Hong Kong Productivity Council
香港生產力促進局

Automotive and Electronics Division
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Test Report

Project Number	:	40149331
Date of issue	:	20 January 2012
Client	:	DARG Partners Limited
Nature of Test	:	Far InfraRed Ray Transmission Test
Sample		SEAG Window Film F7710

1. Objective

To measure the IR transmittance for SEAG Window Film F7710

2. Test Samples provided by DARG Partners Limited

2.1. One control glass without adhering window film F7710. Glass thickness is 2mm.

2.2. Five tested glass with adhering window film F7710

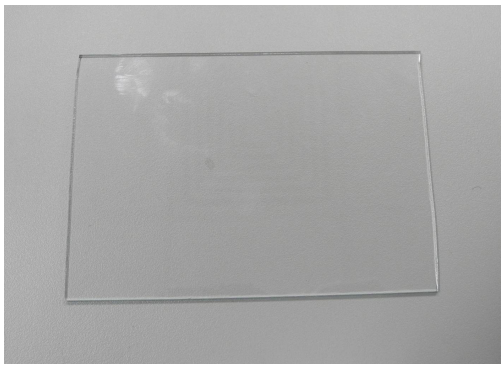


Figure 1 Control glass

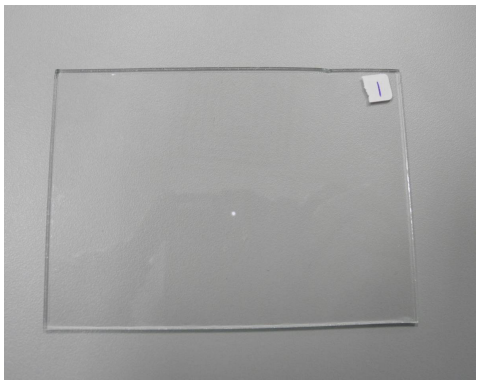


Figure 2 Sample glass #1

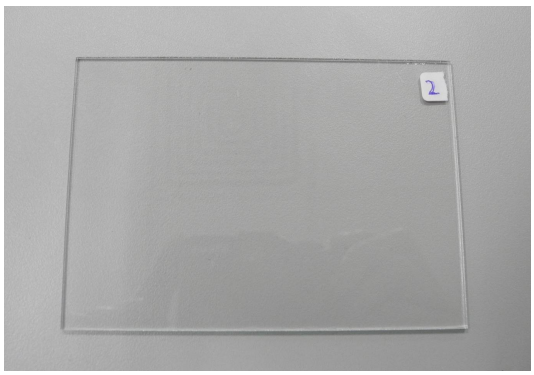


Figure 3 Sample glass #2

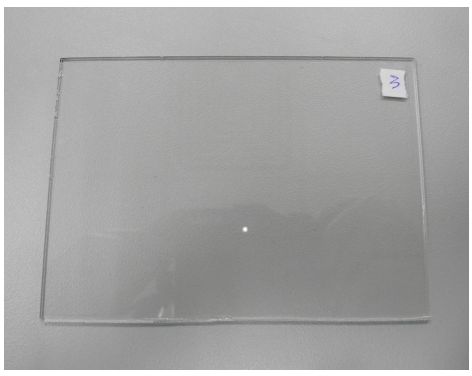


Figure 4 Sample glass #3

Figure 5 Sample glass #4

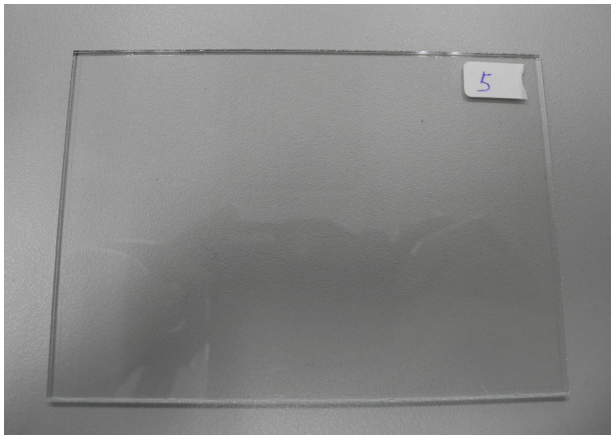


Figure 6 Sample glass #5

3. Equipment used

FTIR Measurement System (Model number : Bruker Optics VERTEX 7.0)

