



Dialight[®] LED Reliant[™] High Bay - UL Technical Specification Sheet - Americas

JANUARY 2020

Reliant™ LED High Bay

100-277 VAC, 347-480 VAC

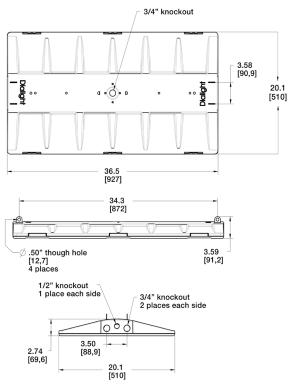


Certifications & Ratings

- UL 1598
- UL 8750
- CSA C22.2 No. 250.0
- Damp location
- L90 rated for >100,000 hours @ 25°C
- DLC Standard & Premium
- Title 24 compliant

Features & Benefits

- 10 year warranty
- Up to 160 lm/W
- 10% up-light accessory available (most models)
- Modular configuration
- Field replaceable parts available
- ٠ Controls enabled



Dimensions in inches [mm] Additional drawings on page 6

Mechanical Information:

Fixture weight:									
Single unit:	18 lb* (polycarbonate, 120 VAC version)								
Tandem unit:	41 lb* (polycarbonate, 120 VAC version)								
*Base models only - does not include add on accessories									
(surge, battery backup, sens	sor) - estimated additional 3 lb								

Mountina:

Fixture color:

Mounting:	Cable/chain Pendant mount kit available (see mounting accessories section on page 17)
Mounting tabs:	2 per side
Cable entries:	3/4" knockout - 2 per side, 1 top 1/2" knockout - 1 per side
Wiring:	8" of flying leads within wiring cavity
Materials:	
Housing:	Halogen free polycarbonate
Lens:	Tempered glass, polycarbonate or acrylic
Mounting tabs:	304 stainless steel

304 stainless steel

Grey Consult factory for additional color options

Electrical Specifications:

Operating voltage:	100-277 VAC 347-480 VAC
Operating temperature: Battery backup:	-40°F to +131°F (-40°C to +55°C) +50°F to +95°F (10°C to +35°C)
Total system power consumption:	See table
EMC:	FCC Title 47, Subpart B, Section 15, Class A
Transient protection: 100-277 VAC: 347-480 VAC:	6kV (10kV optional) 10kV
THD:	<20%
Power factor:	>0.9
Variable dimming:	0-10 VDC
Dimming range:	100%-5%
Photometric Informatio	in:

CRI: 80 Consult factory for more options available CCT: 5000K (cool white) 4000K (neutral white) Consult factory for more options available

All values typical unless otherwise stated (tolerance +/- 10%)

WARNING - INSTALLATION & SECONDARY RETENTION. Use of any Dialight products without proper installation (including secondary retention / netting) and periodic inspections could cause severe injury or death. Dialight recommends that all installations should use secondary retention / netting (appropriate to the installation environment) where applicable. It is the exclusive responsibility of the contractor, installer and/or end-user to: (a) determine the suitability of the product for its intended application; and, (b) ensure that the product is safely installed (with secondary retention / netting where appropriate) and in compliance with all applicable laws and regulations. To the extent permissible under applicable laws, Dialight disclaims all liability for personal injury and/or other damage resulting from any dislodgment or other dislocation of its products.

