

Typical Performance Data

Frequency (MHz)	Power deviation from nominal Vs. Output Frequency (dBm)									
	-45 dBm	-40 dBm	-30 dBm	-20 dBm	-10 dBm	0 dBm	10 dBm	14 dBm	17 dBm	20 dBm
10	0.143	0.186	0.079	0.133	0.920	0.929	0.789	0.609	0.392	0.009
50	0.200	0.253	0.157	0.139	0.326	0.328	0.271	0.165	0.033	-0.223
100	0.055	0.104	0.056	0.032	0.180	0.188	0.107	0.015	-0.093	-0.325
250	0.084	0.133	0.094	0.083	0.072	0.076	0.017	-0.056	-0.144	-0.304
500	-0.052	-0.017	-0.055	-0.024	0.065	0.066	0.022	-0.041	-0.124	-0.272
1000	0.053	0.104	0.085	0.040	0.061	0.067	0.030	-0.021	-0.093	-0.190
1500	-0.124	-0.084	-0.091	-0.079	0.054	0.058	0.003	-0.045	-0.107	-0.213
2000	0.182	0.236	0.226	0.216	0.077	0.090	0.059	0.008	-0.047	-0.114
2500	-0.088	-0.038	-0.046	-0.008	0.022	0.022	-0.110	-0.165	-0.194	-0.230
3000	-0.108	-0.044	-0.042	-0.001	0.034	0.047	0.032	-0.040	-0.076	-0.173
3500	0.118	0.165	0.178	0.230	0.113	0.128	0.034	-0.021	-0.054	-0.114
4000	-0.266	-0.229	-0.407	-0.031	-0.003	0.030	-0.048	-0.422	-0.457	-0.539
4500	-0.109	-0.087	-0.134	-0.077	-0.050	-0.042	-0.072	-0.288	-0.327	-0.381
5000	0.274	0.270	-0.322	-0.383	-0.335	-0.315	-0.215	-0.037	-0.075	-0.174
6000	0.294	0.351	0.232	0.108	0.118	0.151	0.217	-0.045	-0.062	-0.159
7000	-0.362	-0.313	-0.215	-0.057	-0.052	-0.049	-0.085	-0.065	0.003	-0.093
8000	-0.460	-0.423	-0.449	-0.003	0.016	0.026	-0.065	-0.206	-0.372	-0.461
9000	0.135	0.151	0.192	-0.006	0.019	0.022	0.056	0.012	-0.036	-0.140
10000	0.354	0.359	0.500	0.167	0.184	0.216	0.272	0.262	0.184	0.046
11000	-0.026	0.015	-0.094	0.066	0.150	0.121	0.048	-0.268	-0.336	-0.496
12000	0.037	0.072	-0.023	0.019	0.036	0.059	0.057	-0.103	-0.186	-0.402
13000	-0.022	0.027	0.003	0.032	0.071	0.089	0.142	-0.085	-0.151	-0.316
14000	-0.538	-0.519	-0.571	-0.141	-0.141	-0.133	-0.164	-0.276	-0.349	-0.541
14500	0.012	0.033	0.020	0.145	0.195	0.199	0.257	0.155	0.058	0.084
15000	0.538	0.552	0.299	0.374	0.396	0.411	0.466	0.328	0.208	0.348
15500	1.015	1.066	0.461	0.451	0.468	0.390	0.629	0.717	0.766	0.248
16000	0.312	0.396	0.529	0.575	0.235	0.639	0.205	0.233	0.288	0.671
17000	0.879	0.915	0.589	0.566	0.720	0.561	0.340	0.402	0.390	0.433
17800	0.121	0.280	0.454	0.229	0.459	0.373	0.474	-0.108	0.026	0.186
18000	0.319	0.483	0.643	0.662	0.426	0.130	0.427	0.057	0.178	0.286
19000	0.474	0.133	-0.066	0.202	0.036	0.363	0.339	-0.224	-0.063	0.724
20000	-0.096	-0.074	-0.075	0.577	0.149	0.013	0.397	0.050	0.096	0.541
21000	0.594	0.535	0.153	0.024	0.319	0.283	0.038	0.223	0.209	0.286
21200	0.809	0.358	0.429	0.072	0.380	0.174	-0.033	0.188	-0.237	0.248
22000	0.604	0.828	0.648	0.700	0.546	0.607	0.263	0.251	0.431	--
23000	0.747	0.856	0.556	0.498	0.278	0.324	-0.086	0.196	-0.093	--
23500	0.393	0.255	0.508	0.201	0.450	0.519	0.176	0.514	0.464	--
24000	0.173	0.647	0.442	0.322	0.289	0.368	-0.022	0.246	0.417	--
24500	0.529	0.001	0.084	0.521	0.472	0.161	0.197	-0.080	0.427	--
25200	0.581	0.537	0.546	0.511	0.692	0.526	0.330	0.511	0.677	--
26000	0.510	0.492	0.660	0.590	0.582	0.552	0.385	0.492	0.628	--
27000	0.090	0.608	0.731	0.804	0.546	0.849	1.176	1.880	1.069	--
28000	0.746	0.291	-0.105	0.281	0.063	0.561	0.939	0.785	--	--
29000	-0.133	0.444	0.347	-0.114	0.235	0.600	0.956	0.289	--	--
29500	1.254	0.688	0.549	0.709	0.771	1.290	1.362	1.312	--	--
30000	1.082	1.364	0.881	0.506	0.162	0.726	0.730	0.603	--	--

