

Mobile Station Coupling Loss (MSCL)

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Change History

Version	Date	Status	Handled by	Comments
0.1	05-Sep-19	Draft	Raimo Jacobi	
0.2	06-Sep-19	Draft	Raimo Jacobi	Coupling loss for US frequency bands actualized
1.0	16-Oct-19	Release	Raimo Jacobi	Minimum cable loss actualized

To whom it may concern,

The MSCL calculations were performed for the one cradle (near-field coupling antenna) kit option that can be installed together with the LTE/UMTS/GSM Compensator (LTE-MBC-NAR-JLR):

1. LG Phonebox (WC501M)

Yours sincerely,

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List of operational frequency bands supported by the Laird NAR Compenser:

Operational Frequency Band	Uplink Frequency Range (MHz)
12	698-716
13	777-787
5	824-849
4	1710-1755
2	1850-1910

List of cradle kit options:

1. LG Phonebox (WC501M):

Operational Frequency Band	12	13	5	4	2
Min. Cradle Coupling Loss (dB)	5.6	7.1	7.0	10.4	11.3
Min. Coax. Cable Loss (dB)	1.5	1.5	1.6	2.4	2.4
MSCL (dB)	7.1	8.6	8.6	12.8	13.7

Conclusion: With RF connector losses, the minimum coupling loss (MSCL) is 7 dB.