

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: P159794

Luminaire Tested: **VST-F07-LED-E-U-T4-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159794
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33707)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-F07-LED-E-U-T4-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(7) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 SHORT
Light Source: (49) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15709.1 lumens
Efficiency: N/A
Efficacy: 87.0 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G3

Input Watts (W): 180.5
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

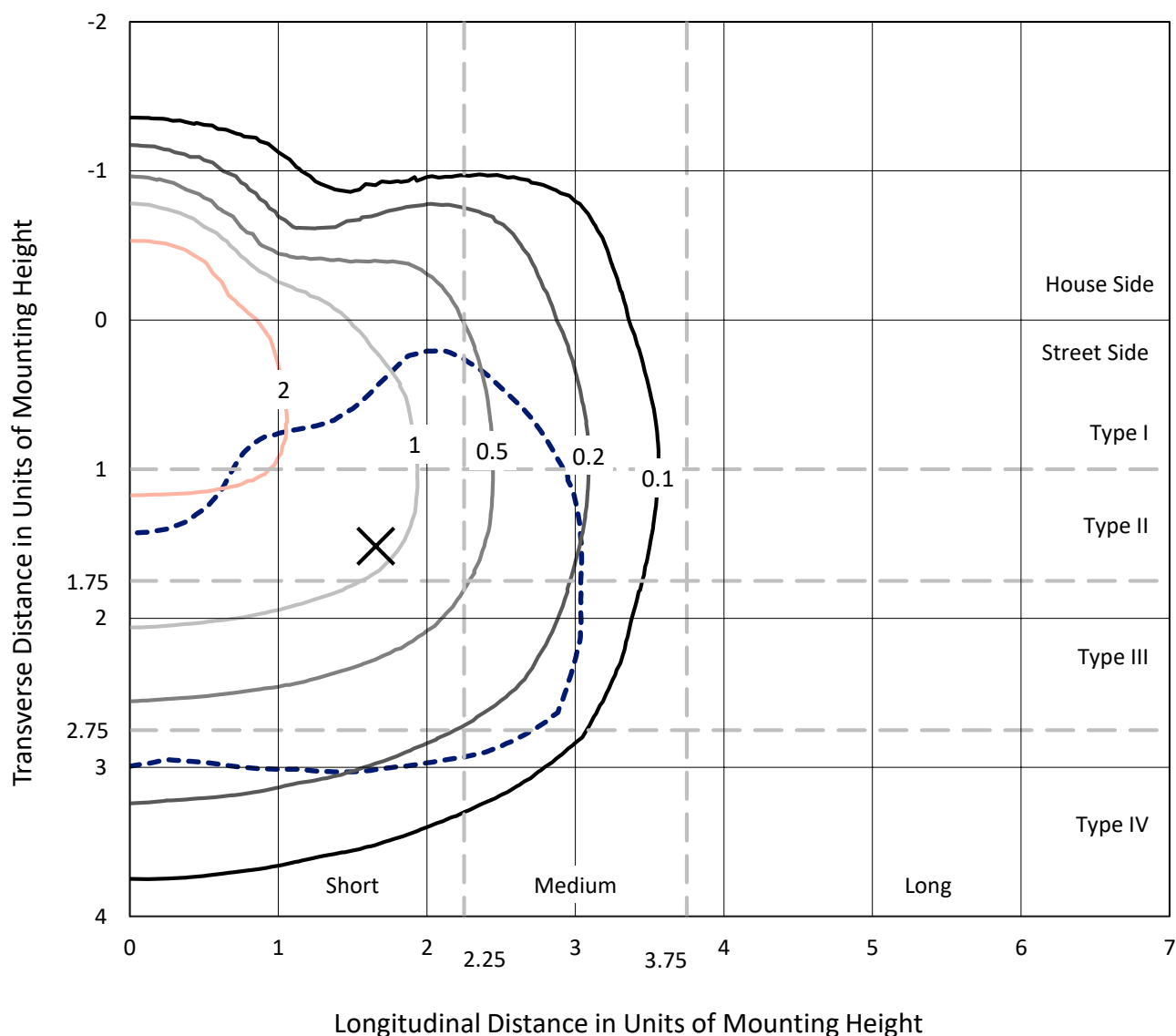


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

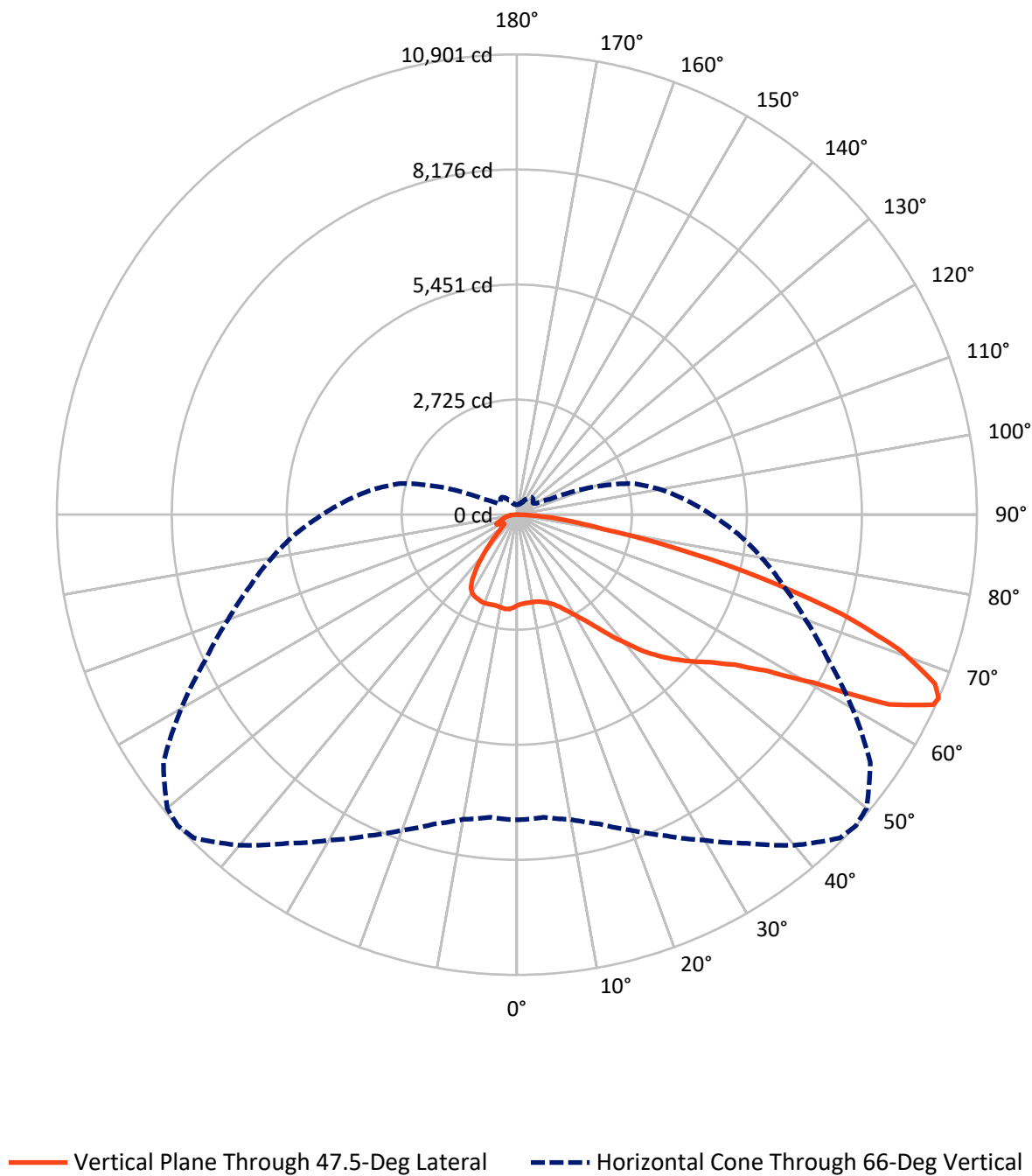


Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3252.5	0.0	3252.5
	% Fixture	20.7	0.0	20.7
Street Side	Lumens	12456.6	0.0	12456.6
	% Fixture	79.3	0.0	79.3
Total	Lumens	15709.1	0.0	15709.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.2	1.3
10°-20°	621.2	4.0
20°-30°	1059.9	6.7
30°-40°	1599.7	10.2
40°-50°	2079.3	13.2
50°-60°	2852.6	18.2
60°-70°	4388.2	27.9
70°-80°	2536.6	16.1
80°-90°	364.4	2.3
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°	15709.1	100.0
0°-180°	15709.1	100.0

Coefficient of Utilization



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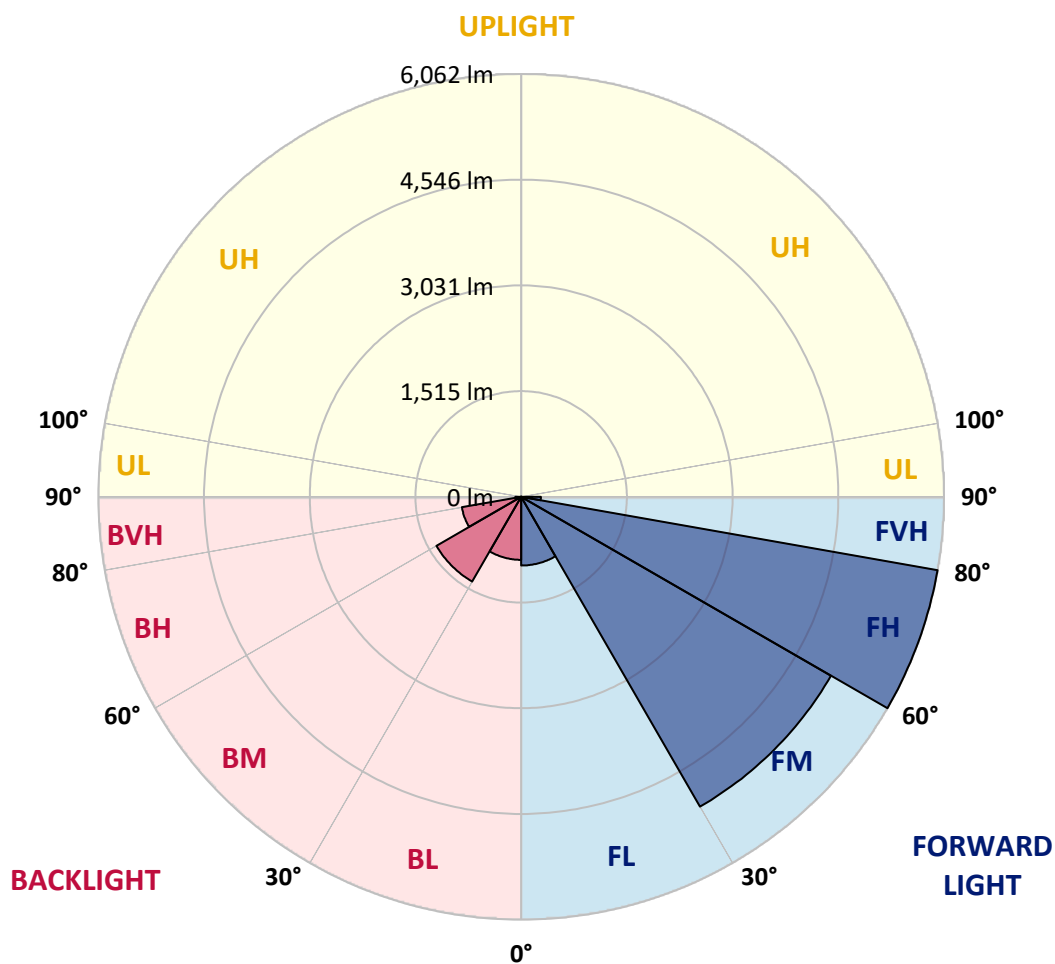
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	984.7	6.3			
FM	(30°-60°)	5128.3	32.6			
