

HARMONISING LIGHT & SOUND





KEY FAMILY DETAILS	
Optical System:	Hybrid Pods (Black or White)
Mounting Type:	Pendant
Finish Options:	Opera, Savoye or Flatiron as standard. Other colours via customisation.
System Warranty:	5 years
CCT:	4000K
CRI (Ra):	90+
R9:	55+
COI Compliant:	Yes (COI<=2.7) (except 3000K models)
Melanopic Ratio	0.54+
Circadian Stimulus CS [%] (*)	12%+
Circadian Light Cla [lux] (*)	85+

^(*) For 150lux corneal photopic illumination. As a guide only.

STANDARD COLOURS

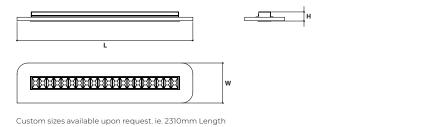






Flatiron

MECHANICAL DRAWING				
Physical Parameters	Lui	Weight		
Code	L [mm]	W [mm]	H [mm]	[kg]
EL-ARI-1100-244/974	1200	275	62	4.7
EL-ARI-1103-244/974	1200	275	62	4.7
EL-ARI-1106-244/974	1200	275	62	4.7
EL-ARI-1109-244/974	1200	275	62	4.7
EL-ARI-1112-244/974	1200	275	62	4.6
EL-ARI-1115-244/974	1200	275	62	4.6
EL-ARI-1118-244/974	1200	275	62	4.7
EL-ARI-1121-244/974	1200	275	62	4.7
EL-ARI-1124-244/974	1200	275	62	4.7
EL-ARI-1127-244/974	1200	275	62	4.7
EL-ARI-1130-254/975	1200	275	62	4.6
EL-ARI-1133-254/975	1200	275	62	4.6





Within commercial interiors, the quality of room acoustics is equally important as the quality of light. Eagle Lighting has created a product that perfects both in a single package...

Meet the Arin - a modern suspended pendant made in Melbourne that offers best-in-class lighting and acoustic performance.

APPLICATION

A unique pendant that solves the problem of ineffective lighting and poor room acoustics in a single package. Designed, tested and manufactured in Australia, Arin advances lighting performance while simultaneously reducing acoustic reverberation.

DESIGN

Arin is available in 24 on-point colours to complement architectural interior intent, offering creative expression by using colour accents. As with light and accoustics, colour subconsciously induces biological reactions and influences mood, emotion, and behaviour.

Arin incorporates a noise-absorbing recycled fibre that forms the surrounding component of a central linear array of light chambers.

SOUND ABSORPTION

Acoustic conditions profoundly impact human performance and are particularly important for complex cognitive performance and productivity. As a result, acoustic comfort is a key deliverable in commercial office and education projects.

Arin is engineered and scientifically tested to control reverberated noise and echo. Within the range relevant to communication (1000-2000 Hz), the noise absorption benefits of the Arin is at peak performance.

OPTICS

Arin provides premium quality, low glare illumination, with high colour rendering accuracy and options for colour changing and personalised lighting scenes.

A central array of high specification ABS injection moulded chambers and beam shaping microstructured film combines to provide optimum luminescence.

CONTROLS

Optional Organic Response Sensor Nodes available in black or white integral to the pendant that responds to ambient light level and occupancy, pre-set lighting scenes and tuneable white light.

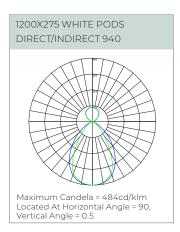
INSTALLATION

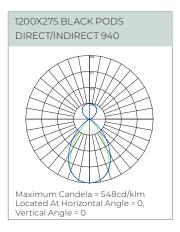
Fast installation via wire pendant package. Height adjustment via friction lock in the luminaire.

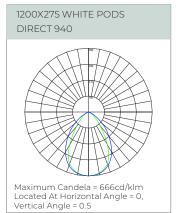
Cable entry via knockout in the top plate to access terminal block. Supplied 5 core power cable in clear colour, one small ceiling cup, one large in either black or white.

