

# Welcome to the Vivacity **Smarterlite** Seminar

26<sup>th</sup> of February 2020

VIVACITY





# Our Mission Statement

Our aim is to help all road users reach their destination safely by providing clear direction, advanced warning and crash prevention solutions – nationwide



# Agenda

10.30

**Joanne McMahon**

RTL Sales & Marketing Manager

**Sue Surjupersad**

RTL Products & Marketing Manager

**Gary Commene**

CEO of Vivacity - Traffic Communication

11.30

**Question & Answer Time**

12.00

**Seminar Wrap**

**VIVACITY**

**RTL** 





**Seminar WIFI**  
**WIFI Name:**  
**Ellerslie Event Centre**  
**Password:**  
**beach**

**VIVACITY**

**RTL** 



# Ask Us Anything!

[www.sli.do](http://www.sli.do)

# RTL VIVACITY

VIVACITY





A nighttime photograph of a city street intersection. On the left, a traffic light pole has a red light illuminated. In the foreground, a green tactile paving strip is visible on the sidewalk. The background shows a multi-story building with lit windows and storefronts, including one with a 'CELESTY BUILD' sign. Pedestrians are blurred in motion, crossing the street. A large, dark, curved graphic element separates the image from the text on the right.

# VIVACITY

*Traffic Communications*





# VIVACITY

smart lighting

## PRODUCTS & APPLICATION

### ***Traffic Communication***

- Public Transport
- LED Safety Tactile
- Street Signage
- PL Signage
- Hybrid Solar / Battery Signage
- Lights & Communications
- Trucking

Vivacity is part of a global organisation that designs, manufactures and supplies some of the most advanced lighting and display systems. With strategic partners in South Korea, Vivacity offers clients the next generation in Lighting Technology and Traffic Communication Systems. This includes the latest in LED Road Safety Lighting / Signage and LED Flashing Tactile Blocks designed to reduce the number of accidents at traffic-controlled intersections as a result of pedestrians not looking up whilst on their phones before stepping onto the road.

With the addition of SmarterLite, Vivacity has the capacity of providing 'hybrid' wireless light solutions that protect the environment and provides safety and visibility for when the 'lights go off'.



LED Edgelit technology to backlight timetable



Overhead Traffic Projector Installation



LED Tactiles (Red for 'STOP')



Custom digital display for parking meter



Solar Powered Stud Lights Installation



LED Tactiles (Green for 'GO')



## VIVACITY LED SAFETY TACTILE BLOCK

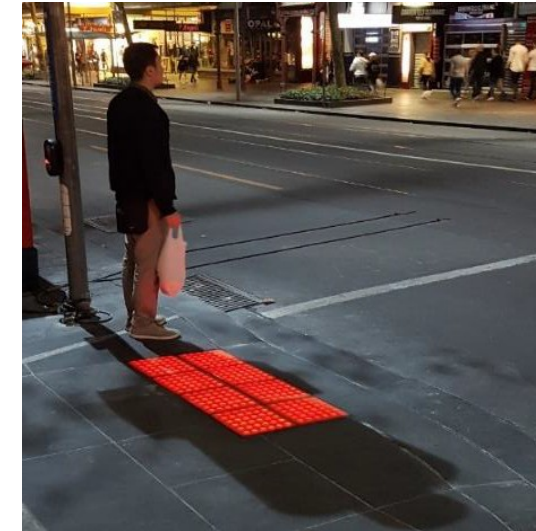


- **VIVACITY LED SAFETY TACTILE BLOCKS** are designed to significantly reduce the number of injuries and deaths at traffic light controlled intersections
- They reduce the likelihood of distracted pedestrians not looking up from their smart phones before stepping onto the road.
- The **VIVACITY** safety blocks are installed in rows on the curbsides on the intersection, they are connected to the traffic pedestrian lights and shine the same colour as the pedestrian lights to create awareness of signal change at the intersection for everyone.

**PEDESTRIANS** are more cautious of traffic and have quick awareness of signal change

**PEOPLE with vision impairment/mobility impairment** find it easier to see the LED tactiles in the ground at their feet rather than a small green/red man in the pedestrian lantern across the street.

