

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: P271299

Luminaire Tested: **XNV2-AF-02-LED-U-AFL-7027-1200-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P271299  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24283)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: XNV2-AF-02-LED-U-AFL-7027-1200-HSS  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9646.9 lumens  
Efficiency: N/A  
Efficacy: 75.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B1 - U0 - G1

Input Watts (W): 128  
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

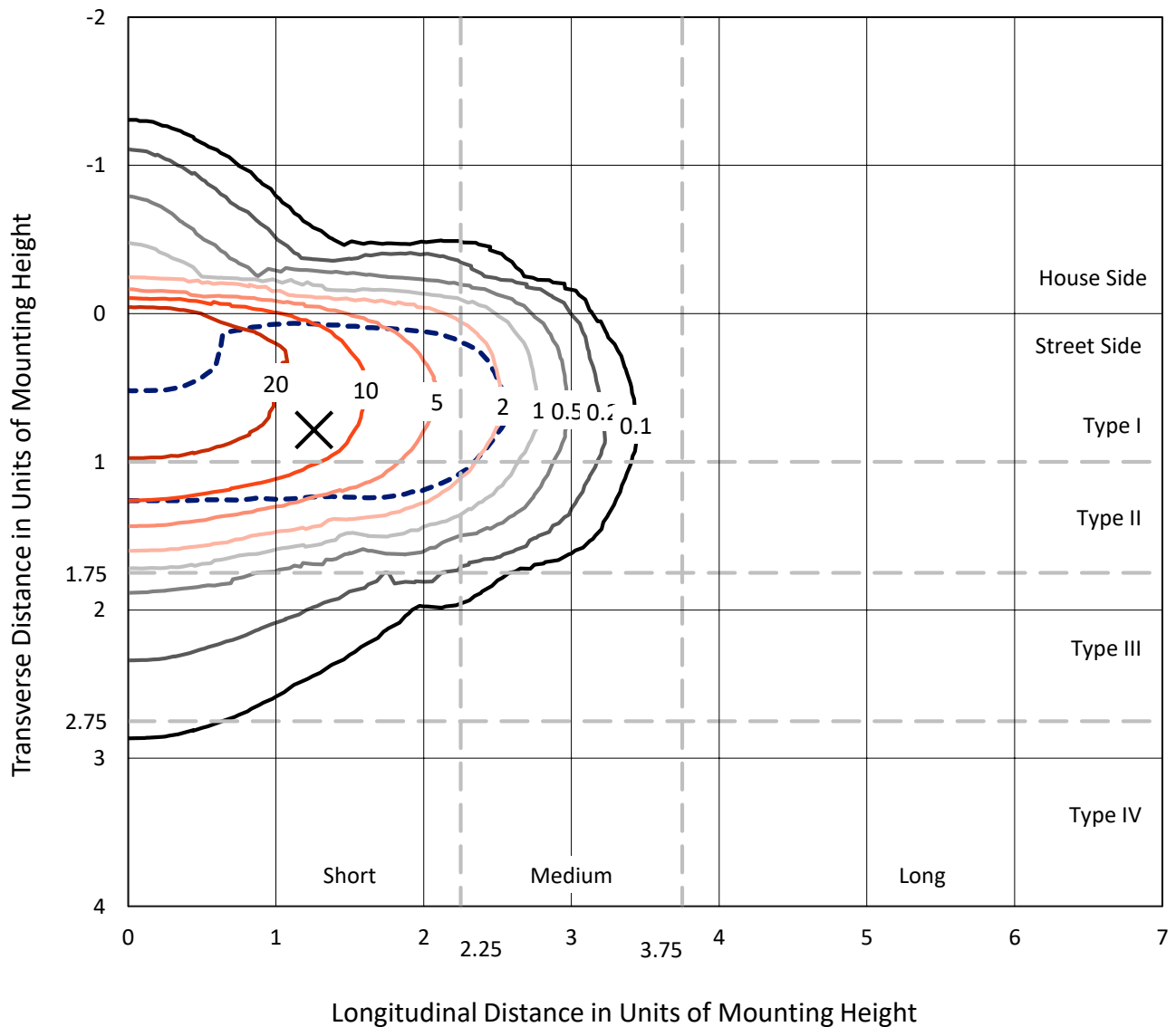


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

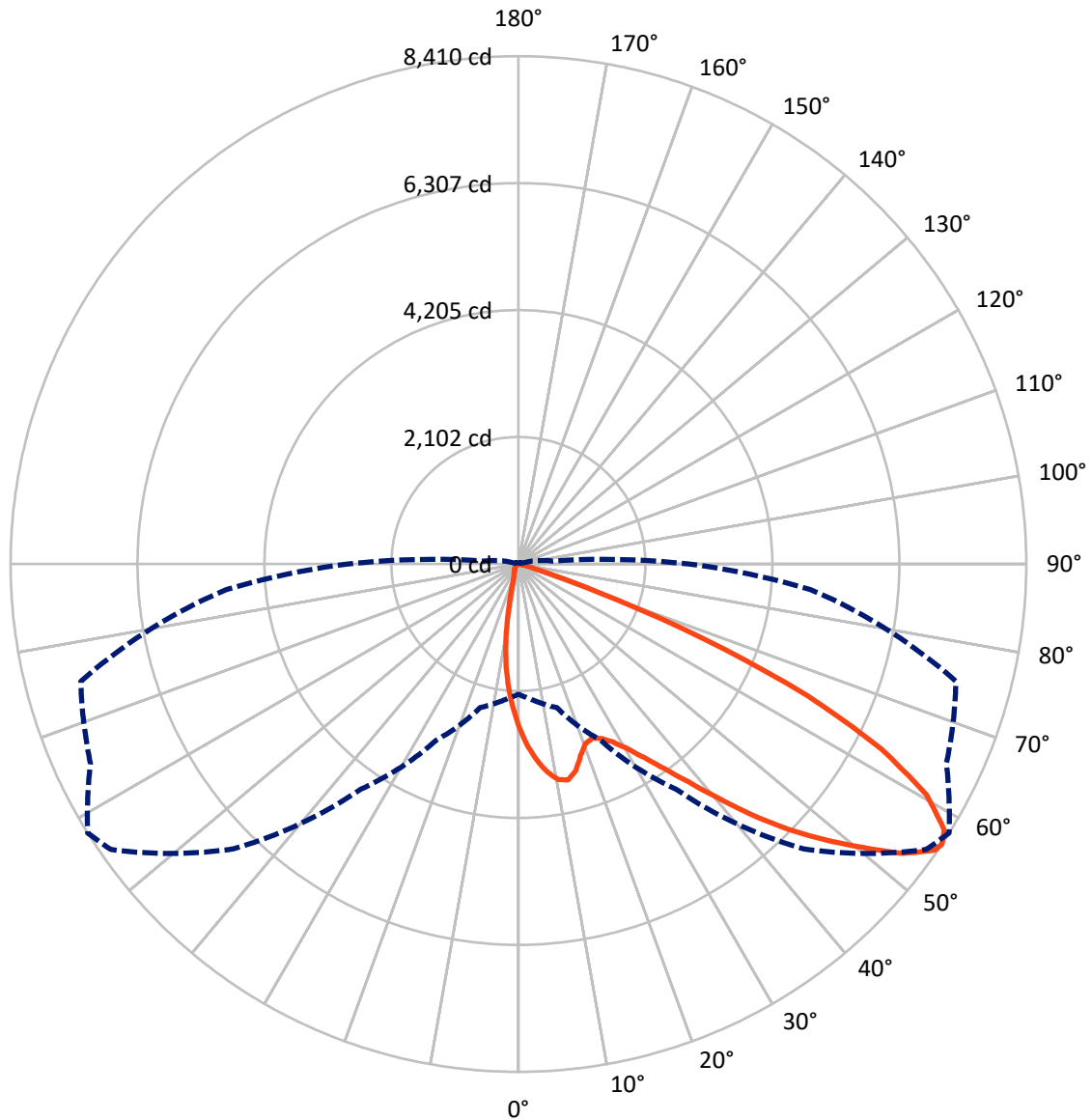


Based on 10 foot mounting height. Maximum calculated value = 33.9 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral      - - - Horizontal Cone Through 56-Deg Vertical

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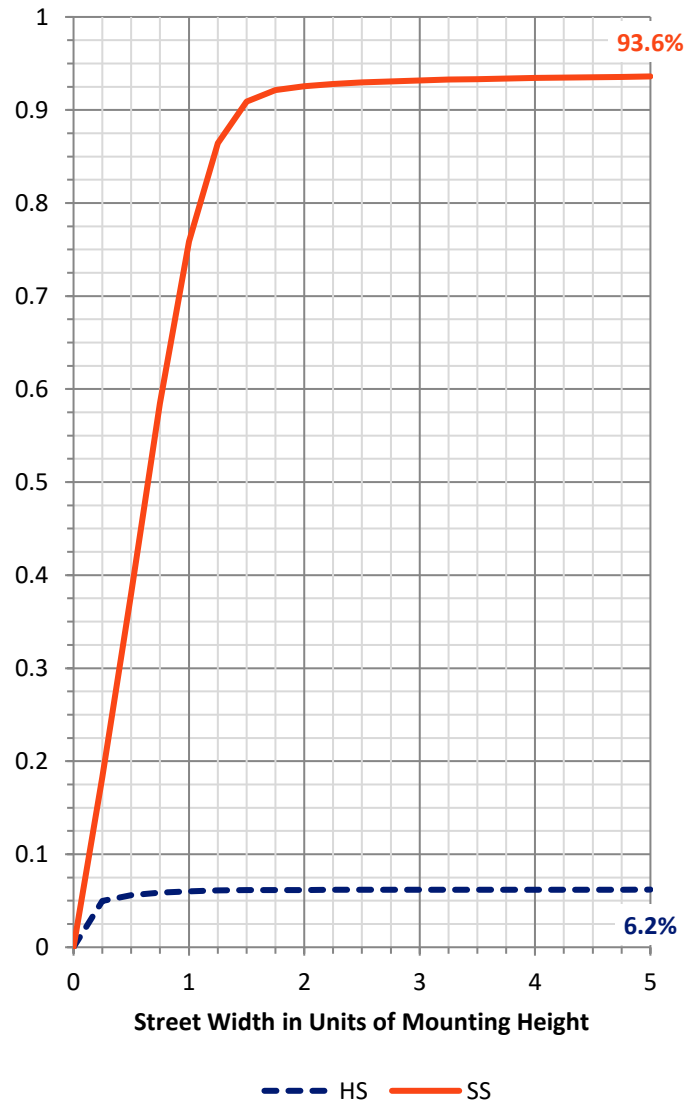
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	602.1	0.0	602.1
	% Fixture	6.2	0.0	6.2
<b>Street Side</b>	Lumens	9044.8	0.0	9044.8
	% Fixture	93.8	0.0	93.8
<b>Total</b>	Lumens	9646.9	0.0	9646.9
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	233.0	2.4
