CTSU Lab freezer Min/Max Temperature Log

Maintain temperature between -65°C to -90 °C

	Month	January	Year	2024	Refrigerator Name/ Location/Serial #/ID	
	Date (Weekdays only)	Time	Min °C	Max °C	Name/Initials	Comments
Tue	1/2/2024	0830	-12.41	-74.03	DN	
Wed	1/3/2024		-74.06	-70.00	pv,	
Thu	1/4/2024		-76.06	-73.23	Na	
Fri	1/5/2024	0800	-76.06	-75.34	DN	
Mon	1/8/2024	0800	-75.95	-72.21	OW	
Tue	1/9/2024					-Inciement weather
Wed	1/10/2024	0900	-75.94	· le. 97	レトハ	
ïhu	1/11/2024	0900	-75.94	-74.43	Na	
Fri	1/12/2024	0800	-15.69 -	.72.35	10V	
Mon	1/15/2024	0800	-75.73	-72.17	DV	
Tue	1/16/2024	1300	- 75.52	-71.21	on	
Wed	1/17/2024	0800	-70.01	-72.30	or	
Thu	1/18/2024	0800	-75.66	-74.45	on	
Fri	1/19/2024	1000	-75.66	-69.65	Or	
Mon	1/22/2024	1210	-75-39	- 3ke.7	aen	Rispikes Moo thatselfcove cted in minutes. adv
Tue	1/23/2024	1000	-75-39	-13.26	NO	
Wed	1/24/2024	1200	-15.34	- 64.40	on	
Thu	1/25/2024	1300	-75.17	-68.01	DV	
Fri	1/26/2024		-75.09	-72.41	012	
Mon	1/29/2024	0906 -	75.00	-71.75	10N m	
rue	1/30/2024		-74.95	- 9.55	ON 1-70-24	spilled due to open closing voor during day, Freezersh correct
Wed	1/31/2024	0900	-,74.98	-8.91	ON	High Usage 1115AM

CTSU Lab Freezer Min/Max Temperature Log

Maintain temperature between -65°C to -90 °C

	Month	February	Year	2024	Freezer ID	/Location:Lab room freezer 412269-86 (-80 freezer B)
	Date (Weekdays only)	Time	Min °C	Max °C	Initials	Comments
Thu	2/1/2024	0090	-75.06	- 70.06	ON	
Fri	2/2/2024	0900	-7619	5.78	L'JO	×
Mon	2/5/2024	0300	-76.27	-73.45	DW	
Tue	2/6/2024	0080	- 7te.25	-64.67	LM	
Wed	2/7/2024		-76-63	-44.4B	NU	*
Thu	2/8/2024			-50.91	WO	*
Fri	2/9/2024	0800		-6181	ON	×
Mon	2/12/2024	0900	- 75.61	-13.20	WQ	
Tue	2/13/2024	0900 -	15.98	-62.53	OW	×
Wed	2/14/2024	0200	-76.03	- 52.53	LN	×
Thu	2/15/2024		-76.03	- 56.44	ON	×
Fri	2/16/2024		-75.94	- 52.20	UNA	×
lon	2/19/2024	000	-76.14	-70.21	NU	
Tue	2/20/2024	0915 -	76.14	-52.23	DN	×
Wed	2/21/2024		-75.94	-47.11	ON	*
Thu	2/22/2024	1000	-15 92	63.66	NO	
Fri	2/23/2024		-75.97 -	-61.80	VIO	
Mon	2/26/2024		76.41	- 73.77	NO	
Tue	2/27/2024	0830	-76-41	62.76	or	%, ₩
Wed	2/28/2024	1000	-76.14	-62.76	MO	
Thu	2/29/2024	1000	-75.78	-65.47	Dr	

