



Test Report

15 degree regular length

KUIU
SL
13 Nov 2013KUIU
1920 N Lincoln St. # 101
Dixon, CA
USAArrived: 31 Oct 2013
Completed: 13 Nov 2013Sample Description: Plumage
Shipped By: FedEx
Filling Label:
Sample Identification: 15 degree regular length, color grey with light grey accents

Thermal Insulation Data and Temperature Ratings for Sleeping Bags

Bag	Bag Weight	Insulation Value (clo) ^a	EN 13537 Temperature Ratings ^b		
			T comfort	T limit	T extreme
15 degree regular length, color all grey, light grey accents (IDFL 13-172676)	1 lb. 15 oz. 0.879 kg	7.28	-3 °C 27 °F	-9 °C 16 °F	-28 °C -18 °F

Note - KUIU designed this bag to match T Limit temperature rating

Temperature Predictions

In section 3, the standard defines three temperatures that designate the range of utility for a sleeping bag system (CEN, 2012).

Comfort temperature (T_{comf}): Lower limit at which a sleeping bag user with a relaxed posture such as lying on the back is globally in thermal equilibrium and not feeling cold (related to standard woman and in standard conditions of use).

Limit temperature (T_{lim}): Lower limit at which a sleeping bag user with a rolled posture is globally in thermal equilibrium and not feeling cold (related to standard man and in standard conditions of use).

Extreme temperature (T_{ext}): Lower extreme temperature where the risk of health damage by hypothermia occurs (related to a standard woman and in standard conditions of use). This is a point of danger that can lead to death.

This analysis represents (within normal testing variances) the test results from the sample(s) submitted. The analysis may not represent the entire lot, batch or production run. In no event shall IDFL be responsible or liable for any direct, indirect, punitive, incidental, special, or consequential damages whatsoever arising out of or connected with the use of, misuse of, or reliance upon such results or analysis. This test report is subject to the Terms and Conditions found at www.idfl.com.



IDFL LABORATORY AND INSTITUTE

IDFL
1455 South 1100 East
Salt Lake City, UT 84105
USA
Tel: +1 801 467 7611
email: info@idfl.comIDFL EUROPE
Zürcherstrasse 282
CH-8500 Frauenfeld
Switzerland
Tel: +41 52 765 1574
email: europe@idfl.comIDFL CHINA
Tonghui Mid-Road 118, Xiaoshan,
Hangzhou Zhejiang 311208
China
Tel: +86 571 8273 6561
email: china@idfl.comIDFL TAIPEI
3F/4F., No. 163, Sec. 2, Wenhua Rd.,
Banqiao District, New Taipei City
Taiwan
Tel: +886 2 2259 1178
email: taiwan@idfl.com

Security # 2450954521 e-Signature

www.idfl.com
Page: 1 of 1
Client: 8858
Sample: 2 of 3



Test Report

DOWN SAMPLE SEWN IN CLOTH BAG 850+ QUIXDOWN

KUIU
SL
14 Nov 2013

KUIU
1920 N Lincoln St. # 101
Dixon, CA
USA

RUSH 3-Day
Arrived: 08 Nov 2013
Completed: 14 Nov 2013

Sample Description: Plumage
Shipped By: FedEx
Filling Label:
Sample Identification: DOWN SAMPLE SEWN IN CLOTH BAG QUIX DOWN



Fill Power

Method	Conditioning	Final
IDFB/Lorch Cylinder (in ³ /oz)	Steam IDFB-10-B	865

Content Analysis IDFB-3 - USA Report Format

Down Cluster	93.9%
Down Fiber	1.1%
Feather Fiber	0.1%
Waterfowl Feathers	4.8%
Broken / Damaged Feathers	0.1%
Quill	0.0%
Landfowl	0.0%
Residue	0.0%
Total	100.0%

This analysis represents (within normal testing variances) the test results from the sample(s) submitted. The analysis may not represent the entire lot, batch or production run. In no event shall IDFL be responsible or liable for any direct, indirect, punitive, incidental, special, or consequential damages whatsoever arising out of or connected with the use of, misuse of, or reliance upon such results or analysis. This test report is subject to the Terms and Conditions found at www.idfl.com.



IDFL LABORATORY AND INSTITUTE

Security # 2460295878 e-Signature

IDFL
1455 South 1100 East
Salt Lake City, UT 84105
USA
Tel: +1 801 467 7611
email: info@idfl.com

IDFL EUROPE
Zürcherstrasse 282
CH-8500 Frauenfeld
Switzerland
Tel: +41 52 765 1574
email: europe@idfl.com

IDFL CHINA
Tonghui Mid-Road 118, Xiaoshan,
Hangzhou Zhejiang 311208
China
Tel: +86 571 8273 6561
email: china@idfl.com

IDFL TAIPEI
3F/4F., No. 163, Sec. 2, Wenhua Rd.,
Banqiao District, New Taipei City
Taiwan
Tel: +886 2 2259 1178
email: taiwan@idfl.com

www.idfl.com
Page: 1 of 2
Client: 8858
Sample: 1 of 1