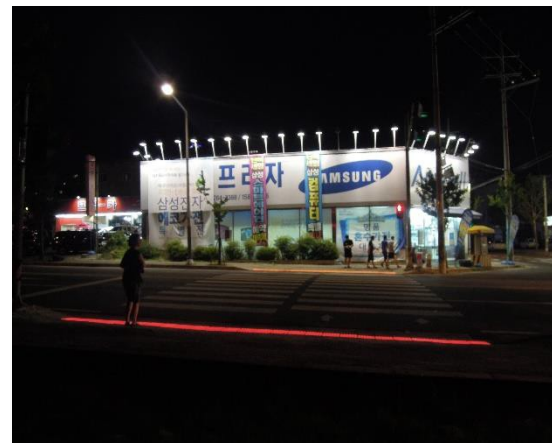
**DRIVERS** can recognise the crosswalk light change at 30m distance at night, adding to the visibility of the crossing and the safety of pedestrians





## Installations

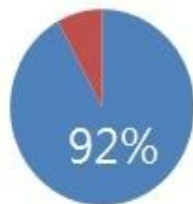
After installations of the LED Safety Tactile Blocks in South Korea at over 90 major locations the number of traffic accidents, injuries and deaths decreased by 26.2%, 21.2% and 38.3% respectively.



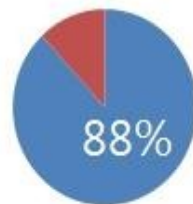
## ◆ User Survey of perceived benefits

Contents of Investigation	Response Rate
1. Prevention of Safety Accident in the Night	92%
2. Functioned as Stand By Line on Crosswalk	88%
3. Prevention of Traffic Accident for the Disabled	98%
4. Contribution to Safety of Pedestrians on Crosswalk	88%
5. Contribution to Driver's Awareness of the Crosswalk in the Night	91%
6. Help for Pedestrians to cross the Crosswalk	92%
The number of Respondent / in 10s~20s : 296people/ in 30s~40s : 65people / in 50s~60s : 37people	

Section 1



Section 2



Section 3



Section 4



Section 5



Section 6





## Installations Melbourne CBD Australia



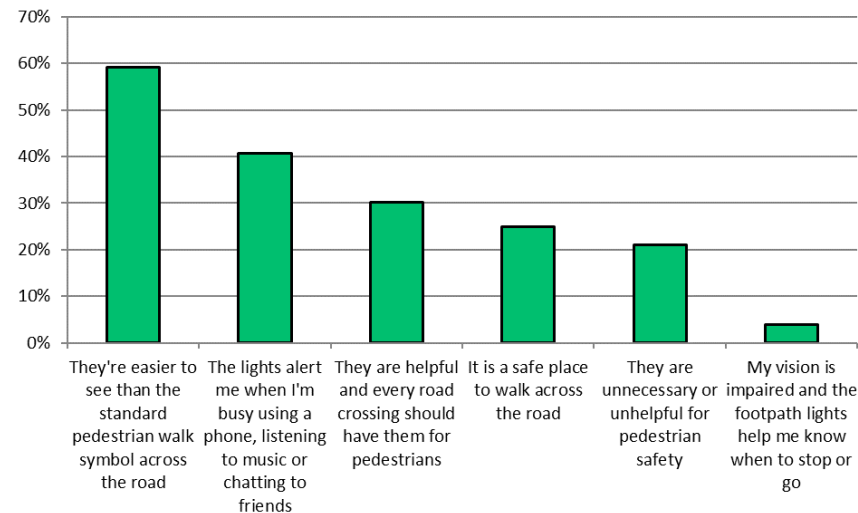
## Thinking about bright LED lights in the footpath at an intersection with traffic lights, how safe do they make you feel?