Key: * Heavy usage

% Normal peak of cooling curve

Normal trough of cooling curve

CTSU Lab Freezer Min/Max Temperature Log

Maintain Temperature between -65°C to -90°C

	Month March Year 2024		ID/Locatio	on: Lab Room Freezer 412269-86 (-80 Freezer B)		
	Date (Weekdays only)	Time	Min °C	Max °C	Initials	Comments
Fri	3/1/2024	090()	-75.78	-67.74	DVI	
Mon	3/4/2024	0800	-7(0.11	- 73.55	LM	
Tue	3/5/2024	09100	-76-12	-63.83	DW	¥
Wed	3/6/2024	0800	-76.10	-67.90	Ma	·
Thu	3/7/2024	0800	16.44	-67.47	Dr.	
Fri	3/8/2024	0900 -	76.67	-67.02	OV,	
Mon	3/11/2024	0900	-76.39	-68.49	NU	
Tue	3/12/2024	0300	-7639	- 68.49	62	
Wed	3/13/2024	0001	-76.17	-67.27	DW,	
Thu	3/14/2024		-76.27	- 63.08	ian	
Fri	3/15/2024	6800	-77.20	- 60 - 00	01	+
Mon	3/18/2024	0200	·7-6.16	- 65. 90	LM	
e	3/19/2024	OROP	-76.16	-65.14	MO	
Wed	3/20/2024	0080	-75.97	-65.66	Via	
Thu	3/21/2024	0900	-75.95-	68.94	017	
Fri	3/22/2024	0900	-75.95	-68.94	or	
Mon	3/25/2024	0300	-76.14	-73.44	ovi	
Tue	3/26/2024	09100	76.50	-70.01	bn	
Wed	3/27/2024	0.800	-76.23	-5777	ON	×
Thu	3/28/2024	0300	-87.57	-66.94	or	N.
Fri	3/29/2024		-76.19	-51.11	no	t

Key: * Heavy usage

% Normal peak of cooling curve

Normal trough of cooling curve

412269-86 (-80 Freezer B)

Refrigerator or Freezer ID/Location:

_	Month	4	April	Year	2024	Threshold:	<u>4 hours</u>
	Docum	nent the deta	ils of any temp	erature excurs	ion in comme	nts below.	Alert study team if excursion exceeds threshold.
	ate (Weekdays only)	Time	Actual Temp	Min *C	Max *C	Initials	Comments
Mon	4/1/2024	0900	- 82.16	- 79.14	-74.61	NO	
Tue	4/2/2024	0745	-16.63	-79.11	-71.83	WO	
Wed	4/3/2024	0750	- 76.37	-79.25	-65-41	DN	
Thu	4/4/2024	0800	-76.70	-79.54	-67.74	LNI	
Fri		1900	-76.57	- 19.54	- 55.73	111	*
Mon	4/8/2024		1666	18.59 -	74.52	DVI	
Tue	4/9/2024		-80.03	- 78.87	-75.60	NO	
Wed		0900	-76.10		-69.21	OW	
Thu	4/11/2024	0900	- 76.01	-18.94	-69.03	ON	
Fri	4/12/2024	1000	-76.38	- 78.94	-68.11	NON	
Mon	4/15/2024		- 17.20	-79.16	-15.08	DN	
Tue	4/16/2024		-76.96	79.27	-72.98	DV	
Wed	4/17/2024		-76.87	- 11.27	-12.57	NO	
Thu	4/18/2024		-76.75	79.17	72.57	indi	
Fri	4/19/2024		-16.74	-79.00	-72.06	<u>ŏ</u> N	
Mon	4/22/2024	0800	-77.09 -	79.02 -	75.06	NO	
Tue	4/23/2024	0000	-76.39 -	78.92	-66.95	NO	
Wed	4/24/2024	0000	-76.34		71.67	Qri	
Thu	4/25/2024	0000	-76.21	18.14	-71.24	NO	
Fri	4/26/2024	0000	-76.50 -	78.69	-11.69	MO	
Mon Tue	4/29/2024 4/30/2024			-78.59	- 68.31	DV LM	
Wed		_	10.10	10.07		<u> </u>	

412269-86 (-80 Freezer B)

