



Physical Properties Test Report

Link Test Report: 250799-01
Test Description: SAE J661-2021

Purpose of Test: To Evaluate the Characteristics of Brake Materials

Material Identification: YN F1-0-1
Test Date: 10/10/2025 - 10/11/2025

Requested By:

YANCHENG YANITIGER AUTO PARTS CO.,LIMITED
Yan Liang

Tested By

Testing Coordination and Facility

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SAE J661-2021

Test Information

Customer Name	YANCHENG YANITIGER AUTO PARTS CO.,LIMITED
Requestor	Yan Liang
Program Number	J661noinsp.chp
Test Coordinator	Fiona Song
Test Equipment	Chase Machine
Test Dates	10/10/2025 - 10/11/2025
Datalogger	v1.0.23
Template Version	1.83

Setup Details

Sample Material	YN F1-0-1
Sample Size	1 inch x 1 inch
Sample Manufacturer	YANCHENG YANITIGER AUTO PARTS CO.,LIMITED
Test Pressure	150.0 psi

Sample Test Summary

Normal Friction Coefficient	0.563	Pass
Normal Friction Class	H	
Hot Friction Coefficient	0.571	Pass
Hot Friction Class	H	
Minimum Bold Coefficient	0.486	Pass
Max Variation Below Average for Bold Readings	0.046	Pass
Max % Variation for Bold Readings	7.89%	Pass

Pass / Fail

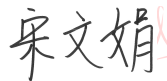
Pass

Comments:

N/A

Created by: Fiona Song

Signature:



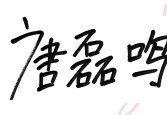
日期: 2025.10.11
10:39:46 +08'00'

Date

10/11/2025

Reviewed by: Duel Tang

Signature:



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+08'00'

Date

10/11/2025



Test Number

Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
250799-01-A	250799-01-B	250799-01-C	250799-01-D	250799-01-E

Manufacturer:
YANCHENG YANITIGER AUTO PARTS CO.,
Material:
YN F1-0-1

Initial Baseline

Application	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
1	0.441	0.408	0.412	0.398	0.417
20	0.497	0.499	0.472	0.504	0.469

Normal **0.563** **H**

First Fade

Temp (°F)	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
200.0	0.474	0.467	0.464	0.469	0.454
550.0	0.561	0.576	0.541	0.562	0.549

Hot **0.571** **H**

(or Temp @ 10min)

First Recovery

Temp (°F)	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Average	Norm/Hot
500.0	0.546	0.579	0.594	0.546	0.598	0.573	
400.0	0.596	0.594	0.594	0.562	0.581	0.585	Hot
300.0	0.560	0.573	0.586	0.562	0.576	0.571	Hot
200.0	0.522	0.534	0.531	0.528	0.544	0.532	

Wear

Application	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
1	0.548	0.527	0.561	0.571	0.570
100	0.604	0.598	0.582	0.603	0.602

Second Fade

Temp (°F)	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Average	Max Var. < Average	Norm/Hot	% Var
200.0	0.489	0.495	0.486	0.497	0.515	0.496	0.010	Normal	2%
250.0	0.563	0.571	0.557	0.576	0.578	0.569	0.012	Normal	2%
300.0	0.575	0.593	0.573	0.606	0.589	0.587	0.014	Normal	2%
350.0	0.586	0.588	0.590	0.604	0.594	0.592	0.006	-	1%
400.0	0.593	0.601	0.585	0.606	0.617	0.600	0.015	Normal	3%
450.0	0.610	0.608	0.605	0.619	0.634	0.615	0.010	Hot	2%
500.0	0.624	0.645	0.610	0.617	0.645	0.628	0.018	Hot	3%
550.0	0.610	0.607	0.573	0.579	0.535	0.581	0.046	Hot	8%
600.0	0.481	0.467	0.461	0.474	0.504	0.477	0.016	Hot	3%
650.0	0.472	0.483	0.471	0.469	0.509	0.481	0.012	Hot	2%

(or Temp @ 10min)

Second Recovery

Temp (°F)	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Average	Max Var. < Average	Norm/Hot	% Var
600.0	0.571	0.582	0.569	0.589	0.581	0.578	0.009	-	2%
500.0	0.619	0.643	0.616	0.603	0.590	0.614	0.024	Hot	4%
400.0	0.611	0.616	0.589	0.598	0.583	0.599	0.016	Hot	3%
300.0	0.551	0.566	0.571	0.561	0.554	0.561	0.010	Hot	2%
200.0	0.524	0.529	0.531	0.527	0.535	0.529	0.005	-	1%

