

## Technical Plan – Multiplex L

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	
Location served by L-DTPS	Transmitter station and relay/s	Channel operational start date <sup>1</sup>	Grid reference	UHF chnl	Centre frequency MHz	Aerial height (metres above ground level)	Polarisation (Horizontal or vertical)	Power (kW)	Radiated pattern	Comments
<b>Aberdeen</b>	Durriss	24 April 2017	NO76418994	30	546	157	H	10 kW	Figure 34	To be used until 15 August 2018
		24 April 2017	NO76418994	41	634	157	H	10 kW	Annex 1, Figure A19	Post clearance – must be used from 15 August 2018
<b>Ayr</b>	Darvel	24 April 2017	NS55753413	30	546	80	H	1 kW	Figure 35	To be used until 5 September 2018
		24 April 2017	NS55753413	31	554	80	H	1 kW	Annex 1, Figure A20	Post clearance – must be used from 5 September 2018
<b>Basingstoke</b>	Hannington (Basingstoke)	23 May 2017	SU52745680	32	562	71	H	5 kW	Annex 1, Figure A1	Transitional state – to be used until 24 July 2019
<b>Belfast</b>	Divis	21 July 2014	NW41193098	30	546	93	H	5 kW	Figure 1	To be used until 4 September 2019

<sup>1</sup> As default, this date reflects the 2-year launch deadline for each respective channel, but it is subject to any postponements of launch deadlines for individual channels to which Ofcom has consented.

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	
Location served by L-DTPS	Transmitter station and relay/s	Channel operational start date <sup>1</sup>	Grid reference	UHF chnl	Centre frequency MHz	Aerial height (metres above ground level)	Polarisation (Horizontal or vertical)	Power (kW)	Radiated pattern	Comments
		21 July 2014	NW41193098	36	594	93	H	10 kW	Annex 1, Figure A29	Post-clearance – must be used from 4 September 2019
<b>Birmingham</b>	Brierley Hill	28 Feb 2015	SO91608560	33	570	105	V	0.2 kW	Annex 1, Figure A2	
	Sutton Coldfield	28 Feb 2015	SK11350032	48	690	132	H	10 kW	Annex 1, Figure A3	
		28 Feb 2015	SK11350032	36	594	132	H	1 kW	Annex 1, Figure A4	
<b>Brighton</b>	Whitehawk Hill	28 Aug 2014	TQ32960452	54	738	42.5	V	0.4 kW	Figure 4	To be used until 16 October 2019
		28 Aug 2014	TQ32960452	40	626	43	V	0.4 kW	Annex 1, Figure A30	Post clearance – must be used from 16 October 2019
<b>Bristol</b>	Bristol Ilchester Crescent	8 Oct 2014	ST57707005	30	546	43	V	0.02 kW	Figure 5	To be used until 5 June 2019
		8 Oct 2014	ST57707005	37	602	33	V	0.02 kW	Annex 1, Figure A26	Post-clearance – must be used from 5 June 2019

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	
Location served by L-DTPS	Transmitter station and relay/s	Channel operational start date <sup>1</sup>	Grid reference	UHF chnl	Centre frequency MHz	Aerial height (metres above ground level)	Polarisation (Horizontal or vertical)	Power (kW)	Radiated pattern	Comments
	Bristol Kings' Weston	8 Oct 2014	ST54727751	30	546	43	V	0.02 kW	Figure 6	To be used until 19 June 2019
		8 Oct 2014	ST54727751	31	554	40	V	0.02 kW	Annex 1, Figure A27	Post-clearance – must be used from 19 June 2019
	Mendip	8 Oct 2014	ST56434883	51	714	144	H	10 kW	Figure 7	To be used until 19 June 2019
		8 October 2014	ST56434883	30	546	144	H	5 kW	Annex 1, Figure A28	Post-clearance – must be used from 19 June 2019
<b>Cambridge</b>	Madingley	18 Aug 2015	TL39245942	35	586	45	H	2.2387 kW	Annex 1, Figure A15	
<b>Cardiff</b>	Wenvoe	15 Oct 2014	ST11077416	51	714	129	H	10 kW	Figure 8	To be used until 15 May 2019
		15 Oct 2014	ST11077416	37	602	118	H	10 kW	Annex 1, Figure A25	Post-clearance – must be used from 15 May 2019
<b>Carlisle</b>	Caldbeck	25 Jul 2017	NY29954259	56	754	165	H	5 kW	Figure 37	

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	
Location served by L-DTPS	Transmitter station and relay/s	Channel operational start date <sup>1</sup>	Grid reference	UHF chnl	Centre frequency MHz	Aerial height (metres above ground level)	Polarisation (Horizontal or vertical)	Power (kW)	Radiated pattern	Comments
<b>Dundee</b>	Angus	24 Apr 2017	NO39484078	48	690	117	H	1 kW	Figure 38	To be used until 27 November 2019
		24 Apr 2017	NO39484078	34	578	117	V	1 kW	Annex 1, Figure A37	Post-clearance – must be used from 27 November 2019
	Tay Bridge	8 Mar 2017	NO43072843	51	714	43	V	0.01 kW	Figure 39	To be used until 27 November 2019
		8 March 2017	NO43072843	32	562	43	V	0.01 kW	Annex 1, Figure A36	Post-clearance – must be used from 27 November 2019
<b>Edinburgh</b>	Craigkelly	12 Jan 2015	NT23338724	30	546	65	H	5 kW	Figure 9	To be used until 3 October 2018
		12 Jan 2015	NT23338724	32	562	65	H	5 kW	Annex 1, Figure A22	Post clearance – must be used from 3 October 2018
<b>Glasgow</b>	Black Hill (Glasgow Petal)	2 Jun 2014	NS83116456	51	714	154	H	5 kW	Figure 10	To be used until 3 October 2018
		2 Jun 2014	NS83116456	30	546	154	H	10 kW	Annex 1, Figure A21	Post clearance – must be used from 3 October 2018

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	
Location served by L-DTPS	Transmitter station and relay/s	Channel operational start date <sup>1</sup>	Grid reference	UHF chnl	Centre frequency MHz	Aerial height (metres above ground level)	Polarisation (Horizontal or vertical)	Power (kW)	Radiated pattern	Comments
<b>Grimsby</b>	Belmont	26 Nov 2013	TF21828365	27	522	222	H	5 kW	Figure 11	To be used until 23 October 2019
		26 Nov 2013	TF21828365	32	562	222	H	5 kW	Annex 1, Figure A38	Transitional state – to be used until 4 March 2020
<b>Guildford</b>	Guildford	31 Jul 2017	SU97474861	33	570	45	V	0.5 kW	Annex 1, Figure A5	
<b>Leeds</b>	Beecroft Hill	6 Nov 2014	SE23723509	56	754	43	V	0.02 kW	Figure 12	To be used until 23 October 2019
		6 Nov 2014	SE23723509	39	618	33	V	0.02 kW	Annex 1, Figure A31	Post-clearance – must be used from 23 October 2019
	Emley Moor	6 Nov 2014	SE22291288	56	754	258	H	5 kW	Figure 13	To be used until 23 October 2019
		6 Nov 2014	SE22291288	39	618	258	H	5 kW	Annex 1, Figure A32	Post-clearance – must be used from 23 October 2019
<b>Liverpool</b>	Storeton	4 Dec 2014	SJ31448416	30	546	43	V	0.06 kW	Figure 14	

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	
Location served by L-DTPS	Transmitter station and relay/s	Channel operational start date <sup>1</sup>	Grid reference	UHF chnl	Centre frequency MHz	Aerial height (metres above ground level)	Polarisation (Horizontal or vertical)	Power (kW)	Radiated pattern	Comments
	Winter Hill (Liverpool Petal)	4 Dec 2014	SD66051446	56	754	145	H	4 kW	Annex 1, Figure A6	To be used until 23 October 2019
		4 Dec 2014	SD66051446	21	474	145	H	3 kW	Annex 1, Figure A6	Post-clearance – must be used from 23 October 2019
London	Croydon	31 Mar 2014	TQ33206960	35	586	105	H	4 kW	Annex 1, Figure A7	
	Crystal Palace	31 Mar 2014	TQ33947122	35	586	127	H	34 kW	Annex 1, Figure A8	
Maidstone	Bluebell Hill	10 Jul 2017	TQ75736134	27	522	44	H	1 kW	Figure 41	To be used until 19 July 2018
		10 July 2017	TQ75736134	21	474	44	H	1 kW	Annex 1, Figure A17	Post clearance – must be used from 19 July 2018
	Tunbridge Wells	10 Jul 2017	TQ60734399	48	690	45	V	0.4 kW	Figure 42	To be used until 19 July 2018
		10 July 2017	TQ60734399	39	618	45	V	0.4 kW	Annex 1, Figure A18	Post clearance – must be used from 19 July 2018

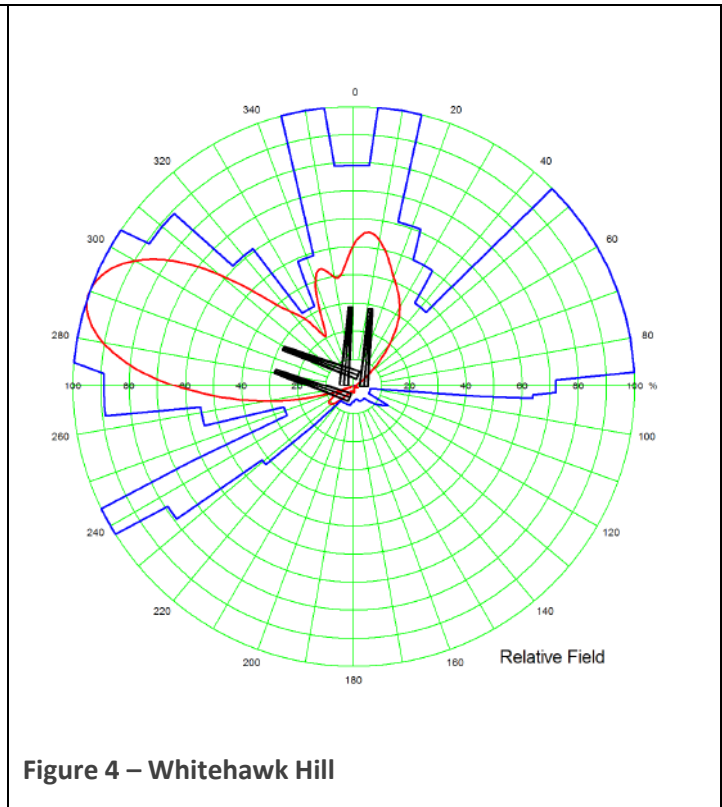
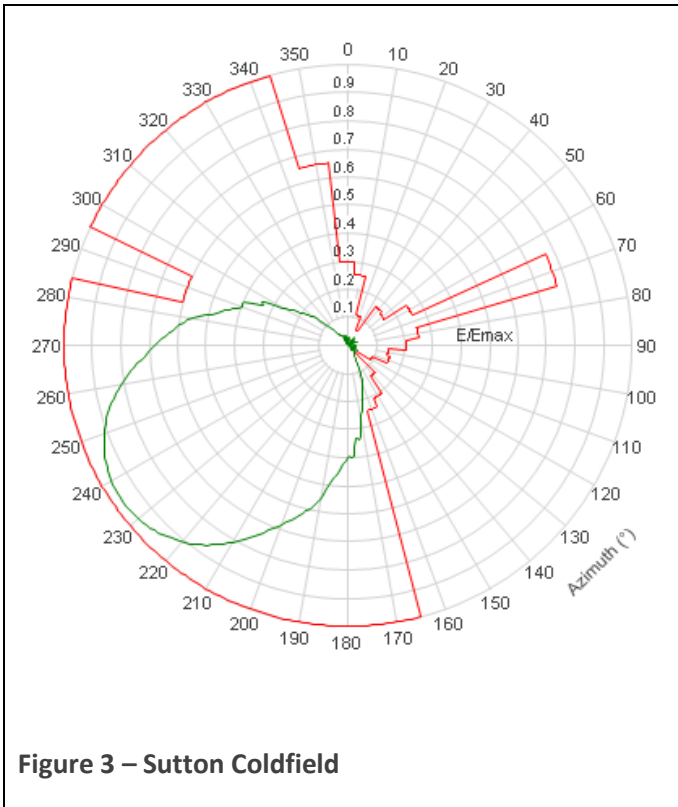
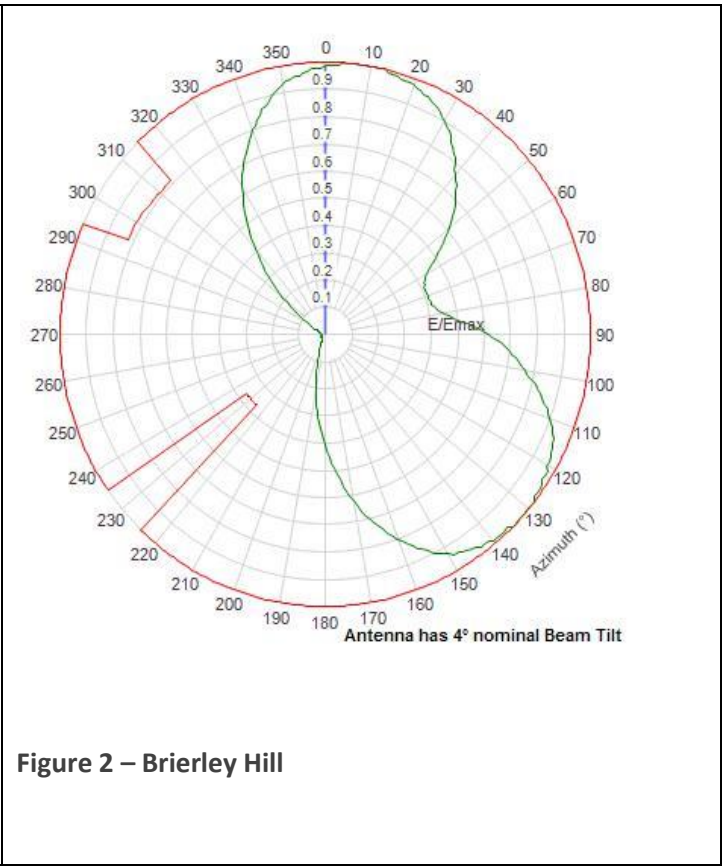
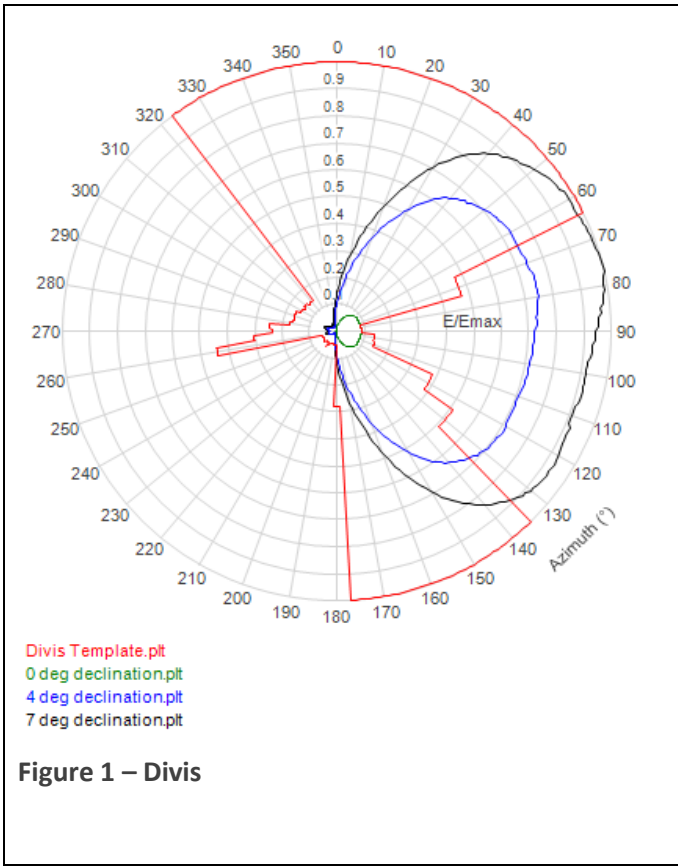
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	
Location served by L-DTPS	Transmitter station and relay/s	Channel operational start date <sup>1</sup>	Grid reference	UHF chnl	Centre frequency MHz	Aerial height (metres above ground level)	Polarisation (Horizontal or vertical)	Power (kW)	Radiated pattern	Comments
<b>Manchester</b>	Winter Hill (Manchester Petal)	31 May 2015	SD66051446	56	754	145	H	4 kW	Annex 1, Figure A9	To be used until 23 October 2019
		31 May 2015	SD66051446	24	498	145	H	2 kW	Annex 1, Figure A9	Post-clearance – must be used from 23 October 2019
<b>Middlesbrough</b>	Bilsdale (Middlesbrough Petal)	31 March 2017	SE55319622	24	498	200	H	5 kW	Figure 28 Figure 29	To be used until 30 October 2019
		31 March 2017	SE55319622	30	546	200	H	7.4 kW	Annex 1, Figure A34	Post-clearance – must be used from 30 October 2019
<b>Mold</b>	Moel Y Parc	26 Apr 2017	SJ12337013	56	754	115	H	2 kW	Figure 30	To be used until 27 February 2019
		26 April 2017	SJ12337013	27	522	118	H	2.5 kW	Annex 1, Figure A23	Post clearance – must be used from 27 February 2019
<b>Newcastle</b>	Pontop Pike	12 Nov 2015	NZ14785270	56	754	73	H	5 kW	Figure 19	To be used until 30 October 2019

