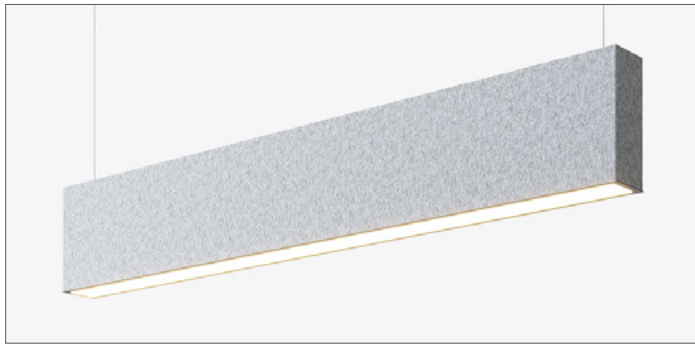


# RAIL 2 ACOUSTIC (LIT)

## RM2DU-ACL . LED . PENDANT . DIRECT / INDIRECT



PART #:		DATE:	
PREP BY:		QTY:	
PROJECT:		NOTES:	
APPROVAL SIGNATURE:		DATE (DD/MM/YYYY):	

### PERFORMANCE SUMMARY

3500K; Batwing Up, Meta Blanc Down

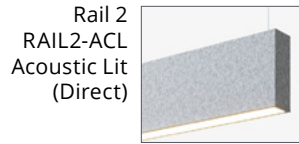
Lumens per foot	1500
Wattage per foot	14.7
Efficacy (LPW)	102
L70 Estimate (h)	≥ 60,000 hrs
NRC	1.10
Sabins	Per Lineal Foot: 1.33 / Per Lineal Meter: 4.35

See page 2 for complete performance data.

### FEATURES

- Optimal direct/indirect lighting partnered with sound absorbing baffle technology by **EZO BOARD**
- Baffle height options of 8", 12" or 16"
- Baffle material is resistant to bacteria and moisture
- Optional carve pattern option for added visual interest

### COMPLEMENTARY PRODUCTS



### ORDERING LOGIC

Example Part Number: RM2DU-ACL-35K-8-BWMB-08CG-500EM-PA18-1

1. SERIES	2. MODEL	3. COLOR TEMP	4. LENGTH	5. OPTICS	6. ACOUSTIC BAFFLE	7. LIGHT LEVEL / DRIVER (50% UP / 50% DOWN)
RM2DU	ACL Acoustic Lit	30K 3000K 35K 3500K 40K 4000K	4 4 ft 5 5 ft 6 6 ft 7 7 ft 8 8 ft RA Continuous Rows C Custom Length (Consult factory) - None (leave space empty)	BWMB Up: Batwing Down: Meta Blanc Meta Blanc: Opal diffuse lens	Code example: <b>08 WAP CP1</b> Height ↑ Carve Pattern ↑ Color / Wood Print ↑ Height codes: 08 = 8 inches 12 = 12 inches 16 = 16 inches Color / Wood Print: See page 3 for options & codes Carve Pattern codes: CP1 = Squeeze CP2 = Vertical Lines CP3 = Hourglass - = No Carve Pattern (Leave space empty) See page 3 for visuals of Patterns	100 1000 lm/f 150 1500 lm/f 200 2000 lm/f C Custom Range Specify lumens: Indirect Direct U D (Combined lumens between 750-2500 at 50 lm intervals) Select Driver below. See Light Level Performance chart on p2.
8. CIRCUITRY	9. MOUNTING	10. VOLTAGE	11. SENSORS	12. CONTROLS	13. OPTIONS	
1 1 Circuit UD Up / Down Switching EM Emergency / Night Light B Emergency Battery Pack <sup>1</sup>	PAX Pendant Aircraft Cable Replace "X" with length (inches) selected below. Select Hanger Length and indicate Canopy Finish below	1 120V 2 277V 3 347 V (Consult factory) 4 UNV (120 - 277V)		Please see last page for fixture integrated SENSORS and CONTROLS Order Logic codes	90 90 CRI (High R9) - None (leave space empty)	

<sup>1</sup>Battery operates 4ft sections only.

