GALI-21 Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

TYPE: MMIC Amplifier
MODEL: GALI-21 Reference Data: RDF-1049
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 40mA, Vd = 3.50V @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	Delta	(dBm)	(dBm)	(dB)
50	-41.14	-23.51	14.75	173.89	-18.95	-4.10	-31.05	175.26	1.12	0.62	28.67	12.49	3.29
100	-35.82	-51.87	14.79	168.58	-18.97	-8.11	-30.58	177.08	1.12	0.62	28.65	12.56	3.4
200	-36.75	-79.42	14.73	157.71	-18.97	-15.89	-29.42	176.10	1.12	0.61	28.77	12.48	3.26
400	-31.47	-129.51	14.56	136.09	-18.96	-31.42	-27.69	164.21	1.13	0.60	28.33	12.27	3.33
600	-28.06	-159.41	14.37	114.80	-18.90	-47.44	-26.29	143.06	1.14	0.59	28.09	12.48	3.32
800	-25.89	176.87	14.19	94.06	-18.89	-63.45	-25.06	122.23	1.14	0.58	27.91	12.12	3.46
1000	-24.76	155.01	14.03	73.40	-18.89	-79.51	-24.74	101.40	1.16	0.57	28.34	11.82	3.41
1200	-23.84	136.50	13.88	52.87	-18.91	-95.80	-24.38	80.90	1.17	0.56	28.37	11.83	3.49
1400	-22.62	120.12	13.72	32.39	-18.96	-111.84	-24.49	61.65	1.18	0.55	28.05	12.1	3.51
1600	-21.85	102.96	13.55	12.10	-19.03	-128.40	-25.02	42.58	1.20	0.53	27.82	11.79	3.57
1800	-20.99	88.52	13.38	-8.11	-19.08	-144.61	-25.49	25.60	1.21	0.52	27.79	11.71	3.54
2000	-20.07	72.89	13.24	-28.24	-19.10	-161.00	-26.50	8.01	1.22	0.51	27.78	11.84	3.54
2200	-19.70	60.10	13.06	-48.31	-19.21	-177.40	-28.43	-8.68	1.25	0.49	27.52	12.07	3.56
2400	-18.91	44.65	12.89	-68.27	-19.25	166.13	-30.52	-22.60	1.26	0.48	27.21	11.83	3.6
2600	-18.44	28.99	12.75	-88.23	-19.35	149.55	-33.91	-42.82	1.29	0.47	27.35	11.49	3.63
2800	-17.76	11.85	12.57	-108.16	-19.43	132.84	-37.26	-62.89	1.31	0.45	27.12	11.46	3.61
3000	-17.52	-1.94	12.41	-127.80	-19.55	116.10	-44.91	-88.04	1.34	0.44	26.82	11.87	3.55
3200	-17.36	-20.37	12.26	-147.49	-19.61	99.32	-51.17	156.27	1.36	0.43	26.66	11.78	3.66
3400	-17.23	-36.83	12.09	-167.15	-19.73	82.36	-41.33	121.71	1.39	0.42	26.45	11.34	3.74
3600	-17.21	-56.58	11.95	173.24	-19.84	65.21	-36.38	100.86	1.42	0.41	26.38	11.32	3.68
3800	-17.55	-74.40	11.83	153.75	-19.96	48.03	-33.74	85.76	1.45	0.39	26.29	11.66	3.71
4000	-17.52	-97.98	11.70	134.19	-20.08	30.53	-31.89	84.44	1.48	0.38	25.97	11.78	3.7
4200	-17.62	-118.82	11.58	114.46	-20.16	13.00	-31.10	73.05	1.51	0.38	25.93	11.37	3.69
4400	-17.57	-141.72	11.51	94.77	-20.27	-4.31	-30.60	62.93	1.53	0.37	25.71	11.24	3.75
4600	-17.65	-166.96	11.36	75.02	-20.35	-22.39	-28.50	54.84	1.56	0.36	25.49	11.58	3.94
4800	-17.45	167.45	11.26	55.53	-20.48	-40.50	-26.96	39.41	1.59	0.35	25.10	11.41	3.95
5000	-16.62	145.33	11.22	35.70	-20.62	-58.49	-25.98	24.56	1.62	0.35	24.79	10.79	3.94
5200	-16.45	120.88	11.12	16.13	-20.72	-77.30	-24.32	8.56	1.64	0.34	24.54	10.6	4.11
5400	-15.51	96.83	11.07	-3.93	-20.86	-95.47	-23.83	-7.54	1.67	0.33	24.18	10.97	4.13
5600	-14.63	74.45	10.99	-23.87	-20.93	-114.07	-22.56	-25.64	1.68	0.33	23.76	10.61	4.17
5800	-13.99	52.67	10.93	-43.91	-21.02	-133.43	-21.36	-47.72	1.70	0.33	23.42	10.13	4.17
6000	-13.14	31.82	10.88	-64.42	-21.18	-152.50	-20.44	-68.69	1.72	0.33	23.47	10.02	4.21
6200	-12.33	9.35	10.81	-84.65	-21.23	-171.05	-18.91	-86.29	1.72	0.33	23.00	10.22	4.33
6400	-11.46	-12.81	10.72	-105.34	-21.28	169.74	-17.46	-104.52	1.72	0.33	22.62	9.69	4.46
6600	-10.74	-33.97	10.62	-126.55	-21.50	149.75	-16.62	-123.31	1.75	0.33	22.47	9.11	4.5
6800	-9.92	-57.30	10.54	-147.33	-21.46	131.86	-15.08	-141.93	1.73	0.34	22.24	9.25	4.44
7000	-9.24	-78.95	10.41	-168.84	-21.45	112.76	-13.80	-161.03	1.72	0.35	21.79	9.49	4.53
7200	-8.68	-102.42	10.26	169.41	-21.41	94.59	-12.70	179.86	1.70	0.36	21.39	8.74	4.72
7600	-7.46	-146.27	9.69	126.02	-21.67	56.41	-11.18	145.99	1.75	0.37	20.87	8.13	4.83
8000	-6.70	169.21	8.97	82.51	-21.84	19.40	-10.22	112.73	1.82	0.37	20.43	7.6	5.12

TYPE: MMIC Amplifier
MODEL: GALI-21 Reference Data: RDF-1049
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 32mA, Vd = 3.43V @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	Delta	(dBm)	(dBm)	(dB)
50	-30.46	-6.21	14.48	173.81	-18.71	-4.27	-44.84	176.33	1.12	0.61	24.96	10.21	3.23
100	-30.14	-25.93	14.55	168.62	-18.78	-8.00	-41.96	-161.15	1.12	0.61	24.91	10.6	3.34
