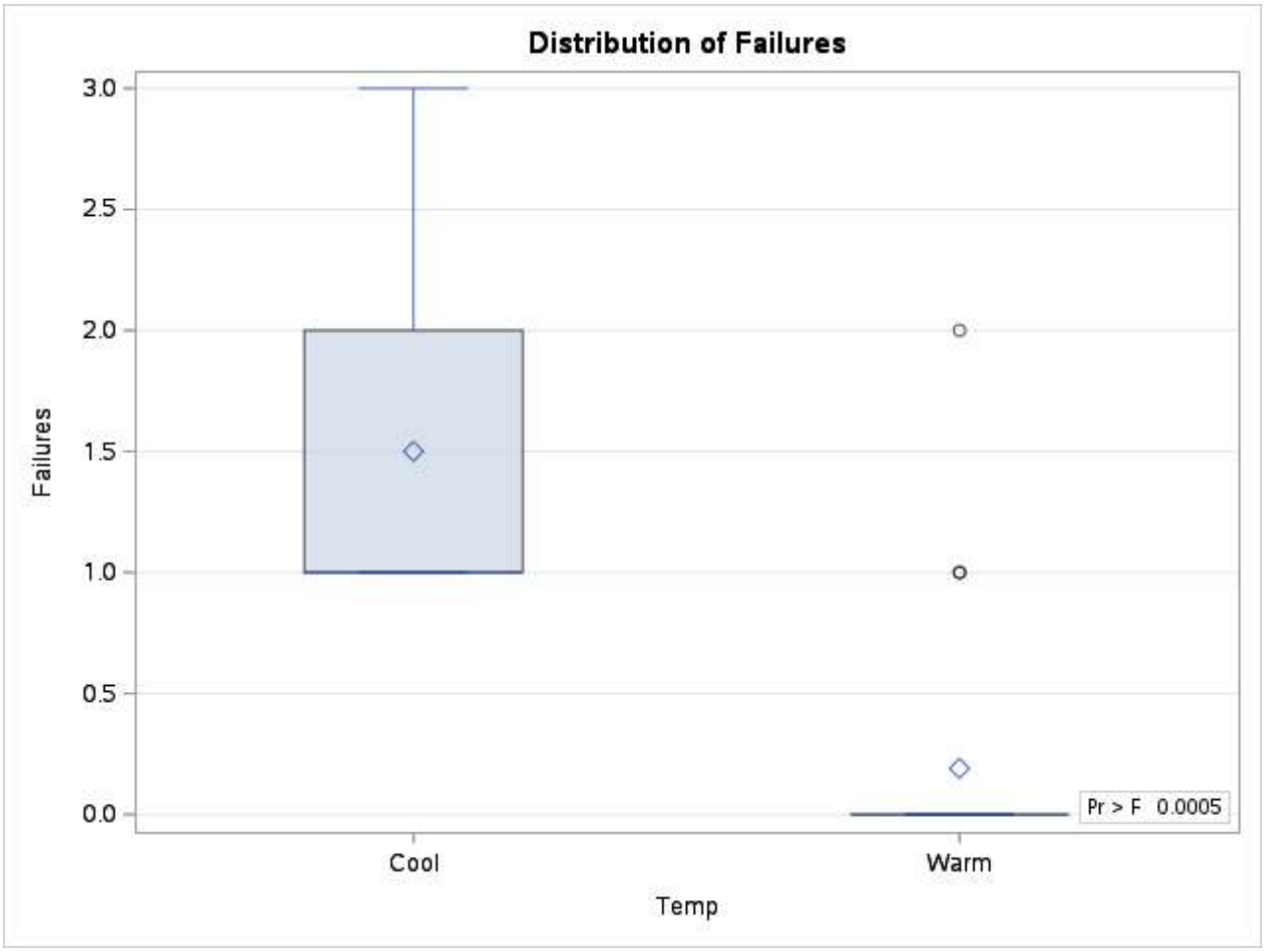
Kruskal-Wallis Test for Failures by Temperature

The NPAR1WAY Procedure

Analysis of Variance for Variable Failures Classified by Variable Temp		
Temp	N	Mean
Cool	4	1.500000
Warm	21	0.190476

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Among	1	5.761905	5.761905	16.0867	0.0005
Within	23	8.238095	0.358178		
Average scores were used for ties.					



