

orcadesign

I°SCENT

**Aroma Diffuser**

Design Development

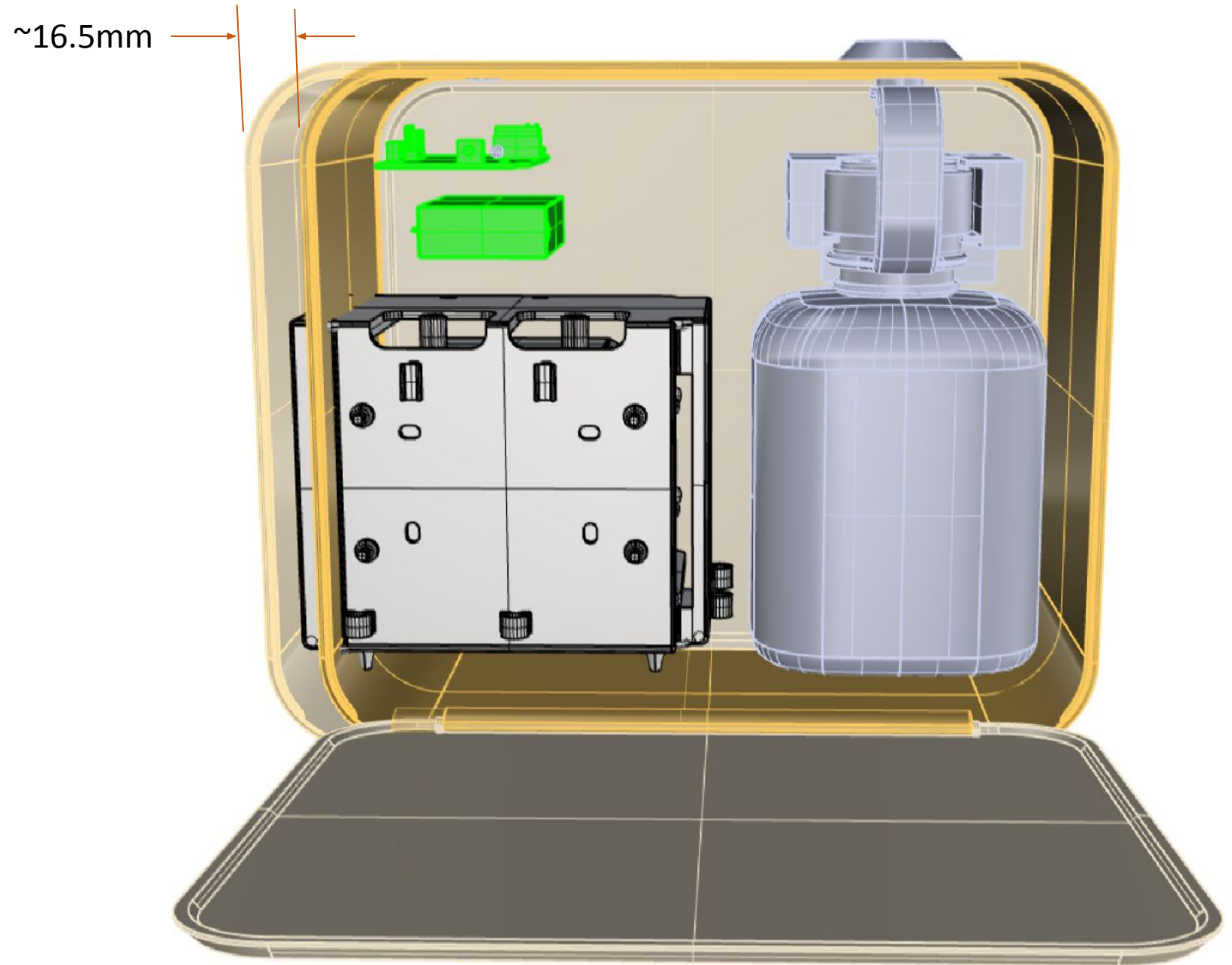
09<sup>th</sup> June-2021

## ISSUE 1

Estimated size increase based on new pump

7-June: PCB and Pump are out of the ID boundary hence inevitably have to increase the width accordingly.

