

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: P159550

Luminaire Tested: **VST-E05-LED-E-U-T3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159550
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33706)
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-T3
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 AREA
Light Source: (105) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15291.8 lumens
Efficiency: N/A
Efficacy: 120.1 lumens/watt
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B3 - 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

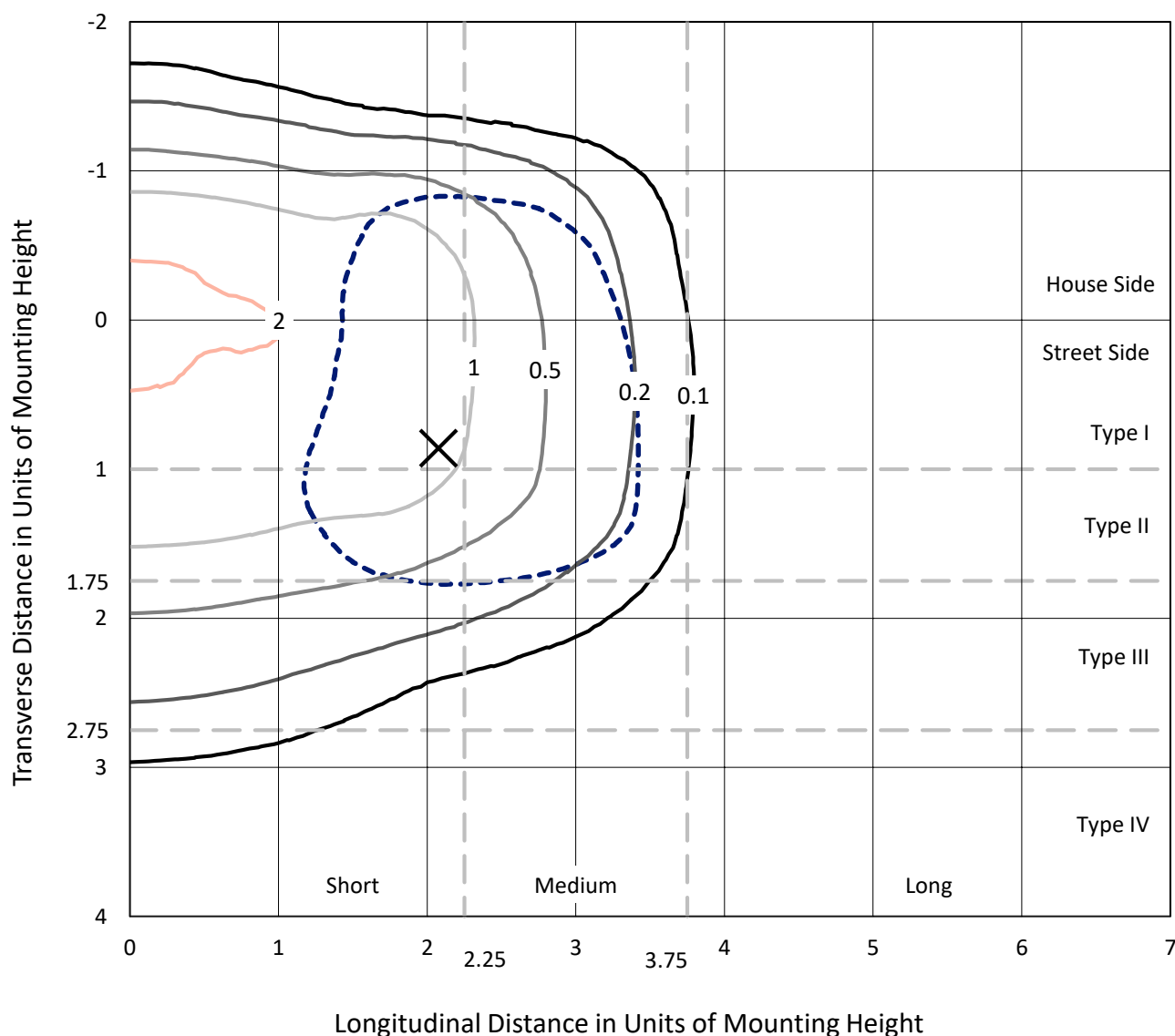


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

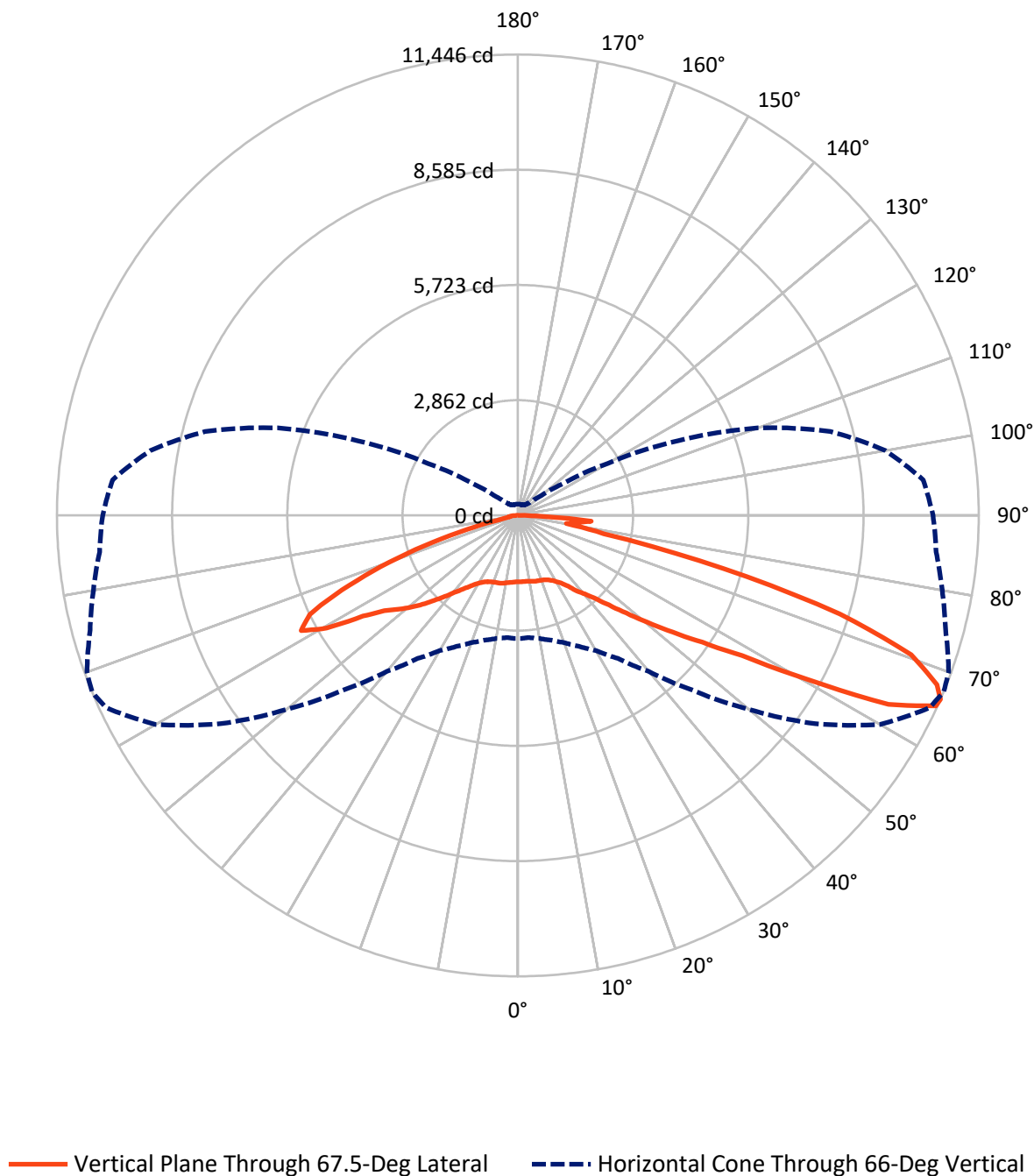


Based on 25 foot mounting height. Maximum calculated value = 2.6 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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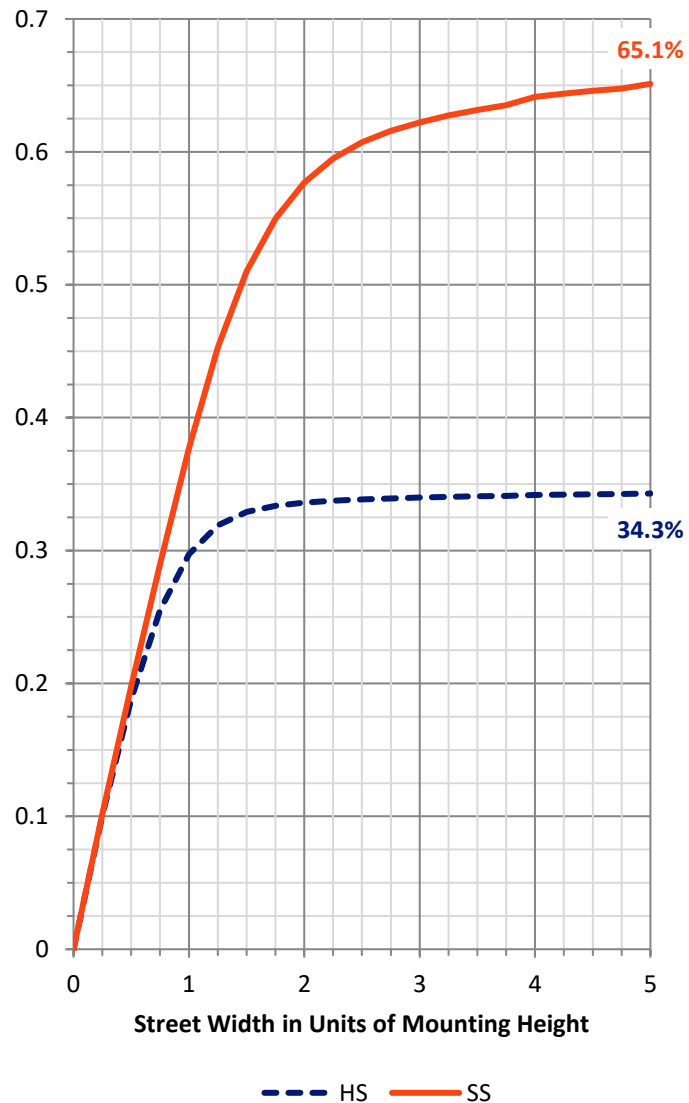
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5291.6	0.0	5291.6
	% Fixture	34.6	0.0	34.6
Street Side	Lumens	10000.2	0.0	10000.2
	% Fixture	65.4	0.0	65.4
Total	Lumens	15291.8	0.0	15291.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.3	1.0
10°-20°	468.8	3.1
20°-30°	806.0	5.3
30°-40°	1302.6	8.5
40°-50°	2158.7	14.1
50°-60°	3387.8	22.2
60°-70°	4631.8	30.3
70°-80°	2036.9	13.3
80°-90°	340.9	2.2
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°	15291.8	100.0
0°-180°	15291.8	100.0

Coefficient of Utilization



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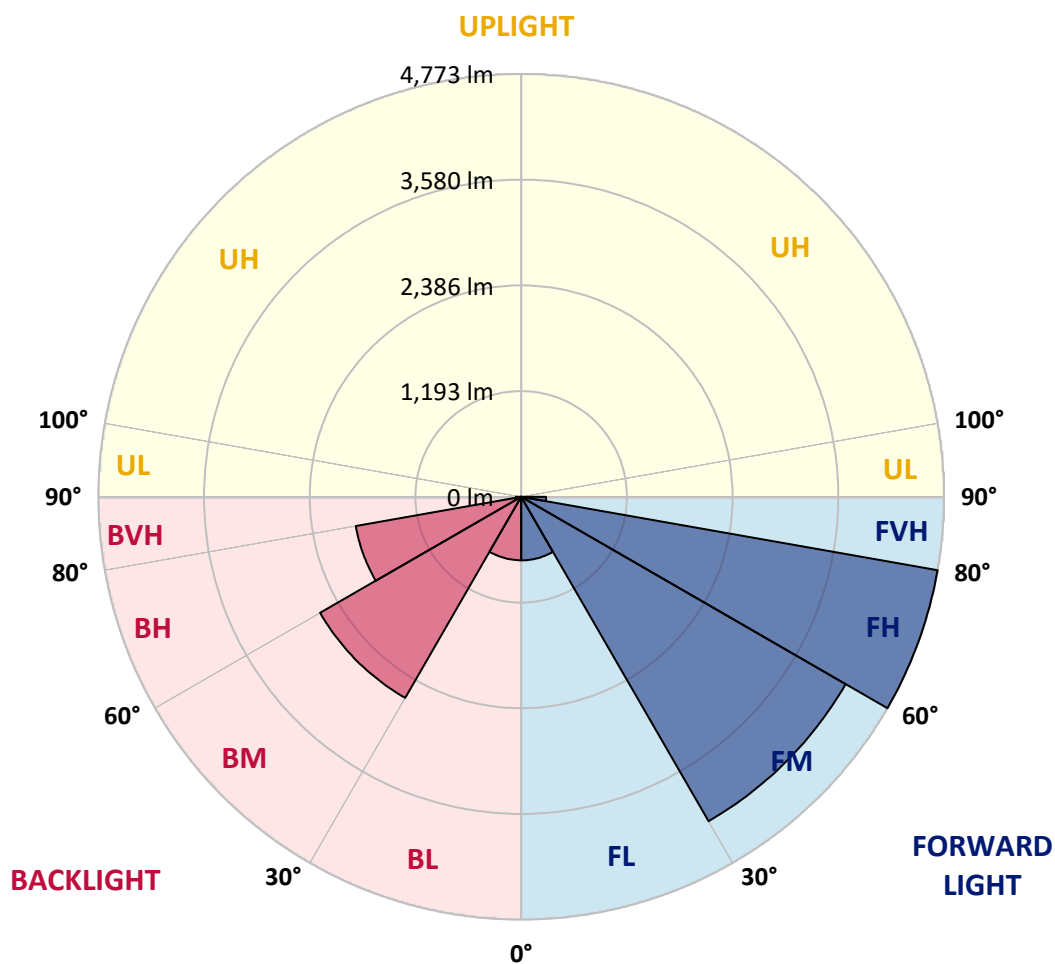
