

## 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>	Durris	24 April 2017	NO76418994	41	634	157	H	10 kW	Annex 1, Figure A19	
<b>Ayr</b>	Darvel	24 April 2017	NS55753413	31	554	80	H	1 kW	Annex 1, Figure A20	
<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
		23-May-17	SU52745680	32	562	71	H	10 kW	Annex 1, Figure A41	Post clearance – must be used from 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
		21 July 2014	NW41193098	36	594	93	H	10 kW	Annex 1, Figure A29	Post-clearance – must be used from 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
<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
	Bristol Kings' Weston	8 Oct 2014	ST54727751	30	546	43	V	0.02 kW	Figure 6	To be used until 19 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
		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 Oct 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	To be used from 6th June 2018 until 30th October 2019
		18 Aug 2015	TL39245942	35	586	45	H	3.2 kW	Annex 1, Figure A 48	Post clearance – must be used from 30th October 2019
<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
		25-Jul-17	NY29954259	33	570	165	H	5 kW	Annex 1, Figure A42	Post clearance – must be used from 31st July 2019
	Caldbeck (petal)	25-Jul-17	NY29954259	29	538	165	H	4kW	Annex 1, Figure A43	Post clearance – must be used from 29 April 2020
<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	32	562	65	H	5 kW	Annex 1, Figure A22	

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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
<b>Glasgow</b>	Black Hill (Glasgow Petal)	2 Jun 2014	NS83116456	30	546	154	H	10 kW	Annex 1, Figure A21	Post clearance – must be used from 3 October 2018
<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
		26-Nov-13	TF21828365	32	562	222	H	10 kW	Annex 1, Figure A38	Post-clearance - must be used from 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

(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
		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	To be used until 22 March 2020
		04-Dec-14	SJ31448416	43	650	43	V	0.06 kW	Annex 1, Figure A50	Post-clearance - must be used from 22 March 2020
	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
<b>London</b>	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	

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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
	Hemel Hempstead	31-Mar-14	TL08790449	34	578	72	V	0.2 kW	Annex 1, Figure A39	Post clearance – must be used from 27th March 2019
	Reigate	31-Mar-14	TQ25645213	35	586	50	V	0.1 kW	Annex 1, Figure A 44	Post clearance – must be used from 16th October 2019
<b>Maidstone</b>	Bluebell Hill	10 July 2017	TQ75736134	21	474	44	H	1 kW	Annex 1, Figure A17	
	Tunbridge Wells	10 July 2017	TQ60734399	39	618	45	V	0.4 kW	Annex 1, Figure A18	
<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	31 March 2017	SE55319622	24	498	200	H	5 kW	Figure 28 Figure 29	To be used until 30 October 2019

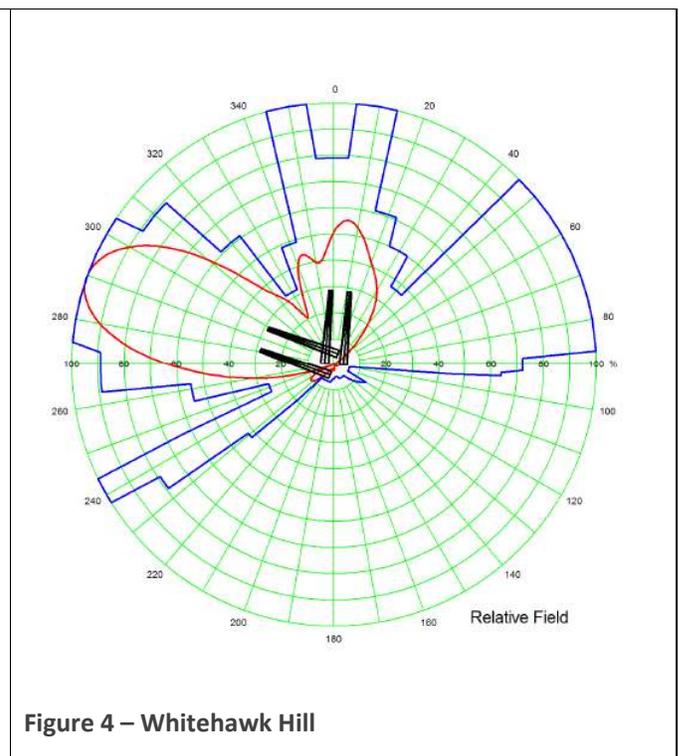
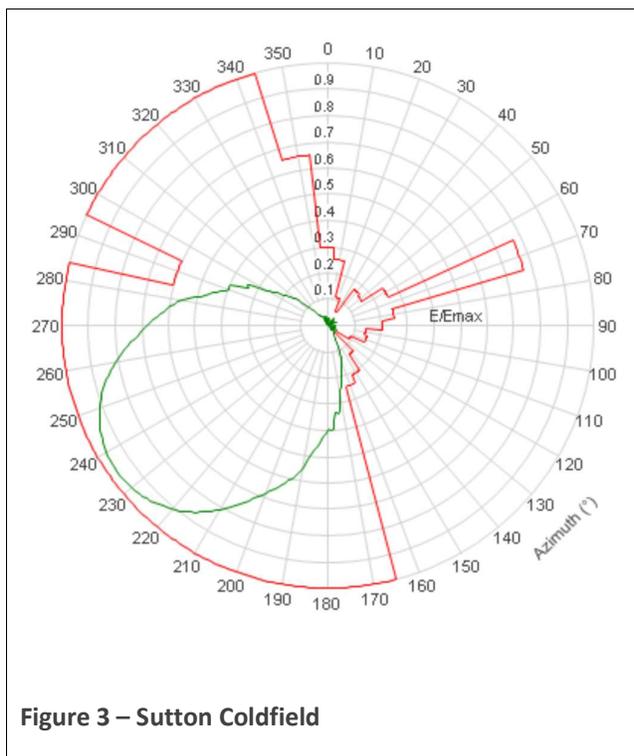
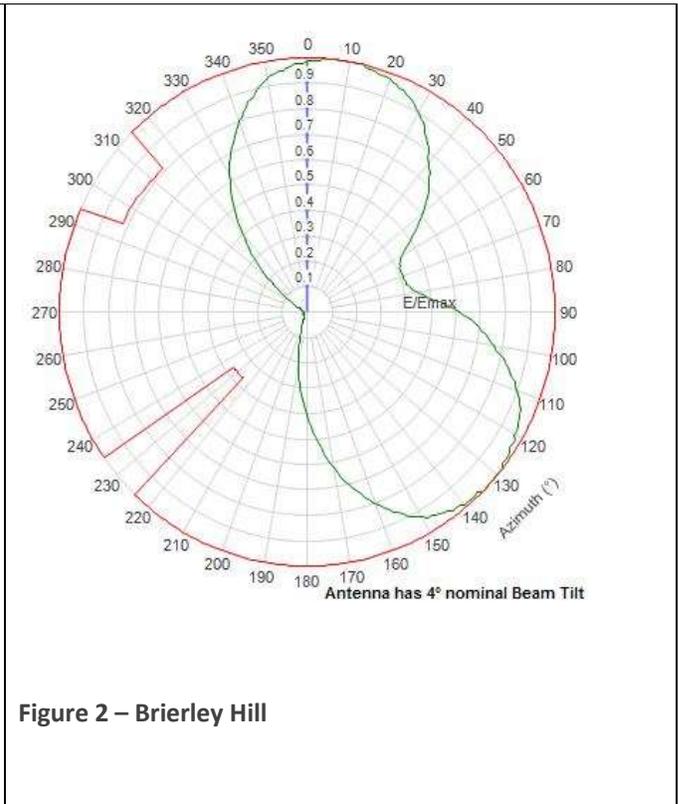
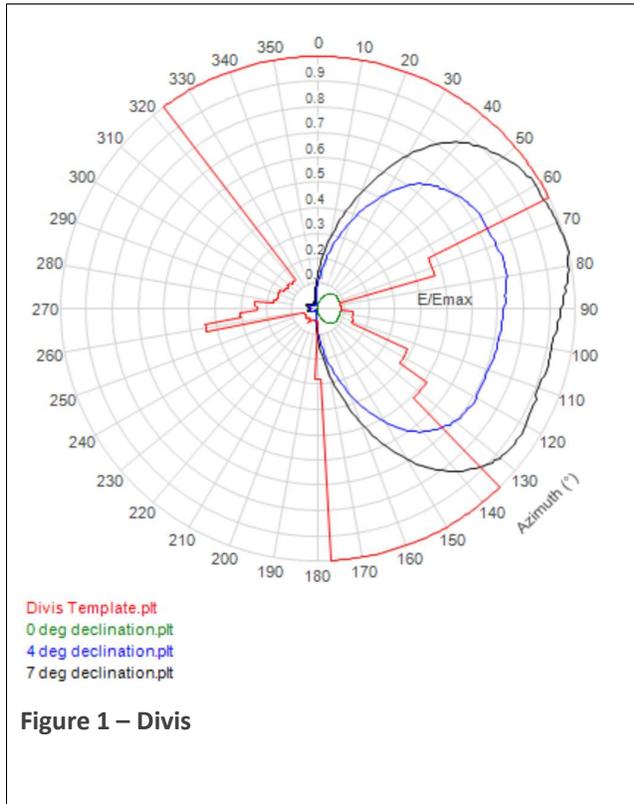
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	
Location served by L-DTPS	Transmitter station and relay/s	Channel operational start date <sup>1</sup>	Grid reference	UHF chnl	Centre frequency MHz	Aerial height (metres above ground level)	Polarisation (Horizontal or vertical)	Power (kW)	Radiated pattern	Comments
	(Middlesbrough Petal)	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
		12 Nov 2015	NZ14785270	33	570	68	H	5 kW	Annex 1, Figure A35	Post-clearance – must be used from 30 October 2019
	Fenham	12-Nov-15	NZ21676487	36	594	51	V	0.01 kW	Annex 1, Figure A 46	Post clearance – must be used from 13th November 2019
<b>Norwich</b>	Tacolneston	24 Mar 2014	TM13059572	32	562	104	H	10 kW	Annex 1, Figure A16	
<b>Nottingham</b>	Nottingham	27 May 2014	SK50354354	50	706	41	V	0.1 kW	Figure 21	

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	Waltham	27 May 2014	SK80942333	26	514	151	H	5 kW	Figure 22	
<b>Oxford</b>	Oxford	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	
<b>Preston</b>	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
<b>Reading</b>	Hannington (Reading)	10 May 2017	SU52745680	29	538	71	H	10 kW	Figure 43	
		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
<b>Salisbury</b>	Salisbury	31 July 2017	SU13642852	23	490	45	V	0.2 kW	Annex 1, Figure A13	

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Scarborough <sup>2</sup>	Olivers Mount	31 July 2017	TA04018691	56	754	33	V	0.2kW	Figure 31	To be used until 30th October 2019
		31 July 2017	TA04018691	39	618	33	V	0.6 kW	Annex 1, Figure A 47	Post clearance – must be used from 30 <sup>th</sup> October 2019
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
	Grenoside	23-Sep-14	SK33189333	31	554	23	H	1 kW	Annex 1, Figure A49	Post clearance – must be used from 5th February 2020
Southampton	Rowridge	26 Nov 2014	SZ44728654	37	602	89	H	10 kW	Annex 1, Figure A14	
Swansea	Kilvey Hill	12 Jul 2016	SS67189401	30	546	45	V	0.1 kW	Figure 32	To be used until 15 May 2019

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

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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
		12 Jul 2016	SS67189401	34	578	45	V	0.2 kW	Annex 1, Figure A40	Post clearance – must be used from 15th May 2019
York	Bilborough	26 June 2017	SE54254721	39	618	40	H	4 kW	Figure 33	To be used until 23rd October 2019
		26 June 2017	SE54254721	42	642	40	H	8 kW	Annex 1, Figure A45	Post clearance – must be used from 23rd October 2019



