

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: P158450

Luminaire Tested: **VST-E05-LED-E-U-SL3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158450
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33713)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E05-LED-E-U-SL3
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: (105) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15084.3 lumens
Efficiency: N/A
Efficacy: 118.5 lumens/watt
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G3

Input Watts (W): 127.3
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

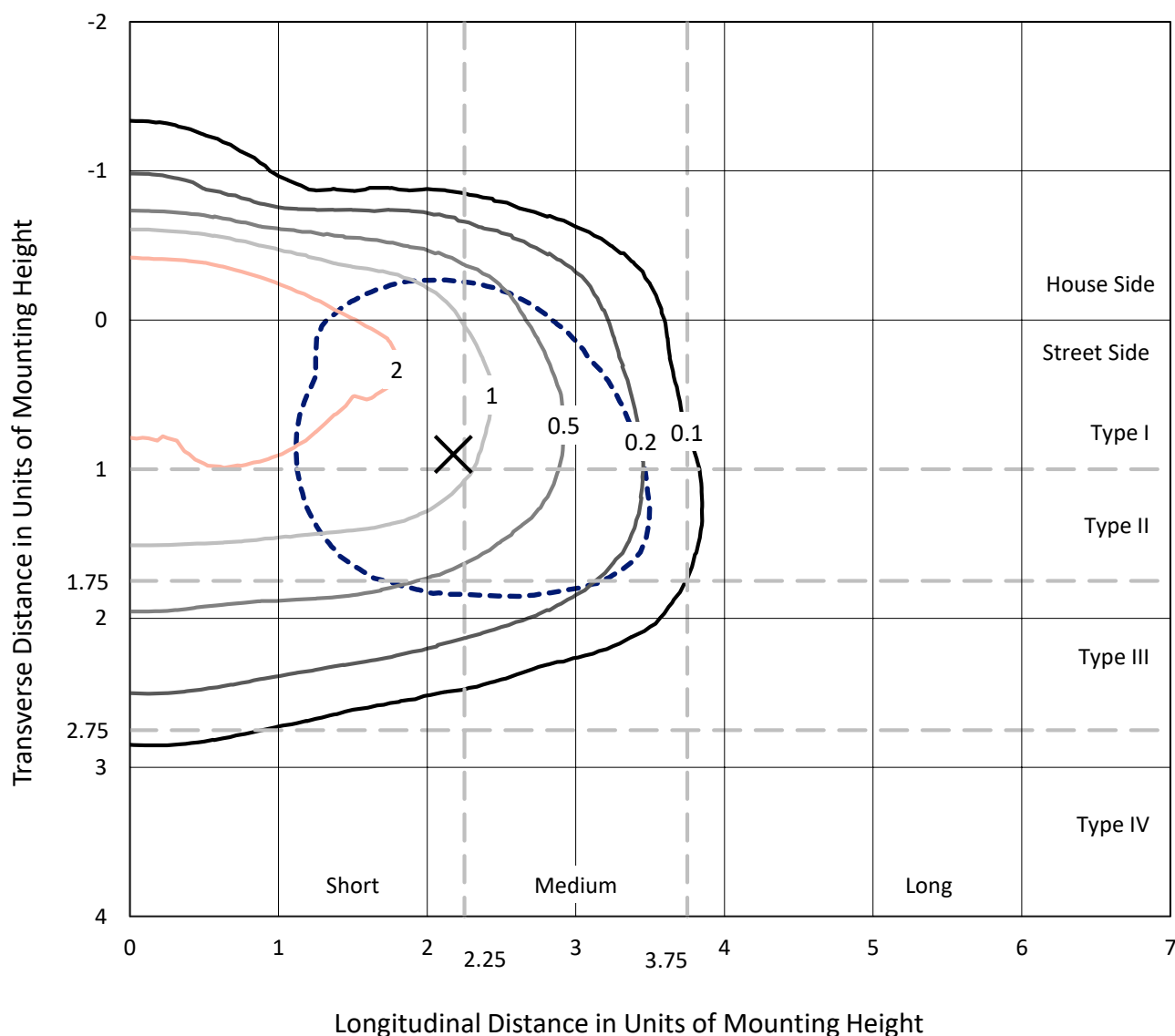


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

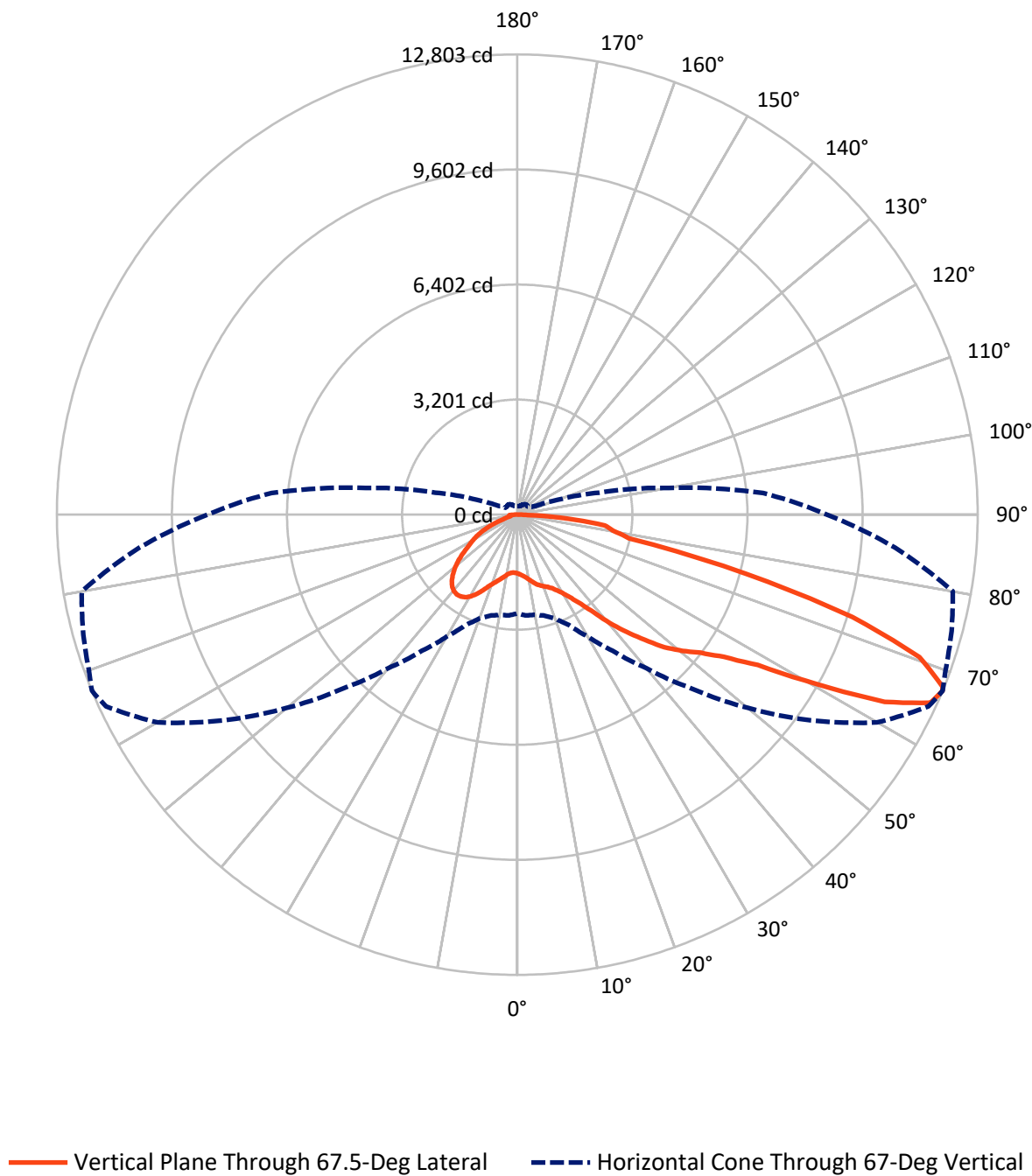


Based on 25 foot mounting height. Maximum calculated value = 3.3 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3618.8	0.0	3618.8
	% Fixture	24.0	0.0	24.0
Street Side	Lumens	11465.6	0.0	11465.6
	% Fixture	76.0	0.0	76.0
Total	Lumens	15084.3	0.0	15084.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.5	1.1
10°-20°	553.6	3.7
20°-30°	988.4	6.6
30°-40°	1448.6	9.6
40°-50°	2238.3	14.8
50°-60°	3259.3	21.6
60°-70°	4245.8	28.1
70°-80°	1900.5	12.6
80°-90°	287.4	1.9
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°	15084.3	100.0
0°-180°	15084.3	100.0

Coefficient of Utilization



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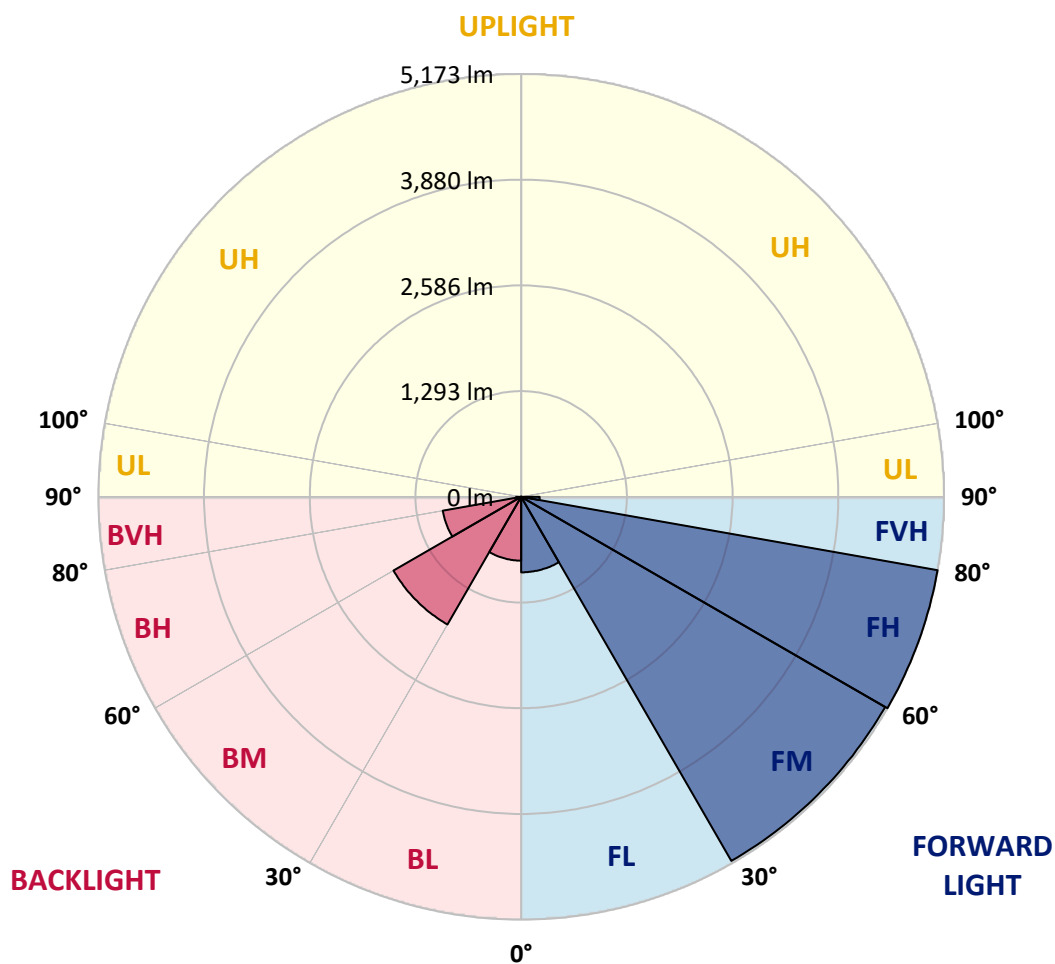
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	924.2	6.1			
FM	(30°-60°)	5143.0	34.1			
FH	(60°-80°)	5172.7	34.3			G3/7500
