

GALI-19 Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

TYPE: MMIC Amplifier

MODEL: GALI-19 Reference Data: RDF-1299

S PARAMETERS are presented in dB/deg Format

TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 40mA, Vd = 3.64V @Temperature = +25degC

Definitions:

Input Return Loss=-S11(dB)

Gain(Power Gain)=S21(dB)

Reverse Isolation=-S12(dB)

Output Return Loss=-S22(dB)

FREQ	S11		S21		S12		S22		Stability		IP-3 Output	1 dB Compression Output	Noise Figure
	(MHz)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	K			
50	-32.79	-1.10	12.34	174.15	-17.02	-5.17	-31.60	165.29	1.15	0.58	26.76	11.59	4.09
100	-33.28	-11.32	12.31	169.23	-17.08	-8.79	-31.38	164.74	1.15	0.58	26.63	11.32	4.25
200	-32.78	-28.05	12.28	159.22	-17.11	-17.07	-31.53	157.39	1.16	0.57	26.80	11.78	4.17
300	-32.66	-46.96	12.25	149.03	-17.13	-25.29	-31.51	150.27	1.16	0.57	26.64	11.31	4.22
400	-32.05	-62.29	12.21	138.95	-17.13	-33.68	-31.47	142.86	1.16	0.57	26.18	11.71	4.20
500	-31.57	-76.80	12.17	128.79	-17.15	-42.04	-31.03	132.94	1.17	0.56	26.07	11.53	4.22
600	-30.85	-91.77	12.13	118.71	-17.15	-50.43	-30.71	123.84	1.17	0.56	25.94	11.73	4.18
700	-30.31	-105.01	12.10	108.68	-17.17	-58.74	-30.54	115.01	1.17	0.56	26.16	11.60	4.21
800	-29.75	-117.23	12.05	98.65	-17.19	-67.18	-30.52	104.90	1.18	0.55	26.34	11.50	4.21
1000	-28.53	-139.26	11.97	78.69	-17.23	-83.97	-30.60	84.66	1.19	0.55	26.19	11.09	4.20
1200	-27.42	-161.23	11.89	58.79	-17.28	-100.78	-31.12	64.50	1.20	0.54	26.08	10.69	4.21
1400	-26.27	178.35	11.79	38.96	-17.35	-117.58	-31.56	44.25	1.21	0.53	25.80	10.87	4.21
1600	-25.25	158.87	11.71	19.19	-17.41	-134.48	-32.66	24.94	1.22	0.52	26.31	10.71	4.20
1800	-24.15	140.68	11.62	-0.49	-17.48	-151.41	-34.85	5.94	1.23	0.51	26.79	11.14	4.15
2000	-23.02	123.26	11.55	-20.12	-17.56	-168.45	-39.20	-12.64	1.24	0.50	26.50	11.48	4.18
2200	-22.03	106.46	11.46	-39.77	-17.66	174.51	-49.53	-62.22	1.26	0.49	26.54	11.60	4.14
2400	-21.02	90.25	11.38	-59.32	-17.74	157.40	-42.18	144.04	1.27	0.48	26.72	11.59	4.24
2600	-20.21	73.52	11.28	-78.84	-17.86	140.19	-34.63	122.79	1.29	0.47	26.81	11.41	4.22
2800	-19.42	56.70	11.19	-98.32	-17.99	122.87	-30.75	104.87	1.31	0.46	26.63	11.12	4.24
3000	-18.40	40.09	11.10	-117.76	-18.09	105.69	-27.62	86.78	1.33	0.45	26.83	10.95	4.18
3200	-17.70	23.71	11.02	-137.12	-18.22	88.07	-25.11	70.84	1.35	0.44	27.25	10.91	4.25
3400	-16.99	6.93	10.94	-156.47	-18.35	70.58	-23.44	54.22	1.37	0.43	27.21	10.86	4.30
3600	-16.34	-9.11	10.87	-175.75	-18.48	53.00	-21.87	38.28	1.38	0.43	26.70	10.53	4.38
3800	-15.85	-25.91	10.79	164.94	-18.59	35.15	-20.73	23.10	1.40	0.42	26.26	10.53	4.43
4000	-15.46	-42.03	10.74	145.90	-18.74	17.21	-19.52	8.26	1.42	0.42	26.19	10.92	4.47
4200	-15.21	-59.89	10.67	126.45	-18.81	-0.62	-18.87	-7.66	1.44	0.41	26.31	11.15	4.46
4400	-15.05	-76.67	10.63	107.36	-18.95	-18.70	-18.22	-21.84	1.46	0.41	26.27	11.04	4.49
4600	-14.86	-93.71	10.60	88.20	-19.06	-36.99	-17.60	-36.50	1.47	0.40	25.81	10.96	4.62
4800	-14.74	-111.66	10.60	69.02	-19.16	-55.17	-17.10	-51.83	1.48	0.40	25.60	11.07	4.63
5000	-15.02	-128.44	10.58	49.99	-19.24	-74.04	-16.79	-64.98	1.50	0.39	25.55	11.18	4.54
5200	-15.26	-145.92	10.58	30.83	-19.28	-92.98	-16.54	-78.33	1.50	0.39	26.05	10.94	4.62
5400	-15.43	-166.15	10.64	11.16	-19.35	-110.99	-16.43	-94.36	1.50	0.39	26.02	10.88	4.61
5600	-16.03	174.84	10.68	-8.13	-19.33	-129.82	-16.45	-107.58	1.50	0.39	25.93	10.66	4.69
5800	-16.58	155.54	10.78	-27.70	-19.38	-148.88	-16.25	-121.04	1.49	0.39	25.87	11.06	4.71
6000	-17.38	134.64	10.87	-47.51	-19.40	-167.87	-16.20	-134.24	1.48	0.39	25.72	11.26	4.71
6200	-18.60	112.59	11.00	-67.35	-19.32	172.73	-16.07	-146.25	1.46	0.40	25.74	11.60	4.72
6400	-19.85	85.40	11.11	-87.74	-19.30	153.67	-15.97	-157.92	1.44	0.40	25.74	11.96	4.76
6600	-21.96	54.28	11.25	-108.12	-19.16	134.61	-15.64	-168.08	1.41	0.41	25.72	12.29	4.83
6800	-23.45	16.65	11.41	-129.21	-19.06	114.86	-15.11	179.40	1.38	0.43	25.50	12.31	4.80
7000	-23.81	-32.17	11.57	-150.64	-18.93	95.50	-14.56	167.53	1.35	0.44	25.05	12.32	4.76

TYPE: MMIC Amplifier
 MODEL: GALI-19 Reference Data: GALI-19
 S PARAMETERS are presented in dB/deg Format
 TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 32mA, Vd = 3.56V @Temperature = +25degC

Definitions:

Input Return Loss=-S11(dB)
 Gain(Power Gain)=S21(dB)
 Reverse Isolation=-S12(dB)
 Output Return Loss=-S22(dB)

