

Frequency Variation

Frequency Variation with Temperature						
temp	Uplink Frequency 1	ppm From 173.075	Uplink Frequency 2	ppm From 173.075	Uplink Frequency 3	ppm From 173.075
-30	173.073304	-9.8034682	173.074286	-4.12716763	173.075357	2.06358382
-20	173.074107	-5.1618497	173.075112	0.64739884	173.076138	6.57803468
-10	173.074353	-3.7398844	173.075357	2.06358382	173.076406	8.12716763
0	173.074353	-3.7398844	173.075357	2.06358382	173.076384	8
10	173.074062	-5.4219653	173.075045	0.26011561	173.076138	6.57803468
20	173.073616	-8	173.074688	-1.80346821	173.075737	4.26011561
30	173.073103	-10.965318	173.074085	-5.28901734	173.075089	0.51445087
40	173.072455	-14.710983	173.073527	-8.51445087	173.074643	-2.0635838
50	173.07221	-16.127168	173.073214	-10.3236994	173.074263	-4.2601156
60	173.072076	-16.901734	173.07308	-11.0982659	173.074107	-5.1618497
Maximum absolute difference		16.9017341		11.0982659		8.12716763
Frequency Variation with Voltage						
voltage	Uplink Frequency 1	ppm From 173.075	Uplink Frequency 2	ppm From 173.075	Uplink Frequency 3	ppm From 173.075
8	173.073103	-10.965318	173.074062	-5.42196532	173.075112	0.64739884
8.5	173.073036	-11.352601	173.074018	-5.67630058	173.075089	0.51445087
9	173.073214	-10.323699	173.074241	-4.38728324	173.075268	1.54913295
9.5	173.073214	-10.323699	173.074196	-4.64739884	173.075223	1.28901734
10	173.073125	-10.83815	173.074152	-4.9017341	173.075179	1.03468208
10.5	173.07308	-11.098266	173.074107	-5.16184971	173.075089	0.51445087
11	173.073103	-10.965318	173.074107	-5.16184971	173.075112	0.64739884
11.5	173.073103	-10.965318	173.074062	-5.42196532	173.075089	0.51445087
12	173.073058	-11.225434	173.074085	-5.28901734	173.075089	0.51445087
12.5	173.073036	-11.352601	173.074062	-5.42196532	173.075089	0.51445087
13	173.073036	-11.352601	173.07404	-5.54913295	173.075045	0.26011561
13.5	173.073013	-11.485549	173.074018	-5.67630058	173.075067	0.38728324
14	173.072991	-11.612717	173.074018	-5.67630058	173.075022	0.12716763
14.5	173.072991	-11.612717	173.073996	-5.80346821	173.075022	0.12716763
15	173.072969	-11.739884	173.073973	-5.93641618	173.075	0
15.5	173.072946	-11.872832	173.073951	-6.06358381	173.075	0
16	173.072946	-11.872832	173.073951	-6.06358381	173.074955	-0.2601156
16.5	173.072924	-12	173.073929	-6.19075145	173.074933	-0.3872832
17	173.072902	-12.127168	173.073906	-6.32369942	173.074911	-0.5144509
Maximum absolute difference		12.1271676		6.32369942		1.54913295
Equipment list: All equipment was calibrated to plant standards.						
1. 1 HP E3610A - DC Power Supply						
2. 1 HP 8901B - Mod Analyzer						
3. 1 HP 53310A - Mod Domain Analyzer						
4. 1 UCT 2008 Rubidium Reference Timebase Generator - supplied to 8901B and 53310A						

Frequency Variation

Uplink Frequency 4	ppm From 173.075	Normal MSK Transmit Frequency	ppm From 173.075
173.076563	9.034682	173.0748	-1.156069
173.077388	13.80347	173.0757	4.046243
173.077656	15.3526	173.076	5.780347
173.077656	15.3526	173.076	5.780347
173.077388	13.80347	173.0756	3.468208
173.076942	11.22543	173.0753	1.734104
173.076339	7.739884	173.0748	-1.156069
173.075871	5.034682	173.0741	-5.202312
173.075513	2.965318	173.0736	-8.092486
173.075335	1.936416	173.0733	-9.82659
	15.3526		9.82659
		lj3	
Uplink Frequency 4	ppm From 173.075	Normal MSK Transmit Frequency	ppm From 173.075
173.076384	8	173.0749	-0.578035
173.076339	7.739884	173.0749	-0.578035
173.076518	8.774566	173.0748	-1.156069
173.076473	8.514451	173.0749	-0.578035
173.076429	8.260116	173.0749	-0.578035
173.076384	8	173.0748	-1.156069
173.076384	8	173.0748	-1.156069
173.076384	8	173.0748	-1.156069
173.076339	7.739884	173.0748	-1.156069
173.076339	7.739884	173.0748	-1.156069
173.076317	7.612717	173.0748	-1.156069
173.076295	7.485549	173.0748	-1.156069
173.076272	7.352601	173.0748	-1.156069
173.076272	7.352601	173.0748	-1.156069
173.076272	7.352601	173.0747	-1.734104
173.076228	7.098266	173.0747	-1.734104
173.076228	7.098266	173.0748	-1.156069
173.076205	6.965318	173.0747	-1.734104
173.076183	6.83815	173.0745	-2.890173
	8.774566		2.890173