10°-20°	542.2	5.6
20°-30°	912.3	9.5
30°-40°	1562.2	16.2
40°-50°	2357.3	24.4
50°-60°	2450.4	25.4
60°-70°	1375.6	14.3
70°-80°	188.5	2.0
80°-90°	25.5	0.3
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°	9646.9	100.0
0°-180°	9646.9	100.0

**Coefficient of Utilization**



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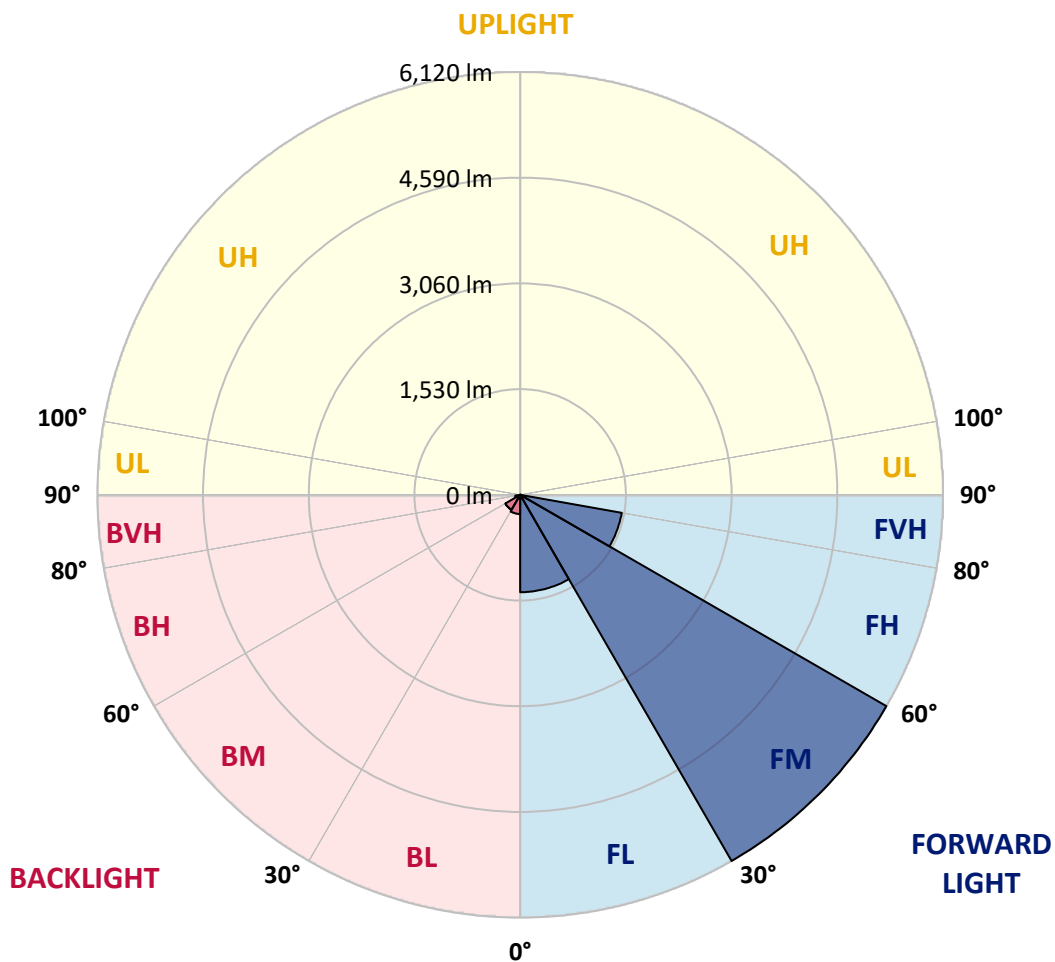
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1409.6	14.6			
FM (30°-60°)	6120.4	63.4			
FH (60°-80°)	1492.7	15.5			G1/1800
FVH (80°-90°)	22.0	0.2			G1/100
BL (0°-30°)	277.8	2.9	B1/500		
BM (30°-60°)	249.4	2.6	B1/1000		
BH (60°-80°)	71.4	0.7	B0/110		G0/110
BVH (80°-90°)	3.5	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-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	2731.3	2731.3	2731.3	2731.3	2731.3	2731.3	2731.3	2731.3	2731.3	2731.3	2731.3
2.5°	3286.3	3266.4	3245.8	3207.6	3172.3	3117.7	3042.6	3024.2	2965.5	2868.3	2777.6
5°	3569.7	3566.0	3552.0	3521.0	3482.8	3416.6	3332.0	3275.3	3184.0	3030.9	2856.5
7.5°	3401.8	3432.8	3483.5	3555.8	3604.3	3597.6	3532.9	3483.5	3393.0	3184.0	2933.8
10°	2867.5	2873.4	2943.3	3094.9	3334.9	3558.6	3643.3	3630.1	3546.9	3318.0	3001.4
12.5°	2679.0	2682.8	2699.0	2747.6	2903.6	3215.7	3599.1	3668.3	3661.8	3446.0	3073.6
