

HIGH DOSE RADIATION TEST REPORT ADRF5022-CSL

October 2025

Generic

Radiation Test Report	
Product:	ADRF5022-CSL
Gamma:	0,100k
Gamma Source:	Co60/TM1019 Condition A
Dose Rate:	152 Rad/s
Facilities:	VPT RAD
Tested:	July 6th, 2025

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	SN	Idd_HI (uA)		Iss_HI (uA)		CTRL_HI (uA)	
		PRE	100k	PRE	100k	PRE	100k
CTRL	24	145.30	145.32	-499.94	-499.96	9.32E-06	9.72E-06
	1	144.38	156.03	-496.47	-520.26	1.25E-05	3.90E-06
	2	144.86	156.05	-500.09	-527.47	6.66E-06	9.57E-06
	3	143.93	157.81	-494.38	-523.99	1.10E-05	3.04E-06
	4	145.71	160.31	-499.35	-526.78	7.21E-06	5.05E-06
	5	144.79	154.66	-495.96	-517.91	2.39E-06	6.11E-06
	6	144.08	152.86	-496.26	-520.96	1.11E-05	1.04E-06
	7	145.20	150.24	-497.79	-503.95	8.87E-06	7.77E-06
	8	145.95	153.58	-500.67	-506.68	1.48E-05	8.07E-06
	9	146.24	152.62	-504.40	-510.41	7.46E-06	6.51E-06
	10	143.86	152.46	-493.84	-499.95	9.32E-06	1.29E-06
	11	146.84	152.26	-498.48	-504.55	8.47E-06	5.00E-06
	12	143.16	151.81	-494.31	-500.34	1.15E-05	6.36E-06
	13	143.75	149.38	-496.13	-501.59	7.46E-06	3.09E-06
	14	145.71	151.06	-498.83	-505.23	4.85E-06	7.21E-06
	15	147.03	151.61	-498.96	-504.88	1.35E-05	3.09E-06
	16	143.90	153.57	-492.91	-499.98	8.42E-06	6.21E-06
	17	143.28	152.99	-492.98	-499.58	1.06E-05	5.40E-06
	18	145.34	152.90	-499.51	-499.60	3.50E-06	6.26E-06
	19	145.27	151.93	-499.66	-505.17	9.32E-06	7.01E-06
	20	143.78	156.03	-497.54	-507.23	-4.71E-07	8.27E-06
	21	144.70	151.99	-495.30	-504.35	7.71E-06	9.52E-06
	22	143.56	151.95	-492.23	-504.34	6.76E-06	3.95E-06
	Min	143.16	149.38	-504.40	-527.47	-4.71E-07	1.04E-06
	Max	147.03	160.31	-492.23	-499.58	1.48E-05	9.57E-06
	Mean	144.79	153.37	-497.09	-508.87	8.32E-06	5.62E-06
	Std. Dev	1.13	2.55	3.02	9.38	3.63E-06	2.40E-06
	Mean - 3 Sigma	141.41	145.71	-506.17	-537.00	-2.55E-06	-1.58E-06
	Mean + 3 Sigma	148.17	161.03	-488.02	-480.74	1.92E-05	1.28E-05

	SN	EN_HI (uA)		RF1_IL_650MHz (dB)		RF1_ISOL 650MHz (dB)	
		PRE	100k	PRE	100k	PRE	100k
CTRL	24	34.58	34.58	-0.871	-0.781	80.39	86.01
	1	34.48	34.35	-0.832	-0.780	78.62	85.60
	2	33.86	33.78	-0.838	-0.822	78.70	82.82
	3	33.77	33.64	-0.846	-0.782	78.48	82.91
	4	33.87	33.75	-0.845	-0.809	79.89	84.40
	5	34.36	34.22	-0.854	-0.821	80.34	82.11
	6	34.02	33.90	-0.888	-0.813	78.97	81.23
	7	34.20	34.10	-0.880	-0.806	81.22	83.76
	8	34.45	34.32	-0.880	-0.808	80.55	87.09
	9	34.42	34.26	-0.892	-0.835	82.44	80.26
	10	33.82	33.68	-0.874	-0.819	81.55	83.75
	11	33.70	33.53	-0.885	-0.827	82.76	81.98
	12	33.95	33.81	-0.871	-0.815	84.47	84.37
	13	34.19	34.05	-0.872	-0.815	85.66	92.20
	14	34.16	34.01	-0.870	-0.824	84.71	83.31
	15	33.84	33.67	-0.878	-0.828	83.58	81.34
	16	33.84	33.71	-0.865	-0.830	89.96	81.85
	17	33.85	33.73	-0.852	-0.810	85.53	91.12
	18	34.27	33.73	-0.867	-0.823	87.94	84.52
	19	34.18	34.10	-0.870	-0.842	84.72	87.59
	20	33.76	34.06	-0.877	-0.829	89.07	85.78
	21	33.64	33.61	-0.882	-0.832	88.50	80.94
	22	33.71	33.63	-0.885	-0.824	95.39	83.35
	Min	33.64	33.53	-0.892	-0.842	78.48	80.26
	Max	34.48	34.35	-0.832	-0.780	95.39	92.20
	Mean	34.02	33.89	-0.868	-0.818	83.78	84.19
	Std. Dev	0.2665	0.2537	0.0169	0.0151	4.39	3.08
	Mean - 3 Sigma	33.22	33.13	-0.919	-0.863	70.61	74.94
	Mean + 3 Sigma	34.82	34.65	-0.818	-0.773	96.94	93.45