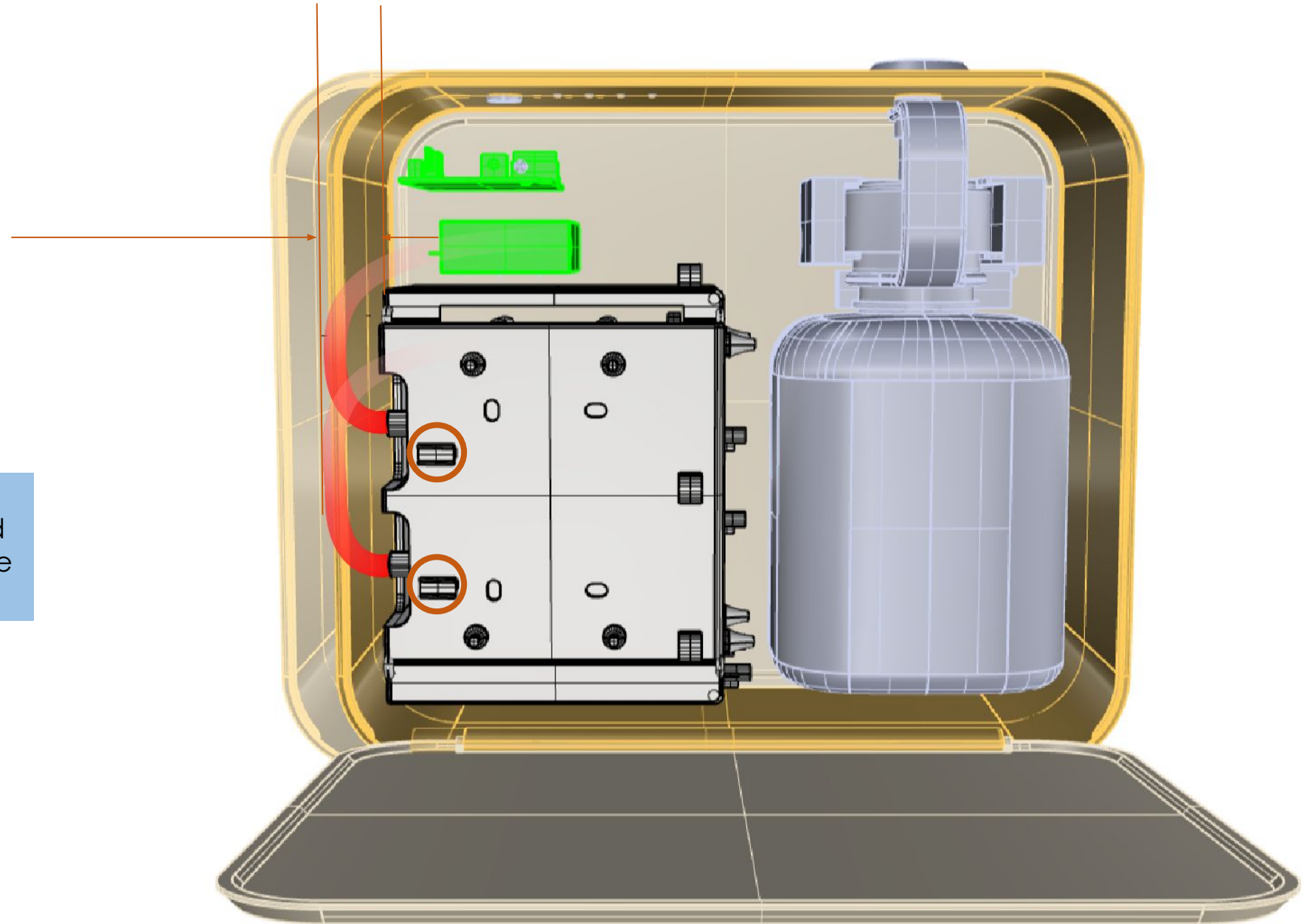
iScent is ok to increase the width but not the height.



## ISSUE 2

1. Is it possible to explore vertical orientation of pump?
2. What is the space needed for tube connected to the pump
3. Can we see the complete tubing connection from the pump to the bottle?

