



# ENERGY LABELING GUIDE for PURCHASING APPLIANCES

cooling capacity  
19,600 kWh  
Brand: **CARRIER** Power Consumption: **1,866 W**  
Model: **APXR1355B** Tested @ 230 Volts, 60 Hz

**ENERGY GUIDE**

NON-DUCTED AIR COND

**10.5**  
ENERGY EFFICIENCY RATIO

For units with the same cooling higher EER means lower electricity cost.

For this model, the minimal standard set by the government.

The monthly operating cost of this model:

RATED POWER DEMAND X MONTHLY USAGE = PER MONTHLY COST  
watt/1000 (VA) hours (h) Pesos

Check for the best value.

REMOVAL OF THIS LABEL BEFORE CONSUMER PURCHASE IS A VIOLATION OF REPUBLIC ACT NO. 7264

For additional information ask your dealer or write Call the Department of Energy, Puro and Kabisada Building, Energy Planning and Development Center, Quezon City, Tel. No. 873-3200 or 873-7131.

SINGER PHILIPPINES INC.

Brand: **SINGER** Rated Voltage: 230 volts  
Model: REF 178A Rated Current: 0.90 ampere  
Type: ONE DOOR Rated Frequency: 60 hertz  
Total Storage Volume: 196 liters Energy Consumption: 0.84 kWh/24h  
Rated Power Input: 116 watts

**ENERGY GUIDE**  
REFRIGERATORS AND FREEZERS

ENERGY EFFICIENCY FACTOR

**246**  
(At standard test conditions)

higher EEF means lower operating cost

The daily operating cost of this model will be approximately:

Energy Consumption (kWh/24h) X Energy Cost (Pesos/kWh) = Cost of Operation (Pesos per 24h)

Check for the best value.

REMOVAL OF THIS LABEL BEFORE CONSUMER PURCHASE IS A VIOLATION OF REPUBLIC ACT NO. 7264

For additional information ask your dealer or write Call the Department of Energy, Puro and Kabisada Building, Energy Planning and Development Center, Quezon City, Tel. No. 873-3200 or 873-7131.

Brand Name :  
Model/Type :  
Wattage Rating :

Lamp Specifications \*

Light Output **900** lumens

Power Consumption **15** watts

Efficacy **60** lumens per watt

Average Life **8,000\*\*** hours

For lamps of similar light output, higher efficacy means more energy savings

\* when tested at standard test conditions \*\* rated average life at 50% failure

DEPARTMENT OF ENERGY  
PHILIPPINES  
dti  
DEPARTMENT OF TRADE AND INDUSTRY  
PHILIPPINES

Brand Name : **LAMPS** EFFICACY\*

Model/ Type: **Brightest**

Light output, lumens : **2880**

Wattage rating, watts : **36**

**80** lumens/watt based on standard test

Important: For lamps with same wattage rating, HIGHER EFFICACY means MORE ENERGY SAVINGS

THE MINIMUM EFFICACY SET BY THE GOVERNMENT FOR THIS TYPE OF LAMP IS 70 lumens per watt

DEPARTMENT OF ENERGY  
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DEPARTMENT OF TRADE AND INDUSTRY  
PHILIPPINES

**Kristian Carlo B. Victorio, REE, RME**  
Energy Research and Testing Laboratory Services

E-POWER MO – Empowering Filipinos through Informed Energy Plans and Policies  
09 October 2018 | Grand Xing Imperial Hotel, Iloilo City

# What is an Energy Label?

**ENERGY LABELS** or **Energy Guides** are yellow cards commonly seen with household appliances and lighting products. The number in Energy Labels indicates the efficiency of product in terms of electricity consumption.