200	-30.80	-48.37	14.46	157.71	-18.76	-15.93	-37.35	-157.08	1.12	0.61	25.07	10.35	3.25
400	-29.59	-94.56	14.31	136.18	-18.73	-31.56	-33.08	-172.64	1.13	0.60	24.73	10.08	3.29
600	-27.52	-132.83	14.13	114.76	-18.69	-47.60	-30.76	158.95	1.14	0.59	24.62	10.58	3.29
800	-25.78	-162.50	13.96	93.96	-18.68	-63.72	-28.90	133.62	1.15	0.58	24.49	10.18	3.41
1000	-24.71	173.91	13.79	73.30	-18.68	-79.89	-28.31	110.56	1.16	0.57	25.00	9.97	3.38
1200	-23.77	153.02	13.65	52.82	-18.72	-96.17	-27.78	88.43	1.17	0.56	25.29	9.87	3.43
1400	-22.32	133.84	13.50	32.30	-18.73	-112.45	-28.04	69.27	1.18	0.55	24.88	10.31	3.46
1600	-21.57	115.79	13.32	11.88	-18.81	-128.90	-28.61	49.82	1.20	0.53	24.90	9.98	3.51
1800	-20.54	99.62	13.16	-8.35	-18.87	-145.29	-29.28	34.04	1.21	0.52	25.02	9.89	3.47
2000	-19.64	82.59	13.03	-28.48	-18.91	-161.53	-30.73	18.16	1.23	0.51	25.21	9.94	3.47
2200	-19.11	68.58	12.84	-48.64	-19.02	-178.08	-33.82	6.41	1.25	0.49	24.88	10.26	3.51
2400	-18.24	52.28	12.67	-68.65	-19.07	165.45	-37.07	4.47	1.27	0.48	24.67	10.01	3.54
2600	-17.72	35.50	12.52	-88.65	-19.18	148.84	-43.81	15.85	1.29	0.46	25.01	9.64	3.56
2800	-17.04	17.70	12.36	-108.60	-19.23	132.02	-44.78	60.31	1.31	0.45	25.01	9.55	3.53
3000	-16.81	3.08	12.20	-128.27	-19.33	115.26	-38.32	80.80	1.33	0.44	24.68	10.16	3.48
3200	-16.60	-15.59	12.06	-148.09	-19.43	98.38	-35.53	76.59	1.36	0.43	24.48	10.07	3.57
3400	-16.44	-32.47	11.91	-167.66	-19.55	81.34	-33.64	72.91	1.39	0.42	24.59	9.71	3.65
3600	-16.43	-52.45	11.75	172.62	-19.65	64.20	-31.69	65.50	1.42	0.41	24.72	9.61	3.6
3800	-16.67	-70.61	11.65	153.14	-19.80	46.90	-30.38	55.66	1.45	0.39	24.57	10.03	3.64
4000	-16.71	-93.99	11.50	133.35	-19.88	29.32	-30.12	52.88	1.48	0.39	24.34	10.27	3.61
4200	-16.80	-114.59	11.39	113.71	-19.96	11.70	-29.85	42.74	1.50	0.38	24.49	9.95	3.62
4400	-16.72	-137.34	11.30	93.98	-20.09	-5.60	-29.91	33.42	1.53	0.37	24.42	9.83	3.67
4600	-16.83	-162.34	11.18	74.17	-20.16	-23.86	-28.67	30.51	1.56	0.36	24.22	10.27	3.83
4800	-16.75	172.46	11.07	54.58	-20.29	-41.99	-27.26	19.64	1.59	0.35	23.94	10.26	3.84
5000	-15.97	149.94	11.02	34.69	-20.43	-59.98	-26.39	6.14	1.61	0.35	23.73	9.82	3.85
5200	-15.89	125.69	10.92	15.08	-20.58	-78.80	-24.73	-6.66	1.65	0.34	23.63	9.59	3.99
5400	-15.05	101.47	10.86	-5.15	-20.68	-96.98	-24.28	-22.14	1.67	0.33	23.25	9.93	4.02
5600	-14.23	78.56	10.78	-25.12	-20.77	-115.64	-22.96	-38.84	1.68	0.33	22.97	9.76	4.04
5800	-13.61	56.27	10.73	-45.21	-20.84	-135.06	-21.56	-59.87	1.69	0.33	22.65	9.3	4.1
6000	-12.80	34.74	10.67	-65.79	-21.01	-154.09	-20.54	-79.73	1.72	0.33	22.62	9.08	4.11
6200	-12.02	12.17	10.59	-86.13	-21.06	-172.77	-19.03	-95.54	1.72	0.33	22.30	9.42	4.25
6400	-11.21	-10.26	10.51	-106.85	-21.11	168.06	-17.58	-112.96	1.72	0.33	21.97	9.04	4.36
6600	-10.51	-31.69	10.39	-128.12	-21.35	148.14	-16.73	-131.09	1.76	0.33	21.75	8.43	4.38
6800	-9.73	-55.43	10.29	-148.94	-21.31	130.23	-15.20	-149.06	1.74	0.34	21.64	8.49	4.29
7000	-9.07	-77.31	10.15	-170.51	-21.29	111.22	-13.93	-167.34	1.72	0.35	21.29	8.88	4.4
7200	-8.53	-100.95	9.99	167.72	-21.29	93.15	-12.86	174.36	1.72	0.36	20.97	8.21	4.55
7600	-7.36	-145.12	9.40	124.44	-21.51	54.84	-11.41	141.42	1.76	0.36	20.57	7.54	4.65
8000	-6.66	170.17	8.67	80.97	-21.67	17.82	-10.49	108.92	1.85	0.36	20.22	7.26	4.95

TYPE: MMIC Amplifier
MODEL: GALI-21 Reference Data: RDF-1049
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 48mA, Vd = 3.57V @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	Delta	(dBm)	(dBm)	(dB)
50	-50.13	-107.92	14.91	173.95	-19.06	-4.14	-27.58	174.90	1.11	0.62	31.40	13.63	3.34
100	-41.56	-122.39	14.94	168.60	-19.09	-8.07	-27.20	174.40	1.11	0.62	31.40	13.63	3.47
200	-38.23	-134.91	14.86	157.71	-19.11	-15.85	-26.51	171.43	1.12	0.61	31.40	13.71	3.32
400	-31.24	-152.92	14.71	136.22	-19.07	-31.31	-25.39	158.61	1.13	0.61	30.73	13.58	3.38
600	-27.59	-174.71	14.53	114.82	-19.03	-47.29	-24.26	138.96	1.13	0.60	30.29	13.63	3.36
800	-25.37	163.82	14.33	94.08	-19.01	-63.33	-23.29	118.84	1.14	0.58	30.02	13.13	3.5
1000	-24.31	144.50	14.16	73.43	-19.01	-79.34	-23.01	98.71	1.15	0.57	30.22	12.63	3.45
1200	-23.61	126.85	14.01	53.09	-19.05	-95.41	-22.73	78.82	1.17	0.56	29.81	12.83	3.54
