

## SAR exemption letter according 447498 D01 General RF Exposure Guidance v06

| Customer                                                                                    | Product                             | Model      | HW Status | SW status | FCC-ID         |
|---------------------------------------------------------------------------------------------|-------------------------------------|------------|-----------|-----------|----------------|
| Witte-Velbert GmbH & Co. KG<br>Höferstr. 3-15, 42551 Velbert<br>Germany<br>Mr. Kay Lackmann | Automotive NFC Outer<br>Door Handle | INTTAGEBTP | 03.10     | 06.10     | V2T-INTTAGEBTP |

Declared minimum distance to human body according to customer 50 mm according customer's information in "BMW\_INTTAGEPTP\_Operational\_Description\_20230202\_draft". The customer thus declares that the device is not body-worn.

According 447498 D01 General RF Exposure Guidance v06 – 4.3. General SAR test exclusion guidance 4.3.1 c) can be exempted as follows using a test separation distances of < 200 mm:

### Appendix C

#### SAR Test Exclusion Thresholds for < 100 MHz and < 200 mm

Approximate SAR test exclusion power thresholds at selected frequencies and test separation distances are illustrated in the following table. The equation and threshold in 4.3.1 must be applied to determine SAR test exclusion.

| MHz  | < 50 | 50   | 60   | 70   | 80   | 90   | 100  | 110  | 120  | 130  | 140  | 150  | 160  | 170  | 180  | 190  | mm |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----|
| 100  | 237  | 474  | 481  | 487  | 494  | 501  | 507  | 514  | 521  | 527  | 534  | 541  | 547  | 554  | 561  | 567  | mW |
| 50   | 308  | 617  | 625  | 634  | 643  | 651  | 660  | 669  | 677  | 686  | 695  | 703  | 712  | 721  | 729  | 738  |    |
| 10   | 474  | 948  | 961  | 975  | 988  | 1001 | 1015 | 1028 | 1041 | 1055 | 1068 | 1081 | 1095 | 1108 | 1121 | 1135 |    |
| 1    | 711  | 1422 | 1442 | 1462 | 1482 | 1502 | 1522 | 1542 | 1562 | 1582 | 1602 | 1622 | 1642 | 1662 | 1682 | 1702 |    |
| 0.1  | 948  | 1896 | 1923 | 1949 | 1976 | 2003 | 2029 | 2056 | 2083 | 2109 | 2136 | 2163 | 2189 | 2216 | 2243 | 2269 |    |
| 0.05 | 1019 | 2039 | 2067 | 2096 | 2125 | 2153 | 2182 | 2211 | 2239 | 2268 | 2297 | 2325 | 2354 | 2383 | 2411 | 2440 |    |
| 0.01 | 1185 | 2370 | 2403 | 2437 | 2470 | 2503 | 2537 | 2570 | 2603 | 2637 | 2670 | 2703 | 2737 | 2770 | 2803 | 2837 |    |

Calculation based on information provided by customer:

| Frequency | test separation distance | Exclusion Threshold | Cond. PWR incl. Tolerance | SAR Exemption fulfilled |
|-----------|--------------------------|---------------------|---------------------------|-------------------------|
| MHz       | mm                       | mW                  | mW                        |                         |
| 13.56     | 50                       | 886                 | 550                       | yes                     |

**Conclusion: SAR-Based Exemption fulfilled**




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| Version | Applied changes | Date of release |
|---------|-----------------|-----------------|
| --      | Initial release | 2023-Feb-06     |
|         |                 |                 |