EULUMDAT File Format

The following standards were referenced as the EULUMDAT format:

Stockmar, A. W. 1998. "EULUMDAT/2 - Extended Version of a Well Established Luminaire Data Format," 1998 CIBSE National Lighting Conference, pp. 353-362.

Stockmar, A. W. 1990. "EULUMDAT - ein Leuchtendatenformat für den europäischen Beleuchtungsplaner," Tagungsband Licht '90, pp. 641-644.

The ASCII file format is shown below. Each line in the table represents one line the photometric file.

EULUMDAT File Format

Line	Description	Number of characters
1	Company identification/databank/version/format identification	Max 78
2	Ityp - Type indicator (0 - point source with no symmetry; 1 - symmetry about the vertical axis; 2 - linear luminaire; 3 - point source with any other symmetry. Note: only linear luminaires, Ityp = 2, are being subdivided in longitudinal and transverse directions)	1
3	Isym - Symmetry indicator (0 ... no symmetry; 1 - symmetry about the vertical axis; 2 - symmetry to plane C0-C180; 3 - symmetry to plane C90-C270; 4 - symmetry to plane C0-C180 and to plane C90-C270)	1
4	Mc - Number of C-planes between 0 and 360 degrees (usually 24 for interior, 36 for road lighting luminaires)	2
5	Dc - Distance between C-planes (Dc = 0 for non-equidistantly available C-planes)	5
6	Ng - Number of luminous intensities in each C-plane (usually 19 or 37)	2
7	Dg - Distance between luminous intensities per C-plane (Dg = 0 for non-equidistantly available luminous intensities in C-planes)	5
8	Measurement report number	Max 78
9	Luminaire name	Max 78
10	Luminaire number	Max 78
11	File name	8
12	Date/user	Max 78
13	Length/diameter of luminaire (mm)	4
14	b - Width of luminaire (mm) (b = 0 for circular luminaire)	4
15	Height of luminaire (mm)	4
16	Length/diameter of luminous area (mm)	4

17	b1 - Width of luminous area (mm) (b1 = 0 for circular luminous area of luminaire)	4
18	Height of luminous area C0-plane (mm)	4
19	Height of luminous area C90-plane (mm)	4
20	Height of luminous area C180-plane (mm)	4
21	Height of luminous area C270-plane (mm)	4
22	DFF - Downward flux fraction (%)	4
23	LORL - Light output ratio luminaire (%)	4
24	Conversion factor for luminous intensities (depending on measurement)	6
25	Tilt of luminaire during measurement (road lighting luminaires)	6
26	n - Number of standard sets of lamps (optional, also extendable on company-specific basis) For absolute photometry, this value is 1	4
26a	Number of lamps For absolute photometry, number is negative	n * 4
26b	Type of lamps	n * 24
26c	Total luminous flux of lamps (lm) For absolute photometry, this field is Total Luminous Flux of Luminaire	n * 12
26d	Color appearance / color temperature of lamps	n * 16
26e	Color rendering group / color rendering index	n * 6
26f	Wattage including ballast (W)	n * 8
27	DR - Direct ratios for room indices k = 0.6 ... 5 (for determination of luminaire numbers according to utilization factor method)	10 * 7
28	Angles C (beginning with 0 degrees)	Mc * 6
29	Angles G (beginning with 0 degrees)	Ng * 6
30	Luminous intensity distribution (cd/1000 lumens)	(Mc2 - Mc1 + 1) * Ng * 6