

ELECTRICAL LOAD REPORT

REPORT NO.: IANZ LR 1002 **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 Schreder Luminaires in accordance with the AEMO Unmetered Load Guidelines and LM79 electrical load reporting.

DEVICE UNDER TEST (DUT):-

1. Schröder PIANO MINI 16 LEDs 700mA luminaire
2. Schröder PIANO MIDI 56 LEDs 700mA luminaire
3. Schröder PIANO MAXI 88 LEDs 700mA luminaire

TEST METHOD:

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

The luminaires were mounted on the frame and oriented to be as per normal mounting at 0 degrees spigot tilt and zero degrees luminaire tilt. The luminaire has 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 $250 \text{ V} \pm 0.2\%$ and the supply frequency was 50 Hz. The laboratory ambient temperature is maintained in the range $24 \text{ }^{\circ}\text{C} \pm 2 \text{ }^{\circ}\text{C}$.

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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

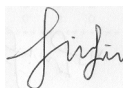
RESULTS:

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
BETACOM (1988) LIMITED

All tests reported herein have been performed in accordance with the laboratory's scope of accreditation.

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RESULTS SUMMARY

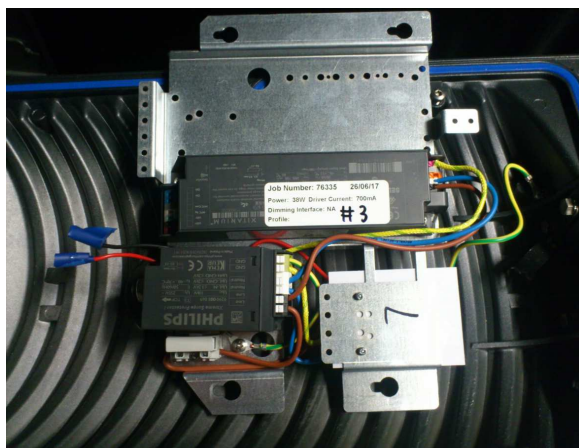
Luminaire	PIANO MINI 16 LEDs
Driver	PHILIPS Xi FP 40W 0.2-0.7A SNLDAE 230V S175 sXt

Electrical Characteristics

Applied Nominal Voltage

250V

Luminaire Test #	Voltage (Volts)	Current (mA)	Wattage (Watts)	Power Factor	Ta (degrees C)
1	250.0	153.19	37.49	0.979	22.3
2	250.1	154.32	37.78	0.979	19.9
3	250.1	152.47	37.33	0.979	20.8
4	250.1	154.09	37.71	0.979	21.8
5	250.1	152.95	37.43	0.979	22.6
6	250.0	152.41	37.27	0.978	22.3
7	250.1	152.55	37.32	0.978	21.5
8	250.1	152.79	39.4	0.979	22.1
9	250.0	152.44	37.29	0.978	22.6
10	250.0	152.93	37.43	0.979	22.2
Average Values	250.1	153.0	37.6	0.979	21.8

Measurement Sample Photos:
DUT

Luminaire set up



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Luminaire	PIANO MIDI 56 LEDs
Driver	1 off PHILIPS XITANIUM 150W 0.35 – 0.70A GL Prog sXt

Electrical Characteristics

Applied Nominal Voltage 250V

Luminaire Test #	Voltage (Volts)	Current (mA)	Wattage (Watts)	Power Factor	Ta (degrees C)
1	250	517.8	124.66	0.963	22
2	249.9	515	123.77	0.961	23.2
3	250	522.7	125	0.957	22.1
4	249.9	519.8	124.65	0.96	22.7
5	249.9	523.1	125.06	0.957	23.3
6	249.9	521.3	124.94	0.959	23.7
7	249.9	515.2	123.56	0.96	22.4
8	249.9	517.8	124.32	0.961	22.6
9	249.9	494.2	121.61	0.985	22.9
10	249.9	497.5	122.35	0.984	23.1
Average Values	249.9	514.4	123.99	0.965	22.8

Measurement Sample Photo:



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FILE NAME:-

IANZ_LR1002 - PIANO Load Report.doc

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Luminaire	PIANO MAXI 88 LEDs
Driver	2 off PHILIPS XITANIUM 150W 0.35 – 0.70A GL Prog sXt

Electrical Characteristics

Applied Nominal Voltage

250V

Luminaire Test #	Voltage (Volts)	Current (mA)	Wattage (Watts)	Power Factor	Ta (degrees C)
1	249.9	850.1	199.98	0.937	21.9
2	249.9	861.9	199.71	0.927	23.3
3	249.9	866.9	200.1	0.924	23.5
4	249.9	856.3	198.83	0.929	22
5	249.8	794.6	193.88	0.977	22.7
6	249.8	852.6	200.1	0.939	22.8
7	249.8	837.7	196.24	0.938	23.2
8	249.9	795.1	193.51	0.974	21.6
9	249.8	860.4	195.68	0.91	22.1
10	249.8	803	195.59	0.975	22.9
Average Values	249.9	837.9	197.36	0.943	22.6

Measurement Sample Photos:

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