



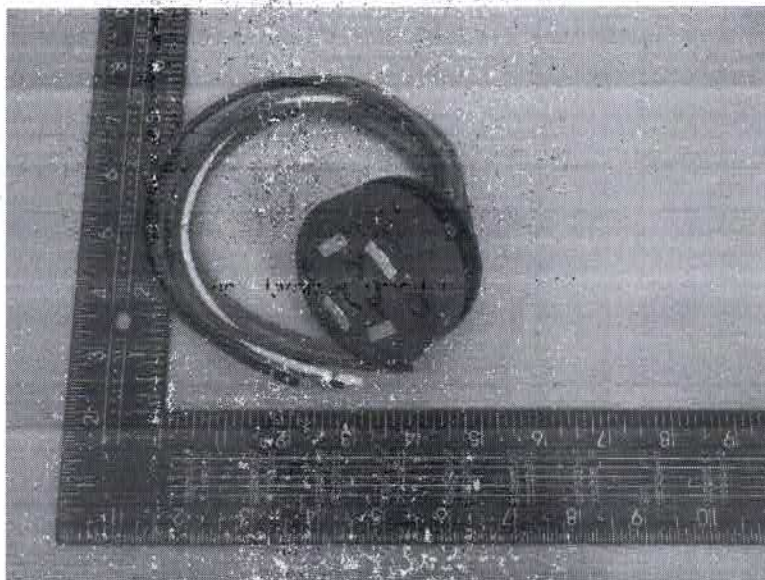
Tredação nº: 154 Livro nº: 20 Folha nº: 113 Página 17 de 23



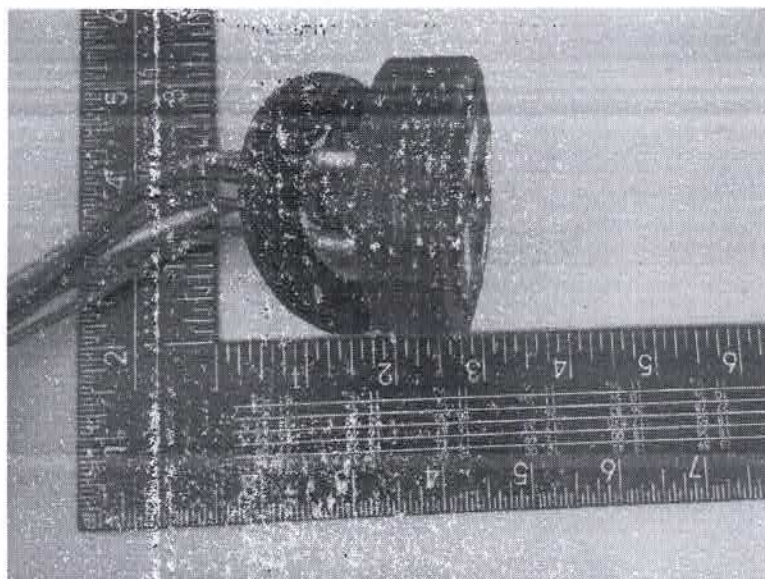
Fangguang Inspection & Testing Co., Ltd

Página 20 de 31

Relatório nº: S20180515035701



Visão geral do modelo JL-240X



Vista lateral do modelo JL-240X

Este documento foi assinado digitalmente por André Luiz Bettega D'Ávila. Para verificar as assinaturas vá ao site <https://www.portaldeassinaturas.com.br/443> e utilize o código CFDA-D664-4214-B37D.

[Handwritten signatures and initials]



REPÚBLICA FEDERATIVA DO BRASIL
 Estado do Paraná – Comarca de Curitiba
 André Luiz Bettega D'Ávila
 Tradutor Público Juramentado e Intérprete Comercial
 Matrícula 12/170 T, da Junta Comercial do Paraná.



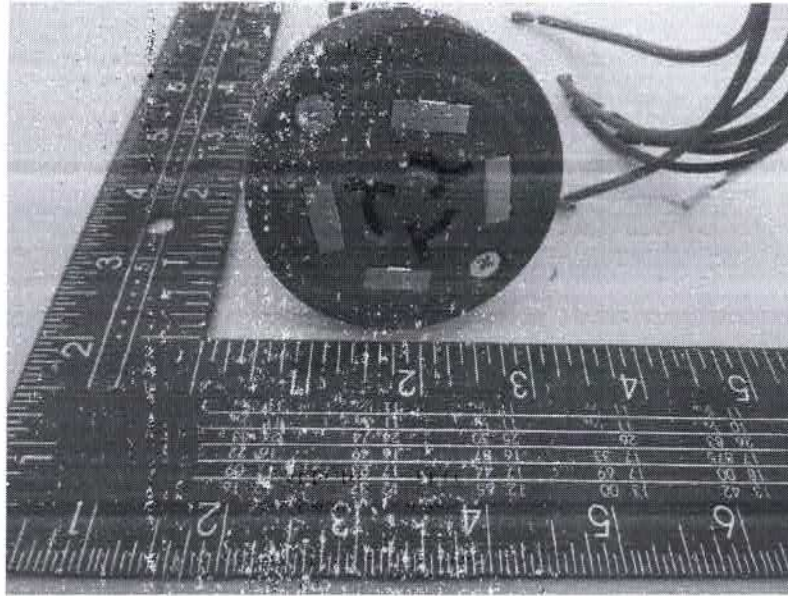
Tradução nº: 2041 Livro nº: 20 Folha nº: 114 Página 18 de 23



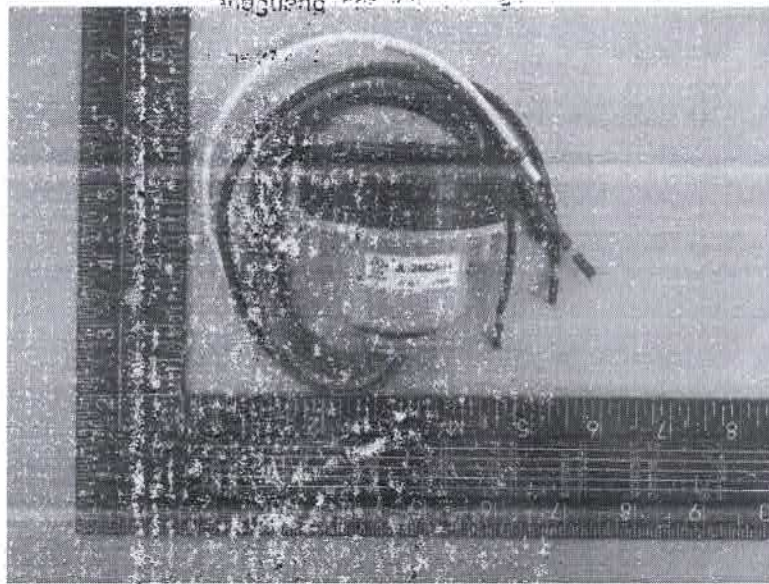
Faz. Inspectors & Testing Co., Ltd

Página 2 de 31

Relatório nº: S20180515035701



Visão geral do modelo JL-240Z



Visão lateral do modelo JL-240Z

Este documento foi assinado digitalmente por André Luiz Bettega D'Ávila. Para verificar as assinaturas vá ao site <https://www.portaldeassinaturas.com.br/443> e utilize o código CFDA-D6B4-4214-B37D.



