

MODEL NUMBER Example: RNNAWD LLP 24FT MSL8 90CRI 40K 500LMF SSH MDLS DARK NLIGHT 120 F2 C210 REP

Luminaire	Linear Length Plan	Total Run Length	Maximum Section Length	LED Color Rendering	LED Color Temperature	Direct LED Output
RNNAWD	LLP	Linear longest possible	MSL4 4' Section(s)	90CRI 90+ CRI	27K 2700K	300LMF 300 Nominal lumens per foot
	LSL	Longest same length	MSL8 8' Section(s)		30K 3000K	500LMF 500 Nominal lumens per foot
					35K 3500K	700LMF 700 Nominal lumens per foot
					40K 4000K	900LMF 900 Nominal lumens per foot
	LCB	Longest Center Balanced	50K 5000K		**Available in 100 lumen increments between min of 300LMF & max of 900LMF **Nominal distribution. Refer to photometric tests for exact distribution	

Direct Lens (Light Guide Plate)	Driver Type	Minimum Dimming Level	Control Input	Voltage
SSH SoftShine	INTG¹ Integral AC Driver MDLS² Modulus 1. INTG available with ZT only 2. Low - voltage DC drivers. Includes remote head unit with DC power supply and controls adapters	DARK Constant current, dimming to < 1% MIN1 Constant Current dimming to 1%	ZT¹ 0-10V NLIGHT²,⁴ nLight enabled DALI³,⁴ DALI enabled NLTAIR2⁴ nLight AIR enabled ECO1²,⁴ Lutron Ecosystem Interface 1. 0-10V will use linear dimming curve 2. Will use logarithmic dimming curve 3. Not available with sensors. Will use logarithmic dimming curve 4. Available with MDLS only	120 120V 277 277V 347¹ 347V MVOLT 120V-277V 1. 347 not available with EC, E35INV, E50INV, WEC or ECOI

Emergency Options	Primary Zone	Secondary Zone	Tertiary Zone
(Blank) None _EC¹ Emergency circuit module E35INV¹,⁴ 35W Emergency Micro Inverter E50INV¹,³,⁴ 50W Emergency Micro Inverter _ECZ² Zoned Emergency WECZ² Whole run on EC circuit (INTG) WEC¹ Whole run on EC circuit 1. Available with MDLS only. 2. Available with INTG only 3. (Not California Title 20 (T20 Compliant) 4. Not available with 27K, 50K, 347, MVOLT or CP. Only available with 500LMF or greater. Only available on runs of 8ft or greater.	(blank) Select if single zone NS_¹ Select if multi-zones required (with no sensors), call out length of zone in feet. Zone length must match whole fixture lengths, zones cannot end mid-fixture. _VPIR15ADC² Vertex Sensor 1. Not available with NLTAIR2, ECOI or INTG. 2. Available with NLIGHT & MDLS. Not available with secondary or tertiary zones. Max 5 vertex per run. Up to 16 zones can be configured with sensorview in field	(blank) Select if secondary zone is required (with no sensors), call out length of zone in feet. Zone length must match whole fixture lengths, zones cannot end mid-fixture. 1. Not available with NLTAIR2, ECOI or INTG.	(blank) Select if tertiary zone is required (with no sensors), call out length of zone in feet. Zone length must match whole fixture lengths, zones cannot end mid-fixture. 1. Not available with NLTAIR2, ECOI or INTG.

Mounting Head Unit	Color	End Caps	Options
(blank)¹ Select if INTG is chosen F1² Recessed head unit F2² Surface mount head unit 1. Only chose if INTG was chosen. 2. Only chose F1 or F2 Mount if MDLS is chosen	C210 Textured White C202 Textured Black C110 Painted Aluminum C099¹ Custom color RALTBD² RAL Paint Finishes 1 C099 for pricing only. Custom color chip and requested finish needs to be sent in to your Customer Care Rep and matched up with our paint department and customer approved before order is entered. Standard finish choice is Textured (C099T). 2 RALTBD for pricing only, replace with applicable RAL number and finish when ready to order. See the RAL BROCHURE for available color options. Standard finish choice is Textured (RALxxxxT)	SQEP Square End Caps SCEP Sculpted End Caps REP Rounded End Caps	CP¹ Chicago Plenum 1. Available with F1 Mounting only

For additional information on Modulus head unit and emergency options, reference [Modulus spec sheet](#)

SPECIFICATIONS

Housing

Extruded outer and inner aluminum housing for light weight rigidity and support.

