



## 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:** Simmons signs Limited

**Contact Name:** Neil Maddox

**Contact Telephone Number:** 01952 217920

**Email Address:** [neil@simmons signs.co.uk](mailto:neil@simmons signs.co.uk)

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) <i>(Only applicable to dimmable products - If your product does not dim, this is not necessary)</i>	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)	[This will determine the upper and lower limit of the Charge Code range – Test Data/Curve must confirm this]
7	What is the product's name or model number?	Safeway Hermit – Variable output LED Light Unit
8	Who is the manufacturer of this product?	Simmons signs Limited

## Test Report

**Report No** : L15283

**Client:** : Link By Design Ltd  
Unit 10 Business Development  
Stafford Park 4  
Telford  
TF3 3BA

**Description** : LED Hermit Geartray AD016-02

**Manufacturer** : Not Disclosed

**Type/Model** : \SWHL24/LU

**Test Specification** : Measurement of power consumption in accordance with the  
'Unmetered Supplies Operational Information Document' –  
Version 14.0 (17/12/2014)

**Date Testing Started** : 30/09/2015

**Conclusion** : Refer to body of report

**Date of Issue** : 30/09/2015

**Date of Expiry** : 29/09/2020

**Tested by:** A.BROTHWOOD  
**Position:** Laboratory Technician



1286

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



## **INTRODUCTION**

Link by Design Ltd 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	LED Hermit Geartray AD016-02
Model No.	\SWHL24/LU
Number of Samples	Five
Condition on Receipt	Good
Nominal Dimensions	550mm x 150mm
Product Supply Requirement	240V 50Hz
Lamp Type and Power	LED
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.

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## **RESULTS**

**Table 2. Wattage and VA results for LED Hermit Geartray AD016-02**

Operating Mode	100%				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	54.83	53.50	54.31	54.32	54.43
220	54.84	53.50	54.12	54.10	54.20
230	54.81	53.54	54.23	54.18	54.30
240	54.89	53.56	54.24	54.19	54.29
250	54.92	53.59	54.31	54.26	54.35
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	55.79	54.27	55.18	55.03	55.19
220	55.82	54.43	54.94	54.85	54.97
230	55.87	54.50	55.18	55.05	55.19
240	56.05	54.66	55.36	55.20	55.33
250	56.24	54.84	55.72	55.52	55.65
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.98	0.99	0.98	0.99	0.99
220	0.98	0.98	0.99	0.99	0.99
230	0.98	0.98	0.98	0.98	0.98
240	0.98	0.98	0.98	0.98	0.98
250	0.98	0.98	0.97	0.98	0.98
Ambient Temperature During Test (°C)					
24.8					
PF Leading/Lagging					
Leading					

Continued on following page

**Table 3. Wattage and VA results for LED Hermit Geartray AD016-02**

Operating Mode	15%				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	7.25	8.03	7.35	7.53	7.50
220	7.37	8.15	7.48	7.66	7.63
230	7.51	7.73	7.60	7.78	7.75
240	7.66	7.88	7.91	8.08	8.06
250	7.85	8.07	8.02	8.19	8.17
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	8.91	9.61	8.93	9.09	9.04
220	9.23	9.92	9.31	9.46	9.41
230	9.61	9.79	9.62	9.76	9.70
240	10.06	10.24	10.50	10.62	10.56
250	10.58	10.76	10.78	10.91	10.84
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.81	0.84	0.82	0.83	0.83
220	0.80	0.82	0.80	0.81	0.81
230	0.78	0.79	0.79	0.80	0.80
240	0.76	0.77	0.75	0.76	0.76
250	0.74	0.75	0.74	0.75	0.75
Ambient Temperature During Test (°C)					
24.8					
PF Leading/Lagging					
Leading					

