



arqiva

Predicted Horizontal Radiation Patterns for National 2 DAB Reference Offer

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Author	Greg Beeke
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Distribution List	
Name	Job Title

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1 DAB Frequency blocks

The following information shows DAB frequency blocks currently in use in the UK and was derived from Ofcom's "Technical parameters" DAB Data, downloaded from their web site on 14 August 2014, apart from for block 11A.

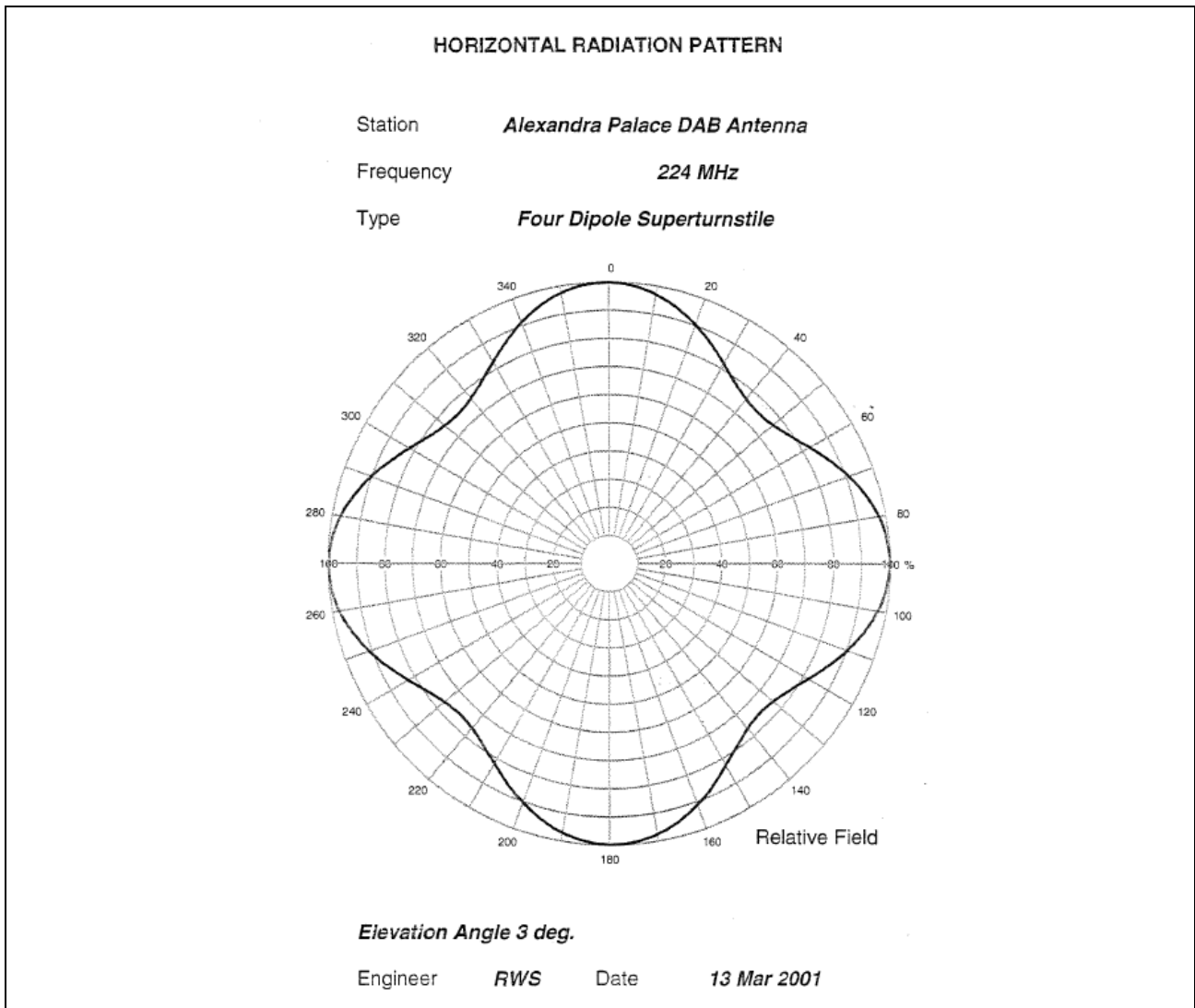
The frequency for block 11A is not currently in use so this was taken from Ofcom's "Advertisement of National Radio Multiplex Licence" dated 1 July 2014.

This information is provided as a guide to frequency blocks referenced in the HRP information in this document.

Frequency Block	Frequency MHz
10B	211.648
10C	213.36
10D	215.072
11A	216.928
11B	218.64
11C	220.352
11D	222.064
12A	223.936
12B	225.648
12C	227.36
12D	229.072

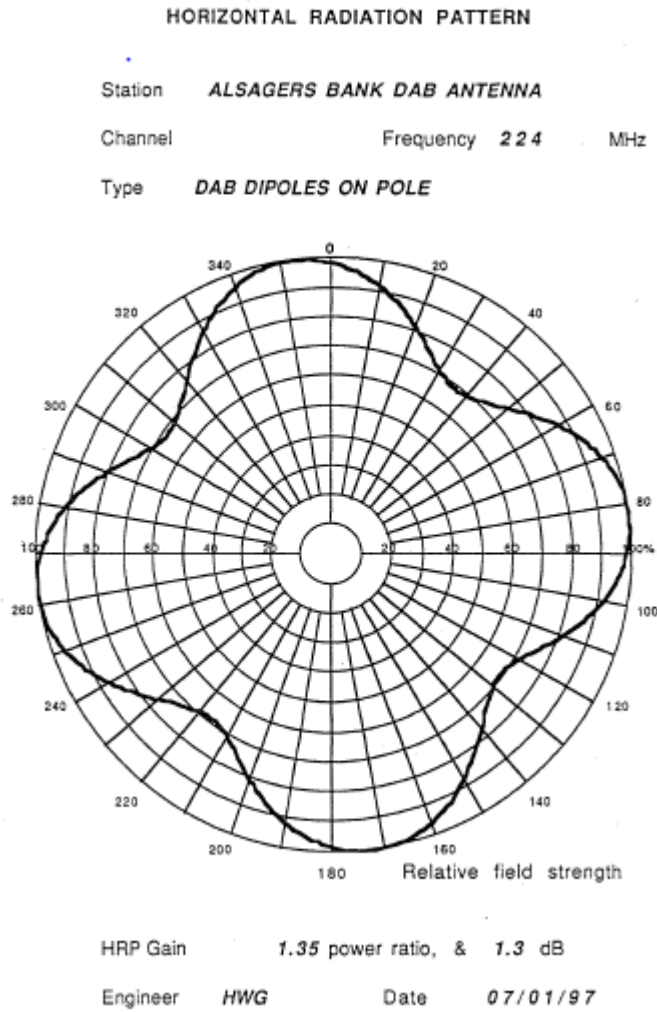
2 Alexandra Palace

The following HRP is for a frequency of 224 MHz. The pattern for 11A is expected to be substantially similar.



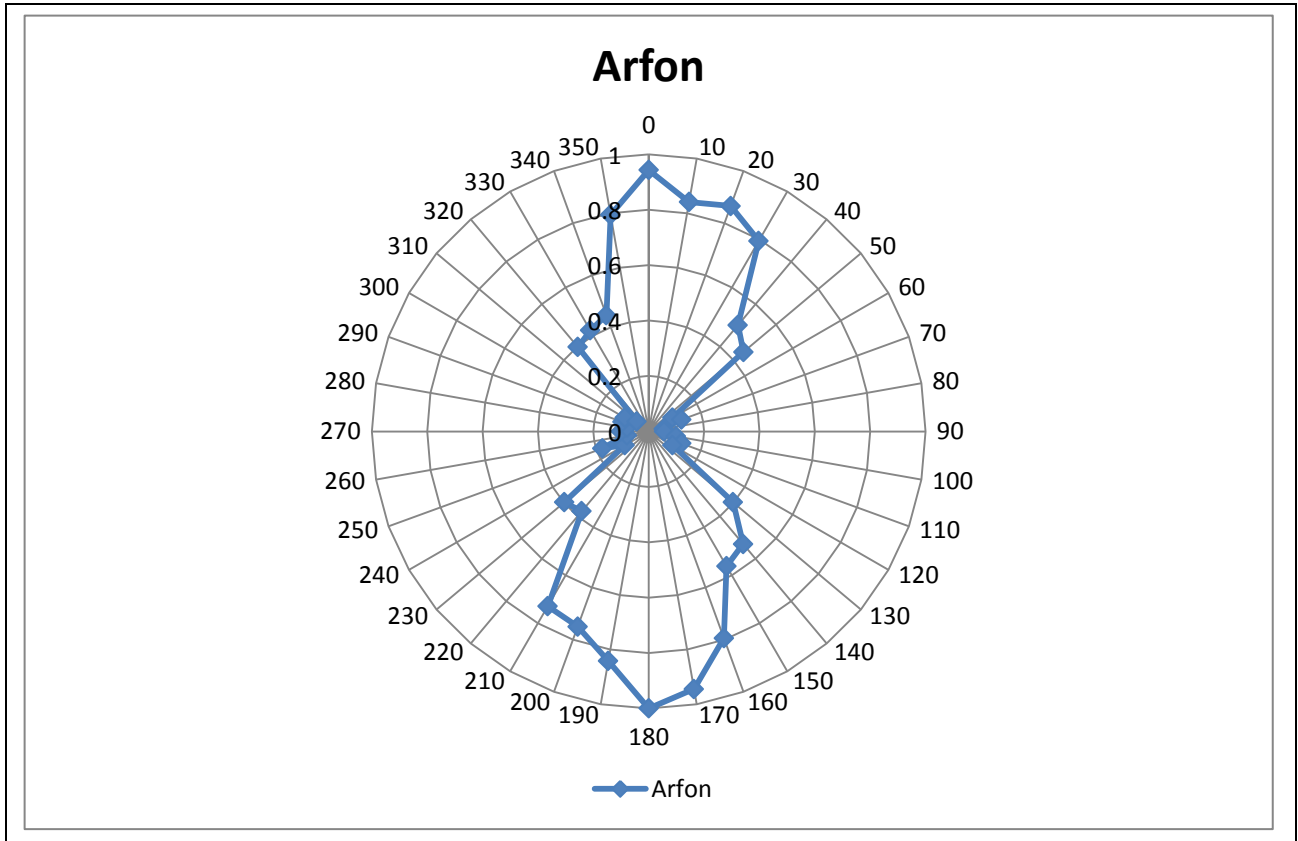
3 Alsagers Bank

The following HRP is for a frequency of 224 MHz. The pattern for 11A is expected to be substantially similar.



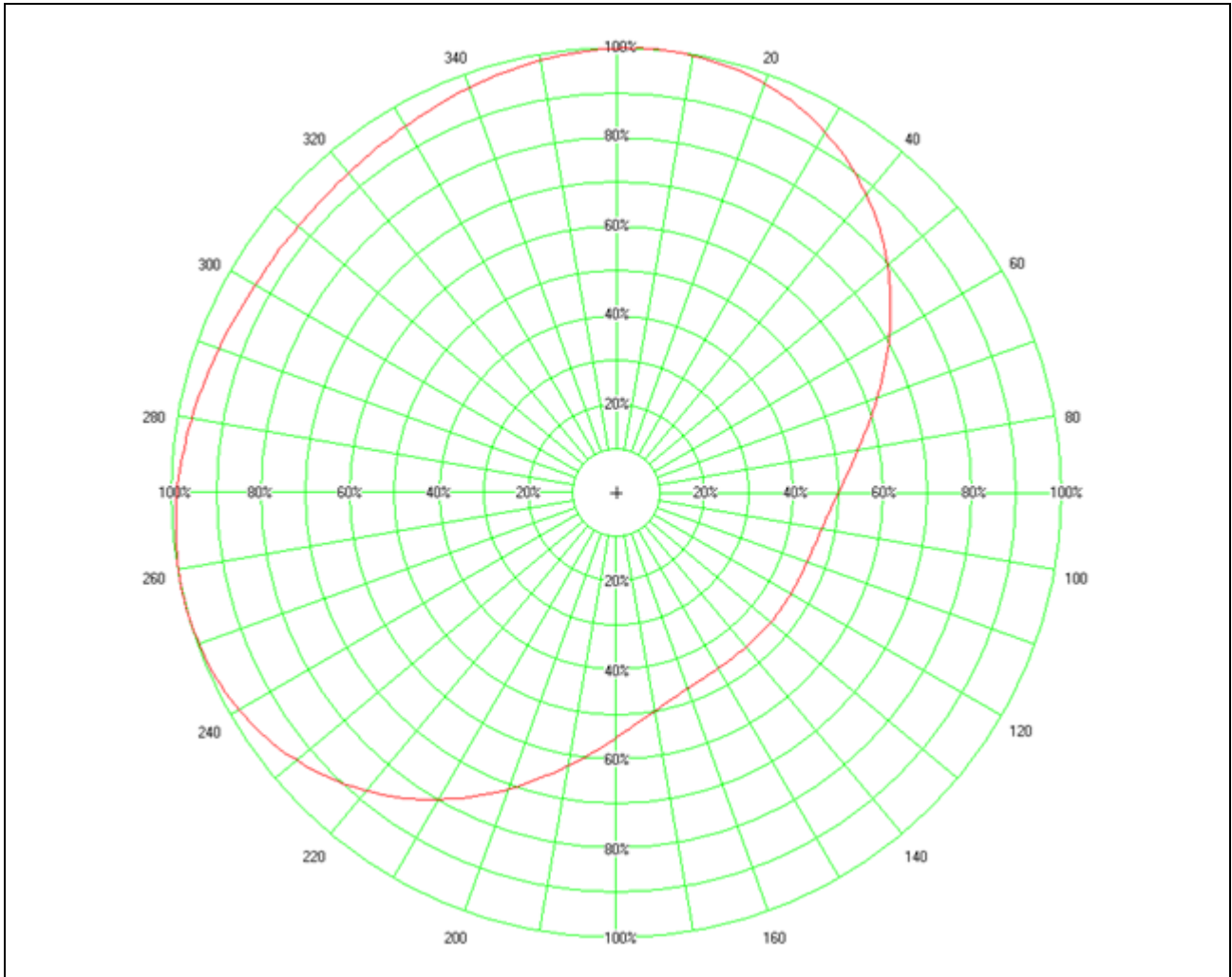
4 Arfon

The pattern for 11A is expected to be substantially similar.



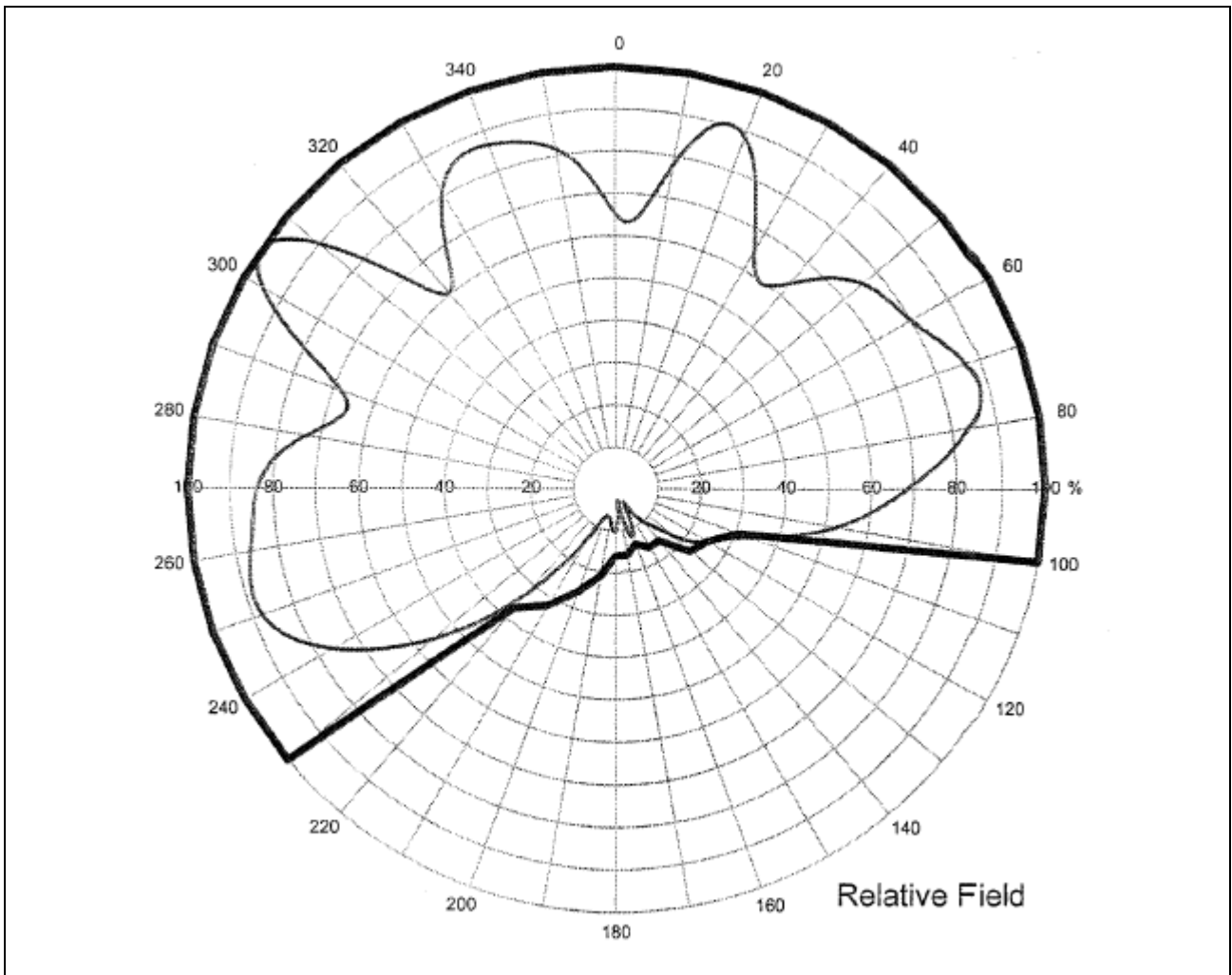
5 Basingstoke

The following HRP is for 12B. The pattern for 11A is expected to be substantially similar.



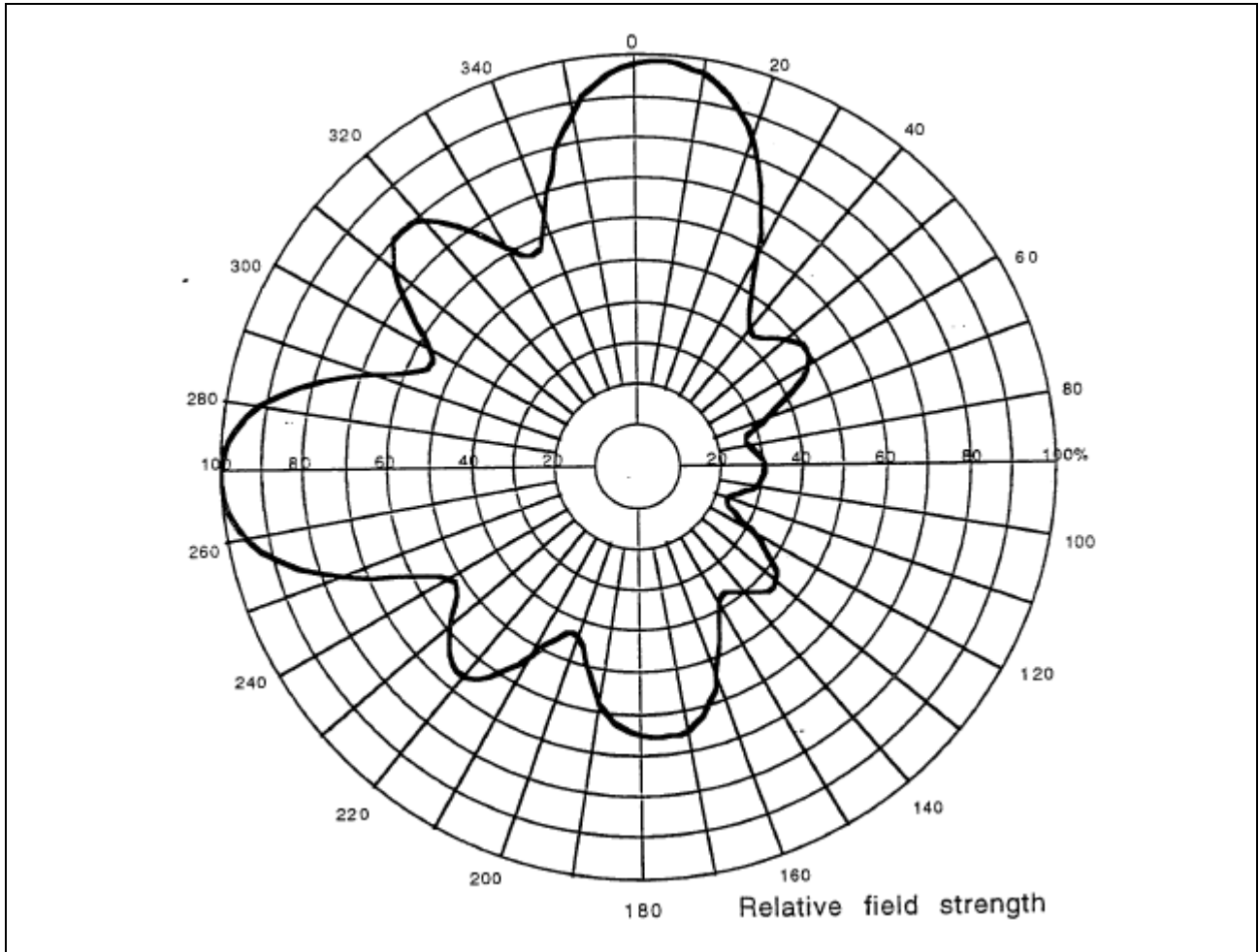
6 Beacon Hill (North)

The following HRP is at 217.5MHz. The pattern for 11A is expected to be substantially similar.



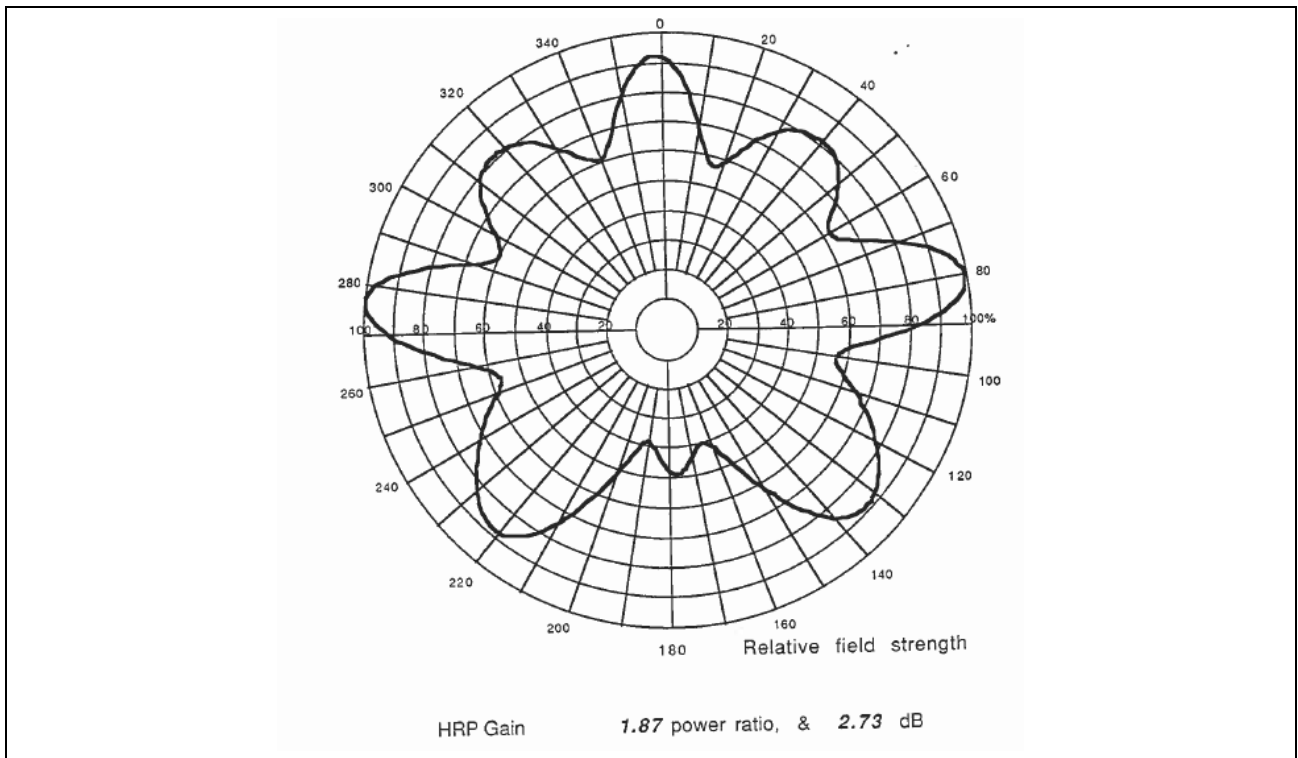
7 Belmont

The following HRP is for channel 12B. The pattern for 11A is expected to be substantially similar.