### Select Driver:

- Factory option 0-10V, 1% Dimming
- LHE** Lutron H-Series Hi-lume 1% EcoSystem LED Driver
- LA2** Lutron A-Series Hi-lume 1% 2-wire LED Driver
- L5E** Lutron 5-Series EcoSystem LED Driver

### Select Hanger Length:

Total aircraft adjustment range is 6" up & down for each standard length. See detailed hanger diagrams on page 5. All other lengths are considered custom unless otherwise stated.

**NOTE: If no selection is made, a 48" hanger will be supplied.**

Select:	Imperial (in)	Metric (mm)
<input type="checkbox"/>	12	305
<input type="checkbox"/>	18	460
<input type="checkbox"/>	24	610
<input type="checkbox"/>	30	760
<input type="checkbox"/>	36	915
<input type="checkbox"/>	42	1067
<input type="checkbox"/>	48	1220

Select:	Imperial (in)	Metric (mm)
<input type="checkbox"/>	54	1372
<input type="checkbox"/>	60	1525
<input type="checkbox"/>	72	1830
<input type="checkbox"/>	96	2440
<input type="checkbox"/>	120	3050
<input type="checkbox"/>	144	3660
<input type="checkbox"/>	Custom Length:	_____

### Canopy and Power Cord Finish

White canopy & cord is standard

Canopy	Cord
<input type="checkbox"/> Custom RAL: _____	<input type="checkbox"/> Custom RAL: _____

## PERFORMANCE

### LIGHT LEVEL

3500K, 80 CRI, 0-10V Dimming (Standard)

Batwing Up / Meta Blanc Down Distribution: 50% Up / 50% Down (approx.)			
Light Level	Lumens per foot	Wattage per foot	Efficacy (lm/W)
<b>1000</b>	1004	9.8	102
<b>1500</b>	1501	14.7	102
<b>2000</b>	2001	20	100

Metalumen's light level performance metrics are subject to manufacturers component tolerances.

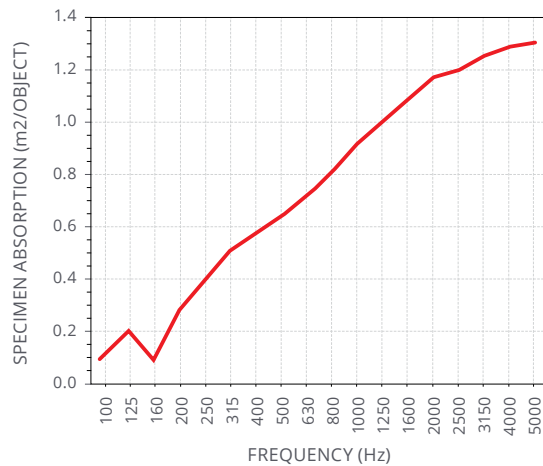
## ACOUSTIC SOUND DATA

### Sound Absorption

Material thickness: 9 mm (3/8 inches)  
 Number of baffle objects: 6  
 Spacing: 12 inches apart  
**NRC: 1.10**  
**SABINS Per Lineal Foot: 1.33**  
**SABINS Per Lineal Meter: 4.35**

### Sound Absorption Coefficients (ASTM C423-17)

NRC	125	250	500	1000	2000	4000
<b>1.10</b>	<b>0.2</b>	<b>0.39</b>	<b>0.64</b>	<b>0.92</b>	<b>1.17</b>	<b>1.29</b>