Refrigerator or Freezer ID/Location: CTSU FAIRWAY

	Month	5	May		2024	Thread allow	4 hours
-				Yea			<u>4 hours</u>
	Docum	ent the del	ails of any tem	perature excur	rsion in comme	nts below.	Alert study team if excursion exceeds threshold.
	ate (Weekdaγs only)	Time	Actual Temp	Min °C	Max °C	Initials	Comments
Wed	5/1/2024	0749	-76.52	-18.63	-72.51	ON	
Thu	5/2/2024	0300	-77.89	-79.60	-75.49	ON,	
Fri	5/3/2024	6800	-76.40	-78.63	-72.65	pr	
Mon	5/6/2024	0 <u>800</u>	-76.66 -	13.49	-74.78	ON	
Tue	5/7/2024	0800	- 7636	-78.43	-73.04	OW	
Wed	5/8/2024	300	-1914	-82.29	-75.6	ON	
Thu	5/9/2024		- 76.17	-18.12	-73.27	ON.	
Fri	5/10/2024		-76.02 -	-78.06	-72.96	NO	
Mon	5/13/2024	6300	-76.25 .	-77.95	-14.25	22	
Tue	5/14/2024	0800	176.27	-78.44	-73.47	m	
Wed	5/15/2024	0300	-76.14	-78.44	-72.93	ON	
Thu	5/16/2024	0300	-76.13 -	-81.35	-74.47	in	
Fri	5/17/2024	0800	-76.14	-18.12	-72.31	ON	
Mon		0800	76.24	-18.08	-73.03	OW	
Tue	5/21/2024	0300	-76.13	-77.97	-13.30	na	
Wed	5/22/2024	0800	- 76.00 -	18.09	-71.41	NO	
Thu	5/23/2024	0800	-76.17 -	18.09	-72.77	Dr.	
Fri	5/24/2024	0300	76.23	-18.11	73.89	0N	
Mon	5/27/2024	-					- Holiday 5-28-24
Tue	5/28/2024		- 75-36	-76.74	-13.09	02	
Wed	5/29/2024		-15.76	-18.14	-13.09	NO	
Thu	5/30/2024 (5/31/2024 (-76.04	10.14	-73.67	ON	
Fri	5/31/2024	0000	-76.07	-11.10 -	114.17	NA	

412269-86 (-80 Freezer B)

Refrigerator or Freezer ID/Location: CTSU FAIRWAY

	Month	6	June	Year	2024	Threshold:	<u>4 hours</u>
	Docur	ment the def	ails of any tempe	rature excurs	ion in comme	nts below.	Alert study team if excursion exceeds threshold.
Da	ate (Weekdays only)	Time	Actual Temp	Min °C	Max °C	Initials	Comments
Non	6/3/2024	0800	-76.09	7783 -	14.23	Or	
Tue	6/4/2024	0800	-75.94 -	17.80	-13.50	ON	
/ed	6/5/2024	0800	-75.78 -	17.94 -	66.66	DIN	
Thu	6/6/2024	0800	-16.07	17.88 -	73.56	Dir	
Fri	6/7/2024	0000	-76.55	- 19.59	- 69.48		
lon	6/10/2024	0900	-17.43 -	19.45	-75.17	ON	
Tue	6/11/2024		-17.02 -	31 BB -	75.52	OIN	
Ved	6/12/2024		-77.20-	79.50	-73.26		
[hu	6/13/2024		-77.20 -	19.57	12.16	DV"	
Fri	6/14/2024		-7750 -	19.60	- 75.08	Or	
Ion	6/17/2024		-7754 -	9.60 -	75.41	Dr	
Tue	6/18/2024		-11.35 -	19.56 -	74.30	DV	
/ed	6/19/2024						- HOLIDAY
Thu	6/20/2024	0900	-17.52 -	19.56 -	15.36	2V1	
Fri		0800	- 11.17 -	- 79.56	- 46.96	LMAN	
on	6/24/2024			1960	-15-30	Dic	
ue	6/25/2024		-7734 -	79.60	-73 95	LM	
led	6/26/2024		- 19.08 -			ovi	
hu	6/27/2024		- 79.24	8 91	16.90	an	
Fri	6/28/2024	0800	-76.76 -	18.60	-74.19	ON	
on	7/1/2024	-					
ue	7/2/2024						
led	7/3/2024	1					

412269-86	(-80 Fr	eezer B)
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Refrigerator or Freezer ID/Location: CTSU FAIRWAY

