



Physical Properties Test Report

Link Test Report: 230368-01
Test Description: SAE J661-2012
Purpose of Test: To Evaluate the Characteristics of Brake Materials
Material Identification: RZZW ZWA
Test Date: 07/13/2023 - 07/14/2023

Requested By

**Rizhao Zhongwei Automobile Part Co., Ltd.
Han Songhua**

Tested By

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Test Number					
Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	
230368-01-A	230368-01-B	230368-01-C	230368-01-D	230368-01-E	

Manufacturer:
Rizhao Zhongwei
Automobile Part Co., Ltd.
Material:
RZZW ZWA

Initial Baseline					
Application	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
1	0.283	0.250	0.250	0.233	0.288
20	0.331	0.293	0.275	0.293	0.339

Normal **0.387** **F**

First Fade					
Temp (°F)	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
200.0	0.315	0.285	0.270	0.285	0.317
550.0	0.344	0.335	0.268	0.292	0.345
(or Temp @ 10min)					

Hot **0.345** **E**

First Recovery							
Temp (°F)	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Average	Norm/Hot
500.0	0.310	0.334	0.274	0.293	0.323	0.307	
400.0	0.312	0.325	0.281	0.291	0.310	0.304	Hot
300.0	0.325	0.337	0.290	0.301	0.311	0.313	Hot
200.0	0.327	0.343	0.287	0.294	0.328	0.316	

Wear					
Application	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
1	0.346	0.353	0.312	0.304	0.334
100	0.403	0.394	0.360	0.382	0.406

Second Fade							Max Var.		
Temp (°F)	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Average	< Average	Norm/Hot	% Var
200.0	0.360	0.370	0.332	0.362	0.368	0.358	0.026	Normal	7%
250.0	0.390	0.395	0.367	0.407	0.403	0.392	0.025	Normal	6%
300.0	0.405	0.402	0.393	0.399	0.417	0.403	0.010	Normal	3%
350.0	0.416	0.402	0.389	0.402	0.406	0.403	0.014	-	3%
400.0	0.412	0.390	0.379	0.399	0.397	0.395	0.016	Normal	4%
450.0	0.394	0.386	0.360	0.372	0.392	0.381	0.021	Hot	5%
500.0	0.368	0.368	0.357	0.366	0.379	0.368	0.011	Hot	3%
550.0	0.370	0.361	0.345	0.370	0.372	0.364	0.019	Hot	5%
600.0	0.328	0.364	0.332	0.336	0.350	0.342	0.014	Hot	4%
650.0	0.329	0.348	0.315	0.307	0.342	0.328	0.021	Hot	6%
(or Temp @ 10min)									

Second Recovery							Max Var.		
Temp (°F)	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Average	< Average	Norm/Hot	% Var
600.0	0.323	0.335	0.317	0.317	0.314	0.321	0.007	-	2%
500.0	0.340	0.348	0.339	0.338	0.329	0.339	0.010	Hot	3%
400.0	0.349	0.353	0.346	0.355	0.351	0.351	0.005	Hot	1%
300.0	0.353	0.372	0.341	0.368	0.355	0.358	0.017	Hot	5%
200.0	0.363	0.376	0.346	0.388	0.357	0.366	0.020	-	5%

Final Baseline					
Application	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
1	0.358	0.384	0.366	0.388	0.369
20	0.418	0.409	0.408	0.414	0.403

