

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: P157849

Luminaire Tested: **VST-E11-LED-E-U-5XQ-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157849
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33710)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E11-LED-E-U-5XQ-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(11) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (231) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31773.9 lumens
Efficiency: N/A
Efficacy: 117.8 lumens/watt
Luminous Opening: Rectangular (W 1.83' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B5 - U2 - G5

Input Watts (W): 269.7
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

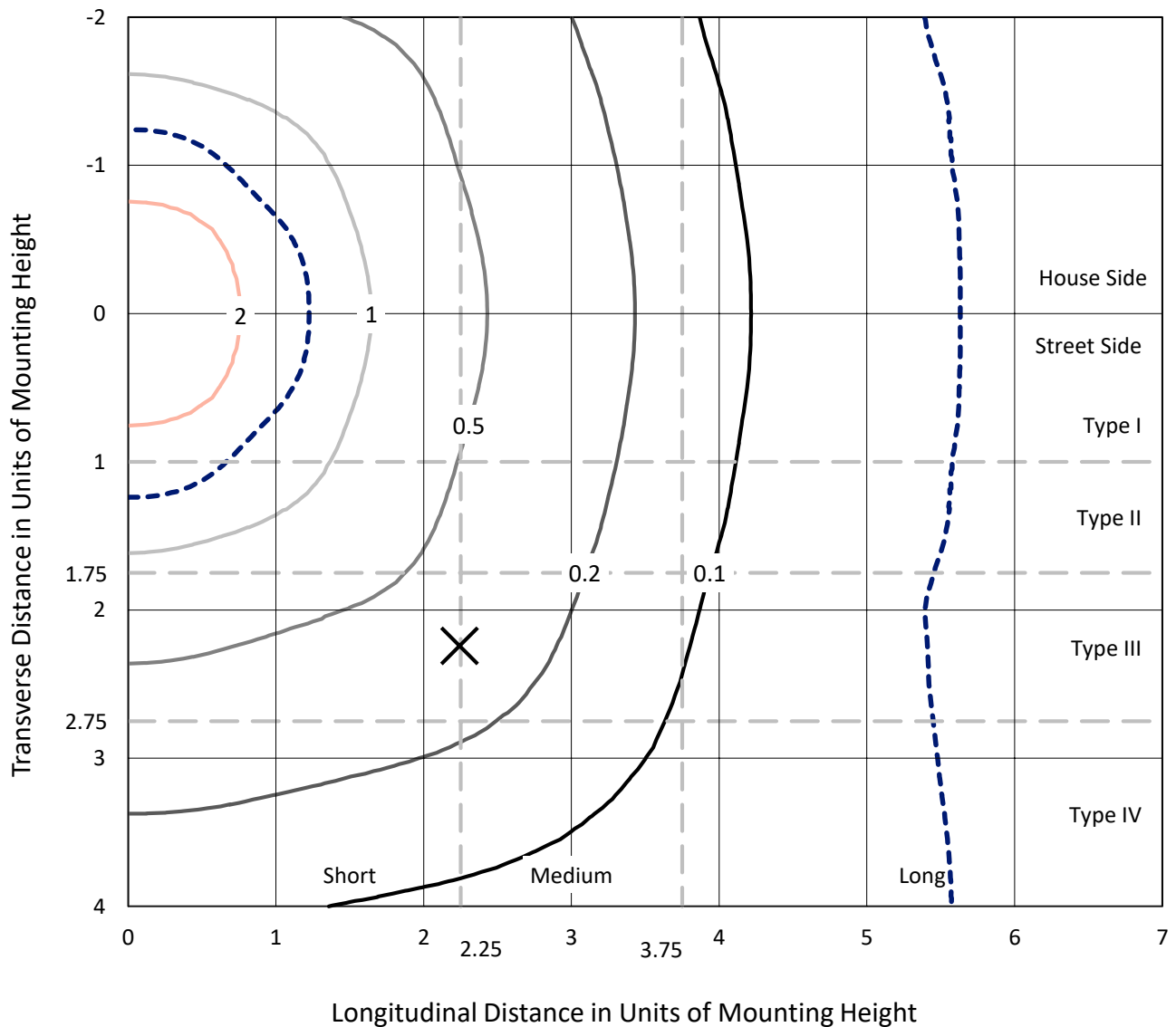


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

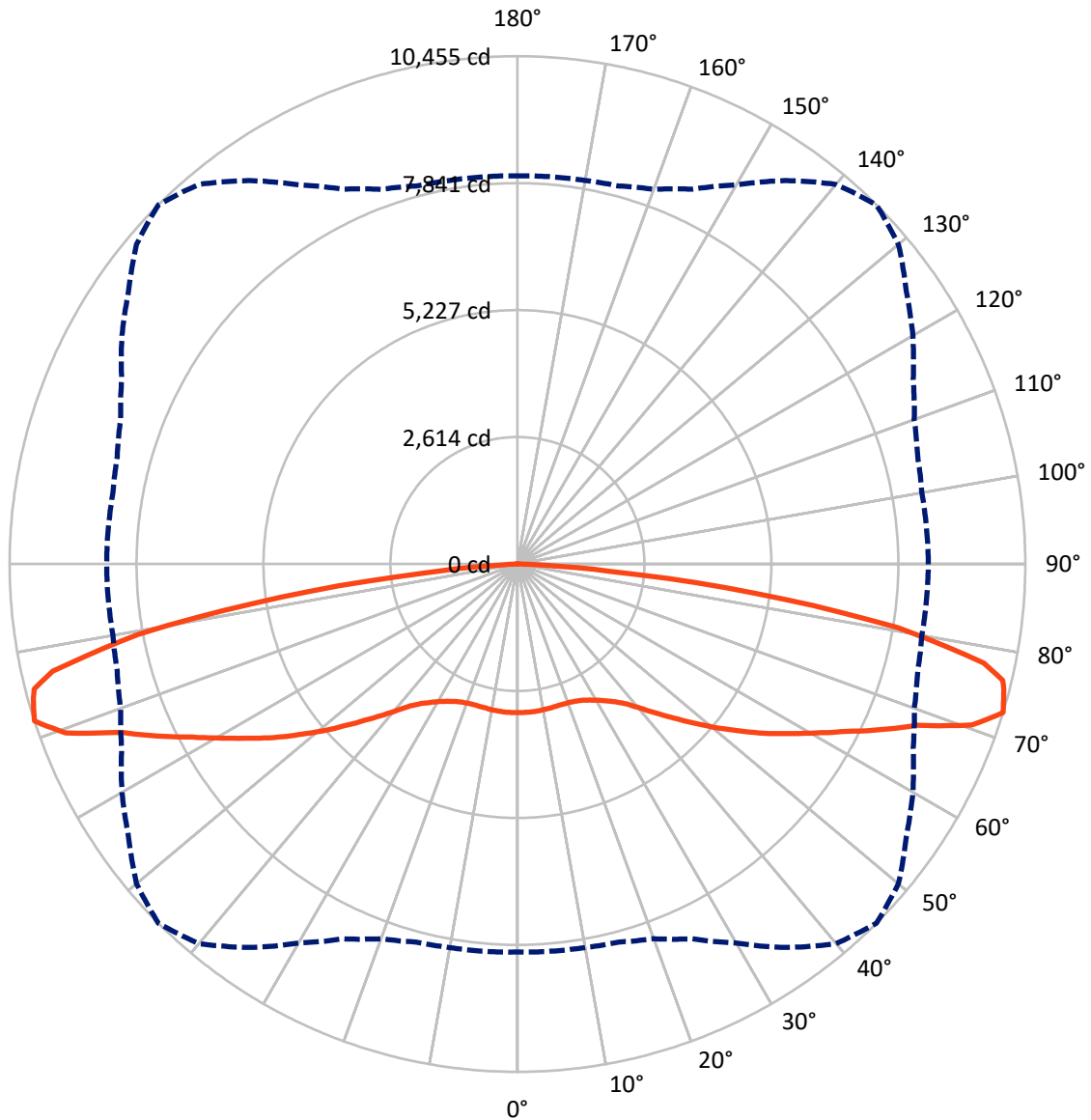


Based on 30 foot mounting height. Maximum calculated value = 3.4 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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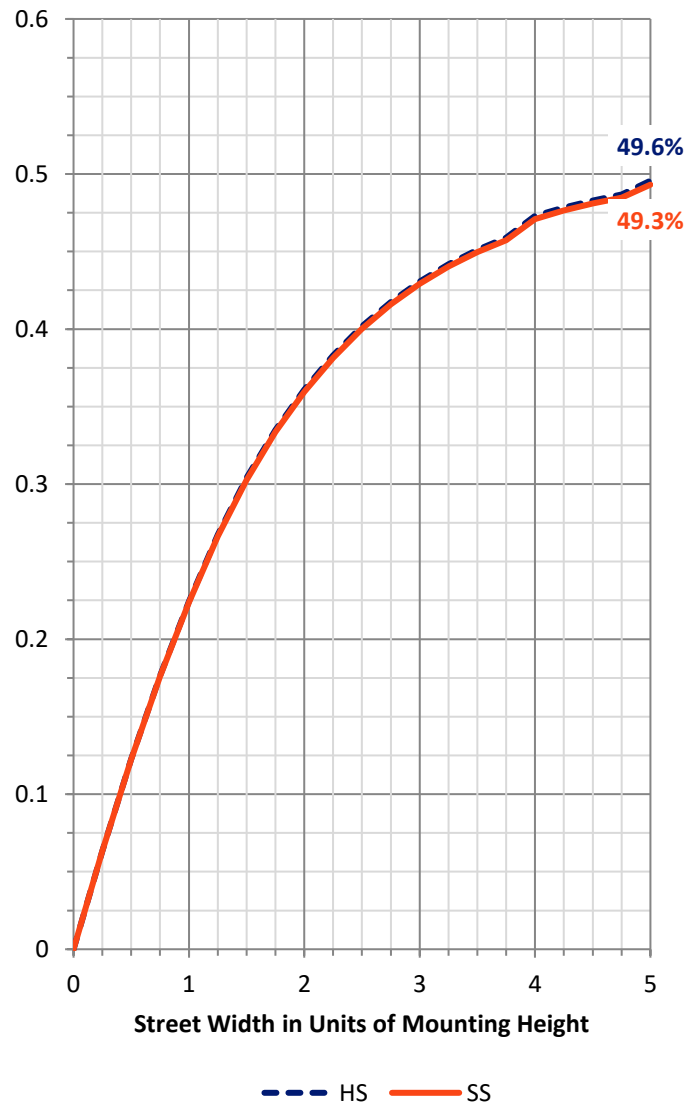
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	15879.2	7.7	15887.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	15879.2	7.7	15887.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	31758.5	15.4	31773.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	291.8	0.9
10°-20°	861.8	2.7
20°-30°	1441.1	4.5
30°-40°	2190.4	6.9
40°-50°	3469.2	10.9
50°-60°	5306.7	16.7
60°-70°	7594.8	23.9
70°-80°	8690.1	27.3
80°-90°	1912.6	6.0
90°-100°	1.6	0.0
100°-110°	3.3	0.0
110°-120°	2.3	0.0
120°-130°	2.5	0.0
