

Rania Natural White Tape Light

PRODUCT DESCRIPTION

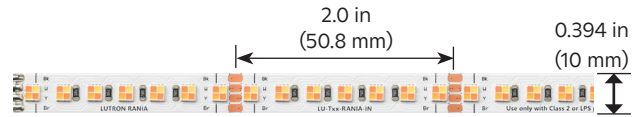
A complete Rania natural white tape light solution consists of field-cutttable LED tape, a wireless controller with integrated LED drivers, high-reliability punch connectors, dedicated wiring, and a power interface. For an added level of quality, install the tape light inside Lutron LED tape extrusions.

High-output tape lights are offered in 16.4 ft (5 m) and 98.4 ft (30 m) spools and long run tape lights are offered in 32.8 ft (10 m) and 98.4 ft (30 m) spools to complete any lighting design project.

FEATURES

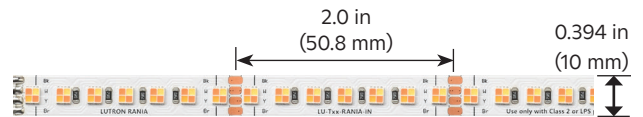
Natural Light—Rania leverages a breakthrough three-channel solution and state of the art color mixing technology to deliver a wide CCT range and replicates natural light more faithfully than any light source other than Ketra.

Natural Show—The Rania fixtures’ wide color temperature range and native control enables it to participate in Lutron’s Natural Show. Natural show automatically adjusts the intensity and color temperature of the light over the course of the day. It can be used to bring the outside in by matching outdoor light - from the cool bright light at noon to the warm lower light in the evening.



HIGH OUTPUT	
Delivered Lumens	350 lm/ft
Delivered Output (Light Transmission)	76 lm/W
Power Consumption	4.6 W/ft (15.3 W/m)
Maximum Tape Length per Power Interface	16.4 ft (5 m)

Note: High Output runs greater than 11 ft (3.3 m) should use dual ended wiring.

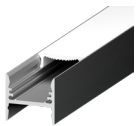


LONG RUN	
Delivered Lumens	200 lm/ft
Delivered Output (Light Transmission)	76 lm/W
Power Consumption	2.6 W/ft (8.6 W/m)
Maximum Tape Length per Power Interface	32.8 ft (10 m)

Note: Long Run that are greater than 16.4 ft (5 m) should use dual ended wiring or be split into parallel runs.

LED TAPE EXTRUSIONS

SR1



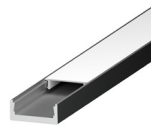
Luxury diffusion with hidden mounting

SR2



Classic rectangular surface-mount

SR3



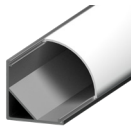
Thin, low profile surface-mount

45S



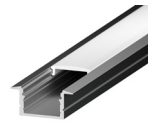
Classic 45° angled surface-mount

45T



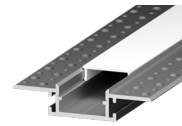
Large 45° with premium diffusion

RR1



Recessed mount with a clean finish

MI1



Mount into drywall for a flush light beam

All profiles available in 8 ft (2.44 m) lengths. See page 9 for the [Extrusion Ordering Guide](#).

LANIA NATURAL WHITE TAPE LIGHT

Specifications are subject to change without notice

LED TAPE LIGHT SPECIFICATIONS ¹
Optical Performance

CCT Range	1800 K - 5500 K
CRI (Ra)	>90 (R9>90) from 2700 K to 5000 K
Lumen Maintenance ²	50,000 hours to L70 @ 25 °C
Dimming Range	0.1-100%

Environmental

Ambient Temperature	32 °F to 104 °F (0 °C to 40 °C)
Extended Ambient Temperature	-32 °F to 32 °F (-35 °C to 0 °C) ³
Humidity	0% to 95% non-condensing
Certification	UL, cUL, RoHS, FCC Class B, Title 24 [JA8]

Location **UL Indoor damp/dry location**
Wardrobe closet rated

Outdoor/Indoor **Outdoor use available for residential enclosed/covered patio applications**

Limited Warranty **www.lutron.com/warranty or call 1.844.LUTRON1 for a printed copy.**
The warranty will not cover issues caused by use of incompatible devices (including non-Lutron LED tape and/or power supplies).

Mechanical

Mounting Options	Tapes can also be mounted using Lutron extrusions. Refer to LED Tape Extrusions Spec (P/N 3691292) for the list of all extrusions supplied by Lutron
Backing	Strong VHB Adhesive

Dimensions

Tape Length	High-Output: 16.4 ft (5 m) and 98.4 ft (30 m) versions Long Run: 32.8 ft (10 m) and 98.4 ft (30 m)
Cuttable Section	2.2 in (55.8 mm)
Tape Width	0.39 in (10 mm)
Tape Height	0.05 in (1.2 mm)

Electrical

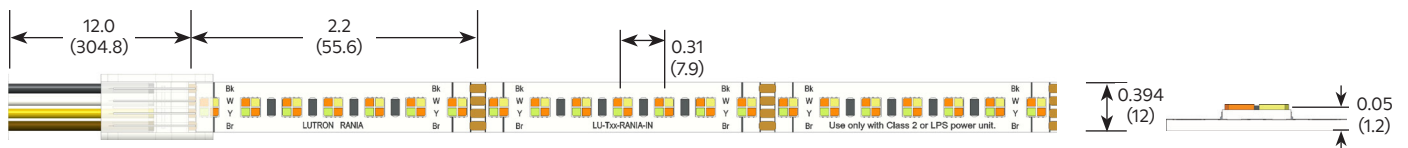
Voltage	24 V ⁻⁻⁻
Power Consumption	High-Output: 4.6 W/ft (15.3 W/m) Long Run: 2.6 W/ft (8.6 W/m)
Maximum Tape Length per Power Interface	High-Output: 16.4 ft (5 m) Long Run: 32.8 ft (10 m)

Notes:

- ¹ All measurements are considered typical performance and were taken at 3000 K, 25 °C ambient, 100% power input, no optical accessory unless otherwise stated.
- ² Lumen maintenance values calculated in accordance to TM-21 procedures based on LM-80 compliant measurement data.
- ³ Color accuracy not guaranteed in extended ambient temperature range in outdoor applications.

