

## ELECTRICAL LOAD REPORT

REPORT NO.: IANZ LR 1004    Date of Issue:-    3 October 2017  
CUSTOMER:            Name            **Schröder Australia (Pty) Ltd**  
                                Address            6 Jayelem Crescent, Padstow, NSW 2211,  
   AUSTRALIA

**OBJECT OF TEST:**    To produce an electrical load report for a range of Schröder Luminaires in accordance with the AEMO Unmetered Load Guidelines and LM79 electrical load reporting.

**DEVICE UNDER TEST (DUT):-**

1. Schröder SHUFFLE 20 LED NW 23W luminaire
2. Schröder SHUFFLE 20 LED NW 33W luminaire
3. Schröder SHUFFLE 20 LED NW 46W luminaire

**TEST METHOD:**

The testing is carried out in our Photometric Laboratory. The laboratory is temperature controlled to 24 °C ± 2 °C.

The luminaires were mounted on a suitable frame and oriented to be as per normal mounting for photometric measurements at 0 degrees spigot tilt and zero degrees luminaire tilt. The luminaire had voltage applied to it and was allowed to stabilised in accordance with the requirements of the IES LM-79-08 procedures.

10 separate tests were conducted on each luminaire type. Measurements of supply voltage, supply current, supplied power and power factor were recorded for each test.

The luminaires were provided with power from an AC stabilized power supply.

All measurements were recorded using a Digital Power Analyser.

**REFERENCE DATA**

The supply voltage was 250 V ± 0.2% and the supply frequency was 50 Hz. The laboratory ambient temperature is maintained in the range 24 °C ± 2 °C.

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### MEASUREMENT UNCERTAINTIES:

Electrical Property	Least Uncertainty of Measurement
AC current up to 20 A	0.6% of reading + 1 digit
AC Voltage up to 300V	0.3% of reading + 1 digit
AC power up to 5 kW	0.5% of reading + 1 count
Power Factor (PF)	0.5% of reading +1 count, at unity 0.002 + 0.001/PF x frequency, for non-unity

Confidence Level:- As per M3003 and ISO5725, a 95% level of confidence is defined with a coverage factor k=2

### RESULTS:

The results for each luminaire are given on pages 3, 4 and 5 of this report. The frequency of the AC supply was nominally 50 HZ

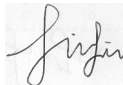
### EQUIPMENT:

#### POWER MEASUREMENT INSTRUMENTATION

Digital Power Analyser :- Voltech Digital Power Analyser – Model Number:- PM1000+  
Calibration certificate number:- C107962.

Laboratory Thermometer:-- Zeal Thermometer A26599A.

### APPROVED SIGNATORIES



(Jin Lin)  
Electrical and Lighting Engineer

The measurements reported only apply to the samples tested – which are representative of production units



(G.R.Culling)  
Senior Engineer - Standards and Compliance  
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**All tests reported herein have been performed in accordance with the laboratory's scope of accreditation.**

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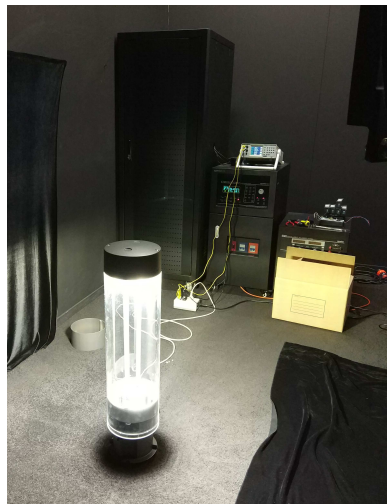
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### RESULTS SUMMARY

<b>Luminaire</b>	Schröder Shuffle 20 LED NW 23W				
<b>Driver</b>	PHILIPS Xi FP 40W 0.2-0.7A SNLDAE 230V S175 sXt				
<b>Electrical Characteristics</b>					
Applied Nominal Voltage		250 V			
<b>Luminaire Test #</b>	<b>Voltage (Volts)</b>	<b>Current (mA)</b>	<b>Wattage (Watts)</b>	<b>Power Factor</b>	<b>Ta (degrees C)</b>
1	250.1	97.35	23.33	0.958	23
2	250.1	98.01	23.47	0.958	23.7
3	250.1	96.37	23.09	0.958	23.7
4	250.1	97.67	23.40	0.958	24.7
5	250.1	96.81	23.16	0.957	24.3
6	250.1	97.20	23.27	0.957	22.1
7	250.1	96.65	23.12	0.957	22.3
8	250.1	96.81	23.18	0.958	22.5
9	250.1	96.90	23.21	0.958	22.8
10	250.0	96.90	23.20	0.958	23.2
<b>Average Values</b>	<b>250.1</b>	<b>97.07</b>	<b>23.24</b>	<b>0.958</b>	<b>23.2</b>

Measurement Sample Photo:



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<b>Luminaire</b>	Schröder Shuffle 20 LED NW 33W				
<b>Driver</b>	PHILIPS Xi FP 40W 0.2-0.7A SNLDAE 230V S175 sXt				
<b>Electrical Characteristics</b>					
Applied Nominal Voltage		250 V			
<b>Luminaire Test #</b>	<b>Voltage (Volts)</b>	<b>Current (mA)</b>	<b>Wattage (Watts)</b>	<b>Power Factor</b>	<b>Ta (degrees C)</b>
1	250.1	134.56	32.82	0.975	21.8
2	250.2	134.73	32.85	0.975	22.3
3	250.2	133.04	32.45	0.975	22.4
4	250.1	134.67	32.83	0.975	22.9
5	250.1	133.6	32.56	0.975	23.0
6	250.1	133.18	32.45	0.974	23.2
7	250.1	133.06	32.42	0.974	23.4
8	250.1	133.36	32.51	0.975	23.4
9	250.1	133.78	32.62	0.975	21.9
10	250.1	133.73	32.6	0.975	22.2
<b>Average Values</b>	<b>250.1</b>	<b>133.77</b>	<b>32.61</b>	<b>0.975</b>	<b>22.7</b>

Measurement Sample Photo:



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<b>Luminaire</b>	Schröder Shuffle 20 LED NW 46W				
<b>Driver</b>	PHILIPS Xi FP 40W 0.2-0.7A SNLDAE 230V S175 sXt				
<b>Electrical Characteristics</b>					
Applied Nominal Voltage 250 V					
Luminaire Test #	Voltage (Volts)	Current (mA)	Wattage (Watts)	Power Factor	Ta (degrees C)
1	250.1	185.98	45.69	0.982	22.6
2	250.1	186.62	45.83	0.982	22.8
3	250.2	185.29	45.53	0.982	21.2
4	250.1	186.97	45.89	0.981	21.5
5	250.1	185.39	45.56	0.983	22.1
6	250.1	185.2	45.45	0.981	22.7
7	250.1	184.86	45.39	0.982	22.5
8	250.0	185.28	45.54	0.983	22.9
9	250.1	185.64	45.44	0.979	23.1
10	250.1	184.98	45.46	0.983	23.1
<b>Average Values</b>	<b>250.1</b>	<b>185.62</b>	<b>45.58</b>	<b>0.982</b>	<b>22.5</b>

Measurement Sample Photo:



End of Report



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