

1.0 Reference and Address			
Report Number	150400559SHA-001	Original Issued: 22-Apr-2015	Revised: 1-Mar-2016
Standard(s)	ENERGY STAR® Program Requirements for Displays Version 6.0		
Applicant	<u>MMD Monitors & Displays Nederland B.V.</u>	Manufacturer	TPV Electronics(Fujian) Co., Ltd
Address	Prins Bernhardplein 200, 1097 JB Amsterdam, The Netherlands	Address	Rongqiao Economic and Technological Development Zone, Fuqing City, Fujian Province
Country	Netherland	Country	P.R.China
Contact	P.M. van Til	Contact	Lissa. Wang
Phone	+31 (0) 20 504 6975	Phone	+86-591-85285555
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2.0 Product Description			
Product	Display (Professional display/signage)		
Brand name	Philips		
Description	<p>The product covered by this report is a LCD Display (LED backlighting) The evaluation standard of this report is based on: ENERGY STAR Program Requirements Product Specification for Displays Eligibility Criteria Version 6.0 And the test specification of this report refer to: IEC 62301:2011(Ed.2.0): Household electrical appliances -Measurement of standby power IEC 62087:2011(Ed.3.0): Methods of measurement for the power consumption of audio, video and related equipment</p>		
Models	BDL3230QL		
Model Similarity	NA		
Ratings	100-240Vac, 50-60Hz, 1.5A		
Other Ratings	NA		
Date available	04/20/2015	Market availability	Yes
		Last Mfg date	NA
Major Markets	Australia, New Zealand, Canada, Europe, Japan, Switzerland, Taiwan, United States		
Trans Type	Modification: Other (If Other, List in Notes Field)		
Notes	Add test specification in Description		
Additional model details (optional)	Model Name or Number	Identifying Information	
Original Certificate actual issued date for model tested (only applies to revised reports)			04/30/2015

3.0 Product Photographs

Photo 1 - External view (Front)



Photo 2 - External view (Back)

