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CLASSIFICATION Constructional Data Report (CDR)

1.0 Reference and Address						
Report Number	103669881SAT-002	Original Issued:	31-Jul-2019	Revised: 21-Aug-2019		
Standard(s)	Fire Test For Heat And Visible Smoke Release For Discrete Products And Their Accessories Installed In Air-Handling Spaces [UL 2043:2013 Ed.4]					
Applicant	Crestron Electronics	Inc	Manufacturer	Meida Technology Suzhou Co., Ltd.		
Address	15 Volvo Rockleigh, NJ 07647		Address	No. 5 Chun Shen Hu East Road, Xiang Cheng District, Suzhou City, Jingsu Province, China 215131		
Country	USA		Country	China		
Contact	Mr. Gary Freed		Contact	Mr. Michael Wang Mr. Alex Lhy		
Phone	800-237-2041, ext 12305		Phone	86512851888993315 86512851888993315		
FAX	N/A		FAX	N/A		
Email	gfreed@crestron.com		Email	michael.wang@meida-tech.com.cn alexlhy@meida-tech.com.cn		

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2.0 Product Des	cription
Product	In-Ceiling Tile Loudspeaker
Brand name	NA
Description	The product covered by this report is a commercial, indoor use, ceiling speakers intended for the fixed installation in accordance with Article 640 of the National Electrical Code, ANSI/NFPA 70. These products are not intended for mobile use. Dry location only. the units are non-active, meaning they have no connection towards mains supply voltages.
Models	SAROS ICT5T-12-W-T-EACH, SAROS ICT5T-22-W-T-EACH
Model Similarity	Model SAROS ICT5T-22-W-T-EACH is identical to model SAROS ICT5T-12-W-T-EACH, except for the 2x2 construction of the baffle and grill.
Ratings	70/100VAC or 8Ω, 16Wmax
Other Ratings	Frequency range: 70 Hz to 18 kHz

Photo 1 - External top view of model SAROS ICT5T-12-W-T-EACH



Photo 1a - External top view of model SAROS ICT5T-22-W-T-EACH



Photo 2 - External back view of model SAROS ICT5T-12-W-T-EACH



Photo 2a - External back view of model SAROS ICT5T-22-W-T-EACH



Photo 3a - Terminal Block



Photo 4 - top view of model SAROS ICT5T-12-W-T-EACH with the grill removed



Photo 5 - Top internal view of model SAROS ICT5T-12-W-T-EACH



Photo 6 - Top internal view of model SAROS ICT5T-12-W-T-EACH



Photo 7 -Side view of the speaker



4.0 (Critic	al Components				
Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
1, 1a	1	Metal grill	Various	Various	SPCC Refer to illustrations # 1 and 1a	NR
2, 2a	2	Enclosure	Various	Various	SPCC, black powder coated Refer to illustration # 2 and 2a	NR
3a	3	Terminal Block	Various	PA66	12-28AWG, 15A, 300V, V-0, 105°C.	cURus
4, 5	4	Speaker woofer	Meiloon	WF	5.25" woofer 8ohm. Refer to illustration # 4	NR
5, 7	5	Capacitor	Shenzhen Hao Junxing Electronics Co., Ltd.	YC2018091101	1UF/100V	NR
5, 6	6	Matching transformer	Shanghai Sucheng Electric Co. Ltd.	SC048190001	70/100Vac, 16W refer to illustration # 3	NR
3a	7	Internal Wires	Various	AWM 1007	300V, 22AWG, VW-1, 80°C	cURus
6	8	Insulation	Suzhou Banlan Electronic Technology co. LTD	Various	Sound-absorbing cotton . Rated V- 0.	cURus
6	9	Wires insulation	Suzhou Shun hon Eletronics	EVA Foam	Polymer of polyvinyl acetate. Rated V-0	cURus
7	10	Terminal Insulation	Yueqing Tianda Electronic Sheath CO., LTD	Various	Rated V-0	cURus
1	11	Marking Label (Not Shown)	Various	Various	SILVER POLYESTER, .002" THK WITH PERMANENT ACRYLIC ADHESIVE	cURus
3a	12	Rotary Switch	Taiwan SWVR Enterprise Co. Ltd.	SR25	125Vac, 0.3A, 55°C,	NR

NOTES:

1) Not all item numbers are indicated (called out) in the photos, as their location is obvious.

2) "Various" means any type, from any manufacturer that complies with the "Technical data and securement means" and meets the "Mark(s) of conformity" can be used.