130°-140°	2.3	0.0
140°-150°	1.8	0.0
150°-160°	1.2	0.0
160°-170°	0.5	0.0
170°-180°	0.0	0.0
0°-90°	31758.5	100.0
0°-180°	31773.9	100.0



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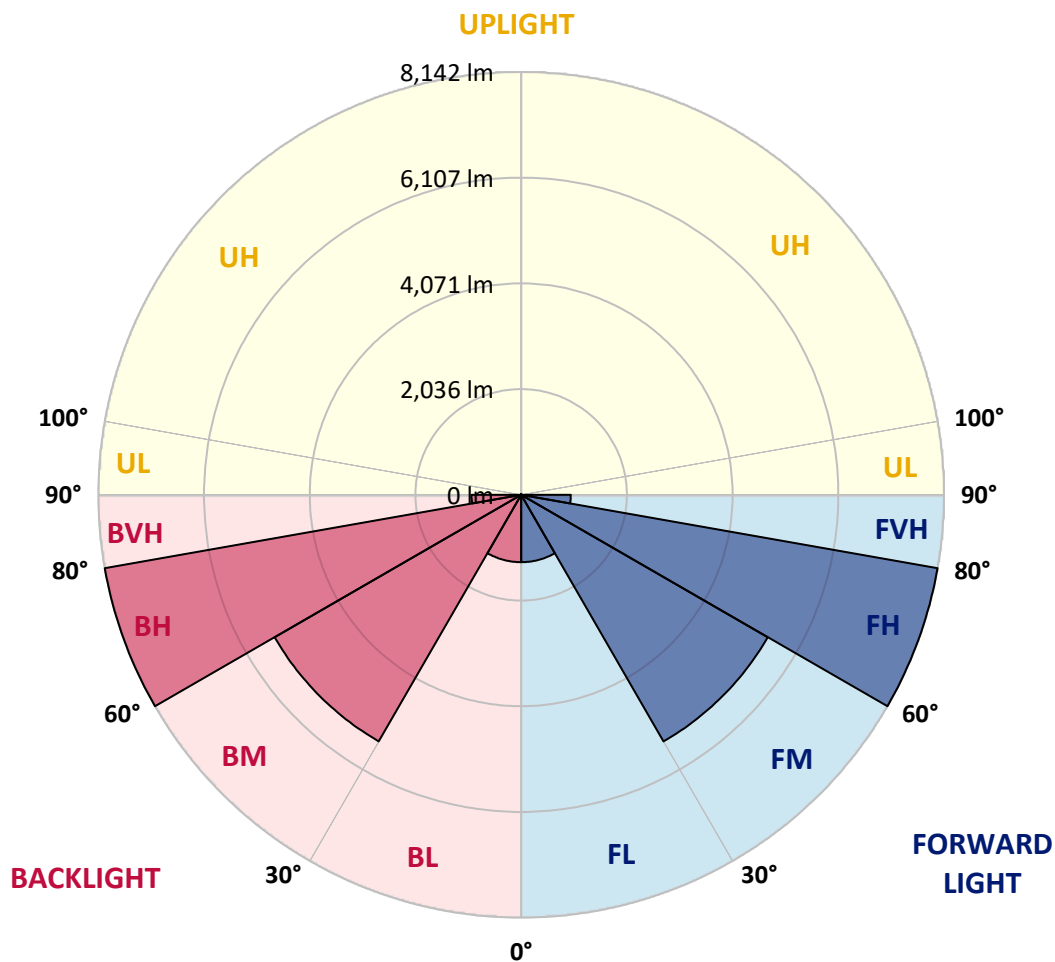
CATALOG NUMBER: VST-E11-LED-E-U-5XQ-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1297.4	4.1			
FM	(30°-60°)	5483.1	17.3			
FH	(60°-80°)	8142.4	25.6			G4/12000
FVH	(80°-90°)	956.3	3.0			G5
BL	(0°-30°)	1297.4	4.1	B3/2500		
BM	(30°-60°)	5483.1	17.3	B4/8500		
BH	(60°-80°)	8142.4	25.6	B5		G4/12000
BVH	(80°-90°)	956.3	3.0			G5
UL	(90°-100°)	1.6	0.0		U1/10	
UH	(100°-180°)	7.7	0.0		U1/10	

BUG Rating: B5-U2-G5

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3058.3	3058.3	3058.3	3058.3	3058.3	3058.3	3058.3	3058.3	3058.3	3058.3	3058.3
2.5°	3060.3	3056.3	3058.3	3062.3	3060.3	3060.3	3058.3	3058.3	3062.3	3058.3	3060.3
5°	3062.3	3058.3	3060.3	3062.3	3060.3	3062.3	3060.3	3060.3	3060.3	3058.3	3062.3
7.5°	3054.2	3054.2	3056.3	3056.3	3054.2	3056.3	3056.3	3056.3	3054.2	3054.2	3058.3
10°	3050.2	3048.2	3048.2	3050.2	3048.2	3048.2	3050.2	3050.2	3046.2	3046.2	3050.2
12.5°	3044.2	3042.2	3042.2	3042.2	3040.2	3040.2	3042.2	3042.2	3040.2	3038.2	3044.2
15°	3040.2	3038.2	3038.2	3038.2	3034.1	3036.2	3036.2	3036.2	3034.1	3032.1	3038.2
17.5°	3038.2	3036.2	3036.2	3036.2	3034.1	3034.1	3034.1	3034.1	3032.1	3032.1	3036.2
20°	3042.2	3042.2	3042.2	3042.2	3040.2	3040.2	3040.2	3042.2	3042.2	3042.2	3046.2
22.5°	3052.2	3052.2	3054.2	3056.3	3056.3	3060.3	3062.3	3064.3	3064.3	3066.3	3070.3
25°	3078.4	3078.4	3080.4	3082.4	3088.4	3092.4	3100.5	3104.5	3106.5	3106.5	3108.5
