

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: INVUE

Report Number: P151659

Luminaire Tested: **VWM-E04-LED-E1-SL4-HSS-7030**

Issue Date: 03/03/2020

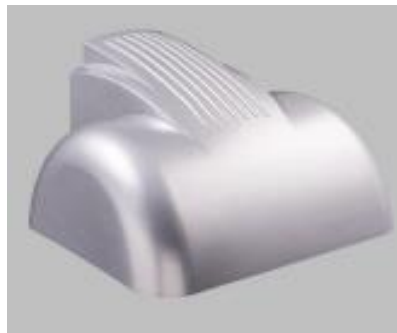
Test Information

Test Method: LM-79-08
Report Number: P151659
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33728)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: VWM-E04-LED-E1-SL4-HSS-7030
Description: VISION WALL MEDIUM LED LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (84) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7434 lumens
Efficiency: N/A
Efficacy: 76.5 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G2

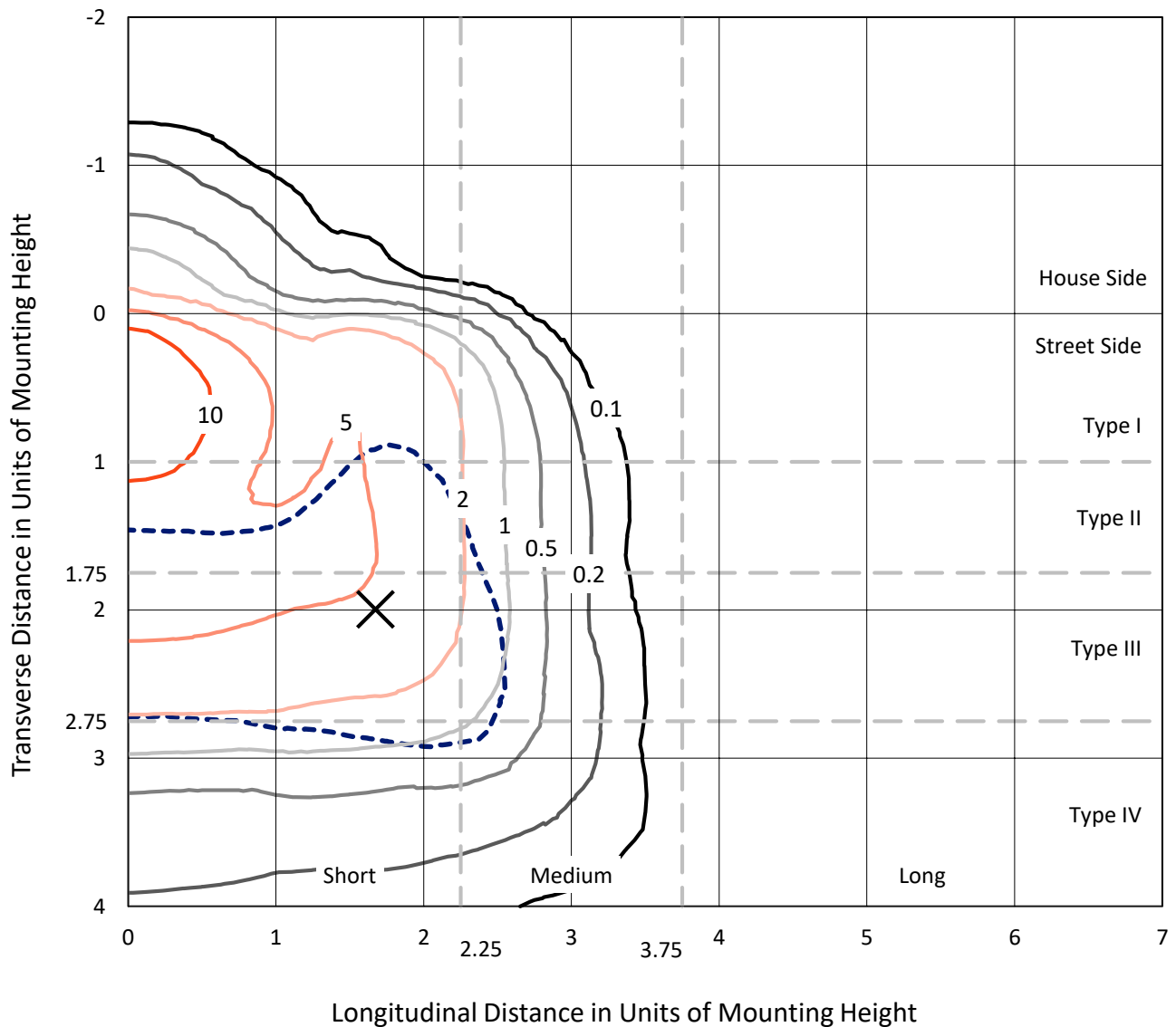
Input Watts (W): 97.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

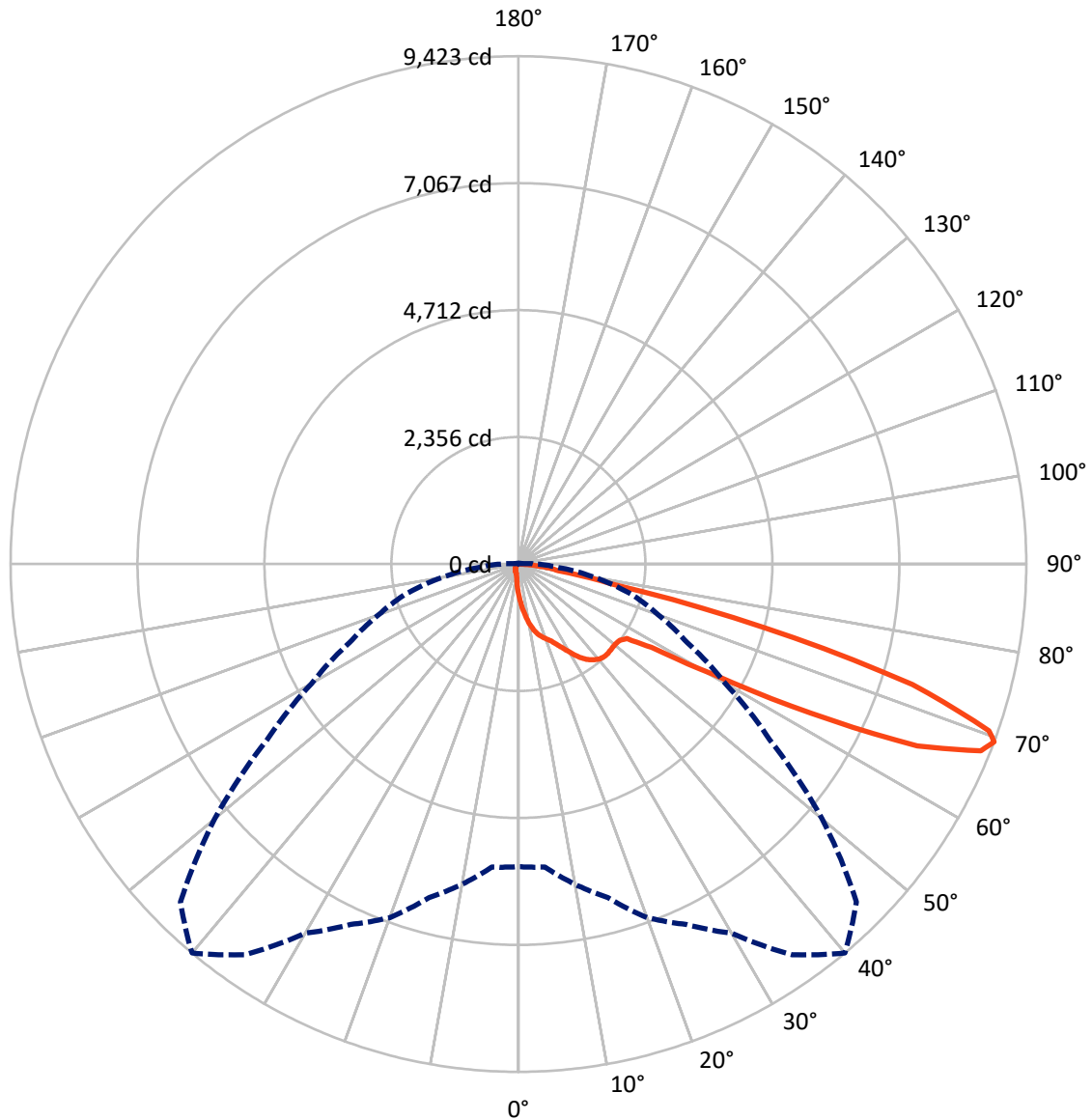
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 16.6 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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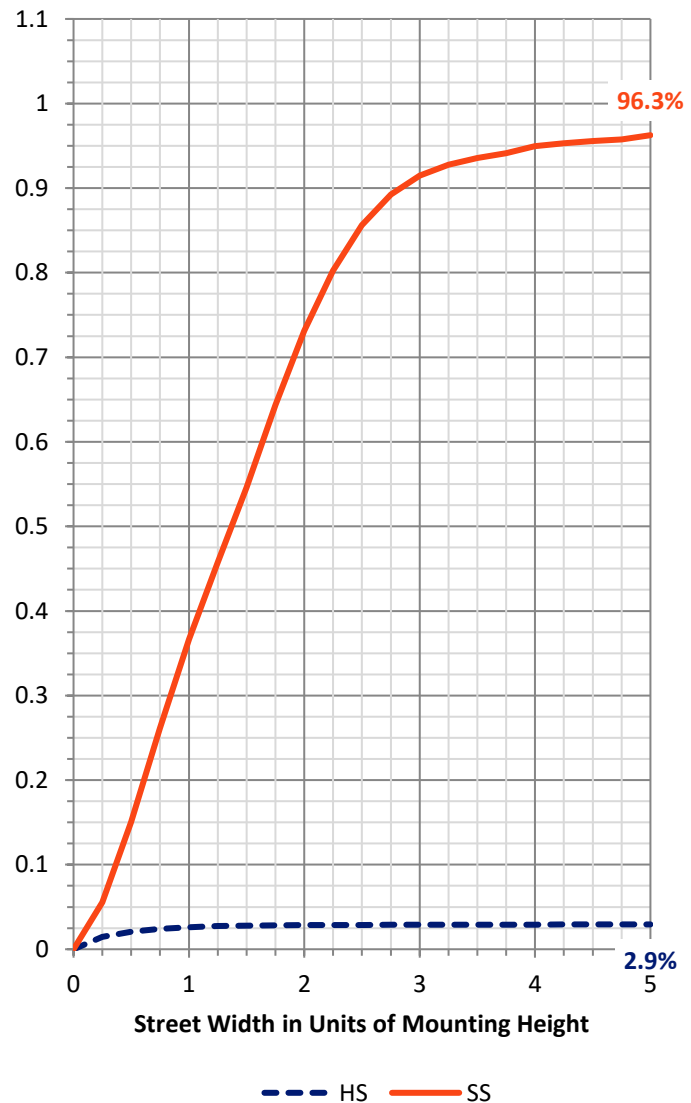
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	221.4	0.0	221.4
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	7212.6	0.0	7212.6
	% Fixture	97.0	0.0	97.0
Total	Lumens	7434.0	0.0	7434.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.7	0.8
10°-20°	198.9	2.7
20°-30°	380.8	5.1
30°-40°	633.2	8.5
40°-50°	856.9	11.5
50°-60°	1340.1	18.0
60°-70°	2755.2	37.1