Continued on following page

**Table 4. Wattage and VA results for LED Hermit Geartray AD016-02**

Operating Mode	25%				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	13.62	13.52	13.33	13.31	13.29
220	13.75	13.65	13.49	13.47	13.45
230	13.91	13.80	13.58	13.56	13.53
240	14.03	13.93	13.76	13.75	13.71
250	14.19	14.08	13.85	13.82	13.79
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	14.88	14.77	14.60	14.55	14.53
220	15.20	15.09	15.07	15.02	14.99
230	15.62	15.50	15.28	15.23	15.20
240	15.95	15.83	15.75	15.69	15.65
250	16.36	16.24	15.99	15.93	15.89
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.92	0.92	0.91	0.91	0.91
220	0.90	0.90	0.90	0.90	0.90
230	0.89	0.89	0.89	0.89	0.89
240	0.88	0.88	0.87	0.88	0.88
250	0.87	0.87	0.87	0.87	0.87
Ambient Temperature During Test (°C)			25.0		
PF Leading/Lagging			Leading		

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**Table 5. Wattage and VA results for LED Hermit Geartray AD016-02**

Operating Mode	35%				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	19.41	19.37	19.07	19.03	19.02
220	19.52	19.48	19.16	19.12	19.11
230	19.66	19.61	19.30	19.26	19.25
240	19.77	19.72	19.39	19.35	19.34
250	19.91	19.87	19.54	19.50	19.49
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	20.51	20.45	20.23	20.14	20.14
220	20.79	20.73	20.46	20.37	20.37
230	21.56	21.08	20.84	20.75	20.73
240	21.45	21.38	21.09	20.99	20.99
250	21.84	21.77	21.49	21.38	21.38
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.95	0.95	0.94	0.94	0.94
220	0.94	0.94	0.94	0.94	0.94
230	0.91	0.93	0.93	0.93	0.93
240	0.92	0.92	0.92	0.92	0.92
250	0.91	0.91	0.91	0.91	0.91
Ambient Temperature During Test (°C)			25.0		
PF Leading/Lagging			Leading		

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**Table 6. Wattage and VA results for LED Hermit Geartray AD016-02**

Operating Mode	45%				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	25.67	25.66	25.41	25.38	25.37
220	25.77	25.75	25.14	25.75	25.77
230	25.87	25.86	25.84	25.82	25.83
240	25.99	25.97	25.91	25.91	25.94
250	26.11	26.09	26.04	26.03	26.07
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	26.66	26.62	26.39	26.30	26.36
220	26.92	26.86	26.33	26.86	26.90
230	27.20	27.15	27.16	27.07	27.10
240	27.52	27.47	27.41	27.33	27.38
250	27.87	27.80	27.77	27.66	27.72
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.96	0.96	0.96	0.97	0.96
220	0.96	0.96	0.95	0.96	0.96
230	0.95	0.95	0.95	0.95	0.95
240	0.94	0.95	0.95	0.95	0.95
250	0.94	0.94	0.94	0.94	0.94
Ambient Temperature During Test (°C)			25.0		
PF Leading/Lagging			Leading		

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**Table 7. Wattage and VA results for LED Hermit Geartray AD016-02**

Operating Mode	57%				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	32.34	32.37	31.95	31.84	31.89
220	32.40	32.43	32.58	31.84	31.91
230	32.50	32.52	32.66	32.55	31.99
240	32.59	32.61	32.76	32.65	32.72
250	32.69	32.71	32.87	32.74	32.81
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	33.24	33.24	32.90	32.75	32.79
220	33.44	33.43	33.63	32.82	32.90
230	33.72	33.70	33.86	33.66	33.14
240	34.00	33.96	34.15	33.94	34.05
250	34.29	34.26	34.27	34.23	34.33
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.97	0.97	0.97	0.97	0.97
220	0.97	0.97	0.97	0.97	0.97
230	0.96	0.96	0.96	0.97	0.97
240	0.96	0.96	0.96	0.96	0.96
250	0.95	0.95	0.96	0.96	0.96
Ambient Temperature During Test (°C)			25.0		
PF Leading/Lagging			Leading		