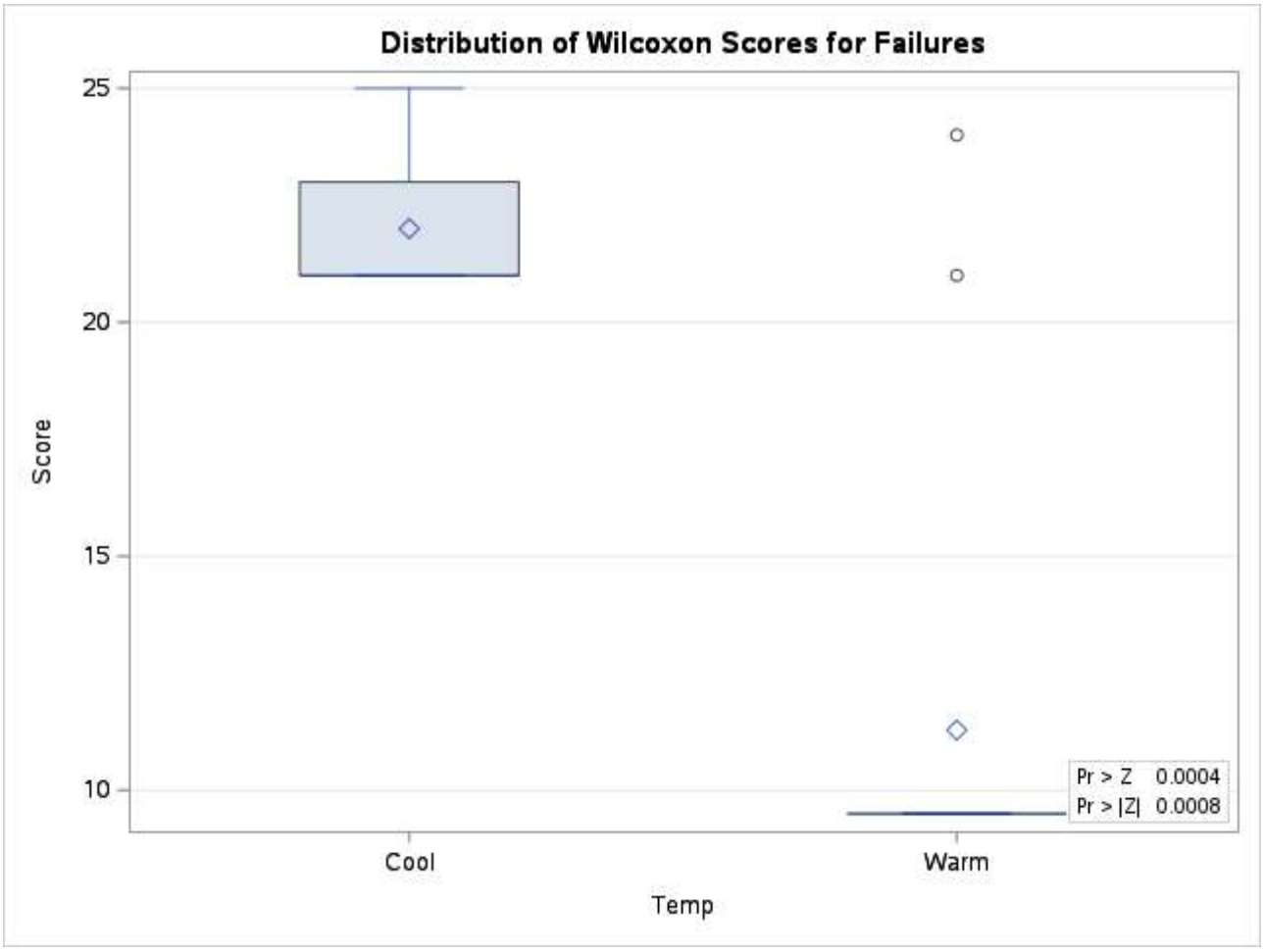
Kruskal-Wallis Test for Failures by Temperature

