

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: P157355

Luminaire Tested: **VST-F05-LED-E-U-5MQ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157355
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-F05-LED-E-U-5MQ
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (35) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13203.7 lumens
Efficiency: N/A
Efficacy: 99.1 lumens/watt
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B4 - U0 - G2

Input Watts (W): 133.3
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



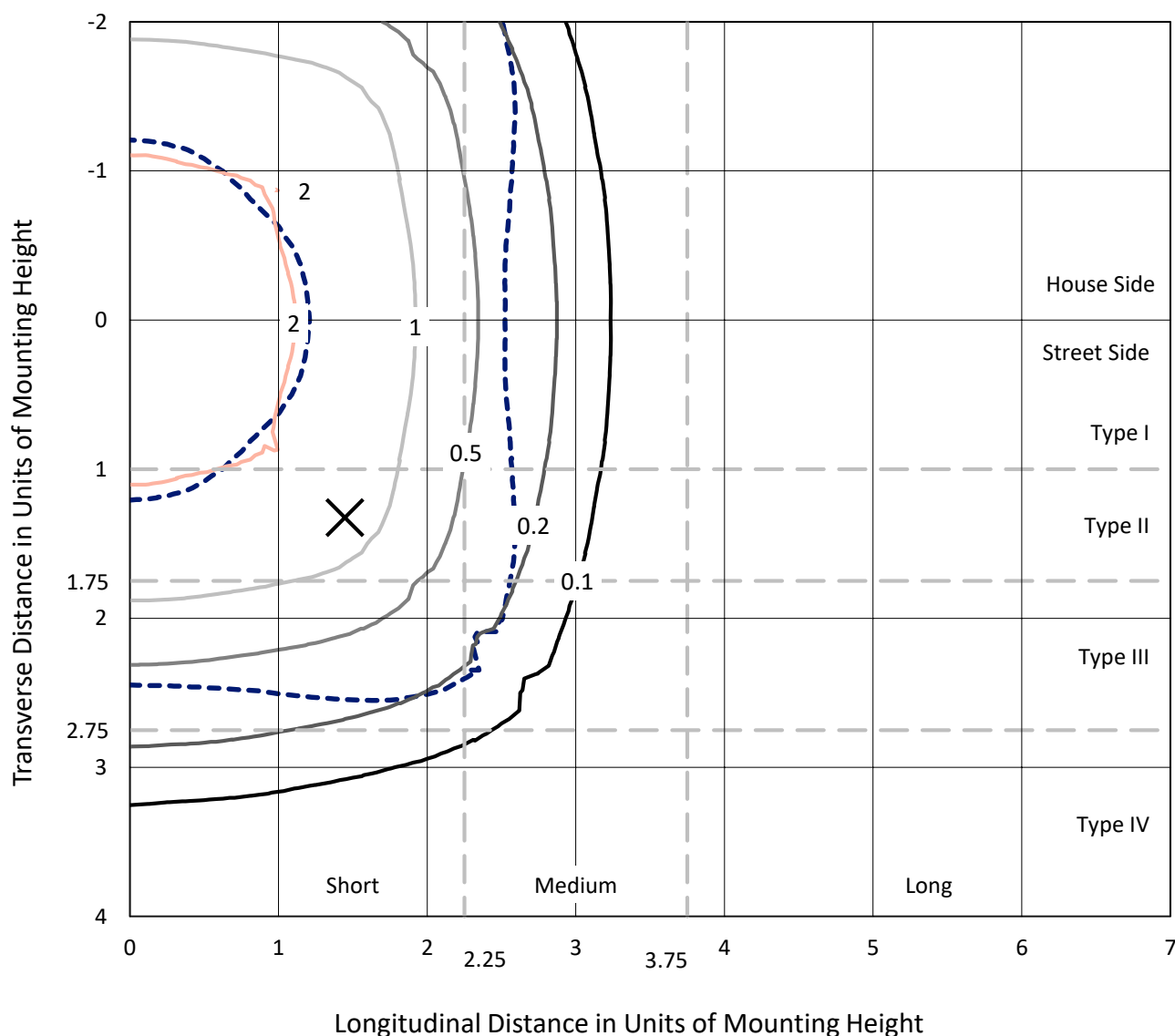
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

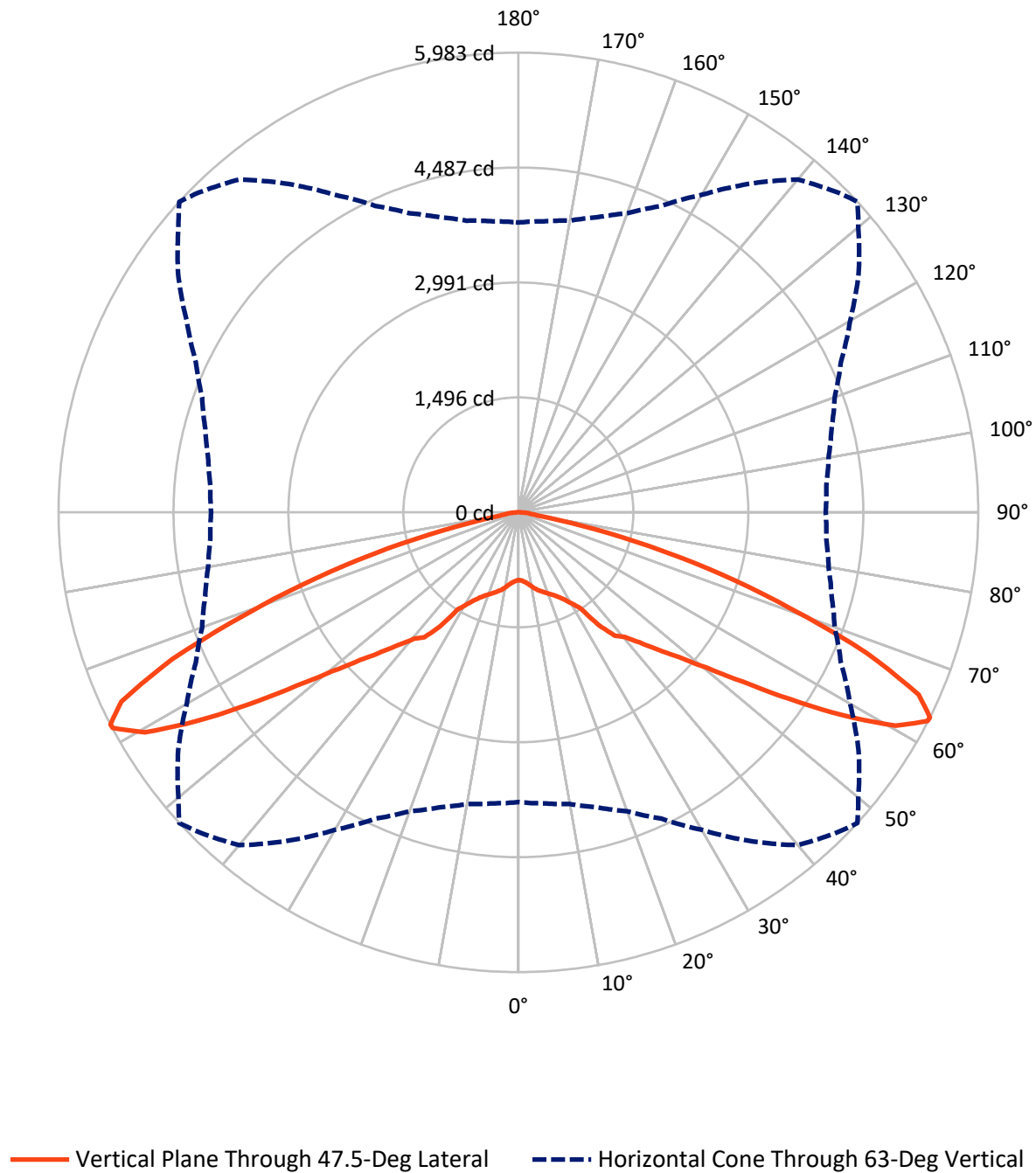


Based on 20 foot mounting height. Maximum calculated value = 2.4 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



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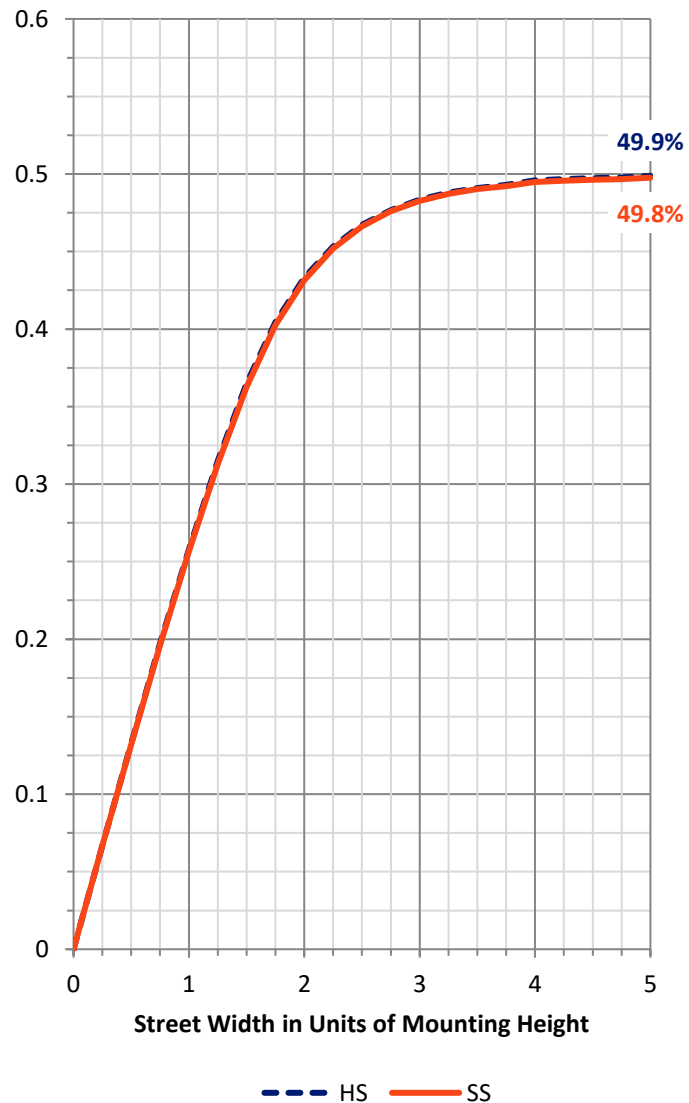
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6601.8	0.0	6601.8
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	6601.8	0.0	6601.8
	% Fixture	50.0	0.0	50.0
Total	Lumens	13203.7	0.0	13203.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.5	0.7
10°-20°	300.9	2.3
20°-30°	575.5	4.4
30°-40°	1100.9	8.3
