**IEEE P802.15**

**Wireless Personal Area Networks**

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| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) |
| Title | **15.7a Coexistence Assurance Document (CAD)** |
| Date Submitted | Decmber 2022 |
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| 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  |
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# 15.7a Coexistence Assurance Document (CAD)

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

At this time, there are two approved draft standards (IEEE P802.15.13 and IEEE P802.11bb) for operation in the optical light wavelength band (from 10,000 nm to 190 nm in IEEE P802.15.13 and from 1,000 nm to 800 nm in IEEE P802.11bb)

Therefore, other IEEE 802 systems can be operated without performance degradation in the presence of interference from an IEEE 802.15.7a system. The IEEE 802.15.7a can achieve the same performance when other IEEE 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.