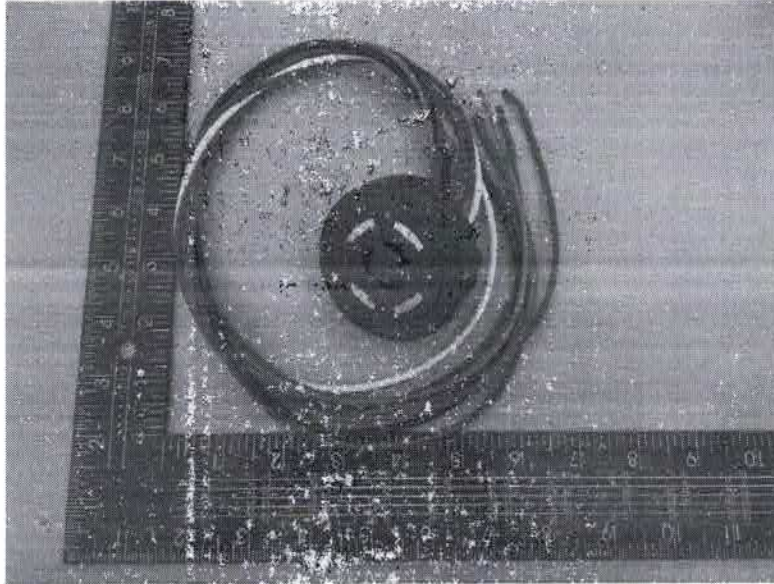
Tradução nº: 1-41 Livro nº: 26 Folha nº: 115 Página 19 de 23



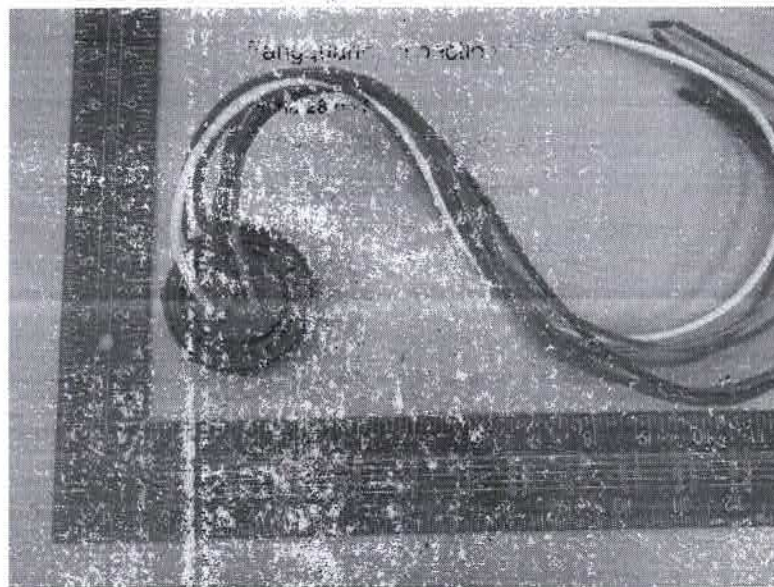
g Inspection & Testing Co., Ltd

Página 31

Relatório nº: S20180515035701



Visão geral do modelo JL-260D



Vista posterior do modelo JL-260D

Este documento foi assinado digitalmente por André Luiz Bettega D. Ávila. Para verificar as assinaturas vá ao site <https://www.portaleassinaturas.com.br> e utilize o código CFDA-D6B4-4214-B37D.

(Assinaturas manuais)



REPÚBLICA FEDERATIVA DO BRASIL
 Estado do Paraná - Comarca de Curitiba
 André Luiz Bettega D'Ávila
 Tradutor Público Juramentado e Intérprete Comercial
 Matrícula 12/170 T, da Junta Comercial do Paraná.



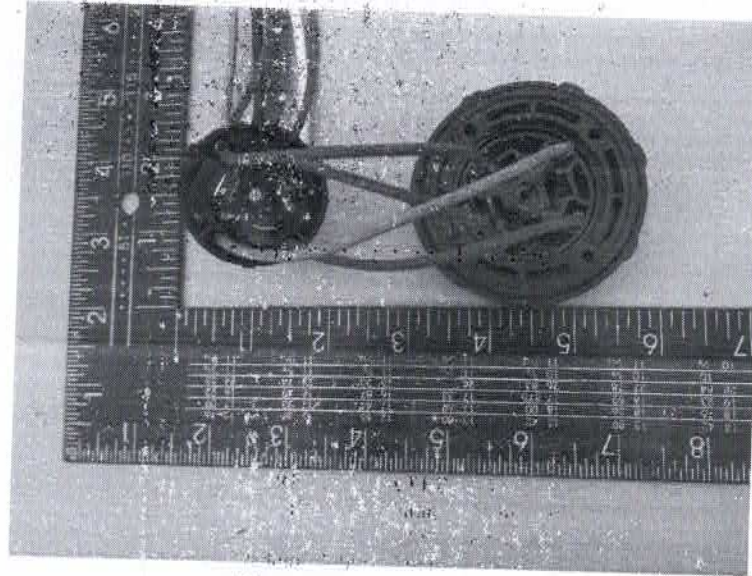
Tradução nº: 1541 Livro nº: 20 Folha nº: 116 Página 20 de 23



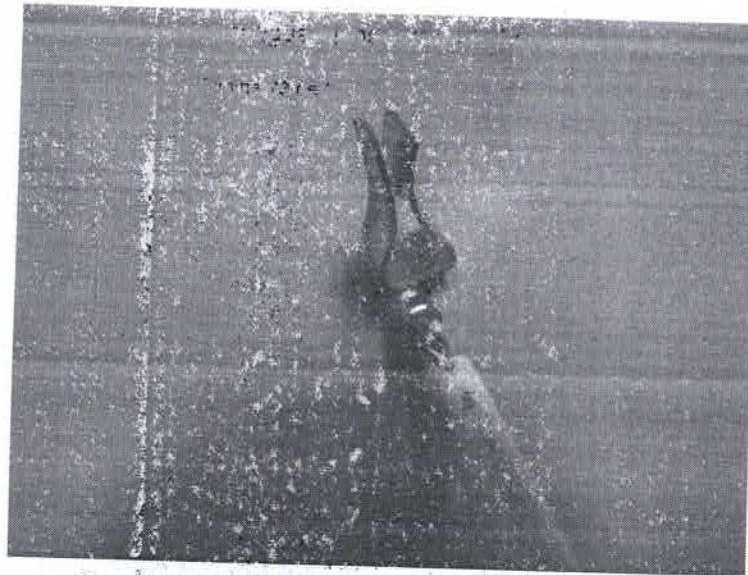
Fang Yang Inspection & Testing Co., Ltd

Página 25 de 31

Relatório nº: S20180515035701



Interior do modelo JL-260D



Pino de contato dos modelos JL-260C, JL-260D

Este documento foi assinado digitalmente por André Luiz Bettega D'Ávila.
 Para verificar as assinaturas vá ao site <https://www.portaldeassinaturas.com.br/443> e utilize o código CFDA-D6B4-4214-B37D.



