

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: P157399

Luminaire Tested: **VST-E10-LED-E-U-5MQ-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157399
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33708)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E10-LED-E-U-5MQ-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(10) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (210) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29216.8 lumens
Efficiency: N/A
Efficacy: 118.0 lumens/watt
Luminous Opening: Rectangular (W 1.67' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G3

Input Watts (W): 247.7
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

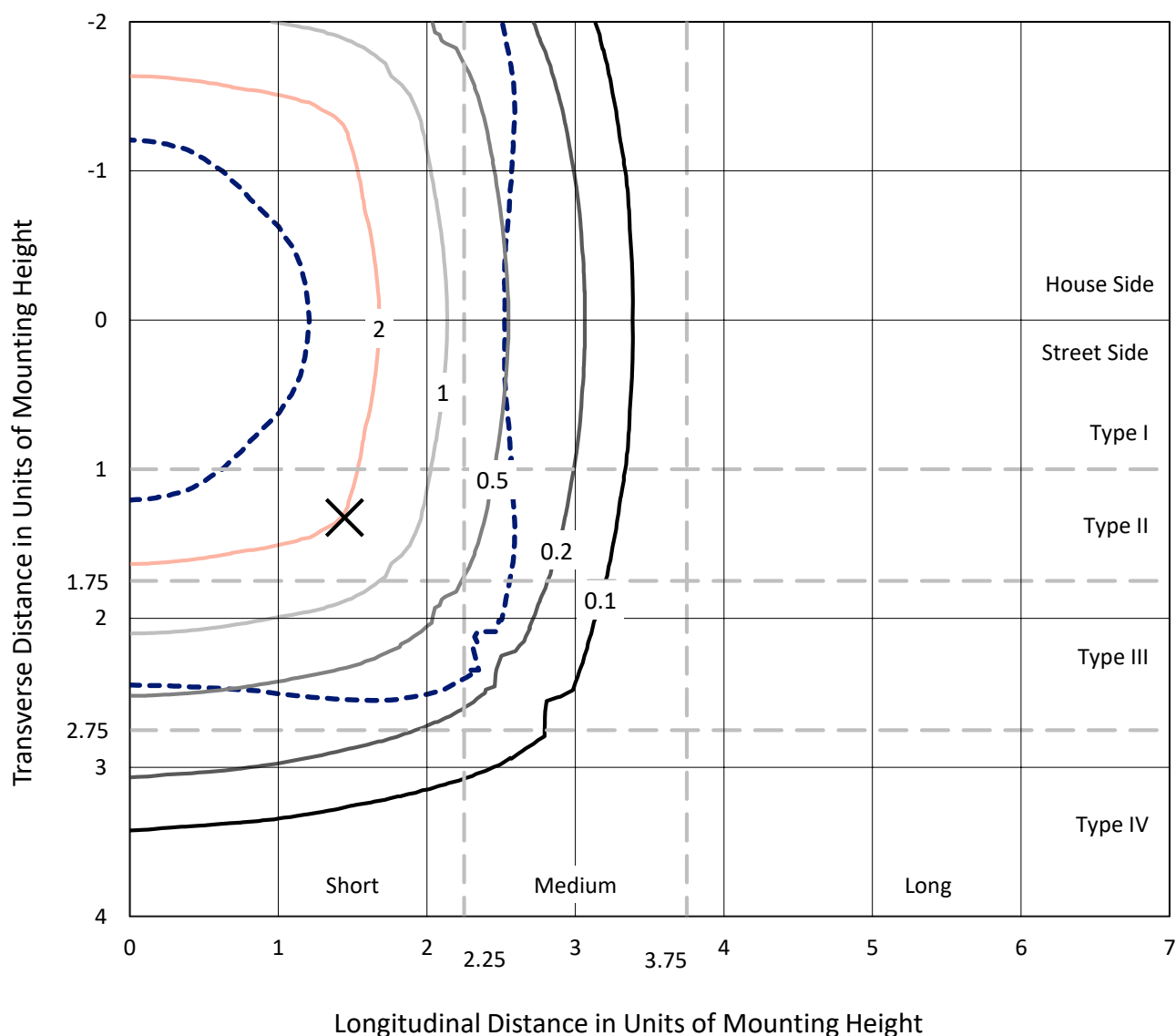


REPORT NUMBER: P157399

CATALOG NUMBER: VST-E10-LED-E-U-5MQ-7030

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

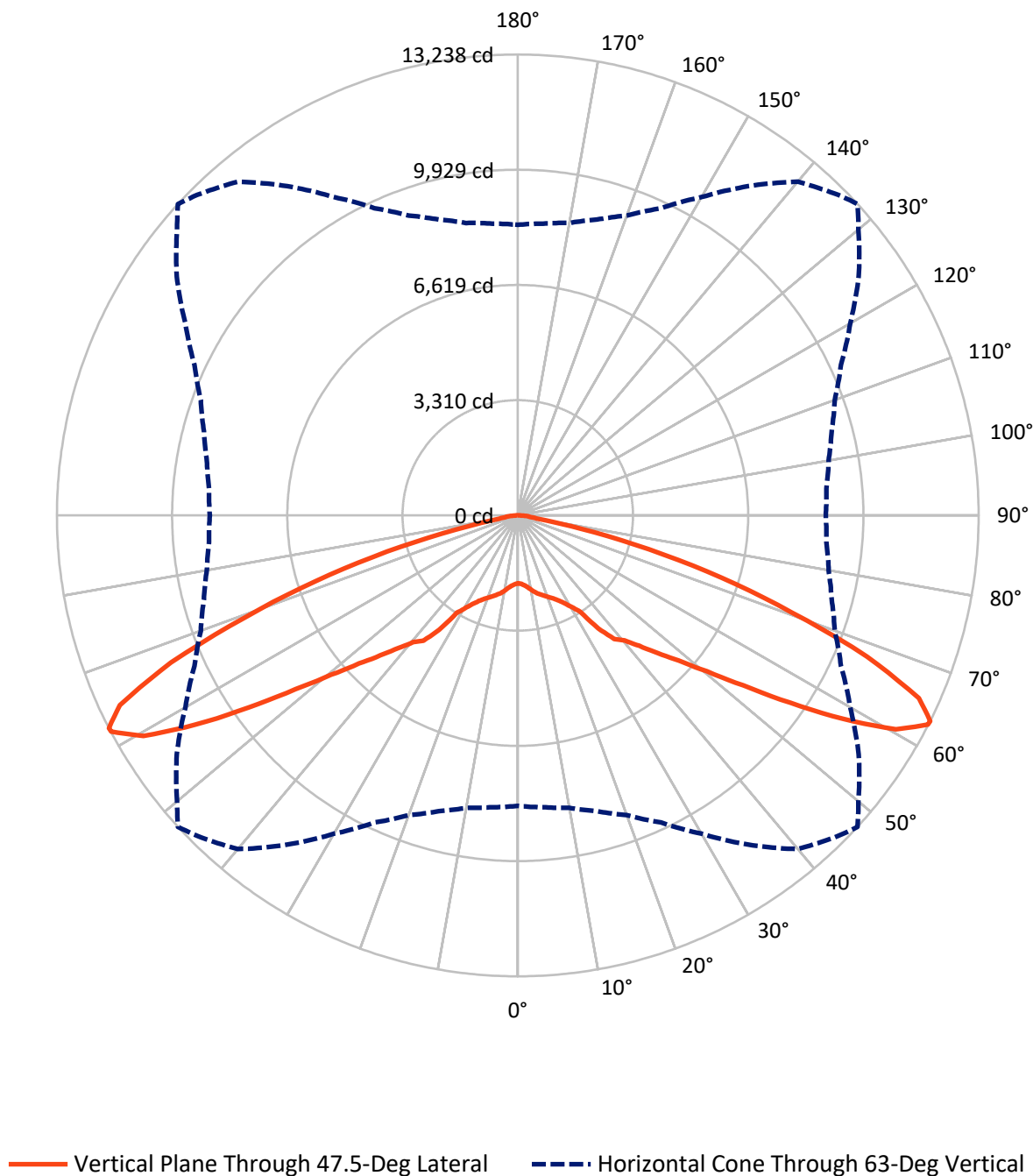


Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
Type V - Short - Full Cutoff