FVH	(80°-90°)	225.7	1.5			G3/500
BL	(0°-30°)	780.3	5.2	B2/1000		
BM	(30°-60°)	1803.2	12.0	B2/2500		
BH	(60°-80°)	973.6	6.5	B2/1000		G2/1000
BVH	(80°-90°)	61.7	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-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1635	1635	1635	1635	1635	1635	1635	1635	1635	1635	1635
2.5°	1699	1703	1704	1703	1704	1700	1699	1693	1696	1688	1686
5°	1791	1794	1796	1788	1790	1786	1781	1775	1767	1756	1749
7.5°	1881	1886	1885	1882	1875	1871	1861	1852	1838	1825	1816
10°	2002	2001	2001	1984	1974	1965	1947	1933	1919	1900	1890
12.5°	2142	2135	2132	2120	2099	2083	2057	2030	2005	1985	1969
15°	2277	2277	2269	2250	2230	2209	2172	2133	2092	2060	2044
17.5°	2400	2389	2382	2357	2336	2302	2261	2219	2168	2123	2092
20°	2490	2481	2466	2435	2399	2359	2311	2262	2207	2158	2123
22.5°	2542	2531	2508	2467	2418	2362	2306	2260	2210	2173	2144
25°	2569	2558	2527	2473	2407	2333	2269	2224	2195	2186	2182
27.5°	2568	2559	2526	2464	2379	2294	2225	2187	2184	2219	2245
30°	2542	2536	2506	2444	2355	2266	2202	2182	2213	2287	2351
32.5°	2516	2513	2492	2436	2360	2285	2241	2243	2307	2421	2524
35°	2519	2523	2520	2490	2442	2403	2382	2426	2526	2664	2802
37.5°	2545	2560	2579	2582	2583	2577	2621	2714	2860	3040	3256
40°	2602	2619	2674	2722	2784	2858	2947	3076	3257	3479	3744
42.5°	2779	2803	2871	2960	3074	3190	3323	3499	3721	3955	4233
45°	3010	3060	3135	3234	3405	3568	3740	3937	4173	4466	4746
47.5°	3298	3348	3457	3563	3765	3968	4156	4362	4618	4918	5228
50°	3550	3607	3704	3847	4081	4330	4538	4761	4976	5292	5605
52.5°	3748	3789	3882	4013	4274	4547	4810	5058	5313	5629	5919