**ENERGY GUIDE**  
NON-DUCTED AIR CONDITIONERS

**10.5**  
ENERGY EFFICIENCY RATIO

For units with the same cooling capacity, higher EER means lower electricity cost.  
For this model, the minimum EER standard set by the government is: **8.6**

The monthly operating cost of this model will be approximately:

RATED POWER DEMAND	MONTHLY USAGE	POWER RATE	COST OF OPERATION
watt/1000 (VA)	kWh (kWh)	Per kWh (₱)	₱/month

REMOVAL OF THIS LABEL BEFORE CONSUMER PURCHASE IS A VIOLATION OF REPUBLIC ACT NO. 7924

**ENERGY GUIDE**  
REFRIGERATORS AND FREEZERS

**246**  
ENERGY EFFICIENCY FACTOR

(At standard test condition)  
higher EEF means lower operating cost

The daily operating cost of this model will be approximately:

Energy Consumption	Energy Cost	Cost of Operation
(kWh/24h)	(₱/kWh)	(₱/day)

REMOVAL OF THIS LABEL BEFORE CONSUMER PURCHASE IS A VIOLATION OF REPUBLIC ACT NO. 7924

**Brand Name :** SINGER  
**Model/Type :** REF-178A  
**Wattage Rating :** 15 watts

**Lamp Specifications \***

Light Output	900 lumens
Power Consumption	15 watts
Efficacy	60 lumens per watts
Average Life	8,000** hours

For lamps of similar light output, higher efficacy means more energy savings

\* when tested at standard test conditions  
\*\* rated average life at 50% failure

**Based on standard test condition**

**BALLAST EFFICACY FACTOR**

**2.6**

**Important: HIGHER BEF means HIGHER SAVINGS**

dti DEPARTMENT OF TRADE AND INDUSTRY PHILIPPINES 0512-345678

**Brand Name :** LAMPS  
**Model/ Type :** Brightest  
**Light output, lumens :** 2880  
**Wattage rating, watts :** 36

**EFFICACY\***

**80**  
lumens/ watt

**Important! For lamps with same wattage rating, HIGHER EFFICACY means MORE ENERGY SAVINGS**

THE MINIMUM EFFICACY SET BY THE GOVERNMENT FOR THIS TYPE OF LAMP IS 70 lumens per watt

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# What is an Energy Label?

With **ENERGY LABELS**...  
**The HIGHER** the efficiency rating,  
**The LOWER** the appliance consumes electricity!

Lowest Price Guarantee  
 Cooling Capacity: 19,600 kJ/h  
 Brand: **CARRIER** Power Consumption: 1,866 W  
 Model: **APXR135BA** Tested @ 230 Volts, 14-50 Hz

**ENERGY GUIDE**

**NON-DUCTED AIR CONDITIONERS**

**10.5**  
 ENERGY EFFICIENCY RATIO

For units with the same cooling capacity, higher EER means lower electricity cost.  
 For this model, the minimum EER standard set by the government is: **8.6**

The monthly operating cost of this model will be approximately:

RATED POWER (Watt) x MONTHLY USAGE (hours) x POWER RATE (Pesos/kWh) = COST OF OPERATION (Pesos)

0002055

SINGER PHILIPPINES INC.

Brand: **SINGER** Rated Voltage: 230 volts  
 Model: REF 178A Rated Current: 0.90 ampere  
 Type: ONE DOOR Rated Frequency: 60 Hertz  
 Total Storage Volume: 196 liters Energy Consumption: 0.84 kWh/24h  
 Rated Power Input: 116 watts

**ENERGY GUIDE**

**REFRIGERATORS AND FREEZERS**

**ENERGY EFFICIENCY FACTOR**

**246**

(At standard test condition)  
 higher EEF means lower operating cost

The daily operating cost of this model will be approximately:

Energy Consumption (kWh/24h) x Energy Cost (Pesos/kWh) = Cost of Operation (Pesos per day)

REMOVAL OF THIS LABEL BEFORE CONSUMER PURCHASE IS A VIOLATION OF PUBLIC ACT NO. 7394

1112030300

Brand Name :  
 Model/Type :  
 Wattage Rating :

Lamp Specifications \*

Light Output : 900 lumens  
 Power Consumption : 15 watts  
 Efficacy : 60 lumens per watts  
 Average Life : 8,000\*\* hours

For lamps of similar light output, higher efficacy means more energy savings

\* when tested at standard test conditions  
 \*\* rated average life at 50% failure

dti

Based on standard test condition

**BALLAST EFFICACY FACTOR**

**2.6**

Important: HIGHER BEF means HIGHER SAVINGS

dti  
 DEPARTMENT OF TRADE AND INDUSTRY PHILIPPINES  
 0512-345678

Brand Name : LAMPS EFFICACY\*\*

Model/ Type: Brightest

Light output, lumens: 2880

Wattage rating, watts: 36

**80**  
 lumens/ watt

based on standard test condition

Important: For lamps with same wattage rating, HIGHER EFFICACY means MORE ENERGY SAVINGS