1400	-22.46	111.87	13.86	32.60	-19.09	-111.64	-22.88	59.79	1.18	0.55	29.45	13.1	3.54
1600	-21.84	95.00	13.68	12.32	-19.13	-128.00	-23.34	40.97	1.20	0.54	29.10	12.65	3.62
1800	-21.09	81.32	13.51	-7.86	-19.19	-144.36	-23.77	23.74	1.21	0.52	28.84	12.5	3.6
2000	-20.30	66.41	13.37	-27.96	-19.23	-160.52	-24.63	6.03	1.22	0.51	28.64	12.82	3.63
2200	-20.03	53.76	13.19	-48.01	-19.33	-176.95	-26.11	-11.26	1.25	0.49	28.44	13.1	3.65
2400	-19.24	39.15	13.03	-67.82	-19.38	166.60	-27.74	-26.59	1.26	0.48	28.16	12.75	3.66
2600	-18.82	24.69	12.88	-87.85	-19.48	150.10	-30.04	-46.64	1.29	0.47	28.00	12.23	3.7
2800	-18.20	7.87	12.69	-107.66	-19.55	133.45	-32.10	-66.27	1.31	0.45	27.74	12.28	3.69
3000	-18.03	-5.51	12.54	-127.26	-19.65	116.74	-35.77	-87.65	1.34	0.44	27.47	12.7	3.61
3200	-17.88	-23.51	12.39	-147.04	-19.74	99.84	-39.53	-119.28	1.36	0.43	27.34	12.58	3.7
3400	-17.82	-40.03	12.22	-166.54	-19.85	83.01	-40.07	-170.61	1.39	0.42	26.99	12.03	3.79
3600	-17.74	-59.67	12.06	173.89	-19.96	65.93	-37.74	142.84	1.42	0.40	26.73	12.02	3.77
3800	-18.13	-77.46	11.96	154.51	-20.11	48.77	-35.07	115.08	1.46	0.39	26.63	12.45	3.77
4000	-18.09	-101.36	11.82	134.94	-20.20	31.24	-32.30	107.65	1.48	0.38	26.40	12.4	3.78
4200	-18.20	-121.98	11.70	115.27	-20.27	13.84	-31.20	93.88	1.51	0.38	26.14	11.86	3.77
4400	-18.10	-144.72	11.61	95.69	-20.39	-3.43	-30.47	82.73	1.54	0.37	25.80	11.8	3.85
4600	-18.16	-170.57	11.49	75.98	-20.46	-21.54	-28.14	69.85	1.56	0.36	25.59	12.17	4
4800	-17.92	163.61	11.38	56.61	-20.60	-39.69	-26.64	52.83	1.60	0.35	25.28	11.86	4.04
5000	-17.02	141.67	11.33	36.83	-20.73	-57.63	-25.70	37.17	1.62	0.35	24.94	11.21	4.02
5200	-16.87	117.36	11.24	17.34	-20.84	-76.30	-24.07	19.31	1.65	0.34	24.62	11.06	4.19
5400	-15.87	93.67	11.18	-2.70	-20.97	-94.48	-23.61	2.89	1.67	0.33	24.24	11.41	4.21
5600	-14.94	71.53	11.10	-22.51	-21.05	-113.00	-22.40	-16.25	1.68	0.33	23.84	10.98	4.26
5800	-14.26	49.97	11.07	-42.56	-21.13	-132.31	-21.33	-39.32	1.70	0.33	23.54	10.48	4.29
6000	-13.40	29.40	11.03	-62.88	-21.29	-151.23	-20.47	-60.54	1.72	0.33	23.55	10.44	4.32
6200	-12.58	7.17	10.95	-83.14	-21.32	-169.94	-18.95	-79.08	1.72	0.33	23.05	10.63	4.48
6400	-11.67	-14.67	10.88	-103.77	-21.37	170.89	-17.49	-98.30	1.72	0.33	22.62	10.01	4.64
6600	-10.95	-35.46	10.79	-124.91	-21.60	151.00	-16.65	-117.15	1.75	0.33	22.48	9.51	4.63
6800	-10.07	-58.53	10.72	-145.68	-21.56	133.07	-15.08	-136.54	1.72	0.34	22.25	9.66	4.59
7000	-9.38	-80.09	10.61	-167.14	-21.53	114.03	-13.78	-156.26	1.70	0.35	21.78	9.84	4.68
7200	-8.78	-103.35	10.46	171.15	-21.51	95.76	-12.64	-175.60	1.69	0.36	21.36	9.04	4.91
7600	-7.53	-147.06	9.92	127.79	-21.74	57.43	-11.08	149.92	1.73	0.37	20.81	8.44	4.98
8000	-6.72	168.62	9.23	84.25	-21.93	20.37	-10.05	116.00	1.79	0.38	20.30	7.88	5.34

TYPE: MMIC Amplifier
MODEL: GALI-21 Reference Data: RDF-1049
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 40mA, Vd = 3.69V @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	Delta	(dBm)	(dBm)	(dB)
50	-35.94	-23.65	14.77	173.88	-18.90	-4.30	-33.70	174.21	1.11	0.62	29.44	12.63	2.88
100	-32.55	-35.37	14.81	168.55	-18.94	-8.22	-33.55	-178.18	1.11	0.62	29.42	12.81	2.96
200	-34.40	-48.05	14.73	157.63	-18.93	-16.05	-31.79	-172.32	1.12	0.62	29.55	12.71	2.81
400	-30.87	-105.47	14.59	135.90	-18.87	-31.96	-30.01	171.15	1.12	0.61	29.20	12.54	2.87
600	-28.37	-146.99	14.42	114.33	-18.83	-48.21	-27.82	145.95	1.13	0.60	29.03	12.81	2.84
800	-26.65	-177.81	14.25	93.29	-18.82	-64.68	-26.06	124.78	1.14	0.59	28.90	12.45	2.96
1000	-25.18	159.10	14.09	72.43	-18.81	-81.10	-25.50	101.99	1.15	0.58	29.45	12.31	2.89
1200	-24.75	137.52	13.94	51.76	-18.83	-97.62	-24.97	83.03	1.16	0.57	29.54	12.25	2.93
1400	-22.84	119.49	13.80	30.98	-18.86	-114.23	-25.01	61.30	1.17	0.56	29.14	12.51	2.96
1600	-22.19	101.07	13.63	10.44	-18.91	-130.96	-25.34	42.29	1.18	0.54	29.01	12.23	3.01
1800	-21.41	85.51	13.47	-9.97	-18.95	-147.59	-25.60	26.90	1.20	0.53	29.06	12.18	2.99
2000	-20.34	69.27	13.34	-30.38	-18.99	-164.25	-26.77	9.37	1.21	0.52	28.94	12.31	2.98
2200	-20.11	56.52	13.17	-50.75	-19.10	179.01	-28.70	-6.56	1.23	0.50	28.72	12.48	2.99