REPORT NUMBER: P157399

CATALOG NUMBER: VST-E10-LED-E-U-5MQ-7030

Luminous Intensity Polar Plot



REPORT NUMBER: P157399

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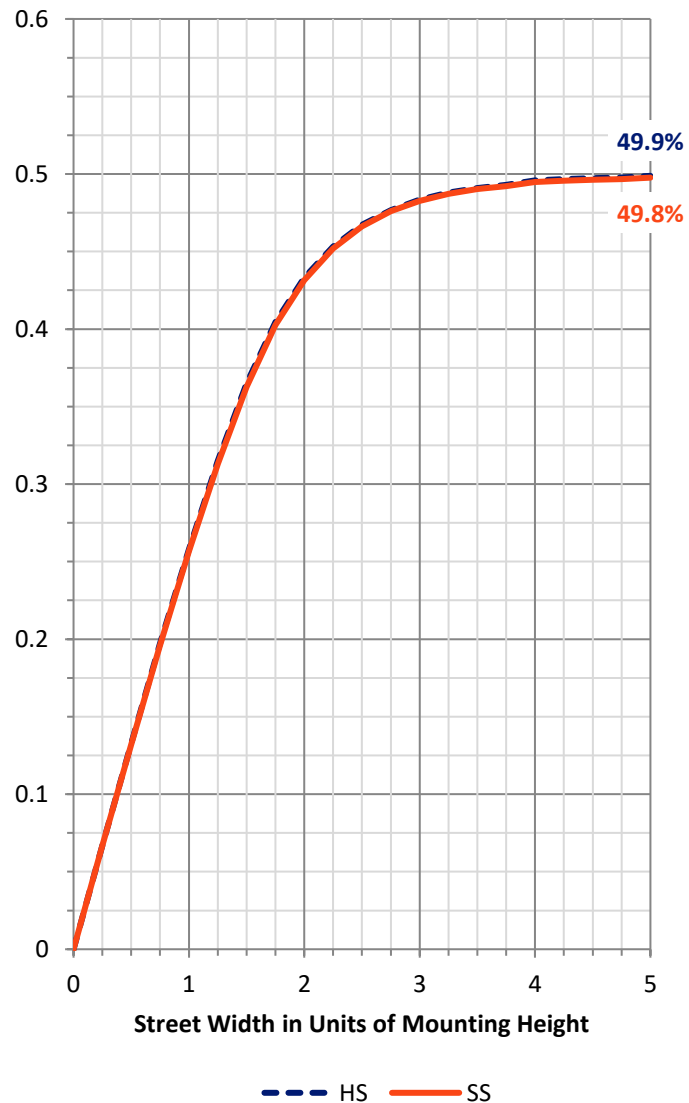
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	14608.4	0.0	14608.4
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	14608.4	0.0	14608.4
	% Fixture	50.0	0.0	50.0
Total	Lumens	29216.8	0.0	29216.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.9	0.7
10°-20°	665.8	2.3
20°-30°	1273.5	4.4
30°-40°	2436.1	8.3
40°-50°	4215.3	14.4
50°-60°	7570.5	25.9
60°-70°	9205.8	31.5
70°-80°	3324.7	11.4
80°-90°	329.3	1.1
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°	29216.8	100.0
0°-180°	29216.8	100.0

