

The distance to the Moon December 11 based upon the ratio of Umbral shadow diameter to Moon angular size diameter, for the International Measure The Moon Night December 2011. (C) The Classroom Astronomer Magazine 2011

Umbral diameter to Moon diameter ratios	Moon diameter Moon dista miles	Moon Diameter Miles
2.5	252,913	2207
2.52	251,513	2195
2.54	250,127	2183
2.56	248,757	2171
2.58	247,402	2159
2.6	246,062	2147
2.62	244,736	2136
2.64	243,424	2124
2.66	242,126	2113
2.68	240,842	2102
2.7	239,572	2091
2.72	238,315	2080
2.74	237,071	2069
2.76	235,840	2058
2.78	234,621	2047
2.8	233,415	2037
2.82	232,222	2026
2.84	231,041	2016
2.86	229,871	2006
2.88	228,714	1996
2.9	227,568	1986
2.92	226,433	1976
2.94	225,310	1966
2.96	224,197	1956
2.98	223,096	1947
3	222,005	1937