

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: P180948

Luminaire Tested: **ICS-E04-LED-E1-SL4**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P180948
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33680)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ICS-E04-LED-E1-SL4
Description: ICON SITE SMALL LED LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL
Light Source: (84) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10635.4 lumens
Efficiency: N/A
Efficacy: 109.4 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.67' x L: 1' x H: 0.1')
IES Classification: Type IV - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

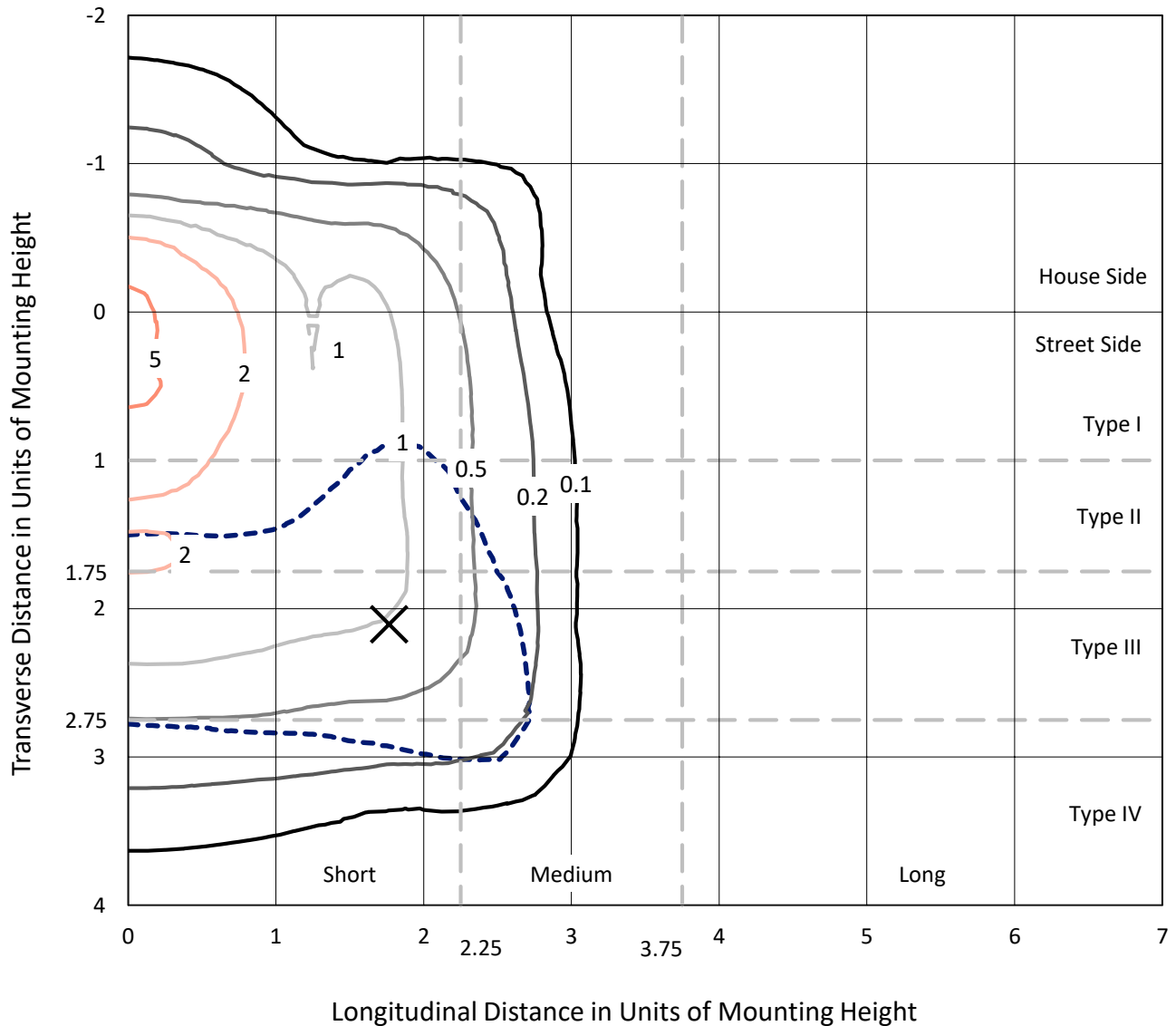
Input Watts (W): 97.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

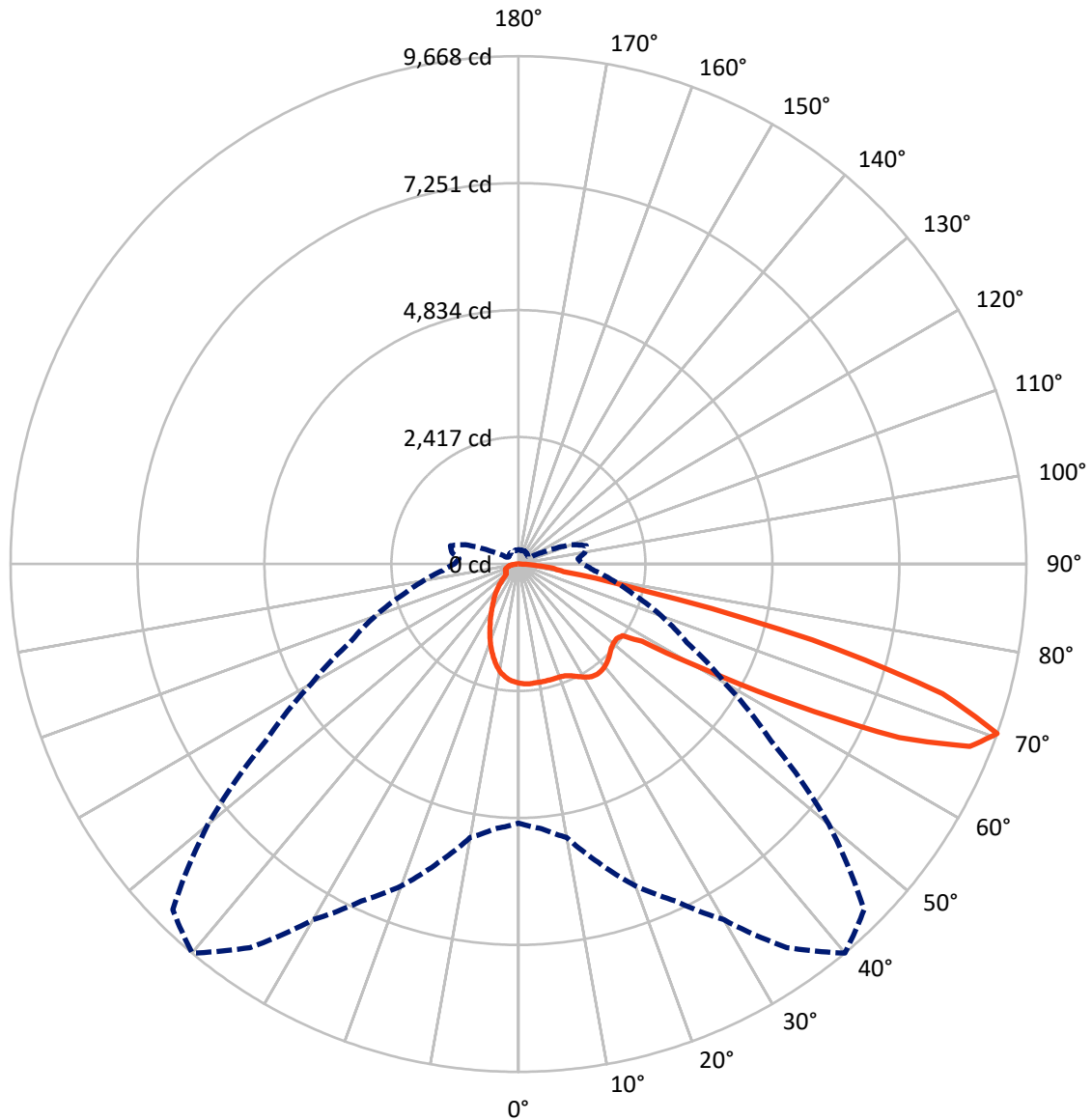
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 5.7 fc
 Type IV - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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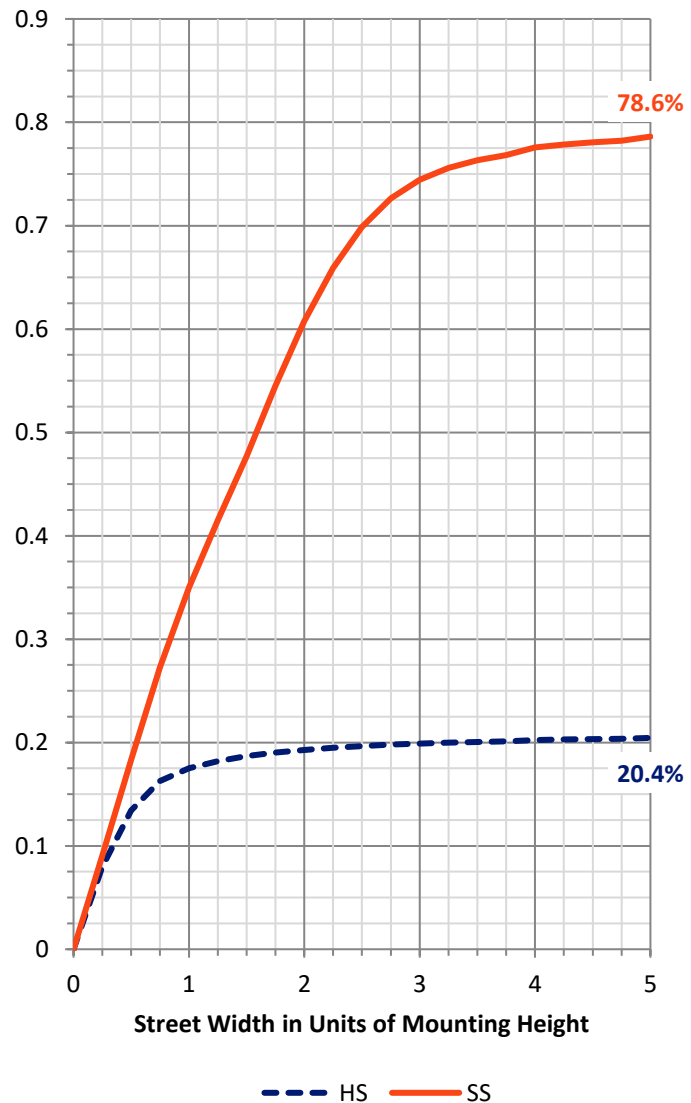
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2207.8	0.0	2207.8
	% Fixture	20.8	0.0	20.8
Street Side	Lumens	8427.6	0.0	8427.6
	% Fixture	79.2	0.0	79.2
Total	Lumens	10635.4	0.0	10635.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	212.0	2.0
10°-20°	580.4	5.5
20°-30°	859.2	8.1
30°-40°	1085.8	10.2
40°-50°	1227.9	11.5
50°-60°	1747.4	16.4
60°-70°	3254.3	30.6
70°-80°	1491.5	14.0
80°-90°	177.0	1.7