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Failures Classified by Variable Temp					
Temp	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
Cool	4	88.0	52.0	10.619322	22.000000
Warm	21	237.0	273.0	10.619322	11.285714
Average scores were used for ties.					

Wilcoxon Two-Sample Test					
				t Approximation	
Statistic	Z	Pr > Z	Pr > |Z|	Pr > Z	Pr > |Z|
88.0000	3.3430	0.0004	0.0008	0.0014	0.0027
Z includes a continuity correction of 0.5.					

Kruskal-Wallis Test		
Chi-Square	DF	Pr > ChiSq
11.4924	1	0.0007



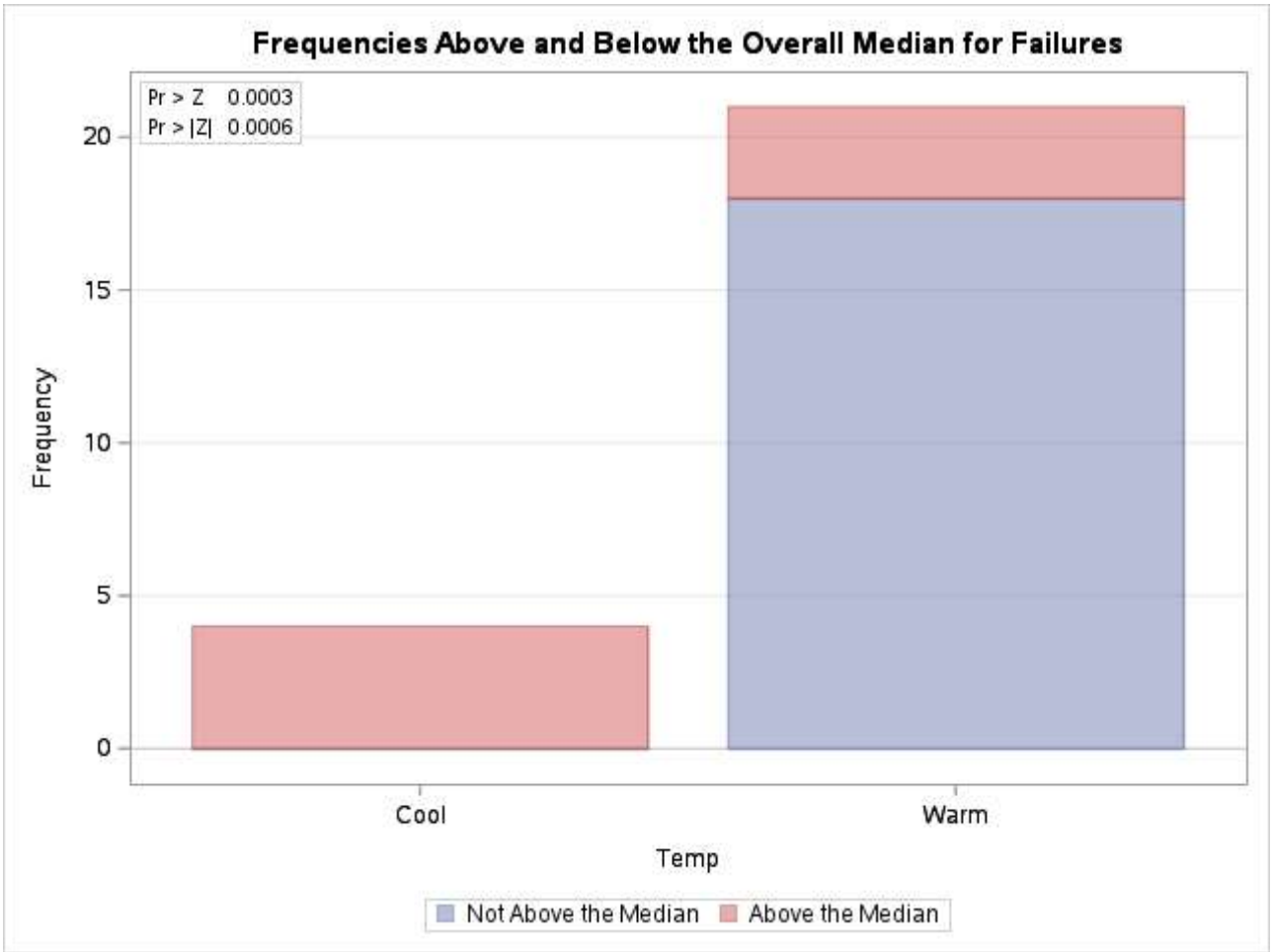
Kruskal-Wallis Test for Failures by Temperature