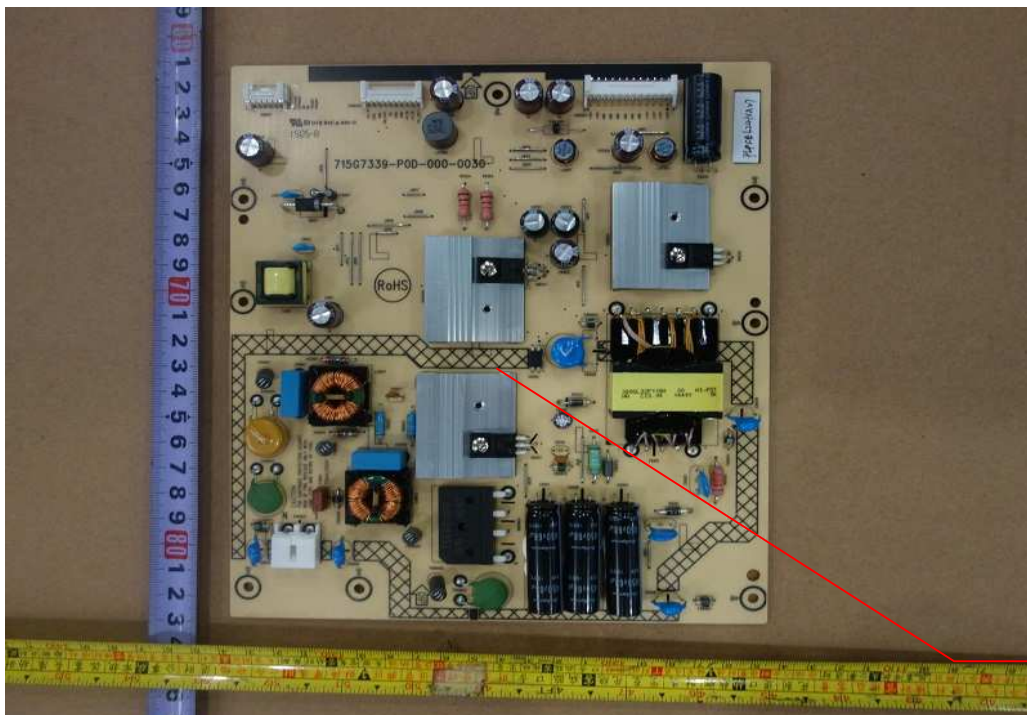


3.0 Product Photographs

Photo 3- Mainb board



Photo 4- Power Board



4.0 Critical Components						
Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
1	1	LCD Panel	TPV	TPT315B5	31.5", TFT type, with LED backlighting.	NR
3	2	Main Board	TPV	715G7249	I/P: Max.5Vdc, Max.2.5A	NR
4	3	Power Board	TPV	715G7339	I/P: 90-264Vac, 47-63Hz, max.1.5A. O/P: 18Vdc, max.1.5A; 12Vdc, max.1.2A; 5.2Vdc, 1.6A	NR
NOTES:						
<p>1) Not all item numbers are indicated (called out) in the photos, as their location is obvious.</p> <p>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.</p> <p>3) Indicates specific marks to be verified, which assures the agreed level of surveillance for the component. "NR" - indicates: a) Unlisted and only visual examination is necessary or b) marks are not required to be verified.</p>						

5.0 Critical Unlisted CEC Components

Periodic Evaluation of Critical Unlisted Components by the Intertek Component Evaluation Centers (CEC) is not required under the INTERTEK ENERGY STAR Program.

6.0 Critical Features

Critical Features/Components - 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 ENERGY STAR® Program Requirements.

Listed Component - 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.

Recognized Component - 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.

Unlisted Component - 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.

Construction Details - 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. Product Safety Compliance - NA

2. EMI Compliance - NA

3. Schematics - NA

4. Installation, Operating and Safety Instructions - Instructions for installation and use of this product are provided by the manufacturer. Refer to Illustration No.1.for details.

5. Package Markings - NA

6. Warranty Information - NA

7. Marking Label - Refer to Illustration No.2.for details.

7.0 Illustrations

Illustration 1 - Installation, Operating and Safety Instructions

BDL3230QL

Important Safety Instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



- WARNING:** TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.
- WARNING:** Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.
- WARNING:** The batteries (batteries installed) shall not be exposed to excessive heat such as sunshine, fire or the like.
- WARNING:** The mains plug or appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.
- WARNING:** To prevent the spread of fire, keep candles or other open flames away from this product at all times.



- WARNING:** To prevent injury, this apparatus must be securely attached to the floor/wall in accordance with the installation instructions.
- CAUTION:** These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that

contained in the operating instructions unless you are qualified to do so.

CAUTION: Excessive sound pressure from earphones and headphones can cause hearing loss. Adjustment of the equalizer to maximum increases the earphone and headphone output voltage and the sound pressure level. Therefore, to protect your hearing, adjust the equalizer to an appropriate level.

For UL/CUL application: For use only with UL Listed Wall Mount Bracket with minimum weight/load: 8.7 Kg

For CB application: Unit without base weight: 8.7 Kg. The equipment and its associated mounting means still remain secure during the test. (Used wall mounting kit: 400x400 mm and 200x200mm distance by using M6 screws of 10 mm long plus the thickness of the mounting bracket.

IMPORTANT INFORMATION

If a television is not positioned in a sufficiently stable location, it can be potentially hazardous due to falling. Many injuries, particularly to children, can be avoided by taking simple precautions such as:

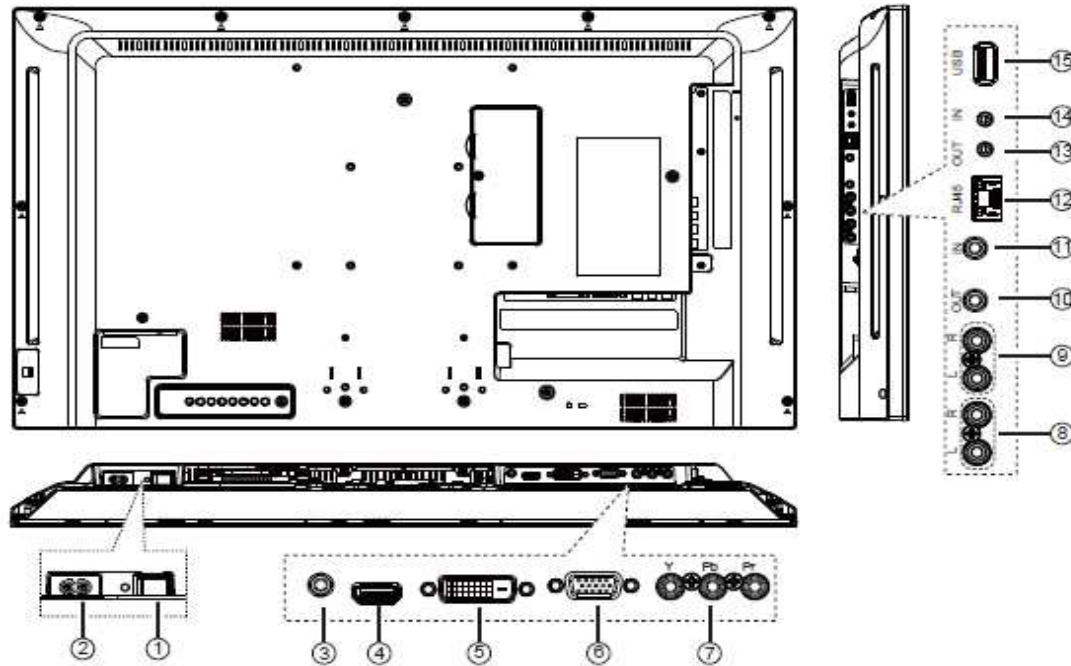
- Using cabinets or stands recommended by the manufacturer of the television.
- Only using furniture that can safely support the television.
- Ensuring the television is not overhanging the edge of the supporting furniture.
- Not placing the television on tall furniture (for example, cupboards or bookcases) without anchoring both the furniture and the television to a suitable support.
- Not standing the televisions on cloth or other materials placed between the television and supporting furniture.
- Educating children about the dangers of climbing on furniture to reach the television or its controls.

EAC

7.0 Illustrations

BDL3230QL

2.2. Input/Output Terminals



① MAIN POWER SWITCH
Switch the main power on/off.

② AC IN
AC power input from the wall outlet.

③ PC LINE IN
Audio input from VGA source (3.5mm stereo phone).

④ HDMI IN
HDMI video / audio input.

⑤ DVI-D IN
DVI-D video input.

⑥ VGA IN (D-Sub)
VGA video input.

⑦ Y/CVBS
Video source input.

⑧ AUDIO IN
Audio input from external AV device (RCA).

⑨ AUDIO OUT
Audio output to external AV device.

⑩ IR OUT / ⑪ IR IN
IR signal output /input for the loop-through function.

NOTES:

- This display's remote control sensor will stop working if the jack [IR IN] is connected.
- To remotely control your A/V device via this display, refer to page 12 for IR Pass Through connection.

⑫ RJ-45

LAN control function for the use of remote control signal from control center.

