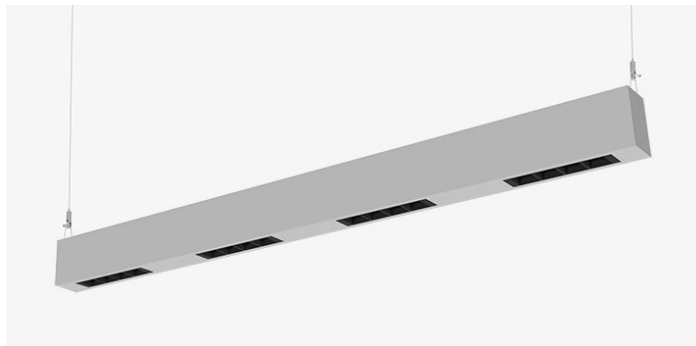


RAIL 2 RM2DU

ACCENT PATTERNS . PENDANT . DIRECT / INDIRECT



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

PERFORMANCE SUMMARY @ 3500K, 80 CRI	Recessed Downlight Low "A" Light Level (LL)
Lumens (lm) per foot	322
Distribution (Up / Down %)	0 / 100
Wattage (W) per foot	2.2
Efficacy (LPW)	145
L70 Estimate (h)	≥ 60,000 hrs

See page 2 for the complete Light Level Performance chart.

FEATURES

- Available standard lengths of 4, 8 and 12 ft only
- Available with 50° or 80° beam spreads
- 90 CRI available

ORDERING LOGIC

Example Part Number: RM2DU-2L35K-G4-MBLM5-W-L3B21-PA18-1-DW-90

RM2DU											
1	2	3	4	5	6	7	8	9	10	11	12
1. SERIES RM2DU	2. COLOR TEMP 2L30K 3000K 2L35K 3500K 2L40K 4000K		3. PATTERN ¹ GA Square GAxB Rectangle UAxBxC U-Shape LAxB L-Shape C Custom Pattern* _ None (leave space empty)			4. OPTICS (UP / DOWN) MBXX5 Meta Blanc / Accent, 50° Beamspread MBXX8 Meta Blanc / Accent, 80° Beamspread MRXX5 Rise Lens / Accent, 50° Beamspread MRXX8 Rise Lens / Accent, 80° Beamspread			5. FINISH SA Satin Aluminum W White B Black C Custom Finish Specify RAL:		
			Standard Patterns Minimum Lengths <p>A = 4 ft min. B = 4 ft min. A = 3 ft min. B = 4 ft min. C = 3 ft min. A = 3 ft min. B = 3 ft min.</p>			Replace XX with accent selected on p2. ACCENT finish is black. Meta Blanc & Rise Lens: Opal Diffuse Lens					
6. LIGHT LEVEL (LL) / DRIVER CODES: L1YX L2YX L3YX L4YX	Replace "Y" with ACCENT Light Level: A = Low Light Level B = Mid Light Level C = High Light Level		7. CIRCUITRY 1 1 Circuit UD Up / Down Switching EM Emergency / Night Light B Emergency Battery Pack ²			8. MOUNTING PAA Pendant Aircraft Cable PTA Pendant Aircraft Cable for T-bar Replace "A" with length (in inches) selected below. Select Aircraft Cable Length, Canopy Finish & Power Cord Color below		9. VOLTAGE 1 120V 2 277V 3 347V 4 UNV (120 - 277V)	10. SENSORS Please see last page for fixture integrated SENSORS and CONTROLS Order Logic codes	11. CONTROLS	12. OPTIONS 90 90 CRI, High R9 _ None (leave space empty)
	Replace "X" with STANDARD LENS Light Level: 1 = Light Level 1 2 = Light Level 2 3 = Light Level 3 4 = Light Level 4 N = No Light Level (applicable when ACCENT configuration doesn't include lens)		Custom Patterns* (C) Lengths and a drawing of custom pattern are required on page 3 T-Shape Cross/X			Select corner: <input checked="" type="checkbox"/> Outside 90° <input checked="" type="checkbox"/> Inside 90° 		Code example: Indirect: L3B2 Direct: Standard Light Level 2 Light Level 3 Accent Mid Light Level	See and select driver options at the right. See Light Level Performance chart on p2.	Select Driver: <input type="checkbox"/> Factory option 0-10V, 1% Dimming <input type="checkbox"/> LHE Lutron H-Series Hi-Lume 1% EcoSystem LED Driver <input type="checkbox"/> LSE Lutron 5-Series EcoSystem LED Driver	

* Consult factory. | ** Not available with patterns. | ¹ Pattern record drawings showing mounting locations will be sent out upon order. | ² Battery operates 4ft direct sections only.