FH	(60°-80°)	6061.6	38.6			G3/7500
FVH	(80°-90°)	282.0	1.8			G3/500
BL	(0°-30°)	903.6	5.8	B2/1000		
BM	(30°-60°)	1403.3	8.9	B2/2500		
BH	(60°-80°)	863.2	5.5	B2/1000		G2/1000
BVH	(80°-90°)	82.4	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	47.5°
0°	2149.2	2149.2	2149.2	2149.2	2149.2	2149.2	2149.2	2149.2	2149.2	2149.2	2149.2
2.5°	2094.3	2095.3	2096.4	2096.4	2099.6	2099.6	2104.8	2108.0	2109.1	2115.4	2119.6
5°	2055.2	2054.2	2055.2	2057.3	2062.6	2066.8	2077.4	2084.8	2091.1	2101.7	2107.0
7.5°	2038.3	2040.5	2042.6	2043.6	2047.8	2058.4	2067.9	2075.3	2088.0	2100.6	2105.9
10°	2060.5	2063.7	2060.5	2062.6	2062.6	2072.1	2076.3	2081.6	2091.1	2102.7	2105.9
12.5°	2112.2	2118.6	2112.2	2107.0	2102.7	2111.2	2109.1	2104.8	2110.1	2113.3	2113.3
15°	2197.7	2197.7	2193.5	2186.1	2175.6	2176.6	2167.1	2157.6	2153.4	2146.0	2140.7
17.5°	2281.1	2279.0	2269.5	2260.0	2252.6	2249.5	2235.7	2223.1	2208.3	2196.7	2184.0
20°	2362.4	2370.9	2359.2	2345.5	2333.9	2326.5	2316.0	2290.6	2272.7	2253.7	2241.0
22.5°	2502.8	2495.4	2482.7	2462.7	2451.1	2438.4	2416.2	2388.8	2361.4	2338.1	2322.3
25°	2647.4	2640.0	2622.1	2607.3	2590.4	2579.9	2555.6	2521.8	2495.4	2459.5	2438.4
27.5°	2802.6	2796.3	2775.1	2763.5	2751.9	2739.3	2718.1	2683.3	2659.0	2617.9	2595.7
30°	2977.8	2976.8	2948.3	2946.2	2929.3	2915.5	2900.8	2871.2	2846.9	2805.8	2779.4
32.5°	3164.7	3160.4	3140.4	3134.0	3145.7	3136.2	3115.0	3084.4	3052.8	3028.5	2998.9
35°	3430.7	3423.3	3411.7	3416.9	3424.3	3450.7	3418.0	3391.6	3353.6	3321.9	3280.8
37.5°	3624.9	3614.3	3628.1	3657.6	3699.8	3719.9	3748.4	3749.5	3731.5	3689.3	3653.4
