



National Technical Systems
1701 E. Plano Pkwy. Suite 150
Plano, TX 75074

Main: 972-509-2566
Fax: 972-509-0073

Date: 09/13/2022

Customer:

BlueSky Mast Inc.
2080 Wild Acres Road
Largo, FL 33771US

Purchase Order Number: 220803-06

- A. TESTS: High Temperature, Low Temperature, Humidity, Salt Fog, Sand and Dust, Icing & Freezing Rain
- B. TEST ITEM: Mast Assembly
- C. SPECIFICATION: 1. MIL-STD 810H
- D. RESULTS:
This is to certify that the Mast Assembly was subjected to the High Temperature, Low Temperature, Humidity, Salt Fog, Sand and Dust, Icing & Freezing Rain tests according to the above specification.

See Page 4 for Summary of Test Results. The Mast Assembly was returned to BlueSky Mast for final evaluation.

Test data, an equipment list, and photographs are attached.

Kimberly Zavala
Preparer

John Ngo
General Manager

Britney Morales
Quality Assurance
Manager

REVISIONS

Revision	Reason for Revision	Date
0	Original	09/13/2022

TEST ITEM IDENTIFICATION

Name of EUT	Quantity	Part Numbers	Item Number
Mast Assembly	1	BSM3-W-L303-AL3-000 BSM3-K-A351-S24-BOL BSM2-K-A350-BRK-012 BSM2-P-A100_CUP-EM	ENV 1

SUMMARY OF TEST RESULTS

The test program consisted of subjecting the Mast Assembly to testing described in this report. The test results are tabulated in the test summary below.

Test	Test Specification	Conforms	Test Location	Date
Low Temperature	MIL-STD 810H	Yes	NTS Plano	02/18/2013-02/19/2013
High Temperature	MIL-STD 810H	Yes	NTS Plano	02/15/2013-02/16/2013 & 08/25/2022-09/01/2022
Humidity	MIL-STD 810H	Yes	NTS Plano	02/20/2013-02/21/2013 & 09/02/2022-09/13/2022
Salt Fog	MIL-STD 810H	Yes	NTS Plano	03/03/2013-03/06/2013
Dust	MIL-STD 810H	Yes	NTS Plano	02/26/2013
High Temperature Dust	MIL-STD 810H	Yes	NTS Plano	02/27/2013
Sand	MIL-STD 810H	Yes	NTS Plano	02/28/2013
Icing Freezing Rain	MIL-STD 810H	Yes	NTS Plano	03/06/2013-03/08/2013

Note: Testing was completed in 2013 in accordance with the MIL-STD 810G test specification. In 2022, NTS conducted a technical test report review to determine compliance with the MIL-STD 810H test specification. It was concluded that additional cycles for high temperature and humidity were required to meet the requirements of MIL-STD 810H. Additional testing was completed. Mast Assembly meets the requirements listed above of MIL-STD 810H.

HIGH TEMPERATURE TEST DATA

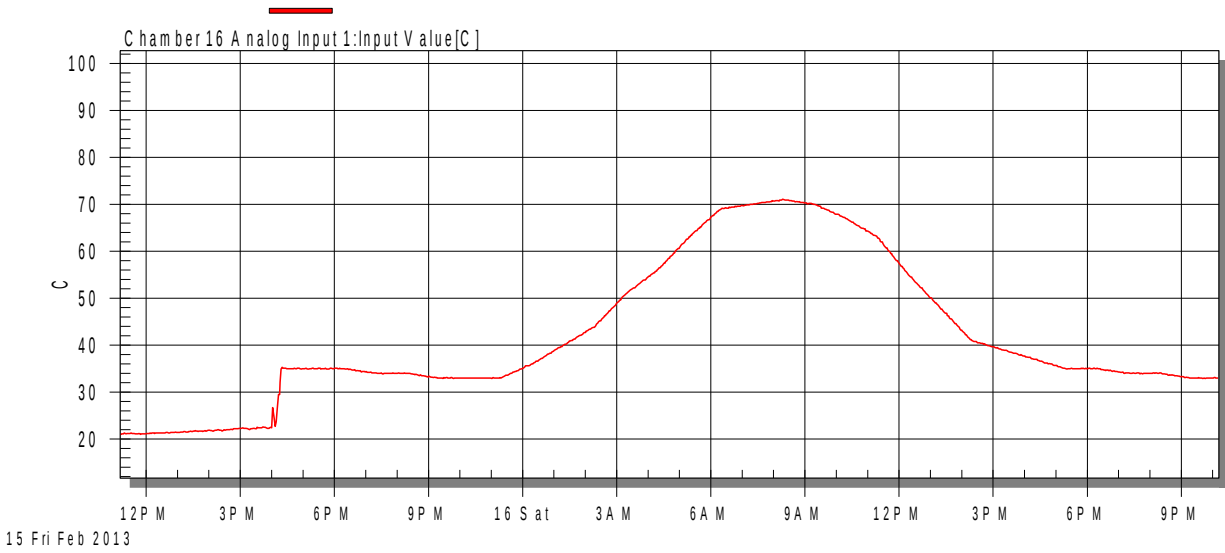
CUSTOMER:	BlueSky Mask Inc.	MJO:	PR019878
TEST ITEM:	Mast Assy	DATE:	2/15/13
MODEL NUMBER:	BSM3/BSM2	UNIT NO:	ENV1
SPECIFICATION:	MIL-STD 810G	CHAMBER NO:	16
METHOD:	501.4, Procedure: I	TECH / ENGR:	BN/FB

DESCRIPTION OF TEST				
DATE:	TIME:	LOG ENTRY:	EUT Operate	TECH/ENGR INITIALS:
2/15/13	1500	Begin set up for Cyclic High Temperature Test	N/A	BN/FB
	1520	EUT in stalled in chamber, photograph taken		BN/FB
	1545	Begin test		BN/FB
	1600	From ambient conditions ramp chamber to 35°C		BN/FB
	1700	Chamber at conditions ramp to 34°C		BN/FB
	1900	Chamber at conditions ramp to 33°C		BN/FB
	2200	Chamber at conditions ramp to 36°C		BN/FB
	2300	Chamber at conditions ramp to 40°C		BN/FB
2/16/13	0000	Chamber at conditions ramp to 44°C		BN/FB
	0100	Chamber at conditions ramp to 51°C		BN/FB
	0200	Chamber at conditions ramp to 56°C		BN/FB
	0300	Chamber at conditions ramp to 63°C		BN/FB
	0400	Chamber at conditions ramp to 69°C		BN/FB
	0800	Chamber at conditions ramp to 70°C		BN/FB
	0900	Chamber at conditions ramp to 67°C		BN/FB
	1000	Chamber at conditions ramp to 63°C		BN/FB
	1100	Chamber at conditions ramp to 55°C		BN/FB
	1200	Chamber at conditions ramp to 48°C		BN/FB
	1300	Chamber at conditions ramp to 41°C		BN/FB
	1400	Chamber at conditions ramp to 39°C		BN/FB
	1500	Chamber at conditions ramp to 37°C		BN/FB
	1600	Chamber at conditions ramp to 35°C		BN/FB
	1630	Test complete no anomalies noted		BN/FB
		Unit conforms		BN/FB