End Plates

Die-cast aluminum end plates are mechanically attached with no exposed fasteners. Square end plates standard. Sculpted or Rounded end plates are optional.

Color

Standard colors are textured white, textured black, and painted aluminum. Consult factory for customer colors and RAL color options.

Luminaire Length

4' and 8' lengths in a single section for nominal suspension spacing of 4' and 8'. For total length, add 2 1/2" for each standard end cap, and 4" for each optional end caps.

Source

4 standard lumen packages available with 2700K, 3000K, 3500K, 4000K, 5000K CCT all within a 2.5 step MacAdam Ellipse.

Optics

Direct optical system consists of Softshine high performance acrylic lens and microstructure film.

Mounting

Support kits include formed steel wall brackets painted the same color as the fixture that are attached to the wall structure. Fixtures hang from the wall brackets to allow for adjustment before final installation. Feed kits include an integral low-profile recessed junction box that is hidden by the fixture after installation.

Dimming Driver

Factory-tuned constant current electronic dimming driver is standard. Flicker-free dimming available down to <1%. LED drivers perform within the recommended operating areas for flicker as a function of frequency and modulation (%) IEEE Standard 1789-2015 (IEEE recommended practices for modulating current in high-brightness LEDs for mitigating health risks to viewers), in typical operating conditions at representative dimming levels. Electrical specifications at maximum driver load: PF > 0.9 and THD <20%. Meets FCC Title 47 Class A or Class B.

Modulus Remote Power and Control System

Remote power source provides "natural dimming" with smooth, continuous and flicker-free dimming to dark (0.1%). Syncing for controls: 2mA max.

THD: <10%. Insignificant inrush current at 120 and 277VAC. FCC Class A and B tested for EMI and RFI. When NLIGHT or DALI is specified driver will be set for logarithmic dimming curve. If control Input of 0-10V is specified driver will be set for linear dimming curve.

Integrated digital nLight module enables 16-channel wired networking via Cat-5e and daylighting and occupancy detection via internal sensors located in luminaires. The Modulus™ head unit outputs a maximum of 10mA into the nLight® bus See controls page for internal sensor options

Each integral nLight modulus head unit utilizes 22 device addresses. Tunable White head units consume 14 device addresses.

Electrical

LED light engine — consisting of modular LED boards and eldoLED® dimming driver — is rated for 60,000 hours (L80) at 25° C ambient temperature. Pre-wired with 18AWG fixture wire. Plug in electrical connectors included in fixtures sections, hard wire connections to be made in feed kit recessed junction box.

Head unit can be installed up to 50ft away from feed kit recessed junction box. Minimum 4x 12AWG wires should be run in grounded conduit from Modulus output wires in head unit to the recessed junction box.

Environment

Suitable for damp location.

Validation

cULus listed. Tested to UL2108 Standards. LM-79 tested. Individual sections meet FCC Part 15 requirements. EC, E35INV and E50INV options tested to UL924 standards.

ADA requirements

Luminaire must be installed at a minimum of 80" above the floor.

Packaging

Recycled cardboard box and inserts. Biodegradable, protective luminaire bag. Recycled kraft paper tape.

Warranty

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. The product images shown are for illustration purposes only and may not be an exact representation of the product.

Fixture Weights

2.75 lbs per foot less packaging.

A+ Capable Luminaire

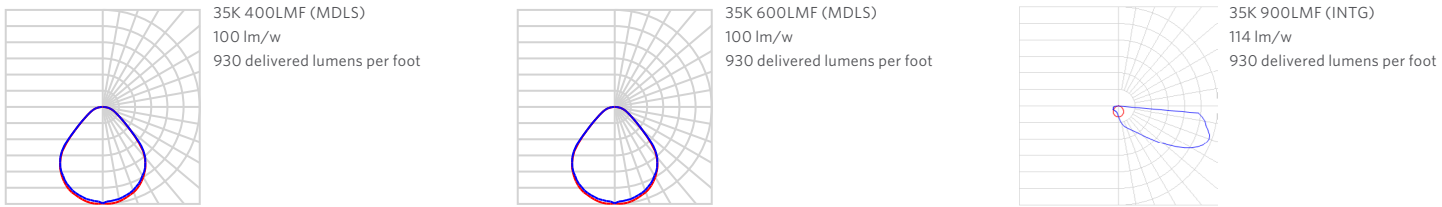
This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning when used with Acuity Brands controls products.

