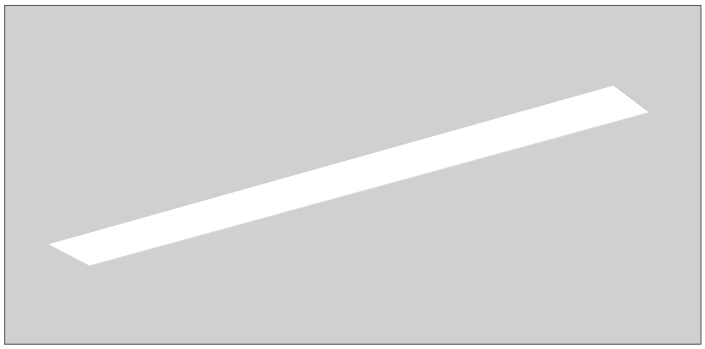
SPECIFICATION SHEET

RAIL 6 S6

LED . RECESSED DRYWALL FLANGELESS . DIRECT

DROP LENS | DAMP



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

PERFORMANCE SUMMARY @ 3500K		Meta Blanc (MB)	Meta Ice (M)	Drop Lens (MD)
		L3	L3	L3
Lumens per foot	80 CRI	609	713	642
	90 CRI	533	624	562
Wattage per foot		6.1	6.1	6.1
Efficacy	80 CRI	101	118	106
	90 CRI	87	102	92
L70 Estimate (h)		≥ 60,000 hrs		

See page 2 for the complete Light Level Performance chart.

FEATURES

- Efficacy up to 111 lm/W
- Suitable for dry or damp locations
- Integral drivers
- Option for daylight harvesting, occupancy sensing , dimming control and emergency lighting

ORDERING LOGIC

Example Part Number: S6-1L35K-12-MB-W-L31-DF-1-DW-90

S6								DF				
1	2	3	4	5	6	7	8	9	10	11	12	13

1. SERIES

S6

2. COLOR TEMP

1L30K 3000K
1L35K 3500K
1L40K 4000K

90 CRI is available under OPTIONS

Dim to Warm is not available with integrated sensors.

Tunable White and Dim to Warm are availabe with emergency battery packs connected to the cool color LEDs only.

3. LENGTH

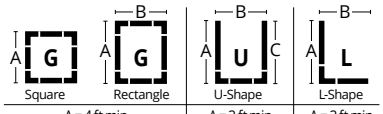
2 2 ft
3 3 ft
4 4 ft
5 5 ft
6 6 ft
7 7 ft
8 8 ft
9 9 ft
10 10 ft
11 11 ft
12 12 ft
RA Continuous Rows
Replace "A" with length in feet selected on p2
C Custom Length*
_ None (leave space empty)

4. PATTERN [1]

GA Square
GAx**B** Rectangle
UAx**B**x**C** U-Shape
LAx**B** L-Shape
C Custom Pattern*
_ None (leave space empty)

Replace "A", "B", "C" with length in feet. See minimum lengths below

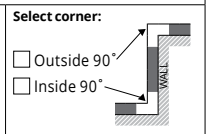
Standard Patterns Minimum Lengths



Square	Rectangle	U-Shape	L-Shape
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.

Custom Patterns*
Lengths and a drawing of custom pattern are required on page 3

Select corner:



5. OPTICS

MB Meta Blanc
M Meta Ice
MD Drop Lens **

Meta Blanc & Drop Lens: Opal diffuse lens

Meta Ice: High output semi-diffuse lens

6. FINISH

SA Satin Aluminum
W White
C Custom Finish
Specify RAL:

7. LIGHT LEVEL / DRIVER

L1
L2
L3
L4

Select Driver below.
See Light Level Performance chart on p2.