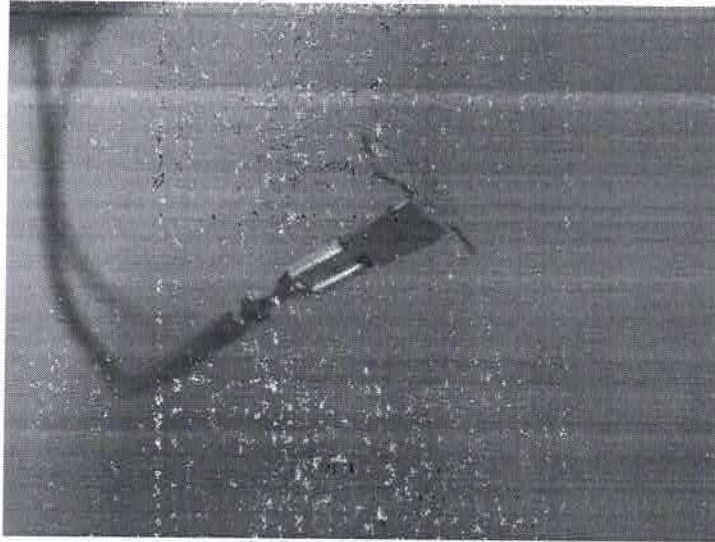
Tradução nº: 1541 Livro nº: 20 Folha nº: 117 Página 21 de 23



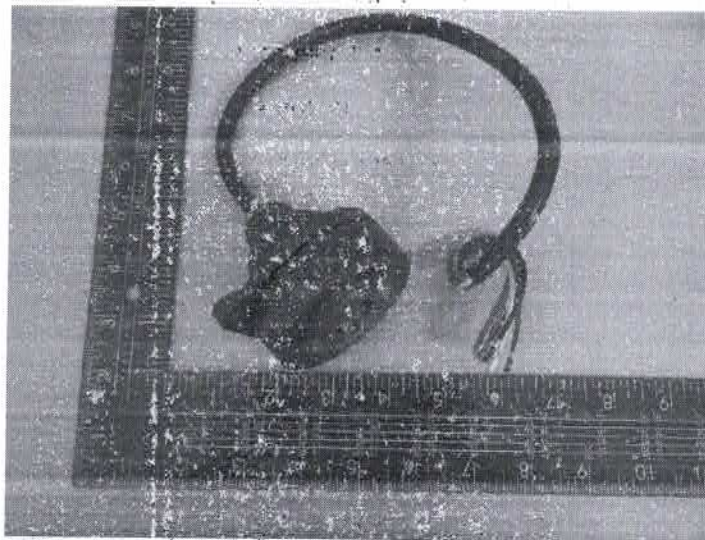
Fangguang Inspection & Testing Co., Ltd

Página 30 de 31

Relatório nº: S20180515035701



Pino de contato de dimerização dos modelos JL-260C e JL-260D



Visão geral do modelo JL-260C

Este documento foi assinado digitalmente por André Luiz Bettega D'Ávila.
Para verificar as assinaturas vá ao site <https://www.portaleassinaturas.com.br> e utilize o código CFDA-D6B4-4214-B37D.

Assinaturas manuais em azul



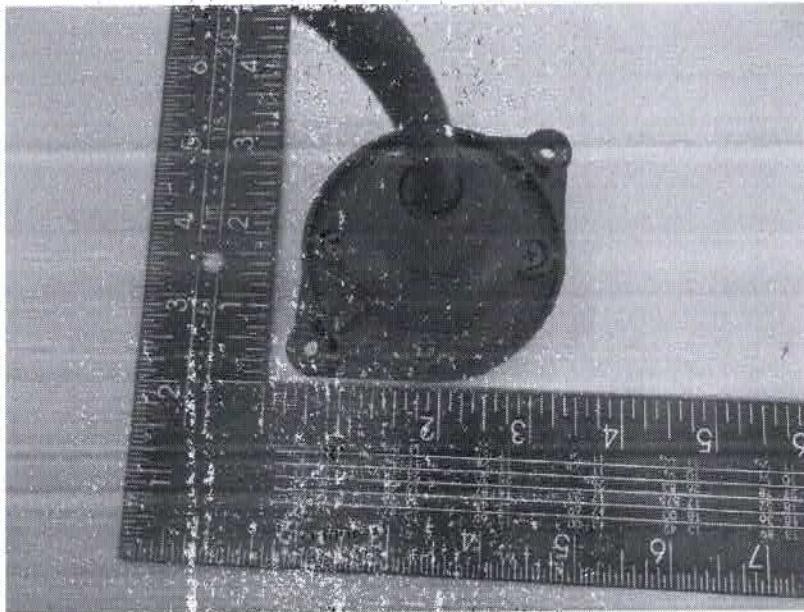
Tradução nº 13.11.15 nº 20 Folha nº: 118 Página 22 de 23



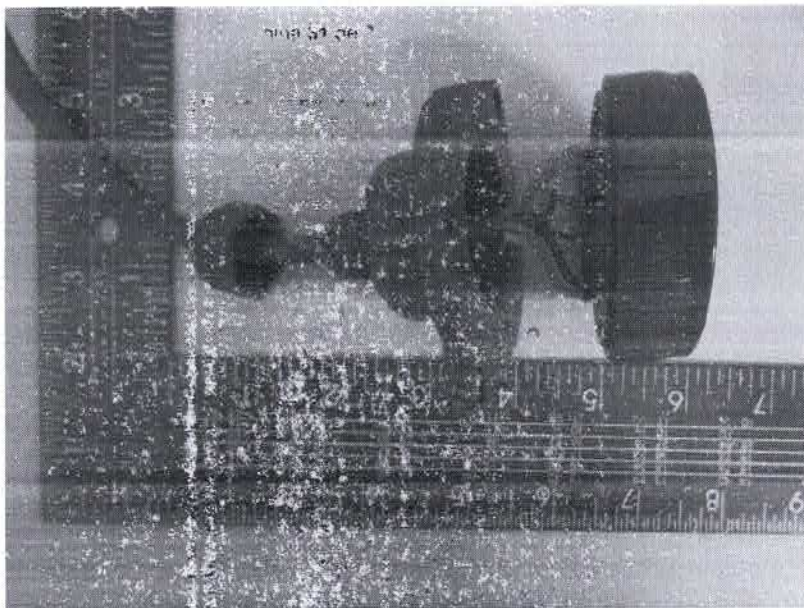
Fluorescence Co. & Testing Co., Ltd

Página 31

Relatório nº: S20180515035701



Vista posterior do modelo JL-260C



Vista lateral do modelo JL-260C

--Fim--

Este documento foi assinado digitalmente por André Luiz Bettega D'Ávila.
 Para verificar as assinaturas vá ao site <https://www.portaldassinaturas.com.br-443> e utilize o código CFDA-D6B4-4214-B37D.

(Assinaturas manuscritas)



REPÚBLICA FEDERATIVA DO BRASIL
 Estado do Paraná - Comarca de Curitiba
 André Luiz Bettega D'Ávila
 Tradutor Público Juramentado e Intérprete Comercial
 Matrícula 12/170 T, da Junta Comercial do Paraná.



Tradução nº: 1541 Livro nº: 20 Folha nº: 119 Página 23 de 23

André Luiz Bettega D'Ávila, abaixo assinado, Tradutor Público e Intérprete Comercial do Idioma Inglês, matriculado e juramentado na Junta Comercial do Estado do Paraná sob o número 12-170 T, no ano de 2012, certifica que recebeu o documento em inglês para ser traduzido ao vernáculo, o que cumpriu em razão do seu ofício na forma anexada acima.

Esta tradução não implica julgamento sobre a forma, a autenticidade e/ou o conteúdo do documento traduzido. Nada mais continha o documento, que traduzi para o português, conferi e dou fé.

Curitiba, 30 de julho de 2021.

 André Luiz Bettega D'Ávila

Este documento foi assinado digitalmente por André Luiz Bettega D'Ávila. Para verificar as assinaturas vá ao site <https://www.portaldassinaturas.com.br:443> e utilize o código CFDA-D6B4-4214-B37D.