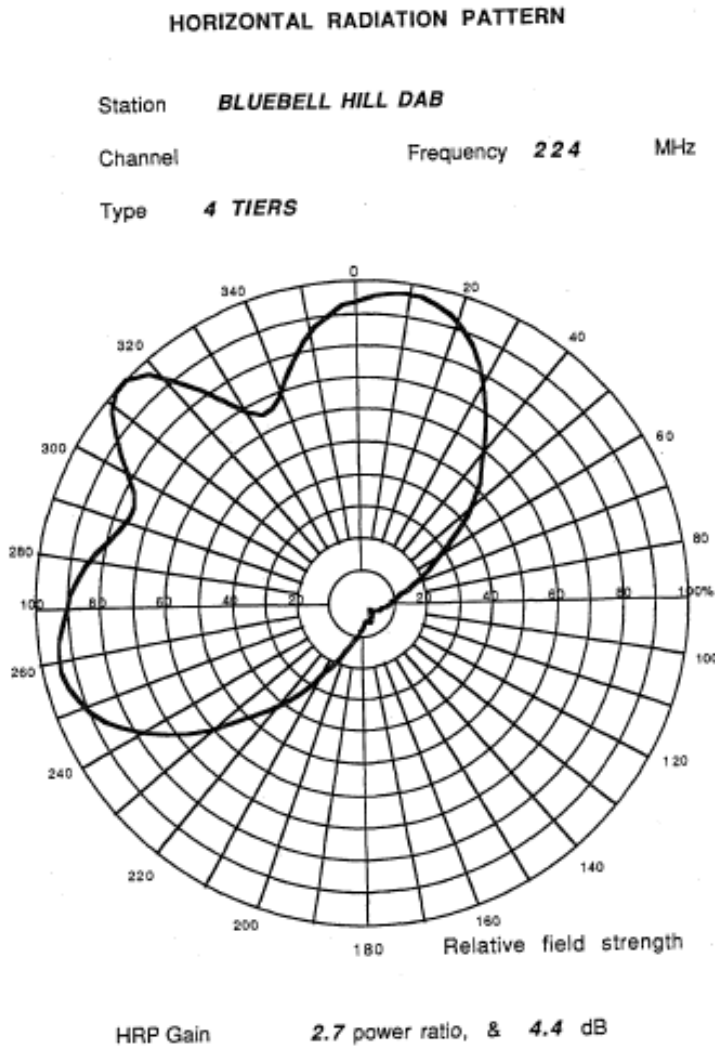
8 **Bilsdale**

The following HRP is for channel 12B. The pattern for 11A is expected to be substantially similar.



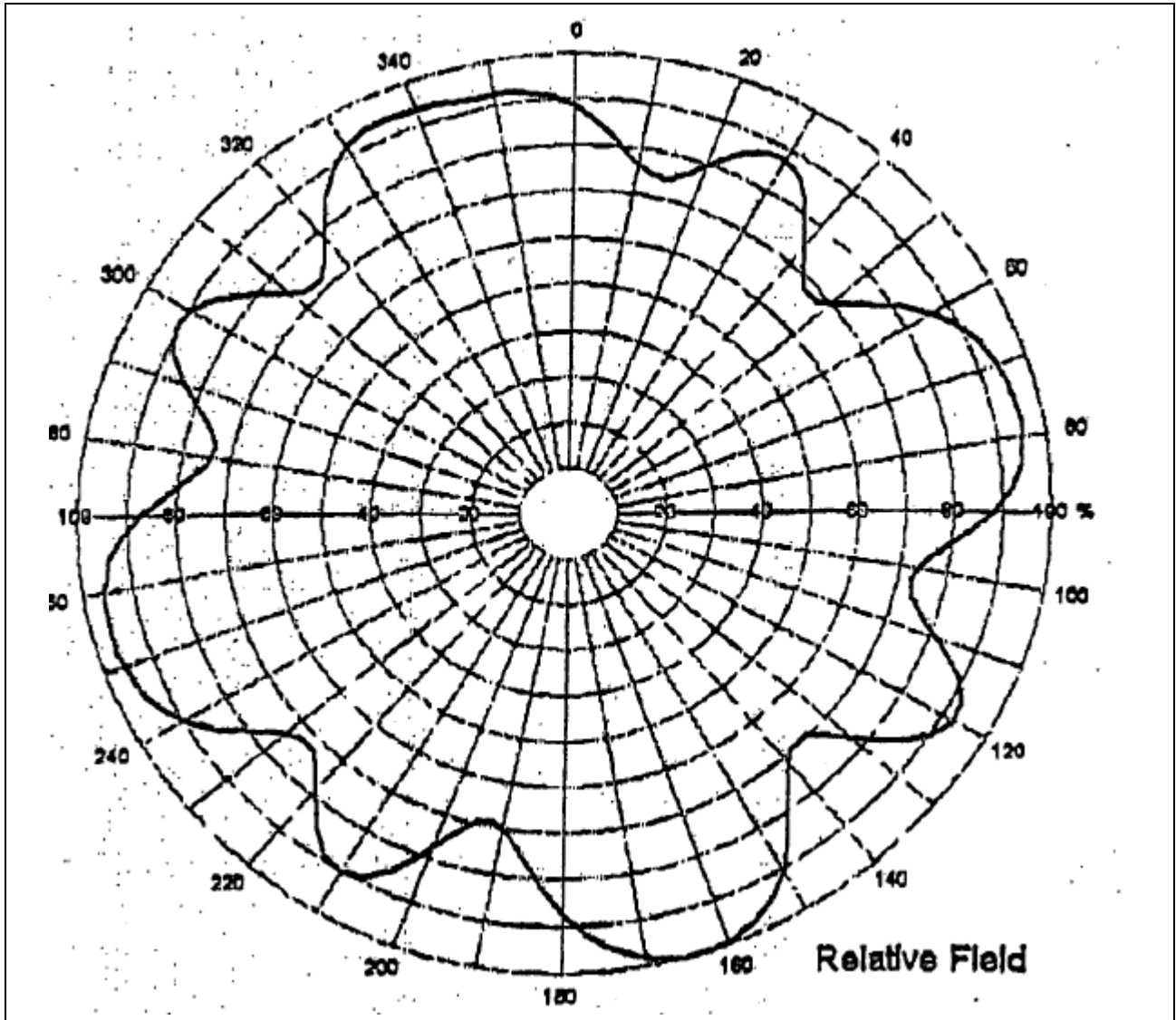
9 Bluebell Hill

The following HRP is for a frequency of 222 MHz. The pattern for 11A is expected to be substantially similar.



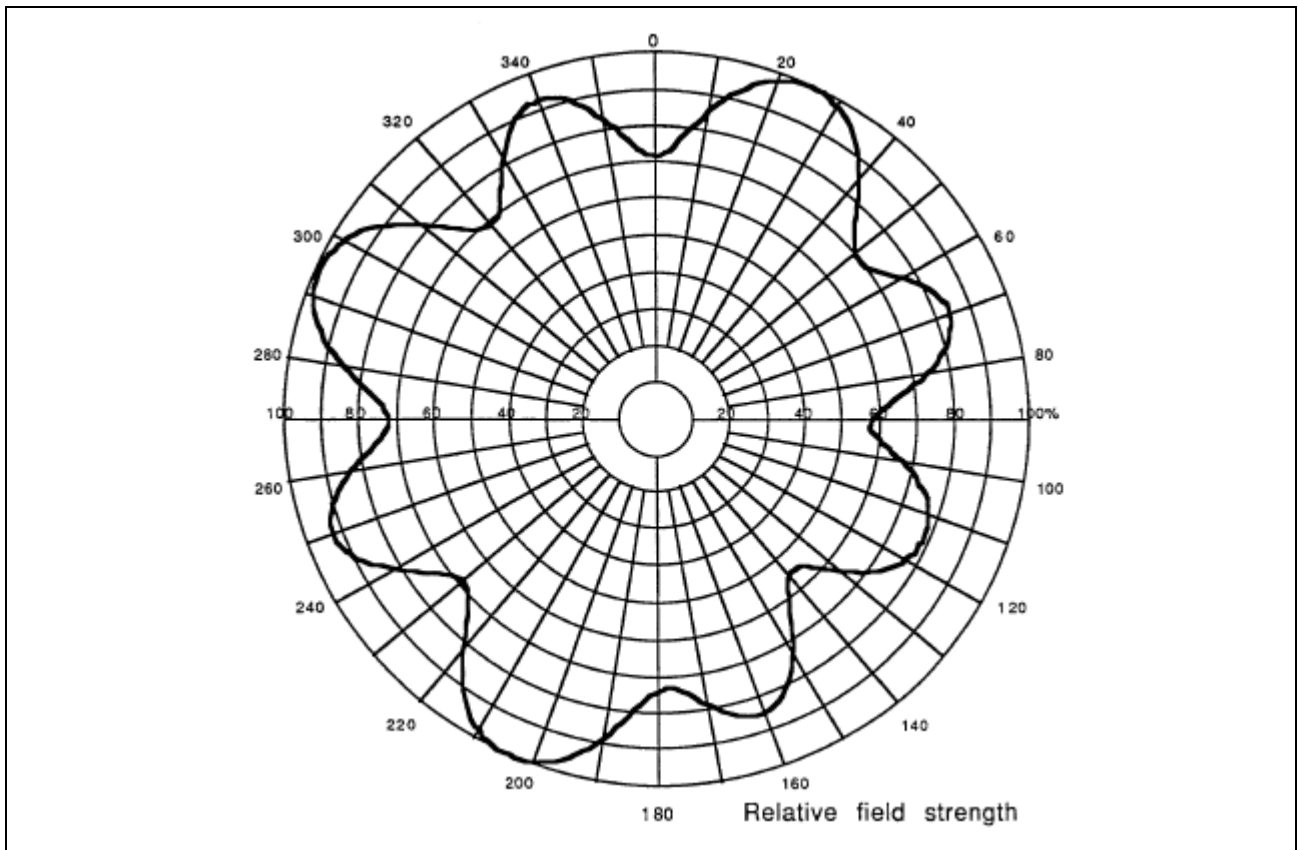
10 Blunsdon

The following HRP is for 222.1MHz. The pattern for 11A is expected to be substantially similar.



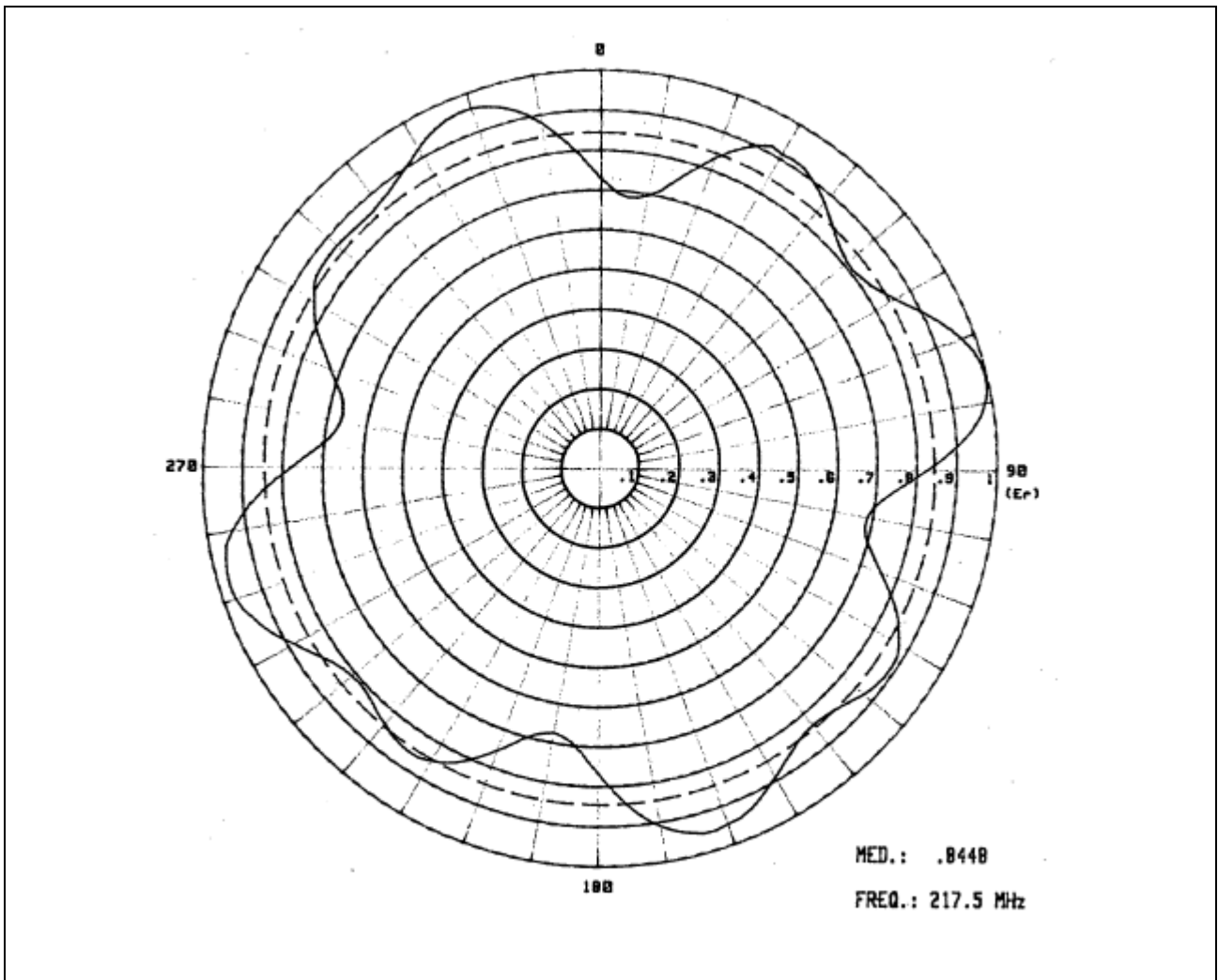
11 Bow Brickhill

The following HRP is at 224MHz. The pattern for 11A is expected to be substantially similar.



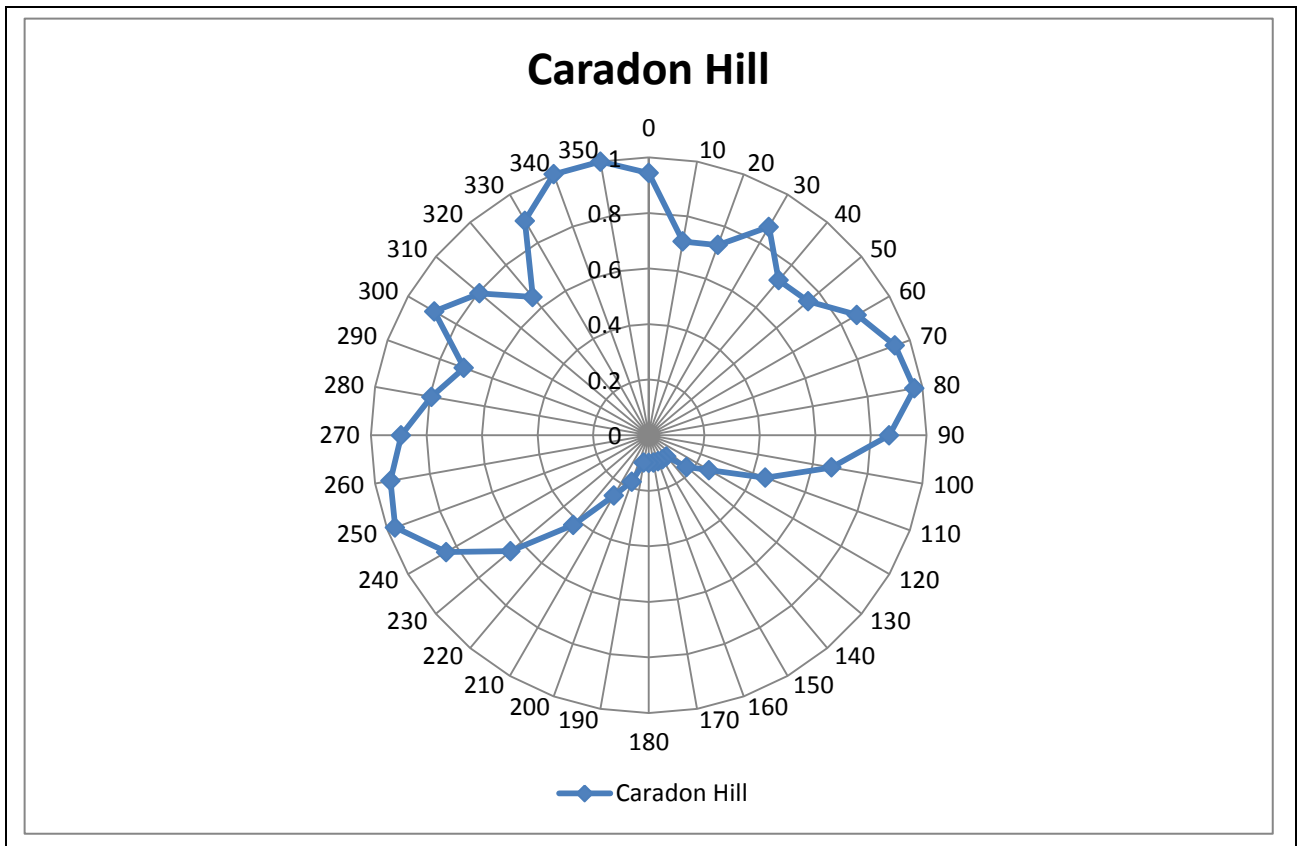
12 Bromsgrove

The following works HRP is at 217.5MHz. The pattern for 11A is expected to be substantially similar.



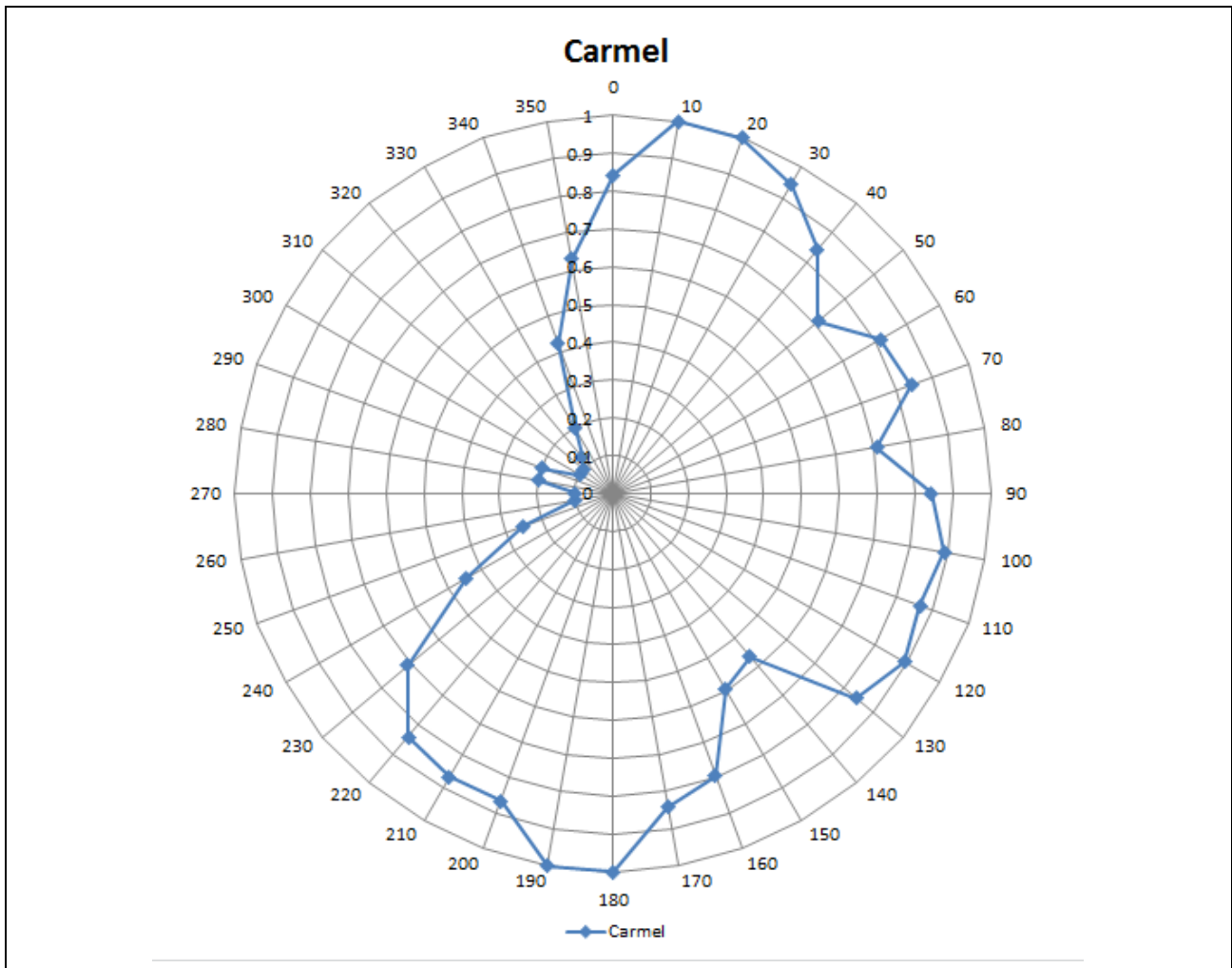
13 Caradon Hill

The following HRP is at 222MHz. The pattern for 11A is expected to be substantially similar.



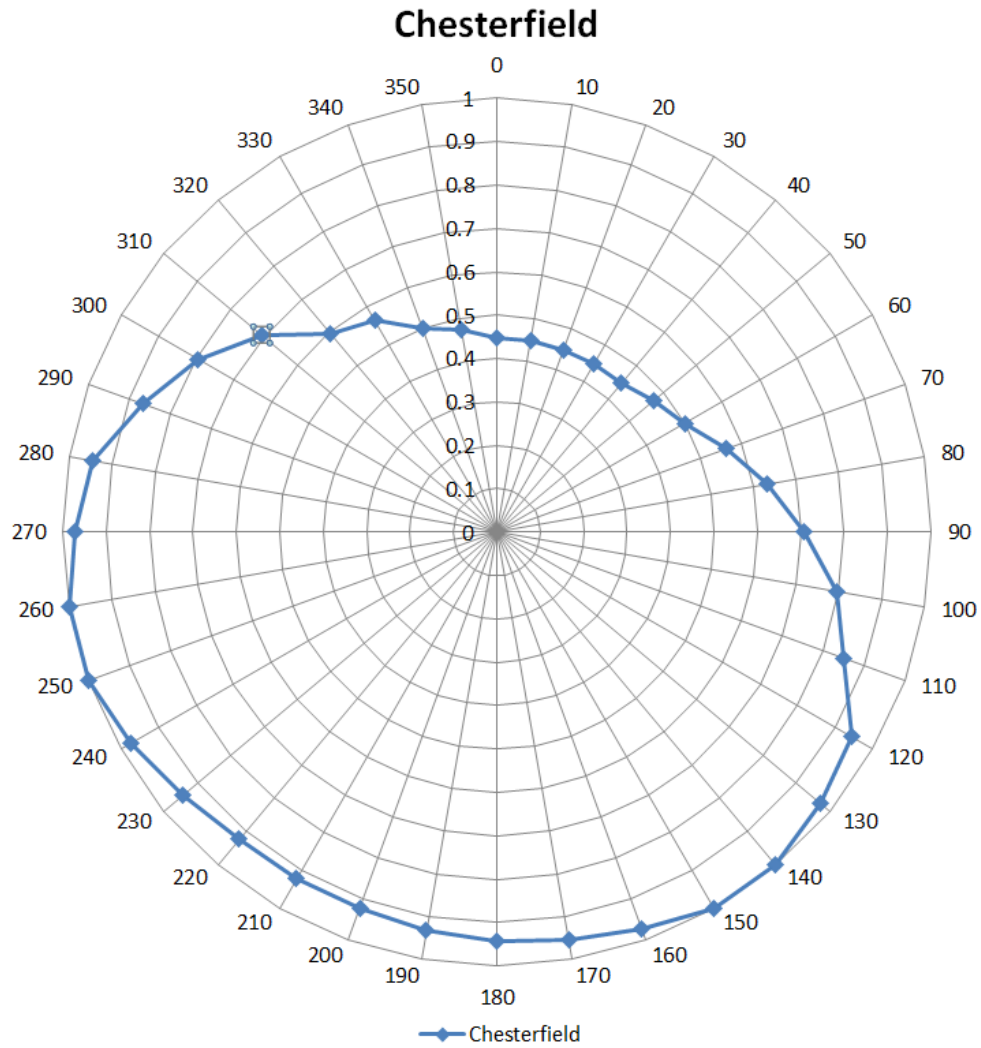
14 Carmel

The following HRP is for a frequency of 222 MHz. The pattern for 11A is expected to be substantially similar.