FREQ	S11		S21		S12		S22		Stability		IP-3 Output	1 dB Compression Output	Noise Figure
	(MHz)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	K			
50	-26.80	-1.35	12.01	174.20	-16.82	-5.08	-47.52	91.57	1.16	0.57	21.73	7.67	4.06
100	-26.99	-11.09	11.97	169.25	-16.84	-8.77	-52.26	66.03	1.16	0.57	21.67	7.59	4.16
200	-26.73	-24.76	11.95	159.23	-16.87	-17.12	-54.27	107.24	1.16	0.57	21.79	8.07	4.14
300	-26.71	-38.53	11.93	149.03	-16.89	-25.43	-57.12	146.62	1.17	0.56	21.63	7.51	4.19
400	-26.57	-52.10	11.88	138.95	-16.89	-33.80	-52.20	168.12	1.17	0.56	21.32	7.97	4.20
500	-26.42	-64.86	11.84	128.81	-16.90	-42.18	-54.40	159.30	1.17	0.56	21.23	7.70	4.18
600	-26.15	-78.17	11.79	118.71	-16.93	-50.58	-52.01	149.48	1.18	0.55	21.11	8.04	4.17
700	-25.87	-90.41	11.77	108.68	-16.94	-59.00	-48.32	136.75	1.18	0.55	21.31	7.74	4.19
800	-25.59	-102.54	11.72	98.65	-16.95	-67.38	-47.99	121.17	1.18	0.55	21.48	7.68	4.19
1000	-24.88	-125.16	11.65	78.66	-17.01	-84.23	-49.70	98.88	1.19	0.54	21.31	7.26	4.18
1200	-24.25	-147.71	11.58	58.75	-17.05	-101.09	-47.20	67.23	1.20	0.53	21.15	6.83	4.17
1400	-23.56	-169.56	11.47	38.93	-17.10	-117.99	-56.62	34.39	1.21	0.52	20.90	7.00	4.19
1600	-22.72	170.13	11.39	19.15	-17.18	-134.94	-58.14	-121.93	1.23	0.51	21.32	6.95	4.19
1800	-21.83	150.68	11.30	-0.57	-17.26	-151.89	-43.03	-168.43	1.24	0.50	21.64	7.37	4.12
2000	-20.88	131.84	11.24	-20.22	-17.34	-168.92	-38.44	169.42	1.25	0.50	21.45	7.79	4.12
2200	-20.11	113.48	11.15	-39.89	-17.43	173.91	-33.60	154.51	1.26	0.49	21.50	7.87	4.09
2400	-19.20	96.07	11.07	-59.46	-17.53	156.77	-30.53	134.22	1.28	0.48	21.71	8.04	4.20
2600	-18.56	78.20	10.99	-78.99	-17.63	139.53	-28.22	117.18	1.29	0.47	21.78	7.72	4.19
2800	-17.87	60.51	10.89	-98.50	-17.76	122.14	-25.85	100.24	1.31	0.46	21.70	7.45	4.19
3000	-17.00	43.01	10.80	-117.95	-17.86	104.85	-23.95	82.95	1.33	0.45	21.90	7.30	4.15
3200	-16.38	26.02	10.75	-137.34	-18.00	87.34	-22.57	67.30	1.34	0.44	22.28	7.17	4.20
3400	-15.73	8.72	10.66	-156.72	-18.12	69.73	-21.14	50.60	1.36	0.44	22.26	7.11	4.29
3600	-15.20	-8.04	10.59	-176.02	-18.24	52.13	-19.98	34.72	1.38	0.43	21.73	6.84	4.33
3800	-14.71	-25.22	10.51	164.65	-18.36	34.35	-19.01	19.27	1.40	0.42	21.49	6.86	4.39
4000	-14.34	-41.89	10.48	145.59	-18.53	16.41	-18.20	4.75	1.42	0.42	21.56	7.38	4.41
4200	-14.13	-60.02	10.40	126.13	-18.57	-1.50	-17.70	-11.17	1.43	0.42	21.92	7.66	4.39
4400	-14.01	-77.21	10.36	107.01	-18.70	-19.72	-17.09	-25.75	1.45	0.41	21.72	7.51	4.47
4600	-13.81	-94.61	10.35	87.81	-18.82	-37.90	-16.61	-40.33	1.46	0.41	21.32	7.43	4.57
4800	-13.65	-112.90	10.35	68.58	-18.95	-56.03	-16.21	-55.64	1.48	0.40	21.13	7.52	4.60
5000	-13.93	-130.11	10.33	49.51	-18.99	-75.05	-15.97	-69.14	1.48	0.40	21.26	7.64	4.51
5200	-14.18	-147.95	10.33	30.35	-19.01	-94.01	-15.79	-82.77	1.49	0.40	21.74	7.67	4.59
5400	-14.26	-168.39	10.40	10.61	-19.11	-111.96	-15.69	-98.99	1.49	0.40	21.72	7.20	4.56
5600	-14.78	172.22	10.45	-8.75	-19.08	-130.85	-15.82	-112.10	1.48	0.40	21.73	6.89	4.66
5800	-15.23	152.49	10.56	-28.38	-19.13	-149.90	-15.70	-125.65	1.48	0.40	21.86	7.52	4.64
6000	-15.90	131.32	10.64	-48.22	-19.12	-169.03	-15.70	-139.00	1.47	0.40	21.92	7.72	4.68
6200	-16.88	108.92	10.78	-68.15	-19.06	171.71	-15.63	-151.44	1.45	0.41	22.03	8.26	4.65
6400	-17.73	82.27	10.91	-88.61	-19.05	152.64	-15.63	-163.20	1.43	0.41	22.18	8.87	4.68
6600	-19.32	52.93	11.04	-109.09	-18.89	133.52	-15.40	-173.71	1.40	0.42	22.35	9.39	4.73
6800	-20.45	19.50	11.21	-130.23	-18.77	113.66	-14.95	173.98	1.37	0.43	22.35	9.56	4.71
7000	-20.92	-21.26	11.37	-151.83	-18.67	94.41	-14.48	162.14	1.34	0.45	22.09	9.68	4.71

TYPE: MMIC Amplifier
 MODEL: GALI-19 Reference Data: GALI-19
 S PARAMETERS are presented in dB/deg Format
 TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 48mA, Vd = 3.71V @Temperature = +25degC

Definitions:

Input Return Loss=-S11(dB)
 Gain(Power Gain)=S21(dB)
 Reverse Isolation=-S12(dB)
 Output Return Loss=-S22(dB)

