

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: P165540

Luminaire Tested: **VST-F10-LED-E-U-SL4-HSS-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165540
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33728)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-F10-LED-E-U-SL4-HSS-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(10) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (70) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14007.8 lumens
Efficiency: N/A
Efficacy: 54.1 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.67' x L: 1' x H: 0.1')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G3

Input Watts (W): 258.7
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

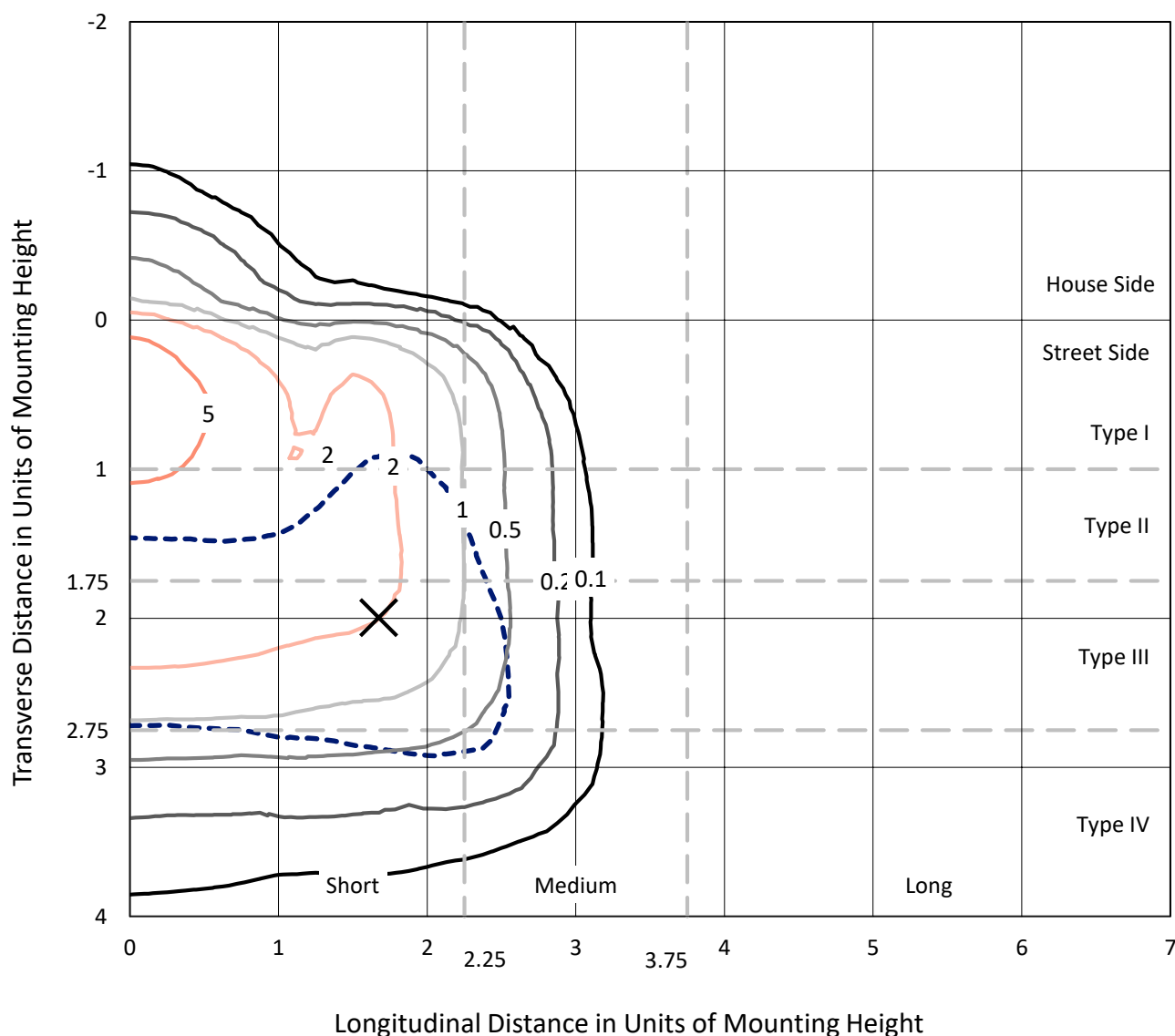


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

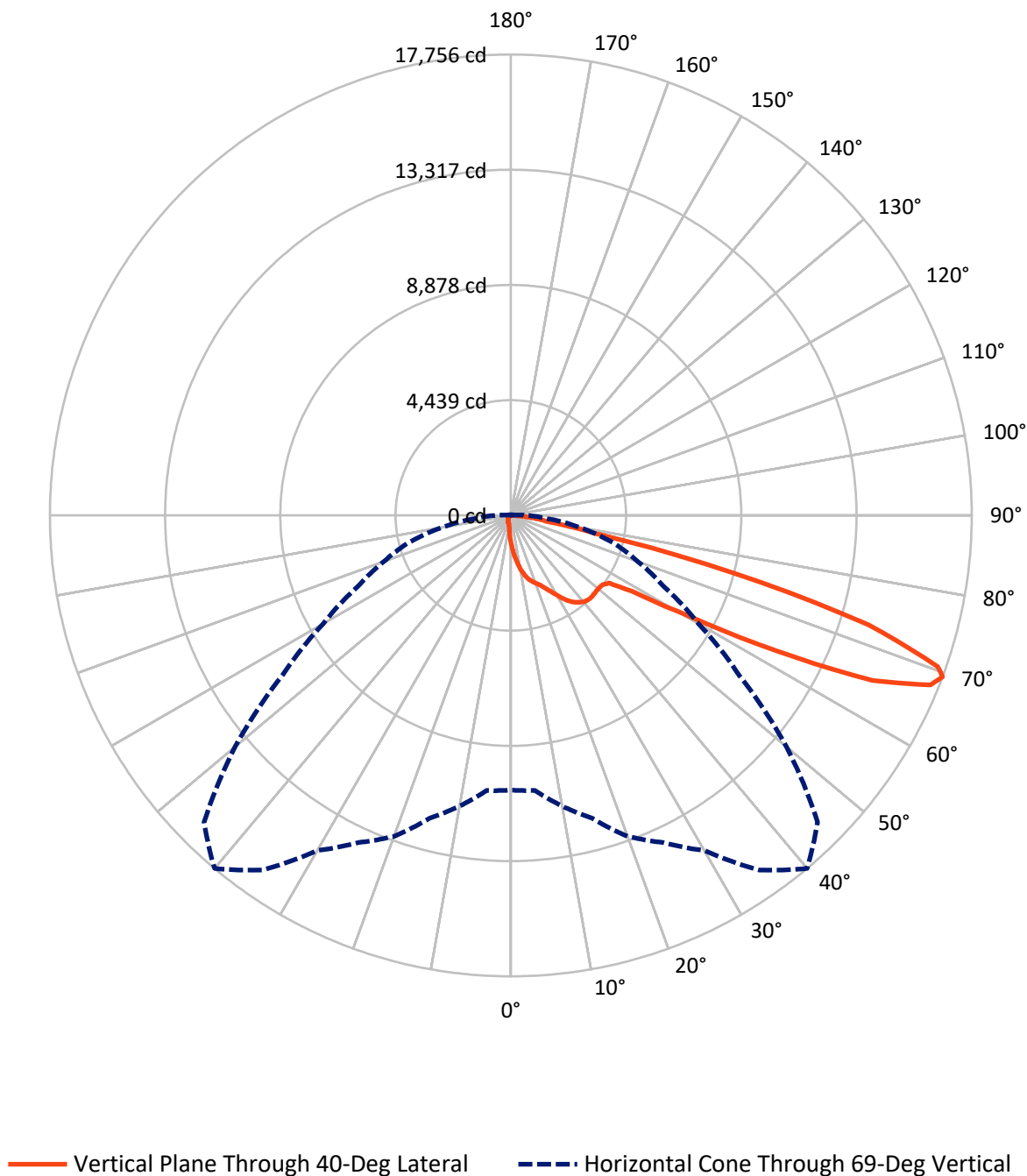


Based on 20 foot mounting height. Maximum calculated value = 7.8 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	417.1	0.0	417.1
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	13590.7	0.0	13590.7
	% Fixture	97.0	0.0	97.0
Total	Lumens	14007.8	0.0	14007.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.7	0.8
10°-20°	374.9	2.7
20°-30°	717.5	5.1
30°-40°	1193.2	8.5
40°-50°	1614.6	11.5
50°-60°	2525.1	18.0
60°-70°	5191.5	37.1
70°-80°	2089.0	14.9
80°-90°	193.2	1.4
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°	14007.8	100.0
0°-180°	14007.8	100.0

Coefficient of Utilization



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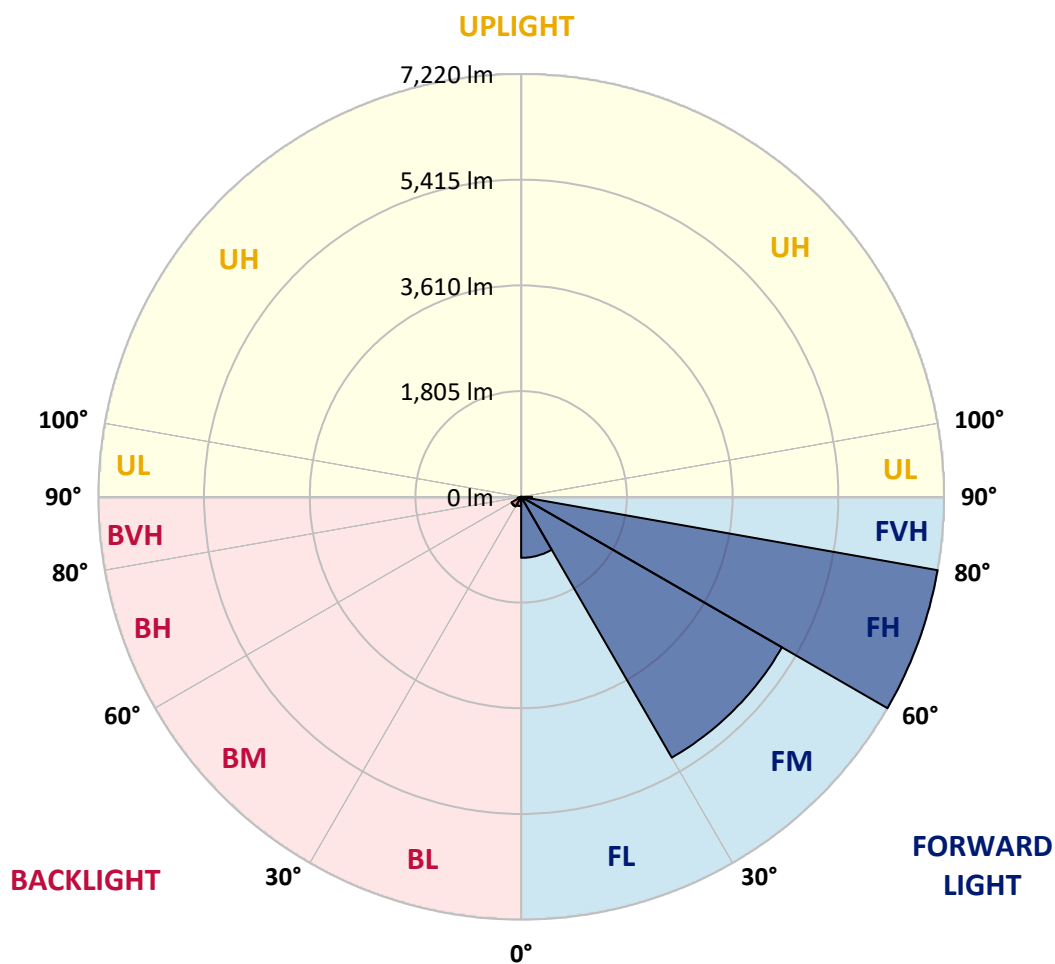
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1042.5	7.4			