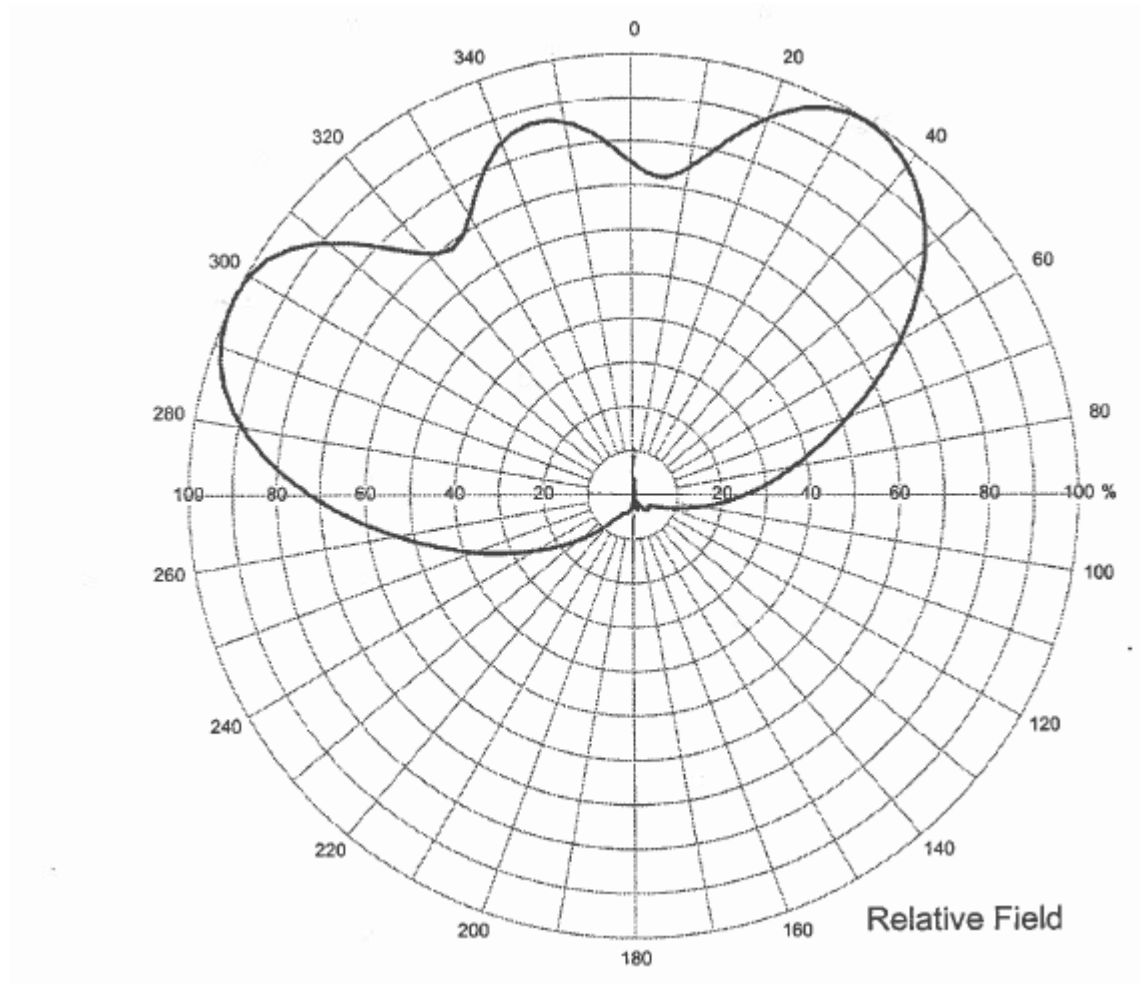
15 Chesterfield

The following HRP is for a frequency of 222 MHz. The pattern for 11A is expected to be substantially similar.



16 Chillerton Down

The following HRP is at 217.5MHz. The pattern for 11A is expected to be substantially similar.

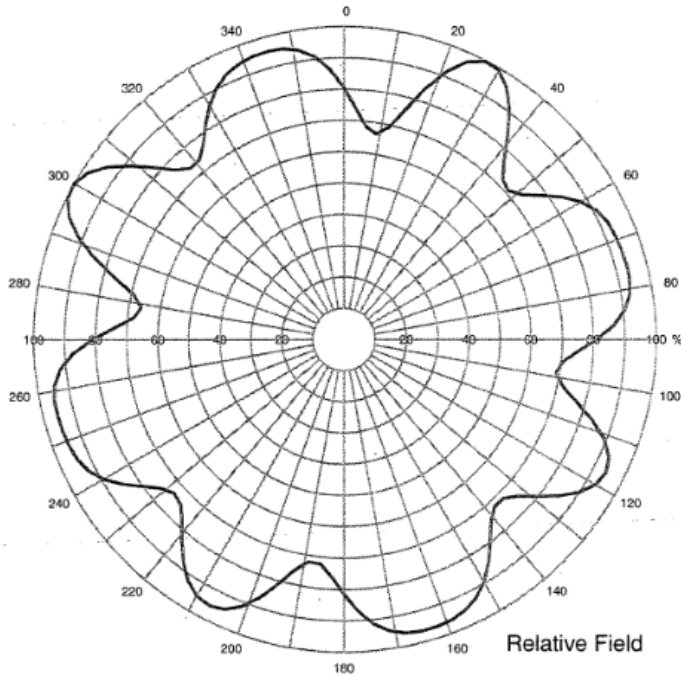


17 Churchdown Hill

The following HRP is for a frequency of 225.6 MHz. The pattern for 11A is expected to be substantially similar.

HORIZONTAL RADIATION PATTERN

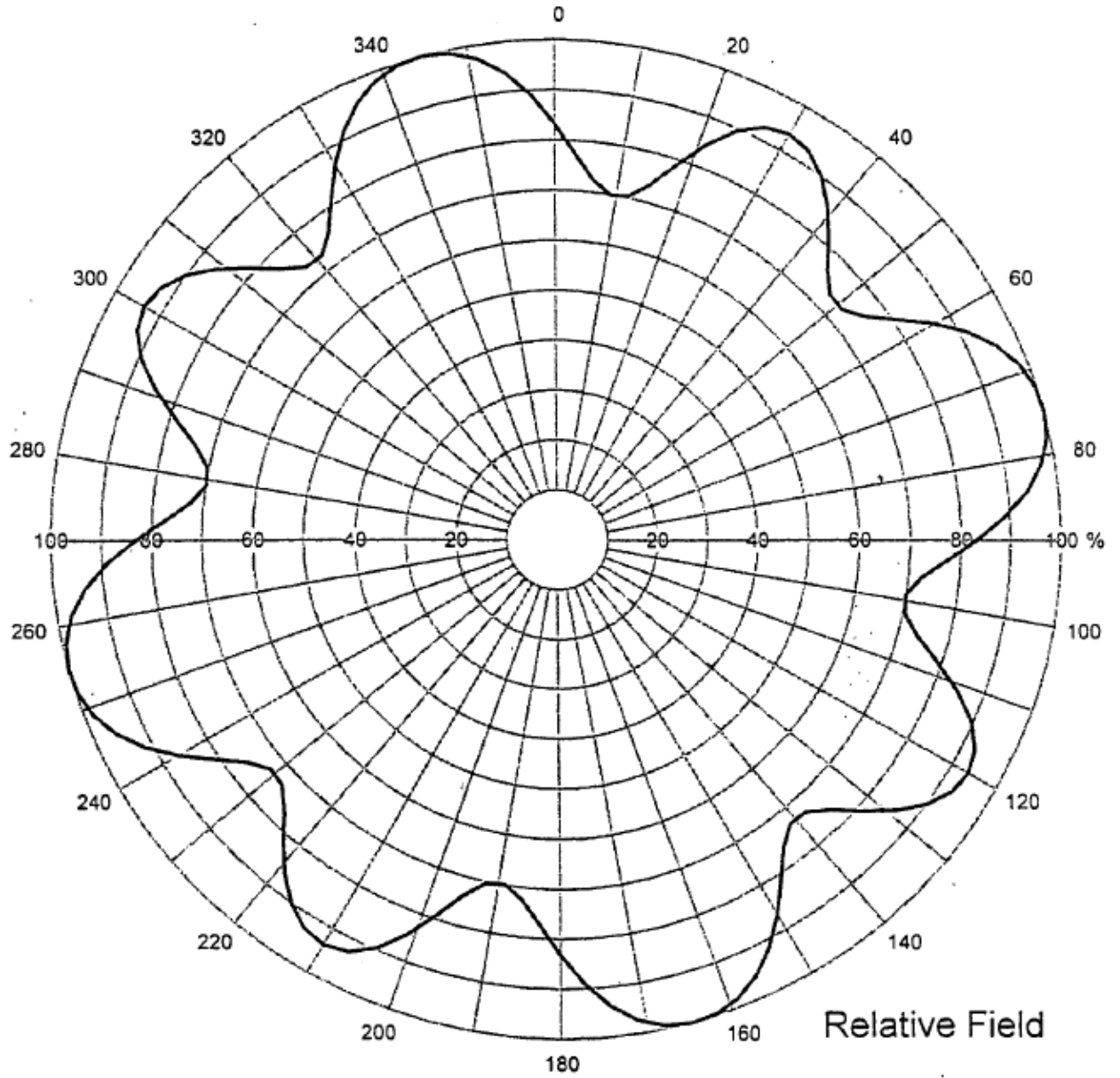
Station **CHURCHDOWN HILL DAB W Test**
Channel **12B** Frequency **225.65 MHz**
Type *** DAB DIPOLES**



HRP Max/Mean Gain **1.3 power ratio , & 1.2 dB**
APERTURE IS SHARED WITH FM
CROSSBOW PANELS

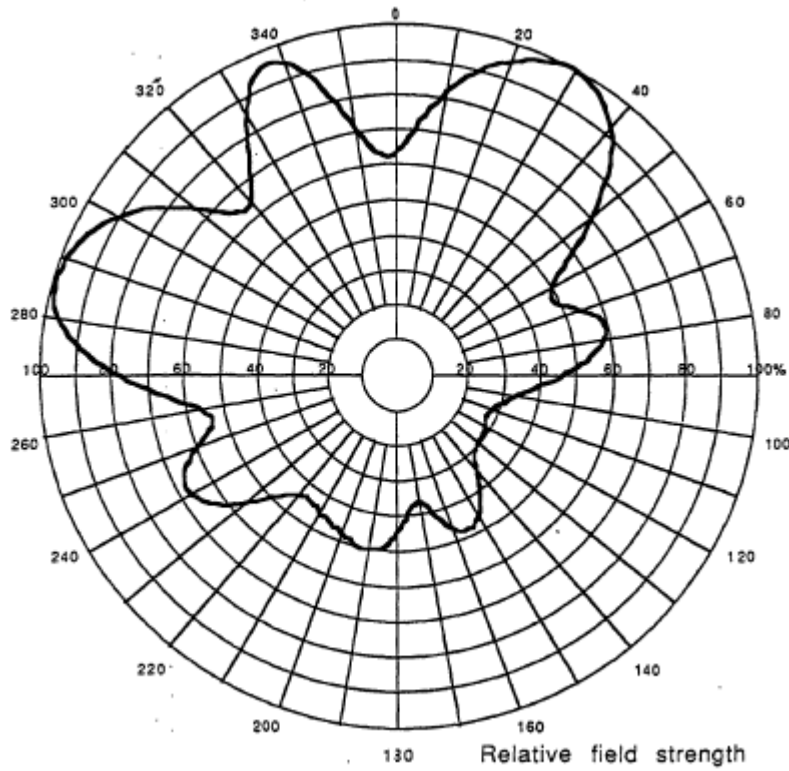
18 Craigkelly

The following HRP is at 224MHz. The pattern for 11A is expected to be substantially similar.



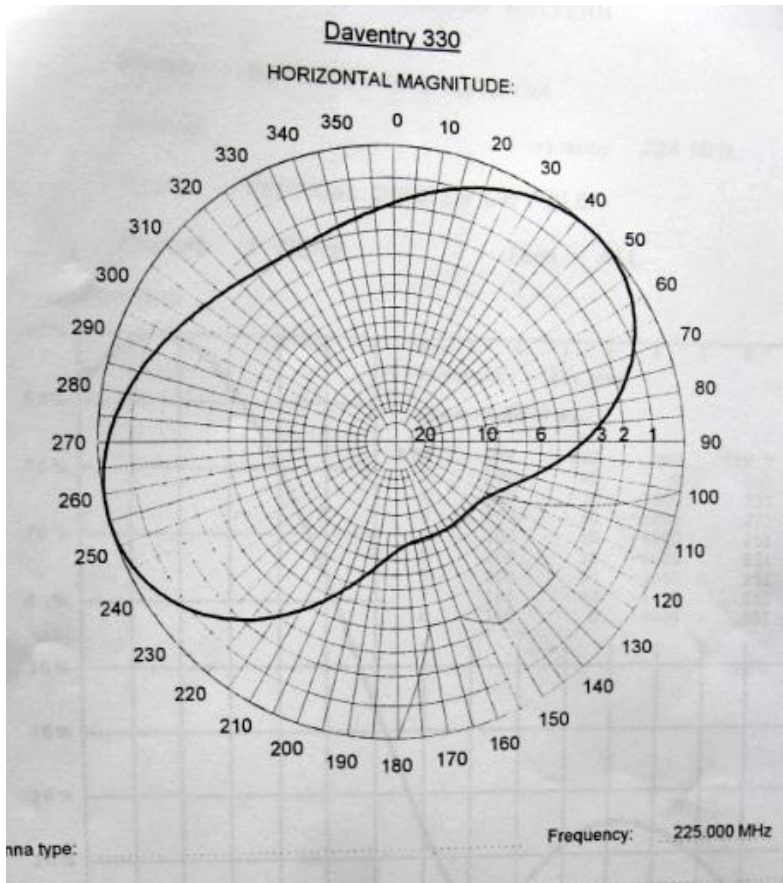
19 Crystal Palace

The following HRP is for 224MHz. The pattern for 11A is expected to be substantially similar.



20 Daventry

The following HRP is for a frequency of 225 MHz. The pattern for 11A is expected to be substantially similar.



21 Divis

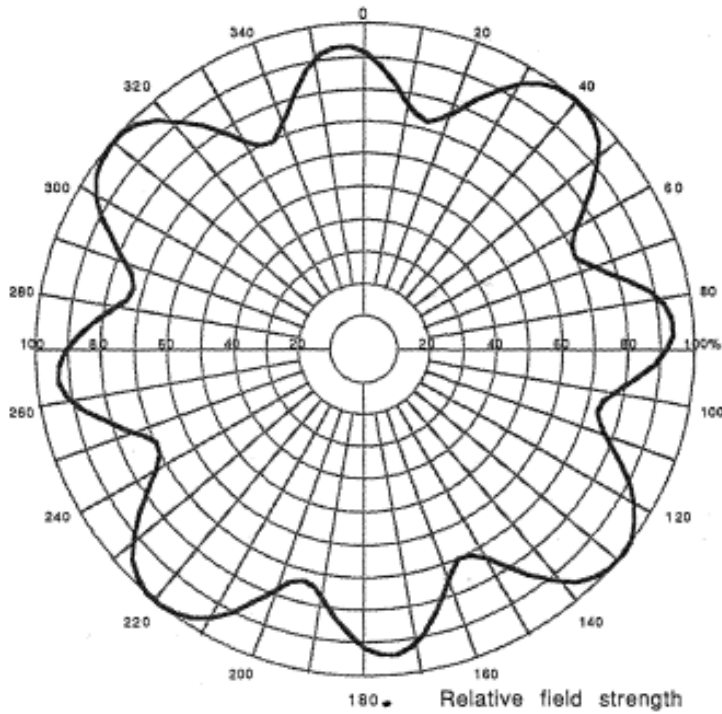
The following HRP is for a frequency of 224 MHz. The pattern for 11A is expected to be substantially similar.

HORIZONTAL RADIATION PATTERN

Station ***DIVIS DAB ANTENNA***

Channel Frequency **224** MHz

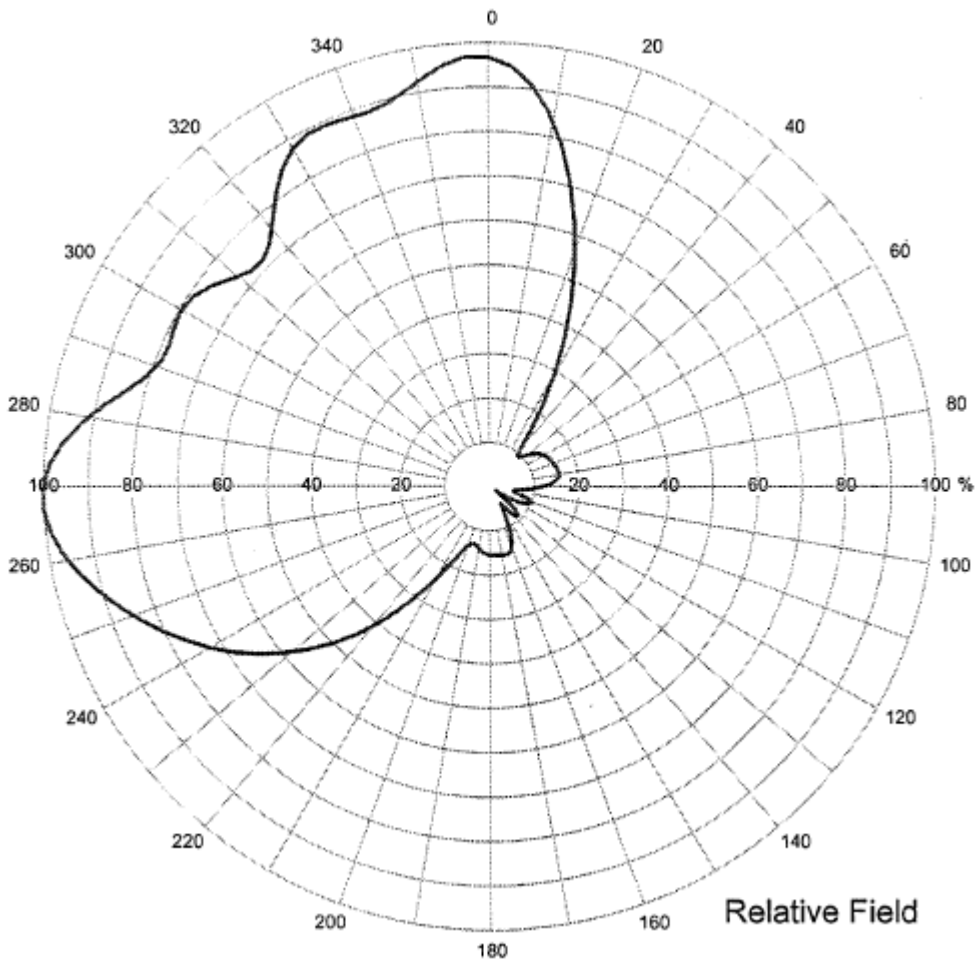
Type ***SHARED WITH CROSSBOW ANTENNA***



HRP Gain **1.35 power ratio, & 1.29 dB**

22 Dover

The following HRP is at 222.1MHz. The pattern for 11A is expected to be substantially similar.

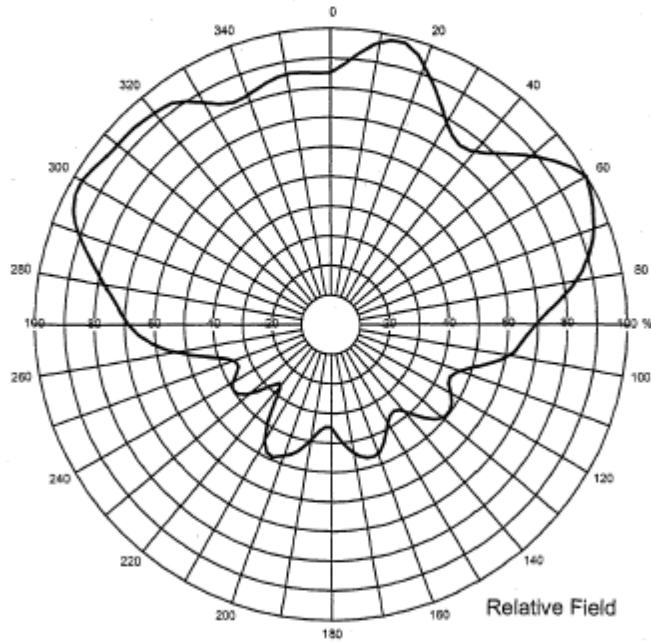


23 Emley Moor

The following HRP is for a frequency of 224 MHz. The pattern for 11A is expected to be substantially similar.

HORIZONTAL RADIATION PATTERN

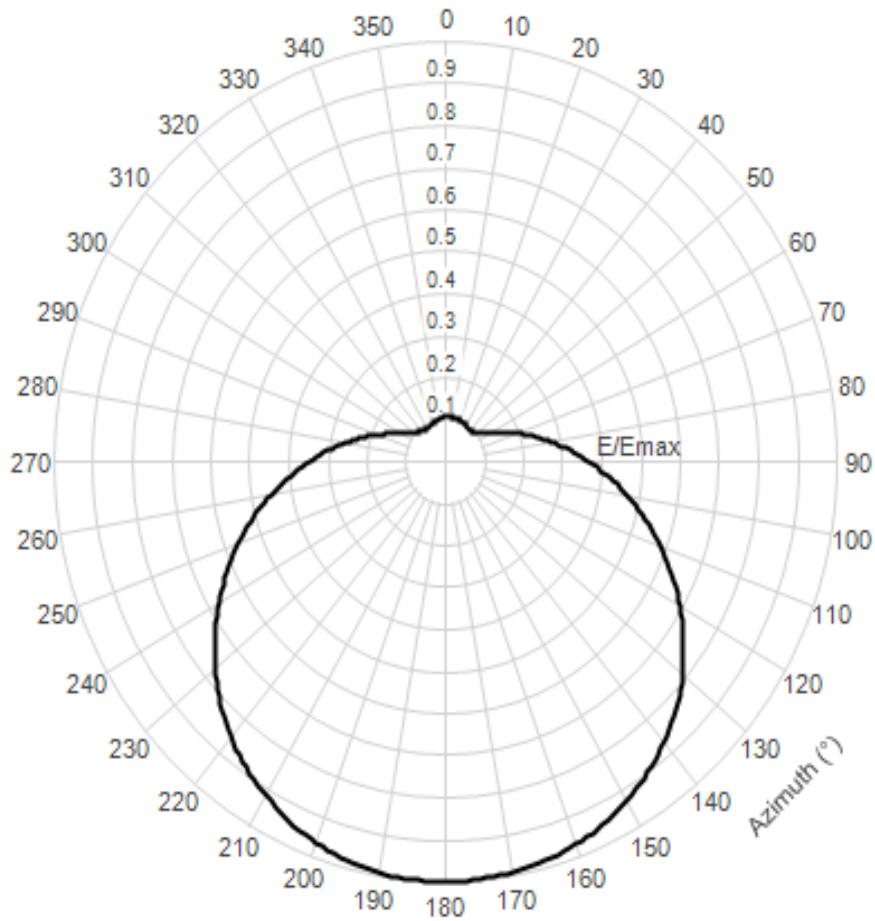
Station **EMLY MOOR DAB**
Channel Frequency **224 MHz**
Type **NINE AROUND DAB DIPOLES**



HRP Max/Mean Gain **2.1 power ratio , & 3.2 dB**
Engineer **HWG** Date **3 Mar 1999**

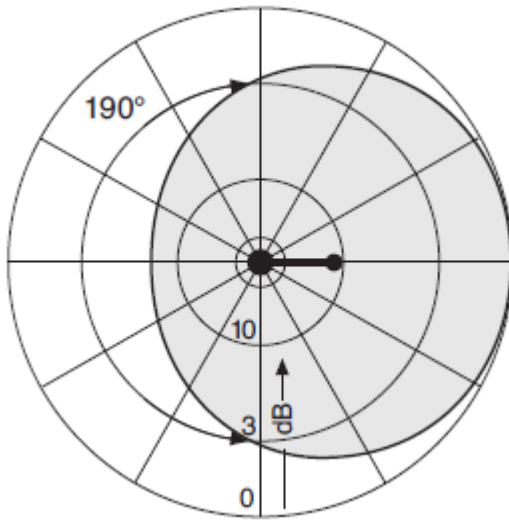
24 Fenham

The following HRP is for a frequency of 225 MHz. The pattern for 11A is expected to be substantially similar.



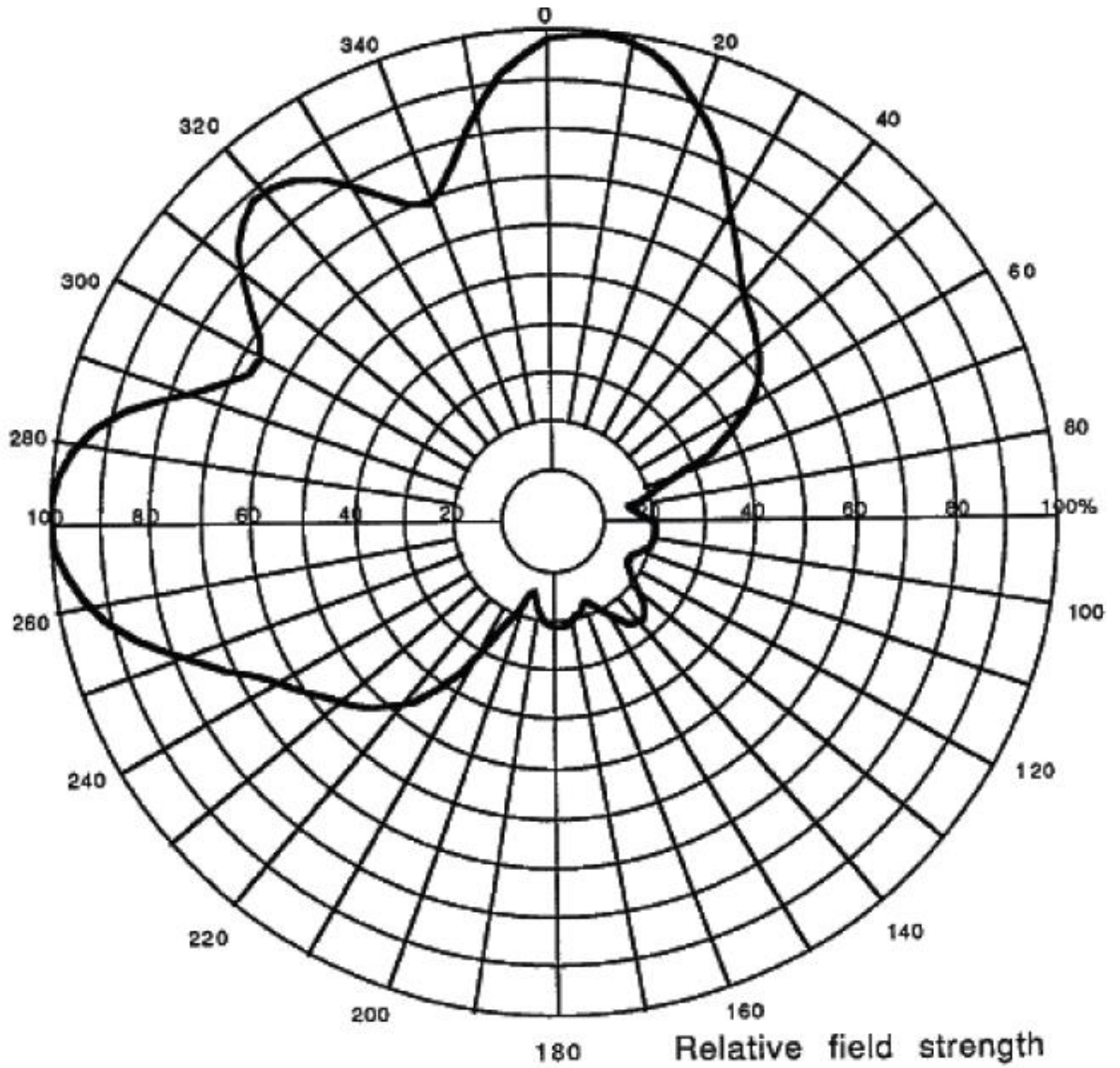
25 Glasgow William Street

The following HRP is from the suppliers' data sheet. The pattern for 11A is expected to be substantially similar, with the exception that the antenna main beam will be on a bearing of 60°ETN.