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°	10635.4	100.0
0°-180°	10635.4	100.0



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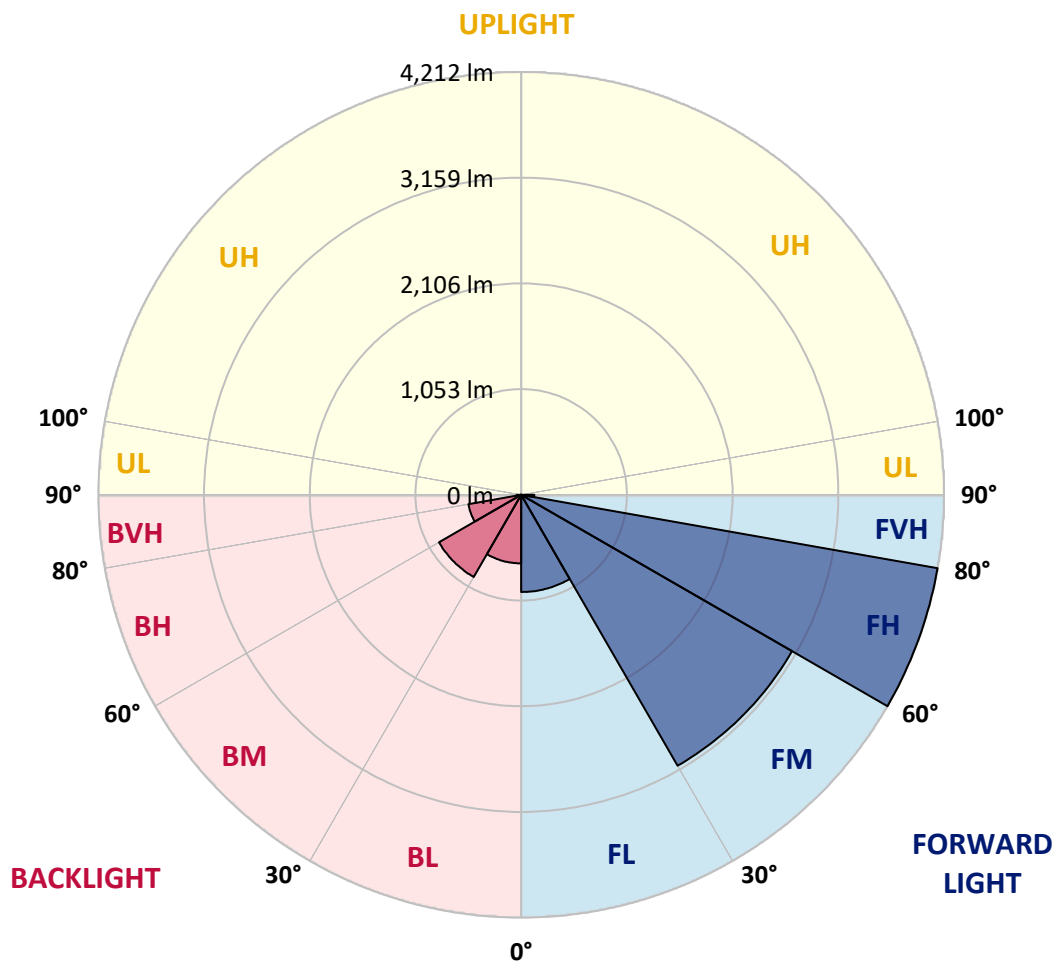
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	968.4	9.1			
FM	(30°-60°)	3115.8	29.3			
FH	(60°-80°)	4212.0	39.6			G2/5000
FVH	(80°-90°)	131.3	1.2			G2/225
BL	(0°-30°)	683.1	6.4	B2/1000		
BM	(30°-60°)	945.2	8.9	B1/1000		
BH	(60°-80°)	533.7	5.0	B2/1000		G2/1000
BVH	(80°-90°)	45.7	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2269.3	2269.3	2269.3	2269.3	2269.3	2269.3	2269.3	2269.3	2269.3	2269.3	2269.3
2.5°	2304.1	2310.1	2302.9	2301.7	2301.7	2300.5	2293.3	2292.1	2282.5	2283.7	2286.1
5°	2320.9	2323.3	2318.5	2317.3	2314.9	2310.1	2304.1	2296.9	2289.7	2282.5	2276.5
7.5°	2337.7	2335.3	2331.7	2331.7	2328.1	2320.9	2308.9	2299.3	2283.7	2275.3	2264.5
10°	2361.7	2358.1	2353.3	2350.9	2344.9	2334.1	2317.3	2304.1	2284.9	2268.1	2250.1
12.5°	2384.5	2383.3	2376.1	2372.5	2362.9	2352.1	2331.7	2311.3	2286.1	2259.7	2235.7
15°	2425.3	2420.5	2413.3	2406.1	2390.5	2376.1	2344.9	2320.9	2284.9	2250.1	2212.9
17.5°	2496.1	2487.7	2480.5	2464.9	2445.7	2420.5	2374.9	2334.1	2284.9	2234.5	2192.5
20°	2625.7	2607.7	2598.1	2577.7	2544.1	2498.5	2427.7	2361.7	2288.5	2223.7	2167.3
22.5°	2772.2	2760.2	2746.9	2733.7	2680.9	2614.9	2518.9	2420.5	2310.1	2218.9	2146.9
25°	2936.6	2921.0	2913.8	2891.0	2841.8	2766.2	2635.3	2498.5	2359.3	2238.1	2146.9
27.5°	3083.0	3078.2	3077.0	3050.6	3003.8	2915.0	2760.2	2595.7	2426.5	2277.7	2164.9