Coefficient of Utilization



REPORT NUMBER: P157399

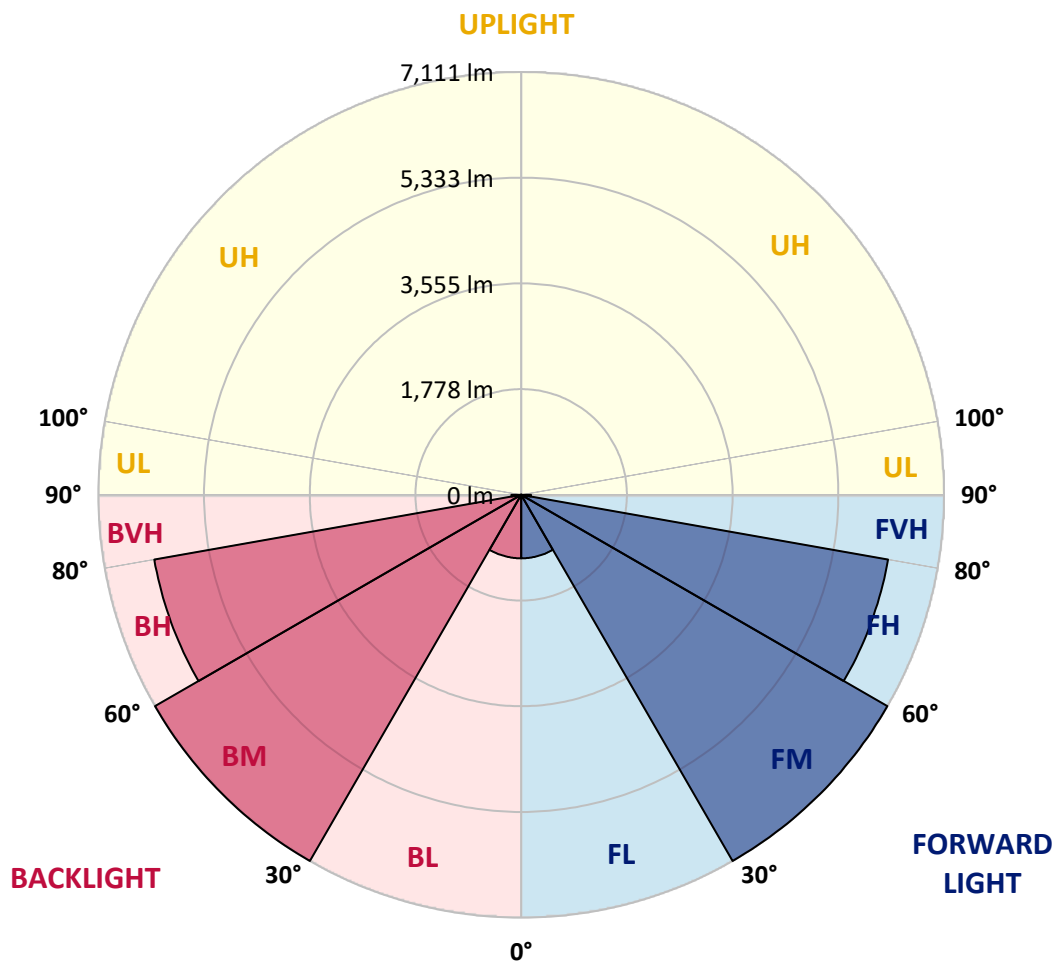
CATALOG NUMBER: VST-E10-LED-E-U-5MQ-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1067.6	3.7			
FM	(30°-60°)	7110.9	24.3			
FH	(60°-80°)	6265.2	21.4			G3/7500
FVH	(80°-90°)	164.6	0.6			G2/225
BL	(0°-30°)	1067.6	3.7	B3/2500		
BM	(30°-60°)	7110.9	24.3	B4/8500		
BH	(60°-80°)	6265.2	21.4	B5		G3/7500
BVH	(80°-90°)	164.6	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G3