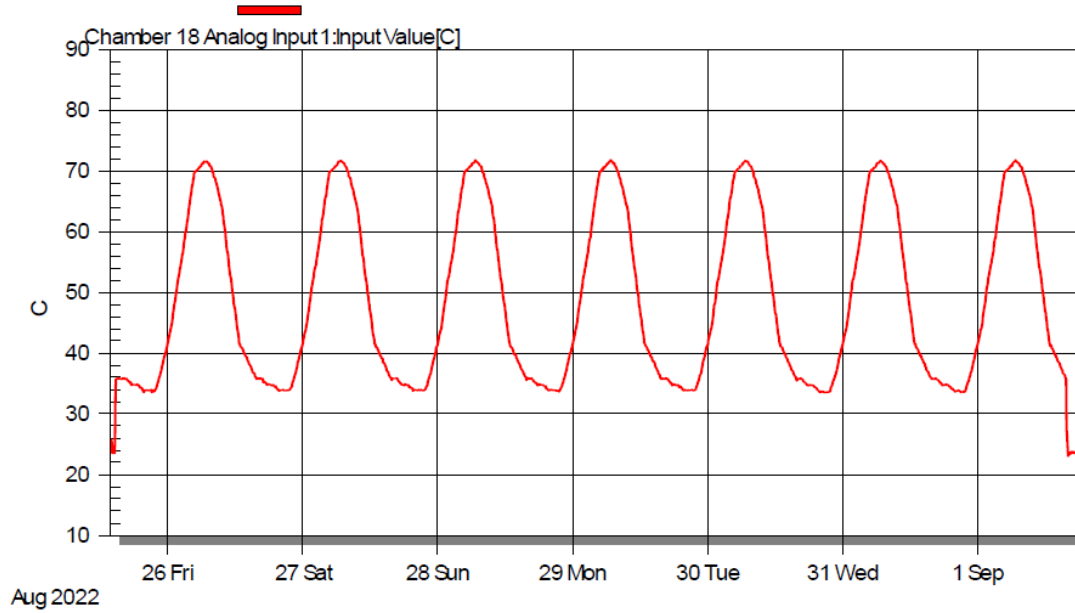
TECHNICIAN / ENGINEER:	B Newingham/F Boyd	DATE:	2/16/13
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CUSTOMER:		BlueSky Mast Inc.		MJO:	PR163688	
TEST ITEM:		Antenna Mast		DATE:	8/25/2022	
MODEL NUMBER:		N/A		UNIT NO:	ENV 1	
SPECIFICATION:		MIL-STD-810H		CHAMBER NO:	18	
METHOD:		501.7, Procedure: I		TECH / ENGR:	BC	
HIGH TEMPERATURE STORAGE						
DATE:	TIME:	LOG ENTRY:			EUT Operate	TECH/ENGR INITIALS:
8/25/2022	1330	Start setup for High Temperature Storage Test.				BC
	1345	Unit loaded in to chamber and setup photo taken.				BC
	1400	Ramp chamber to 23°C.				BC
	1401	Chamber at conditions. Start 30 minute soak.				BC
	1431	Soak complete. Ramp chamber to 35°C.				BC
	1441	Chamber at conditions. Start 1 hour soak.				BC
	1541	Soak complete. Ramp chamber to 35°C.				BC
	1641	Chamber at conditions. Ramp chamber to 34°C.				BC
	1741	Chamber at conditions. Ramp chamber to 34°C.				BC
	1841	Chamber at conditions. Ramp chamber to 33°C.				BC
	1941	Chamber at conditions. Ramp chamber to 33°C.				BC
	2041	Chamber at conditions. Ramp chamber to 33°C.				BC
	2141	Chamber at conditions. Ramp chamber to 36°C.				BC
	2241	Chamber at conditions. Ramp chamber to 40°C.				BC
	2341	Chamber at conditions. Ramp chamber to 44°C.				BC
8/26/2022	0041	Chamber at conditions. Ramp chamber to 51°C.				BC
	0141	Chamber at conditions. Ramp chamber to 56°C.				BC
	0241	Chamber at conditions. Ramp chamber to 63°C.				BC
	0341	Chamber at conditions. Ramp chamber to 69°C.				BC
	0441	Chamber at conditions. Ramp chamber to 70°C.				BC
	0541	Chamber at conditions. Ramp chamber to 71°C.				BC
	0641	Chamber at conditions. Ramp chamber to 70°C.				BC
	0741	Chamber at conditions. Ramp chamber to 67°C.				BC
	0841	Chamber at conditions. Ramp chamber to 63°C.				BC
	0941	Chamber at conditions. Ramp chamber to 55°C.				BC
	1041	Chamber at conditions. Ramp chamber to 48°C.				BC
	1141	Chamber at conditions. Ramp chamber to 41°C.				BC
	1241	Chamber at conditions. Ramp chamber to 39°C.				BC
	1341	Chamber at conditions. Ramp chamber to 37°C.				BC
	1441	Chamber at conditions. Ramp chamber to 35°C.				BC
	1541	Chamber at conditions. Cycle 1 Complete. Start Cycle 2.				BC
8/27/2022	1541	Cycle 2 Complete. Start Cycle 3.				BC
8/28/2022	1541	Cycle 3 Complete. Start Cycle 4.				BC
8/29/2022	1541	Cycle 4 Complete. Start Cycle 5.				BC
8/30/2022	1541	Cycle 5 Complete. Start Cycle 6.				BC
8/31/2022	1541	Cycle 6 Complete. Start Cycle 7.				BC
9/1/2022	1541	Cycle 7 Complete. Ramp chamber to 23°C.				BC
	1551	Chamber at conditions. Start 1 hour soak.				BC
	1651	Soak complete. Perform operational check on unit.			X	BC
	1715	Test complete. No abnormalities noted.				BC
	****	Note Cycle 2 - 7 were ran to the same parameters as Cycle 1.				BC
TECHNICIAN / ENGINEER:		Brian Carr		DATE:	9/1/2022	

Bluesky Mast
High Temperature



PR163688 BlueSky Mast Inc.
High Temperature Storage



HIGH TEMPERATURE TEST EQUIPMENT LIST

NTS ID#	Manufacturer	Description	Model No.	Cal Date	Cal Due
ENV-1132-P	Thermotron	Temp/RH Chamber	WP802	N/A	N/A
ENV-1131-P	Watlow	Over/Temp Protection	SD6L	N/A	N/A
ENV-1060-P	Watlow	Temp/Humidity Controller	F-4	10/05/12	10/05/13
ENV-1270-P	Vaisala	Humidity Probe	HMT 120	06/26/12	06/26/13

PR163688			Date(s) Used:	8/25/2022 - 9/1/2022	
NTS ID#	Manufacturer	Description	Model No.	Cal Date	Cal Due
WC020939	Beamco	Temp/Alt/RH Chamber	AFW-210	N/A	N/A
WC021175	Watlow	Over/Temp Protection	Limit SD	N/A	N/A
WC021669	Watlow	Temp/Humidity Controller	F-4	11/4/2021	11/4/2022
WC021667	Watlow	Temp/Altitude Controller	F-4	3/3/2022	3/3/2023
WC021158	Watlow	Over/Temp Protection	Limit SD	N/A	N/A