Select Aircraft Cable Length:

Total adjustment range is 6" up & down for each standard length. All other lengths are considered custom unless otherwise stated.

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: _____	

Select Canopy Finish & Power Cord Color

Canopy

White

Black

Custom Finish

RAL: _____

Power Cord

White

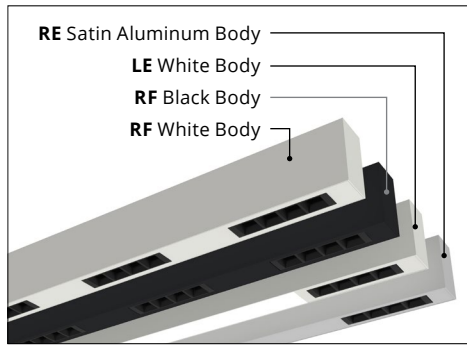
Black*

*consult factory

ACCENTS

Recessed Downlights

Recessed downlight sections are available in 4, 8 and 12 ft lengths with beam spreads of 50 or 80 degrees. Recessed downlight comes in black finish only.



Blank Filler

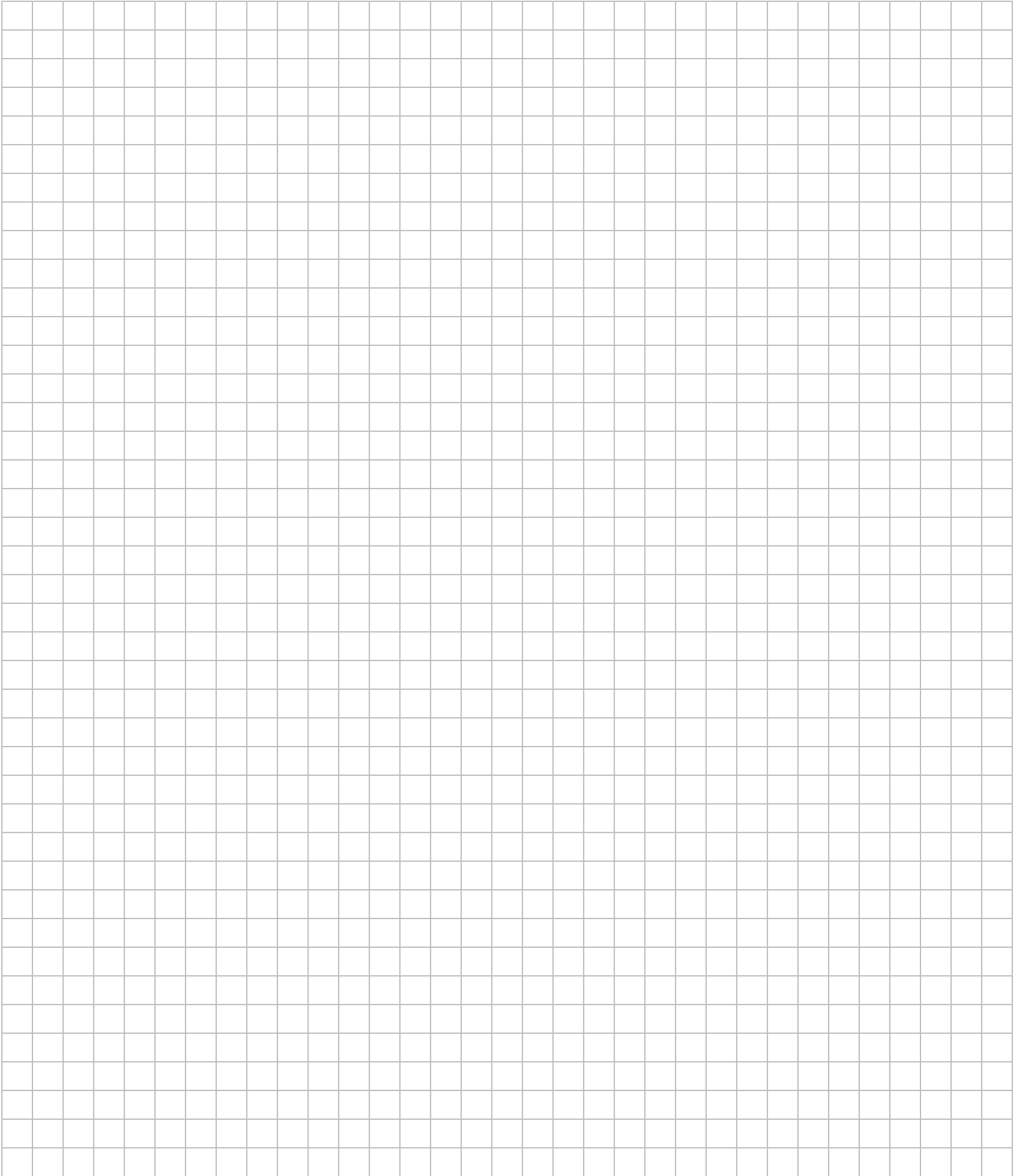
Finished in the same color as the body, the blank filler appears smooth and seamless, completing the rhythmical aesthetic of the recessed downlight configurations.