FREQ	S11		S21		S12		S22		Stability		IP-3 Output	1 dB Compression Output	Noise Figure
	(MHz)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	K			
50	-39.58	5.85	12.51	174.18	-17.22	-4.70	-27.83	168.59	1.15	0.58	30.10	13.90	4.16
100	-41.24	-11.42	12.48	169.24	-17.21	-8.86	-27.73	165.96	1.15	0.58	30.12	13.80	4.31
200	-39.89	-37.67	12.45	159.23	-17.24	-17.21	-27.68	157.97	1.15	0.58	30.47	13.89	4.21
300	-38.36	-62.72	12.41	149.05	-17.24	-25.28	-27.68	150.53	1.16	0.57	30.16	13.77	4.27
400	-36.62	-79.79	12.38	138.96	-17.26	-33.60	-27.58	142.40	1.16	0.57	29.66	13.96	4.25
500	-35.57	-95.73	12.35	128.82	-17.27	-41.98	-27.54	132.24	1.16	0.57	29.31	13.83	4.28
600	-34.38	-112.05	12.31	118.76	-17.28	-50.37	-27.42	123.19	1.17	0.56	29.19	13.96	4.22
700	-33.47	-124.93	12.26	108.72	-17.30	-58.72	-27.26	114.19	1.17	0.56	29.49	13.88	4.26
800	-32.31	-134.43	12.22	98.71	-17.31	-67.04	-27.19	104.26	1.17	0.56	29.69	13.76	4.23
1000	-30.83	-156.00	12.13	78.74	-17.36	-83.79	-27.42	84.42	1.18	0.55	29.53	13.52	4.22
1200	-29.23	-174.65	12.05	58.87	-17.41	-100.61	-27.51	64.81	1.19	0.54	29.51	13.17	4.25
1400	-27.90	166.26	11.97	39.09	-17.47	-117.36	-28.09	44.97	1.20	0.53	29.23	13.30	4.27
1600	-26.65	148.96	11.87	19.33	-17.54	-134.26	-28.80	25.80	1.22	0.52	29.92	13.25	4.24
1800	-25.54	131.59	11.79	-0.31	-17.62	-151.18	-30.41	7.23	1.23	0.51	30.40	13.51	4.19
2000	-24.29	115.70	11.70	-19.93	-17.69	-168.12	-32.47	-10.67	1.24	0.50	30.17	13.76	4.22
2200	-23.26	100.09	11.61	-39.55	-17.79	174.80	-36.53	-34.73	1.26	0.49	30.10	13.82	4.20
2400	-22.14	85.12	11.52	-59.07	-17.88	157.66	-46.02	-61.14	1.27	0.48	30.24	13.86	4.30
2600	-21.20	69.47	11.43	-78.55	-17.99	140.60	-44.18	135.25	1.29	0.47	29.89	13.78	4.29
2800	-20.35	53.27	11.34	-98.00	-18.13	123.30	-35.06	109.87	1.31	0.46	29.78	13.53	4.30
3000	-19.33	37.29	11.26	-117.40	-18.22	106.02	-30.27	89.29	1.33	0.45	29.90	13.42	4.24
3200	-18.54	21.68	11.16	-136.77	-18.35	88.55	-27.16	73.13	1.35	0.44	29.89	13.28	4.32
3400	-17.77	5.35	11.09	-156.06	-18.49	71.01	-24.96	56.29	1.37	0.43	29.85	13.21	4.37
3600	-17.11	-10.31	11.01	-175.30	-18.60	53.47	-23.06	40.05	1.39	0.43	29.04	12.99	4.43
3800	-16.64	-26.70	10.93	165.41	-18.73	35.66	-21.67	24.82	1.41	0.42	28.28	12.95	4.48
4000	-16.17	-42.47	10.86	146.36	-18.88	17.80	-20.37	10.19	1.43	0.41	27.98	13.16	4.51
4200	-15.90	-60.06	10.80	127.01	-18.95	-0.08	-19.65	-5.78	1.44	0.41	28.19	13.44	4.51
4400	-15.76	-76.59	10.75	107.96	-19.09	-18.17	-18.86	-19.97	1.46	0.40	28.29	13.37	4.56
4600	-15.61	-93.31	10.72	88.81	-19.20	-36.41	-18.17	-34.61	1.48	0.40	27.92	13.40	4.65
4800	-15.47	-111.06	10.71	69.66	-19.33	-54.58	-17.64	-49.88	1.50	0.39	27.72	13.51	4.69
5000	-15.75	-127.52	10.69	50.69	-19.40	-73.51	-17.27	-62.97	1.51	0.39	27.38	13.49	4.61
5200	-16.07	-144.58	10.70	31.63	-19.43	-92.44	-16.98	-76.31	1.51	0.39	27.56	13.35	4.69
5400	-16.30	-164.66	10.74	11.93	-19.50	-110.35	-16.84	-92.41	1.51	0.39	27.54	13.34	4.68
5600	-16.98	176.69	10.77	-7.30	-19.50	-129.25	-16.87	-105.37	1.51	0.38	27.29	13.09	4.74
5800	-17.54	157.66	10.86	-26.86	-19.55	-148.25	-16.64	-118.71	1.51	0.38	26.91	13.42	4.79
6000	-18.44	137.08	10.96	-46.50	-19.56	-167.33	-16.56	-131.84	1.50	0.39	26.37	13.33	4.79
6200	-20.00	115.67	11.08	-66.32	-19.49	173.33	-16.39	-143.88	1.47	0.39	26.20	13.40	4.79
6400	-21.51	87.93	11.19	-86.63	-19.49	154.37	-16.27	-155.32	1.46	0.39	25.99	13.59	4.83
6600	-24.15	54.88	11.33	-106.88	-19.33	135.30	-15.89	-165.49	1.43	0.41	25.83	13.77	4.91
6800	-26.27	11.69	11.50	-127.76	-19.22	115.45	-15.32	-178.05	1.39	0.42	25.53	13.69	4.88
7000	-25.96	-46.23	11.65	-149.23	-19.10	96.16	-14.74	170.06	1.36	0.43	25.17	13.66	4.89

TYPE: MMIC Amplifier
 MODEL: GALI-19 Reference Data: GALI-19
 S PARAMETERS are presented in dB/deg Format
 TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 40mA, Vd = 3.82V @Temperature = -45degC

Definitions:

Input Return Loss=-S11(dB)
 Gain(Power Gain)=S21(dB)
 Reverse Isolation=-S12(dB)
 Output Return Loss=-S22(dB)

