UMS Generic LED Charge Code Form

ALL APPLICATIONS ARE SUBJECT TO INDUSTRY APPROVAL. IF AN APPLICATION IS LARGE OR CONTENTIOUS, THE APPROVAL PROCESS IS ALSO LIKELY TO TAKE LONGER.

Company Name:	Simmonsigns Limited
Contact Name:	Neil Maddox
Contact Telephone Number:	01952 217920
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Please complete all of the questions below using the Guidance Notes supplied as a separate attachment. All fields are mandatory.

Your Test Data and Supporting Evidence

***Please place a cross against all completed steps and attach supporting documents to your email.**

1	Has your equipment been tested by an ISO 17025 accredited test house?	Yes
2	Have you included evidence of the test house's accreditation?	Yes
3	Have you included test data that shows the power range for your application that meets the requirements outlined in the Guidance Notes?	Yes
4	Have you included a dimming curve which shows the power range for your application and at least **5** points of dimming in between (including the maximum and minimum) *(Only applicable to dimmable products - If your product does not dim, this is not necessary)*	Yes
5	Have you included a product specification or brochure?	Yes

Your Product

		Details
6	What power range of this driver are you applying for? (E.G. 40W-100W)	4W – 31W
7	What is the product's name or model number?	Safeway EcoSafelight variable output
8	Who is the manufacturer of this product?	Simmonsigns Limited

Test Report

Report No	:	L14802
Client:	:	Simmonsigns Limited Stafford Park 5 Telford Shropshire, TF3 3AS
Description	:	Safeway IL2 Variable Output Retrofit LED Luminaire
Manufacturer	:	Not Disclosed
Type/Model	:	\SWLV/LU/0
Test Specification	:	Measurement of power consumption in accordance with the 'Unmetered Supplies Operational Information Document' – Version 14.0 (17/12/2014)
Date Testing Started	:	28/01/2015
Conclusion	:	Refer to body of Report
Date of Issue	:	05/02/2015
Date of Expiry	:	04/02/2020

Tested by: **T.MALIK**
Position: Quality Accreditation & Certification Officer

Approved by: **J.ADAMS**
Position: Laboratory Supervisor

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INTRODUCTION

Simmonsigns Limited has supplied the product identified in table 1 for measurement of power consumption in accordance with the 'Unmetered Supplies Operational Information Document' – Version 14.0 (17/12/2014).

PRODUCT DETAILS

Table 1. ***Test Sample Details***

Product Description	Safeway IL2 Variable Output Retrofit LED Luminaire
Model No.	\SWLV/LU/0
Number of Samples	Five
Condition on Receipt	Good
Nominal Dimensions	L 600mm × W 110mm × H 60mm
Product Supply Requirement	240V ac 50Hz
Lamp Type and Power	LED, Variable Wattage
Sampling Method: Test samples selected and supplied by client, no sampling method specified by client.	

The customer has declared that the equipment load does not vary with ambient temperature.

RESULTS

Table 2. ***Wattage and VA results for Safeway IL2 Variable Output at 100% output***

Operating Mode	100%				
Watts					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	31.14	30.95	30.92	30.69	30.64
220	31.22	31.08	30.99	30.71	30.67
230	31.30	31.20	31.06	30.72	30.70
240	31.38	31.33	31.14	30.73	30.68
250	31.51	31.48	31.26	30.75	30.77
VA					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	31.77	31.58	31.57	31.39	31.29
220	31.94	31.80	31.72	31.48	31.43
230	32.11	32.01	31.89	31.60	31.56
240	32.32	32.26	32.11	31.72	31.73
250	32.59	32.54	32.37	31.90	31.92
Power Factor					
Voltage	**Sample Number**				
	1	**1**	**1**	**1**	**1**
210	0.98	0.98	0.98	0.98	0.98
220	0.98	0.98	0.98	0.98	0.98
230	0.97	0.97	0.97	0.97	0.97
240	0.97	0.97	0.97	0.97	0.97
250	0.97	0.97	0.97	0.96	0.96
Ambient Temperature During Test (°C)	23				
PF Leading/Lagging	Leading				