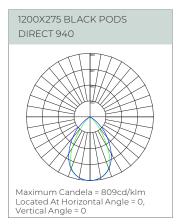


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330 LUX TARGET ILLUMINANCE									
Code	CCT1 [K] (direct)	CCT2 [K] (indirect)	Power Initial [W]	Final Power [W]	Luminaire Lumens [lm]	Colour/ Finish	Target Spacing	UGR Rounded	CLO L100B50 Lifetime [hrs]
									LM80 duration: 12,000hrs
EL-ARI-1100-244	4000K		19	23	2137	Opera	2.4m x 2.4m	19	72,000
EL-ARI-1100-9 7 4	4000K		19	23	2137	Opera	2.4m x 2.4m	19	72,000
EL-ARI-1103-244	4000K		22	28	2132	Opera	2.4m x 2.4m	19	72,000
EL-ARI-1103-9 7 4	4000K		22	28	2132	Opera	2.4m x 2.4m	19	72,000
EL-ARI-1106-244	4000K		23	28	2706	Opera	single	-	72,000
EL-ARI-1106-9 7 4	4000K		23	28	2706	Opera	single	-	72,000
EL-ARI-1109-244	4000K		26	32	2504	Opera	single	-	72,000
EL-ARI-1109-9 7 4	4000K		26	32	2504	Opera	single	-	72,000
EL-ARI-1112-244	4000K		18	23	1970	Opera	single	-	72,000
EL-ARI-1112-9 7 4	4000K		18	23	1970	Opera	single	-	72,000
EL-ARI-1115-244	4000K		22	27	1734	Opera	single	-	72,000
EL-ARI-1115-9 7 4	4000K		22	27	1734	Opera	single	-	72,000
EL-ARI-1118-244	4000K	3000K	23	28	2683	Opera	single	-	72,000
EL-ARI-1118-9 7 4	4000K	3000K	23	28	2683	Opera	single	-	72,000
EL-ARI-1121-244	4000K	3000K	26	32	2473	Opera	single	-	72,000
EL-ARI-1121-9 7 4	4000K	3000K	26	32	2473	Opera	single	-	72,000
EL-ARI-1124-244	3000K		20	24	2168	Opera	2.4m x 2.4m	19	72,000
EL-ARI-1124-9 7 4	3000K		20	24	2168	Opera	2.4m x 2.4m	19	72,000
EL-ARI-1127-244	3000K		24	29	2169	Opera	2.4m x 2.4m	19	72,000
EL-ARI-1127-9 7 4	3000K		24	29	2169	Opera	2.4m x 2.4m	19	72,000
EL-ARI-1130-254	2700-6500K		24	30	2630	Opera	single	-	72,000
EL-ARI-1130-9 7 5	2700-6500K		24	30	2630	Opera	single	-	72,000
EL-ARI-1133-254	2700-6500K		26	31	2238	Opera	single	-	72,000
EL-ARI-1133-9 7 5	2700-6500K		26	31	2238	Opera	single	-	72,000

WIRING OPTIONS	SUFFIX
DALI CLO	-244
Organic Response CLO	-9 7 4
Tuneable White DALI CLO	-254
Tuneable White ORT CLO	-9 7 5

MOUNTING ACCESSORIES	CODE
Suspension large round ceiling w/mains & wire 1.5m black	EL-ACC-541-000
Suspension small round ceiling w/wire 1.5m black	EL-ACC-542-000
Suspension large round ceiling w/mains & wire 1.5m white	EL-ACC-543-000
Suspension small round ceiling w/wire 1.5m white	EL-ACC-544-000

EAGLE LIGHTING

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CubeTM

PRODUCT SPECIFICATIONS

Product Name Cube™
Composition 100% Polyester Fibre
Panel Dimensions 1220mm x 2440mm
Tolerance (+5mm) x (+10mm)
Thickness 12mm 24mm Tolerance (+/-6%) (+/-6%)
Weight 2400gsm 3600gsm

ENVIRONMENTAL

Autex is committed to best practice through our ISO 9001 and ISO 14001 certified Quality and Environmental Management Systems. Autex Cube™ contains a minimum of 60% previously recycled polyester fibre (from PET bottle-flake). Off-cuts and manufacturing waste are reused or recycled wherever possible.

Autex Cube™ is manufactured from 100% polyester fibres and does not contain formaldehyde binders. Autex polyester fibres support safer indoor air quality and will not become a potential airborne pollutant.

THERMAL PERFORMANCE

(Internally tested by Autex Lab) Cube 24mm R0.82 (@15°C)

MICROBIAL RESISTANCE

ASTM G21-15

Growth Rating: 0 (No growth)

Cube™ does not promote the growth of moulds and mildew.

VOC EMISSIONS

Autex polyester has been tested for chemical emissions in accordance with ASTM D5116 and is considered as a low VOC product. VOC concentration: 0.009 mg/m³ (7 days)

WATER VAPOUR ABSORPTION

ASTM C1104 / C1104M-13a Test conditions: 49°C, 95%RH Water vapour absorbed and adsorped after 4 days: 0.4% by weight

FIRE RATINGS

Cube™ has been evaluated using the following test methods:

ISO 9705: 1993

Classification: Group 1-S Smoke Production Rate: <5.0m²/s As required by NZBC C/VM2

AS ISO 9705 - 2003

Classification: Group 1
(SMOGRArc): <100m²/s²
Assessed using methodology AS ISO 9705 - 2003
in accordance with AS 5637.1:2015, as required
by BCA Specification C1.10-4
FI 4974 dated 16th September, 2012
FAR 4055-2 dated 8th October 2013