FREQ	S11		S21		S12		S22		Stability		IP-3 Output	1 dB Compression Output	Noise Figure
	(MHz)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	K			
50	-29.17	-2.37	12.30	174.13	-17.01	-5.02	-37.35	163.78	1.15	0.58	27.35	11.21	3.65
100	-28.24	-12.47	12.26	169.03	-16.99	-9.06	-41.42	169.56	1.15	0.58	27.28	10.97	3.79
200	-26.86	-22.89	12.25	158.77	-17.03	-17.78	-46.66	118.18	1.15	0.58	27.45	11.39	3.70
300	-28.74	-36.86	12.22	148.29	-17.04	-26.33	-36.84	131.95	1.16	0.57	27.40	11.03	3.75
400	-30.37	-54.49	12.20	137.92	-17.05	-35.04	-33.33	136.81	1.16	0.57	27.02	11.50	3.68
500	-30.11	-71.09	12.16	127.48	-17.06	-43.67	-33.46	129.91	1.16	0.57	26.91	11.24	3.66
600	-29.56	-88.85	12.12	117.10	-17.06	-52.43	-33.34	117.41	1.16	0.57	26.70	11.51	3.64
700	-29.00	-103.00	12.08	106.74	-17.07	-61.13	-32.50	109.74	1.17	0.56	27.01	11.34	3.63
800	-28.00	-112.35	12.05	96.43	-17.10	-69.91	-33.57	100.47	1.17	0.56	27.22	11.23	3.65
1000	-27.22	-135.70	11.97	75.83	-17.12	-87.38	-33.25	73.34	1.18	0.55	26.98	10.83	3.64
1200	-26.85	-155.49	11.90	55.32	-17.18	-104.88	-32.82	60.26	1.19	0.54	26.88	10.49	3.62
1400	-26.35	178.43	11.82	34.87	-17.22	-122.48	-32.83	41.82	1.20	0.54	26.69	10.69	3.65
1600	-25.13	161.48	11.73	14.48	-17.28	-140.05	-36.19	25.41	1.21	0.53	27.19	10.52	3.62
1800	-24.03	140.23	11.64	-5.85	-17.35	-157.76	-41.75	-12.55	1.22	0.52	27.54	10.95	3.56
2000	-22.87	119.01	11.57	-26.11	-17.43	-175.45	-40.82	-63.80	1.23	0.51	27.45	11.29	3.57
2200	-22.12	98.96	11.48	-46.40	-17.52	166.71	-42.47	-112.71	1.25	0.50	27.49	11.45	3.55
2400	-21.04	81.14	11.41	-66.58	-17.61	148.96	-42.30	175.88	1.26	0.49	27.68	11.48	3.62
2600	-20.09	65.66	11.32	-86.72	-17.73	131.02	-34.87	118.50	1.28	0.48	27.67	11.35	3.63
2800	-19.22	48.81	11.22	-106.84	-17.83	112.97	-30.38	95.62	1.29	0.47	27.53	11.05	3.61
3000	-18.26	34.22	11.14	-126.88	-17.93	95.01	-26.51	72.53	1.31	0.46	27.81	10.88	3.55
3200	-17.81	18.56	11.07	-146.85	-18.07	76.80	-24.47	54.18	1.33	0.45	28.24	10.78	3.64
3400	-17.32	-0.72	10.99	-166.84	-18.17	58.53	-22.94	39.76	1.34	0.45	28.43	10.74	3.71
3600	-16.85	-19.06	10.92	173.26	-18.29	40.21	-21.82	24.11	1.36	0.44	27.80	10.48	3.69
3800	-16.41	-37.38	10.85	153.28	-18.39	21.73	-20.82	9.37	1.38	0.43	27.31	10.34	3.75
4000	-16.16	-54.17	10.80	133.63	-18.55	3.10	-19.98	-6.14	1.40	0.42	27.06	10.70	3.80
4200	-15.92	-73.37	10.74	113.56	-18.61	-15.46	-19.53	-23.05	1.41	0.42	27.39	10.98	3.81
4400	-15.88	-90.91	10.68	93.75	-18.71	-34.37	-18.83	-39.54	1.43	0.41	27.42	10.90	3.83
4600	-15.62	-108.96	10.65	73.93	-18.82	-53.43	-18.09	-54.87	1.44	0.41	26.98	10.82	3.91
4800	-15.24	-127.29	10.64	54.08	-18.95	-72.25	-17.13	-71.86	1.45	0.41	26.70	10.98	3.89
5000	-15.43	-145.46	10.62	34.53	-19.03	-91.91	-16.60	-83.78	1.47	0.40	26.65	11.11	3.89
5200	-15.36	-163.32	10.60	14.78	-19.06	-111.66	-16.08	-98.74	1.47	0.40	27.01	10.99	3.98
5400	-15.28	175.97	10.64	-5.56	-19.16	-130.14	-15.66	-114.81	1.47	0.40	27.17	10.83	3.93
5600	-15.54	156.69	10.67	-25.30	-19.14	-149.74	-15.60	-127.85	1.47	0.40	27.33	10.65	3.99
5800	-15.78	140.75	10.76	-45.30	-19.22	-169.33	-15.44	-142.82	1.46	0.40	27.22	10.97	4.03
6000	-16.86	124.26	10.86	-65.54	-19.22	171.17	-15.95	-157.32	1.46	0.40	27.09	10.99	4.04
6200	-19.04	106.28	11.00	-85.82	-19.11	151.05	-16.08	-169.81	1.43	0.40	27.08	11.42	4.05
6400	-21.03	79.03	11.12	-106.70	-19.10	131.45	-16.15	178.95	1.42	0.41	27.13	11.99	4.08
6600	-25.05	47.39	11.26	-127.40	-18.92	111.78	-15.96	170.43	1.39	0.42	27.03	12.46	4.17
6800	-29.01	-1.43	11.44	-148.87	-18.84	91.27	-15.66	157.38	1.36	0.43	27.02	12.58	4.11
7000	-27.96	-78.82	11.62	-170.82	-18.67	71.00	-14.85	144.72	1.32	0.45	26.62	12.66	4.07

TYPE: MMIC Amplifier
 MODEL: GALI-19 Reference Data: GALI-19
 S PARAMETERS are presented in dB/deg Format
 TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 32mA, Vd = 3.73V @Temperature = -45degC

Definitions:

Input Return Loss=-S11(dB)
 Gain(Power Gain)=S21(dB)
 Reverse Isolation=-S12(dB)
 Output Return Loss=-S22(dB)