26 Guildford Hogs Back

The following HRP is at 224MHz. The pattern for 11A is expected to be substantially similar.



27 Hannington

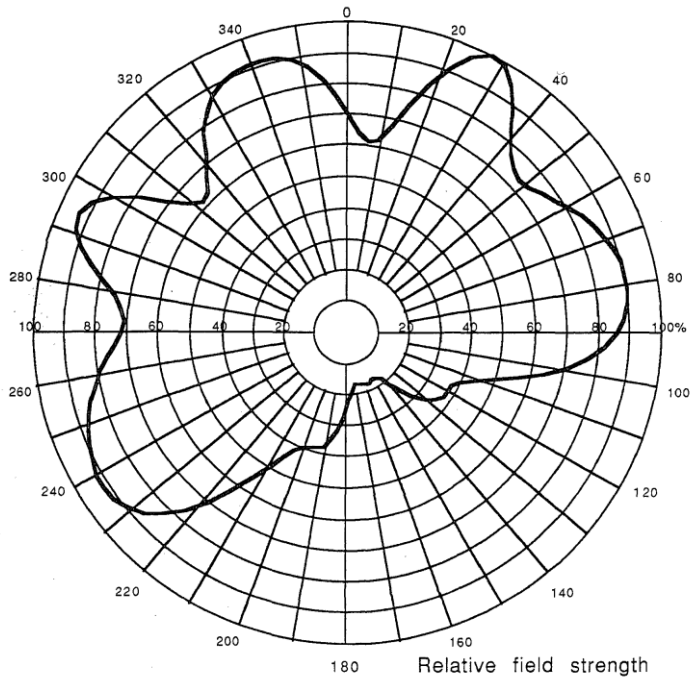
The following HRP is for a frequency of 224 MHz. The pattern for 11A is expected to be substantially similar.

HORIZONTAL RADIATION PATTERN

Station **HANNINGTON DAB**

Channel Frequency **224** MHz

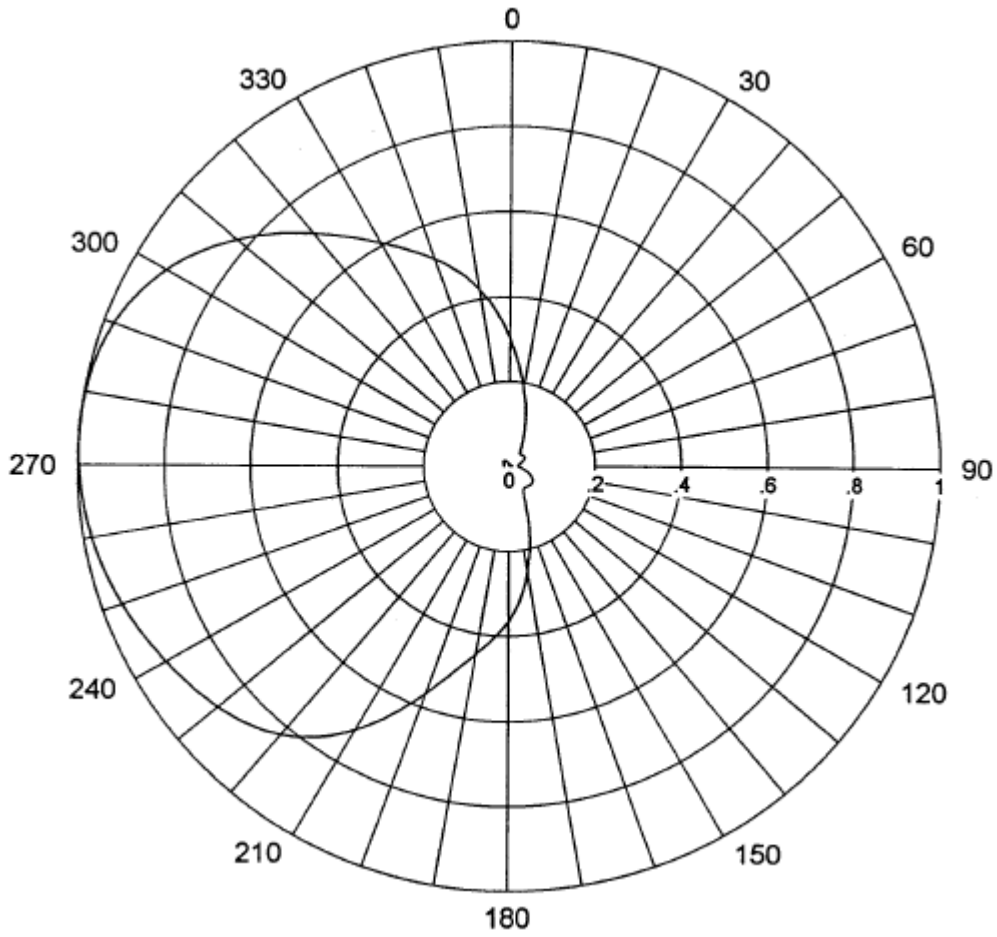
Type **DAB DIPOLES INDEPENDENT APERTURE**



HRP Gain **2.0** power ratio, & **3.0** dB

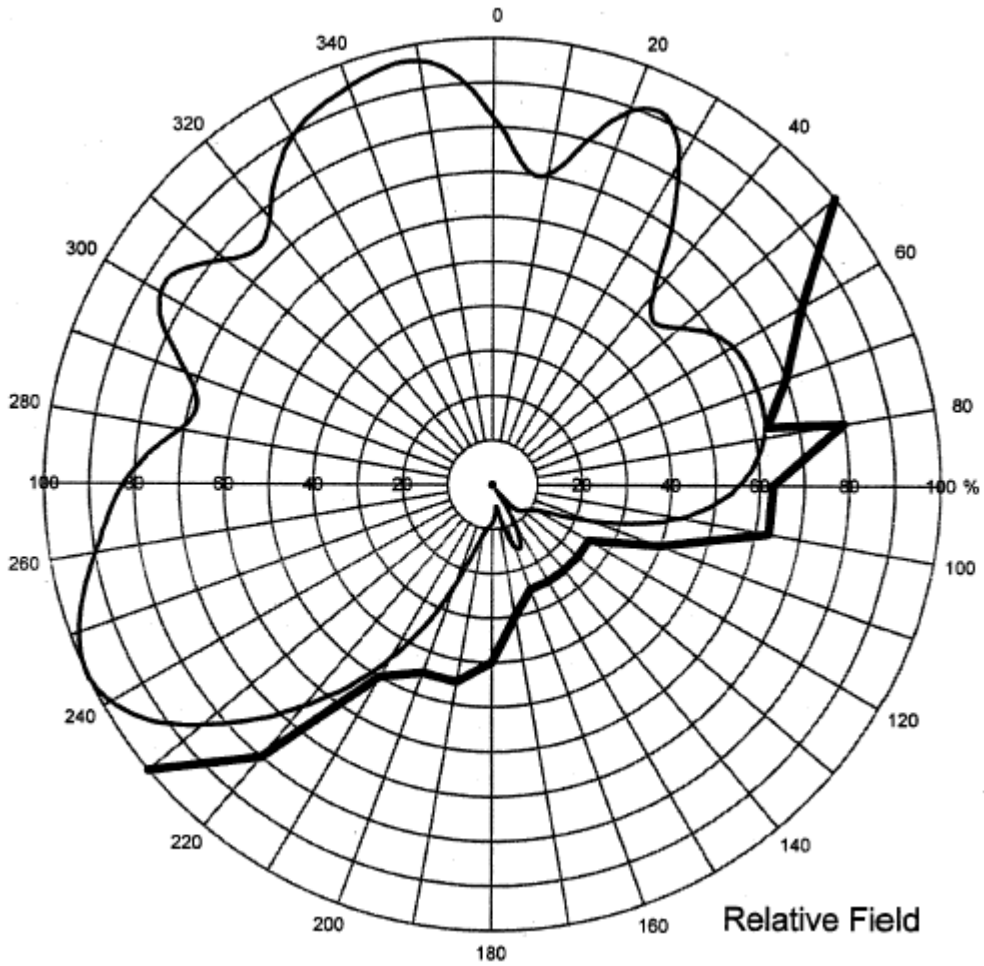
28 Hastings

The following HRP is at 222.1MHz. The pattern for 11A is expected to be substantially similar.



29 Heathfield

The following HRP is at 222.1MHz. The pattern for 11A is expected to be substantially similar.

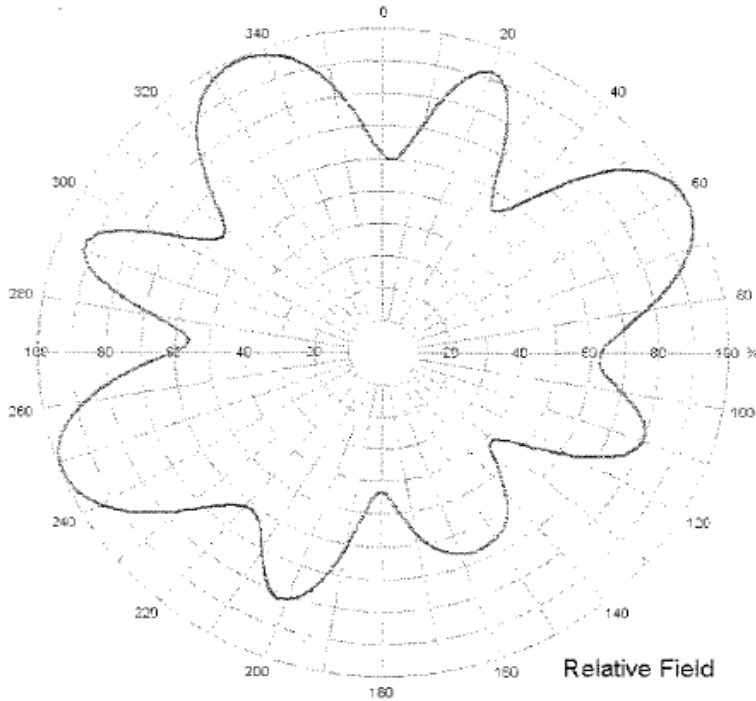


30 Hemel Hempstead

The following HRP is for a frequency of 224 MHz. The pattern for 11A is expected to be substantially similar.

HORIZONTAL RADIATION PATTERN

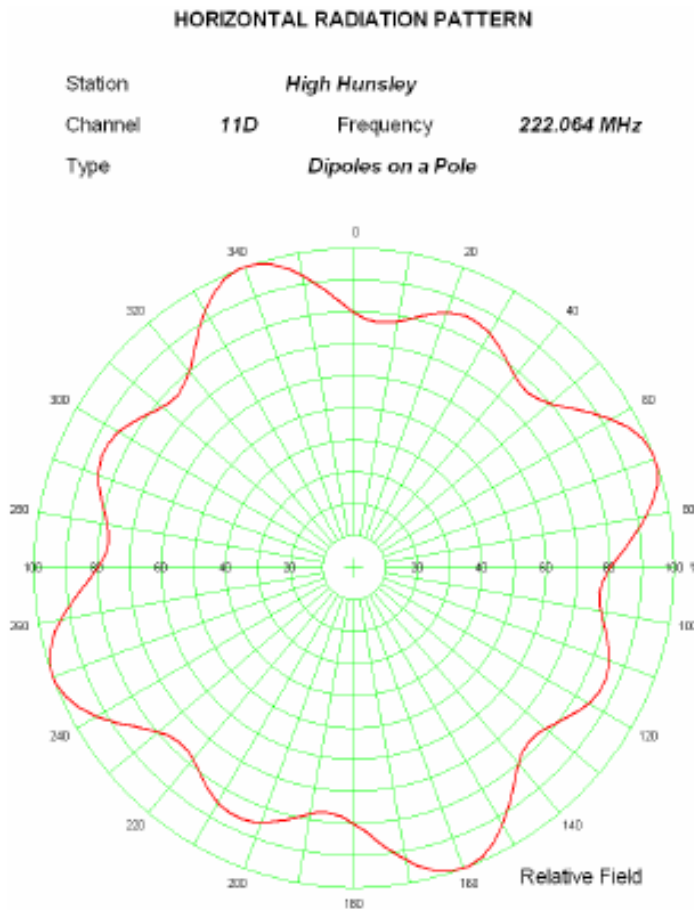
Station **Crown Castle Hemel Hempstead**
 Channel **DAB** Frequency **224 MHz**
 Type **2 Tiers of DAB Panels**



HRP Max/Mean Gain **1.7 power ratio , & 2.4 dB**

31 High Hunsley

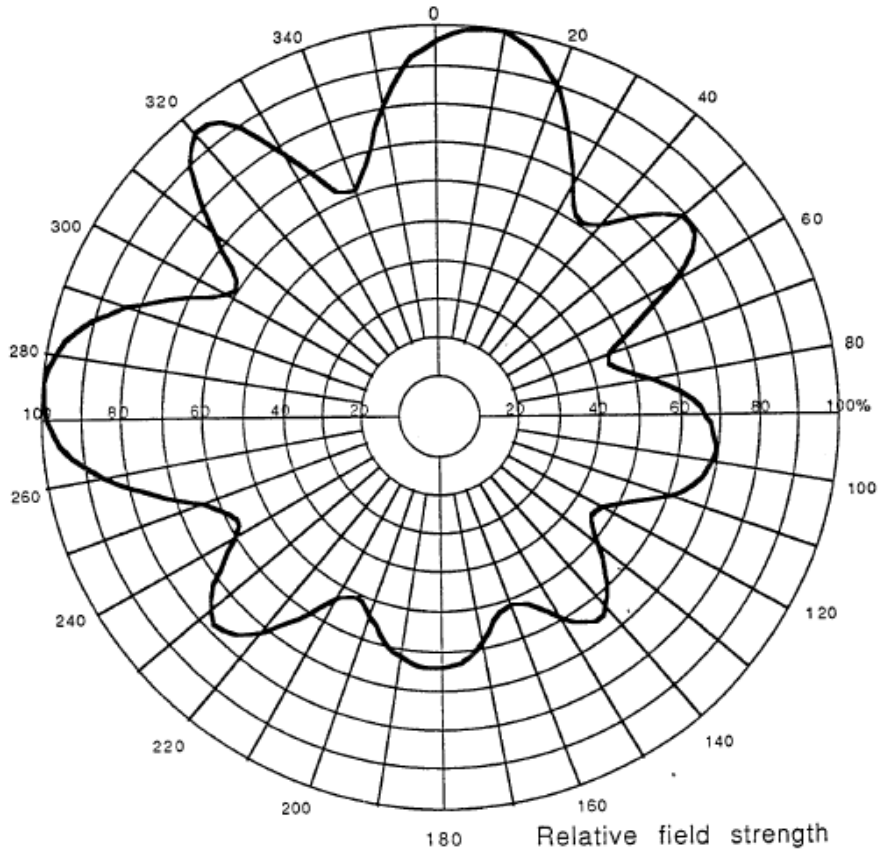
The following HRP is for a frequency of 222 MHz. The pattern for 11A is expected to be substantially similar.



HRP Max/Mean Gain **1.4 power ratio**, & **1.3 dB**
NEC Generated Pattern.

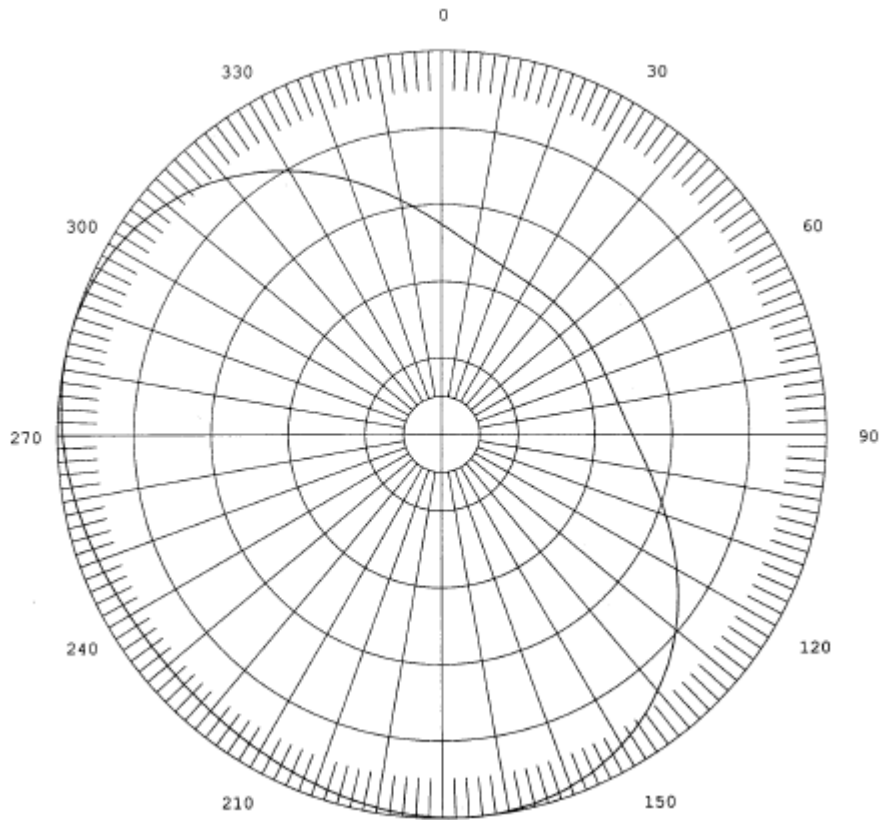
32 Holme Moss

The following HRP is at 224MHz. The pattern for 11A is expected to be substantially similar.



33 Houghton on the Hill

The following HRP is for channel 11B. The pattern for 11A is expected to be substantially similar.

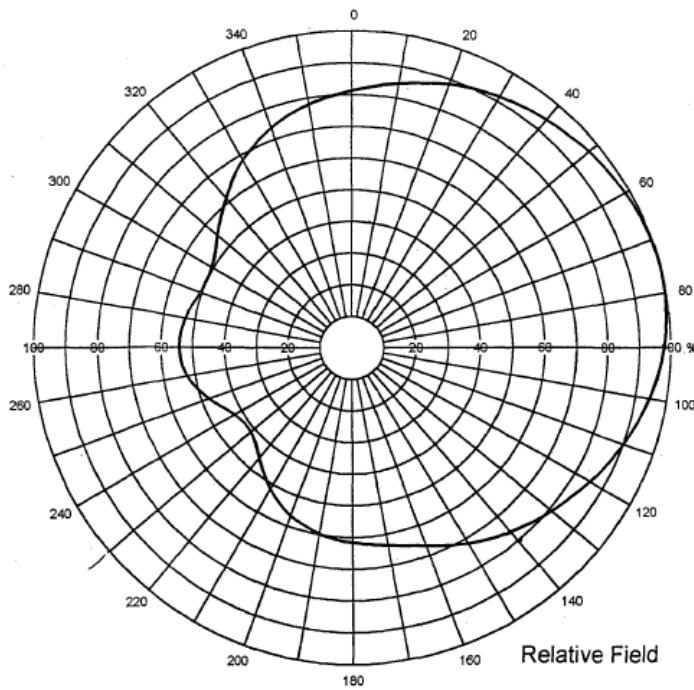


34 Kilvey Hill

The following HRP is for a frequency of 225.6 MHz. The pattern for 11A is expected to be substantially similar.

HORIZONTAL RADIATION PATTERN

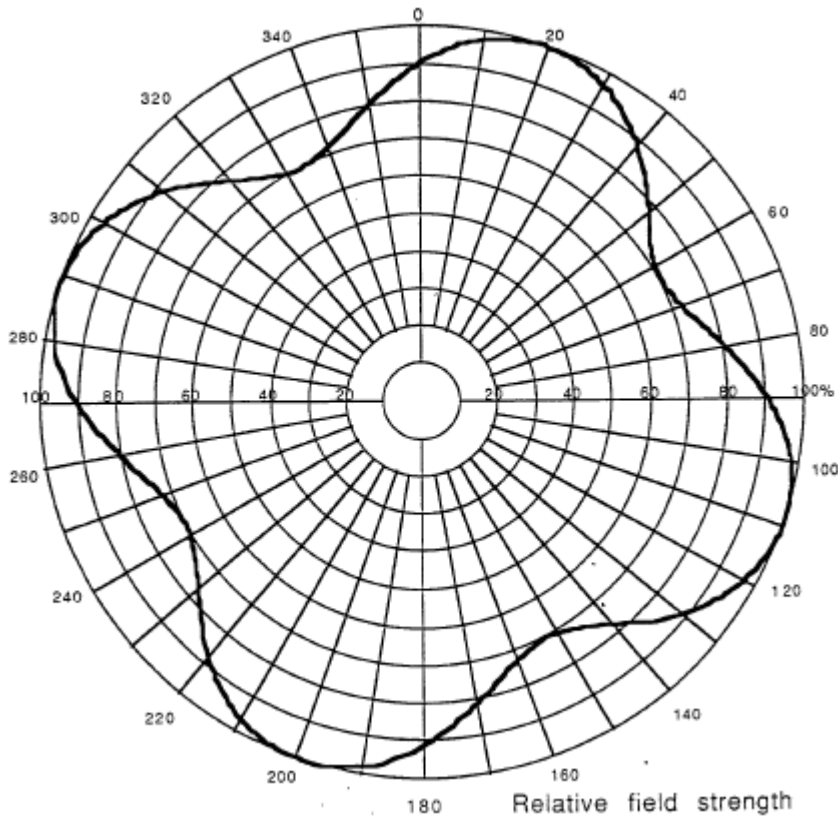
Station **Kilvey Hill DAB**
Frequency **225 MHz**
Type **4 Tiers of 2 Dipoles on a Pole**



HRP Max/Mean Gain **1.8 power ratio , & 2.7 dB**

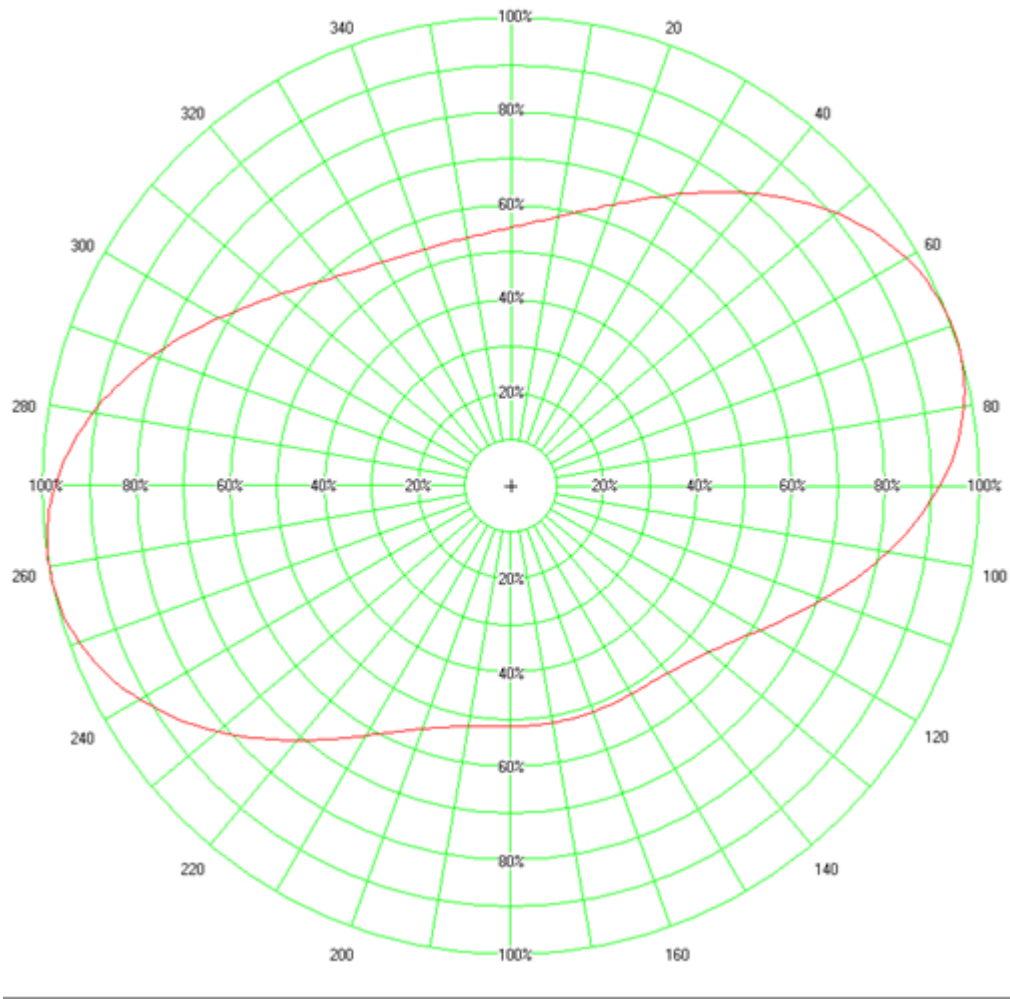
35 Kirk O'Shotts

The following HRP is for 224MHz. The pattern for 11A is expected to be substantially similar.