All configurations of this luminaire are calibrated and tested to meet the Acuity Brand's specification for chromatic consistency - including color rendering, color fidelity and color temperature tolerance around standard CIE chromaticity coordinates.

To learn more about Acuity A+ standards, specifications, and testing, visit www.acuitybrands.com/aplus.

The product images shown are for illustration purposes only and may not be an exact representation of the product.

FIXTURE PERFORMANCE DATA



LUMEN PACKAGES Based on 3500K and MDLS. Additional color temperatures available.

Direct LED Output	300LMF	500LMF	700LMF	900LMF
Direct Delivered Lumens Per Foot	354	496	697	885
Total Delivered Lumens Per Foot	354	496	697	885
Input Watts Per Foot	3.4	5	6.8	8.7
Lumens Per Watt	104	99	102	101

*Please pull the appropriate IES file for the hard data number for your luminaire selection.

EXPECTED LIFE: L80@60,000 HOURS

CCT SCALING CHART

CCT	CRI	MULTIPLIER
27K	90CRI	0.97
30K	90CRI	1.02
35K	90CRI	1
40K	90CRI	1.00
50K	90CRI	0.93

UGR CHART

Lumen Package	UGR (70% 50% 20% reflectance using a 4H x 8H room size)	
	Crosswise	Endwise
300LMF	23.2	23
400LMF	23.7	23.5
500LMF	24.2	23.9
600LMF	24.5	24.3
700LMF	21.4	21.2
800LMF	22	21.8
900LMF	22.5	22.3

*UGR varies based on luminaire options and is affected by application dependent parameters. Numbers depicted here are considered "Luminaire-UGR" and/or "Point-UGR" values. To determine a more precise maximum UGR value ("Application-UGR"), a full lighting design layout should be completed with the selected luminaire configuration for each application.

HEAD UNIT RUN LENGTH CHART

MDLS - DK320P	Direct LPF	Max Feet per DK320P head unit, 5% margin										
		Indirect LPF										
		0	300	400	500	600	700	800	900	1000	1100	1200
	0		32	32	32	32	32	32	32	32	32	28
	300	32	32	32	32	32	32	32	24	24	24	20
	400	32	32	32	32	32	32	28	24	24	20	20
	500	32	32	32	32	28	28	24	24	20	20	20
	600	32	32	32	28	24	24	24	20	20	20	16
	700	32	28	28	28	24	24	20	20	20	16	16
	800	32	28	28	24	24	20	20	20	16	16	16
	900	32	24	24	20	20	20	16	16	16	16	16

MDLS - DK75P	Direct LPF	Max Feet per DK75P head unit, 5% margin										
		Indirect LPF										
		0	300	400	500	600	700	800	900	1000	1100	1200
	0		28	20	16	12	12	8	8	8	4	4
	300	24	12	12	8	8	8	4	4	4	4	4
	400	16	8	8	8	8	4	4	4	4	4	4
	500	12	8	8	8	4	4	4	4	4	4	4
	600	12	8	8	4	4	4	4	4	4	4	4
	700	8	4	4	4	4	4	4	4	4	4	4
	800	8	4	4	4	4	4	4	4	4	4	4
	900	8	4	4	4	4	4	4	4	4	0	0

MDLS - E35INV	Direct LPF	Max Feet per DK320P or DK75P E35INV head unit, limits inverter load to 27W max at 30K										
		Indirect LPF										
		0	300	400	500	600	700	800	900	1000	1100	1200
	0		32	32	28	28	24	20	20	20	16	16
	300	32	24	20	20	20	16	16	16	12	12	12
	400	32	20	20	16	16	16	16	12	12	12	12
	500	28	20	16	16	16	16	12	12	12	12	12
	600	24	16	16	16	12	12	12	12	12	12	12
	700	20	16	16	12	12	12	12	12	12	8	8
	800	20	16	12	12	12	12	12	12	8	8	8
	900	16	12	12	12	12	12	12	8	8	8	8

MDLS - E50INV	Direct LPF	Max Feet per DK320P or DK75P E50INV head unit, limits inverter load to 43.5W max at 30K										
		Indirect LPF										
		0	300	400	500	600	700	800	900	1000	1100	1200
	0		32	32	32	32	32	32	32	32	28	28
	300	32	32	32	32	32	28	28	24	24	24	20
	400	32	32	32	28	28	28	24	24	20	20	20
	500	32	32	28	28	24	24	24	20	20	20	20
	600	32	28	28	24	24	24	20	20	20	20	16
	700	32	28	24	24	20	20	20	20	20	16	16
	800	32	24	24	20	20	20	20	16	16	16	16
	900	28	24	20	20	20	20	16	16	16	16	16

