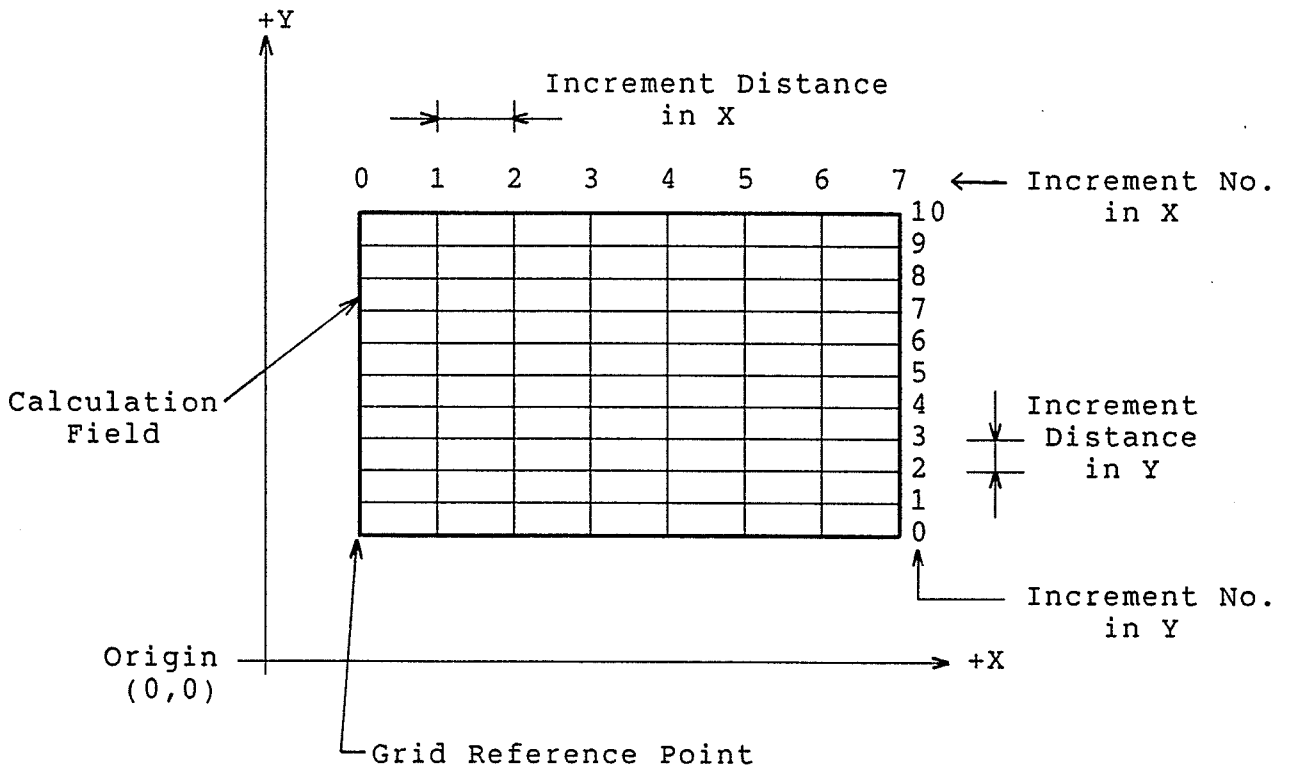


Appendix A

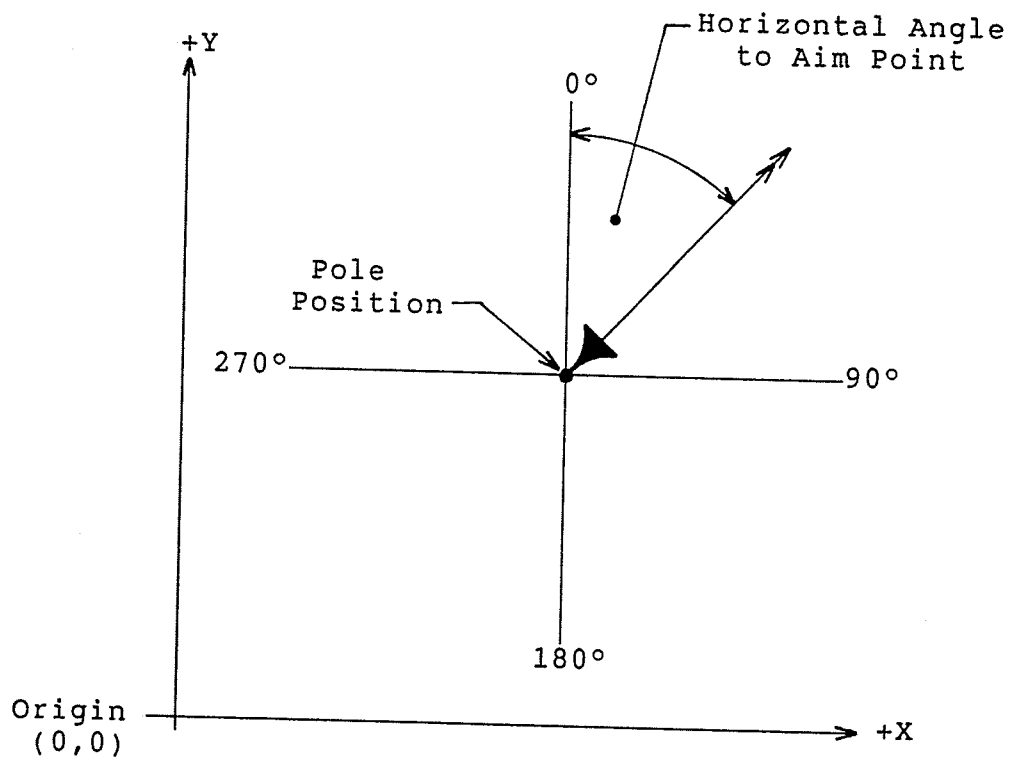
DIAGRAMS OF ANGLE AND GRID CONVENTIONS

A.1 Co-ordinate system and Calculation field

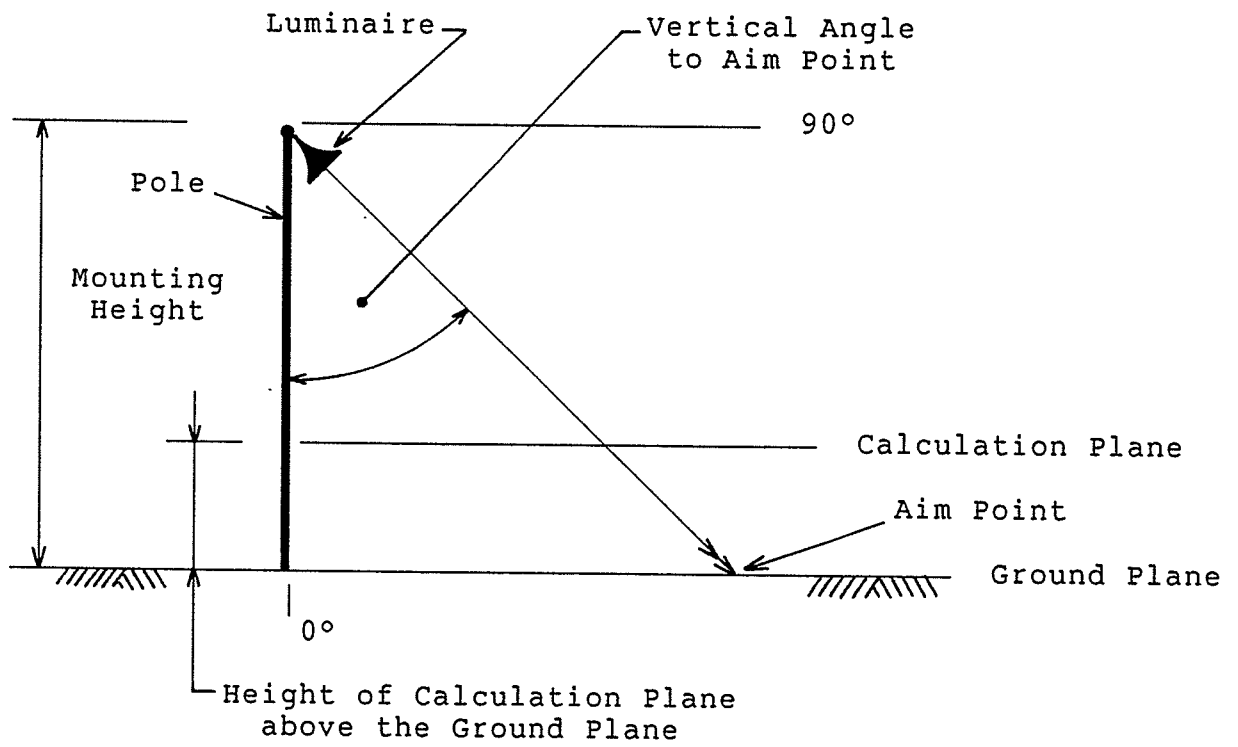


