



LM-79 Distribution Test Report (Luminaire)

Total Luminous Flux, Luminous Intensity Distribution and
Electrical Characteristics of Customer Submitted Luminaire

CURTIS-STRAUS

Report No.: PHM-RPT-180302-11
Date: March 02, 2018

LM-79 Distribution Testing: Total Luminous Flux, Luminous Intensity Distribution, Electrical Characteristics and Efficacy.

Report Prepared for:

**Vantage Lighting
181 Narragansett Park Drive
East Providence, RI 02916
USA
Telephone: (860) 564-4512**

**Description : FR 6699
Model Tested: SQ66VOFLEDU-2035K
WO/CS#: S0461**

**Report Issue Date: March 2, 2018
Date of Test(s): February 26- March 2, 2018
Total Number of Pages : 9 (including this page)**

Report Reviewed by:

**Mark Razvi
Photometric Lab Supervisor
Curtis-Straus**



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CURTIS-STRAUS

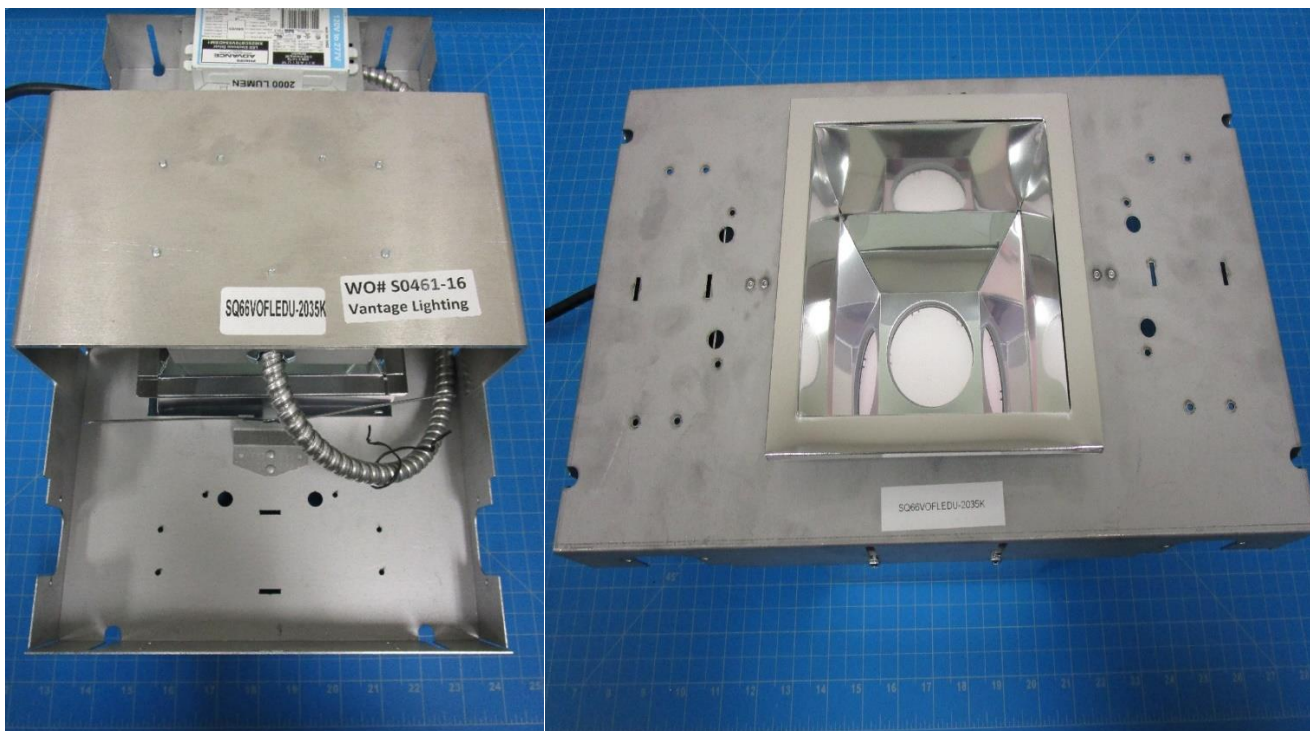
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DETAILED PRODUCT DESCRIPTION

Model #	SQ66VOFLEDU-2035K
CS/WO#	S0461
Description	FR 6699
Supply Voltage	120VAC

Pictures:





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Curtis-Straus Photometric Testing Information

Photometric Testing is performed in accordance with the procedures outlined in LM-79-2008 . The test sample is evaluated for photometric and electrical characteristics using the equipment listed below.