*Each Modulus remote driver kit can power up to 32 linear feet of luminaires. Use tables to calculate the number of remote driver units needed in a run or pattern by finding the intersection between your direct and indirect lumen outputs (If Indirect or Direct only, use the zero to represent the direction not applicable.) Modulus units can be a maximum of 50 feet from the mounting junction box.

**This table indicates 1 head unit required for the identified run length * Lumen values based on 3500K color temperature

MAX FEET PER FEED

INTG - 120V	Max Feet Per Feed INTG (120V or MVOLT)					
		0	I300LMF	I600LMF	I900LMF	I1200LMF
	300LMF	240	136	96	68	56
	600LMF	124	88	72	52	44
	900LMF	72	60	52	40	36

INTG - 277V	Max Feet Per Feed INTG (277V)					
		0	I300LMF	I600LMF	I900LMF	I1200LMF
	300LMF	468	268	204	144	120
	600LMF	268	184	152	116	100
	900LMF	160	128	112	92	80

LINEAR PLAN:

PEERLESS offers the ability to provide a continuous run plan to suit your requirements by optionally offering three different methods of configuration.

LSL- Linear Same Length:

In this configuration, each segment is the same length and is standardized based on the longest length available and is the only option provided. Because it is dependent on one segment length there are mathematical limitations on what overall row lengths can be achieved. Example: 20 FT row would be achieved with 5, 4 FT long segments equaling 20 FT (nominal).

LSL	4FT	4FT	4FT	4FT	4FT
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LLP- Linear Longest Possible

In this configuration, the longest length available is optimized, resulting in the fewest segments and mounting locations. Caution, should be used where balanced appearance is a concern. Example: 20 FT run would have 2, 8 FT segment and 1, 4 FT segment at the end of the run.

LLP	8 FT	8 FT	4 FT
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LCB- Linear Center Balanced:

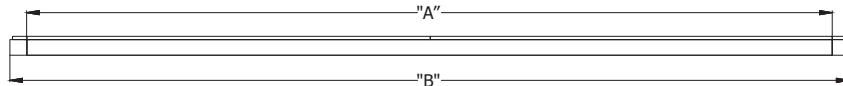
This configuration incorporates the longest center segment(s) along with any additional lengths required to fill the run length, added to the run ends. Example: 16 FT run would have 2, 4 FT segments (one at each end) and 1, 8 FT segment in the center.

LCB	4 FT	8 FT	4 FT
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WEIGHTS & SUPPORT SPACING

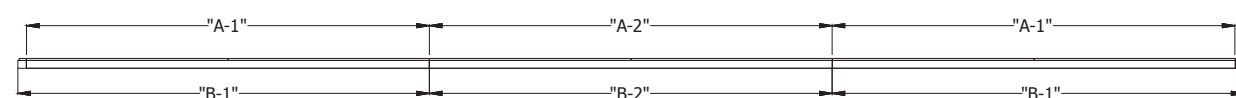
Suspension spacing equals section length. Default location shown.
For full mounting details see installation sheets

RNNAW INDIVIDUAL FIXTURE LAYOUT



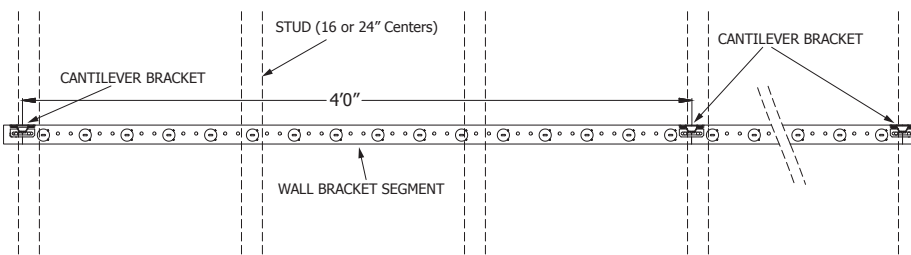
INDIVIDUAL FIXTURES					
ORDERED LENGTH	"A" O.C.	"B" SQEP OVERALL	"B" SCEP OVERALL	"B" REP OVERALL	APPROX. WEIGHT
4FT	4'-0"	4'-4"	4'-6"	4'-6"	11LB
8FT	8'-0"	8'-4"	8'-6"	8'-6"	22LB