FM	(30°-60°)	5142.5	36.7			
FH	(60°-80°)	7219.7	51.5			G3/7500
FVH	(80°-90°)	186.0	1.3			G2/225
BL	(0°-30°)	158.7	1.1	B1/500		
BM	(30°-60°)	190.5	1.4	B0/220		
BH	(60°-80°)	60.8	0.4	B0/110		G0/110
BVH	(80°-90°)	7.2	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9
2.5°	1411.3	1395.1	1376.7	1376.7	1353.9	1353.9	1340.1	1303.5	1298.9	1278.1	1257.5
5°	1801.3	1787.5	1764.7	1743.9	1725.7	1693.5	1670.5	1626.9	1578.8	1532.8	1491.6
7.5°	2182.3	2175.3	2134.1	2127.1	2097.3	2044.6	1998.7	1934.4	1851.8	1787.5	1711.9
10°	2535.7	2519.5	2510.3	2471.3	2427.8	2370.4	2299.2	2221.3	2124.9	2023.9	1916.0
12.5°	2815.6	2806.5	2765.1	2749.0	2703.2	2645.8	2556.3	2455.3	2359.0	2228.2	2101.9
15°	3024.4	3008.4	2980.8	2955.6	2900.5	2850.1	2767.4	2657.2	2540.3	2398.0	2246.6
17.5°	3198.9	3169.0	3162.1	3123.0	3065.8	3006.0	2914.3	2813.3	2675.6	2533.3	2368.1
20°	3432.8	3391.6	3377.8	3320.4	3253.9	3171.3	3065.8	2939.5	2794.9	2639.0	2469.1
22.5°	3708.2	3678.3	3648.5	3598.1	3513.2	3396.2	3242.5	3104.8	2921.1	2749.0	2565.5
25°	4098.3	4073.1	4024.9	3956.1	3850.4	3710.5	3524.6	3322.7	3107.0	2886.7	2671.0
27.5°	4476.9	4454.0	4419.5	4366.9	4247.4	4093.7	3864.2	3607.3	3334.2	3068.0	2829.3
30°	4832.7	4811.9	4777.5	4724.8	4619.2	4467.7	4208.4	3933.1	3593.5	3283.7	2996.9
32.5°	5215.9	5208.9	5169.9	5094.3	5002.4	4798.3	4516.0	4220.0	3875.8	3517.8	3182.7
35°	5649.5	5596.7	5560.1	5484.3	5328.4	5110.3	4779.9	4456.3	4093.7	3726.6	3352.6
37.5°	6016.7	5966.3	5920.3	5824.0	5633.5	5355.8	4981.8	4626.0	4252.0	3878.0	3497.1
40°	6285.1	6259.9	6204.8	6078.6	5865.3	5534.9	5130.9	4743.1	4366.9	3990.5	3614.1
