

Proposal to Change the Transmit MPD Lower Bound Limit in 802.3bv/D1.4

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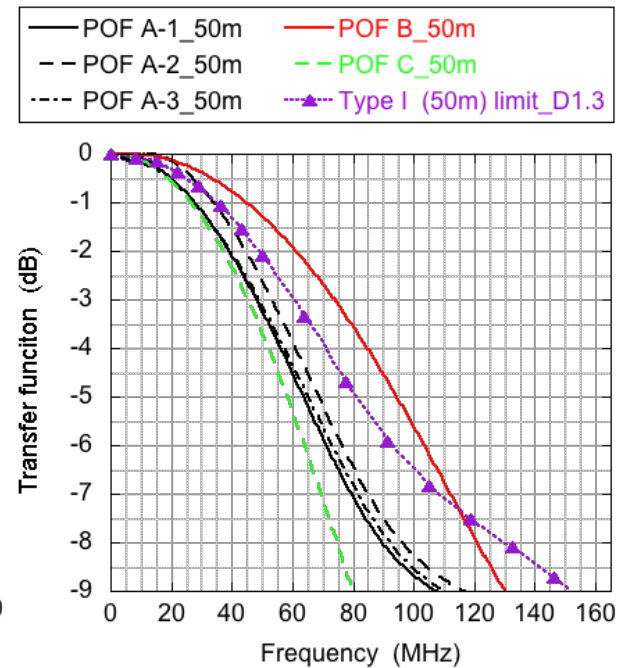
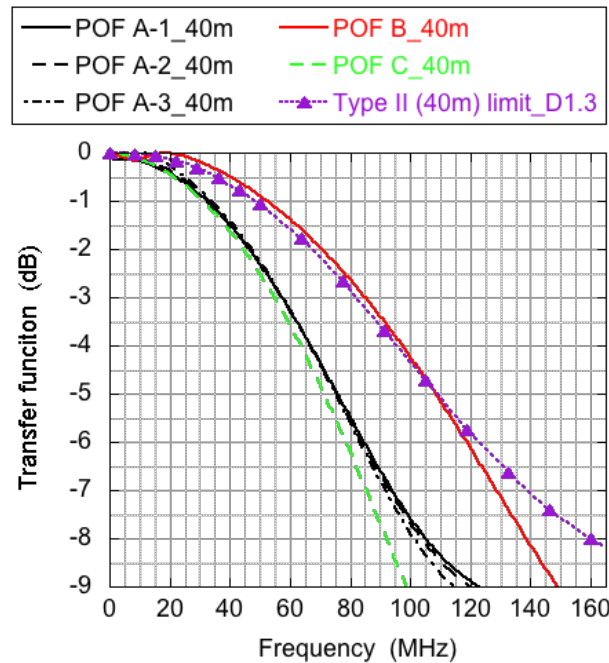
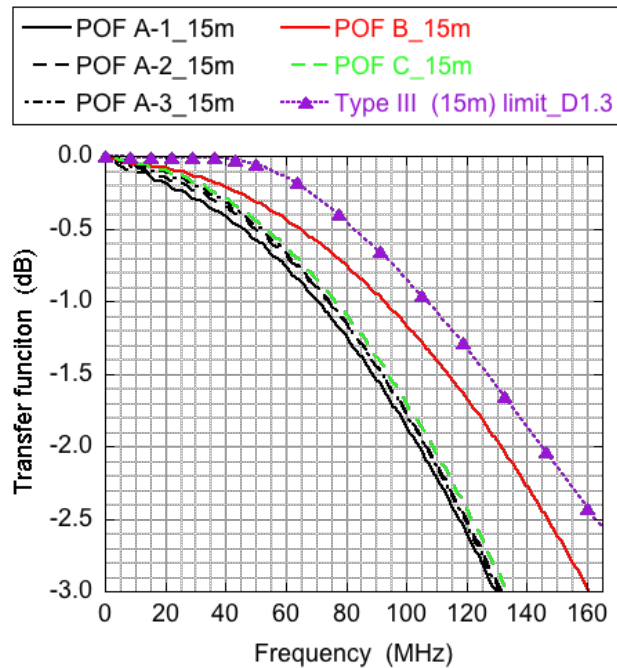
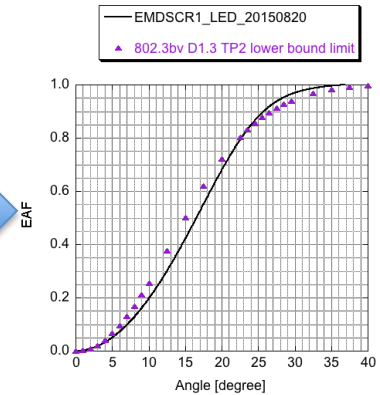
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Agenda