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Typical Performance Data

Power (dBm)	Power deviation from nominal Vs. Output Power (dBm)													
	0.01 GHz	0.2 GHz	0.5 GHz	1 GHz	3 GHz	5 GHz	10 GHz	12 GHz	15 GHz	17.8 GHz	21.2 GHz	25.2 GHz	28 GHz	30 GHz
	-45	0.143	0.024	-0.052	0.053	-0.108	0.274	0.354	0.037	0.538	0.121	0.809	0.581	0.746
-43	0.165	0.039	-0.041	0.071	-0.079	0.260	0.336	0.036	0.526	0.129	0.830	0.696	0.690	1.303
-41	0.181	0.060	-0.028	0.095	-0.060	0.272	0.373	0.065	0.538	0.211	0.236	0.595	0.392	1.123
-40	0.186	0.071	-0.017	0.104	-0.044	0.270	0.359	0.072	0.552	0.280	0.358	0.537	0.291	1.364
-38	0.205	0.083	-0.004	0.113	-0.037	0.308	0.407	0.073	0.532	0.351	0.438	0.624	0.305	1.306
-36	0.189	0.058	-0.037	0.087	-0.053	0.123	0.411	0.052	0.552	0.398	0.448	0.508	0.420	1.133
-34	0.111	0.057	-0.027	0.103	-0.035	0.150	0.427	0.072	0.569	0.489	0.387	0.631	0.415	0.840
-32	0.073	0.014	-0.067	0.073	-0.060	-0.319	0.481	-0.002	0.515	0.377	0.344	0.460	0.285	0.683
-30	0.079	0.027	-0.055	0.085	-0.042	-0.322	0.500	-0.023	0.299	0.454	0.429	0.546	-0.105	0.881
-28	0.067	0.025	-0.049	0.086	-0.044	-0.279	0.506	0.045	0.323	0.482	0.501	0.424	-0.044	0.704
-26	0.085	0.003	-0.078	0.064	-0.061	-0.282	0.510	-0.073	0.327	0.534	0.291	0.718	0.333	0.736
-25	0.081	0.017	-0.039	0.065	-0.063	-0.286	0.296	-0.091	0.359	0.228	0.390	0.584	0.425	0.707
-24	0.055	0.025	-0.017	0.044	-0.004	-0.373	0.136	-0.034	0.326	0.122	0.152	0.655	0.283	0.579
-22	0.185	0.041	-0.008	0.069	0.007	-0.342	0.156	-0.005	0.339	0.186	0.085	0.706	0.235	0.384
-20	0.133	0.025	-0.024	0.040	-0.001	-0.383	0.167	0.019	0.374	0.229	0.072	0.511	0.281	0.506
-18	0.134	0.045	-0.015	0.065	0.035	-0.352	0.163	0.016	0.360	0.309	0.113	0.648	0.150	-0.150
-16	0.263	0.127	0.086	0.086	0.059	-0.342	0.189	0.026	0.387	0.338	0.175	0.588	0.287	0.555
-14	0.395	0.121	0.073	0.068	0.043	-0.324	0.176	0.018	0.396	0.397	0.257	0.716	0.084	0.484