The NPAR1WAY Procedure

Median Scores (Number of Points Above Median) for Variable Failures Classified by Variable Temp					
Temp	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
Cool	4	4.0	1.920	0.606667	1.000000
Warm	21	8.0	10.080	0.606667	0.380952
Average scores were used for ties.					

Median Two-Sample Test			
Statistic	Z	Pr > Z	Pr > |Z|
4.0000	3.4286	0.0003	0.0006

Median One-Way Analysis		
Chi-Square	DF	Pr > ChiSq
11.7551	1	0.0006



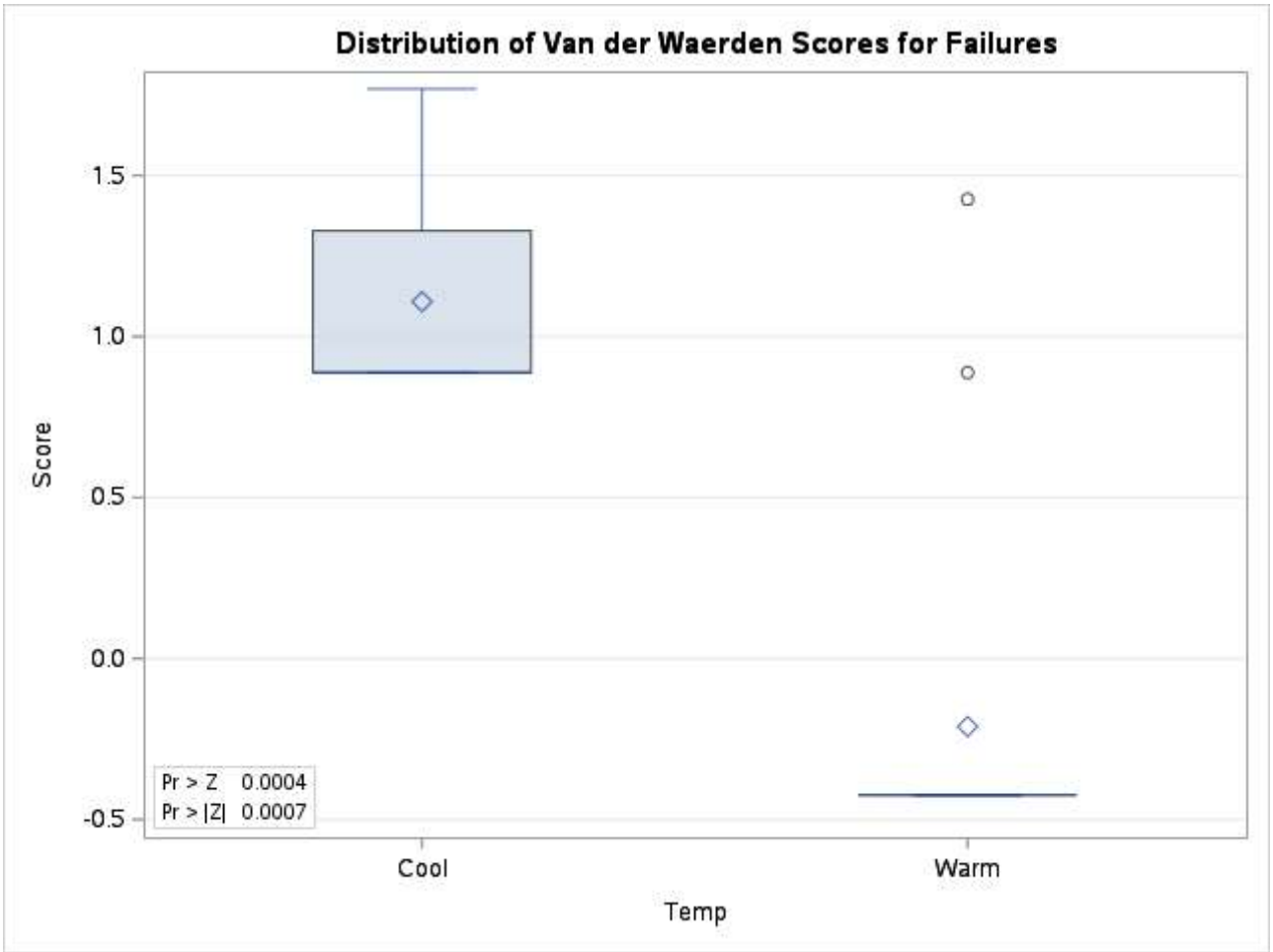
Kruskal-Wallis Test for Failures by Temperature