30°	3216.2	3211.4	3209.0	3194.6	3140.6	3035.0	2867.0	2682.1	2499.7	2332.9	2198.5
32.5°	3357.8	3342.2	3335.0	3307.4	3246.2	3122.6	2930.6	2738.5	2557.3	2386.9	2235.7
35°	3473.0	3459.8	3445.4	3405.8	3319.4	3173.0	2958.2	2757.8	2580.1	2416.9	2254.9
37.5°	3557.0	3543.8	3523.4	3473.0	3366.2	3189.8	2957.0	2751.7	2571.7	2412.1	2258.5
40°	3594.2	3581.0	3559.4	3495.8	3374.6	3180.2	2934.2	2724.1	2546.5	2386.9	2244.1
42.5°	3579.8	3570.2	3542.6	3481.4	3348.2	3137.0	2888.6	2672.5	2498.5	2346.1	2211.7
45°	3524.6	3517.4	3491.0	3426.2	3288.2	3067.4	2821.4	2607.7	2440.9	2295.7	2168.5
47.5°	3441.8	3439.4	3413.0	3349.4	3212.6	2997.8	2751.7	2544.1	2383.3	2246.5	2132.5
50°	3350.6	3338.6	3325.4	3266.6	3141.8	2937.8	2701.3	2504.5	2350.9	2228.5	2116.9
52.5°	3293.0	3289.4	3277.4	3224.6	3104.6	2903.0	2678.5	2490.1	2348.5	2224.9	2108.5
55°	3804.2	3812.6	3702.2	3473.0	3271.4	2999.0	2746.9	2563.3	2407.3	2282.5	2197.3
57.5°	5627.1	5589.9	5400.3	4945.5	4431.8	3753.8	3265.4	2969.0	2775.8	2797.4	2840.6
60°	6556.0	6548.8	6514.0	6337.5	5995.5	5479.5	4907.1	4250.6	4041.8	4064.6	4081.4
62.5°	6971.2	6982.0	7008.4	6942.4	6852.4	6702.4	6416.7	6152.7	5873.1	5768.7	5489.1
65°	7163.2	7182.4	7242.4	7279.6	7314.4	7340.8	7453.6	7763.2	7967.2	7585.6	6697.6
67.5°	6766.0	6858.4	7056.4	7249.6	7422.4	7668.4	8050.0	8768.9	9269.3	8800.1	7512.4
70°	4932.3	5058.3	5285.1	5882.7	6521.2	7079.2	7818.4	8912.9	9667.7	9305.3	7714.0
72.5°	3092.6	3127.4	3228.2	3447.8	3921.8	4638.3	5930.7	7572.4	8443.7	8154.4	6520.0