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**Table 8. Wattage and VA results for LED Hermit Geartray AD016-02**

Operating Mode	72%				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	41.34	41.36	41.46	41.42	41.53
220	41.39	41.40	41.50	41.46	41.57
230	41.44	41.45	41.56	41.51	41.61
240	41.52	41.52	41.62	41.58	41.68
250	41.68	41.66	41.76	41.70	41.82
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	42.17	42.15	42.27	42.15	42.29
220	42.36	42.33	42.45	42.33	42.46
230	42.58	42.54	42.66	42.52	42.65
240	42.74	42.70	42.89	42.72	42.86
250	42.90	42.89	43.20	43.02	43.18
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
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	0.98	0.98
240	0.97	0.97	0.97	0.97	0.97
250	0.97	0.97	0.97	0.97	0.97
Ambient Temperature During Test (°C)			25.0		
PF Leading/Lagging			Leading		

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**Table 9. Wattage and VA results for LED Hermit Geartray AD016-02**

Operating Mode	84%				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	48.19	48.25	49.21	49.38	49.29
220	48.21	48.27	49.23	49.39	49.31
230	48.21	48.24	49.26	49.42	49.33
240	48.24	48.30	49.44	49.16	49.50
250	48.30	48.34	49.56	49.31	49.65
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	49.04	49.05	49.96	50.05	49.99
220	49.26	49.26	50.10	50.17	50.12
230	49.36	49.35	50.28	50.33	50.28
240	49.65	49.62	50.63	50.23	50.61
250	49.85	49.82	50.93	50.56	50.91
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.98	0.98	0.98	0.99	0.99
220	0.98	0.98	0.98	0.98	0.98
230	0.98	0.98	0.98	0.98	0.98
240	0.97	0.97	0.98	0.98	0.98
250	0.97	0.97	0.97	0.98	0.98
Ambient Temperature During Test (°C)			25.0		
PF Leading/Lagging			Leading		

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### **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):  $\pm 0.69\%$ , Apparent Power (VA):  $\pm 0.61\%$

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.