27.5°	3126.6	3128.6	3132.6	3136.6	3144.7	3150.7	3158.7	3166.8	3168.8	3170.8	3172.8
30°	3186.9	3188.9	3196.9	3200.9	3211.0	3223.0	3233.1	3241.1	3247.1	3251.2	3249.2
32.5°	3273.3	3277.3	3287.3	3293.4	3307.4	3319.5	3333.5	3345.6	3351.6	3357.7	3355.6
35°	3393.8	3403.9	3413.9	3419.9	3434.0	3444.1	3462.1	3474.2	3486.3	3482.2	3484.2
37.5°	3572.7	3580.7	3582.7	3586.7	3600.8	3608.8	3628.9	3645.0	3651.0	3655.0	3657.1
40°	3813.8	3813.8	3823.8	3815.8	3833.9	3835.9	3860.0	3882.1	3888.1	3904.2	3892.2
42.5°	4095.1	4093.1	4099.1	4093.1	4093.1	4113.2	4133.3	4173.5	4177.5	4197.6	4185.5
45°	4400.5	4400.5	4394.5	4396.5	4400.5	4422.6	4446.7	4490.9	4511.0	4523.1	4515.1
47.5°	4732.1	4724.0	4722.0	4720.0	4732.1	4756.2	4792.3	4834.5	4884.8	4888.8	4884.8
50°	5067.6	5065.6	5051.6	5063.6	5071.7	5083.7	5152.0	5208.3	5260.5	5292.7	5282.6
52.5°	5421.3	5403.2	5403.2	5403.2	5423.3	5461.5	5521.8	5598.1	5668.4	5702.6	5696.6
55°	5779.0	5772.9	5754.8	5746.8	5772.9	5827.2	5913.6	6006.0	6098.4	6150.7	6130.6
57.5°	6106.5	6096.4	6098.4	6100.4	6130.6	6202.9	6303.4	6426.0	6526.4	6582.7	6568.6
60°	6363.7	6351.6	6373.7	6379.8	6434.0	6554.6	6715.3	6870.0	7002.7	7058.9	7036.8
62.5°	6655.0	6647.0	6661.1	6659.1	6717.3	6852.0	7067.0	7314.1	7515.0	7587.4	7555.2
65°	7125.2	7101.1	7095.1	7073.0	7111.2	7215.7	7430.7	7718.0	8039.5	8224.4	8180.1
67.5°	7687.9	7681.8	7661.7	7649.7	7663.7	7794.3	8001.3	8278.6	8606.1	8861.3	8917.6
70°	8059.6	8067.6	8087.7	8117.9	8234.4	8487.6	8865.3	9285.3	9735.4	9926.3	9892.1
72.5°	7989.3	8001.3	8017.4	8055.6	8208.3	8511.7	9010.0	9636.9	10201.6	10454.8	10237.7
