

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: P157345

Luminaire Tested: **VST-F04-LED-E-U-5MQ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157345
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-F04-LED-E-U-5MQ
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (28) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10563 lumens
Efficiency: N/A
Efficacy: 103.4 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B3 - U0 - G2

Input Watts (W): 102.2
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

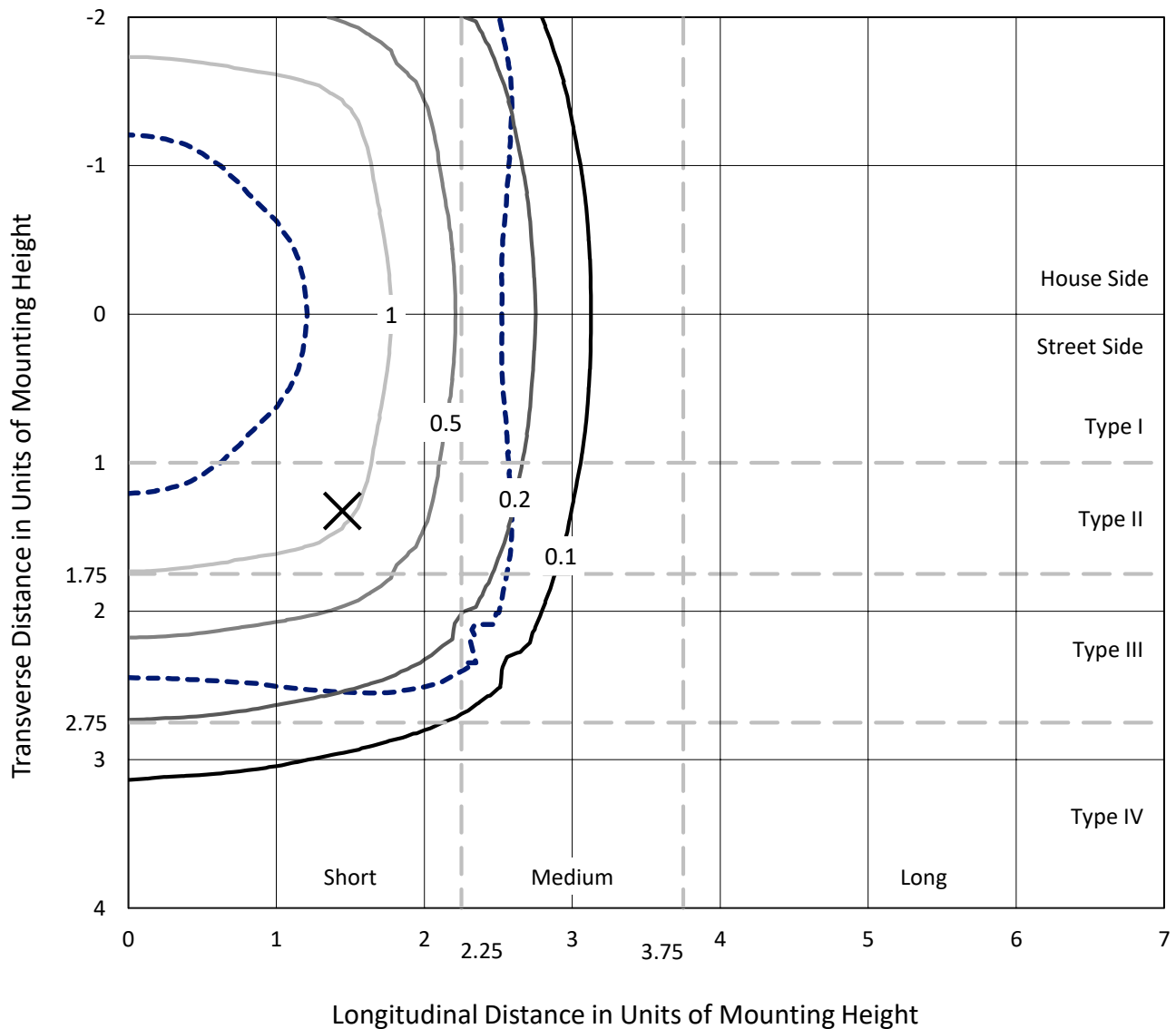


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

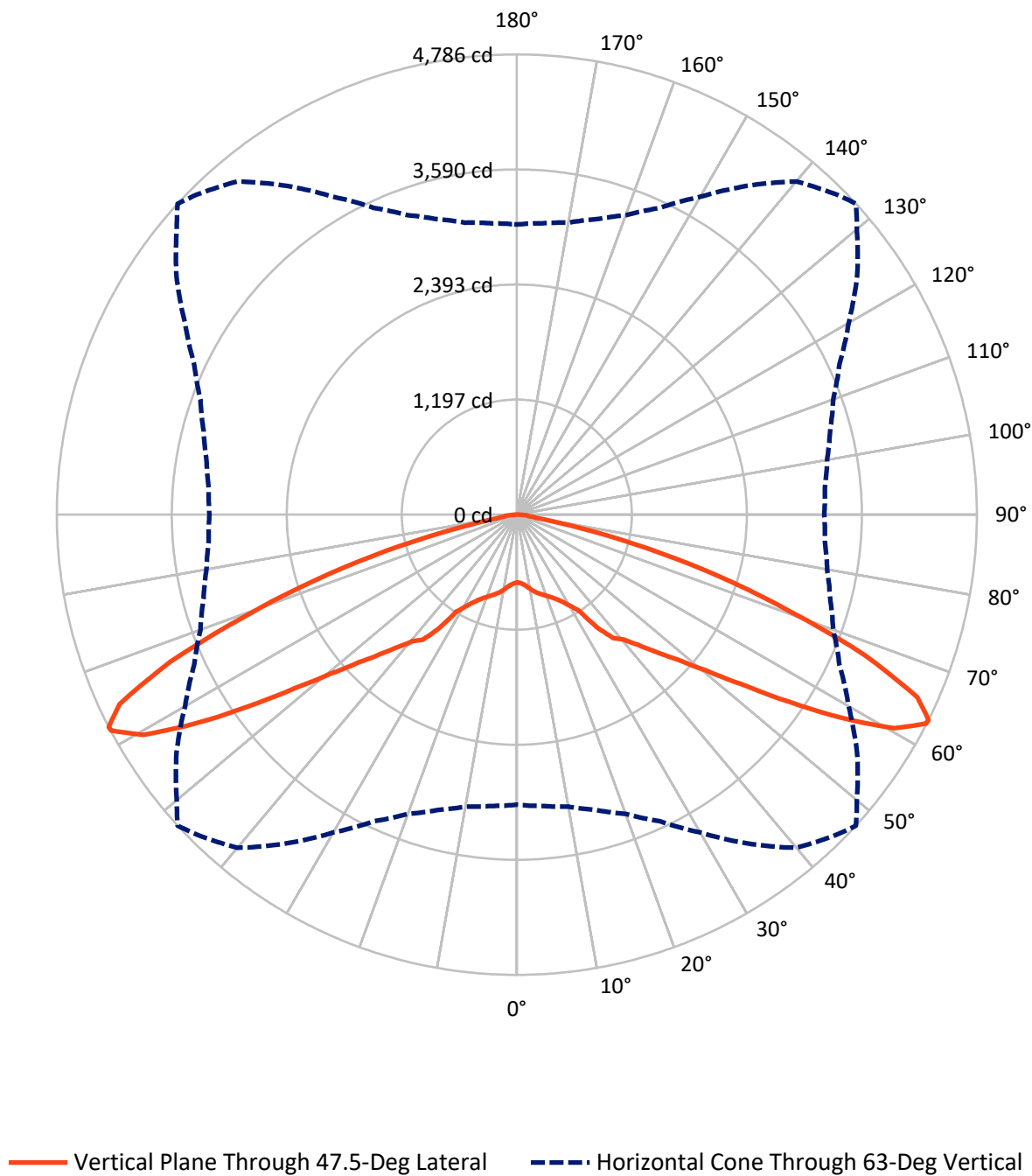


Based on 20 foot mounting height. Maximum calculated value = 1.9 fc
Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



