**IEEE P802.15**

**Wireless Personal Area Networks**

|  |  |  |
| --- | --- | --- |
| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) | |
| Title | **15.7a Coexistence Assurance Document (CAD)** | |
| Date Submitted | May 2022 | |
| Source | Huy Nguyen (Kookmin University), Yeong Min Jang (Kookmin University) | Voice: [ ] Fax: [ ] E-mail: [yjang@kookmin.ac.kr] |
| Re: | Task Group 15.7a OCC Coexistence Assurance Document (CAD) to satisfy PAR and CSD | |
| Abstract | To evaluate coexistence issues related to other existing 802 systems | |
| Purpose | Work Group Motion Preparation for Letter Ballot | |
| Notice | This document has been prepared to assist the IEEE P802.15. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein. | |
| Release | The contributor acknowledges and accepts that this contribution becomes the property of IEEE and may be made publicly available by P802.15. | |

# 15.7a Coexistence Assurance Document (CAD)

This document investigates the coexistence impacts of the proposed 802.15.7a operation with respect to other 802 devices by evaluating two types of performance analyses – one is the impact to 802.15.7a by other 802 systems and the other is the impact to other 802 systems by 802.15.7a.

At this time, there is no approved standards for operation in the optical light wavelength band from 10,000nm to 190 nm.

Therefore, other 802 systems can be operated without performance degradation in the presence of interference from an 802.15.7a system. The 802.15.7a can achieve the same performance when other 802 systems are operated in any radio frequency bands, due to use of different communication media for these two categories of systems and no interference with each other.