Continued on following page

Table 3. *Wattage and VA results for Safeway IL2 Variable Output at 10% output*

Operating Mode	10%				
Watts					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	4.39	4.17	3.80	4.29	4.22
220	4.44	4.21	3.83	4.32	4.25
230	4.48	4.24	3.84	4.35	4.28
240	4.49	4.21	3.80	4.31	4.26
250	4.51	4.20	3.80	4.28	4.24
VA					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	6.15	6.02	5.73	6.14	6.07
220	6.55	6.32	6.05	6.41	6.35
230	6.75	6.63	6.38	6.71	6.66
240	7.13	6.99	6.60	7.07	7.04
250	7.62	7.37	7.29	7.24	7.37
Power Factor					
Voltage	**Sample Number**				
	1	**1**	**1**	**1**	**1**
210	0.71	0.69	0.66	0.70	0.69
220	0.68	0.67	0.63	0.67	0.67
230	0.66	0.64	0.60	0.65	0.64
240	0.63	0.60	0.58	0.61	0.60
250	0.59	0.57	0.52	0.59	0.58
Ambient Temperature During Test (°C)	24				
PF Leading/Lagging	Leading				

Continued on following page

Table 4. *Wattage and VA results for Safeway IL2 Variable Output at 27% output*

Operating Mode	27%				
Watts					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	8.97	8.82	8.50	8.82	8.80
220	9.01	8.85	8.54	8.85	8.83
230	9.07	8.90	8.58	8.89	8.88
240	9.12	8.95	8.62	8.93	8.93
250	9.17	9.01	8.67	8.98	8.99
VA					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	10.22	10.12	9.80	10.12	10.10
220	10.41	10.31	10.00	10.31	10.29
230	10.67	10.57	10.26	10.56	10.55
240	10.94	10.85	10.54	10.82	10.82
250	11.24	11.15	10.84	11.14	11.14
Power Factor					
Voltage	**Sample Number**				
	1	**1**	**1**	**1**	**1**
210	0.88	0.87	0.87	0.87	0.87
220	0.87	0.86	0.85	0.86	0.86
230	0.85	0.84	0.84	0.84	0.84
240	0.83	0.83	0.82	0.82	0.83
250	0.82	0.81	0.80	0.81	0.81
Ambient Temperature During Test (°C)	21				
PF Leading/Lagging	Leading				

Continued on following page

Table 5. *Wattage and VA results for Safeway IL2 Variable Output at 39% output*

Operating Mode	39%				
Watts					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	12.30	12.11	11.83	12.12	12.16
220	12.42	12.29	12.02	12.38	12.33
230	12.44	12.28	12.01	12.36	12.33
240	12.47	12.30	12.03	12.36	12.33
250	12.50	12.32	12.05	12.37	12.34
VA					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	13.33	13.17	12.89	13.19	13.22
220	13.61	13.51	13.24	13.68	13.56
230	13.80	13.69	13.42	13.78	13.75
240	14.03	13.92	13.65	13.98	13.95
250	14.28	14.17	13.90	14.22	14.20
Power Factor					
Voltage	**Sample Number**				
	1	**1**	**1**	**1**	**1**
210	0.92	0.92	0.92	0.92	0.92
220	0.91	0.91	0.91	0.90	0.91
230	0.90	0.90	0.89	0.90	0.90
240	0.89	0.88	0.88	0.88	0.88
250	0.87	0.87	0.87	0.87	0.87
Ambient Temperature During Test (°C)	23				
PF Leading/Lagging	Leading				