HIGH TEMPERATURE TEST SETUP



HIGH TEMPERATURE TEST SETUP

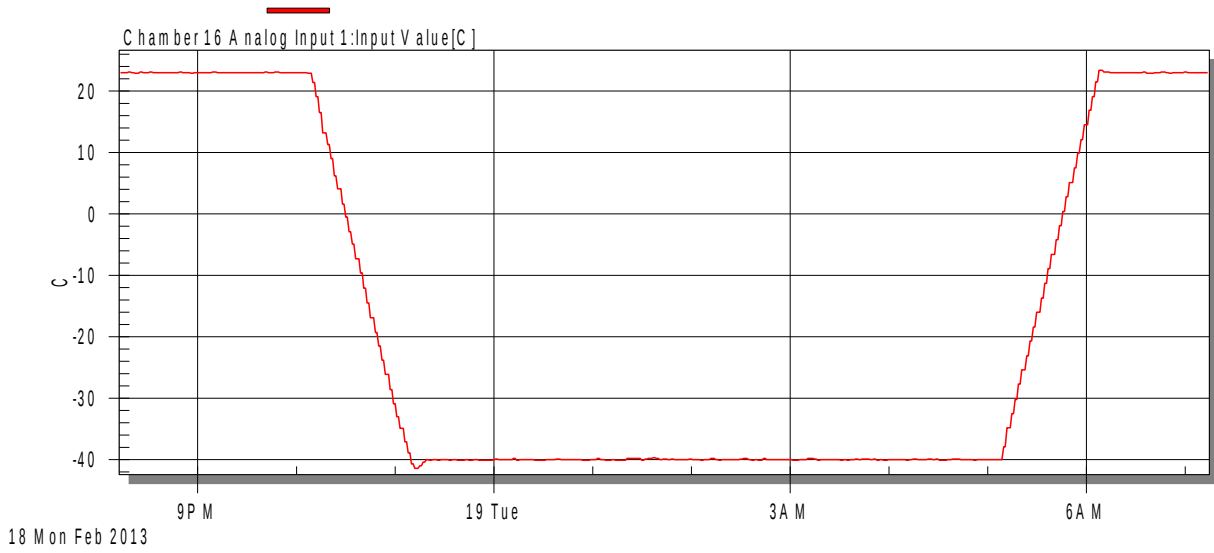
LOW TEMPERATURE TEST DATA

CUSTOMER:	BlueSky Mask Inc.	MJO:	PR019878
TEST ITEM:	Mast Assy	DATE:	2/18/13
MODEL NUMBER:	BSM3/BSM2	UNIT NO:	ENV1
SPECIFICATION:	MIL-STD 810G	CHAMBER NO:	16
METHOD:	502.4, Procedure: 1	TECH / ENGR:	BN/FB

DESCRIPTION OF TEST				
DATE:	TIME:	LOG ENTRY:	EUT Operate	TECH/ENGR INITIALS:
2/18/13	1500	Begin set up for Low Temperature	N/A	BN/FB
	1600	EUT in stalled in chamber, photograph taken		BN/FB
	2130	Begin test		BN/FB
	2200	From ambient conditions ramp chamber to -40°C		BN/FB
	2300	Ramp complete chamber at conditions soak for 6 hours		BN/FB
2/19/13	0500	Soak complete return chamber to ambient temperature		BN/FB
	0600	chamber at conditions test complete		BN/FB
		No visual anomalies or damage noted		BN/FB
		Unit conforms		

TECHNICIAN / ENGINEER:	B Newingham/F Boyd	DATE:	2/19/13
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Bluesky Mast PR 019878
Low Temperature



LOW TEMPERATURE TEST EQUIPMENT LIST

NTS ID#	Manufacturer	Description	Model No.	Cal Date	Cal Due
ENV-1132-P	Thermotron	Temp/rh Chamber	WP802	N/A	N/A
ENV-1131-P	Watlow	Over/Temp Protection	SD6L	N/A	N/A
ENV-1060-P	Watlow	Temp/Humidity Controller	F-4	10/05/12	10/05/13
ENV-1270-P	Vaisala	Humidity Probe	HMT 120	06/26/12	06/26/13



LOW TEMPERATURE TEST SETUP

HUMIDITY TEST DATA

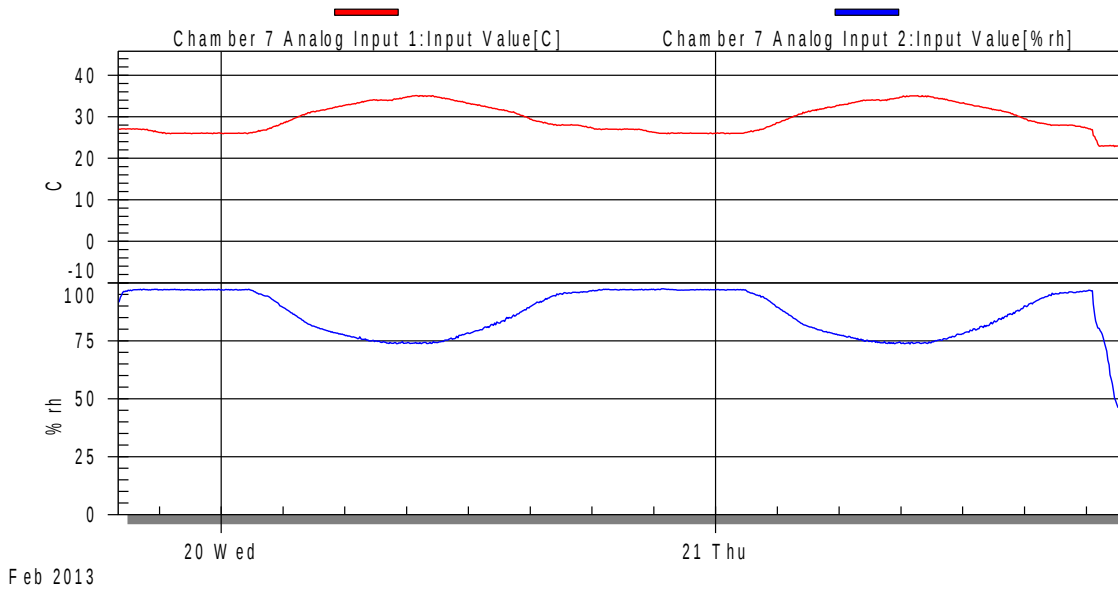
CUSTOMER:	Blue Sky	MJO:	PR019878
TEST ITEM:	Mast Assy	DATE:	2/20/13
MODEL NUMBER:	BSM3/BSM2	UNIT NO:	ENV1
SPECIFICATION:	Mil-Std 810G	CHAMBER NO:	7
METHOD:	507.4 Pro 1	TECH / ENGR:	BN/FB

DESCRIPTION OF TEST				
DATE:	TIME:	LOG ENTRY:	EUT Operate	TECH/ENGR INITIALS:
2/20/13	1630	Begin set up for Humidity	N/A	BN/FB
	1615	EUT in stalled in chamber, photograph taken		BN/FB
	1630	Begin test		BN/FB
	1700	Ramp to 27°C at 100% humidity		BN/FB
	1720	Chamber at conditions soak for 1 hour		BN/FB
	1820	Soak complete		BN/FB
	1822	Ramp to 26°C at 100% humidity		BN/FB
	1940	Chamber at conditions soak for 4 hours		BN/FB
2/21/13	0117	Soak complete Ramp to 27°C at 94% humidity		BN/FB
	0220	Chamber at conditions ramp to 29°C at 88% humidity		BN/FB
	0320	Chamber at conditions ramp to 31°C at 82% humidity		BN/FB
	0420	Chamber at conditions ramp to 32°C at 79% humidity		BN/FB
	0520	Chamber at conditions ramp to 33°C at 77% humidity		BN/FB
	0620	Chamber at conditions ramp to 34°C at 75% humidity		BN/FB
	0720	Chamber at conditions ramp to 34°C at 74% humidity		BN/FB
	0820	Chamber at conditions ramp to 35°C at 74% humidity		BN/FB
	0915	Chamber at conditions soak for 1 hour		BN/FB
	1015	Soak complete Ramp to 34°C at 76% humidity		BN/FB
	1115	Chamber at conditions ramp to 33°C at 79% humidity		BN/FB
	1215	Chamber at conditions ramp to 32°C at 82% humidity		BN/FB
	1315	Chamber at conditions ramp to 31°C at 86% humidity		BN/FB
	1415	Chamber at conditions ramp to 29°C at 91% humidity		BN/FB
	1515	Chamber at conditions ramp to 28°C at 95% humidity		BN/FB
	1615	Chamber at conditions ramp to 28°C at 96% humidity		BN/FB
	1715	Chamber at conditions ramp to 27°C at 100% humidity		BN/FB
	1815	Chamber at conditions soak for 1 hour		BN/FB
	1915	Soak complete cycle 1 complete		BN/FB
2/21/13	1815	Cycle 2 complete		BN/FB
		Test complete return chamber to ambient conditions		BN/FB
		No physical damage or anomalies noted item conforms		