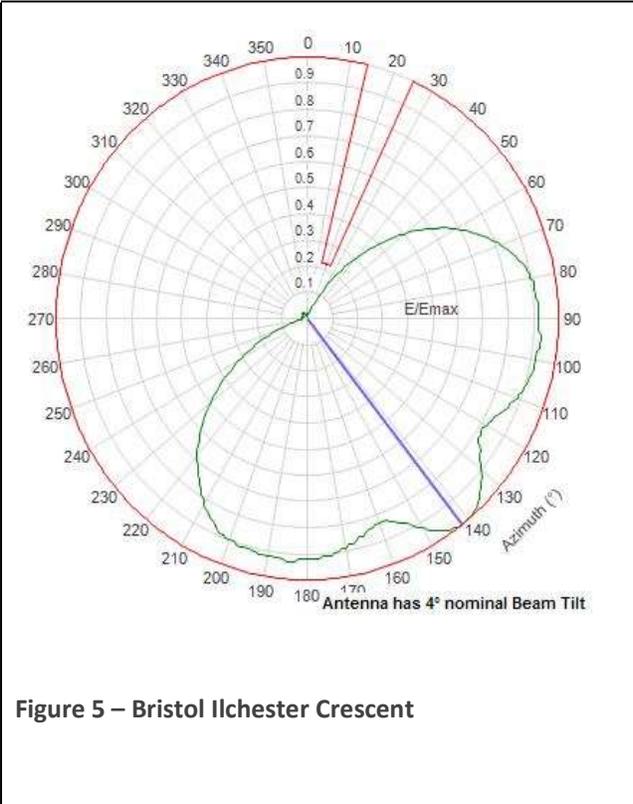


Figure 5 – Bristol Ilchester Crescent

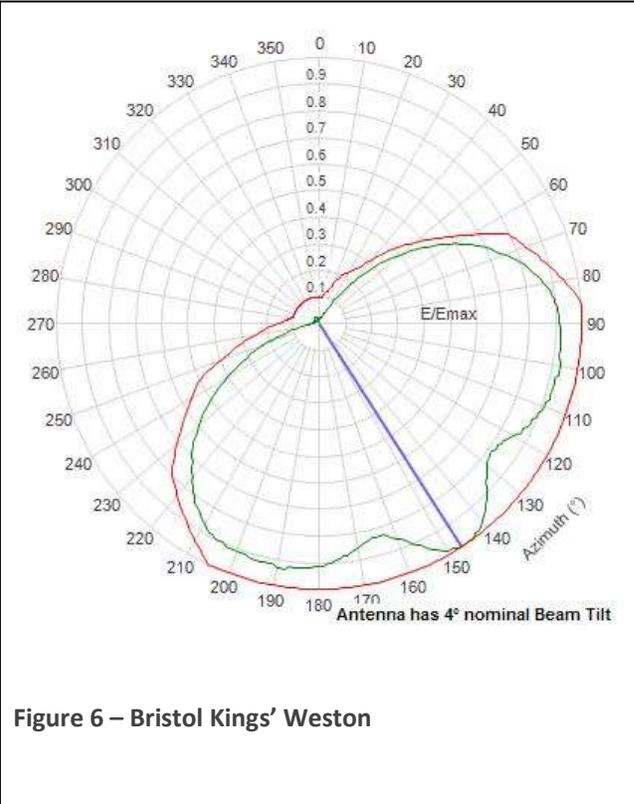


Figure 6 – Bristol Kings' Weston

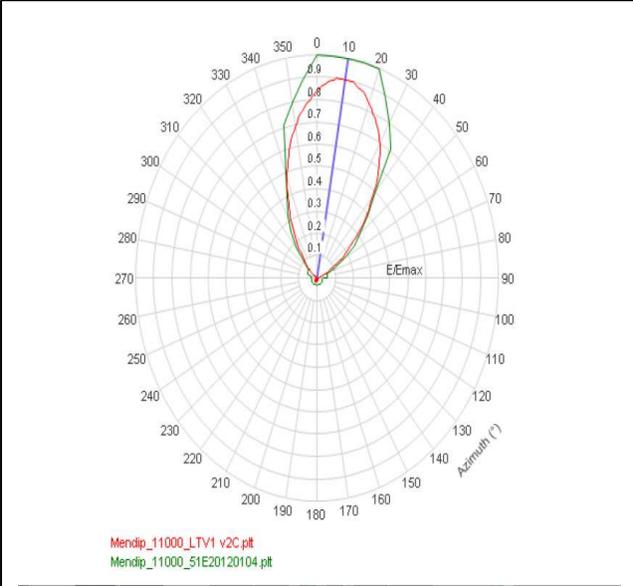


Figure 7 – Mendip

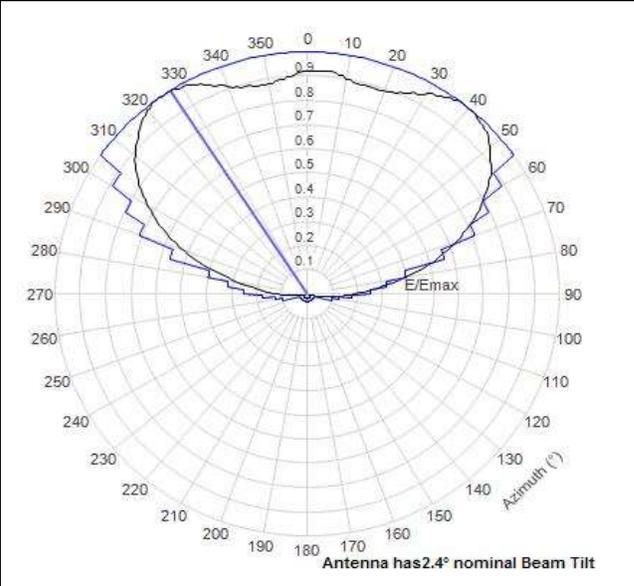
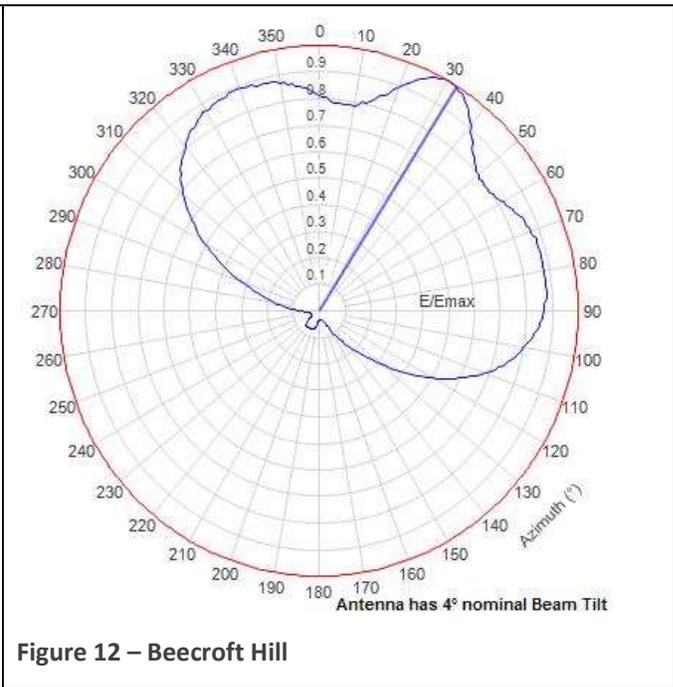
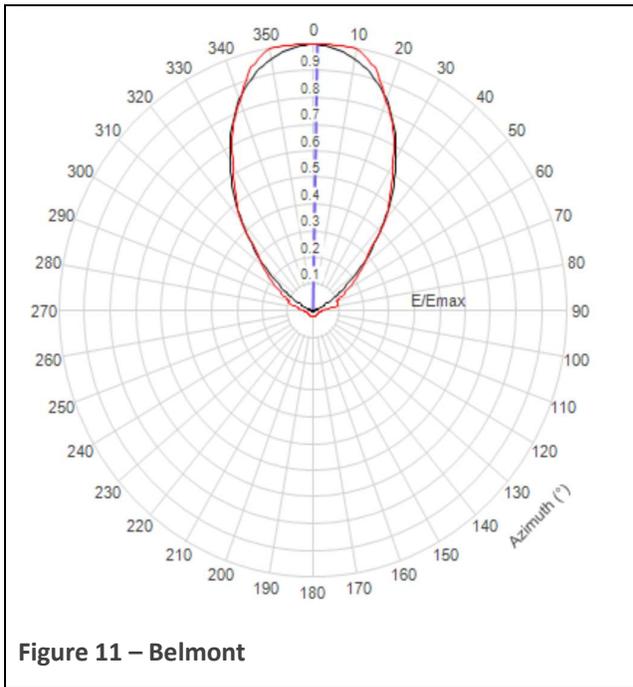
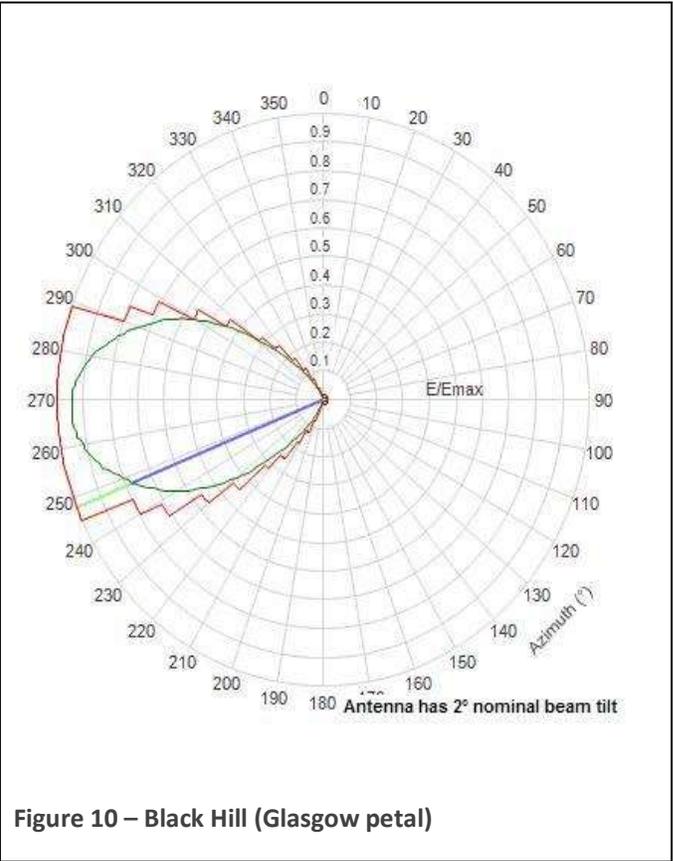
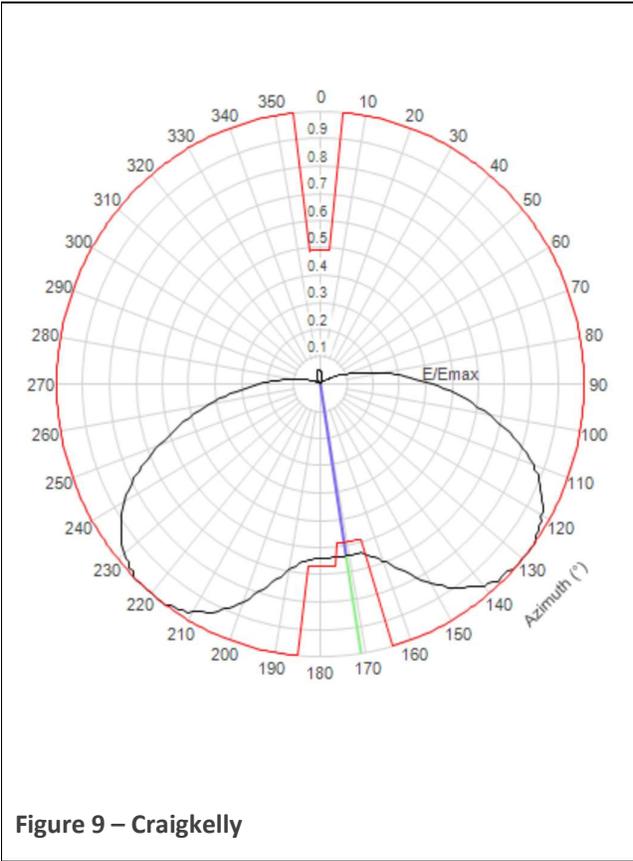
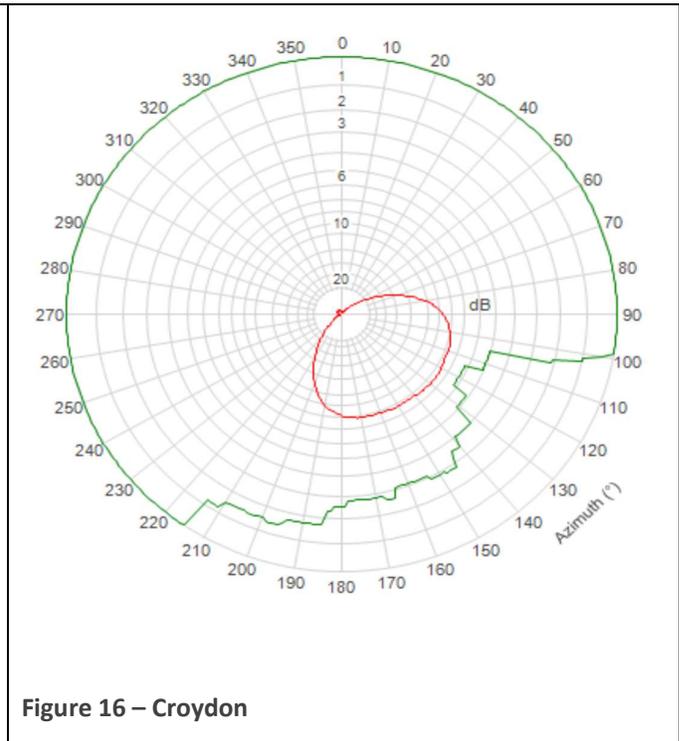
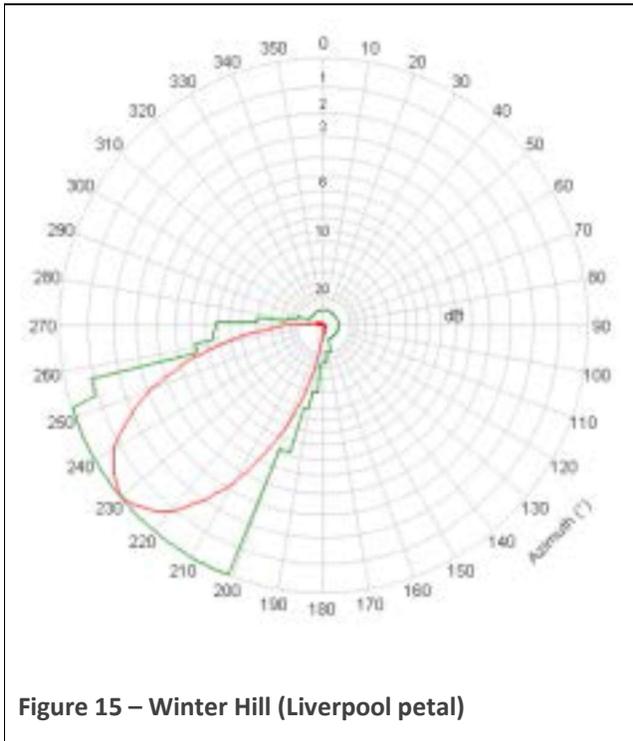
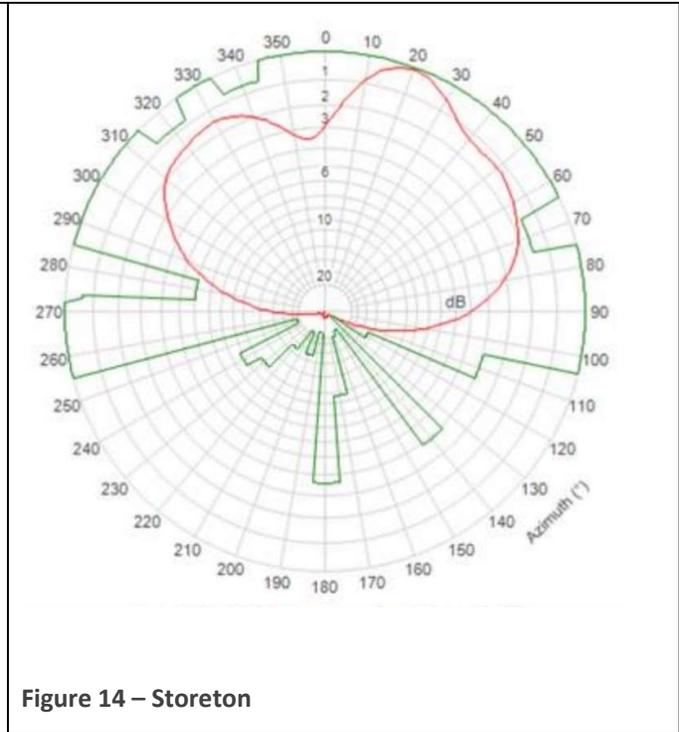
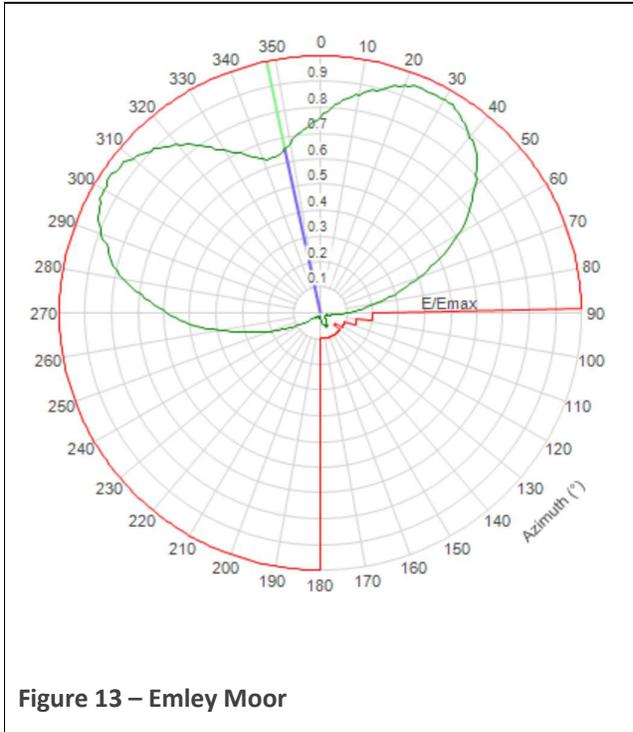