Continued on following page

Table 6. *Wattage and VA results for Safeway IL2 Variable Output at 47% output*

Operating Mode	47%				
Watts					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	14.53	14.37	14.12	14.52	14.59
220	14.58	14.40	14.16	14.47	14.54
230	14.60	14.42	14.18	14.48	14.55
240	14.63	14.44	14.20	14.50	14.57
250	14.67	14.48	14.23	14.52	14.58
VA					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	15.47	15.34	15.08	15.47	15.54
220	15.65	15.52	15.26	15.59	15.65
230	15.84	15.71	15.46	15.78	15.83
240	16.07	15.93	15.69	16.00	16.04
250	16.29	16.16	15.91	16.21	16.26
Power Factor					
Voltage	**Sample Number**				
	1	**1**	**1**	**1**	**1**
210	0.94	0.94	0.94	0.94	0.94
220	0.93	0.93	0.93	0.93	0.93
230	0.92	0.92	0.92	0.92	0.92
240	0.91	0.91	0.91	0.91	0.91
250	0.90	0.90	0.89	0.90	0.90
Ambient Temperature During Test (°C)	23				
PF Leading/Lagging	Leading				

Continued on following page

Table 7. ***Wattage and VA results for Safeway IL2 Variable Output at 56% output***

Operating Mode	56%				
Watts					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	17.07	16.92	16.73	17.00	16.91
220	17.10	16.94	16.76	17.00	16.85
230	17.13	16.96	16.78	17.02	16.84
240	17.17	17.00	16.82	17.06	16.87
250	17.19	17.02	16.84	17.10	16.91
VA					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	17.91	17.99	17.58	17.87	17.78
220	18.07	17.95	17.75	18.01	17.86
230	18.26	18.13	17.94	18.19	18.01
240	18.45	18.33	18.14	18.42	18.23
250	18.70	18.58	18.39	18.65	18.46
Power Factor					
Voltage	**Sample Number**				
	1	**1**	**1**	**1**	**1**
210	0.95	0.94	0.95	0.95	0.95
220	0.95	0.94	0.94	0.94	0.94
230	0.94	0.94	0.94	0.94	0.94
240	0.93	0.93	0.93	0.93	0.93
250	0.92	0.92	0.92	0.92	0.92
Ambient Temperature During Test (°C)	23				
PF Leading/Lagging	Leading				

Continued on following page

Table 8. ***Wattage and VA results for Safeway IL2 Variable Output at 68% output***

Operating Mode	68%				
Watts					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	20.70	20.76	20.43	20.78	20.68
220	20.65	20.66	20.35	20.69	20.62
230	20.62	20.59	20.29	20.62	20.57
240	20.57	20.49	20.22	20.53	20.54
250	20.60	20.51	20.25	20.47	20.53
VA					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	21.44	21.54	21.20	21.55	21.46
220	21.52	21.56	21.24	21.60	21.54
230	21.63	21.64	21.34	21.67	21.63
240	21.77	21.73	21.46	21.67	21.78
250	21.98	21.94	21.65	21.92	21.95
Power Factor					
Voltage	**Sample Number**				
	1	**1**	**1**	**1**	**1**
210	0.97	0.96	0.96	0.96	0.96
220	0.96	0.96	0.96	0.96	0.96
230	0.95	0.95	0.95	0.95	0.95
240	0.94	0.94	0.94	0.95	0.94
250	0.94	0.93	0.94	0.93	0.94
Ambient Temperature During Test (°C)	23				
PF Leading/Lagging	Leading				

Continued on following page

Table 9. *Wattage and VA results for Safeway IL2 Variable Output at 82% output*

Operating Mode	82%				
Watts					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	24.58	24.38	24.30	24.66	24.57
220	24.60	24.51	24.33	24.59	24.53
230	24.62	24.41	24.33	24.55	24.51
240	24.64	24.43	24.36	24.54	24.52
250	24.67	24.42	24.38	24.53	24.52
VA					
Voltage	**Sample Number**				
	1	**2**	**3**	**4**	**5**
210	25.36	25.18	25.09	25.46	25.35
220	25.37	25.30	25.11	25.52	25.42
230	25.59	25.43	25.32	25.58	25.52
240	25.73	25.56	25.45	25.68	25.64
250	25.91	25.71	25.64	25.88	25.86
Power Factor					
Voltage	**Sample Number**				
	1	**1**	**1**	**1**	**1**
210	0.97	0.97	0.97	0.97	0.97
220	0.97	0.97	0.97	0.96	0.96
230	0.96	0.96	0.96	0.96	0.96
240	0.96	0.96	0.96	0.96	0.96
250	0.95	0.95	0.95	0.95	0.95
Ambient Temperature During Test (°C)	23				
PF Leading/Lagging	Leading				

Continued on following page

DEVIATION(S) FROM TEST STANDARD

No reported deviations from test standard.