7-June:  
Pump can be turn vertically if needed  
(this to be reviewed when the PCB size is fixed)



1. What is the function of these ME features?

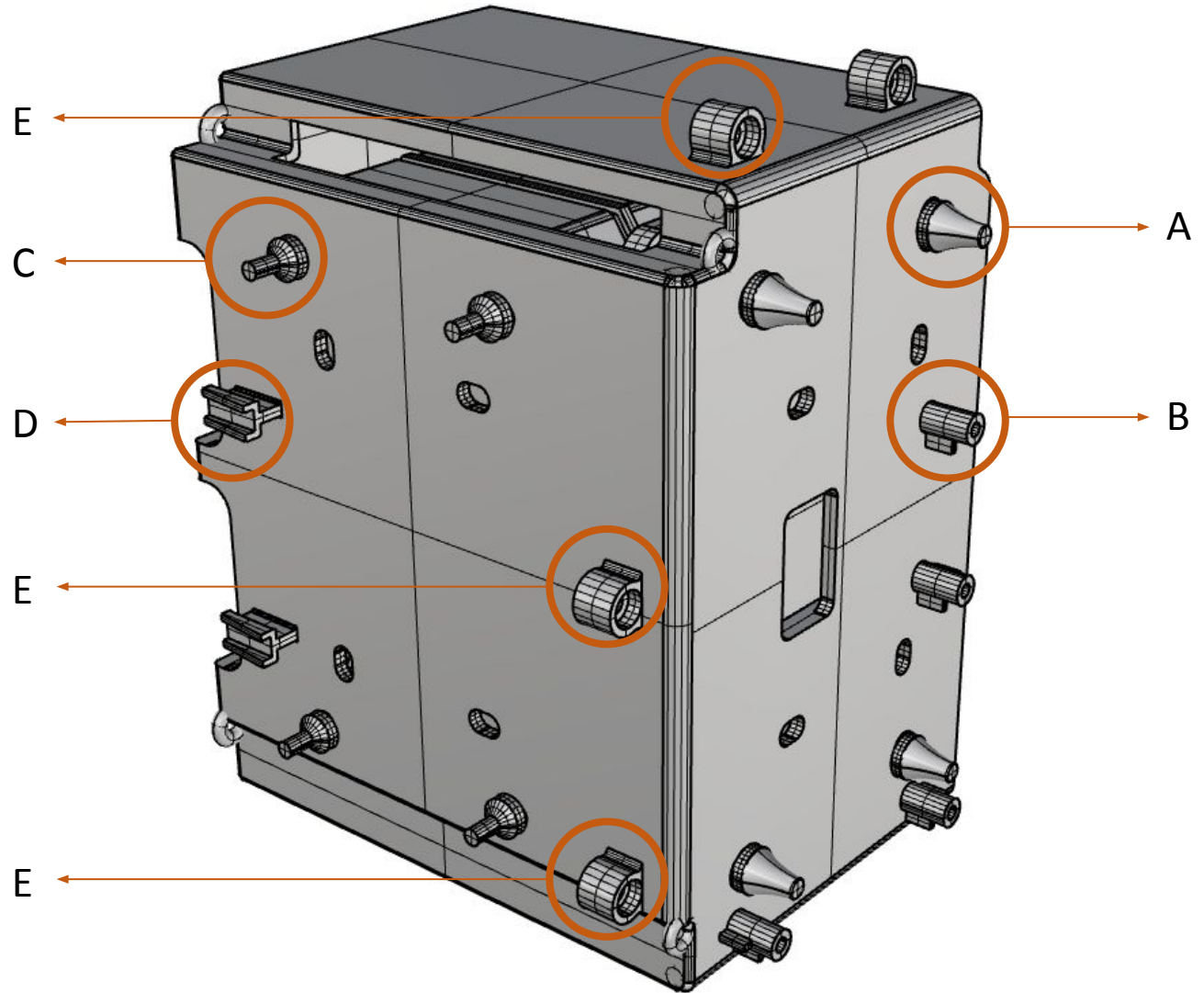
7-June:

1. Feature A, C are damper.
2. Crearoma: the casing is a generic holder, it has the advantage to change/roll in other Crearoma pump when needed.
3. This cover is not for noise sealing.
4. Adding noise sealing will make the size increase for 50mm per-side, (which able to get an estimated reduction from 40dbs to 30 dbs)
5. Orcadesign to request the sample of item No.4 from Crearoma.

To Holly 14-06:

可否提供防噪音设计的样品

Crearoma 21-06: The sample is client's properties hence can't release. Propose fabricate a quick prototype with noise cancellation cover for review. Prototype cost is around USD 1,000.



### CONCEPT 3

#### Overview

Magnetic catch:  
This is not final yet, iScent prefer the design  
flush with the internal surface.

Rectangular form factor with chamfered edges to  
create a slim visual profile

iScent:  
Need to refine the fitting mechanism.  
Prefer to have a effortless loading, and prominent feed back (eg. magnet  
when loading the bottle).

