**IEEE P802.15**

**Wireless Personal Area Networks**

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| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) |
| Title | **Kookmin Classification of ISC modes** |
| Date Submitted | [March, 2016] |
| Source | Yeong Min Jang, Trang Nguyen, Nam Tuan Le (Kookmin University) |
| Re: |  |
| Abstract | This document gives a suggestion in classifying ISC modes. |
| Purpose | D0 structure |
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**Proposed Draft v0 Structure**

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| **Pending draft v0** **(Intel contribution)** | **Kookmin suggestion** |
| **13. PHY IV**13.1 UFSOOK13.2 Twinkle VPPM Intel twinkle  Kookmin twinkle | **13. PHY IV ISC modes - hybrid modulation schemes and cameras** 13.1 Undersampled technique for both Global/Rolling Shutter Cameras Intel UFSOOK Kookmin S2-PSK13.2 Twinkle VPPM Intel twinkle (UFSOOK + VPPM) Kookmin (S2-PSK + DSM-PSK) |
| **14. PHY V**14.1 NTU RS-FSK14.2 Panasonic PPM114.3 Panasonic PPM214.4 Panasonic PPM314.5 Kookmin CM-FSK14.6 Kookmin C-OOK | **14. PHY V – Rolling shutter ISC modes**14.1 RS-FSK Kookmin CM-FSK (low symbol rate mode) NTU RS-FSK (high symbol rate mode)14.2 PPM Panasonic PPM mode 1 Panasonic PPM mode 2 Panasonic PPM mode 3 SNUST Offset-PPM14.3 OOK Kookmin C-OOK mode 1 (low symbol rate mode) Kookmin C-OOK mode 2 (frame rate drop error detection mode) |
| **15. PHY VI**15.1 UCT-ISC 15.2 Invisible 15.3 CSM | **15. PHY VI – MIMO screen based ISC modes**15.1 Visible 2D-sequential code Kookmin color code Intel 2D-sequential code15.2 Invisible code SNUST invisible code  Kookmin Invisible code 15.3 Color Space Modulation  |

**Proposed Draft v0 Structure**

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| **Panasonic contribution** | **Kookmin suggestion** |
| **13. PHY IV: Discrete Point source(s) transmitter** | **13. PHY IV: Discrete Point source(s) transmitter**13.1 Under-sampled modulation (flicker-free mode) Intel UFSOOK Kookmin S2-PSK13.2 (flicker mode) modulation SNUST Offset-PPM13.3 Twinkle VPPM Intel twinkle (UFSOOK + VPPM) Kookmin (S2-PSK + DSM-PSK)13.4 Multiple point sources ??? Color Space Modulation PAPM China Telecom  |
| **14. PHY V: LED panel transmitter** | **14. PHY V: LED panel transmitter**14.1 RS-FSK Kookmin CM-FSK (low symbol rate mode) NTU RS-FSK (high symbol rate mode)14.2 PPM Panasonic PPM mode 1 Panasonic PPM mode 2 Panasonic PPM mode 3 14.3 OOK Kookmin C-OOK mode 1 (low symbol rate mode) Kookmin C-OOK mode 2 (frame rate drop error detection mode) |
| **15. PHY VI: Screen** | **15. PHY VI – Low symbol rate 2D-sequential code**15.1 Visible 2D-sequential code SNUST SCAM code Kookmin color code Intel 2D-sequential code15.2 Invisible 2S-scode SNUST invisible code  Kookmin Invisible code |