

RF Exposure Evaluation

1 Requirements

KDB 680106 D01 RF Exposure Wireless Charging Apps v03

| | |
|------------|--|
| YES | Power transfer frequency is less than 1 MHz. |
| YES | Output power from each primary coil is less than or equal to 15 watts. |
| YES | The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils. |
| YES | Client device is placed directly in contact with the transmitter. |
| YES | Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion). |
| YES | The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit. |

2 Test Instruments list

| Test Equipment | Manufacturer | Model No. | SN. | Cal.Date (mm-dd-yy) | Cal.Due date (mm-dd-yy) |
|--|--------------|------------------------------|--------|---------------------|-------------------------|
| Exposure Level Tester | Narda | ELT-400 | N-0231 | June. 26 2019 | June. 25 2020 |
| Magnetic field probe 100cm ² | Narda | ELT probe 100cm ² | M0675 | June. 26 2019 | June. 25 2020 |

3 Test Result

Full load:

| E-Filed Strength Frequency Range (MHz) | 15cm | | | | 20cm | Limits (V/m) |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|--------------|
| | Test Position A | Test Position B | Test Position C | Test Position D | Test Position E | |
| 0.111-0.20654 | 0.29 | 0.24 | 0.38 | 0.15 | 0.34 | 614 |

| H-Filed Strength Frequency Range (MHz) | 15cm | | | | 20cm | Limits (A/m) |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|--------------|
| | Test Position A | Test Position B | Test Position C | Test Position D | Test Position E | |
| 0.111-0.20654 | 0.11 | 0.34 | 0.18 | 0.23 | 0.17 | 1.63 |

Half load:

| E-Filed Strength Frequency Range (MHz) | 15cm | | | | 20cm | Limits (V/m) |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|--------------|
| | Test Position A | Test Position B | Test Position C | Test Position D | Test Position E | |
| 0.111-0.20654 | 0.13 | 0.21 | 0.33 | 0.08 | 0.26 | 614 |

| H-Filed Strength Frequency Range (MHz) | 15cm | | | | 20cm | Limits (A/m) |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|--------------|
| | Test Position A | Test Position B | Test Position C | Test Position D | Test Position E | |
| 0.111-0.20654 | 0.12 | 0.23 | 0.11 | 0.12 | 0.09 | 1.63 |

Empty load:

| E-Filed Strength | 15cm | | | | 20cm | Limits (V/m) |
|-------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------------|
| Frequency Range (MHz) | Test Position A | Test Position B | Test Position C | Test Position D | Test Position E | |
| 0.111-0.20654 | 0.11 | 0.08 | 0.13 | 0.07 | 0.16 | 614 |

| H-Filed Strength | 15cm | | | | 20cm | Limits (A/m) |
|-------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------------|
| Frequency Range (MHz) | Test Position A | Test Position B | Test Position C | Test Position D | Test Position E | |
| 0.111-0.20654 | 0.09 | 0.16 | 0.09 | 0.14 | 0.14 | 1.63 |

4 Test Set-up Photo