40°	3803.3	3799.1	3830.7	3871.9	3950.0	4007.0	4060.9	4087.2	4093.6	4066.1	4012.3
42.5°	3954.2	3966.9	4009.1	4072.5	4182.3	4268.8	4369.1	4431.4	4470.4	4455.6	4431.4
45°	4133.7	4140.0	4191.8	4272.0	4376.5	4520.0	4652.0	4757.5	4826.2	4825.1	4797.7
47.5°	4358.5	4359.6	4403.9	4497.9	4609.8	4755.4	4922.2	5062.6	5153.4	5157.6	5136.5
50°	4625.6	4623.5	4672.0	4760.7	4880.0	5020.4	5197.7	5373.0	5499.6	5499.6	5469.0
52.5°	4969.7	4965.5	4991.9	5070.0	5185.1	5332.8	5509.1	5711.8	5849.0	5878.6	5812.1
55°	5428.9	5435.2	5441.6	5510.2	5608.4	5725.5	5928.2	6115.0	6298.7	6315.6	6276.5
57.5°	5959.9	5938.8	5984.1	6096.0	6207.9	6354.7	6498.2	6718.8	6936.3	6973.2	6968.0
60°	6789.6	6762.1	6808.6	6951.1	7074.6	7305.7	7551.7	7836.7	8094.3	8170.3	8078.4
62.5°	7552.8	7586.5	7649.9	7815.6	7995.0	8303.3	8672.7	9161.5	9650.2	9916.2	9897.2
65°	7484.1	7452.5	7573.9	7799.8	8124.9	8517.6	8976.7	9565.8	10269.8	10804.0	10851.5
66°	7229.7	7197.0	7327.9	7586.5	7958.1	8395.1	8905.0	9504.5	10224.5	10828.3	10901.1
67.5°	6809.6	6776.9	6924.7	7160.1	7543.3	8093.2	8644.2	9299.8	10048.2	10626.6	10685.7
70°	5998.9	5954.6	6069.6	6335.7	6646.0	7178.0	7702.6	8397.2	9165.7	9628.0	9650.2
72.5°	5081.6	4978.2	5100.6	5305.4	5527.1	5967.3	6424.3	6899.3	7511.6	7939.1	8061.5
75°	3687.2	3741.0	3776.9	3912.0	4058.7	4422.9	4691.0	5089.0	5563.0	5872.3	5970.4
77.5°	1956.0	2037.3	2088.0	2223.1	2465.9	2743.5	3033.8	3279.7	3591.1	3764.2	3884.6
80°	1097.8	1154.8	1237.2	1343.8	1462.0	1675.2	1847.3	1974.0	2018.3	2048.9	2076.3
