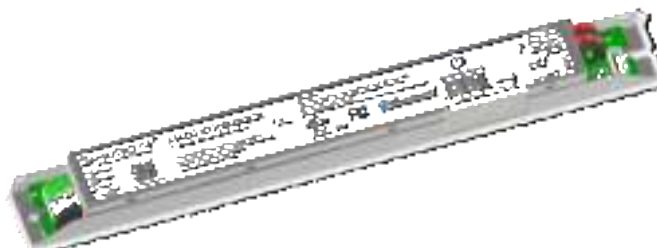


## ■ Features & benefits:

- Universal AC Input Voltage(120-277Vac)
- Linear form factor, Metal sheet case, Side feed
- Mesh Bluetooth control with BLE module
- Integrated OEM NFC program:Output Current
- Two direction installation
- Suitable for indoor use
- Flicker free, excellent camera compatibility
- UL Class2, UL Class P(E468718)
- Operating temperature: -25℃~+50℃
- Comply with IEEE1789 , title 24, UL8750



**RoHS**



## ■ Model List:

Model Name	Rated Input Voltage	Max Output Power	Default Output Current	Adjustable output current	Rated Output Voltage <sup>a</sup>	Note
MAC030D0800UNB	120-277VAC	30W max.	800mA	45-800mA	20-48VDC	Built in Litetrace BLE Module

Note: The Vf of the two channels should be equal.

### Model name code:

MAC030 D 0800 U N B — c c c c  
① ② ③ ④ ⑤ ⑥ ⑦

①	Series	Linear form factor series driver
②	Output channel	Dual output
③	Output current	MAX. total output current
④	Input voltage	U: 120-277V <sub>AC</sub>
⑤	programming	N: NFC Programmable
⑥	Control	B: Built in BLE Module
⑦	Internal code	Internal code for ADPower

■ **Specification:**

Parameters	Symbols	Test Conditions / Comment	Min	Typ	Max	Units
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**INPUT**

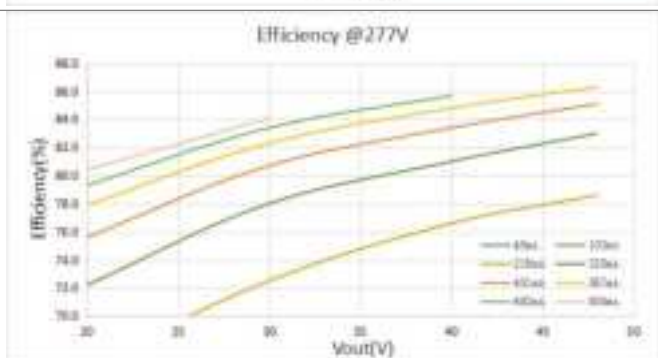
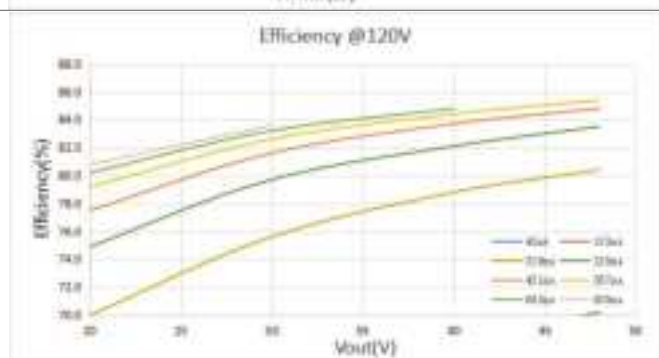
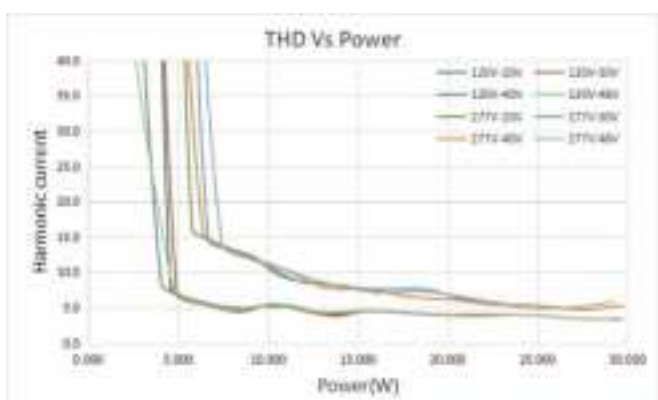
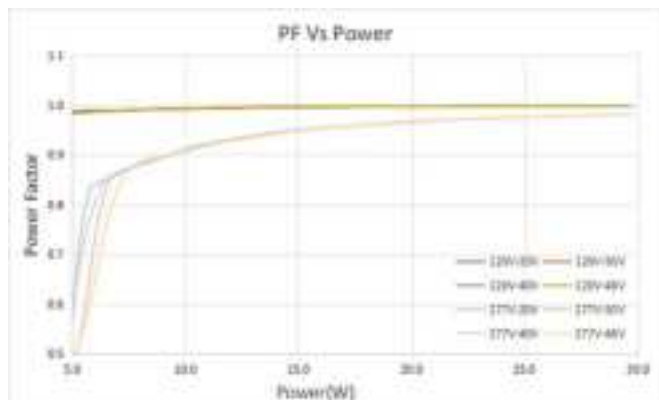
Input Voltage	$V_{IN}$		108		305	$V_{AC}$
Rated Input Voltage	$V_{IN\ RATED}$		120		277	$V_{AC}$
Input Frequency	$f_{line}$		47	50/60	63	Hz
Input Current	$I_{IN}$	Full Load, $V_{IN} = 120V_{AC}$			0.33	A
Inrush Current	$I_{INRUSH}$	Cold Start, $V_{IN} = 277V_{AC}$			40	A
Leakage Current	$I_{Leakage}$	$V_{IN} = 120V_{AC}$ 60Hz			0.5	mA
		$V_{IN} = 277V_{AC}$ 60Hz			0.75	mA
Number of Drivers per MCB(Circuit Breaker)	MCB type	B10 C10 D10 B13 C13 D13 B16 C16 D16 B20 C20 D20				
	120V <sub>AC</sub>	25 30 34 33 39 44 41 48 54 51 60 68				
	277V <sub>AC</sub>	15 26 52 20 33 67 25 41 83 31 52 104				



