

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: P157834

Luminaire Tested: **VST-F09-LED-E-U-5XQ-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157834
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-F09-LED-E-U-5XQ-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(9) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (63) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21461.2 lumens
Efficiency: N/A
Efficacy: 91.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B5 - U1 - G4

Input Watts (W): 234.8
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



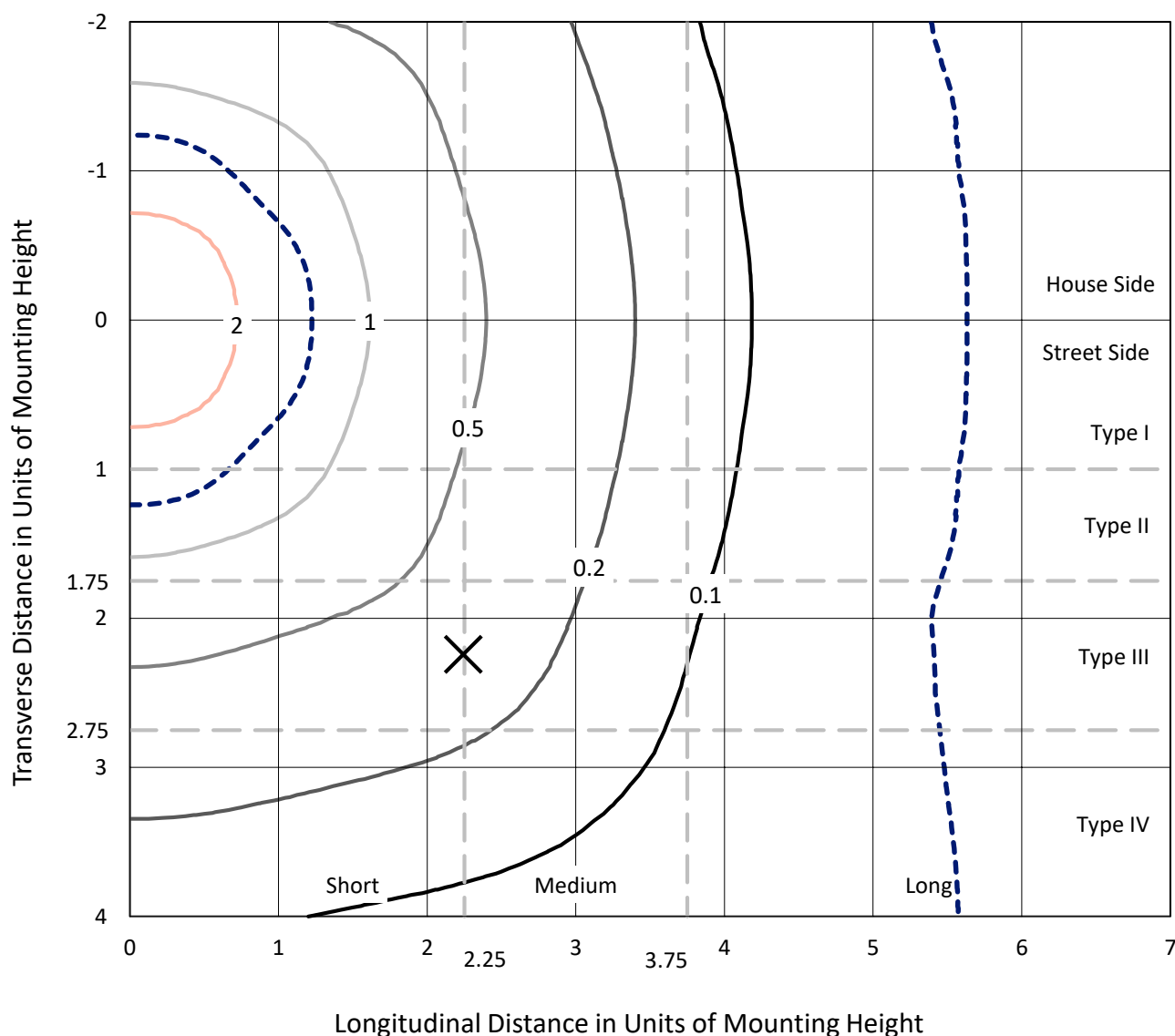
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

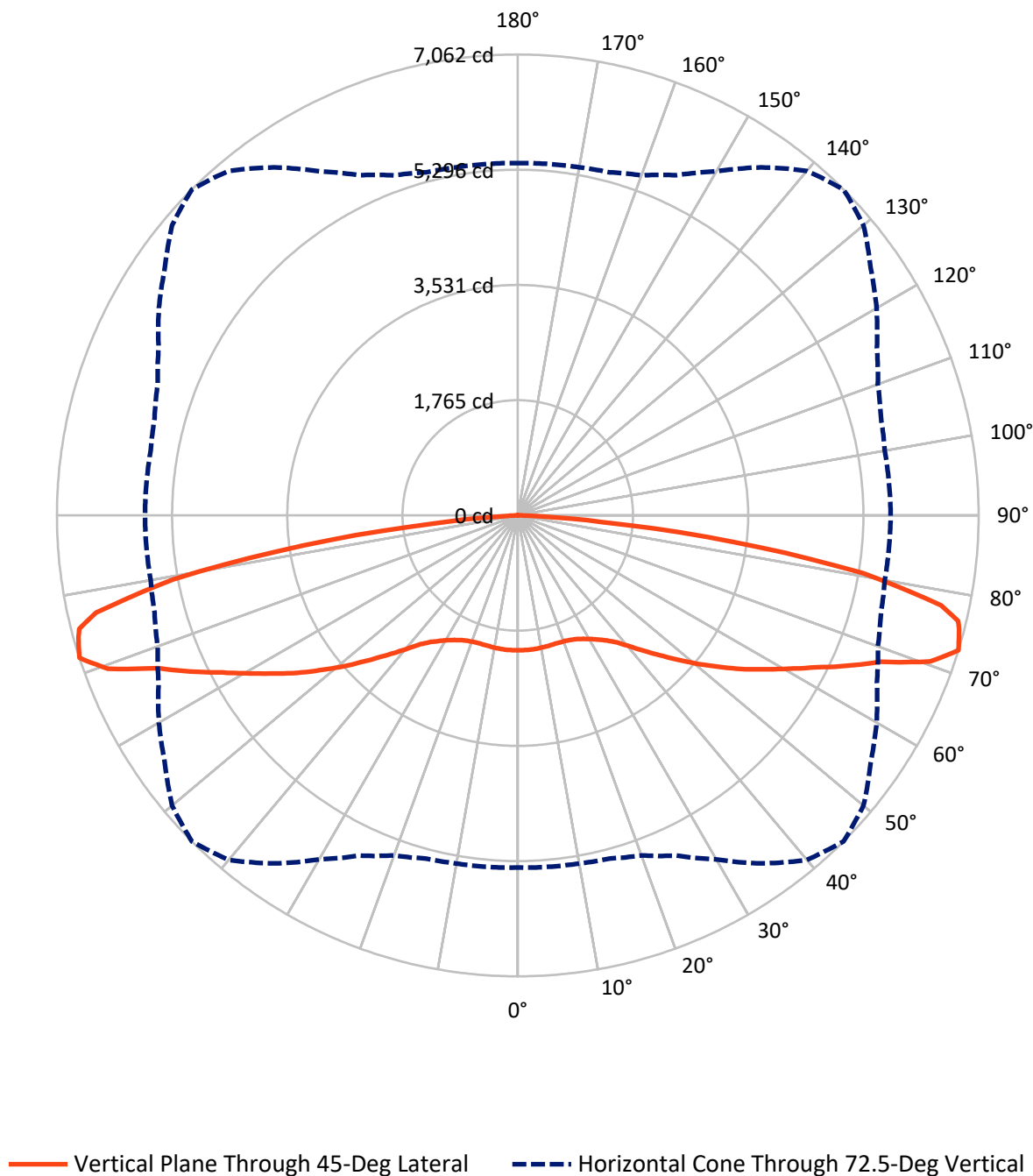


Based on 25 foot mounting height. Maximum calculated value = 3.3 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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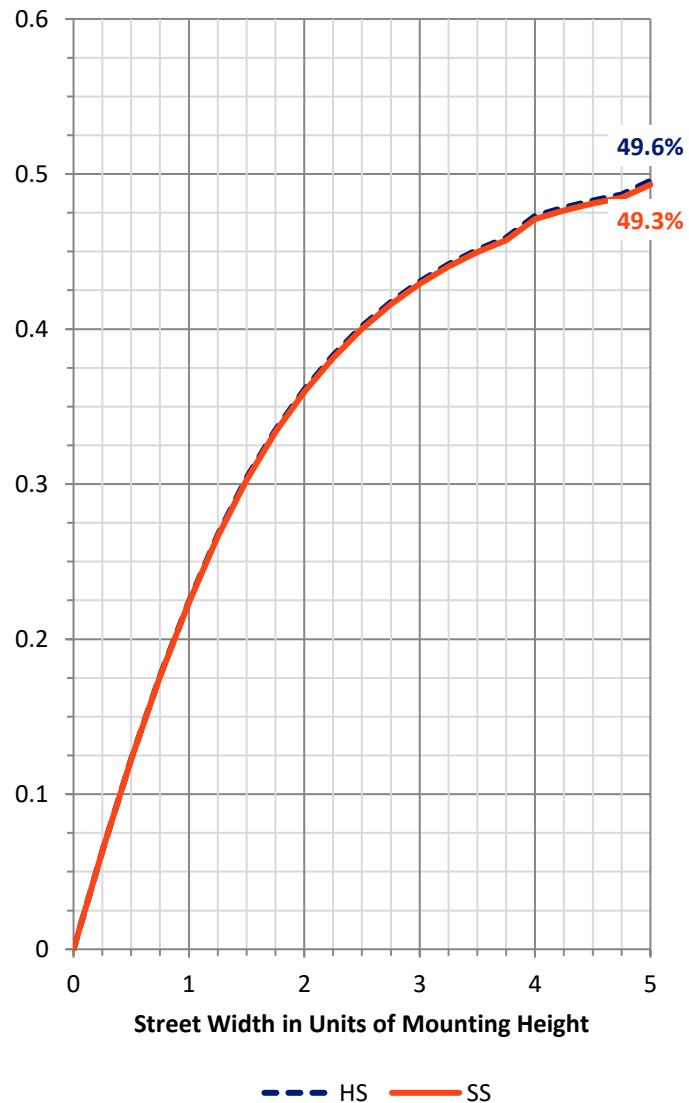
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10725.3	5.3	10730.6
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	10725.3	5.3	10730.6
	% Fixture	50.0	0.0	50.0
Total	Lumens	21450.6	10.6	21461.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	197.1	0.9
10°-20°	582.1	2.7
20°-30°	973.4	4.5
30°-40°	1479.5	6.9
40°-50°	2343.2	10.9
50°-60°	3584.3	16.7
60°-70°	5129.7	23.9
70°-80°	5869.6	27.3
80°-90°	1291.8	6.0
90°-100°	1.1	0.0
100°-110°	2.2	0.0
110°-120°	1.6	0.0
120°-130°	1.7	0.0
130°-140°	1.6	0.0
140°-150°	1.2	0.0
150°-160°	0.8	0.0
160°-170°	0.3	0.0