15°	2693.7	2696.1	2700.5	2715.8	2760.0	2916.8	3375.4	3551.3	3735.3	3567.4	3144.2
17.5°	2810.1	2808.6	2794.6	2780.0	2793.9	2845.4	3147.2	3332.7	3719.8	3669.8	3202.4
20°	3036.8	3044.1	2997.0	2931.6	2897.8	2899.9	3034.6	3173.7	3632.9	3749.3	3245.8
22.5°	3355.4	3360.6	3283.3	3169.9	3070.6	3020.6	3058.1	3131.8	3532.9	3822.8	3281.1
25°	3736.1	3736.1	3627.9	3466.6	3312.8	3203.1	3170.7	3198.8	3494.5	3906.0	3316.5
27.5°	4146.7	4161.4	4020.2	3808.9	3605.7	3445.3	3343.8	3338.6	3524.1	4010.6	3356.2
30°	4593.5	4606.7	4439.0	4180.5	3939.8	3734.6	3578.5	3544.6	3636.7	4151.1	3414.4
32.5°	5038.1	5049.1	4863.7	4600.1	4319.7	4078.2	3873.0	3819.1	3839.0	4356.5	3499.7
35°	5603.3	5605.6	5370.6	5057.2	4757.7	4474.3	4214.4	4161.4	4139.4	4615.5	3622.7
37.5°	6053.0	6035.4	5886.7	5590.1	5246.3	4950.4	4645.0	4575.7	4522.7	4979.8	3813.2
40°	6159.0	6159.0	6137.0	6047.7	5774.8	5489.9	5194.1	5091.1	4973.9	5409.0	4069.4
42.5°	5883.0	5900.6	6046.3	6239.9	6242.1	6059.5	5770.4	5683.4	5477.4	5897.7	4349.1
45°	5265.4	5270.5	5620.2	6142.8	6497.5	6602.1	6388.7	6268.6	5983.2	6405.5	4605.3
47.5°	5043.2	5059.3	5208.1	5846.9	6516.7	7041.5	6981.8	6817.0	6451.2	6869.2	4844.5
50°	4701.6	4721.5	4903.3	5411.2	6344.5	7323.3	7549.3	7372.7	6877.3	7255.6	4963.0