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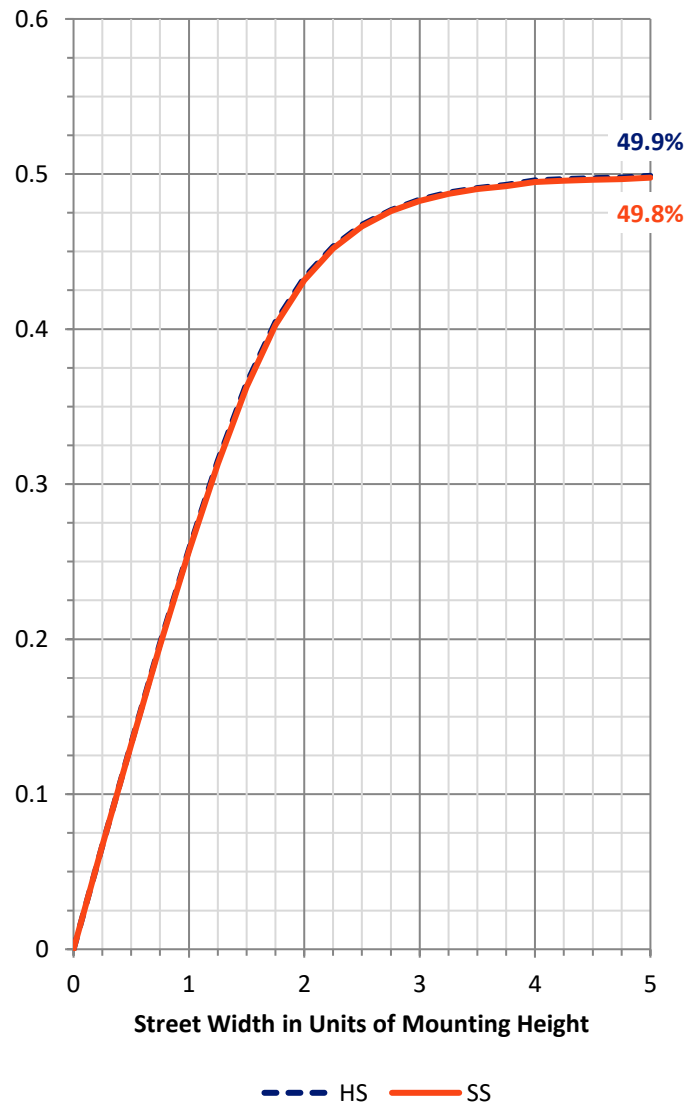
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5281.5	0.0	5281.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	5281.5	0.0	5281.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	10563.0	0.0	10563.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.8	0.7
10°-20°	240.7	2.3
20°-30°	460.4	4.4
30°-40°	880.8	8.3
40°-50°	1524.0	14.4
50°-60°	2737.0	25.9
60°-70°	3328.2	31.5
70°-80°	1202.0	11.4
80°-90°	119.1	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°	10563.0	100.0
0°-180°	10563.0	100.0