Figure 8 – Wenvoe





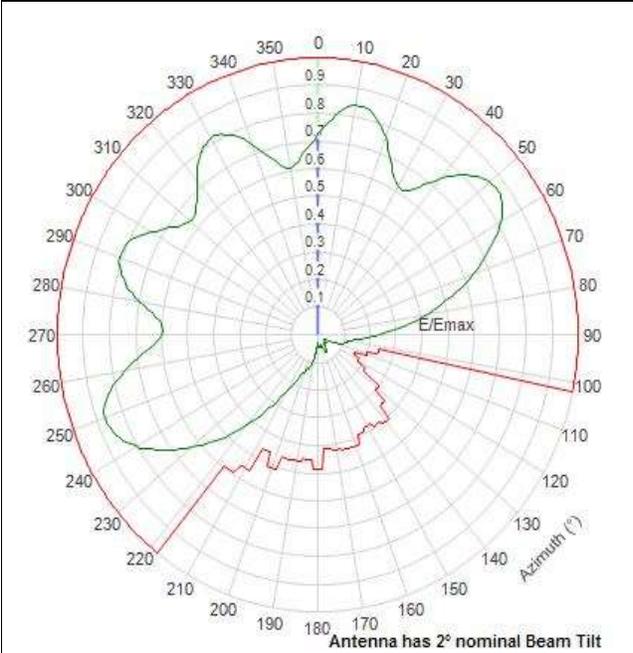


Figure 17 – Crystal Palace

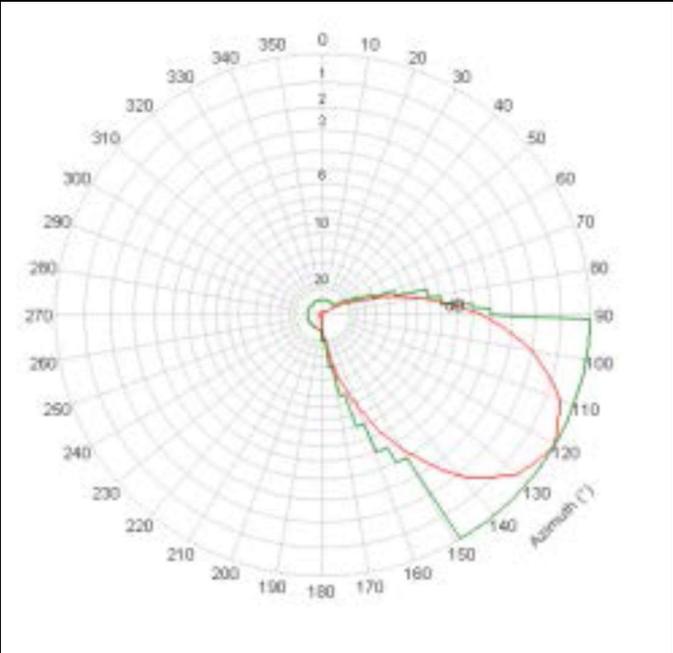
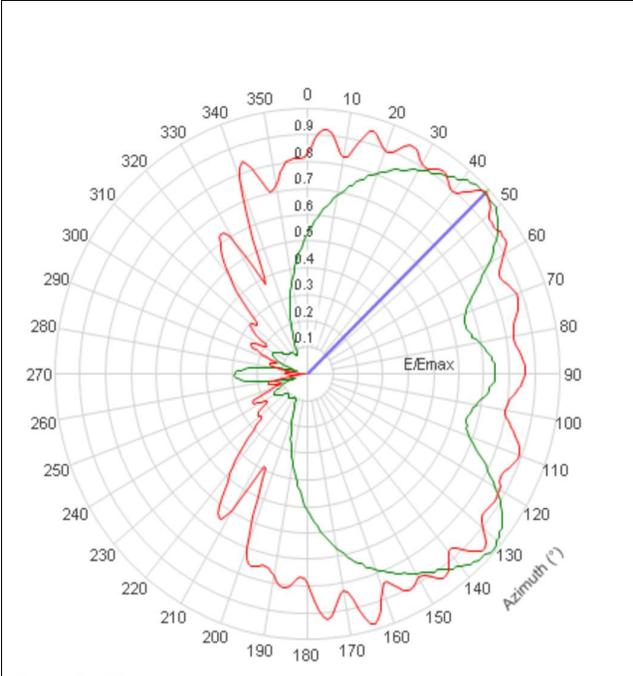
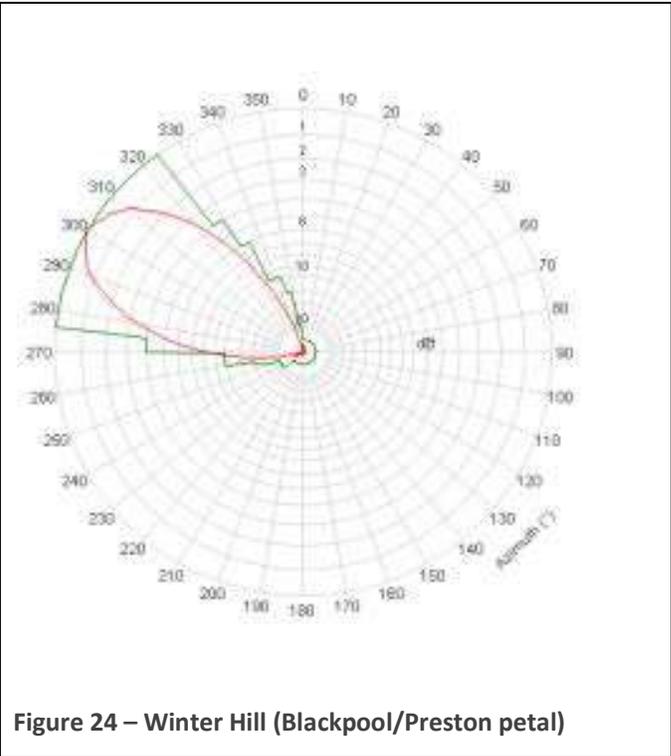
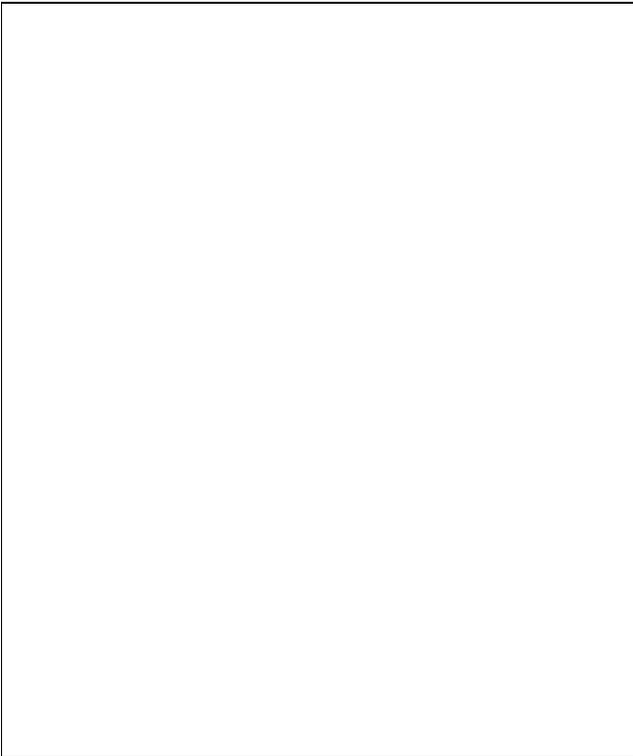
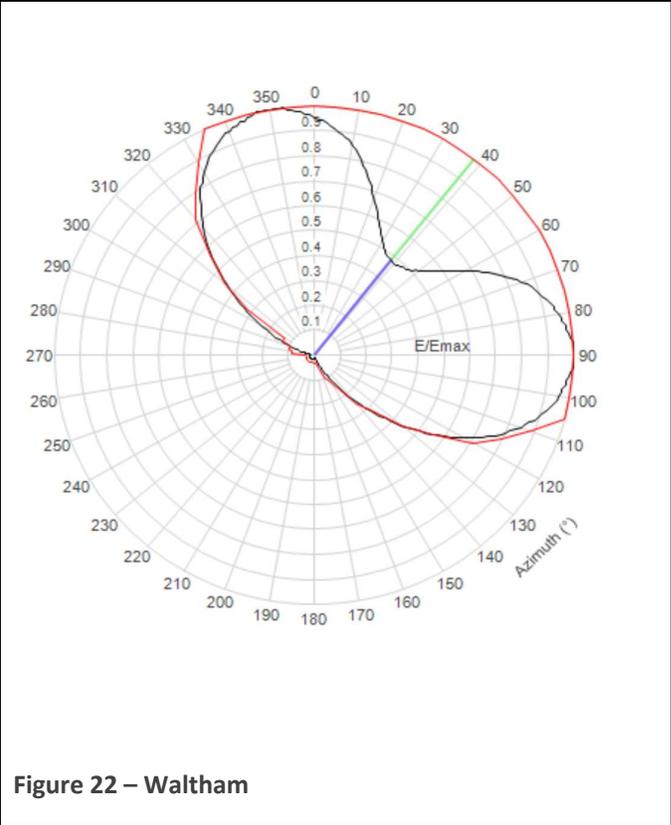
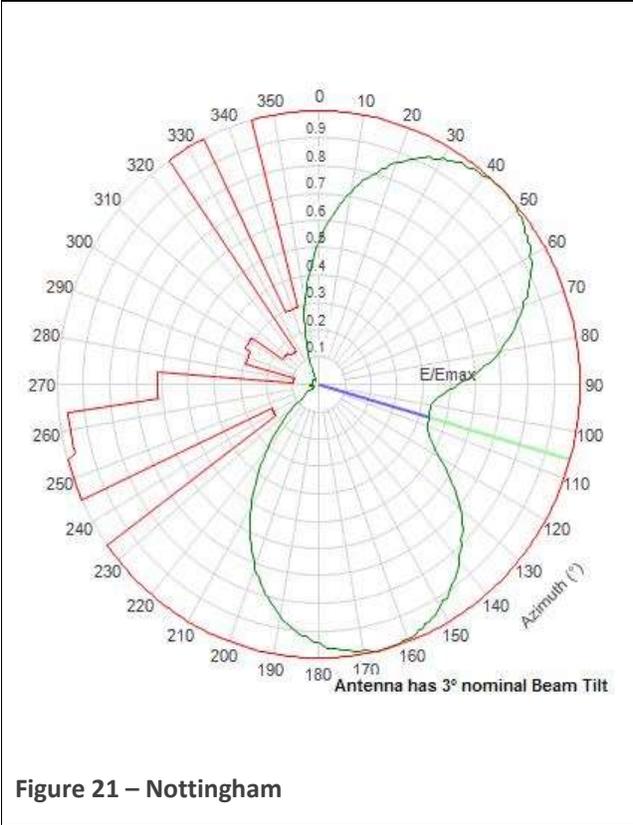


Figure 18 – Winter Hill (Manchester petal)