- Background
- Samples and Measurement Setup
- Measurement Results of Transfer Function
- Measurement Result of EAF at TP2
- MPD at TP2 Lower Bound Limit Proposal
- Motion

Background

No sample met the transfer function lower bound
under the launch condition close to that specified in 802.3bv/D1.3
in our measurement



Need to verify EAF and transfer function with actual FOTs

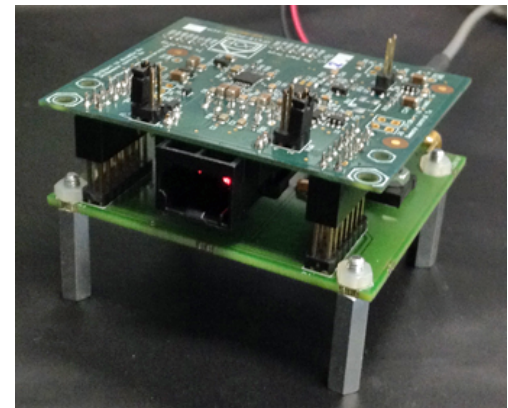
Samples

➤ POF

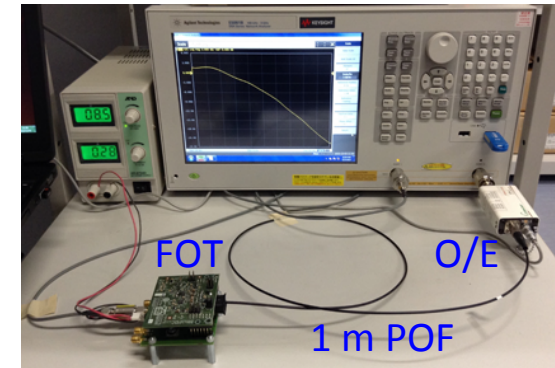
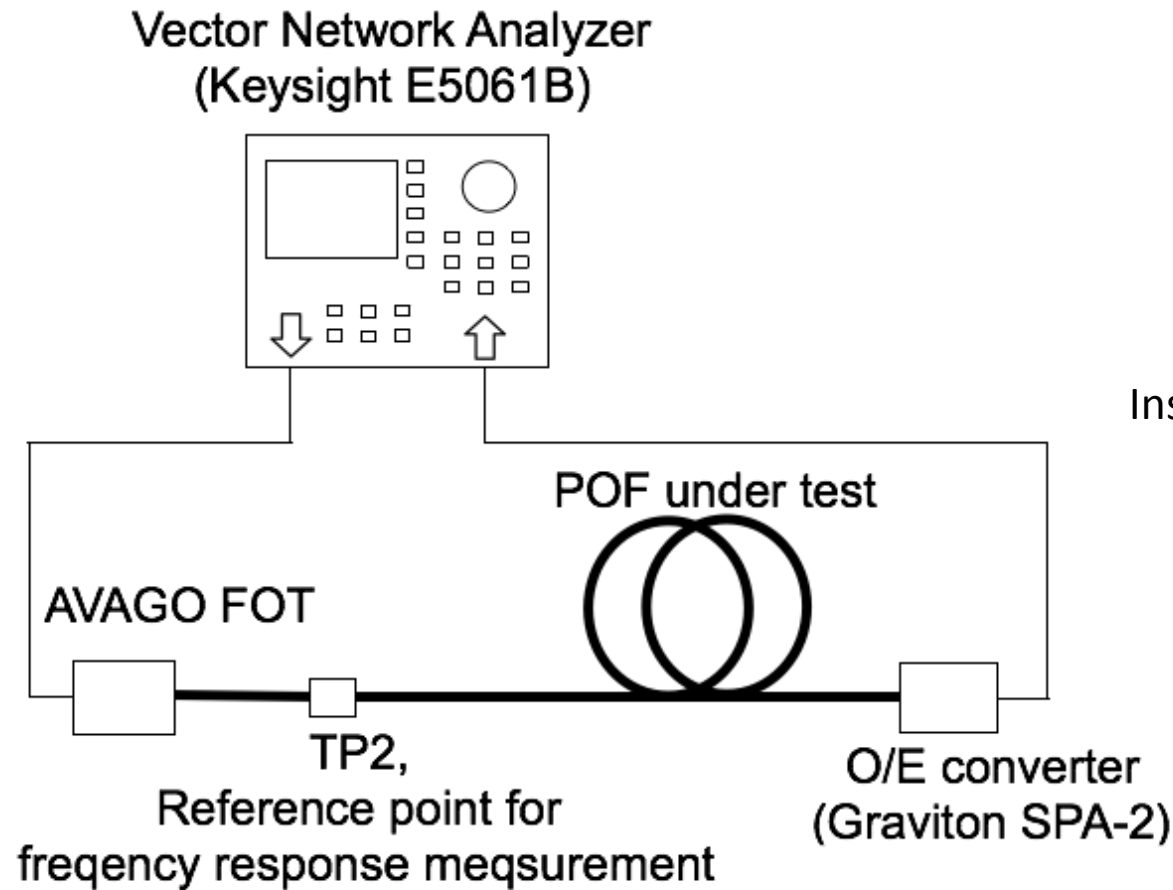
- Subcategory A4a.2 ($NA = 0.485 \pm 0.045$)
- 3 manufacturers, one product from each
- 3 samples for Product A
- One sample for Product B and C