EN13501-1:2007+A1:2009

B - s2, d2 (Cube™ 12mm) WF336911 dated 25th February 2014

ASTM E-84-15a

Class A, FS:0 - SD:45 (Cube™ 1/2") RJ4479-2 dated 25th January, 2016 Class A, FS:0 - SD:65 (Cube™ 1") RJ4479-1 dated 25th January, 2016



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NATA TEST REPORT

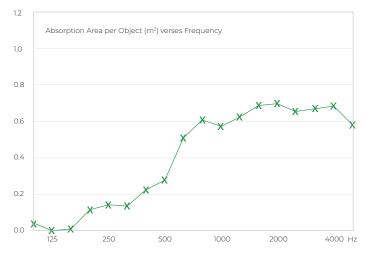
To achieve acoustic comfort in a room, the goal is to lower the reverberation time and noise level. Each Arin pendant is capable of absorbing 45% of the soundwaves that it intercepts reducing the reverberant noise in a space.

Measurement type; Sound Absorption AS ISO 354 – 2006 – Acoustics – Measurement of sound absorption in a reverberation room.

Test Specimen Eagle Lighting Arin Pendant 1200 x 273mm, 24mm baffle

Data also available upon request for Arin Pendant 1300 x 373mm 24mm baffle

MEASUREMENT DETAILS & RESULTS					
FREQ	ABSORPTION AREA PER LUMINAIRE 2	REVERBERATION TIMES, T_{60} (SEC)			
Hz	(m² SABIN)	EMPTY ROOM	WITH SPECIMEN		
100	0.04	5.47	5.37		
125	0.00	6.11	6.12		
160	0.01	6.41	6.40		
200	0.12	5.89	5.56		
250	0.14	4.83	4.56		
315	0.14	5.93	5.54		
400	0.22	6.01	5.36		
500	0.28	5.61	4.93		
630	0.51	5.35	4.30		
800	0.61	5.11	3.99		
1000	0.58	4.88	3.90		
1250	0.62	4.44	3.56		
1600	0.69	3.98	3.20		
2000	0.70	3.61	2.95		
2500	0.66	3.23	2.72		
3150	0.67	2.88	2.47		
4000	0.69	2.38	2.10		
5000	0.58	1.96	1.80		



MEASUREMENT CONDITIONS

	Empty Room	with Test Specimen
Date of measurement	10 Jun 2021	10 Jun 2021
Temperature & Humidity	19°C, 54% R.H	17°C, 59% R.H
Atmospheric pressure	997 mBar	997 mBar

The required 12 spatially independent decay curves came from the ensemble averaging 10 successive decays with each of 3 different source loudspeaker positions, all sampled by 4 fixed microphones, using linear averaging.

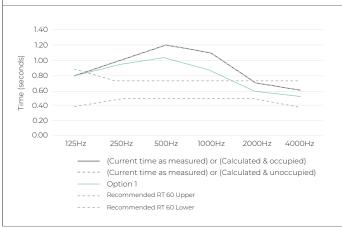


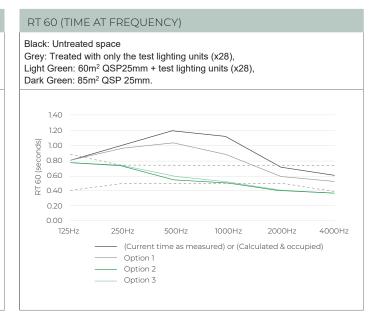
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CubeTM

PROJECT SIMULATION STH MELBOURNE PRIMARY SCHOOL

The RT 60 time without the acoustic lights is taken as 1.1 seconds ((TMF) average time at 250Hz, 500Hz and 1kHz.) By adding the test units (x28) the new time is calculated as being RT60 0.95 seconds, corresponding to 15% reduction in the RT levels.





ACOUSTIC PERFORMANCE 1200X273MM

 $\mathsf{Cube}^{\mathsf{TM}}$ is specifically designed to reduce and control reverberated and (echo) noise in building interiors.

Minimum Noise Reduction Coefficient 0.45

Sound Absorption Coefficients according to ISO 354.

University of Auckland Testing Service Cube 12mm - Test No. To71-23

Cube 24mm - Test No. T1961-1 and T1326-5

Below is the average absorption per unit and the also the rounded data for the ARIN lighting unit.

Each unit provides the equivalent of 0.45m² of absorption.

