



Subject **QUV-A testing on “Rust Look” and “Timber Look” finishes**  
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Project number 18LSR272  
Document number 002  
Date 24 June 2019  
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Remark Customer – Knotwood (QLD)

## INTRODUCTION

The customer has provided two extrusions with “Rust Look” and “Timber Look” finishes to compare QUV-A performance.

Samples were cut to into panels to prepare the below set of samples:

A, B: Timber look

C, D: Rust look

The bottom of each panel was subjected to QUV-A (marked as T, tested), while the top half was covered (marked as NT, not tested). Gloss retention and colour change will be evaluated over time for up to 4000 hours.

Note: QUV cabinet conditions.

Conditions	QUV-A
Wavelength	340nm
UV cycle	8 hours at 55°C
Condensation cycle	4 hours at 45°C

## CONCLUSION

- Samples have reported similar gloss retention performance. See results below.
- Samples C and D (rust look) exhibited less colour change compared to A and B (timber look), after 4000 hours.

**TEST VALUE:** \$2400

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## RESULTS

Chart 1. Gloss retention performance.

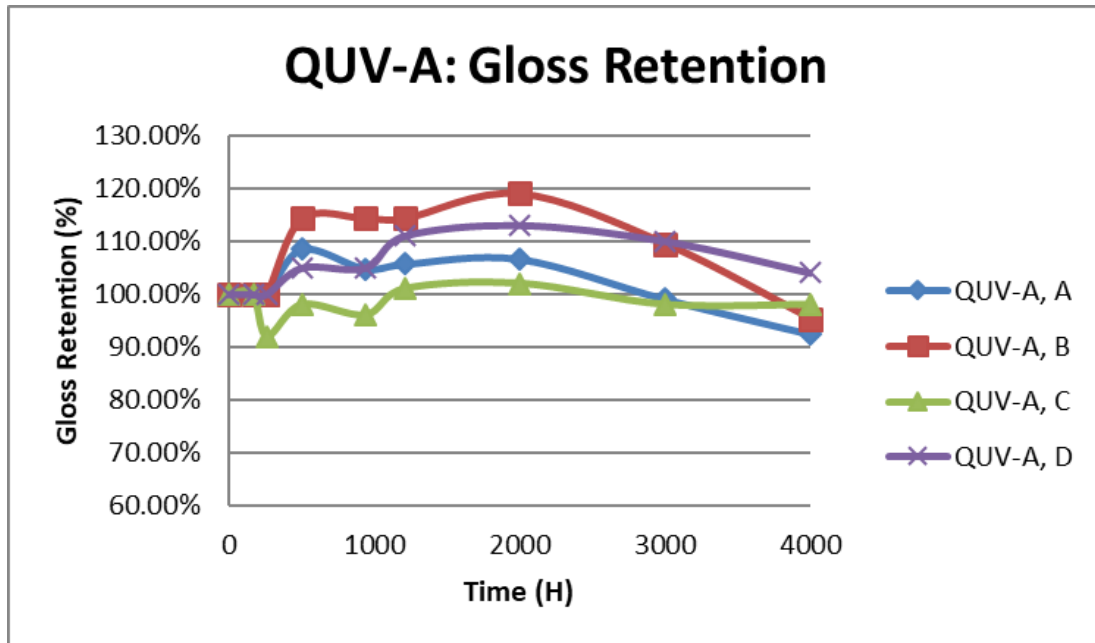


Chart 2. Colour change performance.