75°	1962.1	1974.1	1970.5	2020.9	2101.3	2257.3	2768.6	4472.6	5784.3	5333.1	3633.8
77.5°	1168.9	1186.9	1194.1	1209.7	1248.1	1303.3	1345.3	1521.7	2425.3	2354.5	1318.9
80°	979.3	993.7	981.7	978.1	954.1	937.3	957.7	937.3	870.0	837.6	771.6
82.5°	518.4	517.2	513.6	548.4	619.2	674.4	716.4	706.8	639.6	544.8	462.0
85°	284.4	294.0	294.0	306.0	295.2	296.4	306.0	322.8	298.8	249.6	204.0
87.5°	24.0	37.2	30.0	37.2	50.4	36.0	34.8	34.8	30.0	21.6	19.2
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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CATALOG NUMBER: ICS-E04-LED-E1-SL4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2269.3	2269.3	2269.3	2269.3	2269.3	2269.3	2269.3	2269.3	2269.3	2269.3	2269.3
2.5°	2280.1	2277.7	2272.9	2269.3	2269.3	2263.3	2259.7	2257.3	2256.1	2251.3	2251.3
5°	2272.9	2264.5	2256.1	2250.1	2246.5	2240.5	2230.9	2226.1	2220.1	2215.3	2212.9
7.5°	2257.3	2241.7	2228.5	2218.9	2206.9	2197.3	2185.3	2174.5	2163.7	2158.9	2156.5
10°	2233.3	2212.9	2192.5	2174.5	2157.7	2140.9	2125.3	2109.7	2096.5	2086.9	2077.3
12.5°	2210.5	2179.3	2152.9	2126.5	2100.1	2079.7	2058.1	2035.3	2016.1	1998.1	1993.3
15°	2179.3	2143.3	2109.7	2077.3	2044.9	2011.3	1984.9	1959.7	1928.5	1908.1	1892.5
17.5°	2150.5	2107.3	2066.5	2028.1	1988.5	1953.7	1914.1	1880.5	1849.3	1818.1	1795.3
20°	2119.3	2072.5	2029.3	1986.1	1942.9	1898.5	1852.9	1809.7	1771.3	1734.1	1696.9
22.5°	2091.7	2043.7	2001.7	1954.9	1906.9	1856.5	1803.7	1749.7	1705.3	1657.3	1614.1
25°	2074.9	2022.1	1978.9	1933.3	1880.5	1825.3	1765.3	1701.7	1647.7	1592.5	1540.9