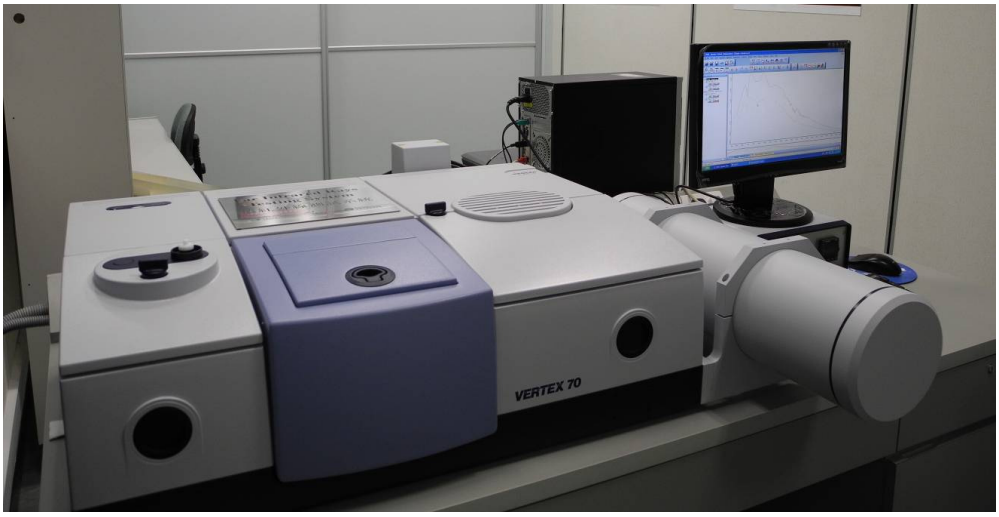


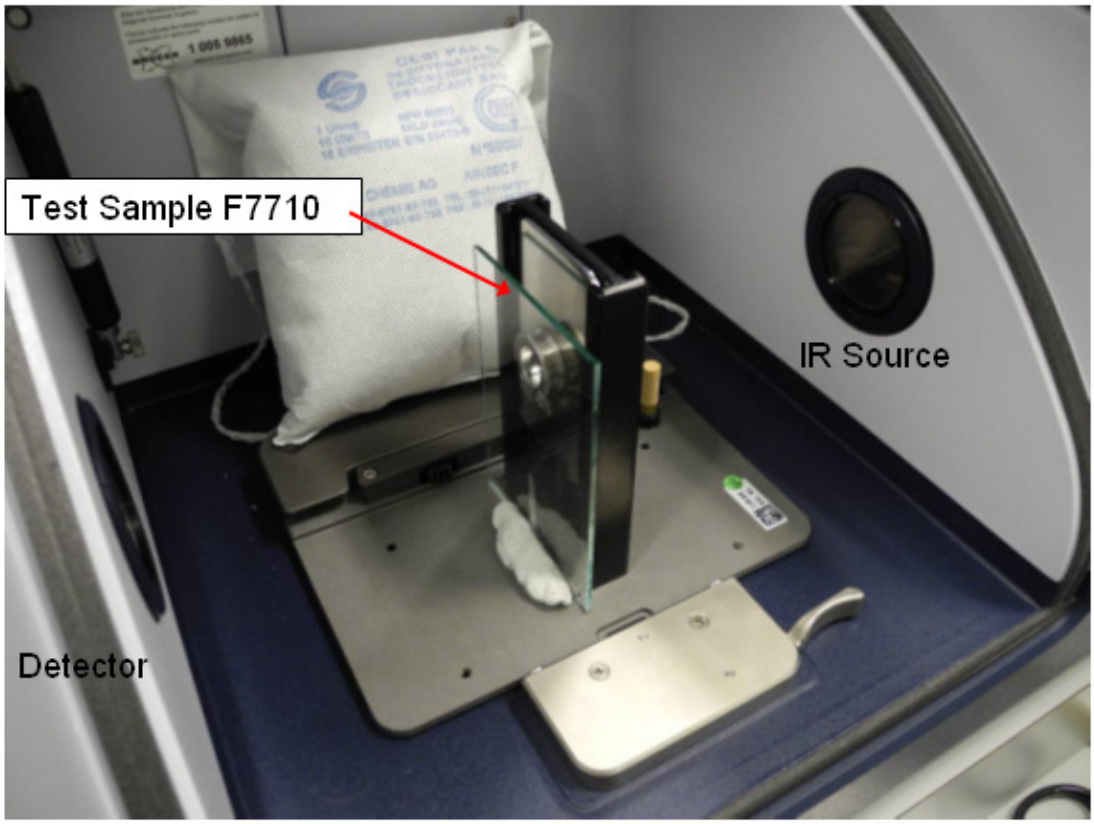
Figure 7 FTIR Measurement System

4. Testing Procedures

4.1. Placed the control glass into the testing holder. Measured the IR Transmittance.

4.2. Placed the tested glasses into the testing holder. Measured the IR Transmittance for sample 1 to sample 5 as shown in Figure 1 to 5.