FREQ	S11		S21		S12		S22		Stability		IP-3 Output	1 dB Compression Output	Noise Figure
	(MHz)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	K			
50	-25.13	-4.42	11.99	174.06	-16.81	-4.99	-40.12	3.02	1.16	0.57	21.89	7.33	3.59
100	-24.53	-11.67	11.96	169.04	-16.79	-9.09	-37.70	-11.78	1.16	0.57	21.78	7.13	3.71
200	-23.76	-22.33	11.94	158.78	-16.84	-17.73	-33.70	-11.61	1.16	0.57	21.88	7.59	3.68
300	-24.88	-34.90	11.92	148.34	-16.83	-26.24	-39.23	-5.96	1.16	0.57	21.81	7.14	3.72
400	-25.98	-49.32	11.90	137.95	-16.83	-35.10	-49.96	-20.68	1.16	0.57	21.58	7.60	3.67
500	-25.73	-63.52	11.88	127.49	-16.85	-43.76	-59.88	-52.31	1.17	0.56	21.49	7.28	3.61
600	-25.68	-78.54	11.83	117.10	-16.86	-52.55	-59.86	-0.53	1.17	0.56	21.38	7.56	3.62
700	-25.42	-92.13	11.78	106.74	-16.88	-61.33	-53.93	109.32	1.17	0.56	21.57	7.49	3.61
800	-24.57	-102.36	11.77	96.42	-16.88	-70.05	-56.93	-89.62	1.18	0.56	21.74	7.38	3.63
1000	-24.21	-125.69	11.67	75.82	-16.93	-87.60	-51.56	2.95	1.19	0.55	21.52	6.97	3.61
1200	-23.95	-146.11	11.61	55.31	-16.97	-105.13	-70.87	-130.31	1.19	0.54	21.39	6.55	3.60
1400	-23.71	-170.94	11.53	34.84	-17.02	-122.81	-56.69	62.32	1.20	0.53	21.22	6.83	3.60
1600	-22.63	170.29	11.46	14.45	-17.07	-140.44	-43.11	-168.79	1.21	0.52	21.59	6.57	3.58
1800	-21.90	148.12	11.37	-5.90	-17.15	-158.13	-37.88	-169.35	1.22	0.51	21.85	7.03	3.51
2000	-21.03	126.21	11.30	-26.16	-17.23	-175.86	-35.68	-174.91	1.24	0.51	21.73	7.51	3.53
2200	-20.39	105.70	11.20	-46.46	-17.34	166.31	-34.44	164.90	1.25	0.50	21.83	7.64	3.51
2400	-19.48	86.67	11.14	-66.68	-17.40	148.41	-31.67	136.60	1.26	0.49	22.05	7.73	3.60
2600	-18.63	69.96	11.05	-86.84	-17.51	130.46	-28.18	110.52	1.28	0.48	22.01	7.58	3.57
2800	-17.77	52.50	10.97	-106.97	-17.62	112.40	-26.15	91.26	1.29	0.47	21.92	7.32	3.57
3000	-16.98	36.57	10.88	-127.03	-17.74	94.44	-23.63	70.52	1.31	0.46	22.13	7.03	3.51
3200	-16.59	20.23	10.81	-147.02	-17.86	76.19	-22.02	52.22	1.33	0.45	22.50	7.04	3.58
3400	-16.09	0.75	10.75	-167.01	-17.95	57.89	-20.94	37.08	1.34	0.45	22.58	6.96	3.67
3600	-15.72	-17.91	10.67	173.06	-18.10	39.60	-20.14	21.22	1.36	0.44	22.20	6.66	3.64
3800	-15.30	-36.52	10.60	153.07	-18.19	21.09	-19.42	6.28	1.37	0.43	21.79	6.41	3.73
4000	-15.07	-53.76	10.56	133.38	-18.34	2.33	-18.63	-9.64	1.39	0.43	21.77	7.00	3.72
4200	-14.86	-73.14	10.51	113.29	-18.38	-16.19	-18.24	-26.84	1.40	0.42	22.20	7.32	3.76
4400	-14.78	-91.04	10.46	93.47	-18.50	-35.12	-17.75	-42.95	1.42	0.42	22.17	7.22	3.79
4600	-14.59	-109.28	10.41	73.63	-18.63	-54.18	-17.15	-58.39	1.44	0.41	21.74	7.15	3.88
4800	-14.23	-127.93	10.42	53.73	-18.74	-73.01	-16.27	-75.32	1.45	0.41	21.51	7.14	3.87
5000	-14.34	-146.50	10.41	34.14	-18.81	-92.76	-15.87	-87.50	1.45	0.41	21.61	7.44	3.86
5200	-14.33	-164.63	10.38	14.36	-18.85	-112.45	-15.45	-102.46	1.46	0.41	22.13	7.34	3.93
5400	-14.24	174.59	10.43	-5.96	-18.95	-130.92	-15.11	-118.28	1.46	0.41	22.10	7.23	3.91
5600	-14.52	155.16	10.45	-25.76	-18.93	-150.52	-15.07	-131.90	1.46	0.41	22.24	6.77	3.97
5800	-14.68	138.36	10.55	-45.79	-18.99	-170.14	-14.96	-146.96	1.45	0.41	22.40	7.14	3.97
6000	-15.65	120.95	10.67	-66.08	-18.98	170.37	-15.47	-162.03	1.44	0.41	22.53	7.30	3.98
6200	-17.54	101.55	10.80	-86.38	-18.88	150.27	-15.70	-174.34	1.43	0.41	22.70	7.74	3.97
6400	-19.04	74.01	10.94	-107.33	-18.84	130.68	-15.83	173.93	1.41	0.42	22.93	8.53	4.02
6600	-21.71	42.94	11.10	-128.13	-18.67	110.91	-15.77	165.27	1.37	0.43	22.98	9.20	4.10
6800	-24.29	3.56	11.27	-149.72	-18.59	90.47	-15.52	152.32	1.35	0.44	23.04	9.34	4.06
7000	-24.92	-53.08	11.45	-171.72	-18.44	70.18	-14.81	140.07	1.31	0.46	22.79	9.55	4.01

TYPE: MMIC Amplifier
 MODEL: GALI-19 Reference Data: GALI-19
 S PARAMETERS are presented in dB/deg Format
 TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 48mA, Vd = 3.89V @Temperature = -45degC

Definitions:

Input Return Loss=-S11(dB)
 Gain(Power Gain)=S21(dB)
 Reverse Isolation=-S12(dB)
 Output Return Loss=-S22(dB)

FREQ	S11		S21		S12		S22		Stability		IP-3 Output	1 dB Compression Output	Noise Figure
	(MHz)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	K			
50	-32.88	-0.94	12.46	174.12	-17.10	-5.02	-31.37	169.81	1.14	0.59	31.06	13.98	3.75
100	-31.23	-12.06	12.43	169.04	-17.12	-8.98	-33.04	168.84	1.15	0.58	31.06	13.82	3.89
200	-29.58	-24.57	12.42	158.75	-17.14	-17.72	-35.53	148.82	1.15	0.58	31.26	14.03	3.75
300	-32.01	-39.29	12.39	148.30	-17.15	-26.27	-31.29	140.04	1.15	0.58	31.21	13.69	3.80
400	-34.45	-62.24	12.36	137.94	-17.17	-34.94	-29.25	137.92	1.16	0.57	30.75	14.08	3.71
500	-33.48	-81.09	12.32	127.49	-17.18	-43.62	-29.08	129.71	1.16	0.57	30.30	13.93	3.70
600	-32.51	-101.24	12.28	117.11	-17.18	-52.39	-29.08	118.62	1.16	0.57	30.24	14.11	3.68
700	-31.54	-115.85	12.25	106.80	-17.20	-61.03	-28.74	109.89	1.16	0.56	30.58	13.88	3.70
800	-30.27	-123.06	12.21	96.48	-17.21	-69.82	-29.21	100.52	1.17	0.56	30.83	13.82	3.69
1000	-29.19	-146.00	12.13	75.88	-17.25	-87.30	-29.22	76.16	1.18	0.55	30.70	13.44	3.67
1200	-28.85	-165.75	12.06	55.38	-17.29	-104.74	-29.11	60.45	1.18	0.55	30.64	13.16	3.67
1400	-27.99	168.22	11.97	34.96	-17.35	-122.30	-28.98	41.85	1.19	0.54	30.37	13.29	3.69
1600	-26.64	153.12	11.89	14.60	-17.40	-139.95	-31.06	24.11	1.20	0.53	31.31	13.21	3.67
1800	-25.37	132.89	11.80	-5.71	-17.48	-157.54	-33.74	-3.00	1.22	0.52	31.69	13.56	3.58
2000	-24.06	112.34	11.72	-25.94	-17.55	-175.14	-34.46	-36.89	1.23	0.51	31.37	13.85	3.64
2200	-23.15	93.26	11.63	-46.22	-17.66	167.02	-36.34	-64.13	1.25	0.50	31.58	13.92	3.59
2400	-22.04	76.11	11.55	-66.36	-17.73	149.21	-41.10	-97.12	1.26	0.49	31.69	14.02	3.68
2600	-21.07	61.67	11.46	-86.47	-17.83	131.27	-42.15	135.30	1.27	0.48	31.32	13.89	3.68
2800	-20.08	45.90	11.37	-106.56	-17.96	113.32	-34.52	100.50	1.29	0.47	31.28	13.53	3.67
3000	-19.10	32.03	11.28	-126.59	-18.06	95.33	-28.83	73.85	1.31	0.46	31.55	13.44	3.62
3200	-18.66	16.90	11.20	-146.54	-18.18	77.12	-26.10	55.03	1.33	0.45	31.66	13.28	3.69
3400	-18.10	-2.10	11.13	-166.49	-18.28	58.96	-24.34	41.14	1.34	0.44	32.07	13.30	3.75
3600	-17.60	-20.12	11.05	173.62	-18.42	40.63	-22.97	25.79	1.36	0.44	31.31	13.00	3.74
3800	-17.13	-38.28	10.97	153.68	-18.53	22.21	-21.82	11.39	1.38	0.43	30.34	12.93	3.80
4000	-16.90	-54.73	10.92	134.06	-18.67	3.54	-20.81	-4.14	1.40	0.42	29.84	13.15	3.86
4200	-16.68	-73.83	10.86	114.02	-18.73	-15.11	-20.29	-21.26	1.41	0.42	30.14	13.46	3.89
4400	-16.60	-91.09	10.80	94.23	-18.85	-33.90	-19.55	-37.54	1.43	0.41	30.38	13.40	3.88
4600	-16.36	-108.90	10.76	74.45	-18.97	-52.96	-18.68	-52.98	1.45	0.41	30.06	13.36	3.96
4800	-15.98	-126.97	10.76	54.65	-19.10	-71.81	-17.65	-70.18	1.46	0.40	29.78	13.43	3.96
5000	-16.15	-144.90	10.73	35.13	-19.16	-91.45	-17.07	-81.82	1.47	0.40	29.67	13.60	3.95
5200	-16.11	-162.50	10.71	15.42	-19.21	-111.19	-16.50	-96.75	1.48	0.40	29.74	13.50	4.03
5400	-16.01	176.84	10.74	-4.87	-19.32	-129.59	-16.04	-112.88	1.49	0.40	29.71	13.46	4.01
5600	-16.37	157.86	10.76	-24.58	-19.29	-149.23	-15.94	-125.90	1.48	0.40	29.76	13.17	4.05
5800	-16.59	142.49	10.85	-44.55	-19.36	-168.90	-15.74	-140.77	1.48	0.40	29.41	13.48	4.11
6000	-17.79	126.93	10.95	-64.74	-19.37	171.61	-16.25	-155.12	1.47	0.39	28.98	13.47	4.07
6200	-20.24	110.39	11.08	-84.96	-19.27	151.58	-16.34	-167.53	1.45	0.40	28.66	13.71	4.13
6400	-22.67	83.78	11.19	-105.77	-19.26	131.96	-16.38	-178.59	1.43	0.40	28.63	14.03	4.14
6600	-27.93	51.89	11.33	-126.40	-19.09	112.28	-16.17	173.10	1.40	0.41	28.39	14.30	4.26
6800	-34.27	-14.24	11.51	-147.77	-19.01	91.79	-15.83	160.04	1.37	0.42	28.11	14.30	4.20
7000	-28.59	-104.23	11.69	-169.60	-18.85	71.57	-14.99	147.40	1.33	0.44	27.63	14.29	4.16