Select one:	Code	Direct Accent Configuration (Available for 4, 8 and 12 ft sections only)	Light Level (LL) Performance		
			A Low LL	B Mid LL	C High LL
<input type="checkbox"/>	RE	Recessed downlight located at Edge (Power entry located on same end as accent) 	322 lm	611 lm	869 lm
<input type="checkbox"/>	RM	Recessed downlight located at Middle 	322 lm	611 lm	869 lm
<input type="checkbox"/>	R2	Recessed downlights x2 	644 lm	1222 lm	1738 lm
<input type="checkbox"/>	R3	Recessed downlights x3 	966 lm	1833 lm	2607 lm
<input type="checkbox"/>	RF	Recessed downlights Full			
		4 ft Full 4 ft section fits max. 4 recessed downlights 	1288 lm	2444 lm	3476 lm
		8 ft Full 8 ft section fits max. 8 recessed downlights 	2576 lm	4888 lm	6952 lm
	12 ft Full 12 ft section fits max. 12 recessed downlights 	3864 lm	7332 lm	10428 lm	
<input type="checkbox"/>	LE	Recessed downlight located at Edge with Lens (Power entry located on same end as accent) 	Consult factory		
<input type="checkbox"/>	LM	Recessed downlight located at Middle (with Lens) 	Consult factory		
<input type="checkbox"/>	L2	Recessed downlights x2 (with Lens) 	Consult factory		
For custom configurations, please provide a drawing on next page.			Metalumen's light level performance metrics are subject to manufacturers component tolerances.		

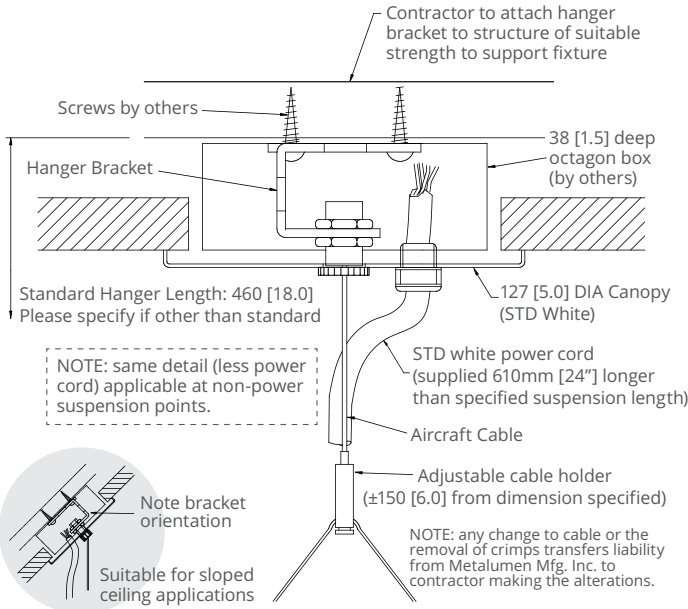
A custom length drawing is required in the grid below

Approval drawings will be sent out upon order showing mounting locations.