LED TAPE LIGHT DIMENSIONS

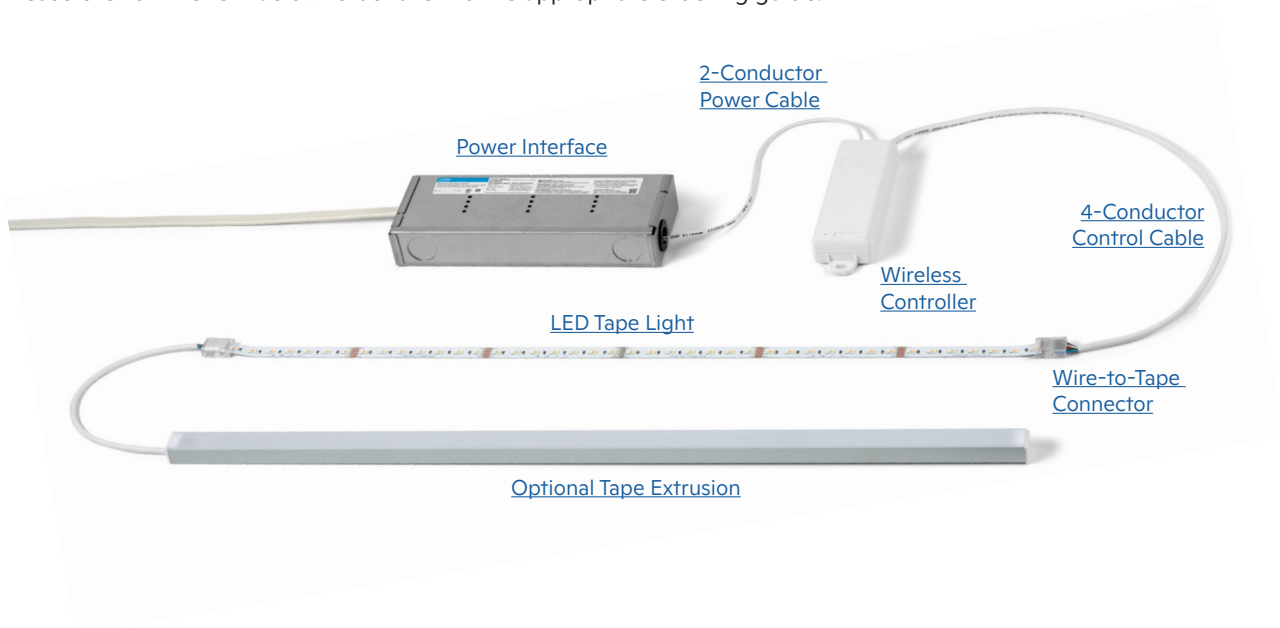
All dimensions shown as: in (mm)



CAUTION: Overheating Risk. May result in moderate injury or product damage. Do not power the LED tape while coiled, on a spool, or directly to 120 V[~] power. Unroll or install before applying power.

EXAMPLE SOLUTION DIAGRAM

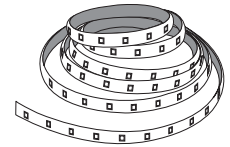
Please click on the text below to be taken to the appropriate ordering guide.



LED TAPE LIGHT ORDERING GUIDES

HIGH-OUTPUT TAPE ORDERING GUIDE

Please download this PDF to use the interactive features of the ordering guide.



LED Tape

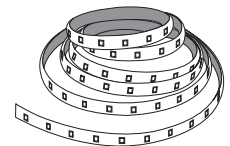
Product Line Tape Length Product Line Location

Order code: _____

Product	Code	Product Line	Code	Location	Code
Lutron	LU-	Rania	RANIA-	Indoors	IN
Tape Length					
16.4 ft (5 m)	T05-				
98.4 ft (30 m)	T30-				

LONG RUN TAPE ORDERING GUIDE

Please download this PDF to use the interactive drop down features of the ordering guide.





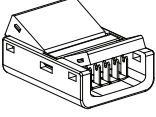
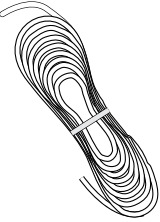
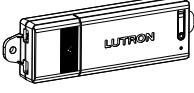
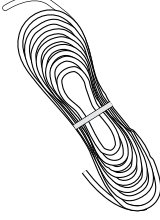
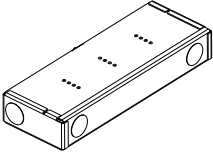

LED Tape

Product Tape Length Product Line Location Type

Order code: _____

Product	Code	Product Line	Code	Location	Code
Lutron	LU-	Rania	RAN-	Indoors	IN-
Tape Length				Type	
32.8 ft (10 m)	T10-			Long Run	LR
98.4 ft (30 m)	T30-				



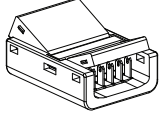
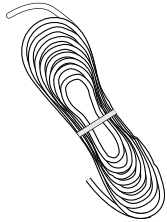
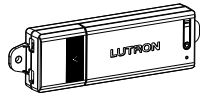
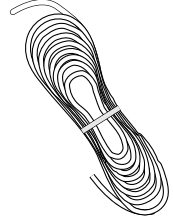
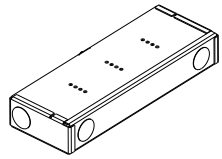