3) Indicates specific marks to be verified, which assures the agreed level of surveillance for the component. "NR" - indicates Unlisted and only visual examination is necessary. "See 5.0" indicates Unlisted components or assemblies to be evaluated periodically refer to section 5.0 for details.

5.0 Critical Unlisted CEC Components

No Unlisted CEC components are used in this report.

6.0 Critical Features

<u>Recognized Component</u> - A component part, which has been previously evaluated by an accredited certification body with restrictions and must be evaluated as part of the basic product considering the restrictions as specified by the Conditions of Acceptability.

<u>Listed Component</u> - A component part, which has been previously Listed or Certified by an accredited Certification Organization with no restrictions and is used in the intended application within its ratings.

<u>Unlisted Component</u> - A part that has not been previously evaluated to the appropriate designated component standard. It may also be a Listed or Recognized component that is being used outside of its evaluated Listing or component recognition.

<u>Critical Features/Components</u> - An essential part, material, subassembly, system, software, or accessory of a product that has a direct bearing on the product's conformance to applicable requirements of the product standard.

<u>Construction Details</u> - For specific construction details, reference should be made to the photographs and descriptions. All dimensions are approximate unless specified as exact or within a tolerance. In addition to the specific construction details described in this Report, the following general requirements also apply.

- 1. <u>Spacing</u> In primary circuits, 1.6 mm minimum spacing are maintained through air and over surfaces of insulating material between current-carrying parts of opposite polarity and 12.7 mm minimum between such current-carrying parts and dead-metal parts or low voltage isolated circuits.
- Mechanical Assembly Components such as switches, fuseholders, connectors, wiring terminals and display lamps are mounted and prevented from shifting or rotating by the use of lockwashers, starwashers, or other mounting format that prevents turning of the component.
- 3. <u>Corrosion Protection</u> All ferrous metal parts are protected against corrosion by painting, plating or the equivalent.
- 4. <u>Accessibility of Live Parts</u> All uninsulated live parts in primary circuitry are housed within a metal enclosure constructed with no openings other than those specifically described in Sections 4 and 5.
- 5. <u>Grounding</u> This product is not provided with a means of grounding as it is not required to be grounded since connected to low voltage audio circuits.
- 6. Polarized Connection NA
- 7. <u>Internal Wiring</u> Internal wiring is routed away from sharp or moving parts. Internal wiring leads terminating in soldered connections are made mechanically secure prior to soldering. Recognized Component separable (quick disconnect) connectors of the positive detent type, closed loop connectors, or other types specifically described in the text of this report are also acceptable as internal wiring terminals. At points where internal wiring passes through metal walls or partitions, the wiring insulation is protected against abrasion or damage by plastic bushings or grommets. All wiring is minimum 22 AWG, with a minimum rating of 300V, 80°C.

8.	Schematics - NA
9.	<u>Markings</u> - The product is marked on a labeling system as described in item no. 11 of Section 4.0 as
	follows. Drahu hame, model humber, date of manufacturer, electrical fatilitys.
10.	Cautionary Markings - N/A
11.	Installation, Operating and Safety Instructions - Instructions for installation and use of this product are
	provided by the manufacturer. Refer to Illustration No(s). 5a and 6a for details.