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	
Location served by L-DTPS	Transmitter station and relay/s	Channel operational start date <sup>1</sup>	Grid reference	UHF chnl	Centre frequency MHz	Aerial height (metres above ground level)	Polarisation (Horizontal or vertical)	Power (kW)	Radiated pattern	Comments
		12 Nov 2015	NZ14785270	33	570	68	H	5 kW	Annex 1, Figure A35	Post-clearance – must be used from 30 October 2019
Norwich	Tacolneston	24 Mar 2014	TM13059572	57	762	104	H	10 kW	Figure 20	To be used until 17 July 2018
		24 Mar 2014	TM13059572	32	562	104	H	10 kW	Annex 1, Figure A16	Post clearance – must be used from 17 July 2018
Nottingham	Nottingham	27 May 2014	SK50354354	50	706	41	V	0.1 kW	Figure 21	
	Waltham	27 May 2014	SK80942333	26	514	151	H	5 kW	Figure 22	
		17 Apr 2015	SP56711054	22	482	59	H	10 kW	Annex 1, Figure A10	
		17 Apr 2015	SP56711054	46	674	59	H	10 kW	Annex 1, Figure A11	
Preston	Winter Hill (Blackpool/Preston Petal)	24 Aug 2017	SD66051446	56	754	145	H	2 kW	Annex 1, Figure A12	Transitional state - to be used until 23 October 2019
		24 Aug 2017	SD66051446	40	626	145	H	4 kW	Annex 1, Figure A12	Post-clearance – must be used from 23 October 2019



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Location served by L-DTPS	Transmitter station and relay/s	Channel operational start date <sup>1</sup>	Grid reference	UHF chnl	Centre frequency MHz	Aerial height (metres above ground level)	Polarisation (Horizontal or vertical)	Power (kW)	Radiated pattern	Comments
Reading	Hannington (Reading)	10 May 2017	SU52745680	34	578	71	H	10 kW	Figure 43	To be used until 1 May 2019
		10 May 2017	SU52745680	34	578	71	H	20 kW	Annex 1, Figure A24	Post-clearance – must be used from 1 May 2019
Salisbury	Salisbury	31 July 2017	SU13642852	23	490	45	V	0.2 kW	Annex 1, Figure A13	
Scarborough <sup>2</sup>	Olivers Mount	31 July 2017	TA04018691	56	754	33	V	0.2kW	Figure 31	
Sheffield	Sheffield	23 Sept 2014	SK32448706	55	746	43	V	0.1 kW	Figure 25	To be used until 23 October 2019
		23 Sept 2014	SK32448706	35	586	43	V	0.4 kW	Annex 1, Figure A33	Post-clearance – must be used from 23 October 2019
Southampton	Rowridge	26 Nov 2014	SZ44728654	37	602	89	H	10 kW	Annex 1, Figure A14	
Swansea	Kilvey Hill	12 Jul 2016	SS6718 9401	30	546	45	V	0.1 kW	Figure 32	
York	Bilborough	26 June 2017	SE5425447210	39	618	40	H	4 kW	Figure 33	

<sup>2</sup> Baseline technical parameters subject to finalisation



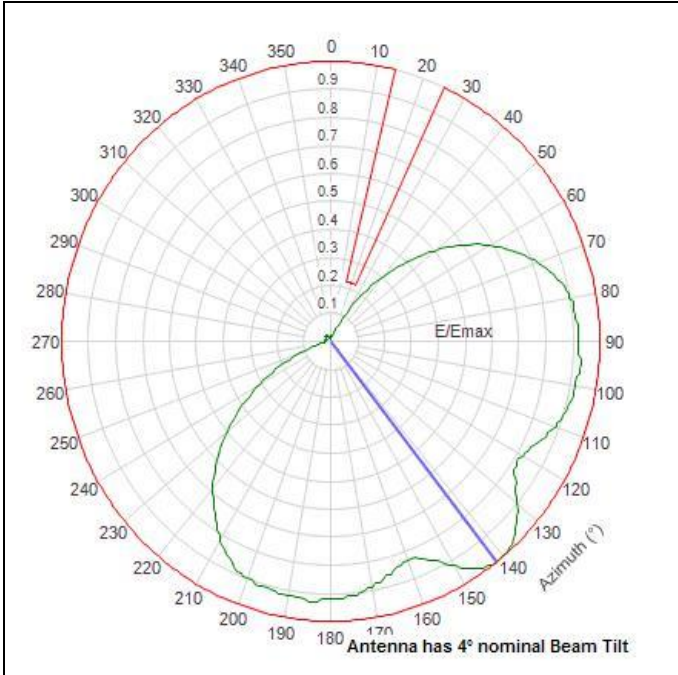


Figure 5 – Bristol Ilchester Crescent

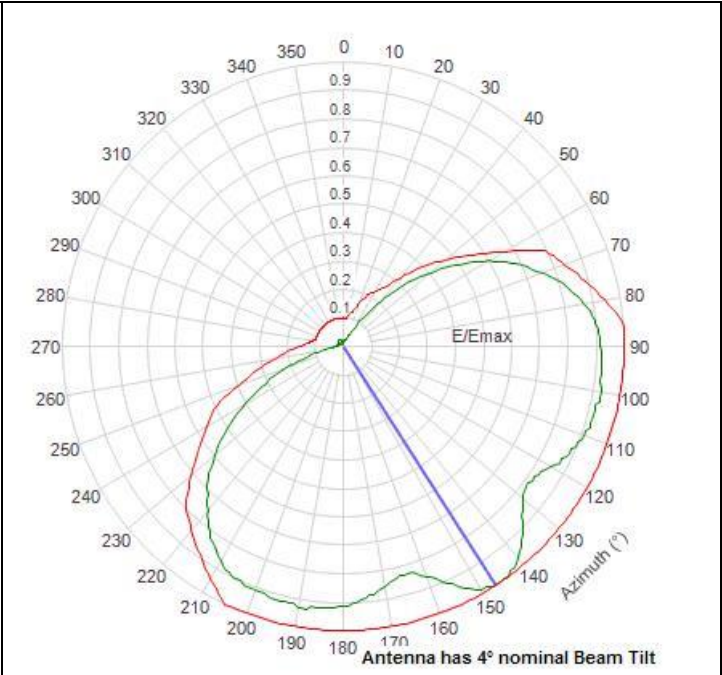


Figure 6 – Bristol Kings' Weston

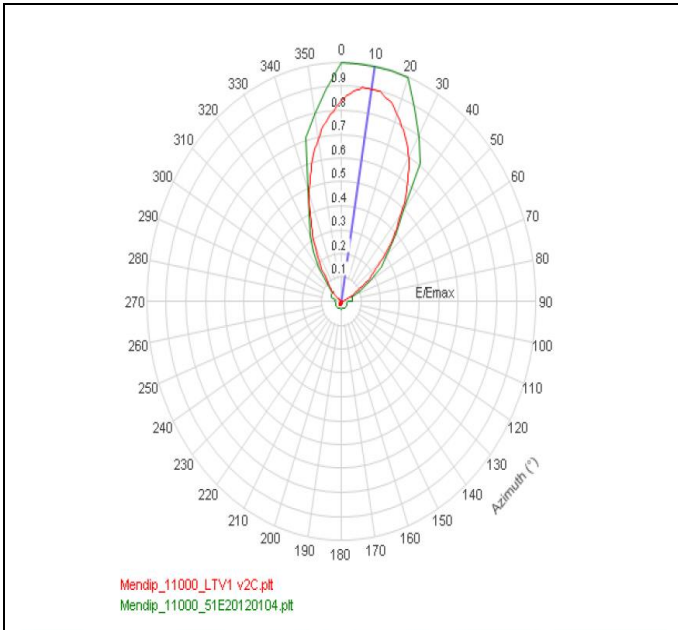


Figure 7 – Mendip

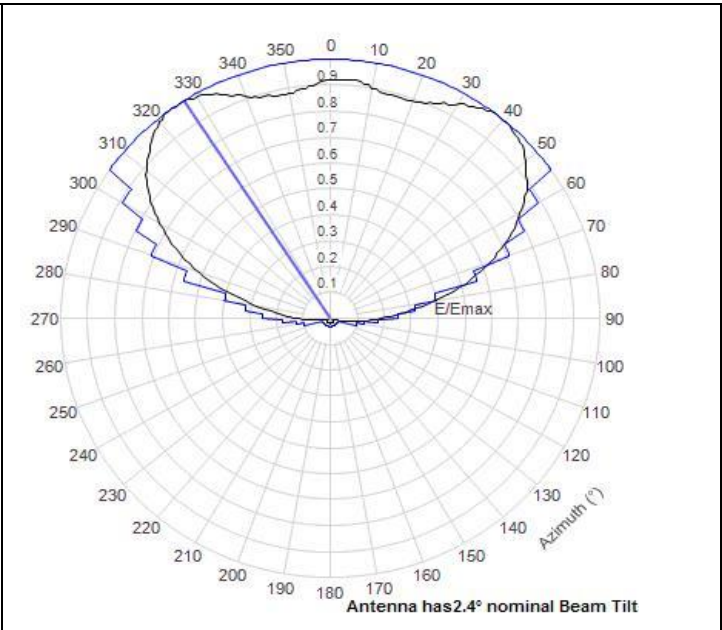


Figure 8 – Wenvoe

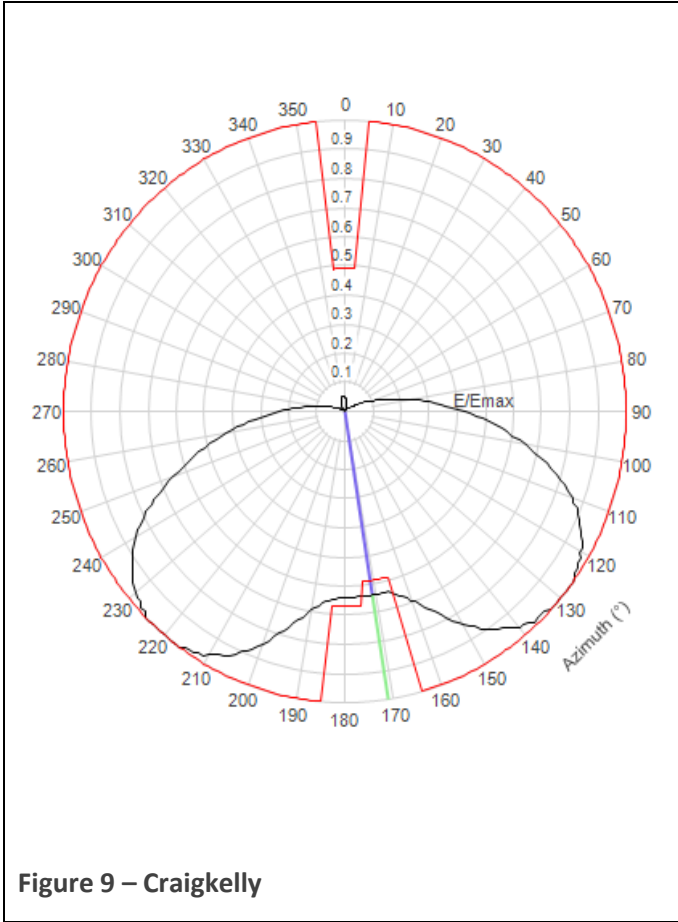


Figure 9 – Craigkelly

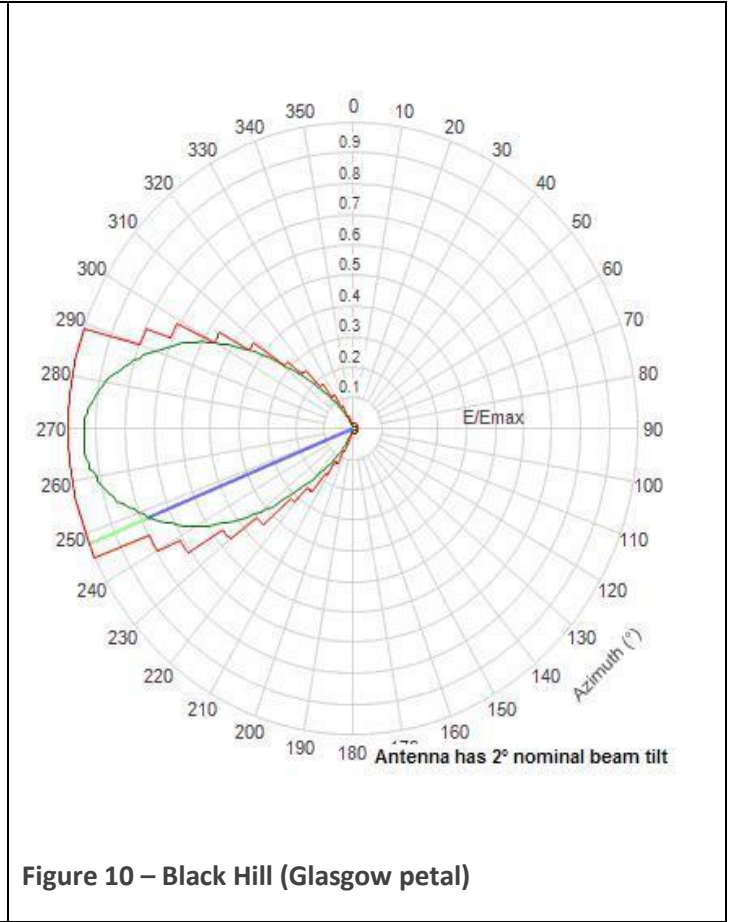


Figure 10 – Black Hill (Glasgow petal)