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Ordering Information

Reliant™ LED High Bay - 100-277 VAC, 347-480 VAC



	Most	Popular Va	iriants (cons	sult factor	y for other options)		
Part Number	Form Factor	Fixture Lumens	Wattage	lm/W	Lens	Beam Distribution	Controls
			100-277 V	AC Model	s		
RHU-5MC2-CDCN-NGN	Single	16,200	123	132	Diffused Polycarbonate	Medium	Dimming
RHU-5MC2-CFCN-NGN	Single	16,200	123	132	Diffused Polycarbonate	Medium	Occupancy Sensor
RHU-7MC2-CDCN-NGN	Single	18,000	123	146	Tempered Glass	Medium	Dimming
RHU-7MC2-CFCN-NGN	Single	18,000	123	146	Tempered Glass	Medium	Occupancy Sensor
RHU-5MC2-EDCN-NGN	Single	21,100	163	129	Diffused Polycarbonate	Medium	Dimming
RHU-7MC2-EDCN-NGN	Single	23,520	163	144	Tempered Glass	Medium	Dimming
RHU-5MC2-FDCN-NGN	Single	26,400	199	133	Diffused Polycarbonate	Medium	Dimming
RHU-7AC2-FDCN-NGN	Single	29,400	199	148	Tempered Glass	Aisle	Dimming
RHU-7MC2-FDCN-NGN	Single	29,400	199	148	Tempered Glass	Medium	Dimming
RHU-7MC2-FFCN-NGN	Single	29,400	199	148	Tempered Glass	Medium	Occupancy Sensor
RHU-5MC2-HDCN-NGN	Single	31,500	239	132	Diffused Polycarbonate	Medium	Dimming
RHU-7MC2-HDCN-NGN	Single	34,500	239	144	Tempered Glass	Medium	Dimming
RHU-7MC2-LDEN-NGN	Tandem Side By Side	47,000	325	145	Tempered Glass	Medium	Dimming
RHU-7MC2-LDDN-NGN	Tandem End To End	47,000	325	145	Tempered Glass	Medium	Dimming
RHU-7MC2-NDEN-NGN	Tandem Side By Side	58,800	398	148	Tempered Glass	Medium	Dimming
RHU-7MC2-NDDN-NGN	Tandem End To End	58,800	398	148	Tempered Glass	Medium	Dimming
RHU-7MC2-RDEN-NGN	Tandem Side By Side	69,000	478	144	Tempered Glass	Medium	Dimming
	·	100-27	7 VAC Batt	ery Backu	p Models		·
RHU-7MC2-CDCN-NGF	Single	18,000	123	146	Tempered Glass	Medium	Dimming
RHU-7MC2-FDCN-NGF	Single	29,400	199	148	Tempered Glass	Medium	Dimming
			347-480 V	AC Model	s		
RHU-5MC9-CDCN-NGN	Single	16,200	125	130	Diffused Polycarbonate	Medium	Dimming
RHU-7MC9-EDCN-NGN	Single	23,500	166	142	Tempered Glass	Medium	Dimming
RHU-5MC9-FDCN-NGN	Single	26,400	203	130	Diffused Polycarbonate	Medium	Dimming
RHU-7MC9-FDCN-NGN	Single	29,400	203	145	Tempered Glass	Medium	Dimming
RHU-7MC9-HDCN-NGN	Single	34,550	244	142	Tempered Glass	Medium	Dimming
RHU-7MC9-LDEN-NGN	Tandem Side By Side	47,000	331	142	Tempered Glass	Medium	Dimming
RHU-7MC9-NDEN-NGN	Tandem Side By Side	58,800	406	145	Tempered Glass	Medium	Dimming
RHU-7MC9-RDEN-NGN	Tandem Side By Side	69,100	487	142	Tempered Glass	Medium	Dimming
RHU-7MC9-RDDN-NGN	Tandem End To End	69,100	487	142	Tempered Glass	Medium	Dimming

All values typical unless otherwise stated (tolerance +/- 10%)



Ordering Information

Reliant™ LED High Bay - 100-277 VAC, 347-480 VAC



	Project Informat	ion	Specifications
Part Number:			
Project:			
Fixture Type:		Date:	

Ordering Information

RH - U -			- N - G		
Product Cert. Lens Code Material	Beam CCT & Oper. Lun Dist. CRI Voltage Ty		Elect. Finish Battery Access.		
Product Code	Beam Distribution	Lumen Type	Hardware Accessories		
RH Reliant™ High Bay	A Aisle	C 18,000 Lumens	N No Cord		
	M Medium	E 23,500 Lumens	2 6' 18-3 STOOW Power Cord		
	P Aisle Distribution with 10%	F 29,400 Lumens	3 12' 18-3 STOOW Power Cord		
	Up-Light (Factory Installed)	H 34,600 Lumens			
Certification	Q Medium Distribution with 10% Up-Light (Factory Installed)	Tandem Models			
U UL 1598, CSA	* Field installable up-light accessory available	L 47,000 Lumens	Electrical Accessories		
		N 58,800 Lumens	N No Option		
		R 69,100 Lumens			
	CCT & CRI		Finish		
Lens Material	C Cool White 5000K - 80 CRI	Controls			
2 Acrylic - Clear	N Neutral White 4000K - 80 CRI	D Dimming (0-10V)	G Gray		
4 Polycarbonate - Clear		F Occupancy Sensor FSP-212	,		
5 Polycarbonate - Diffused		G Occupancy Sensor, Bluetooth FSP-321B			
7 Tempered Glass - Clear	Operating Voltage	J IntelliLED™ Wireless Controls			
	2 100-277 VAC,		Battery		
	6kV Surge Protection		F Standard Battery Backup - 5W		
	8 100-277 VAC, 10kV Surge Protection	Configuration	G Battery Backup - 10W		
	9 347-480 VAC	C Single	N No Option		
	10kV Surge Protection	D Tandem End to End			
		E Tandem Side by Side			