70°-80°	1108.6	14.9
80°-90°	102.5	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°	7434.0	100.0
0°-180°	7434.0	100.0



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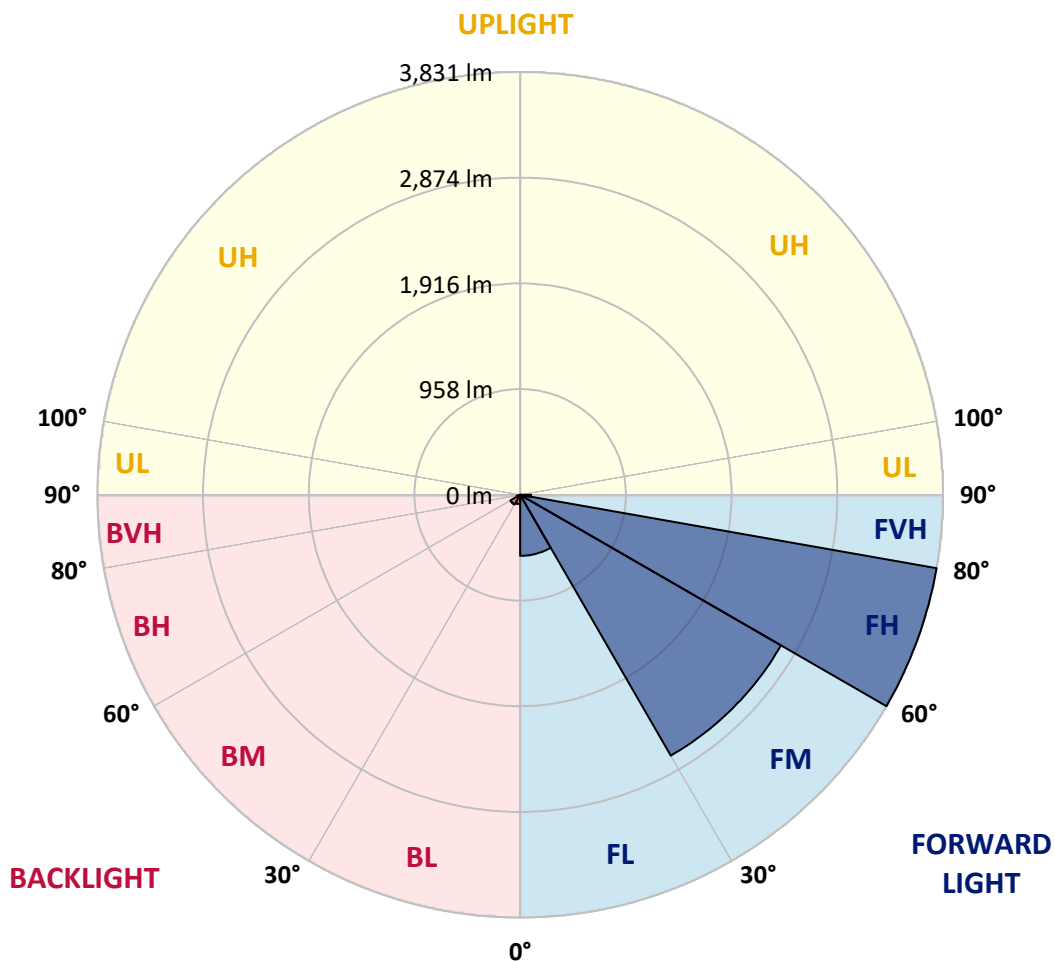
CATALOG NUMBER: VWM-E04-LED-E1-SL4-HSS-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	553.2	7.4			
FM	(30°-60°)	2729.1	36.7			
FH	(60°-80°)	3831.5	51.5			G2/5000
FVH	(80°-90°)	98.7	1.3			G1/100
BL	(0°-30°)	84.2	1.1	B0/110		
BM	(30°-60°)	101.1	1.4	B0/220		
BH	(60°-80°)	32.3	0.4	B0/110		G0/110
BVH	(80°-90°)	3.8	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	561.4	561.4	561.4	561.4	561.4	561.4	561.4	561.4	561.4	561.4	561.4
2.5°	748.9	740.4	730.7	730.7	718.5	718.5	711.2	691.7	689.3	678.3	667.4
5°	956.0	948.7	936.5	925.5	915.8	898.7	886.6	863.4	837.8	813.5	791.6
7.5°	1158.1	1154.5	1132.6	1128.9	1113.1	1085.1	1060.7	1026.6	982.8	948.7	908.5
10°	1345.7	1337.1	1332.3	1311.6	1288.4	1258.0	1220.2	1178.8	1127.7	1074.1	1016.9
12.5°	1494.2	1489.4	1467.4	1458.9	1434.6	1404.1	1356.6	1303.0	1251.9	1182.5	1115.5
15°	1605.1	1596.5	1581.9	1568.5	1539.3	1512.5	1468.7	1410.2	1348.1	1272.6	1192.2
17.5°	1697.6	1681.8	1678.1	1657.4	1627.0	1595.3	1546.6	1493.0	1420.0	1344.5	1256.8
20°	1821.8	1799.9	1792.6	1762.2	1726.8	1683.0	1627.0	1560.0	1483.3	1400.5	1310.4
22.5°	1968.0	1952.1	1936.3	1909.5	1864.5	1802.3	1720.8	1647.7	1550.3	1458.9	1361.5