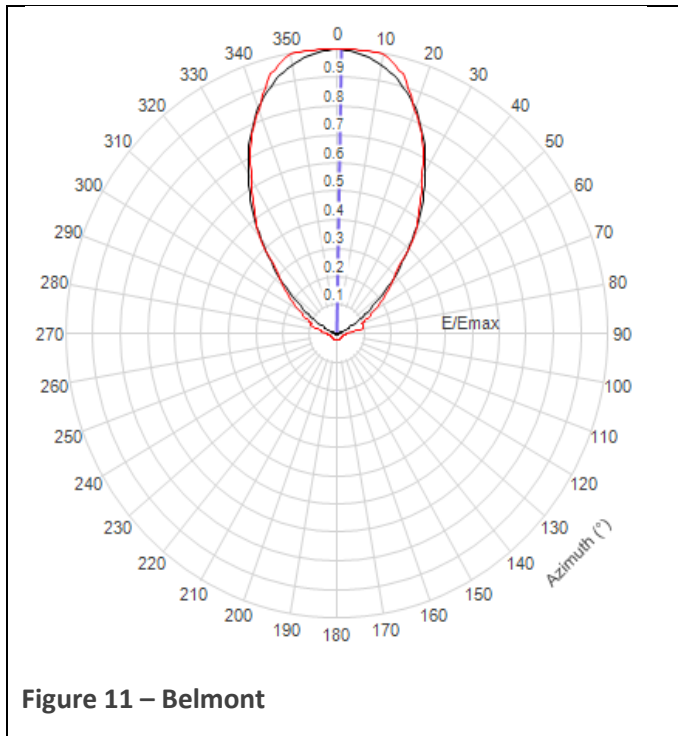


Figure 11 – Belmont

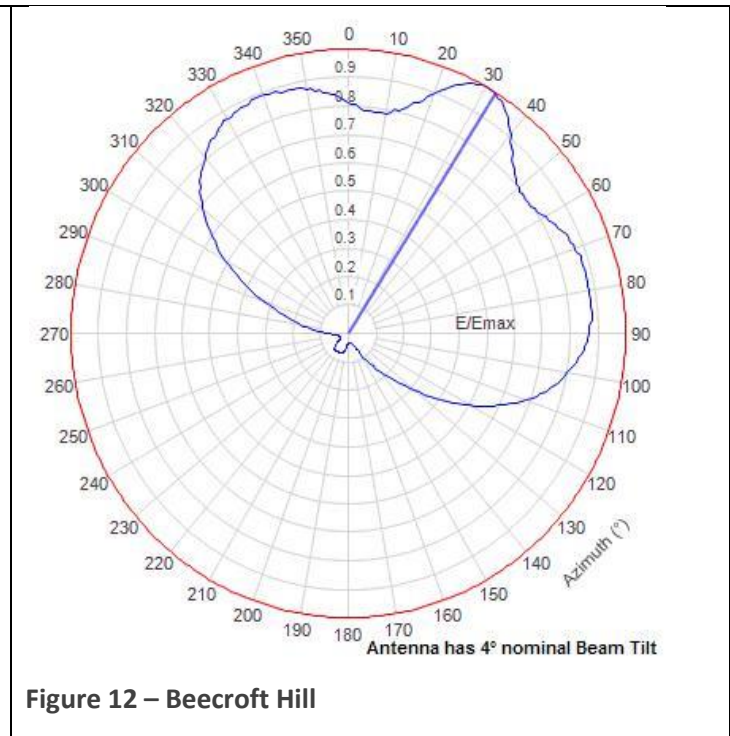


Figure 12 – Beecroft Hill

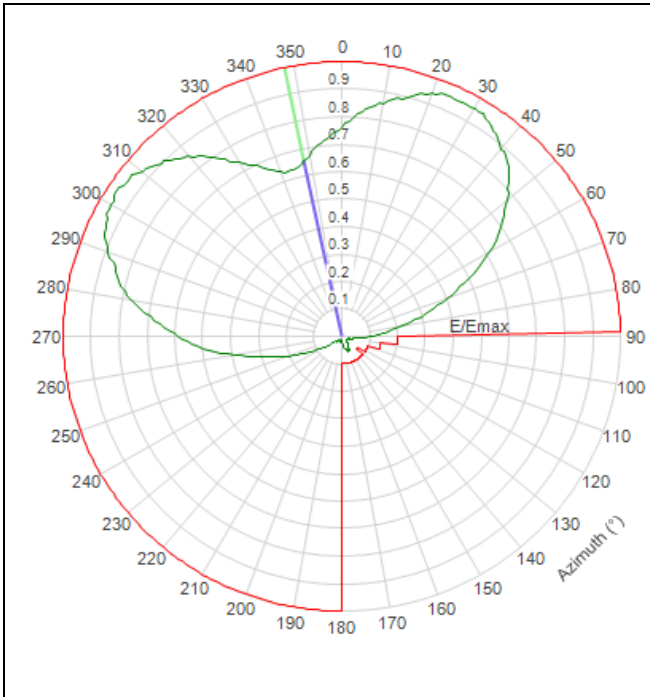


Figure 13 – Emley Moor

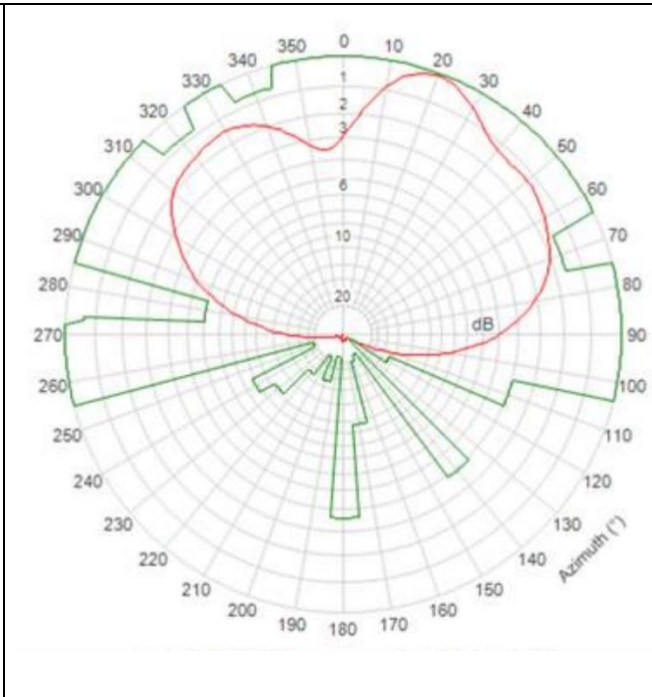


Figure 14 – Storeton

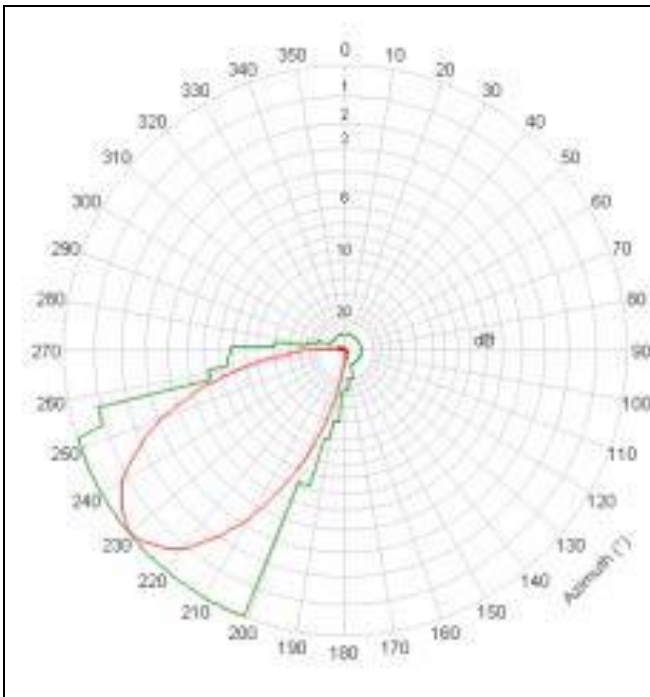


Figure 15 – Winter Hill (Liverpool petal)

