**IEEE P802.15**

**Wireless Personal Area Networks**

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| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) | |
| Title | TG3d Channel Modelling Document (CMD) | |
| Date Submitted | July 2014 | |
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| Re: |  | |
| Abstract | The CMD contains descriptions of the propagation characteristics and channel models of the operational environments relevant for the considered applications (e. g. data required to calculate link budgets) | |
| Purpose | Supporting document for the development of the amendment 3d of IEEE 802.15.3 | |
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Document Overview

The CMD contains descriptions of the propagation characteristics and channel models of the operational environments relevant for the considered applications (e. g. data required to calculate link budgets)

The CMD will support the evaluation of the proposals submitted to P802.15.3d for consideration by the 15.3d task group.

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# Definitions:

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# Scope

This document details the characteristics of the air interface channels for the suite of applications described in the current revision of the 802.15.3d Application Requirements Document, 15-14-304-xx-003d.

# Methodology

Descriptions of the applications and associated channel modeling parameters are listed in paragraphs 4-7.

## The channel modeling parameters considered are the following.

### Operating frequency band(s)

### Path loss model

### Fading model

### Temporal Dispersion

### Multipath

### Antenna gain/pattern

### Other

# Kiosk Downloading

## Path Loss Model

## Fading Model

### Scintillation

### Molecular attenuation

### Doppler

## Temporal Dispersion

### Angle of arrival/departure

### Time of arrival

### Delay spread

### Coherence time/bandwidth

## Multipath

## Antenna Gain/Pattern

## Other

# Intra-Device Communication

## Path Loss Model

## Fading Model

### Scintillation

### Molecular attenuation

### Doppler

## Temporal Dispersion

### Angle of arrival/departure

### Time of arrival

### Delay spread

### Coherence time/bandwidth

## Multipath

## Antenna Gain/Pattern

## Other

# Backhauling/Fronthauling

## Path Loss Model

## Fading Model

### Scintillation

### Molecular attenuation

### Doppler

## Temporal Dispersion

### Angle of arrival/departure

### Time of arrival

### Delay spread

### Coherence time/bandwidth

## Multipath

## Antenna Gain/Pattern

## Other

# Data Center

## Path Loss Model

## Fading Model

### Scintillation

### Molecular attenuation

### Doppler

## Temporal Dispersion

### Angle of arrival/departure

### Time of arrival

### Delay spread

### Coherence time/bandwidth

## Multipath

## Antenna Gain/Pattern

## Other