170°-180°	0.0	0.0
0°-90°	21450.6	100.0
0°-180°	21461.2	100.0

Coefficient of Utilization



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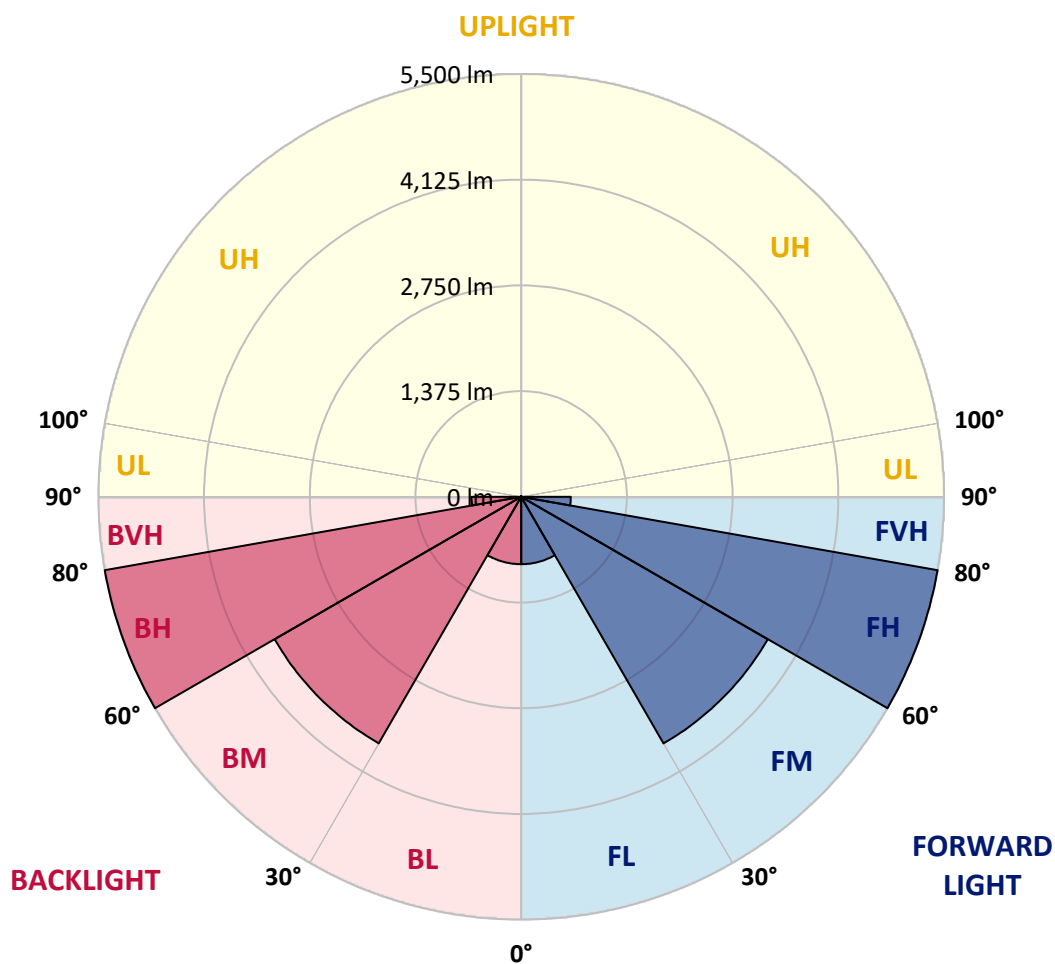
CATALOG NUMBER: VST-F09-LED-E-U-5XQ-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	876.3	4.1			
FM	(30°-60°)	3703.5	17.3			
FH	(60°-80°)	5499.6	25.6			G3/7500
FVH	(80°-90°)	645.9	3.0			G4/750
BL	(0°-30°)	876.3	4.1	B2/1000		
BM	(30°-60°)	3703.5	17.3	B3/5000		
BH	(60°-80°)	5499.6	25.6	B5		G3/7500
BVH	(80°-90°)	645.9	3.0			G4/750
UL	(90°-100°)	1.1	0.0		U1/10	
UH	(100°-180°)	5.3	0.0		U1/10	

BUG Rating: B5-U1-G4

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2065.6	2065.6	2065.6	2065.6	2065.6	2065.6	2065.6	2065.6	2065.6	2065.6	2065.6
2.5°	2067.0	2064.3	2065.6	2068.4	2067.0	2067.0	2065.6	2065.6	2068.4	2065.6	2067.0
5°	2068.4	2065.6	2067.0	2068.4	2067.0	2068.4	2067.0	2067.0	2067.0	2065.6	2068.4
7.5°	2062.9	2062.9	2064.3	2064.3	2062.9	2064.3	2064.3	2064.3	2062.9	2062.9	2065.6
10°	2060.2	2058.9	2058.9	2060.2	2058.9	2058.9	2060.2	2060.2	2057.5	2057.5	2060.2
12.5°	2056.1	2054.8	2054.8	2054.8	2053.4	2053.4	2054.8	2054.8	2053.4	2052.1	2056.1
15°	2053.4	2052.1	2052.1	2052.1	2049.4	2050.7	2050.7	2050.7	2049.4	2048.0	2052.1
17.5°	2052.1	2050.7	2050.7	2050.7	2049.4	2049.4	2049.4	2049.4	2048.0	2048.0	2050.7
20°	2054.8	2054.8	2054.8	2054.8	2053.4	2053.4	2053.4	2054.8	2054.8	2054.8	2057.5
22.5°	2061.6	2061.6	2062.9	2064.3	2064.3	2067.0	2068.4	2069.7	2069.7	2071.1	2073.8