40°-50°	1905.0	14.4
50°-60°	3421.2	25.9
60°-70°	4160.3	31.5
70°-80°	1502.5	11.4
80°-90°	148.8	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°	13203.7	100.0
0°-180°	13203.7	100.0

Coefficient of Utilization



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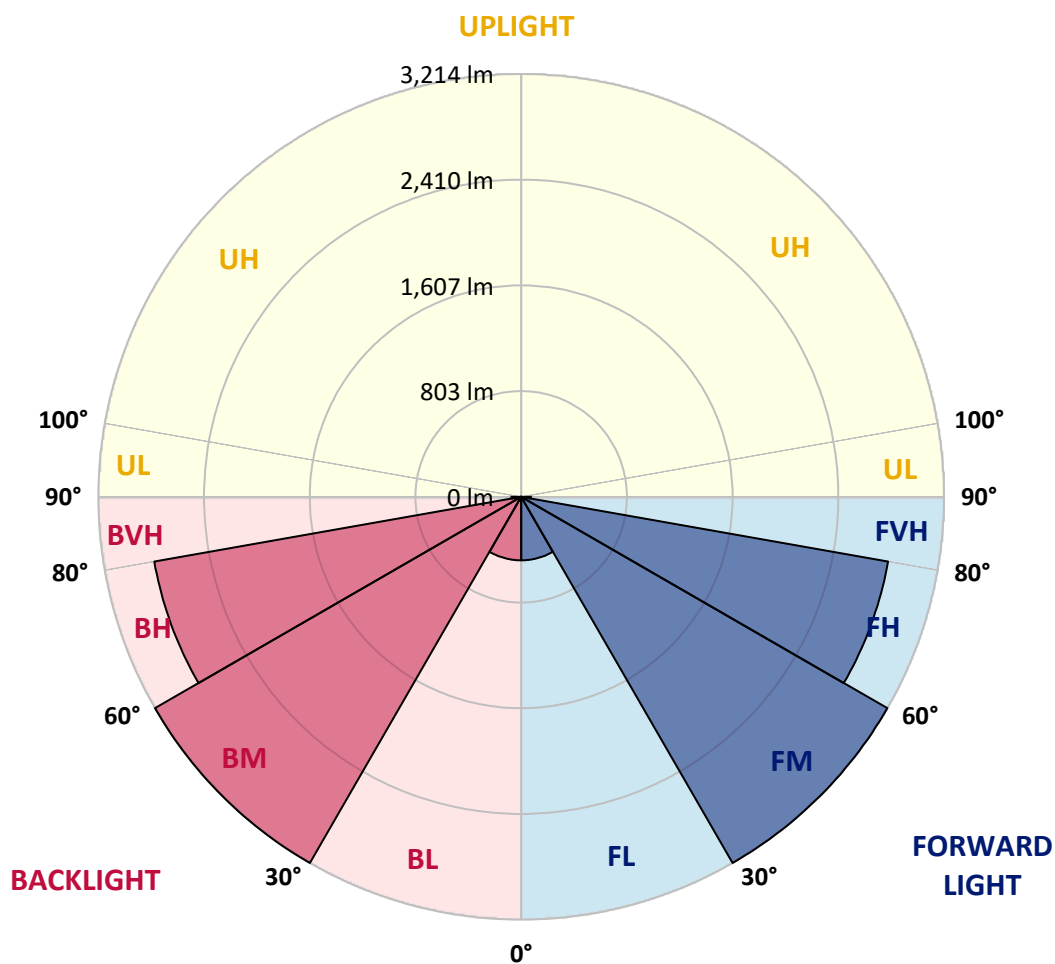
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	482.5	3.7			
FM	(30°-60°)	3213.6	24.3			
FH	(60°-80°)	2831.4	21.4			G2/5000
FVH	(80°-90°)	74.4	0.6			G1/100
BL	(0°-30°)	482.5	3.7	B1/500		
BM	(30°-60°)	3213.6	24.3	B3/5000		
BH	(60°-80°)	2831.4	21.4	B4/5000		G2/5000
BVH	(80°-90°)	74.4	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-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°	881.7	881.7	881.7	881.7	881.7	881.7	881.7	881.7	881.7	881.7	881.7
2.5°	887.4	885.8	886.6	887.4	886.6	885.8	885.8	885.8	887.4	885.8	889.9
5°	904.8	903.1	903.9	903.9	903.9	902.3	902.3	902.3	901.5	902.3	911.4
7.5°	937.8	935.3	934.5	936.1	934.5	933.7	932.8	932.8	931.2	931.2	942.7
10°	977.4	974.1	975.8	976.6	974.1	972.5	972.5	972.5	970.0	969.2	984.0
12.5°	1021.2	1019.5	1019.5	1017.9	1017.0	1015.4	1014.6	1015.4	1012.1	1012.1	1027.0
15°	1063.3	1060.0	1060.8	1058.3	1056.7	1055.0	1054.2	1053.4	1051.7	1051.7	1060.8
