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 in the test equipment is on and shall be equal to or less than -32 (dB) when amplitude drift compensation is off in the test equipment. For all other constellations 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.