MEASUREMENT UNCERTAINTY

The following expanded uncertainties apply to the measurements shown in the results;

True Power (W): ±0.69%, Apparent Power (VA): ±0.61%

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor *k*=2, providing a coverage probability of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements.

Continued on following page

ILLUSTRATION

Figure 1. *Image of tested samples*

End

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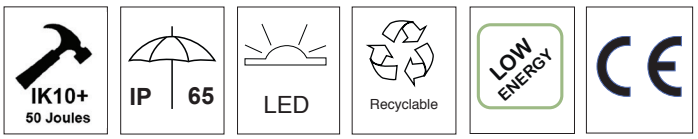
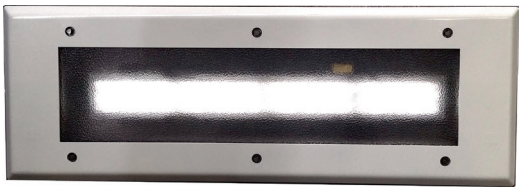
Safe-Way Urban Lighting System

Data Guide





DESCRIPTION

The Safe-Way is ideal where high resistance to vandalism is required or where access to the unit is a security issue. Typical installations include pedestrian underpasses, undercover car parks and stairwells. The Safe-Way has been tested against vandalism in accordance with BS EN 62262:2002 clause 6. The level reached was IK10 (50 Joules) which exceeds the standard test by 30 Joules (150%).

LIGHTING EQUIPMENT

LED

- EcoSafelight LED array.
- Single IP67 LED driver with 0.9 power factor correction.
- Maximum 30 Watt total energy consumption (dimmable) **[see table below].**

OPTIONS

Full range of powder coated stainless steel infill panels and end caps for varying installation configurations.

A range of cornice, recessed and surface fixings.

CONSTRUCTION

Body

2mm fabricated stainless steel. Gear enclosure IP65 certified using supplied 25mm glands. IP integrity is independent of installation fixing points.

Glazing Frame

3mm fabricated stainless steel, powder coated white. Secured using 6 No. positively captivated and rebated security screws, with unique assisted alignment feature, to ease access and replacement. Easily replaceable standard glazing comprises 1x10mm polycarbonate panel with 1mm graffiti protection screen. Stainless steel double link hinge system for safe and easy maintenance.

	SWLV/780/7*	SWLV/780/6**
Light Option	LED	LED
Light Source	104 LEDs in strings of 4	104 LEDs in strings of 4
Power (W)	24	20
Operation Voltage	230V ac	230V ac
Guarantee (yr)	3	3

Note - Improvements in LED technology may result in a change of this information.

* 55w PL-L Equivalent
** 40w PL-L Equivalent

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Doc Ref: DG062
Issue Date: October 2015
Issue Number: 9

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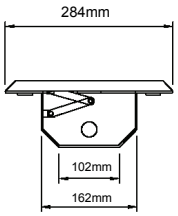
Safe-Way Urban Lighting System