PROTOCOLO DE ASSINATURA(S)



O documento acima foi proposto para assinatura digital na plataforma Portal de Assinaturas Certisign. Para verificar as assinaturas clique no link: <https://www.portaldeassinaturas.com.br/Verificar/CFDA-D6B4-4214-B37D> ou vá até o site <https://www.portaldeassinaturas.com.br:443> e utilize o código abaixo para verificar se este documento é válido.

Código para verificação: CFDA-D6B4-4214-B37D



Hash do Documento

AE1E1C1610091ACCF10ABB92AD87C558ED64887E153352A9DFF0AB86CDFAE5F5

O(s) nome(s) indicado(s) para assinatura, bem como seu(s) status em 30/07/2021 é(são) :

- Andre Luiz Bettega D Avila (Signatário) - 024.182.929-16 em 30/07/2021 15:35 UTC-03:00

Tipo: Certificado Digital



Handwritten signatures and initials in blue ink at the bottom right of the page.




TEST REPORT

Application No.....: S201805150357
Applicant's name.....: Shanghai Long-join Intelligent Technology Inc
Applicant's address : No. 398, Nan Wenzao Rd, Baoshan, Shanghai
Sample description: : Base and Receptacles
Model.....: JL-241J, JL-240X, JL-240T, JL-240TL, JL-240Z, JL-240TZ, JL-260C, JL-260D

Date of receipt of test item.....: 2018-05-17
Test location.....: Room 02, The 2nd floor No.201, GRG Technological Building, 163 Ping Yun Rd, Tianhe District, Guangzhou, China
Test standard.....: ANSI C136.41-2013
 For Roadway and Area Lighting Equipment—Dimming Control Between an External Locking Type Photocontrol and Ballast or Driver

Test date(s).....: 2018-05-17 to 2018-05-30
Test result.....: The test results are in compliance with the above mentioned standards
Date of issue.....: 2018-06-19

Tested by: Bill Luo <i>Bill Luo</i>	Reviewed by: Jinjin Teng <i>Jinjin Teng</i>	Approved by: Connie Yang / Manager <i>Connie Yang</i> 
--------------------------------------------------	----------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------

Other aspects: N/A

Abbreviations: P = passed; F = failed; N/A = not applicable

The test result in this test report refers exclusively to the presented test sample. This report shall not be reproduced, except in full, without the written approval of FGTEST.

a
R
ab



Test item description..: Locking Type Plug and Receptacles

Trade mark: LONGJOIN

Manufacturer: Shanghai Long-join Intelligent Technology Inc

Address: No. 398, Nan Wenzao Rd, Baoshan, Shanghai

Manufacturer: Zhejiang Long-Join Electronics Co Ltd.

Address: No.2099, Yedao Rd, Haiyan County, Jiaxing City, Zhejiang Province.

Ratings.....: Max 480Vac; Max.15A;
Dimming 0-30VDC, 250mA

Test items particulars:	
Classification of installation and use.....	N/A
Supply Connection.....	N/A

General product information:

Base model: JL-241J, So full test was done on this model

There are two type receptacles models,

1)JL-240X, JL-240T, JL-240TL JL-240Z, JL-240TZ

2) JL-260C, JL-260D

Each type Receptacles models have the same mechanical and electrical construction, the same installation except for the size of Line/Load/ Neutral/ Dimming pin. So all tests were performed on models: JL-240X, JL-260C

The size see Attachment 1 to 10

Copy of marking plate:
N/A



ANSI C136.41-2013			
Clause	Requirement + Test	Result - Remark	Verdict
5	GENERAL REQUIREMENTS		P
5.1	Background		P
5.2	Dimming Standards		P
5.2.1	0-10 VDC		P
5.2.2	Digital Addressable Lighting Interface (DALI)		P
6	MECHANICAL REQUIREMENTS		P
6.1	Plug Type		P
	The plug used in a dimmable photocontrol (or more broadly, a locking-type dimmable control device) shall be configured with the standard 3 conductors as defined in ANSI C136.10-2010 (referenced in Figure 2), with the addition of two (optionally four) spring type conductors as shown in Figure 6 with limiting dimensions per Figure 1.	See table 6.1	P
	The type of conductor may be of spring pin type or a bent metal member with a spring quality.		P
	If using a bent metal member, it shall be formed with a low stress relaxation material (e.g., beryllium copper alloy, copper nickel silicon alloy).	Copper nickel alloy	P
	The conductors shall have the appropriate mechanical strength and current-carrying capacity required for the dimmable photocontrol application.		P
	The material surface shall be gold plated with nickel under-plating to prevent galvanic corrosion and ensure compatibility with various producers of compliant receptacles.	material surface gold plated with nickel	P
	The gold plating should be Type II, Class 0.75 per ASTM B-488-11.		P
6.2	Receptacle Type		P
	The receptacle shall be configured with the standard 3 conductors as defined in ANSI C136.10-2010 (referenced in Figure 3 and Figure 4), with the addition of two (optionally four) conductive pads with limiting dimensions per Figure 5.	See table 6.2	P
	The pad surfaces shall be gold plated with nickel under-plating to prevent galvanic corrosion and ensure compatibility with various producers of compliant controls.	material surface gold plated with nickel	P
	The gold plating should be Type II, Class 0.75 per ASTM B-488-11.		P



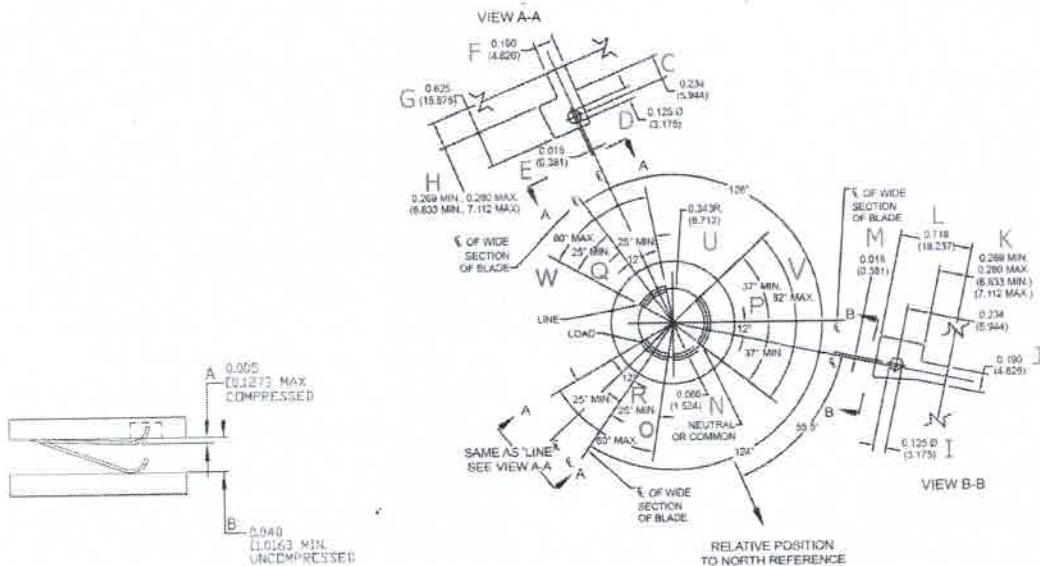
ANSI C136.41-2013			
Clause	Requirement + Test	Result - Remark	Verdict
	If the dimming control connector or the receptacle is supplied with wire leads: • The dimming control wire leads attached to this plug shall be 18 American Wire Gauge (AWG) or larger. Insulation shall be rated 105 °C, 600V minimum. The wire should also be outdoor rated and ROHS compliant.	Dimming control wire: 18AWG, 105 °C, 600V	P
	• For polarity sensitive control circuits (e.g., 0-10V), the positive dimming conductor shall have insulation which is violet in color and the reference dimming conductor shall have insulation which is gray in color.		P
6.3	Vibration Test		P
	The plug used in a locking-type dimmable control device shall be installed in a compliant, dimmable receptacle, and subject to the vibration test specified in ANSI C136.31.		P
	The plug and receptacle shall be mounted to the vibration table in a manner that is consistent with the way the receptacle is mounted in the luminaire. The frequency range may be extended to 55 Hz to find a fundamental resonant frequency.		P
	If a fundamental resonant frequency is not found, a sweep from 2 Hz to 55 Hz at 1 octave/minute shall be run for one hour. The test shall be run with a displacement of 0.250 inches or an acceleration of 3.0 G (29.4 m/s ²) measured at the receptacle, whichever is less.		P
	Contact resistance of the dimming conductors shall not exceed 1.0 ohms after the vibration test (receptacle wires may be omitted from the measurement).	0.03 ohms	P
7	ELECTRICAL REQUIREMENTS		P
7.1	Plug Type		P
	See the reference specification for the particular dimming method used for proper electrical requirements.		P
	In general, voltage and current limitations of the spring contact shall comply with the applicable dimming standard.		P
	Safety standards, such as UL 773 might involve additional electrical requirements and limitations.	UL Certificate Number 20180516-E188110	P
	This standard does not address these requirements.		P
7.2	Receptacle Type		P
	The receptacle shall be capable of withstanding the voltage and current requirements of both the 0-10VDC dimming method and DALI.		P