55°	3773	3811	3902	4052	4317	4620	4923	5217	5578	5923	6307
57.5°	3665	3696	3788	3922	4180	4525	4908	5285	5747	6213	6682
60°	3512	3543	3615	3722	3955	4327	4774	5290	5904	6577	7267
62.5°	3344	3371	3429	3505	3710	4053	4565	5257	6032	6939	8003
65°	3061	3126	3151	3229	3434	3758	4279	5034	5980	7100	8465
67°	2748	2814	2827	2906	3070	3381	3911	4621	5568	6822	8363
67.5°	2648	2704	2724	2803	2958	3251	3754	4472	5442	6670	8240
70°	1947	2009	2031	2064	2175	2419	2752	3375	4339	5443	6951
72.5°	1042	1092	1113	1162	1219	1352	1607	2054	2663	3642	4945
75°	705	725	740	774	833	939	1051	1208	1576	2055	2814
77.5°	402	411	413	419	466	567	751	1017	1304	1489	1800
80°	174	192	206	197	194	215	269	401	786	1248	1481
82.5°	94	102	114	115	121	128	139	165	232	468	1021
85°	49	51	68	78	83	87	89	99	114	145	254
87.5°	7	10	12	16	18	19	22	28	33	40	68
90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	1635	1635	1635	1635	1635	1635	1635	1635	1635	1635	1635
2.5°	1677	1675	1669	1665	1661	1657	1652	1648	1641	1636	1630
5°	1739	1727	1719	1708	1706	1693	1680	1674	1662	1652	1640
7.5°	1802	1788	1775	1766	1761	1743	1730	1715	1701	1688	1674
10°	1876	1862	1848	1842	1833	1816	1805	1786	1772	1756	1737
12.5°	1953	1943	1933	1925	1921	1913	1897	1881	1862	1846	1824
15°	2021	2014	2010	2008	2008	2003	1988	1973	1953	1935	1911
17.5°	2069	2066	2069	2072	2076	2072	2069	2052	2039	2017	1993
20°	2097	2103	2118	2128	2137	2144	2147	2133	2116	2100	2084
22.5°	2127	2144	2170	2185	2200	2225	2231	2221	2208	2198	2181
25°	2177	2202	2247	2271	2292	2329	2334	2336	2333	2325	2304
