IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Text Changes on Transmitter modulation accuracy (EVM) test | | | | |
| Date: 2017-09-03 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Jianhan Liu | Mediatek |  |  | jianhan.liu@mediatek.com |
| Hongyuan Zhang | Marvell |  |  | hongyuan@marvell.com |
| Bin Tian | Qualcomm |  |  | btian@qti.qualcomm.com |
| Ron Porat | Broadcom |  |  | ron.porat@broadcom.com |
| Xiaogang Chen | Intel |  |  | xiaogang.c.chen@intel.com |
| Ross Yu  David Yang | Huawei |  |  | [ross.yujian@huawei.com](mailto:ross.yujian@huawei.com)  [david.yangxun@huawei.com](mailto:david.yangxun@huawei.com) |
| Jinsoo Choi | LGE |  |  | js.choi@lge.com |
| Yujin Noh  Minho Cheong | Newracom |  |  | [yujin.noh@newracom.com](mailto:yujin.noh@newracom.com)  minho.cheong@newracom.com |
| Bo Sun | ZTE |  |  | sun.bo1@zte.com.cn |
| Tianyu Wu | Samsung |  |  |  |

This document provides text for chnangs to “28.3.18.4.4 Transmitter modulation accuracy (EVM) test” for 11ax draft 1.4.

***To TGax editor: In D1.4, Please make the following changes to Table 28-44 in 28.3.18.4.4***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| * Allowed relative constellation error versus constellation size and coding rate | | | | | |
| Modulation | | Coding rate | Relative constellation error in an HE SU PPDU, HE extended rate SU PPDU and HE MU PPDU (dB) | Relative constellation error in an HE TB PPDU when transmit power is larger than the maximum power of MCS7 (dB)(#4877) | Relative constellation error in an HE TB PPDU when transmit power is less than or equal to the maximum power of MCS7 (dB) |
| Without DCM | With DCM |
| N/A | BPSK | 1/2 | –5 | –13 | –27 |
| BPSK | QPSK | 1/2 | –5 | –13 | –27 |
| QPSK | 16-QAM | 1/2 | –10 | –13 | –27 |
| QPSK | 16-QAM | 3/4 | –13 | –13 | –27 |
| 16-QAM | N/A | 1/2 | –16 | –16 | –27 |
| 16-QAM | N/A | 3/4 | –19 | –19 | –27 |
| 64-QAM | N/A | 2/3 | –22 | –22 | –27 |
| 64-QAM | N/A | 3/4 | –25 | –25 | –27 |
| 64-QAM | N/A | 5/6 | –27 | –27 | –27 |
| 256-QAM | N/A | 3/4 | –30 | –30 | –30 |
| 256-QAM | N/A | 5/6 | –32 | –32 | –32 |
| 1024-QAM | N/A | 3/4 | –35/-32\* | –35/-32\* | –35/-32\* |
| 1024-QAM | N/A | 5/6 | –35/-32\* | –35/-32\* | –35/-32\* |
| NOTE—The maximum power of MCS7 can be measured by setting the Target RSSI subfield as defined in Table 9-25g (Target RSSI subfield encoding) in the Trigger frame to 127 for the same data-carrying subcarriers which EVM test is conducted.  \*NOTE-For 1024-QAM, relative constellation error shall be equal to or less than -35 (dB) when amplitude drift compensation is on AND shall be equal to or less than -32 (dB) when amplitude drift compensation is off. For BPSK~256-QAM the EVM shall be equal to or less than the values in the table, no matter whether amplitude drift compensation in the test equipment is on or off. | | | | | |

***To TGax editor: In D1.4, please make the following changes to line 9-11, page 451 in 28.3.18.4.4:***

* Symbols in a PPDU shall be derotated according to estimated frequency offset. Sampling offset drift shall be also compensated.

***To TGax editor: In D1.4, please make the following changes to line 23-25, page 452 in 28.3.18.4.4:***

* Symbols in a PPDU shall be derotated according to estimated frequency offset. Sampling offset drift shall be also compensated.