ANSI C136.41-2013			
Clause	Requirement + Test	Result - Remark	Verdict
	For the purposes of this standard, the conductive dimming pads shall be capable of carrying 250mA and shall be limited to 30VDC.	0-30VDC, 250mA	P
8	MARKING REQUIREMENTS		N/A
	In addition to the marking requirements of ANSI C136.10-2010, the photocontrol (control device) shall be clearly marked with the control method utilized, 0-10VDC, DALI, or other.		N/A
	If other, the label may be more descriptive to describe the method or simply "OTHER".		N/A
	The luminaire shall be clearly marked (labeled), indicating the compatible control method as 0-10VDC, DALI, or other.		N/A
	This marking shall be located on the external surface such that it is visible during typical photocontrol installation.		N/A

ANSI C136.41-2013			
Clause	Requirement + Test	Result - Remark	Verdict

6.1	TABLE: Plug Dimensions For Model JL-241J			
Location	1st Sample	2nd Sample	3rd sample	Limit (mm)
A	0.11	0.12	0.11	0.127 MAX
B	4.30	4.41	4.32	1.016MIN
C	5.83	5.85	5.87	5.944 ± 0.127
D	3.21	3.25	3.26	Ø 3.175 ± 0.127
E	0.41	0.47	0.45	0.381 ± 0.127
F	4.92	4.90	4.87	4.826 ± 0.127
G	15.80	15.92	15.78	15.875 ± 0.127
H	6.86	7.05	6.91	6.833MIN., 7.112MAX
I	3.20	3.18	3.24	Ø 3.175 ± 0.127
J	4.93	4.90	4.87	4.825 ± 0.127
K	7.05	6.93	6.98	6.833MIN., 7.112MAX
L	18.15	18.20	18.28	18.237 ± 0.127
M	0.41	0.47	0.43	0.381 ± 0.127
N	1.52	1.47	1.43	1.524 ± 0.127
U	8.75	8.67	8.80	8.712 ± 0.127
V	25.2°	27.1°	29.2°	82° MAX
W	45.3°	48.5°	47.2°	60° MAX
O	35.4°	36.1°	38.3°	60° MAX
P	46.5°	49.3°	42.5°	37° MIN
Q	28.3°	27.3°	28.3°	25° MIN
R	27.5°	28.2°	27.4°	25° MIN





ANSI C136.41-2013			
Clause	Requirement + Test	Result - Remark	Verdict

6.2		TABLE: Receptacle Dimensions For Model JL-240X			
Location	1 st Sample	2 nd Sample	3 rd sample	Limit (mm)	
A	6.38	6.45	6.30	6.350 ± 0.127	
B	0.70	0.65	0.73	0.635 ± 0.127	
C	2.28	2.41	2.38	Ø2.362 ± 0.127	
D	6.45	6.52	6.37	6.223MIN., 6.706MAX.	
E	8.71	8.80	8.67	8.712 ± 0.127	
F	2.18	2.22	2.15	1.905 TO 2.286	
G	18.3°	18.0°	18.4°	18° ± 0.5°	
H	35.2°	37.3°	35.4°	33° MIN	
I	60.6°	60.8°	62.1°	70° MAX	
J	18.3°	18.0°	18.4°	18° ± 0.5°	
K	35.3°	36.4°	35.6°	33° MIN.	
L	60.7°	62.4°	60.7°	70° MAX.	
M	18.4°	18.2°	18.3°	18° ± 0.5°	
N	35.2°	35.1°	35.4°	35° ± 0.5°	
O	51.5°	50.9°	52.4°	45° MIN.	
P	93.6°	90.8°	90.2°	95° MAX.	
Q	124.1°	124.0°	124.1°	124° ± 0.5°	
R	126.3°	126.0°	126.4°	126° ± 0.5°	
T	16.93	16.75	16.95	15.875 MIN	
U	1.73	1.74	1.71	2.362(+0.000,-0.787)	
V	7.67	7.83	7.85	6.350 MIN	
W	64.03	64.22	64.05	66.675(+0.000,-3.175)	
X	48.59	48.44	48.46	53.975 MAX.	
Y	64.64	64.92	65.10	88.900 MAX.	
Z	5.01	5.02	5.09	2.79 MIN.	
AA	24.3°	23.5°	25.6°	22° MIN.	
BB	38.6°	40.5°	40.3°	48° MAX.	
CC	75.3°	75.0°	75.2°	75° ± 0.5°	
DD	105.3°	105.1°	105.2°	105° ± 0.5°	
EE	36.6	36.48	36.50	Ø36.58 ± 0.127	

6.2		TABLE: Receptacle Dimensions For Model JL-260C			
-----	--	------------------------------------------------	--	--	--



ANSI C136.41-2013

Clause	Requirement + Test	Result - Remark	Verdict
--------	--------------------	-----------------	---------