Extremely safe	Somewhat safe	Don't know	Somewhat unsafe	Extremely unsafe
29.27%	39.02%	19.51%	6.10%	6.10%
24	32	16	5	5

**SELECT ANY** of the following statements about LED lights in the footpath at traffic lights that you **AGREE WITH**.

Statement	Proportion of Responses	Number of Responses
They're easier to see than the standard pedestrian walk symbol across the road	59%	45
The lights alert me when I'm busy using a phone, listening to music or chatting to friends	41%	31
They are helpful and every road crossing should have them for pedestrians	30%	23
It is a safe place to walk across the road	25%	19
They are unnecessary or unhelpful for pedestrian safety	21%	16
My vision is impaired and the footpath lights help me know when to stop or go	4%	3

**SELECT ANY** of the following statements about LED lights in the footpath at traffic lights that you **AGREE WITH**.





## Product Specification

### Quality of the material: Polycarbonate

A group of thermoplastic polymers. Strong, tough materials and some grades are optically transparent. Easily worked, molded, and thermoformed with impact resistance over 150 times higher than tempered glass. Proper for components needed to be given short and intense shock.

Examination request institution: Products Quality Management Service on Public Procurement Service (Estimation department) Testing institution: Korea Testing & Research Institute for Chemical Industry

### Examination

Proprietary name	Proprietary name	Verification test detail	Testing method	Measure	Result
LED Safety Guard Block	Complete product	Contamination	KS F 4561	-	Test OK
		Ratio of Length Change by absorption )	KS F 4561	%	0.1
		Ratio of Width Change by absorption	KS F 4561	%	0.1
		Ratio of Length Change by heat	KS F 4561	%	0.1
		Ratio of Width Change by heat	KS F 4561	%	0.1
		Indentation	KS F 4561	mm	0.12
		Remain injection rate	KS F 4561	%	0.3
		Tensile strength	KS F 4561	MPa	60
		Skid resistance	KS F 4561	BPN	59
		IP Grade	KS F 4561	-	Test OK

#### Note

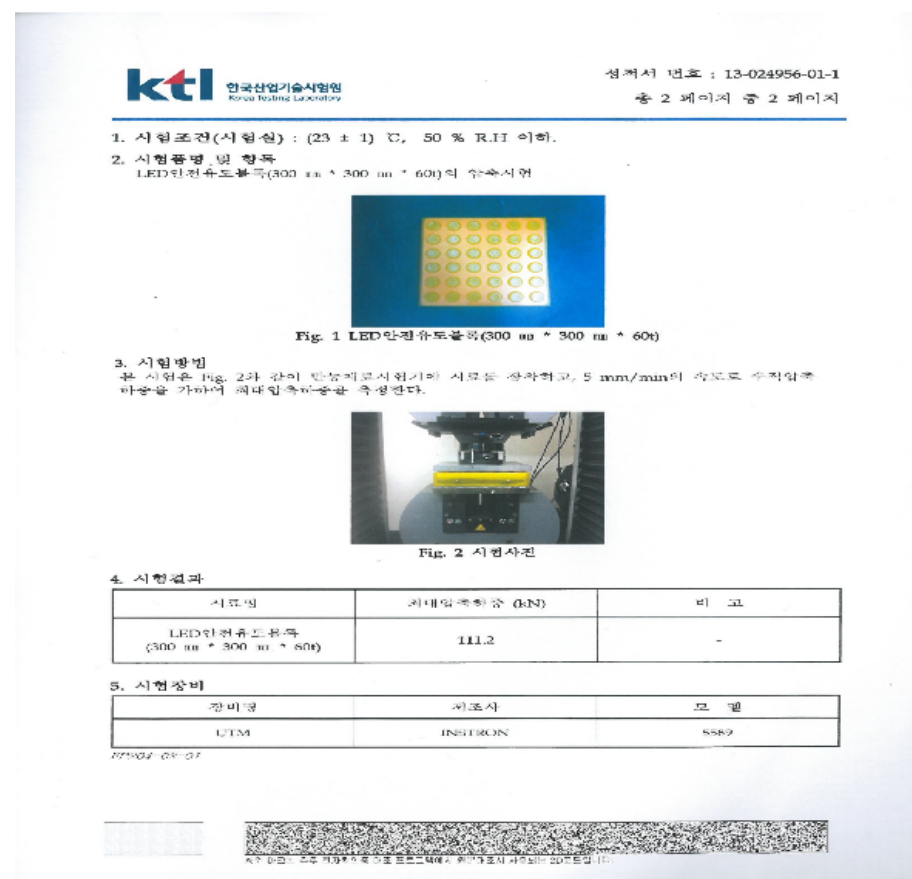
Fouling resistant - Soybean oil, Lubricating Oil, 95% Ethanol, Cement, 10% Aqueous ammonia, Milk, 5% Acetic acid, 5% Hydrochloric acid, kerosine, soy sauce

## Product Specification

The testing institution has a testing machine that can measure up to 11 tones maximum which we passed. Manufacture believes product can handle up to 30 tones.