75°	7645.7	7655.7	7691.9	7750.1	7937.0	8304.7	8841.2	9506.3	10089.1	10342.2	10115.2
76°	7328.2	7360.3	7426.6	7495.0	7720.0	8119.9	8692.5	9401.8	10018.7	10275.9	10056.9
77.5°	6608.8	6637.0	6691.2	6809.8	7064.9	7577.3	8246.5	8943.7	9586.7	9817.8	9632.9
80°	4973.2	4997.3	5047.5	5190.2	5411.2	5728.7	6247.1	6928.3	7633.6	7937.0	7816.5
82.5°	2099.8	2127.9	2326.9	2533.8	2777.0	3120.6	3458.1	4060.9	4579.4	4925.0	4740.1
85°	231.1	285.3	351.6	478.2	586.7	781.6	972.5	1338.2	1691.9	1906.9	1685.9
87.5°	40.2	46.2	66.3	84.4	94.4	108.5	130.6	182.9	249.2	215.0	219.0
90°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	4.0	4.0	4.0	4.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0
97.5°	0.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
100°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	4.0	4.0	4.0
102.5°	2.0	2.0	2.0	2.0	2.0	4.0	4.0	4.0	4.0	4.0	4.0
105°	2.0	2.0	2.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
107.5°	2.0	2.0	2.0	2.0	4.0	4.0	2.0	2.0	2.0	4.0	2.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
110°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
112.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
115°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
117.5°	4.0	4.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
120°	4.0	4.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
122.5°	4.0	4.0	4.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
125°	4.0	4.0	4.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
127.5°	4.0	4.0	4.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