42.5°	6484.8	6445.8	6383.9	6253.1	6000.7	5624.3	5190.5	4791.3	4419.5	4059.3	3689.9
45°	6558.2	6526.2	6468.8	6326.5	6053.4	5649.5	5188.3	4777.5	4421.9	4079.9	3740.4
47.5°	6514.6	6482.6	6432.0	6298.9	6030.5	5619.7	5147.1	4738.5	4398.9	4086.9	3786.2
50°	6370.1	6351.7	6312.7	6200.2	5959.3	5562.3	5110.3	4717.9	4394.3	4121.3	3850.4
52.5°	6356.3	6344.9	6296.7	6184.2	5938.7	5543.9	5105.7	4729.4	4433.3	4164.9	3896.4
55°	7767.5	7604.6	7239.8	6930.0	6420.6	5814.8	5337.4	4915.2	4598.6	4337.0	4148.8
57.5°	11039.8	10796.6	10317.0	9727.3	8556.9	7407.3	6487.2	5821.6	5493.5	5374.2	5445.3
60°	12572.6	12529.1	12453.3	12173.4	11574.4	10585.5	9484.0	8293.1	7815.7	7774.5	7919.0
62.5°	13300.1	13272.5	13295.5	13261.1	13075.2	12786.1	12469.3	11955.4	11482.6	11177.4	10530.3
65°	13635.1	13653.5	13784.2	13887.5	13910.5	13986.1	14218.0	14858.2	15326.2	14539.2	12742.5
67.5°	12783.7	12891.6	13192.3	13568.5	14009.1	14435.9	15124.3	16473.6	17435.1	16510.4	13958.7
69°	10583.1	10635.9	11370.2	12079.3	13155.5	13908.2	14906.4	16675.5	17756.4	16712.3	13862.3
70°	8332.0	8380.2	9167.4	10131.1	11950.8	12919.1	14224.8	16333.7	17455.7	16443.8	13366.6
72.5°	3758.7	3689.9	3967.5	4483.8	6461.8	7999.4	10282.6	13233.5	14401.5	13173.9	10000.2
75°	2625.2	2595.3	2625.2	2627.4	2934.9	3786.2	4777.5	7173.2	8871.3	7655.2	4777.5
77.5°	2033.1	2012.5	1991.8	1968.8	2005.6	2246.6	2342.8	2544.8	3304.3	3125.4	1822.0
80°	1608.6	1590.2	1640.7	1624.6	1624.6	1652.2	1633.8	1558.0	1415.8	1312.5	1174.8
82.5°	748.0	752.6	752.6	816.9	984.5	1149.6	1202.4	1126.8	1000.5	851.3	686.1
85°	71.1	80.3	135.4	208.9	415.4	468.1	470.4	390.0	390.0	307.5	247.8