17.5°	1102.1	1099.6	1098.8	1096.3	1093.8	1091.3	1089.7	1088.9	1086.4	1086.4	1094.6
20°	1142.5	1140.0	1138.4	1134.3	1130.1	1127.7	1124.4	1122.7	1119.4	1120.2	1129.3
22.5°	1188.8	1184.6	1181.3	1178.0	1170.6	1165.6	1161.5	1158.2	1156.6	1156.6	1168.9
25°	1250.7	1248.2	1243.2	1232.5	1223.4	1216.0	1209.4	1206.1	1202.8	1201.1	1220.1
27.5°	1326.6	1324.1	1317.5	1306.8	1294.4	1282.0	1274.6	1268.8	1264.7	1262.2	1289.5
30°	1427.3	1423.2	1417.4	1400.1	1389.4	1370.4	1362.1	1353.9	1344.8	1347.3	1379.5
32.5°	1624.6	1618.9	1600.7	1581.7	1548.7	1523.1	1496.7	1476.9	1457.9	1455.4	1490.1
35°	1803.8	1801.3	1798.0	1784.8	1772.4	1756.7	1744.3	1723.7	1706.4	1702.2	1799.6
37.5°	1900.4	1906.1	1901.2	1899.5	1899.5	1907.0	1930.1	1953.2	1969.7	1979.6	2034.1
40°	2048.1	2048.1	2042.3	2039.0	2032.4	2042.3	2052.3	2069.6	2077.0	2077.8	2133.2
42.5°	2215.7	2216.5	2210.8	2200.8	2197.5	2206.6	2219.8	2236.3	2246.3	2248.7	2313.1
45°	2402.3	2399.8	2394.8	2391.5	2394.0	2402.3	2418.0	2450.2	2465.0	2476.6	2546.7
47.5°	2604.5	2621.0	2607.0	2609.5	2609.5	2635.1	2670.6	2697.0	2720.9	2743.2	2817.5
50°	2869.5	2872.0	2874.5	2881.9	2886.9	2920.7	2965.3	2996.7	3031.3	3060.2	3181.6
52.5°	3223.7	3218.7	3231.1	3239.4	3267.4	3285.6	3359.9	3399.5	3447.4	3484.5	3662.0