RESIDENTIAL Á LA CARTE SOLUTION FOR HWQSX

Tape Light ¹	Wire-to-Tape Connectors ²	Control Cable ^{3,4}	Multi-Channel Wireless Controller	Power Cable ⁴	Power Interface
<p>High Output - LU-T05-RANIA-IN - LU-T30-RANIA-IN</p>  <p>Long Run - LU-T10-RAN-IN-LR - LU-T30-RAN-IN-LR</p>  <p>See Tape Light Ordering Guides on page 4</p>	<p>- LU-CK1-4W</p>  <p>See Cable and Connector Ordering Guide on page 8</p>	<p>- LU-WK1-4W</p>  <p>See Cable and Connector Ordering Guide on page 8</p>	<p>- HWL-MWCL-WH</p>  <p>See Controller Ordering Guide on page 7</p>	<p>2-conductor cable, off-the-shelf, not sold by Lutron</p> 	<p>Surface-mounted with flying leads - LU-PH3-B</p>  <p>Panel mounted - LU-PH3-A</p>  <p>See Power Interface Ordering Guide on page 7</p>

Notes:

- ¹ Extrusions are optional, see extrusions ordering guide for details.
- ² LU-CK1-4W **MUST** be used to connect the control wire to cut tape segments.
- ³ Use LU-WK1-4W to guarantee proper electrical connection with LU-CK1-4W.
- ⁴ For acceptable wire gauges and lengths, see the wiring tables for Power and Control Cable section.

COMMERCIAL Á LA CARTE SOLUTION FOR MYROOM XC AND ATHENA

Tape Light ¹	Wire-to-Tape Connectors ²	Control Cable ^{3,4}	Multi-Channel Wireless Controller	Power Cable ⁴	Power Interface
<p>High Output - LU-T05-RANIA-IN - LU-T30-RANIA-IN</p>  <p>Long Run - LU-T10-RAN-IN-LR - LU-T30-RAN-IN-LR</p>  <p>See Tape Light Ordering Guides on page 4</p>	<p>- LU-CK1-4W</p>  <p>See Cable and Connector Ordering Guide on page 8</p>	<p>- LU-WK1-4W</p>  <p>See Cable and Connector Ordering Guide on page 8</p>	<p>- CM-MWCL-WH</p>  <p>See Controller Ordering Guide on page 7</p>	<p>2-conductor cable, off-the-shelf, not sold by Lutron</p> 	<p>Surface-mounted with flying leads - LU-PH3-B</p>  <p>Panel mounted - LU-PH3-A</p>  <p>See Power Interface Ordering Guide on page 7</p>

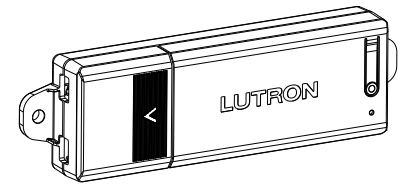
Notes:

- ¹ Extrusions are optional, see extrusions ordering guide for details.
- ² LU-CK1-4W **MUST** be used to connect the control wire to cut tape segments.
- ³ Use LU-WK1-4W to guarantee proper electrical connection with LU-CK1-4W.
- ⁴ For acceptable wire gauges and lengths, see the wiring tables for Power and Control Cable section.

CONTROLLER ORDERING GUIDE

Product Line Model Finish

Order code: _____

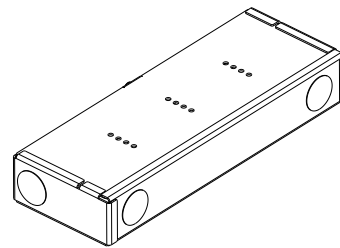


Multi-Channel Wireless Controller

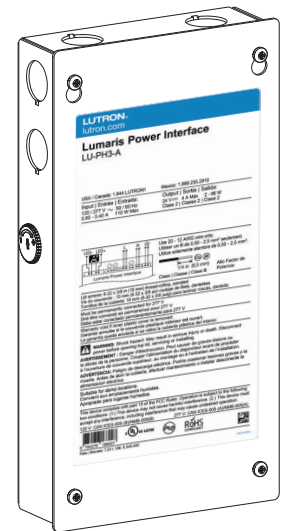
Product Line	Code	Finish	Code
Athena/myRoom XC	CM-	White	WH
HomeWorks QSX	HWL-		
Model			
Multi-Channel Wireless Controller	MWCL-		

POWER INTERFACE ORDERING GUIDE

Power Interface	LU-PH3-A
Power Interface with Flying Leads	LU-PH3-B



LU-PH3-B



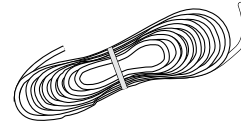
LU-PH3-A

CABLE AND CONNECTOR ORDERING GUIDE

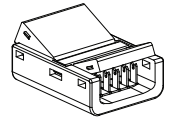
4×22 AWG (0.5 mm²) **LU-WK1-4W**
Cable 50 ft (15.2 m)

4-Pin Wire-to-Tape **LU-CK1-4W**
Connectors (Qty. 10)

NOTE: LU-CK1-4W MUST be used to connect the wire to the cut tape segments.
Use LU-WK1-4W to guarantee proper electrical connection with LU-CK1-4W.



Cable



Connectors

EXTRUSIONS ORDERING GUIDE

Please download this PDF to use the interactive features of the ordering guide.