87.5°	0.0	2.2	2.2	2.2	20.6	57.4	48.2	13.8	6.8	6.8	11.4
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9
2.5°	1220.8	1213.9	1186.4	1158.8	1133.6	1106.0	1080.8	1055.6	1028.0	1007.3	982.1
5°	1427.3	1376.7	1319.5	1264.4	1209.3	1152.0	1092.3	1039.5	984.5	933.9	885.7
7.5°	1636.1	1537.4	1459.4	1360.7	1271.3	1181.8	1099.2	1014.3	936.3	862.8	794.0
10°	1812.8	1693.5	1571.8	1445.7	1317.1	1197.8	1083.1	982.1	878.9	789.4	704.5
12.5°	1957.4	1805.9	1656.8	1498.4	1353.9	1202.4	1060.2	938.5	816.9	716.0	628.7
15°	2088.1	1913.8	1734.7	1551.2	1367.7	1195.6	1037.2	885.7	761.8	647.1	548.5
17.5°	2193.7	1994.1	1792.1	1585.6	1388.3	1186.4	1007.3	849.0	704.5	585.1	488.8
20°	2285.6	2076.7	1858.8	1626.9	1402.1	1184.0	982.1	803.2	654.0	527.8	433.6
22.5°	2370.4	2161.6	1927.6	1679.7	1422.7	1181.8	959.1	768.8	610.3	484.2	390.0
25°	2466.9	2246.6	2001.0	1734.7	1459.4	1191.0	945.5	741.2	571.3	442.8	355.6
27.5°	2574.7	2342.8	2088.1	1803.6	1507.6	1209.3	940.9	711.4	536.9	403.8	328.2
30°	2726.0	2457.7	2175.3	1872.4	1551.2	1230.0	936.3	693.0	502.5	374.0	300.6
32.5°	2859.3	2570.1	2271.8	1943.6	1599.4	1250.6	933.9	667.8	470.4	344.2	279.9
35°	2999.2	2673.4	2354.4	2012.5	1640.7	1273.5	931.7	649.4	440.6	314.4	259.3
37.5°	3120.8	2760.5	2418.6	2072.1	1686.7	1294.3	933.9	633.3	413.0	289.1	240.9
40°	3224.1	2850.1	2489.7	2127.1	1734.7	1326.3	936.3	617.3	385.6	266.2	224.9
42.5°	3315.9	2934.9	2565.5	2189.1	1789.9	1363.1	950.1	603.5	362.6	245.5	208.9
45°	3387.0	3013.0	2648.0	2276.4	1879.4	1422.7	975.3	594.3	339.6	227.1	195.1
47.5°	3460.4	3127.6	2788.1	2414.0	2010.2	1516.8	1018.9	592.1	321.2	213.3	183.5