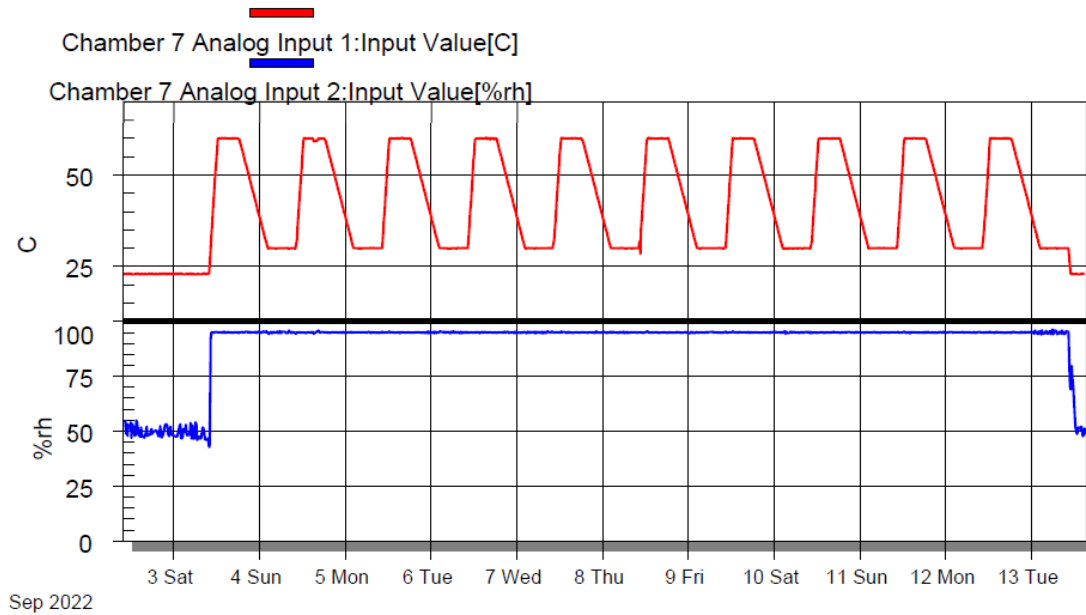
TECHNICIAN / ENGINEER:	B Newingham/F Boyd	DATE:	2/21/13
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CUSTOMER:	BlueSky Mast Inc.	MJO:	PR163688
TEST ITEM:	Antenna Mast	DATE:	9/2/2022
MODEL NUMBER:	N/A	UNIT NO:	ENV 1
SPECIFICATION:	MIL-STD-810H	CHAMBER NO:	7
METHOD:	507.6, Procedure II	TECH / ENGR:	BC
HUMIDITY			
DATE:	TIME:	LOG ENTRY:	EUT Operate
9/2/2022	0935	Start setup for Humidity Testing.	
	0940	Unit assembled and operational check performed.	X
	0945	Operational check complete. No abnormalities noted. Unit installed in chamber.	
	0950	Setup photo taken.	
	0954	Ramp chamber to 23°C and 50% RH.	
	0955	Chamber at conditions. Start 30 minute soak for temperature stabilization.	
	1025	Stabilization soak complete. Start 24 hour soak.	
9/3/2022	1025	Soak complete. Ramp chamber to 30°C and 95% RH.	
	1032	Chamber at conditions. Ramp chamber to 60°C and 95% RH.	
	1232	Chamber at conditions. Start 6 hour soak.	
	1832	Soak complete. Ramp chamber to 30°C and 95% RH.	
9/4/2022	0232	Chamber at conditions. Start 8 hour soak.	
	1032	Soak complete. Cycle 1 Complete. Start Cycle 2.	
9/5/2022	1032	Cycle 2 Complete. Start Cycle 3.	
9/6/2022	1032	Cycle 3 Complete. Start Cycle 4.	
9/7/2022	1032	Cycle 4 Complete. Start Cycle 5.	
9/8/2022	1015	Perform operational check on unit.	X
	1032	Operational check complete. No abnormalities noted.	
	1032	Cycle 5 Complete. Start Cycle 6.	
9/9/2022	1032	Cycle 6 Complete. Start Cycle 7.	
9/10/2022	1032	Cycle 7 Complete. Start Cycle 8.	
9/11/2022	1032	Cycle 8 Complete. Start Cycle 9.	
9/12/2022	1032	Cycle 9 Complete. Start Cycle 10.	
9/13/2022	1015	Perform operational check on unit.	X
	1020	Operational check complete. No abnormalities noted.	
	1032	Cycle 10 complete. Ramp chamber to 23°C and 50% RH.	
	1102	Chamber at conditions. Start 4 hour soak.	
	1502	Soak complete. Perform final operational check.	X
	1600	Test complete. No abnormalities noted.	
	****	Note: Cycle 2 - 10 were ran to the same parameters as Cycle 1.	
TECHNICIAN / ENGINEER:		DATE:	9/13/2022

PR019878 Bluesky Mast
Humidity



PR163688 BlueSky Mast Inc.
Humidity



HUMIDITY TEST EQUIPMENT LIST

NTS ID#	Manufacturer	Description	Model No.	Cal Date	Cal Due
ENV-1046-P	Envirotronic	Temp/Humidity Chamber	EH-64-2-5	N/A	N/A
ENV-1067-P	Omega	Over/Tem Protection	CN76133	N/A	N/A
ENV-1025-P	Watlow	Temp/Humidity Controller	F-4	12/10/12	12/10/13
ENV-1187-P	Viasala	Humidity Probe	HMT-100	10/22/12	10/22/13