8. CIRCUITRY

1 1 Circuit
EM Emergency / Night Light
B Emergency Battery Pack [2]

9. MOUNTING

DF Recessed Drywall Flangeless

10. VOLTAGE

1 120 V
2 277 V
3 347 V
4 UNV (120 - 277V)

11. SENSORS / 12. CONTROLS

Please see last page for fixture integrated SENSORS and CONTROLS Order Logic codes

13. OPTIONS

90 90 CRI, High R9
_ None (leave space empty)

*Consult factory. | **Drop lens is not available with patterns. | [1] Pattern record drawings showing mounting locations will be sent out upon order. | [2] 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

Light Level Performance

3500K, 80 CRI, 0-10V Dimming

Optics	Meta Blanc (MB)			Meta Ice (M)			Drop Lens (MD)		
Light Level	Lumens per foot	Wattage per foot	Efficacy (lm/W)	Lumens per foot	Wattage per foot	Efficacy (lm/W)	Lumens per foot	Wattage per foot	Efficacy (lm/W)
L1	370	3.5	107	433	3.5	125	377	3.5	108
L2	456	4.4	104	533	4.4	121	472	4.4	107
L3	609	6.1	101	713	6.1	118	642	6.0	106
L4	1121	12.5	90	1312	12.5	105	1191	12.5	95.4

Lumen Adjustment Factor

Color Temp	80 CRI	90 CRI
3000K	0.984	0.880
3500K	1.000	0.875
4000K	1.032	0.879

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

CONTINUOUS ROWS

Step 1) Indicate desired quantity of rows under the QTY column

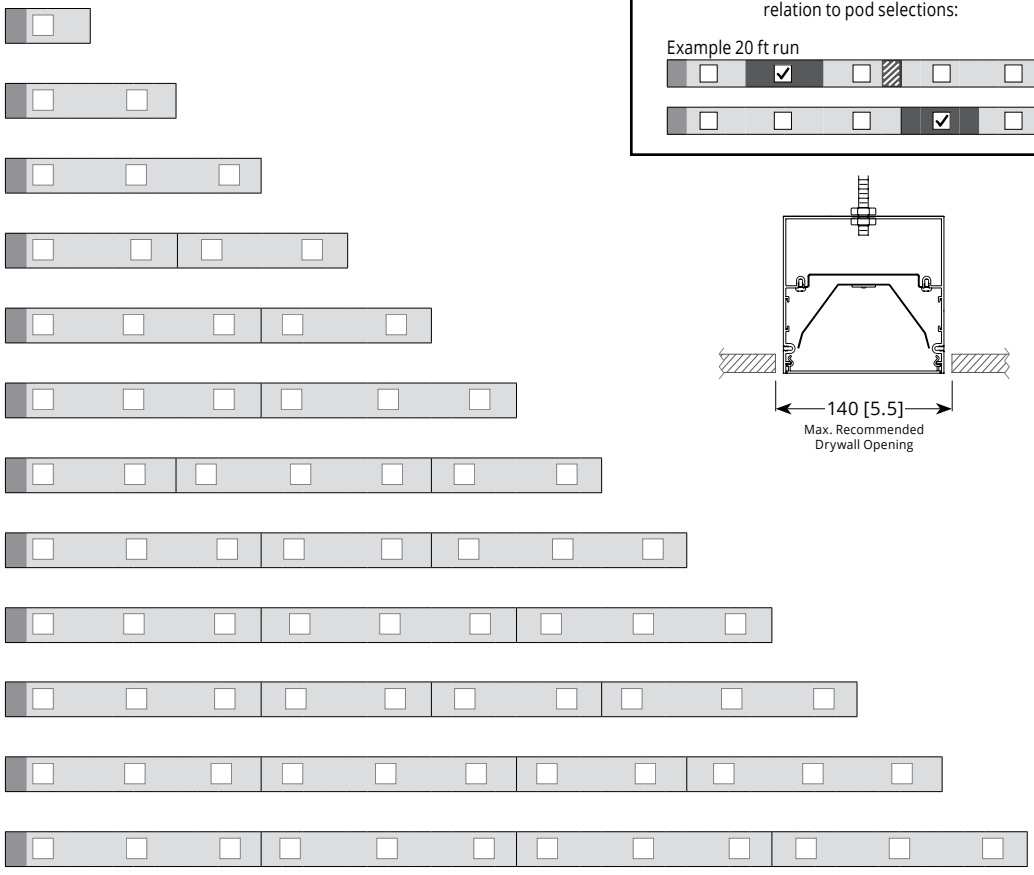
Step 2) ☐← Pods →☐ If applicable, select pod(s) per row to indicate desired Emergency Lighting/Night Light/Battery Location. If a similar row requires a different Emergency lighting location, please fill out another sheet.