2400	-19.20	39.79	13.00	-70.87	-19.13	162.15	-30.24	-18.98	1.25	0.49	28.50	12.27	3.04
2600	-18.67	23.32	12.86	-91.09	-19.23	145.24	-33.28	-34.49	1.27	0.48	28.67	12.07	3.05
2800	-17.96	7.60	12.69	-111.20	-19.30	128.26	-37.87	-48.26	1.29	0.47	28.52	12.04	3.03
3000	-17.77	-9.35	12.54	-131.34	-19.37	111.01	-41.42	-52.70	1.31	0.45	28.21	12.41	2.98
3200	-17.53	-27.86	12.40	-151.35	-19.45	93.85	-50.32	-26.18	1.33	0.44	28.10	12.28	3.03
3400	-17.39	-44.46	12.27	-171.07	-19.56	76.92	-48.04	72.80	1.35	0.43	28.06	12.02	3.11
3600	-17.33	-64.41	12.10	169.07	-19.66	59.26	-38.93	88.99	1.38	0.42	27.97	12.03	3.07
3800	-17.85	-83.85	11.95	149.29	-19.78	41.36	-35.47	88.01	1.42	0.41	27.89	12.24	3.1
4000	-17.85	-108.27	11.84	129.55	-19.91	23.69	-33.02	86.05	1.45	0.40	27.61	12.35	3.1
4200	-17.57	-128.97	11.74	109.27	-19.88	6.42	-33.99	81.97	1.45	0.39	27.63	12.16	3.05
4400	-17.76	-150.17	11.70	89.90	-20.15	-11.19	-32.43	57.72	1.49	0.38	27.48	12.1	3.09
4600	-18.41	-177.48	11.54	70.11	-20.19	-30.28	-29.19	51.42	1.52	0.37	27.37	12.39	3.25
4800	-18.00	157.64	11.50	50.32	-20.39	-48.32	-27.93	35.08	1.55	0.36	27.09	12.32	3.28
5000	-17.10	134.06	11.43	30.27	-20.47	-66.52	-26.94	21.39	1.57	0.36	26.68	11.85	3.28
5200	-16.71	109.75	11.34	9.98	-20.55	-85.14	-25.97	10.52	1.59	0.35	26.55	11.7	3.45
5400	-16.02	82.42	11.27	-9.67	-20.64	-104.49	-23.97	-8.82	1.61	0.35	26.13	12	3.42
5600	-15.19	61.78	11.23	-29.92	-20.76	-123.19	-23.27	-26.10	1.62	0.35	25.80	11.7	3.45
5800	-14.47	39.93	11.17	-50.36	-20.82	-142.66	-22.35	-46.04	1.63	0.34	25.44	11.28	3.51
6000	-13.72	17.11	11.17	-70.98	-20.96	-162.18	-21.41	-72.02	1.65	0.34	25.53	11.19	3.49
6200	-12.80	-5.72	11.05	-91.10	-20.87	179.87	-19.55	-83.26	1.64	0.35	25.24	11.4	3.69
6400	-12.04	-28.57	11.09	-112.40	-20.88	158.75	-18.18	-110.66	1.62	0.35	24.76	10.85	3.77
6600	-11.08	-51.25	11.00	-133.31	-20.99	140.41	-16.70	-123.27	1.62	0.36	24.53	10.43	3.76
6800	-10.04	-72.84	10.85	-154.68	-21.41	121.33	-15.87	-140.89	1.68	0.35	24.42	10.55	3.66
7000	-9.63	-95.23	10.82	-177.00	-20.99	99.35	-14.63	-166.39	1.60	0.37	23.99	10.67	3.76
7200	-8.85	-119.55	10.72	161.36	-20.84	82.48	-12.99	174.66	1.56	0.39	23.47	9.95	3.93
7600	-7.46	-164.46	10.26	117.45	-21.28	48.00	-11.03	140.80	1.60	0.40	23.13	9.53	3.98
8000	-6.66	151.02	9.59	73.28	-21.05	7.16	-10.21	107.27	1.60	0.41	22.79	8.93	4.21

TYPE: MMIC Amplifier
MODEL: GALI-21 Reference Data: RDF-1049
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 32mA, Vd = 3.61V @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	Delta	(dBm)	(dBm)	(dB)
50	-28.23	-15.91	14.55	173.84	-18.76	-4.39	-58.28	175.93	1.12	0.62	25.52	10.14	2.83
100	-27.67	-23.72	14.58	168.54	-18.74	-8.13	-47.34	-107.85	1.12	0.62	25.44	10.65	2.88
200	-29.24	-35.65	14.52	157.7	-18.75	-16.12	-38.06	-124.61	1.12	0.61	25.61	10.35	2.8
400	-27.98	-84.58	14.38	135.89	-18.69	-32.03	-35.03	-155.22	1.12	0.61	25.35	9.99	2.86
600	-27.04	-125.44	14.20	114.32	-18.66	-48.37	-32.25	164.58	1.13	0.60	25.31	10.63	2.81
800	-26.20	-157.57	14.04	93.31	-18.63	-64.83	-29.54	136.51	1.14	0.59	25.18	10.26	2.94
1000	-24.85	175.86	13.88	72.36	-18.64	-81.32	-28.85	110.65	1.15	0.58	25.69	10.19	2.88
1200	-24.58	152.94	13.74	51.70	-18.65	-98.01	-28.11	91.00	1.16	0.57	26.02	9.94	2.91
1400	-22.65	132.35	13.60	30.88	-18.70	-114.76	-28.22	67.92	1.17	0.56	25.65	10.44	2.93
1600	-21.90	112.36	13.43	10.28	-18.72	-131.20	-28.62	48.55	1.18	0.54	25.69	10.08	2.98
1800	-21.04	95.24	13.28	-10.11	-18.80	-148.11	-28.83	34.49	1.20	0.53	25.83	10.01	2.95
2000	-19.88	77.85	13.16	-30.60	-18.82	-164.81	-30.39	18.63	1.21	0.52	25.99	10.07	2.92
2200	-19.48	64.51	12.97	-50.98	-18.94	178.52	-33.23	7.77	1.23	0.50	25.68	10.4	2.94
2400	-18.60	46.51	12.81	-71.15	-18.96	161.62	-35.20	3.59	1.25	0.49	25.51	10.09	2.98
2600	-18.02	29.38	12.67	-91.40	-19.05	144.61	-39.78	10.65	1.26	0.48	25.89	9.82	2.98
2800	-17.33	12.88	12.52	-111.54	-19.14	127.72	-41.88	47.38	1.28	0.47	25.93	9.74	2.98
3000	-17.10	-4.49	12.36	-131.74	-19.20	110.28	-39.21	50.34	1.30	0.45	25.58	10.36	2.94
3200	-16.89	-23.34	12.23	-151.83	-19.25	93.13	-36.29	55.03	1.32	0.45	25.43	10.21	2.97