82.5°	603.8	748.4	870.9	944.8	1014.4	1099.9	1202.3	1307.9	1341.7	1291.0	1264.6
85°	93.9	138.3	421.2	514.1	559.5	624.9	698.8	776.9	778.0	669.2	730.5
87.5°	26.4	29.6	60.2	90.8	88.7	71.8	88.7	161.5	95.0	47.5	54.9
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°	95°	100°
0°	2149.2	2149.2	2149.2	2149.2	2149.2	2149.2	2149.2	2149.2	2149.2	2149.2	2149.2
2.5°	2121.7	2123.8	2129.1	2134.4	2139.7	2145.0	2148.1	2153.4	2157.6	2164.0	2171.4
5°	2113.3	2118.6	2128.1	2139.7	2150.2	2159.7	2167.1	2177.7	2187.2	2195.6	2208.3
7.5°	2113.3	2123.8	2139.7	2152.3	2161.9	2173.5	2185.1	2195.6	2206.2	2214.6	2223.1
10°	2114.3	2124.9	2140.7	2155.5	2166.1	2178.7	2188.2	2197.7	2209.4	2214.6	2225.2
12.5°	2118.6	2122.8	2134.4	2149.2	2161.9	2174.5	2184.0	2193.5	2206.2	2208.3	2215.7
15°	2139.7	2133.3	2136.5	2147.1	2160.8	2171.4	2181.9	2189.3	2197.7	2195.6	2202.0
17.5°	2178.7	2162.9	2156.6	2157.6	2164.0	2171.4	2175.6	2176.6	2177.7	2168.2	2169.2
20°	2231.5	2209.4	2194.6	2187.2	2178.7	2171.4	2159.7	2146.0	2133.3	2114.3	2112.2
22.5°	2310.7	2278.0	2262.1	2242.1	2216.7	2185.1	2156.6	2122.8	2095.3	2066.8	2056.3
25°	2425.7	2392.0	2375.1	2343.4	2298.0	2252.6	2211.5	2166.1	2126.0	2092.2	2076.3
27.5°	2579.9	2546.1	2528.1	2495.4	2439.5	2394.1	2337.1	2288.5	2240.0	2190.4	2170.3
30°	2766.7	2737.1	2717.1	2690.7	2642.1	2592.5	2526.0	2451.1	2374.0	2294.9	2255.8
32.5°	2987.3	2954.6	2939.8	2909.2	2858.5	2806.8	2732.9	2636.9	2508.1	2383.5	2305.4
35°	3262.8	3225.9	3209.0	3168.9	3109.8	3033.8	2954.6	2825.8	2651.6	2478.5	2350.8
37.5°	3631.2	3548.9	3493.0	3401.1	3306.1	3199.5	3086.5	2954.6	2748.8	2534.5	2357.1