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	717.3	4.7			
FM	(30°-60°)	4228.6	27.7			
FH	(60°-80°)	4772.9	31.2			G2/5000
FVH	(80°-90°)	281.3	1.8			G3/500
BL	(0°-30°)	715.8	4.7	B2/1000		
BM	(30°-60°)	2620.4	17.1	B3/5000		
BH	(60°-80°)	1895.8	12.4	B3/2500		G3/2500
BVH	(80°-90°)	59.7	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
2.5°	1647	1647	1648	1647	1647	1646	1650	1650	1650	1649	1652
5°	1643	1643	1644	1644	1645	1644	1647	1648	1648	1648	1651
7.5°	1633	1636	1634	1635	1636	1639	1643	1645	1647	1650	1651
10°	1612	1617	1616	1619	1620	1629	1632	1636	1643	1647	1650
12.5°	1583	1586	1587	1591	1595	1606	1614	1621	1631	1641	1651
15°	1560	1562	1562	1566	1572	1582	1592	1604	1619	1636	1652
17.5°	1567	1572	1568	1567	1569	1575	1584	1594	1612	1631	1650
20°	1613	1614	1612	1607	1603	1604	1604	1606	1617	1632	1647
22.5°	1651	1655	1654	1655	1654	1658	1656	1652	1648	1649	1656
25°	1684	1688	1688	1691	1696	1704	1710	1709	1703	1695	1692
27.5°	1738	1738	1738	1741	1748	1758	1768	1774	1779	1771	1754
30°	1823	1824	1821	1822	1827	1840	1852	1861	1871	1870	1848
32.5°	1916	1920	1919	1923	1930	1942	1955	1969	1982	1990	1976
35°	2036	2040	2041	2047	2055	2073	2091	2109	2123	2129	2126
37.5°	2233	2234	2230	2221	2224	2238	2259	2288	2297	2303	2317
40°	2528	2525	2509	2501	2496	2502	2498	2521	2542	2543	2542
42.5°	2886	2877	2862	2860	2858	2856	2845	2846	2865	2870	2864
45°	3242	3231	3220	3230	3218	3249	3258	3282	3285	3295	3280
47.5°	3534	3535	3535	3549	3573	3632	3685	3731	3748	3772	3775
50°	3755	3761	3780	3825	3876	3975	4064	4147	4222	4250	4324
52.5°	3884	3900	3940	4015	4106	4234	4374	4515	4645	4755	4843