Data Guide

Cornice details



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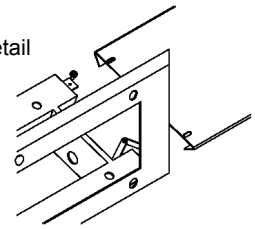
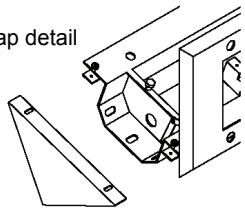
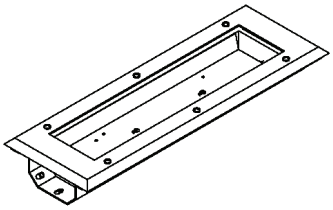
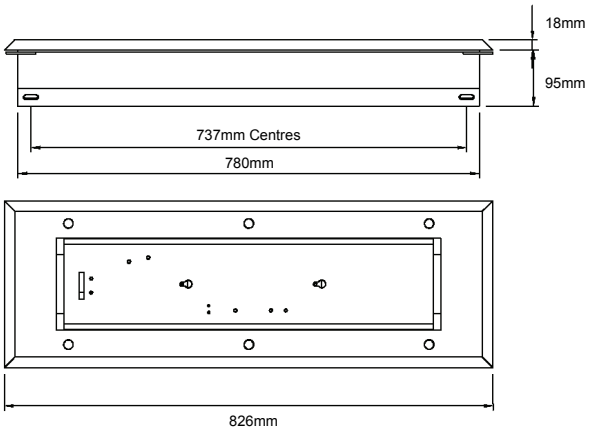


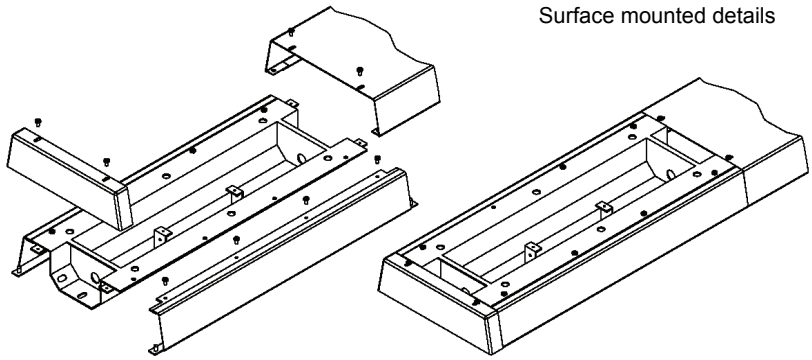
End cap detail

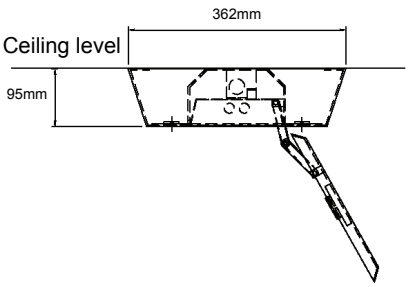




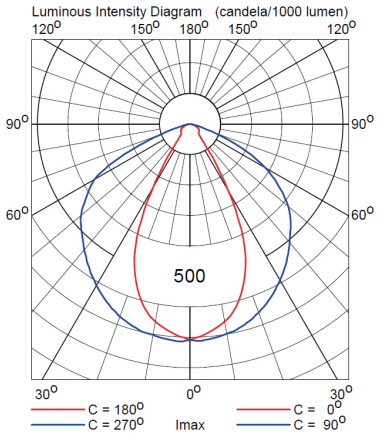


Surface mounted details





EcoSafelight/Clear lens



EcoSafelight operating temperature -25 to +25°C ambient.

Dimming Summary

Ambient Temperature - 25°C BS5225 test conditions

EcoSafelight

Setting	Total Lumen output (Clear lens)	DLOR	ULOR	TLOR	Watt*	DLOR x Lumen output (Clear lens)
7*	2300	1	0	1	24	2300
6**	1940	1	0	1	20	1940
5	1630	1	0	1	17	1630
4	1390	1	0	1	14	1390
3	1150	1	0	1	12	1150
2	810	1	0	1	9	810
1	280	1	0	1	4	280
0	2940	1	0	1	30	2940

* 55w PL-L Equivalent
** 40w PL-L Equivalent

Definitions

DLOR = downward light output ratio
ULOR = upward light output ratio
TLOR = total light output ratio
*Total circuit power

Simmonsigns Limited reserves the right to alter or improve this guide without prior notice.

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