3400	-16.63	-40.61	12.09	-171.55	-19.38	76.08	-34.67	53.68	1.35	0.43	25.62	9.96	3.09
3600	-16.62	-60.65	11.91	168.48	-19.50	58.43	-32.87	56.32	1.38	0.42	25.81	9.88	3.01
3800	-17.10	-79.86	11.78	148.79	-19.62	40.46	-32.05	55.37	1.41	0.41	25.67	10.27	3.03
4000	-17.09	-104.00	11.67	128.94	-19.75	22.73	-31.38	54.06	1.44	0.40	25.46	10.49	3.06
4200	-16.86	-125.16	11.57	108.62	-19.73	5.42	-33.07	43.35	1.45	0.39	25.79	10.36	3
4400	-17.01	-146.21	11.53	89.19	-19.99	-12.31	-31.35	26.67	1.49	0.38	25.74	10.16	3.04
4600	-17.67	-172.86	11.37	69.25	-20.04	-31.30	-29.30	28.31	1.52	0.37	25.54	10.59	3.21
4800	-17.34	162.73	11.33	49.52	-20.22	-49.50	-28.07	15.34	1.55	0.36	25.30	10.78	3.2
5000	-16.55	138.82	11.27	29.35	-20.32	-67.80	-27.28	3.44	1.57	0.36	25.20	10.44	3.23
5200	-16.19	114.47	11.17	9.03	-20.38	-86.36	-26.59	-5.68	1.59	0.35	25.08	10.27	3.36
5400	-15.60	87.04	11.11	-10.68	-20.45	-105.76	-24.42	-21.91	1.60	0.35	24.64	10.57	3.36
5600	-14.83	65.76	11.06	-30.99	-20.55	-124.53	-23.70	-38.89	1.62	0.35	24.37	10.51	3.38
5800	-14.11	43.39	10.99	-51.60	-20.68	-144.03	-22.67	-57.97	1.64	0.34	24.16	10.14	3.42
6000	-13.40	20.53	11.01	-72.20	-20.80	-163.56	-21.47	-82.56	1.64	0.34	24.18	9.98	3.4
6200	-12.51	-2.68	10.86	-92.38	-20.72	178.42	-19.75	-91.93	1.64	0.35	24.02	10.31	3.58
6400	-11.78	-25.89	10.91	-113.76	-20.72	157.35	-18.11	-119.21	1.62	0.35	23.61	10.03	3.69
6600	-10.87	-48.86	10.80	-134.73	-20.88	138.94	-16.82	-130.45	1.63	0.35	23.38	9.55	3.68
6800	-9.89	-70.89	10.64	-156.09	-21.28	119.95	-15.91	-147.67	1.69	0.35	23.25	9.56	3.52
7000	-9.45	-93.54	10.59	-178.44	-20.86	97.69	-14.69	-172.21	1.61	0.37	22.98	9.91	3.66
7200	-8.73	-117.80	10.49	159.89	-20.71	81.09	-13.09	169.66	1.57	0.39	22.55	9.26	3.78
7600	-7.36	-163.27	10.00	115.94	-21.10	46.20	-11.21	136.53	1.61	0.40	22.35	8.91	3.85
8000	-6.59	152.07	9.32	71.87	-20.93	5.89	-10.46	103.78	1.62	0.40	22.11	8.41	4.04

TYPE: MMIC Amplifier
MODEL: GALI-21 Reference Data: RDF-1049
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 48mA, Vd = 3.76V @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	Delta	(dBm)	(dBm)	(dB)
50	-39.04	-44.63	14.9	173.93	-19.06	-4.55	-29.56	174.95	1.12	0.62	32.34	14.17	2.93
100	-36.31	-49.31	14.95	168.56	-19.02	-8.28	-29.58	177.12	1.11	0.63	32.25	14.14	3.01
200	-39.02	-65.94	14.89	157.6	-19.04	-16.04	-28.62	179.11	1.11	0.62	32.45	14.16	2.86
400	-32.07	-126.81	14.73	135.96	-18.98	-31.78	-27.39	163.07	1.12	0.61	31.94	13.96	2.9
600	-28.38	-164.54	14.55	114.36	-18.95	-48.26	-25.66	140.81	1.13	0.60	31.51	14.08	2.86
800	-26.30	170.48	14.39	93.41	-18.93	-64.58	-24.28	120.87	1.14	0.59	31.35	13.69	2.99
1000	-24.80	148.55	14.23	72.51	-18.92	-81.00	-23.87	99.18	1.14	0.58	31.69	13.38	2.93
1200	-24.56	127.48	14.08	51.91	-18.94	-97.42	-23.42	80.57	1.16	0.57	31.37	13.43	3
1400	-22.78	111.34	13.93	31.19	-18.99	-114.00	-23.45	59.43	1.17	0.56	31.03	13.66	2.99
1600	-22.17	93.87	13.76	10.68	-19.03	-130.59	-23.76	40.54	1.18	0.55	30.71	13.33	3.07
1800	-21.50	79.08	13.59	-9.73	-19.08	-147.18	-23.97	24.69	1.20	0.53	30.51	13.27	3.06
2000	-20.51	63.42	13.47	-30.02	-19.11	-163.90	-24.95	6.92	1.21	0.52	30.28	13.5	3.02
2200	-20.39	50.85	13.29	-50.42	-19.20	179.33	-26.58	-9.67	1.23	0.51	30.04	13.67	3.03
2400	-19.57	34.62	13.12	-70.49	-19.25	162.55	-27.87	-23.72	1.25	0.49	29.87	13.43	3.07
2600	-19.05	18.57	12.97	-90.71	-19.34	145.67	-30.20	-41.24	1.27	0.48	29.75	13.13	3.07
2800	-18.36	3.89	12.80	-110.74	-19.42	128.78	-33.16	-58.77	1.29	0.47	29.58	13.12	3.07
3000	-18.19	-12.87	12.67	-130.83	-19.48	111.52	-35.10	-72.63	1.31	0.46	29.24	13.43	3.03
3200	-17.95	-31.24	12.51	-150.80	-19.54	94.40	-39.52	-90.34	1.33	0.44	29.16	13.33	3.1
3400	-17.85	-47.65	12.38	-170.58	-19.65	77.42	-45.04	-134.01	1.35	0.43	29.01	12.95	3.15
3600	-17.83	-67.25	12.20	169.63	-19.75	59.83	-41.16	142.16	1.38	0.42	28.73	12.99	3.13
3800	-18.36	-86.31	12.07	149.91	-19.90	42.01	-36.37	122.10	1.42	0.41	28.64	13.3	3.15
4000	-18.39	-111.29	11.95	130.19	-20.03	24.31	-32.99	110.11	1.45	0.40	28.44	13.33	3.15
4200	-18.09	-132.14	11.85	109.94	-19.98	7.05	-33.13	107.20	1.45	0.39	28.29	12.93	3.13
4400	-18.28	-152.83	11.82	90.70	-20.26	-10.60	-32.24	79.98	1.49	0.38	27.91	12.92	3.16
