20.7	18.4	17.2	18.4	19.5	19.5
87.5°	28.7	25.3	14.9	14.9	11.5	10.3	8.0	9.2	11.5	13.8	13.8
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)