4.3. Compare the test results for the control glass and tested glasses.



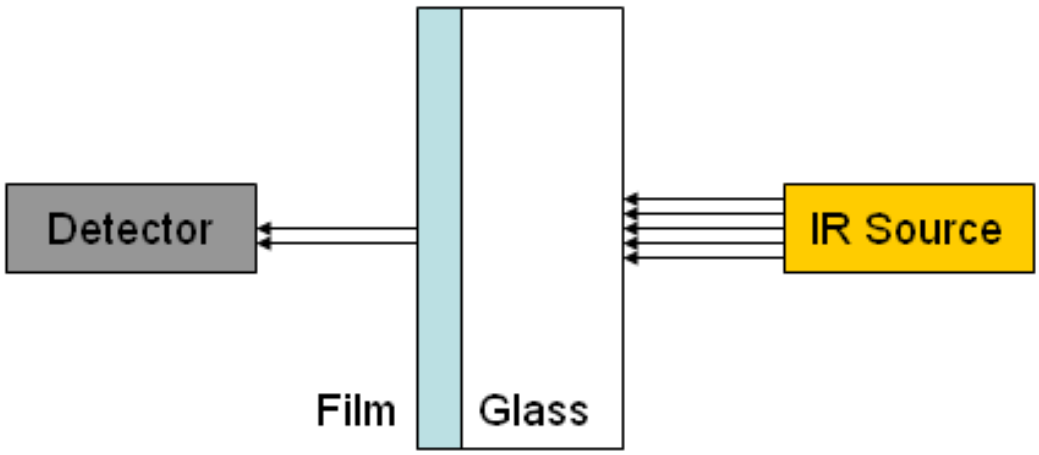


Figure 8 Setup for IR Transmittance Test

5. Result

5.1. Sample 1

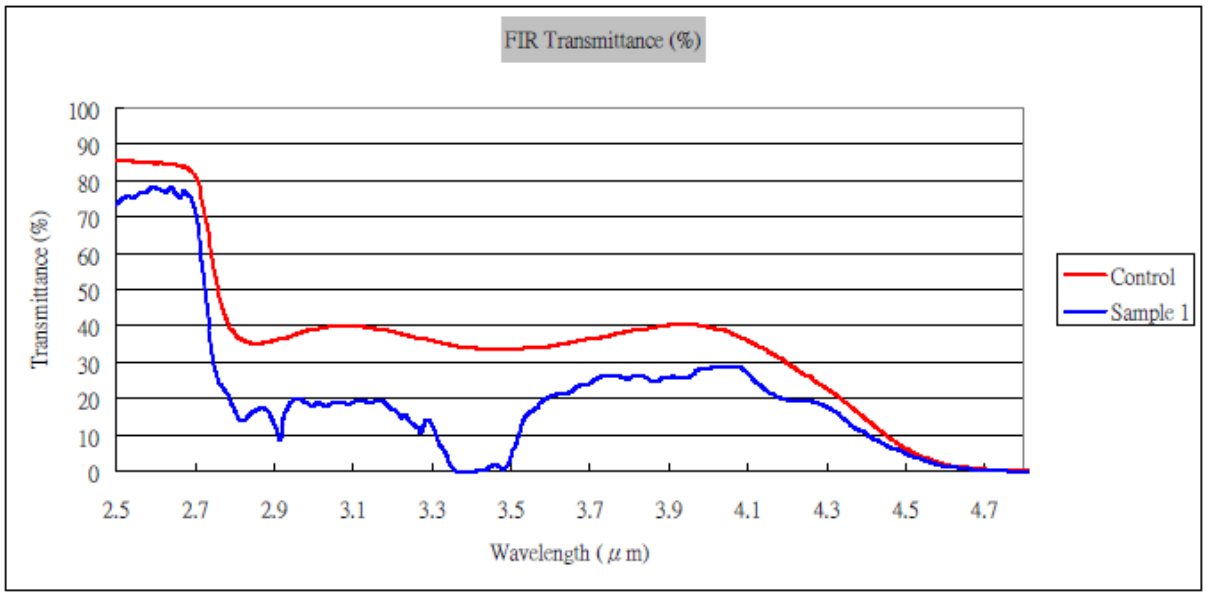