130°	4.0	4.0	4.0	4.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0
132.5°	4.0	4.0	4.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
135°	4.0	4.0	4.0	4.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0
137.5°	4.0	4.0	4.0	4.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0
140°	4.0	4.0	4.0	4.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0
142.5°	4.0	4.0	4.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
145°	4.0	4.0	4.0	4.0	4.0	2.0	2.0	2.0	2.0	0.0	2.0
147.5°	4.0	4.0	4.0	4.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0
150°	4.0	4.0	4.0	4.0	4.0	2.0	2.0	2.0	0.0	0.0	0.0
152.5°	4.0	4.0	4.0	4.0	4.0	2.0	2.0	2.0	2.0	0.0	0.0
155°	4.0	4.0	4.0	4.0	4.0	2.0	2.0	2.0	2.0	0.0	2.0
157.5°	4.0	4.0	4.0	4.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0
160°	4.0	4.0	4.0	4.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0
162.5°	4.0	4.0	4.0	4.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0
165°	4.0	4.0	4.0	4.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	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):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	3058.3	3058.3	3058.3	3058.3	3058.3	3058.3	3058.3	3058.3
2.5°	3058.3	3058.3	3062.3	3060.3	3060.3	3062.3	3066.3	3064.3
5°	3060.3	3062.3	3058.3	3060.3	3062.3	3062.3	3064.3	3062.3
7.5°	3056.3	3056.3	3056.3	3058.3	3060.3	3058.3	3060.3	3060.3
10°	3048.2	3050.2	3048.2	3052.2	3054.2	3054.2	3056.3	3056.3
12.5°	3042.2	3042.2	3042.2	3046.2	3048.2	3048.2	3050.2	3048.2
15°	3036.2	3036.2	3034.1	3038.2	3042.2	3042.2	3044.2	3044.2