➤ FOT

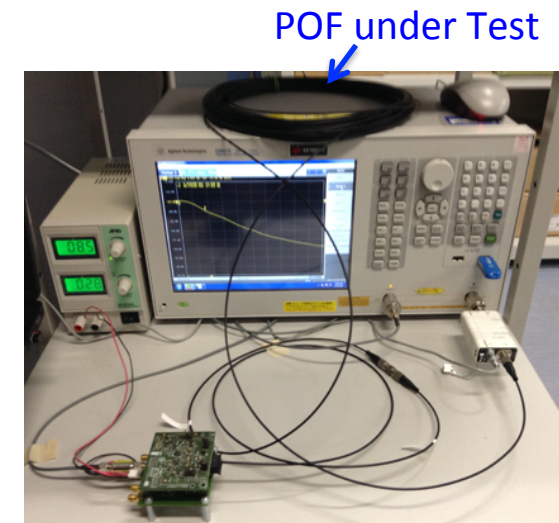
- 3 FiberDock samples
(#2, #4, #6)



Measurement Setup – Transfer Function

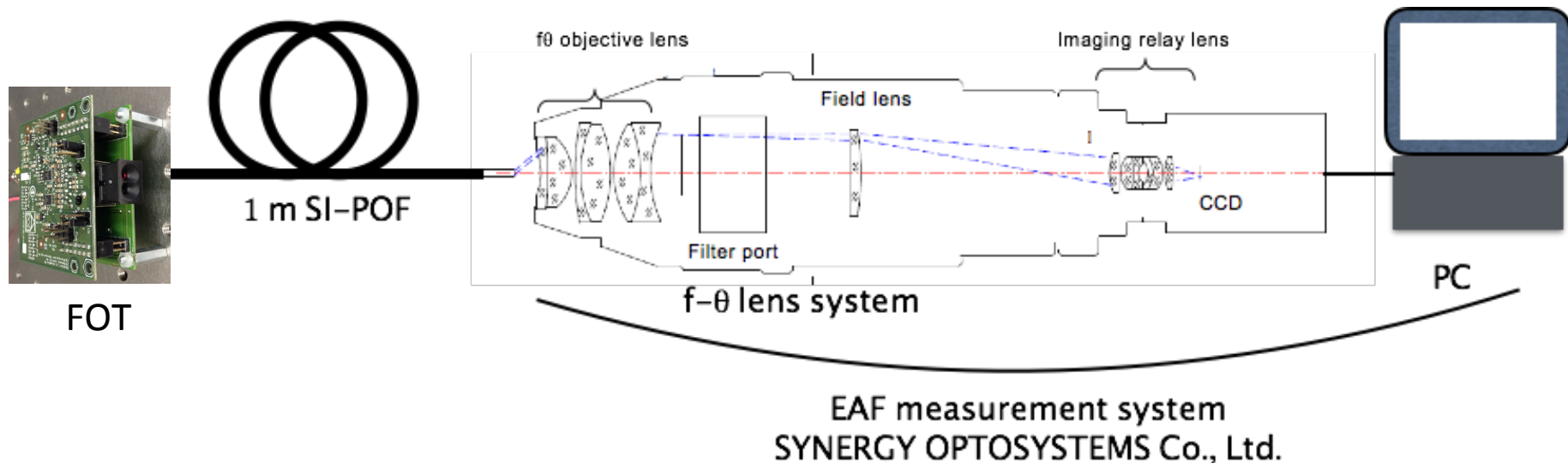


Instrumental function measurement