-12	0.926	0.118	0.070	0.062	0.038	-0.319	0.172	0.037	0.404	0.395	0.355	0.603	0.134	-0.226
-10	0.920	0.115	0.065	0.061	0.034	-0.335	0.184	0.036	0.396	0.459	0.380	0.692	0.063	0.162
-8	0.928	0.118	0.071	0.065	0.038	-0.357	0.181	0.030	0.397	0.469	0.282	0.449	0.139	0.159
-6	0.934	0.119	0.069	0.066	0.036	-0.326	0.171	0.019	0.405	0.485	0.013	0.573	0.121	0.730
-4	0.924	0.113	0.063	0.059	0.040	-0.321	0.175	0.037	0.413	0.630	0.075	0.629	0.256	0.575
-2	0.924	0.107	0.064	0.062	0.045	-0.297	0.234	0.050	0.423	0.266	0.151	0.744	0.639	0.868
0	0.929	0.114	0.066	0.067	0.047	-0.315	0.216	0.059	0.411	0.373	0.174	0.526	0.561	0.726
2	0.870	0.063	0.025	0.031	0.037	-0.211	0.311	0.019	0.368	0.265	0.233	0.598	0.798	0.495
4	0.870	0.074	0.035	0.042	0.050	-0.228	0.304	0.027	0.376	0.365	0.298	0.551	0.841	0.448
6	0.855	0.074	0.036	0.039	0.039	-0.216	0.301	0.018	0.398	0.364	-0.065	0.219	0.582	0.792
8	0.825	0.060	0.019	0.031	0.033	-0.242	0.274	0.029	0.440	0.422	0.007	0.161	0.719	0.805
10	0.789	0.063	0.022	0.030	0.032	-0.215	0.272	0.057	0.466	0.474	-0.033	0.330	0.939	0.730
12	0.708	0.020	-0.014	-0.001	-0.002	-0.229	0.257	-0.061	0.358	-0.232	-0.026	0.292	0.494	0.993
13	0.662	-0.006	-0.026	-0.010	-0.011	-0.069	0.269	-0.078	0.341	-0.058	-0.068	0.557	0.336	1.002
14	0.609	-0.025	-0.041	-0.021	-0.040	-0.037	0.262	-0.103	0.328	-0.108	0.188	0.511	0.785	0.603
15	0.548	-0.048	-0.060	-0.046	-0.044	-0.065	0.232	-0.139	0.289	-0.052	0.127	0.504	0.582	--
16	0.477	-0.075	-0.099	-0.060	-0.053	-0.082	0.205	-0.156	0.258	-0.098	0.274	0.358	0.145	--
17	0.392	-0.127	-0.124	-0.093	-0.076	-0.075	0.184	-0.186	0.208	0.026	-0.237	0.677	-0.845	--
18	0.288	-0.163	-0.156	-0.116	-0.100	-0.118	0.172	-0.233	0.137	-0.081	0.067	--	--	--
19	0.157	-0.218	-0.205	-0.149	-0.115	-0.144	0.122	-0.299	0.296	0.228	0.100	--	--	--
20	0.009	-0.294	-0.272	-0.190	-0.173	-0.174	0.046	-0.402	0.348	0.186	0.248	--	--	--

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# USB Synthesized Signal Generator