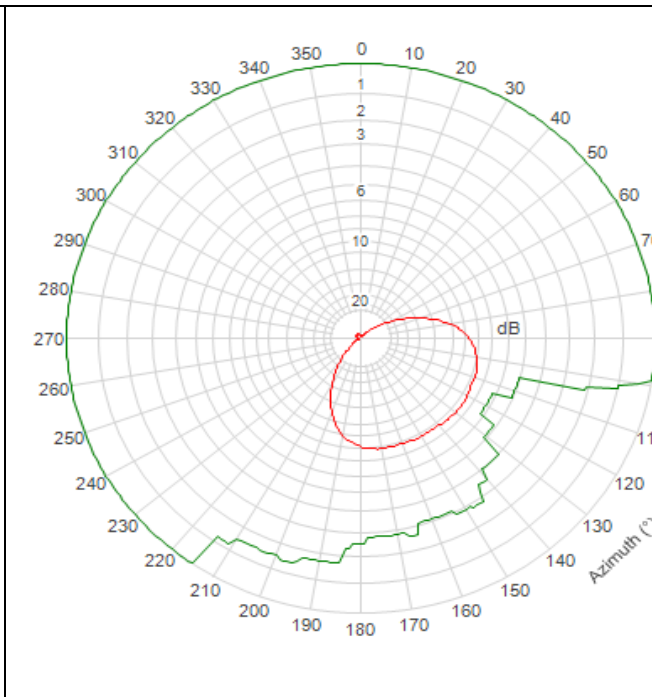
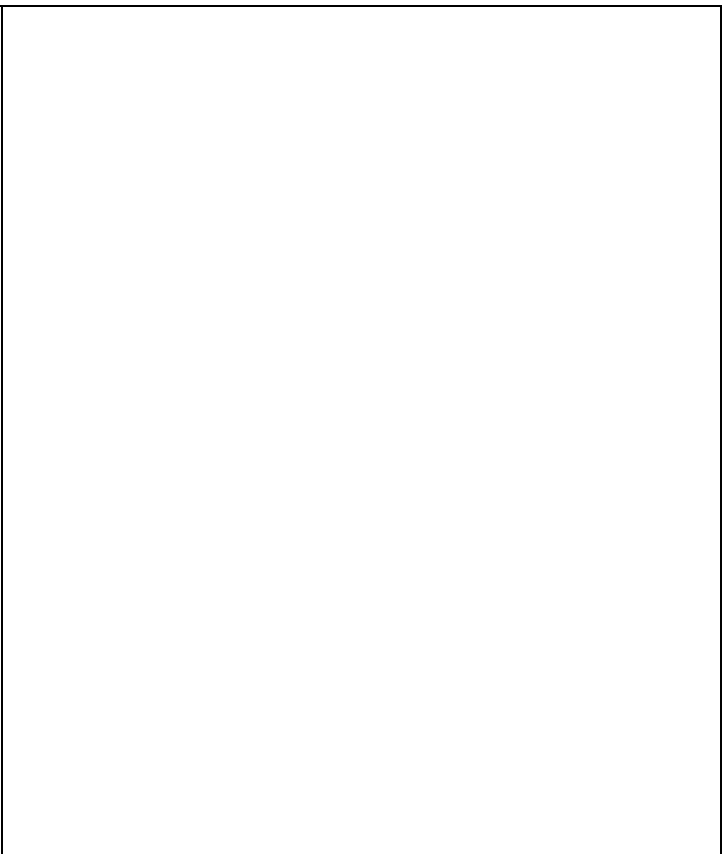
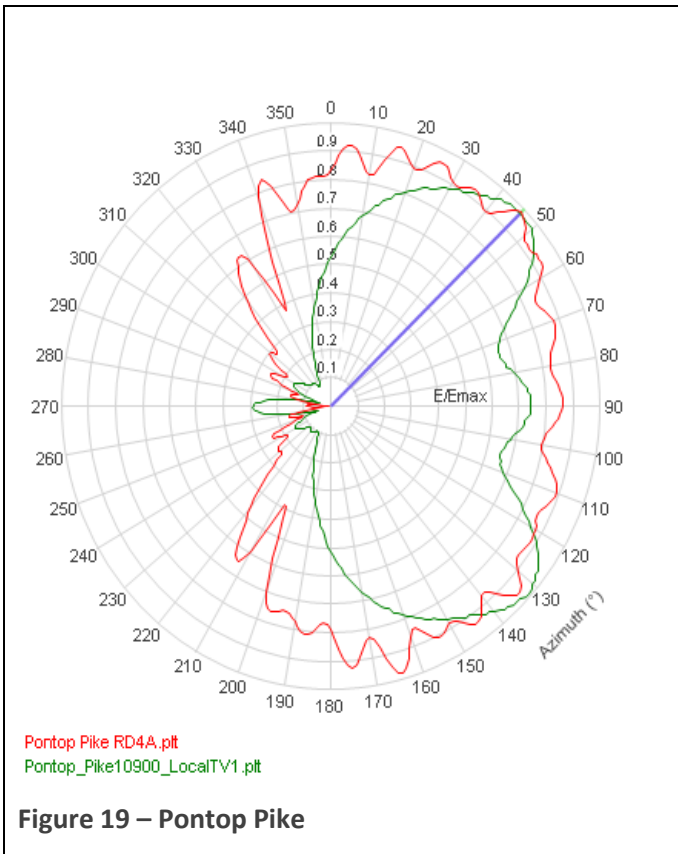
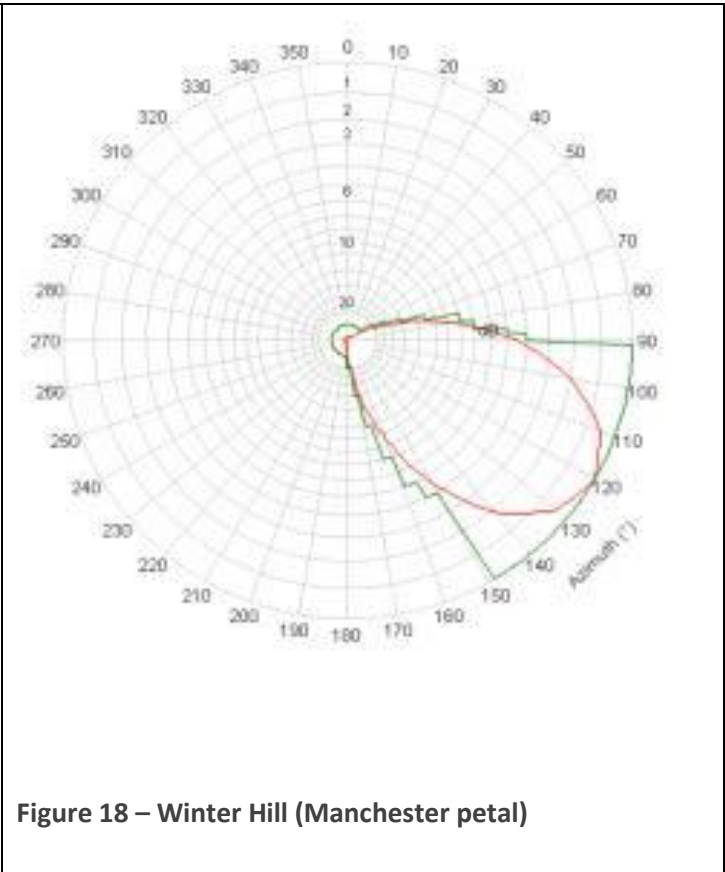
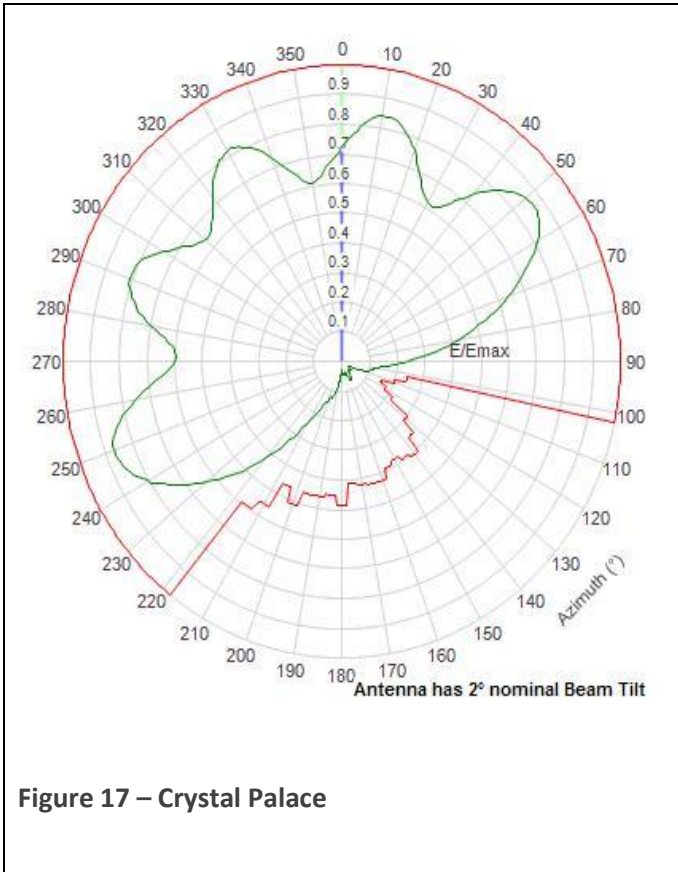
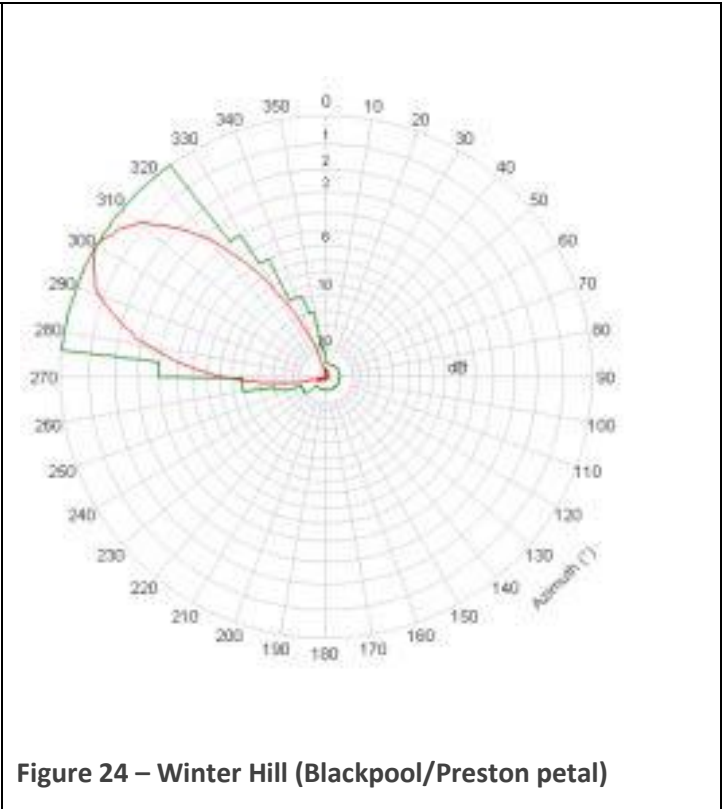
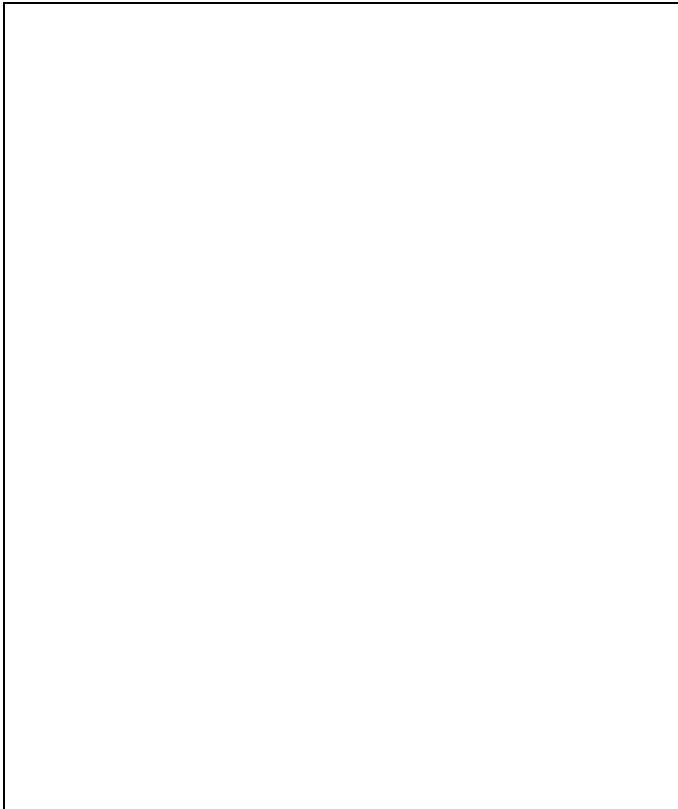
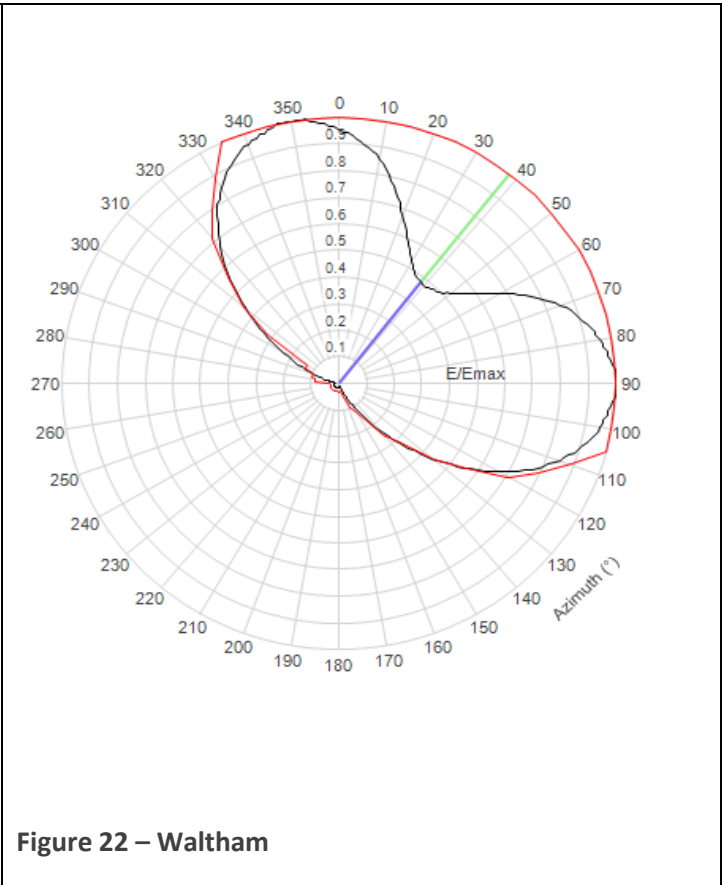
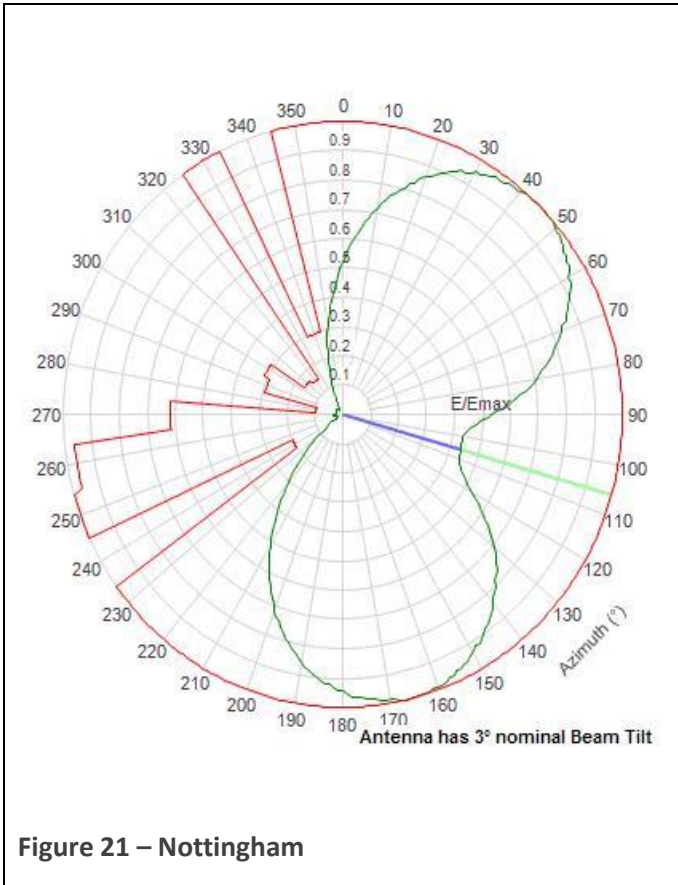


Figure 16 – Croydon





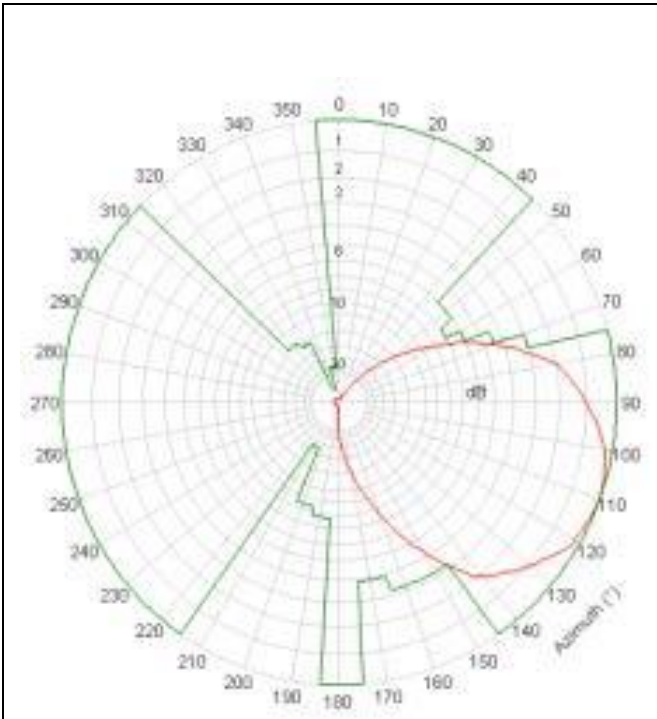


Figure 25 – Sheffield

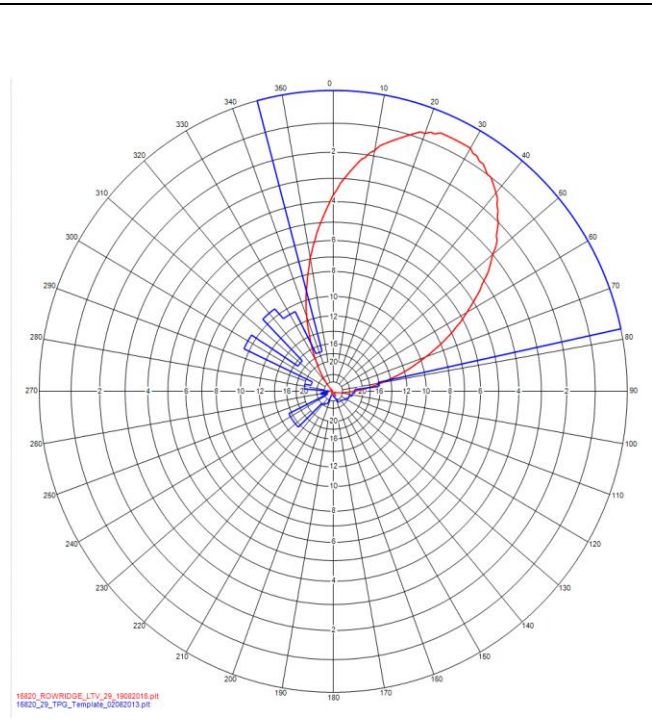


Figure 26 – Rowridge

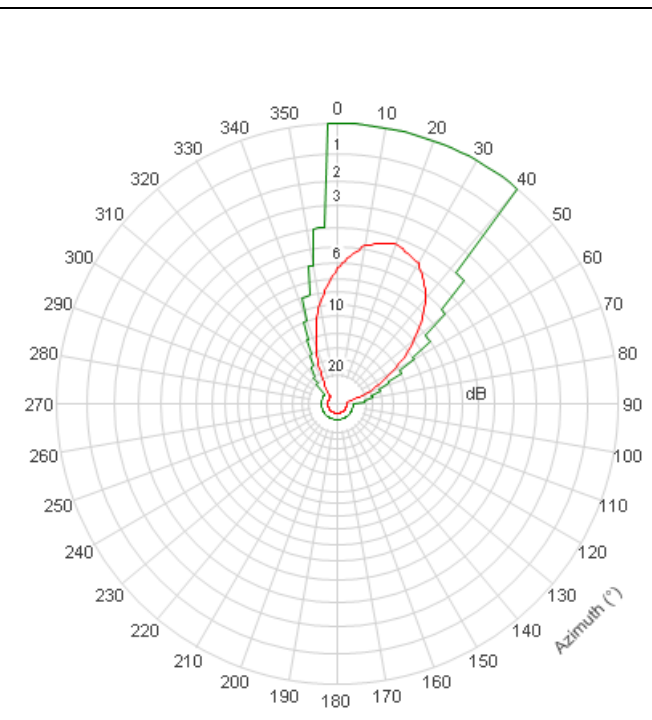
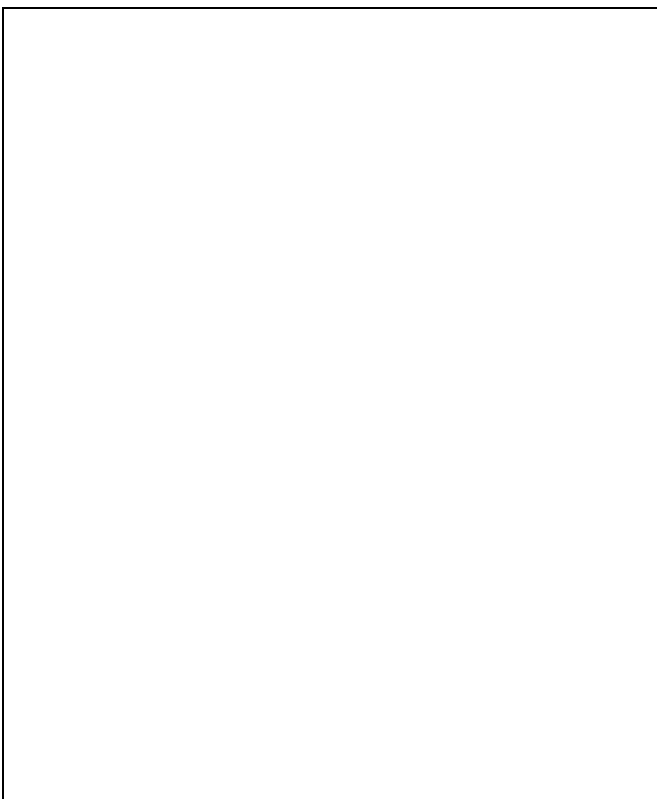