⑬ RS232 OUT / ⑭ RS232 IN

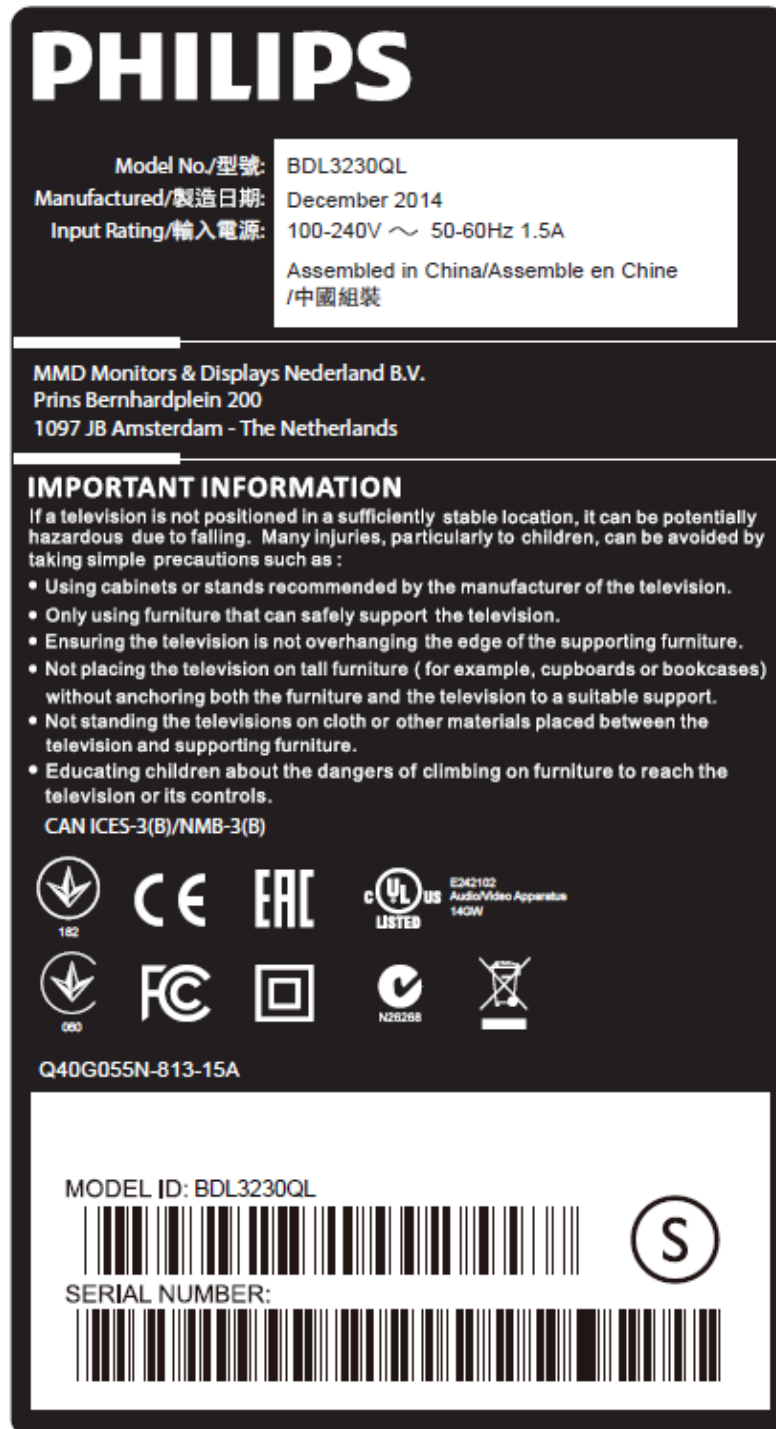
RS232C network output / input for the loop-through function.

⑮ USB PORT

Connect your USB storage device.

7.0 Illustrations

Illustration 2 -Marking Label



8.0 Test Summary			
Evaluation Period	4/22/2015-4/22/2015		Project No. 150400559SHA
Sample Rec. Date	13-Apr-2015	Condition Prototype	Sample ID. 0150413-87-001
Test Location	Intertek Testing Services Shanghai Limited. EPA ID(1105997) Building No.86, 1198 Qinzhou Road (North), Shanghai 200233, China		
Test Procedure	Testing Lab	Test type	Qualification
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.			
The following requirements were evaluated:			
Required Submittal Information			Submittal Data
Model Name and/or Number tested			BDL3230QL
Date tested			04/22/2015
Serial number of Unit tested			NA
ENERGY_STAR_Specification_Version*			6.0
Product_Type*			Professional display/signage
Other_Product_Type			NA
Display_Type*			Other
Other_Display_Type			TFT LCD
Display_Backlight_Technology*			LED
Other_Display_Backlight_Technology			NA
Display_Contrast_Ratio*			1400:1
Viewable_Screen_Height_in*			15.5
Viewable_Screen_Width_in*			27.5
Diagonal_Viewable_Screen_Size_in*			31.5
Viewable_Screen_Area_sq_in*			425.27
Aspect_Ratio*			1.78
Native_Resolution_Vertical_pixels*			1080
Native_Resolution_Horizontal_pixels*			1920
Total_Native_Resolution_megapixels*			2.074
Maximum_Resolution_Vertical*			1080
Maximum_Resolution_Horizontal*			1920
Native_Pixel_Density_Dp_pixels_sq_in*			4876
Screen_Refresh_Rate_Hz*			60
Horizontal_Viewing_Angle_degrees*			178
Vertical_Viewing_Angle_degrees*			178
Color_Gamut*			68% of NTSC
Is_Color_Gamut_at_least_sRGB*			No
Is_This_Model_an_Enhanced_Performance_Display			No
Reported_Contrast_Ratio_at_85_Left_Horizontal_Viewing_Angle			NA
Reported_Contrast_Ratio_at_85_Right_Horizontal_Viewing_Angle			NA
Is_This_Model_Shipped_With_an_External_Power_Supply_EPS*			No
Is_Model_Sold_Through_Enterprise_Channels*			Yes
Other_Available_Interfaces			NA
Other_Data_Network_Peripheral_Ports			RS232
Other_Model_Options			NA
Interface*			HDMI
Other_Interface			NA
Data_Network_Connection*			Fast Ethernet
Other_Data_Network_Connected			NA
Power_Source*			Ac Wall Outlet
Other_Power_Source			NA
VESA_FPDM2_Test_Pattern_Used*			No
Recommended_Image_Size_mm*			698.4x392.85
Display_Has_an_Integrated_Television_Tuner*			No
Other_Mechanism_for_Automatically_Entering_Sleep_or_Off_Mode			NA
Default_Delay_Time_to_Sleep_min			