THE MINIMUM EFFICACY SET BY THE GOVERNMENT FOR THIS TYPE OF LAMP IS 70 lumens per watt

dti  
 DEPARTMENT OF TRADE AND INDUSTRY PHILIPPINES  
 0512-345678



# Why is **Energy Label** is important?



- Consumers will patronize products that are **certified** and with **higher efficiency rating**
- **Maintains or lower** the consumption of electricity
- Helps the **environment**





# Energy Label on Air Conditioners

- Split- and window-type air conditioners
- **Cooling capacity** from **1,340 up to 36,000 kJ/h** (or equivalent to **0.5-13.0 Hp**)
- Look for **Energy Efficiency Ratio** or **EER**
- **The higher the EER, the lower the electricity consumption!**



# Energy Label on Air Conditioners

**MALAMIG COOLING CORPORATION**

Brand : Cool  
Model : MCC-123456  
Type : Window-type RAC

Cooling Capacity: 12,000 kJ/h  
Power Consumption: 930 W  
Frequency: 60 Hz/ 1 Phase/ 220-230 V

**ENERGY GUIDE**

ROOM AIR CONDITIONERS



**12.9**  
ENERGY EFFICIENCY RATIO

For units with the same cooling,  
higher EER means lower electricity cost.  
For this model, the minimum EER standard  
set by the government is 9.1.

The monthly operating cost of this model will be approximately:

<b>RATED POWER DEMAND</b> Watt/ 1000 (kW)	<b>X</b>	<b>MONTHLY USAGE</b> Hours (h)	<b>X</b>	<b>POWER RATE</b> Pesos/ kW-h	<b>=</b>	<b>COST OF OPERATION</b> Pesos
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Data on this label is certified by:



**REMOVAL OF THIS LABEL BEFORE CONSUMER PURCHASE IS A VIOLATION OF REPUBLIC ACT NO. 7394**

For additional information, ask your dealer or write or call the  
**Department of Energy**, Lighting and Appliance Testing Laboratory,  
Energy Center, Rizal Drive corner 34<sup>th</sup> Street, Fort Bonifacio, Taguig City.  
Tel. No. 479-2900 local 419 • Fax 840-5562

← Specifications

← EER or Energy Efficiency Ratio

← MEPS or Minimum Energy Performance Standards

← Operating Cost Computation

← For more information



# Energy Label on Air Conditioners

- Choosing the right size of air conditioner, it is important to know its **cooling capacity**
- **Cooling Capacity** is the ability of the air conditioner to cool a certain space in an hour
- ***Rough Estimate Method:***  
**C.C. = Floor area x 500**

## Comparison table of Air Conditioner Compressor Ratings

Compressor Rating (Hp)	Cooling Capacity Equivalent (kJ/h)
0.75	7,385 – 8,440
1.0	9,495 – 10,550
1.5	12,660 – 13, 290
2.0	18,990 – 20,045
2.5	25,320 – 26,580





# Use Air Conditioners Properly



- Position air conditioner in **appropriate place**



# Use Air Conditioners Properly



- Position air conditioner in appropriate place
- Ensure there is **enough insulation**



# Use Air Conditioners Properly

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- Position air conditioner in appropriate place
- Ensure there is enough insulation
- Check **thermostat** of your unit



# Use Air Conditioners Properly



- Position air conditioner in appropriate place
- Ensure there is enough insulation
- Check thermostat of your unit
- **Always clean** your air conditioner



# Energy Label on Refrigerators

- Direct cooling and No frost cabinets
- From **5 up to 8 cu. ft.** (or equivalent to **141-227 liters**)
- Look for **Energy Efficiency Factor** or **EEF**
- **The higher the EEF, the lower the energy consumption**



# Energy Label on Refrigerators

**MALAMIG COOLING CORPORATION**

Brand : Coolers  
Model : MCC-123456  
Type : Direct Cool – Two Door  
Total Storage Volume : 271 Liters  
Rated Power Input : 140 Watts