Notes
1) Lumen type based on using a glass lens, medium optic, cool white, 80 CRI. See tables for lumens when changing options.
2) For Lumen types L, N, R, use Mounting Option D - Tandem End to End or E - Tandem Side by Side.
3) Up-light accessory available with Lumen Type - C, E, F, L, N models only.
4) Hardware accessories not available on battery back-up models.



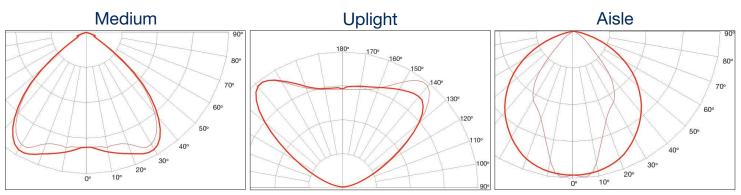


Lumen Tables

				100-277 VA	0			
CRI	Output Family	Beam Distribution	Lens	Wattage	Lumens 5000K CCT	5000K CCT lm/W	Lumens 4000K CCT	4000K CCT lm/W
			Glass		69,090	145	67,708	142
		Aisle	Acrylic Clear] [68,385	143	67,017	140
		AISIE	Polycarbonate - Clear] [64,860	136	63,563	133
80	70,500		Polycarbonate - Diffused	478	62,040	130	60,799	127
80	70,500		Glass	4/0	69,090	145	67,708	142
		Medium	Acrylic Clear]	68,385	143	67,017	140
		Iviedium	Polycarbonate - Clear	1 [64,860	136	63,563	133
		Í	Polycarbonate - Diffused	1 1	62,040	130	60,799	127
	İ		Glass		58,800	148	57,624	145
			Acrylic Clear	1 1	58,200	146	57,036	143
		Aisle	Polycarbonate - Clear	1 1	55,200	139	54,096	136
			Polycarbonate - Diffused	í ľ	52,800	133	51,744	130
80	60,000		Glass	398	58,800	148	57,624	145
			Acrylic Clear	1 1	58,200	146	57,036	143
		Medium	Polycarbonate - Clear	1 1	55,200	139	54,096	136
			Polycarbonate - Diffused	ł ł	52,800	133	51,744	130
			Glass		47,040	145	46,099	142
			Acrylic Clear	1 F	46,560	143	45,629	142
		Aisle	Polycarbonate - Clear	{ }	44,160	136	43,277	140
				{	44,160	130		133
80	48,000		Polycarbonate - Diffused Glass	325	42,240		41,395 46,099	127
						145		
		Medium	Acrylic Clear	-	46,560	143	45,629	140
			Polycarbonate - Clear		44,160	136	43,277	133
			Polycarbonate - Diffused		42,240	130	41,395	127
			Glass		34,545	145	33,854	142
		Aisle	Acrylic Clear	ļļļ	34,193	143	33,509	140
		1 1010	Polycarbonate - Clear		32,430	136	31,781	133
80	35,250		Polycarbonate - Diffused	239	31,020	130	30,400	127
00	00,200		Glass		34,545	145	33,854	142
		Medium	Acrylic Clear		34,193	143	33,509	140
			Polycarbonate - Clear		32,430	136	31,781	133
			Polycarbonate - Diffused		31,020	130	30,400	127
			Glass		29,400	148	28,812	145
		A:=1=	Acrylic Clear] [29,100	146	28,518	143
		Aisle	Polycarbonate - Clear	1 [27,600	139	27,048	136
			Polycarbonate - Diffused		26,400	133	25,872	130
80	30,000		Glass	199	29,400	148	28,812	145
			Acrylic Clear	1 1	29,100	146	28,518	143
		Medium	Polycarbonate - Clear	1 1	27,600	139	27,048	136
			Polycarbonate - Diffused	1 1	26,400	133	25,872	130
	i		Glass	i i	23,520	145	23,050	142
			Acrylic Clear	1 1	23,280	143	22,814	142
		Aisle	Polycarbonate - Clear	1 F	22,080	136	21,638	133
			Polycarbonate - Diffused	1 F	21,120	130	20,698	127
80	24,000		Glass	163	23,520	145	23,050	142
			Acrylic Clear	{ }	23,280	143	22,814	142
		Medium	Polycarbonate - Clear	{	22,080	136	21,638	140
				{ }				
			Polycarbonate - Diffused	<u> </u>	21,120	130	20,698	127
			Glass	4 -	18,032	147	17,671	144
		Aisle	Acrylic Clear		17,848	146	17,491	143
			Polycarbonate - Clear		16,928	138	16,589	135
80	18,400		Polycarbonate - Diffused	123	16,192	132	15,868	130
00	10,700		Glass	120	18,032	147	17,671	144
		Medium	Acrylic Clear	[[17,848	146	17,491	143
		WEGIUITI	Polycarbonate - Clear] [16,928	138	16,589	135
			Polycarbonate - Diffused	<u> </u>	16,192	132	15,868	130
70	10,100	Aisle	Glass	100	19,294	158	18,908	154
70	18,400	Medium	Glass	123	19,294	158	18,908	154