40°	3957.4	3874.0	3766.3	3634.4	3486.6	3339.9	3211.1	3061.2	2837.4	2574.6	2337.1
42.5°	4362.8	4215.0	4042.9	3864.5	3668.2	3487.7	3334.6	3158.3	2897.6	2585.1	2281.1
45°	4733.3	4557.0	4326.9	4089.4	3845.5	3618.6	3446.5	3250.2	2949.3	2585.1	2213.6
47.5°	5071.1	4859.9	4584.4	4288.9	4004.9	3756.8	3561.6	3344.1	3022.2	2617.9	2193.5
50°	5383.5	5140.7	4827.2	4484.1	4165.4	3900.4	3690.3	3464.4	3133.0	2702.3	2242.1
52.5°	5712.9	5455.3	5073.2	4709.0	4357.5	4073.5	3849.7	3613.3	3276.6	2835.3	2327.6
55°	6144.6	5842.7	5408.8	5007.7	4621.4	4307.9	4053.5	3791.7	3433.8	2985.2	2432.1
57.5°	6825.5	6387.4	5953.5	5432.1	5067.9	4655.2	4376.5	4075.6	3689.3	3180.5	2589.4
60°	8017.2	7478.9	6957.4	6357.8	5908.1	5476.4	5055.2	4662.5	4197.0	3621.7	2934.5
62.5°	9718.8	9172.0	8352.9	7619.3	6940.5	6368.4	5819.5	5320.2	4722.7	4093.6	3359.9
65°	10735.4	10109.4	9133.0	8147.1	7322.6	6613.3	5985.2	5374.0	4729.0	4115.7	3488.7
66°	10816.6	10224.5	9181.5	8139.7	7283.6	6547.8	5894.4	5262.1	4601.3	4014.4	3446.5
67.5°	10665.7	10155.8	9082.3	7996.1	7121.0	6326.2	5654.8	4991.9	4327.9	3784.3	3306.1
70°	9600.6	9232.2	8311.7	7294.1	6421.2	5720.2	5011.9	4374.4	3745.2	3288.2	2933.5
72.5°	7870.5	7403.9	6760.0	6076.0	5388.8	4767.0	4123.1	3580.6	3052.8	2720.3	2469.0
75°	5781.5	5361.3	4652.0	4225.5	3771.6	3381.1	2947.2	2433.1	2058.4	1891.6	1830.4
77.5°	3665.0	3209.0	2610.5	2139.7	1839.9	1581.3	1246.7	991.2	793.8	826.5	915.2
80°	1851.5	1595.0	1193.9	942.6	814.9	677.7	536.2	406.4	296.6	338.8	383.2