Final Baseline

Application	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
1	0.528	0.541	0.528	0.529	0.523
20	0.524	0.564	0.548	0.540	0.540

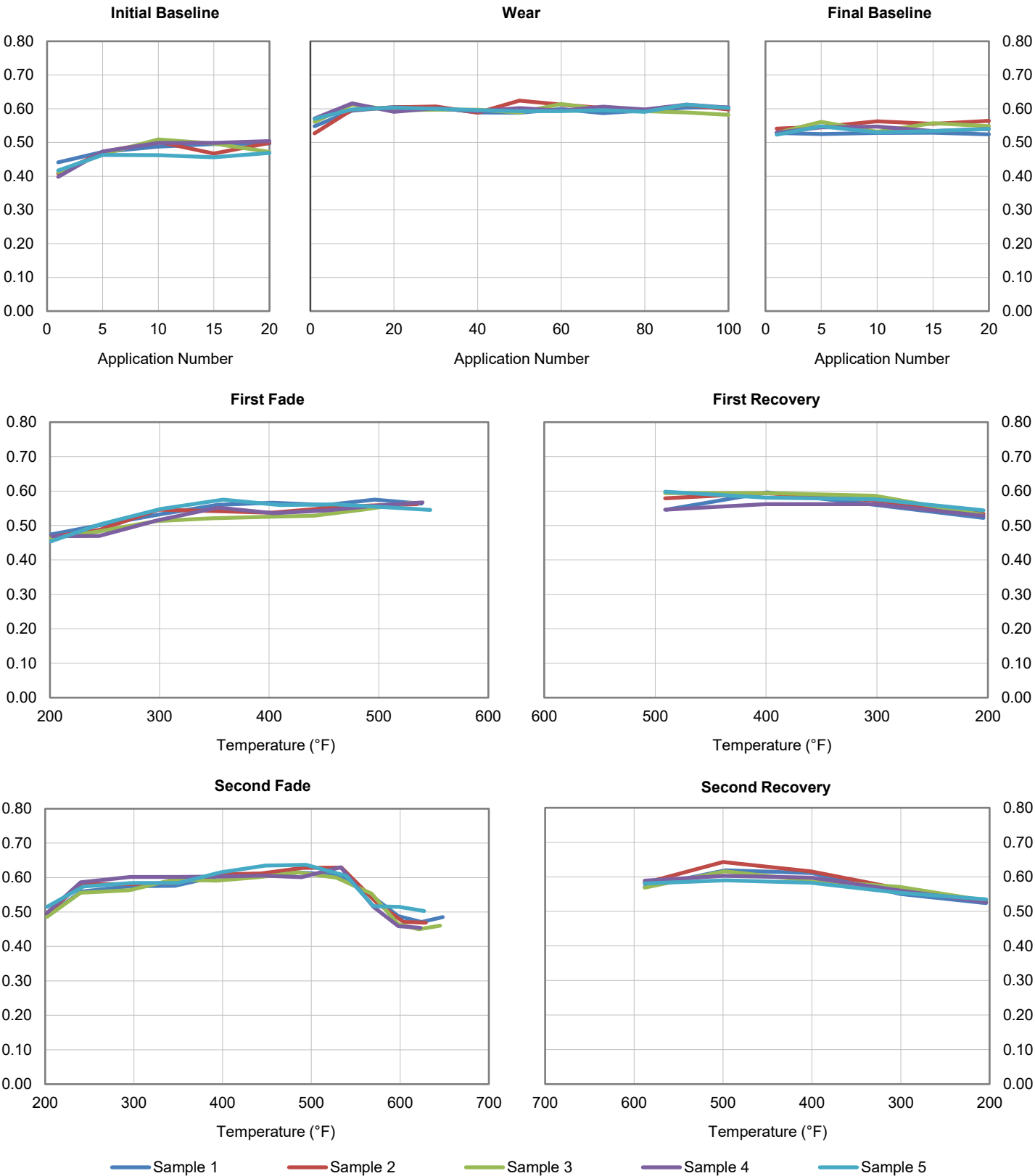


Manufacturer: YANCHENG YANITIGER AUTO PARTS CO.,LIMITED
Material: YN F1-0-1
Test Pressure: 150.0 psi