# FX-30G-RC

## Typical Performance Data

Frequency (MHz)	Harmonics Levels Vs. Output Frequency									
	-45 dBm					+10 dBm				
	F2	F3	F0.5	F1.5	F2.5	F2	F3	F0.5	F1.5	F2.5
10	-75.53	-66.24	--	--	--	-43.36	-53.68	--	--	--
50	-68.64	-70.00	--	--	--	-34.83	-63.31	--	--	--
100	-68.97	-71.44	--	--	--	-37.53	-72.97	--	--	--
250	-55.85	-73.39	--	--	--	-39.10	-66.88	--	--	--
500	-56.61	-74.63	--	--	--	-39.18	-61.08	--	--	--
1000	-66.01	-74.97	--	--	--	-41.13	-65.09	--	--	--
1500	-58.15	-71.04	--	--	--	-40.82	-64.68	--	--	--
2000	-71.12	-74.50	--	--	--	-40.22	-63.19	--	--	--
2500	-70.48	-76.67	--	--	--	-40.30	-61.09	--	--	--
3000	-65.12	-70.55	--	--	--	-39.46	-60.70	--	--	--
3500	-66.55	-67.52	--	--	--	-38.25	-60.64	--	--	--
4000	-66.71	-68.34	--	--	--	-37.33	-62.09	--	--	--
4500	-59.77	-69.34	--	--	--	-38.02	-62.84	--	--	--
5000	-65.72	-64.86	--	--	--	-37.69	-63.13	--	--	--
6000	-68.82	-73.13	--	--	--	-38.32	-64.14	--	--	--
7000	-65.47	-65.98	--	--	--	-39.35	-65.79	--	--	--
8000	-73.47	-62.52	--	--	--	-43.11	-72.51	--	--	--
9000	-68.94	-67.79	--	--	--	-42.77	-88.92	--	--	--
10000	-66.60	-65.58	--	--	--	-45.22	-90.64	--	--	--
11000	-64.67	-64.68	--	--	--	-44.49	-88.92	--	--	--
12000	-65.68	-60.81	--	--	--	-47.90	-89.17	--	--	--
13000	-65.52	-57.51	--	--	--	-59.63	-84.52	--	--	--
14000	-66.52	-56.53	--	--	--	-72.25	-85.26	--	--	--
14500	-63.68	-57.03	--	--	--	-77.81	-85.14	--	--	--
15000	-62.00	-57.09	-67.23	-69.74	-62.15	-76.54	-78.88	-74.28	-89.36	-85.41
15500	-41.05	-38.27	-33.50	-50.45	-46.09	-74.21	-85.68	-88.72	-91.90	-83.41
16000	-44.59	-37.09	-18.89	-46.34	-58.22	-81.37	-81.19	-75.52	-89.11	-86.84
17000	-40.49	--	-30.17	-43.23	-53.82	-92.57	--	-85.24	-91.67	-81.10
17800	-49.86	--	-21.46	-53.91	-42.21	-83.36	--	-74.51	-89.32	-81.78
18000	-32.22	--	-27.21	-56.39	-32.91	-83.59	--	-78.95	-86.01	-80.67
19000	-52.97	--	-12.44	-57.65	-33.64	-92.02	--	-69.64	-87.57	-79.35
20000	-47.15	--	-21.10	-54.89	-42.36	-85.05	--	-65.09	-96.52	-79.96
21000	-36.37	--	-24.86	-54.00	--	-81.35	--	-55.22	-91.26	--
21200	-36.68	--	-31.17	-53.01	--	-86.65	--	-54.89	-89.11	--
22000	-42.19	--	-23.63	-54.18	--	-72.99	--	-60.98	-85.81	--
23000	-27.16	--	-36.85	-36.59	--	-76.51	--	-56.58	-81.28	--
23500	-24.61	--	-24.38	-41.11	--	-80.43	--	-56.61	-85.44	--
24000	-29.23	--	-21.92	-39.09	--	-82.18	--	-66.51	-82.86	--
24500	-38.83	--	-20.27	-62.49	--	-79.99	--	-57.42	-88.75	--
25200	--	--	-18.70	-47.56	--	--	--	-51.95	-85.75	--
26000	--	--	-21.97	-55.33	--	--	--	-57.43	-87.08	--
27000	--	--	-12.56	-54.41	--	--	--	-55.92	-79.25	--
28000	--	--	-17.53	-36.54	--	--	--	-48.61	-84.47	--
29000	--	--	-17.71	-39.13	--	--	--	-51.15	-86.88	--
29500	--	--	-20.24	-54.21	--	--	--	-51.33	-79.73	--
30000	--	--	-16.00	-47.95	--	--	--	-57.42	-86.51	--

Note: No sub-harmonics below 15 GHz.

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