82.5°	1188.6	992.3	790.6	622.8	525.7	463.4	370.5	269.2	200.6	225.9	276.6
85°	715.7	604.9	482.4	394.8	343.1	286.1	210.1	148.8	147.8	158.3	195.3
87.5°	108.7	155.2	89.7	96.1	101.3	108.7	96.1	81.3	70.7	91.8	116.1
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	2149.2	2149.2	2149.2	2149.2	2149.2	2149.2	2149.2	2149.2	2149.2	2149.2	2149.2
2.5°	2178.7	2180.9	2185.1	2190.4	2189.3	2196.7	2200.9	2196.7	2206.2	2206.2	2211.5
5°	2218.9	2222.0	2229.4	2234.7	2236.8	2243.1	2245.2	2244.2	2246.3	2247.4	2249.5
7.5°	2230.5	2238.9	2242.1	2245.2	2246.3	2248.4	2248.4	2246.3	2246.3	2245.2	2247.4
10°	2227.3	2230.5	2232.6	2231.5	2231.5	2229.4	2228.4	2227.3	2227.3	2225.2	2228.4
12.5°	2216.7	2216.7	2216.7	2214.6	2214.6	2213.6	2213.6	2213.6	2215.7	2216.7	2222.0
15°	2195.6	2195.6	2197.7	2196.7	2199.9	2205.1	2211.5	2215.7	2221.0	2222.0	2225.2
17.5°	2162.9	2164.0	2170.3	2184.0	2197.7	2213.6	2225.2	2228.4	2224.1	2213.6	2206.2
20°	2105.9	2119.6	2145.0	2177.7	2208.3	2228.4	2233.6	2221.0	2200.9	2173.5	2158.7
22.5°	2055.2	2082.7	2128.1	2181.9	2219.9	2233.6	2217.8	2188.2	2152.3	2120.7	2098.5
25°	2075.3	2107.0	2154.5	2200.9	2225.2	2217.8	2186.1	2143.9	2105.9	2069.0	2033.1
27.5°	2159.7	2191.4	2225.2	2238.9	2230.5	2203.0	2158.7	2113.3	2062.6	2009.8	1965.5
30°	2240.0	2257.9	2260.0	2246.3	2215.7	2171.4	2119.6	2066.8	2002.5	1939.1	1883.2
32.5°	2265.3	2244.2	2206.2	2167.1	2124.9	2079.5	2019.3	1949.7	1881.1	1809.3	1747.0
35°	2257.9	2172.4	2078.5	1995.1	1944.4	1892.7	1837.8	1744.9	1667.8	1606.6	1566.5
37.5°	2191.4	2035.2	1890.6	1769.2	1690.0	1628.8	1547.5	1470.4	1403.9	1376.5	1343.8