Curtis-Straus Environmental Testing Info

Curtis-Straus testing laboratory temperature during testing: 25.9 °C .

LIST OF EQUIPMENT USED:

Description	Model No.	Serial No.	Asset No	Cal. Date	Cal. Due
Yokogawa Power Meter	WT-310E	C2SK10001V	2360	04-21-17	04-21-18
Chroma AC Power Supply	61603	616030001283	2355	04-21-17	04-21-18
LabSphere Type-C GoniometerSystem	PM-150-140	022172153	AA-30058-195	02-09-18	03-09-18
Digital Thermometer	4627	160739886	2392	09-07-16	09-07-18

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LM-79-2008 Distribution Test Data

Model #	SQ66VOFLEDU-2035K
CS/WO#	S0461
Description	FR 6699
Supply Voltage	120VAC

Result of Tests

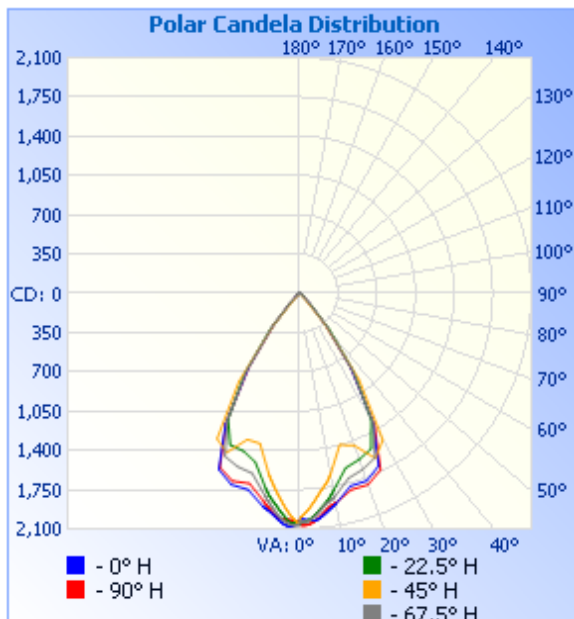
Photometric and Electrical Test Data

Input Voltage: 120 VAC

Base Orientation: Base Up

Lumens (lm)	Watts (W)	Volts (VAC)	Amps (A)	Efficacy	PF	Ithd (%)
2088.86	26.02	120.28	0.22	80.27	0.9936	0.12

Luminous Intensity Summary: Cd



Illumination Cone of Light
Mounting Ht: 10 ft.

	Illuminance at a Distance	
	Center Beam fc	Beam Width
1.7ft	704 fc	2.2 ft 2.2 ft
3.3ft	187 fc	4.3 ft 4.3 ft
5.0ft	81.3 fc	6.4 ft 6.4 ft
6.7ft	45.3 fc	8.6 ft 8.6 ft
8.3ft	29.5 fc	10.7 ft 10.7 ft
10.0ft	20.3 fc	12.9 ft 12.9 ft

■ Vert. Spread: 65.6°
■ Horiz. Spread: 65.6°



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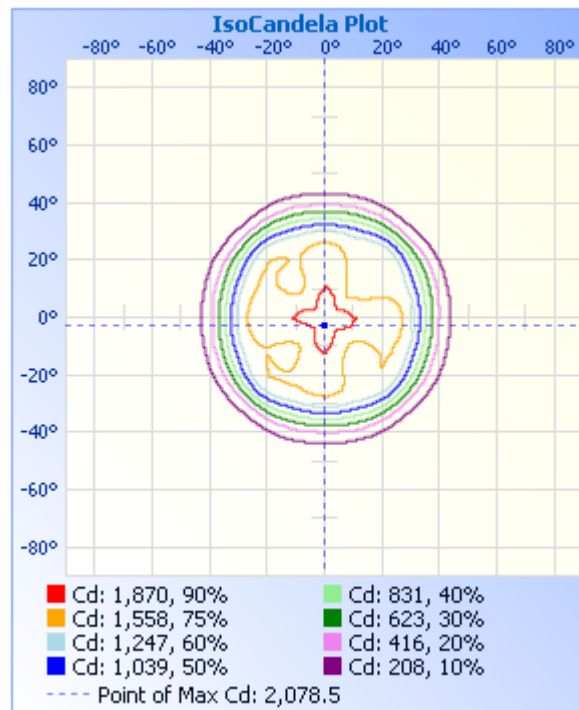
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IsoCandela Plot



