

# 2 SERIES GEMINI

Precision engineered downlight family featuring pinhole apertures available in powder coat or plated finishes for flange overlay or flush installations.

PROJECT NAME:	TYPE:
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## ORDERING INFORMATION

**TITLE 24 COMPLIANT** JA8-2022 COMPLIANCE INDICATED BY SHADING

TRIM		RATING	FLANGE FINISH	LUMEN PACKAGE	CCT	OPTIC		INSTALL TYPE	CEILING THICKNESS	POWER SUPPLY	MEDIA		FLANGE CONFIGURATION
#1	#2					#1	#2				#1	#2	
<b>G</b>													
2RA	Round Expanded Adjustable	1 Dry/Damp 2 Wet* *(Lens sealed in place)	WH White	<b>STATIC WHITE</b> <b>80S11A</b> 80+ CRI, 11 Watts (Delivered - 2RS 1152, 2PS 1111, 2SS 1163) <b>80S15A</b> 80+ CRI, 15 Watts (Delivered - 2RS 1554, 2PS 1504, 2SS 1569) <b>80S21A</b> 80+ CRI, 21 Watts* (Delivered - 2RS 2126, 2PS 2022, 2SS 2147) *(Not available for IC, IR, AT, or AR install types)	27 2700K 30 3000K 35 3500K 40 4000K	10 10** *(Only available with 15A wattage packages) 15 15** 20 20* 25 25* 40 40* 60 60** *(Not available for 2PA, 2PD, or 2PS)	HOUSING W/INTEGRAL DRIVER (HB) NC Non-IC IC IC AT IC, Airtight* *(CCEA, Airtight and Title 24 compliant housing)	1 0.50" - 0.75" 2 0.76" - 1.25" 3 1.26" - 2.00" *(Not available for 2RW, 2SW 2PG, or 2SG) 4 2.01" - 3.00" *(Not available for 2RW, 2SW 2PG, or 2SG)	(120V) TR2 Philips, 2% Leading/Trailing/Triac* *(120-277V) LH1 Lutron, Hi-Lume 1% Ecosystem LP1 Lutron, Premier 0.1% Ecosystem AN4 Philips Xitanium 1% 0-10V, LOG LN2 Philips Xitanium 1% 0-10V, LIN EA2 eldoLED, SOLOdrive 0.1% 0-10V, LOG LA2 eldoLED, SOLOdrive 0.1% 0-10V, LIN ED1 eldoLED, SOLOdrive 0.1% DALI-2, LOG LD1 eldoLED, SOLOdrive 0.1% DALI-2, LIN	STANDARD MEDIA 04 Soft Focus Lens 00 No Lens* *(Standard for 10° optic, Not available for wet location or Warm Dim) WL WallWash Lens* *(Required for 2RW and SW) GL Wall Grazer* *(Required for 2PG and 2SG)	F Flange Overlay (No Applique) G Zero Sightline, 1/16" Applique - Gypsum* *(Not available for wet location, cannot mix round and square trims) P Zero Sightline, 1/8" Applique - Plaster* *(Not available for wet location, cannot mix round and square trims)		
2PA	Round Pinhole Adjustable		AG Satin Silver									<b>90S11A</b> 90+ CRI, 11 Watts (Delivered - 2RS 993, 2PS 958, 2SS 1003) <b>90S15A</b> 90+ CRI, 15 Watts (Delivered - 2RS 1340, 2PS 1297, 2SS 1353) <b>90S21A</b> 90+ CRI, 21 Watts* (Delivered - 2RS 1833, 2PS 1743, 2SS 1851) *(Not available for IC, IR, AT, or AR install types)	20 20° 25 25° 40 40° 60 60** *(Not available for 2PA, 2PD, or 2PS) WW WallWash* *(Required for 2RW and 2SW) WG Wall Grazer* *(Required for 2PG and 2SG)