40°	2098.5	1860.0	1659.4	1489.4	1407.1	1329.0	1238.2	1179.1	1160.1	1134.8	1135.8
42.5°	1965.5	1655.2	1396.5	1201.3	1111.5	1026.0	961.6	926.8	927.9	906.8	911.0
45°	1825.1	1449.3	1124.2	930.0	841.3	768.5	732.6	722.0	723.1	724.1	717.8
47.5°	1739.6	1288.9	901.5	705.1	627.0	585.9	566.9	561.6	562.6	563.7	556.3
50°	1726.9	1205.5	752.6	539.4	488.7	465.5	456.0	450.7	450.7	446.5	440.2
52.5°	1762.8	1184.4	679.8	467.6	419.1	398.0	390.6	386.3	380.0	371.6	360.0
55°	1819.8	1203.4	657.6	443.3	395.8	374.7	365.2	363.1	352.6	336.7	317.7
57.5°	1925.4	1272.0	672.4	449.7	400.1	381.1	374.7	372.6	357.8	333.6	309.3
60°	2228.4	1471.5	746.3	485.6	430.7	414.8	414.8	411.7	391.6	356.8	322.0
62.5°	2646.4	1763.9	846.6	535.2	472.9	470.8	488.7	489.8	453.9	398.0	343.1
65°	2848.0	1901.1	881.4	545.7	484.5	508.8	544.7	544.7	494.0	417.0	346.2
66°	2849.0	1898.0	870.9	533.1	471.8	503.5	540.5	540.5	487.7	411.7	341.0
67.5°	2776.2	1838.8	836.0	509.9	443.3	472.9	505.6	504.6	457.1	390.6	326.2
70°	2490.1	1626.7	736.8	471.8	409.6	410.6	422.2	414.8	383.2	337.8	296.6
72.5°	2147.1	1360.7	638.6	447.6	383.2	363.1	353.6	347.3	327.2	299.8	274.5
75°	1646.7	1056.6	556.3	425.4	360.0	325.1	312.5	307.2	293.5	277.6	257.6
77.5°	1009.1	724.1	471.8	389.5	333.6	301.9	288.2	277.6	263.9	249.1	235.4
80°	434.9	437.0	377.9	330.4	290.3	253.3	235.4	222.7	215.3	210.1	202.7
82.5°	304.0	313.5	288.2	256.5	221.7	195.3	179.5	176.3	177.3	177.3	175.2
85°	228.0	223.8	201.6	183.7	167.8	150.9	138.3	137.2	141.4	141.4	138.3
87.5°	131.9	133.0	114.0	106.6	110.8	95.0	86.6	87.6	98.2	97.1	95.0