Record drawings for rows not represented here will be sent out upon order.

QTY	Nominal Length	Run Length Overall	Alone / Start Length	Mid Length(s)	End Length
	4'	1223 [48.1]	4		
	8'	2442 [96.1]	8		
	12'	3662 [144.2]	12		
	16'	4880 [192.1]	8		8
	20'	6100 [240.2]	12		8
	24'	7320 [288.2]	12		12
	28'	8538 [336.1]	8	12	8
	32'	9758 [384.2]	12	8	12
	36'	10978 [432.2]	12	12	12
	40'	12196 [480.2]	12	8, 8	12
	44'	13416 [528.2]	12	12, 8	12
	48'	14636 [576.2]	12	12, 12	12

ROWS IN PLAN VIEW

Rows are for demonstration purposes only and are not to scale.



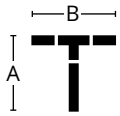
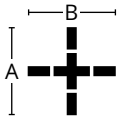
LEGEND

- Standard (STD) Wire Entry Location (located 52mm from end on top of fixture)
- Emergency (EM) / Night Light Location (4 ft sections)
- EM or Battery Wire Entry Location (located 52mm from end on top of fixture)

EM / Night Light and EM or Battery Wire Entry location in relation to pod selections:

Example 20 ft run

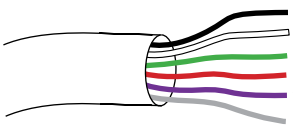
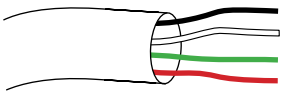
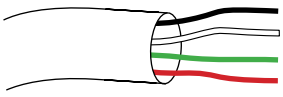
PATTERNS

Select Pattern:	☐ T-SHAPE (C)	☐ CROSS / X-SHAPE (C)
Pattern Configuration		
Indicate Desired Lengths (ft)	A = ☐ B = ☐	A = ☐ B = ☐
Minimum Lengths	A = 3 ft B = 6 ft	A = 6 ft B = 6 ft

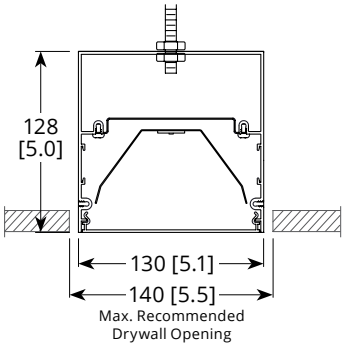
A custom pattern configuration drawing is required in the grid below

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

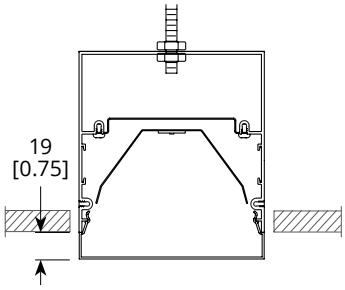
WIRING

Standard Wiring	Emergency Wiring	Emergency Battery Pack Wiring
		

CROSS SECTIONS



Meta Blanc or Meta Ice



Drop Lens

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.
Finish: Satin aluminum and white are standard finishes. For custom finish, contact factory.
Weight: 1.7 kg/300 mm [3.8 lb/ft]
Mounting: Mounting brackets provided.
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: Certified to NRTL and IES testing standards. This product is cULus listed. All components are CSA/QPS recognized or listed, RoHS, LM79, LM80 and LM82 compliant.
Environment: Suitable for dry or damp locations.