25°	2079.2	2079.2	2080.6	2081.9	2086.0	2088.7	2094.1	2096.9	2098.2	2098.2	2099.6
27.5°	2111.8	2113.1	2115.9	2118.6	2124.0	2128.1	2133.5	2138.9	2140.3	2141.6	2143.0
30°	2152.5	2153.9	2159.3	2162.0	2168.8	2176.9	2183.7	2189.1	2193.2	2195.9	2194.6
32.5°	2210.9	2213.6	2220.4	2224.4	2233.9	2242.1	2251.6	2259.7	2263.8	2267.9	2266.5
35°	2292.3	2299.1	2305.9	2309.9	2319.4	2326.2	2338.4	2346.6	2354.7	2352.0	2353.4
37.5°	2413.1	2418.5	2419.9	2422.6	2432.1	2437.5	2451.1	2461.9	2466.0	2468.7	2470.1
40°	2575.9	2575.9	2582.7	2577.3	2589.5	2590.9	2607.2	2622.1	2626.2	2637.0	2628.9
42.5°	2765.9	2764.6	2768.7	2764.6	2764.6	2778.2	2791.7	2818.9	2821.6	2835.2	2827.0
45°	2972.2	2972.2	2968.2	2969.5	2972.2	2987.2	3003.5	3033.3	3046.9	3055.0	3049.6
47.5°	3196.2	3190.7	3189.4	3188.0	3196.2	3212.5	3236.9	3265.4	3299.3	3302.0	3299.3
50°	3422.8	3421.5	3412.0	3420.1	3425.5	3433.7	3479.8	3517.8	3553.1	3574.8	3568.0
52.5°	3661.7	3649.5	3649.5	3649.5	3663.1	3688.8	3729.6	3781.1	3828.6	3851.7	3847.6
55°	3903.3	3899.2	3887.0	3881.6	3899.2	3935.8	3994.2	4056.6	4119.1	4154.4	4140.8
57.5°	4124.5	4117.7	4119.1	4120.4	4140.8	4189.6	4257.5	4340.3	4408.1	4446.1	4436.6
60°	4298.2	4290.1	4305.0	4309.1	4345.7	4427.1	4535.7	4640.2	4729.8	4767.8	4752.9
62.5°	4495.0	4489.6	4499.1	4497.7	4537.1	4628.0	4773.2	4940.2	5075.9	5124.7	5103.0
65°	4812.6	4796.3	4792.2	4777.3	4803.1	4873.7	5018.9	5213.0	5430.1	5555.0	5525.1
67.5°	5192.6	5188.5	5175.0	5166.8	5176.3	5264.5	5404.3	5591.6	5812.8	5985.2	6023.2
70°	5443.7	5449.1	5462.7	5483.0	5561.8	5732.8	5987.9	6271.6	6575.6	6704.5	6681.4