Coefficient of Utilization



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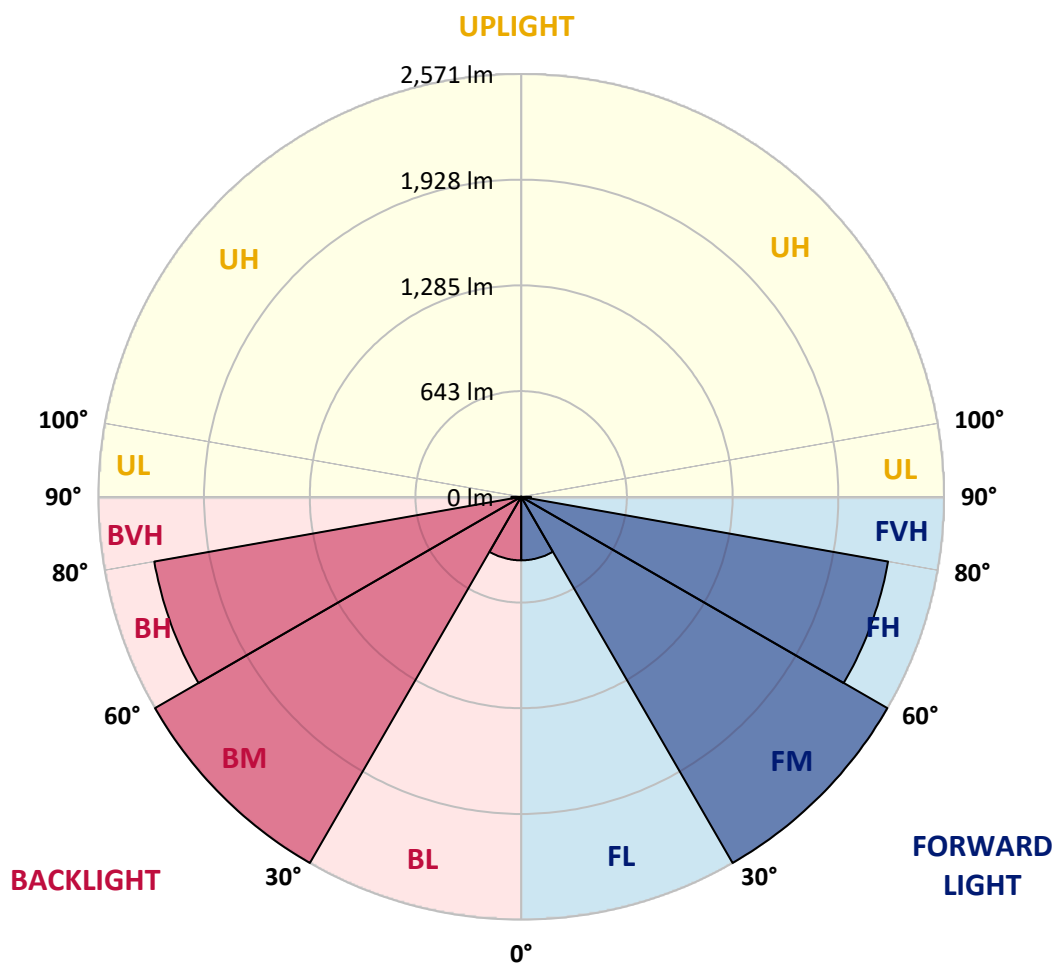
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	386.0	3.7			
FM	(30°-60°)	2570.9	24.3			
FH	(60°-80°)	2265.1	21.4			G2/5000
FVH	(80°-90°)	59.5	0.6			G1/100
BL	(0°-30°)	386.0	3.7	B1/500		
BM	(30°-60°)	2570.9	24.3	B3/5000		
BH	(60°-80°)	2265.1	21.4	B3/2500		G2/5000
BVH	(80°-90°)	59.5	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	47.5°
0°	705.3	705.3	705.3	705.3	705.3	705.3	705.3	705.3	705.3	705.3	705.3
2.5°	710.0	708.6	709.3	710.0	709.3	708.6	708.6	708.6	710.0	708.6	711.9
5°	723.8	722.5	723.2	723.2	723.2	721.8	721.8	721.8	721.2	721.8	729.1
7.5°	750.2	748.3	747.6	748.9	747.6	746.9	746.3	746.3	745.0	745.0	754.2
10°	781.9	779.3	780.6	781.3	779.3	778.0	778.0	778.0	776.0	775.3	787.2
12.5°	816.9	815.6	815.6	814.3	813.6	812.3	811.7	812.3	809.7	809.7	821.6
15°	850.6	848.0	848.6	846.7	845.3	844.0	843.4	842.7	841.4	841.4	848.6
17.5°	881.7	879.7	879.0	877.0	875.1	873.1	871.8	871.1	869.1	869.1	875.7
20°	914.0	912.0	910.7	907.4	904.1	902.1	899.5	898.2	895.5	896.2	903.5
22.5°	951.0	947.7	945.1	942.4	936.5	932.5	929.2	926.6	925.2	925.2	935.2
25°	1000.5	998.6	994.6	986.0	978.7	972.8	967.5	964.9	962.2	960.9	976.1
27.5°	1061.3	1059.3	1054.0	1045.4	1035.5	1025.6	1019.7	1015.1	1011.8	1009.8	1031.6
30°	1141.9	1138.6	1133.9	1120.1	1111.5	1096.3	1089.7	1083.1	1075.8	1077.8	1103.6
32.5°	1299.7	1295.1	1280.6	1265.4	1238.9	1218.5	1197.3	1181.5	1166.3	1164.3	1192.1
35°	1443.0	1441.0	1438.4	1427.8	1417.9	1405.4	1395.5	1379.0	1365.1	1361.8	1439.7
37.5°	1520.3	1524.9	1520.9	1519.6	1519.6	1525.6	1544.1	1562.6	1575.8	1583.7	1627.3