Rated Voltage : 230 Volts  
Rated Current : 1.06 Amperes  
Rated Frequency : 60 Hertz  
Energy Consumption : 1.38 kW-h/24h

**ENERGY GUIDE**

REFRIGERATORS AND FREEZERS

ENERGY EFFICIENCY FACTORS

**230**



(At Standard Test Conditions)

Higher EEF means lower operating cost

The daily operating cost of this model will be approximately:

Energy Consumption (kW/24h)	X	Energy Cost Pesos/ kW-h	=	Cost of Operation (Pesos/24h)
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Data on this label is certified by:



**REMOVAL OF THIS LABEL BEFORE CONSUMER PURCHASE IS A VIOLATION OF REPUBLIC ACT NO. 7394**

For additional information, ask your dealer or write or call the Department of Energy, Lighting and Appliance Testing Laboratory, PNOO-ERDC Compound, Commonwealth Avenue, Diliman, Quezon City, Tel. Nos.: 479-2900 loc. 559 / 927-7201 • Fax: 927-7137

← Specifications

← EEF or Energy Efficiency Factor

← Operating cost computation

← For more information



# Use Refrigerators Properly



- **Use the right size of refrigerator accordingly**



# Use Refrigerators Properly



- Use the right size of refrigerator accordingly
- Place your unit in an **appropriate space** inside your home





# Use Refrigerators Properly



- Use the right size of refrigerator accordingly
- Place your unit in an appropriate space inside your home
- Avoid **frequent opening** of your refrigerator



# Use Refrigerators Properly

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- Use the right size of refrigerator accordingly
- Place your unit in an appropriate space inside your home
- Avoid frequent opening of your refrigerator
- **Defrost and clean** your refrigerator regularly



# Use Refrigerators Properly



- Use the right size of refrigerator accordingly
- Place your unit in an appropriate space inside your home
- Avoid frequent opening of your refrigerator
- Defrost and clean your refrigerator regularly
- Check the magnetic **rubber gasket**



# Energy Label on Lamp Ballasts



## What does BALLAST do?

- Serves as gateway to the light source
- Corrects the lamp voltage
- Matches line voltage to the operating voltage of the lamp
- Limits the flow of electricity in the lamp
- The ballast power should be the same with that of the *fluorescent lamp* being used



# Energy Label on Lamp Ballasts

- Two types: **magnetic** and **electronic**
- Look for **Ballast Efficacy Factor** or **BEF**
- The higher the BEF, the lower the electricity it consumes!



Based on standard test condition

**2.6**

BALLAST EFFICACY FACTOR



0512-345678

Important: HIGHER BEF means HIGHER SAVINGS



# Energy Label on CFLs

- **Compact fluorescent lamps or CFLs** are miniaturized fluorescent lamps as substitute to incandescent bulbs
- Includes **self-ballasted lamps** from **3 up to 65 watts**
- Look for the **Efficacy**
- The higher the **efficacy**, the **lower the electricity it consumes**



# Energy Label on CFLs

Brand Name: **MALIWANAG**  
Model/Type: **2U15W**

Lamp Specifications<sup>1</sup>

Light Output	<b>900</b> lumens
Power Consumption	<b>15</b> watt
Efficacy <sup>3</sup>	<b>60</b> lumens per watt
Average Life <sup>2</sup>	<b>8000</b> hours

For lamps of similar light output, higher efficacy means more energy saving

<sup>1</sup> when tested at standard test condition  
<sup>2</sup> rated average life at 50% failure  
<sup>3</sup> The minimum efficacy set by the Government for this type of lamp is 57 lumens per watt.