55°	3861	3873	3943	4060	4202	4374	4570	4774	4977	5163	5307
57.5°	3713	3721	3791	3923	4100	4331	4608	4911	5196	5496	5742
60°	3519	3531	3596	3700	3885	4131	4452	4863	5318	5790	6250
62.5°	3395	3392	3449	3542	3681	3904	4213	4700	5330	6128	7037
65°	3189	3180	3239	3345	3496	3712	4005	4473	5204	6256	7545
66°	3061	3043	3102	3209	3360	3590	3871	4333	5051	6131	7491
67.5°	2837	2828	2856	2940	3052	3268	3561	4026	4689	5755	7095
70°	2306	2286	2308	2346	2389	2442	2622	2991	3552	4585	5716
72.5°	1571	1561	1602	1660	1775	1829	1900	1960	2158	2890	3987
75°	1195	1201	1253	1349	1497	1657	1813	1870	1804	1747	2263
77.5°	670	705	768	890	1047	1273	1545	1845	1995	1958	1831
80°	276	271	302	369	423	608	930	1306	1728	1995	1953
82.5°	77	79	102	131	169	215	336	540	880	1369	1792
85°	24	24	33	49	58	67	85	140	239	477	967
87.5°	5	5	7	14	15	15	19	26	23	21	94
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°	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
2.5°	1649	1647	1648	1649	1648	1648	1647	1646	1647	1647	1650
5°	1648	1647	1648	1648	1648	1649	1649	1649	1652	1652	1657
7.5°	1650	1650	1652	1652	1652	1652	1653	1655	1660	1659	1668
10°	1654	1656	1661	1662	1662	1665	1667	1671	1676	1678	1686
12.5°	1659	1669	1678	1680	1683	1688	1691	1693	1702	1705	1715
15°	1665	1679	1690	1694	1698	1704	1708	1711	1719	1723	1735
17.5°	1666	1682	1695	1701	1706	1713	1719	1725	1734	1740	1752
20°	1665	1686	1706	1714	1719	1732	1741	1749	1760	1766	1778
22.5°	1676	1700	1727	1737	1745	1763	1775	1788	1802	1806	1815
25°	1702	1727	1761	1775	1789	1813	1830	1849	1863	1865	1868
27.5°	1746	1769	1810	1831	1854	1888	1913	1932	1952	1952	1950