Input Voltage	Inrush Current	t(us)10%-10%
120VAC	8.65A	262
277VAC	21.09A	266
347VAC	NA	NA

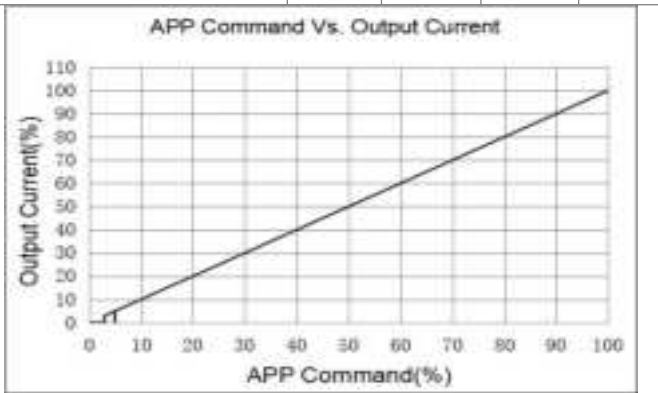
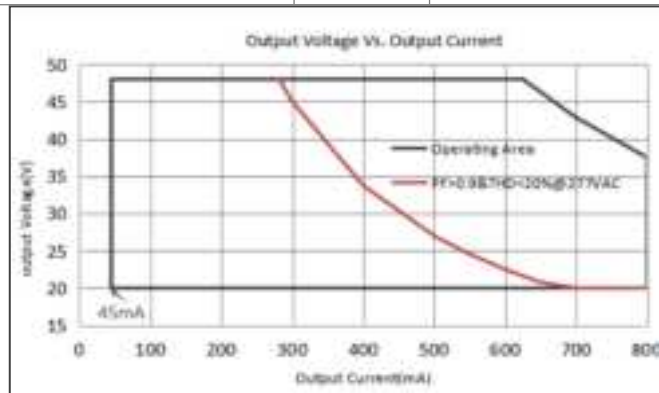
**General Characteristics**