	Month	7	July	Year	2024	Threshold:	<u>4 hours</u>
	Docum	nent the de	tails of any temp	perature excurs	sion in commer	nts below.	Alert study team if excursion exceeds threshold.
	Date (Weekdays only)	Time	Actual Temp	Min °C	Max °C	Initials	Comments
Mon	7/1/2024		-76.81	-78.63	-74.89	DVK	
Tue	7/2/2024	1000	-76.15	-18.59	-70.47	on	
Wed	7/3/2024	1000	-16.03	- 18-54	-71.27	DV	
Thu	7/4/2024						- HOLIDAY
Fri	7/5/2024	0800	-76-36 .	-18-17	-74.27	NO	
Mon	7/8/2024	0800	-77.52	-79.56	-75.36	DN	
Tue	7/9/2024	0800	-16.20	-78.19	-13.00	DW	
Wed	7/10/2024	0900	-15.81	- 18.06	-72.03	NG	
Thu	7/11/2024	0900	-75.62	-17.95	67.20	VO	
Fri	7/12/2024	1000	-76.13	- 78.06 -	73.47	OV	
Mon	7/15/2024	6800	-70.43	-18.12 .	-74.50	'OV	
Tue	7/16/2024		-76.43	-18.12	-74.50	or	
Wed	7/ 17/2024	0800	-TS-28	-17.70	-69.2]	DW.	
Thu	7/18/2024	112221	-76.30	-79.81	-72.21	ON	
Fri	7/19/2024	1000	-15-1(-11.70	-73.14	ON	1012 entry 7-22-24
Mon	7/22/2024	1000	-15.69	-17.70	-73.16	DV1	
Tue	7/23/2024		-15.71 .	-17.70	-73,14	Dr,	
Wed	7/24/2024	0900	-75.53 -	-77.46	-72-02	ON	
Thu	7/25/2024	0800	-15.89	-17.44	-74.03	DN	14th entry 7-29-24 on
Fri	7/26/2024	0900	-15.98	-17.56 -	74.14	200	19te entry 7.29-24 DW
Mon	7/29/2024	0400	-75.97	-77.66	- 14.14	5NC	
Tue	7/30/2024		-15 93	17.56	14:21	AN NO	
Wed	7/31/2024	0100	115.90	- 11.04	15.20	y'	

412269-86 (-80 Freezer B)

Refrigerator or Freezer ID/Location: CTSU FAIRWAY

	Month	8	August	Year	2024	Threshold:	<u>4 hours</u>
	Docum	nent the deta	ils of any temp	erature excurs	sion in comme	nts below.	Alert study team if excursion exceeds threshold.
	Date (Weekdays only)	Time	Actual Temp	Min °C	Max °C	Initials	Comments
Thu	8/1/2024	0900	-76.00	-11.37	-73.50	NO	
Fri	8/2/2024	0900	- 76.18	-77.89 .	74.36	DN	
Mon	8/5/2024	0300	-7627 .	17.91	-74.56	DIN	
Tue	8/6/2024	0800	-16.33	- 78.37	-74.16	DW	
Wed	8/7/2024	9800	-15.68	-18.27	-70.93	OL,	
Thu	8/8/2024	0800	-76.04	77.75	73.88	Dr	
Fri	8/9/2024		76.12 .	-11.97 -	12.38	DV	
Mon	8/12/2024		-16.33	-18.06	-14.66	DIN	
Tue	8/13/2024		76.07	-17.96	-13.12	NO	· · · · · · · · · · · · · · · · · · ·
Wed	8/14/2024		15.82-	11.91 -	10.64	DN	
Thu	8/15/2024	0800	75.94	77.94	-72.66	DIN	
Fri	8/16/2024		76.51 -	18.27		DVN	
Mon	8/19/2024	0900	-77.59	-78.27 -	74.75	DN	
Tue	8/20/2024		-75.72	-78.20	-69.93	LM	
Wed	8/21/2024	0800	-75.74	.77.64	- 72.62	M	
Thu	8/22/2024		-15.86 -	77.80	-72.7	DN	
Fri	8/23/2024		-76.06 .	77.78	-73.07	DN	
Mon	8/26/2024		-16.25	-17.81 -	74.61	DV	
Tue	8/27/2024		-75.95	7781	-72.40	pr	
Wed	8/28/2024		-16.02	-77.81	-73.11	or	
Thu	8/29/2024	0800	-15.61 -	11.81	-68.08	DIN	
Fri	8/30/2024	0400	- 75.58	- 77.73		UN	
Mon	9/2/2024						Holidny

Key: * Heavy usage

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412269-86 (-80 Freezer B)