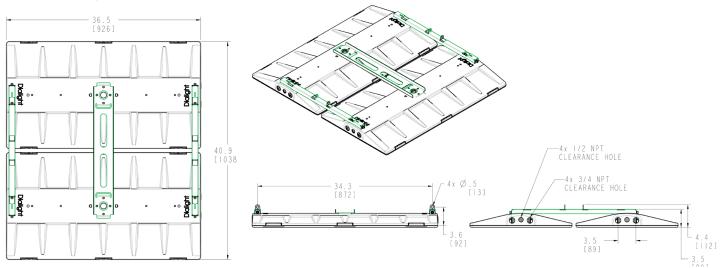


Beam Distribution

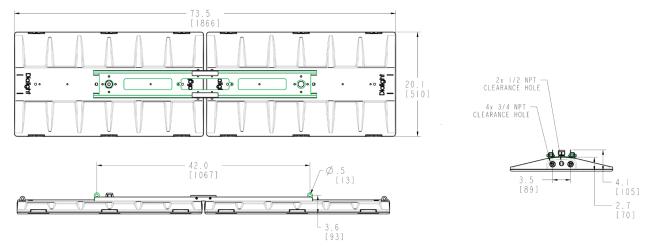


Dimensional Drawings

Tandem - Side by Side



Tandem - End to End





Inrush Current / Circuit Breakers

Model	Max Wattage	Inrush Current @ Input Voltage			Approx. Time Duration (T50) of Inrush Current			Max # of Lights per Breaker @100 VAC			Max # of Lights per Breaker @120 VAC			Max # of Lights per Breaker @277 VAC		
		100 VAC	120 VAC	277 VAC	100 VAC	120 VAC	277 VAC	C10	B16	C16	C10	B16	C16	C10	B16	C16
18k	142	6.5A	7.7A	18A	1.5ms	1.5ms	1.5ms	5	8	8	6	10	10	14	22	22
18k-U	152	6.5A	7.7A	18A	1.5ms	1.5ms	1.5ms	5	7	7	6	9	9	13	20	20
24k	188	6.5A	7.7A	18A	1.5ms	1.5ms	1.5ms	4	6	6	5	7	7	10	17	17
24k-U	205	6.5A	7.7A	18A	1.5ms	1.5ms	1.5ms	3	6	6	4	7	7	9	15	15
30k	232	6.5A	7.7A	18A	1.5ms	1.5ms	1.5ms	3	5	5	4	6	6	8	13	13
30k-U	257	6.5A	7.7A	18A	1.5ms	1.5ms	1.5ms	3	4	4	3	5	5	8	12	12
36k	267	6.5A	7.7A	18A	1.5ms	1.5ms	1.5ms	3	4	4	3	5	5	7	11	11
48k	376	13A	15.4A	36A	1.5ms	1.5ms	1.5ms	2	3	3	2	3	3	5	8	8
48k-U	410	13A	15.4A	36A	1.5ms	1.5ms	1.5ms	1	3	3	2	3	3	4	7	7
60k	464	13A	15.4A	36A	1.5ms	1.5ms	1.5ms	1	2	2	2	3	3	4	6	6
60k-U	514	13A	15.4A	36A	1.5ms	1.5ms	1.5ms	1	2	2	1	2	2	4	6	6
72k	534	13A	15.4A	36A	1.5ms	1.5ms	1.5ms	1	2	2	1	2	2	3	5	5