Type V Short





REPORT NUMBER: P157399

CATALOG NUMBER: VST-E10-LED-E-U-5MQ-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	47.5°
0°	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9
2.5°	1963.7	1960.0	1961.9	1963.7	1961.9	1960.0	1960.0	1960.0	1963.7	1960.0	1969.2
5°	2002.1	1998.4	2000.2	2000.2	2000.2	1996.6	1996.6	1996.6	1994.8	1996.6	2016.7
7.5°	2075.1	2069.7	2067.8	2071.5	2067.8	2066.0	2064.2	2064.2	2060.5	2060.5	2086.1
10°	2162.8	2155.5	2159.2	2161.0	2155.5	2151.9	2151.9	2151.9	2146.4	2144.5	2177.4
12.5°	2259.6	2256.0	2256.0	2252.3	2250.5	2246.8	2245.0	2246.8	2239.5	2239.5	2272.4
15°	2352.8	2345.5	2347.3	2341.8	2338.2	2334.5	2332.7	2330.9	2327.2	2327.2	2347.3
17.5°	2438.6	2433.2	2431.3	2425.9	2420.4	2414.9	2411.2	2409.4	2403.9	2403.9	2422.2
20°	2528.2	2522.7	2519.0	2509.9	2500.8	2495.3	2488.0	2484.3	2477.0	2478.8	2498.9
22.5°	2630.4	2621.3	2614.0	2606.7	2590.3	2579.3	2570.2	2562.9	2559.2	2559.2	2586.6
25°	2767.5	2762.0	2751.0	2727.3	2707.2	2690.7	2676.1	2668.8	2661.5	2657.8	2699.9
27.5°	2935.5	2930.0	2915.4	2891.7	2864.3	2836.9	2820.4	2807.6	2798.5	2793.0	2853.3
30°	3158.4	3149.2	3136.4	3098.1	3074.3	3032.3	3014.1	2995.8	2975.7	2981.2	3052.4
32.5°	3594.9	3582.2	3542.0	3500.0	3426.9	3370.3	3311.8	3268.0	3226.0	3220.5	3297.2
35°	3991.3	3985.9	3978.6	3949.3	3921.9	3887.2	3859.8	3814.2	3775.8	3766.7	3982.2
37.5°	4205.1	4217.9	4206.9	4203.2	4203.2	4219.7	4270.8	4322.0	4358.5	4380.4	4501.0
40°	4532.0	4532.0	4519.3	4512.0	4497.3	4519.3	4541.2	4579.5	4596.0	4597.8	4720.2
42.5°	4902.9	4904.7	4891.9	4870.0	4862.7	4882.8	4912.0	4948.5	4970.5	4975.9	5118.4
45°	5315.7	5310.2	5299.3	5292.0	5297.4	5315.7	5350.4	5421.6	5454.5	5480.1	5635.4
47.5°	5763.2	5799.8	5768.7	5774.2	5774.2	5830.8	5909.4	5967.8	6020.8	6070.1	6234.5
50°	6349.6	6355.1	6360.6	6377.0	6388.0	6462.9	6561.5	6630.9	6707.6	6771.6	7040.1
52.5°	7133.3	7122.3	7149.7	7168.0	7230.1	7270.3	7434.7	7522.4	7628.3	7710.5	8103.2
55°	8070.4	8064.9	8105.1	8119.7	8201.9	8300.5	8483.2	8675.0	8855.8	8956.3	9493.4
57.5°	8742.6	8757.2	8826.6	8923.4	9084.2	9294.3	9566.4	9990.2	10333.6	10443.2	11035.1
60°	8890.6	8938.0	9042.2	9235.8	9511.6	9902.5	10437.8	11086.2	11714.6	11924.7	12480.0
62.5°	8475.9	8530.7	8684.1	8916.1	9276.0	9855.1	10627.7	11542.9	12476.4	12944.0	13223.5
63°	8344.4	8412.0	8527.0	8795.6	9160.9	9732.7	10554.7	11541.1	12509.2	13018.9	13238.1
65°	7726.9	7739.7	7911.4	8180.0	8591.0	9184.7	10014.0	11153.8	12227.9	12816.1	12664.5
67.5°	6649.2	6702.2	6846.5	7116.8	7516.9	8134.3	9034.9	10088.9	11033.3	11502.7	10825.0
70°	5372.3	5368.7	5547.7	5765.1	6117.6	6660.2	7449.3	8401.0	9149.9	9491.5	8357.2
72.5°	3837.9	3742.9	3874.4	4115.6	4404.2	4837.1	5461.8	6201.6	6872.0	7168.0	6110.3
75°	1748.2	1722.6	1839.5	2078.8	2371.1	2756.5	3269.8	3909.1	4552.1	4899.2	3892.7
77.5°	588.2	595.5	641.2	727.0	884.1	1077.8	1397.4	1806.6	2327.2	2670.6	1826.7
80°	394.6	405.5	420.1	432.9	451.2	480.4	549.8	655.8	816.5	988.2	577.2
82.5°	323.3	336.1	369.0	383.6	394.6	403.7	409.2	416.5	416.5	420.1	365.3
85°	232.0	253.9	297.8	325.2	336.1	343.4	352.6	363.5	347.1	332.5	283.1
87.5°	80.4	109.6	160.7	177.2	190.0	191.8	204.6	226.5	215.6	175.4	85.9
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: P157399