52.5°	3884.7	3915.6	4172.4	4834.9	5913.9	7335.1	8068.9	7962.9	7313.8	7462.5	4948.9
55°	2673.1	2696.1	2995.6	3774.3	5045.4	6975.2	8292.7	8365.6	7703.1	7508.8	4881.3
56°	2156.6	2241.9	2461.3	3215.7	4550.8	6669.0	8241.2	8409.8	7818.7	7501.4	4851.8
57.5°	1425.7	1441.9	1681.1	2330.3	3654.3	6004.5	8008.6	8315.5	7967.3	7463.9	4830.5
60°	670.6	678.0	764.0	1075.4	1977.7	4375.6	7252.6	7762.1	8021.9	7385.1	4829.7
62.5°	437.1	438.6	449.0	513.0	808.8	2383.3	6012.5	6745.6	7570.6	7376.3	4815.8
65°	360.0	363.6	351.1	359.2	423.2	898.7	4240.9	5258.9	6511.5	7168.7	4658.3
67.5°	317.2	318.0	301.0	291.5	309.8	394.4	2136.7	3317.3	4870.3	6091.2	3836.8
70°	289.3	288.5	269.4	247.4	248.0	262.0	696.2	1377.8	2694.6	3616.8	2203.0
72.5°	256.8	258.4	247.4	216.4	206.2	185.5	262.0	371.7	917.1	1161.4	580.8
75°	225.2	222.3	211.2	191.3	172.2	124.3	131.7	158.2	239.2	237.1	125.1
77.5°	170.8	167.9	173.0	163.4	134.7	86.9	72.1	82.5	108.2	100.8	50.8
80°	130.3	128.7	117.8	139.9	122.9	65.4	49.2	50.8	58.8	53.7	25.1
82.5°	94.2	93.5	89.0	86.1	78.1	47.8	37.5	39.7	44.1	37.5	18.3
85°	36.0	36.0	69.9	58.8	53.7	32.3	26.5	28.7	33.9	27.2	12.4
87.5°	5.8	5.8	47.2	38.9	24.3	16.2	16.9	18.3	19.9	16.2	9.5