Zonal Lumens Summary

Zonal Lumen Summary		
Zone	Lumens	% Luminaire
0-30	1,352.3	64.7%
0-40	1,884.9	90.2%
0-60	2,027.3	97.1%
60-90	26.2	1.3%
70-100	19.2	0.9%
90-120	15.6	0.7%
0-90	2,053.4	98.3%
90-180	35.4	1.7%
0-180	2,088.9	100%

Lumens per Zone

Lumens Per Zone					
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	180.5	8.6%	90-100	5.5	0.3%
10-20	464.4	22.2%	100-110	5.2	0.3%
20-30	707.5	33.9%	110-120	4.9	0.2%
30-40	532.5	25.5%	120-130	4.7	0.2%
40-50	118.3	5.7%	130-140	4.6	0.2%
50-60	24.1	1.2%	140-150	4.3	0.2%
60-70	12.4	0.6%	150-160	3.4	0.2%
70-80	7.4	0.4%	160-170	2.2	0.1%
80-90	6.4	0.3%	170-180	0.7	0%



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Candela Table - Type C

	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5	360
0	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033
0.1	2013	2048	2000	2032	2063	2060	2028	2050	2057	2055	2051	2063	2021	2002	1997	2021	2006
0.2	2014	2048	1997	2032	2064	2059	2025	2050	2058	2055	2049	2065	2024	2002	1997	2022	2007
0.3	2014	2047	1995	2033	2065	2058	2022	2049	2058	2054	2047	2065	2026	2003	1997	2023	2008
0.4	2014	2047	1992	2033	2065	2056	2019	2049	2059	2054	2045	2066	2027	2003	1996	2024	2010
0.5	2015	2046	1989	2033	2066	2054	2015	2049	2060	2053	2042	2066	2027	2003	1996	2025	2011
0.6	2015	2045	1986	2034	2067	2052	2012	2048	2061	2053	2039	2067	2026	2003	1993	2026	2013
0.7	2016	2044	1984	2034	2067	2049	2008	2048	2062	2053	2036	2067	2026	2004	1990	2027	2014
0.8	2016	2043	1981	2034	2068	2047	2005	2048	2063	2052	2033	2067	2026	2004	1988	2028	2015
0.9	2017	2042	1978	2034	2068	2045	2001	2048	2064	2052	2030	2068	2025	2004	1985	2029	2017
1	2017	2041	1974	2035	2067	2043	1998	2047	2065	2052	2027	2068	2025	2004	1982	2030	2018
1.1	2018	2040	1971	2035	2067	2041	1995	2047	2065	2051	2024	2069	2025	2005	1980	2031	2020
1.2	2018	2039	1968	2035	2067	2038	1991	2047	2066	2051	2021	2069	2025	2005	1977	2032	2021
1.3	2019	2038	1965	2036	2067	2036	1988	2046	2067	2050	2018	2068	2024	2005	1974	2033	2022
1.4	2019	2036	1961	2036	2066	2034	1984	2046	2068	2050	2015	2067	2024	2005	1971	2034	2024
1.5	2019	2035	1958	2036	2066	2031	1981	2046	2069	2050	2012	2067	2024	2006	1969	2035	2025
1.6	2020	2034	1955	2037	2066	2028	1977	2046	2070	2049	2008	2066	2024	2006	1966	2036	2027
1.7	2020	2032	1951	2037	2065	2026	1973	2045	2071	2049	2004	2065	2023	2006	1963	2037	2028
1.8	2021	2030	1948	2037	2065	2023	1969	2045	2072	2048	2001	2065	2023	2006	1959	2038	2030
1.9	2021	2029	1945	2037	2065	2020	1966	2045	2072	2048	1997	2064	2023	2007	1956	2037	2031
2	2022	2027	1941	2038	2063	2017	1962	2044	2073	2048	1993	2063	2022	2007	1952	2036	2032
2.1	2022	2025	1937	2038	2062	2014	1958	2044	2074	2047	1990	2063	2022	2007	1949	2035	2034
2.2	2023	2023	1933	2035	2061	2011	1954	2044	2075	2047	1986	2062	2022	2007	1946	2033	2035
2.3	2023	2022	1929	2033	2060	2008	1951	2044	2076	2044	1982	2061	2022	2008	1942	2032	2037
2.4	2024	2020	1925	2031	2059	2006	1947	2043	2077	2041	1978	2060	2021	2008	1939	2031	2038
2.5	2024	2018	1921	2029	2057	2003	1943	2043	2078	2038	1975	2058	2021	2008	1936	2029	2039
2.6	2024	2016	1918	2026	2056	1999	1939	2043	2079	2035	1971	2057	2021	2008	1932	2028	2041
2.7	2025	2014	1914	2024	2055	1996	1935	2042	2078	2033	1966	2056	2021	2009	1929	2027	2042
2.8	2025	2011	1910	2022	2054	1993	1932	2042	2077	2030	1962	2054	2020	2009	1925	2026	2041
2.9	2026	2009	1906	2020	2053	1989	1928	2042	2076	2027	1957	2053	2020	2008	1921	2024	2040
3	2026	2006	1902	2018	2051	1986	1924	2042	2075	2024	1953	2051	2020	2006	1916	2023	2040
3.1	2027	2004	1898	2015	2049	1982	1920	2041	2074	2021	1948	2050	2020	2003	1912	2021	2039
3.2	2027	2001	1894	2013	2047	1979	1917	2041	2073	2018	1944	2049	2019	2001	1908	2019	2038
3.3	2028	1998	1890	2011	2046	1976	1913	2041	2072	2016	1940	2047	2019	1999	1904	2017	2037
3.4	2028	1996	1886	2008	2044	1972	1909	2040	2071	2012	1935	2046	2019	1996	1900	2015	2037