Illustration 1 - Metal Grill



Illustration 1a - Metal Grill of model SAROS ICT5T-22-W-T-EACH



ED 16.3.15 (20-Apr-17) Mandatory





Illustration 2a - Enclosure Drawing of model SAROS ICT5T-22-W-T-EACH



Illustration 3 - Transformer internal component



上海苏程电子有限公司 SHANGHAI SUCHENG ELECTRONIC CO., LTD

文件	名称	变压	器用料规格标准		文件编号	SC048190001	
客户料号			文件版		文件版号		
ITEM	DESCR	IPTION	MATERIAL	THICKNESS		MANUFACTURER	
1	1 Primary Bobbin		Nylon66	0.7mm		Kenta Enterprise Company Limited E41938(M) or Other Equivalent	
2	2 Cross Insulation		Acetate Cloth Tape	0.18/0.36mm		Jingjiang Presssure Sensitive Glue Fiy.E165111(N) or Other Equivalent.	
3	Prima	ry Winding	(2UEW)Polyurethane Enameled Copper Wire			NINGBO JINTIAN NEW MATERIAL CO.,LTD E227047 or Other Equivalent.	
4	Insulatio Pri Wind:	on Bewteen ing	Polyester Film Tape 2 Turns Press Board 1 PC	0.025 0.5 or	mm r 0.4mm	Jingjiang Presssure Sensitive Glue Fiy.E165111(N) or Other Equivalent.	
						Joint Force Metal Research& CO.,LTD. or Other Equivalent.	
6	Pri L	ead Wire	1007#22			Shanghai Xinhui Wire& Cable Co.,Ltd ULE330134or Other Equivalent.	
7	Pri Ou	terwarp	Polyester Film Tape 3 Turns Press Board 1 PC	0.025mm 0.5 or 0.4mm		Jingjiang Presssure Sensitive Glue Fiy.E165111(N) or Other Equivalent.	
8	Sec Wi	nding	(2UEW)Polyurethane Enameled Copper Wire			NINGBO JINTIAN NEW MATERIAL CO.,LTD E227047 or Other Equivalent.	
9	9 Insulation Bewteen Sec Winding		Polyester Film Tape 3 Turns Press Board 1 PC	0.025mm 0.5 or 0.4mm		Jingjiang Presssure Sensitive Glue Fiy.E165111(N) or Other Equivalent.	
10	0 Sec Lead Wire		1007#22			Shanghai Xinhui Wire& Cable Co.,Ltd ULE330134or Other Equivalent.	
11	11 Sec Outerwarp		Polyester Film Tape 3 Turns Press Board 1 PC	0.025 0.5 or	mm r 0.4mm	Jingjiang Presssure Sensitive Glue Fiy.E165111(N) or Other Equivalent.	
12	2 Core		EI-48 H50-0.5A	0.35m	m		
13	Frame		Cold Rolled Steel	0. 6m	n	Hang Shing Metal Factory. or Other Equivalent.	
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17							
18	3						
19							
20							
21	21						

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Illustration 4 - Woofer



Illustration 5a - Installation Instructions



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the loudspecker (ICT5T-12 shown)

7.0 Illustrations



W-T-BACH+ >> Additional Information and a first dick the GR top of the 8 0CT5T-12 Connect the Loudspeak cure the o #1 Philips UTION: Wh

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8.0 Test Summary						
Evaluation Period	12/4/2018			Project No.	G103669881	
Sample Rec. Date	16-Nov-2018	Condition	Production	Sample ID.	SAT1811161409- 001	
Test Location	16015 Shady Fa	lls Road, Elmendor	f, TX 78112			
Test Procedure	Testing Lab					
Determination of the r methods. The produc	esult includes co t was tested as in	nsideration of meas ndicated below with	urement uncertaint results in conformation	y from the test ec ance to the releva	quipment and ant test criteria.	
The following tests we	ere periormed:		111 20/12:2012			
Test Description			Ed.4			
Peak Rate of Heat Re	elease		9.1A			
Peak Smoke Release	Rate		9.1B			
Total Smoke Release	d		9.1C			
Evaluation Period	7/31/2019			Project No.	G103971148	
Due to the previous testing performed under Intertek Report 103669881SAT-001 no additional testing was necessary.						
8.1 Signatures						
A representative sample of the product covered by this report has been evaluated and found to comply with the applicable requirements of the standards indicated in Section 1.0 with regard to the risks of flammability. The risks associated with the other properties of this product have not been investigated.						
Completed by:	Jason De La Cru	IZ	Reviewed by:	Sal Romo		

Completed by:	Jason De La Cruz	Reviewed by:	Sal Romo
Title:	Senior Project Engineer	Title:	Project Engineer
Signature:	Signature on file	Signature:	Signature on file

9.0 Correlation Page For Multiple Listings

The following products, which are identical to those identified in this report except for model number and Listee name, are authorized to bear the ETL label under provisions of the Intertek Multiple Listing Program.

BASIC LISTEE	Crestron Electronics Inc
Address	15 Volvo Rockleigh, NJ 07647
Country	USA
Product	In-Ceiling Tile Loudspeaker

MULTIPLE LISTEE 1	None	
Address		
Country		
Brand Name		
ASSOCIATED		
MANUFACTURER		
Address		
Country		
MULTIPLE LISTEE 1 MODELS		BASIC LISTEE MODELS

MULTIPLE LISTEE 2	None	
Address		
Country		
Brand Name		
ASSOCIATED		
MANUFACTURER		
Address		
Country		
MULTIPLE	LISTEE 2 MODELS	BASIC LISTEE MODELS

MULTIPLE LISTEE 3	None	
Address		
Country		
Brand Name		
ASSOCIATED		
MANUFACTURER		
Address		
Country		
MULTIPLE	LISTEE 3 MODELS	BASIC LISTEE MODELS

10.0 General Information

The Applicant and Manufacturer have agreed to produce, test and label ETL Listed products in accordance with the requirements of this Report. The Manufacturer has also agreed to notify Intertek and to request authorization prior to using alternate parts, components or materials.