Pontop Pike RD4A.pt  
 Pontop\_Pike10900\_LocalTV1.pt

Figure 19 – Pontop Pike



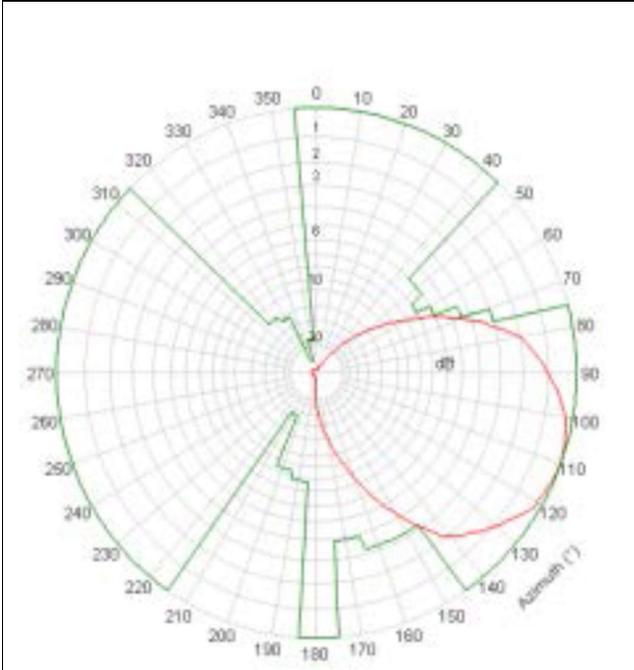


Figure 25 – Sheffield

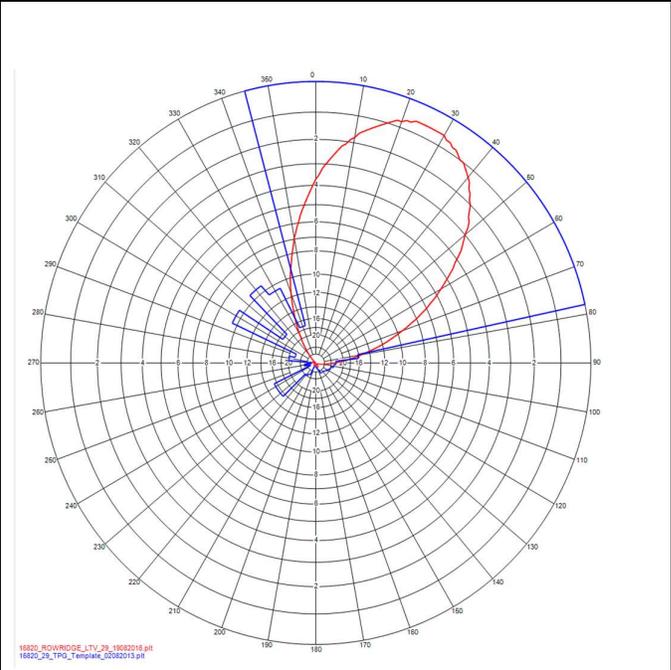


Figure 26 – Rowridge

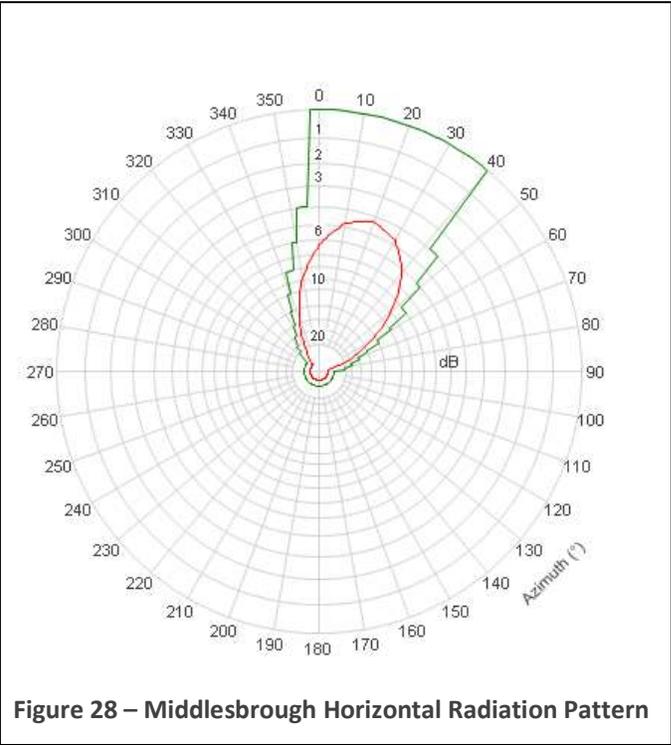
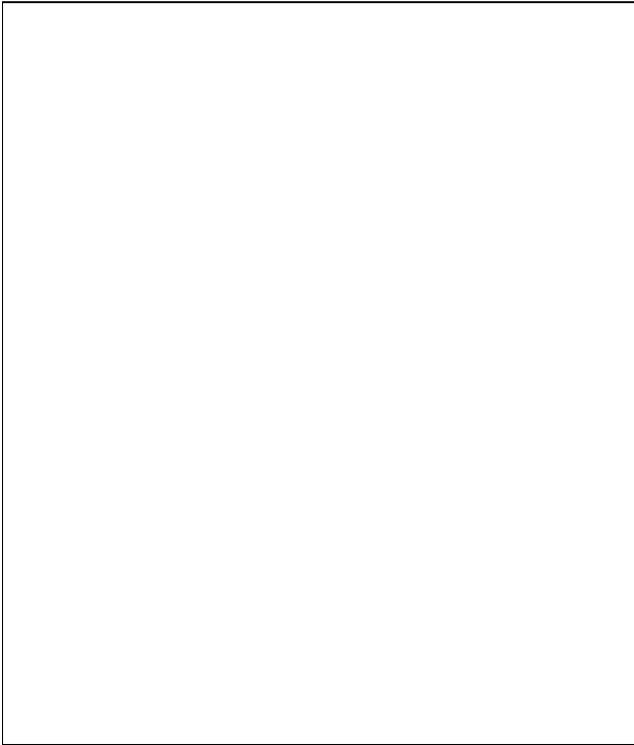
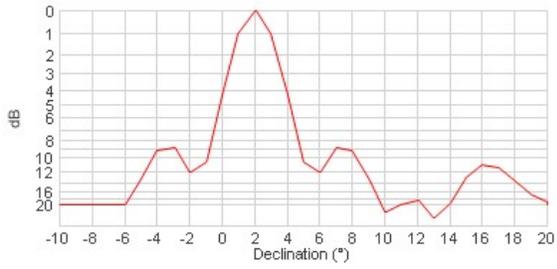
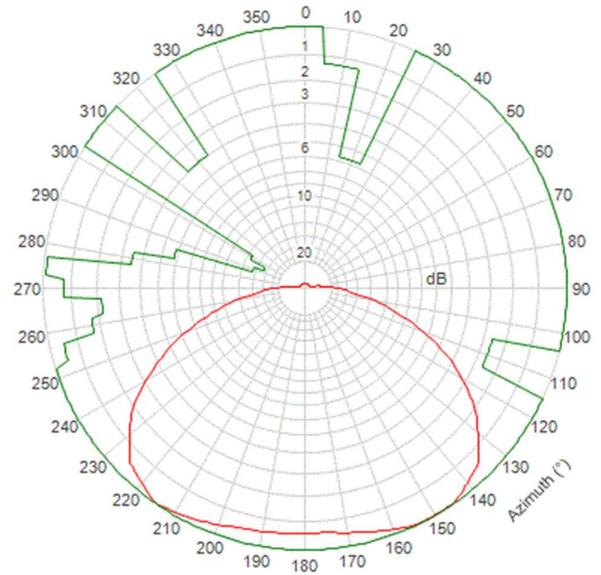


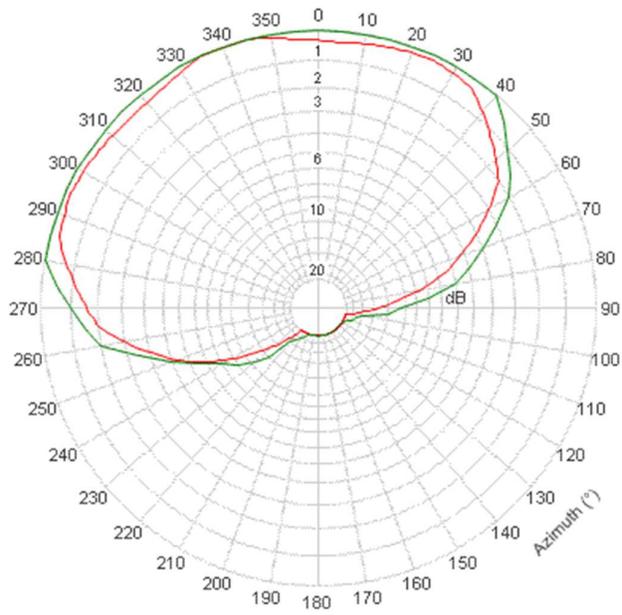
Figure 28 – Middlesbrough Horizontal Radiation Pattern



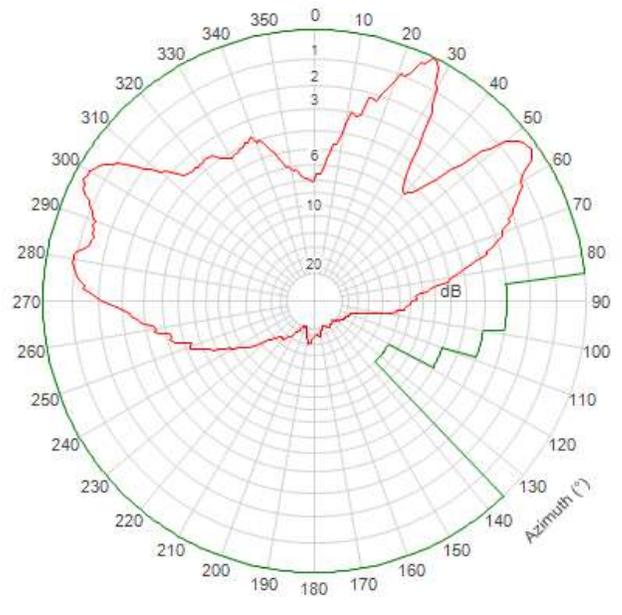
**Figure 29 – Middlesbrough Vertical Radiation Pattern**