4600	-18.96	178.68	11.64	70.87	-20.30	-29.57	-28.81	66.34	1.52	0.37	27.77	13.18	3.33
4800	-18.46	153.90	11.60	51.21	-20.48	-47.57	-27.64	48.27	1.55	0.36	27.53	12.96	3.33
5000	-17.54	130.72	11.54	31.23	-20.58	-65.82	-26.66	33.12	1.57	0.36	27.14	12.44	3.36
5200	-17.06	106.41	11.45	10.99	-20.65	-84.36	-25.58	21.02	1.59	0.35	26.86	12.26	3.51
5400	-16.30	79.02	11.39	-8.58	-20.71	-103.71	-23.72	0.17	1.60	0.35	26.44	12.58	3.48
5600	-15.51	58.55	11.35	-28.79	-20.85	-122.47	-23.05	-17.43	1.62	0.35	26.17	12.19	3.54
5800	-14.70	37.04	11.30	-49.24	-20.91	-141.81	-22.19	-37.73	1.63	0.34	25.92	11.76	3.6
6000	-13.99	14.50	11.31	-69.63	-21.07	-161.37	-21.42	-63.94	1.65	0.34	25.94	11.72	3.61
6200	-12.96	-7.85	11.17	-89.77	-20.96	-179.23	-19.48	-76.31	1.63	0.35	25.62	11.89	3.81
6400	-12.21	-30.60	11.24	-110.88	-20.99	159.66	-18.19	-104.99	1.61	0.36	25.10	11.27	3.9
6600	-11.25	-53.16	11.14	-131.80	-21.10	141.37	-16.68	-117.83	1.62	0.36	24.91	10.86	3.88
6800	-10.21	-74.16	11.01	-153.11	-21.51	122.15	-15.81	-135.78	1.67	0.35	24.78	11.03	3.78
7000	-9.76	-96.63	11.00	-175.43	-21.06	99.97	-14.65	-161.82	1.59	0.37	24.25	11.11	3.89
7200	-8.98	-120.87	10.90	163.00	-20.90	83.32	-12.96	178.74	1.55	0.40	23.75	10.35	4.08
7600	-7.47	-165.35	10.46	119.07	-21.29	49.20	-10.92	144.05	1.58	0.41	23.36	9.92	4.13
8000	-6.68	150.28	9.80	74.88	-21.13	7.99	-10.06	110.23	1.59	0.42	22.96	9.27	4.37

TYPE: MMIC Amplifier
MODEL: GALI-21 Reference Data: RDF-1049
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 40mA, Vd = 3.38V @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	Delta	(dBm)	(dBm)	(dB)
50	-37.68	12.73	14.67	173.86	-18.94	-4.26	-31.37	176.66	1.12	0.61	28.38	12.27	3.64
100	-40.79	-61.34	14.72	168.58	-18.95	-8.01	-30.33	177.05	1.12	0.61	28.33	12.26	3.77
200	-36.32	-99.43	14.65	157.57	-18.93	-15.61	-29.22	172.02	1.12	0.61	28.44	12.18	3.64
400	-31.1	-134.24	14.47	136.12	-18.89	-31.08	-27.47	162.94	1.13	0.6	27.81	11.97	3.71
600	-27.55	-159.44	14.28	114.84	-18.88	-46.94	-26.21	142.88	1.14	0.59	27.48	12.14	3.71
800	-25.80	177.40	14.08	94.14	-18.86	-62.78	-25.17	124.08	1.15	0.58	27.19	11.67	3.87
1000	-24.64	159.22	13.91	73.55	-18.88	-78.74	-25.12	104.14	1.16	0.56	27.47	11.28	3.82
1200	-23.75	141.27	13.76	53.16	-18.89	-94.68	-24.99	83.60	1.17	0.55	27.36	11.37	3.88
1400	-22.55	125.65	13.59	32.72	-18.95	-110.84	-25.26	64.11	1.19	0.54	26.98	11.69	3.93
1600	-21.71	108.75	13.41	12.52	-19.01	-126.79	-25.98	44.61	1.21	0.52	26.74	11.27	3.98
1800	-20.80	94.35	13.24	-7.62	-19.06	-143.23	-26.49	27.28	1.22	0.51	26.55	11.06	3.96
2000	-19.74	78.66	13.09	-27.65	-19.11	-159.18	-27.79	8.45	1.24	0.50	26.43	11.31	3.98
2200	-19.30	65.45	12.91	-47.74	-19.22	-175.46	-29.93	-10.80	1.26	0.48	26.17	11.62	4
2400	-18.40	50.51	12.72	-67.49	-19.28	168.32	-32.29	-26.39	1.28	0.47	25.90	11.36	4.06
2600	-17.95	34.68	12.57	-87.44	-19.38	151.91	-36.15	-50.36	1.31	0.46	25.90	10.81	4.1
2800	-17.36	18.45	12.40	-107.11	-19.47	135.53	-40.66	-82.20	1.33	0.44	25.62	10.78	4.06
3000	-17.15	2.88	12.24	-126.94	-19.53	118.78	-46.55	-116.52	1.35	0.43	25.28	11.27	3.99
3200	-16.92	-14.89	12.09	-146.66	-19.60	102.33	-47.74	146.23	1.37	0.42	25.12	11.13	4.11
3400	-16.95	-29.60	11.93	-165.88	-19.76	85.77	-38.72	107.95	1.41	0.41	24.92	10.56	4.18
3600	-16.94	-51.11	11.74	174.38	-19.83	68.53	-35.64	102.34	1.44	0.40	24.63	10.49	4.16
3800	-17.13	-69.05	11.64	155.04	-19.97	51.67	-33.61	83.58	1.47	0.39	24.53	10.97	4.18
4000	-16.76	-92.70	11.51	135.12	-20.01	34.49	-33.79	83.73	1.49	0.38	24.10	10.98	4.18
4200	-16.93	-113.24	11.37	115.64	-20.14	17.30	-31.92	69.78	1.53	0.37	23.95	10.4	4.17
4400	-17.03	-132.79	11.30	96.44	-20.36	-0.01	-30.15	52.35	1.57	0.36	23.73	10.23	4.26
4600	-17.59	-160.12	11.09	77.42	-20.45	-19.20	-26.34	46.03	1.62	0.35	23.42	10.69	4.45
4800	-17.49	177.15	10.99	57.97	-20.57	-37.15	-25.48	31.35	1.65	0.34	23.08	10.43	4.45
5000	-16.69	155.87	10.99	38.25	-20.74	-55.06	-24.60	11.68	1.67	0.33	22.67	9.74	4.43
5200	-15.83	131.25	10.86	17.74	-20.80	-72.29	-24.57	4.09	1.69	0.33	22.42	9.48	4.63
5400	-15.08	107.47	10.76	-2.08	-20.92	-90.54	-23.44	-13.19	1.72	0.32	21.99	9.9	4.63
