TAGGED PERFORMANCE SPECIFICATION

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VERSION 1

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Sensitivity at Receiver	-70 dB
Standard test configurations	Single Inlay on Cardstock
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2 READ SENSITIVITY

The inlay should meet the following read sensitivity (dBm) requirements in the following test configurations through the frequency range. All of the inlay samples tested should meet the minimum requirements. It is noted that the sensitivity is calculated at the tag by calibrating the measured power at the transmitter with the loss/gain during transmission.

2.1 Standard Test - Single Inlay on Cardstock

Frequency 865 MHz to 868 MHz in steps of 1 MHz

Position 0 Ant 1	Position 0: Ant 2	Position 0: Ant 3	Position 0: Ant 4
-10	-9.5	-9.5	-10
Position 30: Ant 1	Position 30: Ant 2	Position 30: Ant 3	Position 30: Ant 4
-8	-8	-7.5	-8
Position 60: Ant 1	Position 60: Ant 2	Position 60: Ant 3	Position 60: Ant 4
-5	-5	-3.5	NA
Position 90: Ant 1	Position 90: Ant 2	Position 90: Ant 3	Position 90: Ant 4
-3	-2	NA	NA
Position 120: Ant 1	Position 120: Ant 2	Position 120: Ant 3	Position 120: Ant 4
-5	-5	-3.5	NA
Position 150: Ant 1	Position 150: Ant 2	Position 150: Ant 3	Position 150: Ant 4
-8	-8	-7.5	-8
Position 180: Ant 1	Position 180: Ant 2	Position180: Ant 3	Position 180: Ant 4
-10	-9.5	-9.5	-10
Position 210: Ant 1	Position 210: Ant 2	Position 210: Ant 3	Position 210: Ant 4
-8	-8	-7.5	-8
Position 240: Ant 1	Position 240: Ant 2	Position 240: Ant 3	Position 240: Ant 4
-5	-5	-3.5	NA
Position 270: Ant 1	Position 270: Ant 2	Position 270: Ant 3	Position 270: Ant 4
-3	-2	NA	NA
Position 300: Ant 1	Position 300: Ant 2	Position 300: Ant 3	Position 300: Ant 4
-5	-5	-3.5	NA
Position 330 Ant 1	Position 330: Ant 2	Position 330: Ant 3	Position 330: Ant 4
-8	-8	-7.5	-8

Frequency 902 MHz to 928 MHz in steps of 1 MHz

Position 0 Ant 1	Position 0: Ant 2	Position 0: Ant 3	Position 0: Ant 4
-14	-13	-13	-14
Position 30: Ant 1	Position 30: Ant 2	Position 30: Ant 3	Position 30: Ant 4
-12	-12	-11	-12
Position 60: Ant 1	Position 60: Ant 2	Position 60: Ant 3	Position 60: Ant 4
-9	-9	-8	-7
Position 90: Ant 1	Position 90: Ant 2	Position 90: Ant 3	Position 90: Ant 4
-6	-5	-5	NA
Position 120: Ant 1	Position 120: Ant 2	Position 120: Ant 3	Position 120: Ant 4
-9	-9	-8	-7
Position 150: Ant 1	Position 150: Ant 2	Position 150: Ant 3	Position 150: Ant 4
-12	-12	-11	-12
Position 180: Ant 1	Position 180: Ant 2	Position180: Ant 3	Position 180: Ant 4
-14	-13	-13	-14
Position 210: Ant 1	Position 210: Ant 2	Position 210: Ant 3	Position 210: Ant 4
-12	-12	-11	-12
Position 240: Ant 1	Position 240: Ant 2	Position 240: Ant 3	Position 240: Ant 4
-9	-9	-8	-7
Position 270: Ant 1	Position 270: Ant 2	Position 270: Ant 3	Position 270: Ant 4
-6	-5	-5	NA
Position 300: Ant 1	Position 300: Ant 2	Position 300: Ant 3	Position 300: Ant 4
-9	-9	-8	-7
Position 330 Ant 1	Position 330: Ant 2	Position 330: Ant 3	Position 330: Ant 4
-12	-12	-11	-12