Practical Sound Absorption Coefficients						
125	250	500	1000	2000	4000	
Metric Sabins per Unit						Average (per m²250Hz-2kHz)
0.00	0.15	0.45				

Reported values represent the estimated practical sound absorption coefficients and metric sabins calculated from configurations tested in accordance to ISO 354. The graph presents third octave sound absorption coefficients. The NRC rating is determined as the arithmetic average of the absorption coefficients measured by one-third octave bands centred on 250Hz, 500Hz, 1000Hz and 2000Hz, rounded to the nearest 0.05. Where the NRC is > 1 it is rounded to 1.00. (Sabins per $\rm m^2$ of practical coverage are calculated at one-third octave bands centred on 250Hz, 500Hz, 1000Hz and 2000Hz, rounded to the nearest 0.05. The values and ratings in this report are estimates and not to be considered as a guarantee of performance.



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AVAILABLE COLOUR RANGE

FLATIRON*	FALLING WATER	GHERKIN	BEEHIVE
SAVOYE*	PINNACLE	CAVALIER	SENADO
OPERA*	MURALLA	SARGAZO	PARTHENON
PETRONAS	воѕсо	ROSADA	ZENITH
EMPIRE	ACROS	IRON BANK	PAVILION
HERALD	TREE HOUSE		

^{*} Standard colours.

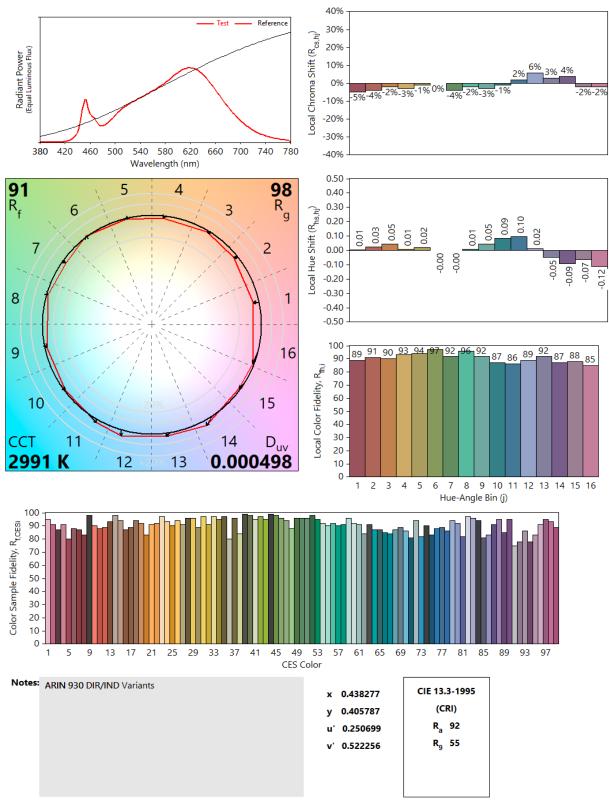
N.B. MOQ apply to all non-standard colours. Colour choices will continuously be updated based on trends, latest information will be available on our website

FLATIRON	
OPERA	
SAVOYE	
ACROS	
FALLING WATER	
ROSADA	



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TM-30 COLOUR RENDITION REPORT (930)

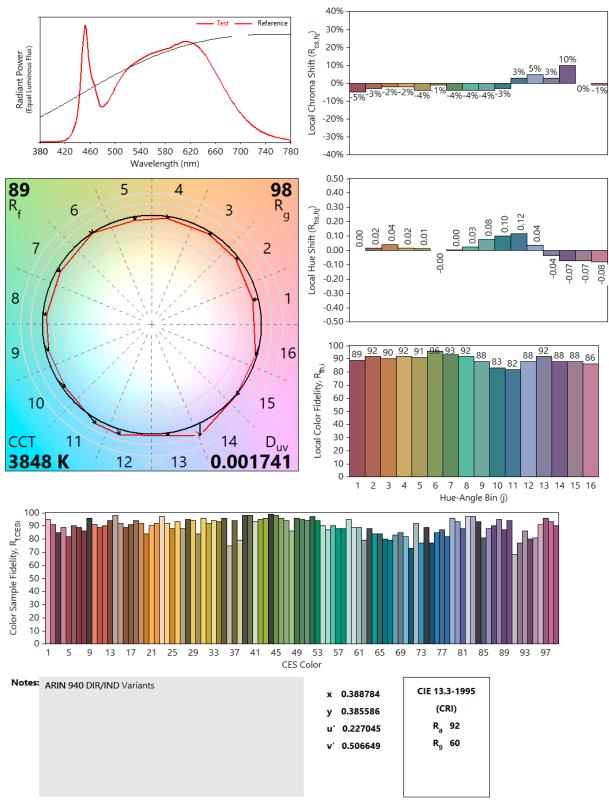


Colors are for visual orientation purposes only.



HARMONISING LIGHT & SOUND

TM-30 COLOUR RENDITION REPORT (940)



Colors are for visual orientation purposes only.