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

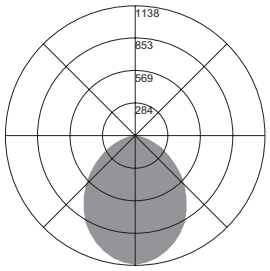
WARRANTY

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: **Meta Blanc**
IES File: **S6-1L35K-4-MB-L3**
Lumens: **609/ft** Wattage: **6.1/ft**
Efficacy: **101 lm/W**

PHOTOMETRIC CURVE
100% Down



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-20	399	16.4
0-30	819	33.6
0-40	1287	52.8
0-60	2067	84.9
0-80	2407	98.8
0-90	2435	100.0
10-90	2330	95.7
20-40	888	36.5
20-50	1324	54.3
40-70	1008	41.4
60-80	340	14.0
70-80	112	4.6
80-90	28	1.2
90-110	0	0.0
90-120	0	0.0
90-130	0	0.0
90-150	0	0.0
90-180	0	0.0
110-180	0	0.0
0-180	2435	100.0

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	116	116	116	116	111	111	111
1	110	106	102	98	107	103	100	97	99	96	94
2	101	93	87	82	98	91	86	81	88	83	79
3	93	83	75	69	90	81	74	69	78	72	68
4	85	74	66	60	83	73	65	59	70	64	59
5	79	67	58	52	77	66	58	52	64	57	51
6	73	61	52	46	71	60	52	46	58	51	45
7	68	55	47	41	66	54	47	41	53	46	41
8	64	51	43	37	62	50	42	37	49	42	37
9	60	47	39	34	58	46	39	33	45	38	33
10	56	43	36	31	55	43	35	31	42	35	30

LUMINANCE DATA (CD/M²)

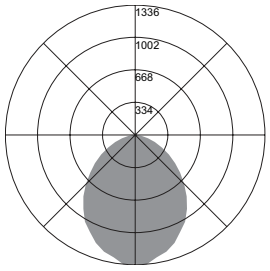
Vertical Angle	Horizontal Angle		
	0	45	90
45	4443	2684	2224
55	3665	1899	1520
65	2843	1223	937
75	1889	623	454
85	733	153	113

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angle				
	0	22.5	45	67.5	90
0	1129	1129	1129	1129	1129
5	1116	1105	1138	1102	1118
10	1089	1088	1095	1089	1067
15	1048	1042	1038	1035	1038
20	997	991	983	974	977
25	938	929	914	900	889
30	874	860	834	812	806
35	786	775	749	721	707
40	700	693	653	625	621
45	610	597	567	525	520
50	521	503	465	439	431
55	425	416	383	355	346
60	340	331	302	275	273
65	259	248	227	208	201
70	185	176	162	145	142
75	120	114	102	94	89
80	63	60	53	50	48
85	25	23	21	20	19
90	6	5	5	6	5

Optics: **Meta Ice**
IES File: **S6-1L35K-4-M-L3**
Lumens: **713/ft** Wattage: **6.1/ft**
Efficacy: **118 lm/W**

PHOTOMETRIC CURVE
100% Down



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-20	470	16.5
0-30	965	33.8
0-40	1515	53.1
0-60	2427	85.0
0-80	2822	98.9
0-90	2855	100.0
10-90	2730	95.6
20-40	1046	36.6
20-50	1555	54.5
40-70	1178	41.3
60-80	395	13.8
70-80	129	4.5
80-90	32	1.1
90-110	0	0.0
90-120	0	0.0
90-130	0	0.0
90-150	0	0.0
90-180	0	0.0
110-180	0	0.0
0-180	2855	100.0

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	101	101	101	101	99	99	99	99	94	94	94
1	93	90	86	84	91	88	85	82	84	82	80
2	86	79	74	70	84	78	73	69	75	71	67
3	79	71	64	59	77	69	63	59	67	62	58
4	73	63	56	51	71	62	56	51	60	54	50
5	67	57	50	44	65	56	49	44	54	48	44
6	62	52	44	39	61	51	44	39	49	43	39
7	58	47	40	35	56	46	40	35	45	39	35
8	54	43	36	32	53	43	36	31	41	36	31
9	51	40	33	29	50	39	33	29	38	32	28
10	48	37	30	26	47	36	30	26	36	30	26