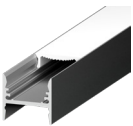
Product	Model	Type
Order code: _____		

Product	Code	Model	Code	Type	Code
Lutron	LU-	SR1 extrusion bundle	SR1-	Kit ¹	K
		SR2 extrusion bundle	SR2-	Accessory Pack ²	ACS
		SR3 extrusion bundle	SR3-		
		45S extrusion bundle	45S-		
		45T extrusion bundle	45T-		
		RR1 extrusion bundle	RR1-		
		MI1 extrusion bundle	MI1-		

Notes:

- ¹ The kit includes (1) 8 ft (2.44 m) aluminum channel and frosted lens and (1) accessory pack that matches the extrusion type.
- ² The accessory pack includes (2) open end caps, (2) closed end caps, (6) mounting clips and (6) mounting screws.

SR1



Luxury diffusion with hidden mounting

SR2



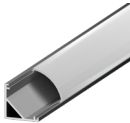
Classic rectangular surface-mount

SR3



Thin, low profile surface-mount

45S



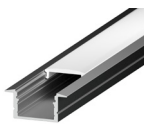
Classic 45° angled surface-mount

45T



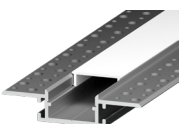
Large 45° with premium diffusion

RR1

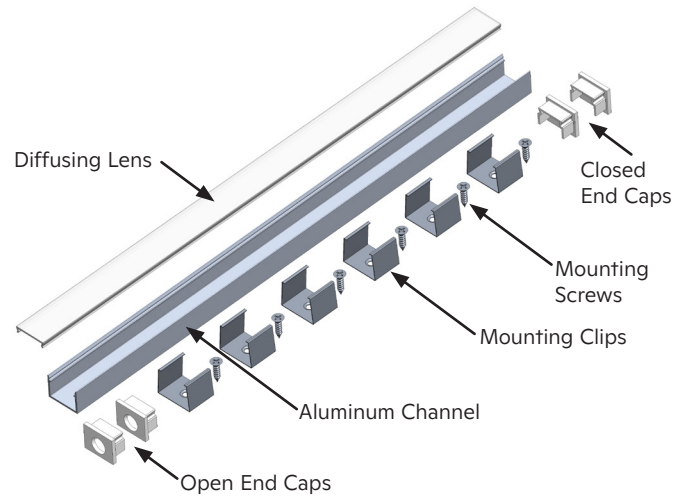


Recessed mount with a clean finish

MI1



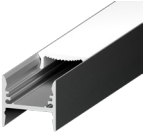
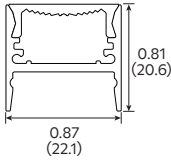
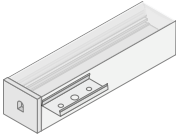


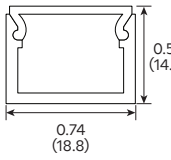
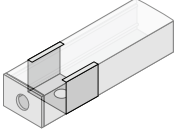


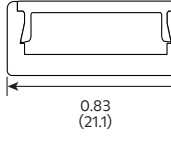
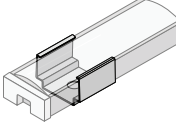


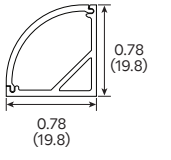
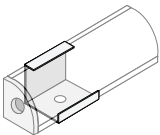

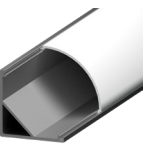
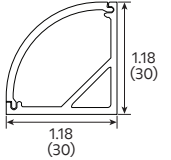
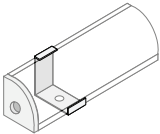

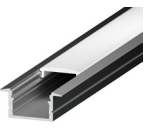
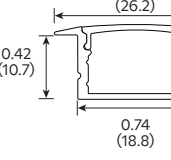
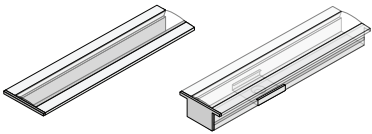


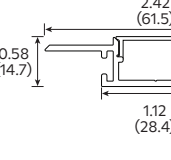
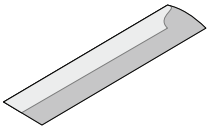

Mount into drywall for a flush light beam



LED Tape Extrusion (SR2 shown)

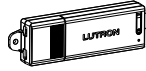
EXTRUSION OPTIONS

Measurements shown as: in (mm)

Model	Dimensions	Mounting	Lens Rating	Diffusion
 <p>SR1</p>	 <p>0.81 (20.6) 0.87 (22.1)</p>	 <p>Height with mounting clip: 0.81 (20.6)</p>	<p>Light loss: 45% CCT shift: -100K</p>	<p>Semi-diffused</p> 
 <p>SR2</p>	 <p>0.57 (14.5) 0.74 (18.8)</p>	 <p>Height with mounting clip: 0.65 (16.5)</p>	<p>Light loss: 40% CCT shift: -100K</p>	<p>Semi-diffused</p> 
 <p>SR3</p>	 <p>0.38 (9.6) 0.83 (21.1)</p>	 <p>Height with mounting clip: 0.53 (13.5)</p>	<p>Light loss: 10% CCT shift: -100K</p>	<p>Hot-spotted</p> 
 <p>45S</p>	 <p>0.78 (19.8) 0.78 (19.8)</p>	 <p>Height with mounting clip: 0.89 (22.6)</p>	<p>Light loss: 25% CCT shift: -100K</p>	<p>Semi-diffused</p> 
 <p>45T</p>	 <p>1.18 (30) 1.18 (30)</p>	 <p>Height with mounting clip: 1.25 (31.7)</p>	<p>Light loss: 30% CCT shift: -65K</p>	<p>Uniform</p> 
 <p>RR1</p>	 <p>1.03 (26.2) 0.42 (10.7) 0.49 (12.4) 0.74 (18.8)</p>	 <p>Height with mounting clip: 0.63 (16)</p>	<p>Light loss: 25% CCT shift: -85K</p>	<p>Semi-diffused</p> 
 <p>MI1</p>	 <p>2.42 (61.5) 0.58 (14.7) 1.12 (28.4)</p>	 <p>Height with mounting clip: Not applicable</p>	<p>Light loss: 65% CCT shift: -275K</p>	<p>Uniform</p> 