2SA	Square Expanded Adjustable	IG Industrial Gray	<b>97S11A</b> 97+ CRI, 11 Watts (Delivered - 2RS 874, 2PS 843, 2SS 883) <b>97S15A</b> 97+ CRI, 15 Watts (Delivered - 2RS 1179, 2PS 1411, 2SS 1191) <b>97S21A</b> 97+ CRI, 21 Watts (Delivered - 2RS 1613, 2PS 1534, 2SS 1629) *(Not available for IC, IR, AT, or AR install types)	WL 2700K - 1800K *(Not available for 2PA, 2PD, or 2PS) WW WallWash* *(Required for 2RW and 2SW) WG Wall Grazer* *(Required for 2PG and 2SG)	CH Chrome* *(Increased lead time)	MB Matte Bronze* *(Increased lead time)	PB Polished Bronze* *(Increased lead time)	PR Primer CF Custom* *(Consult Factory)	*SEE PAGE 3 FOR DETAILED WARM DIM PROFILE COMPARISON.  *SEE PAGE 4 FOR DETAILED WARM DIM PROFILE COMPARISON.  *ALL DELIVERED LUMEN OUTPUTS AND T24 COMPLIANCE REFLECT 3000K PAIRED WITH 20° WW OR WG OPTIC AND SOFT FOCUS LENS. REFER PAGE 5 FOR ADDITIONAL T24 COMPLIANT CONFIGURATIONS.				
2RD	Round Expanded Fixed Deep Regress	AU Cashmere Gold	<b>90W15A</b> 90+ CRI, 15 Watts* Incandescent Profile: 2700K - 1800K (Delivered - 2RS 959, 2PS 974, 2SS 984) Standard Profile: 3000K - 1800K (Delivered - 2RS 963, 2PS 970, 2SS 980) *(Not available for IC, IR, AT, or AR install types)							WD 3000K - 1800K	SS Stainless Steel* *(Increased lead time)	CH Chrome* *(Increased lead time)	MB Matte Bronze* *(Increased lead time)
2RD	Round Expanded Fixed Deep Regress	AU Arch Bronze	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)					
2PD	Round Pinhole Fixed Deep Regress	BB Burnt Bronze	*(Not available for IC, IR, AT, or AR install types)						*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)
2SD	Square Expanded Fixed Deep Regress	BK Black	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)					
2RS	Round Expanded Fixed Shallow Regress	SS Stainless Steel*	*(Not available for IC, IR, AT, or AR install types)						*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)
2PS	Round Pinhole Fixed Shallow Regress	CH Chrome*	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)					
2SS	Square Expanded Fixed Shallow Regress	MB Matte Bronze*	*(Not available for IC, IR, AT, or AR install types)						*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)
2RW	Round Expanded WallWasher	PB Polished Bronze*	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)					
2SW	Square Expanded WallWasher	PR Primer	*(Not available for IC, IR, AT, or AR install types)						*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)
2PG	Round Pinhole Wall Grazer	CF Custom*	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)					
2SG	Square Expanded Wall Grazer		*(Not available for IC, IR, AT, or AR install types)						*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)	*(Not available for IC, IR, AT, or AR install types)