LUMINANCE DATA (CD/M²)

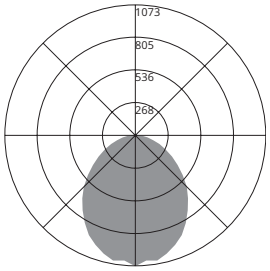
Vertical Angle	Horizontal Angle		
	0	45	90
45	5198	3134	2581
55	4347	2212	1751
65	3365	1427	1090
75	2172	730	518
85	839	175	137

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angle			
	0	30	60	90
0	1323	1323	1323	1323
5	1336	1316	1318	1310
10	1274	1288	1279	1277
15	1240	1222	1226	1221
20	1181	1159	1150	1141
25	1099	1093	1063	1055
30	1028	1003	968	950
35	928	901	861	827
40	824	798	740	716
45	714	692	631	604
50	602	580	522	498
55	504	469	422	399
60	403	374	327	315
65	307	281	248	234
70	216	199	173	166
75	138	128	111	101
80	74	67	59	54
85	28	25	23	23
90	7	6	6	7

Optics: **Drop Lens**
IES File: **S6-1L35K-4-MD-L3**
Lumens: **642/ft** Wattage: **6.0/ft**
Efficacy: **106 lm/W**

PHOTOMETRIC CURVE
5% Up
95% Down



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-20	376	14.6
0-30	772	30
0-40	1212	47.1
0-60	1976	76.9
0-80	2373	92.3
0-90	2440	94.9
10-90	2341	91
20-40	837	32.5
20-50	1254	48.8
40-70	1014	39.4
60-80	397	15.4
70-80	147	5.7
80-90	67	2.6
90-110	67	2.6
90-120	91	3.6
90-130	109	4.3
90-150	128	5
90-180	131	5.1
110-180	64	2.5
0-180	2571	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	118	118	118	118	115	115	115	115	108	108	108
1	108	103	99	95	105	100	97	93	95	92	89
2	98	91	84	78	95	88	82	77	84	79	75
3	90	80	72	66	87	78	71	65	74	68	63
4	83	71	63	56	80	70	62	56	67	60	55
5	77	64	55	49	74	63	55	49	60	53	48
6	71	58	49	43	69	57	49	43	55	47	42
7	66	53	44	38	64	52	44	38	50	43	38
8	61	48	40	35	60	47	40	34	46	39	34
9	58	45	37	31	56	44	36	31	42	35	31
10	54	41	34	28	53	41	33	28	39	33	28

LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angle		
	0	45	90
45	4727	2541	2053
55	3960	1850	1474
65	3237	1244	1015
75	2558	752	618
85	1832	387	342

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angle				
	0	22.5	45	67.5	90
0	1073	1073	1073	1073	1073
10	1042	1024	1025	1025	1008
20	955	946	926	914	896
30	828	811	784	758	738
40	676	655	619	586	572
50	507	490	460	432	419
60	348	340	311	294	292
70	211	200	186	181	181
80	104	85	90	94	94
90	21	27	40	48	51
100	18	22	33	38	41
110	15	18	29	36	36
120	11	14	24	30	31
130	8	11	19	24	26
140	5	7	13	18	19
150	2	4	8	11	13
160	1	2	4	5	6
170	0	0	1	1	2
180	0	0	0	0	0

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: S6-1L35K-12-MB-W-L31-PA18-1-**DW**-90
Occupancy Sensor with Casambi Wireless Bluetooth Mesh Control Capability: S6-1L35K-12-MB-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 Encelium	Osram Encelium connectivity
OD	-	**OSRM**			Osram Encelium	Osram SensiLum Connectivity for Enclelium 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