40°	1638.5	1638.5	1633.9	1631.2	1626.0	1633.9	1641.8	1655.7	1661.6	1662.3	1706.5
42.5°	1772.6	1773.2	1768.6	1760.7	1758.0	1765.3	1775.9	1789.1	1797.0	1799.0	1850.5
45°	1921.8	1919.8	1915.9	1913.2	1915.2	1921.8	1934.4	1960.1	1972.0	1981.3	2037.4
47.5°	2083.6	2096.8	2085.6	2087.6	2087.6	2108.1	2136.5	2157.6	2176.7	2194.6	2254.0
50°	2295.6	2297.6	2299.6	2305.5	2309.5	2336.6	2372.2	2397.3	2425.1	2448.2	2545.3
52.5°	2578.9	2575.0	2584.9	2591.5	2613.9	2628.5	2687.9	2719.6	2757.9	2787.6	2929.6
55°	2917.7	2915.8	2930.3	2935.6	2965.3	3000.9	3067.0	3136.3	3201.7	3238.0	3432.2
57.5°	3160.8	3166.1	3191.1	3226.2	3284.3	3360.2	3458.6	3611.8	3736.0	3775.6	3989.6
60°	3214.3	3231.4	3269.1	3339.1	3438.8	3580.1	3773.6	4008.1	4235.3	4311.2	4512.0
62.5°	3064.3	3084.2	3139.6	3223.5	3353.6	3563.0	3842.3	4173.2	4510.7	4679.7	4780.8
63°	3016.8	3041.2	3082.8	3179.9	3312.0	3518.7	3815.9	4172.5	4522.6	4706.8	4786.1
65°	2793.6	2798.2	2860.3	2957.4	3106.0	3320.6	3620.4	4032.5	4420.9	4633.5	4578.7
67.5°	2403.9	2423.1	2475.3	2573.0	2717.6	2940.8	3266.4	3647.5	3988.9	4158.7	3913.6
70°	1942.3	1941.0	2005.7	2084.3	2211.7	2407.9	2693.2	3037.3	3308.0	3431.5	3021.4
72.5°	1387.5	1353.2	1400.8	1487.9	1592.3	1748.8	1974.7	2242.1	2484.5	2591.5	2209.1
75°	632.0	622.8	665.0	751.6	857.2	996.6	1182.2	1413.3	1645.8	1771.2	1407.4
77.5°	212.7	215.3	231.8	262.8	319.6	389.6	505.2	653.2	841.4	965.5	660.4
80°	142.7	146.6	151.9	156.5	163.1	173.7	198.8	237.1	295.2	357.3	208.7
82.5°	116.9	121.5	133.4	138.7	142.7	146.0	147.9	150.6	150.6	151.9	132.1
85°	83.9	91.8	107.6	117.6	121.5	124.2	127.5	131.4	125.5	120.2	102.4
87.5°	29.1	39.6	58.1	64.1	68.7	69.3	74.0	81.9	77.9	63.4	31.0
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):