COMPONENT SPECIFICATIONS

**MULTI-CHANNEL WIRELESS CONTROLLERS
(HWL-MWCL-WH, RRL-MWCL-WH, CM-MWCL-WH)**



Regulatory Approvals

Certification **cULus listed for USA & Canada, FCC Part 15 Class B compliant, ICES-005 compliant**

Electrical

Input **24 V^{DC} 1.5 A**
 Output **24 V^{DC} 96 W max**
 Electrical Protection **Output short-circuit and overload protection**
 Wiring **Wireless RF/Clear Connect - Type X (CCX)**
 Emergency Lighting **Evaluated by UL[®] for emergency lighting systems in accordance with standard UL[®] 924 and CSA C22.2 No. 141 when paired with LVS™ model LUT-SHUNT-A-TD (UL[®] file E206507)**

Environmental

Ambient Temperature **32 °F to 104 °F (0 °C to 40 °C)**
 Humidity **0% to 95% non-condensing**
 Location **Indoor use only**
 Air Handling Spaces **UL[®] 2043 Plenum Rated**

Communication

Radio Frequency for Wireless Communication **2.4 GHz Wireless RF, Lutron Clear Connect - Type X (CCX)**

Range

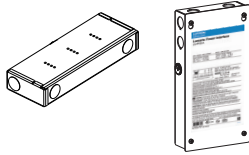
- All CCX devices must be within 75 ft. (22.9 m) of their assigned processor or gateway
- Each CCX device must have at least two (2) other non-battery powered CCX devices within 25 ft (7.5 m)
- Groups or clusters of CCX devices assigned to the same processor or gateway must not be separated by more than 25 ft (7.5 m)
- It is recommended that the wireless processor or gateway and the CCX devices assigned to it are located on the same floor
- CCX devices must be placed a minimum of 3 ft (1.0 m) from 2.4 GHz interference sources such as wireless access points, microwave ovens, Vive hubs
- Radio Power Savr occupancy/vacancy sensors (LRFx) must be mounted at least 2 ft (0.6 m) away from CCX devices

Warranty

Limited Warranty **www.lutron.com/warranty or call 1.844.LUTRON1 for a printed copy.**
The warranty will not cover issues caused by use of incompatible devices (including non-Lutron LED tape and/or power supplies).

COMPONENT SPECIFICATIONS (cont.)

**POWER INTERFACES
(LU-PH3-A, LU-PH3-B)**



Regulatory Approvals

Certification	<p>cULus Listed for USA and Canada</p> <p>FCC Part 15</p> <ul style="list-style-type: none"> - Class A compliant (277 V~) - Class B compliant (120 V~) <p>Meets UL[®] 8750/CSA C22.2 No. 250.13-14, "Light Emitting Diode (LED) Equipment For Use in Lighting Products"</p> <p>Class 2 output; meets UL[®] 1310/CSA C22.2 No. 223-M91</p>
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Electrical

Input	120 V~ / 277 V~ 50/60 Hz
Output	24 V== constant voltage
Electrical Protection	Output open-circuit, short-circuit and overload protection

Environmental

Ambient Temperature	32 °F to 104 °F (0 °C to 40 °C)
Humidity	LU-PH3-A: 0% to 90% non-condensing LU-PH3-B: 5% to 95% non-condensing
Location	Indoor use only

Warranty

Limited Warranty	<p>www.lutron.com/warranty or call 1.844.LUTRON1 for a printed copy.</p> <p>The warranty will not cover issues caused by use of incompatible devices (including non-Lutron LED tape and/or power supplies).</p>
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Features

-
- Powers up to three wireless controllers and a total of 96 W of tape
 - Class 2 separation
 - LU-PH3-A: Barrier provided for installation in the wiring compartment
 - LU-PH3-B: Barrier pre-installed
 - LU-PH3-B: 96 W power interface with flying lead connections. Best for surface mounting
 - LU-PH3-A: 96 W power interface with terminal connections. Best for recess mounting.

WIRING

POWER INTERFACES (LU-PH3-A; LU-PH3-B)

- Power up to three wireless controllers and 96 W of LED tape.
- LU-PH3-A: Terminals on the power interface accept 12 AWG to 20 AWG (4.0 mm² to 0.75 mm²).
 - Each screw terminal may only accept one wire.
 - LU-PH3-A is grounded by a terminal connection.
- LU-PH3-B: Use provided wire connectors to connect flying leads to wire per instructions printed on the connector bag.
- LU-PH3-B is grounded by a grounding screw.

