

Launch condition and Temperature effect for POF Attenuation

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Agenda

~Launch condition effect~

- Objectives
- Measurement setup
- Measurement results

~Temperature effect~

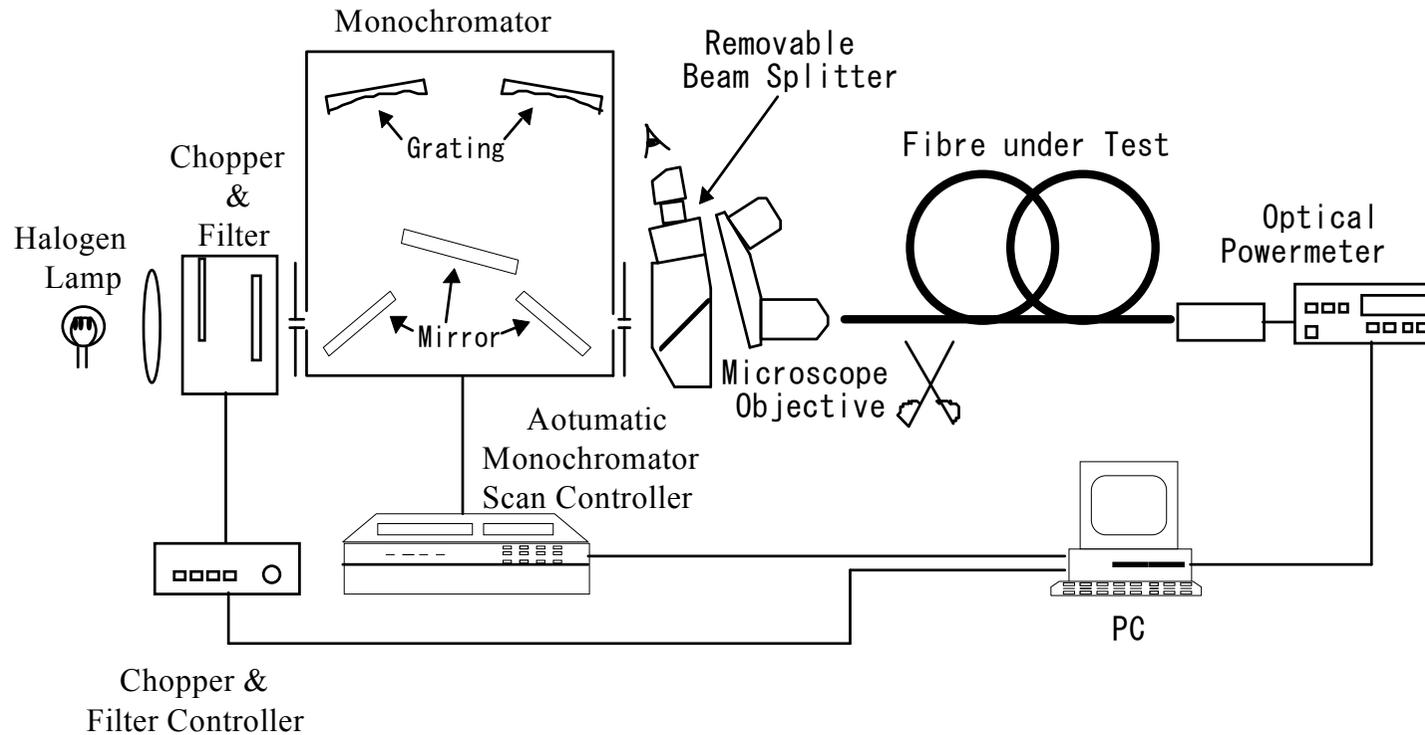
- Aging test results

Launch condition effect

Objectives

- Confirmation of an influence of launch condition for a POF attenuation.
- Measurement sample
GHAN4001 (Standard POF cable for automotive,
1.0mm dia., NA 0.5)