	50°	55°	60°	65°	70°	75°	80°	85°	90°
0°	705.3	705.3	705.3	705.3	705.3	705.3	705.3	705.3	705.3
2.5°	708.6	708.0	708.6	709.3	709.3	709.3	710.0	710.6	710.6
5°	721.8	722.5	721.8	722.5	722.5	723.2	723.2	724.5	724.5
7.5°	744.3	745.6	745.0	746.3	746.3	747.6	746.9	748.9	748.9
10°	774.7	776.0	777.3	778.0	777.3	778.6	780.0	780.6	780.0
12.5°	809.0	809.7	809.0	810.3	810.3	811.7	811.7	813.6	813.6
15°	840.7	840.1	839.4	841.4	842.7	843.4	844.7	846.7	844.7
17.5°	869.1	869.8	868.5	870.4	873.1	875.1	876.4	879.0	878.4
20°	897.5	896.2	897.5	900.8	903.5	906.1	908.7	912.7	912.0
22.5°	925.2	926.6	929.9	932.5	937.1	941.1	944.4	949.7	951.7
25°	964.2	964.2	969.5	972.8	979.4	984.7	992.0	997.9	1001.2
27.5°	1013.7	1013.7	1019.7	1027.0	1036.9	1046.1	1054.0	1062.0	1060.6
30°	1081.1	1084.4	1089.7	1098.9	1112.1	1123.4	1133.9	1141.9	1142.5
32.5°	1169.6	1173.6	1189.4	1213.2	1240.9	1262.1	1277.9	1297.1	1299.7
35°	1370.4	1380.3	1400.8	1419.9	1431.1	1443.7	1451.6	1452.3	1453.6
37.5°	1581.7	1564.5	1548.7	1534.2	1527.6	1526.2	1526.2	1528.9	1530.2
40°	1659.0	1650.4	1643.1	1633.9	1636.5	1635.9	1640.5	1644.4	1647.1
42.5°	1791.1	1784.5	1777.9	1766.0	1772.6	1770.6	1777.2	1783.1	1786.4
45°	1975.3	1954.8	1940.3	1921.2	1927.8	1923.8	1923.8	1931.1	1932.4
47.5°	2178.7	2155.0	2125.2	2101.5	2093.5	2086.3	2092.9	2092.9	2085.6
50°	2422.4	2394.0	2359.0	2320.7	2307.5	2300.2	2302.9	2306.2	2285.7
52.5°	2753.3	2721.6	2672.1	2613.9	2601.4	2595.5	2594.1	2589.5	2584.2
55°	3201.7	3142.3	3081.5	3004.9	2981.8	2975.2	2975.9	2970.6	2983.1
57.5°	3730.7	3643.5	3503.5	3410.4	3354.9	3333.8	3314.6	3306.7	3307.4
60°	4254.4	4076.8	3867.4	3705.0	3588.7	3514.8	3456.6	3424.3	3415.0
62.5°	4591.9	4312.5	3998.2	3734.7	3543.8	3421.6	3329.8	3271.7	3253.2
63°	4618.3	4322.4	3986.3	3703.6	3502.9	3374.7	3278.3	3218.2	3198.4
65°	4560.9	4222.7	3831.1	3494.3	3274.4	3132.4	3028.0	2971.2	2956.0
67.5°	4114.4	3833.1	3434.2	3086.1	2864.2	2720.3	2600.7	2546.6	2529.4
70°	3347.0	3154.2	2827.3	2530.1	2323.4	2184.7	2063.8	2018.9	2018.2
72.5°	2481.2	2230.9	2036.1	1818.1	1637.8	1527.6	1422.5	1372.4	1347.3
75°	1641.1	1373.0	1155.1	971.5	791.8	692.8	574.6	523.7	494.0
77.5°	826.8	612.9	439.2	304.5	236.4	194.2	177.7	169.1	168.4
80°	275.4	206.7	177.7	166.4	163.1	163.8	161.8	158.5	154.5
82.5°	152.6	160.5	161.8	157.2	157.2	154.5	151.9	139.3	132.7
85°	130.8	144.0	145.3	142.7	142.0	138.0	133.4	116.2	106.3
87.5°	81.9	94.4	92.5	82.6	91.1	85.2	80.6	52.2	38.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)