Refrigerator or Freezer ID/Location: CTSU FAIRWAY

	Month	9	Septemb er	Year	2024	Threshold:	<u>4 hours</u>
	Docum	nent the deta	ils of any temp	erature excurs	ion in comme	nts below.	Alert study team if excursion exceeds threshold.
Dal	te (Weekdays only)	Time	Actual Temp	Min °C	Max °C	Initials	Comments
	9/2/2024						- floriday
	9/3/2024	0800	-76.09	-1766	-7442	DN	
4	9/4/2024	0800	-75.40	-17.66	-67.59	NO	
	9/5/2024	0800	-75.87	-77.66	-73.45	an	
1	9/6/2024	OBDD	-75.91	-11.11.	-13.36	LM	
n	9/9/2024	0800	-76.13	-77.70	-74.44	DV	
e	9/10/2024	0800	-75.84	-77.70 -	71.95	DW	
d	9/11/2024		-15.97	-77.73	-73.58	ON.	
u	9/12/2024	YOOD -	75.89	17.73	-73.44	PN	
ri	9/13/2024	0800	15.94	77.66 ·	73-52	NO	
n	9/16/2024	0900	15.88	17.56 .	13.33	DIN	
e	9/17/2024		-75.61	17.54	11.98	ON	
d	9/18/2024	0900	-19.03	22.52	-1.5 19	DN	
u	9/19/2024	0200	-75.51	-71.59	-71.12	LM	
rì	9/20/2024	0900	-75.94	-17.07	-74.05	DIN	
n	9/23/2024	CI L D	-16.03	- 77 70	- 70.17	OV	
e	9/24/2024		97.05	82.25	-74.35	DIN	
d	9/25/2024		15.32 -	11.15	-77.34	ON.	
u	9/26/2024		15.44	1112 -	72.94	ON	
rl	9/27/2024	0080	-75.43	-77.10	-72.73	LM	
	9/27/2024		-15-36	-76.77 -	73.88	DW	
e	10/1/2024				15.00	V4.	
	10/2/2024						

412269-86 (-80 Freezer B)

Refrigerator or Freezer ID/Location: CTSU FAIRWAY

	Month	10	October	Year	2024	Threshold:	<u>4 hours</u>
	Docum	nent the deto	ails of any temp	erature excur	sion in comme	nts below.	Alert study team if excursion exceeds threshold.
	Date (Weekdays only)	Time	Actual Temp	Min °C	Max °C	Initials	Comments
Tue	10/1/2024	0750	-75.34	76.88	-73.42	ON	
Wed	10/2/2024	0900	-75.18	-77. De	-72.35	ON	
Thu	10/3/2024		-15.14 .	17.06	-72.32	NU	
Fri	10/4/2024	0900	-75.04	-76-76	-72.41	NO	
Mon	10/7/2024	1116	-71.16	-74.36	- 67.05	Yds.	DEFIOST. DN 10-4-24
Tue	10/8/2024		-7204	-74.36	-63.88	ON	×
Wed	10/9/2024	0900	-74.89	-78.20	-75.80	DV	•
Thu	10/10/2024	0800	-76.41 -	78.27	-71.02	N	
Fri	10/11/2024	000	-16.54 -	78.30	- 73.50	ON	
Mon	10/14/2024	0755	-76.52 .	18.16	- 74.92	Or	
Tue	10/15/2024	1401	-03.	-78.16	-74.92	BB	
Wed	10/16/2024	0800	-76.05	-17.66	-73.59	DUN,	
Thu	10/17/2024	0800	-15.89	-77.66	-70.47	pv	
Fri	10/18/2024	UUD	-75.84	-77.52	-73.48	0N	
Mon	10/21/2024		- 80 01 -	76.66	-74.50	DN	
Tue	10/22/2024	0900	-75.89	-77.40	-74.20	LM	
Wed	10/23/2024	0300	-75.78	- 77.38	-73.52	uy	
Thu	10/24/2024	0900	-75.65	-17.35	-72.44	OVJ	
Fri	10/25/2024	1000	-15.77	-77.43	-73 42	DIN	
Mon	10/28/2024	0.080	75.89	-17.34 .	-74.34	NO	
Tue	10/29/2024	11	-15.77	-77.24 .	73.70	DW	
Wed	10/30/2024		-15.84 -	1135	-14.05	05	
Thu	10/31/2024	UIUS	-15.51	-11.49	- 69.67	or'	