**Figure 30 – Mold**



**Figure 31 – Scarborough**



**Figure 32 – Swansea**

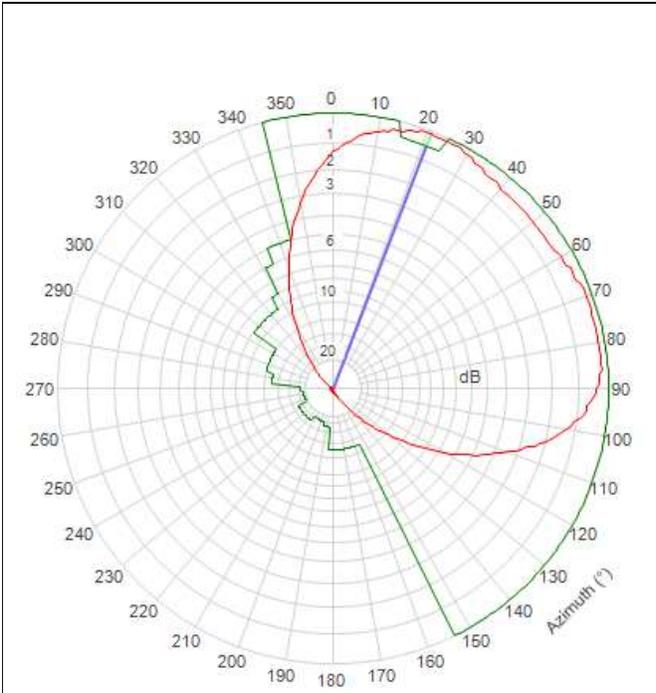


Figure 33 – York Horizontal Radiation Pattern

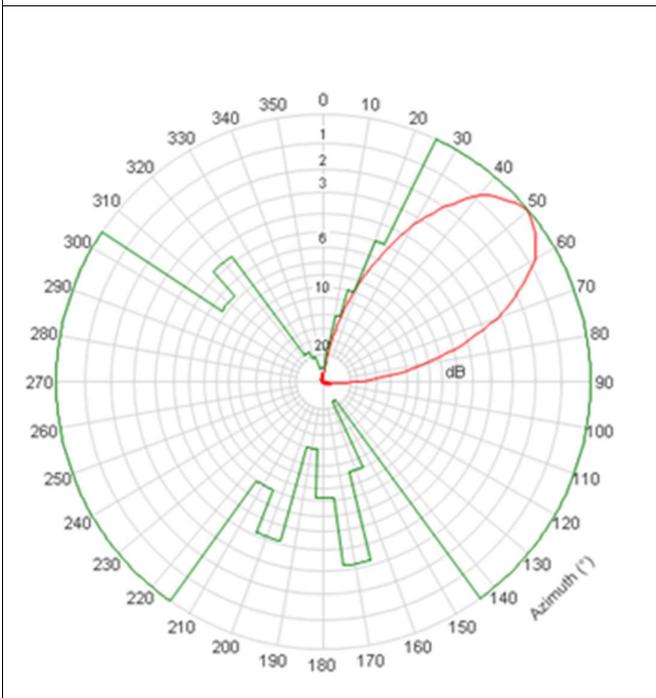


Figure 34 – Aberdeen

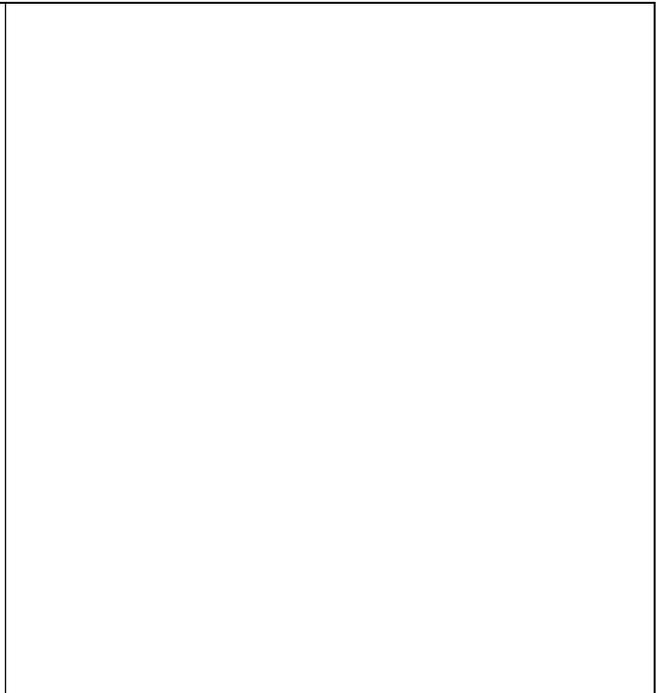


Figure 35 – Ayr

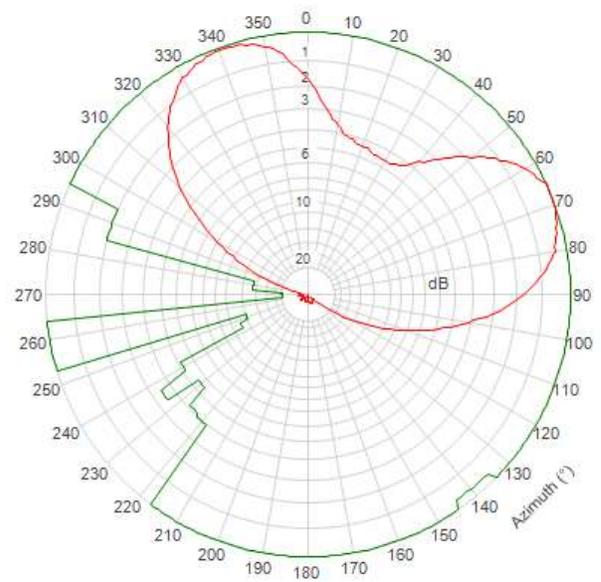


Figure 37 – Carlisle

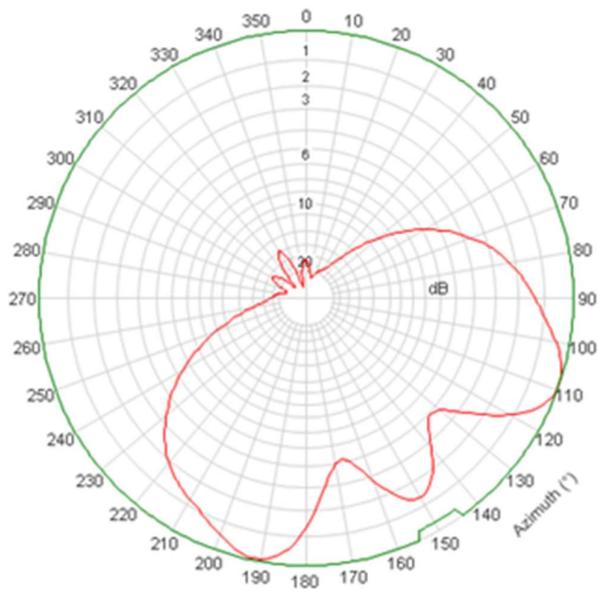


Figure 38 – Dundee (Angus)

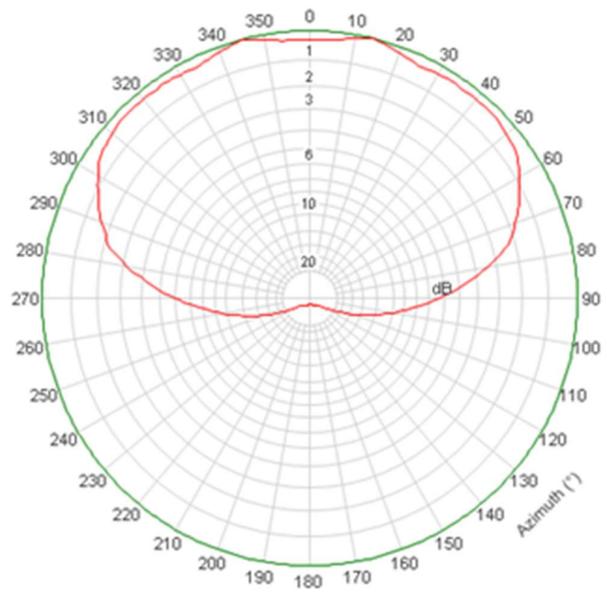


Figure 39 – Dundee (Tay Bridge)

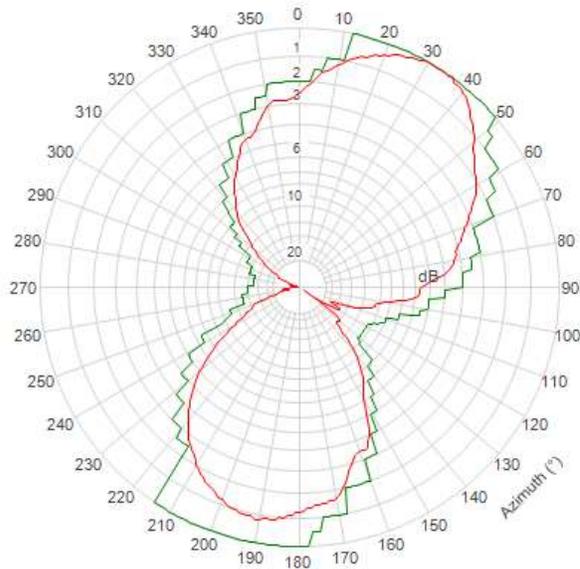


Figure 41 – Maidstone (Bluebell Hill)

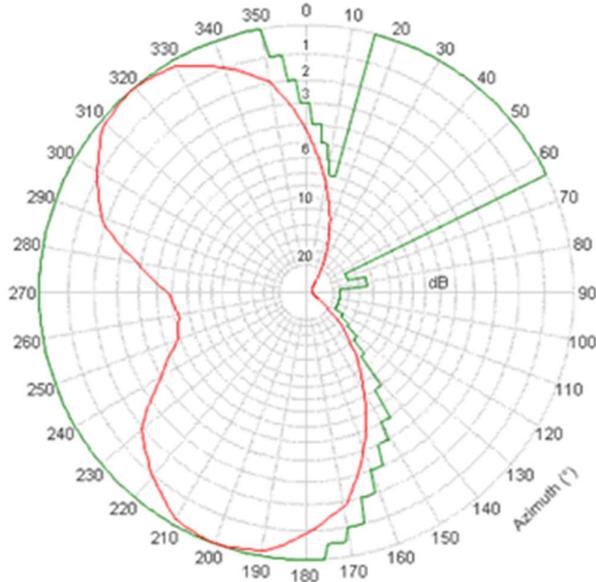


Figure 42 – Maidstone (Tunbridge Wells)

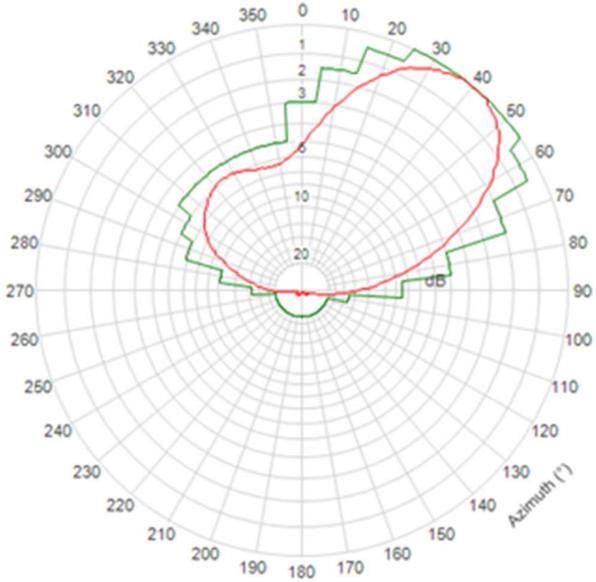


Figure 43 – Reading

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

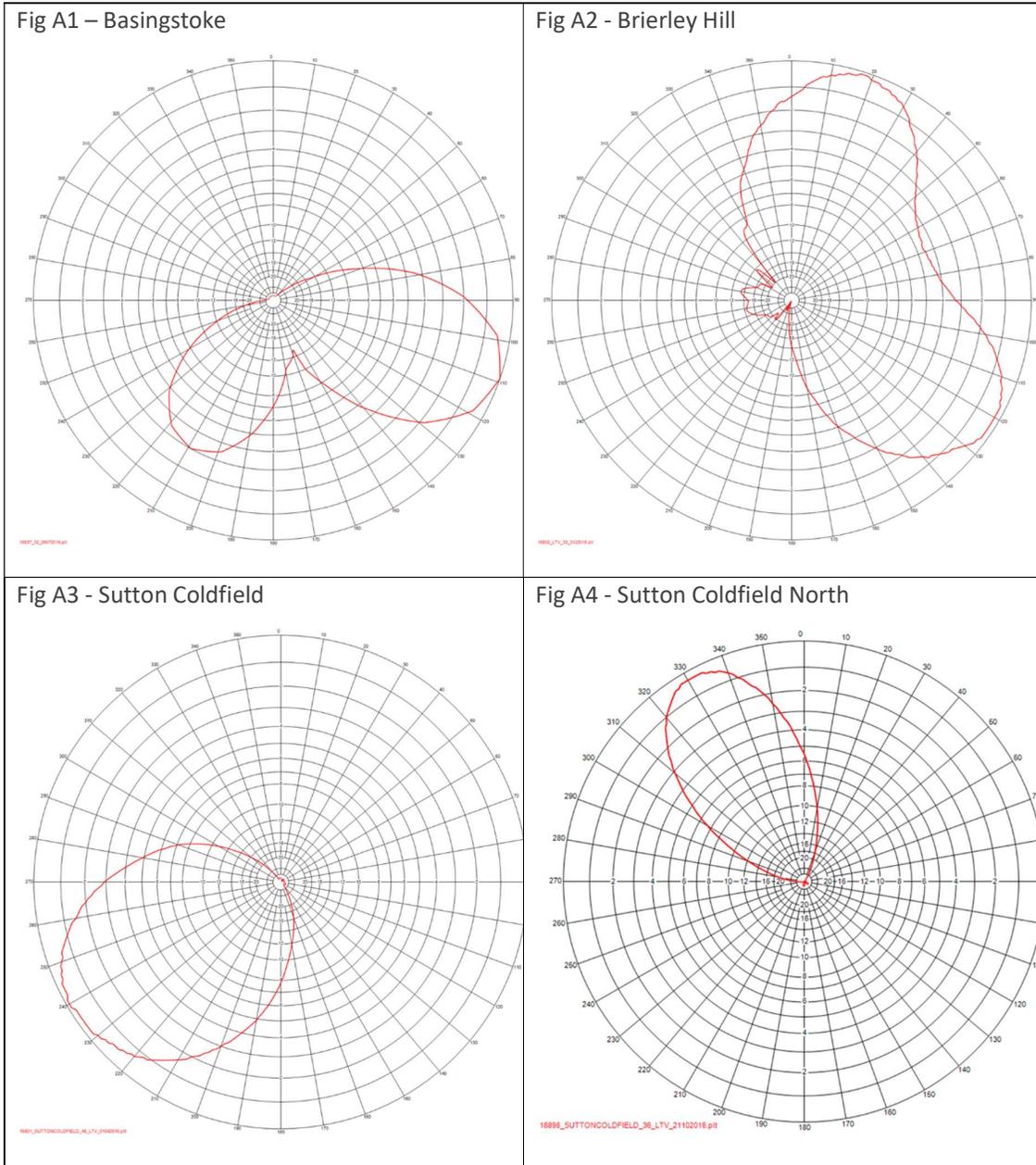


Fig A5 – Guildford

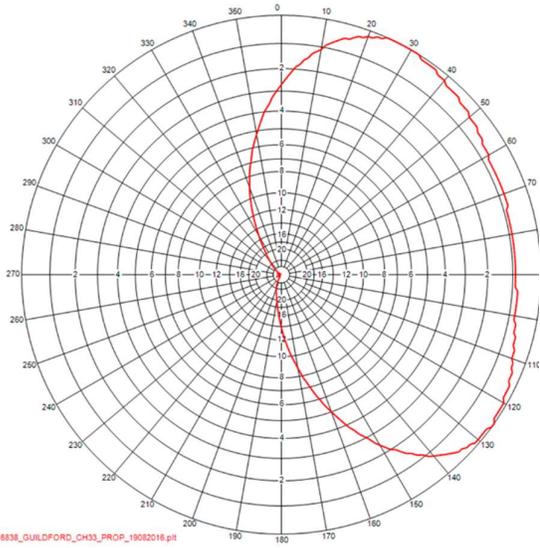


Fig A6 - Winter Hill (Liverpool petal)

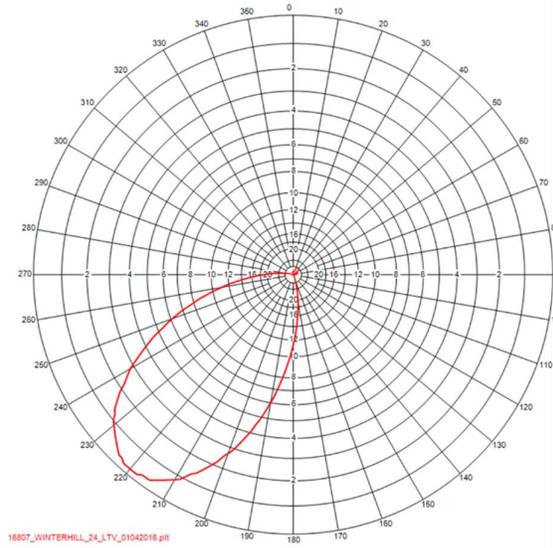


Fig A7 - Croydon

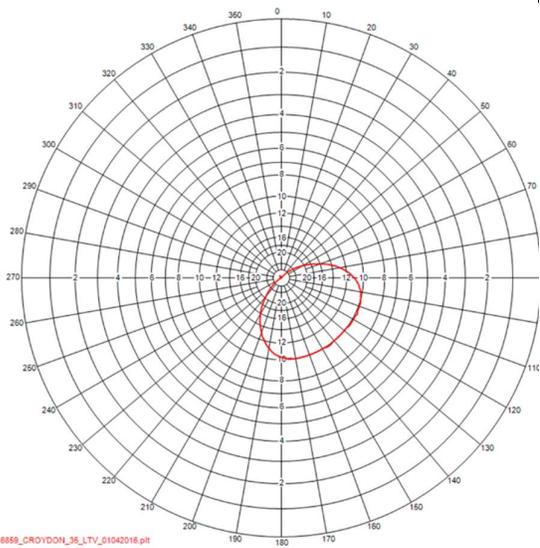


Fig A8 - Crystal Palace

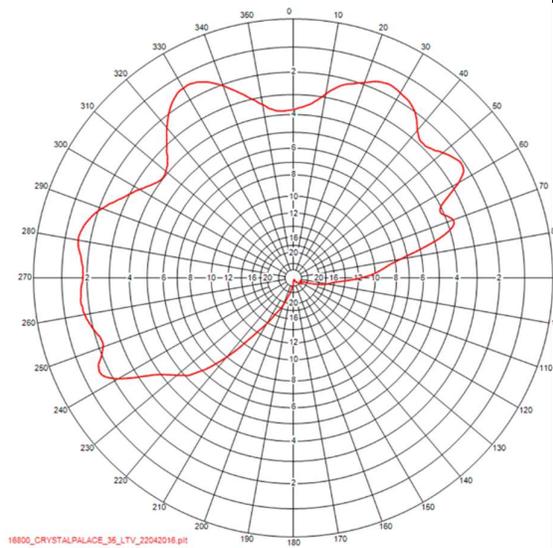


Fig A9 - Winter Hill (Manchester petal)