Testing institution: Korea Industry Technology Institute

Maximum compressive load : **111.2kN**





## Product Specification

**Question 3: What is durability with respect to UV – does the colour fade?**

Answer: product in field for over 5 years with NO colour fade

**Question 6: Has the product been tested for slip resistance, is information available?**

Answer: yes BPN 59, Testing institution Korea Testing & Research Institute for Chemical Industry

Test Provision	Unit	Method of Test	Result of Test
Skid Resistance	BPN	KS F 4561	59

## Product Specification

### 7. Has the product been tested under high temperature conditions, i.e to what temperature?

Answer: yes tested at 40 degrees C for 6 hrs with 0.1% change in width and length of the block

### Examination

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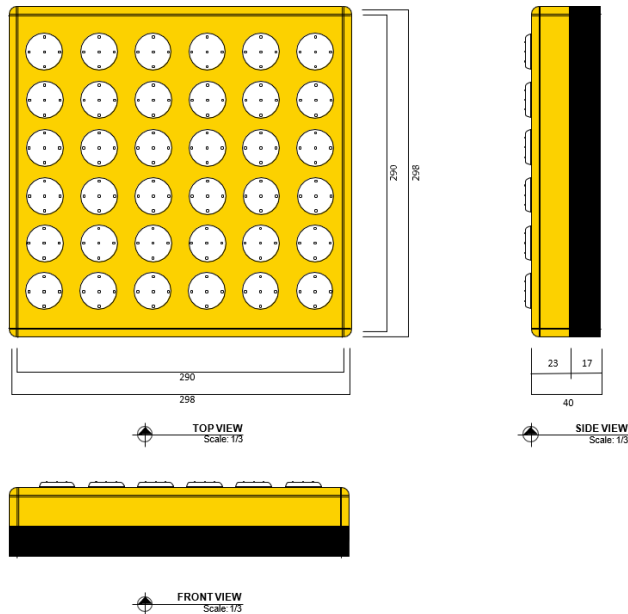
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Fouling resistant - Soybean oil, Lubricating Oil, 95% Ethanol, Cement, 10% Aqueous ammonia, Milk, 5% Acetic acid, 5% Hydrochloric acid, kerosine, soy sauce



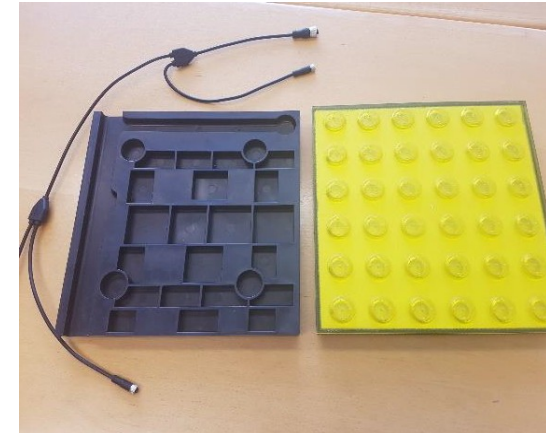
## New Design LED Safety Tactile Block with removable top plate section for easy maintenance

### B-1. Specification



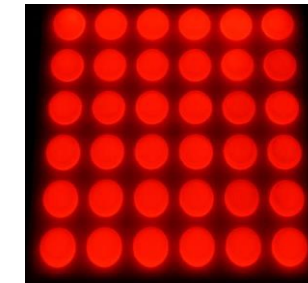
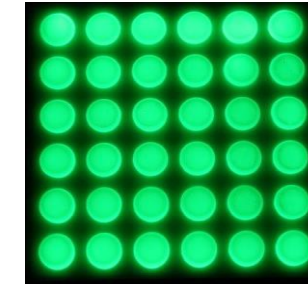
#### Case