30°	1835	1840	1883	1910	1944	1994	2031	2052	2067	2067	2050
32.5°	1950	1944	1983	2012	2059	2129	2179	2195	2211	2206	2177
35°	2116	2099	2121	2165	2218	2314	2366	2402	2412	2398	2352
37.5°	2325	2323	2334	2383	2442	2566	2619	2642	2634	2609	2528
40°	2546	2540	2533	2566	2632	2781	2875	2887	2876	2839	2737
42.5°	2841	2841	2808	2817	2872	3039	3150	3188	3189	3135	2999
45°	3247	3243	3185	3171	3213	3377	3520	3541	3541	3470	3321
47.5°	3735	3730	3673	3624	3632	3809	3928	3960	3932	3879	3702
50°	4285	4276	4218	4172	4152	4331	4432	4447	4406	4343	4151
52.5°	4843	4870	4836	4811	4818	4934	5038	4967	4946	4878	4685
55°	5424	5507	5582	5560	5586	5699	5719	5625	5587	5538	5323
57.5°	6009	6251	6497	6566	6630	6792	6769	6615	6644	6717	6475
60°	6826	7525	8149	8264	8463	8601	8632	8602	8737	8699	8485
62.5°	8081	9246	10114	10330	10530	10523	10418	10310	10443	10443	9884
65°	8977	10299	11228	11407	11399	11158	10910	10694	10675	10527	9710
66°	9019	10380	11290	11446	11386	10998	10701	10427	10310	10104	9267
67.5°	8641	10151	11088	11224	11066	10510	10101	9734	9564	9217	8429
70°	7088	8724	10087	10365	10186	9482	8922	8426	8101	7600	7032
72.5°	5174	6441	7917	8369	8341	7693	7242	6788	6361	5905	5490
75°	3363	4190	5013	5277	5150	4775	4452	4187	3782	3465	3388
77.5°	1920	2346	2219	2186	2027	1636	1088	763	689	860	943
80°	1827	1656	1356	1223	1124	766	402	283	248	254	273
82.5°	2060	2147	1756	1467	1277	932	509	237	173	205	230
85°	1544	2174	2155	1826	1498	1074	602	181	104	144	188
87.5°	313	515	496	436	371	259	101	57	52	71	108
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°	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