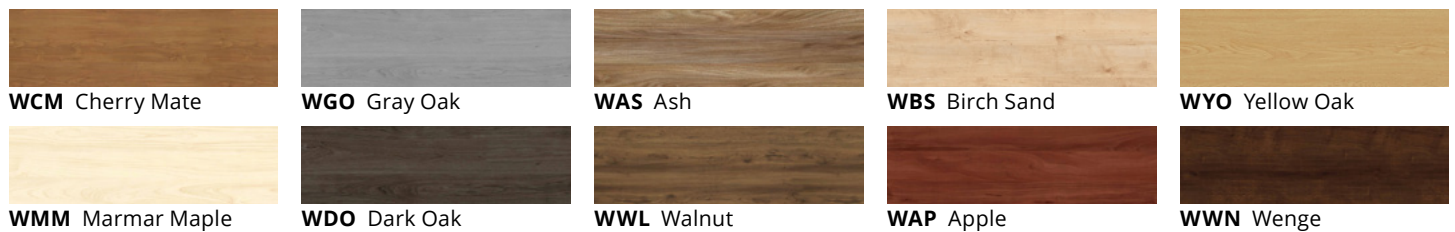


BAFFLE OPTIONS

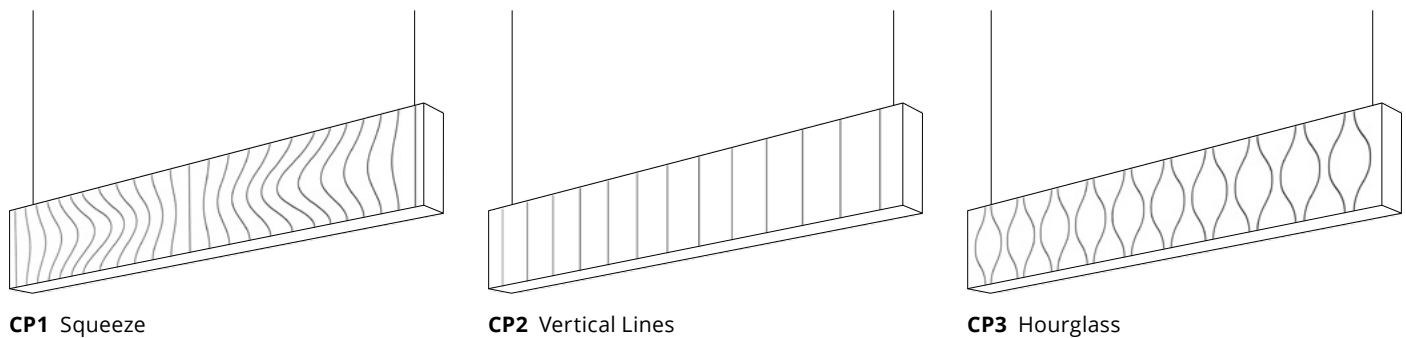
STANDARD COLORS



WOOD GRAIN PRINTS



CARVE PATTERNS





## BAFFLE SPECIFICATIONS

**Composition:** 100% PET (min. 50% recycled content)

**Thickness:** 3/8" (9mm ) | ±0.5mm

**Weight:** 3/8" (9mm) sheet: 8.4lbs (3.8kg) | ±5%

**Hardness:** 60-65 (Shore C)

**Fire Testing:**

• North America:

- ASTM E-84 Class A\*- CAN ULC S102-10  
• Europe and UK:

- EN13501-1: 2007

**Acoustics:** Refer to ASTM C423-17 test charts for specific absorption coefficients. NRC 0.75 (subject to mounting conditions)

**Product Variances:** Variation in fiber

mix and colour may occur. All products will be supplied within commercial tolerances.

**General:** Tackable, impact resistant, bacteria resistant, moisture resistant, installation friendly.

**Environment:** Made of polyester fiber, min. 50% of which comes from recycled

water bottles which contributes to LEED MR Credit and BREEAM Health and Wellbeing, Materials points due to recycled content, acoustic performance, and low emitting materials.  
No VOC's: CDPH v1.2 and REACH SVHC Compliant.

## COMMITMENT TO THE ENVIRONMENT

There are approximately 50 billion water bottles consumed around the world each year, and only about half of those get recycled. The rest end up in landfills, littered through our neighborhoods, or floating in our oceans.