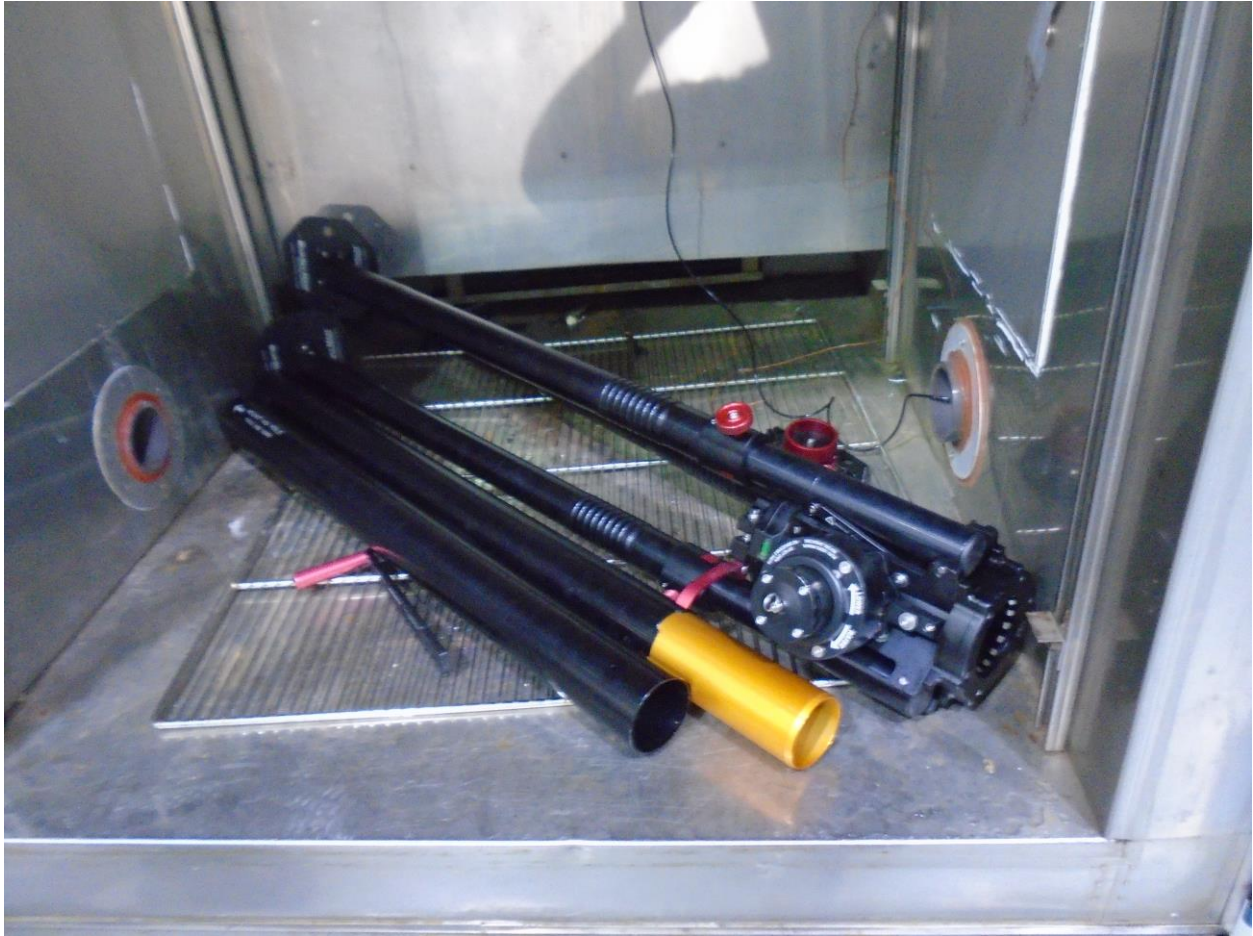
PR163688			Date(s) used:	9/2/2022 - 9/13/2022	
NTS ID#	Manufacturer	Description	Model No.	Cal Date	Cal Due
WC021685	Envirotronic	Temp/Humidity Chamber	EH-64-2-5	N/A	N/A
WC021172	Omega	Over/Temp Protection	CN76000	N/A	N/A
WC021009	Watlow	Temp/Humidity Controller	F-4	8/11/2022	8/11/2023
WC066588	Vaisala	Humidity Probe	HMT-120	8/30/2022	8/30/2023



HUMIDITY TEST SETUP



HUMIDITY TEST SETUP



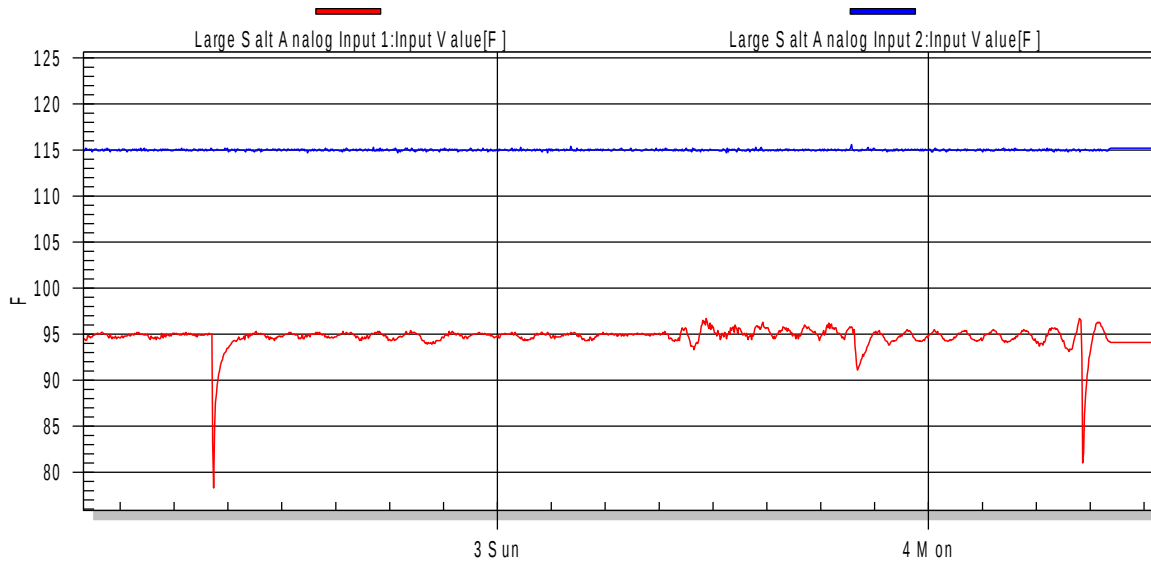
HUMIDITY TEST SETUP

SALT FOG TEST DATA

CUSTOMER:	BlueSky Mask Inc.		MJO:	PR019878			
TEST ITEM:	Mast Assy		DATE:	3/3/13			
MODEL NUMBER:	BSM3/BSM2		UNIT NO:	ENV1			
SPECIFICATION:	MIL-STD 810F		CHAMBER NO:	Large Salt			
METHOD:	509.4 Procedure I		TECH/ENGR:	BN/FB			
Type of Salt:	Food grade	Type of Water:	Type 4 De-ionized				
Salt Concentration	5%	Water Conductivity:	<5µS/cm ^E				
Readings Below to be Monitored Daily							
DATE:	TIME:	Temp 35C (+/-2C)	Fallout Rate 1.0 to 3.0 mL/hour	Ph 6.5 to 7.2 of Collection	Specific Gravity of Collection 1.025 - 1.040	Days in Test	TECH / ENGR:
3/3/2013	1530	34°C	1.8 mL/hour	6.6 Ph	1.035	1	BN/FB
3/4/2013	1530	35°C	1.9 mL/hour	6.8 Ph	1.038	2	BN/FB
DESCRIPTION OF TEST							
DATE:	TIME:	LOG ENTRY:				EUT Operate:	TECH / ENGR:
3/2/13	0800	Begin test set up for Salt Fog				N/A	BN/FB
	0810	EUT installed in chamber photograph taken					BN/FB
	0815	Operation verified begin test					BN/FB
	0820	Condition chamber to 35°C for 2 hours before introducing salt					BN/FB
	1020	2 hour conditioning complete verified salt/water fallout rate of 2.2 ml/80cm2/hr					BN/FB
	1025	Continue salt fog for an additional 48 hours					BN/FB
3/4/13	1025	48 hours complete remove EUT from chamber and allow 48 hour drying period					BN/FB
3/6/13	1025	48 hour drying period complete					BN/FB
	1030	Test complete operation verified no excessive salt damage noted, moves freely					BN/FB
		Unit conforms					
TECHNICIAN / ENGINEER: B Newingham/F Boyd DATE: 3/6/2013							