The NPAR1WAY Procedure

Van der Waerden Scores (Normal) for Variable Failures Classified by Variable Temp					
Temp	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
Cool	4	4.432427	0.0	1.314480	1.108107
Warm	21	-4.432427	0.0	1.314480	-0.211068
Average scores were used for ties.					

Van der Waerden Two-Sample Test			
Statistic	Z	Pr > Z	Pr > |Z|
4.4324	3.3720	0.0004	0.0007

Van der Waerden One-Way Analysis		
Chi-Square	DF	Pr > ChiSq
11.3704	1	0.0007



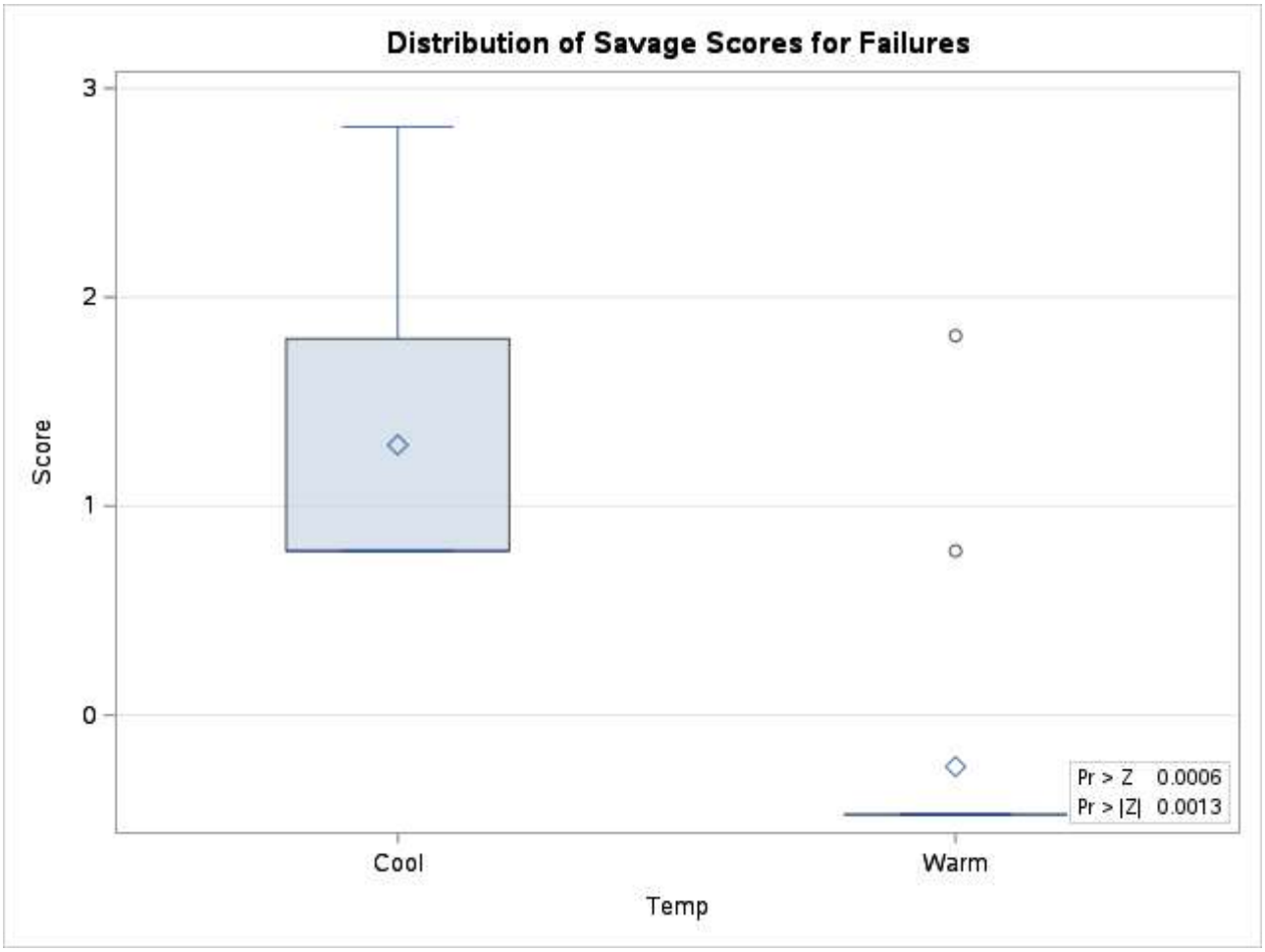
Kruskal-Wallis Test for Failures by Temperature

The NPAR1WAY Procedure

Savage Scores (Exponential) for Variable Failures Classified by Variable Temp					
Temp	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
Cool	4	5.173833	0.0	1.604484	1.293458
Warm	21	-5.173833	0.0	1.604484	-0.246373
Average scores were used for ties.					

Savage Two-Sample Test			
Statistic	Z	Pr > Z	Pr > |Z|
5.1738	3.2246	0.0006	0.0013