Bottled water consumption has more than doubled since 2000; in 2015 there was the equivalent of more than 5

bottles of water consumed for every person in the USA every single week. This, of course, means that the amount of oil required to produce the energy used for the water bottling process continues to grow.

In 2007, the last year global statistics of oil consumption were available, between 32 million and 54 million barrels of oil were used to produce the

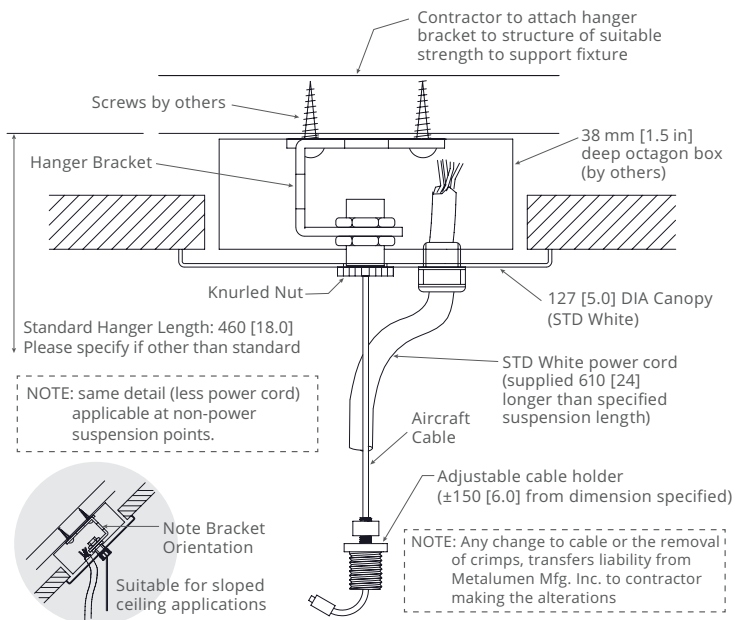
bottled water that was consumed in the USA alone. This energy is used to make the bottles from PET pellets (1 million tons in the USA), treat water, bottle the water, label the bottles, and transport the bottled water.

Most of the energy consumption occurs in the creation of the bottles themselves. To help in the lifecycle of this plastic product, we have chosen to manufacture our material so that

it recycles these PET bottles. We are doing our part to reduce the waste. This acoustical and tackable material is made from PET bottles in a zero-waste process with postindustrial recycling. An environmentally friendly, sustainable, and waste reduced alternative to traditional acoustical/ tackable material that looks great in any office, education, or open space installation.