N.B. Maximum no. of Increments in X is 30 and Y is 50

A.2 Horizontal aiming angles

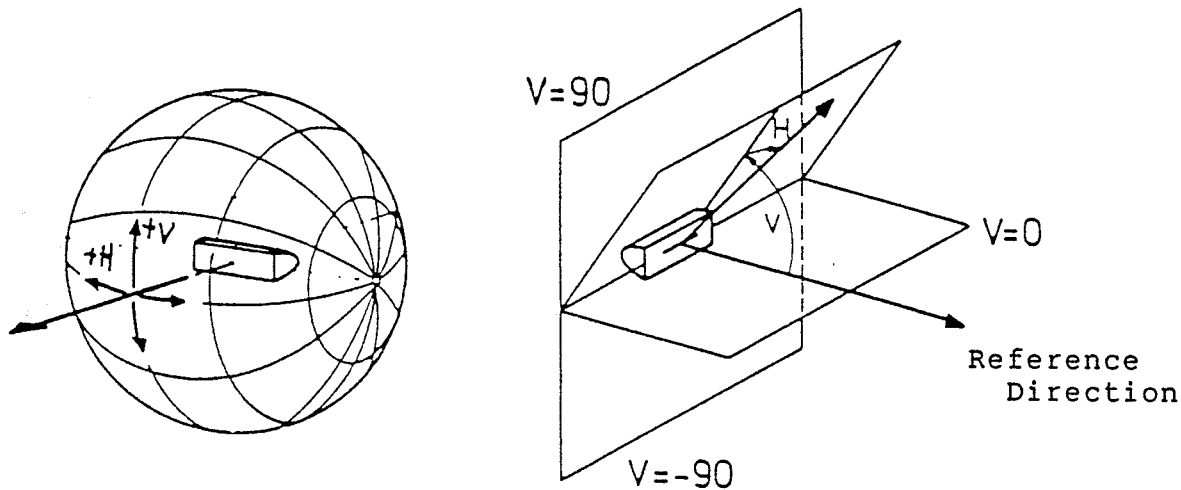


A.3 Vertical aiming angles and Calculation plane



**Appendix B**  
**PHOTOMETRIC I-TABLE DATA