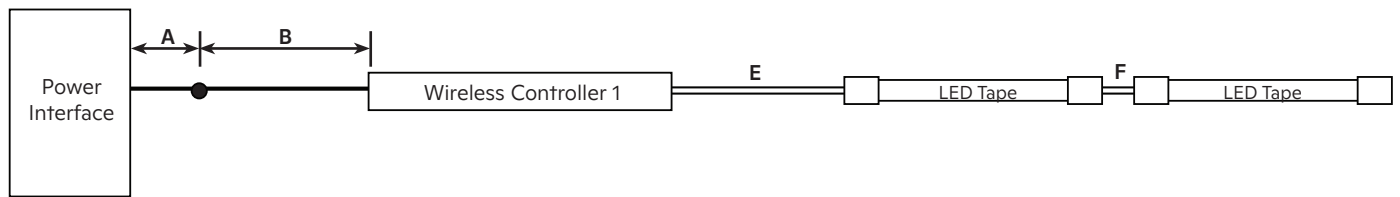
WIRE LENGTH RECOMMENDATIONS

The wiring diagrams and wiring tables on the next pages demonstrate how power wire and control wire lengths can be varied to increase installation flexibility and maintain optimum performance. Refer to the diagram below for control wire and power wire. If using more than six connectors on any individual series-wired LED tape run, each additional connector reduces the maximum length of the control wire allowed by 6 in (152.4 mm), regardless of gauge.

WIRING DIAGRAM 1: Rania Tape Light Installation

For a single wireless controller:

- Power Cable = A + B Control Cable = E + F



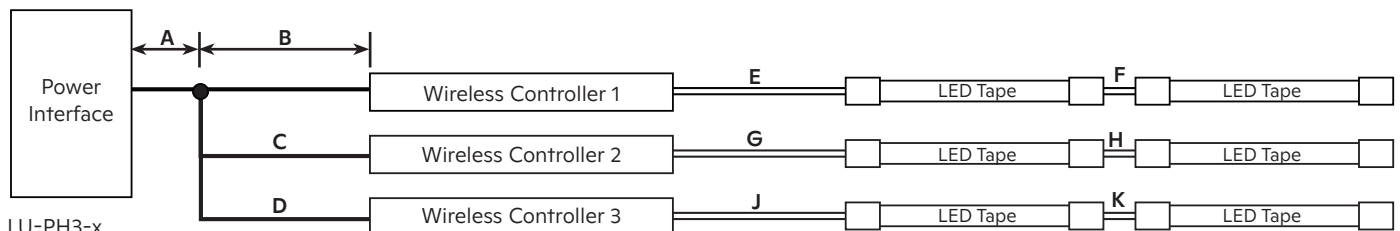
LU-PH3-x - Power wire
 _____ - Control wire

WIRING DIAGRAM 2: Rania Tape Light Installation with Multiple Controllers

For a multiple wireless controllers:

Each wireless controller cable lengths should be calculated by each controller using the below table.

- Wireless Controller 1: Power Cable = A + B Control Cable = E + F
- Wireless Controller 2: Power Cable = A + C Control Cable = G + H
- Wireless Controller 3: Power Cable = A + D Control Cable = J + K



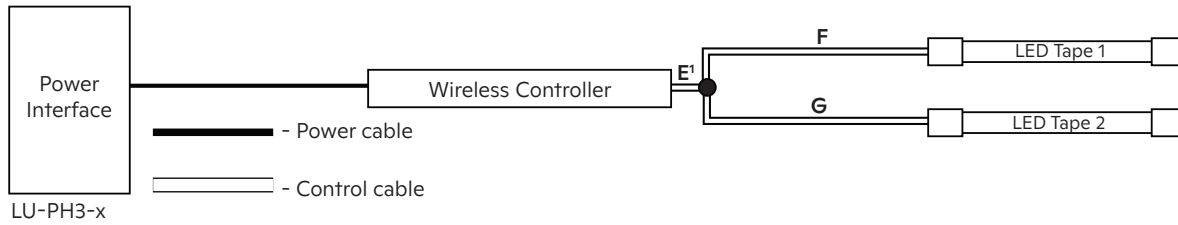
LU-PH3-x - Power wire
 _____ - Control wire

WIRING (cont.)

WIRING DIAGRAM 3: Rania Tape Installation - Split into Parallel Runs, Each No More Than 16.4 ft (5 m)

Total control cable length for each tape includes the following:

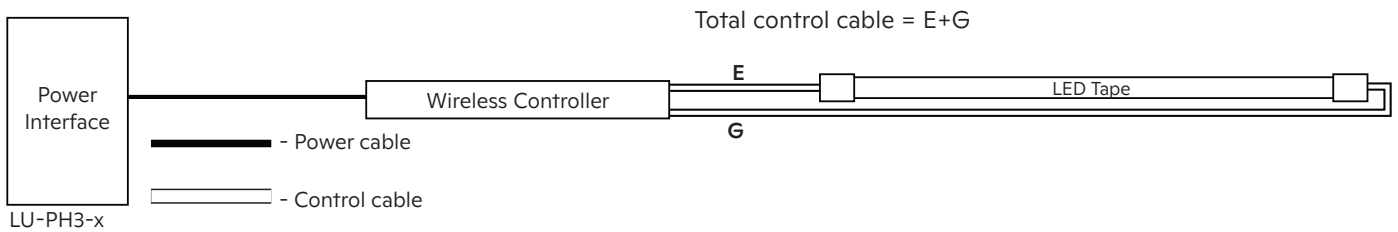
- Control Cable 1 = E + F
- Control Cable 2 = E + G
- Total Control Cable = (E + F) + (E+G)



Note:

- ¹ It is recommended to keep cable length (E) as short as possible, less than 1 ft (0.3 m) is ideal, to maintain optimum performance.

WIRING DIAGRAM 4: Rania Tape Installation with Connection to Both Ends of the Tape (Dual-ended); Total LED Tape Must be Less Than 32.8 ft (10 m)



WIRING (cont.)