Figure 28 – Middlesbrough Horizontal Radiation Pattern



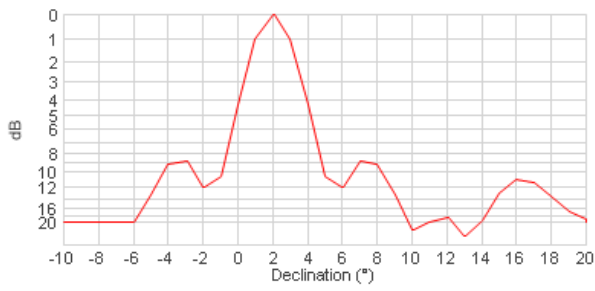


Figure 29 – Middlesbrough Vertical Radiation Pattern

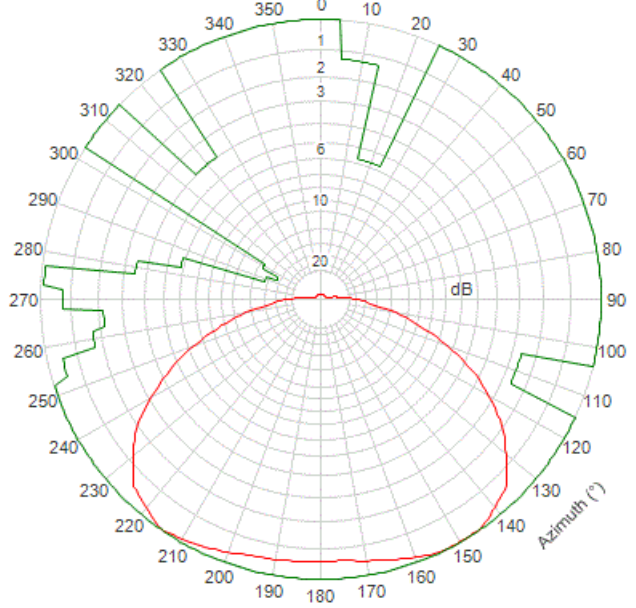


Figure 30 – Mold

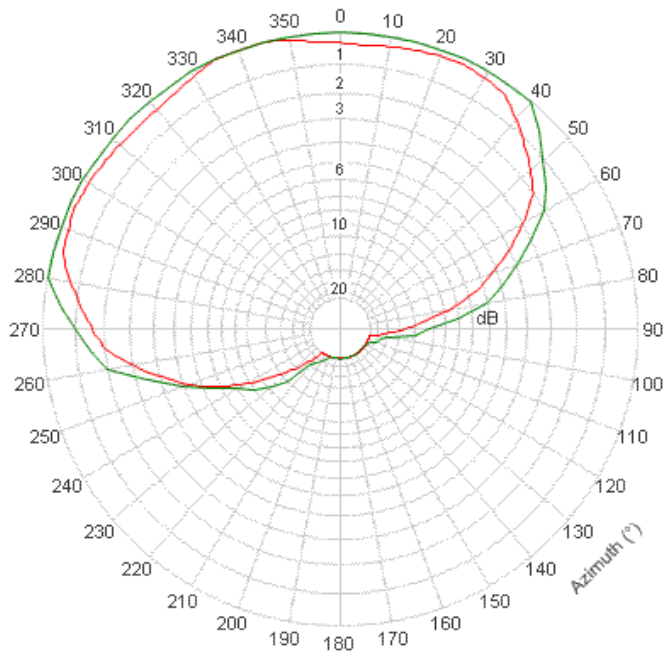


Figure 31 – Scarborough

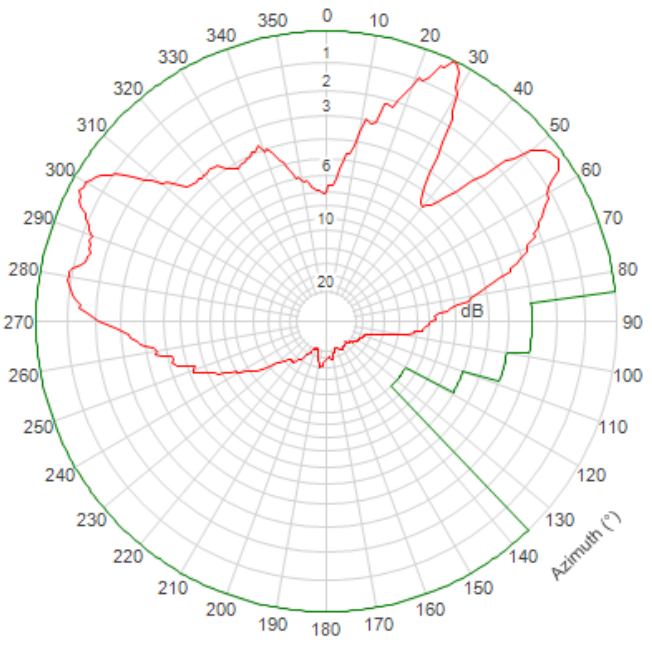


Figure 32 – Swansea

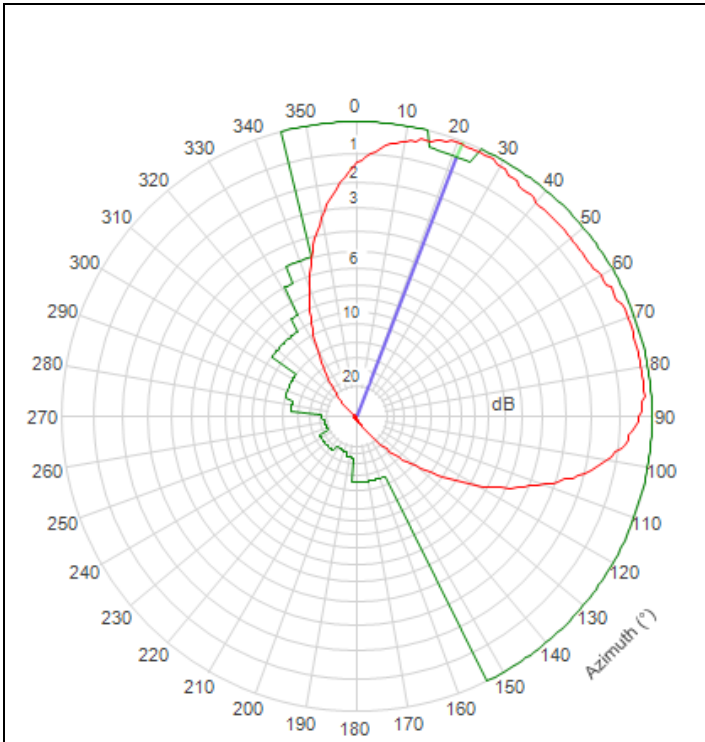


Figure 33 – York Horizontal Radiation Pattern

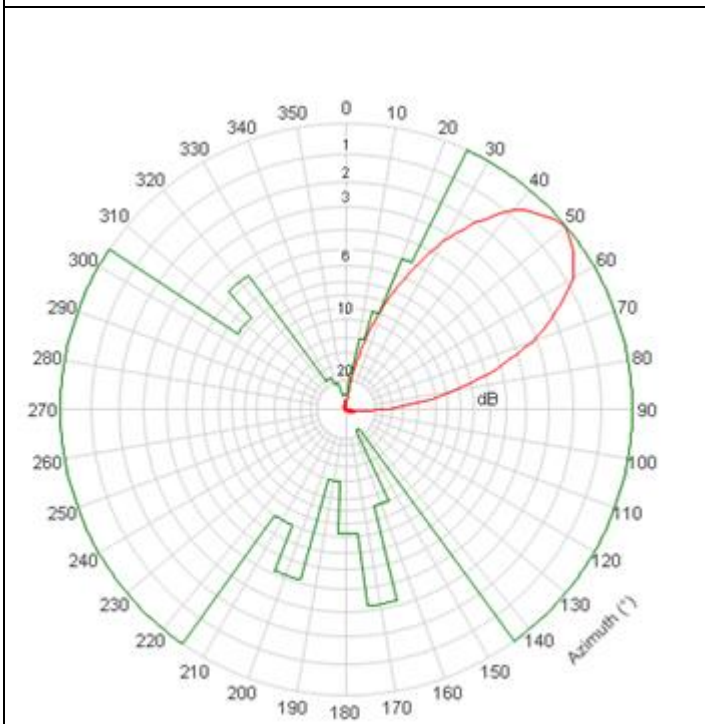


Figure 34 – Aberdeen

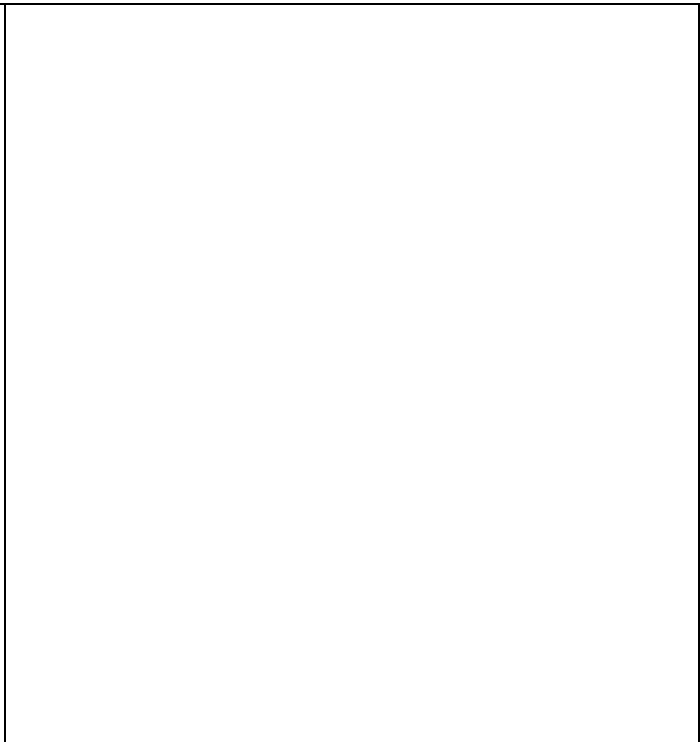


Figure 35 – Ayr

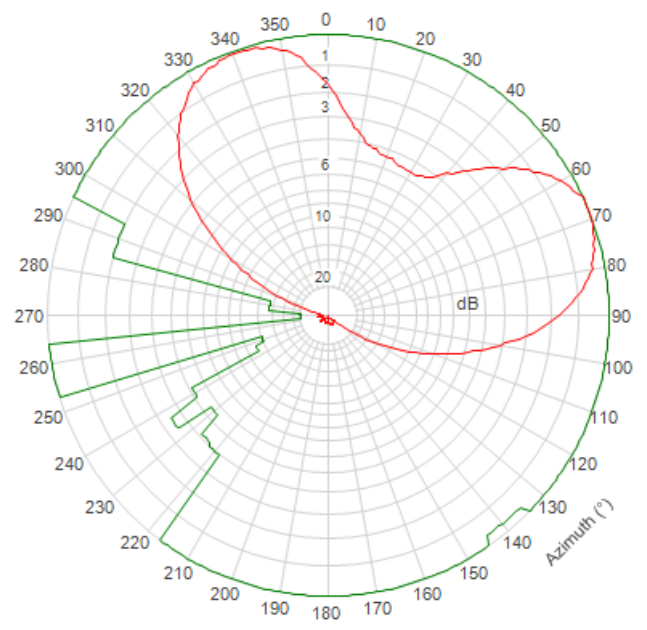


Figure 37 – Carlisle

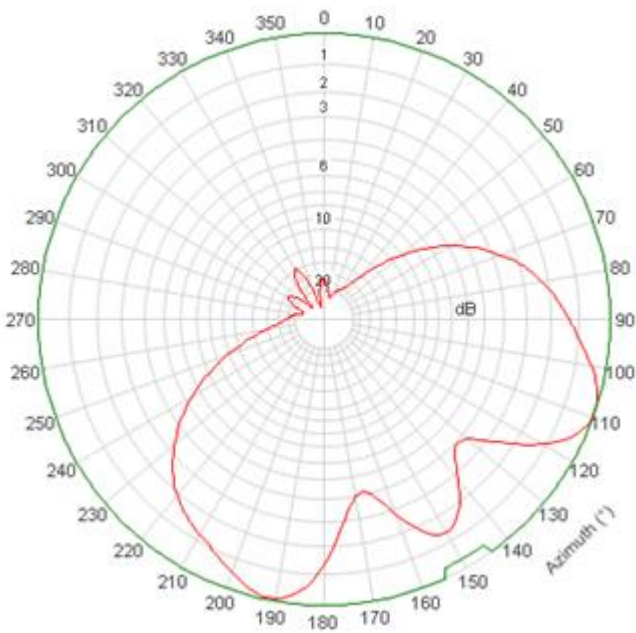


Figure 38 – Dundee (Angus)

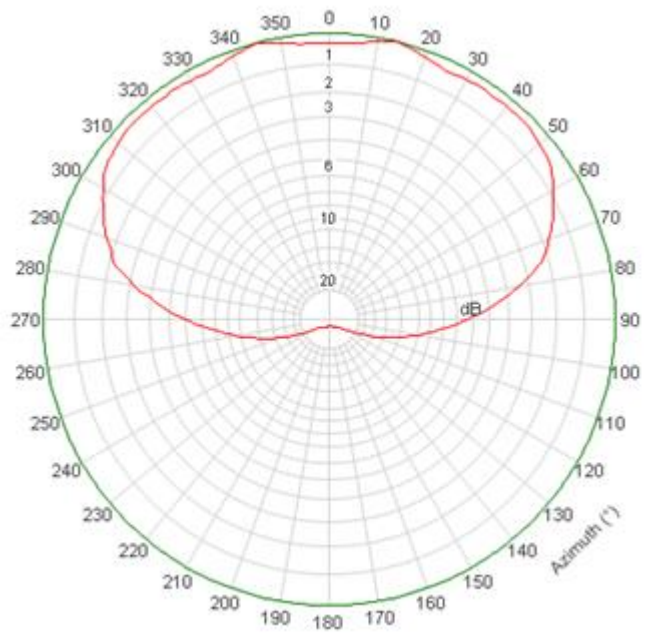


Figure 39 – Dundee (Tay Bridge)