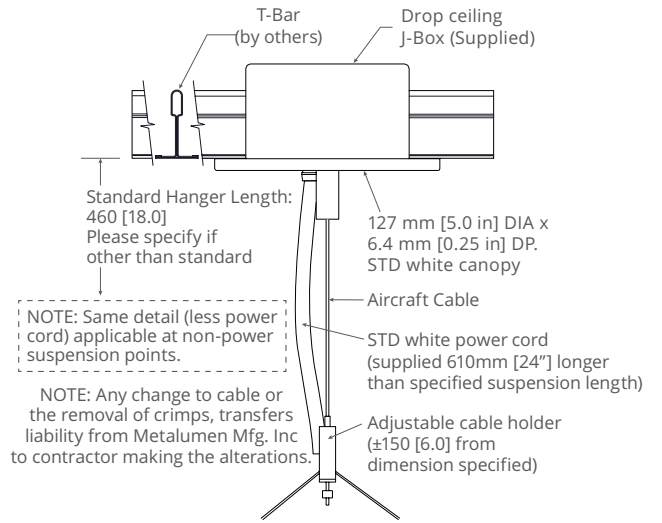


HANGERS

Aircraft Cable & Cord



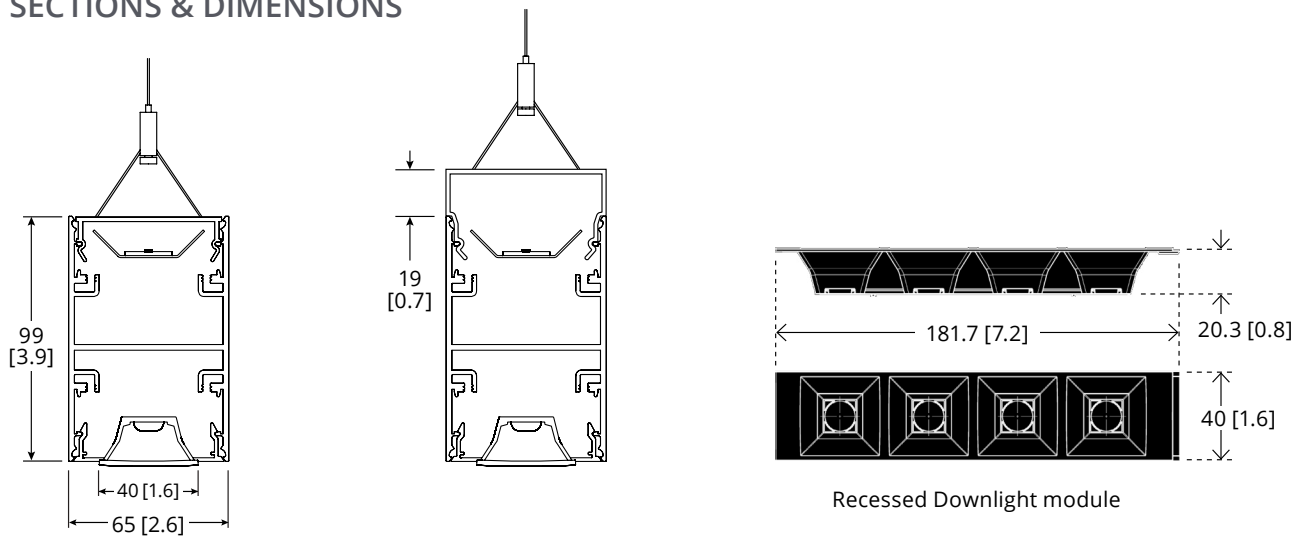
T-Bar Aircraft Cable & Cord



WIRING

Standard	Emergency / Night Light	Emergency Battery Pack
<ul style="list-style-type: none"> BLACK - LINE WHITE - NEUTRAL GREEN - GROUND RED - CAPPED/SW LEAD VIOLET - DIM(+) PINK - DIM(-) 	<ul style="list-style-type: none"> BLACK - LINE WHITE - NEUTRAL GREEN - GROUND RED - CAP OFF 	<ul style="list-style-type: none"> BLACK - LINE WHITE - NEUTRAL GREEN - GROUND RED - UNSWITCHED HOT