## PART NUMBER NOTES

- Trims ships as e.g. 2RA1-WH-80S11A1-2HB1-TR204
- Housing ships as e.g. NCG-2RF-1-LED-01
- Requires two drivers; drivers ship with trims
- Remote drivers ship with trims as e.g. PS-RMT-80S11A-1TR2
- Applique ships with housing or Remodel trims.



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## ACCESSORIES

### ALTERNATE MEDIA

#### QTY

___	<b>HCL-2</b>	Honeycomb Louver* <small>*(Not available for wet location or Warm Dim)</small>
___	<b>CGL-2</b>	Clear Glass Lens* <small>*(Not available for Warm Dim)</small>
___	<b>SFL-2</b>	Soft Focus Lens
___	<b>FGL-2</b>	Frosted Glass Lens
___	<b>UVL-2</b>	Ultra Violet Lens
___	<b>FLSL-2</b>	Frosted Linear Spread Lens* <small>*(Not available for wet location)</small>
___	<b>SFL-2-SP</b>	Shatterproof Soft Focus Lens
___	<b>FGL-2-SP</b>	Shatterproof Frosted Lens

### REPLACEMENT OPTIC

Interchangeable optics accessible through fixture aperture.

#### Static White

#### QTY

___	<b>RO-50-15-S</b>	15° optic
___	<b>RO-50-20-S</b>	20° optic
___	<b>RO-50-25-S</b>	25° optic
___	<b>RO-50-40-S</b>	40° optic
___	<b>RO-50-60-S</b>	60° optic* <small>*(Not available for 2PA, 2PD or 2PS)</small>
___	<b>RO-50-WW-S</b>	Wallwash Optic* <small>*(Only available for 2RW and 2SW)</small>
___	<b>RO-50-WG-S</b>	Wall Grazer Optic* <small>*(Only available for 2PG and 2SG)</small>

#### WARM DIM

#### QTY

___	<b>RO-50-20-W</b>	20° optic
___	<b>RO-50-25-W</b>	25° optic
___	<b>RO-50-40-W</b>	40° optic
___	<b>RO-50-60-W</b>	60° optic* <small>*(Not available for 2PA, 2PD or 2PS)</small>
___	<b>RO-50-WW-W</b>	Wallwash Optic* <small>*(Only available for 2RW and 2SW)</small>
___	<b>RO-50-WG-W</b>	Wall Grazer Optic* <small>*(Only available for 2PG and 2SG)</small>

### HANGER BAR EXTENDER KIT

Extends hanger bars from 24.0" to 46.0" maximum.

#### QTY

___	<b>2S-HBE-46</b>	Extender, Hanger Bar
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### FURRING CHANNEL ACCESSORY KIT

Recommended for installations in furring channel. Available for ceiling thicknesses from 0.125" - 1.25".

#### QTY

___	<b>DHA-FC-KIT</b>	Accessory, Furring Channel
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### ADJUSTMENT TOOL

One included with every four fixtures.

#### QTY

___	<b>TOOL-HEX-050</b>	
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### ROUTER TOOL GUIDE (Dry / Damp locations only)

Recommended for Zero-Sightline installations in wood ceilings.

#### QTY

___	<b>DLA-RTG-2S-RD</b>	Tool, router guide, round; reusable
___	<b>DLA-RTG-2S-SQ</b>	Tool, router guide, square; reusable

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## PERFORMANCE - 3000K



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CRI / WATTAGE PACKAGE	WATTAGE	ADJUSTABLE - 20° OPTIC - SOFT FOCUS LENS					
		2RA		2PA		2SA	
		DELIVERED	LPW	DELIVERED	LPW	DELIVERED	LPW
80S11A	11	1076	98	886	80	1011	92
80S15A	15	1471	98	1194	80	1386	92
80S21A	21	1974	94	1624	77	1856	88
90S11A	11	928	84	764	69	872	79
90S15A	15	1268	84	1029	69	1195	80
90S21A	21	1702	81	1400	67	1600	76
97S11A	11	817	74	672	61	767	70
97S15A	15	1116	74	905	60	1052	70
97S21A	21	1498	71	1232	59	1408	67
90W15AL (WL 27K-18K)	15	917	69	791	53	862	57
90W15AD (WD 30K-18K)	15	904	60	756	50	850	57

CRI / WATTAGE PACKAGE	WATTAGE	DEEP REGRESS - 20° OPTIC - SOFT FOCUS LENS					
		2RD		2PD		2SD	
		DELIVERED	LPW	DELIVERED	LPW	DELIVERED	LPW
80S11A	11	1109	101	998	91	1109	101
80S15A	15	1486	99	1349	90	1486	99
80S21A	21	2025	96	1828	87	2025	96
90S11A	11	956	87	860	78	956	87
90S15A	15	1281	85	1163	77	1281	85
90S21A	21	1746	83	1576	75	1746	83
97S11A	11	841	76	757	69	841	76
97S15A	15	1127	75	1023	68	1127	75
97S21A	21	1536	73	1387	66	1536	73
90W15AL (WL 27K-18K)	15	915	61	857	57	915	61
90W15AD (WD 30K-18K)	15	943	63	879	59	943	63

CRI / WATTAGE PACKAGE	WATTAGE	SHALLOW REGRESS - 20° OPTIC - SOFT FOCUS LENS					
		2RS		2PS		2SS	
		DELIVERED	LPW	DELIVERED	LPW	DELIVERED	LPW
80S11A	11	1152	105	1111	101	1163	106
80S15A	15	1554	104	1504	100	1569	105
80S21A	21	2126	101	2022	96	2147	102
90S11A	11	993	90	958	87	1003	91
90S15A	15	1340	89	1297	86	1353	90
90S21A	21	1833	87	1743	83	1851	88
97S11A	11	874	79	843	77	883	80
97S15A	15	1179	79	1141	76	1191	79
97S21A	21	1613	77	1534	73	1629	77
90W15AL (WL 27K-18K)	15	959	64	965	64	969	65
90W15AD (WD 30K-18K)	15	963	64	971	65	973	65