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3.5	2029	1993	1882	2005	2042	1969	1905	2040	2069	2009	1931	2044	2018	1994	1896	2013	2036
3.6	2029	1991	1878	2003	2040	1966	1902	2038	2068	2005	1926	2041	2018	1992	1892	2011	2035
3.7	2029	1988	1873	2000	2038	1962	1898	2036	2067	2001	1922	2039	2018	1989	1887	2009	2034
3.8	2030	1985	1869	1997	2036	1958	1894	2033	2066	1998	1917	2037	2018	1987	1883	2007	2033
3.9	2030	1982	1865	1995	2034	1955	1890	2031	2064	1994	1912	2035	2017	1984	1879	2005	2032
4	2031	1979	1861	1992	2032	1951	1886	2028	2062	1990	1908	2032	2017	1982	1874	2003	2030
4.1	2030	1976	1857	1990	2030	1947	1883	2026	2060	1987	1903	2030	2017	1979	1870	2000	2029
4.2	2029	1973	1853	1987	2028	1944	1879	2023	2058	1983	1898	2028	2017	1976	1866	1998	2028
4.3	2027	1970	1849	1984	2025	1940	1875	2021	2055	1979	1894	2026	2016	1973	1861	1995	2026
4.4	2025	1967	1845	1981	2023	1936	1871	2018	2053	1976	1889	2023	2016	1970	1857	1992	2025
4.5	2024	1964	1840	1978	2020	1933	1867	2016	2051	1972	1884	2021	2016	1967	1852	1989	2023
4.6	2022	1961	1836	1975	2018	1929	1864	2013	2049	1968	1880	2018	2015	1964	1848	1986	2022
4.7	2021	1958	1832	1972	2015	1925	1860	2011	2047	1965	1875	2015	2015	1961	1844	1984	2021
4.8	2019	1955	1828	1969	2013	1922	1856	2008	2045	1961	1870	2012	2015	1958	1839	1981	2019
4.9	2018	1952	1824	1966	2010	1918	1853	2005	2042	1957	1866	2009	2015	1955	1835	1978	2017
5	2016	1949	1819	1963	2008	1914	1850	2002	2040	1954	1861	2006	2014	1952	1830	1975	2015
5.1	2015	1946	1815	1960	2005	1910	1846	2000	2037	1950	1856	2003	2014	1949	1826	1973	2013
5.2	2013	1943	1811	1956	2003	1906	1843	1997	2034	1946	1851	2000	2014	1946	1822	1970	2011
5.3	2011	1939	1807	1953	2000	1903	1840	1994	2031	1943	1846	1996	2014	1942	1817	1966	2009
5.4	2008	1936	1803	1950	1997	1899	1836	1991	2029	1939	1841	1993	2013	1939	1813	1963	2007
5.5	2006	1933	1799	1947	1994	1895	1833	1988	2026	1935	1837	1990	2013	1936	1808	1959	2005
5.6	2004	1930	1796	1944	1991	1891	1830	1985	2023	1932	1832	1987	2010	1932	1804	1956	2003
5.7	2001	1927	1792	1941	1988	1887	1826	1983	2020	1928	1827	1984	2008	1929	1800	1953	2000
5.8	1999	1924	1788	1937	1985	1884	1823	1980	2018	1924	1822	1980	2005	1926	1795	1949	1998
5.9	1997	1921	1784	1934	1982	1880	1820	1977	2015	1920	1817	1977	2002	1923	1791	1946	1996
6	1994	1918	1780	1931	1979	1876	1816	1974	2012	1917	1812	1973	2000	1919	1787	1942	1994
6.1	1992	1915	1776	1928	1976	1873	1813	1972	2009	1913	1808	1969	1997	1916	1782	1939	1991
6.2	1990	1912	1772	1925	1973	1870	1809	1969	2007	1909	1803	1966	1994	1913	1777	1935	1989
6.3	1988	1909	1769	1921	1970	1867	1806	1966	2004	1905	1798	1962	1992	1909	1773	1932	1986
6.4	1985	1906	1765	1918	1967	1864	1802	1963	2001	1901	1794	1959	1989	1905	1768	1928	1984
6.5	1983	1903	1762	1915	1964	1861	1799	1961	1998	1898	1789	1955	1986	1902	1764	1925	1981
6.6	1980	1900	1759	1912	1961	1857	1795	1958	1996	1894	1784	1951	1984	1898	1759	1921	1979
6.7	1978	1897	1755	1910	1958	1854	1792	1955	1993	1890	1780	1948	1981	1894	1754	1918	1976
6.8	1975	1894	1752	1907	1955	1851	1788	1952	1990	1887	1775	1944	1978	1891	1750	1914	1974
6.9	1973	1891	1749	1904	1952	1848	1785	1950	1987	1884	1770	1940	1975	1887	1745	1911	1971
7	1970	1888	1746	1902	1949	1845	1781	1948	1985	1880	1766	1937	1971	1883	1740	1907	1969
7.1	1968	1885	1742	1899	1946	1842	1777	1945	1982	1877	1761	1933	1968	1880	1736	1904	1966
7.2	1966	1882	1739	1897	1943	1840	1774	1943	1980	1874	1756	1929	1965	1876	1731	1900	1964
7.3	1963	1878	1736	1894	1941	1838	1770	1941	1977	1870	1751	1926	1962	1872	1726	1897	1962
7.4	1961	1875	1732	1892	1938	1836	1766	1939	1975	1867	1747	1922	1959	1868	1721	1894	1959