Figure 9 IR Transmittance for Sample 1

5.2. Sample 2

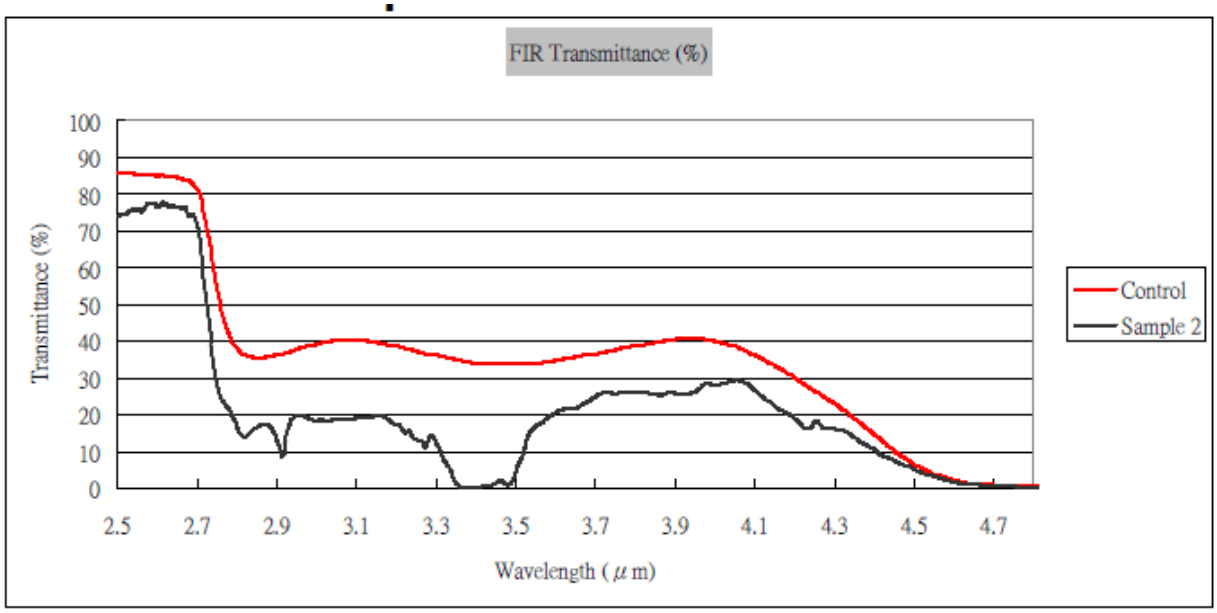


Figure 10 IR Transmittance for Sample 2

5.3. Sample 3

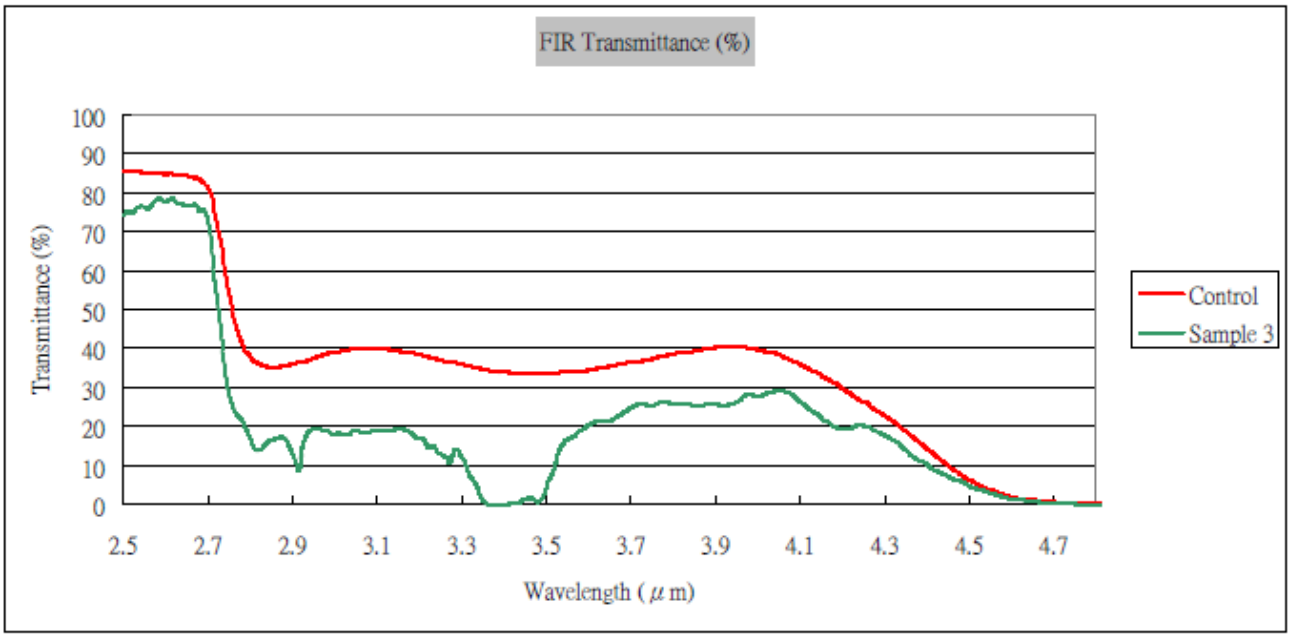


Figure 11 IR Transmittance for Sample 3