Orcadesign to check with Crearoma the feasibility

To Holly 14-06:  
客户需要优化现有的雾化头卡扣：  
诉求是可以轻松置入，而且有明显的确认反馈(比如说用磁铁)。

Crearoma 21-06:  
The catches on the cap is designed to have tight assembly between the outlet  
connector from pump and the cap.  
Changing to magnetic interface is quite difficult however we can look into design  
improvement of the catches to have better user experience.



CONCEPT 3  
Overview

Magnetic catch:  
This is not final yet, iScent prefer the design  
flush with the internal surface.

Rectangular form factor with chamfered edges to  
create a slim visual profile

Power button

Crearoma to check the availability of  
damper hinge

To Holly 14-06:  
需要确认可否找到具弹簧的转轴。

Crearoma 21-06: To be confirmed, need to  
check the availability of the hinge.



Power button



Square profile bottle  
750mL

Magnetic  
This is not  
flush with

Laser etching is possible however don't have depth.  
CNC is not feasible because reject rate is high.  
Laser etching is another option, however it won't have depth.

Orcadesign to provide the casing 3d file for iScent to evaluate the feasibility of the logo.  
Orcadesign to check with Crearoma what is the cost impact if have to CNC the logo.

To Holly 21-06:  
客户不接受镭射Logo。  
麻烦让他知道如果是cnc的话，由于良率问题，价钱是多少？

Crearoma 17-06: Will check the cost of CNC logo.

Rectangular form factor with chamfered edges to

CONCEPT 3  
Elevation View

Overall size  
Width : 240 mm  
Height : 210 mm  
Depth : 116 mm



Door Material options:  
PP, easily deform  
PC: break easily hence not recommend.  
Metal cover: is better option since it is easier to control dimension.

Orcadesign: checking with Crearoma whether changing the gating of plastic to centre could reduce the warpage.

To Holly 14-06:  
如果是塑料面板, 磨具进胶口改为中心, 会不会减少变形?  
如果是金属cnc, 目前的产品报价有否影响?

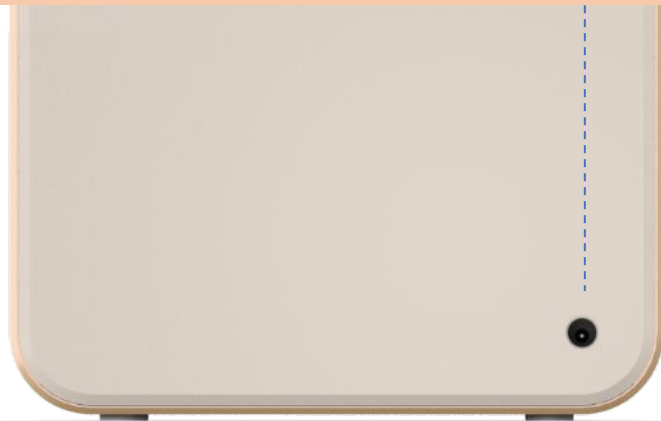
Crearoma 21-06: Will check the cost of metal front cover.



SIDE VIEW



FRONT VIEW



REAR VIEW



750mL BOTTLE

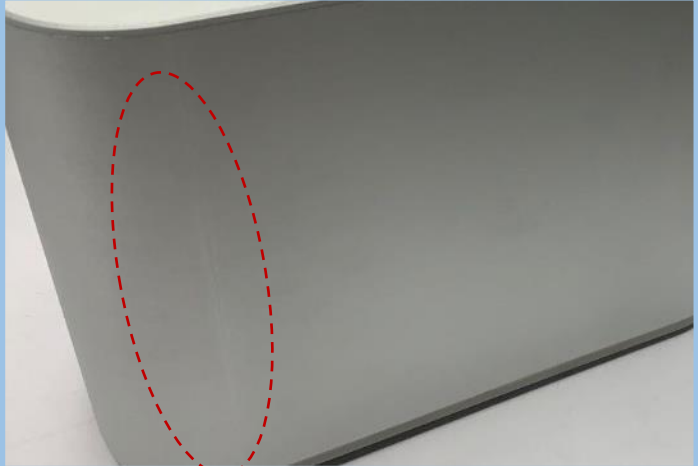
3/4ths VIEW

CONCEPT 3  
Elevation View

Overall size  
Width : 240 mm  
Height : 210 mm  
Depth : 116 mm



This is aluminum cover is and protect the surface



Main housing: Aluminum extrusion will have 'stretch' mark at the radius area..