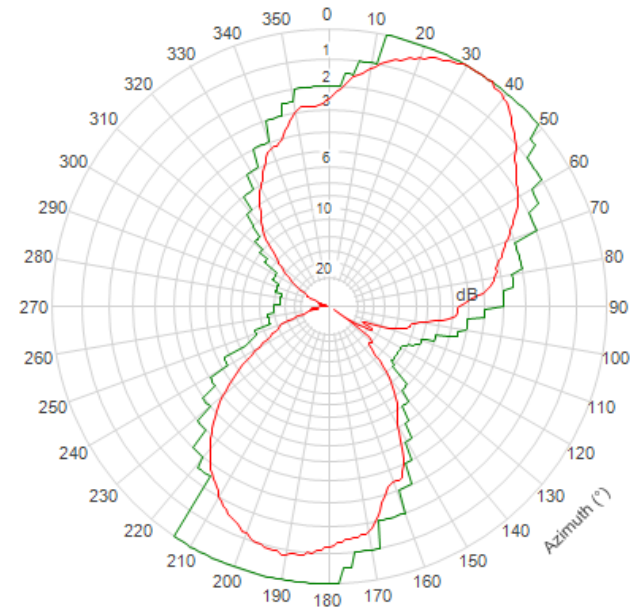


Figure 41 – Maidstone (Bluebell Hill)

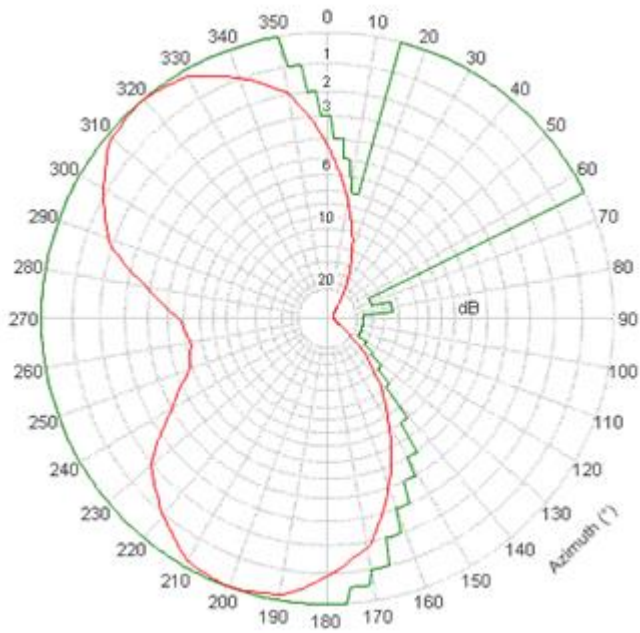


Figure 42 – Maidstone (Tunbridge Wells)

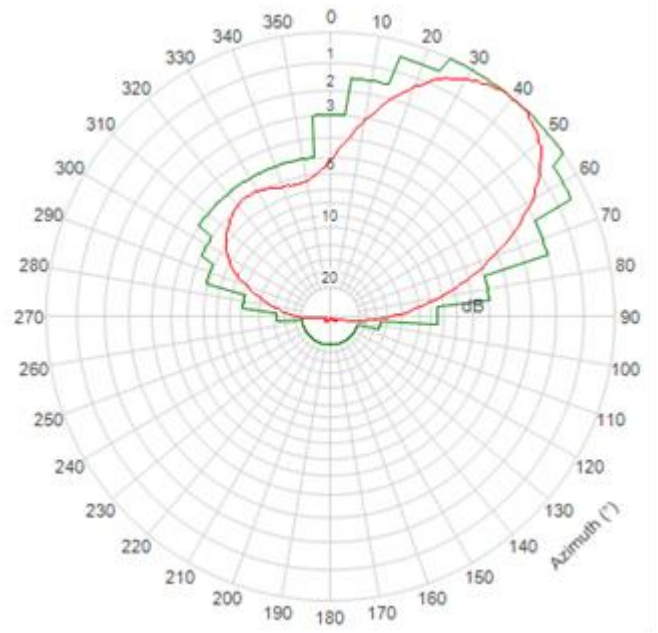


Figure 43 – Reading

# A1. Annex 1 - Post 700 MHz Clearance Technical Plan – Multiplex L

Fig A1 – Basingstoke

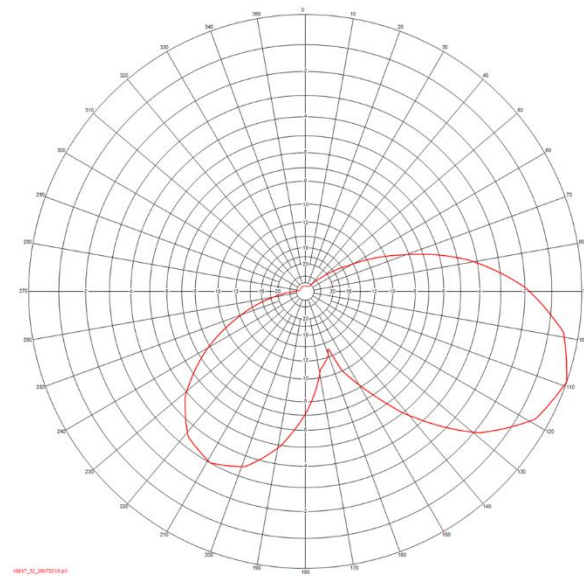


Fig A2 - Brierley Hill

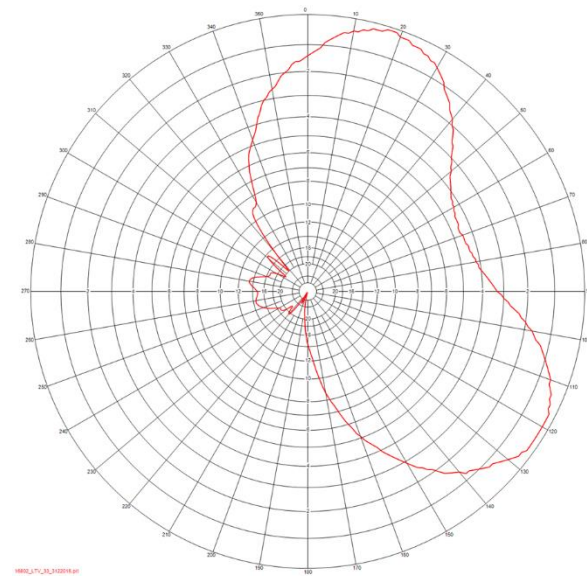


Fig A3 - Sutton Coldfield

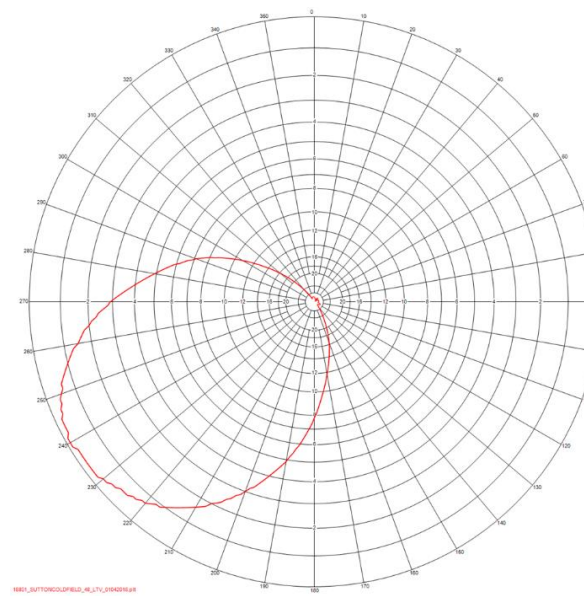


Fig A4 - Sutton Coldfield North

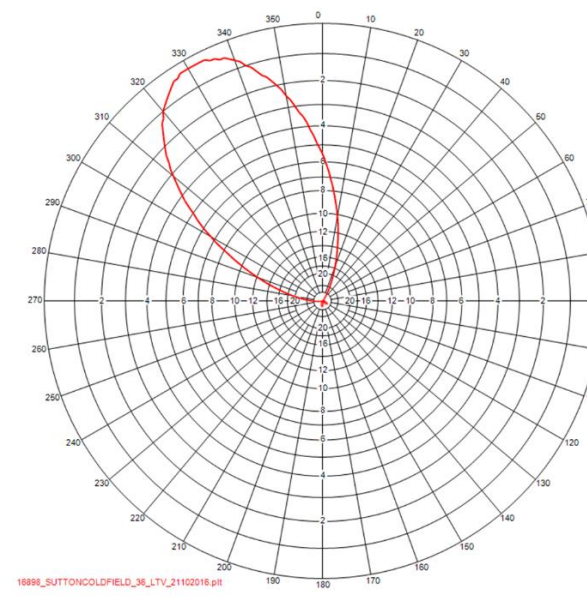


Fig A5 – Guildford

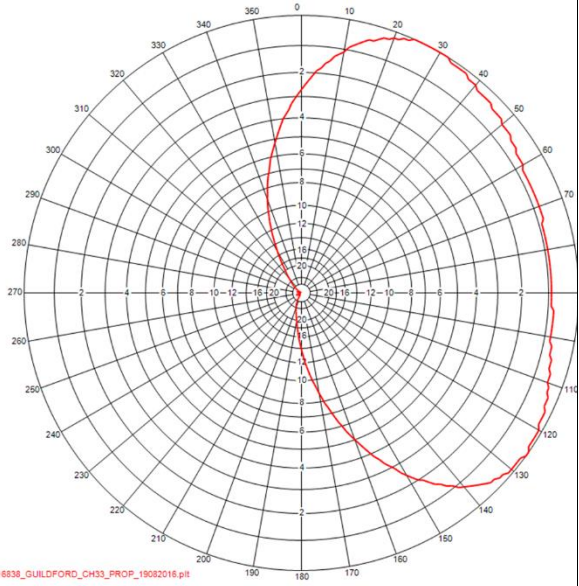


Fig A6 - Winter Hill (Liverpool petal)

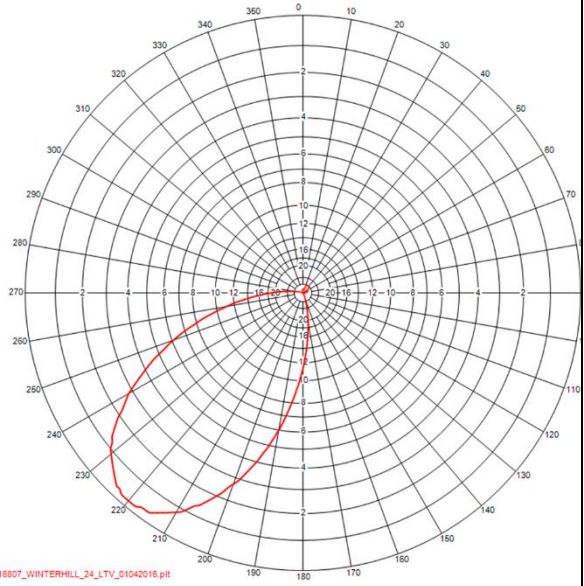


Fig A7 - Croydon

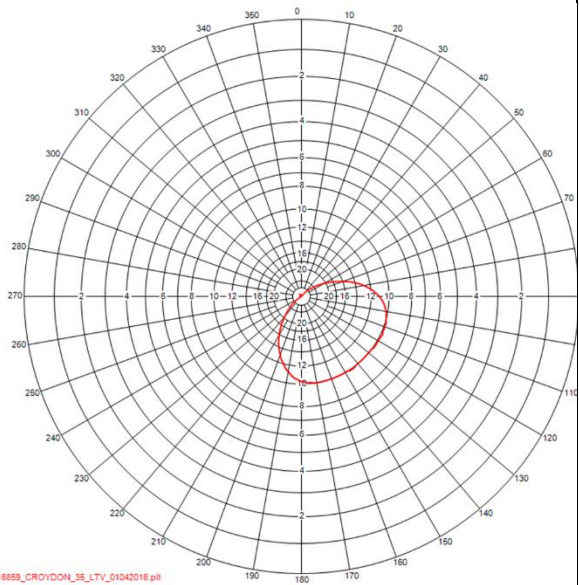


Fig A8 - Crystal Palace

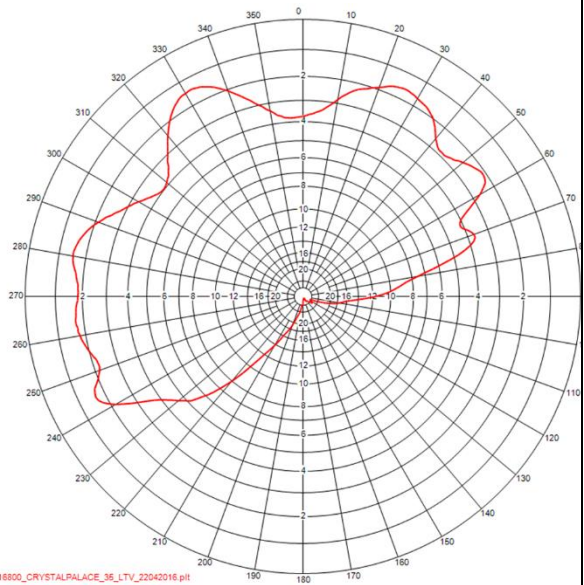


Fig A9 - Winter Hill (Manchester petal)

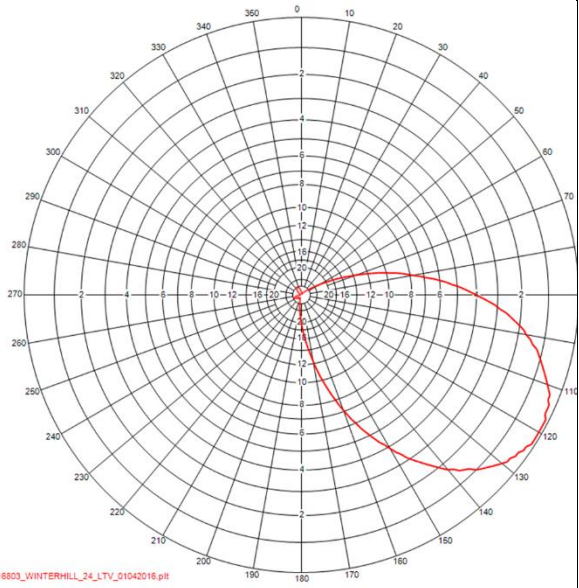


Fig A10 – Oxford

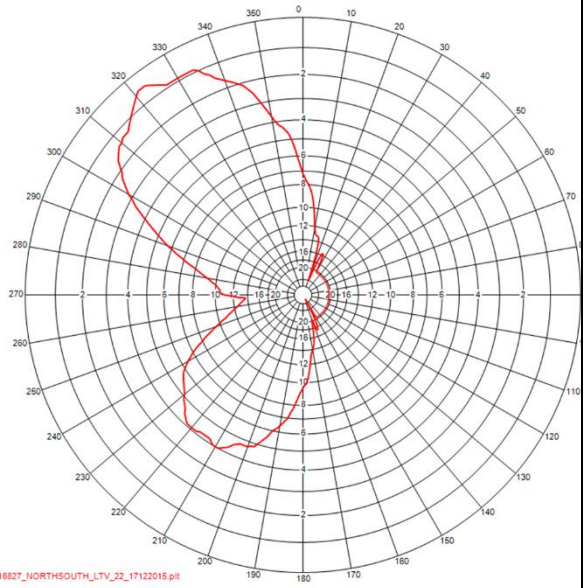


Fig A11 - Oxford East

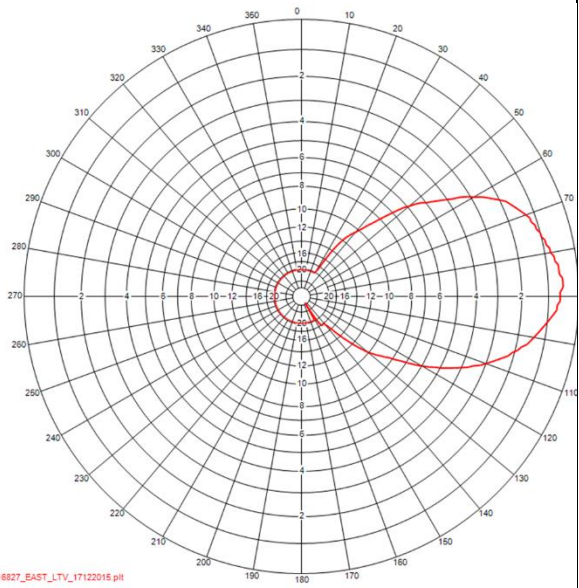


Fig A12 – Winter Hill (Blackpool/Preston petal)