RNNAW RUN LAYOUT



RUN LAYOUT							
ORDERED LENGTH	"A-1" O.C.	"A-2" O.C.	"B-1" SQEP OVERALL	"B-1" SCEP OVERALL	"B-1" REP OVERALL	"B-2" OVERALL	APPROX. WEIGHT
4FT	4'-0"	4'-0"	4'-2"	4'-3"	4'-3"	4'-0"	11LB
8FT	8'-0"	8'-0"	8'-2"	8'-3"	8'-3"	8'-0"	22LB

WALL BRACKET LAYOUT



INTELLIGENT LUMINAIRE TECHNOLOGY GUIDE

Choose nomenclature from these columns						
Driver Configurations	Driver Type	Minimum Dimming Level	Control Input	Driver Type	Dimming Range	Notes
	MDLS	MIN1	DALI	eldoLED DCDC DUALdrive	100 to 1%	Logarithmic Dimming, DALI controls and power supply supplied by others
	MDLS	MIN1	ZT	eldoLED DCDC DUALdrive	100 to 1%	Linear Dimming, supplied with leads for two independent zones of 0-10V
	MDLS	MIN1	NLIGHT	eldoLED DCDC DUALdrive	100 to 1%	Logarithmic Dimming, nIO EZDCA 16Z in head unit
	MDLS	MIN1	NLTAIR2	eldoLED DCDC DUALdrive	100 to 1%	Logarithmic Dimming, rIO EZDL in head unit with external antenna
	MDLS	MIN1	ECO1	eldoLED DCDC DUALdrive	100 to 1%	Logarithmic Dimming, Lutron TVI-LMF-2A Ecosystem -> 0-10V converter in head unit
	MDLS	DARK	DALI	eldoLED DCDC DUALdrive	100 to 0.1%	Logarithmic Dimming, DALI controls and power supply supplied by others
	MDLS	DARK	ZT	eldoLED DCDC DUALdrive	100 to 0.1%	Linear Dimming, supplied with leads for two independent zones of 0-10V
	MDLS	DARK	NLIGHT	eldoLED DCDC DUALdrive	100 to 0.1%	Logarithmic Dimming, nIO EZDCA 16Z in head unit
	MDLS	DARK	NLTAIR2	eldoLED DCDC DUALdrive	100 to 0.1%	Logarithmic Dimming, rIO EZDL in head unit with external antenna
Control + Sensor Configurations	INTG	MIN1	ZT	1% dimming integral AC driver	100 to 1%	Linear Dimming, 0-10V controls and power supply supplied by others Select this option for: - Single-circuit 0-10V applications with up to 2 zones of control - Dual-circuit 0-10V applications with 1 zone of control - Non-dimming installations - On/off operation via switched line voltage (relay or wall switch) - Use with nLight or nLight Air power packs
	Control	Sensor	Sensor	Notes		
	NLIGHT	VPIR15ADC	VERTEX 15F EZ ADC VLP	Available in endcaps or midpoint of 8ft fixture section. Max 5 sensors per run. Zoning reconfigurable via Sensorview software.		

UL924 Sequence of Operation

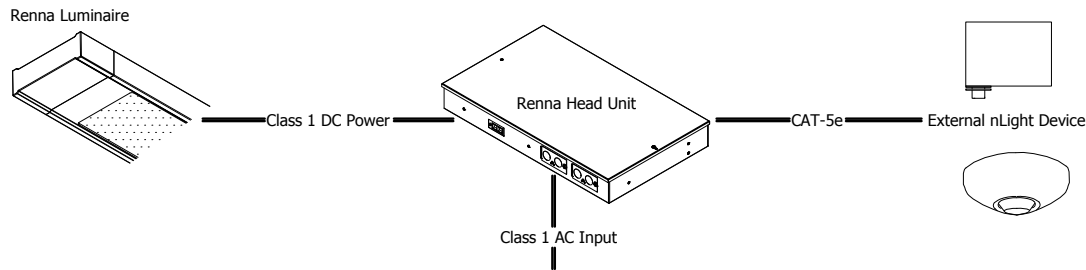
The below information applies to all nLight AIR devices with an EM option.