8.0 Test Summary	
Does_Model_Have_a_Forced_Menu_at_Initial_Start_up*	No
Is_Automatic_Brightness_Control_ABC_Present*	No
Is_Automatic_Brightness_Control_ABC_Enabled_by_Default	No
Automatic_Brightness_Control_ABC_Disabled_Brightness_Mode	
Minimum_Luminance_cd_m_2*	0.7
Maximum_Measured_Luminance_cd_m_2*	362.1
Maximum_Reported_Luminance_cd_m_2*	350
As_shipped_Luminance_cd_m_2	263.7
As_tested_Luminance_cd_m_2*	227.5
On_Mode_Power_at_10_Lux_at_115_Volts_W	
On_Mode_Power_at_300_Lux_at_115_Volts_W	
Measured_On_Mode_Power_at_115_Volts_W	42.58
Reported_On_Mode_Power_at_115_Volts_W	
Measured_Sleep_Mode_Power_at_115_Volts_W	0.25
Reported_Sleep_Mode_Power_at_115_Volts_W	
Measured_Non_Connected_Sleep_Mode_Power_at_115_Volts_W	
Measured_Off_Mode_Power_at_115_Volts_W	0.25
Reported_Off_Mode_Power_at_115_Volts_W	
On_Mode_Power_at_10_Lux_at_230_Volts_W	
On_Mode_Power_at_300_Lux_at_230_Volts_W	
Measured_On_Mode_Power_at_230_Volts_W	41.76
Measured_Sleep_Mode_Power_at_230_Volts_W	0.26
Measured_Non_Connected_Sleep_Mode_Power_at_230_Volts_W	
Measured_Off_Mode_Power_at_230_Volts_W	0.26
On_Mode_Limit_Pon_max_W*	122.82
Sleep_Mode_Limit_Psleep_ap_or_Psleep_max_W*	0.7
Off_Mode_Limit_Poff_max_W*	0.5
True_Power_Factor_PF_During_On_Mode_Testing*	0.56
Low_Voltage_Dc_Source_Power_PI_W	
Adder_for_an_Enhanced_Performance_Display_W	0
Adder_for_Automatic_Brightness_Control_W	0
Number_of_Sleep_Modes_in_Addition_to_Default_Sleep_Mode*	0
Signal_Technology*	Analog,Digital
Available_Interfaces*	HDMI,DVI,VGA,C omposite
Data_Network_Peripheral_Ports*	Ethernet,Other
Model_Options*	Built-In Speakers
Mechanism_for_Automatically_Entering_Sleep_or_Off_Mode*	Display Power Management Signaling
On_Mode_Power_at_10_Lux_at_100_Volts_50Hz_W	
On_Mode_Power_at_300_Lux_at_100_Volts_50Hz_W	
Measured_On_Mode_Power_at_100_Volts_50Hz_W	42.87
Measured_Sleep_Mode_Power_at_100_Volts_50Hz_W	0.25
Measured_Non_Connected_Sleep_Mode_Power_at_100_Volts_50Hz_W	
Measured_Off_Mode_Power_at_100_Volts_50Hz_W	0.25
On_Mode_Power_at_10_Lux_at_100_Volts_60Hz_W	
On_Mode_Power_at_300_Lux_at_100_Volts_60Hz_W	
Measured_On_Mode_Power_at_100_Volts_60Hz_W	42.87
Measured_Sleep_Mode_Power_at_100_Volts_60Hz_W	0.25
Measured_Non_Connected_Sleep_Mode_Power_at_100_Volts_60Hz_W	
Measured_Off_Mode_Power_at_100_Volts_60Hz_W	0.25