25°	2175.0	2161.6	2136.0	2099.5	2043.5	1969.2	1870.5	1763.4	1648.9	1532.0	1417.5
27.5°	2375.9	2363.8	2345.5	2317.5	2254.1	2172.6	2050.8	1914.4	1769.5	1628.2	1501.5
30°	2564.7	2553.7	2535.5	2507.5	2451.4	2371.1	2233.4	2087.3	1907.1	1742.7	1590.4
32.5°	2768.1	2764.4	2743.7	2703.5	2654.8	2546.4	2396.6	2239.5	2056.9	1866.9	1689.1
35°	2998.2	2970.2	2950.7	2910.5	2827.7	2712.0	2536.7	2365.0	2172.6	1977.7	1779.2
37.5°	3193.1	3166.3	3141.9	3090.8	2989.7	2842.3	2643.8	2455.1	2256.6	2058.1	1855.9
40°	3335.6	3322.2	3292.9	3226.0	3112.7	2937.3	2723.0	2517.2	2317.5	2117.8	1918.0
42.5°	3441.5	3420.8	3387.9	3318.5	3184.5	2984.8	2754.7	2542.8	2345.5	2154.3	1958.2
45°	3480.5	3463.4	3433.0	3357.5	3212.6	2998.2	2753.4	2535.5	2346.7	2165.2	1985.0
47.5°	3457.3	3440.3	3413.5	3342.9	3200.4	2982.4	2731.5	2514.8	2334.5	2168.9	2009.4
50°	3380.6	3370.9	3350.2	3290.5	3162.6	2951.9	2712.0	2503.8	2332.1	2187.2	2043.5
52.5°	3373.3	3367.2	3341.6	3282.0	3151.7	2942.2	2709.6	2509.9	2352.8	2210.3	2067.8
55°	4122.3	4035.8	3842.2	3677.8	3407.4	3085.9	2832.6	2608.5	2440.5	2301.6	2201.8
57.5°	5858.8	5729.8	5475.2	5162.3	4541.2	3931.1	3442.7	3089.6	2915.4	2852.1	2889.8
60°	6672.3	6649.2	6609.0	6460.4	6142.6	5617.7	5033.2	4401.1	4147.8	4125.9	4202.6
62.5°	7058.4	7043.8	7055.9	7037.7	6939.0	6785.6	6617.5	6344.7	6093.9	5931.9	5588.5
65°	7236.2	7245.9	7315.3	7370.1	7382.3	7422.5	7545.5	7885.3	8133.7	7716.0	6762.4