Test Dates: 10/10/2025 - 10/11/2025

Summary of 5 Samples

Coefficient of Friction



Normal	0.555	H
Hot	0.573	H

10/10/2025
250799-01-A
Sample 1 of 5

Wear

	Initial	Final	Loss	Loss / %
Weight (gr)	6.92	6.25	0.67	9.68
Thickness (inch)	0.234	0.216	0.018	7.69

Baseline

	Initial		Final	
Event	Force (lb)	μ	Force (lb)	μ
1	65.3	0.441	79.9	0.528
5	71.8	0.472	78.7	0.525
10	72.0	0.488	79.2	0.528
15	72.7	0.495	80.3	0.529
20	75.0	0.497	80.0	0.524

Wear

Event	Force (lb)	μ
1	81.7	0.548
10	88.6	0.594
20	90.8	0.605
30	91.5	0.604
40	88.7	0.589
50	87.9	0.588
60	90.1	0.599
70	88.7	0.587
80	90.0	0.595
90	91.4	0.603
100	90.5	0.604

First Fade

[illegible]

Second Fade

[illegible]

First Recovery

Event	Force (lb)	μ	Temp ($^{\circ}\text{F}$)
1	82.0	0.546	490.0
2	88.2	0.596	399.0
3	82.8	0.560	302.0
4	77.3	0.522	204.0