17.5°	3034.1	3034.1	3032.1	3036.2	3040.2	3040.2	3042.2	3042.2
20°	3040.2	3042.2	3038.2	3042.2	3046.2	3048.2	3048.2	3048.2
22.5°	3064.3	3062.3	3056.3	3058.3	3060.3	3060.3	3060.3	3060.3
25°	3100.5	3096.4	3090.4	3088.4	3086.4	3084.4	3084.4	3084.4
27.5°	3162.7	3156.7	3146.7	3144.7	3142.7	3138.6	3138.6	3138.6
30°	3237.1	3229.1	3217.0	3213.0	3207.0	3202.9	3200.9	3198.9
32.5°	3343.6	3327.5	3313.5	3303.4	3297.4	3285.3	3283.3	3279.3
35°	3466.2	3454.1	3434.0	3428.0	3417.9	3411.9	3409.9	3399.9
37.5°	3635.0	3620.9	3602.8	3598.8	3596.8	3590.7	3590.7	3588.7
40°	3870.0	3856.0	3839.9	3823.8	3827.9	3829.9	3829.9	3821.8
42.5°	4157.4	4135.3	4103.1	4113.2	4107.2	4099.1	4115.2	4105.1
45°	4484.9	4454.8	4430.7	4420.6	4420.6	4410.6	4426.6	4426.6
47.5°	4848.6	4800.4	4756.2	4758.2	4742.1	4746.1	4756.2	4770.2
50°	5232.4	5168.1	5125.9	5105.8	5089.7	5095.8	5113.8	5117.9
52.5°	5630.3	5551.9	5495.6	5465.5	5445.4	5453.4	5467.5	5479.6
55°	6044.2	5957.8	5873.4	5841.2	5817.1	5833.2	5835.2	5851.3
57.5°	6476.2	6357.6	6259.2	6211.0	6186.9	6202.9	6215.0	6231.1
60°	6912.2	6775.6	6659.1	6602.8	6568.6	6590.7	6618.9	6626.9
62.5°	7418.6	7229.7	7099.1	7018.7	7002.7	7024.8	7032.8	7056.9
65°	8017.4	7790.3	7609.5	7511.0	7507.0	7519.1	7537.1	7543.2
67.5°	8700.6	8447.4	8204.3	8105.8	8067.6	8103.8	8121.9	8146.0
70°	9665.1	9317.5	8965.8	8746.8	8654.4	8626.2	8634.3	8660.4
72.5°	9773.6	9399.8	8989.9	8692.5	8529.8	8455.4	8453.4	8457.4
75°	9536.5	8939.7	8650.3	8308.7	8077.7	7957.1	7941.0	7939.0
76°	9417.9	8712.6	8294.7	8023.4	7746.1	7623.6	7605.5	7595.4
77.5°	8917.6	8160.1	7531.1	7366.4	7101.1	6946.4	6978.5	6952.4