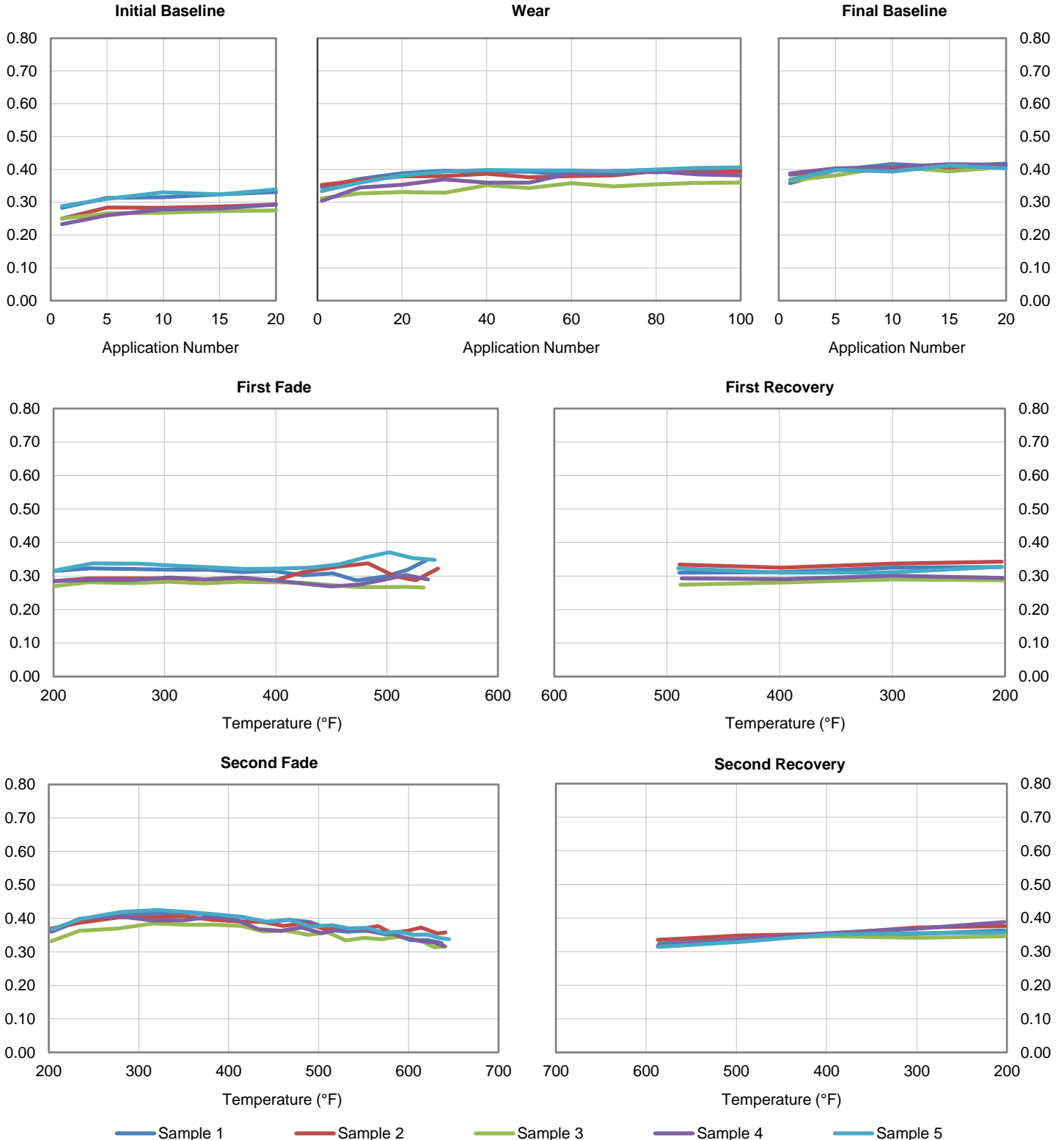


Manufacturer: Rizhao Zhongwei Automobile Part Co., Ltd.
Material: RZZW ZWA
Test Pressure: 150.0 psi