72.5°	5396.2	5404.3	5415.2	5441.0	5544.1	5749.0	6085.6	6509.1	6890.4	7061.5	6914.9
75°	5164.1	5170.9	5195.3	5234.7	5360.9	5609.3	5971.6	6420.9	6814.4	6985.4	6832.1
76°	4949.7	4971.4	5016.2	5062.3	5214.3	5484.4	5871.2	6350.3	6766.9	6940.7	6792.7
77.5°	4463.8	4482.8	4519.4	4599.5	4771.9	5118.0	5569.9	6040.8	6475.1	6631.2	6506.4
80°	3359.0	3375.3	3409.3	3505.6	3654.9	3869.3	4219.5	4679.6	5156.0	5360.9	5279.5
82.5°	1418.3	1437.3	1571.6	1711.4	1875.6	2107.7	2335.7	2742.9	3093.0	3326.5	3201.6
85°	156.1	192.7	237.5	323.0	396.3	527.9	656.9	903.9	1142.8	1288.0	1138.7
87.5°	27.1	31.2	44.8	57.0	63.8	73.3	88.2	123.5	168.3	145.2	147.9
90°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	2.7	2.7	2.7	2.7
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.4
95°	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.4	1.4	1.4	1.4
97.5°	0.0	0.0	0.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
100°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.7	2.7	2.7
102.5°	1.4	1.4	1.4	1.4	1.4	2.7	2.7	2.7	2.7	2.7	2.7
105°	1.4	1.4	1.4	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
107.5°	1.4	1.4	1.4	1.4	2.7	2.7	1.4	1.4	1.4	2.7	1.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
110°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
112.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
115°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
117.5°	2.7	2.7	2.7	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
120°	2.7	2.7	2.7	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