Division	Safety Guard Block	Certification results
Standard	298mm * 298 * 60T	Suitability
Bump amount	36EA /4.5T	Suitability
Material of case	ABS	Suitability
Sealed protection degree (IP Code)	IP67	Suitability
Slip resistance of case	59BPN	Suitability
Tensile strength	60.7MPa	Suitability



Base plate

Top plate



Division	Safety Guard Block
Voltage	24V
Power consumption	3.4W / EA

## How To Install existing tactile site



- Cut around existing tactiles
- Remove old tactile blocks
- Lay bed of cement
- Fix LED tactiles into place
- Connect to pedestrian lights





## How To Install New Site

- Cut out pavement for LED tactiles
- Cement and fix base plate into ground
- Lay 24VDC cables into base plate and connect top LED tactile plate



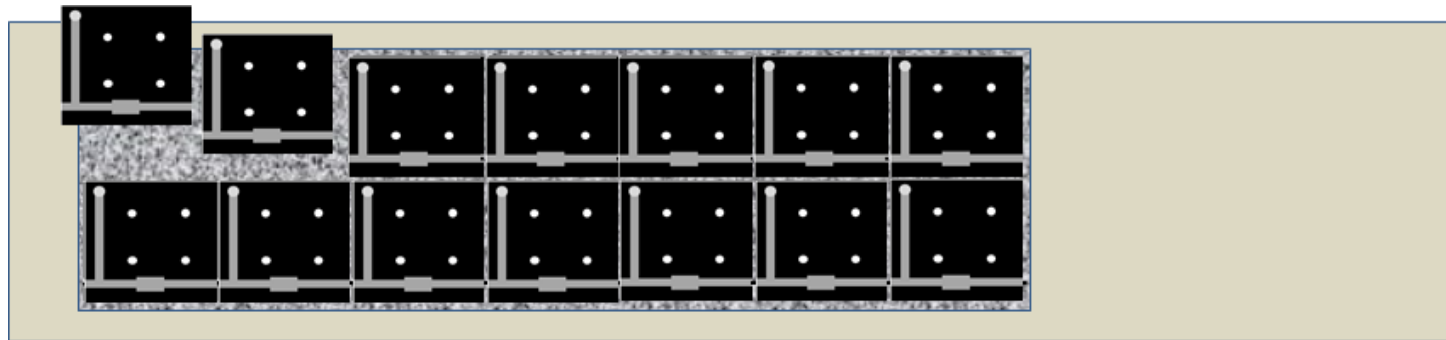
- Fix top tactile plates into position and silicone



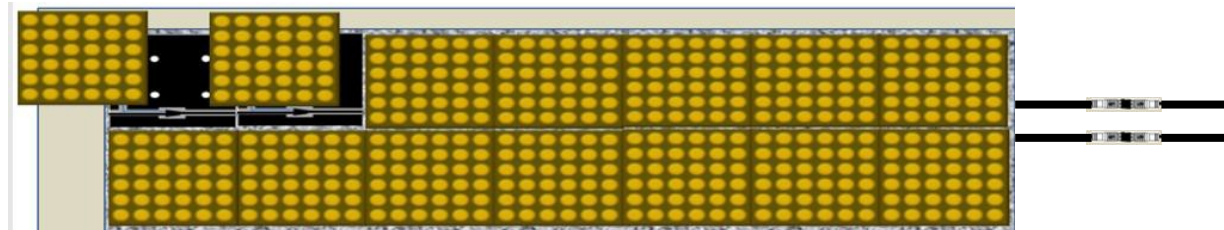
## Installation Steps



- Cut out pavement 50mm deep and lay 15mm bed of cement



- Lay tactile base plates on bed of cement, level and then insert DC cables



- Attached top LED tactile plates and connect all to DC cables.
- Connect DC cables to main controller box

LED Tactile Blocks can be supplied in various base colours



Orange

Yellow



White

Bluestone



## CONNECTING WITH TRAFFIC SIGNALS



Pedestrian Crossing

## WITHOUT CONNECTING



Bus Stops

## OTHERS



Railway and Tram Platforms



## APPENDIX

**OMNIGRIP**  
**DIRECT** 

**VIVACITY**  
smart lighting

**SAFETY PATH** 