Power Factor	PF	Full load, $V_{IN} = 120V_{AC}$	0.95			PF
		Full load, $V_{IN} = 277V_{AC}$	0.9			
Total Harmonic Distortion	THD	Full load, $V_{IN} = 120V_{AC}$			20	%
		Full load, $V_{IN} = 277V_{AC}$			20	%
Efficiency	$\eta$	Vout=48V, Iout=625mA, $V_{IN} = 120V_{AC}$ , Steady state	84	85		%
		Vout=48V, Iout=625mA, $V_{IN} = 277V_{AC}$ , Steady state	85	86		%
Turn On Delay Time	$T_{on\_delay}$	Cold Start, 400-800mA			1	S
		Cold Start, 100-399mA			2	S



### OUTPUT

Output Current Range	$I_{OUT-2CH}$	Total current	45	800	mA
Output current tolerance	t	400-800mA		5	%
		100-399mA		10	%
Output Power	$P_{OUT}$	See "Operating window"		30	W
Line Regulation	$V_{OUT-LINE}$			3	%
Load Regulation	$I_{OUT-LOAD}$	$V_{OUT}$ from MIN. to MAX. $I_{OUT}=400-800mA$		5	%
		$V_{OUT}$ from MIN. to MAX. $I_{OUT}=100-399mA$		10	%
Ripple Current	$I_{OUT-RIPPLE\_2}$	Full Load, $(I_{omax}-I_{omin})/(I_{omax}+I_{omin})$ , two channels output together. BW<10KHz		30	%
	$I_{OUT-RIPPLE\_1}$	Full Load, $(I_{omax}-I_{omin})/(I_{omax}+I_{omin})$ , One channel output, BW<10KHz		10	%
Output Current Overshoot	$I_{OVERSHOOT}$	Turning Power ON		10	%



### NFC Programming

NFC Programmable Feature	Output current					
Programming tool	FEIG, ID CPR30+	Desktop reader, Please contact ADPower for details.				
	APP of Android OS and iOS	TapTronic APP, Please contact ADPower for details.				
Mini wireless control distance			10			mm

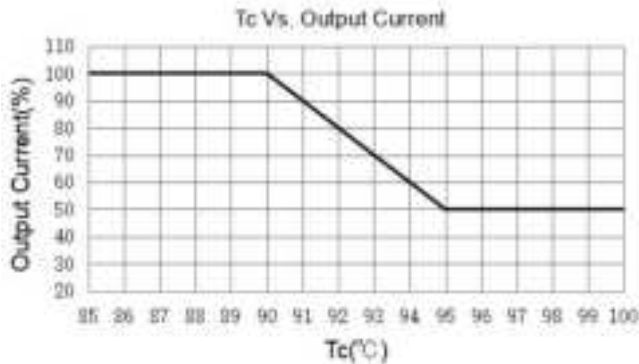
### BLE control

A Litetrace BLE module is built in the driver.

APP link	Please contact ADPower for details.					
Dimming range	$I_{BT}$	Brightness dimming range	6		100	%
	$I_{TW}$	Tunable white dimming range	1		100	%

### Protection

Over Voltage Protection	$V_{OVP}$	The driver can recover automatically after fault conditions is removed.			60	V
Under Voltage Protection	$V_{UVP}$	The driver can shut down when input voltage lower than $V_{UVP}$		90		V
Over Temp. Protection	$T_{OTP}$	Current foldback at hotspot greater than $T_{OTP}$		90		°C
Short Circuit Protection	The driver can recover automatically after fault conditions is removed.					