Blue Sky Mast PR019878

Salt Fog



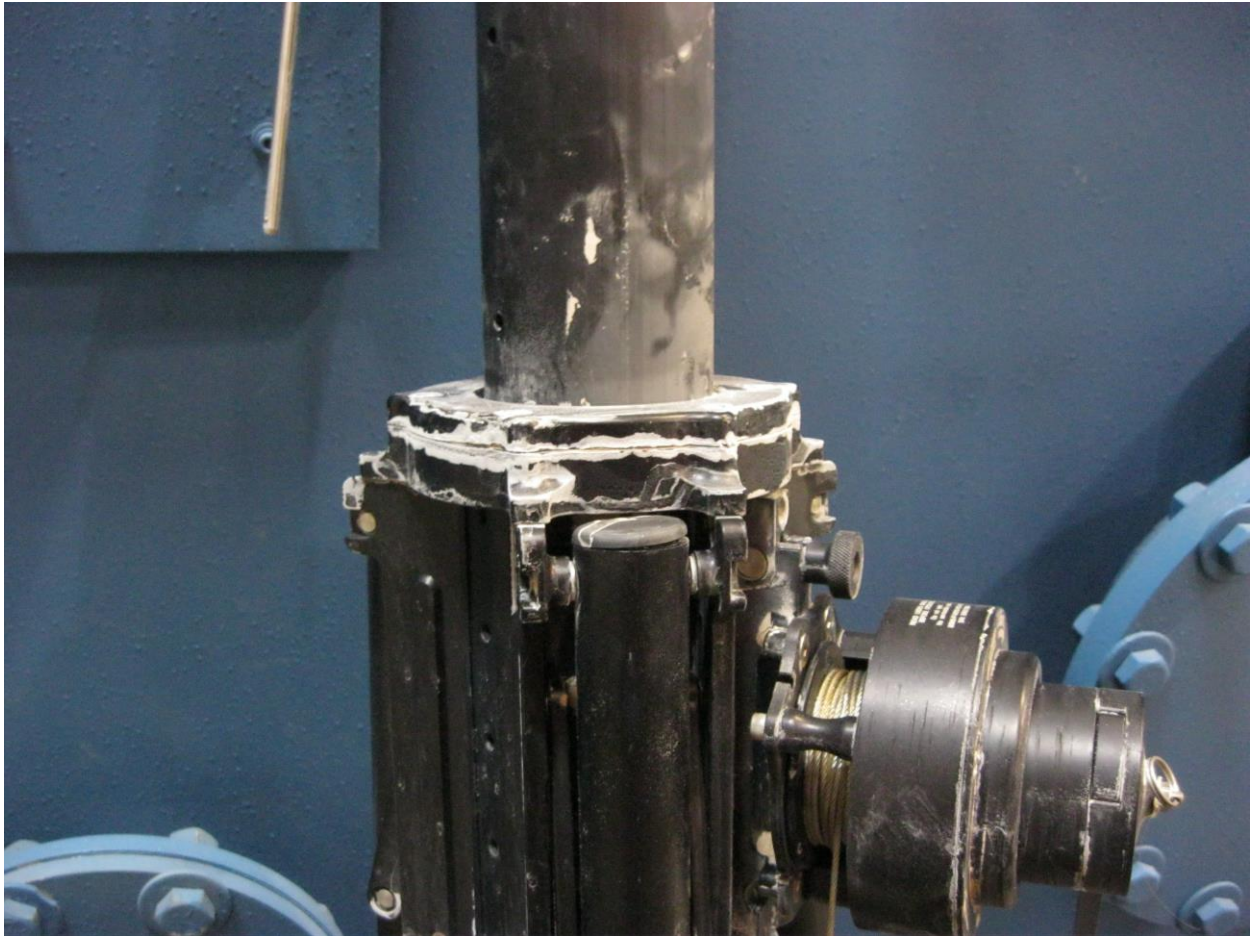
Mar 2013

SALT FOG TEST EQUIPMENT LIST

NTS ID#	Manufacturer	Description	Model No.	Cal Date	Cal Due
ENV-1218-P	NTS	Salt-Fog Chamber	Large	N/A	N/A
ENV-1128-P	Watlow	Temperature Controller	F4	10/5/2012	10/5/2013
ENV-1219-P	Omega	Hi/Low Limit	CN76000	N/A	N/A



SALT FOG TEST SETUP



SALT FOG POST TEST



SALT FOG POST TEST



SALT FOG POST TEST



SALT FOG POST TEST – AFTER 48 HOUR DRYING PERIOD/CLEANING



SALT FOG POST TEST – AFTER 48 HOUR DRYING PERIOD/CLEANING

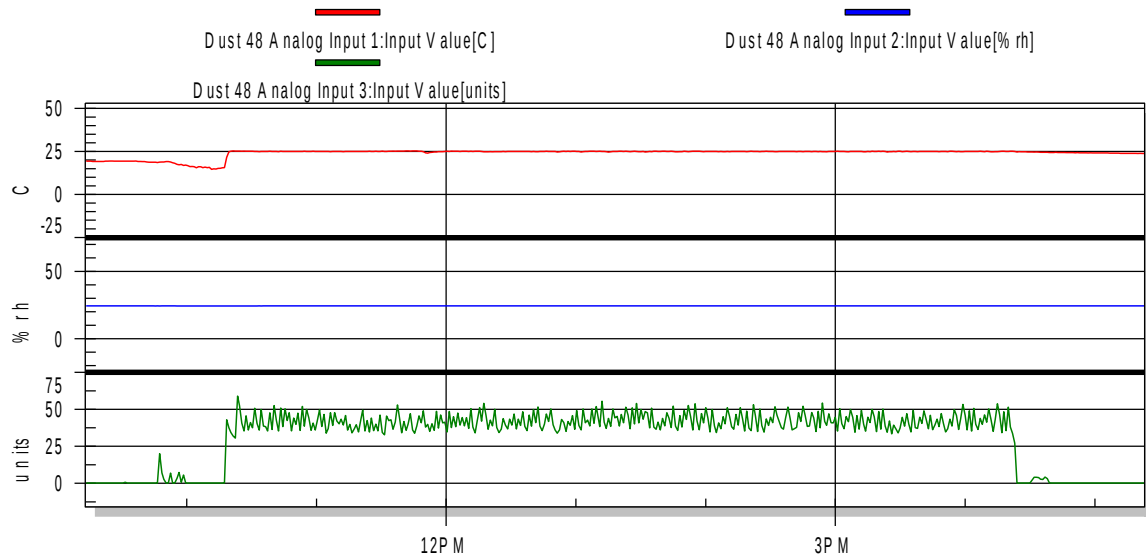


SALT FOG POST TEST – AFTER 48 HOUR DRYING PERIOD/CLEANING

DUST TEST DATA

CUSTOMER:	BlueSky Mask Inc.	MJO:	PR019878	
TEST ITEM:	Mast Assy	DATE:	2/26/13	
MODEL NUMBER:	NA	UNIT NO:	ENV1	
SPECIFICATION:	MIL-STD 810G	CHAMBER NO:	Dust 48	
METHOD:	510.4, Procedure: I A	TECH / ENGR:	BN/FB	
DESCRIPTION OF TEST				
DATE:	TIME:	LOG ENTRY:	EUT Operate	TECH/ENGR INITIALS:
2/26/13	0930	Begin test set up for Ambient Dust		BN/FB
	0945	Dust rate set at 10.6=+/- 7 grams per cubic meter		
	1000	Installed EUT in dust chamber.		BN/FB
	1005	Ease of operation of all moving parts verified	x	BN/FB
	1010	Took photo of test set up.		BN/FB
	1015	Begin test wind speed at 8.7 m/s		BN/FB
	1020	Chamber temperature stable 25°C Begin 6 hour blowing dust.		BN/FB
		Relative humidity below 30%		BN/FB
	1620	6 hour blowing dust complete. Stop dust feed.		BN/FB
	1625	Test item stable at ambient temperature.		BN/FB
	1630	Removed excess dust from unit with soft bristle brush		BN/FB
	1632	Performed ease of operation of all moving parts verified	x	BN/FB
		No anomalies noted unit conforms		BN/FB
		Dust used was Red China Clay		
TECHNICIAN / ENGINEER		B Newingham/F Boyd	DATE:	2/26/13