122.5°	2.7	2.7	2.7	2.7	1.4	1.4	1.4	1.4	1.4	1.4	1.4
125°	2.7	2.7	2.7	2.7	1.4	1.4	1.4	1.4	1.4	1.4	1.4
127.5°	2.7	2.7	2.7	2.7	1.4	1.4	1.4	1.4	1.4	1.4	1.4
130°	2.7	2.7	2.7	2.7	2.7	1.4	1.4	1.4	1.4	1.4	1.4
132.5°	2.7	2.7	2.7	2.7	1.4	1.4	1.4	1.4	1.4	1.4	1.4
135°	2.7	2.7	2.7	2.7	2.7	1.4	1.4	1.4	1.4	1.4	1.4
137.5°	2.7	2.7	2.7	2.7	2.7	1.4	1.4	1.4	1.4	1.4	1.4
140°	2.7	2.7	2.7	2.7	2.7	1.4	1.4	1.4	1.4	1.4	1.4
142.5°	2.7	2.7	2.7	2.7	1.4	1.4	1.4	1.4	1.4	1.4	1.4
145°	2.7	2.7	2.7	2.7	2.7	1.4	1.4	1.4	1.4	0.0	1.4
147.5°	2.7	2.7	2.7	2.7	2.7	1.4	1.4	1.4	1.4	1.4	1.4
150°	2.7	2.7	2.7	2.7	2.7	1.4	1.4	1.4	0.0	0.0	0.0
152.5°	2.7	2.7	2.7	2.7	2.7	1.4	1.4	1.4	1.4	0.0	0.0
155°	2.7	2.7	2.7	2.7	2.7	1.4	1.4	1.4	1.4	0.0	1.4
157.5°	2.7	2.7	2.7	2.7	1.4	1.4	1.4	1.4	0.0	0.0	0.0
160°	2.7	2.7	2.7	2.7	1.4	1.4	1.4	1.4	0.0	0.0	0.0
162.5°	2.7	2.7	2.7	2.7	1.4	1.4	1.4	1.4	0.0	0.0	0.0
165°	2.7	2.7	2.7	2.7	1.4	1.4	1.4	1.4	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°	2065.6	2065.6	2065.6	2065.6	2065.6	2065.6	2065.6	2065.6
2.5°	2065.6	2065.6	2068.4	2067.0	2067.0	2068.4	2071.1	2069.7
5°	2067.0	2068.4	2065.6	2067.0	2068.4	2068.4	2069.7	2068.4
7.5°	2064.3	2064.3	2064.3	2065.6	2067.0	2065.6	2067.0	2067.0
10°	2058.9	2060.2	2058.9	2061.6	2062.9	2062.9	2064.3	2064.3
12.5°	2054.8	2054.8	2054.8	2057.5	2058.9	2058.9	2060.2	2058.9
15°	2050.7	2050.7	2049.4	2052.1	2054.8	2054.8	2056.1	2056.1
17.5°	2049.4	2049.4	2048.0	2050.7	2053.4	2053.4	2054.8	2054.8
20°	2053.4	2054.8	2052.1	2054.8	2057.5	2058.9	2058.9	2058.9