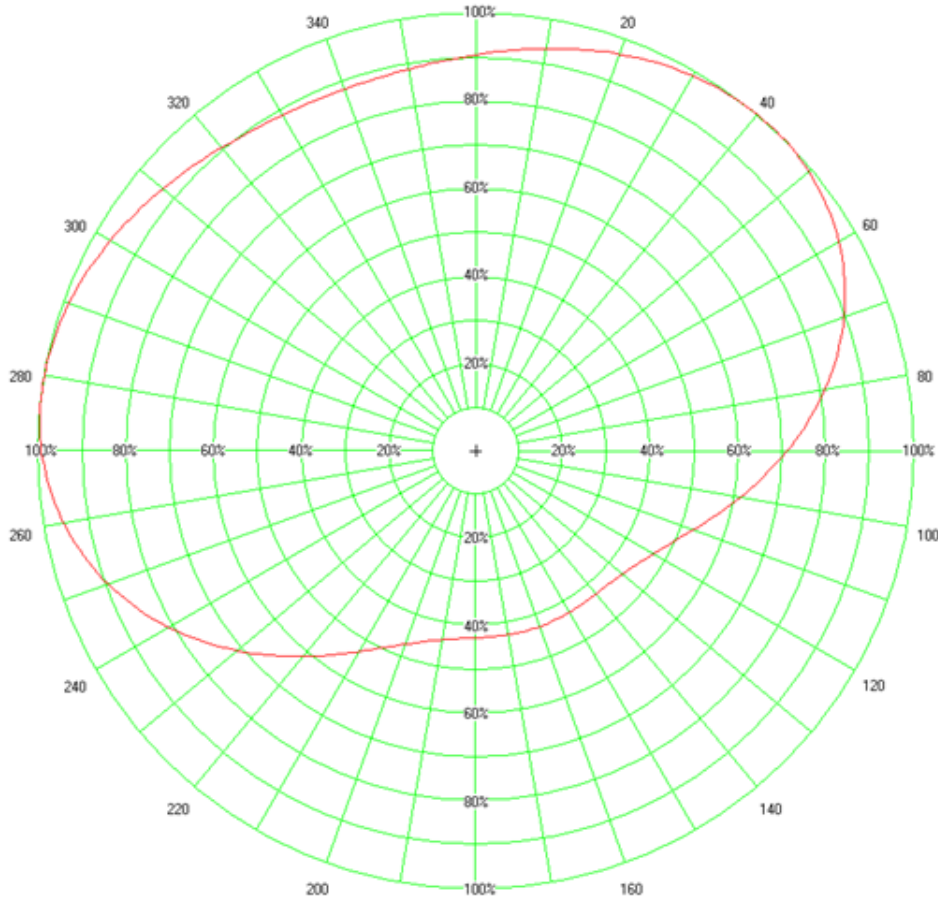
36 Liverpool St Johns Beacon

The following HRP is for channel 12B. The pattern for 11A is expected to be substantially similar.



37 London BT Tower

The following HRP is for channel 12B. The pattern for 11A is expected to be substantially similar.

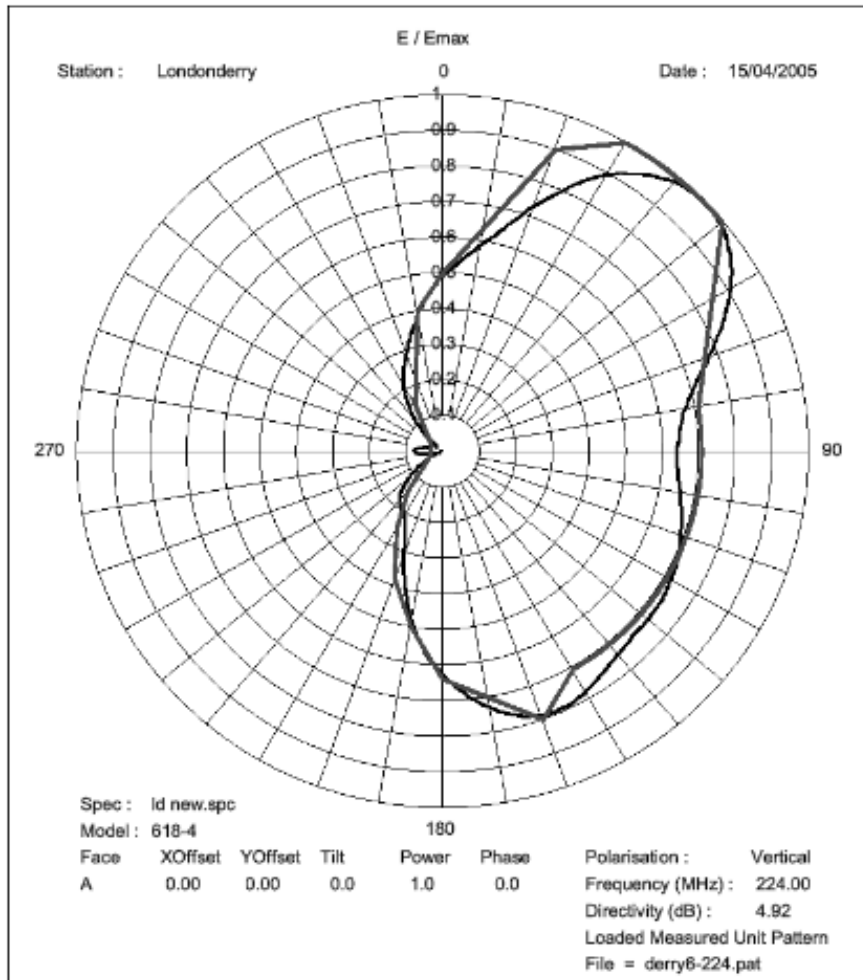


38 Londonderry

The following HRP is for a frequency of 224 MHz. The pattern for 11A is expected to be substantially similar.

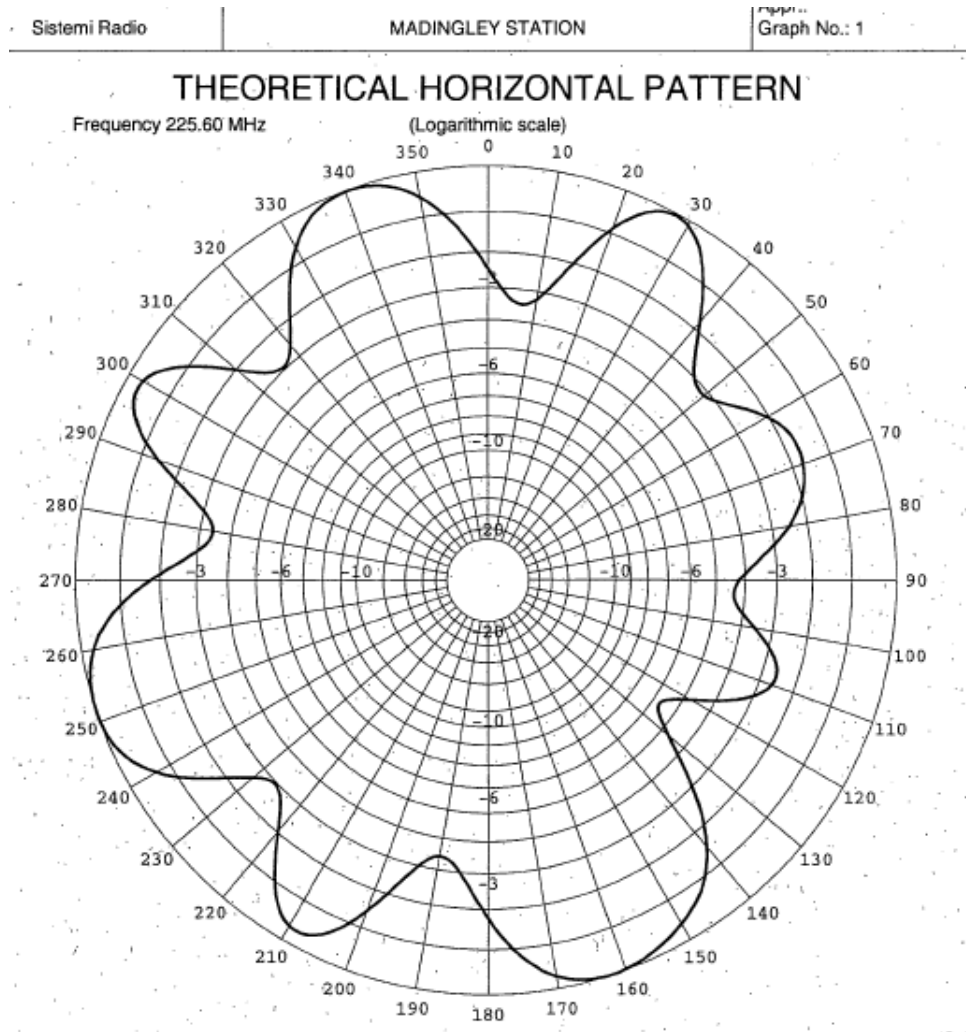
Handbook No: 49.51600

Radio Frequency Systems



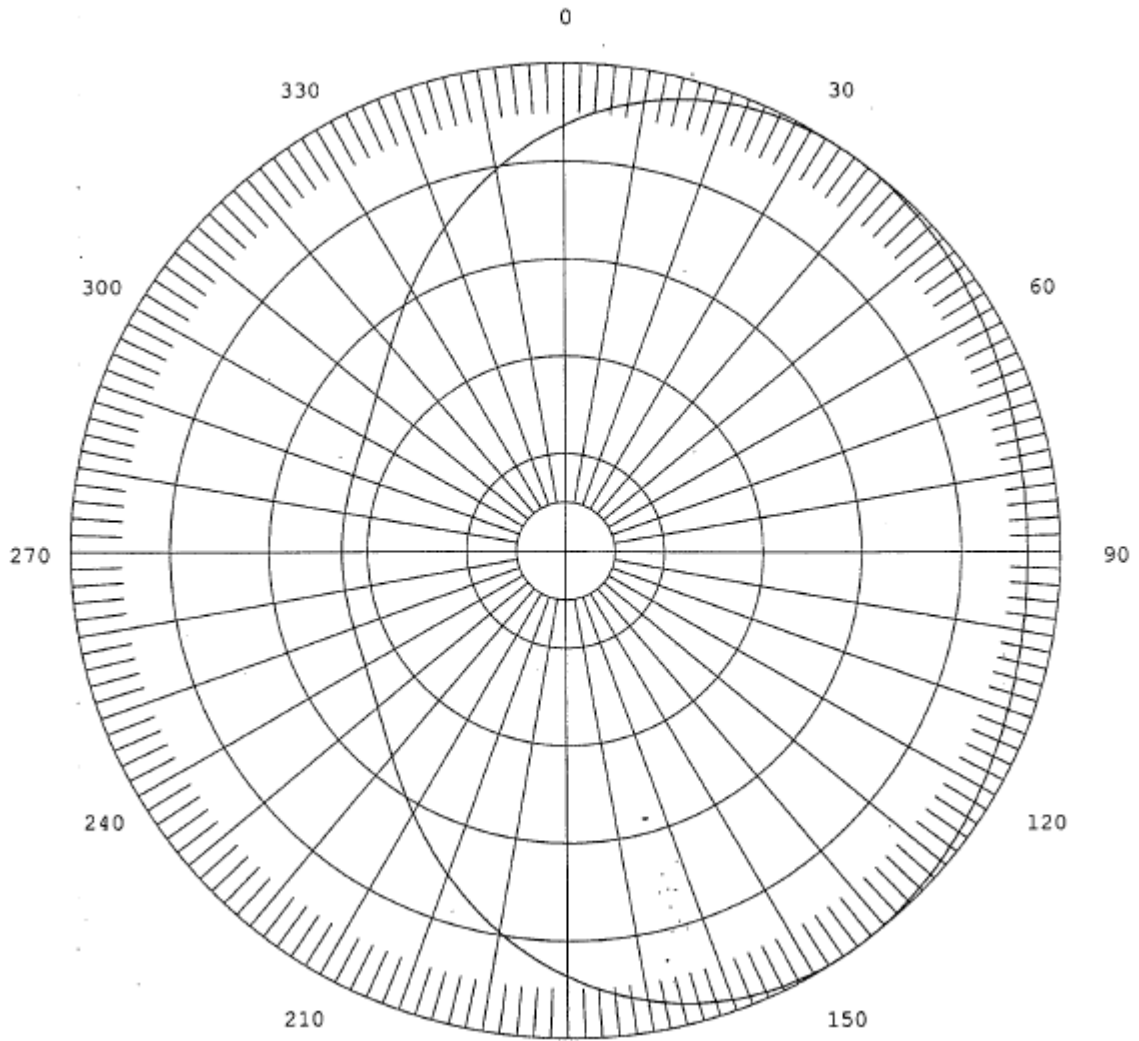
39 Madingley

The following HRP is for a frequency of 225 MHz. The pattern for 11A is expected to be substantially similar.



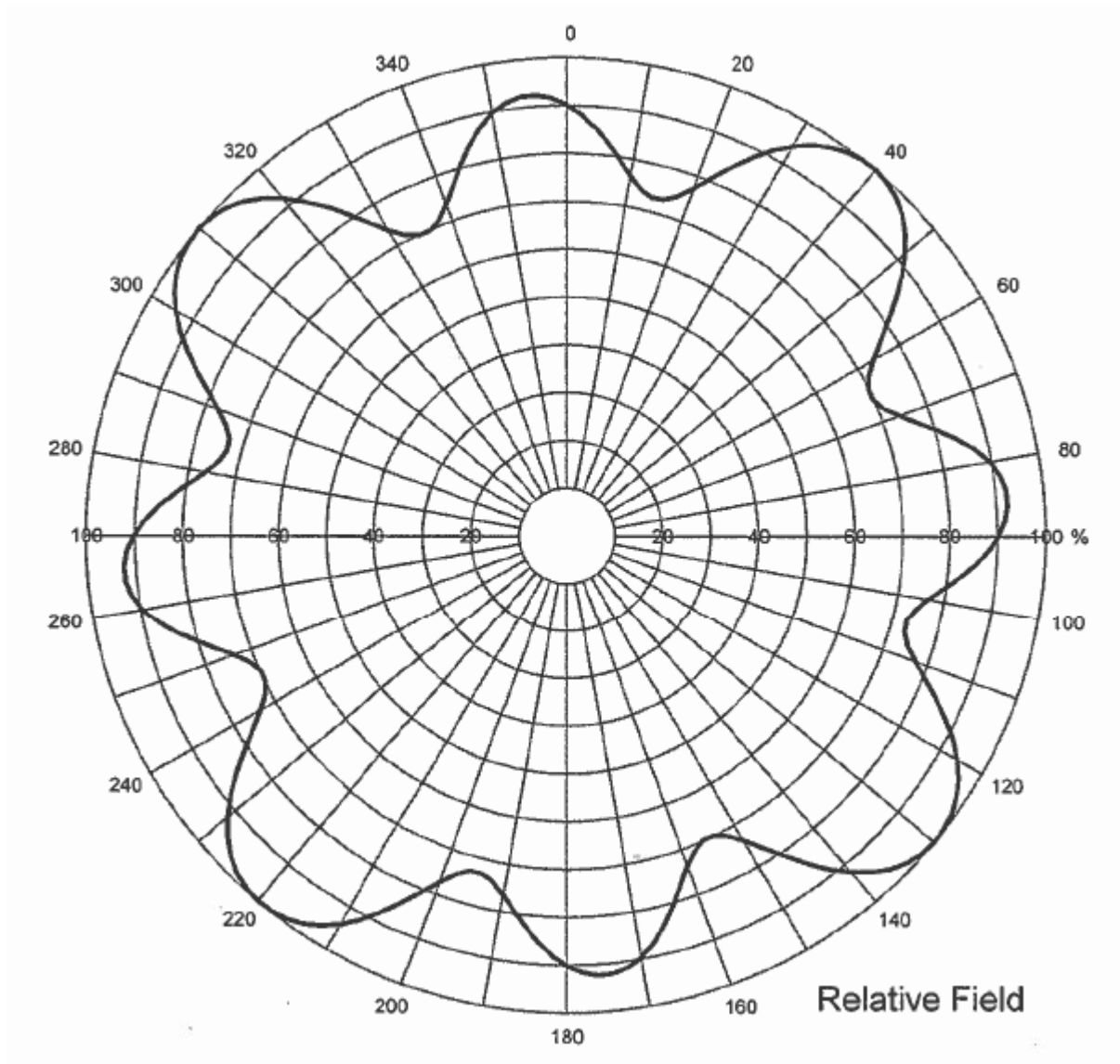
40 Manchester City Tower

The following HRP is for channel 12C. The pattern for 11A is expected to be substantially similar.



41 Mapperley (S)

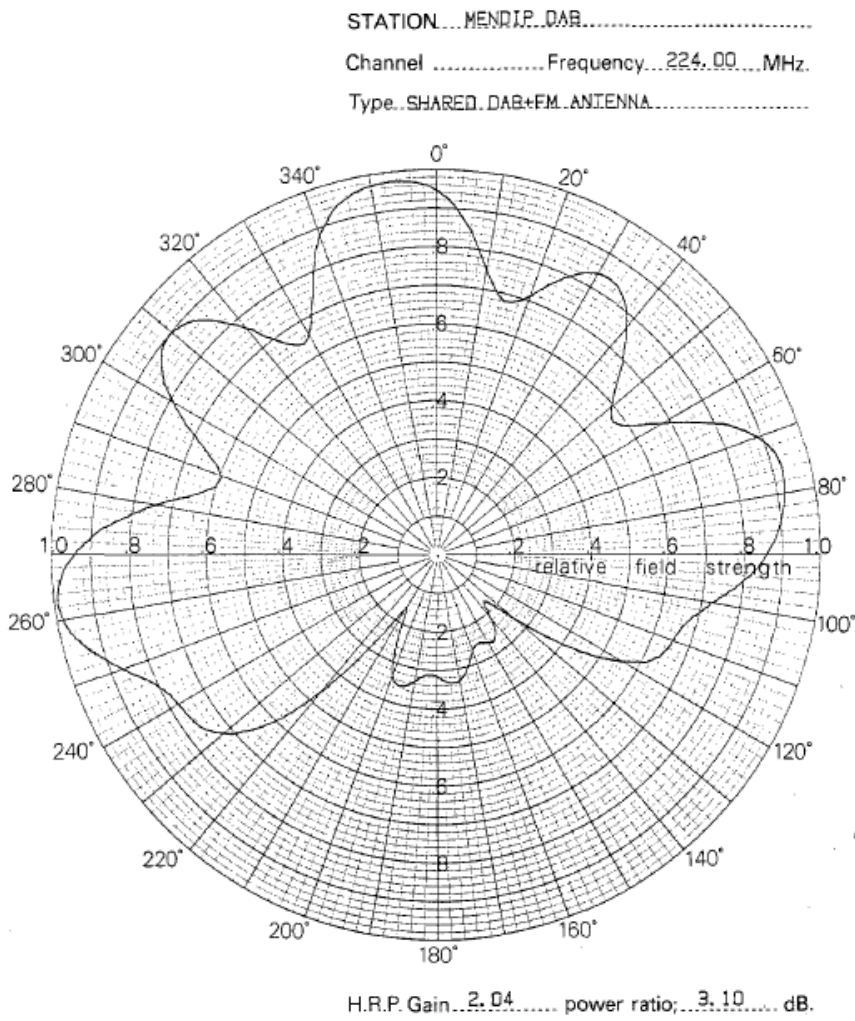
The following HRP is for channel 11D. The pattern for 11A is expected to be substantially similar.



42 Mendip

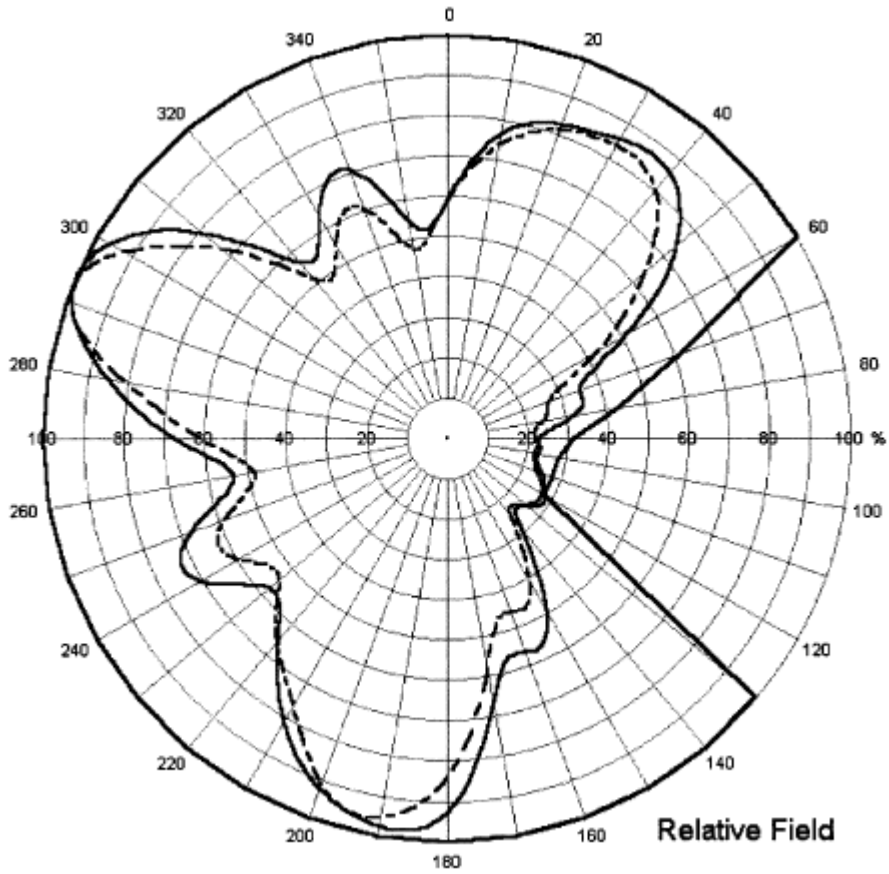
The following HRP is for a frequency of 224 MHz. The pattern for 11A is expected to be substantially similar.

HORIZONTAL RADIATION PATTERN



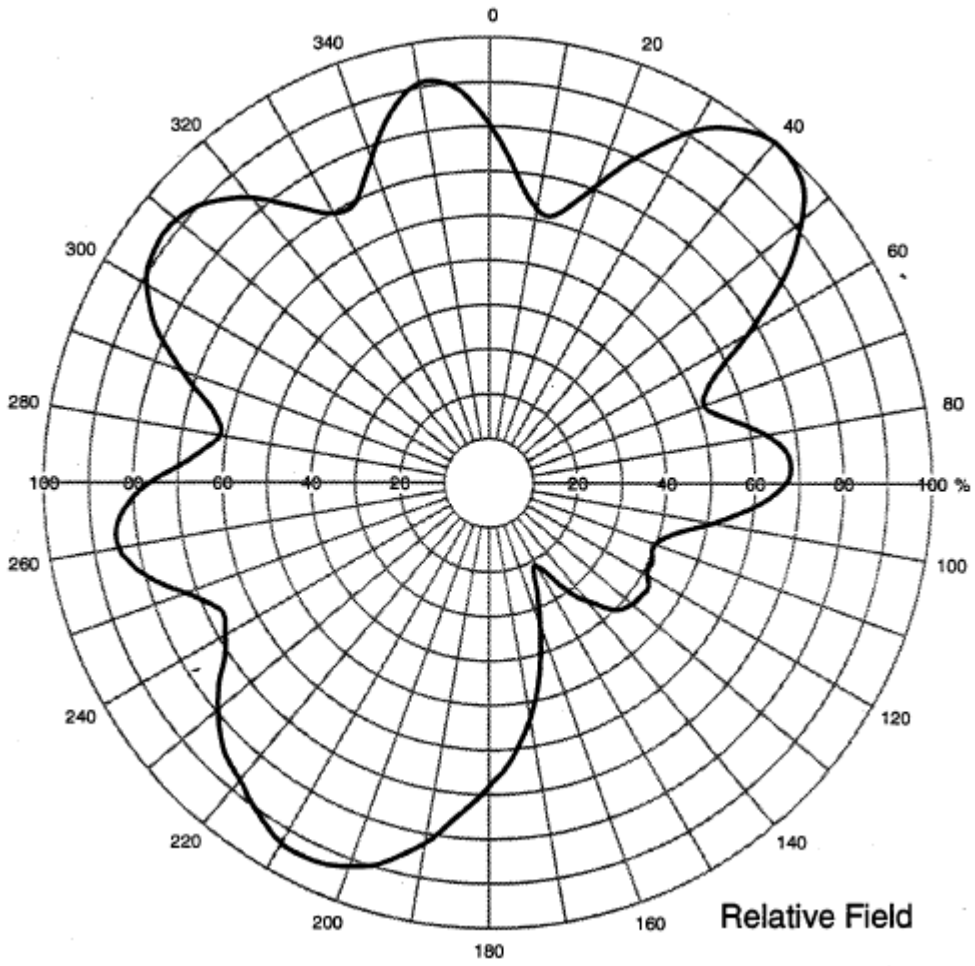
43 Mendlesham SC

The following HRP is at 222MHz. The pattern for 11A is expected to be substantially similar.