Test Dates: 07/13/2023 - 07/14/2023

Summary of 5 Samples

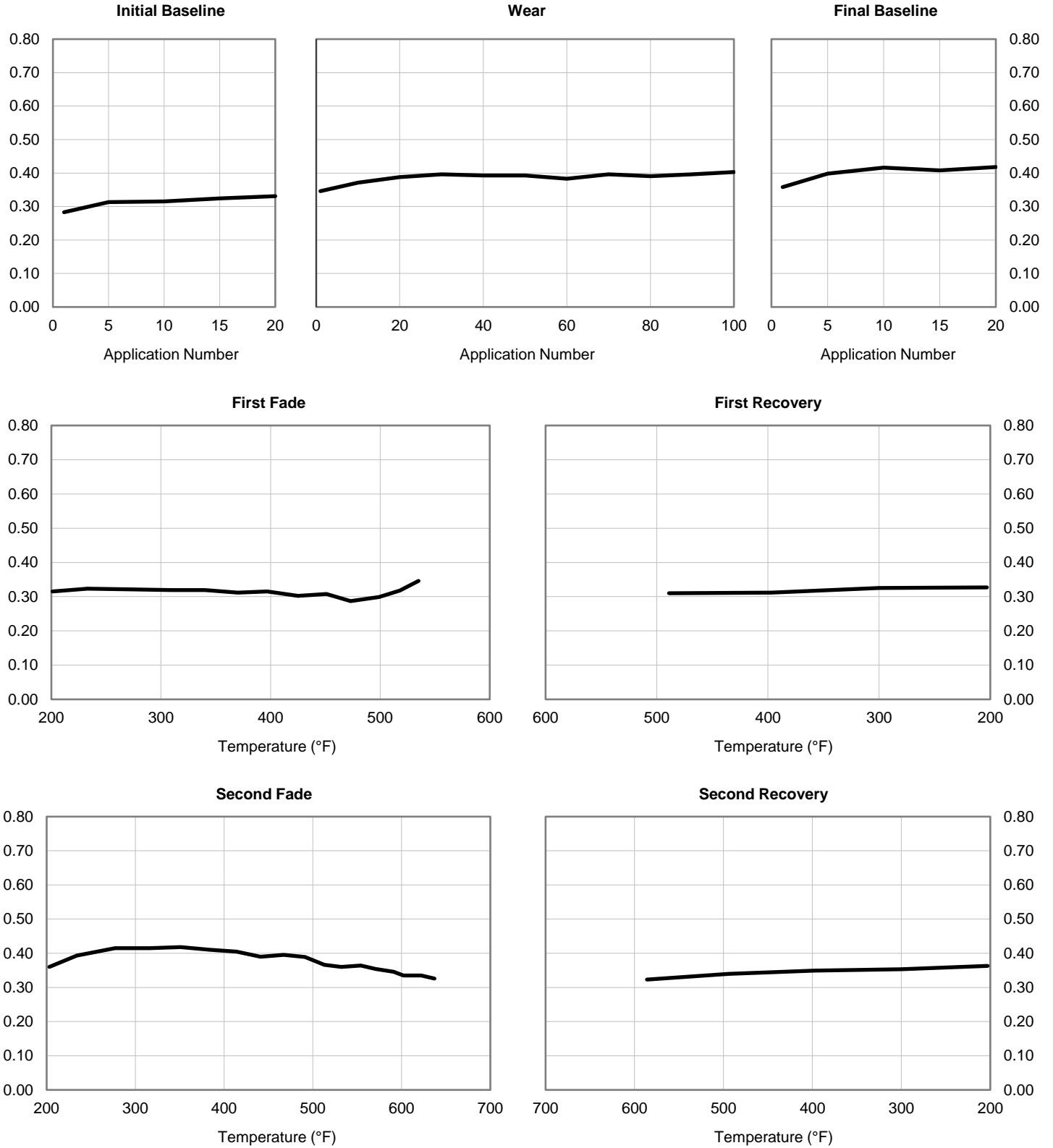
Coefficient of Friction





7/13/2023
230368-01-A
Sample 1 of 5

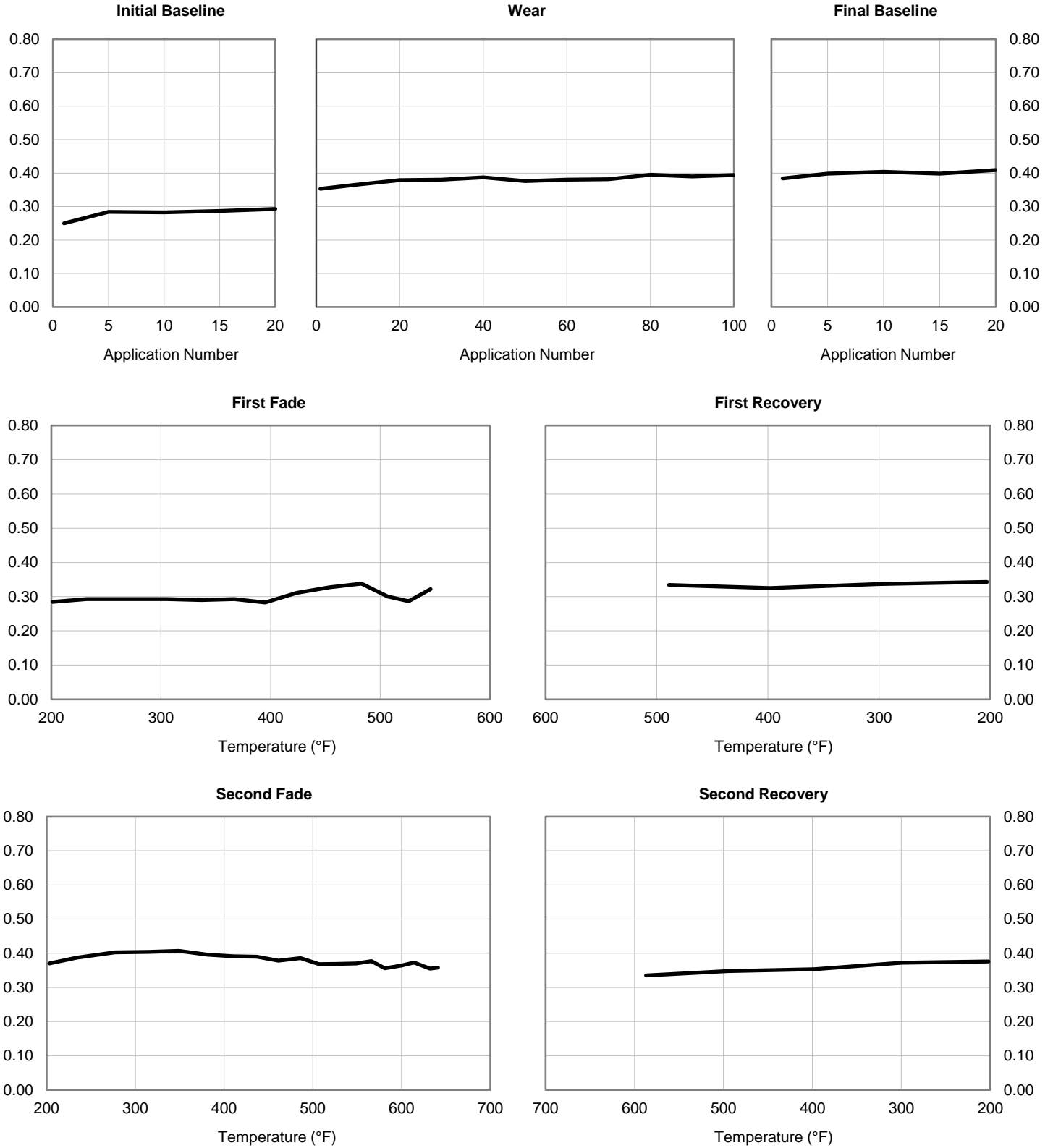