50°	3561.4	3242.5	2911.9	2554.0	2129.5	1613.2	1071.6	594.3	298.3	199.7	172.1
52.5°	3634.9	3359.4	3072.6	2797.3	2414.0	1906.8	1275.9	635.6	286.8	188.1	158.3
55°	4068.5	4020.3	4027.1	4073.1	3777.1	3244.7	2134.1	917.9	337.4	213.3	156.1
57.5°	5736.8	5906.5	6005.2	6002.9	5514.1	4573.4	2866.1	1179.4	376.4	247.8	185.9
60°	7930.5	7802.0	7620.8	7173.2	6523.8	5220.5	3205.7	1269.0	325.8	197.3	169.9
62.5°	9869.5	9116.8	8449.0	7724.0	6872.6	5445.3	3274.5	1262.1	284.5	149.1	119.3
65°	11078.8	9724.9	8646.5	7737.7	6734.9	5257.1	3097.8	1158.8	240.9	121.7	98.7
67.5°	11367.9	9396.7	7870.9	6711.9	5626.6	4091.5	2274.0	872.0	188.1	101.0	87.2
69°	10736.8	8352.7	6521.6	5206.7	4093.7	2714.6	1406.7	550.7	144.5	91.8	80.3
70°	9876.4	7265.0	5312.2	4178.6	3031.4	1906.8	984.5	387.8	117.1	84.9	73.4
72.5°	6354.1	3816.0	2611.4	1817.4	1250.6	759.6	385.6	174.5	89.5	71.1	59.6
75°	2464.5	1411.3	1023.5	777.8	608.1	422.2	234.1	112.5	75.7	59.6	45.8
77.5°	1213.9	929.3	759.6	520.9	302.9	188.1	126.2	87.2	62.0	43.6	29.8
80°	959.1	637.9	381.0	236.3	178.9	135.4	96.4	71.1	45.8	27.6	20.6
82.5°	491.1	268.5	197.3	160.7	133.1	105.6	78.0	50.4	29.8	18.4	16.0
85°	153.7	112.5	101.0	98.7	91.8	75.7	55.0	32.2	18.4	11.4	11.4
87.5°	11.4	16.0	20.6	16.0	18.4	16.0	20.6	13.8	9.2	9.2	6.8
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9	1057.9
2.5°	963.7	936.3	911.1	894.9	865.1	853.6	842.2	837.6	816.9	821.5	803.2
5°	842.2	794.0	757.2	720.6	686.1	660.9	640.2	614.9	594.3	585.1	566.7
7.5°	732.0	670.1	621.9	582.9	541.5	509.5	481.9	463.5	445.2	426.8	417.6
10°	635.6	569.1	514.1	475.0	436.0	408.4	387.8	374.0	362.6	355.6	353.4