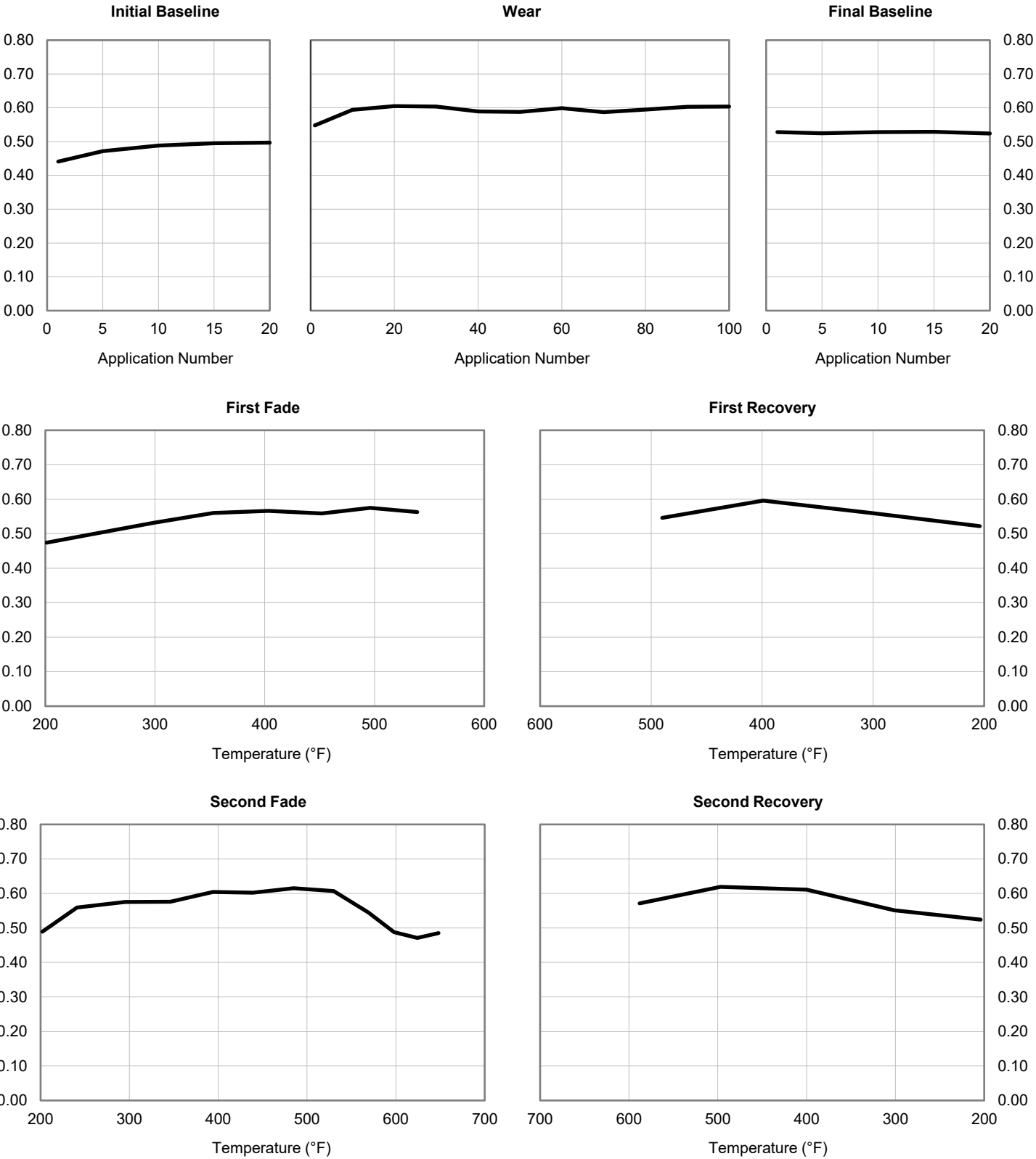
Second Recovery

Event	Force (lb)	μ	Temp (°F)
1	86.9	0.571	588.0
2	93.2	0.619	497.0
3	91.0	0.611	400.0
4	83.9	0.551	301.0
5	80.0	0.524	204.0



10/10/2025
250799-01-A
Sample 1 of 5

Coefficient of Friction



Normal	0.565	H
Hot	0.580	H

10/10/2025
250799-01-B
Sample 2 of 5

Wear

	Initial	Final	Loss	Loss / %
Weight (gr)	6.78	6.10	0.68	10.03
Thickness (inch)	0.235	0.215	0.020	8.53

Baseline

	Initial		Final	
Event	Force (lb)	μ	Force (lb)	μ
1	60.6	0.408	81.7	0.541
5	70.7	0.472	82.7	0.546
10	75.0	0.502	85.6	0.563
15	68.9	0.467	83.5	0.555
20	73.9	0.499	85.4	0.564

Wear

Event	Force (lb)	μ
1	80.3	0.527
10	90.1	0.597
20	90.8	0.604
30	91.4	0.607
40	89.3	0.588
50	93.9	0.624
60	91.0	0.612
70	91.4	0.602
80	90.3	0.592
90	91.3	0.611
100	91.3	0.598

First Fade

[illegible]

Second Fade

[illegible]

First Recovery

Event	Force (lb)	μ	Temp (°F)
1	85.9	0.579	491.0
2	88.7	0.594	400.0
3	84.1	0.573	302.0
4	81.2	0.534	204.0