Orcadesign to ask for sample from Crearoma for review.

To Holly 14-06:  
可以提供这个铝件供客户评估吗？  
如果需要采购样品，请跟进。

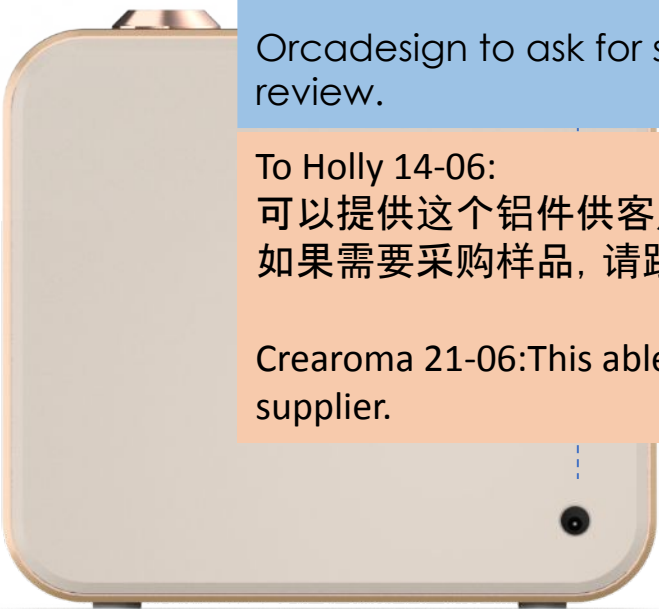
Crearoma 21-06: This able to resolve after spoken to supplier.



SIDE VIEW



FRONT VIEW



REAR VIEW



750mL BOTTLE

3/4ths VIEW



Crearoma 21-06: The aluminium main frame will have production tolerance, hence the door might have a miss match around 1~2mm preside (meaning leaving a gap).

To resolve this, one idea is to have the front cover overlap the main Aluminum housing reduce the miss match.

*SIDE VIEW*

*FRONT VIEW*

*REAR VIEW*

*750mL BOTTLE*

*3/4ths VIEW*

CONCEPT 3

Components Layout

Overall size  
Width : 240 mm  
Height : 210 mm  
Depth : 116 mm



The nozzle cover shall not sandwich the main housing because it will affect the weighing feature.  
Hence need to keep some gap to avoid this cover touching the housing.

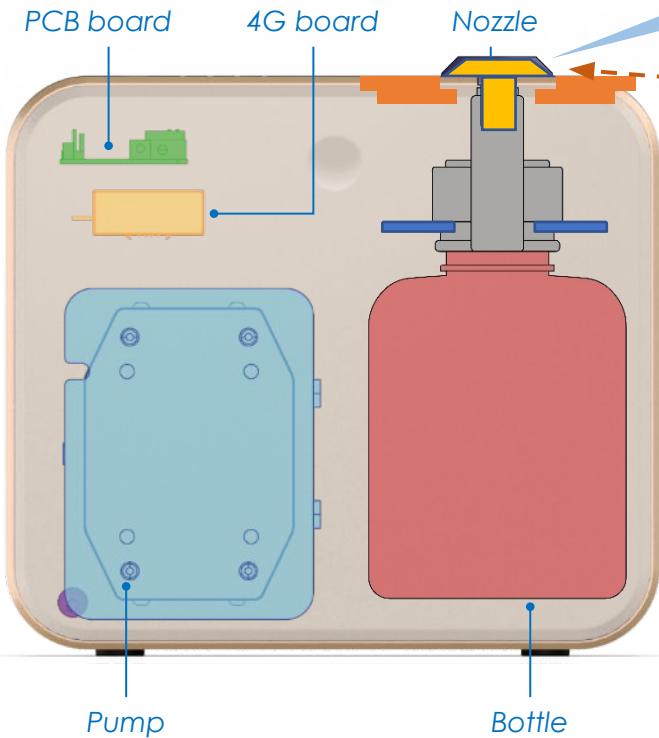
To Holly 14-06:  
为了保持设计及不影响称重, 可以让我们知道这个部件和外壳的间隙需要多少吗?

Crearoma 21-06: Engineer estimate the diameter for the opening increase 3~4mm)

\* Do you want to consider adding a fan to have better distribution of the fragrance like the one found on the ND500?)



SIDE VIEW



FRONT VIEW



REAR VIEW



750mL BOTTLE  
3/4ths VIEW

**Aroma Diffuser**  
DC jack on bottom