67.5°	6784.4	6841.6	7001.1	7200.9	7434.7	7661.2	8026.5	8742.6	9252.8	8762.1	7407.9
69°	5616.5	5644.5	6034.2	6410.5	6981.6	7381.1	7910.8	8849.8	9423.3	8869.2	7356.7
70°	4421.8	4447.4	4865.1	5376.6	6342.3	6856.2	7549.1	8668.3	9263.8	8726.8	7093.7
72.5°	1994.8	1958.2	2105.6	2379.6	3429.3	4245.3	5457.0	7023.1	7642.9	6991.4	5307.2
75°	1393.2	1377.3	1393.2	1394.4	1557.6	2009.4	2535.5	3806.8	4708.0	4062.6	2535.5
77.5°	1079.0	1068.0	1057.1	1044.9	1064.4	1192.2	1243.4	1350.5	1753.6	1658.6	966.9
80°	853.7	843.9	870.7	862.2	862.2	876.8	867.1	826.9	751.4	696.6	623.5
82.5°	397.0	399.4	399.4	433.5	522.4	610.1	638.1	597.9	531.0	451.8	364.1
85°	37.8	42.6	71.9	110.8	220.4	248.4	249.6	207.0	207.0	163.2	131.5
87.5°	0.0	1.2	1.2	1.2	11.0	30.4	25.6	7.3	3.7	3.7	6.1
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°	561.4	561.4	561.4	561.4	561.4	561.4	561.4	561.4	561.4	561.4	561.4
2.5°	647.9	644.2	629.6	615.0	601.6	587.0	573.6	560.2	545.6	534.6	521.2
5°	757.5	730.7	700.2	671.0	641.8	611.3	579.7	551.7	522.4	495.6	470.1
7.5°	868.3	815.9	774.5	722.2	674.7	627.2	583.3	538.3	496.9	457.9	421.4
10°	962.1	898.7	834.2	767.2	699.0	635.7	574.8	521.2	466.4	418.9	373.9
12.5°	1038.8	958.4	879.3	795.2	718.5	638.1	562.6	498.1	433.5	380.0	333.7
15°	1108.2	1015.6	920.7	823.2	725.8	634.5	550.4	470.1	404.3	343.4	291.1
17.5°	1164.2	1058.3	951.1	841.5	736.8	629.6	534.6	450.6	373.9	310.5	259.4