TYPE: MMIC Amplifier
 MODEL: GALI-19 Reference Data: GALI-19
 S PARAMETERS are presented in dB/deg Format
 TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 40mA, Vd = 3.48V @Temperature = +85degC

Definitions:

Input Return Loss=-S11(dB)
 Gain(Power Gain)=S21(dB)
 Reverse Isolation=-S12(dB)
 Output Return Loss=-S22(dB)

FREQ	S11		S21		S12		S22		Stability		IP-3 Output	1 dB Compression Output	Noise Figure
	(MHz)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	K			
50	-34.53	2.08	12.25	174.32	-17.08	-4.70	-30.54	163.05	1.16	0.57	26.45	11.86	4.56
100	-37.04	-7.30	12.23	169.47	-17.06	-8.61	-28.80	162.90	1.16	0.57	26.44	11.66	4.74
200	-42.57	-45.39	12.20	159.69	-17.10	-16.63	-27.44	159.80	1.16	0.57	26.71	12.02	4.68
300	-36.99	-69.34	12.16	149.75	-17.09	-24.52	-28.42	157.07	1.16	0.57	26.49	11.62	4.77
400	-32.62	-74.94	12.12	139.91	-17.11	-32.51	-30.61	148.85	1.17	0.56	25.98	12.01	4.71
500	-30.83	-82.55	12.10	129.99	-17.12	-40.56	-31.06	135.84	1.17	0.56	25.70	11.70	4.73
600	-30.27	-93.60	12.05	120.17	-17.14	-48.69	-30.79	129.63	1.17	0.56	25.59	12.04	4.70
700	-29.61	-103.20	12.01	110.40	-17.16	-56.76	-30.68	123.41	1.18	0.55	25.79	11.80	4.75
800	-28.78	-112.64	11.96	100.62	-17.17	-64.80	-31.74	115.21	1.18	0.55	25.97	11.68	4.72
1000	-27.41	-131.32	11.88	81.16	-17.22	-80.97	-32.37	94.15	1.19	0.54	25.82	11.32	4.72
1200	-26.46	-152.80	11.78	61.78	-17.28	-97.13	-33.39	72.32	1.20	0.53	25.69	10.93	4.74
1400	-25.46	-173.73	11.71	42.46	-17.33	-113.41	-33.84	50.34	1.21	0.52	25.46	11.11	4.75
1600	-24.62	164.91	11.61	23.22	-17.40	-129.68	-35.01	29.55	1.23	0.51	26.01	11.04	4.76
1800	-23.55	146.38	11.53	4.03	-17.50	-145.95	-36.61	12.89	1.24	0.50	26.41	11.41	4.74
2000	-22.56	129.50	11.44	-15.08	-17.57	-162.38	-41.60	6.39	1.25	0.49	26.18	11.68	4.72
2200	-21.60	113.44	11.35	-34.21	-17.67	-178.89	-56.66	34.67	1.27	0.48	26.25	11.79	4.71
2400	-20.69	97.47	11.27	-53.25	-17.77	164.75	-39.00	128.59	1.29	0.47	26.35	11.91	4.79
2600	-19.85	81.02	11.17	-72.27	-17.89	148.02	-33.20	120.12	1.30	0.46	26.26	11.66	4.84
2800	-19.05	64.23	11.09	-91.21	-18.01	131.38	-29.56	106.97	1.32	0.45	26.19	11.31	4.82
3000	-17.94	47.15	11.01	-110.14	-18.12	114.75	-26.63	93.55	1.34	0.45	26.35	11.15	4.76
3200	-16.98	30.96	10.91	-129.04	-18.27	97.80	-24.08	80.23	1.36	0.44	26.59	11.02	4.84
3400	-16.05	15.01	10.84	-147.83	-18.41	80.89	-22.07	65.07	1.38	0.43	26.51	11.05	4.91
3600	-15.26	-0.25	10.76	-166.63	-18.55	63.96	-20.55	50.49	1.40	0.42	25.84	10.69	4.98
3800	-14.66	-15.67	10.70	174.66	-18.69	46.81	-19.27	36.22	1.42	0.42	25.51	10.77	5.04
4000	-14.30	-30.95	10.62	156.10	-18.84	29.60	-18.30	22.24	1.44	0.41	25.24	11.19	5.07
4200	-14.09	-48.03	10.58	137.20	-18.93	12.53	-17.75	6.68	1.45	0.41	25.55	11.39	5.05
4400	-14.11	-64.89	10.55	118.58	-19.06	-5.00	-17.48	-6.53	1.47	0.40	25.56	11.24	5.13
4600	-14.11	-82.22	10.52	99.84	-19.17	-22.51	-17.27	-20.30	1.49	0.40	25.35	11.29	5.23
4800	-14.13	-100.25	10.54	81.07	-19.31	-40.08	-17.06	-35.68	1.50	0.39	25.01	11.36	5.28
5000	-14.57	-118.42	10.51	62.37	-19.33	-58.37	-17.10	-48.76	1.51	0.39	25.13	11.39	5.17
5200	-14.79	-137.05	10.51	43.51	-19.36	-76.47	-17.16	-62.65	1.52	0.39	25.44	11.13	5.28
5400	-14.86	-156.64	10.58	24.26	-19.48	-94.03	-17.09	-79.40	1.53	0.38	25.36	11.05	5.25
5600	-15.38	-176.13	10.61	5.22	-19.49	-112.27	-17.24	-93.53	1.53	0.38	25.26	10.90	5.33
5800	-15.87	164.08	10.69	-13.96	-19.53	-130.95	-16.99	-107.23	1.52	0.38	24.94	11.31	5.35
6000	-16.34	141.92	10.77	-33.41	-19.54	-149.59	-16.74	-120.07	1.51	0.38	24.59	11.33	5.36
6200	-17.17	118.46	10.87	-52.82	-19.47	-168.23	-16.68	-130.78	1.49	0.39	24.44	11.49	5.39
6400	-17.61	92.24	10.97	-72.95	-19.52	173.19	-16.38	-143.71	1.49	0.39	24.33	11.79	5.39
6600	-18.48	61.90	11.06	-92.94	-19.43	154.85	-16.02	-153.40	1.47	0.40	24.16	12.06	5.50
6800	-19.20	31.94	11.22	-113.49	-19.28	135.55	-15.16	-164.03	1.43	0.41	23.83	11.98	5.45
7000	-19.52	-4.71	11.35	-134.50	-19.23	116.95	-14.52	-174.65	1.40	0.42	23.52	11.95	5.48

