

RF Exposure evaluation

Model: INFO3 CSM HIGH and INFO3 CSM MID

FCC ID: 2AHPN-BE2817

RF Exposure Evaluation

| Standards |
|---|
| OET Bulletin 65 Edition 97-01 August 1997 |
| FCC 47 CFR §1.1307 |
| FCC 47 CFR §1.1310 |

Test limits

As specified in Table 1B of 47 CFR 1.1310 – Limits for Maximum Permissible Exposure (MPE), Limits for General Population/Uncontrolled Exposure.

| Frequency range (MHz) | Power density (mW/cm²) | | | |
|-----------------------|------------------------|--|--|--|
| 300 – 1,500 | f/1500 | | | |
| 1,500 – 100,000 | 1.0 | | | |

Equation OET bulletin 65, page 18, edition 97-01: $S = \frac{PG}{4\pi R^2} = \frac{EIRP}{4\pi R^2}$

Where:

S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

Following antenna gain values were considered as far as they apply:



| Frequency (MHz) | Efficiency (%) | Average Gain (dB) | Max Gain (dBi) |
|--------------------|----------------|-------------------|----------------|
| 5160 | 55,73 | -2,5391 | 5 |
| 5240 | 57,12 | -2,4321 | 4,36 |
| 5320 | 62,09 | -2,0698 | 4,47 |
| 5400 | 62,57 | -2,0363 | 4,2 |
| 5480 | 60,01 | -2,2178 | 3,96 |
| 5560 | 62,66 | -2,0301 | 4,36 |
| 5640 | 57,28 | -2,4200 | 3,8 |
| 5720 | 61,75 | -2,0936 | 4,58 |
| 5840 | 59,52 | -2,2534 | 4,2 |

2,4 GHz band

| Frequency | Efficiency (%) | Average Gain (dB) | Max Gain (dBi) |
|-----------|----------------|-------------------|----------------|
| (MHz) | | | |
| 2402 | 77,68 | -1,0969 | 4,5 |
| 2441 | 78,18 | -1,0690 | 4,89 |
| 2480 | 82,09 | -0,8571 | 5,78 |

| Band | Mode | Duty Cycle | Frequency (MHZ) | Maximum Conducted output power (dBm) | Equivalent conducted output power (mW) | FCC MPE Limit (mW/cm²) | MPE Value using Max gain | Separation distance (cm) | Verdict |
|-----------------|----------------|---------------|--------------------|--|---|------------------------------|-----------------------------------|-----------------------------|---------|
| Bluetooth | GFSK 1- DH1 | 100.0% | 2441.0 | 1.3 | 1.35 | 1000 | 0.0010 | 20 | PASS |
| WLAN 2.4 | DIT | 100.070 | 2441.0 | 1.5 | 1.33 | 1000 | 0.0010 | 20 | 1 A33 |
| GHz, n- | | | | | | | | | |
| Mode; 20 MHz | 72.2 Mbit/s | 100.0% | 2412 | 19.9 | 97.72 | 1000 | 0.074 | 20 | PASS |
| WLAN a- | 72.2 141010/3 | 100.070 | 2712 | 15.5 | 31.12 | 1000 | 0.074 | 20 | 1 733 |
| Mode; 20 | 6 Mbit/s | | | | | | | | |
| MHz | MCS0 | 100.0% | 5755 | 13.3 | 21.38 | 1000 | 0.0123 | 20 | PASS |

Yours sincerely,

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