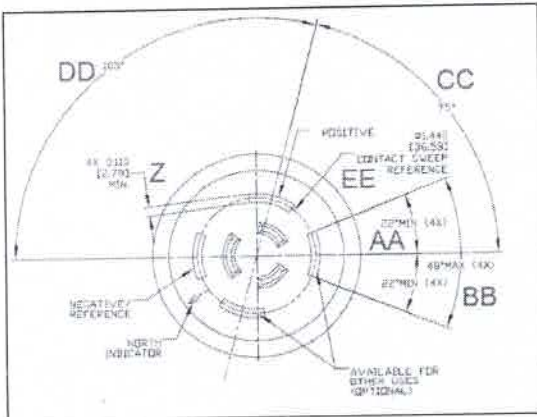
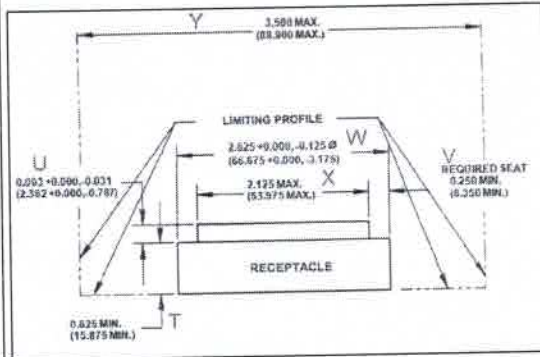
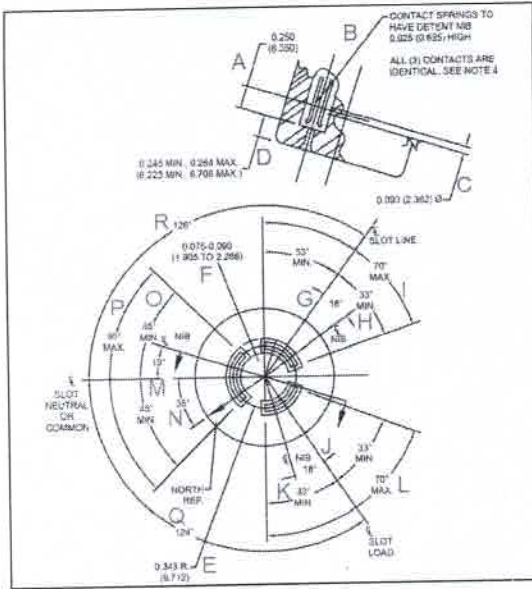
Location	1 st Sample	2 nd Sample	3 rd sample	Limit (mm)
A	6.40	6.37	6.45	6.350 ± 0.127
B	0.72	0.68	0.64	0.635 ± 0.127
C	2.38	2.46	2.29	∅2.362 ± 0.127
D	6.56	6.63	6.38	6.223MIN., 6.706MAX.
E	8.73	8.63	8.70	8.712 ± 0.127
F	2.11	2.26	2.18	1.905 TO 2.286
G	18.3°	18.1°	18.3°	18° ± 0.5°
H	34.1°	35.4°	35.3°	33°MIN
I	68.4°	65.3°	64.6°	70°MAX
J	18.3°	18.2°	18.1°	18° ± 0.5°
K	34.2°	35.3°	36.1°	33°MIN.
L	68.3°	66.5°	68.3°	70°MAX.
M	18.2°	18.3°	18.4°	18° ± 0.5°
N	35.3°	35.2°	35.4°	35° ± 0.5°
O	48.8°	46.5°	48.2°	45°MIN.
P	93.5°	90.2°	92.1°	95°MAX.
Q	124.3°	123.8°	124.4°	124° ± 0.5°
R	126.2°	126.0°	126.0°	126° ± 0.5°
T	17.29	17.10	16.95	15.875MIN
U	1.73	1.77	1.80	2.362(+0.000,-0.787)
V	7.74	7.64	7.52	6.350 MIN
W	64.81	64.24	65.10	66.675(+0.000,-3.175)
X	48.79	48.51	49.06	53.975 MAX.
Y	65.38	64.33	65.93	88.900 MAX.
Z	3.02	3.15	3.18	2.79 MIN.
AA	25.3°	24.3°	26.5°	22°MIN.
BB	47.5°	46.5°	47.5°	48°MAX.
CC	75.1°	75.3°	75.0°	75° ± 0.5°
DD	105.1°	105.0°	105.3°	105° ± 0.5°
EE	36.60°	36.65°	36.48°	∅36.58 ± 0.127

[Handwritten signatures and initials]



ANSI C136.41-2013

Clause	Requirement + Test	Result - Remark	Verdict
--------	--------------------	-----------------	---------



Handwritten signatures and initials in blue ink.



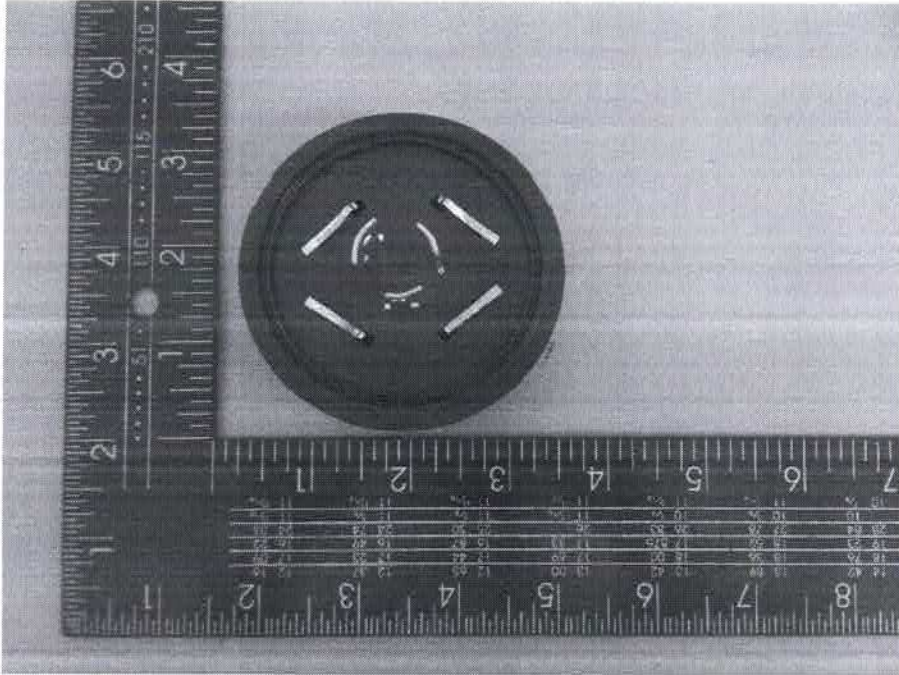
ANSI C136.41-2013			
Clause	Requirement + Test	Result - Remark	Verdict

Critical components	P
----------------------------	----------

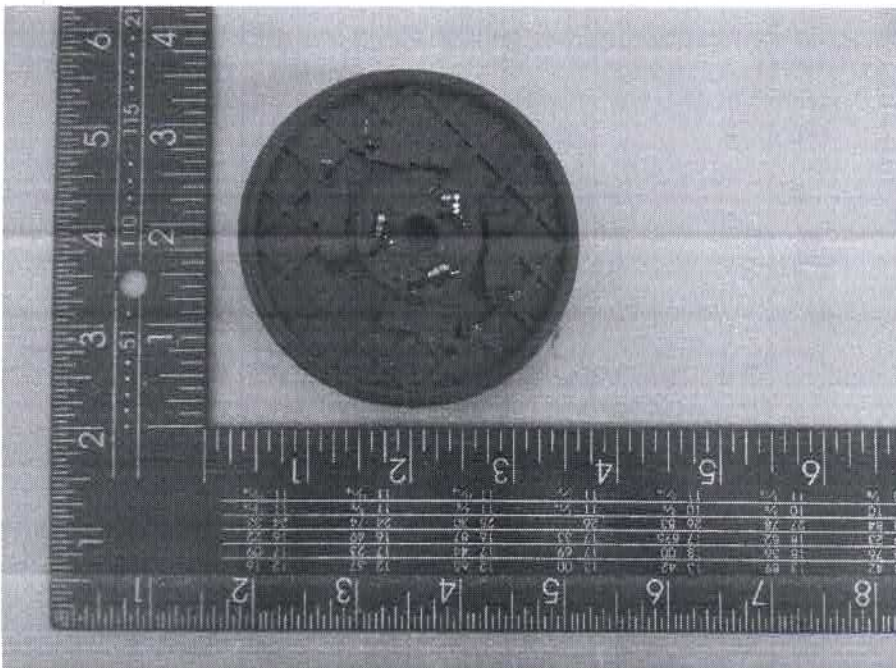
Object/part No.	manufacturer/ trademark	type/model	technical data	standard	mark(s) of conformity
Line/Load/ Neutral/ Dimming pins	SHANGHAI LONG- JOIN INTELLIGENT TECHNOLOGY INC.	JL-241J, JL- 240X, JL- 260D, JL- 240T, JL- 240TL, JL- 240Z, JL- 240TZ, JL- 260C	Line/Load/ Neutral pins /:1.5mm thick, Copper nickel alloy Dimming pins: 0.25mm thick, Copper nickel alloy	ANSI C136.41	Tested with appliance
Plastic enclosure-black for model JL- 241J	SABIC INNOVATIVE PLASTICS US L L C	420SE0(f1)(w)(GG)(rr1)	V-0,5VA 130 °C	ANSI C136.41	Tested with appliance
Plastic enclosure-black for models JL- 240X, JL-240T, JL-240TL, JL- 240Z, JL-240TZ,	SABIC INNOVATIVE PLASTICS US L L C	420SE0(f1)(w)(GG)(rr1)	V-0,5VA 130 °C	ANSI C136.41	Tested with appliance
	E I DUPONT DE NEMOURS & CO INC	FR530	5VA 155°C	ANSI C136.41	Tested with appliance
Plastic enclosure-black for models JL- 260C, JL-260D	SABIC INNOVATIVE PLASTICS BV	943(f1)	V-0,80°C	ANSI C136.41	Tested with appliance
Dimming wire leads	SUZHOU DAOWANG ELECTRONIC TECHNOLOGY CO LTD	1015	18AWG, 105°C, 600V	ANSI C136.41	Tested with appliance
		3321	18AWG, 150°C, 600V		
Line/Load/ Neutral/ wire leads	SUZHOU DAOWANG ELECTRONIC TECHNOLOGY CO LTD	1015	14AWG or 16AWG, 105°C, 600V	ANSI C136.41	Tested with appliance
		3321	14AWG or 16AWG, 150°C, 600V		