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**ILLUSTRATION**

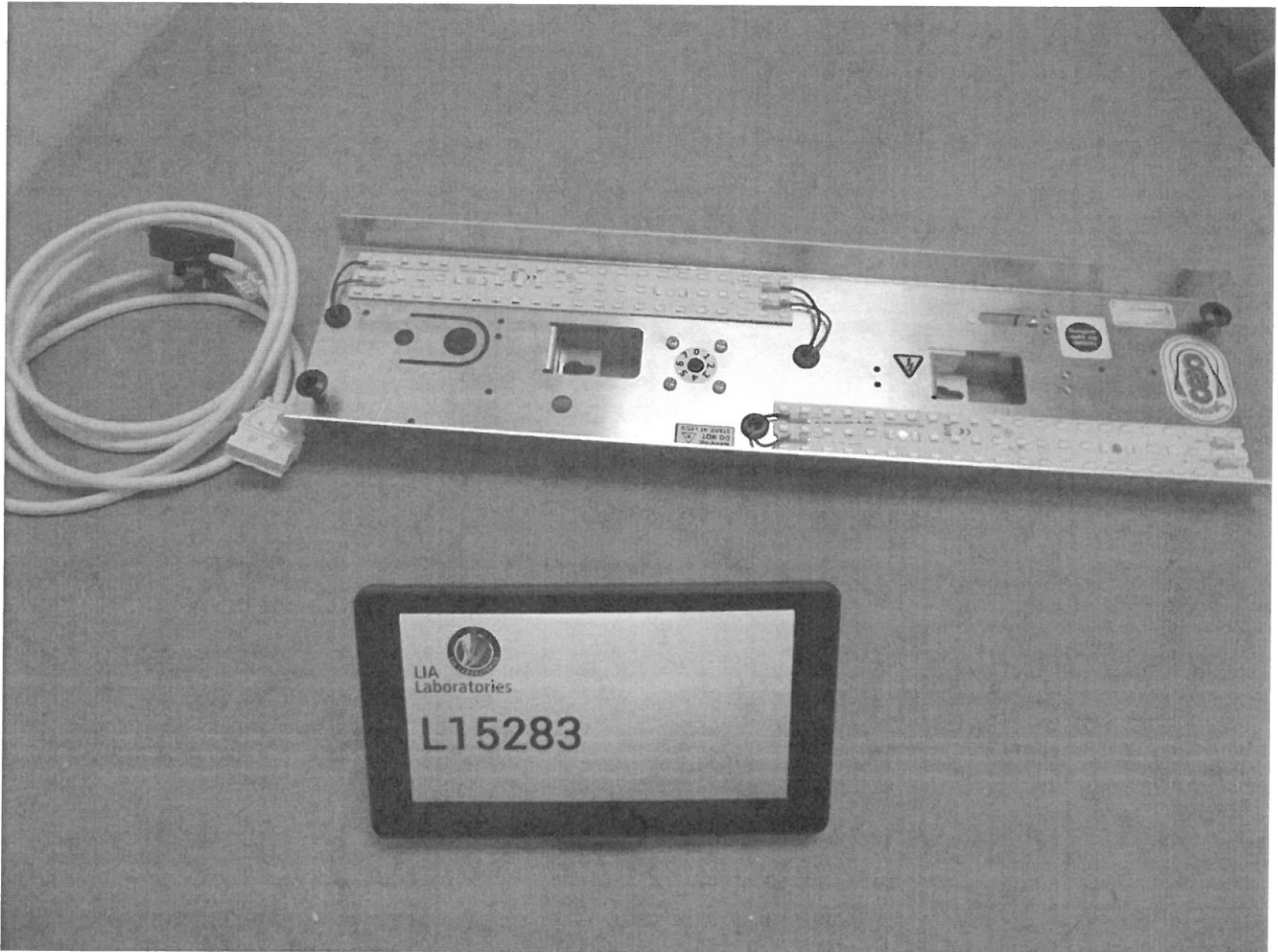


Figure 1. *Product image*

End



**Simmons signs**

## HERMIT LED RECESSED LIGHTING SYSTEM Data Guide

### DESCRIPTION

Using the time-proven construction and features of the highly successful Safe-Way urban lighting system, the Hermit is the perfect solution for existing ceiling and wall recesses. The Hermit is ideal where high resistance to vandalism is required or where access to the unit is a security issue.

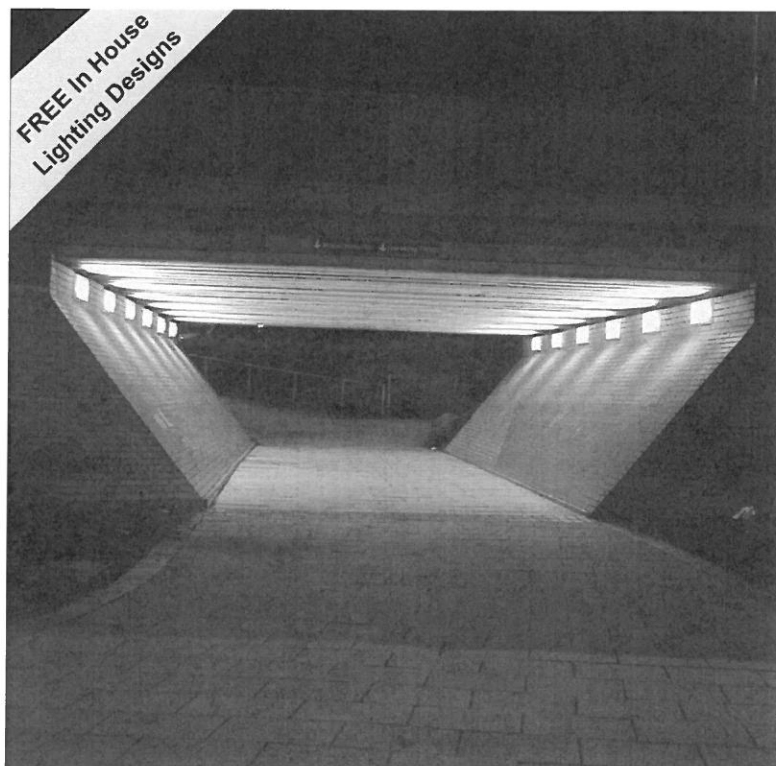
Typical installations include pedestrian underpasses, undercover car parks and stairwells.