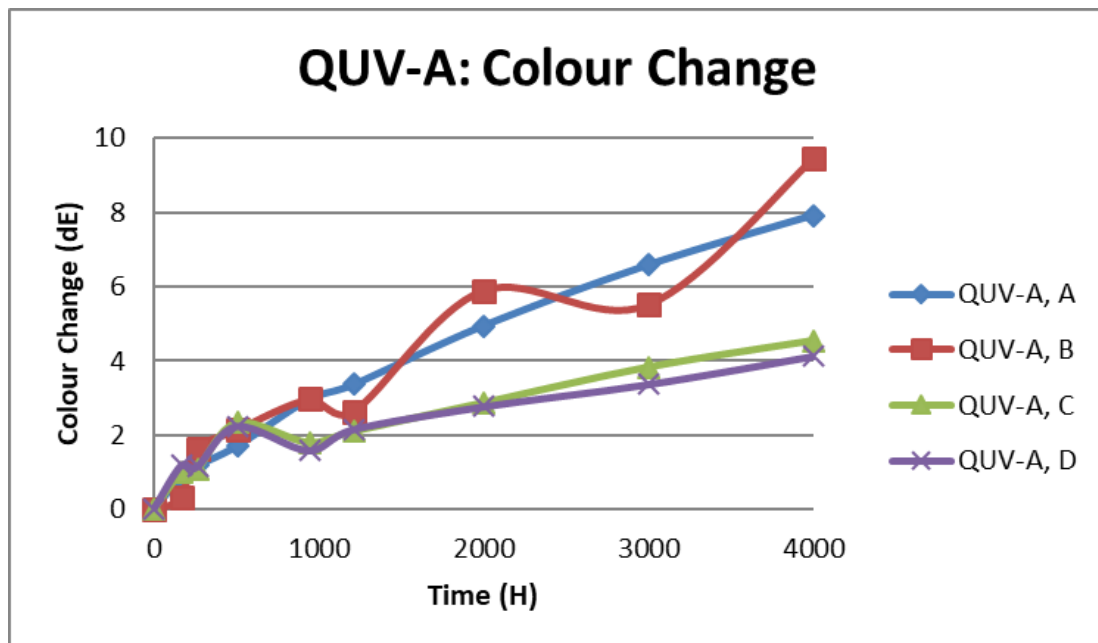




Table 1. Results

Sample	Test	Spec	0	169	265	507	944	1213	2000	3000	4000									
QUV-A,	Gloss	TBD (%)	10.5	10.5	10.5	11.4	11	11.1	11.2	10.4	9.7									
A		Gloss Retention	100.00%	100.00%	100.00%	108.57%	104.76%	105.71%	106.67%	99.05%	92.38%									
	Colour	L	dL	47.61	48.47	0.86	48.73	1.12	49.24	1.63	50.28	2.67	50.71	3.1	52.26	4.65	54.11	6.5	55.48	7.87
		a	da	12.57	12.76	0.19	12.85	0.28	13.05	0.48	13.75	1.18	13.49	0.92	13.32	0.75	12.71	0.14	11.83	-0.74
		b	db	20.97	21.02	0.05	20.70	-0.27	20.74	-0.23	20.40	-0.57	20.04	-0.93	19.48	-1.49	19.98	-0.99	20.66	-0.31
		dE	0	0.88	1.19	1.71	2.97	3.36	4.94	6.58	7.91									
QUV-A,	Gloss	TBD (%)	10.5	10.5	10.5	12	12	12	12.5	11.5	10									
B		Gloss Retention	100.00%	100.00%	100.00%	114.29%	114.29%	114.29%	119.05%	109.52%	95.24%									
	Colour	L	dL	47.1	47.15	0.05	48.42	1.32	46.38	-0.72	49.76	2.66	48.64	1.54	52.84	5.74	52.22	5.12	56.4	9.3
		a	da	12.65	12.94	0.29	13.36	0.71	12.68	0.03	13.94	1.29	13.42	0.77	13.98	1.33	12.6	-0.05	12.46	-0.19
		b	db	20.43	20.27	-0.16	21.05	0.62	18.41	-2.02	20.17	-0.26	18.43	-2	20.61	0.18	18.39	-2.04	22.01	1.58
		dE	0	0.33	1.62	2.14	2.97	2.64	5.89	5.51	9.44									
QUV-A,	Gloss	TBD (%)	10	10	9.2	9.8	9.6	10.1	10.2	9.8	9.8									
C		Gloss Retention	100.00%	100.00%	92.00%	98.00%	96.00%	101.00%	102.00%	98.00%	98.00%									
	Colour	L	dL	36.9	37.91	1.01	37.98	1.08	39.19	2.29	38.62	1.72	38.98	2.08	39.7	2.8	40.49	3.59	41.17	4.27
		a	da	15.09	15.05	-0.04	15.06	-0.03	14.79	-0.3	15.42	0.33	15.23	0.14	15.35	0.26	15.39	0.3	15.17	0.08
		b	db	15.42	15.46	0.04	15.43	0.01	15.8	0.38	15.85	0.43	15.73	0.31	16.01	0.59	16.72	1.3	16.97	1.55
		dE	0	1.01	1.08	2.34	1.80	2.11	2.87	3.83	4.54									
QUV-A,	Gloss	TBD (%)	10	10	10	10.5	10.5	11.1	11.3	11	10.4									
D		Gloss Retention	100.00%	100.00%	100.00%	105.00%	105.00%	111.00%	113.00%	110.00%	104.00%									
	Colour	L	dL	36.37	37.26	0.89	37.49	1.12	38.42	2.05	37.91	1.54	38.49	2.12	39.13	2.76	39.7	3.33	40.39	4.02
		a	da	15.99	15.47	-0.52	15.9	-0.09	15.15	-0.84	15.77	-0.22	15.66	-0.33	16.01	0.02	15.93	-0.06	15.49	-0.5
		b	db	15.37	14.77	-0.6	15.13	-0.24	15.01	-0.36	15.05	-0.32	15.15	-0.22	15.57	0.2	15.86	0.49	16.12	0.75
		dE	0	1.19	1.15	2.24	1.59	2.16	2.77	3.37	4.12									



## PHOTOGRAPHS FOR REFERENCE

