**IEEE P802.15**

**Wireless Personal Area Networks**

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| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) |
| Title | **SNUST - VTASC Super Frame Structure and PHY Dimming Specification Revision**  |
| Date Submitted | January, 2017 |
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| Re: | Draft D1 Comment Resolution based VTASC Super Frame Structure and PHY Dimming Specification Revision |
| Abstract | Details of Resolutions regarding to the submitted Comments on D1 are suggested for VTASC Super Frame Structure and PHY Dimming Specification Revision. The VTASC method is designed to operate on the application services like LED ID, Digital Signage with Advertisement Information etc. |
| Purpose | Draft D1 Comments Resolutions and Editorial Revision. |
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# **1. PHY DIMMING FORMART FOR VTASC**

# **VTASC Dimming**

The VTASC based Display Light Pattern based Transmitter for OCC uses the visibly embedding the data on Video display frame by overlaying patterns on displays visual area.

# **2. SUPERFRAME STRUCTURE FOR VTASC**

# **VTASC Superframe Structure**

The Display Light Pattern Based Transmitter with VTASC uses the unslotted ALOHA; that is, when the Display Light Pattern Based Transmitter with VTASC uses has a packet to send, it just sends it. This support with beacon and without beacon support and the transmitter does not do a listen before talk channel activity check.

The super frame structure for VTASC PHY without beacon is shown in Figure 5-1.



**Figure 5-1 – VTASC PHY Superframe Structure without Beacon**

The super frame structure for VTASC PHY with beacon is shown in Figure 5-2.

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**Figure 5-2 – VTASC PHY Superframe Structure with Beacon**