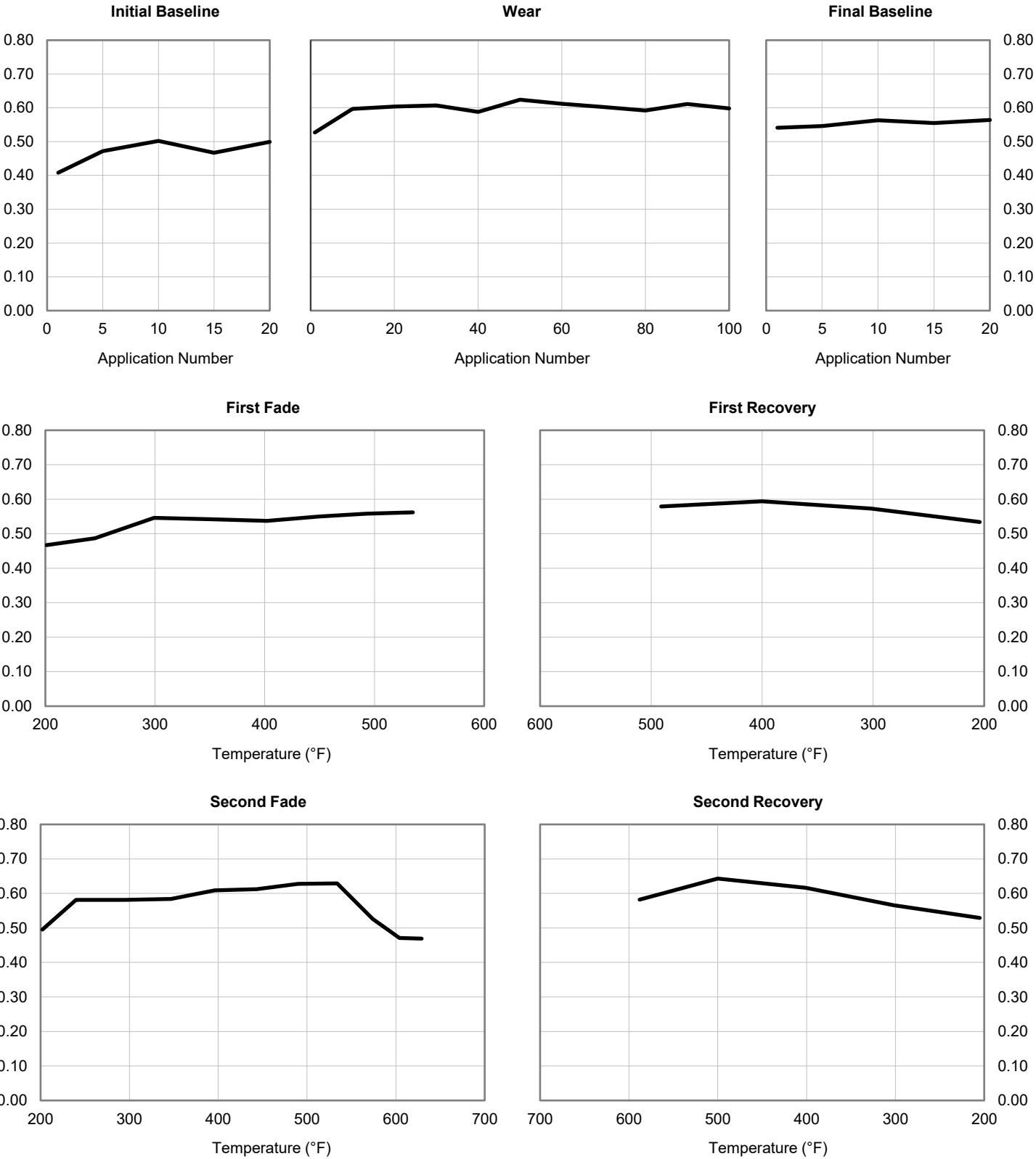
Second Recovery

Event	Force (lb)	μ	Temp (°F)
1	88.8	0.582	588.0
2	97.2	0.643	500.0
3	92.6	0.616	401.0
4	83.8	0.566	302.0
5	80.9	0.529	205.0



10/10/2025
250799-01-B
Sample 2 of 5

Coefficient of Friction



Normal	0.550	H
Hot	0.568	H

10/10/2025
250799-01-C
Sample 3 of 5

Wear

	Initial	Final	Loss	Loss / %
Weight (gr)	6.92	6.24	0.68	9.83
Thickness (inch)	0.236	0.218	0.018	7.43

Baseline

	Initial		Final	
Event	Force (lb)	μ	Force (lb)	μ
1	62.4	0.412	79.5	0.528
5	69.2	0.465	84.6	0.561
10	76.9	0.509	80.9	0.532
15	75.7	0.497	82.1	0.557
20	71.5	0.472	82.8	0.548

Wear

Event	Force (lb)	μ
1	85.0	0.561
10	90.4	0.612
20	90.7	0.596
30	89.9	0.597
40	90.9	0.597
50	89.7	0.589
60	92.8	0.614
70	89.4	0.598
80	88.2	0.593
90	89.0	0.589
100	86.7	0.582

First Fade

[illegible]

Second Fade

[illegible]

First Recovery

Event	Force (lb)	μ	Temp (°F)
1	88.2	0.594	491.0
2	88.4	0.594	399.0
3	87.0	0.586	302.0
4	79.6	0.531	205.0