Coefficient of Friction





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230368-01-B
Sample 2 of 5

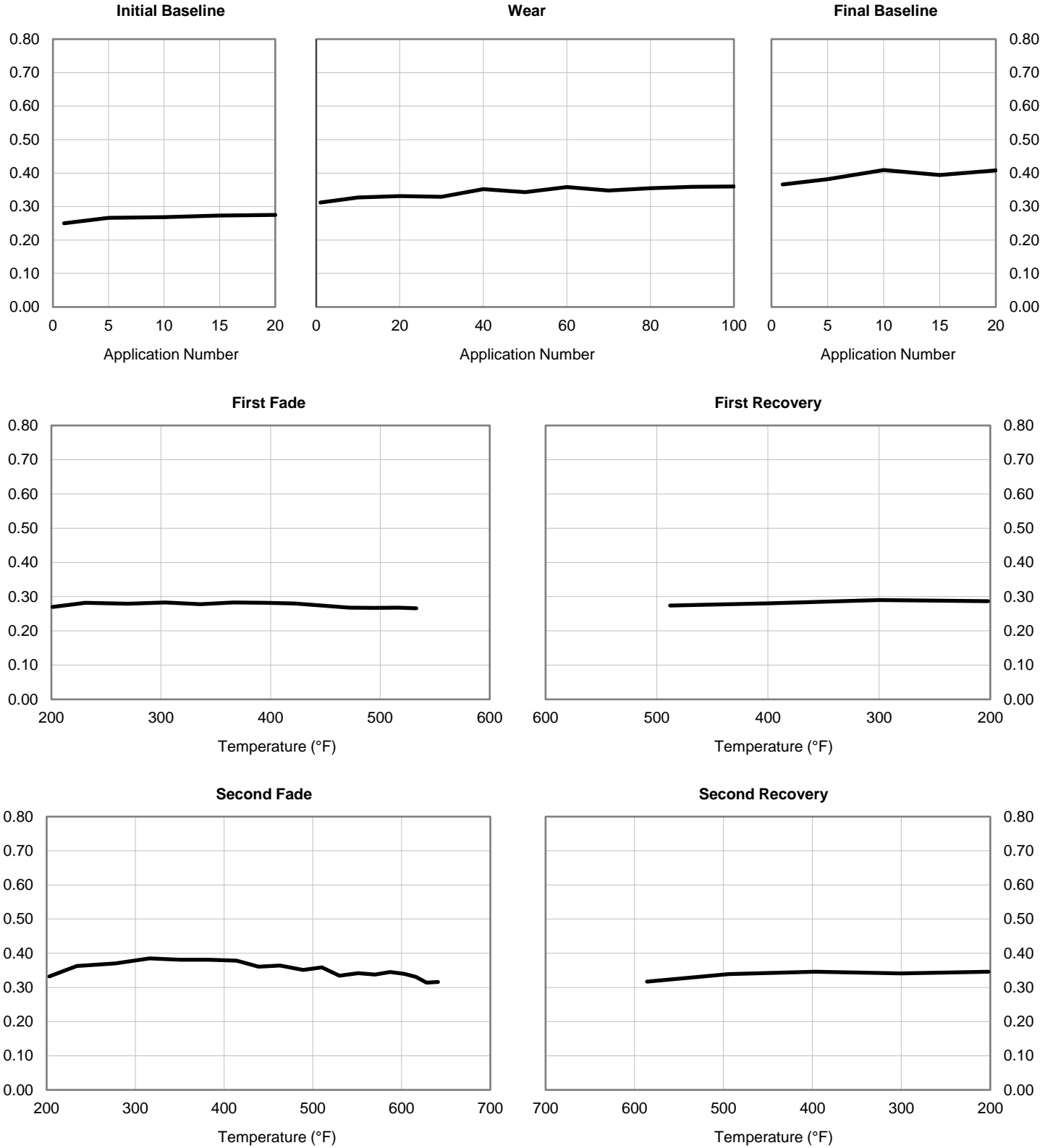
Coefficient of Friction