55°	3647.2	3644.7	3662.9	3669.5	3706.6	3751.2	3833.7	3920.4	4002.1	4047.5	4290.3
57.5°	3951.0	3957.6	3988.9	4032.7	4105.3	4200.3	4323.3	4514.8	4670.0	4719.5	4987.0
60°	4017.8	4039.3	4086.3	4173.9	4298.5	4475.2	4717.0	5010.1	5294.1	5389.0	5640.0
62.5°	3830.4	3855.2	3924.5	4029.4	4192.0	4453.7	4802.9	5216.5	5638.3	5849.7	5976.0
63°	3771.0	3801.5	3853.6	3974.9	4140.0	4398.4	4769.9	5215.7	5653.2	5883.5	5982.6
65°	3492.0	3497.7	3575.3	3696.7	3882.4	4150.7	4525.5	5040.7	5526.1	5791.9	5723.4
67.5°	3004.9	3028.9	3094.1	3216.2	3397.0	3676.1	4083.0	4559.4	4986.2	5198.3	4892.1
70°	2427.9	2426.2	2507.1	2605.4	2764.7	3009.9	3366.5	3796.6	4135.1	4289.4	3776.8
72.5°	1734.4	1691.5	1750.9	1859.9	1990.3	2186.0	2468.3	2802.7	3105.6	3239.4	2761.4
75°	790.0	778.5	831.3	939.4	1071.5	1245.7	1477.7	1766.6	2057.2	2214.1	1759.2
77.5°	265.8	269.1	289.8	328.6	399.6	487.1	631.5	816.4	1051.7	1206.9	825.5
80°	178.3	183.3	189.9	195.6	203.9	217.1	248.5	296.4	369.0	446.6	260.9
82.5°	146.1	151.9	166.8	173.4	178.3	182.4	184.9	188.2	188.2	189.9	165.1
85°	104.8	114.7	134.6	146.9	151.9	155.2	159.3	164.3	156.8	150.2	128.0
87.5°	36.3	49.5	72.6	80.1	85.9	86.7	92.5	102.4	97.4	79.3	38.8
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°	881.7	881.7	881.7	881.7	881.7	881.7	881.7	881.7	881.7