27.5°	2074.9	2006.5	1962.1	1916.5	1862.5	1803.7	1737.7	1668.1	1606.9	1545.7	1482.1
30°	2092.9	2008.9	1948.9	1900.9	1845.7	1782.1	1708.9	1635.7	1568.5	1496.5	1435.3
32.5°	2109.7	2013.7	1939.3	1878.1	1814.5	1752.1	1677.7	1599.7	1525.3	1456.9	1392.1
35°	2120.5	2013.7	1921.3	1843.3	1771.3	1710.1	1636.9	1558.9	1483.3	1416.1	1356.1
37.5°	2121.7	2004.1	1892.5	1803.7	1728.1	1664.5	1594.9	1521.7	1449.7	1387.3	1336.9
40°	2109.7	1984.9	1863.7	1761.7	1682.5	1617.7	1554.1	1488.1	1423.3	1371.7	1328.5
42.5°	2088.1	1964.5	1836.1	1728.1	1645.3	1578.1	1519.3	1462.9	1406.5	1362.1	1326.1
45°	2055.7	1936.9	1810.9	1707.7	1626.1	1555.3	1497.7	1450.9	1402.9	1365.7	1329.7
47.5°	2026.9	1927.3	1819.3	1720.9	1635.7	1562.5	1503.7	1464.1	1426.9	1401.7	1352.5
50°	2020.9	1922.5	1822.9	1731.7	1645.3	1570.9	1519.3	1498.9	1488.1	1472.5	1396.9
52.5°	2004.1	1921.3	1849.3	1798.9	1743.7	1708.9	1654.9	1674.1	1662.1	1606.9	1470.1
55°	2180.5	2204.5	2271.7	2367.7	2456.5	2476.9	2470.9	2448.1	2326.9	2001.7	1646.5
57.5°	2997.8	3133.4	3260.6	3317.0	3309.8	3246.2	3200.6	3108.2	2933.0	2536.9	1994.5
60°	4133.0	4154.6	4087.4	3987.8	3819.8	3679.4	3529.4	3356.6	3102.2	2714.5	2208.1
62.5°	5178.3	4887.9	4589.0	4308.2	4052.6	3829.4	3620.6	3379.4	3048.2	2643.7	2180.5
65°	5916.3	5301.9	4830.3	4427.0	4065.8	3753.8	3493.4	3180.2	2807.0	2442.1	2020.9
67.5°	6296.7	5354.7	4631.1	4069.4	3557.0	3125.0	2778.2	2473.3	2196.1	2036.5	1768.9
70°	5871.9	4544.6	3536.6	2901.8	2288.5	1834.9	1449.7	1216.9	1136.5	1287.7	1339.3