CRI / WATTAGE PACKAGE	WATTAGE	ADJUSTABLE - 10° OPTIC - NO LENS					
		2RA		2PA		2SA	
		DELIVERED	LPW	DELIVERED	LPW	DELIVERED	LPW
80S15C	15	921	61	732	49	850	57
90S15C	15	794	53	631	42	733	49
97S15C	15	685	46	544	36	632	42

### OUTPUT MULTIPLIER

CCT	CCT SCALE
2700K	0.97
3000K	1.00
3500K	1.03
4000K	1.08

### MEDIA LIGHT LOSS FACTOR

MEDIA	LIGHT LOSS FACTOR
NO LENS	1.15
CGL	1.03
SFL	1.00
FGL	0.79
FSFL	0.70
FLSL	0.70
HCL	0.81

CRI / WATTAGE PACKAGE	WATTAGE	DEEP REGRESS - 10° OPTIC - NO LENS					
		2RD		2PD		2SD	
		DELIVERED	LPW	DELIVERED	LPW	DELIVERED	LPW
80S15C	15	984	66	929	62	982	65
90S15C	15	848	57	801	53	846	56
97S15C	15	732	49	691	46	730	49

### OUTPUT MULTIPLIER

CCT	CCT SCALE
2700K	0.97
3000K	1.00
3500K	1.03
4000K	1.08

### MEDIA LIGHT LOSS FACTOR

MEDIA	LIGHT LOSS FACTOR
NO LENS	1.08
CGL	1.02
SFL	1.00
FGL	0.85
FSFL	0.76
FLSL	0.73
HCL	0.74

CRI / WATTAGE PACKAGE	WATTAGE	SHALLOW REGRESS - 10° OPTIC - NO LENS					
		2RS		2PS		2SS	
		DELIVERED	LPW	DELIVERED	LPW	DELIVERED	LPW
80S15C	15	1131	75	1095	73	1135	76
90S15C	15	975	65	944	63	978	65
97S15C	15	841	56	815	54	844	56

### OUTPUT MULTIPLIER

CCT	CCT SCALE
2700K	0.97
3000K	1.00
3500K	1.03
4000K	1.08

### MEDIA LIGHT LOSS FACTOR

MEDIA	LIGHT LOSS FACTOR
NO LENS	1.04
CGL	1.01
SFL	1.00
FGL	0.89
FSFL	0.80
FLSL	0.79
HCL	0.67

# 2 SERIES LED GEMINI

## PERFORMANCE - 3000K

CRI / WATTAGE PACKAGE	WATTAGE	WALL GRAZER			
		2PG		25G	
		DELIVERED	LPW	DELIVERED	LPW
80S11A	11	536	49	628	57
80S15A	15	724	48	856	57
80S21A	21	1000	48	1156	55
90S11A	11	462	46	541	54
90S15A	15	624	44	738	51
90S21A	21	862	41	997	47
97S11A	11	406	37	494	38
97S15A	15	549	37	649	43
97S21A	21	758	36	877	42
90W15AL (WL 27K-18K)	15	386	26	406	27
90W15AD (WD 30K-18K)	15	369	25	453	30

OUTPUT MULTIPLIER

CCT	CCT SCALE
2700K	0.957
3000K	1.000
3500K	1.019
4000K	1.030

CRI / WATTAGE PACKAGE	WATTAGE	WALLWASH			
		2RW		2SW	
		DELIVERED	LPW	DELIVERED	LPW
80S11A	11	680	56	554	49
80S15A	15	926	62	770	51
80S21A	21	1245	59	1029	49
90S11A	11	586	53	478	43
90S15A	15	798	53	664	44
90S21A	21	1073	51	887	42
97S11A	11	516	47	421	38
97S15A	15	702	47	584	39
97S21A	21	944	45	781	37
90W15AL (WL 27K-18K)	15	571	38	496	33
90W15AD (WD 30K-18K)	15	578	38	497	33

