



FIGURE 4.1 THE CIE C, γ ANGULAR COORDINATE SYSTEM DEFINING THE DIRECTION OF LIGHT EMITTED FROM A LUMINAIRE

Pictorial representation of the CIE/SAASTAN angular system

TABLE 4.1
STANDARD FORMAT FOR LUMINAIRE LIGHT DISTRIBUTION, KNOWN AS
AN I-TABLE, GIVING VALUES OF LUMINOUS INTENSITY (I) IN
CANDELAS PER 1000 LAMP LUMENS

γ angle degrees	Luminous intensity, (I), cd/1000 lamp lumens								
	C angle, degrees								
	270	285	300	310	← (5°steps) →	50	60	75	90
0 ↑	x	x	x	x		x	x	x	x
(10° steps) ↓									
30 ↑	x	x	x	x		x	x	x	x
(5° steps) ↓									
45 ↑	x	x	x	x		x	x	x	x
(2.5° steps) ↓									
105 ↑	x	x	x	x		x	x	x	x
(15° steps) ↓									
180	x	x	x	x		x	x	x	x

γ angle degrees	Luminous intensity, (I), cd/1000 lamp lumens								
	C angle, degrees								
	105	120	130	310 135	← (5°steps) →	230	240	255	
0 ↑	x	x	x	x		x	x	x	
(10° steps) ↓									
30 ↑	x	x	x	x		x	x	x	
(5° steps) ↓									
45 ↑	x	x	x	x		x	x	x	
(2.5° steps) ↓									
105 ↑	x	x	x	x		x	x	x	
(15° steps) ↓									
180									

NOTE: The table is divided into two halves. The luminous intensities need only be provided for the C, γ coordinates in the top half of the table where the luminaire has a light distribution which is symmetrical about the half-planes $C = 270^\circ$ and $C = 90^\circ$

The respective angles of the CIE/SAASTAN system

4.5.3 Luminaire light distribution. The data required specify the luminaire and its light distribution as given by the values of luminous intensity, expressed in candelas per 1000 lamp lumens, contained in the appropriate *I*-table (see Table 4.2).

(a) *Record No 1.* Record No 1 specifies the user defined number and name of the luminaire and information on the symmetry of the light distribution.

Datum

- 1 LNUMB —the identification number of the luminaire up to a maximum of 4 digits. The luminaire number must be the same as that given in Record No 2 of Clause 4.5.2.
- 2 ISYM —a code indicating the symmetrical nature of the light distribution about the $C = 90^\circ$ and $C = 270^\circ$ half-planes (see Clause 4.4.2).
ISYM = 0 indicates asymmetry
ISYM = 1 indicates symmetry
- 3 IGRID —a code indicating the format of the *I*-table. This value must be 0 (zero) which corresponds to the standard format of Table 4.2.
- 4 RLNAME—the name of the luminaire, if desired, up to a maximum of 20 characters. If the luminaire name is given it will appear in the output.

Format: (3I4,8X,5A4)

(b) *Record No 2 and succeeding records.* Record No 2 and succeeding records specify the $I(C, \gamma)$ —values of the *I*-table (see Table 4.2). They are given 17 to a record in the following continuous sequences depending on the symmetry of the light distribution.

Format of the CIE/SAASTAN (text) file