72.5°	4375.4	2958.2	2103.7	1627.3	1246.9	993.7	762.0	598.8	487.2	511.2	663.6
75°	2068.9	1276.9	902.4	686.4	546.0	452.4	369.6	338.4	283.2	235.2	220.8
77.5°	805.2	586.8	484.8	355.2	252.0	202.8	172.8	166.8	170.4	165.6	163.2
80°	613.2	415.2	260.4	190.8	164.4	145.2	128.4	123.6	126.0	132.0	138.0
82.5°	342.0	213.6	158.4	138.0	123.6	105.6	96.0	88.8	90.0	97.2	110.4
85°	132.0	103.2	94.8	91.2	85.2	68.4	58.8	60.0	68.4	81.6	81.6
87.5°	14.4	14.4	19.2	14.4	14.4	14.4	13.2	15.6	16.8	21.6	25.2
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°	2269.3	2269.3	2269.3	2269.3	2269.3	2269.3	2269.3	2269.3	2269.3	2269.3	2269.3
2.5°	2248.9	2248.9	2248.9	2246.5	2247.7	2242.9	2242.9	2239.3	2245.3	2241.7	2240.5
5°	2214.1	2212.9	2208.1	2208.1	2208.1	2208.1	2211.7	2202.1	2209.3	2209.3	2205.7
7.5°	2155.3	2155.3	2142.1	2149.3	2146.9	2150.5	2155.3	2150.5	2157.7	2162.5	2158.9
10°	2073.7	2073.7	2062.9	2071.3	2067.7	2076.1	2084.5	2079.7	2084.5	2091.7	2094.1
12.5°	1983.7	1978.9	1969.3	1972.9	1972.9	1977.7	1981.3	1987.3	1993.3	2002.9	2007.7
15°	1879.3	1872.1	1860.1	1860.1	1852.9	1855.3	1862.5	1864.9	1876.9	1890.1	1905.7
17.5°	1772.5	1754.5	1741.3	1725.7	1713.7	1723.3	1731.7	1737.7	1747.3	1767.7	1778.5
20°	1671.7	1635.7	1610.5	1590.1	1576.9	1582.9	1593.7	1600.9	1609.3	1614.1	1617.7
22.5°	1572.1	1531.3	1496.5	1471.3	1449.7	1455.7	1450.9	1447.3	1453.3	1437.7	1436.5
25°	1485.7	1437.7	1390.9	1360.9	1334.5	1326.1	1300.9	1294.9	1278.1	1264.9	1255.3