TABLE 1: Rania High Output Installation Cable Lengths for Power and Control Cable

The below table values apply to a Rania high output tape with one (1) power interface and one (1) multi-channel wireless controller (Wiring diagrams 1, 3, and 4) or one (1) power interface and up to three (3) multi-channel wireless controllers (wiring diagram 2). If parallel power wiring exists, the table values assume that the power cable connections are in the homerun configuration to the power interface (spliced closest to the power interface) and the tape lengths are similar. The displayed values allow for up to 25% lumen drop at the beginning of the LED tape.

Tape Length ft (m)	Power Cable ¹		Total Control Cable Length ft (m) ²				
	Wire Gauge AWG (mm ²)	Total Cable Length ft (m)	12 AWG (4.0 mm ²)	14 AWG (2.5 mm ²)	16 AWG (1.5 mm ²)	18 AWG (1.0 mm ²)	22 AWG (0.5 mm ²)
0-4 (0-1.2)	20 (0.75)	15 (4.6)	417 (127.1)	262 (80.0)	165 (50.3)	103 (31.4)	41 (12.5)
	16 (1.5)	40 (12.2)					
	14 (2.5)	64 (19.5)					
	12 (4.0)	102 (31.1)					
4.1-8 (1.2-2.4)	20 (0.75)	7 (2.1)	209 (63.7)	131 (40.0)	82 (25.0)	52 (15.8)	20 (6.1)
	16 (1.5)	20 (6.1)					
	14 (2.5)	32 (9.8)					
	12 (4.0)	51 (15.5)					
8.1-11 (2.5-3.4)	20 (0.75)	10 (3.0)	287 (87.5)	180 (54.9)	113 (34.4)	71 (21.6)	28 (8.5)
	16 (1.5)	28 (8.5)					
	14 (2.5)	44 (13.4)					
	12 (4.0)	70 (21.3)					
11.1-16.4 (3.4-5.0) ³	20 (0.75)	7 (2.1)	385 (117.3) ³	242 (73.8) ³	152 (46.3) ³	95 (29.0) ³	37 (11.3) ³
	16 (1.5)	18 (5.5)					
	14 (2.5)	29 (8.8)					
	12 (4.0)	47 (14.3)					

Notes:

- ¹ Refer to Wiring Diagram 1 for what the total power wire length indicates.
- ² Refer to Wiring Diagram 1 for what the total control wire length indicates.
- ³ This row assumes the tape has the control wire connected on both ends of the tape as in Wiring Diagram 3. For tape lengths over 11 ft (3.4 m) it is recommended to connect the control wire on both ends of the tape run as in Wiring Diagram 3.

WIRING (cont.)

TABLE 2: Power Wire and Control Wire Lengths for Long Run Rania Tape Lights

All Rania long run tape light installations >16.4 ft (5 m) should use one of the two wiring methods:

- Split into parallel runs, each no more than 16.4 ft (5 m), see Wiring Diagram 2.
- Wireless controller connection should be made to both ends of the tape, see Wiring Diagram 3.

The below table values apply to long run Rania tape with one (1) power interface and one (1) multi-channel wireless controller (Wiring diagrams 1, 3, and 4) or one (1) power interface and up to three (3) multi-channel wireless controllers (wiring diagram 2). If parallel power wiring exists, the table values assume that the power cable connections are in the homerun configuration to the power interface (spliced closest to the power interface) and the tape lengths are similar. The displayed values allow for up to 25% lumen drop at the beginning of the LED tape.

Tape Length ft (m)	Power Cable ¹		Total Control Cable Length ft (m) ²				
	Wire Gauge AWG (mm ²)	Total Cable Length ft (m)	12 AWG (4.0 mm ²)	14 AWG (2.5 mm ²)	16 AWG (1.5 mm ²)	18 AWG (1.0 mm ²)	22 AWG (0.5 mm ²)
0 - 8.0 (0 - 2.4)	20 (0.75)	14 (4.3)	393 (119.8)	247 (75.3)	155 (47.2)	97 (29.6)	38 (11.6)
	16 (1.5)	38 (11.6)					
	14 (2.5)	61 (18.6)					
	12 (4.0)	97 (29.6)					
8.1 - 16.4 (2.5 - 5)	20 (0.75)	7 (2.1)	385 (117.3)	242 (73.8)	152 (46.3)	95 (29.0)	37 (11.3)
	16 (1.5)	18 (5.5)					
	14 (2.5)	29 (8.8)					
	12 (4.0)	47 (14.3)					
16.5 - 24.0 (5 - 7.3) ³	20 (0.75)	4 (1.2)	263 (80.2) ³	165 (50.3) ³	104 (31.7) ³	65 (19.8) ³	25 (7.6) ³
	16 (1.5)	12 (3.7)					
	14 (2.5)	20 (6.1)					
	12 (4.0)	32 (9.8)					
24.1 - 32.8 (7.3 - 10.0) ³	20 (0.75)	3 (0.9)	193 (58.8) ³	121 (36.9) ³	76 (23.2) ³	48 (14.6) ³	19 (5.8) ³
	16 (1.5)	9 (2.7)					
	14 (2.5)	15 (4.6)					
	12 (4.0)	23 (7.0)					

Notes:

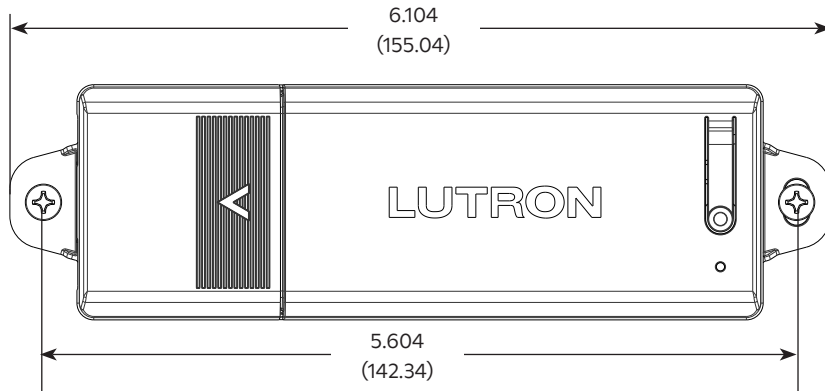
- ¹ Refer to Wiring Diagram 1 for what the total power cable length indicates.
- ² Refer to Wiring Diagrams 1 and 3 for what the total control cable length indicates.
- ³ Refer to Wiring Diagram 3 for installations > 16.4 ft (5 m) split into parallel runs, each no more than 16.4 ft (5 m).