5.4. Sample 4

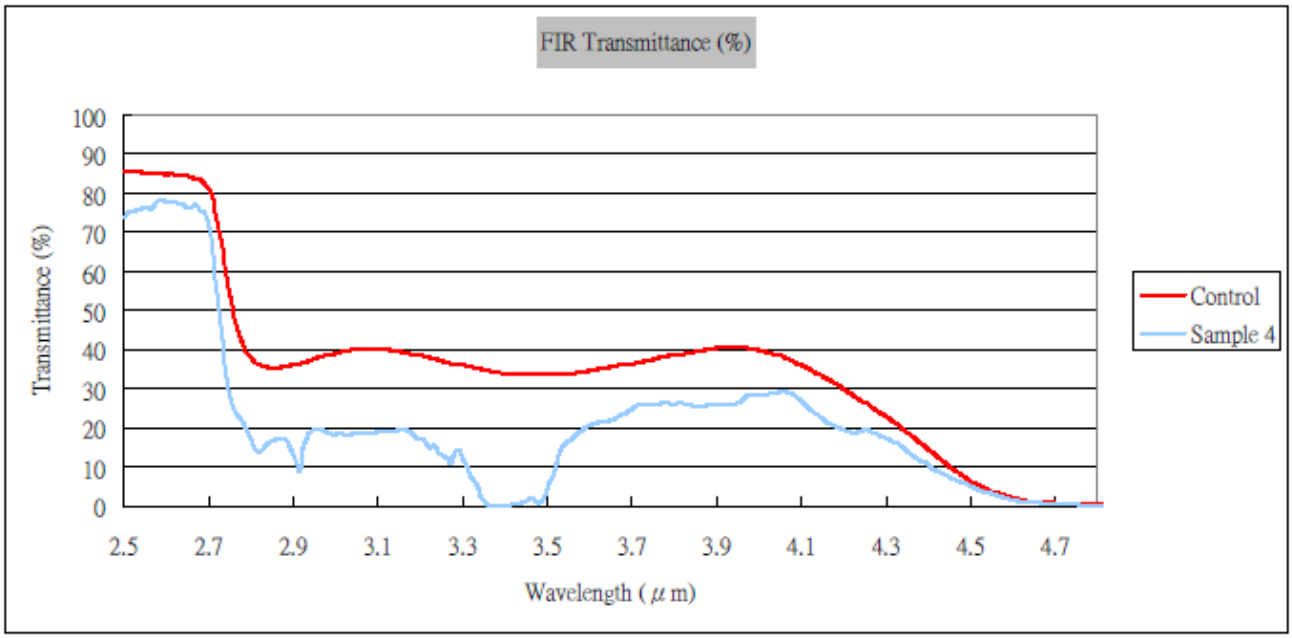


Figure 12 IR Transmittance for Sample 4

5.5. Sample 5

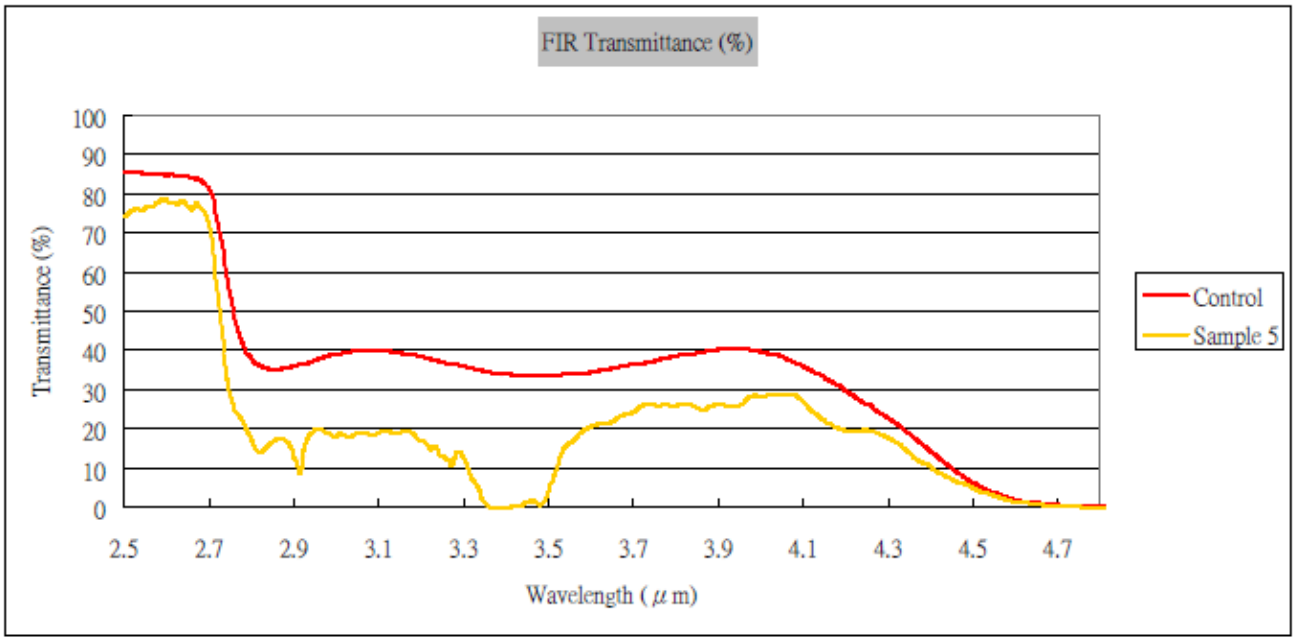


Figure 13 IR Transmittance for Sample 5

6. Conclusions

Based on the findings, there is a noticeable difference in the FIR Transmittance between controlled glass (without film) and the sample glasses (with film). After attachment of the film, the FIR Transmittance was found to be lower by 20% approximately.

End