80°	7149.3	6397.8	5805.1	5340.9	5355.0	5242.4	5196.2	5182.2
82.5°	4213.7	3596.8	2941.7	2557.9	2192.2	2095.8	1804.4	1738.1
85°	1346.3	954.5	578.7	420.0	285.3	239.1	186.9	170.8
87.5°	178.8	140.7	114.5	110.5	100.5	86.4	56.3	40.2
90°	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0
97.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
100°	4.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
102.5°	4.0	4.0	4.0	4.0	2.0	2.0	2.0	2.0
105°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
107.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
110°	2.0	2.0	2.0	2.0	2.0	4.0	4.0	4.0
112.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	4.0
115°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	4.0
117.5°	2.0	2.0	2.0	2.0	2.0	4.0	4.0	4.0
120°	2.0	2.0	2.0	2.0	2.0	4.0	4.0	4.0
122.5°	2.0	2.0	2.0	2.0	4.0	4.0	4.0	4.0
125°	2.0	2.0	2.0	2.0	4.0	4.0	4.0	4.0
127.5°	2.0	2.0	2.0	2.0	4.0	4.0	4.0	4.0
130°	2.0	2.0	2.0	4.0	4.0	4.0	4.0	4.0
132.5°	2.0	2.0	2.0	4.0	4.0	4.0	4.0	4.0
135°	2.0	2.0	2.0	4.0	4.0	4.0	4.0	4.0
137.5°	2.0	2.0	2.0	4.0	4.0	4.0	4.0	4.0
140°	2.0	2.0	2.0	4.0	4.0	4.0	4.0	4.0
142.5°	2.0	2.0	2.0	4.0	4.0	4.0	4.0	4.0
145°	2.0	2.0	2.0	2.0	4.0	4.0	4.0	4.0
147.5°	2.0	2.0	2.0	4.0	4.0	4.0	4.0	4.0
150°	2.0	2.0	2.0	2.0	4.0	4.0	4.0	4.0
152.5°	2.0	2.0	2.0	2.0	4.0	4.0	4.0	4.0
155°	2.0	2.0	2.0	4.0	4.0	4.0	4.0	4.0
157.5°	2.0	2.0	2.0	2.0	4.0	4.0	4.0	4.0
160°	2.0	2.0	2.0	2.0	4.0	4.0	4.0	4.0
162.5°	2.0	2.0	2.0	4.0	4.0	4.0	4.0	4.0
165°	2.0	2.0	2.0	4.0	4.0	4.0	4.0	4.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)