2.5°	1652	1652	1654	1657	1658	1658	1660	1658	1662	1663	1664
5°	1661	1664	1666	1671	1674	1676	1679	1677	1681	1682	1684
7.5°	1671	1676	1680	1682	1686	1686	1687	1685	1684	1681	1680
10°	1689	1692	1697	1695	1693	1686	1680	1671	1666	1657	1652
12.5°	1718	1720	1720	1711	1698	1682	1667	1652	1640	1630	1624
15°	1738	1742	1737	1724	1705	1683	1663	1643	1627	1614	1606
17.5°	1753	1752	1743	1725	1707	1688	1670	1649	1629	1610	1598
20°	1776	1766	1750	1731	1712	1696	1682	1662	1641	1615	1597
22.5°	1807	1789	1766	1746	1728	1713	1697	1680	1658	1629	1604
25°	1851	1820	1794	1774	1758	1741	1723	1701	1679	1649	1619
27.5°	1918	1872	1839	1821	1806	1783	1760	1734	1706	1675	1641
30°	1999	1944	1906	1890	1872	1846	1821	1785	1746	1709	1667
32.5°	2094	2038	2000	1988	1959	1929	1894	1846	1795	1740	1690
35°	2238	2167	2132	2104	2064	2028	1969	1906	1833	1760	1698
37.5°	2386	2314	2278	2239	2187	2121	2042	1952	1855	1765	1689
40°	2584	2506	2460	2400	2316	2213	2096	1973	1855	1743	1651
42.5°	2815	2743	2672	2573	2438	2288	2124	1966	1823	1694	1597
45°	3135	3012	2899	2740	2543	2332	2127	1933	1768	1625	1517
47.5°	3495	3336	3136	2887	2618	2349	2098	1871	1681	1526	1408
50°	3910	3666	3359	3004	2656	2326	2029	1767	1561	1383	1257
52.5°	4385	4013	3561	3087	2650	2256	1915	1630	1400	1211	1087
55°	4912	4391	3754	3140	2596	2120	1736	1437	1200	1014	905
57.5°	5841	5054	4122	3211	2483	1914	1509	1193	979	821	717
60°	7567	6213	4819	3378	2313	1656	1223	936	757	642	565
62.5°	8635	7029	5159	3354	2037	1303	908	694	553	477	429
65°	8382	6709	4744	2881	1585	924	601	454	380	341	318