27.5°	1423.3	1360.9	1309.3	1274.5	1232.5	1201.3	1168.9	1136.5	1118.5	1096.9	1086.1
30°	1374.1	1308.1	1246.9	1188.1	1132.9	1084.9	1041.7	999.7	970.9	939.7	919.2
32.5°	1328.5	1267.3	1192.9	1112.5	1038.1	984.1	927.7	879.6	834.0	793.2	763.2
35°	1297.3	1228.9	1134.1	1035.7	951.7	888.0	828.0	759.6	704.4	651.6	619.2
37.5°	1280.5	1196.5	1080.1	970.9	877.2	805.2	730.8	651.6	584.4	535.2	486.0
40°	1267.3	1164.1	1032.1	913.2	814.8	728.4	642.0	548.4	474.0	422.4	384.0
42.5°	1252.9	1128.1	990.1	867.6	758.4	657.6	553.2	453.6	382.8	346.8	330.0
45°	1237.3	1096.9	950.5	824.4	703.2	580.8	460.8	368.4	326.4	314.4	314.4
47.5°	1233.7	1076.5	921.7	782.4	640.8	492.0	375.6	318.0	306.0	308.4	313.2
50°	1248.1	1070.5	896.4	733.2	558.0	398.4	318.0	298.8	301.2	308.4	315.6
52.5°	1282.9	1075.3	870.0	664.8	459.6	328.8	294.0	292.8	300.0	310.8	318.0
55°	1341.7	1075.3	819.6	562.8	367.2	295.2	285.6	290.4	300.0	309.6	315.6
57.5°	1467.7	1064.5	730.8	450.0	307.2	283.2	283.2	289.2	297.6	307.2	312.0
60°	1617.7	1050.1	606.0	348.0	277.2	273.6	282.0	289.2	296.4	304.8	309.6
62.5°	1627.3	1012.9	480.0	288.0	261.6	267.6	280.8	290.4	292.8	298.8	304.8
65°	1495.3	883.2	381.6	258.0	254.4	264.0	277.2	284.4	285.6	288.0	294.0
67.5°	1309.3	720.0	308.4	243.6	247.2	258.0	265.2	271.2	274.8	280.8	282.0
70°	1075.3	578.4	264.0	229.2	232.8	244.8	250.8	256.8	264.0	271.2	267.6
72.5°	762.0	450.0	231.6	213.6	218.4	229.2	236.4	241.2	247.2	254.4	249.6
75°	324.0	314.4	200.4	193.2	200.4	207.6	214.8	222.0	228.0	231.6	231.6
77.5°	165.6	184.8	172.8	172.8	177.6	184.8	190.8	198.0	201.6	205.2	210.0
