

§ 24.235

47 CFR Ch. I (10–1–16 Edition)

transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

(e) Peak transmit power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage. The measurement results shall be properly adjusted for any instrument limitations, such as detector response times, limited resolution bandwidth capability when compared to the emission bandwidth, sensitivity, *etc.*, so as to obtain a true peak measurement for the emission in question over the full bandwidth of the channel.

NOTE TO §24.232: Height above average terrain (HAAT) is to be calculated using the method set forth in §24.53 of this part.

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§ 24.235 Frequency stability.

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

§ 24.236 Field strength limits.

The predicted or measured median field strength at any location on the border of the PCS service area shall not exceed 47 dBuV/m unless the parties agree to a higher field strength.

§ 24.237 Interference protection.

(a) All licensees are required to coordinate their frequency usage with the co-channel or adjacent channel incumbent fixed microwave licensees in the 1850–1990 MHz band. Coordination must occur before initiating operations from any base station. Problems that

arise during the coordination process are to be resolved by the parties to the coordination. Licensees are required to coordinate with all users possibly affected, as determined by appendix I to this subpart E (Appendix E of the Memorandum Opinion and Order, GEN Docket No. 90–314, FCC 94–144; TIA Telecommunications Systems Bulletin 10–F, “Interference Criteria for Microwave Systems,” May 1994, (TSB10–F)); or an alternative method agreed to by the parties.

(b) The results of the coordination process need to be reported to the Commission only if the parties fail to agree. Because broadband PCS licensees are required to protect fixed microwave licensees in the 1850–1990 MHz band, the Commission will be involved in the coordination process only upon complaint of interference from a fixed microwave licensee. In such a case, the Commission will resolve the issues.

(c) In all other respects, coordination procedures are to follow the requirements of §101.103(d) of this chapter to the extent that these requirements are not inconsistent with those specified in this part.

(d) The licensee must perform an engineering analysis to assure that the proposed facilities will not cause interference to existing OFS stations within the coordination distance specified in Table 3 of a magnitude greater than that specified in the criteria set forth in paragraphs (e) and (f) of this section, unless there is prior agreement with the affected OFS licensee. Interference calculations shall be based on the sum of the power received at the terminals of each microwave receiver from all of the applicant’s current and proposed PCS operations.

TABLE 3—COORDINATION DISTANCES IN KILOMETERS

| PCS Base Station Antenna HAAT in Meters | | | | | | | | | | | | | |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| EIRP(W) | 5 | 10 | 20 | 50 | 100 | 150 | 200 | 250 | 300 | 500 | 1000 | 1500 | 2000 |
| 0.1 | 90 | 93 | 99 | 110 | 122 | 131 | 139 | 146 | 152 | 173 | 210 | 239 | 263 |
| 0.5 | 96 | 100 | 105 | 116 | 128 | 137 | 145 | 152 | 158 | 179 | 216 | 245 | 269 |
| 1 | 99 | 103 | 108 | 119 | 131 | 140 | 148 | 155 | 161 | 182 | 219 | 248 | 272 |
| 2 | 120 | 122 | 126 | 133 | 142 | 148 | 154 | 159 | 164 | 184 | 222 | 250 | 274 |
| 5 | 154 | 157 | 161 | 168 | 177 | 183 | 189 | 194 | 198 | 213 | 241 | 263 | 282 |
| 10 | 180 | 183 | 187 | 194 | 203 | 210 | 215 | 220 | 225 | 240 | 268 | 291 | 310 |
| 20 | 206 | 209 | 213 | 221 | 229 | 236 | 242 | 247 | 251 | 267 | 296 | 318 | 337 |
| 50 | 241 | 244 | 248 | 255 | 264 | 271 | 277 | 282 | 287 | 302 | 331 | 354 | 374 |
| 100 | 267 | 270 | 274 | 282 | 291 | 297 | 303 | 308 | 313 | 329 | 358 | 382 | 401 |
| 200 | 293 | 296 | 300 | 308 | 317 | 324 | 330 | 335 | 340 | 356 | 386 | 409 | 436 |
| 500 | 328 | 331 | 335 | 343 | 352 | 359 | 365 | 370 | 375 | 391 | 421 | 440 | |