[Handwritten signatures and initials in blue ink]

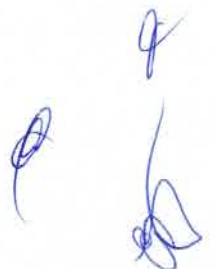
Attachment 10 Photos of product



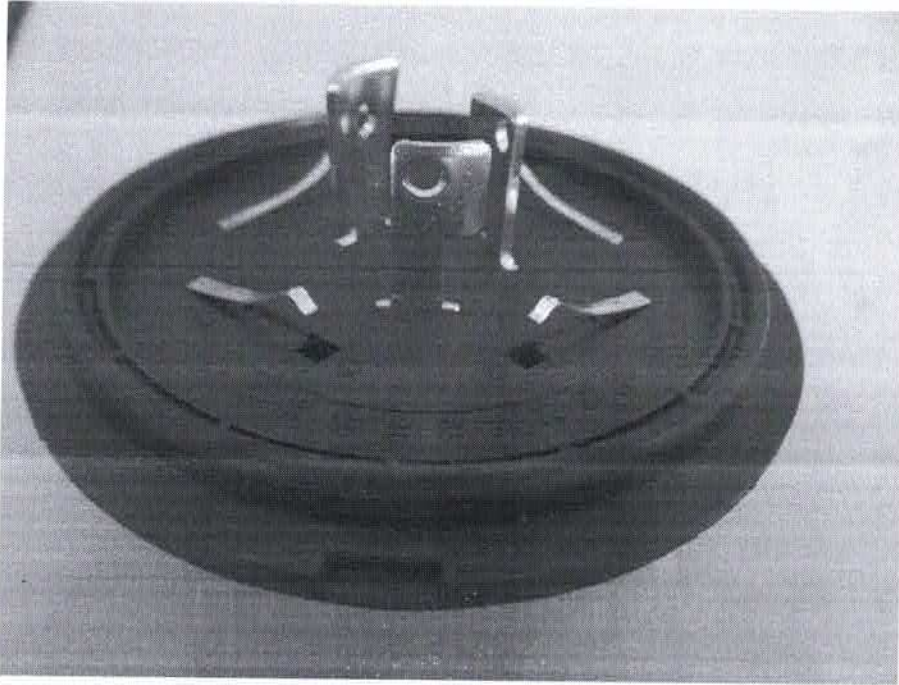
Overall view for model JL-241J



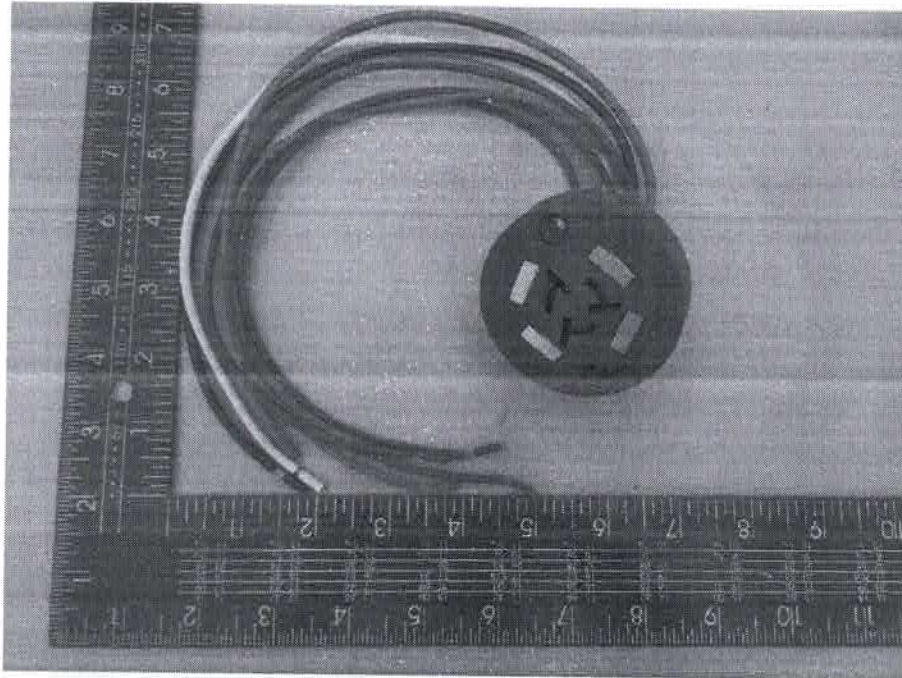
Back view for model JL-241J



Handwritten signatures in blue ink.