412269-86 (-80 Freezer B)

Refrigerator or Freezer ID/Location CTSU FAIRWAY

	Month	11	Novemb er	Year	2024	Threshold:	<u>4 hours</u>
	Docum	nent the deta	ils of any temp	erature excurs	sion in comme	nts below.	Alert study team if excursion exceeds threshold.
1	ate (Weekdays only)	Time	Actual Temp	Min °C	Max °C	Initials	Comments
	11/1/2024	1000	-78.06	-80.28	-67.22	ON	
	11/4/2024	0800	-76.13	-7778	-74.42	DVN	
	11/5/2024	0745	-75.51	-17.77	20.83	DN.	
	11/6/2024		-76.40	-76.01	-71.90	DN	
	11/7/2024		-75.34	-77.56	-72.12	DW	
	11/8/2024	0800	-75102	-77.49		LM	
	11/11/2024	·					- HOLIDAY
	11/12/2024	1D45 -	15.6	-77.43	-73.06	DW	nondarj
	11/13/2024	1000	-75.68	-71.62	-12-87	DW	
	11/14/2024	0800	-75.56	-17.40	-17.87	DW	
	11/15/2024	0800 -	15.54	77.23	7279	NO	
	11/18/2024	00800	-15.62	-11.13	-14.00	OV	
	11/19/2024	0745	-15.49 -	.77.10		202	
	11/20/2024	DRID	15.44 .	77.10	-73.30	DW	
	11/21/2024		-76.66	-76.12	-73.50	OW	
_	11/22/2024	6800	-15.77	-15.11	-71.60	ON	
	11/25/2024		-76.70	- 74.03	- 70.01	DN	
_	11/26/2024		-75.65	-75.97	-72.81	OV	
	11/27/2024		-15.29	-17.23	-12.23	ON	
	11/28/2024						Holiday
	11/29/2024	~					- Holiday
	12/2/2024						
	12/3/2024						

412269-86 (-80 Freezer B)

V

Refrigerator or Freezer ID/Location: CTSU FAIRWAY

) de celle	12	Decemb		2024	,	
	Month	12	er	Year	2024	Threshold:	<u>4 hours</u>
	Docun	nent the det	ails of any temp	erature excurs	ion in comme	nts below.	Alert study team if excursion exceeds threshold.
	Weekdays only)	Time	Actual Temp	Min °C	Max °C	Initials	Comments
m	12/2/2024	D745	-79.20	-77.04	-75.16	DW	
ie :	12/3/2024	0750	-75.21	- 77.21	-71.69	DW	
	12/4/2024		-75.13 -	77.18	-71.55	ON	
	12/5/2024		-75.20	-77.07	-71.17	NIG	
	12/6/2024		-74.72	~ 77	-71	EM	
	12/9/2024		-75.39	-17.02 .	-73.55	Dr	
ie 12	2/10/2024	n900	-15.07	12.01 .	11.710	DN	
e 12	2/10/2024	0900	-15.11	-17.01	- 11.71	DW	
	2/12/2024		-15.10	-71.07	-72.67	LM	
	2/12/2024		- 75.09	-17.02	- 69.12	ON	
	2/13/2024 2/16/2024		-14.92	-110 [1]	-72 20		
				-76 72	13.10	an	
	2/17/2024		-75.01	10.10	-77.10	ON	
	2/18/2024		-75.86	10.40	-69.94	ON	
	2/19/2024		-15.72	-18.40	-72 09	DV	
		0200	-75.33	- 77.48	-72.62	LM	
on 12	2/23/2024	0900	75.28	-76.87	-73.61	LM	
ie 12	2/24/2024	0738	-74.55	-76.87	- 72.76	Yds	
id 12	2/25/2024						
w 12	2/26/2024						
ri 12	2/27/2024						
-	2/30/2024						
ie 12	2/31/2024				1 1		
d	1/1/2025			~ 0	losed,	Wint	er Break

Key: * Heavy usage

COBEX "Wheel" record changed, Tue., Dec. 24, 2024 d/t Hol. Break/Yds