27.5°	2255	2304	2364	2395	2418	2466	2485	2485	2477	2486	2486
30°	2391	2456	2534	2552	2588	2630	2661	2665	2666	2685	2713
32.5°	2600	2662	2749	2769	2800	2840	2875	2871	2880	2921	2958
35°	2904	2967	3024	3051	3065	3101	3114	3136	3163	3214	3209
37.5°	3354	3410	3418	3435	3418	3425	3435	3461	3533	3579	3505
40°	3896	3989	3980	3960	3922	3871	3889	3929	4007	3967	3768
42.5°	4407	4503	4485	4462	4378	4359	4357	4390	4432	4318	3974
45°	4910	5008	4977	4964	4908	4867	4901	4903	4892	4648	4154
47.5°	5429	5519	5499	5510	5452	5425	5428	5414	5311	4928	4294
50°	5848	5969	5981	5956	5925	5884	5989	5951	5722	5200	4429
52.5°	6174	6337	6399	6383	6358	6363	6560	6603	6224	5543	4578
55°	6560	6817	6918	6978	6952	7052	7503	7525	6922	5991	4772
57.5°	7117	7485	7804	7889	7971	8296	9028	8805	7828	6669	5018
60°	7964	8770	9288	9560	9752	10206	10902	10337	8957	7476	5327
62.5°	9150	10328	11194	11467	11546	11807	12311	11230	9572	7838	5354
65°	10033	11446	12483	12623	12529	12534	12666	11183	9343	7522	4890
67°	9975	11557	12619	12803	12673	12502	12296	10546	8607	6860	4282
67.5°	9886	11450	12560	12754	12635	12440	12139	10299	8378	6654	4158
70°	8546	10099	11594	11867	11917	11739	10894	8684	6802	5413	3229
72.5°	6652	8035	9514	9751	9943	9430	7929	5998	4958	3901	2338
75°	4392	5799	6545	6580	6335	5385	3874	3004	2765	2293	1447
77.5°	2350	3410	3431	3177	3061	2282	926	511	569	646	576
80°	1753	2172	2517	2706	2762	1957	479	271	237	216	213
82.5°	1581	2098	2352	2455	2429	1610	269	182	151	164	187
85°	620	1120	1473	1426	1198	600	147	98	98	142	184
87.5°	127	230	312	298	268	116	72	59	60	115	174