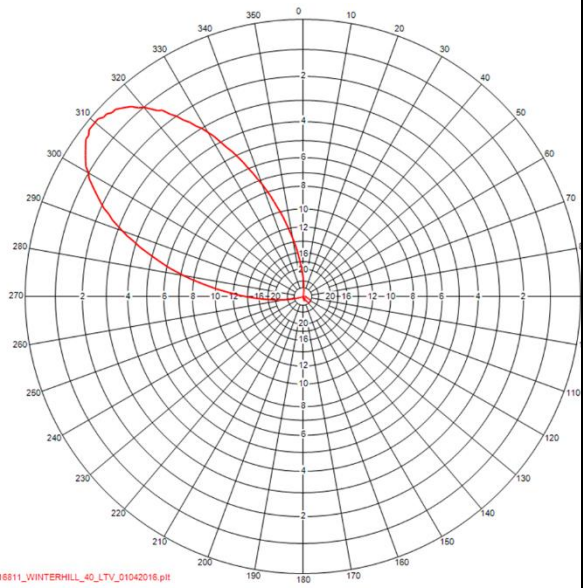


Fig A13 – Salisbury

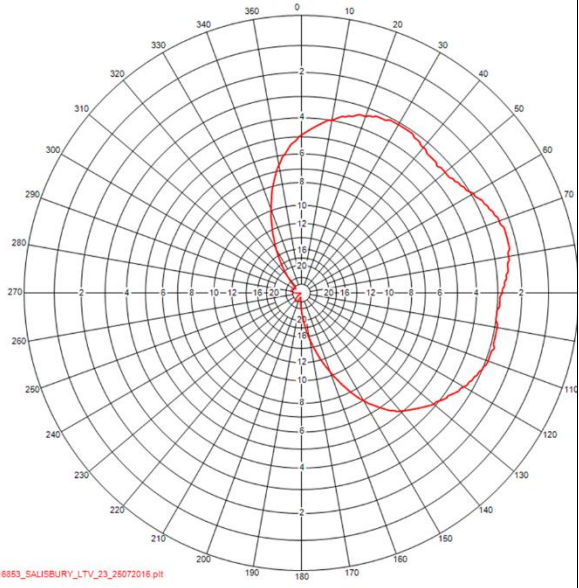


Fig A14 – Rowridge

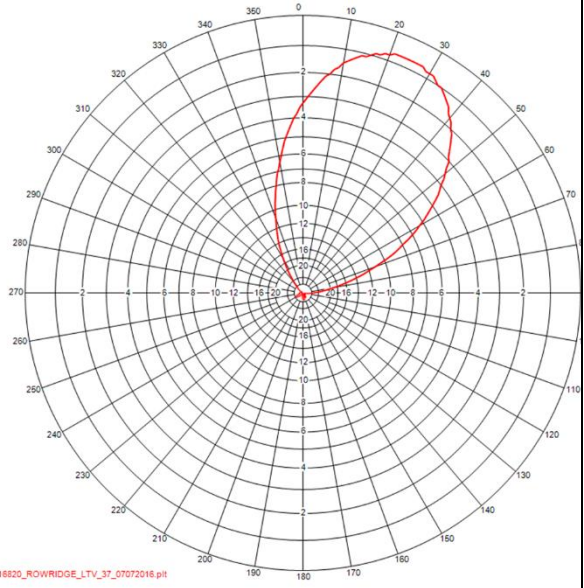


Fig A15 – Cambridge

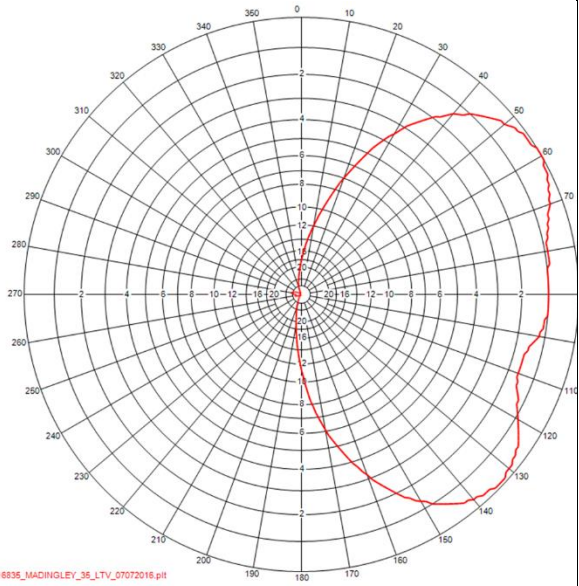


Fig A16 – Tacolneston

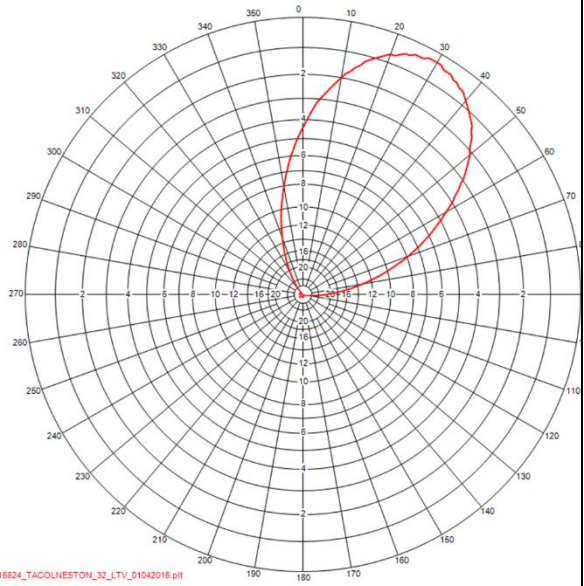
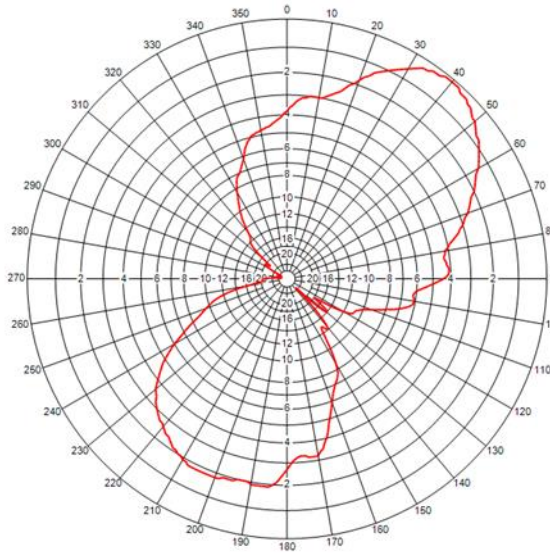


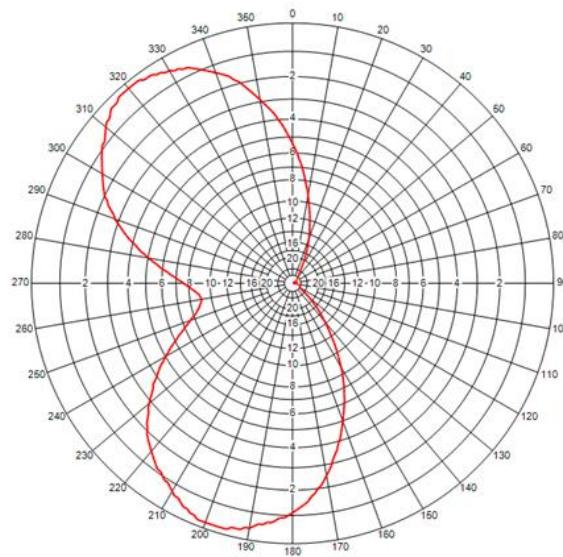


Fig A17 – Bluebell Hill



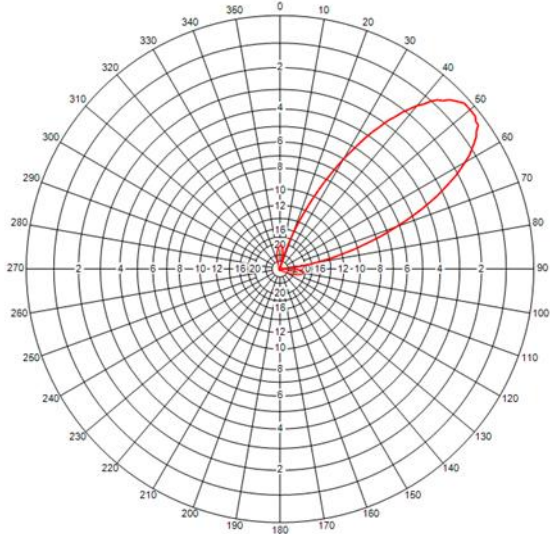
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Fig A18 – Tunbridge Wells



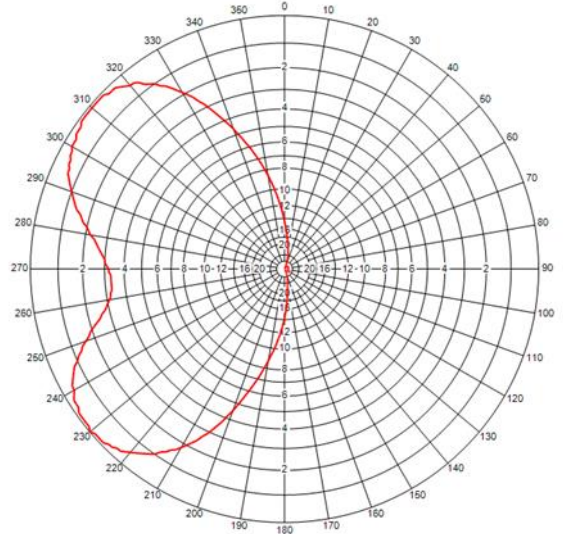
16864\_TUNBRIDGEWELLS\_38\_LTV\_07092016.ppt

Fig A19 – Durriss



16826\_DURRIS\_41\_LTV\_25072016.ppt

Fig A20 – Darvel



16834\_DARVEL\_31\_LTV\_19082016.ppt

Fig A21 – Black Hill

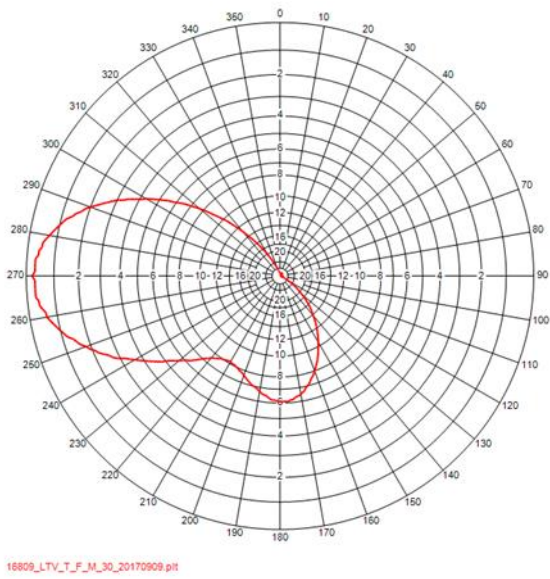


Fig A22 – Craiggelly

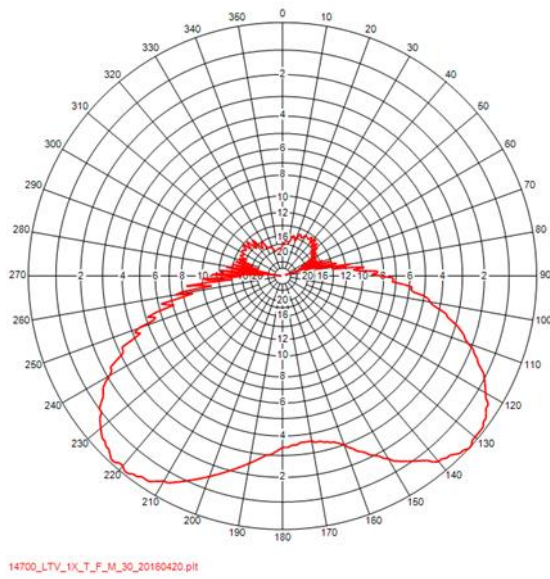


Fig A23 – Moel Y Parc

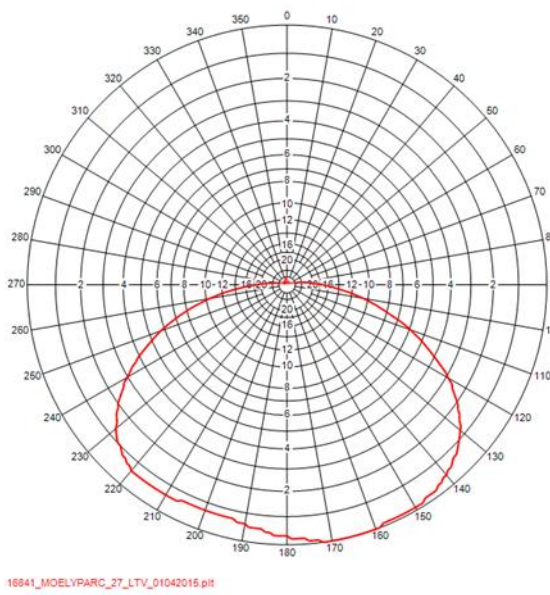


Fig A24 – Hannington (Reading)