## HANGER

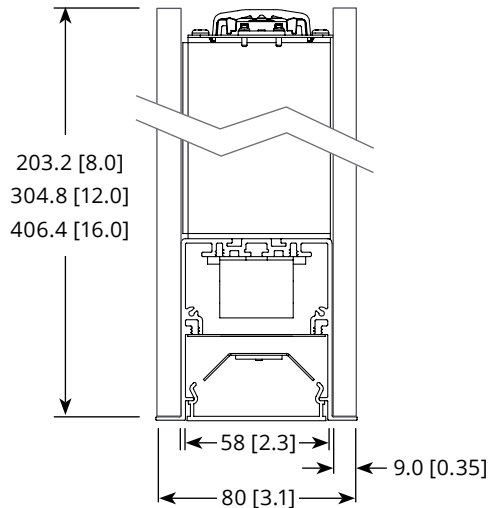
### Aircraft Cable & Cord



## WIRING

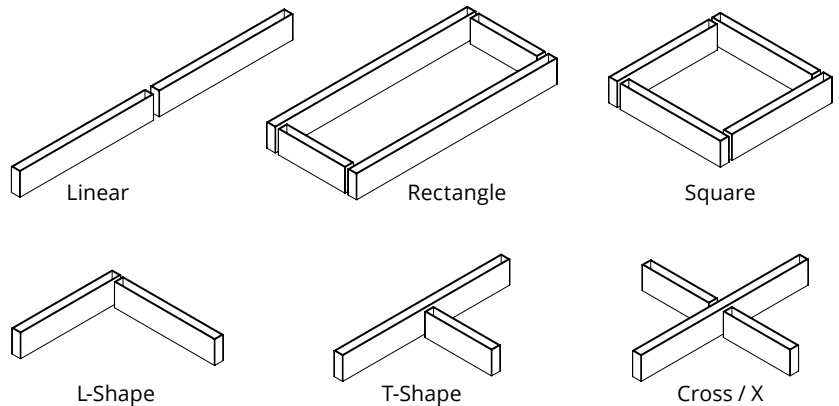
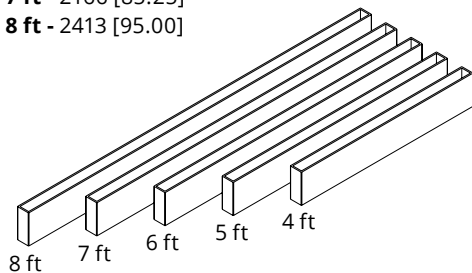
Standard	Up/Down Switching	Emergency / Night Light	Emergency Battery Pack
<p>BLACK - LINE WHITE - NEUTRAL GREEN - GROUND RED - CAPPED/SW LEAD VIOLET - DIM(+) PINK - DIM(-)</p>	<p>BLACK - LINE (UP) WHITE - NEUTRAL GREEN - GROUND RED - LINE (DOWN) VIOLET - DIM(+) PINK - DIM(-)</p>	<p>BLACK - LINE WHITE - NEUTRAL GREEN - GROUND RED - CAP OFF</p>	<p>BLACK - LINE WHITE - NEUTRAL GREEN - GROUND RED - UNSWITCHED HOT</p>

## CROSS SECTIONS



## LENGTHS &amp; CONFIGURATIONS

- 4 ft - 1251 [49.25]
- 5 ft - 1556 [61.25]
- 6 ft - 1861 [73.25]
- 7 ft - 2166 [85.25]
- 8 ft - 2413 [95.00]



## SPECIFICATIONS

Due to the Continuous Improvement Policy at Metalumen, we reserve the right to change our specifications without notice.

**Housing:** Rigid extruded aluminum body, 2.0mm (0.08") nominal wall thickness. Aluminum end caps.

**Optical System:** Metalumen luminaires are designed to utilize leading edge LED technology combined with luminaire optimized reflectors and our custom diffusers, resulting in industry leading optical performance.

**CRI:** 83+ for 3500K, 80 minimum for all CCTs in standard configurations.

**Lumen Maintenance:** Minimum 50,000h with TM-21 lumen maintenance of 85% @ 25°C ambient temperature (calculated based on IESNA LM-80-08 LED test data). L70: ≥60,000hrs.

**Paint Finish:** White standard finish. For custom finish, contact factory.

**Weight:** 0.95 kg/300mm [ 2.1 lb/ft ]

**Mounting:** Aircraft cable complete with a Quick-Grip field adjustable suspension system.

**Electrical:** Factory prewired with easy wire quick connect sections.

**Drivers:** Metalumen offers 0-10V dimming\* as a standard on our entire LED product offering. Dimming range is 1%-100%. Power factor is > 90%. Class

2 rating. Drivers are integral.

**Approvals:** All components are UL/ CSA/QPS recognized or listed. RoHS compliant. This product is cULus listed.

**Environment:** Suitable for dry or damp locations.

*\*Standard drivers compatible with passive/ sinking dimmers. Please contact Metalumen if active/sourcing dimmer support is required.*

## WARRANTY

Metalumen will warrant defective luminaires for 5 years from date of purchase. Warranty is valid if luminaire is installed and used according to specification. If defective, Metalumen will send replacement boards or drivers at no cost along with detailed replacement instructions and instructions on how to return defective components to Metalumen.