An LED upgrade kit is available and is backward compatible with existing Simmons signs Hermit bodies using the existing power supply cable and fixing screws.

The LED Hermit is dimmable using an 8 step rota-switch accessible from the front of the light unit. An optional Dali dimming system is also available.

The unit is supplied with a stippled lens.

**FREE In House  
Lighting Designs**



### CONSTRUCTION

#### Body

2mm fabricated stainless steel. Gear enclosure IP65 using 25mm gland. 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 1 x 10mm polycarbonate panel and a 3mm Polycarbonate stippled graffiti protection lens. Stainless steel double link hinge system for safe and easy maintenance.

#### Light Unit

132 LED's arranged across two light engines with dimmable driver all mounted to a 2mm aluminium gear tray, polyester powder coated white.  
Colour temperature is 4,000K , CRI (Ra) 86. All components are fitted to this gear tray.

#### Electrical

Supply : 220 - 240V AC 47-63 Hz  
Ambient Temperature -25 to +25°C

### MAINTENANCE

Other than routine cleaning there are no user serviceable parts in this product. The lens may be periodically cleaned with warm soapy water.

### CMS/DIMMING OPTIONS

Telensa  
Mayflower  
StarSense  
External Dali interface

*Simmons signs Limited reserves the right to alter or improve this guide without prior notice.*

**Doc ref:** DG131 | **Issue Date:** July 2015 | **Draft Number:** 1

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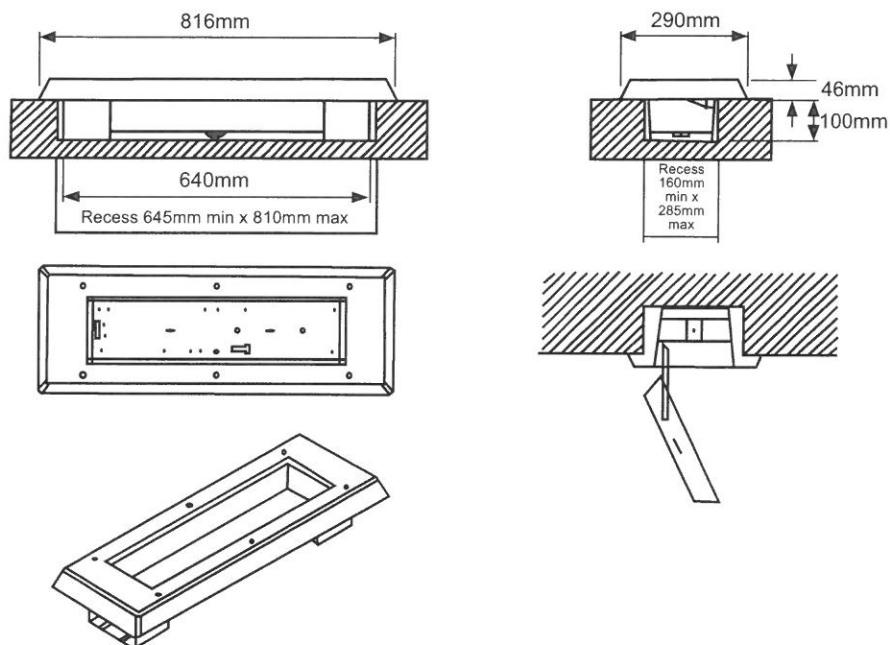