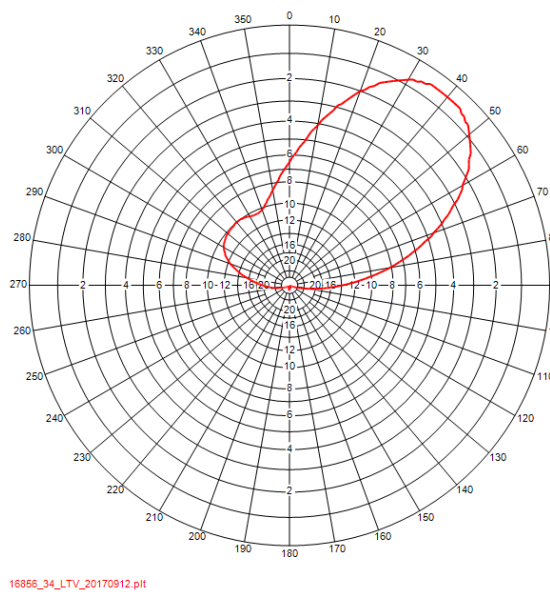


Figure A25 – Wenvoe

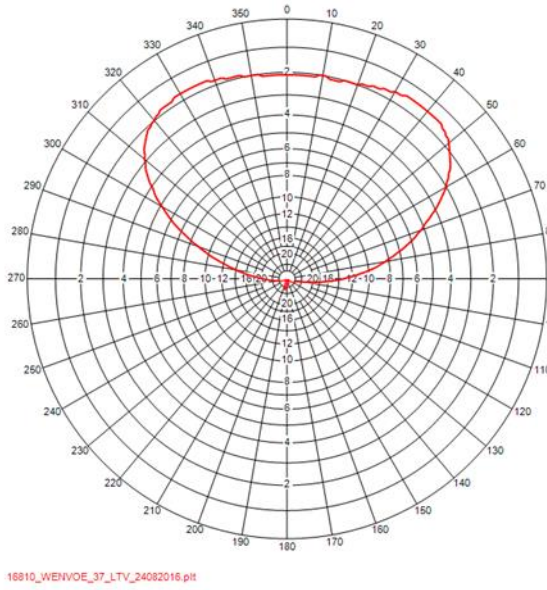


Figure A26 – Bristol Ilchester Crescent

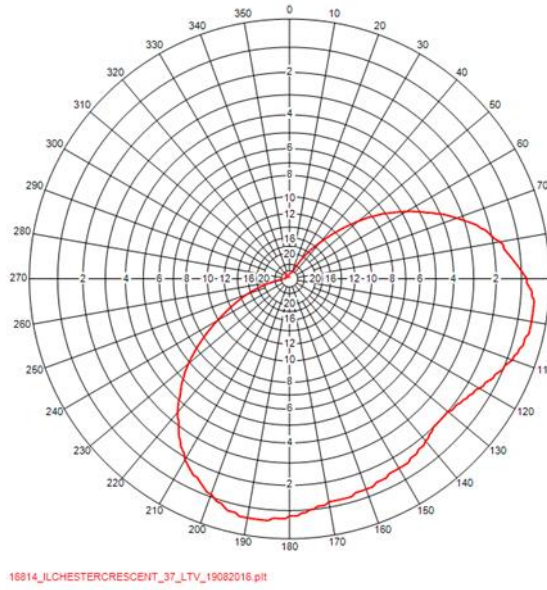


Figure A27 – Bristol King's Weston

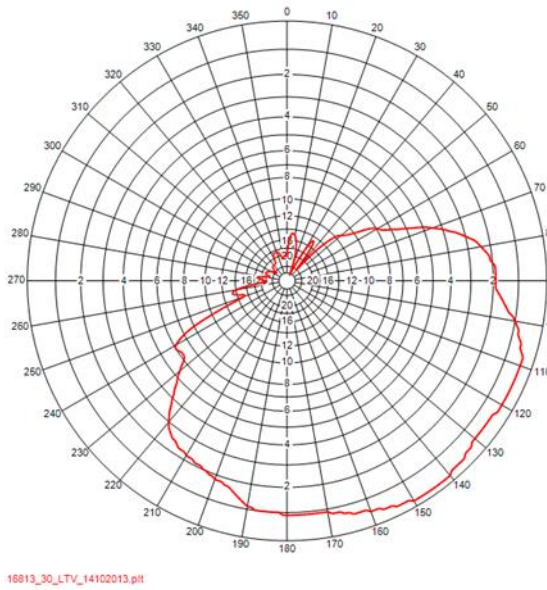


Figure A28 – Mendip

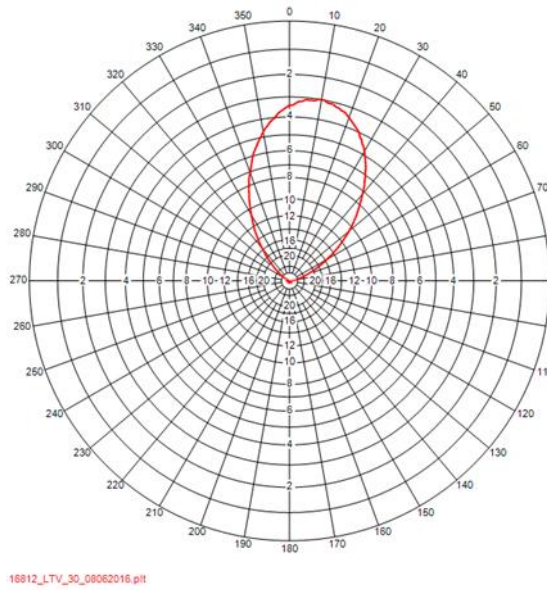


Figure A29 – Divis

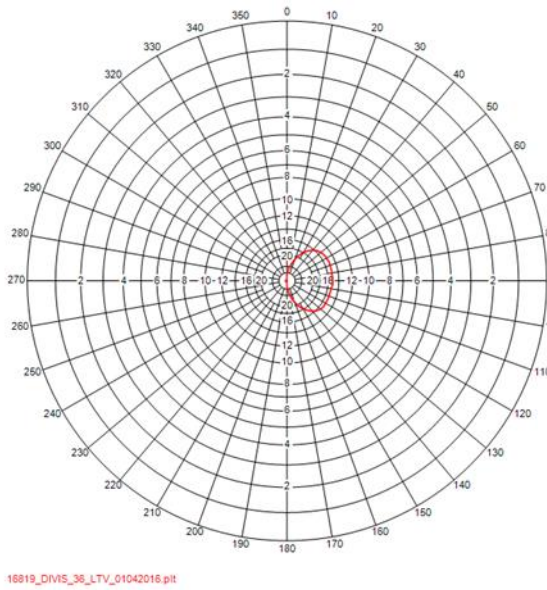


Figure A30 – Whitehawk Hill

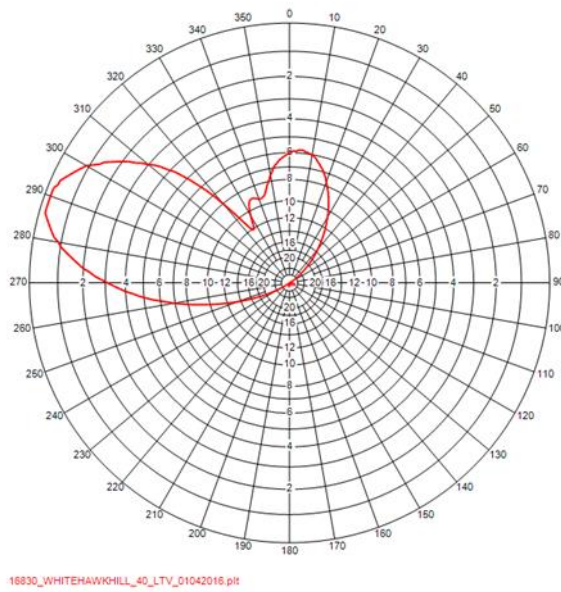


Figure A31 – Beecroft Hill

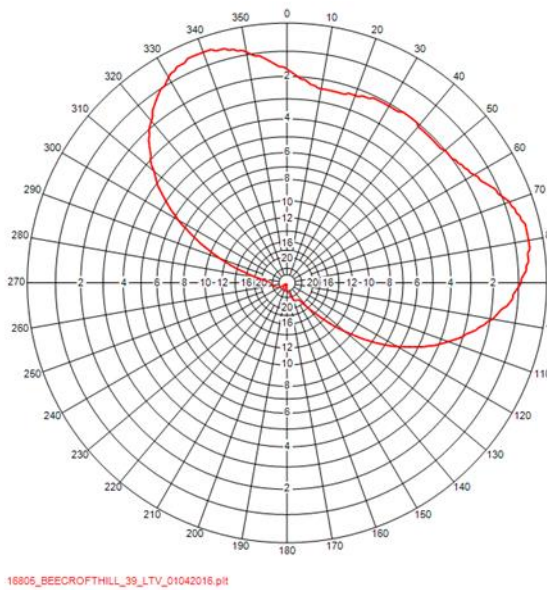


Figure A32 – Emley Moor

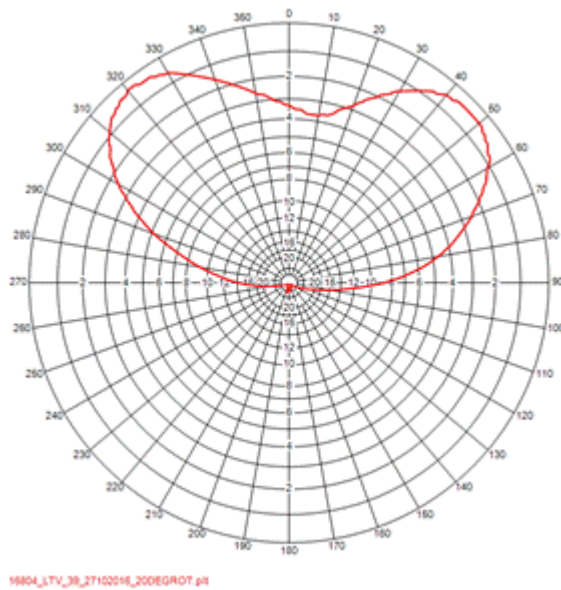
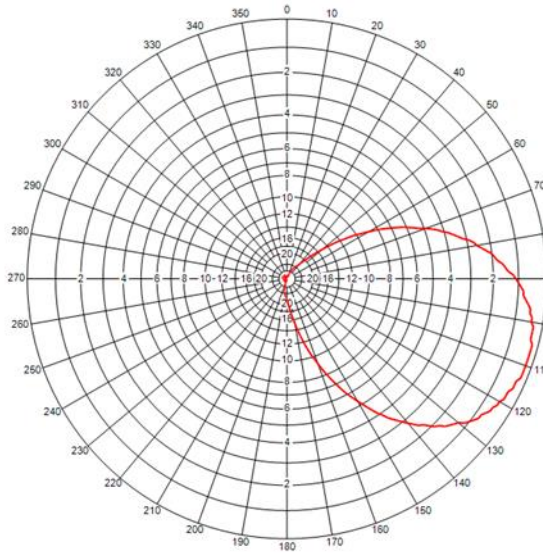
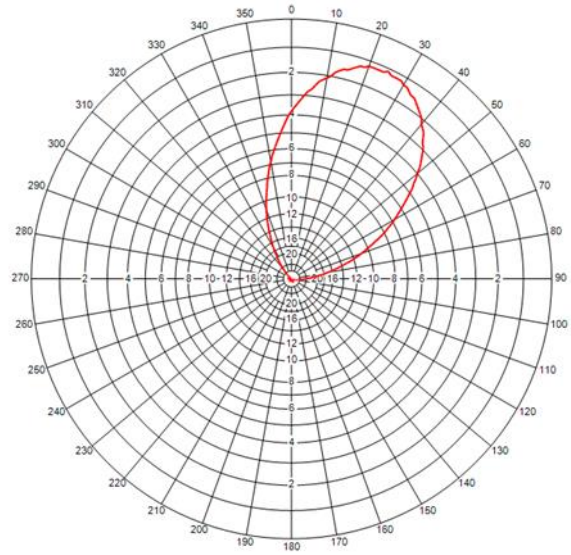


Figure A33 – Sheffield



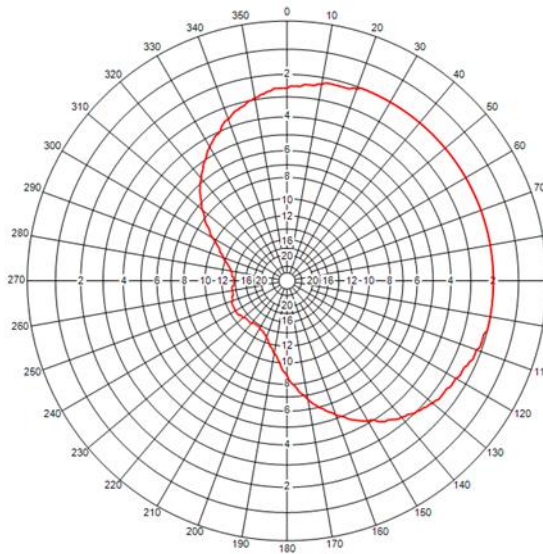
16832\_SHEFFIELD\_35\_LTV\_25082016.ppt

Figure A34 - Bilsdale



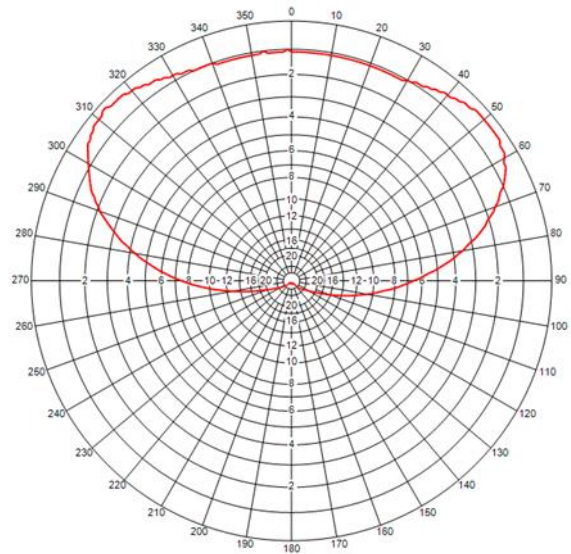
16821\_LTV\_T\_F\_M\_30\_20170704.ppt

Figure A35 – Pontop Pike



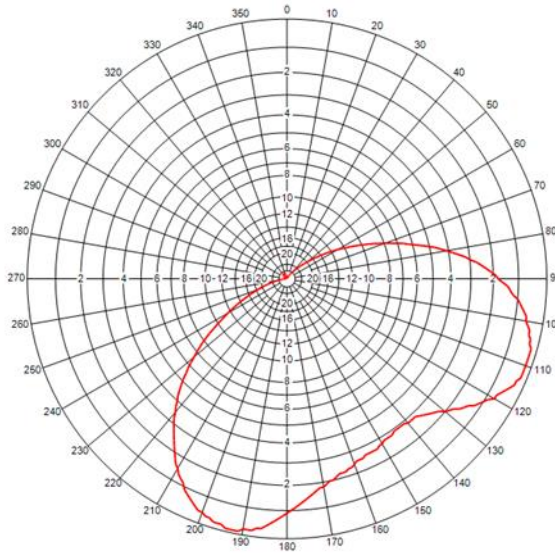
16806\_33\_15032016.ppt

Figure A36 – Tay Bridge



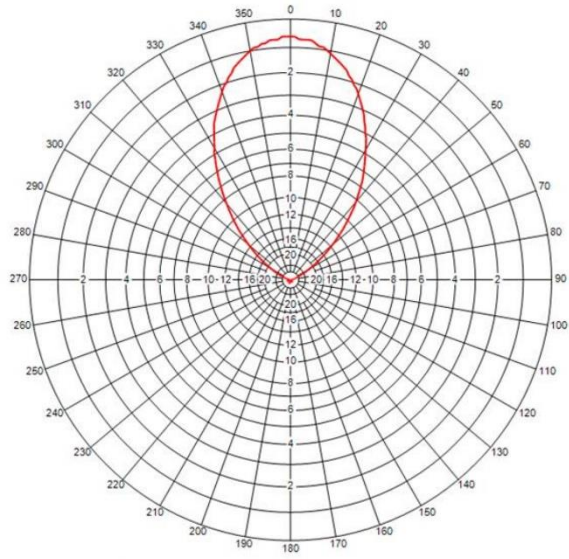
16823\_TAYBRIDGE\_32\_LTV\_28072016.ppt

Figure A37 – Angus



16822\_ANGUS\_34\_LTV\_22072016.plt

Figure A38 – Belmont



16818\_BELMONT\_32\_LTV\_01042016.plt