

What is the expected RSL of the radios with the new proposed antenna heights?

The receive signal levels for the new antenna heights are as follows:

	Falmouth RX	Falmouth CO
Main Receive Signal Level	-32.43	-36.27
Diversity Receive Signal Level	-34.28	-37.98

The RSL is dynamic and can be impacted by things such as weather, environment, vegetation, and other obstructions. The ideal RSL depends on the path characteristics but generally, an RSL around -35 is optimum. The optimum RSL is not zero. There is a limit to how much power a receiver can handle. If the RSL is too low it can damage or blow out the receiver.

Is there an industry standard for acceptable loss of signal or industry standard for acceptable interference with a signal?

There is no acceptable loss of signal when it comes to public safety traffic. There is no standard for interference. Engineers design paths according to customer requirements. This path was designed with the understanding that it carries 911 traffic and must be designed with an availability of at least 99.9999% (six 9s). Availability is the percentage of time over the course of a year that the path is available. Ideally this number would be 100% but over the course of a year you will lose some bits you can't recover.