

RF Exposure Report

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Test Model: AF61

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Release Control Record

| Issue No. | Description | Date Issued |
|-------------|-------------------|---------------|
| SA160222E03 | Original release. | Mar. 31, 2016 |

2 Evaluation Result

Following FCC KDB 447498 D01 “General SAR test exclusion guidance”

The corresponding SAR Exclusion Threshold condition, listed below:

- 1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$$
 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where
 - $f(\text{GHz})$ is the RF channel transmit frequency in GHz.
 - Power and distance are rounded to the nearest mW and mm before calculation.
 - The result is rounded to one decimal place for comparison. The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

- 2) At 100 MHz to 6 GHz and for test separation distances > 50 mm, the SAR test exclusion threshold is determined according to the following:
 - a) [Threshold at 50 mm in step 1) + (test separation distance - 50mm) · (f(MHz)/150)] mW, at 100MHz to 1500 MHz
 - b) [Threshold at 50 mm in step 1) + (test separation distance - 50 mm) · 10] mW at > 1500 MHz and ≤ 6 GHz

- 3) At frequencies below 100 MHz, the following may be considered for SAR test exclusion.
 - a) The threshold at the corresponding test separation distance at 100 MHz in step 2) is multiplied by $[1 + \log(100/f(\text{MHz}))]$ for test separation distances > 50 mm and < 200 mm.
 - b) The threshold determined by the equation in a) for 50 mm and 100 MHz is multiplied by $\frac{1}{2}$ for test separation distances ≤ 50 mm.
 - c) SAR measurement procedures are not established below 100 MHz. When SAR test exclusion cannot be applied, a KDB inquiry is required to determine SAR evaluation requirements for any test results to be acceptable.

3 Antenna Gain

1. The antenna provided to the EUT, please refer to the following table:

| Brand | Model | Antenna Gain(dBi) | Frequency range (GHz to GHz) | Antenna Type | Connector Type |
|----------|----------------|-------------------|------------------------------|--------------|--------------------|
| Unictron | H2U34WGTQW0100 | 2.5 | 2.4~2.4835 | Chip | none (like solder) |

4 SAR Test Exclusion Thresholds

| Frequency (GHz) | Max. Power (mW) | Min. test separation distance (mm) | SAR test exclusion calculation value ^(NOTE 2) | 10-g extremity SAR test exclusion thresholds | Result |
|-----------------|-----------------|------------------------------------|--|--|--------|
| 2.402 ~ 2.480 | 3.162 | 5 | 0.98784038 | 7.5 | Pass |

NOTE: 1. The antenna type is Chip antenna with 2.5dBi gain.
2. Calculate SAR test exclusion thresholds from condition "1" formulas.
3. This power include tune-up tolerance range that specified in AF61 Tune Up power table

5 Conclusion

Since Source-base time average power is below SAR test exclusion power thresholds, the SAR evaluation is not required.

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