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°	2731.3	2731.3	2731.3	2731.3	2731.3	2731.3	2731.3	2731.3	2731.3	2731.3	2731.3
2.5°	2724.0	2674.7	2566.5	2462.0	2370.6	2270.6	2219.8	2161.0	2138.9	2094.7	2099.1
5°	2752.0	2648.9	2431.8	2203.0	1993.1	1779.7	1628.1	1485.3	1405.8	1327.1	1327.1
7.5°	2780.7	2623.2	2287.5	1921.7	1568.4	1202.7	943.6	736.0	620.5	543.1	541.0
10°	2800.6	2590.1	2123.5	1595.7	1074.6	619.7	374.0	294.5	265.7	253.2	252.5
12.5°	2826.2	2556.9	1936.4	1211.5	597.0	294.5	233.3	220.9	215.7	212.7	212.7
15°	2848.3	2509.9	1709.7	814.8	313.6	220.9	201.0	196.5	195.8	195.0	195.8
17.5°	2853.6	2442.9	1438.1	476.9	227.5	192.9	184.1	180.3	180.3	179.7	179.7
20°	2841.8	2354.5	1137.9	294.5	196.5	177.3	167.9	163.4	162.7	162.7	162.7
22.5°	2817.4	2241.9	841.3	223.0	178.9	163.4	150.8	146.5	146.5	147.2	148.0
25°	2787.4	2108.7	577.8	192.1	165.6	148.7	136.2	131.7	133.2	134.7	135.5
27.5°	2749.1	1949.7	378.2	166.4	148.0	133.9	122.9	120.0	122.9	125.9	127.3
30°	2710.7	1775.3	256.1	144.3	128.1	117.8	111.1	110.4	114.9	121.5	122.2
32.5°	2685.8	1596.4	193.6	129.5	112.6	103.8	100.8	102.2	109.0	116.3	117.8
35°	2683.4	1421.9	164.8	117.8	102.2	94.2	92.7	97.1	104.6	110.4	111.8
37.5°	2718.1	1258.5	149.4	109.0	94.2	86.1	83.9	91.9	98.6	104.6	106.0
40°	2788.0	1112.1	139.1	100.8	87.6	78.1	76.5	83.2	89.8	96.4	98.6