POF transfer function
measurement

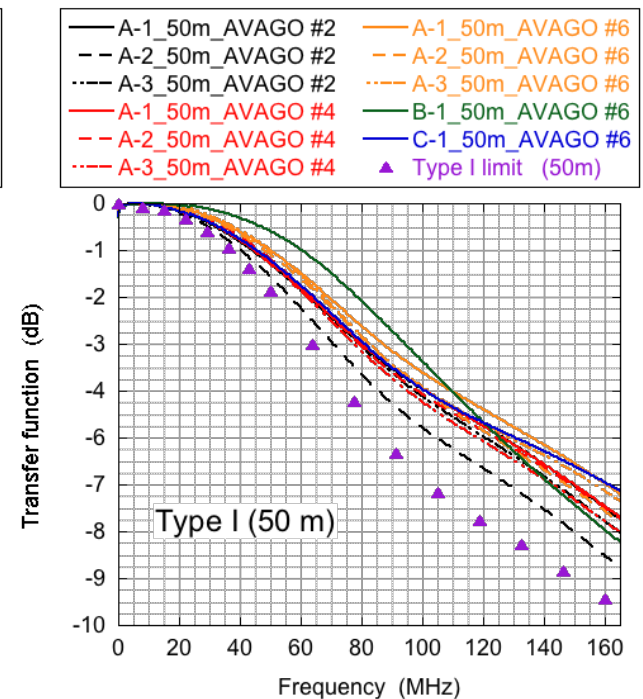
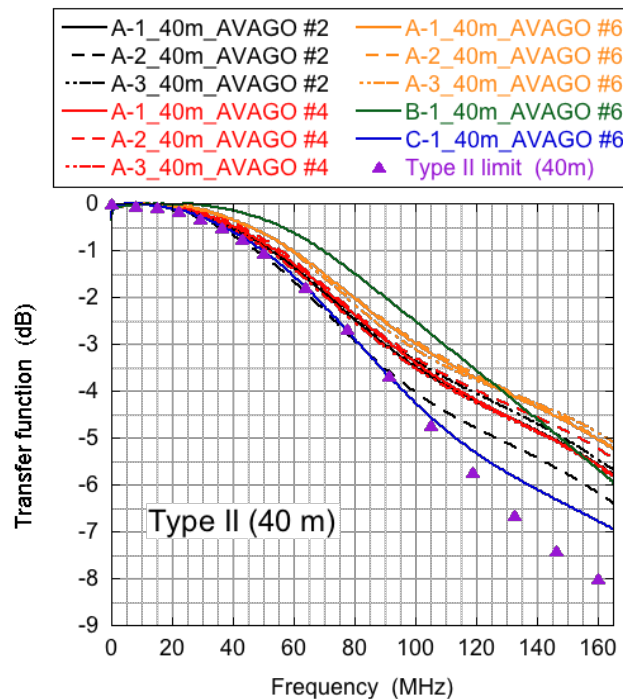
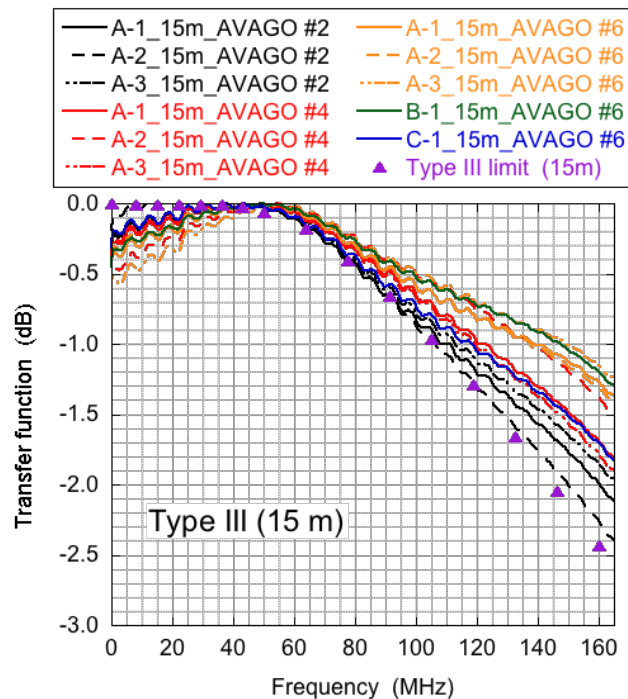
Measurement Setup – Encircled Angular Flux