LAYOUT**

B.1 Type 0: B-Beta Symmetrical [about H=0 and V=0]



Representation on a sphere of the V-H co-ordinate system.

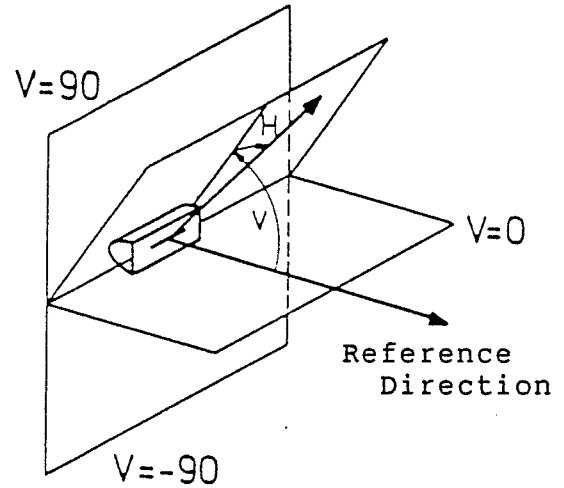
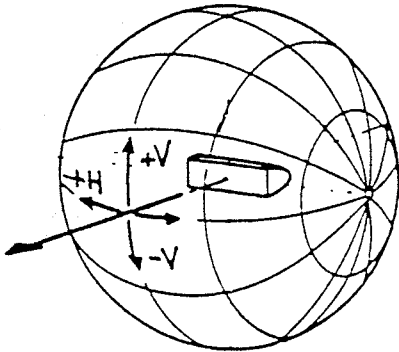
V-H Co-ordinate system