22.5°	2069.7	2068.4	2064.3	2065.6	2067.0	2067.0	2067.0	2067.0
25°	2094.1	2091.4	2087.4	2086.0	2084.6	2083.3	2083.3	2083.3
27.5°	2136.2	2132.1	2125.4	2124.0	2122.6	2119.9	2119.9	2119.9
30°	2186.4	2181.0	2172.9	2170.1	2166.1	2163.4	2162.0	2160.6
32.5°	2258.4	2247.5	2238.0	2231.2	2227.1	2219.0	2217.6	2214.9
35°	2341.1	2333.0	2319.4	2315.4	2308.6	2304.5	2303.1	2296.4
37.5°	2455.2	2445.7	2433.4	2430.7	2429.4	2425.3	2425.3	2423.9
40°	2613.9	2604.4	2593.6	2582.7	2585.4	2586.8	2586.8	2581.4
42.5°	2808.0	2793.1	2771.4	2778.2	2774.1	2768.7	2779.5	2772.7
45°	3029.2	3008.9	2992.6	2985.8	2985.8	2979.0	2989.9	2989.9
47.5°	3274.9	3242.3	3212.5	3213.8	3203.0	3205.7	3212.5	3222.0
50°	3534.1	3490.7	3462.2	3448.6	3437.8	3441.8	3454.0	3456.8
52.5°	3802.8	3749.9	3711.9	3691.6	3678.0	3683.4	3692.9	3701.1
55°	4082.4	4024.1	3967.1	3945.3	3929.1	3939.9	3941.3	3952.1
57.5°	4374.2	4294.1	4227.6	4195.1	4178.8	4189.6	4197.8	4208.6
60°	4668.7	4576.4	4497.7	4459.7	4436.6	4451.6	4470.6	4476.0
62.5°	5010.7	4883.2	4794.9	4740.7	4729.8	4744.7	4750.2	4766.4
65°	5415.2	5261.8	5139.7	5073.2	5070.5	5078.6	5090.8	5094.9
67.5°	5876.6	5705.6	5541.4	5474.9	5449.1	5473.5	5485.8	5502.0
70°	6528.1	6293.3	6055.8	5907.8	5845.4	5826.4	5831.8	5849.5
72.5°	6601.4	6348.9	6072.1	5871.2	5761.3	5711.0	5709.7	5712.4
75°	6441.2	6038.1	5842.7	5612.0	5455.9	5374.5	5363.6	5362.3
76°	6361.1	5884.8	5602.5	5419.3	5232.0	5149.2	5137.0	5130.2
77.5°	6023.2	5511.5	5086.7	4975.5	4796.3	4691.8	4713.5	4695.9
80°	4828.9	4321.3	3920.9	3607.4	3616.9	3540.9	3509.7	3500.2