42.5°	2875.7	975.2	127.3	92.7	80.2	69.2	67.7	72.9	79.5	89.0	90.5
45°	2951.4	847.9	114.9	83.9	72.1	59.6	58.8	64.8	69.9	78.7	80.2
47.5°	3015.4	741.9	103.0	74.3	61.9	53.0	52.2	55.2	58.1	66.3	67.7
50°	2981.7	652.1	91.3	61.1	50.0	45.6	44.8	44.8	48.6	56.7	58.1
52.5°	2898.4	596.1	80.2	50.8	41.2	38.9	36.8	37.5	41.2	44.8	45.6
55°	2831.5	569.6	70.6	44.8	34.6	32.3	30.2	29.5	30.2	28.7	27.2
56°	2815.3	566.7	68.5	43.4	33.1	30.2	27.2	25.7	25.1	22.1	21.3
57.5°	2807.9	566.7	64.8	40.5	30.9	27.2	23.5	20.7	17.6	15.5	15.5
60°	2802.1	570.5	60.4	35.4	26.5	22.1	16.9	12.4	10.3	10.3	10.3
62.5°	2789.4	568.9	55.2	29.5	22.7	16.9	10.3	8.1	7.4	8.1	8.9
65°	2648.9	528.5	48.6	23.5	17.6	11.8	5.8	5.8	6.6	8.1	8.9
67.5°	2134.5	400.4	39.7	18.3	12.4	8.9	5.1	5.1	6.6	8.1	8.9
70°	1172.5	211.2	33.9	13.2	9.5	7.4	5.1	4.4	6.6	8.1	8.9
72.5°	286.3	88.4	30.9	10.3	8.9	6.6	4.4	4.4	6.6	8.1	8.9
75°	70.6	66.3	25.1	8.1	7.4	5.8	4.4	4.4	6.6	8.1	8.9
77.5°	33.1	87.6	16.9	7.4	6.6	5.1	4.4	4.4	6.6	8.1	8.1
80°	19.9	66.3	10.3	6.6	5.8	5.1	4.4	4.4	6.6	8.1	8.9
82.5°	11.8	19.1	7.4	6.6	5.8	4.4	4.4	4.4	6.6	8.1	8.9
85°	10.3	9.5	7.4	6.6	5.8	5.1	4.4	4.4	7.4	8.9	8.9
87.5°	8.1	7.4	6.6	5.8	5.8	5.1	4.4	4.4	6.6	8.1	8.9
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)