12.5°	546.1	481.9	431.4	397.0	367.2	353.4	344.2	337.4	335.0	332.8	332.8
15°	477.3	413.0	374.0	348.8	335.0	328.2	325.8	321.2	316.7	314.4	314.4
17.5°	413.0	364.8	337.4	323.6	316.7	312.1	307.5	302.9	298.3	296.0	296.0
20°	369.4	330.4	316.7	307.5	300.6	296.0	289.1	284.5	282.3	279.9	277.7
22.5°	335.0	309.8	300.6	293.7	284.5	277.7	273.1	268.5	263.9	261.6	259.3
25°	309.8	293.7	286.8	277.7	268.5	261.6	254.7	247.8	243.3	240.9	236.3
27.5°	291.4	279.9	270.8	259.3	250.1	243.3	236.3	229.5	224.9	220.3	217.9
30°	275.3	263.9	252.4	243.3	231.7	224.9	215.7	208.9	206.5	201.9	197.3
32.5°	259.3	247.8	236.3	224.9	213.3	204.3	199.7	190.5	185.9	183.5	178.9
35°	240.9	229.5	215.7	206.5	195.1	185.9	178.9	172.1	167.5	162.9	160.7
37.5°	224.9	211.1	197.3	185.9	176.7	167.5	160.7	153.7	149.1	144.5	142.3
40°	206.5	192.7	178.9	167.5	158.3	151.5	144.5	137.7	133.1	130.8	130.8
42.5°	190.5	174.5	160.7	151.5	144.5	135.4	128.5	121.7	119.3	117.1	119.3
45°	174.5	158.3	146.9	137.7	130.8	121.7	114.7	110.1	107.9	110.1	112.5
47.5°	160.7	144.5	133.1	126.2	119.3	112.5	105.6	101.0	101.0	105.6	110.1
50°	146.9	130.8	121.7	117.1	110.1	103.3	94.1	91.8	94.1	98.7	103.3
52.5°	133.1	114.7	107.9	105.6	98.7	91.8	84.9	82.6	84.9	89.5	87.2
55°	119.3	101.0	98.7	96.4	89.5	80.3	73.4	73.4	73.4	71.1	66.6
57.5°	114.7	89.5	87.2	84.9	78.0	68.8	64.2	59.6	57.4	50.4	48.2
60°	119.3	80.3	80.3	75.7	68.8	59.6	52.8	45.8	41.2	36.6	36.6
62.5°	96.4	73.4	71.1	66.6	57.4	48.2	41.2	34.4	32.2	29.8	29.8
65°	78.0	66.6	62.0	55.0	48.2	39.0	32.2	27.6	25.2	25.2	27.6
67.5°	71.1	59.6	52.8	45.8	39.0	29.8	25.2	23.0	23.0	25.2	25.2
69°	66.6	55.0	48.2	41.2	34.4	27.6	23.0	23.0	23.0	23.0	25.2