TYPE: MMIC Amplifier
 MODEL: GALI-19 Reference Data: GALI-19
 S PARAMETERS are presented in dB/deg Format
 TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 32mA, Vd = 3.40V @Temperature = +85degC

Definitions:

Input Return Loss=-S11(dB)
 Gain(Power Gain)=S21(dB)
 Reverse Isolation=-S12(dB)
 Output Return Loss=-S22(dB)

FREQ	S11		S21		S12		S22		Stability		IP-3 Output	1 dB Compression Output	Noise Figure
	(MHz)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	K			
50	-27.12	-1.38	11.89	174.29	-16.75	-4.88	-43.76	71.33	1.16	0.57	21.79	8.07	4.51
100	-28.37	-9.48	11.88	169.50	-16.76	-8.48	-41.02	136.37	1.16	0.57	21.74	8.10	4.69
200	-30.41	-26.18	11.86	159.70	-16.82	-16.59	-37.16	159.19	1.17	0.57	21.95	8.46	4.65
300	-28.66	-44.12	11.81	149.75	-16.83	-24.55	-40.16	173.72	1.17	0.56	21.75	7.95	4.71
400	-26.60	-57.13	11.77	139.90	-16.86	-32.68	-48.53	-146.75	1.17	0.56	21.34	8.45	4.70
500	-25.63	-67.25	11.72	130.00	-16.88	-40.76	-54.19	-147.74	1.18	0.55	21.19	8.13	4.71
600	-25.65	-78.78	11.70	120.16	-16.90	-48.93	-48.09	-179.09	1.18	0.55	21.06	8.49	4.67
700	-25.29	-89.18	11.66	110.38	-16.91	-56.97	-45.91	-162.67	1.19	0.55	21.28	8.29	4.71
800	-24.54	-99.10	11.60	100.61	-16.92	-65.01	-46.03	-149.67	1.19	0.54	21.43	8.11	4.71
1000	-23.91	-119.92	11.53	81.15	-16.97	-81.27	-46.12	-139.04	1.20	0.53	21.21	7.57	4.70
1200	-23.18	-141.19	11.44	61.77	-17.02	-97.48	-43.65	-128.89	1.21	0.53	21.09	7.26	4.71
1400	-22.52	-162.64	11.35	42.46	-17.09	-113.75	-44.73	-135.81	1.22	0.52	20.88	7.48	4.74
1600	-21.95	175.89	11.27	23.18	-17.17	-130.12	-42.64	-146.43	1.23	0.51	21.31	7.57	4.72
1800	-21.26	155.64	11.20	3.97	-17.25	-146.52	-40.18	-167.07	1.25	0.50	21.63	7.84	4.68
2000	-20.52	137.25	11.13	-15.16	-17.31	-162.91	-35.35	-169.17	1.26	0.49	21.44	8.33	4.68
2200	-19.66	120.05	11.03	-34.32	-17.43	-179.45	-32.32	153.50	1.27	0.48	21.53	8.48	4.68
2400	-18.94	102.72	10.96	-53.37	-17.52	164.01	-28.98	135.09	1.29	0.47	21.71	8.42	4.77
2600	-18.10	85.62	10.85	-72.40	-17.64	147.35	-26.60	120.29	1.31	0.46	21.62	8.25	4.78
2800	-17.38	68.05	10.76	-91.39	-17.77	130.57	-25.00	105.11	1.32	0.45	21.56	7.90	4.78
3000	-16.52	50.06	10.69	-110.35	-17.90	114.01	-23.24	90.59	1.34	0.44	21.78	7.65	4.68
3200	-15.64	33.18	10.60	-129.26	-18.03	96.87	-21.35	76.47	1.36	0.44	22.07	7.50	4.75
3400	-14.80	16.56	10.52	-148.09	-18.18	80.04	-20.03	61.67	1.38	0.43	21.96	7.62	4.89
3600	-14.10	0.66	10.44	-166.89	-18.32	63.01	-18.83	46.98	1.40	0.42	21.50	7.31	4.94
3800	-13.63	-15.33	10.39	174.36	-18.46	45.86	-17.87	32.79	1.41	0.42	21.27	7.23	5.01
4000	-13.29	-31.03	10.33	155.80	-18.60	28.56	-17.02	18.45	1.43	0.42	21.36	7.95	5.02
4200	-13.05	-48.45	10.28	136.90	-18.70	11.55	-16.57	2.91	1.45	0.41	21.70	8.15	4.98
4400	-13.05	-65.65	10.24	118.24	-18.82	-5.94	-16.42	-10.54	1.47	0.41	21.49	7.91	5.09
4600	-13.14	-83.16	10.24	99.47	-18.91	-23.65	-16.26	-24.59	1.48	0.40	21.12	7.98	5.19
4800	-13.17	-101.43	10.27	80.68	-19.04	-41.19	-16.13	-39.96	1.49	0.40	21.02	8.04	5.25
5000	-13.45	-119.95	10.23	61.90	-19.07	-59.44	-16.24	-53.32	1.50	0.39	21.23	8.08	5.14
5200	-13.65	-138.85	10.23	43.00	-19.11	-77.49	-16.31	-67.55	1.51	0.39	21.70	7.78	5.20
5400	-13.75	-158.39	10.32	23.70	-19.22	-95.09	-16.28	-84.06	1.51	0.39	21.65	7.67	5.20
5600	-14.23	-178.08	10.36	4.63	-19.21	-113.39	-16.43	-98.79	1.51	0.39	21.68	7.48	5.29
5800	-14.58	161.84	10.45	-14.61	-19.24	-132.14	-16.28	-112.48	1.51	0.39	21.78	8.14	5.29
6000	-14.93	139.64	10.53	-34.12	-19.26	-150.72	-16.09	-125.59	1.50	0.39	21.82	8.30	5.30
6200	-15.66	116.34	10.63	-53.61	-19.18	-169.45	-16.11	-136.57	1.48	0.40	22.01	8.85	5.30
6400	-16.04	90.83	10.75	-73.79	-19.20	171.93	-15.91	-149.51	1.47	0.40	22.15	9.36	5.30
6600	-16.55	61.92	10.81	-93.95	-19.14	153.69	-15.66	-159.21	1.45	0.41	22.31	9.80	5.41
6800	-17.12	33.49	10.97	-114.58	-18.99	134.36	-14.92	-169.65	1.42	0.42	22.21	9.77	5.39
7000	-17.57	-0.24	11.10	-135.69	-18.93	115.68	-14.38	-179.94	1.39	0.43	22.12	9.93	5.40

