IEEE P802.11
Wireless LANs

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| Resolution for CID 7157 |
| Date: 2024-04-26 |
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This submission includes the proposed resolution for CID 7157 on P802.11-REVme D5.0.

##### Revision history:

##### R0 – initial version

**CID: 7157**

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| CID | Clause | Page | Line | Comment | Proposed Change | Proposed resolution |
| 7157 | 25.6.9.2.1 | 4022 | 7 | "When using the OFDM mode and only while transmitting OFDM symbols, Ei with i equal to –70 to –2 and +2 to +70 shall not deviate by more than ± 2 dB from Eavg. And Ei with i equal to –71 to –89 and +70 to +89 shall not deviate by more than +2/–4 dB from Eavg." -- it is not clear why +70 is counted twice. This needs to be checked with an SME because the next subclause follows a different pattern | Change to "When using the OFDM mode and only while transmitting OFDM symbols, Ei with i equal to –70 to –2 and +2 to +70 shall not deviate by more than ± 2 dB from Eavg. And Ei with i equal to –71 to –89 and +71 to +89 shall not deviate by more than +2/–4 dB from Eavg.". In the next subclause change "+145" to "+146" | REVISEDAgree with the commentor on the proposed changes of the incorrect subcarrier indices.In addition, this resolution further suggests to correct the range of averging subcarrier indices for calculation of E\_avg for 1080 MHz channel.TGm editor: Please revise the text in *25.6.9.2.1 TX flatness for 540 MHz channel and 25.6.9.2.2 TX flatness for 1080 MHz channel in P802.11-REVme D5.0* as suggested in 11-24/0746r0.  |

*TGm Editor: please revise the text in 25.6.9.2.1 TX flatness for 540 MHz channel and 25.6.9.2.2 TX flatness for 1080 MHz channel in P802.11-REVme D5.0 as following.*

**25.6.9.2.1 TX flatness for 540 MHz channel**

(#6209)Let *Ei* denote the constellation energy averaged over OFDM symbols for the subcarrier with index *i*,

*Eavg* denote *Ei* averaged over *i* equal to –70 to –2 and +2 to +70. When using the OFDM mode and only

while transmitting OFDM symbols, *Ei* with *i* equal to –70 to –2 and +2 to +70 shall not deviate by more than

± 2 dB from *Eavg*. And *Ei* with *i* equal to –71 to –89 and +71 to +89 shall not deviate by more than +2/–4 dB

from *Eavg*.

**25.6.9.2.2 TX flatness for 1080 MHz channel**

(#6209)Let *Ei* denote the constellation energy averaged over OFDM symbols for the subcarrier with index *i*,

*Eavg* denote *Ei* averaged over *i* equal to –146 to –2 and +2 to +146. When using the OFDM mode and only

while transmitting OFDM symbols, *Ei* with *i* equal to –146 to –2 and +2 to +146 shall not deviate by more

than ± 2 dB from *Eavg*. And *Ei* with *i* equal to –147 to –177 and +147 to +177 shall not deviate by more than

+2/–4 dB from *Eavg*.

***Discussion:***

As specified in 25.6.9.2.1, the indices of subcarriers considered for calculation of E\_avg for 540 MHz channel are within [-70:-2, +2:+70], which are a subset of total subcarriers located in [-89, +89] while the indices of subcarriers considered for calculation of E\_avg for 1080 MHz channel are over the full number of subcarriers in [-177:-2, +2:+177] as shown in 25.6.9.2.2.

Table 28-46 specifies the maximum transmit spectral flatness deviations in EDMG, in which the averaging subcarrier indices for calculation are a subset of the total subcarrier indices, e.g., for the case that in **TXVECTOR parameter CH\_BANDWIDTH (CHANNEL\_AGGREGATION =(#4167)NOT\_AGGREGATED)** One bit set to 1 (which is the case of the bandwidth of 2160 MHz) (the second row in Table 28-46), the range of averaging subcarrier incices are in [-146:-2, 2:146] while the tested subcarrier indices are over the full number of subcarriers which are in [-146:-2, 2:146] and [-177:-147, 147:177].

To be consistent for the standard, the range of averaging subcarrier indices in 25.6.9.2.2 is modified as: “Let *Ei* denote the constellation energy averaged over OFDM symbols for the subcarrier with index *i*,

*Eavg* denote *Ei* averaged over *i* equal to –146 to –2 and +2 to +146.”