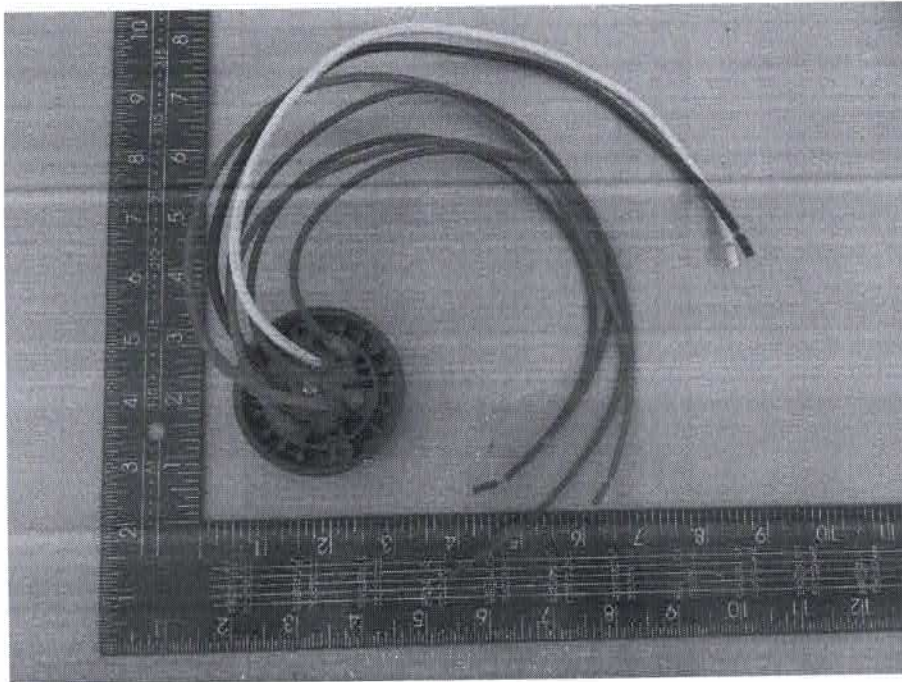
Pins view for model JL-241J



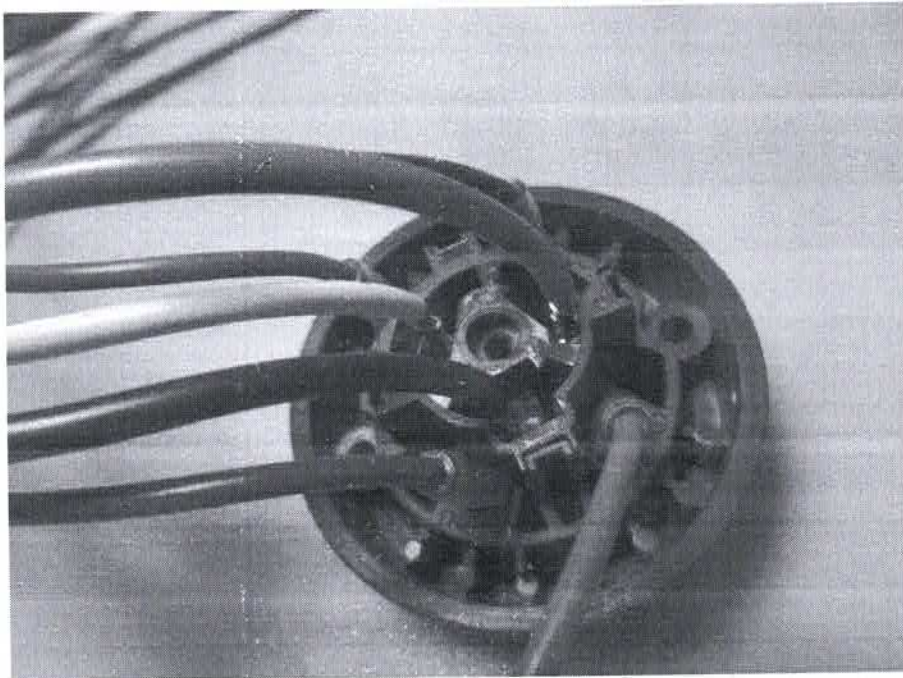
Overall view for model JL-240T



Handwritten signatures in blue ink, located in the bottom right corner of the page.



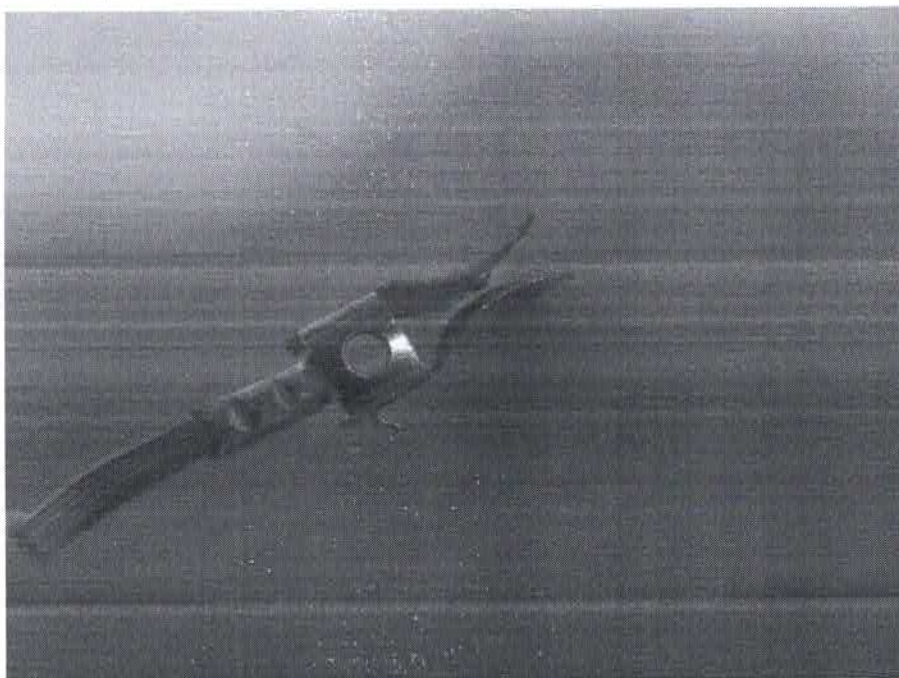
Back view for model JL-240T



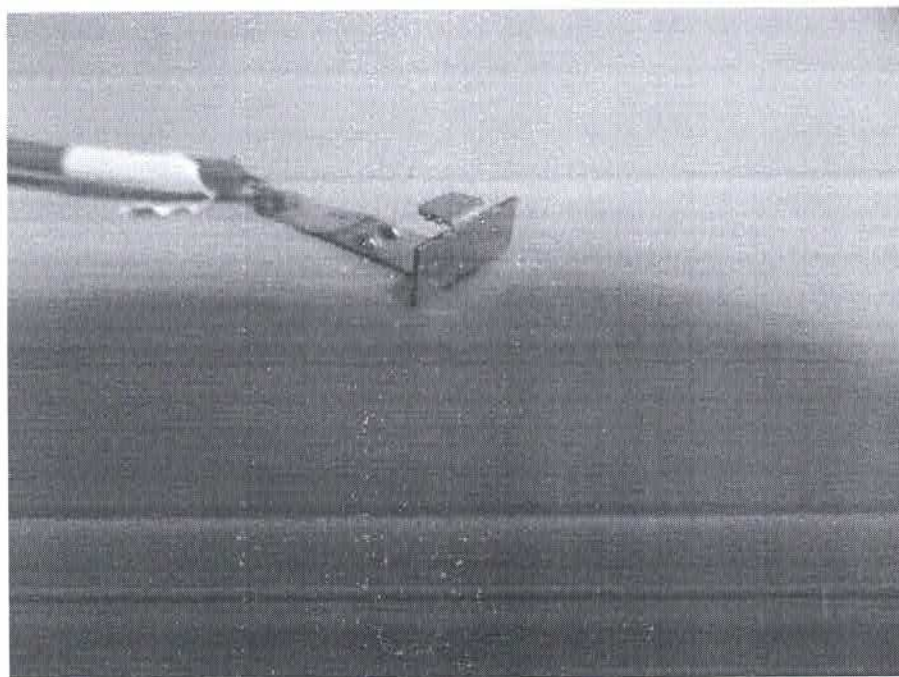
Internal view for models JL-240X, JL-240T, JL-240TL, JL-240Z, JL-240TZ



Handwritten signatures in blue ink, consisting of several stylized marks and initials.



Contact pin view for models JL-240X, JL-240T, JL-240TL, JL-240Z, JL-240TZ



Dimming contact pin view for models JL-240X, JL-240T, JL-240TL, JL-240Z, JL-240TZ



Handwritten signatures in blue ink, including a large stylized 'Q' and other illegible marks.