TYPE: MMIC Amplifier
 MODEL: GALI-19 Reference Data: GALI-19
 S PARAMETERS are presented in dB/deg Format
 TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 48mA, Vd = 3.55V @Temperature = +85degC

Definitions:

Input Return Loss=-S11(dB)
 Gain(Power Gain)=S21(dB)
 Reverse Isolation=-S12(dB)
 Output Return Loss=-S22(dB)

FREQ	S11		S21		S12		S22		Stability		IP-3 Output	1 dB Compression Output	Noise Figure
	(MHz)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	K			
50	-44.11	29.89	12.46	174.30	-17.21	-5.01	-26.80	168.88	1.15	0.58	29.89	13.77	4.63
100	-55.95	96.55	12.42	169.44	-17.19	-8.47	-25.81	164.96	1.15	0.58	30.01	13.73	4.82
200	-42.25	-177.07	12.39	159.68	-17.24	-16.35	-24.62	159.91	1.16	0.57	30.27	13.77	4.71
300	-40.74	-133.66	12.35	149.76	-17.24	-24.35	-25.31	155.06	1.16	0.57	29.94	13.73	4.83
400	-36.60	-105.48	12.32	139.92	-17.26	-32.44	-26.73	145.84	1.16	0.57	29.30	13.80	4.74
500	-34.37	-104.88	12.28	130.02	-17.27	-40.45	-27.28	134.86	1.17	0.56	28.86	13.72	4.81
600	-33.76	-116.03	12.24	120.19	-17.28	-48.56	-27.16	127.29	1.17	0.56	28.76	13.84	4.73
700	-32.78	-122.41	12.19	110.43	-17.30	-56.57	-27.24	120.49	1.18	0.55	28.93	13.75	4.80
800	-31.46	-128.40	12.15	100.66	-17.31	-64.72	-27.75	111.05	1.18	0.55	29.09	13.67	4.74
1000	-29.88	-144.43	12.06	81.20	-17.36	-80.76	-28.47	91.25	1.19	0.54	28.82	13.48	4.75
1200	-28.47	-163.93	11.97	61.83	-17.42	-96.89	-28.74	70.31	1.20	0.53	28.74	13.20	4.80
1400	-27.32	175.30	11.89	42.53	-17.48	-113.13	-29.19	49.84	1.21	0.53	28.44	13.27	4.80
1600	-26.14	155.76	11.79	23.29	-17.56	-129.38	-29.66	30.28	1.22	0.51	29.28	13.22	4.80
1800	-25.02	137.78	11.70	4.14	-17.63	-145.66	-30.95	12.85	1.24	0.51	29.14	13.42	4.77
2000	-23.88	122.60	11.61	-14.96	-17.71	-162.00	-32.96	-1.16	1.25	0.49	28.93	13.66	4.77
2200	-22.85	107.79	11.52	-34.07	-17.81	-178.48	-37.48	-18.65	1.27	0.48	28.82	13.72	4.78
2400	-21.84	92.89	11.43	-53.08	-17.91	165.11	-49.61	-5.28	1.28	0.47	28.51	13.77	4.88
2600	-20.91	77.46	11.35	-72.04	-18.03	148.57	-41.84	119.16	1.30	0.46	28.26	13.69	4.89
2800	-20.03	61.32	11.25	-91.00	-18.15	131.91	-33.72	109.60	1.32	0.45	27.86	13.46	4.88
3000	-18.88	44.75	11.17	-109.90	-18.26	115.23	-29.26	96.50	1.34	0.44	27.73	13.38	4.82
3200	-17.78	29.25	11.08	-128.75	-18.42	98.37	-25.97	83.46	1.36	0.43	27.54	13.20	4.89
3400	-16.78	13.83	11.00	-147.55	-18.54	81.45	-23.52	68.07	1.38	0.43	27.31	13.15	4.95
3600	-15.98	-1.05	10.92	-166.31	-18.69	64.53	-21.61	53.04	1.40	0.42	26.71	12.95	5.05
3800	-15.34	-16.07	10.84	174.98	-18.83	47.39	-20.12	38.70	1.42	0.41	26.07	12.92	5.09
4000	-14.92	-31.00	10.77	156.44	-18.98	30.11	-19.06	24.78	1.44	0.41	25.65	13.17	5.17
4200	-14.72	-47.87	10.73	137.58	-19.08	13.11	-18.48	9.35	1.46	0.40	25.84	13.38	5.09
4400	-14.74	-64.51	10.69	118.97	-19.21	-4.36	-18.06	-4.01	1.48	0.40	25.89	13.39	5.17
4600	-14.79	-81.62	10.66	100.26	-19.31	-22.03	-17.79	-17.75	1.49	0.39	25.52	13.45	5.25
4800	-14.79	-99.56	10.67	81.52	-19.46	-39.51	-17.59	-32.90	1.51	0.39	25.11	13.45	5.34
5000	-15.25	-117.55	10.64	62.85	-19.49	-57.77	-17.60	-45.79	1.52	0.38	24.82	13.42	5.26
5200	-15.55	-135.93	10.64	44.04	-19.52	-75.83	-17.60	-59.64	1.53	0.38	24.70	13.23	5.34
5400	-15.64	-155.39	10.70	24.79	-19.64	-93.46	-17.48	-76.61	1.54	0.38	24.61	13.22	5.33
5600	-16.24	-174.71	10.73	5.84	-19.65	-111.63	-17.66	-90.51	1.54	0.38	24.27	13.01	5.44
5800	-16.71	165.62	10.81	-13.29	-19.70	-130.30	-17.38	-104.18	1.53	0.38	23.80	13.19	5.45
6000	-17.28	143.52	10.89	-32.65	-19.71	-148.96	-17.09	-116.83	1.53	0.38	23.25	13.01	5.44
6200	-18.29	119.99	10.98	-52.04	-19.64	-167.56	-16.94	-127.93	1.51	0.38	22.90	12.99	5.51
6400	-18.79	93.20	11.08	-72.11	-19.68	173.72	-16.63	-140.60	1.50	0.39	22.64	13.06	5.48
6600	-19.76	61.50	11.17	-92.04	-19.60	155.61	-16.22	-150.25	1.48	0.39	22.60	13.21	5.62
6800	-20.71	30.03	11.33	-112.50	-19.45	136.27	-15.29	-161.30	1.44	0.41	22.25	13.06	5.56
7000	-20.96	-9.16	11.44	-133.49	-19.39	117.67	-14.62	-172.05	1.41	0.42	22.01	13.00	5.59