COMPONENTS

Components used shall be those itemized in this Intertek report covering the product, including any amendments and/or revisions.

LISTING MARK

The ETL Listing mark applied to the products shall either be separable in form, such as labels purchased from Intertek, or on a product nameplate or other media only as specifically authorized by Intertek. Use of the mark is subject to the control of Intertek.

The mark must include the following four items:

1) applicable country identifiers "US" and/or "C" or "US", "C" and "EU"

2) the word "Listed" or "Classified" or "Recognized Component" (whichever is appropriate)

3) a control number issue by Intertek

4) a product descriptor that identifies the standards used for certification. Example:

For US standards, the words, "Conforms to" shall appear with the standard number along with the word, "Standard" or "Std." Example: "Conforms to ANSI/UL Std. XX."

For Canadian standards, the words "Certified to CAN/CSA Standard CXX No. XX." shall be used, or abbreviated, "Cert. to CAN/CSA Std. CXX No. XX."

Can be used together when both standards are used.

Note: A facsimile must be submitted to Intertek, Attn: Follow-up Services for approval prior to use. The facsimile need not have a control number. A control number will be issued after signed Certification Agreements have been received by the Follow-up Services office, approval of the facsimile of your proposed Listing Mark, satisfactory completion of the Listing Report, and scheduling of a factory assessment in your facility.

MANUFACTURING AND PRODUCTION TESTS

Manufacturing and Production Tests shall be performed as required in this Report.

FOLLOW-UP SERVICE

Periodic unannounced audits of the manufacturing facility (and any locations authorized to apply the mark) shall be scheduled by Intertek. An audit report shall be issued after each visit. Special attention will be given to the following:

1. Conformance of the manufactured product to the descriptions in this Report.

2. Conformance of the use of the ETL mark with the requirements of this Report and the Certification Agreement.

- 3. Manufacturing changes.
- 4. Performance of specified Manufacturing and Production Tests.

In the event that the Intertek representative identifies non-conformance(s) to any provision of this Report, the Applicant shall take one or more of the following actions:

- 1. Correct the non-conformance.
- 2. Remove the ETL Mark from non-conforming product.
- 3. Contact the issuing product safety evaluation center for instructions.

10.1 Evaluation of Unlisted Components

Because Unlisted Components are uncontrolled, and they do not fall under a third party follow up program, Intertek may require these components to be tested and/or evaluated at least once annually, more often for certain components, as part of the independent certification process. The Unlisted Components in Section 5.0 require testing and/or evaluation as indicated.

Note to Intertek Follow Up Inspector: The Component Evaluation Center, CEC, will notify you in writing when these components must be selected and sent to the CEC for re-evaluation

Ship the samples to: Intertek Testing Services NA Inc. ETL Component Evaluation Center 45000 Helm Street, Suite 150 Plymouth Twp., MI 48170 USA Attn: Component Evaluation Center Sample Disposition: Due to the destructive nature of the testing, all samples will be discarded at the conclusion of testing unless, the manufacturer specifically requests the return of the samples. The request for return must accompany the initial component shipment.

11.0 Manufacturing and Production Tests

The manufacturer agrees to conduct the following Manufacturing and Production Tests as specified:

Required Tests None

12.0 Revision	12.0 Revision Summary					
The following	changes are in com	pliance wit	th the d	leclaration of Section 8.1:		
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change		
21-Aug-2019 J. De La Cruz	3	3 3a Photo updated from terminal block with "-+-+" polar terminal block with "++" polarity label.				
	S.Romo	4	4	Changed manufacturer from Crestron to Meiloon.		
		4	5	Changed technical data from 100UF/100V to 1UF/100V.		
				Changed manufacturer from Just For You Enterprise Co.,		
		4	6	LTD to Shanghai Sucheng Electric Co. Ltd. Changed model from WJ0480329 to SC048190001.		
				Changed datasheet from Just for You Enterprise Co., Model		
		7	3	WJ0480329 datasheet to Shanghai Sucheng Electronic Co.,		
				Ltd datasheet.		