TABLE OF INTENSITY VALUES (candelas)

		Horizontal Angles (H)											
		0*	.	.	.	.	.	.	.	.	.	90	
Vertical Angles (V)	0*	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##
	90	##	##	##	##	##	##	##	##	##	##	##	##

Note: Maximum number of Horizontal Angles = 53  
 Maximum number of Vertical Angles = 40  
 \* data for this column/line must be included

B.2 Type 1: B-Beta Symmetrical [about H=0]



Representation on a sphere of the V-H co-ordinate system.

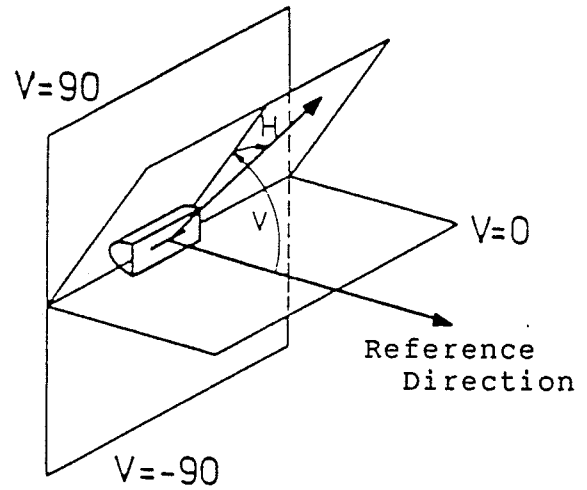
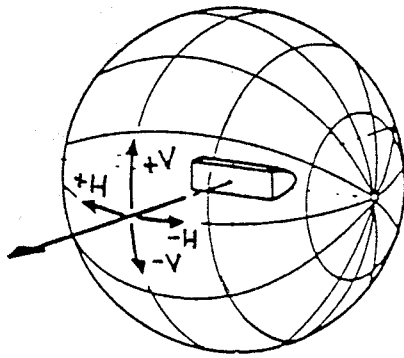
V-H Co-ordinate system

TABLE OF INTENSITY VALUES (candelas)

	Horizontal Angles (H)												
	0*	.	.	.	.	.	.	.	.	.	.	.	90
-175	##	##	##	##	##	##	##	##	##	##	##	##	##
.	##	##	##	##	##	##	##	##	##	##	##	##	##
.	##	##	##	##	##	##	##	##	##	##	##	##	##
.	##	##	##	##	##	##	##	##	##	##	##	##	##
0*	##	##	##	##	##	##	##	##	##	##	##	##	##
.	##	##	##	##	##	##	##	##	##	##	##	##	##
.	##	##	##	##	##	##	##	##	##	##	##	##	##
.	##	##	##	##	##	##	##	##	##	##	##	##	##
.	##	##	##	##	##	##	##	##	##	##	##	##	##
175	##	##	##	##	##	##	##	##	##	##	##	##	##

Note: Maximum number of Horizontal Angles = 53  
 Maximum number of Vertical Angles = 40  
 \* data for this column/line must be included

B.3 Type 2: B-Beta Asymmetrical



Representation on a sphere of the V-H co-ordinate system.

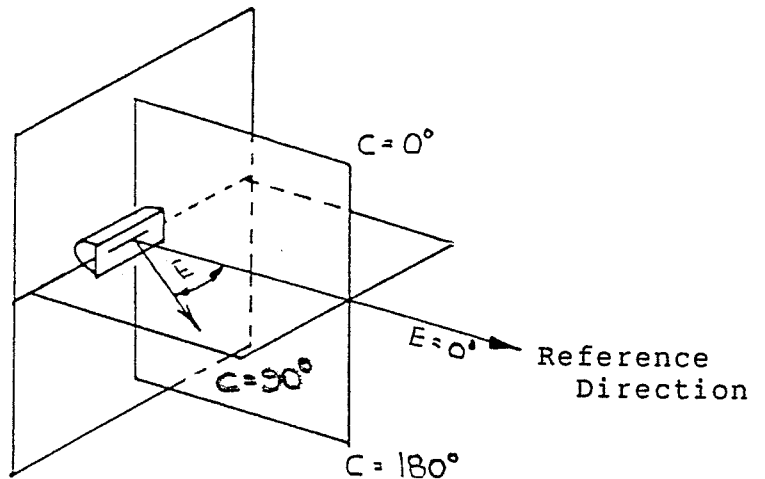
V-H Co-ordinate system

TABLE OF INTENSITY VALUES (candelas)