**Simmons signs**

# HERMIT LED RECESSED LIGHTING SYSTEM Data Guide

## DIMENSIONS

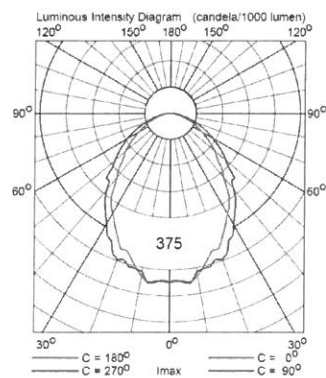


## LIGHTING PERFORMANCE

Setting	Level	Lumen Output	DLOR	ULOR	TLOR	PFC @230v	Watt*	UMSUG*
0	100%	3353	1	0	1	0.98	54	
1	15%	3102	1	0	1	0.76	7.7	
2	25%	2731	1	0	1	0.88	13	
3	35%	2262	1	0	1	0.92	19	
4	45%	1867	1	0	1	0.95	26	
5	57%	1447	1	0	1	0.96	32	
6	72%	1027	1	0	1	0.97	41	
7	84%	541	1	0	1	0.97	49	

\* Issue of codes imminent

\*\* Total circuit power



## PACKAGING

Product	Weight	Packaging	Dimensions	Pack Quantity
Hermit Complete	15.0 kg	Carton	84 x 30 x 12 cm	1
Hermit LED Upgrade Kit	1.6 kg	Carton	55 x 15 x 7 cm	1

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Doc ref: DG131 | Issue Date: July 2015 | Draft Number: 1

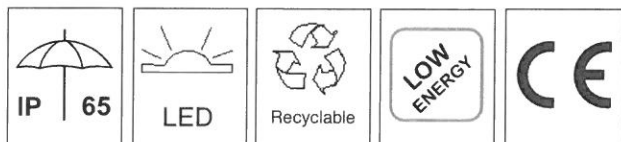
**Simmons signs Limited**  
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Simmons signs

## HERMIT RETROFIT LED LIGHT UNIT Installation Guide



### SAFETY FIRST

Ensure that the supply voltage is suitable for the units being installed.

Isolate the electrical supply before commencing any installation or maintenance work.

All electrical work must be carried out in accordance with the latest IET wiring regulations (BS7671) by suitably qualified engineers.

### TOOLS REQUIRED

Tri-head key.  
PZ2 Pozidriv screwdriver.

**Fixings supplied with retrofit light unit:**  
LED light unit.  
3mm stippled lens.

Weight	Size	Packaging
Gear Tray 1.5Kg Inc. Nodes 1.75Kg	548 x 142 x 64mm	Plain Carton with anti-static bubble wrap

### INSTALLATION

- 1 Loosen the 6 x M8 Tri-head screws and hinge open the hinged cover. (Fig. 1)

Remove and dispose of the existing 1mm clear sacrificial lens and replace with the 3mm stippled lens, ensuring the smooth side is facing out.

- 2 Loosen the 2 x M6 retainer screws securing the light unit. (Fig. 2)

Slide left and lift the light unit out of the Hermit body and disconnect the three-way power socket on the rear of the light unit.

Dispose of the original light unit in accordance with the current WEEE directive.

- 3 Offer the replacement LED light unit into the Hermit casing using the available grip points.

Refit the three-way power socket into the light unit, then place it over the 2 x M6 retainer screws and slide right into the keyhole slots.

- 4 Secure the M6 retainer screws to 2 Nm, ensuring that no cables become trapped.

Close the hinged cover and secure by tightening the 6 x M8 Tri-head screws. (Fig. 1)

Reconnect the mains power supply in accordance with the latest IET wiring regulations (BS7671) and test the Hermit.