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7.5	1958	1872	1729	1889	1935	1833	1763	1937	1973	1864	1742	1918	1956	1865	1717	1891	1957
7.6	1956	1869	1726	1887	1933	1831	1759	1935	1970	1860	1737	1915	1953	1861	1712	1888	1955
7.7	1954	1866	1722	1884	1931	1829	1755	1933	1968	1857	1732	1911	1950	1857	1707	1885	1952
7.8	1951	1863	1719	1882	1928	1827	1752	1930	1966	1854	1728	1907	1947	1853	1702	1882	1950
7.9	1949	1859	1715	1881	1926	1824	1748	1928	1963	1850	1723	1904	1944	1849	1698	1879	1947
8	1946	1856	1712	1879	1924	1822	1745	1926	1961	1847	1718	1900	1941	1846	1693	1876	1945
8.1	1944	1853	1708	1877	1922	1820	1741	1924	1959	1843	1713	1896	1938	1842	1688	1872	1943
8.2	1942	1850	1705	1875	1920	1817	1737	1922	1956	1839	1709	1893	1934	1838	1683	1869	1940
8.3	1939	1846	1701	1873	1917	1815	1733	1920	1955	1836	1704	1889	1931	1834	1678	1866	1938
8.4	1937	1842	1698	1872	1915	1812	1730	1918	1953	1832	1700	1885	1928	1830	1673	1863	1936
8.5	1934	1838	1694	1870	1913	1809	1726	1916	1952	1828	1695	1882	1925	1826	1667	1860	1934
8.6	1932	1835	1691	1868	1911	1807	1722	1914	1950	1825	1691	1878	1922	1823	1661	1857	1932
8.7	1930	1831	1687	1866	1910	1804	1718	1912	1949	1821	1686	1874	1919	1819	1656	1853	1930
8.8	1928	1827	1682	1864	1909	1801	1715	1910	1947	1817	1682	1871	1916	1815	1650	1850	1928
8.9	1926	1823	1677	1862	1908	1798	1711	1908	1946	1814	1677	1867	1913	1811	1644	1846	1926
9	1924	1819	1673	1860	1907	1796	1707	1907	1944	1809	1673	1863	1910	1807	1639	1843	1924
9.1	1922	1816	1668	1858	1905	1793	1704	1905	1943	1805	1668	1859	1907	1803	1633	1839	1922
9.2	1920	1812	1664	1856	1904	1790	1700	1902	1941	1800	1664	1856	1904	1799	1627	1836	1920
9.3	1917	1808	1659	1853	1903	1788	1696	1899	1940	1796	1659	1852	1901	1795	1622	1832	1918
9.4	1915	1804	1655	1851	1902	1784	1692	1896	1938	1792	1654	1848	1898	1791	1616	1829	1916
9.5	1913	1800	1650	1849	1901	1781	1689	1893	1936	1787	1650	1844	1895	1788	1610	1825	1914
9.6	1911	1796	1646	1847	1900	1778	1685	1890	1934	1783	1645	1840	1892	1784	1605	1822	1911
9.7	1909	1792	1641	1845	1898	1774	1681	1887	1932	1778	1640	1836	1889	1779	1599	1818	1909
9.8	1906	1788	1636	1842	1897	1771	1677	1884	1930	1774	1635	1833	1886	1775	1594	1814	1907
9.9	1904	1784	1631	1840	1896	1768	1673	1881	1928	1769	1630	1829	1884	1771	1588	1810	1904
10	1902	1780	1626	1837	1894	1765	1670	1878	1926	1765	1625	1825	1881	1767	1583	1806	1902
15	1777	1610	1398	1705	1811	1619	1448	1724	1809	1554	1385	1660	1753	1590	1329	1615	1778
20	1776	1575	1440	1670	1813	1577	1433	1673	1812	1493	1385	1643	1779	1544	1331	1546	1775
25	1694	1528	1622	1616	1733	1547	1604	1604	1731	1490	1565	1602	1709	1478	1541	1485	1697
30	1325	1298	1507	1331	1356	1316	1533	1299	1339	1294	1495	1310	1330	1273	1496	1257	1326
35	807	857	936	835	813	868	976	855	812	870	959	842	806	870	967	857	810
40	370	412	348	382	366	385	353	393	370	406	364	384	369	420	358	410	373
45	130	136	56	118	120	103	57	126	126	113	60	120	126	123	56	127	130
50	51	48	18	53	54	43	20	53	50	41	20	47	47	41	18	48	51
55	28	25	15	32	34	27	17	31	30	23	17	28	27	23	16	26	28
60	20	17	11	22	24	18	13	23	22	16	13	21	20	18	10	18	20
65	14	10	8	13	18	10	9	15	17	10	9	14	16	11	7	11	14
70	10	7	6	7	9	7	7	9	10	7	7	8	11	7	5	8	10
75	7	7	6	7	7	7	7	8	9	7	6	7	8	6	6	6	7
80	6	6	5	7	7	7	6	8	8	7	6	7	7	6	5	6	6