- EM devices will remain at their high-end trim and ignore wireless lighting control commands, unless a normal-power-sensed (NPS) broadcast is received at least every 8 seconds.
- Using the CLAIRITY+ mobile app, EM devices must be associated with a group that includes a normal power sensing device to receive NPS broadcasts.
- Only non-emergency rPP20, rLSXR, rSBOR, rSDGR, and nLight AIR luminaires with version 3.4 or later firmware can provide normal power sensing for EM devices. See specification sheets for control devices and luminaires for more information on options that support normal power sensing.

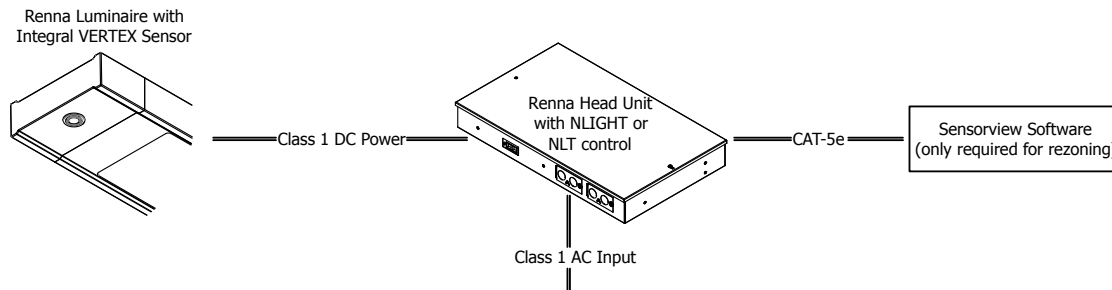
ZONING AND CONTROLS

Remote sensors can be paired with NLIGHT options to control your runs

FOR EXTERNAL CONTROLS

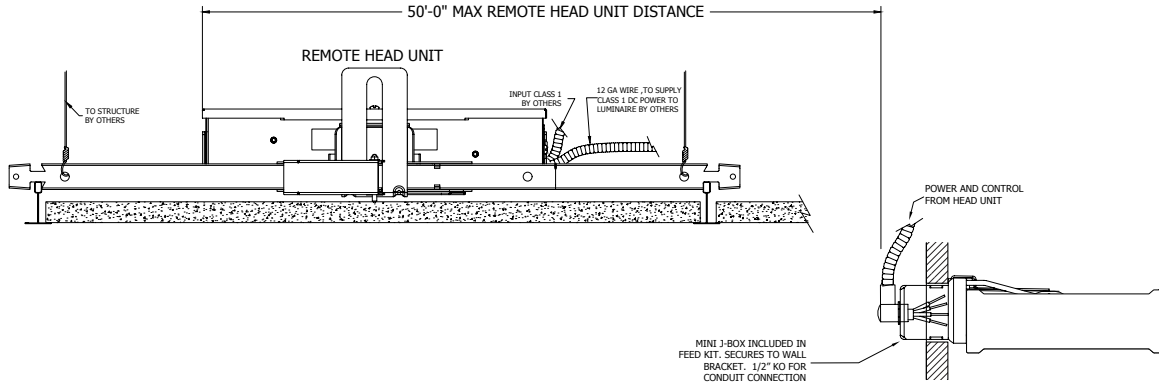


FOR INTERNAL CONTROLS

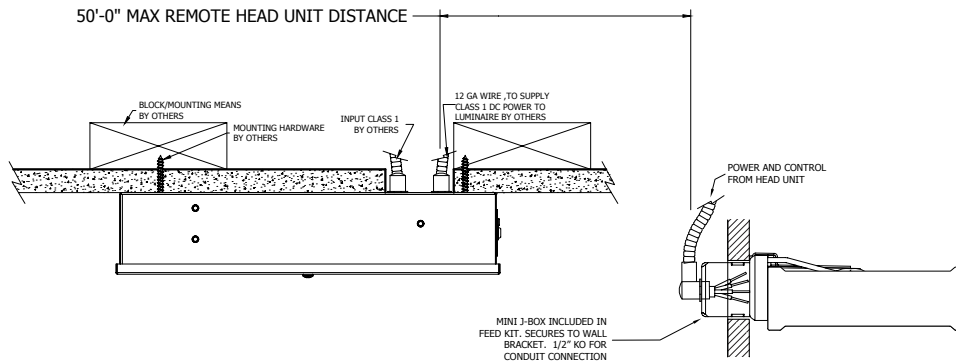


REMOTE HEAD UNITS (MDLS)