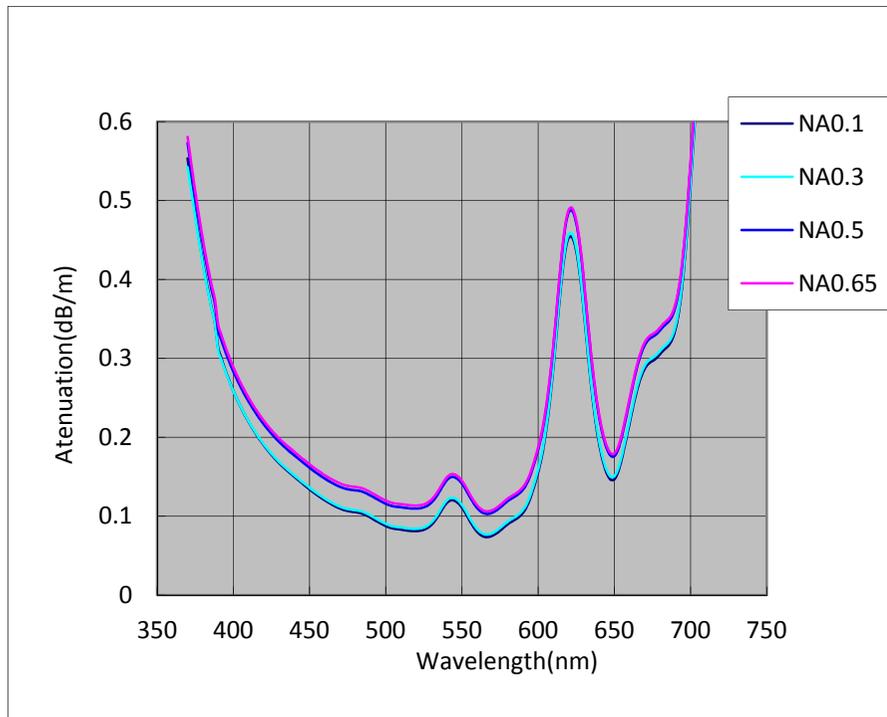
Measurement setup



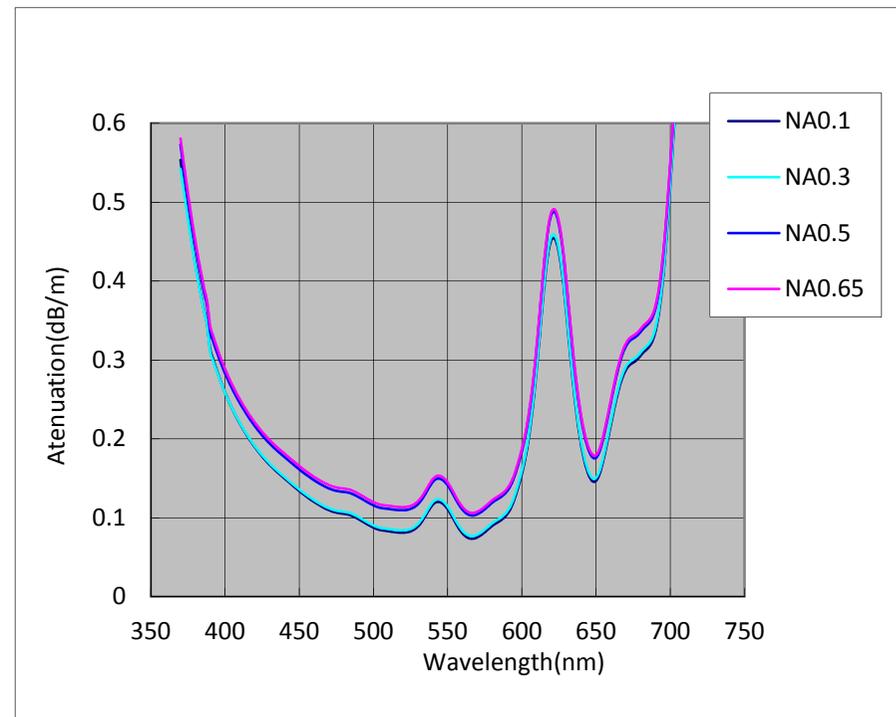
- POF sample length: 40m-1m and 15m-1m cutback
- Launch NA condition: NA0.1, NA0.3, NA0.5, NA0.65 (collimated by focusing lens)