20°	1212.9	1102.1	986.4	863.4	744.1	628.4	521.2	426.2	347.1	280.1	230.2
22.5°	1258.0	1147.2	1023.0	891.4	755.0	627.2	509.0	408.0	323.9	257.0	207.0
25°	1309.1	1192.2	1061.9	920.7	774.5	632.0	501.7	393.3	303.2	235.0	188.8
27.5°	1366.4	1243.4	1108.2	957.2	800.1	641.8	499.3	377.5	285.0	214.3	174.1
30°	1446.7	1304.3	1154.5	993.7	823.2	652.7	496.9	367.8	266.7	198.5	159.5
32.5°	1517.4	1363.9	1205.6	1031.5	848.8	663.7	495.6	354.4	249.6	182.7	148.6
35°	1591.7	1418.7	1249.5	1068.0	870.7	675.9	494.4	344.6	233.8	166.8	137.6
37.5°	1656.2	1465.0	1283.6	1099.7	895.1	686.8	495.6	336.1	219.2	153.4	127.9
40°	1711.0	1512.5	1321.3	1128.9	920.7	703.9	496.9	327.6	204.6	141.3	119.3
42.5°	1759.7	1557.6	1361.5	1161.8	949.9	723.4	504.2	320.3	192.4	130.3	110.8
45°	1797.5	1599.0	1405.3	1208.1	997.4	755.0	517.6	315.4	180.2	120.6	103.5
47.5°	1836.4	1659.9	1479.6	1281.1	1066.8	805.0	540.7	314.2	170.5	113.3	97.4
50°	1890.0	1720.8	1545.4	1355.4	1130.1	856.1	568.7	315.4	158.3	105.9	91.3
52.5°	1929.0	1782.9	1630.6	1484.5	1281.1	1012.0	677.1	337.3	152.2	99.9	84.0
55°	2159.2	2133.6	2137.2	2161.6	2004.5	1722.0	1132.6	487.1	179.0	113.3	82.8
57.5°	3044.5	3134.6	3187.0	3185.8	2926.4	2427.1	1521.0	625.9	199.7	131.5	98.6
60°	4208.7	4140.5	4044.3	3806.8	3462.2	2770.5	1701.3	673.4	172.9	104.7	90.1
62.5°	5237.8	4838.3	4483.9	4099.1	3647.3	2889.8	1737.8	669.8	151.0	79.2	63.3