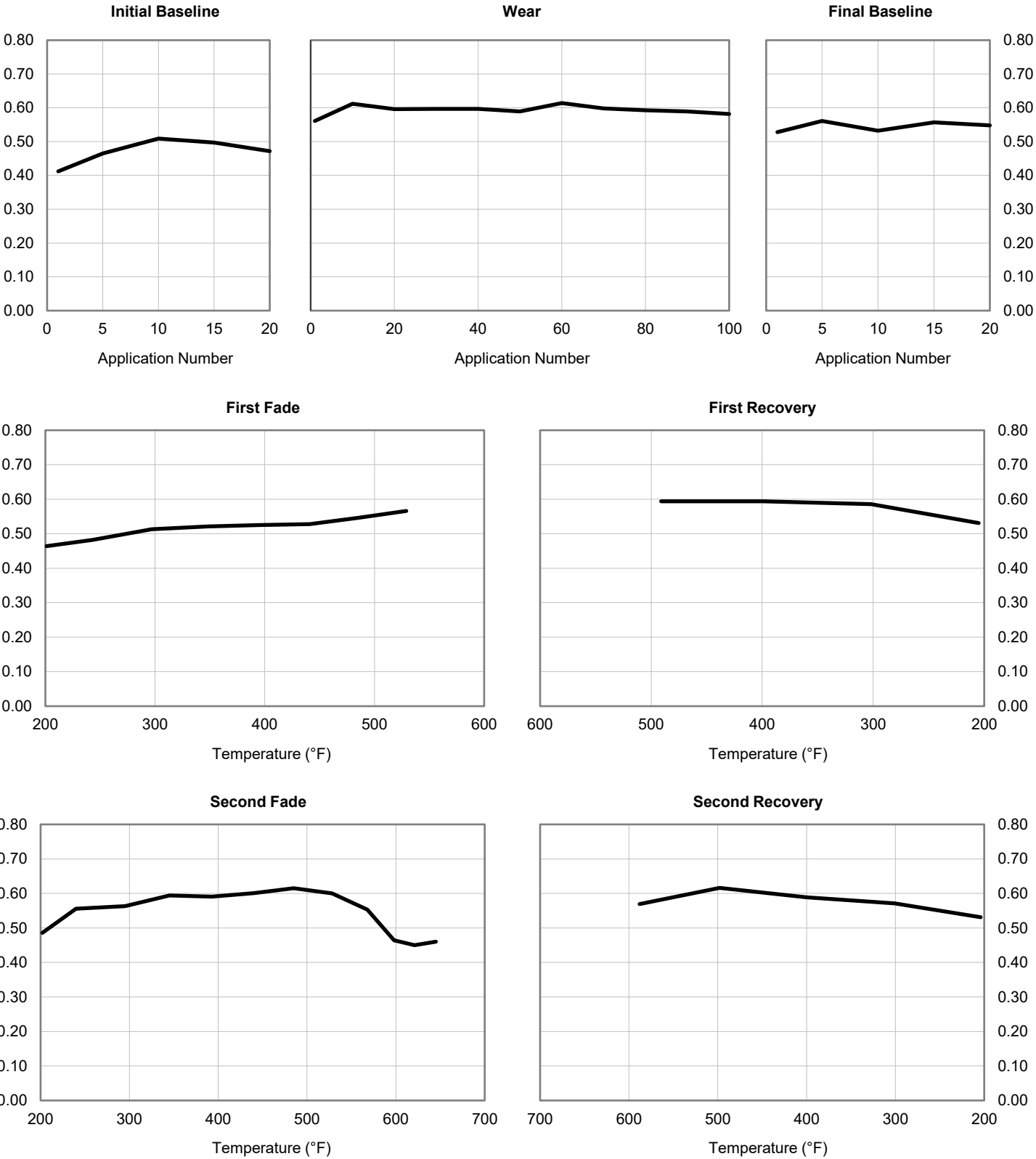
Second Recovery

Event	Force (lb)	μ	Temp (°F)
1	86.5	0.569	588.0
2	93.0	0.616	498.0
3	89.9	0.589	400.0
4	85.7	0.571	301.0
5	79.1	0.531	204.0



10/10/2025
250799-01-C
Sample 3 of 5

Coefficient of Friction



10/10/2025
250799-01-D
Sample 4 of 5

Wear

	Initial	Final	Loss	Loss / %
Weight (gr)	7.05	6.37	0.68	9.65
Thickness (inch)	0.234	0.215	0.020	8.33

Baseline

	Initial		Final	
Event	Force (lb)	μ	Force (lb)	μ
1	59.5	0.398	80.2	0.529
5	69.8	0.473	81.6	0.545
10	75.4	0.499	83.3	0.547
15	75.1	0.499	80.8	0.534
20	75.7	0.504	79.8	0.540

Wear

Event	Force (lb)	μ
1	85.8	0.571
10	92.2	0.616
20	89.1	0.591
30	89.8	0.601
40	89.2	0.592
50	91.1	0.602
60	89.7	0.594
70	91.9	0.606
80	91.0	0.598
90	91.8	0.612
100	91.4	0.603

First Fade

[illegible]

Second Fade

[illegible]