-U = 10% up-light accessory models

Model	Max Wattage	Inrush Current @ Input Voltage		Approx. Time of Inrush		Lights pe @ 347 VAC		Max # of Lights per Breaker @ 480VAC			
		347 VAC	347 VAC 480 VAC		347 VAC 480 VAC		C10 B16		C10	B16	C16
18k	134	4A	5.6A	1.8ms	1.8ms	18	29	29	25	40	40
18k-U	152	4A	5.6A	1.8ms	1.8ms	16	26	26	22	35	35
24k	177	4A	5.6A	1.8ms	1.8ms	14	22	22	19	30	30
24k-U	198	4A	5.6A	1.8ms	1.8ms	12	20	20	17	27	27
30k	224	4A	5.6A	1.8ms	1.8ms	11	18	18	15	24	24
30k-U	245	4A	5.6A	1.8ms	1.8ms	10	16	16	14	22	22
36k	264	4A	5.6A	1.8ms	1.8ms	9	15	15	13	21	21
48k	354	8A	11.2A	1.8ms	1.8ms	7	11	11	9	15	15
48k-U	396	8A	11.2A	1.8ms	1.8ms	6	10	10	8	13	13
60k	448	8A	11.2A	1.8ms	1.8ms	5	9	9	7	12	12
60k-U	490	8A	11.2A	1.8ms	1.8ms	5	8	8	7	11	11
72k	528	8A	11.2A	1.8ms	1.8ms	4	7	7	6	10	10

-U = 10% up-light accessory models



Lumen Maintenance Factor

	% Lumen Output (Models ≤ 24k lm)												
Amt	pient												
Temperature		0	15000	30000	45000 60000		75000	90000	100000	150000			
25°C	77°F	100%	98%	96%	95%	94%	92%	91%	90%	86%			
30°C	86°F	99%	97%	95%	94%	93%	92%	90%	89%	85%			
35°C	95°F	98%	96%	95%	93%	92%	91%	90%	89%	85%			
40°C	104°F	97%	95%	94%	93%	91%	90%	89%	88%	84%			
45°C	113°F	97%	94%	93%	92%	90%	89%	88%	87%	83%			
50°C	122°F	96%	94%	92%	91%	90%	88%	87%	86%	83%			
55°C	131°F	95%	93%	91%	90%	89%	88%	87%	86%	82%			

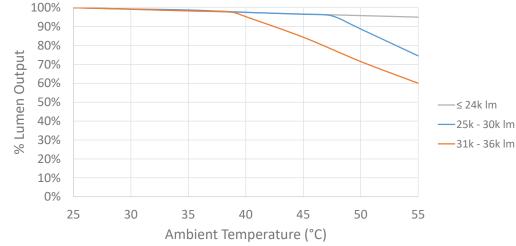
	% Lumen Output (25k Im < Models < 30k Im)													
Amt	pient		Hours											
Temperature		0	15000	30000	0 45000 60000		75000	90000	100000	150000				
25°C	77°F	100%	98%	96%	95%	94%	92%	91%	90%	86%				
30°C	86°F	99%	97%	96%	94%	93%	92%	90%	90%	86%				
35°C	95°F	99%	96%	95%	94%	93%	91%	90%	89%	85%				
40°C	104°F	98%	95%	94%	93%	91%	90%	89%	88%	84%				
45°C	113°F	97%	94%	93%	92%	90%	89%	88%	87%	83%				
50°C	122°F	89%	87%	85%	84%	83%	82%	81%	80%	76%				
55°C	131°F	75%	73%	72%	71%	70%	69%	68%	67%	64%				