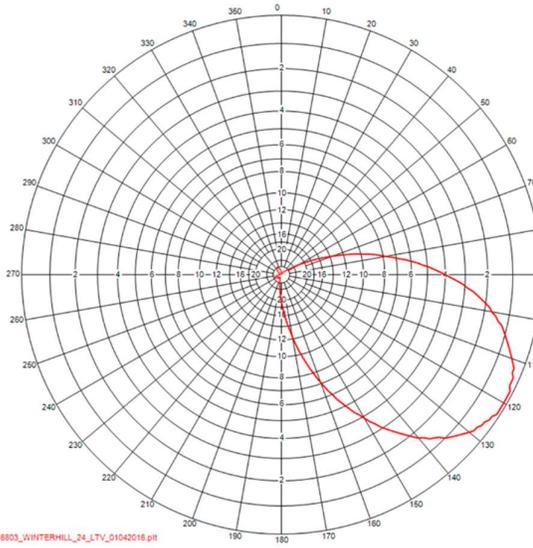


Fig A10 – Oxford

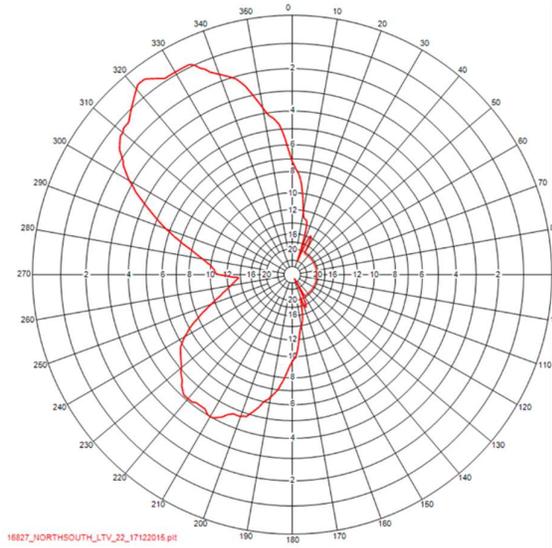


Fig A11 - Oxford East

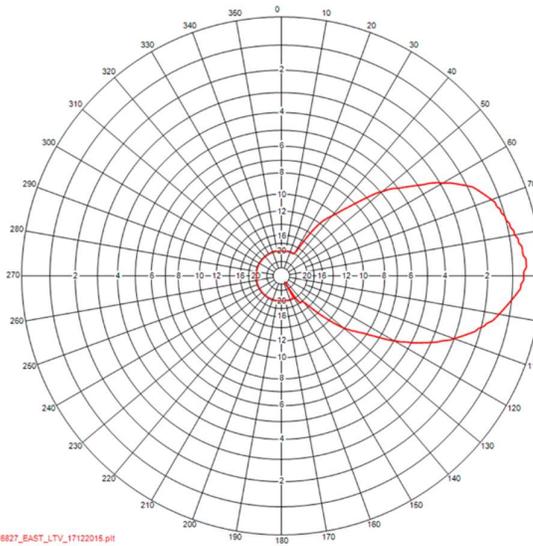


Fig A12 – Winter Hill (Blackpool/Preston petal)

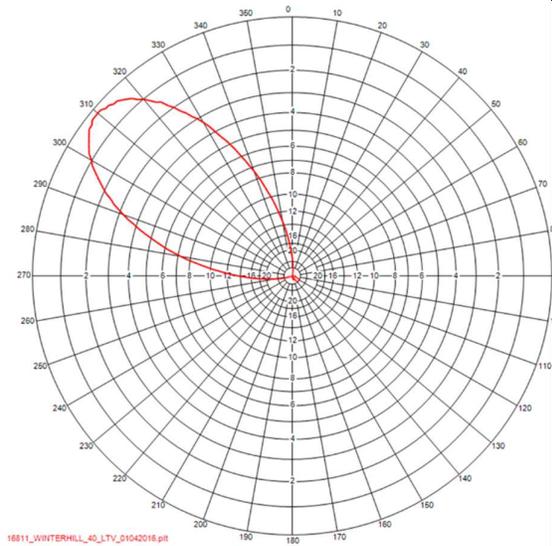


Fig A13 – Salisbury

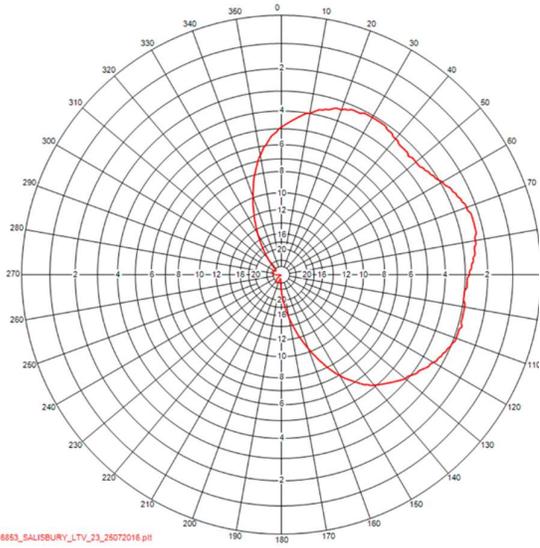


Fig A14 – Rowridge

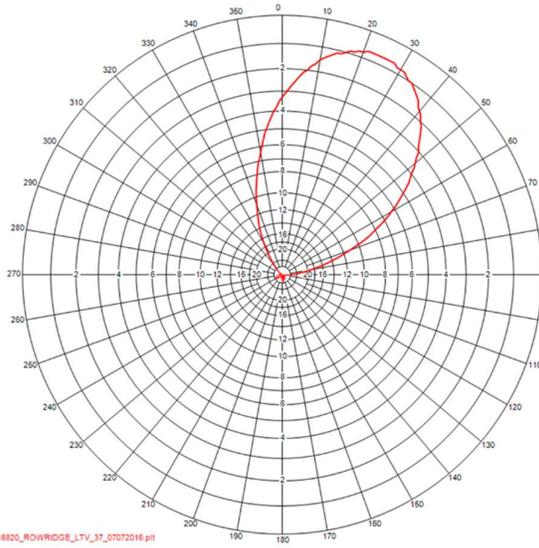


Fig A15 – Cambridge

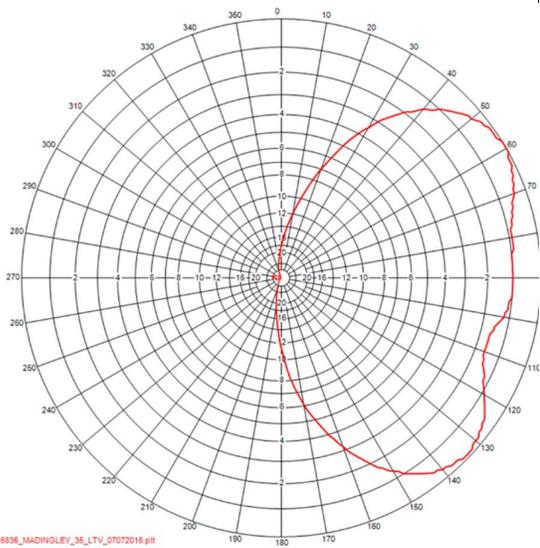


Fig A16 – Tacolneston

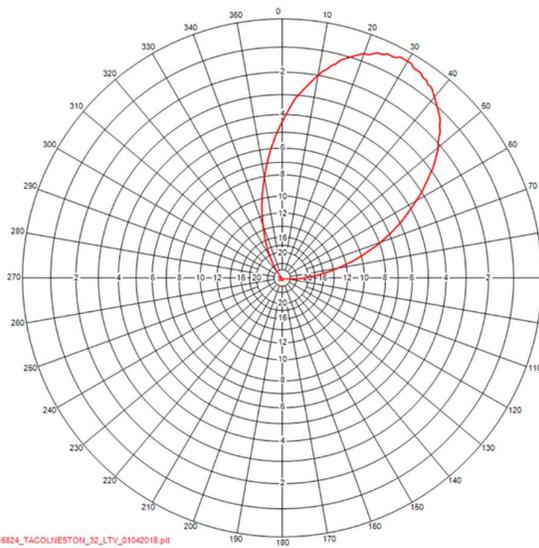
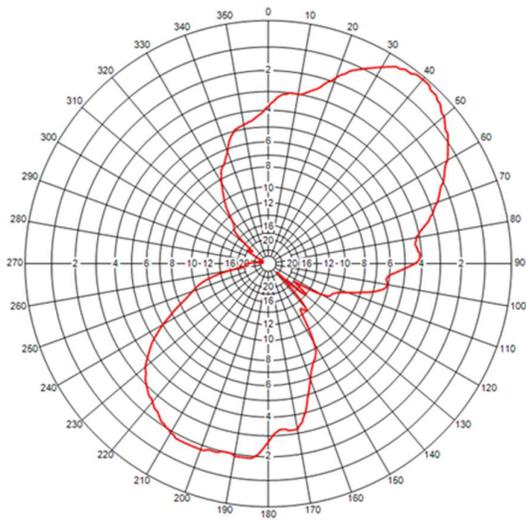
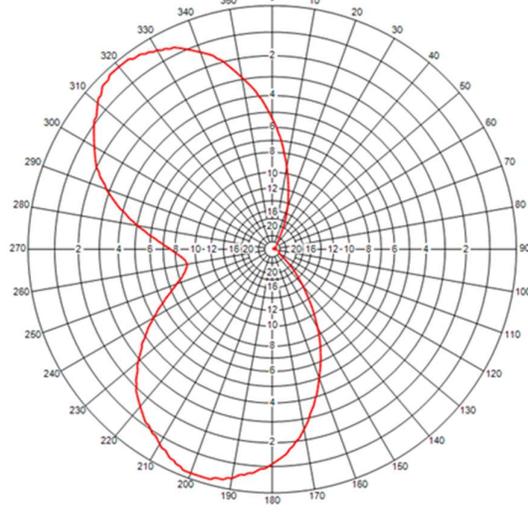


Fig A17 – Bluebell Hill



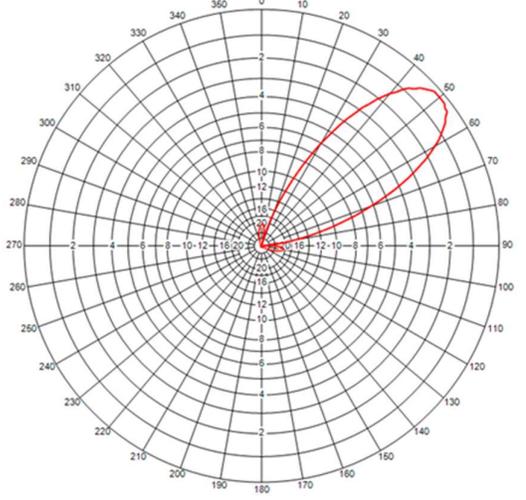
16826\_21\_LTV\_20180614\_EDIT.pit

Fig A18 – Tunbridge Wells



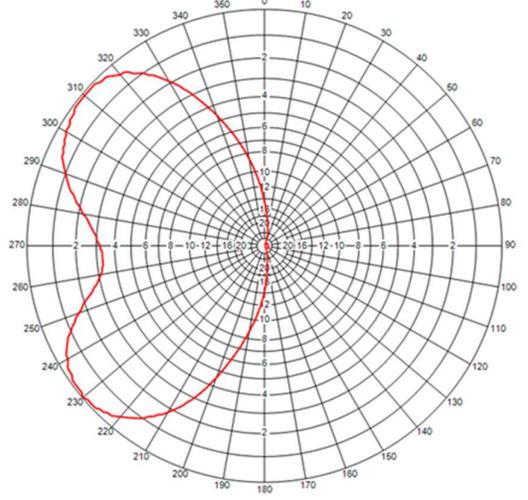
16854\_TUNBRIDGEWELLS\_39\_LTV\_07082016.pit