CTRL NO: 001021212PD15



- ← **Lighting Output** total amount of light produce by the source
- ← **Power Consumption** total amount of electricity consume by the souce
- ← **Efficacy** indicated the efficiency in which the electricity is converted into light
- ← **Average Life** expected median value of lamp expectancy of lamps affected by burning hours

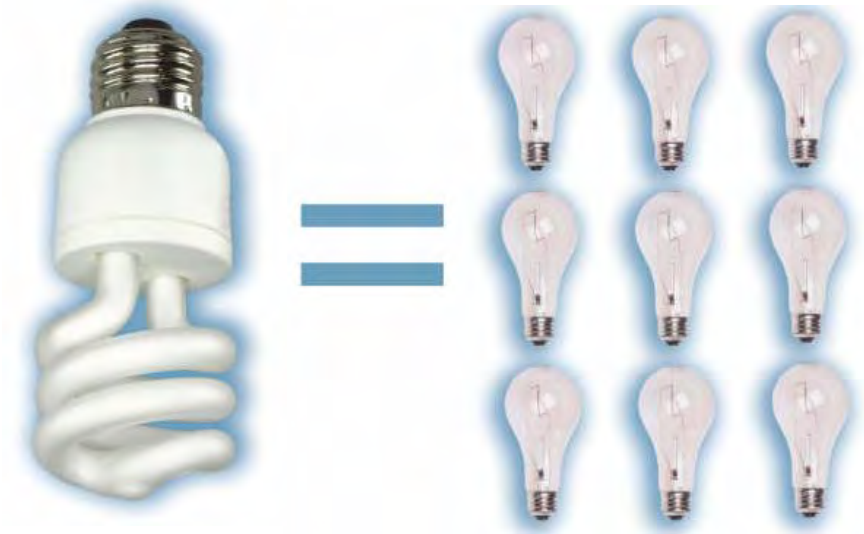


The yellow label.  
Empowering the  
Filipino Consumers.



# Use CFLs Properly

- Use CFL instead of incandescent bulb



**25 W**  
**500 lumens**

**25 W x 9 bulbs**  
**500 lumens**





# Use CFLs Properly

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- Use CFL instead of incandescent bulb
- Install CFL **vertical-base up**



# Use CFLs Properly

- Use CFL instead of incandescent bulb
- Install CFL vertical-base up
- **Use proper wattage** according to your needs



# Use CFLs Properly

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- Use **CFL** instead of incandescent bulb
- Install CFL **vertical-base up**
- **Use proper wattage** according to your needs
- **Clean lamps and luminaires** regularly



# Use CFLs Properly

- Use **CFL** instead of incandescent bulb
- Install CFL **vertical-base up**
- **Use proper wattage** according to your needs
- **Clean lamps and luminaires** regularly
- Do not use **blinking** and **uncertified lamps**



# Energy Label for Other Fluorescent Lamps

- Double-capped, Triphosphor and halophosphate linear and circular fluorescent lamps
- Look for **Efficacy**
- **The higher the efficacy, the more efficient the fluorescent lamp is!**



# Energy Label for Other Fluorescent Lamps

**Brand Name: MALIWANAG LAMPS**      **EFFICACY\***

**Model/Type: U2-LFL**

**Light Output, lumens: 2880**

**Wattage rating, watts: 36**

**80**



\*based on standard test condition

Important: For lamps with same wattage rating, Higher Efficacy means more saving.  
THE MINIMUM EFFICACY SET BY THE GOVERNMENT FOR THIS TYPE OF LAMP IS 78 lumens per watt

001061212T36D

**Brand Name: MALIWANAG LAMPS**      **EFFICACY\***

**Model/Type: U2-FFL**

**Light Output, lumens: 2240**

**Wattage rating, watts: 32**

**70**



\*based on standard test condition

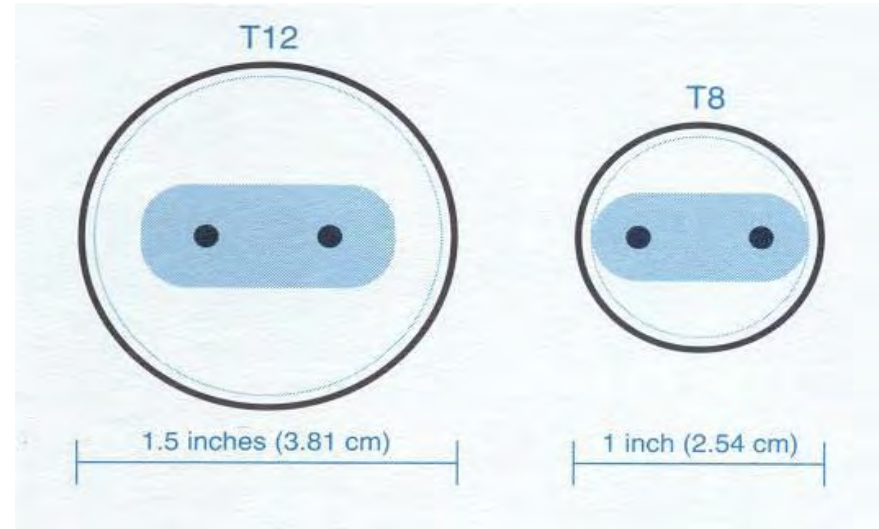
Important: For lamps with same wattage rating, Higher Efficacy means more saving.