2.5°	885.8	885.0	885.8	886.6	886.6	886.6	887.4	888.3	888.3
5°	902.3	903.1	902.3	903.1	903.1	903.9	903.9	905.6	905.6
7.5°	930.4	932.0	931.2	932.8	932.8	934.5	933.7	936.1	936.1
10°	968.3	970.0	971.6	972.5	971.6	973.3	974.9	975.8	974.9
12.5°	1011.3	1012.1	1011.3	1012.9	1012.9	1014.6	1014.6	1017.0	1017.0
15°	1050.9	1050.1	1049.2	1051.7	1053.4	1054.2	1055.8	1058.3	1055.8
17.5°	1086.4	1087.2	1085.6	1088.0	1091.3	1093.8	1095.5	1098.8	1097.9
20°	1121.9	1120.2	1121.9	1126.0	1129.3	1132.6	1135.9	1140.9	1140.0
22.5°	1156.6	1158.2	1162.3	1165.6	1171.4	1176.4	1180.5	1187.1	1189.6
25°	1205.3	1205.3	1211.9	1216.0	1224.3	1230.9	1239.9	1247.4	1251.5
27.5°	1267.2	1267.2	1274.6	1283.7	1296.1	1307.6	1317.5	1327.4	1325.8
30°	1351.4	1355.5	1362.1	1373.7	1390.2	1404.2	1417.4	1427.3	1428.2
32.5°	1462.0	1467.0	1486.8	1516.5	1551.2	1577.6	1597.4	1621.3	1624.6
35°	1713.0	1725.3	1750.9	1774.9	1788.9	1804.6	1814.5	1815.3	1817.0
37.5°	1977.1	1955.7	1935.9	1917.7	1909.4	1907.8	1907.8	1911.1	1912.7
40°	2073.7	2063.0	2053.9	2042.3	2045.7	2044.8	2050.6	2055.6	2058.9
42.5°	2238.8	2230.6	2222.3	2207.5	2215.7	2213.2	2221.5	2228.9	2233.0
45°	2469.1	2443.6	2425.4	2401.5	2409.7	2404.8	2404.8	2413.8	2415.5