82.5°	2846.0	2429.4	1986.9	1727.7	1480.7	1415.5	1218.8	1174.0
85°	909.3	644.7	390.9	283.7	192.7	161.5	126.2	115.4
87.5°	120.8	95.0	77.4	74.6	67.9	58.4	38.0	27.1
90°	1.4	1.4	1.4	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°	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0
97.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
100°	2.7	1.4	1.4	1.4	1.4	1.4	1.4	1.4
102.5°	2.7	2.7	2.7	2.7	1.4	1.4	1.4	1.4
105°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
107.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
110°	1.4	1.4	1.4	1.4	1.4	2.7	2.7	2.7
112.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.7
115°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.7
117.5°	1.4	1.4	1.4	1.4	1.4	2.7	2.7	2.7
120°	1.4	1.4	1.4	1.4	1.4	2.7	2.7	2.7
122.5°	1.4	1.4	1.4	1.4	2.7	2.7	2.7	2.7
125°	1.4	1.4	1.4	1.4	2.7	2.7	2.7	2.7
127.5°	1.4	1.4	1.4	1.4	2.7	2.7	2.7	2.7
130°	1.4	1.4	1.4	2.7	2.7	2.7	2.7	2.7
132.5°	1.4	1.4	1.4	2.7	2.7	2.7	2.7	2.7
135°	1.4	1.4	1.4	2.7	2.7	2.7	2.7	2.7
137.5°	1.4	1.4	1.4	2.7	2.7	2.7	2.7	2.7
140°	1.4	1.4	1.4	2.7	2.7	2.7	2.7	2.7
142.5°	1.4	1.4	1.4	2.7	2.7	2.7	2.7	2.7
145°	1.4	1.4	1.4	1.4	2.7	2.7	2.7	2.7
147.5°	1.4	1.4	1.4	2.7	2.7	2.7	2.7	2.7
150°	1.4	1.4	1.4	1.4	2.7	2.7	2.7	2.7
152.5°	1.4	1.4	1.4	1.4	2.7	2.7	2.7	2.7
155°	1.4	1.4	1.4	2.7	2.7	2.7	2.7	2.7
157.5°	1.4	1.4	1.4	1.4	2.7	2.7	2.7	2.7
160°	1.4	1.4	1.4	1.4	2.7	2.7	2.7	2.7
162.5°	1.4	1.4	1.4	2.7	2.7	2.7	2.7	2.7
165°	1.4	1.4	1.4	2.7	2.7	2.7	2.7	2.7
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)