PR019878 Blue Sky Mast
Ambient Dust



26 Tue Feb 2013

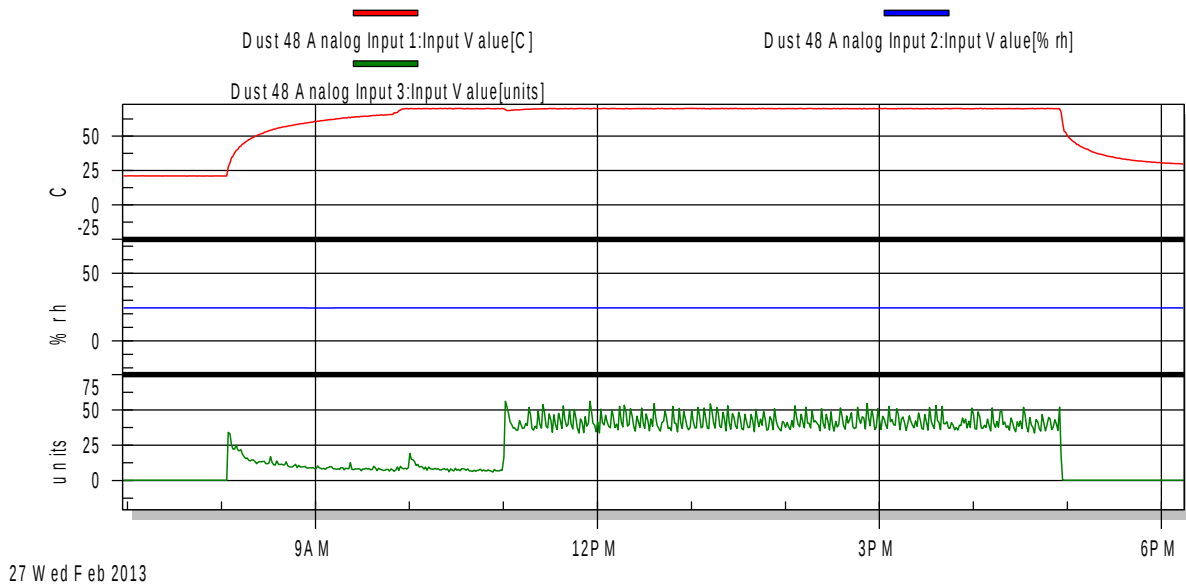
DUST TEST EQUIPMENT LIST

NTS ID#	Manufacturer	Description	Model No.	Cal Date	Cal Due
ENV-1235-P	NTS	Dust/Sand Chamber	NTS	N/A	N/A
ENV-1340-P	Alnor	Hot wire Anemometer	AVM 430	07/24/12	07/24/13
ENV-1254-P	Omega	Hi/Lo Limit	CN76000	N/A	N/A
ENV-1253-P	Watlow	Temp Controller	F4	12/10/12	12/10/13
ENV-1234-P	Viasalla	Humidity Probe	HMT 100	05/25/12	05/25/13

HIGH TEMPERATURE DUST TEST DATA

CUSTOMER:	BlueSky Mask Inc.	MJO:	PR019878
TEST ITEM:	Mast Assy	DATE:	2/27/13
MODEL NUMBER:	NA	UNIT NO:	ENV1
SPECIFICATION:	MIL-STD 810G	CHAMBER NO:	Dust 48
METHOD:	510.4, Procedure: I B	TECH / ENGR:	BN/FB
DESCRIPTION OF TEST			
DATE:	TIME:	LOG ENTRY:	EUT Operate
			TECH/ENGR INITIALS:
2/27/13	0800	Begin test set up for High Temperature Dust	
	0810	Installed EUT in dust chamber.	
		Dust rate set at 10.6 $\pm$ 7 grams per cubic meter	
	0811	Ease of operation of all moving parts verified	x
	0813	Took photo of test set up.	
	0815	Begin test ramp chamber to 70°C wind speed at 1.5m/s	
	1055	Chamber temperature stable 70°C Begin 6 hour blowing dust.	
		wind speed at 8.8m/s Relative humidity below 30%	
	1655	6 hour blowing dust complete. Stop dust feed. Return to ambient	
	1710	Test item stable at ambient temperature.	
	1712	Removed excess dust from unit with soft bristle brush	
	1715	Performed ease of operation of all moving parts verified	x
		No anomalies noted unit conforms	
		Dust used was Red China Clay	
TECHNICIAN / ENGINEER		B Newingham/F Boyd	DATE: 2/27/13

PR019878 Blue Sky Mast
High Temperature Dust



HIGH TEMPERATURE DUST TEST EQUIPMENT LIST

NTS ID#	Manufacturer	Description	Model No.	Cal Date	Cal Due
ENV-1235-P	NTS	Dust/Sand Chamber	NTS	N/A	N/A
ENV1340P	Alnor	Hot wire Anemometer	AVM 430	07/24/12	07/24/13
ENV-1254-P	Omega	Hi/Lo Limit	CN76000	N/A	N/A
ENV-1253-P	Watlow	Temp Controller	F4	12/10/12	12/10/13
ENV-1234-P	Viasalla	Humidity Probe	HMT 100	05/25/12	05/25/13