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230368-01-C
Sample 3 of 5

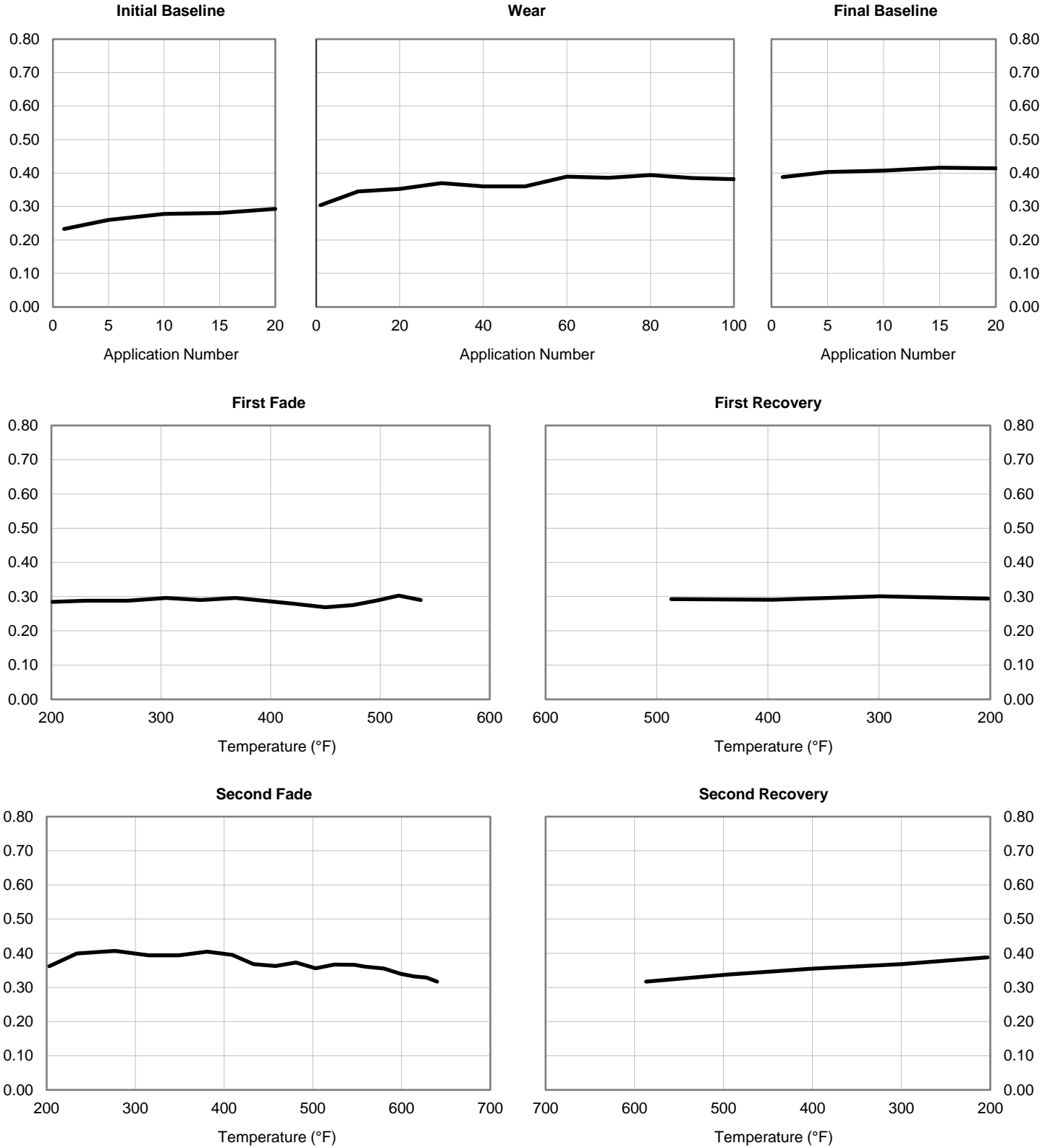
Coefficient of Friction





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230368-01-D
Sample 4 of 5

Coefficient of Friction





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230368-01-E
Sample 5 of 5

Coefficient of Friction