F1 MOUNTING DETAILS

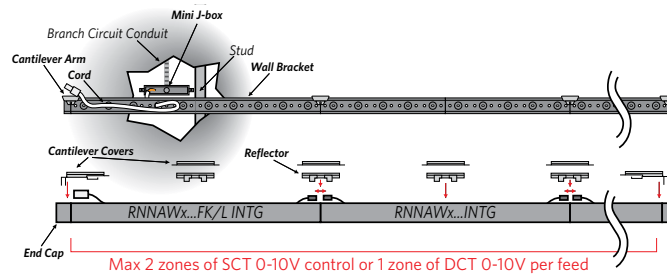


F2 MOUNTING DETAILS

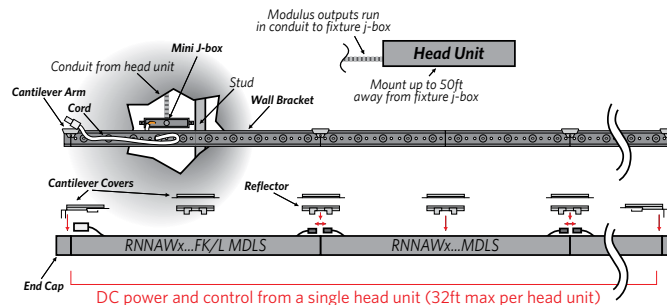


RUN DIAGRAM

INTG



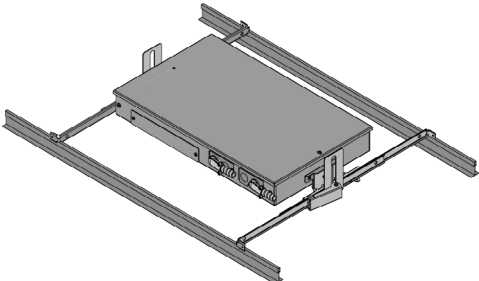
MDLS



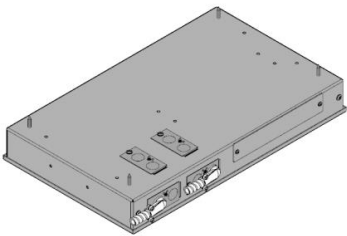
Section Dimensions, All Options



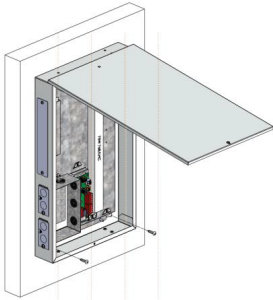
REMOTE HEAD UNITS



F1 GRID MOUNT

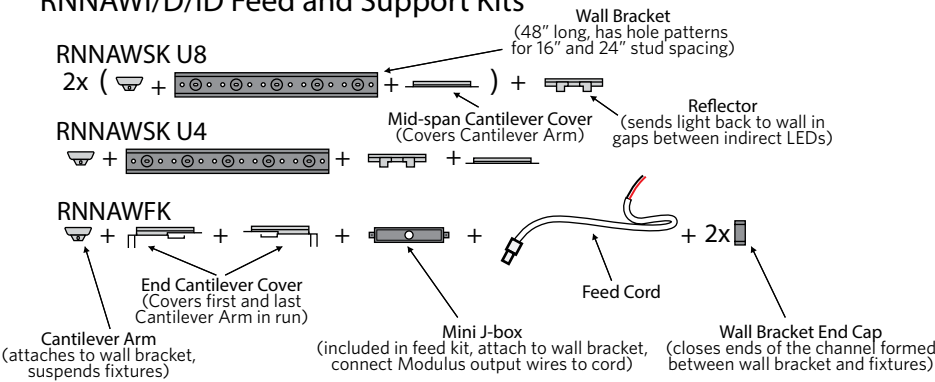


F2 CEILING MOUNT



F2 WALL MOUNT

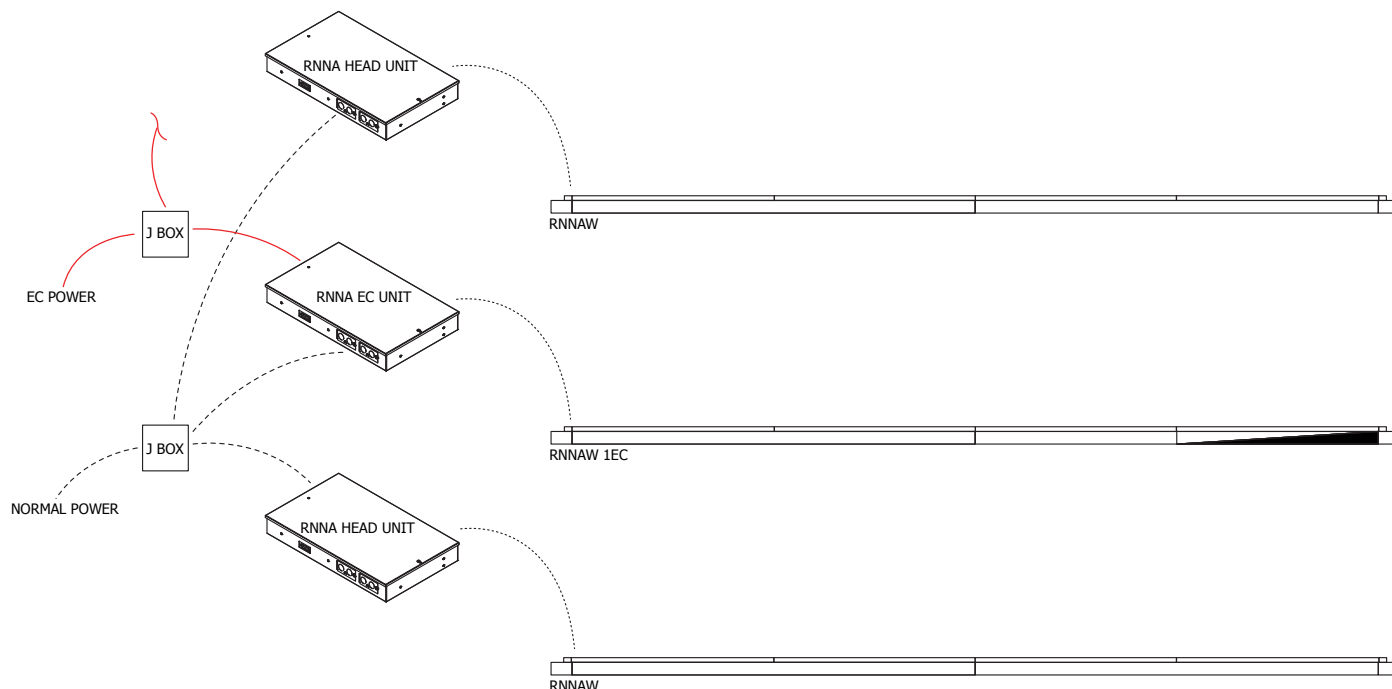
RNNAWI/D/ID Feed and Support Kits



Control Types and Available Zones per Head Unit					
Control Type	Max addressable zones	nLight devices	Max sensors	nLight devices consumed with max sensors	Fixture zoning method
NLIGHT	16	17	5	22	Field programmed - Sensorview
DALI ¹	16	-	0	-	Field programmed - 3rd party DALI commissioning tool
ZT (0-10V)	2	-	0	-	Factory programmed - use NS, SNS fields in order
NLTAIR2 ²	1	-	0	-	N/A (only one zone available)
ECOI ³	1	-	0	-	N/A (only one zone available)
NLTAIR2 with ZT ⁴	2	-	0	-	Factory programmed - use NS, SNS fields in order

¹ Class 1 DALI with no internal isolation from fixture run. Requires user-supplied DALI master controller and power supply
² Uses factory-installed internal single-channel rIO
³ Internal EcoSystem to 0-10V Interface
⁴ Requires 2x user-installed external rPP20D with 0-10V wiring into a standard ZT-type head unit. Order ZT fixtures and rPP separately

TYPICAL BUILDING LAYOUT



EMERGENCY OPTIONS

RNNAWD

Emergency Options:

EC circuits default to the right side 4' section, of an 8' fixture (EC/R) and the complete section of a 4' fixture (EC/L). Single EC circuit defaults to the last 4' of the run. Dual EC circuits default to the last 4' of the run and the first 4' of the run. Additional circuits will be added from the end of the run using the last 4' of an 8' fixture or complete 4' fixtures. If the final fixture is a 2' fixture, the EC circuit will be placed at the next available 4' or 8' fixture section from the end of the run.

EXAMPLES OF TYPICAL EMERGENCY LAYOUTS.