	Horizontal Angles (H)											
	-90	.	.	.	.	0*	.	.	.	.	90	
Vertical Angles (V)	-90	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##
	0*	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##
	90	##	##	##	##	##	##	##	##	##	##	##

Note: Maximum number of Horizontal Angles = 53  
 Maximum number of Vertical Angles = 40  
 \* data for this column/line must be included

B.4 Type 3: C-Gamma Symmetrical [about C=0-180 plane]



C-G Co-ordinate system

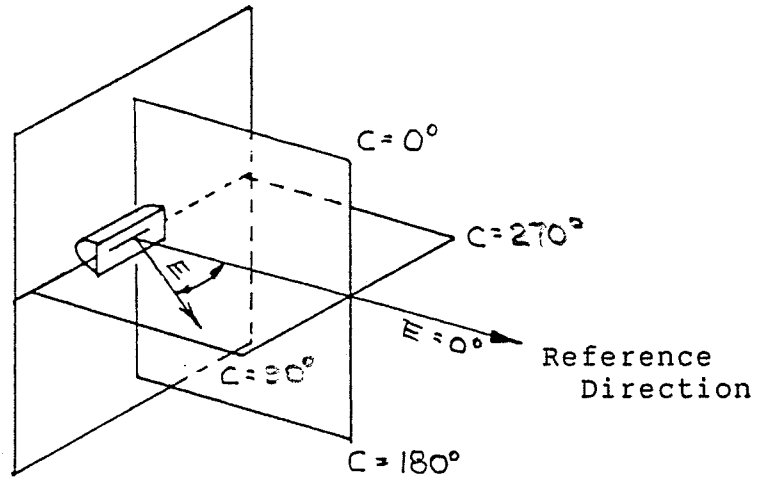
TABLE OF INTENSITY VALUES (candelas)

		Azimuth Angles (C)												
		0*	.	.	.	.	.	.	.	.	.	.	180*	
Elevation Angles (E)	0*	##	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##	##
	180	##	##	##	##	##	##	##	##	##	##	##	##	##

Note: Maximum number of Horizontal Angles = 53  
 Maximum number of Vertical Angles = 40  
 \* data for this column/line must be included



B.5 Type 4: C-Gamma Assymetrical



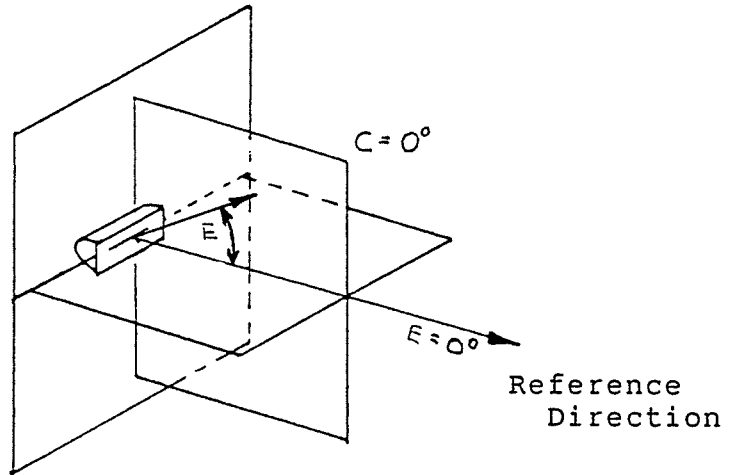
C-G Co-ordinate system

TABLE OF INTENSITY VALUES (candelas)

		Azimuth Angles (C)											
		0*	.	.	.	.	.	.	.	.	.	.	360*
Elevation Angles (E)	0*	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##
	.	##	##	##	##	##	##	##	##	##	##	##	##
	180	##	##	##	##	##	##	##	##	##	##	##	##