001061212T36D



# Use Fluorescent Lamps Properly

- Replace blinking lamps with **slimmer fluorescent lamp**



# Use Fluorescent Lamps Properly

- Replace blinking lamps with **slimmer fluorescent lamp**
- **Dispose busted lamps** properly





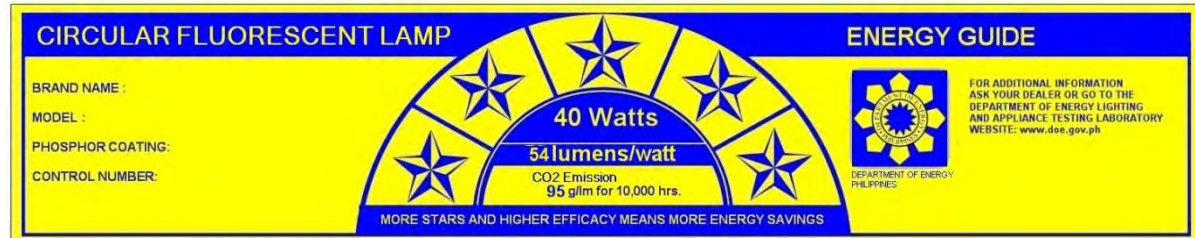
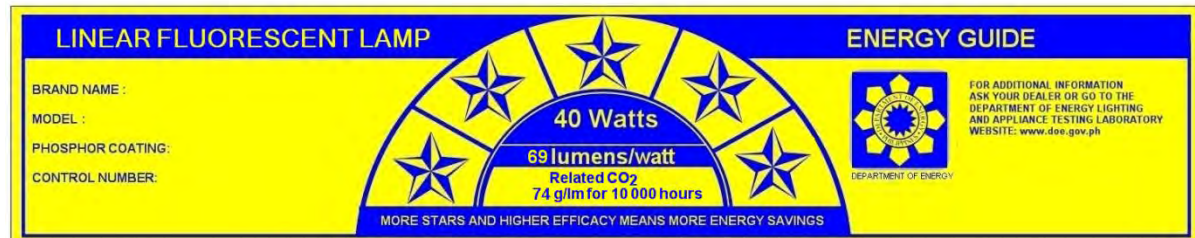
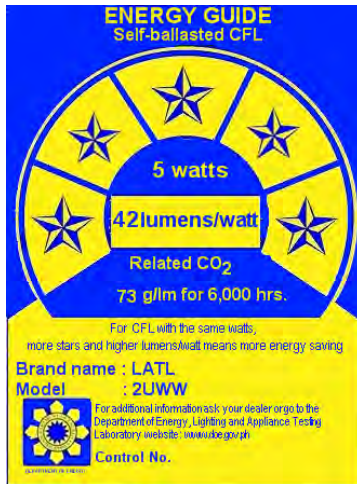
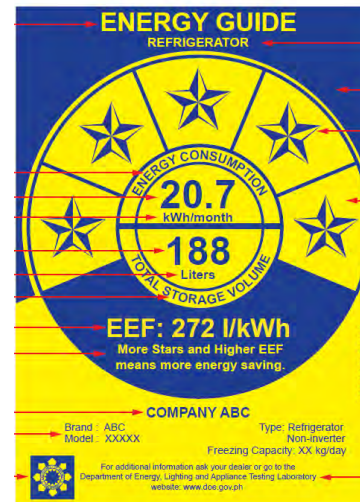
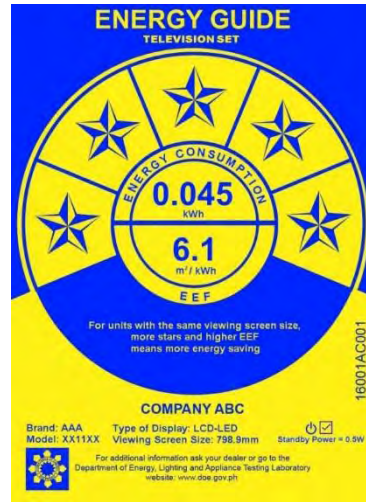
# Use Fluorescent Lamps Properly