% Lumen Output (31k Im < Models < 36k Im)										
Ambient Temperature		Hours								
		0	15000	30000	45000	60000	75000	90000	100000	150000
25°C	77°F	100%	98%	96%	95%	94%	92%	91%	90%	86%
30°C	86°F	99%	97%	96%	94%	93%	92%	90%	90%	85%
35°C	95°F	98%	96%	95%	93%	92%	91%	90%	89%	85%
40°C	104°F	95%	93%	92%	90%	89%	88%	87%	86%	82%
45°C	113°F	84%	82%	81%	80%	79%	78%	77%	76%	73%
50°C	122°F	72%	70%	69%	68%	67%	66%	65%	65%	62%
55°C	131°F	60%	59%	58%	57%	56%	55%	55%	54%	52%

All tables are for single unit models only. For tandem models, 48k similar to 24k, 60k is similar to 30k, and 72k is similar to 36k.

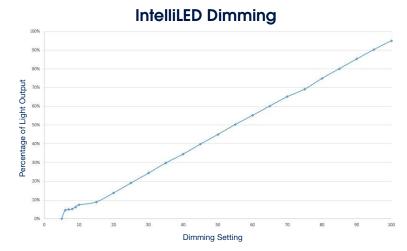


Thermal Roll-Off

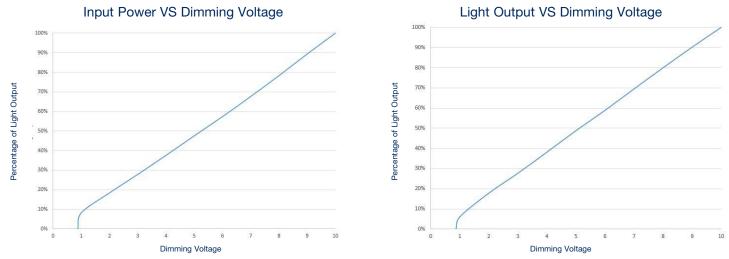


For single unit models only. For tandem models, 48k similar to 24k, 60k is similar to 30k, and 72k is similar to 36k.

Dimming Characterization

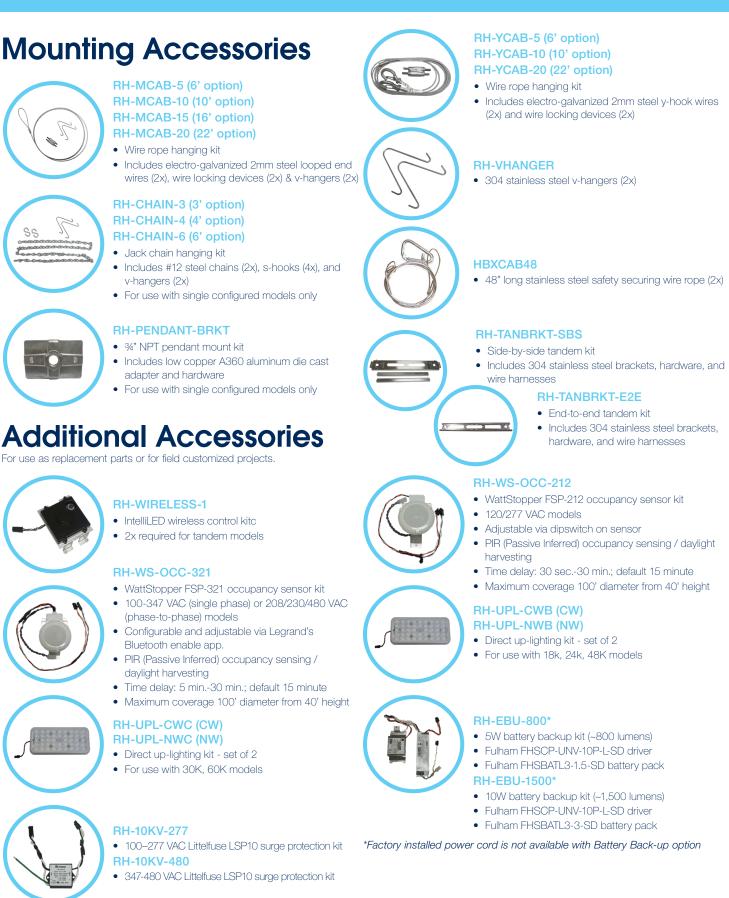


0-10V Dimming



Dialight

High Bay | Technical Information



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