Note: Maximum number of Horizontal Angles = 53  
 Maximum number of Vertical Angles = 40  
 \* data for this column/line must be included

B.6 Type 5: C-Gamma Axially Symmetrical [about G=0]



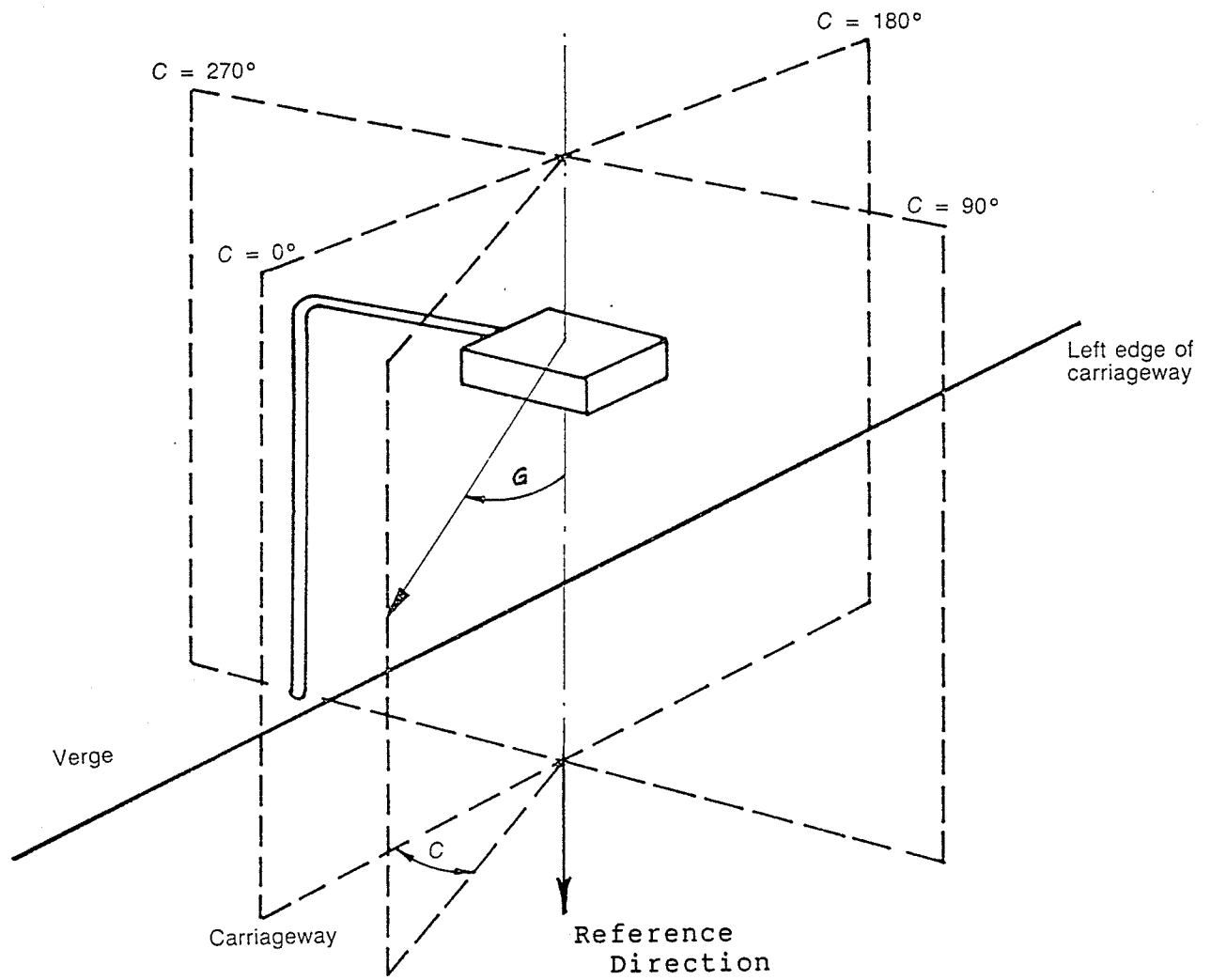
C-G Co-ordinate system

TABLE OF INTENSITY VALUES (candelas)