Fig A19 – Durriss



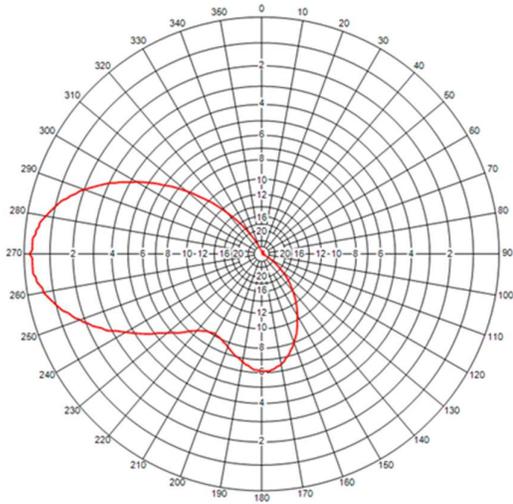
16826\_DURRIS\_41\_LTV\_25072016.pit

Fig A20 – Darvel



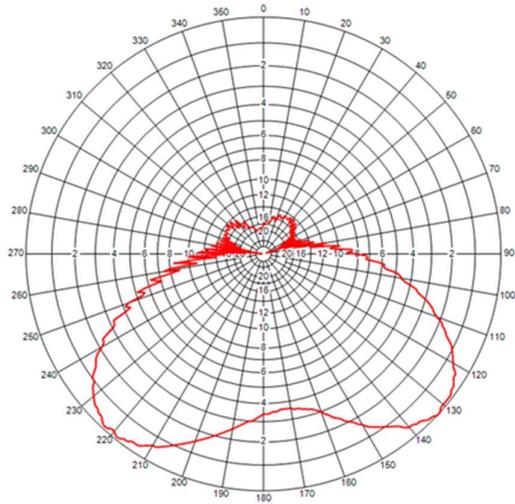
16834\_DARVEL\_31\_LTV\_19082016.pit

Fig A21 – Black Hill



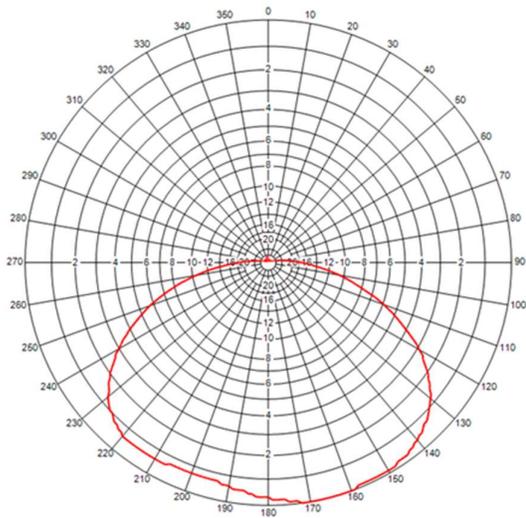
16809\_LTV\_T\_F\_M\_30\_20170909.ppt

Fig A22 – Craigkelly



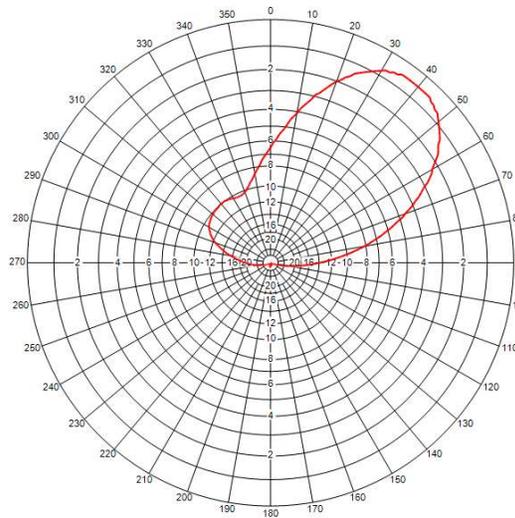
14700\_LTV\_1X\_T\_F\_M\_30\_20180420.ppt

Fig A23 – Moel Y Parc



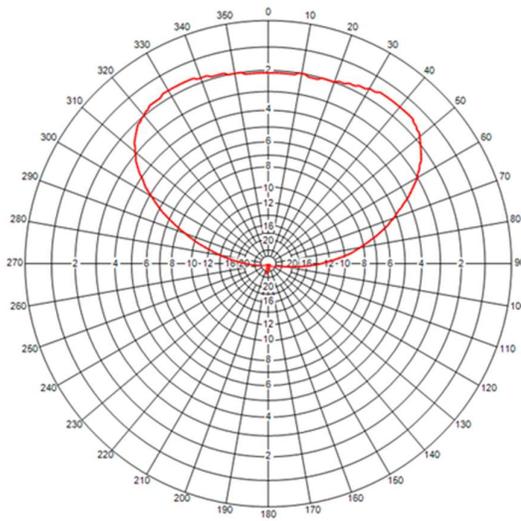
16841\_MOELYPARC\_27\_LTV\_01042015.ppt

Fig A24 – Hannington (Reading)



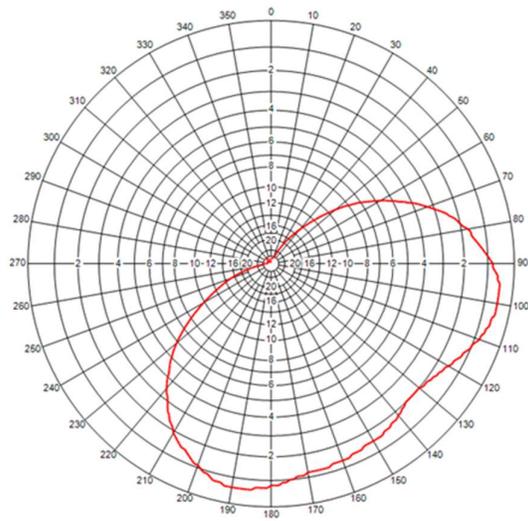
16856\_34\_LTV\_20170912.ppt

Figure A25 – Wenvoe



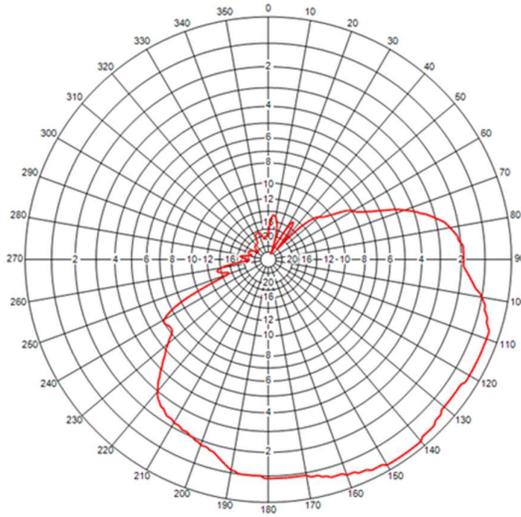
16810\_WENVOE\_37\_LTV\_24082016.plt

Figure A26 – Bristol Ilchester Crescent



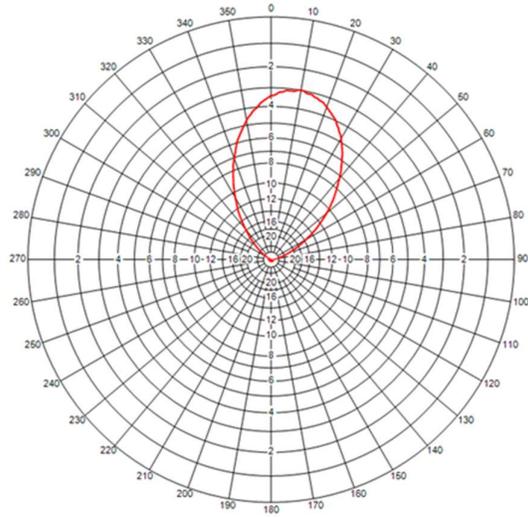
16814\_ILCHESTERCRESCENT\_37\_LTV\_19082016.plt

Figure A27 – Bristol King's Weston



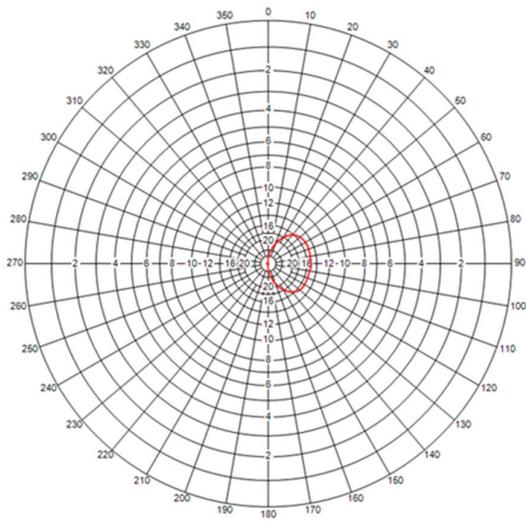
16813\_30\_LTV\_14102013.plt

Figure A28 – Mendip



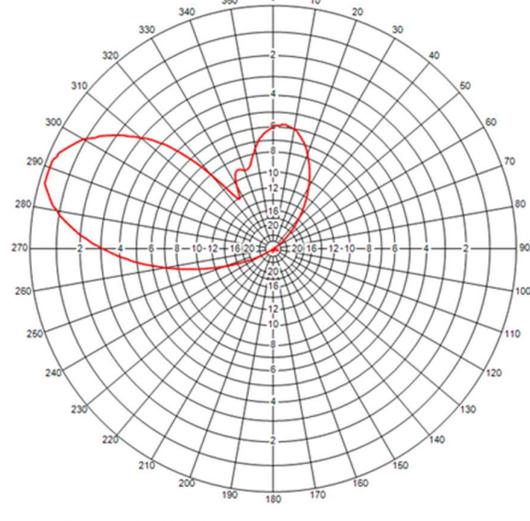
16812\_LTV\_30\_08062016.plt

Figure A29 – Divis



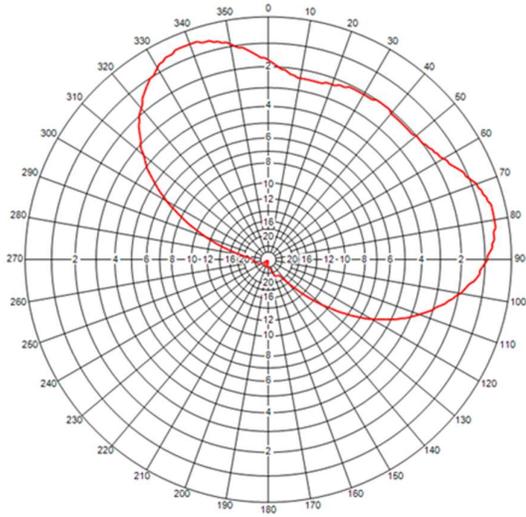
16819\_DIVIS\_36\_LTV\_01042016.ppt

Figure A30 – Whitehawk Hill



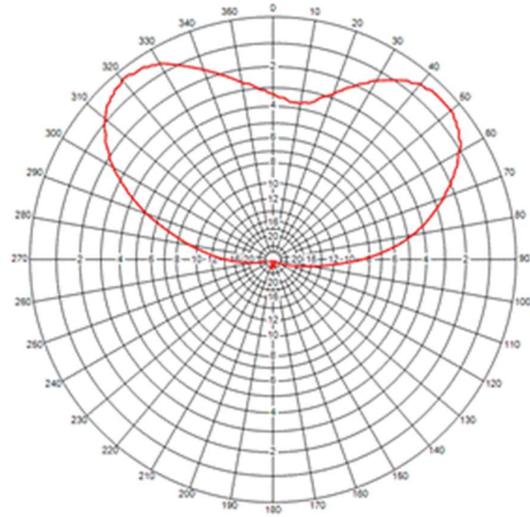
16830\_WHITEHAWKHILL\_40\_LTV\_01042016.ppt

Figure A31 – Beecroft Hill



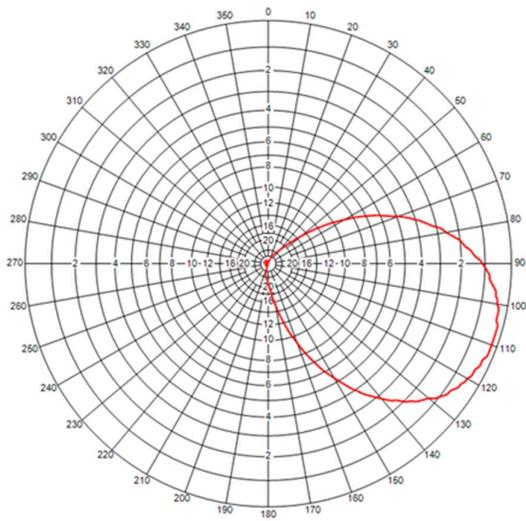
16805\_BEECROFTHILL\_39\_LTV\_01042016.ppt