### Environment

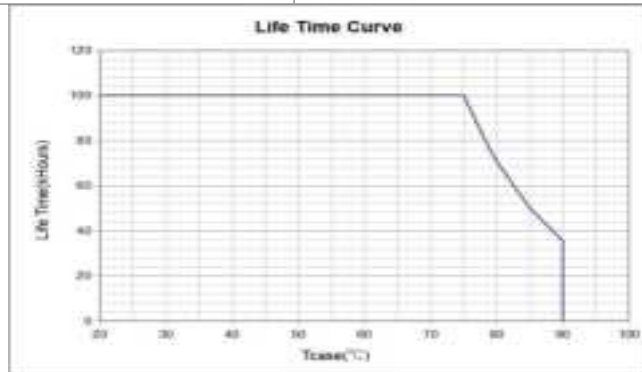
Storage Temperature	$T_{Storage}$	Humidity: 5% RH to 95% RH	-40	-	+85	°C
Ambient Operating Temperature	$T_a$		-25	-	+50	°C
Max. Case Temperature	$T_c$	Hot spot on case			90	°C
Operating Relative Humidity	$H_a$	Non-Condensing	10		90	%
Acoustic Noise		Measured from 1 m away.			24	dBA
Cooling	Convection Cooling					
IP Rating	Dry and damp UL approved					

### Others

Life Time	$T_{Life}$	Full Load, 85°C case temperature, $V_{IN} = 120/277V_{AC}$	50			kHrs
MTBF	$T_{MTBF}$	Full Load, 25°C ambient temperature $V_{IN} = 120/277V_{AC}$	200			kHrs
Net Weight	$W_{NET}$			215		g

Warranty 5 Years Warranty at  $T_c \leq 85^\circ\text{C}$

Flicker Title 24, IEEE1789



### Safety Compliance

CUL/UL UL8750, CAN/CSA-C22.2 No. 250.13

### Electromagnetic Compliance

EMC Requirements	Standard	Conditions
EMI Emissions	FCC Title 47 Part 15	Class A
Voltage Fluctuations and Flicker	IEC61000-3-3	
Immunity Compliance	IEC 61000-4-2	$\pm 8\text{kV}$ air Discharge, $\pm 6\text{kV}$ Contact Discharge
	IEC 61000-4-5 or ANSI/IEEE C62.41-2002	$\pm 2\text{kV}$ Common and $\pm 1\text{kV}$ Differential Mode, test at $2\ \Omega$ , 5 strikes/1minute interval (40 total strikes)
	ANSI/IEEE C62.41.1-2002	2.5kV Ring Wave, test at $30\ \Omega$ 7 Strikes/1 minute interval, Common and Differential mode, 56 total strikes
	IEC 61000-4-11	>95% dip, .5 period; 30% dip, 25 periods; 95% reduction, 250 periods
	IEC 61000-4-4	$\pm 2\text{kV}$ Direct couple to Line input, 5kHz repetition rate, 15mS duration, 300mS period. 7 coupling paths, 1 minute per path (14 total combinations)

Note: Unless otherwise specified, all the above parameters are measured at ambient temperature of  $25^\circ\text{C}$  and rated voltage.