	SN	RF1_IL_16GHz (dB)		RF1_ISOL 16GHz (dB)		RF1_IL_33GHz (dB)	
		PRE	100k	PRE	100k	PRE	100k
CTRL	24	-1.56	-1.55	65.18	65.32	-2.59	-3.15
	1	-1.43	-1.52	64.86	64.12	-2.54	-3.09
	2	-1.46	-1.66	64.92	64.05	-2.70	-3.04
	3	-1.50	-1.72	64.14	64.24	-2.65	-3.14
	4	-1.53	-1.49	65.66	64.05	-2.65	-2.90
	5	-1.45	-1.67	66.16	64.46	-2.49	-2.91
	6	-1.22	-1.63	65.33	64.26	-3.17	-2.88
	7	-1.20	-1.62	65.70	64.08	-3.42	-3.07
	8	-1.20	-1.64	65.87	64.92	-2.75	-3.09
	9	-1.23	-1.57	65.50	64.01	-2.95	-2.85
	10	-1.19	-1.55	65.18	63.54	-2.81	-2.78
	11	-1.20	-1.54	65.30	64.53	-2.87	-2.63
	12	-1.19	-1.53	63.89	63.71	-2.93	-2.71
	13	-1.21	-1.54	64.92	63.80	-3.05	-2.59
	14	-1.27	-1.56	65.46	63.95	-2.92	-2.69
	15	-1.29	-1.64	66.17	64.48	-2.91	-3.11
	16	-1.24	-1.55	64.96	64.01	-2.85	-2.77
	17	-1.19	-1.58	64.08	63.37	-2.76	-2.90
	18	-1.18	-1.61	64.57	63.60	-2.64	-2.80
	19	-1.24	-1.55	64.38	63.86	-2.90	-3.02
	20	-1.38	-1.54	64.69	63.72	-3.05	-2.79
	21	-1.45	-1.49	65.36	63.20	-3.06	-2.72
	22	-1.52	-1.45	66.34	63.42	-2.43	-2.96
	Min	-1.53	-1.72	63.89	63.20	-3.42	-3.14
	Max	-1.18	-1.45	66.34	64.92	-2.43	-2.59
	Mean	-1.31	-1.57	65.16	63.97	-2.84	-2.88
	Std. Dev	0.1272	0.0664	0.6897	0.4172	0.2333	0.1649
	Mean - 3 Sigma	-1.69	-1.77	63.09	62.72	-3.54	-3.38
	Mean + 3 Sigma	-0.93	-1.38	67.23	65.22	-2.14	-2.39

	SN	RF1_ISOL 33GHz (dB)		RF2_IL_650MHz (dB)		RF2_ISOL 650MHz (dB)	
		PRE	100k	PRE	100k	PRE	100k
CTRL	24	57.58	56.89	-1.003	-0.906	64.44	64.89
	1	55.81	56.26	-0.942	-0.899	63.70	64.30
	2	58.88	54.33	-0.956	-0.909	64.10	64.08
	3	57.55	55.78	-0.966	-0.897	63.71	64.25
	4	56.89	56.89	-0.968	-0.921	63.74	64.52
	5	57.81	56.55	-0.984	-0.933	63.87	64.13
	6	56.82	55.56	-1.004	-0.927	64.08	64.49
	7	56.88	55.70	-0.998	-0.920	64.06	63.95
	8	57.04	55.46	-1.000	-0.915	64.23	64.71
	9	58.83	55.10	-1.017	-0.943	64.08	64.22
	10	55.54	58.47	-1.001	-0.932	64.00	64.15
	11	55.19	56.39	-1.018	-0.942	63.95	64.04
	12	57.17	57.71	-0.996	-0.931	63.98	64.44
	13	56.74	56.16	-1.005	-0.928	64.30	64.42
	14	57.06	57.59	-1.003	-0.940	64.35	64.47
	15	58.13	60.56	-1.012	-0.939	64.31	64.49
	16	58.95	55.71	-1.000	-0.943	64.40	64.03
	17	62.20	53.12	-0.984	-0.930	64.37	64.92
	18	57.94	55.43	-0.996	-0.950	64.29	64.29
	19	57.90	57.26	-0.995	-0.962	64.93	64.04
	20	57.79	54.54	-1.003	-0.945	66.19	64.55
	21	62.24	52.94	-1.012	-0.955	64.85	64.42
	22	57.98	53.04	-1.013	-0.952	64.66	64.50
	Min	55.19	52.94	-1.018	-0.962	63.70	63.95
	Max	62.24	60.56	-0.942	-0.897	66.19	64.92
	Mean	57.79	55.93	-0.994	-0.933	64.28	64.34
	Std. Dev	1.75	1.81	0.0201	0.0171	0.5405	0.2446
	Mean - 3 Sigma	52.55	50.52	-1.054	-0.984	62.66	63.60
	Mean + 3 Sigma	63.02	61.35	-0.934	-0.881	65.90	65.07