HIGH TEMPERATURE DUST TEST SETUP

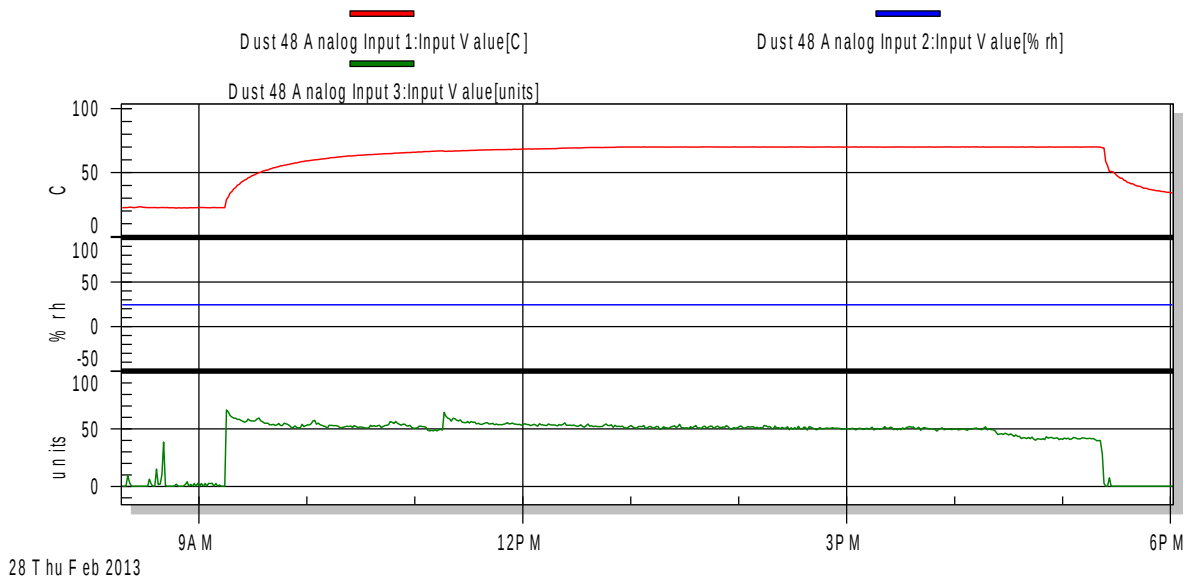


HIGH TEMPERATURE DUST POST TEST

SAND TEST DATA

CUSTOMER:	BlueSky Mask Inc.	MJO:	PR019878
TEST ITEM:	Mast Assy	DATE:	2/28/13
MODEL NUMBER:	NA	UNIT NO:	ENV 1
SPECIFICATION:	MIL-STD 810G	CHAMBER NO:	Sand 48
METHOD:	510.4, Procedure: II	TECH / ENGR:	BN/FB
DESCRIPTION OF TEST			
DATE:	TIME:	LOG ENTRY:	EUT Operate
2/28/13	0750	Chamber controls set at 2.1 grams sand per cubic meter	
		wind speed set at 20m/s	
	0820	Begin test set up for High Temperature Sand	
	0830	Installed EUT in sand chamber.	
	0840	Ease of operation of all moving parts verified	x
	0845	Took photo of test set up.	
	0925	Begin test ramp chamber to 70°C	
	1125	Chamber temperature stable 70°C Begin 6 hour blowing sand.	
		Relative humidity below 30%	
	1725	6 hour blowing sand complete. Stop sand feed. Return to ambient	
	1740	Test items stable at ambient temperature.	
	1742	Removed excess sand from unit with soft bristle brush	
	1745	Performed ease of operation of all moving parts verified	x
		No anomalies noted unit conforms	
TECHNICIAN / ENGINEER		B Newingham/F Boyd	DATE: 2/28/13

PR019878 Blue Sky Mast
High Temperature Sand



SAND TEST EQUIPMENT LIST

NTS ID#	Manufacturer	Description	Model No.	Cal Date	Cal Due
ENV-1235-P	NTS	Dust/Sand Chamber	NTS	N/A	N/A
ENV1340P	Alnor	Hot wire Anemometer	AVM 430	07/24/12	07/24/13
ENV-1254-P	Omega	Hi/Lo Limit	CN76000	N/A	N/A
ENV-1253-P	Watlow	Temp Controller	F4	12/10/12	12/10/13
ENV-1234-P	Viasalla	Humidity Probe	HMT 100	05/25/12	05/25/13



SAND TEST SETUP

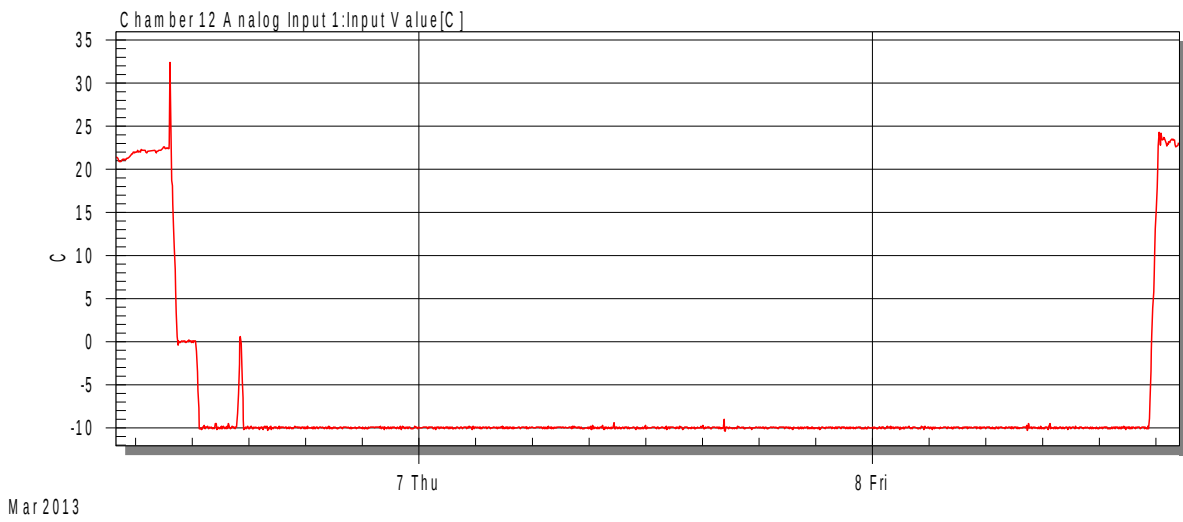


SAND POST TEST

ICING AND FREEZING RAIN TEST DATA

CUSTOMER:	BlueSky Mask Inc.		MJO:	PR019878	
TEST ITEM:	Mast Assy		DATE:	3/6/13	
MODEL NUMBER:	BSM3/BSM2		UNIT NO:	ENV1	
SPECIFICATION:	MIL-STD 810G		CHAMBER NO:	12	
METHOD:	521.3		TECH / ENGR:	BN/FB	
CRITERIA					
DESCRIPTION OF TEST					
DATE:	TIME:	LOG ENTRY:	EUT Operational	TECH/ENGR INITIALS:	
3/6/13	1000	Begin test set up for Icing/Freezing Rain		BN/FB	
	1015	Installed EUT in Chamber		BN/FB	
	1030	Ease of operation of all moving parts verified	x	BN/FB	
	1050	Begin test		BN/FB	
	1111	Chamber temperature stabilized at 0°C start watering for 1 hour		BN/FB	
	1211	1 Hour pre spraying complete adjust chamber to -10°C		BN/FB	
	1222	Chamber at conditions, continue icing until .25" of ice has been achieved		BN/FB	
3/8/13	1030	Ice at .25" stop icing at this time and allow ice to harden for 4 hours		BN/FB	
	1430	4 Hour ice hardening complete, operational check attempt unsuccessful		BN/FB	
		used small rubber tipped hammer to remove ice second attempt successful	x	BN/FB	
	1440	Return chamber to ambient conditions and allow for de thawing		BN/FB	
	1506	Chamber at conditions EUT has been thawed		BN/FB	
	1510	Operational check satisfactory	x	BN/FB	
		Test complete			
TECHNICIAN / ENGINEER:		B Newingham/F Boyd		DATE:	3/8/13

BlueSky Mast PR 019878
Icing/Freezing Rain



ICING AND FREEZING RAIN TEST EQUIPMENT LIST

NTS ID#	Manufacturer	Description	Model No.	Cal Date	Cal Due
ENV-1076-P	Russell	Temp/Humidity Chamber	ECM 3-30-30	N/A	N/A
ENV-1040-P	Omega	Over/Tem Protection	CN76133	N/A	N/A
ENV-1268-P	Watlow	Temp/Humidity Controller	F-4	10/05/12	10/05/13
ENV-1196-P	Viasalla	Humidity Probe	HMT 100	03/23/12	03/23/13



ICING AND FREEZING RAIN TEST SETUP



ICING AND FREEZING RAIN – 0.25” OF ICE