## ■ Typical Application

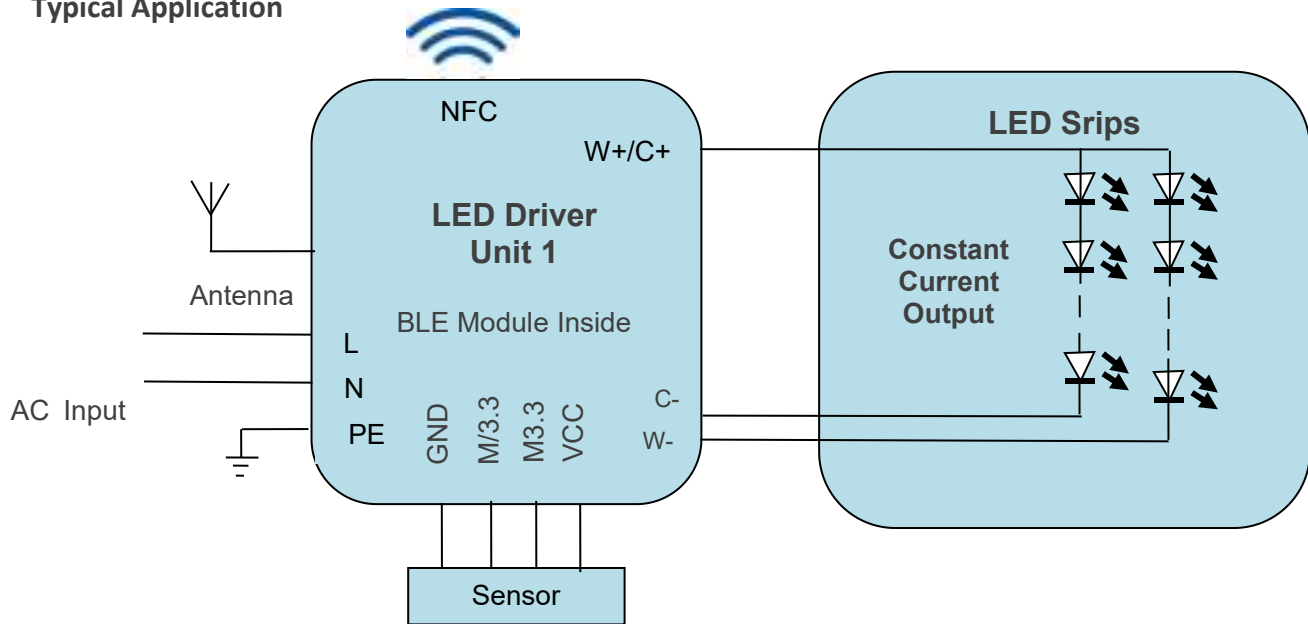
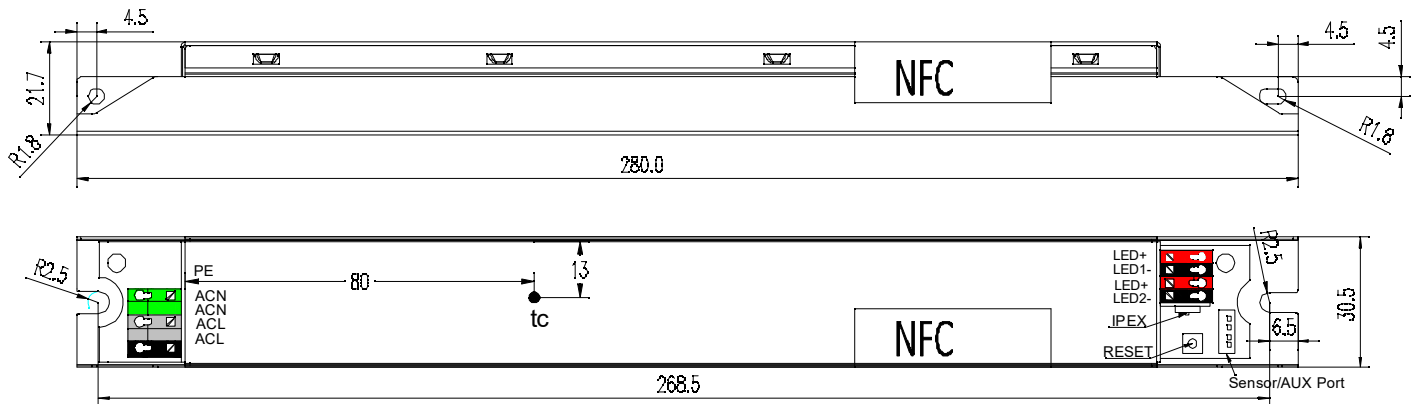


Fig. Typical Application

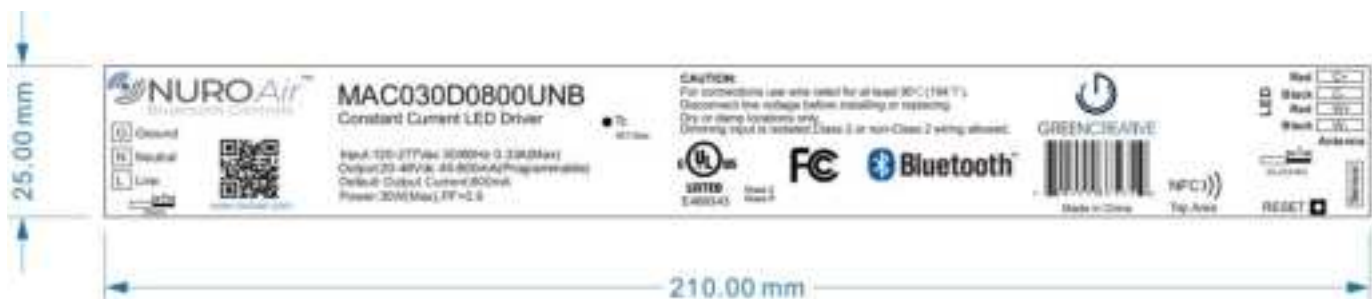
## ■ Mechanical Drawing:

Dimensions(Unit:mm)

Default tolerance:  $\pm 1\text{mm}$

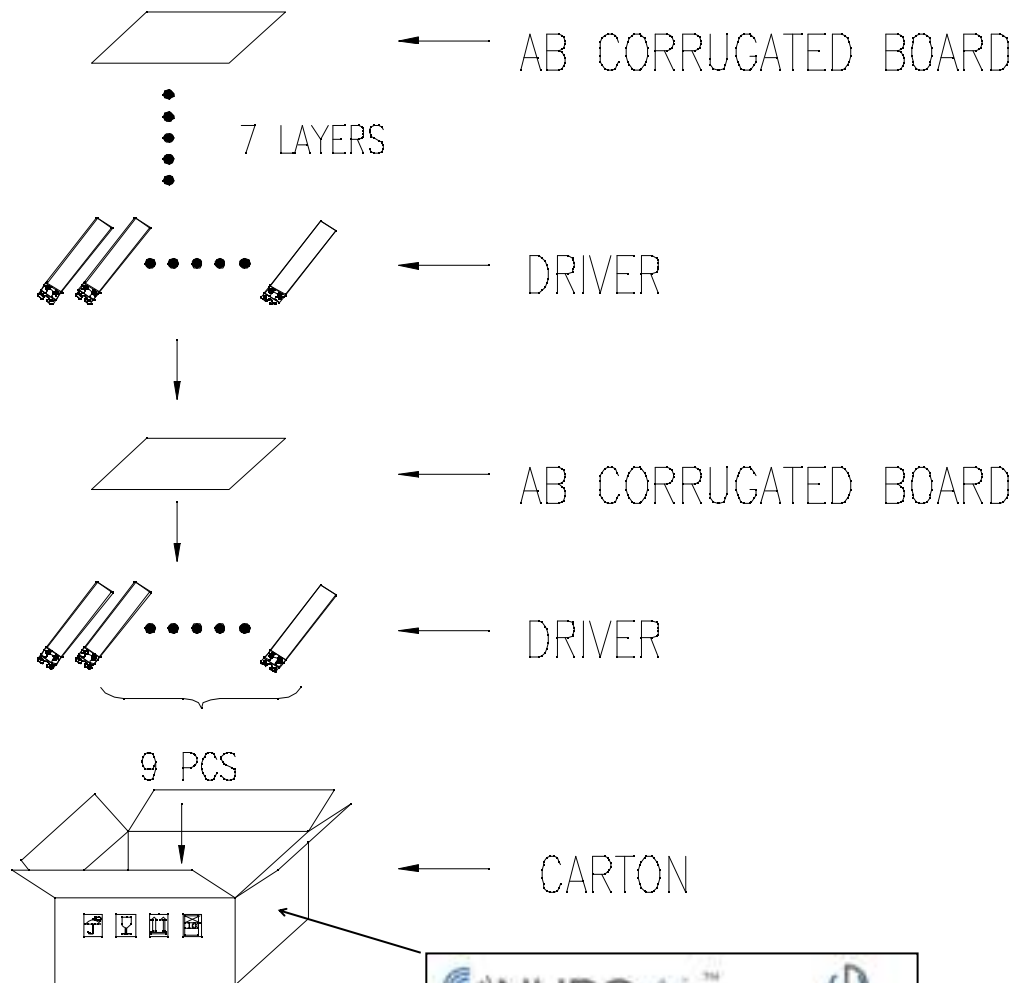


## ■ Label



## ■ Packaging

Driver quantity (pcs)	Layer	Weight (kg)	Outer dimensions of Carton L*W*H(mm)
60	7	15	330 X 305 X 230





**FCC Statement:**

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: 1) this device may not cause harmful interference, and 2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try correct the interference by one or more of the following measures:

- Reorient the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into and outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

The distance between user and products should be no less than 20cm

The EUT is In door use only