

# Titanium C1-PLL LNBF Signal Test

Date: September 12, 2013

Time: 11am PDT

Location: Northern California, USA

Conditions: Clear, 82 degrees F

Dish: Sami 7.5m Prime Focus

Satellite: Intelsat 21 @ 58w

<b>LNBF</b>	<b>Titanium C1-PLL</b>	<b>GEOSATpro C2</b>
Tps Logged	38	33
TV CH Found	316	295
Radio CH Found	73	71

TP Frequency	Polarity	SR	Type	TITANIUM C1-PLL		GEOSATpro C2		Notes
				Signal Level	C/N	Signal Level	C/N	
3720	Vertical	30000	S2	90	13.0	93	12.0	
3720	Horizontal	21000	S2	88	16.0	87	15.0	
3760	Vertical	27690	DVBS	90	13.0	94	13.2	
3760	Horizontal	30000	S2	86	12.1	87	12.0	
3790	Horizontal	3320	DVBS	81	11.2	80	8.7	
3786	Horizontal	6620	DVBS	81	16.0			*C2 TP No Lock
3793	Horizontal	3320	DVBS	81	11.7	80	9.2	
3797	Horizontal	2218	DVBS	89	14.0	91	13.2	
3800	Vertical	26470	DVBS	90	13.0	93	13.0	
3801	Horizontal	4444	DVBS	80	6.6			*C2 TP No Lock
3809	Horizontal	3146	DVBS	79	8.4	80	8.5	
3814	Horizontal	6650	S2	81	13.0	80	12.2	
3840	Vertical	27690	DVBS	89	11.8	91	11.9	
3840	Horizontal	27690	DVBS	88	12.0	88	11.7	
3880	Vertical	27690	DVBS	88	13.2	91	12.9	
3881	Horizontal	27690	DVBS	88	13.5	86	8.4	*C2 BER unstable
3910	Vertical	15000	S2	79	10.0	82	10.0	
3920	Horizontal	27690	DVBS	89	16.2	85	11.8	
3924	Vertical	6620	DVBS	78	12.2	82	11.5	
3934	Vertical	7000	DVBS	76	8.7	79	8.5	*C1-PLL & C2 BER unstable
3962	Vertical	30000	S2	83	11.0			*C2 TP No Lock
4000	Horizontal	28120	S2	86	13.1	85	12.0	
4040	Horizontal	26590	DVBS	86	16.9	85	13.7	
4080	Vertical	27690	DVBS	82	13.4	88	13.1	
4082	Horizontal	30000	S2	83	13.0			*C2 TP No Lock
4108	Horizontal	8850	DVBS	77	12.9	79	13.0	
4120	Vertical	27500	DVBS	82	12.6	85	11.7	
4122	Horizontal	2222	DVBS	74	9.1	76	8.8	
4126	Horizontal	3700	DVBS	74	10.7	75	9.2	
4131	Horizontal	3556	DVBS	74	10.5	76	10.1	*C2 BER unstable
4144	Vertical	2205	DVBS	72	8.0	75	6.4	
4147	Horizontal	7120	S2	71	10.5			*C2 TP No Lock
4148	Vertical	2941	DVBS	72	10.8	75	7.6	
4151	Vertical	2888	DVBS	73	8.1	76	6.6	
4157	Vertical	6250	DVBS	73	8.0	76	6.4	
4163	Vertical	1875	DVBS	73	10.8	76	8.0	
4169	Vertical	3000	DVBS	74	10.6	77	8.1	
4174	Vertical	2941	DVBS	73	10.6	76	8.8	*C2 BER unstable

## Averages

<b>80.87</b>	<b>11.7</b>	<b>82.70</b>	<b>10.5</b>
Signal Level	C/N	Signal Level	C/N
TITANIUM C1-PLL		GEOSATpro C2	

Testing Summary: The Titanium C1-PLL provides higher Carrier to Noise Ratio margins on the vast majority of satellite signals. The Signal Level amplification level provides significantly cleaner amplification of weaker signals. Increased polarity / phase isolation and stability allows satellite receivers are able to log weaker, narrower and transponders that are often lost in base level noise.

Bottom line: Compared in side-by-side testing with the highly rated C2 LNBF, the Titanium C1-PLL logged more transponders, found more channels and registered higher Sig