Measurement results

40-1m

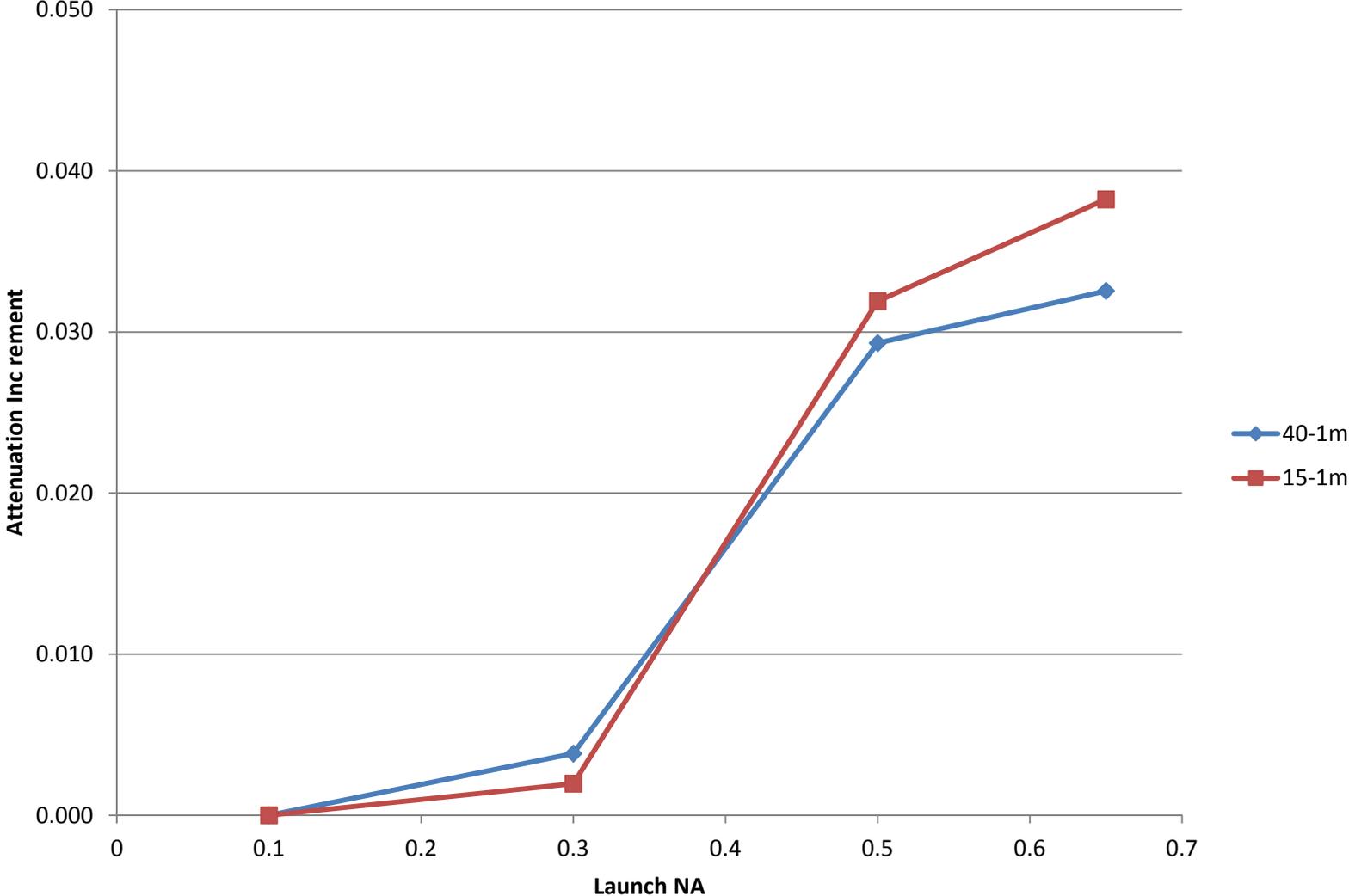


15-1m



- POF sample length: 40m-1m cut back and 15m-1m cutback
- Launch NA condition: NA0.1, NA0.3, NA0.5, NA0.65 (collimated by focusing lens)

