Table A1. Lighting Technologies and 1992 Base-Year Shares for Large Office Buildings

Description	Base-Year Share (Percent)	Efficacy (Lumens per Watt)	Capital Cost (1987 Dollars per Thousand Lumens)	Maintenance Cost (1987 Dollars per Thousand Lumens)	Life (Years)	First Available	Last Available	Maturity Level
Technology Class 1								
Incandescent: 1,170 lumens, 75 watts	3.9	15.6	34.02	10.72	12	1992	2040	Mature
CFL: 786 lumens, 14.6 watts	3.2	53.7	61.72	7.30	12	1992	2040	Adolescent
Halogen Infrared: 1,150 lumens, 55 watts	0.0	20.9	54.53	5.41	12	1995	2040	Adolescent
Coated Filament: 1,150 lumens, 25 watts	0.0	47.9	36.67	6.13	12	2010	2040	Infant
Hafnium Carbide Filament: 1,550 lumens, 23 watts	0.0	30.3	36.67	6.13	12	2005	2040	Infant
CFL: 1,200 lumens, 18 watts	0.0	66.67	44.14	6.21	12	1992	2040	Adolescent
Halogen: 1,300 lumens, 72 watts	2.9	18.06	56.24	22.45	12	1992	2040	Mature
Technology Class 2								
F40T12: Standard Magnetic Ballast	29.4	56.2	25.87	0.51	12	1990	1990	Mature
F40T12: Efficient Magnetic Ballast	8.9	65.2	17.94	0.38	12	1992	1995	Mature
F40T12: Efficient Magnetic Ballast Energy Saver	9.8	64.4	22.42	0.50	12	1992	2040	Mature
Halogen: 4,024 lumens, 209 watts	0.0	20.1	17.39	7.74	12	1993	2040	Mature
F40T12: Electronic Ballast Energy Saver	2.1	75.6	22.65	0.47	12	1992	2040	Adolescent
F32T8: Magnetic Ballast	0.1	74.2	19.83	0.48	12	1992	2040	Mature
F32T8: Electronic Ballast	10.9	84.2	21.60	0.51	12	1992	2040	Adolescent
F32T8: Electronic Ballast with Controls	3.3	120.3	29.27	0.51	12	1992	2040	Adolescent
F32T8: Electronic Ballast, Reflector	16.0	96.8	21.72	0.45	12	1992	2040	Adolescent
Scotopic Lighting	0.0	123	30.78	0.79	12	1995	2040	Infant
Electrodeless Lamp	0.0	152.8	24.47	0.34	20	2015	2040	Infant
Technology Class 3								
F96T12: Standard Magnetic Ballast	1.5	73.2	11.11	0.40	12	1990	1990	Mature
F96T12: Efficient Magnetic Ballast	4.0	75.7	6.36	0.31	12	1992	1994	Mature
F96T12: Efficient Magnetic Ballast Energy Saver	0.9	75.4	8.17	0.39	12	1992	2040	Mature
F96T12: Electronic Ballast	0.0	83.8	7.49	0.33	12	1992	1994	Adolescent
F96T12: Electronic Ballast Energy Saver	0.3	85.9	8.82	0.38	12	1992	2040	Adolescent
F96T12: Standard Magnetic Ballast High Output	0.0	70.6	7.19	0.27	12	1990	1990	Mature
F96T12: Efficient Magnetic Ballast High Output	0.0	73.6	5.18	0.27	12	1992	2040	Mature
F96T12: Electronic Ballast High Output	0.0	80	6.44	0.30	12	1992	2040	Adolescent
F96T12: Electronic Ballast High Output Energy Saver	0.0	80.9	7.44	0.46	12	1992	2040	Adolescent
Scotopic Lamp	0.0	123	25.83	0.79	12	1995	2040	Infant
Electrodeless Lamp	0.0	152.8	18.54	1.02	20	2015	2040	Infant
Technology Class 4								
Mercury Vapor	1.7	40.2	23.48	0.57	15	1992	2040	Mature
Metal Halide	0.7	69.6	11.79	0.28	15	1992	2040	Mature
High-Pressure Sodium	0.7	89.7	13.63	0.39	15	1992	2040	Mature
Sulfur Lamp	0.0	100	11.00	0.20	15	2000	2040	Infant

Source: AEO98 National Energy Modeling System, technology data.