The EAF measurement system is in conformity with IEC 61300-3-53

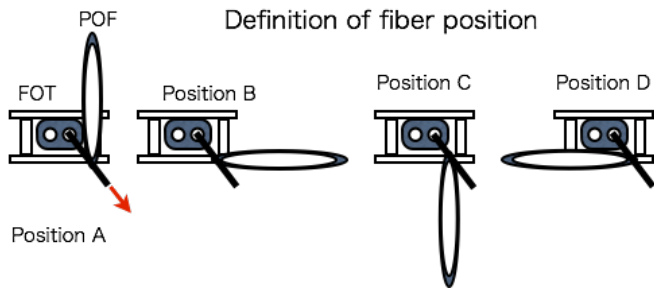
Measurement Result of POF Transfer Function

All the POF samples fulfilled
the transfer function lower bound limits

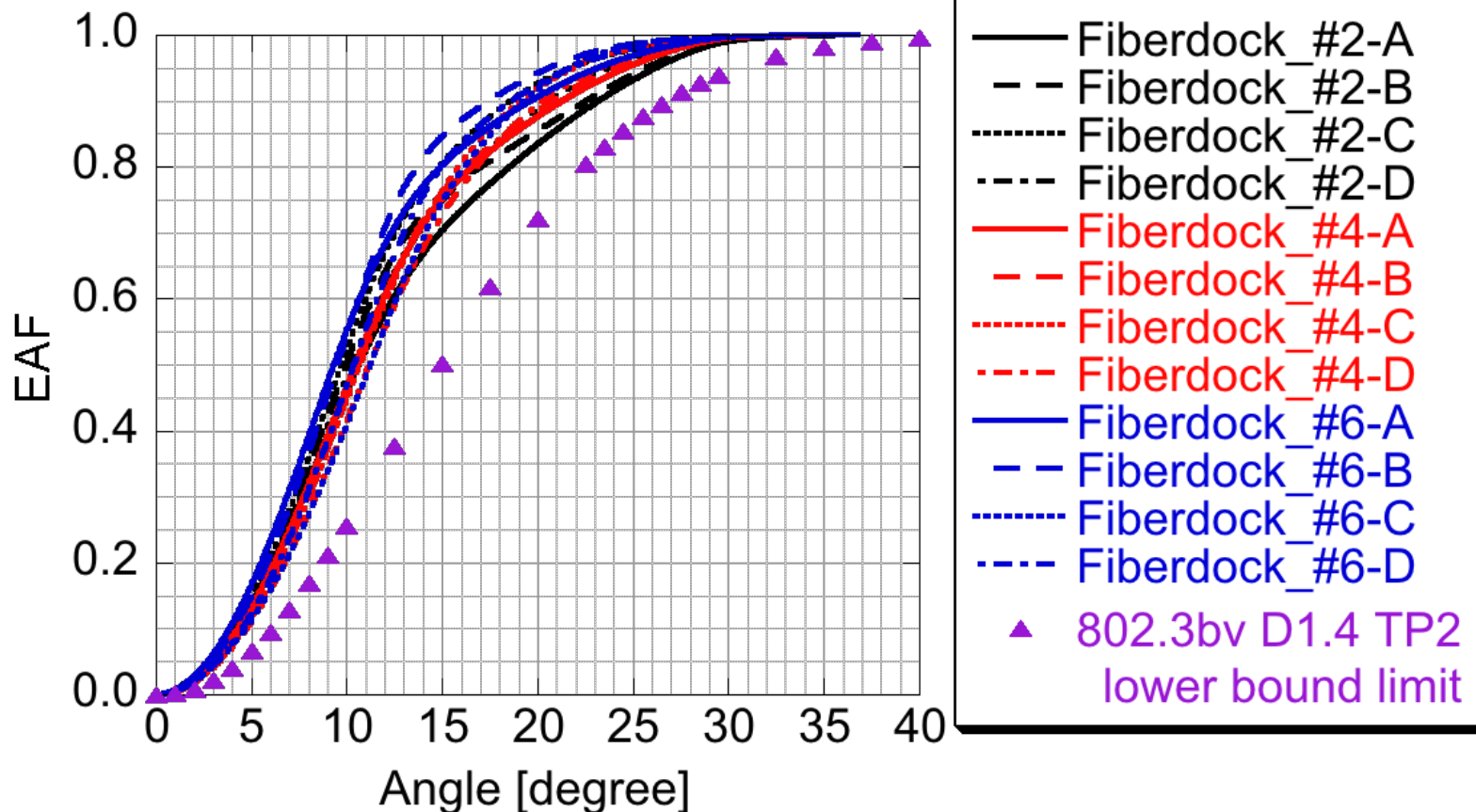


Data in low frequency area of Type III are unreasonable. The cause is not clear at the moment.

Measurement Result of EAF at TP2



All samples showed mode distribution much lower than the EAF template in 802.3bv/D1.4



MPD at TP2 Lower Bound Limit Proposal

