

Project: IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs)

Submission Title: [LB comment resolution related to 5.5.3.2 and its subclauses]

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Re: [Response to LB comment of TG7]

Abstract: [This document describes LB comment resolution related to 5.5.3.2 and its subclauses.]

Purpose: [To resolve LB comments related to 5.5.3.2 and its subclauses]

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LB comment resolution related to 5.5.3.2 and its subclauses

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CIDs related to 5.5.3.2 and its subclauses

- 14 CIDs : 83, 94, 96, 109, 100, 97, 100e,
102, 104, 106, 110, 111, 99, 103

CID 83

CID	Name	Clause	Subclause	Page	Line	Comment	SuggestedRemedy
83	Clint Chaplin	5	5.5.3.2	9	46	(SY) "Light dimming means that the brightness of light source is controlled according to user's requirement. Light dimming is a cross layer function; it is related to the PHY and MAC layers. The details on the light dimming function of MAC layer are shown in 7.3.10. Light dimming in aspect of PHY layer can be accomplished by the methods shown in sections 5.5.3.2.1, 5.5.3.2.2 and 5.5.3.2.3."	"Light dimming means that the brightness of light source as perceived by the human eye is controlled according to the user's requirement. Light dimming is a cross layer function; it requires both PHY and MAC layer functionality. The details on the light dimming function of the MAC layer are shown in 7.3.10. The details of the light dimming function of the PHY layer are shown in 5.5.3.2.1, 5.5.3.2.2 and 5.5.3.2.3."

- **Recommendation/Instruction to editor**
 - Automatically resolved as per DCN 10/485/r2.

CID 94

CID	Name	Clause	Subclause	Page	Line	Comment	SuggestedRemedy
94	R. Roberts	5.5.3.2	1st paragraph	9		Add the remedy text to this paragraph.	<p>All PHY types shall support dimming down to 0.1% (as currently in the draft) but the transmission of data under any given dimming condition is an implementation option. That is, a device can decide to no longer support data transmission for an arbitrary level of dimming. To do this the device simply no longer participates in the link establishment. If a problematic amount of dimming is requested during a data transmission session, the device can issue a “stopping transmission due to dimming” command and then cease data transmission.</p>

CID 94 (cont.)

- **Recommendation/Instruction to editor**
 - It depends on the discussion results of DCN 10/462/r2, 10/546/r0, and 10/545/r0.

CID 96 and 109

CID	Name	Clause	Subclause	Page	Line	Comment	SuggestedRemedy
96	Joachim W. Walewski	5	5.5.3.2.2	10	11	The text refers to Figure 30, but it should actually refer to Figure 6	Replace "Figure 30" with "Figure 6"

CID	Name	Clause	Subclause	Page	Line	Comment	SuggestedRemedy
109	Joachim W. Walewski	5	5.5.3.2.2	10	11	The text refers to Figure 30, but it should actually refer to Figure 6	Replace "Figure 30" with "Figure 6"

- **Recommendation/Instruction to editor**
 - Accept
 - Automatically resolved as per DCN 10/485/r2.

CID 100

CID	Name	Clause	Subclause	Page	Line	Comment	SuggestedRemedy
100	David Cypher	5	5.5.3.2.2	10	11	Figure 30 has nothing to do with idle pattern or data frame.	Correct Figure reference Could it be Figure 6?

- **Recommendation/Instruction to editor**
 - Accept
 - Automatically resolved as per DCN 10/485/r2.

CID 97

CID	Name	Clause	Subclause	Page	Line	Comment	SuggestedRemedy
97	Larry Taylor	5	5.5.3.2.2	10	17-18	Idle patterns should not be limited to use for P-P. A pattern with appropriate characteristics must be used to prevent harmful flicker	This technical comment may require some significant debate before it can be resolved

- **Recommendation/Instruction to editor**
 - CID 97 : The text is not longer in 5.5.3.2.2 because it has been rewritten.
 - Automatically resolved as per DCN 10/485/r2.

CID 100e

CID	Name	Clause	Subclause	Page	Line	Comment	SuggestedRemedy
100e	ETRI	5	5.5.3.2.2	10		Figure 6 describes the idle pattern dimming as well as the adjustment time dimming.	Change the figure 6 so that the idle pattern dimming is separated from the adjustment time dimming. Add a figure to describe only the adjustment time dimming.