2.2 Custom Test - Single Inlay on Plastic2

Frequency 865 MHz to 868 MHz in steps of 1 MHz

Position 0 Ant 1	Position 0: Ant 2	Position 0: Ant 3	Position 0: Ant 4
-14	-12	-12	-12
Position 180: Ant 1	Position 180: Ant 2	Position180: Ant 3	Position 180: Ant 4
-14	-12	-12	-12

Frequency 902 MHz to 928 MHz in steps of 1 MHz

Position 0 Ant 1	Position 0: Ant 2	Position 0: Ant 3	Position 0: Ant 4
-10	-8.5	-9	-8.5
Position 180: Ant 1	Position 180: Ant 2	Position180: Ant 3	Position 180: Ant 4
-10	-8.5	-9	-8.5

2.3 Custom Test - Single Inlay on Rubber2

Frequency 865 MHz to 868 MHz in steps of 1 MHz

Frequency 902 MHz to 928 MHz in steps of 1 MHz

Position 0 Ant 1	Position 0: Ant 2	Position 0: Ant 3	Position 0: Ant 4
-5	-4	-3	-3
Position 180: Ant 1	Position 180: Ant 2	Position180: Ant 3	Position 180: Ant 4
-5	-4	-3	-3

3. Read Backscatter

The inlay should meet the following read backscatter (dBm) requirements in the following test configurations through the entire frequency range. The backscatter value in the table below is the minimum backscatter that should be observed at the corresponding minimum read sensivity value in section 3. All of the tagged item samples tested should meet the minimum requirements. It is noted that the backscatter is calculated at the tag by calibrating the measured power at the receiver with the loss/gain during transmission

4.1 Standard Test - Single Inlay on Cardstock

Frequency 865 MHz to 868 MHz in steps of 1 MHz

Frequency 902 MHz to 928 MHz in steps of 1 MHz

Position 0 Ant 1	Position 0: Ant 2	Position 0: Ant 3	Position 0: Ant 4
-23	-24	-24	-23
Position 180: Ant 1	Position 180: Ant 2	Position180: Ant 3	Position 180: Ant 4
-23	-24	-24	-23

4.2 Custom Test - Single Inlay on Plastic2

Frequency 865 MHz to 868 MHz in steps of 1 MHz

Frequency 902 MHz to 928 MHz in steps of 1 MHz

Position 0 Ant 1	Position 0: Ant 2	Position 0: Ant 3	Position 0: Ant 4
-17	-22	-22	-19
Position 180: Ant 1	Position 180: Ant 2	Position180: Ant 3	Position 180: Ant 4
-17	-22	-22	-19

4.3 Custom Test - Single Inlay on Rubber2

Frequency 865 MHz to 868 MHz in steps of 1 MHz

Frequency 902 MHz to 928 MHz in steps of 1 MHz

Position 0 Ant 1	Position 0: Ant 2	Position 0: Ant 3	Position 0: Ant 4
-15	-20	-20	-17
Position 180: Ant 1	Position 180: Ant 2	Position180: Ant 3	Position 180: Ant 4
-15	-20	-20	-17

4. Write Sensitivity

The inlay should meet the following write sensitivity (dBm) requirements in the following test configurations through the frequency range. All of the inlay samples tested should meet the minimum requirements. It is noted that the sensitivity is calculated at the tag by calibrating the measured power at the transmitter with the loss/gain during transmission.

4.1 Standard Test - Single Inlay on Cardstock

Frequency 865 MHz to 868 MHz in steps of 1 MHz

Frequency 902 MHz to 928 MHz in steps of 1 MHz

Position 0 Ant 1	Position 0: Ant 2	Position 0: Ant 3	Position 0: Ant 4
-7	NA	NA	NA
Position 180: Ant 1	Position 180: Ant 2	Position180: Ant 3	Position 180: Ant 4
-7	NA	NA	NA