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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°
0°	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9
2.5°	1960.0	1958.2	1960.0	1961.9	1961.9	1961.9	1963.7	1965.5	1965.5
5°	1996.6	1998.4	1996.6	1998.4	1998.4	2000.2	2000.2	2003.9	2003.9
7.5°	2058.7	2062.3	2060.5	2064.2	2064.2	2067.8	2066.0	2071.5	2071.5
10°	2142.7	2146.4	2150.0	2151.9	2150.0	2153.7	2157.3	2159.2	2157.3
12.5°	2237.7	2239.5	2237.7	2241.4	2241.4	2245.0	2245.0	2250.5	2250.5
15°	2325.4	2323.6	2321.7	2327.2	2330.9	2332.7	2336.4	2341.8	2336.4
17.5°	2403.9	2405.8	2402.1	2407.6	2414.9	2420.4	2424.0	2431.3	2429.5
20°	2482.5	2478.8	2482.5	2491.6	2498.9	2506.2	2513.5	2524.5	2522.7
22.5°	2559.2	2562.9	2572.0	2579.3	2592.1	2603.0	2612.2	2626.8	2632.3
25°	2667.0	2667.0	2681.6	2690.7	2709.0	2723.6	2743.7	2760.1	2769.3
27.5°	2804.0	2804.0	2820.4	2840.5	2867.9	2893.5	2915.4	2937.3	2933.7
30°	2990.3	2999.4	3014.1	3039.6	3076.2	3107.2	3136.4	3158.4	3160.2
32.5°	3235.1	3246.0	3289.9	3355.6	3432.4	3490.8	3534.7	3587.6	3594.9
35°	3790.4	3817.8	3874.4	3927.4	3958.5	3993.2	4015.1	4016.9	4020.6
37.5°	4374.9	4327.5	4283.6	4243.4	4225.2	4221.5	4221.5	4228.8	4232.5
40°	4588.7	4564.9	4544.8	4519.3	4526.6	4524.7	4537.5	4548.5	4555.8
42.5°	4954.0	4935.7	4917.5	4884.6	4902.9	4897.4	4915.7	4932.1	4941.2
45°	5463.7	5407.0	5366.8	5313.9	5332.1	5321.2	5321.2	5341.3	5344.9
47.5°	6026.3	5960.5	5878.3	5812.6	5790.6	5770.5	5788.8	5788.8	5768.7
50°	6700.3	6621.8	6525.0	6419.0	6382.5	6362.4	6369.7	6378.8	6322.2
52.5°	7615.5	7527.8	7390.8	7230.1	7195.4	7178.9	7175.3	7162.5	7147.9
55°	8855.8	8691.4	8523.4	8311.5	8247.6	8229.3	8231.1	8216.5	8251.2
57.5°	10319.0	10077.9	9690.6	9433.1	9279.6	9221.2	9168.2	9146.3	9148.1
60°	11767.6	11276.2	10697.2	10247.8	9926.3	9721.7	9561.0	9471.4	9445.9
62.5°	12701.0	11928.4	11058.8	10330.0	9802.1	9464.1	9210.2	9049.5	8998.3
63°	12774.1	11955.8	11026.0	10244.1	9688.8	9334.4	9067.7	8901.5	8846.7
65°	12615.2	11679.9	10596.7	9665.1	9056.8	8664.0	8375.4	8218.3	8176.3
67.5°	11380.3	10602.2	9498.8	8536.2	7922.4	7524.2	7193.5	7043.8	6996.3
70°	9257.7	8724.3	7820.1	6998.1	6426.3	6042.7	5708.4	5584.2	5582.4
72.5°	6862.9	6170.6	5631.7	5028.9	4530.2	4225.2	3934.7	3795.9	3726.5
75°	4539.4	3797.7	3194.9	2687.1	2190.2	1916.2	1589.2	1448.6	1366.4
77.5°	2287.0	1695.2	1214.8	842.1	654.0	537.0	491.4	467.6	465.8
80°	761.7	571.8	491.4	460.3	451.2	453.0	447.5	438.4	427.4
82.5°	422.0	443.9	447.5	434.8	434.8	427.4	420.1	385.4	367.2
85°	361.7	398.2	401.9	394.6	392.7	381.8	369.0	321.5	294.1
87.5°	226.5	261.2	255.7	228.3	252.1	235.6	222.9	144.3	105.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)