65°	5879.5	5161.0	4588.7	4106.4	3574.2	2790.0	1644.0	615.0	127.9	64.5	52.4
67.5°	6033.0	4986.9	4177.1	3562.1	2986.0	2171.3	1206.8	462.8	99.9	53.6	46.3
69°	5698.1	4432.8	3461.0	2763.2	2172.6	1440.7	746.5	292.3	76.7	48.7	42.6
70°	5241.4	3855.6	2819.2	2217.6	1608.7	1012.0	522.4	205.8	62.1	45.1	39.0
72.5°	3372.1	2025.2	1385.9	964.5	663.7	403.1	204.6	92.6	47.5	37.8	31.7
75°	1307.9	748.9	543.1	412.8	322.7	224.1	124.2	59.7	40.2	31.7	24.4
77.5°	644.2	493.2	403.1	276.4	160.7	99.9	67.0	46.3	32.9	23.1	15.8
80°	509.0	338.5	202.2	125.4	95.0	71.9	51.1	37.8	24.4	14.6	11.0
82.5°	260.6	142.5	104.7	85.2	70.6	56.0	41.4	26.8	15.8	9.7	8.5
85°	81.6	59.7	53.6	52.4	48.7	40.2	29.2	17.0	9.7	6.1	6.1
87.5°	6.1	8.5	11.0	8.5	9.7	8.5	11.0	7.3	4.9	4.9	3.7
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°	561.4	561.4	561.4	561.4	561.4	561.4	561.4	561.4	561.4	561.4	561.4
2.5°	511.5	496.9	483.5	474.9	459.1	453.0	446.9	444.5	433.5	436.0	426.2
5°	446.9	421.4	401.9	382.4	364.1	350.7	339.8	326.4	315.4	310.5	300.8
7.5°	388.5	355.6	330.0	309.3	287.4	270.4	255.7	246.0	236.3	226.5	221.6
10°	337.3	302.0	272.8	252.1	231.4	216.8	205.8	198.5	192.4	188.8	187.5
12.5°	289.8	255.7	228.9	210.7	194.8	187.5	182.7	179.0	177.8	176.6	176.6
15°	253.3	219.2	198.5	185.1	177.8	174.1	172.9	170.5	168.1	166.8	166.8
17.5°	219.2	193.6	179.0	171.7	168.1	165.6	163.2	160.7	158.3	157.1	157.1
20°	196.1	175.4	168.1	163.2	159.5	157.1	153.4	151.0	149.8	148.6	147.4