DIMENSIONS

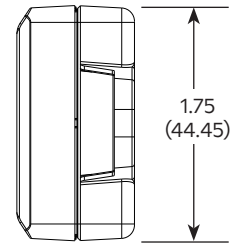
All dimensions shown as: in (mm)

MULTI-CHANNEL WIRELESS CONTROLLER (HWL-MWCL-WH, RRL-MWCL-WH, CM-MWCL-WH)

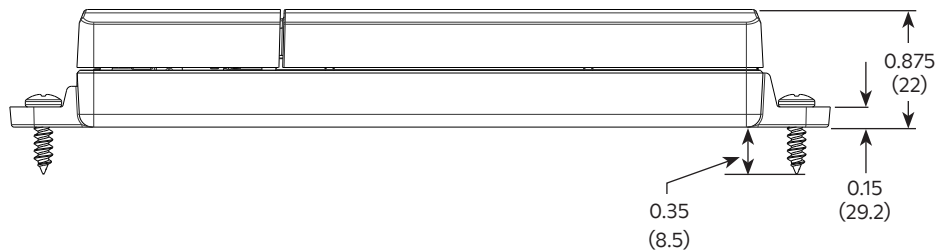
Top View



End View



Side View

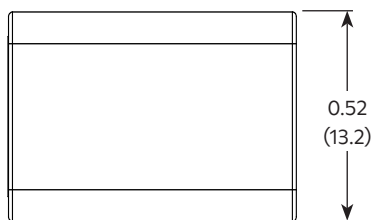


NOTE: The location of the wireless controller must be considered when laying out the Clear Connect - Type X network. See the communication section of the wireless controller for Clear Connect - Type X spacing details.

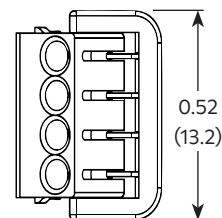
NOTE: Do not mount wireless controllers in or on metal enclosures or cabinets.

4-PIN WIRE-TO-TAPE CONNECTOR (LU-CK1-4W)

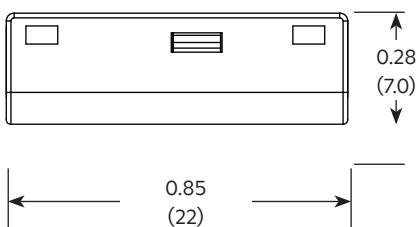
Top View



End View

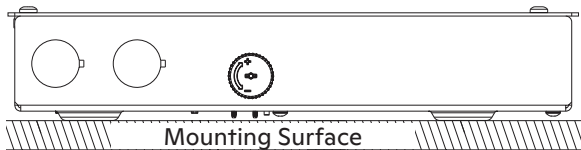
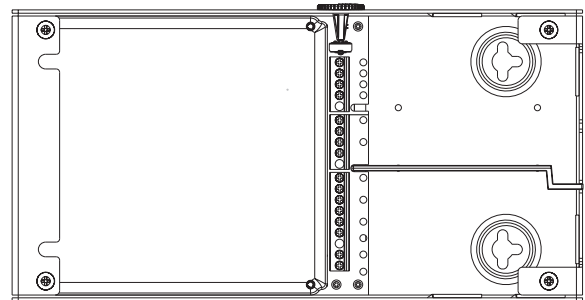
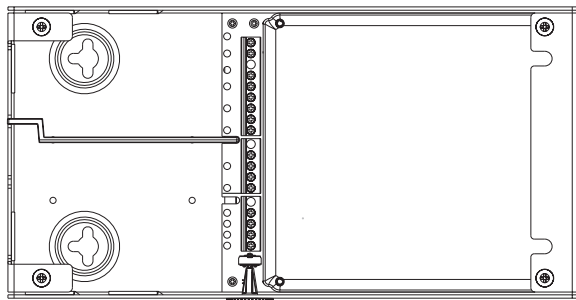
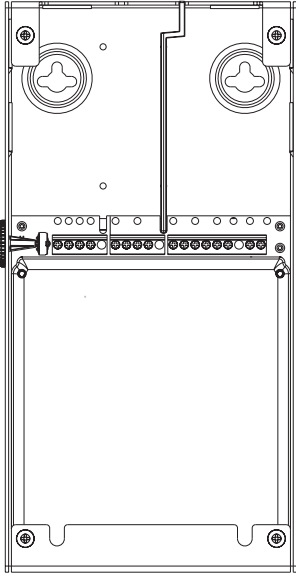


Side View



MOUNTING OPTIONS

POWER INTERFACE ENCLOSURE (LU-PH3-A) ^{1,2}



Note: The gray knob on the side of the enclosure is not used and does not need to be accessed after installation. This knob has no affect on the operation of the power interface.

Notes:

- ¹ Any other mounting configuration will require additional mechanical support. Improper installation may result in hazards to personnel or property.
- ² Mount the power interface in a position where it can be easily located and accessed if service or troubleshooting is necessary.