80°	140.4	142.8	145.2	150.0	154.8	162.0	168.0	174.0	175.2	176.4	178.8
82.5°	116.4	121.2	123.6	130.8	134.4	136.8	140.4	140.4	142.8	142.8	139.2
85°	84.0	90.0	93.6	94.8	93.6	94.8	96.0	98.4	104.4	104.4	99.6
87.5°	24.0	22.8	28.8	30.0	32.4	37.2	42.0	50.4	52.8	55.2	55.2
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°	2269.3	2269.3	2269.3	2269.3
2.5°	2239.3	2241.7	2236.9	2238.1
5°	2205.7	2210.5	2204.5	2211.7
7.5°	2162.5	2169.7	2168.5	2167.3
10°	2100.1	2109.7	2109.7	2113.3
12.5°	2020.9	2026.9	2031.7	2034.1
15°	1914.1	1924.9	1930.9	1930.9
17.5°	1785.7	1792.9	1796.5	1791.7
20°	1622.5	1620.1	1621.3	1609.3
22.5°	1434.1	1437.7	1426.9	1429.3
25°	1249.3	1243.3	1248.1	1240.9
27.5°	1070.5	1071.7	1058.5	1064.5
30°	900.0	894.0	877.2	885.6
32.5°	735.6	720.0	702.0	691.2
35°	580.8	556.8	548.4	544.8
37.5°	456.0	429.6	421.2	411.6
40°	362.4	352.8	349.2	351.6
42.5°	325.2	325.2	327.6	328.8
45°	315.6	319.2	322.8	324.0
47.5°	316.8	320.4	325.2	326.4
50°	319.2	322.8	326.4	327.6
52.5°	320.4	320.4	322.8	324.0
55°	318.0	316.8	318.0	319.2
57.5°	313.2	310.8	312.0	315.6
60°	310.8	307.2	309.6	312.0
62.5°	304.8	303.6	306.0	307.2
65°	291.6	292.8	296.4	296.4
67.5°	279.6	280.8	282.0	283.2
70°	265.2	266.4	268.8	270.0
72.5°	248.4	253.2	256.8	261.6
75°	235.2	240.0	247.2	252.0
77.5°	212.4	216.0	224.4	230.4
80°	180.0	178.8	180.0	183.6
82.5°	138.0	138.0	136.8	135.6
85°	97.2	96.0	92.4	92.4
87.5°	52.8	51.6	50.4	48.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)