22.5°	177.8	164.4	159.5	155.9	151.0	147.4	144.9	142.5	140.0	138.8	137.6
25°	164.4	155.9	152.2	147.4	142.5	138.8	135.2	131.5	129.1	127.9	125.4
27.5°	154.7	148.6	143.7	137.6	132.7	129.1	125.4	121.8	119.3	116.9	115.7
30°	146.1	140.0	134.0	129.1	123.0	119.3	114.5	110.8	109.6	107.2	104.7
32.5°	137.6	131.5	125.4	119.3	113.3	108.4	105.9	101.1	98.6	97.4	95.0
35°	127.9	121.8	114.5	109.6	103.5	98.6	95.0	91.3	88.9	86.5	85.2
37.5°	119.3	112.0	104.7	98.6	93.8	88.9	85.2	81.6	79.2	76.7	75.5
40°	109.6	102.3	95.0	88.9	84.0	80.4	76.7	73.1	70.6	69.4	69.4
42.5°	101.1	92.6	85.2	80.4	76.7	71.9	68.2	64.5	63.3	62.1	63.3
45°	92.6	84.0	77.9	73.1	69.4	64.5	60.9	58.5	57.2	58.5	59.7
47.5°	85.2	76.7	70.6	67.0	63.3	59.7	56.0	53.6	53.6	56.0	58.5
50°	77.9	69.4	64.5	62.1	58.5	54.8	49.9	48.7	49.9	52.4	54.8
52.5°	70.6	60.9	57.2	56.0	52.4	48.7	45.1	43.8	45.1	47.5	46.3
55°	63.3	53.6	52.4	51.1	47.5	42.6	39.0	39.0	39.0	37.8	35.3
57.5°	60.9	47.5	46.3	45.1	41.4	36.5	34.1	31.7	30.4	26.8	25.6
60°	63.3	42.6	42.6	40.2	36.5	31.7	28.0	24.4	21.9	19.5	19.5
62.5°	51.1	39.0	37.8	35.3	30.4	25.6	21.9	18.3	17.0	15.8	15.8
65°	41.4	35.3	32.9	29.2	25.6	20.7	17.0	14.6	13.4	13.4	14.6
67.5°	37.8	31.7	28.0	24.4	20.7	15.8	13.4	12.2	12.2	13.4	13.4
69°	35.3	29.2	25.6	21.9	18.3	14.6	12.2	12.2	12.2	12.2	13.4
70°	32.9	28.0	24.4	20.7	15.8	12.2	11.0	11.0	12.2	12.2	13.4
72.5°	25.6	21.9	20.7	17.0	12.2	11.0	9.7	11.0	11.0	12.2	12.2