## PHOTOMETRIC DATA - 3500K, 80 CRI

Optics Up: **Batwing**  
 Optics Down: **Meta Blanc**  
 IES File: **RM2DU-ACL-35K-4-BWMB-150**  
 Lumens: **1500/ft** Wattage: **14.7/ft**  
 Efficacy: **102 LPW**

### ZONAL LUMEN SUMMARY

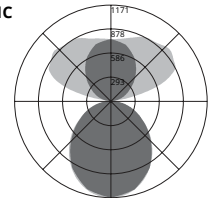
Zone	Lumens	%Fixt
0-90	3030	51
90-180	2972	49
0-180	6002	100.0

### LUMINANCE DATA (CD/M2)

Vertical Angle	Horizontal Angle		
	0	45	90
45	12332	12455	12569
55	11477	11371	11583
65	10878	10379	10378
75	10673	9786	8806
85	10640	9658	5367

### PHOTOMETRIC CURVE

49% Up  
 51% Down



Photometric performance is measured and scaled in accordance with IESNA LM-79.

SENSORS AND CONTROLS



Metalumen offers intelligent standalone and/or connected luminaires with various integrated sensing and control system\* connectivity options. The table below outlines some of the more common combinations and solutions offered. If you do not see the controls solution or the type of sensing technology you require for your project please contact us and we will work with you to try and identify a solution to meet your needs.

\*Control system, installation and commissioning provided by others.

Examples:

WattStopper Daylight Sensor Standalone Luminaire: RM2DU-ACL-35K-12-BWMB-12CG-L31-PA18-1-DW-90

Occupancy Sensor with Casambi Wireless Bluetooth Mesh Control Capability: RM2DU-ACL-35K-12-BWMB-12CG-L31-PA18-1-O-CAB-90

ORDER LOGIC FIELDS		SENSOR FEATURE / BEHAVIOR		LUMINAIRE CONTROL / CONNECTIVITY	DESCRIPTION
11. SENSORS	12. CONTROLS	OCCUPANCY (PIR)	DAYLIGHT HARVESTING		
OF	-		None	Standalone	Factory Sensor - Occupancy Behaviors configured via BLE App
OW	-		None	Standalone (WattStopper)	Wattstopper Standalone Occupancy Sensor
DW	-	None		Standalone (WattStopper)	Wattstopper Standalone Daylight Harvesting Sensor
ODW	-			Standalone (WattStopper)	Wattstopper Standalone Occupancy and Daylight Harvesting Sensors
O	- CAB		None	Casambi Bluetooth Mesh	Casambi Bluetooth Mesh Connectivity with Occupancy Sensing
OD	- CAB			Casambi Bluetooth Mesh	Casambi Bluetooth Mesh Connectivity with Daylight Harvesting and Occupancy Sensing
	- CAB	None	None	Casambi Bluetooth Mesh	Casambi Bluetooth Mesh Connectivity (no sensors)
O	- SLVR		None	Silvair Bluetooth Mesh	Open Standard Bluetooth Mesh Connectivity with Occupancy Sensing
OD	- SLVR			Silvair Bluetooth Mesh	Open Standard Bluetooth Mesh Connectivity with Daylight Harvesting and Occupancy Sensing
	- SLVR	None	None	Silvair Bluetooth Mesh	Open Standard Bluetooth Mesh Connectivity (no sensors)
	- OSRM	None	None	Osram Enceium	Osram Enceium connectivity
OD	- OSRM			Osram Enceium	Osram SensiLum Connectivity for Enceium with Occupancy and Daylight Harvesting
OD	- ENL			Enlighted ONE	Occupancy and Daylight Harvesting Capable Supports EnlightedONE room control as well and upgrade path for Enlighted Connected and Enlighted IoT offering advanced applications, analytics and insights for Space Utilization/Optimization, Asset Tracking, Energy Monitoring, HVAC Integration etc..
	- DALI	None	None	DALI addressable wired Luminaire	Generic DALI addressable luminaire
	- ECOS	None	None	Lutron Ecosystem	Lutron Ecosystem addressable wired luminaire NOTE: See Driver Selection options for specific driver