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Fig. 1

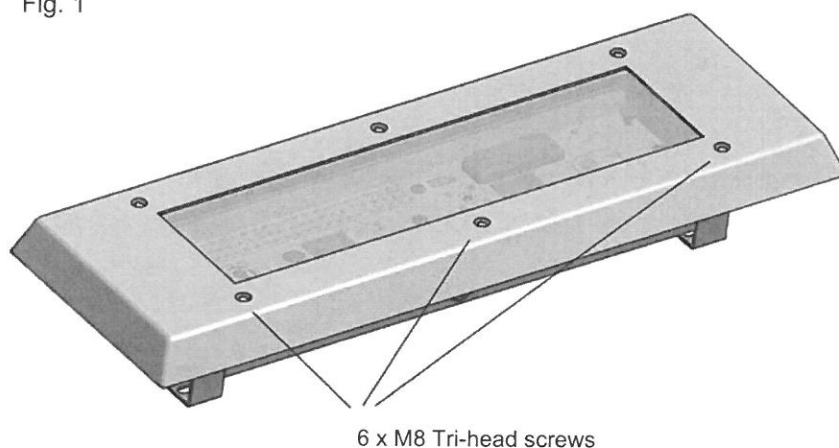
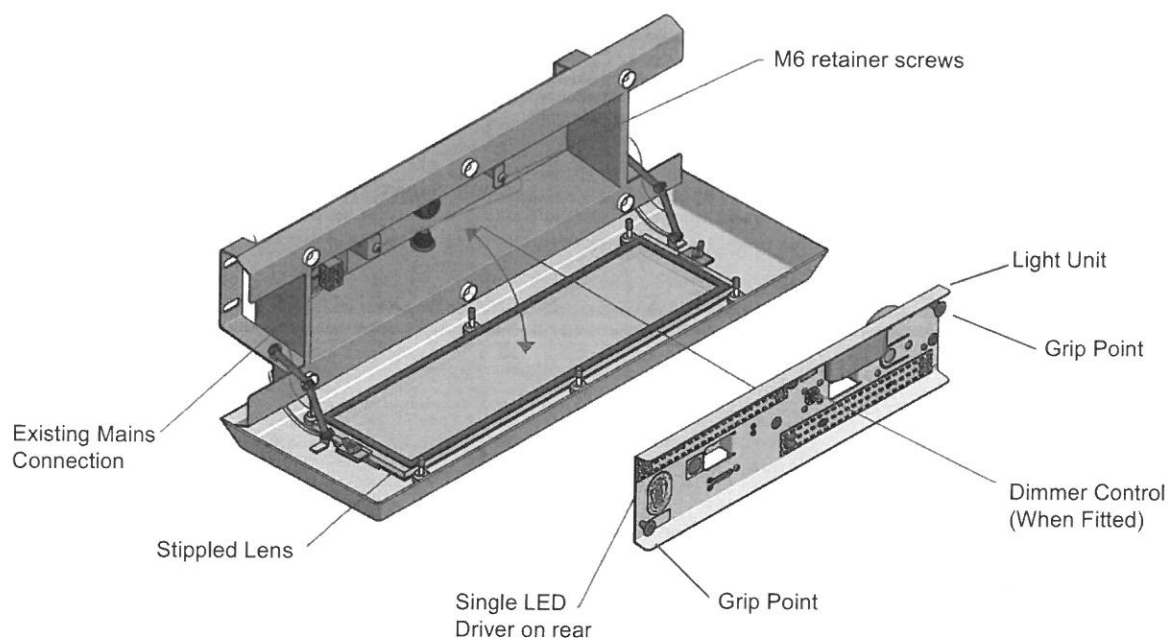


Fig. 2



PLEASE NOTE: On standard installations not using CMS nodes, there will be a small area of bare metal on the reverse side of the light unit.