5600	-14.10	83.74	10.63	-21.98	-20.98	-108.75	-22.33	-27.99	1.74	0.32	21.59	9.47	4.7
5800	-13.66	62.54	10.60	-42.22	-21.12	-128.16	-21.50	-51.66	1.76	0.32	21.27	8.93	4.73
6000	-12.85	41.92	10.59	-62.34	-21.29	-147.91	-19.94	-77.32	1.78	0.31	21.17	8.76	4.74
6200	-11.82	20.02	10.39	-82.81	-21.46	-164.95	-19.09	-88.37	1.82	0.31	20.71	9.07	4.88
6400	-11.13	-1.82	10.32	-103.27	-21.37	175.39	-17.12	-109.74	1.79	0.32	20.31	8.48	5.04
6600	-10.42	-23.42	10.16	-124.19	-21.64	156.24	-16.35	-126.17	1.84	0.31	20.02	7.82	5.06
6800	-9.83	-45.09	10.03	-145.21	-21.80	136.77	-15.18	-144.18	1.87	0.31	19.89	7.96	5.05
7000	-9.16	-67.74	9.87	-166.62	-21.70	118.53	-14.03	-163.10	1.84	0.33	19.40	8.29	5.13
7200	-8.89	-91.60	9.67	171.63	-21.19	100.13	-12.85	176.09	1.77	0.35	18.90	7.48	5.32
7600	-7.40	-135.52	9.02	129.20	-22.10	63.22	-11.37	145.38	1.94	0.34	18.52	6.83	5.48
8000	-6.74	-179.49	8.27	86.37	-22.39	26.47	-10.41	113.47	2.06	0.34	17.99	6.44	5.83

TYPE: MMIC Amplifier
MODEL: GALI-21 Reference Data: RDF-1049
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 32mA, Vd = 3.31V @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	Delta	(dBm)	(dBm)	(dB)
50	-28.77	-13.33	14.39	173.91	-18.72	-4.62	-50.16	-161.09	1.13	0.61	24.84	10.12	3.59
100	-29.8	-22.45	14.44	168.55	-18.69	-7.99	-44.85	-152.55	1.12	0.61	24.78	10.46	3.7
200	-31.02	-52.05	14.36	157.69	-18.72	-15.78	-38.83	-160	1.13	0.61	24.92	10.29	3.62
400	-29.43	-93.79	14.18	136.22	-18.67	-31.3	-33.24	-172.11	1.13	0.6	24.51	9.95	3.68
600	-26.90	-131.70	14.00	114.89	-18.64	-47.18	-31.09	161.01	1.14	0.59	24.30	10.45	3.68
800	-25.50	-160.03	13.83	94.18	-18.63	-63.05	-29.25	138.51	1.15	0.57	24.15	10.09	3.8
1000	-24.44	179.05	13.65	73.47	-18.65	-79.05	-29.24	117.76	1.16	0.56	24.56	9.8	3.77
1200	-23.50	159.36	13.50	53.07	-18.67	-95.14	-29.12	95.76	1.18	0.55	24.77	9.76	3.83
1400	-22.16	140.41	13.35	32.62	-18.72	-111.27	-29.46	75.85	1.19	0.54	24.38	10.1	3.87
1600	-21.28	122.07	13.17	12.36	-18.76	-127.47	-30.46	56.49	1.21	0.52	24.34	9.73	3.91
1800	-20.27	105.27	13.00	-7.86	-18.85	-143.70	-31.18	40.54	1.22	0.51	24.36	9.64	3.93
2000	-19.16	87.77	12.86	-27.94	-18.88	-159.96	-33.35	24.36	1.24	0.50	24.41	9.71	3.92
2200	-18.61	73.73	12.66	-48.00	-19.00	-176.22	-37.49	12.90	1.26	0.48	24.15	10.03	3.92
2400	-17.71	57.60	12.49	-67.84	-19.05	167.55	-42.17	25.41	1.28	0.47	23.92	9.77	3.99
2600	-17.19	41.26	12.35	-87.89	-19.16	150.99	-44.79	85.79	1.30	0.46	24.11	9.41	3.99
2800	-16.62	23.95	12.16	-107.60	-19.23	134.42	-39.62	102.35	1.33	0.44	24.06	9.33	3.98
3000	-16.32	8.00	12.01	-127.44	-19.32	117.74	-36.75	88.98	1.35	0.43	23.74	9.89	3.92
3200	-16.17	-10.48	11.87	-147.15	-19.38	101.21	-34.08	77.35	1.37	0.42	23.53	9.81	4.01
3400	-16.10	-25.76	11.72	-166.42	-19.56	84.58	-31.63	71.23	1.41	0.41	23.59	9.35	4.1
3600	-16.08	-47.25	11.54	173.76	-19.63	67.23	-31.10	65.27	1.44	0.40	23.52	9.27	4.08
3800	-16.24	-65.02	11.42	154.36	-19.76	50.35	-29.97	52.26	1.47	0.39	23.39	9.68	4.09
4000	-15.96	-88.47	11.29	134.40	-19.80	33.20	-31.06	44.72	1.49	0.38	23.03	9.91	4.09
4200	-16.16	-108.98	11.16	114.82	-19.92	15.85	-30.23	36.53	1.52	0.37	23.08	9.43	4.09
4400	-16.20	-128.70	11.08	95.60	-20.17	-1.67	-28.91	24.28	1.57	0.36	22.91	9.17	4.18
4600	-16.82	-155.30	10.88	76.37	-20.24	-20.93	-26.23	26.79	1.61	0.35	22.65	9.66	4.38
4800	-16.70	-178.55	10.78	56.80	-20.34	-38.80	-25.52	13.43	1.64	0.34	22.29	9.65	4.35
5000	-16.06	159.92	10.77	37.15	-20.55	-56.87	-24.47	-4.85	1.67	0.33	22.02	8.96	4.33
5200	-15.26	135.51	10.63	16.52	-20.59	-74.05	-24.95	-13.39	1.69	0.33	21.83	8.73	4.51
5400	-14.62	111.35	10.55	-3.35	-20.71	-92.31	-23.80	-29.13	1.72	0.32	21.42	9.16	4.53
5600	-13.71	87.41	10.42	-23.22	-20.79	-110.43	-22.72	-42.44	1.74	0.32	21.08	8.87	4.58
5800	-13.30	65.91	10.39	-43.56	-20.94	-130.10	-21.68	-64.57	1.76	0.31	20.77	8.32	4.6
6000	-12.50	44.78	10.36	-63.88	-21.10	-149.82	-19.88	-88.15	1.78	0.31	20.68	8.02	4.59
6200	-11.54	22.33	10.16	-84.35	-21.27	-167.03	-19.24	-98.86	1.82	0.31	20.36	8.48	4.73
6400	-10.88	0.44	10.08	-104.88	-21.21	173.28	-17.25	-118.81	1.80	0.32	19.98	7.94	4.91
6600	-10.20	-21.70	9.92	-125.85	-21.44	154.22	-16.47	-134.44	1.84	0.31	19.66	7.17	4.93