66°	8038	6351	4393	2580	1381	772	496	381	327	298	286
67.5°	7317	5697	3789	2066	1035	575	366	299	266	251	243
70°	6124	4590	2680	1220	561	312	234	208	200	195	192
72.5°	4735	3323	1566	600	283	202	178	167	164	164	165
75°	2983	1910	701	289	192	163	152	147	148	149	148
77.5°	991	659	292	205	167	148	139	137	139	140	140
80°	285	249	211	181	153	138	130	129	134	135	133
82.5°	219	205	191	175	147	130	127	128	131	129	120
85°	201	199	143	142	128	124	121	122	119	108	98
87.5°	113	105	81	82	95	98	81	86	80	70	64
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°	1650	1650	1650	1650	1650
2.5°	1666	1665	1665	1668	1664
5°	1685	1684	1684	1687	1684
7.5°	1676	1673	1671	1670	1670
10°	1646	1643	1637	1635	1633
12.5°	1615	1612	1605	1605	1603
15°	1596	1592	1587	1584	1582
17.5°	1586	1580	1574	1571	1569
20°	1582	1574	1567	1562	1562
22.5°	1583	1573	1565	1559	1557
25°	1593	1578	1568	1562	1560
27.5°	1607	1589	1576	1568	1565
30°	1626	1601	1583	1573	1569
32.5°	1639	1604	1581	1567	1562
35°	1638	1593	1565	1547	1541
37.5°	1620	1567	1530	1508	1498
40°	1580	1519	1480	1459	1447
42.5°	1522	1456	1421	1398	1385
45°	1431	1366	1323	1305	1288
47.5°	1305	1239	1202	1176	1165
50°	1157	1091	1052	1031	1021
52.5°	995	932	904	884	870
55°	827	769	757	735	722
57.5°	669	635	624	602	591
60°	523	512	500	486	480
62.5°	405	395	392	383	382
65°	309	310	308	306	304
66°	281	280	281	279	278
67.5°	239	243	246	245	245
70°	194	197	201	200	200
72.5°	166	171	173	172	172
75°	150	155	155	153	152
77.5°	140	142	140	138	136
80°	130	128	125	122	120
82.5°	113	108	105	100	100
85°	91	87	80	75	70
87.5°	59	57	52	39	31
90°	0	0	0	0	0

(END OF REPORT)