8.0 Test Summary			
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.			
Completed by:	Carl Dong	Reviewed by:	Jarree Jiang
Title:	Engineer	Title:	Engineer
Signature:	<i>Signature on file</i>	Signature:	<i>Signature on file</i>

9.0 Correlation Page For Multiple Listings

The following products, which are identical to those identified in this report except for model number and Company name.

BASIC LISTEE	MMD Monitors & Displays Nederland B.V.		
Address	Prins Bernhardplein 200, 1097 JB Amsterdam, The Netherlands		
Country	Netherland	EPA ID	1088182
Product	Display (Professional display/signage)		

MULTIPLE LISTEE 1	None		
Address			
Country		EPA ID	
Contact			
Phone			
FAX			
Email			
Brand Name			
Trans Type			
Notes			

ASSOCIATED MANUFACTURER			
Address			
Country			

	MULTIPLE LISTEE 1 MODELS	BASIC LISTEE MODELS
Additional model details (Optional)	Model Name or Number	Identifying Information

MULTIPLE LISTEE 2	None		
Address			
Country		EPA ID	
Contact			
Phone			
FAX			
Email			
Brand Name			
Trans Type			
Notes			

ASSOCIATED MANUFACTURER			
Address			
Country			

	MULTIPLE LISTEE 2 MODELS	BASIC LISTEE MODELS
Additional model details (Optional)	Model Name or Number	Identifying Information

10.0 General Information

The Applicant has agreed to produce products in accordance with the requirements of this report and to maintain compliance with all ENERGY STAR Product Specification requirements.

Changes to Product Design / Alternate Components

As part of this agreement, the Applicant also has agreed to notify Intertek and to request authorization prior to making any changes to the product (including but not limited to using alternate parts, components or materials) which may effect compliance with the ENERGY STAR Product Specification. Those parts, components or materials identified as critical have been listed in Section 4.0 of this report.

Product Surveillance

Under this Program, market surveillance is conducted on an annual basis. For each Product Type defined in the EPA ENERGY STAR Program, Intertek will select 10% of those certified products for Verification Testing in accordance with the requirements of the EPA ENERGY STAR Product Specification.

The primary source for products under Verification Testing will be the retail market. Applicants whose products are selected for Verification Testing are required to provide a list of locations where the product might be obtained. The Applicant is responsible for the cost of procurement and the Verification Tests. Should products not be readily available on the retail market, the Applicant is required to provide access to distribution warehouses to allow selection of those products. Should the product not be available on the retail market or if procurement from the retail market is not feasible, then alternate arrangements for Verification Testing will be made by the Intertek

As a general rule under the Verification Testing requirements, the products must achieve energy values within 5% of the required Tier Limit.

Compliance with ENERGY STAR Product Specifications under Verification Testing

Products found non-compliant with ENERGY STAR Product Specification under Verification Testing, will be reported to the EPA within 48 hours and the product removed from the ENERGY STAR Program. If it is determined during Verification Testing that changes have been made to product design or critical components, the Certification Body may increase Verification Testing frequency of those products.

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 Shanghai Limited
ETL Component Evaluation Center
Building No. 86, 1198 Qinzhou Road (North)
Shanghai 200233, China
Attn: Ms. Dansy Xu

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

Manufacturing and Production tests are not required under the INTERTEK ENERGY STAR Program. However, Intertek encourages the use of such ongoing product testing to ensure compliance with the EPA ENERGY STAR Product Specifications.