First Recovery

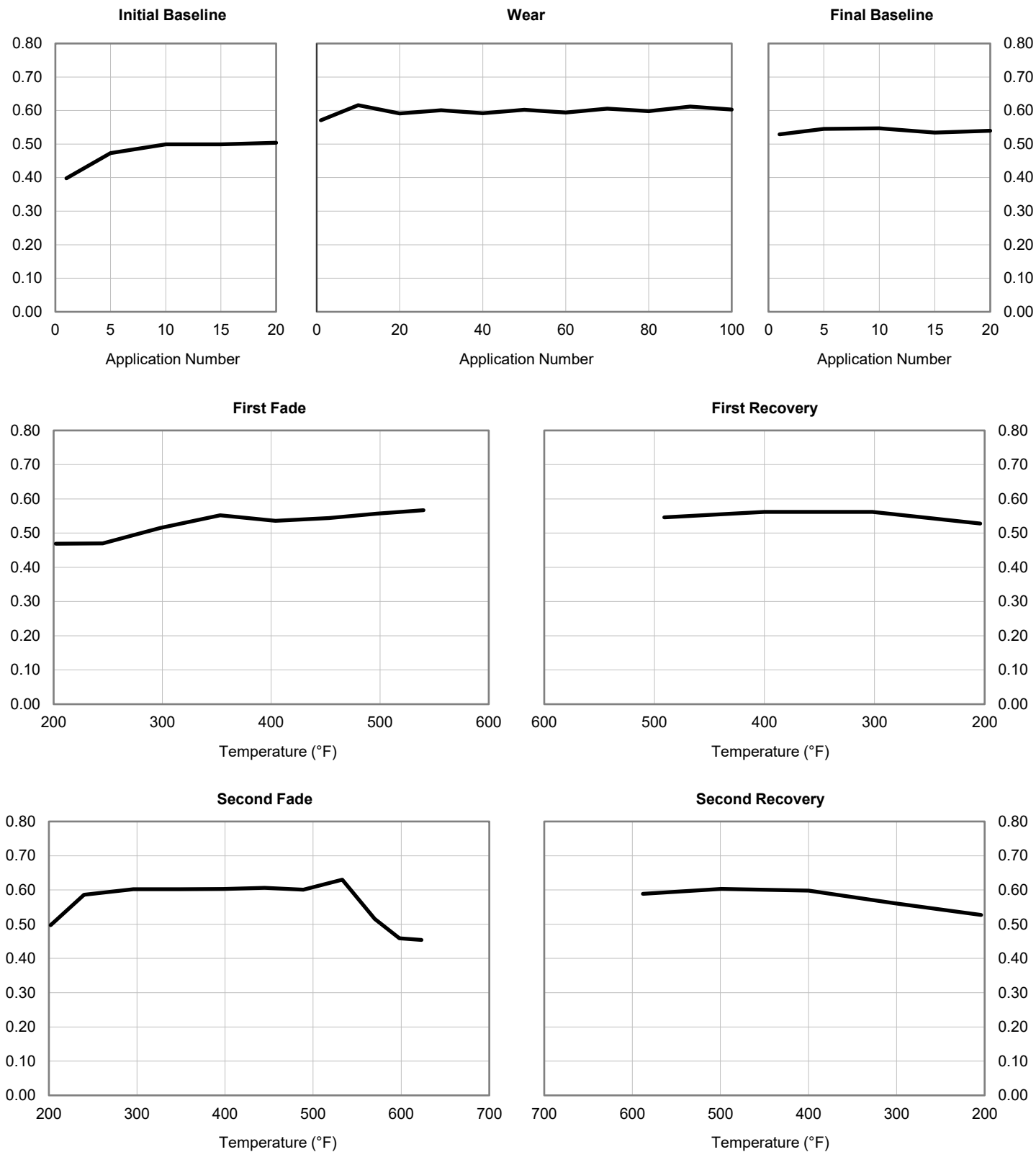
Event	Force (lb)	μ	Temp ($^{\circ}\text{F}$)
1	80.7	0.546	491.0
2	85.4	0.562	400.0
3	83.1	0.562	302.0
4	77.2	0.528	204.0

Second Recovery

Event	Force (lb)	μ	Temp (°F)
1	87.4	0.589	588.0
2	89.0	0.603	499.0
3	90.0	0.598	400.0
4	85.0	0.561	302.0
5	79.5	0.527	204.0

10/10/2025
250799-01-D
Sample 4 of 5

Coefficient of Friction





10/11/2025
250799-01-E
Sample 5 of 5

Coefficient of Friction