90°	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°	1635	1635	1635	1635	1635	1635	1635	1635	1635	1635	1635
2.5°	1624	1618	1614	1610	1606	1604	1601	1601	1595	1593	1591
5°	1631	1621	1614	1605	1598	1592	1584	1582	1575	1570	1568
7.5°	1661	1646	1631	1620	1610	1597	1588	1580	1573	1568	1562
10°	1718	1702	1681	1661	1648	1628	1614	1600	1592	1586	1578
12.5°	1802	1779	1754	1730	1708	1682	1668	1651	1641	1636	1630
15°	1888	1863	1832	1809	1784	1764	1751	1736	1728	1722	1718
17.5°	1976	1947	1925	1902	1890	1875	1858	1839	1816	1802	1783
20°	2066	2044	2031	2018	2004	1983	1949	1910	1867	1826	1787
22.5°	2171	2158	2156	2144	2115	2065	2002	1929	1856	1788	1735
25°	2319	2319	2309	2260	2192	2102	1996	1891	1794	1701	1631
27.5°	2505	2498	2449	2348	2226	2086	1944	1811	1687	1585	1495
30°	2710	2661	2556	2397	2214	2034	1860	1706	1560	1435	1329
32.5°	2923	2804	2615	2397	2172	1956	1755	1566	1399	1259	1133
35°	3116	2899	2629	2358	2090	1841	1608	1394	1194	1043	905
37.5°	3291	2962	2614	2282	1971	1679	1406	1170	944	798	680
40°	3405	2975	2552	2163	1801	1460	1158	894	715	582	503
42.5°	3476	2950	2452	2000	1572	1185	869	641	508	434	404
45°	3516	2885	2304	1777	1295	901	617	463	391	365	355
47.5°	3514	2780	2119	1519	989	628	437	361	341	333	331
50°	3493	2651	1902	1239	714	438	346	324	319	314	312
52.5°	3464	2491	1662	966	507	350	314	308	304	299	297
55°	3410	2294	1402	727	397	316	303	301	296	289	285
57.5°	3344	2094	1153	568	351	308	301	298	291	283	275
60°	3320	1929	958	479	340	311	306	302	292	280	271
62.5°	3170	1743	818	444	346	324	322	316	301	287	273
65°	2782	1474	693	420	358	346	348	339	324	305	280