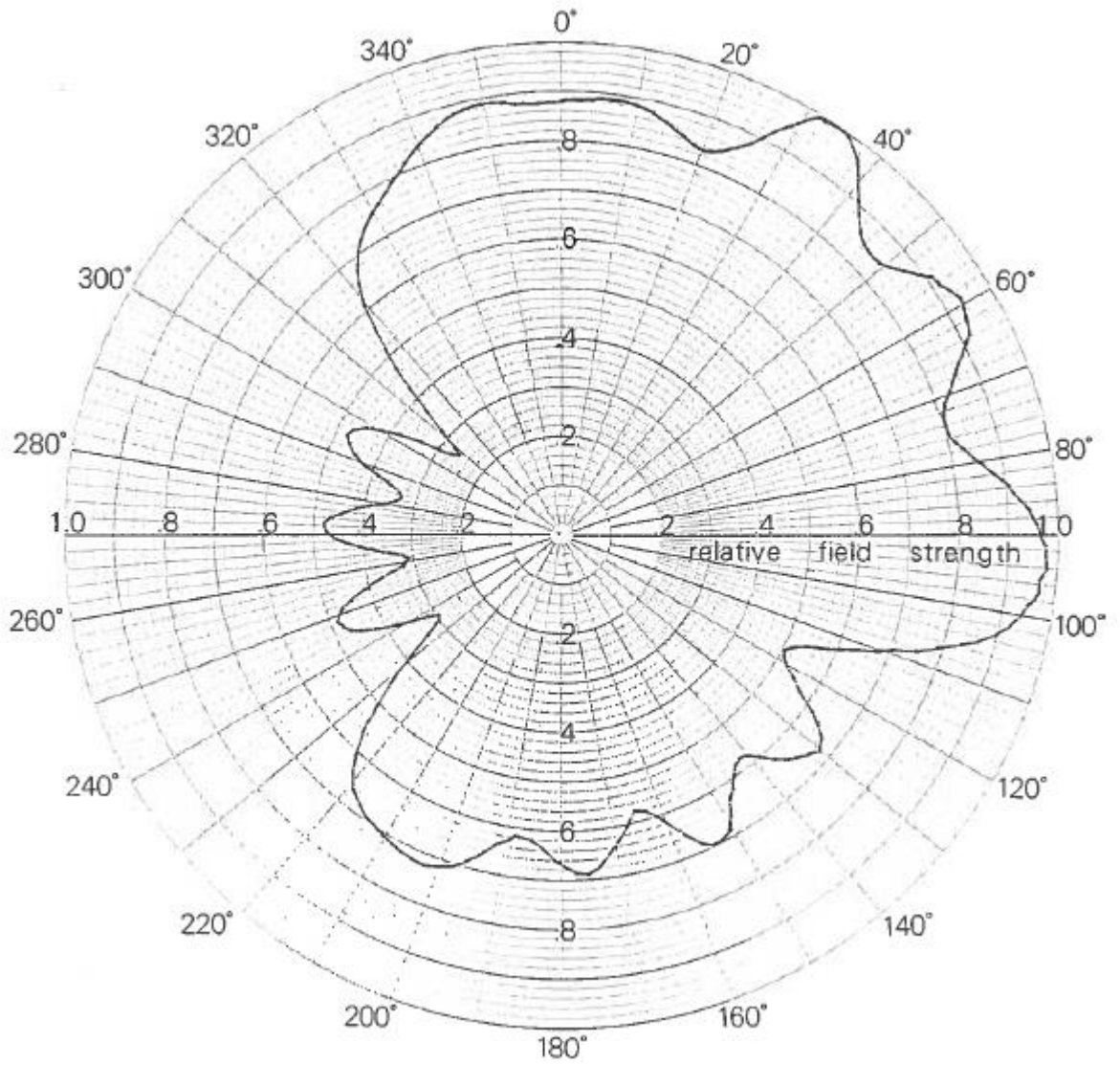
44 Midhurst

The following HRP is at 224MHz. The pattern for 11A is expected to be substantially similar.



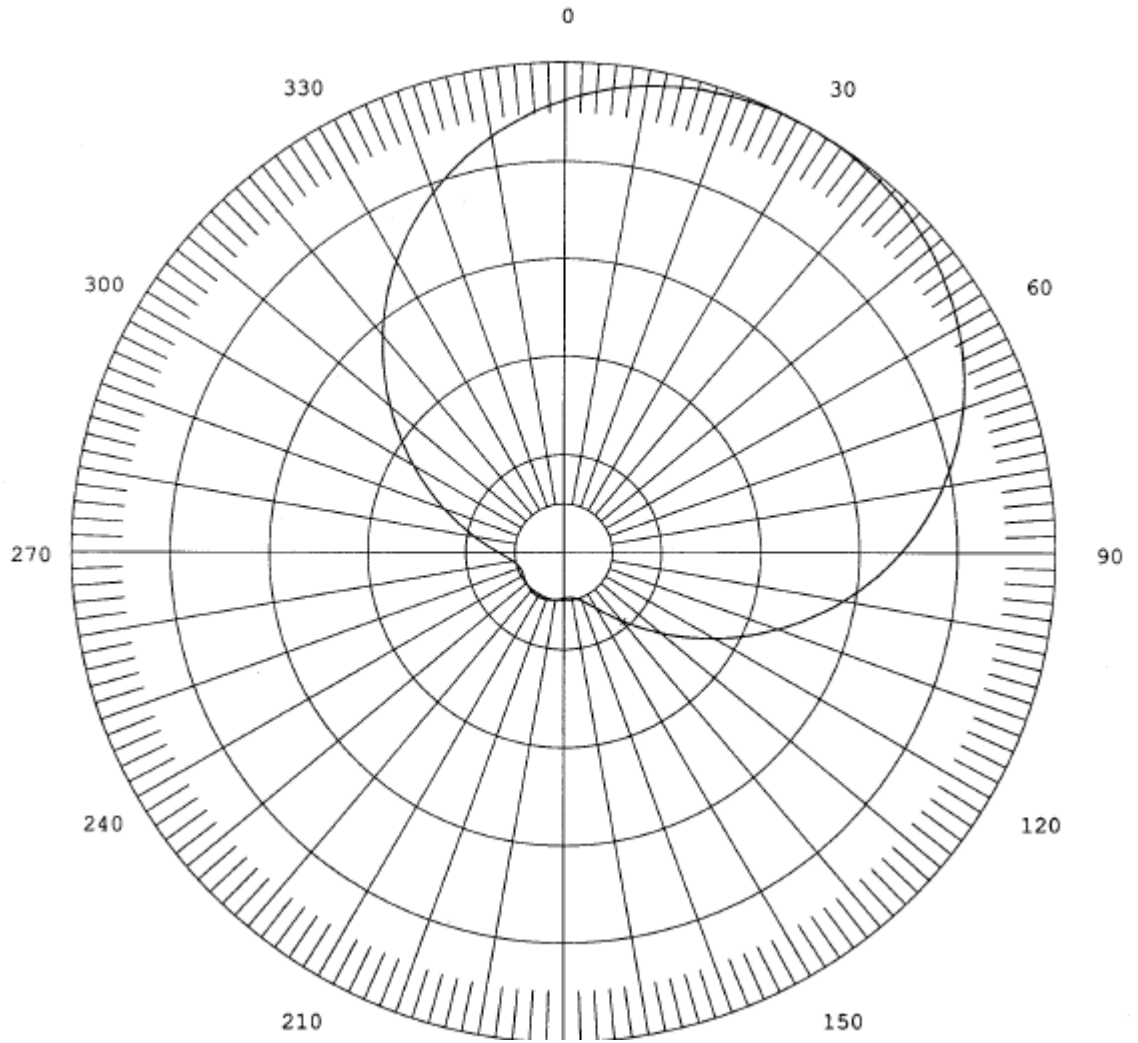
45 Moel Y Parc SC

The following HRP is at 218MHz. The pattern for 11A is expected to be substantially similar.



46 Nine Barrows Down

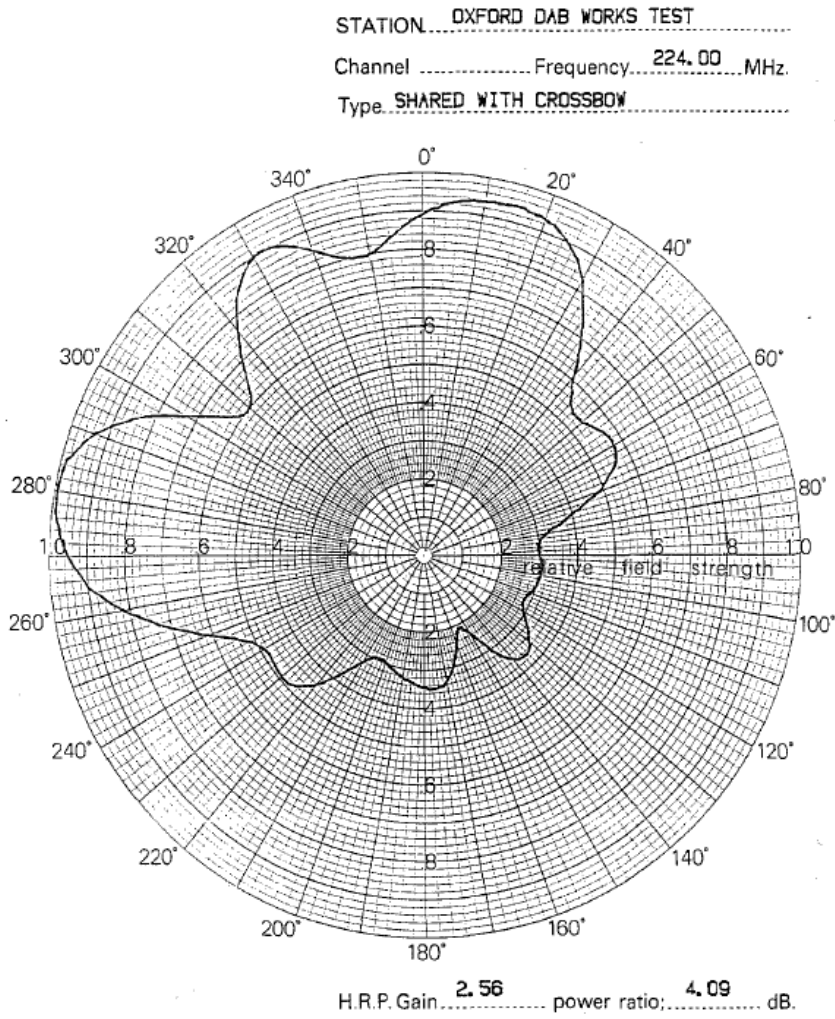
The following HRP is for channel 11B. The pattern for 11A is expected to be substantially similar.



47 Oxford

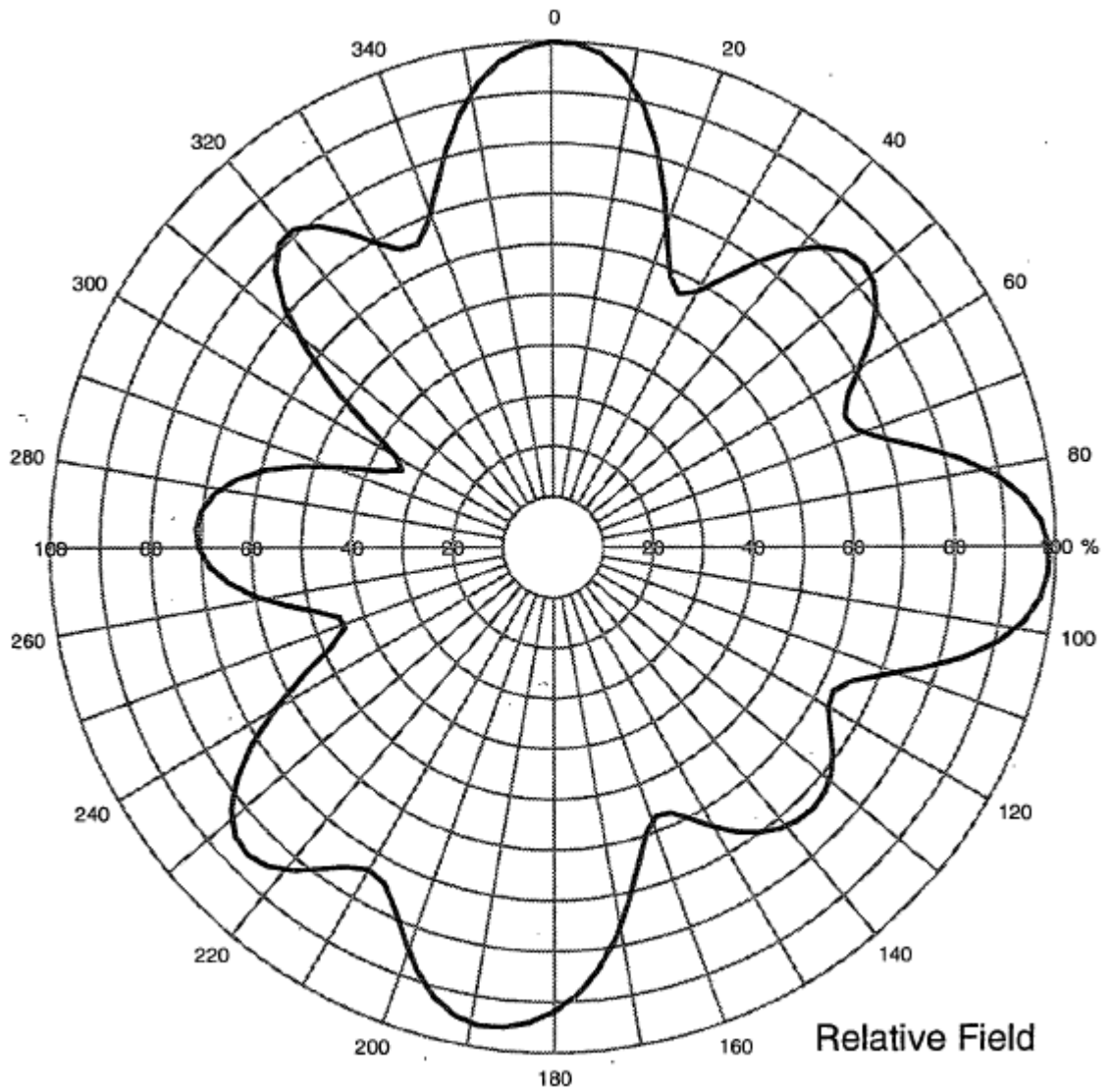
The following HRP is for a frequency of 224 MHz. The pattern for 11A is expected to be substantially similar.

HORIZONTAL RADIATION PATTERN



48 Pendle Forest

The following HRP is for channel 12B. The pattern is expected to be substantially similar.



49 Peterborough

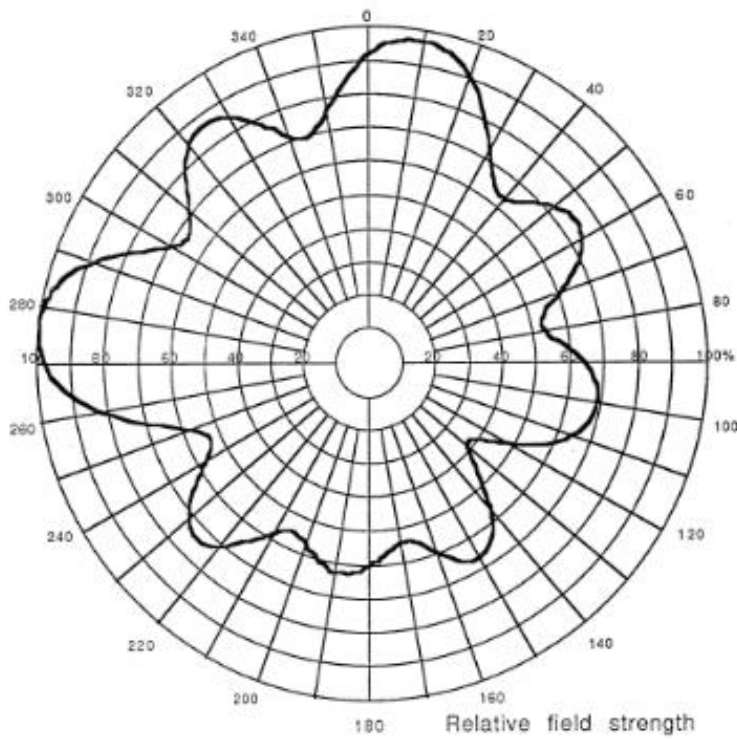
The following HRP is for a frequency of 224 MHz. The pattern for 11A is expected to be substantially similar.

HORIZONTAL RADIATION PATTERN

Station **PETERBOROUGH DAB**

Channel Frequency **224** MHz

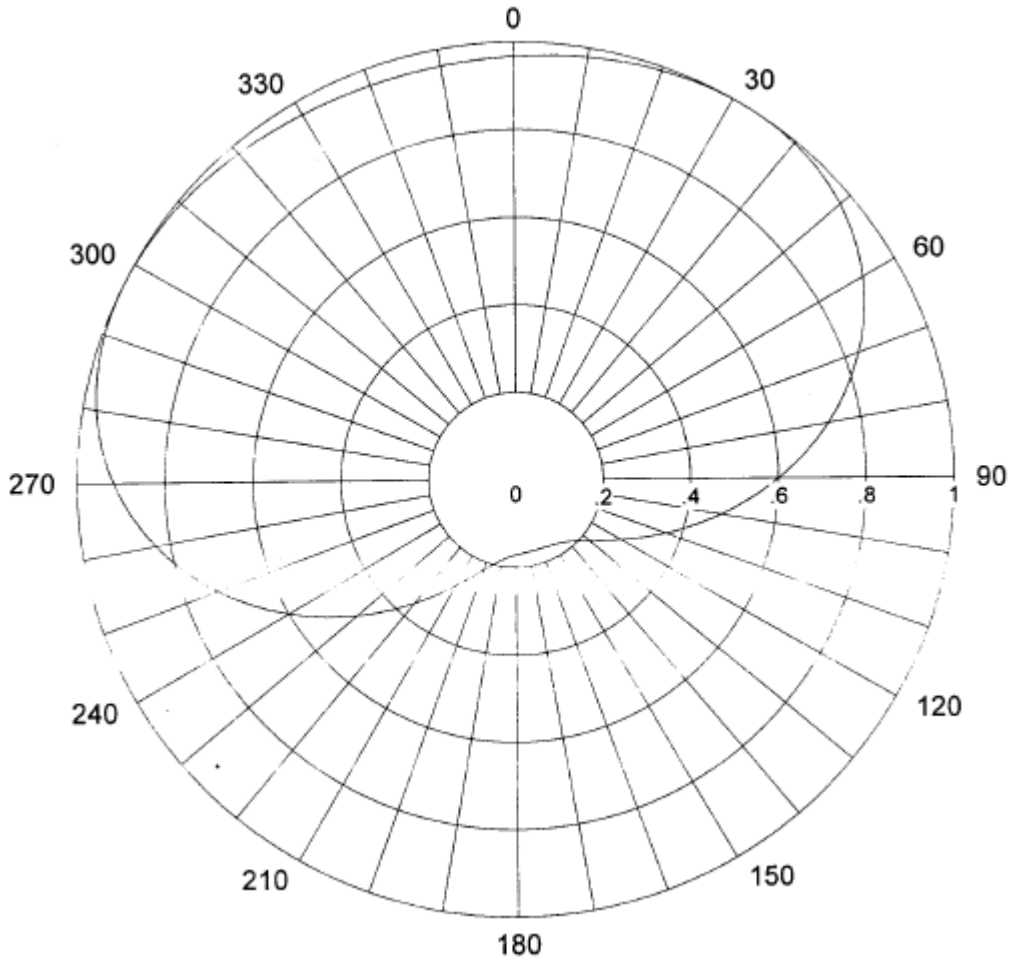
Type **DAB DIPOLES SHARING FM CROSSBOW**



HRP Gain **1.95** power ratio, & **2.91** dB

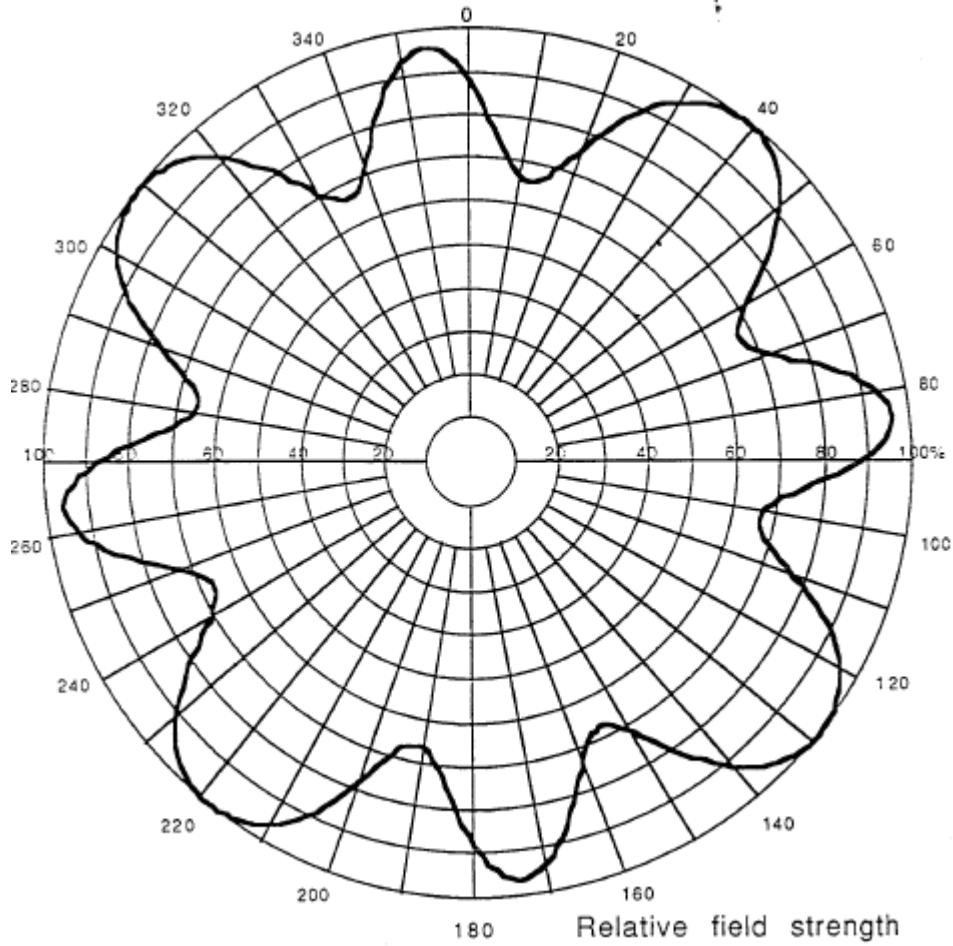
50 Plympton

The following HRP is at 222MHz. The pattern for 11A is expected to be substantially similar.



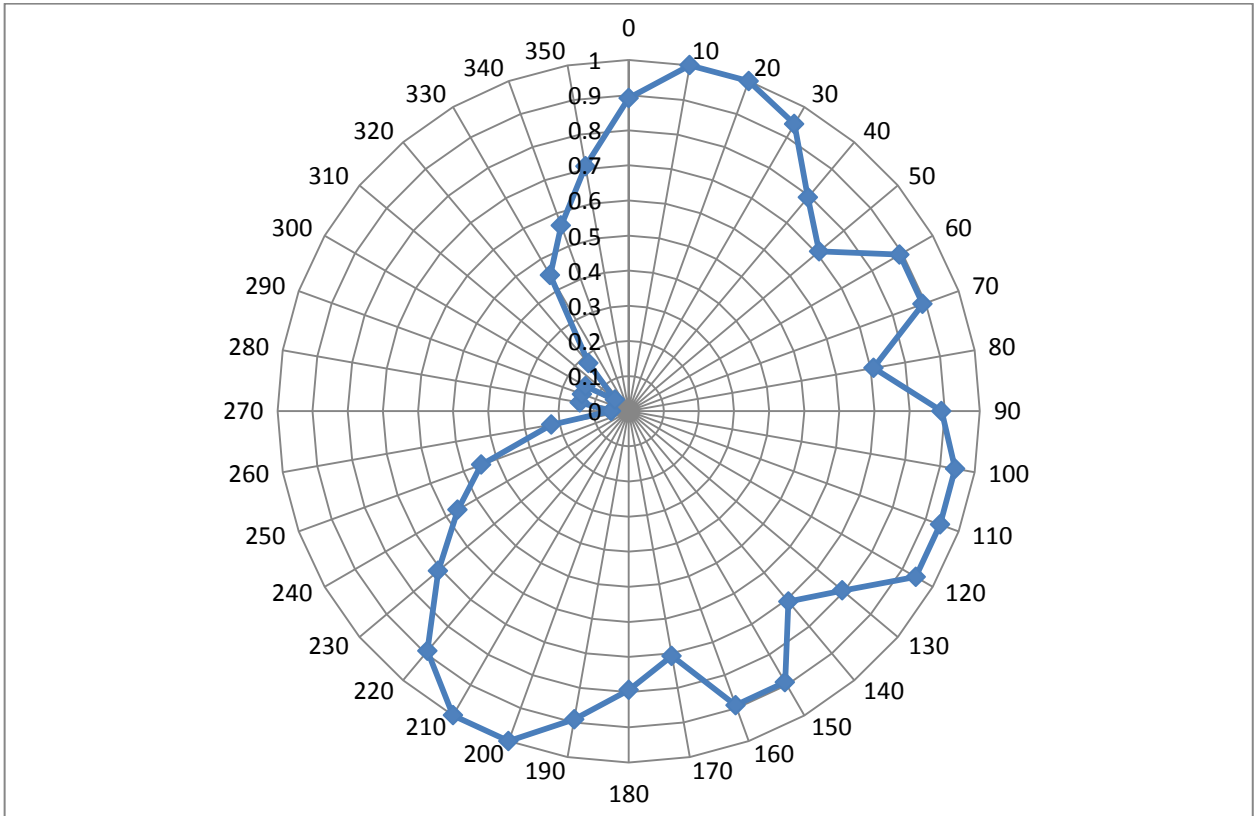
51 Pontop Pike

The following HRP is for 224MHz. The pattern for 11A is expected to be substantially similar.