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- Replace blinking lamps with **slimmer fluorescent lamp**
- **Clean lamps and luminaires** regularly
- Lighting products such as lamps, ballasts, and luminaires have **product warranties**



# The Future of Energy Labels



# Products with **Energy Label** has...

For our Proudly Philippine Made  
and has passed the Philippine  
National Standard



For imported items that has  
passed the Philippine National  
Standard



# Visit our website – [www.doe.gov.ph](http://www.doe.gov.ph)

The screenshot shows a web browser displaying the Department of Energy website. The main content is a PDF document titled "LIST OF CERTIFIED REFRIGERATORS AS OF SEPTEMBER 2016". The document contains a table with the following columns: BRAND, MODEL, TYPE, TOTAL STORAGE VOLUME (liters), ENERGY CONSUMPTION (kW-h/24h), and EEF. The table lists 20 models, including brands like Sanyo, Samsung, Sharp, Panasonic, and Condura.

	BRAND	MODEL	TYPE	TOTAL STORAGE VOLUME (liters)	ENERGY CONSUMPTION (kW-h/24h)	EEF
<b>A. Locally Manufactured Models</b>						
1	SANYO	SR-D39TMS	Two Door/Direct Cooling	372	1.96	167
2	SAMSUNG	RT32FAJCDSP	Frost Free - Inverter Type	322	1.06	367
3	SAMSUNG	RT32FARCDSP	Frost Free - Inverter Type	322	1.11	336
4	SANYO	SR-D49T	Two Door/Direct Cooling	322	2.15	180
5	SAMSUNG	RT32K5032SL	Frost Free Inverter	321	0.89	415
6	SAMSUNG	RT29FAJBDSP	Two Door/Automatic Defrost	302	0.95	372
7	SAMSUNG	RT29FARBDSP	Frost Free Inverter	302	0.95	372
8	SAMSUNG	RT37STPN	Frost Free	304	1.44	259
9	SAMSUNG	RT41LSPN	Frost Free	327	1.47	263
10	SAMSUNG	RB29K5032UT	Frost Free	300	0.86	404
11	SAMSUNG	RT29K5032SL	Frost Free	300	0.86	404
12	SAMSUNG	RT29K5132SL	Frost Free Inverter	300	0.86	404
13	SAMSUNG	RB29FERNDSS	Frost Free - Inverter	290	1.05	356
14	SHARP	SJ-38T-SL	Frost Free	288	1.72	198
15	PANASONIC	NR-B10714B	Frost Free	288	1.36	250
16	PANASONIC	NR-B10715B	Two Door/Direct Cooling	289	1.38	250
17	CONDURA	CTD310MN	Two Door/Direct Cooling	278	1.26	267
18	CONDURA	CTD310MN-G1	Two Door/Direct Cooling	278	1.59	220
19	KELVINATOR	KTD310MN-G1	Two Door/Direct Cooling	278	1.59	220
20	CONDURA	CTD310MN-G1a	Two Door/Direct Cooling	278	1.32	258



# Thank You!



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@doe\_ph



# For more information

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- All information stated in this presentation are available online in the Department of Energy Philippines Website. [www.doe.gov.ph](http://www.doe.gov.ph).
- To learn more about the lighting products, consult *Manual of Practice on Efficient Lighting*. Printed by the Institute of Integrated Electrical Engineers of the Philippines, Inc. and the Department of Energy Philippines(2011).
- *PS and ICC* marks are copyrighted by the Department of Trade and Industry.
- Unless otherwise stated, all pictures are taken from the internet.