		Azimuth Angle (C) 0*
Elevation Angles (E)	0*	##
	.	##
	.	##
	.	##
	.	##
	.	##
	.	##
	.	##
	.	##
	.	##
	.	##
	.	##
	180	##

Note: Maximum number of Horizontal Angles = 53  
 Maximum number of Vertical Angles = 40  
 \* data for this column/line must be included

B.7 Type 6: CIE Street Light Format



C-G Co-ordinate System

SYMMETRICAL TYPE

TABLE OF INTENSITY VALUES (candelas per 1000 lamp lumens)

Elevation Angles (G)	Azimuth Angles (C)								
	270	285	300	310	. 5° steps	. 50	60	75	90
0	##	##	##	##	.....	##	##	##	##
. steps	##	##	##	##	.....	##	##	##	##
10°	##	##	##	##	.....	##	##	##	##
. steps	##	##	##	##	.....	##	##	##	##
30	##	##	##	##	.....	##	##	##	##
. steps	##	##	##	##	.....	##	##	##	##
5°	##	##	##	##	.....	##	##	##	##
. steps	##	##	##	##	.....	##	##	##	##
45	##	##	##	##	.....	##	##	##	##
. steps	##	##	##	##	.....	##	##	##	##
2.5°	##	##	##	##	.....	##	##	##	##
. steps	##	##	##	##	.....	##	##	##	##
105	##	##	##	##	.....	##	##	##	##
. steps	##	##	##	##	.....	##	##	##	##
15°	##	##	##	##	.....	##	##	##	##
. steps	##	##	##	##	.....	##	##	##	##
180	##	##	##	##	.....	##	##	##	##

ASSYMMETRICAL TYPE

TABLE OF INTENSITY VALUES (candelas per 1000 lamp lumens)

	Azimuth Angles (C)									
	270	285	300	310	5°steps	50	60	75	90	
				105	120	130	5°steps	230	240	255
Elevation Angles (G)	0	##	##	##	##	.....	##	##	##	##
	.	##	##	##	##	.....	##	##	##	##
	10° steps	##	##	##	##	.....	##	##	##	##
	.	##	##	##	##	.....	##	##	##	##
	30	##	##	##	##	.....	##	##	##	##
	.	##	##	##	##	.....	##	##	##	##
	5° steps	##	##	##	##	.....	##	##	##	##
	.	##	##	##	##	.....	##	##	##	##
	45	##	##	##	##	.....	##	##	##	##
	.	##	##	##	##	.....	##	##	##	##
	2.5° steps	##	##	##	##	.....	##	##	##	##
	.	##	##	##	##	.....	##	##	##	##
	105	##	##	##	##	.....	##	##	##	##
	.	##	##	##	##	.....	##	##	##	##
	15° steps	##	##	##	##	.....	##	##	##	##
	.	##	##	##	##	.....	##	##	##	##
	180	##	##	##	##	.....	##	##	##	##
						.....	##	##	##	##

## B.8 Type 7: IES (North America) Standard File Format

For information on the correct order of this data refer to the IES Publication titled "IES Recommended Standard File Format for Electronic Transfer of Photometric Data" (IES LM-63-1986). The information supplied in the disk file, in accordance with this publication, is automatically converted to one of the Format types 0 to 5 above. In fact these formats co-incide directly with some of the data types in the publication.

N.B. At present the program does not cater for lamps where the luminous output varies according to the tilt angle of the lamp. If these types are to be used then a simple allowance in the luminous flux should be made in the data input for specific runs.

## Appendix C

### CONTENTS OF DISKS SUPPLIED WITH THIS MANUAL

The Program and Data files supplied on the disks with this manual are as follows:

#### C.1 Disk No. 1 - Program files

PL.EXE	PLCONFIG.OVL	PLPASSWD.DAT
+ BRUN40.EXE	+ BRUN30.EXE	

+ one only will be supplied on the original disks and will depend on the version no.

#### C.2 Disk No. 2 - Program and Data files

PLVDU.OVL	PLWIRE.OVL	* PLCONTRS.TMP
% FLINDEX1.IEE	% FLLIBRY1.IEE	* FLEVELS.
* #####.FLD	* #####.FLA	

\* may not be present on original disks but will be created after running certain options.

% for version 3.xx the library files will be named "FLINDEX1.DAT" and "FLLIBRY1.DAT"