Wafer	SN	RF2_IL_16GHz (dB)		RF2_ISOL 16GHz (dB)		RF2_IL_33GHz (dB)	
		PRE	100k	PRE	100k	PRE	100k
CTRL	24	-1.65	-1.27	73.93	70.45	-2.68	-3.09
	1	-1.46	-1.29	71.94	68.91	-2.71	-2.99
	2	-1.52	-1.31	72.04	68.80	-2.84	-3.07
	3	-1.56	-1.48	71.60	69.91	-2.69	-3.05
	4	-1.61	-1.20	71.49	69.40	-2.99	-3.07
	5	-1.51	-1.41	70.03	69.85	-2.86	-3.19
	6	-1.32	-1.35	69.90	71.18	-2.63	-2.95
	7	-1.28	-1.33	71.47	70.85	-2.50	-2.85
	8	-1.27	-1.33	67.90	69.64	-2.88	-2.87
	9	-1.32	-1.24	69.05	69.90	-2.81	-2.94
	10	-1.29	-1.31	68.65	69.19	-2.55	-2.97
	11	-1.29	-1.31	70.59	70.67	-2.81	-2.86
	12	-1.27	-1.30	70.90	69.43	-2.95	-2.81
	13	-1.31	-1.29	69.14	70.61	-2.99	-2.61
	14	-1.37	-1.32	69.97	70.67	-2.99	-2.75
	15	-1.37	-1.39	73.44	71.07	-2.89	-3.15
	16	-1.32	-1.30	70.66	70.29	-2.94	-2.80
	17	-1.26	-1.29	70.31	70.70	-2.82	-3.03
	18	-1.26	-1.34	71.08	71.05	-2.74	-2.91
	19	-1.31	-1.32	70.29	70.46	-3.00	-3.17
	20	-1.44	-1.27	70.48	71.77	-2.69	-3.01
	21	-1.55	-1.30	71.90	69.10	-2.71	-3.06
	22	-1.62	-1.21	74.00	69.81	-2.50	-2.81
	Min	-1.62	-1.48	67.90	68.80	-3.00	-3.19
	Max	-1.26	-1.20	74.00	71.77	-2.50	-2.61
	Mean	-1.39	-1.31	70.76	70.15	-2.80	-2.95
	Std. Dev	0.1225	0.0618	1.4561	0.8180	0.1580	0.1470
	Mean - 3 Sigma	-1.75	-1.50	66.40	67.69	-3.27	-3.39
	Mean + 3 Sigma	-1.02	-1.13	75.13	72.60	-2.32	-2.51

Wafer	SN	RF2_ISOL 33GHz (dB)	
		PRE	100k
CTRL	24	57.11	60.26
	1	59.69	62.35
	2	65.07	58.02
	3	62.11	62.45
	4	65.18	62.33
	5	67.96	63.61
	6	62.91	61.36
	7	65.23	62.43
	8	62.17	62.04
	9	62.57	63.42
	10	57.77	56.39
	11	57.87	58.33
	12	62.14	60.21
	13	62.67	58.27
	14	64.10	60.05
	15	60.44	64.95
	16	59.94	57.85
	17	58.26	54.76
	18	59.96	59.10
	19	62.31	59.14
	20	63.91	58.43
	21	60.73	53.15
	22	55.54	54.43
	Min	55.54	53.15
	Max	67.96	64.95
	Mean	61.75	59.68
	Std. Dev	2.95	3.18
	Mean - 3 Sigma	52.91	50.14
	Mean + 3 Sigma	70.59	69.23