Savage One-Way Analysis		
Chi-Square	DF	Pr > ChiSq
10.3981	1	0.0013

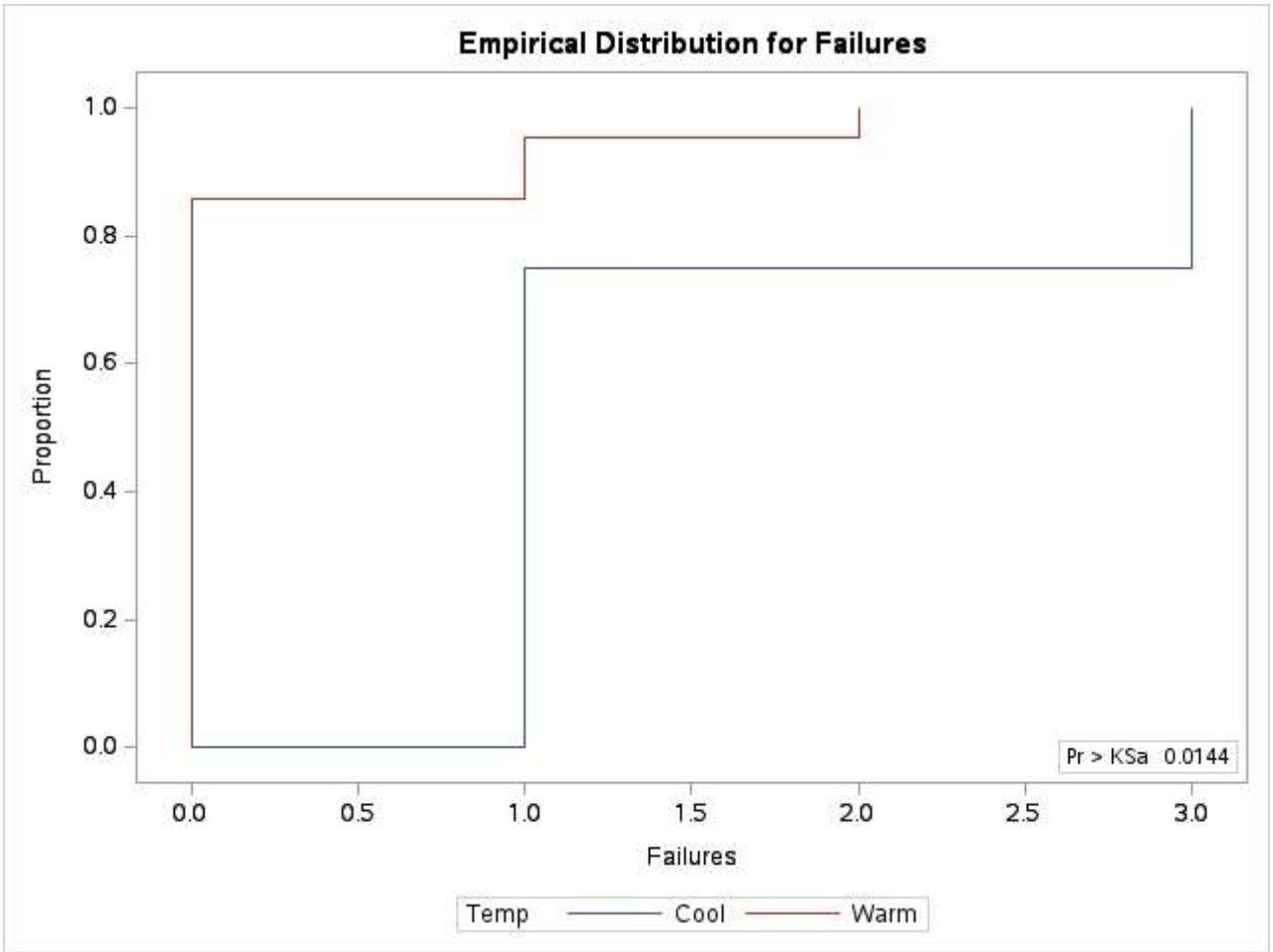


Kruskal-Wallis Test for Failures by Temperature

The NPAR1WAY Procedure

Kolmogorov-Smirnov Test for Variable Failures Classified by Variable Temp			
Temp	N	EDF at Maximum	Deviation from Mean at Maximum
Cool	4	0.000000	-1.440000
Warm	21	0.857143	0.628468
Total	25	0.720000	
Maximum Deviation Occurred at Observation 22			
Value of Failures at Maximum = 0.0			

Kolmogorov-Smirnov Two-Sample Test (Asymptotic)			
KS	0.314234	D	0.857143
KSa	1.571169	Pr > KSa	0.0144



Cramer-von Mises Test for Variable Failures Classified by Variable Temp		
Temp	N	Summed Deviation from Mean
Cool	4	1.523168
Warm	21	0.290127

Cramer-von Mises Statistics (Asymptotic)			
CM	0.072532	CMa	1.813295

Kuiper Test for Variable Failures Classified by Variable Temp		
Temp	N	Deviation from Mean
Cool	4	0.000000
Warm	21	0.857143

Kuiper Two-Sample Test (Asymptotic)					
K	0.857143	Ka	1.571169	Pr > Ka	0.1273