47.5°	2723.4	2693.7	2656.5	2626.8	2616.9	2607.8	2616.1	2616.1	2607.0
50°	3028.0	2992.5	2948.8	2900.9	2884.4	2875.3	2878.6	2882.7	2857.1
52.5°	3441.6	3402.0	3340.1	3267.4	3251.7	3244.3	3242.7	3236.9	3230.3
55°	4002.1	3927.8	3851.9	3756.1	3727.2	3719.0	3719.8	3713.2	3728.9
57.5°	4663.4	4554.4	4379.4	4263.0	4193.7	4167.2	4143.3	4133.4	4134.2
60°	5318.0	5096.0	4834.3	4631.2	4485.9	4393.4	4320.8	4280.3	4268.8
62.5°	5739.9	5390.7	4997.7	4668.3	4429.8	4277.0	4162.3	4089.7	4066.5
63°	5772.9	5403.1	4982.9	4629.5	4378.6	4218.4	4097.9	4022.8	3998.0
65°	5701.1	5278.4	4788.9	4367.9	4093.0	3915.5	3785.0	3714.0	3695.0
67.5°	5143.0	4791.3	4292.7	3857.7	3580.3	3400.3	3250.9	3183.2	3161.8
70°	4183.8	3942.7	3534.1	3162.6	2904.2	2730.8	2579.8	2523.6	2522.8
72.5°	3101.5	2788.6	2545.1	2272.7	2047.3	1909.4	1778.2	1715.4	1684.1
75°	2051.4	1716.3	1443.8	1214.3	989.8	866.0	718.2	654.6	617.5
77.5°	1033.6	766.1	549.0	380.6	295.5	242.7	222.1	211.3	210.5
80°	344.2	258.4	222.1	208.0	203.9	204.7	202.3	198.1	193.2
82.5°	190.7	200.6	202.3	196.5	196.5	193.2	189.9	174.2	165.9
85°	163.5	180.0	181.6	178.3	177.5	172.5	166.8	145.3	132.9
87.5°	102.4	118.1	115.6	103.2	113.9	106.5	100.7	65.2	47.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)