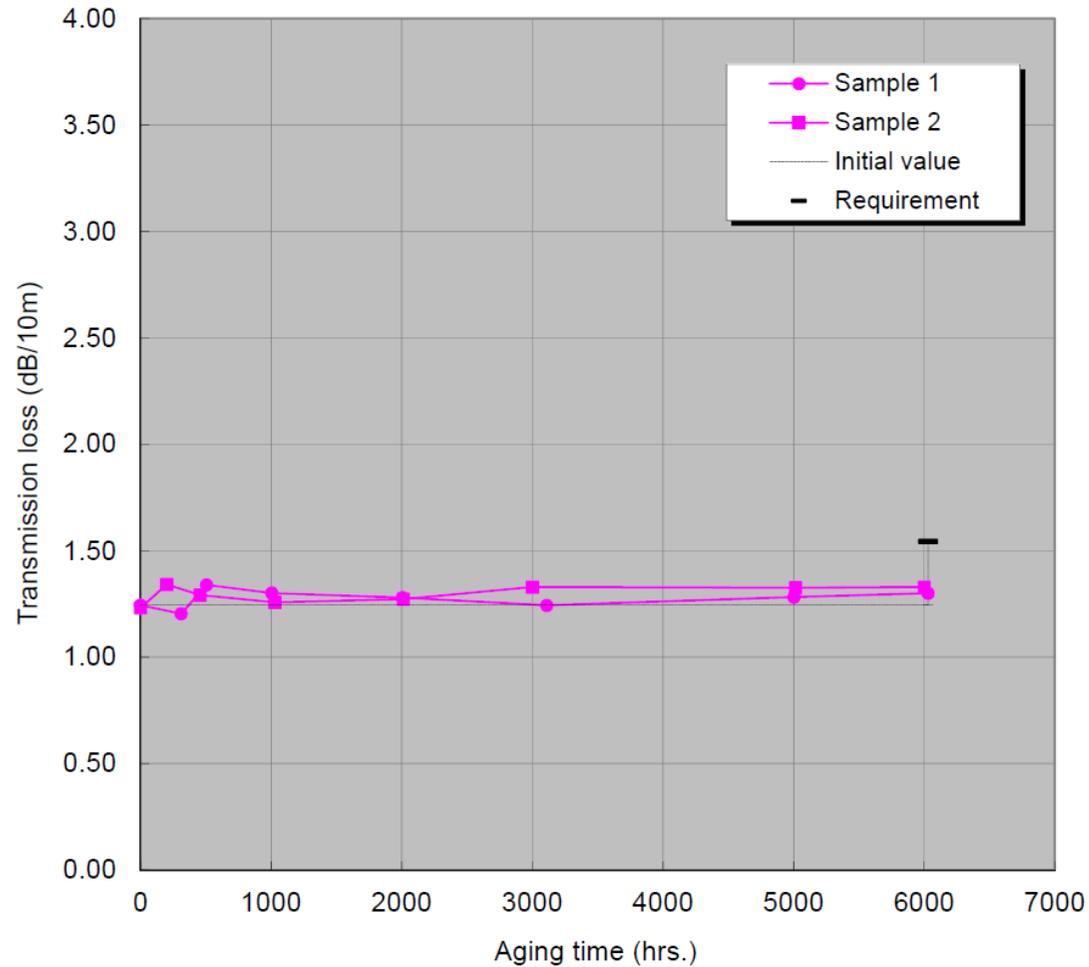
Measurement results



Temperature effect

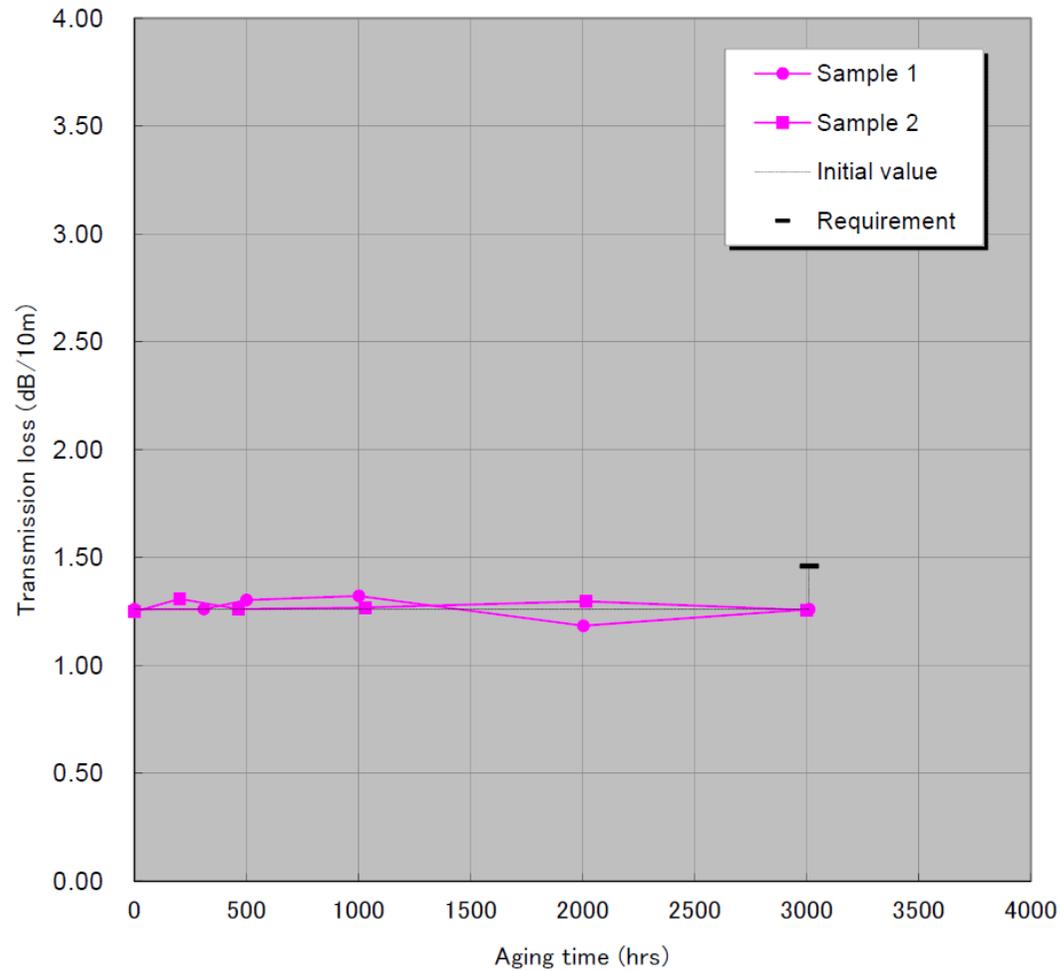
Aging result at 85degrees C

Measurement condition	
Aging atmosphere	85°C
Wavelength	650nm (monochromated)
Launch NA	0.1
Sample length	25~18m
Cut-back	1m



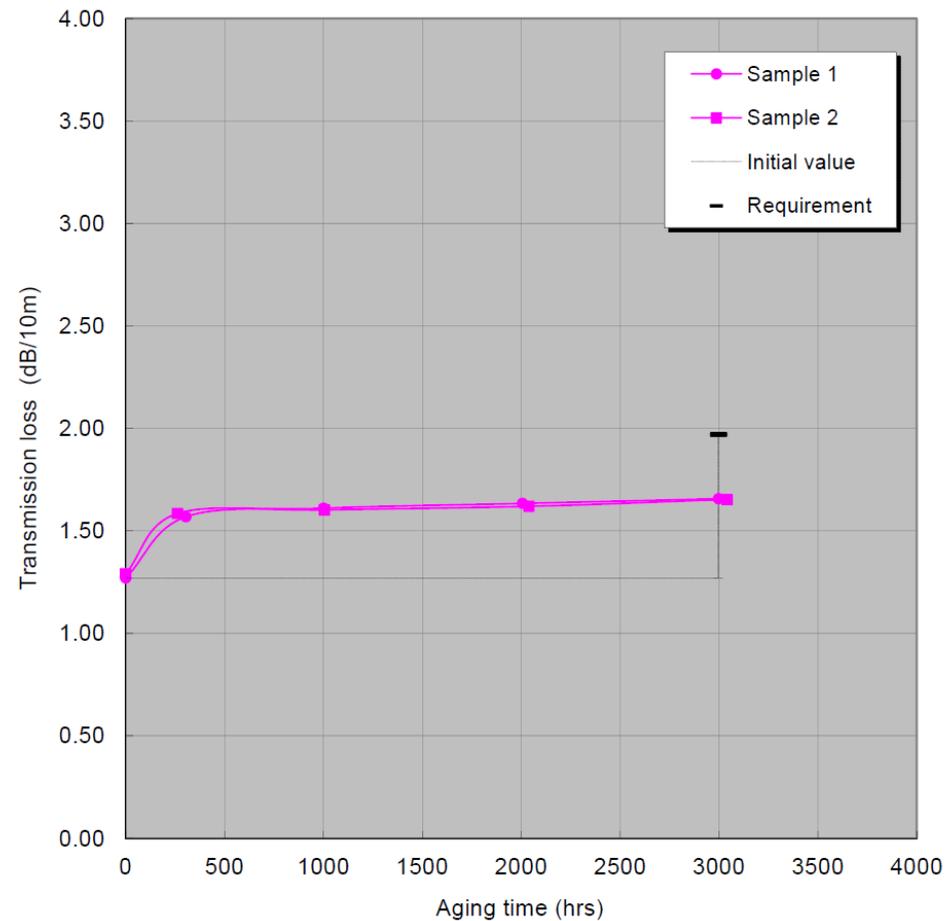
Aging result at -40degrees C

Measurement condition	
Aging atmosphere	-40°C
Wavelength	650nm (monochromated)
Launch NA	0.1
Sample length	25~18m
Cut-back	1m



Aging result at 85degrees C 95%RH

Measurement condition	
Aging atmosphere	85°C, 95%RH
Wavelength	650nm (monochromated)
Launch NA	0.1
Sample length	25~18m
Cut-back	1m



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