Table 114-7 – Transmit MPD lower bound limit per EAF (RHA, RHB and RHC)

Angle (deg.)	EAF	Angle (deg.)	EAF	Angle (deg.)	EAF
0.0	0.00	10.0	0.41	27.5	0.97
1.0	0.00	15.0	0.70	30.0	0.99
2.5	0.03	20.0	0.83	35.0	1.00
5.0	0.11	22.5	0.89		
7.5	0.24	25.0	0.93		

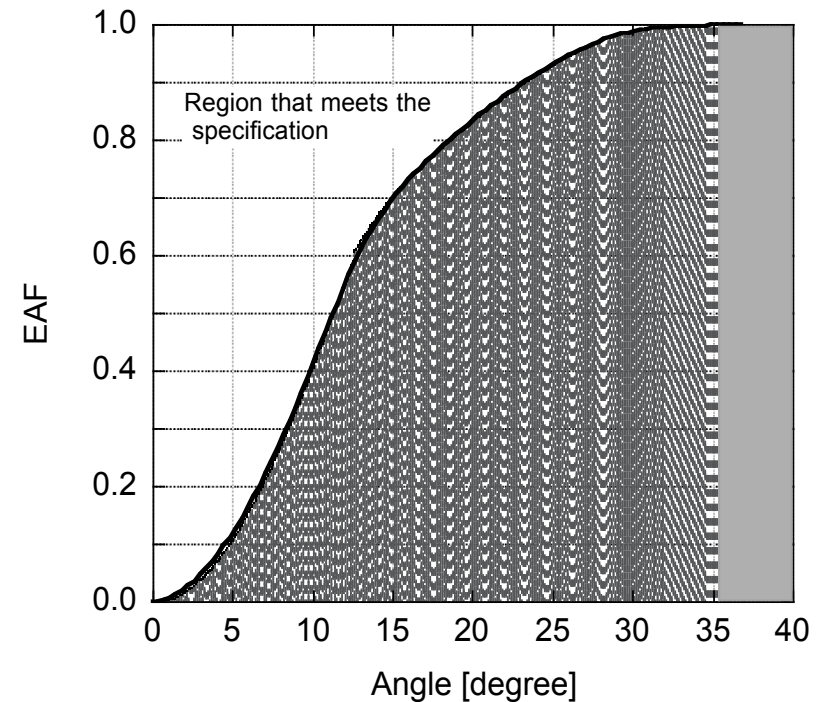


Figure 114-48 – Transmit MPD illustration according to Table 114-7

Motion

- Change Transmit MPD lower bound limit per EAF as mentioned above

Moved: Satoshi Takahashi (POF Promotion)

Seconded:

Y :

N :

A :