Figure A32 – Emley Moor



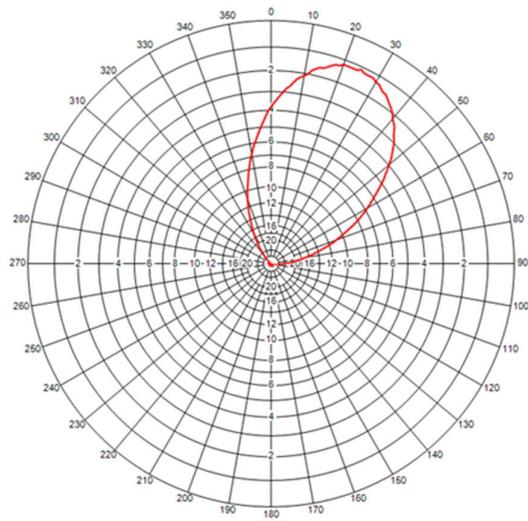
16804\_LTV\_39\_27102016\_200EGROT.ppt

Figure A33 – Sheffield



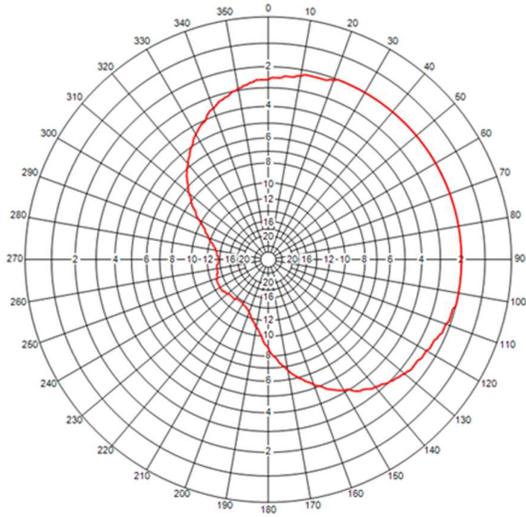
16832\_SHEFFIELD\_36\_LTV\_26082016.pit

Figure A34 - Bilsdale



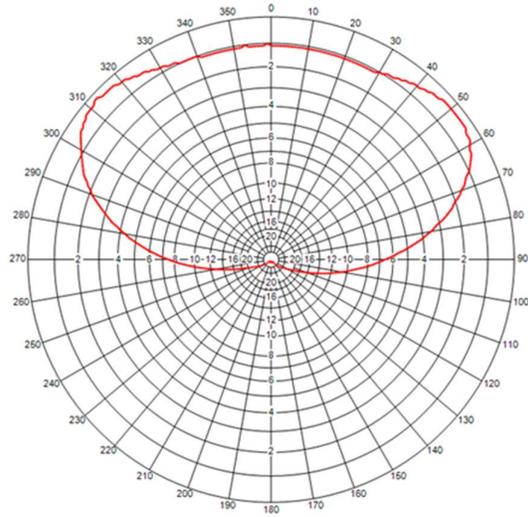
16821\_LTV\_T\_F\_M\_30\_20170704.pit

Figure A35 – Pontop Pike



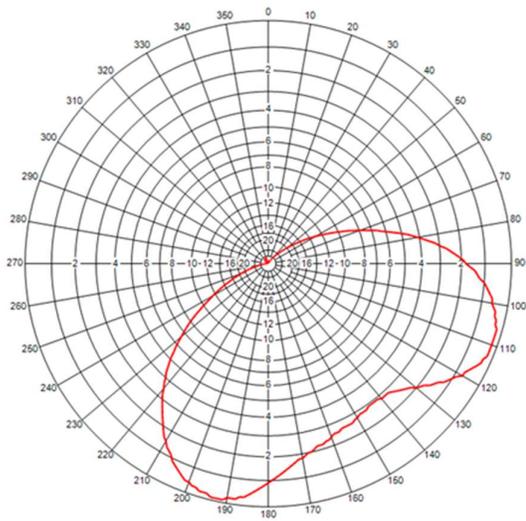
16806\_33\_16032016.pit

Figure A36 – Tay Bridge



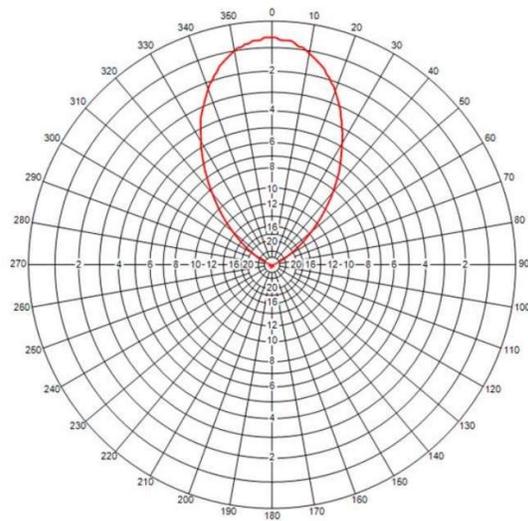
16823\_TAYBRIDGE\_32\_LTV\_28072016.pit

Figure A37 – Angus



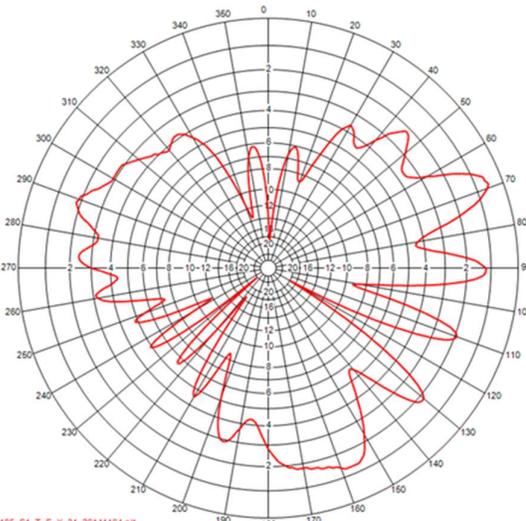
16822\_ANGUS\_34\_LTV\_22072016.ppt

Figure A38 – Belmont



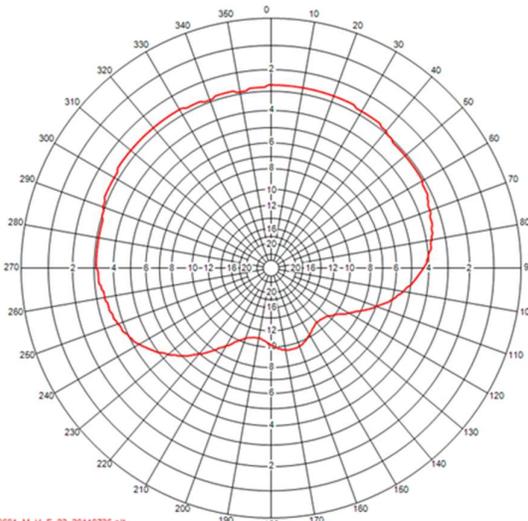
16818\_BELMONT\_32\_LTV\_01042016.ppt

Figure A 39 – Hemel Hempstead



10106\_51\_T\_F\_X\_31\_20141104.ppt

Figure A 40 – Kilvey Hill



10601\_M\_H\_F\_22\_20110725.ppt

Figure A 41 – Hannington Basingstoke

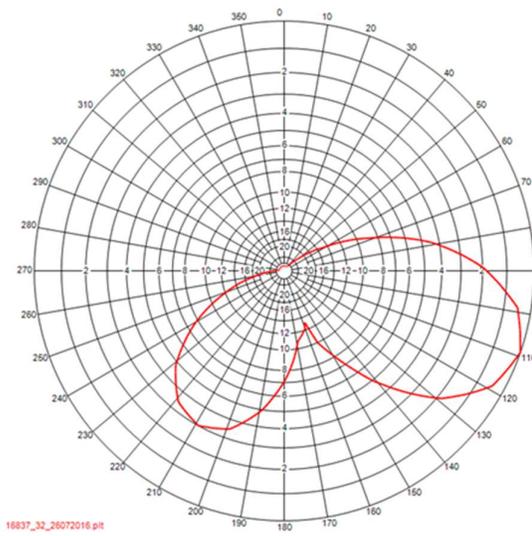


Figure A 42 – Caldbeck ch34

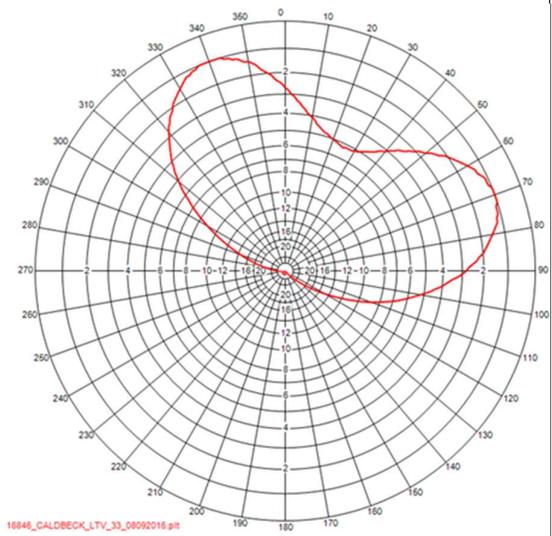


Figure A 43 – Caldbeck petal ch29

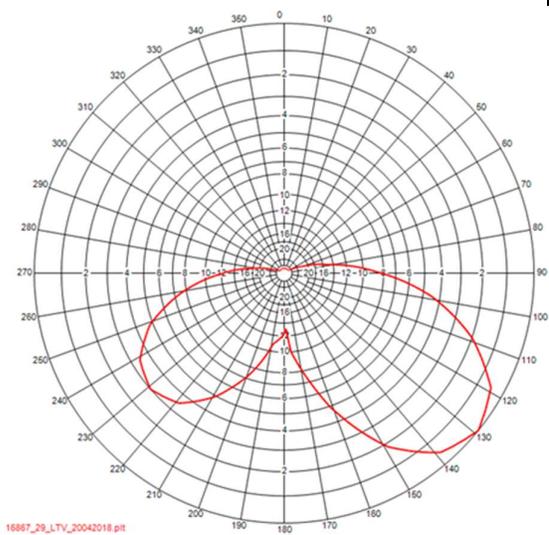
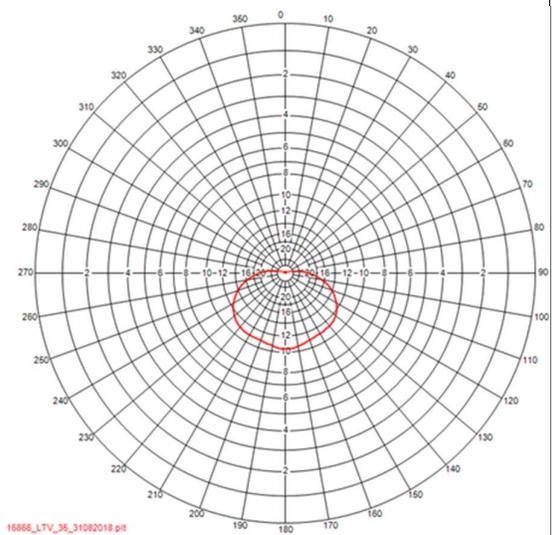
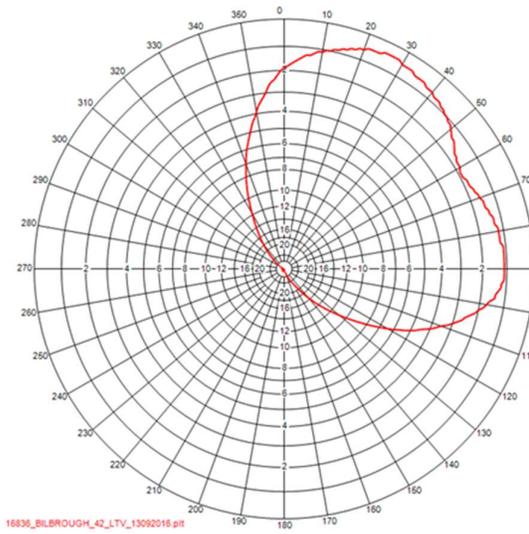


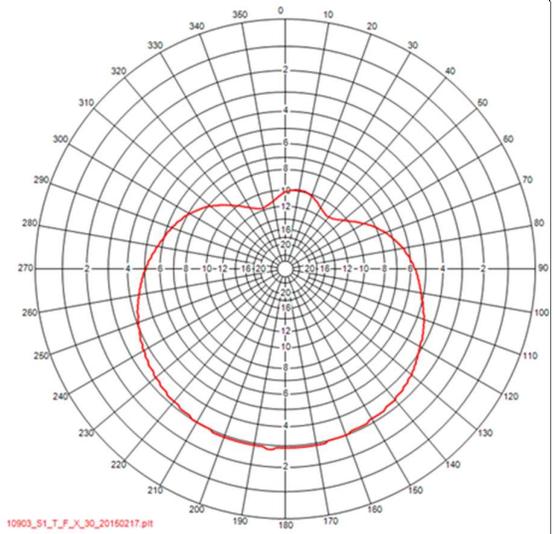
Figure A 44 – Reigate



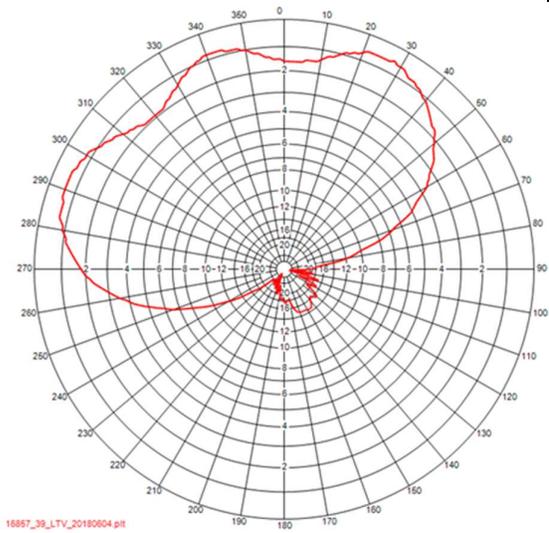
A45 – Bilborough



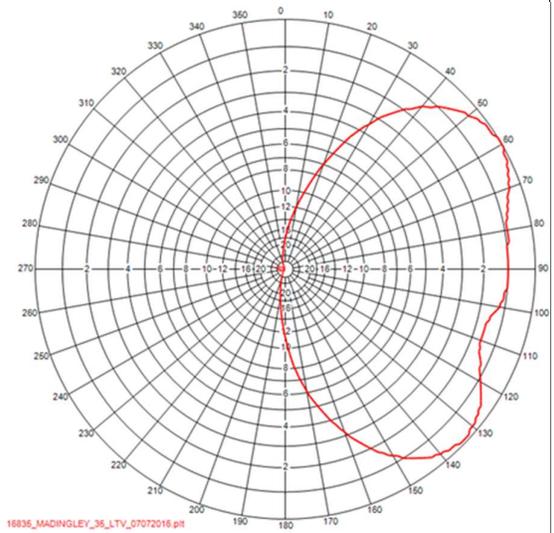
A46 – Fenham



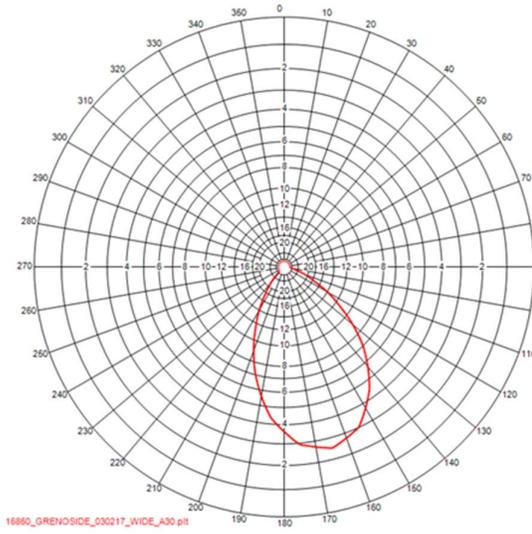
A47 – Olivers Mount



A48 – Madingley



A49 – Grenoside



A50 – Storeton