OUTPUT MULTIPLIER

CCT	CCT SCALE
2700K	0.957
3000K	1.000
3500K	1.019
4000K	1.030

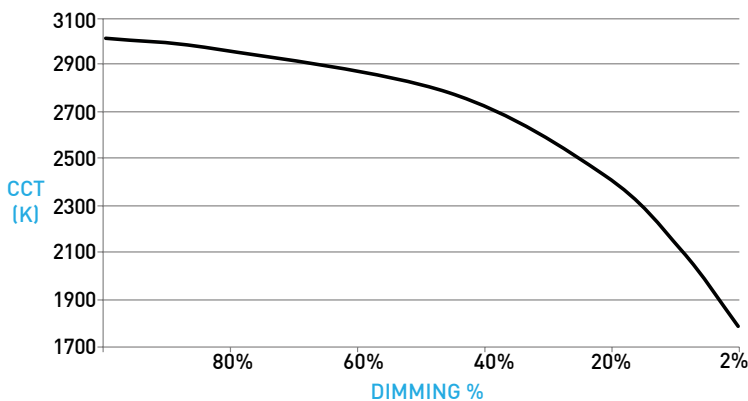


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## WARM DIM PERFORMANCE - 25° OPTIC - SOFT FOCUS LENS

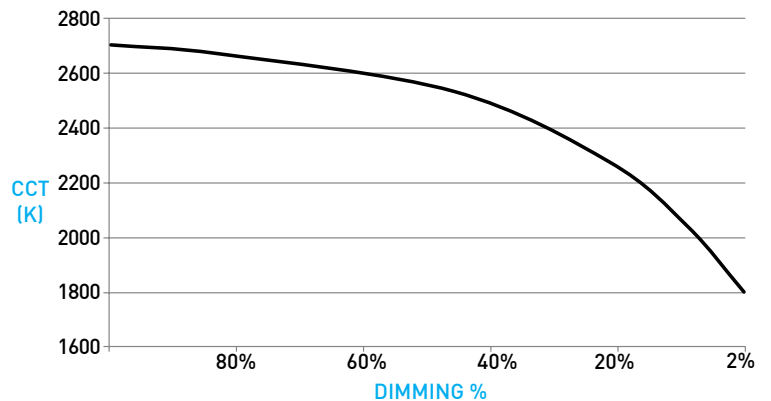
INCANDESCENT DIMMING PROFILE

90W15AL 2700K - 1800K	Full on 100%	Dimmed to 80%	Dimmed to 70%	Dimmed to 50%	Dimmed to 20%	Dimmed to 10%	Dimmed to 2%
CCT (K)	2700	2650	2625	2550	2200	1900	1800
Light Output (Lm)	970	776	679	485	194	97	19
Power (W)	14	11	10	7	3	1.5	0.3
Efficacy (LPW)	69	70	68	69	65	65	63



STANDARD DIMMING PROFILE

90W15AD 3000K - 1800K	Full on 100%	Dimmed to 80%	Dimmed to 70%	Dimmed to 50%	Dimmed to 20%	Dimmed to 10%	Dimmed to 2%
CCT (K)	3000	2950	2920	2775	2375	2000	1800
Light Output (Lm)	974	779	682	487	195	97	19
Power (W)	14	11	10	7	3	1.5	0.3
Efficacy (LPW)	70	71	68	70	65	65	63



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## JA8-2022 TITLE 24 COMPLIANT CONFIGURATIONS