CROSS SECTIONS & DIMENSIONS



UP: Meta Ice or Meta Blanc
DOWN: Recessed Downlight

UP: Rise Lens
DOWN: Recessed Downlight

Recessed Downlight module

SPECIFICATIONS

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

Housing: Rigid extruded aluminum body, 2.3mm [0.09"] nominal wall thickness. Zinc alloy die-cast 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.
Finish: Satin aluminum, white and black are standard finishes. For custom finish, contact factory. Accent finish comes in black only.

Mounting: Aircraft cable complete with a Quick-Grip field adjustable suspension system provides for quick and easy on-site alignment.
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.*

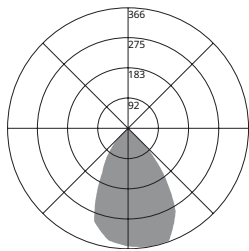
WARRANTY

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: **Meta Blanc or Rise Lens**
 Optics Down: **Recessed Downlight**
 IES File: **RM2DU-2L35K-4-MBAN-L1**
 Lumens: **322** Wattage: **2.2**
 Efficacy: **145**

PHOTOMETRIC CURVE
100% Down



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-20	131	36.2
0-30	257	71.1
0-40	337	93.1
0-60	362	99.9
0-80	362	100
0-90	362	100
10-90	328	90.6
20-40	206	57
20-50	229	63.4
40-70	25	6.8
60-80	0	0.1
70-80	0	0
80-90	0	0
90-110	0	0
90-120	0	0
90-130	0	0
90-150	0	0
90-180	0	0
110-180	0	0
0-180	362	100

COEFFICIENTS OF UTILIZATION

Zonal Cavity Method | Effective Floor Cavity Reflectance = .20

RC	80			70			50					
	RW	70	50	30	10	70	50	30	10	50	30	10
RCR												
0	119	119	119	119	119	116	116	116	116	111	111	111
1	114	111	108	106	111	109	106	104	105	103	101	101
2	108	103	99	96	106	101	98	95	98	95	93	93
3	102	96	91	87	100	95	90	86	92	88	85	85
4	97	90	84	80	95	89	83	79	86	82	79	79
5	92	84	78	74	91	83	78	73	81	76	73	73
6	88	79	73	68	86	78	72	68	76	71	68	68
7	83	74	68	64	82	73	67	63	72	67	63	63
8	79	69	63	59	78	69	63	59	68	63	59	59
9	75	65	59	55	74	65	59	55	64	59	55	55
10	72	62	56	52	71	61	56	52	61	55	52	52

LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angle		
	0	45	90
45	34520	14376	853
55	482	1690	157
65	252	173	16
75	245	64	0
85	229	38	0

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angle				
	0	22.5	45	67.5	90
0	358	358	358	358	358
5	361	361	360	358	355
10	364	365	362	358	352
15	364	365	365	358	346
20	363	362	355	346	324
25	330	329	330	307	278
30	293	276	263	221	187
35	224	211	160	118	82
40	152	144	71	37	17
45	80	82	33	7	2
50	8	25	12	1	1
55	1	1	3	0	0
60	0	1	0	0	0
65	0	0	0	0	0
70	0	0	0	0	0
75	0	0	0	0	0
80	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

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-2L35K-G4-MBLM5-W-L3B21-PA18-1-DW-90

Occupancy Sensor with Casambi Wireless Bluetooth Mesh Control Capability: RM2DU-2L35K-G4-MBLM5-W-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

Wattstopper®

enlighted™
A Siemens Company

SILVAIR

CASAMBI

OSRAM

LUTRON®



HUBBELL
Control Solutions

signify
PHILIPS