6800	-9.62	-43.58	9.78	-146.86	-21.61	134.89	-15.41	-151.91	1.87	0.31	19.53	7.35	4.87
7000	-9.00	-66.24	9.60	-168.27	-21.54	116.39	-14.19	-169.86	1.86	0.32	19.15	7.82	4.97
7200	-8.74	-90.29	9.38	169.93	-21.04	98.23	-13.02	170.51	1.79	0.34	18.71	7.02	5.14
7600	-7.34	-134.65	8.71	127.57	-21.84	61.87	-11.64	140.35	1.94	0.33	18.38	6.31	5.3
8000	-6.70	-178.75	7.97	84.75	-22.17	24.18	-10.76	109.30	2.08	0.33	18.00	6.02	5.61

TYPE: MMIC Amplifier
MODEL: GALI-21 Reference Data: RDF-1049
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 48mA, Vd = 3.44V @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	Delta	(dBm)	(dBm)	(dB)
50	-37.68	12.73	14.67	173.86	-18.94	-4.26	-31.37	176.66	1.12	0.61	31.28	13.3	3.71
100	-40.79	-61.34	14.72	168.58	-18.95	-8.01	-30.33	177.05	1.12	0.61	31.15	13.05	3.86
200	-36.32	-99.43	14.65	157.57	-18.93	-15.61	-29.22	172.02	1.12	0.61	31.06	13.17	3.7
400	-31.10	-134.24	14.47	136.12	-18.89	-31.08	-27.47	162.94	1.13	0.60	30.05	13.1	3.78
600	-27.55	-159.44	14.28	114.84	-18.88	-46.94	-26.21	142.88	1.14	0.59	29.24	13.07	3.78
800	-25.80	177.40	14.08	94.14	-18.86	-62.78	-25.17	124.08	1.15	0.58	28.75	12.5	3.92
1000	-24.64	159.22	13.91	73.55	-18.88	-78.74	-25.12	104.14	1.16	0.56	28.63	11.93	3.88
1200	-23.75	141.27	13.76	53.16	-18.89	-94.68	-24.99	83.60	1.17	0.55	28.08	12.15	3.95
1400	-22.55	125.65	13.59	32.72	-18.95	-110.84	-25.26	64.11	1.19	0.54	27.64	12.44	4.01
1600	-21.71	108.75	13.41	12.52	-19.01	-126.79	-25.98	44.61	1.21	0.52	27.22	11.9	4.07
1800	-20.80	94.35	13.24	-7.62	-19.06	-143.23	-26.49	27.28	1.22	0.51	26.89	11.65	4.05
2000	-19.74	78.66	13.09	-27.65	-19.11	-159.18	-27.79	8.45	1.24	0.50	26.55	12.07	4.07
2200	-19.30	65.45	12.91	-47.74	-19.22	-175.46	-29.93	-10.80	1.26	0.48	26.35	12.38	4.11
2400	-18.40	50.51	12.72	-67.49	-19.28	168.32	-32.29	-26.39	1.28	0.47	26.05	11.99	4.17
2600	-17.95	34.68	12.57	-87.44	-19.38	151.91	-36.15	-50.36	1.31	0.46	25.86	11.37	4.18
2800	-17.36	18.45	12.40	-107.11	-19.47	135.53	-40.66	-82.20	1.33	0.44	25.47	11.4	4.15
3000	-17.15	2.88	12.24	-126.94	-19.53	118.78	-46.55	-116.52	1.35	0.43	25.15	11.85	4.09
3200	-16.92	-14.89	12.09	-146.66	-19.60	102.33	-47.74	146.23	1.37	0.42	24.94	11.71	4.19
3400	-16.95	-29.60	11.93	-165.88	-19.76	85.77	-38.72	107.95	1.41	0.41	24.66	10.98	4.29
3600	-16.94	-51.11	11.74	174.38	-19.83	68.53	-35.64	102.34	1.44	0.40	24.26	10.99	4.25
3800	-17.13	-69.05	11.64	155.04	-19.97	51.67	-33.61	83.58	1.47	0.39	24.06	11.51	4.27
4000	-16.76	-92.70	11.51	135.12	-20.01	34.49	-33.79	83.73	1.49	0.38	23.75	11.44	4.25
4200	-16.93	-113.24	11.37	115.64	-20.14	17.30	-31.92	69.78	1.53	0.37	23.60	10.76	4.27
4400	-17.03	-132.79	11.30	96.44	-20.36	-0.01	-30.15	52.35	1.57	0.36	23.17	10.67	4.38
4600	-17.59	-160.12	11.09	77.42	-20.45	-19.20	-26.34	46.03	1.62	0.35	22.96	11.14	4.56
4800	-17.49	177.15	10.99	57.97	-20.57	-37.15	-25.48	31.35	1.65	0.34	22.62	10.75	4.58
5000	-16.69	155.87	10.99	38.25	-20.74	-55.06	-24.60	11.68	1.67	0.33	22.27	10.03	4.54
5200	-15.83	131.25	10.86	17.74	-20.80	-72.29	-24.57	4.09	1.69	0.33	21.97	9.82	4.74
5400	-15.08	107.47	10.76	-2.08	-20.92	-90.54	-23.44	-13.19	1.72	0.32	21.51	10.25	4.75
5600	-14.10	83.74	10.63	-21.98	-20.98	-108.75	-22.33	-27.99	1.74	0.32	21.18	9.78	4.83
5800	-13.66	62.54	10.60	-42.22	-21.12	-128.16	-21.50	-51.66	1.76	0.32	20.85	9.2	4.84
6000	-12.85	41.92	10.59	-62.34	-21.29	-147.91	-19.94	-77.32	1.78	0.31	20.70	9.07	4.89
6200	-11.82	20.02	10.39	-82.81	-21.46	-164.95	-19.09	-88.37	1.82	0.31	20.34	9.39	5.01
6400	-11.13	-1.82	10.32	-103.27	-21.37	175.39	-17.12	-109.74	1.79	0.32	19.92	8.71	5.2
6600	-10.42	-23.42	10.16	-124.19	-21.64	156.24	-16.35	-126.17	1.84	0.31	19.64	8.1	5.22
6800	-9.83	-45.09	10.03	-145.21	-21.80	136.77	-15.18	-144.18	1.87	0.31	19.52	8.2	5.21
7000	-9.16	-67.74	9.87	-166.62	-21.70	118.53	-14.03	-163.10	1.84	0.33	19.05	8.58	5.31
7200	-8.89	-91.60	9.67	171.63	-21.19	100.13	-12.85	176.09	1.77	0.35	18.51	7.72	5.55
7600	-7.40	-135.52	9.02	129.20	-22.10	63.22	-11.37	145.38	1.94	0.34	18.15	7.03	5.67
8000	-6.74	-179.49	8.27	86.37	-22.39	26.47	-10.41	113.47	2.06	0.34	17.66	6.65	6.09