75°	19.5	15.8	15.8	13.4	9.7	8.5	8.5	9.7	9.7	11.0	11.0
77.5°	13.4	11.0	11.0	9.7	8.5	7.3	7.3	8.5	9.7	9.7	11.0
80°	9.7	8.5	7.3	8.5	7.3	6.1	7.3	8.5	8.5	9.7	9.7
82.5°	7.3	7.3	7.3	7.3	6.1	6.1	7.3	7.3	8.5	9.7	9.7
85°	6.1	6.1	6.1	6.1	6.1	6.1	6.1	7.3	7.3	8.5	8.5
87.5°	3.7	3.7	3.7	4.9	4.9	6.1	6.1	6.1	6.1	7.3	7.3
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°	561.4	561.4	561.4	561.4
2.5°	423.8	422.6	417.7	418.9
5°	297.1	289.8	294.7	293.5
7.5°	218.0	216.8	215.6	218.0
10°	186.3	186.3	185.1	186.3
12.5°	175.4	175.4	175.4	175.4
15°	166.8	166.8	165.6	165.6
17.5°	157.1	157.1	157.1	155.9
20°	147.4	146.1	146.1	146.1
22.5°	136.4	135.2	135.2	135.2
25°	125.4	124.2	124.2	124.2
27.5°	114.5	113.3	112.0	112.0
30°	103.5	102.3	101.1	101.1
32.5°	92.6	91.3	90.1	90.1
35°	82.8	82.8	81.6	80.4
37.5°	74.3	74.3	74.3	74.3
40°	68.2	69.4	69.4	69.4
42.5°	64.5	65.8	67.0	68.2
45°	62.1	64.5	65.8	65.8
47.5°	60.9	62.1	63.3	63.3
50°	56.0	54.8	54.8	54.8
52.5°	45.1	42.6	41.4	40.2
55°	32.9	31.7	29.2	29.2
57.5°	23.1	23.1	21.9	21.9
60°	18.3	18.3	17.0	18.3
62.5°	15.8	15.8	15.8	15.8
65°	14.6	14.6	14.6	14.6
67.5°	14.6	14.6	14.6	14.6
69°	13.4	13.4	13.4	13.4
70°	13.4	13.4	13.4	13.4
72.5°	12.2	12.2	12.2	12.2
75°	11.0	12.2	12.2	12.2
77.5°	11.0	11.0	11.0	11.0
80°	9.7	9.7	11.0	11.0
82.5°	9.7	9.7	9.7	9.7
85°	8.5	8.5	9.7	9.7
87.5°	7.3	7.3	8.5	8.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)