67°	2353	1202	577	397	367	369	376	369	350	323	289
67.5°	2239	1133	548	390	369	375	383	378	359	328	293
70°	1664	798	409	353	369	393	411	416	395	352	301
72.5°	1172	515	314	306	335	367	401	418	394	347	290
75°	704	322	255	260	282	315	342	349	319	289	251
77.5°	326	214	200	207	228	243	243	229	206	188	180
80°	192	175	174	187	201	190	173	154	142	136	133
82.5°	180	187	199	202	191	164	143	124	118	115	112
85°	212	227	207	191	169	138	112	96	93	90	86
87.5°	196	187	163	140	116	84	61	55	59	58	56
90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	1635	1635	1635	1635	1635
2.5°	1592	1592	1588	1586	1591
5°	1564	1565	1562	1561	1562
7.5°	1558	1557	1555	1553	1555
10°	1576	1575	1572	1574	1571
12.5°	1630	1636	1635	1637	1641
15°	1718	1717	1714	1716	1719
17.5°	1768	1760	1753	1750	1750
20°	1756	1733	1721	1714	1712
22.5°	1685	1652	1627	1621	1616
25°	1569	1528	1496	1489	1476
27.5°	1434	1379	1341	1333	1326
30°	1257	1194	1150	1122	1131
32.5°	1041	981	930	885	878
35°	804	738	693	673	660
37.5°	600	545	515	496	497
40°	459	430	414	401	402
42.5°	383	370	366	360	357
45°	347	343	344	338	336
47.5°	327	324	325	321	320
50°	311	309	310	307	306
52.5°	295	296	295	293	293
55°	281	280	282	279	279
57.5°	270	269	269	268	268
60°	264	260	259	259	260
62.5°	261	254	253	253	254
65°	262	251	247	246	245
67°	263	247	239	235	234
67.5°	264	245	236	232	230
70°	258	231	218	211	209
72.5°	243	214	198	189	187
75°	216	194	180	170	166
77.5°	167	157	152	146	144
80°	130	125	123	119	118
82.5°	108	103	100	95	92
85°	84	78	76	72	70
87.5°	55	52	51	46	44
90°	0	0	0	0	0

(END OF REPORT)