

# HIGH DOSE RADIATION TEST REPORT ADL8120-CSL

January 2025  
Generic

Radiation Test Report	
Product:	ADL8120-CSL
Gamma:	0,100k
Gamma Source:	Co60/TM1019 Condition A
Dose Rate:	162 Rad/s
Facilities:	VPT RAD
Tested:	January 30, 2025

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It is the responsibility of the Procuring Activity to screen products from Analog Devices, Inc. for compliance to Nuclear Hardness Critical Items (HCI) specifications.

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		I Total (A)		4 GHz Small Signal Gain (dB)		9GHz Small Signal Gain (dB)		
		PRE	100k	PRE	100k	PRE	100k	
<b>CTRL</b>	<b>SN</b>	<b>17</b>	<b>5.412E-02</b>	<b>5.398E-02</b>	<b>13.920</b>	<b>13.967</b>	<b>13.332</b>	<b>13.404</b>
	9	5.464E-02	5.462E-02	13.921	13.974	13.317	13.298	
100k	10	5.532E-02	5.516E-02	13.912	13.964	13.318	13.300	
	11	5.474E-02	5.463E-02	13.918	13.967	13.307	13.270	
	12	5.596E-02	5.580E-02	14.055	14.114	13.440	13.416	
	13	5.369E-02	5.364E-02	13.933	13.985	13.385	13.356	
	14	5.459E-02	5.456E-02	14.003	14.031	13.530	13.404	
	15	5.419E-02	5.410E-02	13.957	14.001	13.407	13.358	
	16	5.549E-02	5.537E-02	13.915	13.959	13.329	13.310	
	Min	5.369E-02	5.364E-02	13.912	13.959	13.307	13.270	
	Max	5.596E-02	5.580E-02	14.055	14.114	13.530	13.416	
	Mean	5.483E-02	5.473E-02	13.952	13.999	13.379	13.339	
Std. Dev	7.320E-04	6.933E-04	5.180E-02	5.207E-02	7.785E-02	5.293E-02		
Mean - 3 Sigma	5.263E-02	5.265E-02	13.796	13.843	13.146	13.180		
Mean + 3 Sigma	5.702E-02	5.681E-02	14.107	14.155	13.613	13.498		

		17 GHz Small Signal Gain (dB)		4GHz OP1dB (dBm)		9GHz OP1dB (dBm)		
		PRE	100k	PRE	100k	PRE	100k	
<b>CTRL</b>	<b>SN</b>	<b>17</b>	<b>14.632</b>	<b>14.718</b>	<b>14.126</b>	<b>14.094</b>	<b>14.060</b>	<b>14.103</b>
	9	14.784	14.790	14.214	14.188	14.145	14.145	
100k	10	14.785	14.875	14.287	14.266	14.201	14.226	
	11	14.717	14.762	14.223	14.189	14.112	14.120	
	12	14.924	14.920	14.547	14.528	14.376	14.383	
	13	14.818	14.745	14.099	14.073	14.091	14.077	
	14	14.878	14.858	14.309	14.271	14.244	14.196	
	15	14.918	14.884	14.247	14.216	14.180	14.162	
	16	14.827	14.824	14.313	14.287	14.223	14.230	
	Min	14.717	14.745	14.099	14.073	14.091	14.077	
	Max	14.924	14.920	14.547	14.528	14.376	14.383	
	Mean	14.831	14.832	14.280	14.252	14.196	14.192	
Std. Dev	7.167E-02	6.241E-02	1.281E-01	1.307E-01	8.989E-02	9.288E-02		
Mean - 3 Sigma	14.616	14.645	13.896	13.860	13.927	13.914		
Mean + 3 Sigma	15.046	15.019	14.664	14.645	14.466	14.471		

		17GHz OP1dB (dBm)		
		PRE	100k	
<b>CTRL</b>	<b>SN</b>	<b>17</b>	<b>12.892</b>	<b>12.841</b>
	9	12.960	12.958	
100k	10	12.994	13.015	
	11	12.906	12.901	
	12	13.224	13.224	
	13	12.908	12.914	
	14	13.064	13.060	
	15	13.013	12.995	
	16	13.053	13.042	
	Min	12.906	12.901	
	Max	13.224	13.224	
	Mean	13.015	13.014	
Std. Dev	1.032E-01	1.023E-01		
Mean - 3 Sigma	12.705	12.707		
Mean + 3 Sigma	13.325	13.320		