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85	5	6	5	6	6	6	6	7	7	7	6	6	6	6	5	5	5
90	5	5	5	5	5	6	6	6	6	5	5	5	6	5	4	4	5
95	4	5	5	5	5	6	6	6	6	5	5	5	5	5	5	4	4
100	4	4	5	5	5	5	6	6	5	5	5	5	5	5	5	4	4
105	4	5	5	5	5	5	6	6	5	5	5	5	5	4	4	4	4
110	4	5	5	5	5	5	6	5	5	5	5	5	5	4	5	4	4
115	4	5	5	5	5	6	6	5	5	5	5	5	5	4	4	4	4
120	4	4	5	5	5	5	6	6	6	6	5	5	5	5	4	4	4
125	4	5	5	5	5	6	6	6	6	6	6	5	5	5	5	4	4
130	5	5	6	5	6	6	6	6	6	6	6	5	5	5	5	5	5
135	5	5	6	6	6	7	7	6	6	6	7	6	5	5	5	5	5
140	6	6	6	6	6	7	7	7	7	7	7	6	6	6	6	6	5
145	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6
150	6	7	7	7	7	7	8	8	8	8	8	8	7	7	7	7	6
155	7	7	7	7	7	8	8	8	8	8	8	8	8	7	7	7	7
160	7	7	7	7	7	8	8	8	8	8	8	8	8	7	7	7	7
165	7	7	7	7	8	8	8	8	8	8	8	8	8	7	7	7	7
170	7	7	8	8	8	9	9	8	8	8	8	8	8	7	7	7	7
175	7	7	7	8	8	8	9	8	9	8	8	8	8	8	7	7	7
180	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8