70°	62.0	52.8	45.8	39.0	29.8	23.0	20.6	20.6	23.0	23.0	25.2
72.5°	48.2	41.2	39.0	32.2	23.0	20.6	18.4	20.6	20.6	23.0	23.0
75°	36.6	29.8	29.8	25.2	18.4	16.0	16.0	18.4	18.4	20.6	20.6
77.5°	25.2	20.6	20.6	18.4	16.0	13.8	13.8	16.0	18.4	18.4	20.6
80°	18.4	16.0	13.8	16.0	13.8	11.4	13.8	16.0	16.0	18.4	18.4
82.5°	13.8	13.8	13.8	13.8	11.4	11.4	13.8	13.8	16.0	18.4	18.4
85°	11.4	11.4	11.4	11.4	11.4	11.4	11.4	13.8	13.8	16.0	16.0
87.5°	6.8	6.8	6.8	9.2	9.2	11.4	11.4	11.4	11.4	13.8	13.8
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):

	165°	170°	175°	180°
0°	1057.9	1057.9	1057.9	1057.9
2.5°	798.6	796.2	787.0	789.4
5°	559.9	546.1	555.3	553.1
7.5°	410.8	408.4	406.2	410.8
10°	351.2	351.2	348.8	351.2
12.5°	330.4	330.4	330.4	330.4
15°	314.4	314.4	312.1	312.1
17.5°	296.0	296.0	296.0	293.7
20°	277.7	275.3	275.3	275.3
22.5°	257.0	254.7	254.7	254.7
25°	236.3	234.1	234.1	234.1
27.5°	215.7	213.3	211.1	211.1
30°	195.1	192.7	190.5	190.5
32.5°	174.5	172.1	169.9	169.9
35°	156.1	156.1	153.7	151.5
37.5°	140.0	140.0	140.0	140.0
40°	128.5	130.8	130.8	130.8
42.5°	121.7	123.9	126.2	128.5
45°	117.1	121.7	123.9	123.9
47.5°	114.7	117.1	119.3	119.3
50°	105.6	103.3	103.3	103.3
52.5°	84.9	80.3	78.0	75.7
55°	62.0	59.6	55.0	55.0
57.5°	43.6	43.6	41.2	41.2
60°	34.4	34.4	32.2	34.4
62.5°	29.8	29.8	29.8	29.8
65°	27.6	27.6	27.6	27.6
67.5°	27.6	27.6	27.6	27.6
69°	25.2	25.2	25.2	25.2
70°	25.2	25.2	25.2	25.2
72.5°	23.0	23.0	23.0	23.0
75°	20.6	23.0	23.0	23.0
77.5°	20.6	20.6	20.6	20.6
80°	18.4	18.4	20.6	20.6
82.5°	18.4	18.4	18.4	18.4
85°	16.0	16.0	18.4	18.4
87.5°	13.8	13.8	16.0	16.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)