- **Recommendation/Instruction to editor**
 - Reject
 - Automatically resolved as per DCN 10/485/r2.

CID 102

CID	Name	Clause	Subclause	Page	Line	Comment	SuggestedRemedy
102	Clint Chaplin	5	5.5.3.2.2	10	14	(SY) "However, the use of idle pattern for light dimming is in conflict with the inter-frame flicker compensation because that can be resulted in the inter-frame flicker. "ON" and "OFF" times of light source are essential to the dimming through the use of idle pattern, but they decrease the communication efficiency extremely. Therefore, the standard supports that the idle pattern is used only on the applications such as P2P communication which the flicker is allowed."	"However, the use of idle pattern for light dimming is in conflict with inter-frame flicker compensation because use of an idle pattern can result in inter-frame flicker. "ON" and "OFF" times of the light source are essential to dimming through the use of idle pattern, but they decrease the communication efficiency. Therefore, this standard supports using the idle pattern only on applications such as P2P communication in which flicker is allowed."

CID 102

- **Recommendation/Instruction to editor**
 - CID 102 : The text is not longer in 5.5.3.2.2 because it has been rewritten.
 - Automatically resolved as per DCN 10/485/r2.

CID 104

CID	Name	Clause	Subclause	Page	Line	Comment	SuggestedRemedy
104	Michael Bahr	5	5.5.3.2.2	10	7-18	The second paragraph of this Clause contains many falsities. Also, the first sentence seems to contradict Clause 5.5.3.1.2	I suggest that the TG resolves the indicated conflict. Text that removes the aforementioned falsities will be provided.

- **Recommendation/Instruction to editor**

- Accept
- The text is not longer in 5.5.3.2.2 because it has been rewritten.
- Automatically resolved as per DCN 10/485/r2.

CID 106

CID	Name	Clause	Subclause	Page	Line	Comment	SuggestedRemedy
106	Sridhar Rajagopal	5.5.3.2.2		10		idle pattern selection	delete the second section

- **Recommendation/Instruction to editor**
 - Accept
 - The text is not longer in 5.5.3.2.2 because it has been rewritten.
 - Automatically resolved as per DCN 10/485/r2.

CID 111

CID	Name	Clause	Subclause	Page	Line	Comment	SuggestedRemedy
111	R. Roberts	5.5.3.2.2	2nd paragraph	10		Delete the second paragraph	Delete the second paragraph

- **Recommendation/Instruction to editor**
 - Accept
 - The text is not longer in 5.5.3.2.2 because it has been rewritten.
 - Automatically resolved as per DCN 10/485/r2.

CID 110

CID	Name	Clause	Subclause	Page	Line	Comment	SuggestedRemedy
110	R. Roberts	5.5.3.2. 2	Figure 6	10		Figure needs to be re-written	Figure 6 implies there is only one dimming compensation time per data frame. This is not strictly true. There may be multiple compensation times inserted into the data frame. Suggest the figure from document 10/159r1 be incorporated.

- **Recommendation/Instruction to editor**
 - Accept
 - It depends on the discussion results of DCN 10/462/r2, 10/546/r0, and 10/545/r0.

CID 99

CID	Name	Clause	Subclause	Page	Line	Comment	SuggestedRemedy
99	Soo-Young Chang	5	5.5.3.2.3	10	30	This color shift problem is only for CSK in this draft.	Need to compensate color changes. Refer to a contribution which will be posted later.

- **Recommendation/Instruction to editor**
 - Reject
 - In case of the general dimming by driving current control, the color shift can be produced.
 - The schemes to compensate the color shift in CSK has been added in this standard.

CID 103

CID	Name	Clause	Subclause	Page	Line	Comment	SuggestedRemedy
103	Clint Chaplin	5	5.5.3.2.3	10	32	(SY) "Analog dimming indicates the brightness control by changing the current going into the light source which results from adjusting the signal amplitude. However, the color shift of light source can arise from the control of driving current going into the light source for dimming."	"Analog dimming implements brightness control by changing the power going into the light source by adjusting the signal amplitude. However, a color shift of the light source can be a side-effect of analog dimming."

- **Recommendation/Instruction to editor**
 - The text is not longer in 5.5.3.2.3 because it has been rewritten.
 - Automatically resolved as per DCN 10/485/r2.