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):

	160°	165°	170°	175°	180°
0°	2149.2	2149.2	2149.2	2149.2	2149.2
2.5°	2211.5	2214.6	2213.6	2216.7	2213.6
5°	2252.6	2251.6	2250.5	2254.7	2249.5
7.5°	2246.3	2247.4	2247.4	2247.4	2246.3
10°	2230.5	2234.7	2236.8	2241.0	2240.0
12.5°	2225.2	2231.5	2237.9	2244.2	2245.2
15°	2226.2	2230.5	2233.6	2236.8	2237.9
17.5°	2198.8	2197.7	2194.6	2192.5	2190.4
20°	2142.8	2137.6	2132.3	2123.8	2128.1
22.5°	2073.2	2058.4	2041.5	2027.8	2026.7
25°	1991.9	1964.5	1937.0	1919.1	1912.7
27.5°	1920.1	1887.4	1858.9	1843.1	1838.8
30°	1834.6	1805.1	1779.7	1766.0	1757.6
32.5°	1707.9	1684.7	1653.1	1642.5	1641.4
35°	1531.7	1513.7	1491.5	1487.3	1482.0
37.5°	1332.2	1325.8	1315.3	1302.6	1300.5
40°	1118.9	1123.1	1120.0	1112.6	1101.0
42.5°	913.1	920.5	921.5	926.8	932.1
45°	727.3	733.6	733.6	738.9	745.2
47.5°	558.4	554.2	557.4	562.6	565.8
50°	422.2	419.1	413.8	409.6	405.3
52.5°	339.9	333.6	318.8	314.6	310.3
55°	299.8	288.2	277.6	273.4	273.4
57.5°	288.2	273.4	261.8	256.5	254.4
60°	290.3	269.2	254.4	246.0	242.8
62.5°	299.8	270.2	250.2	240.7	237.5
65°	298.7	268.1	249.1	238.6	235.4
66°	293.5	265.0	247.0	237.5	235.4
67.5°	285.0	260.7	244.9	236.5	233.3
70°	268.1	252.3	240.7	233.3	230.1
72.5°	254.4	243.8	233.3	224.8	222.7
75°	241.7	231.2	221.7	217.5	214.3
77.5°	222.7	213.2	208.0	203.7	201.6
80°	197.4	191.1	184.7	180.5	177.3
82.5°	172.1	163.6	157.3	154.1	152.0
85°	140.4	135.1	125.6	119.3	118.2
87.5°	93.9	88.7	85.5	80.2	74.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)