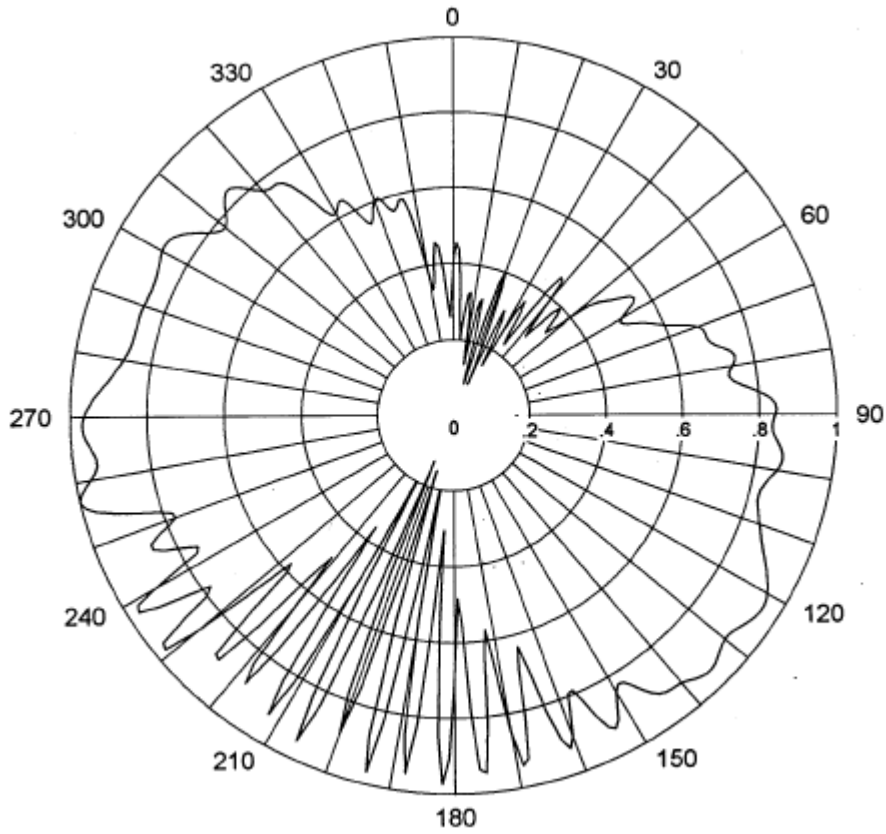
52 Preseli SC

The following HRP is at 222MHz. The pattern for 11A is expected to be substantially similar.



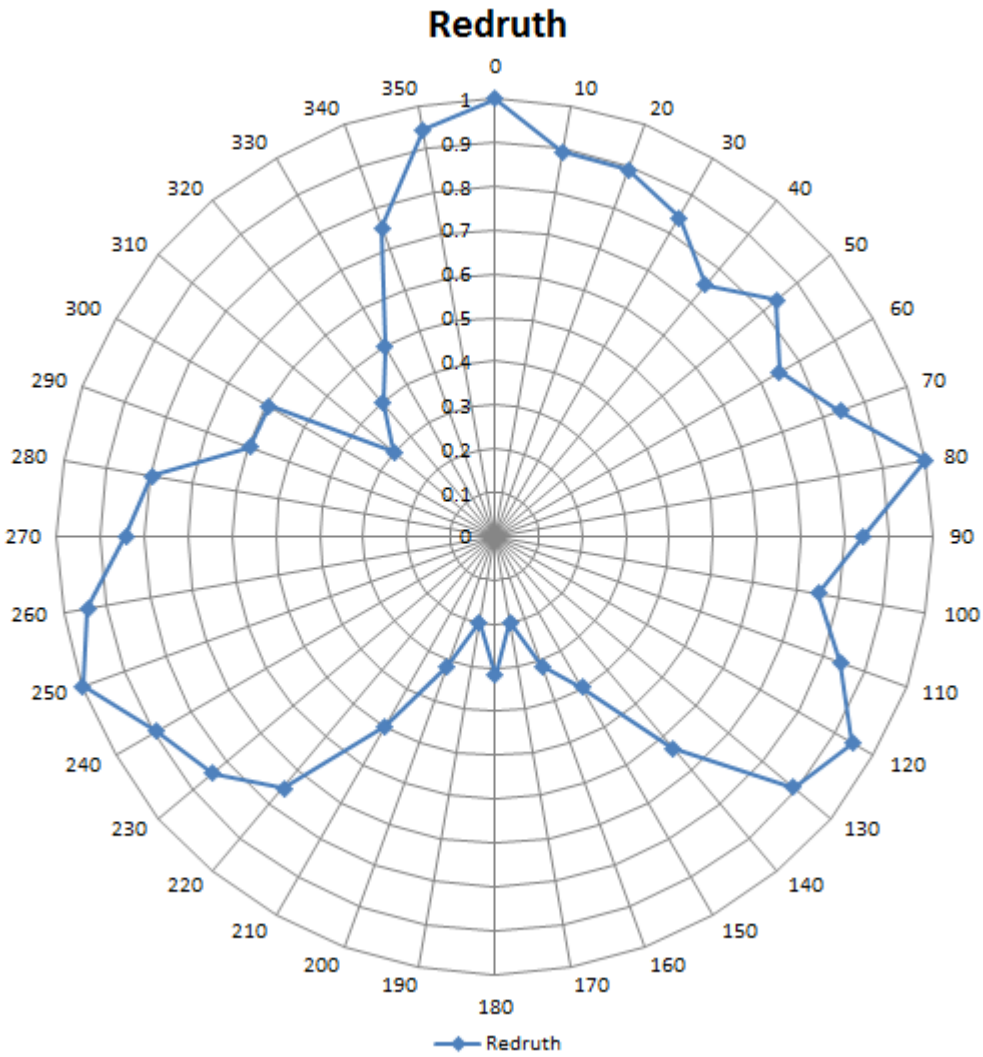
53 Purdown

The following HRP is generated for 11D and is expected to be substantially similar for Channel 11A.



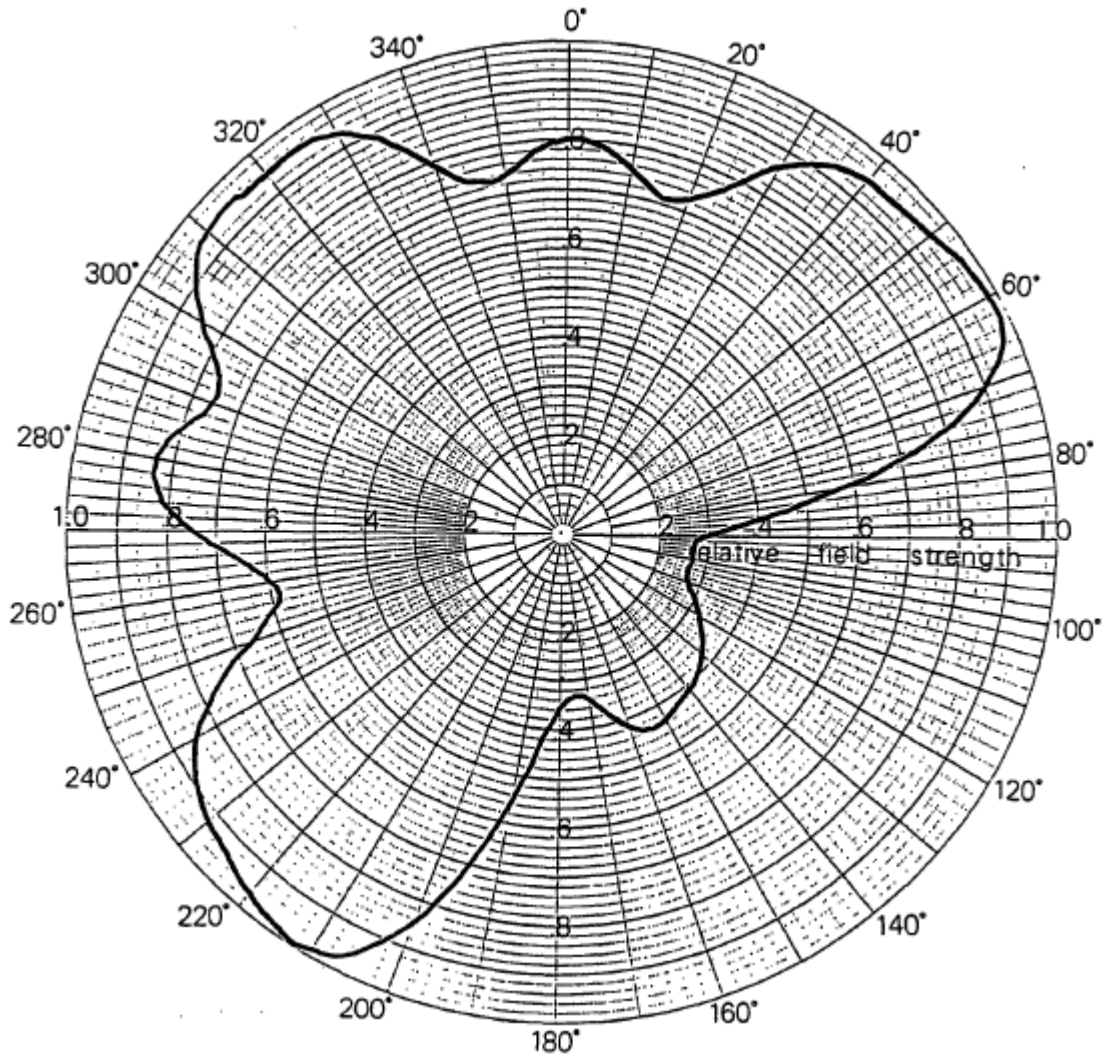
54 Redruth

The following HRP is for a frequency of 225 MHz. The pattern for 11A is expected to be substantially similar.



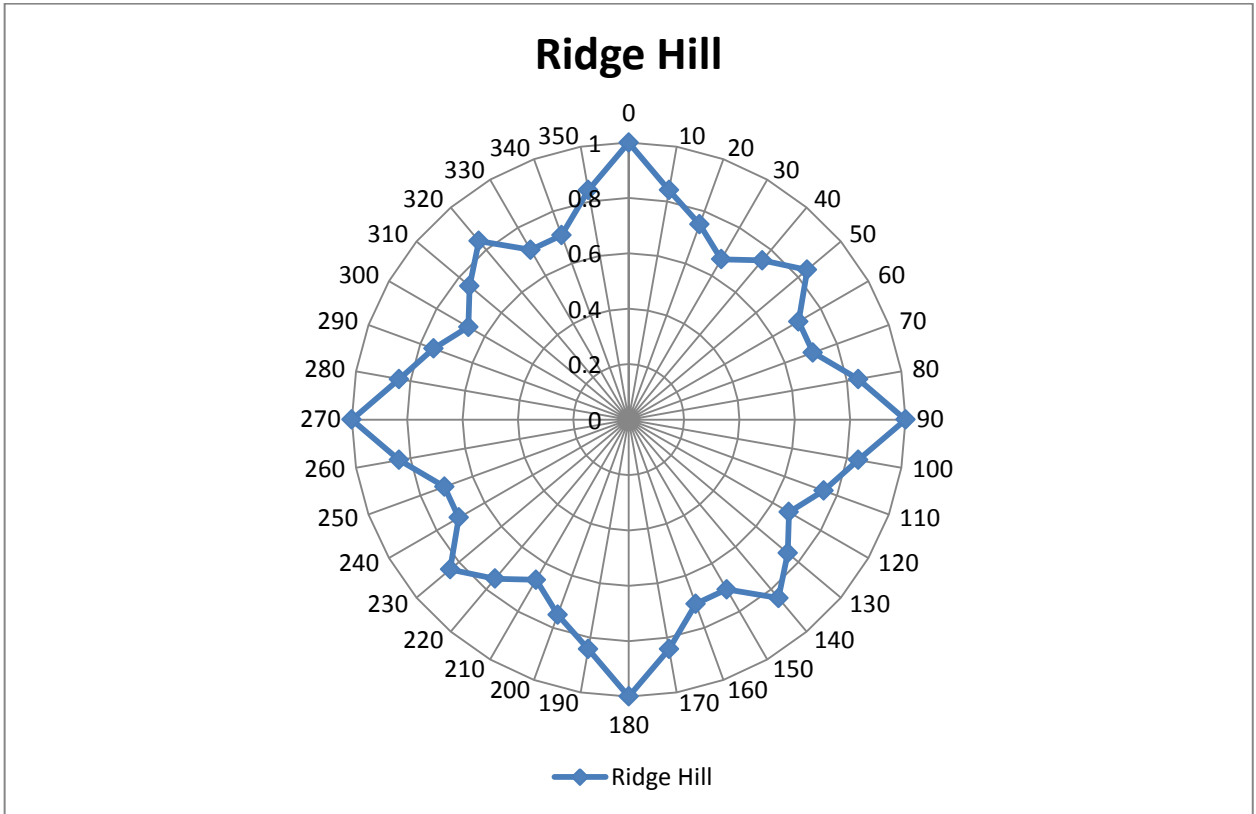
55 Reigate

The following HRP is at 224MHz. The pattern for 11A is expected to be substantially similar.



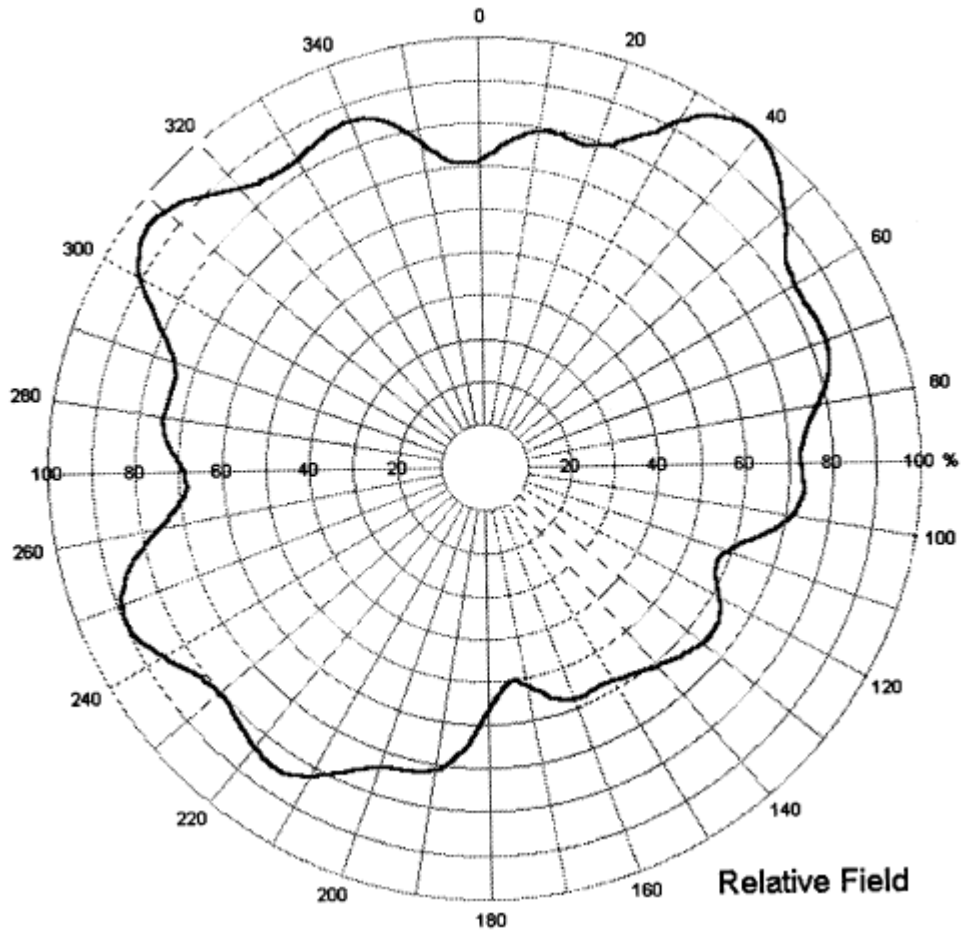
56 Ridge Hill

The following HRP is at 222MHz. The pattern for 11A is expected to be substantially similar.



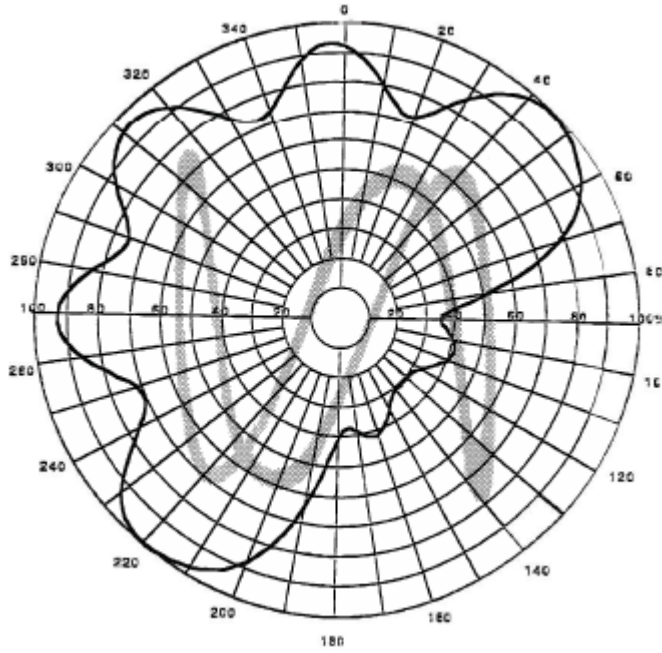
57 Salisbury

The following HRP is at 222.1MHz. The pattern for 11A is expected to be substantially similar.



58 Sandy Heath SC

The following HRP is for 224MHz. The pattern for 11A is expected to be substantially similar.

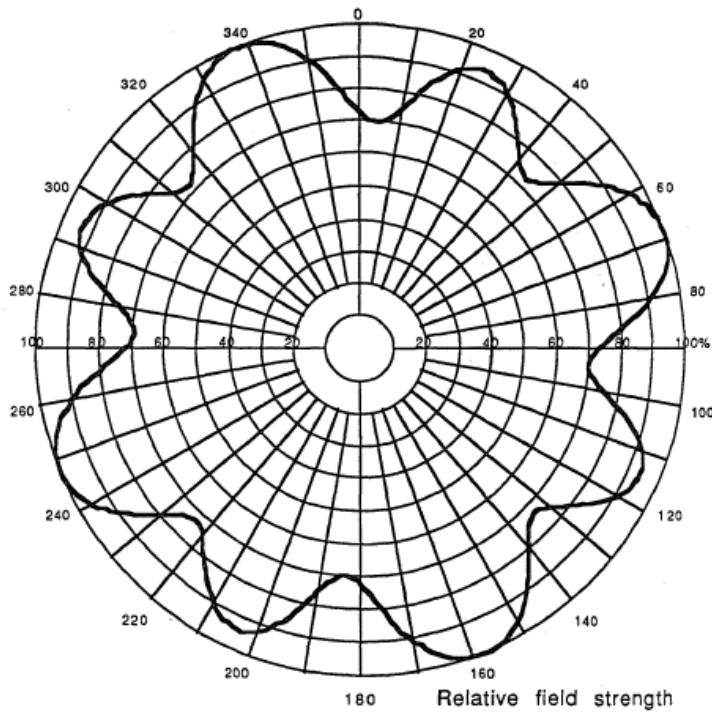


59 Sheffield

The following HRP is for a frequency of 224 MHz. The pattern for 11A is expected to be substantially similar.

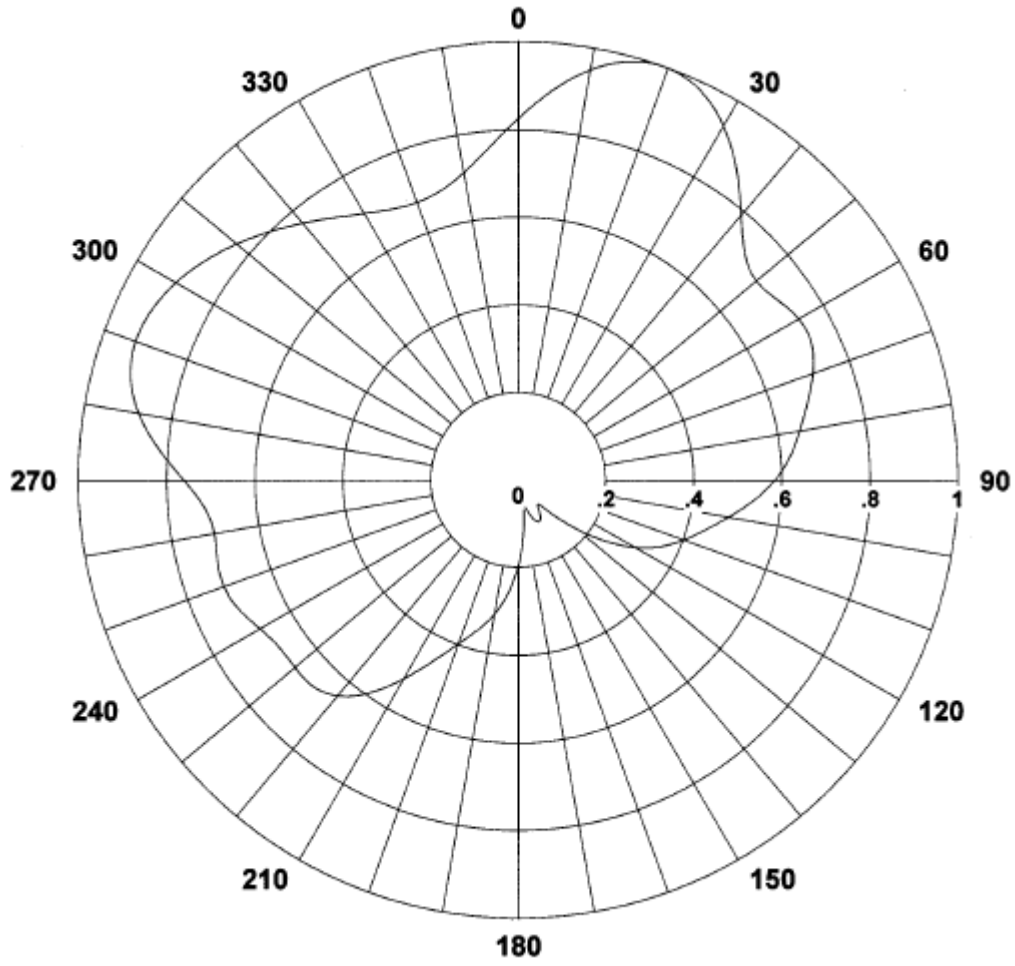
HORIZONTAL RADIATION PATTERN

Station **SHEFFIELD DAB ANTENNA**
Channel Frequency **224** MHz
Type **SHARED WITH FM CROSSBOW ANTENNA**



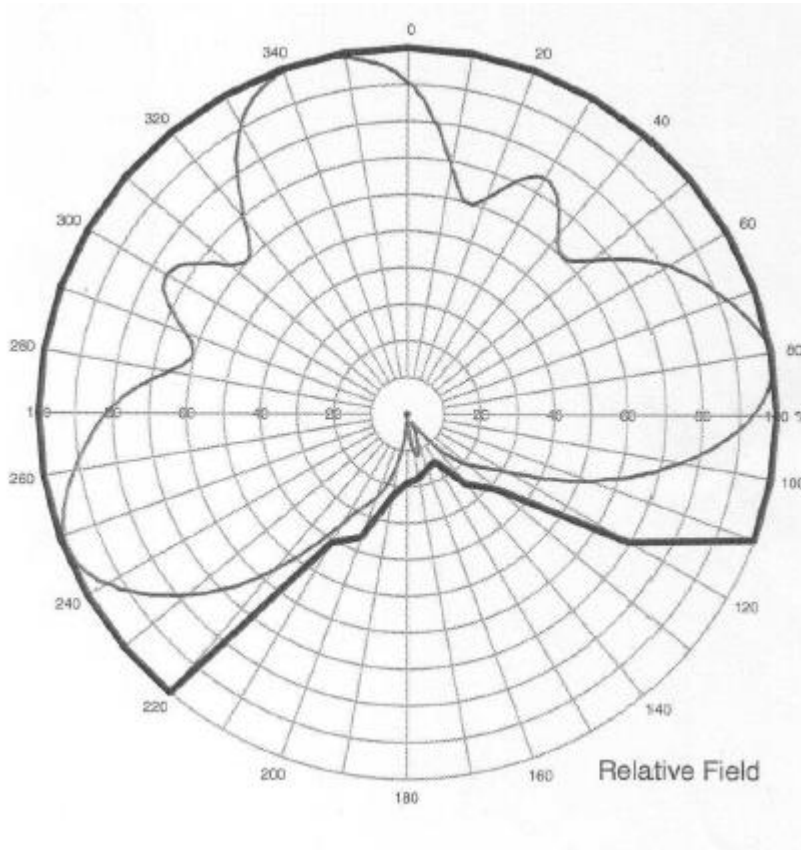
HRP Gain **1.35 power ratio, & 1.3 dB**

60 St Thomas (Exeter)



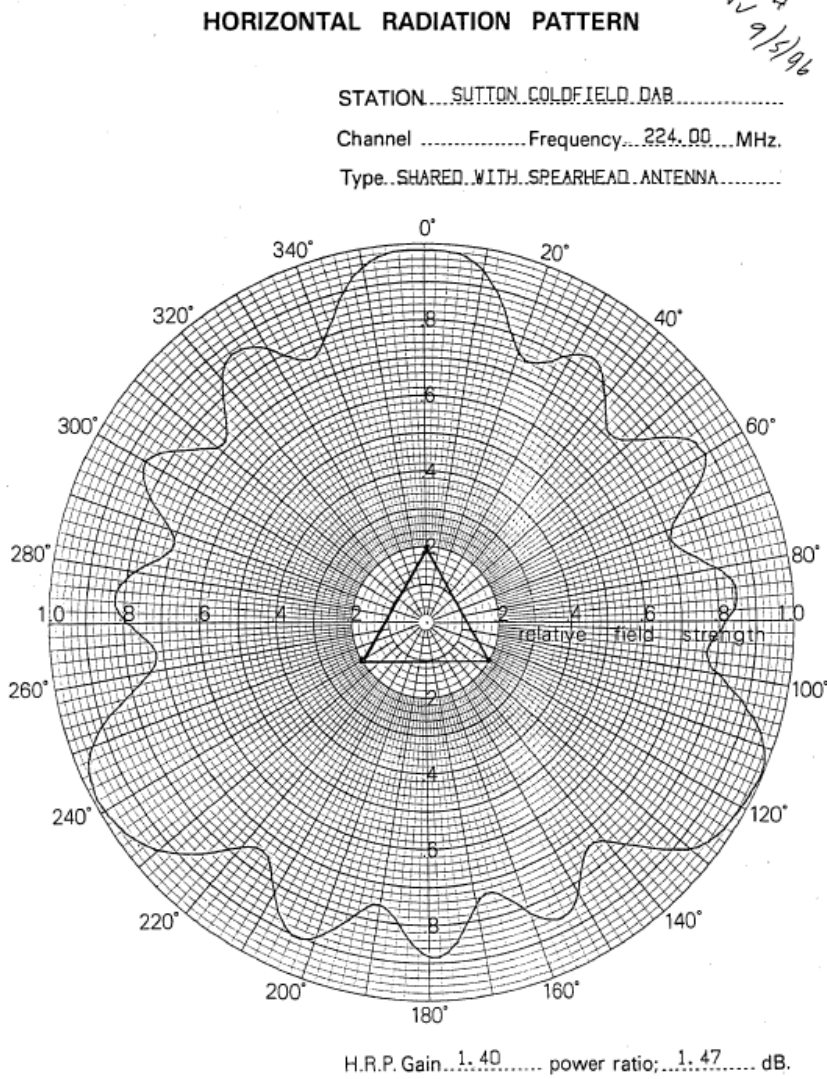
61 Stockland Hill SC

The following HRP is at 222MHz. The pattern for 11A is expected to be substantially similar.



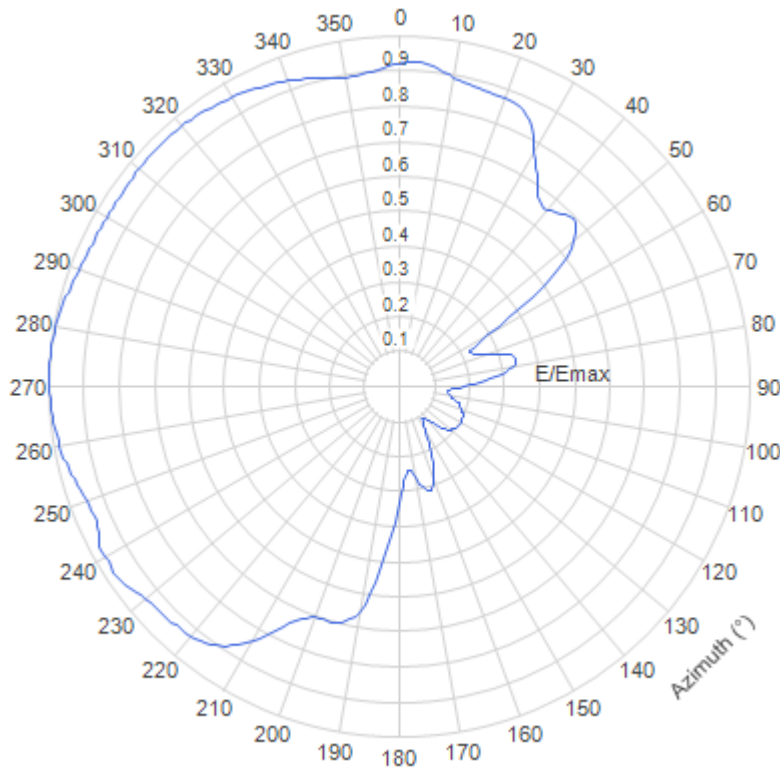
62 Sutton Coldfield SC

The following HRP is for a frequency of 224 MHz. The pattern for 11A is expected to be substantially similar.



63 Tacolneston

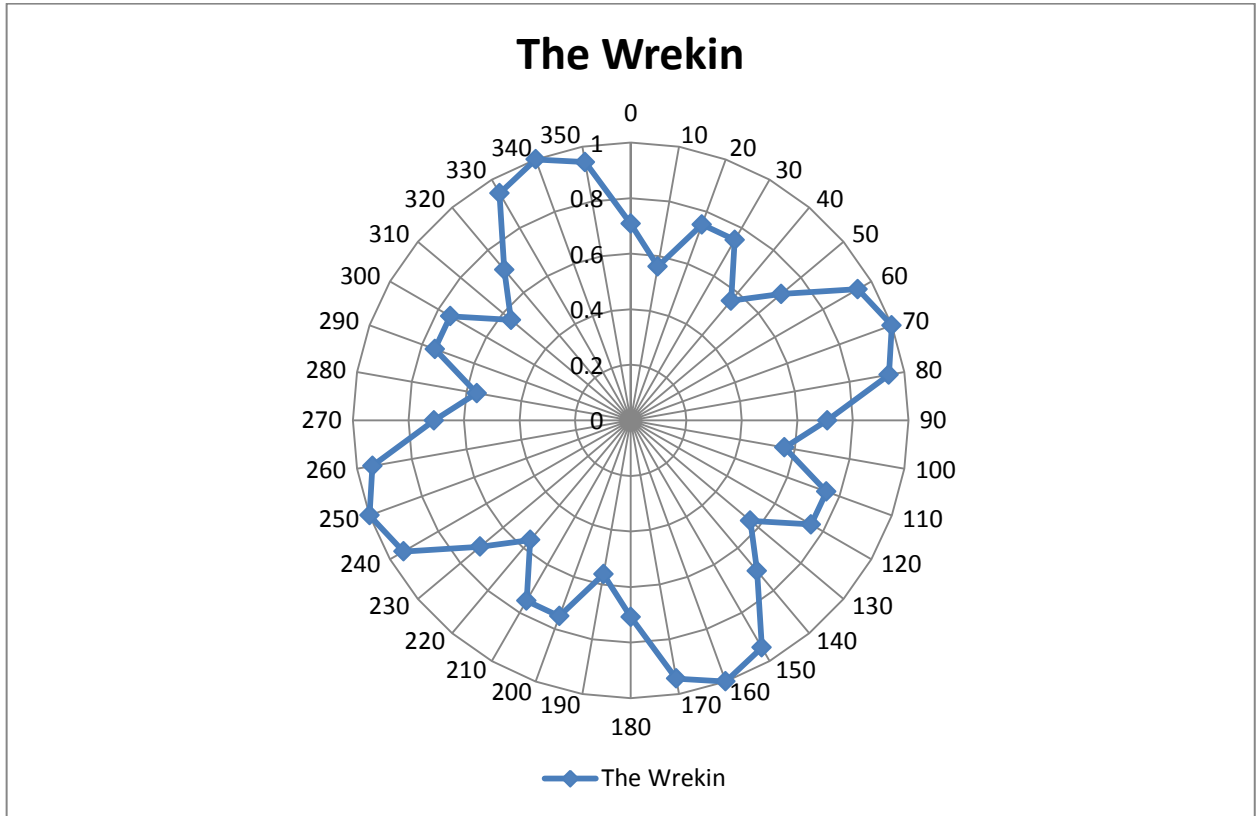
The following HRP is for a frequency of 222 MHz. The pattern for 11A is expected to be substantially similar.



TAC modified DAB 222 MHz (D1) V Pol.ant

64 The Wrekin

The following HRP is at 222MHz. The pattern for 11A is expected to be substantially similar.

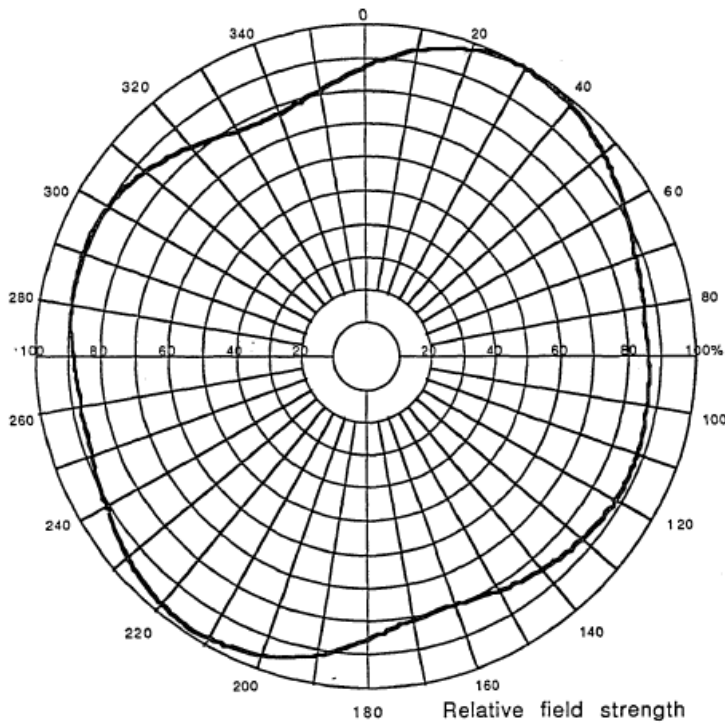


65 Turners Hill (BT)

The following HRP is for a frequency of 224 MHz. The pattern for 11A is expected to be substantially similar.

HORIZONTAL RADIATION PATTERN

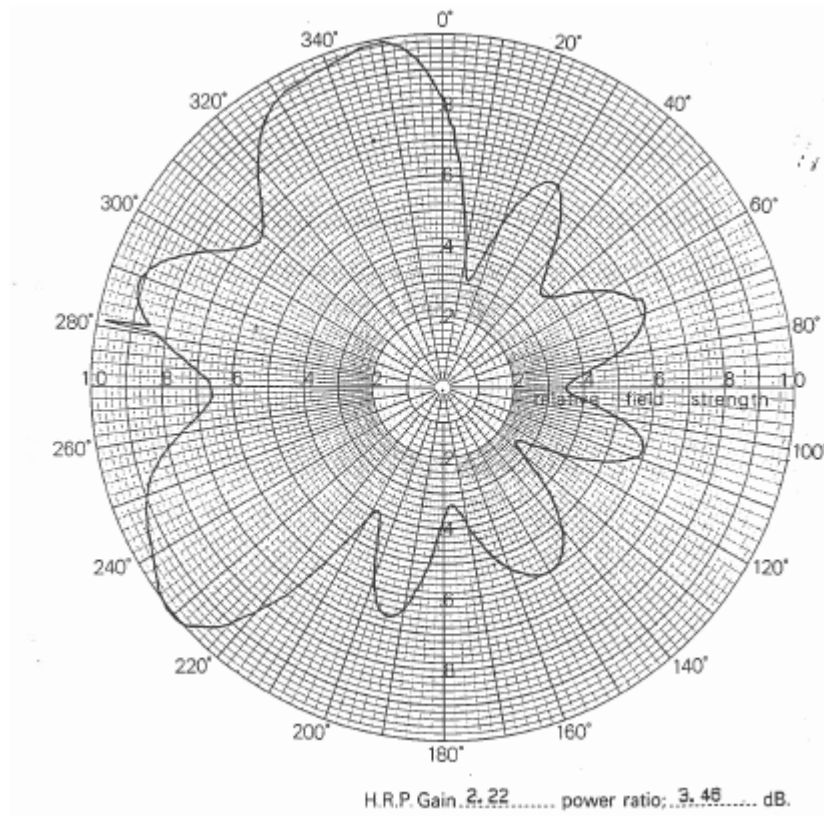
Station **TURNERS HILL DAB ANTENNA**
Channel Frequency **224** MHz
Type **DAB DIPOLES ON POLE**



HRP Gain **1.26** power ratio, & **1.01** dB

66 Waltham

The following HRP is for channel 12B. The pattern for 11A is expected to be substantially similar.

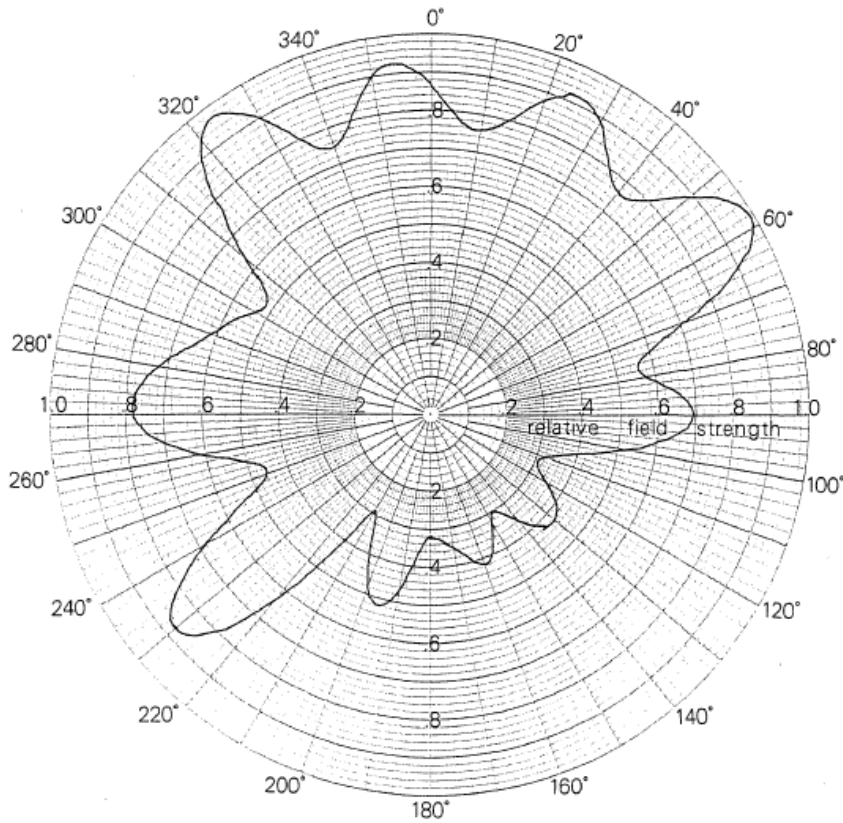


67 Wenvoe

The following HRP is for a frequency of 224 MHz. The pattern for 11A is expected to be substantially similar.

HORIZONTAL RADIATION PATTERN

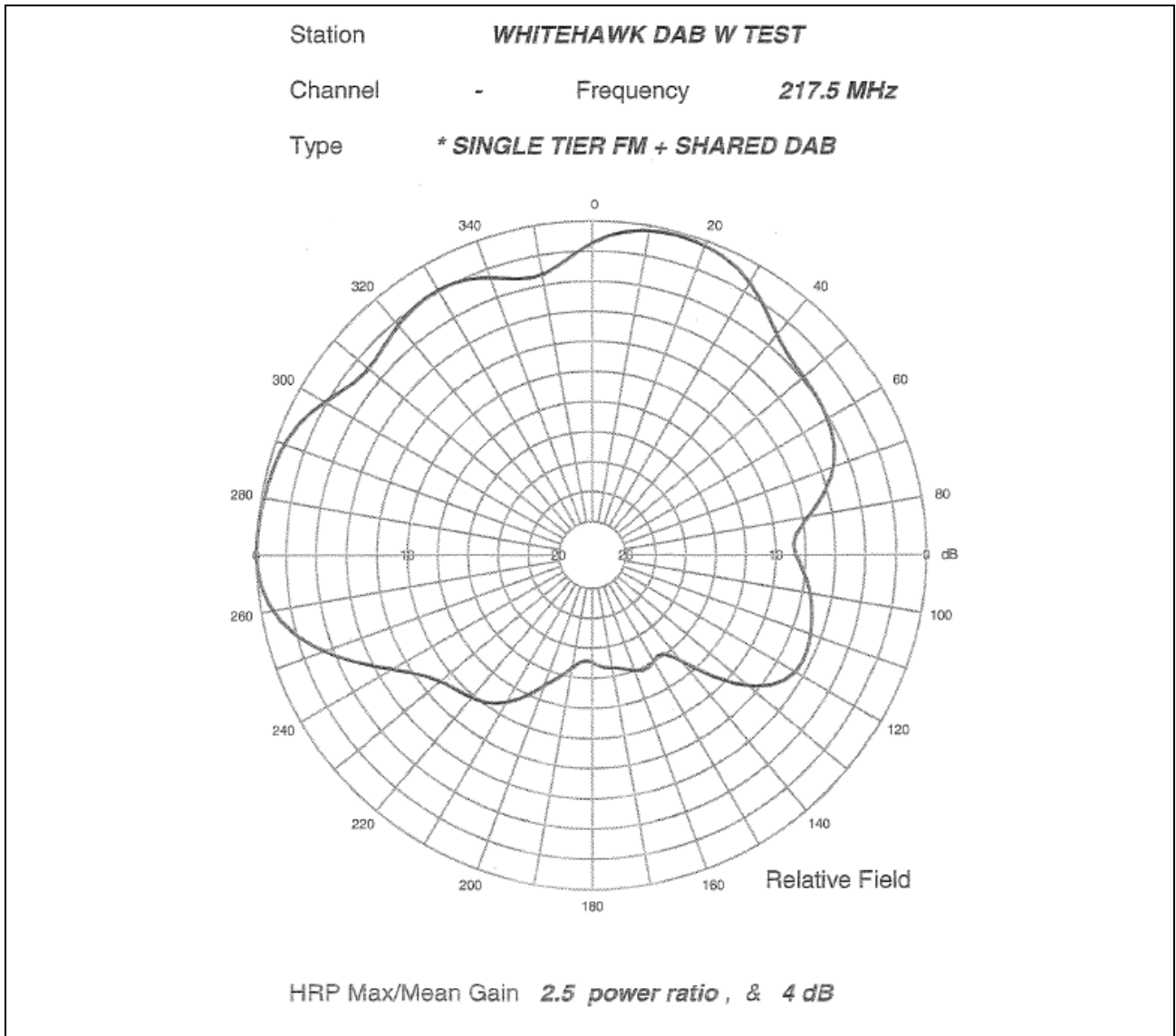
STATION...WENVOE DAB ANTENNA W/TEST.....
Channel Frequency...224.00...MHz.
Type...6..AROUND SHARED WITH SPEARHEAD.....



H.R.P. Gain...2.23..... power ratio;...3.48..... dB.

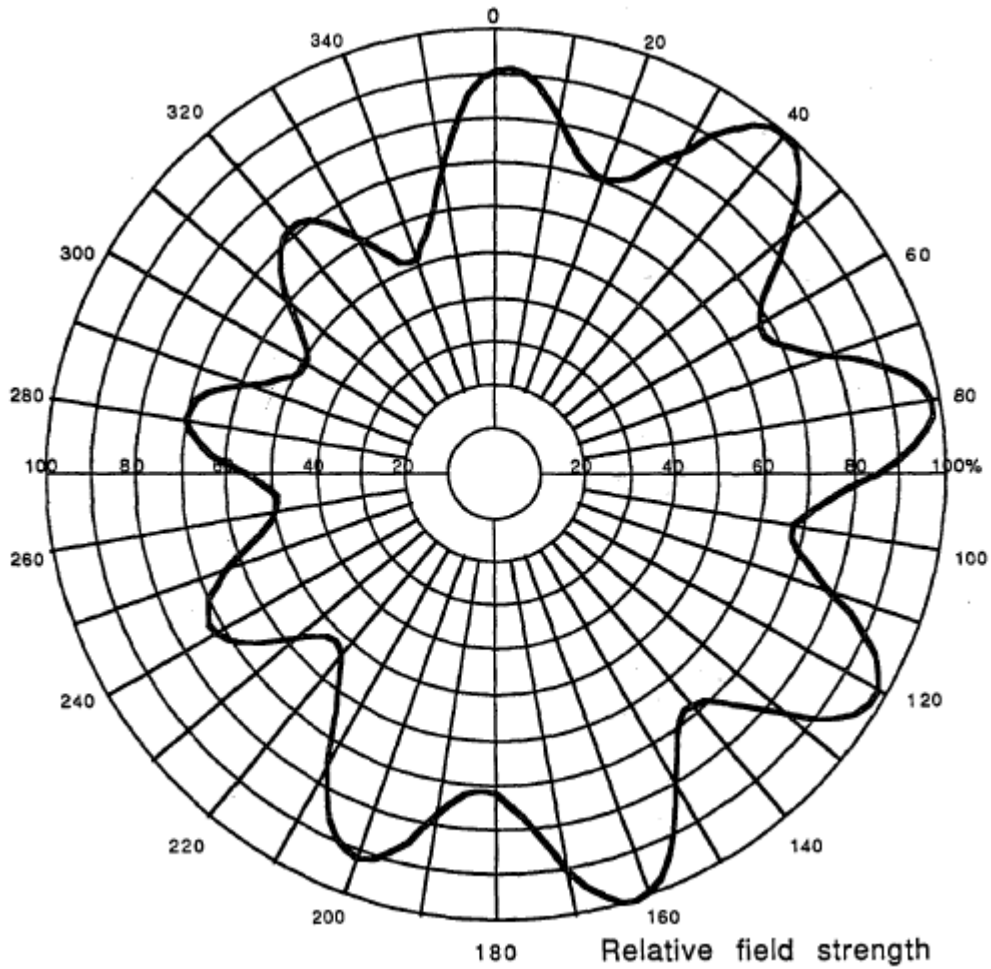
68 Whitehawk Hill

The following HRP is for a frequency of 217.5 MHz. The pattern for 11A is expected to be substantially similar.



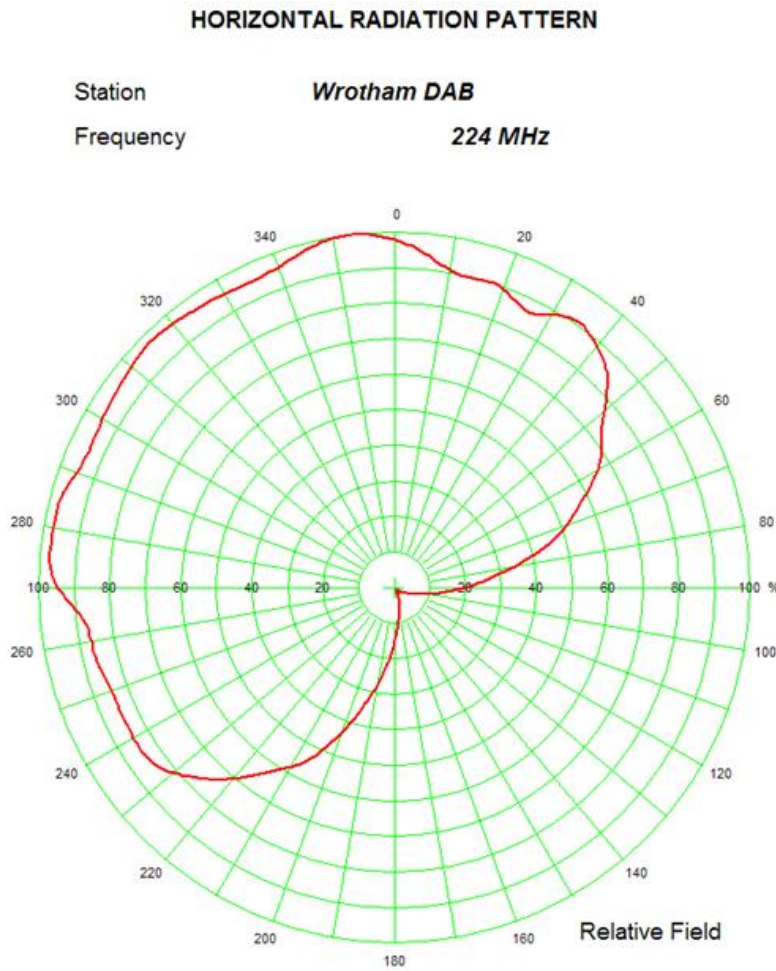
69 Winter Hill SC

The following HRP is for channel 12B (224MHz). The pattern for 11A is expected to be substantially similar.



70 Wrotham

The following HRP is for a frequency of 224 MHz. The pattern for 11A is expected to be substantially similar.



HRP Max/Mean Gain **2 power ratio , & 3 dB**

DAB dipoles on corner of FM antenna

71 Zouches Farm

The following HRP is generated for 224MHz and is expected to be substantially similar for Channel 11A.