OPTIC	LUMEN PACKAGE	ROUND EXPANDED			ROUND PINHOLE			SQUARE EXPANDED		
		2RA	2RD	2RS	2PA	2PD	2PS	2SA	2SD	2SS
20° Optic	90S11A	✓	✓	✓	✓	✓	✓	✓	✓	✓
	90S15A	✓	✓	✓	✓	✓	✓	✓	✓	✓
	90S21A	✓	✓	✓	✓	✓	✓	✓	✓	✓
	97S11A	✓	✓	✓	✓	✓	✓	✓	✓	✓
	97S15A	✓	✓	✓	✓	✓	✓	✓	✓	✓
	97S21A	✓	✓	✓	✓	✓	✓	✓	✓	✓
	90W15AL	✓	✓	✓	✓	✓	✓	✓	✓	✓
	90W15AD	✓	✓	✓	✓	✓	✓	✓	✓	✓
40° Optic	90S11A	✓	✓	✓	✓	✓	✓	✓	✓	✓
	90S15A	✓	✓	✓	✓	✓	✓	✓	✓	✓
	90S21A	✓	✓	✓	✓	✓	✓	✓	✓	✓
	97S11A	✓	✓	✓	✓	✓	✓	✓	✓	✓
	97S15A	✓	✓	✓	✓	✓	✓	✓	✓	✓
	97S21A	✓	✓	✓	✓	✓	✓	✓	✓	✓
	90W15AL	✓	✓	✓	✓	✓	✓	✓	✓	✓
	90W15AD	✓	✓	✓	✓	✓	✓	✓	✓	✓
60° Optic	90S11A	✓	✓	✓	✓	✓	✓	✓	✓	✓
	90S15A	✓	✓	✓	✓	✓	✓	✓	✓	✓
	90S21A	✓	✓	✓	✓	✓	✓	✓	✓	✓
	97S11A	✓	✓	✓	✓	✓	✓	✓	✓	✓
	97S15A	✓	✓	✓	✓	✓	✓	✓	✓	✓
	97S21A	✓	✓	✓	✓	✓	✓	✓	✓	✓
	90W15AL	✓	✓	✓	✓	✓	✓	✓	✓	✓
	90W15AD	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wallgrazer Optic	90S11A				✓	✓	✓	✓	✓	✓
	90S15A							✓	✓	✓
	90S21A							✓	✓	✓
Walwash Optic	90S11A	✓	✓	✓						
	90S15A	✓	✓	✓						
	90S21A	✓	✓	✓						
	97S11A	✓	✓	✓						
	97S15A	✓	✓	✓						
	97S21A	✓	✓	✓						

### UNIFIED GLARE RATING 2 SERIES ADJUSTABLE

10° OPTIC NO LENS	20° OPTIC SOFT FOCUS LENS	25° OPTIC SOFT FOCUS LENS	40° OPTIC SOFT FOCUS LENS	60° OPTIC SOFT FOCUS LENS
<13	<13	<13	<13	<13

### UNIFIED GLARE RATING 2 SERIES DEEP REGRESS

10° OPTIC NO LENS	20° OPTIC SOFT FOCUS LENS	25° OPTIC SOFT FOCUS LENS	40° OPTIC SOFT FOCUS LENS	60° OPTIC SOFT FOCUS LENS
<13	<13	<13	<13	<13

### UNIFIED GLARE RATING 2 SERIES SHALLOW REGRESS

10° OPTIC NO LENS	20° OPTIC SOFT FOCUS LENS	25° OPTIC SOFT FOCUS LENS	40° OPTIC SOFT FOCUS LENS	60° OPTIC SOFT FOCUS LENS
<19	<16	<16	<19	<16

# 2 SERIES LED GEMINI

## DOWNLIGHT

Adjustable - Hot-aim adjustment from below up to 45° tilt and 357° rotation, faceplate conceals adjustment mechanisms.

Fixed Deep Regress - Die-cast deep baffle minimizes aperture glare and conceals view into housing. Black finish standard.

Fixed Shallow Regress - Die-cast shallow baffle minimizes aperture glare and conceals view into housing. Black finish standard.

- A** **ADJUSTABLE YOKE**  
Adjustable yoke allows for quick exchange of optics and media. Accommodates up to 2 media; add 0.16" (4.1mm) to fixture height with use of each media.
- B** **OPTICS**  
Robust light engine with optimized optic pairing integrates Reflection, Refraction, and TIR offering 10°, 15°, 20°, 25°, 40° & 60° beams.
- C** **TILT GUIDE**  
Features adjustment angles and allows for pre-aiming prior to insertion of fixture.
- D** **MEDIA**  
Media must be specified. Lens is sealed in aperture on adjustable Wet location fixtures and to baffle on fixed Wet location fixtures. Secondary media available.
- E** **ADJUSTABLE TRIM PLATE**  
Features removable faceplate providing access to adjustment mechanisms. Rare Earth magnets secure faceplate firmly to trim mechanism and do not degrade over time.
  - Dry / Damp Location: Thickness measures 0.065"
  - Wet Location: Sealed aperture and integral silicone gasket. 0.15" return, installed as flange overlay only.
- F** **FIXED TRIM PLATE**  
Wet location features integral silicone gasket.
  - Dry / Damp Location: Thickness measures 0.065" (1.7mm)
  - Wet Location: 0.15" return, installed as flange overlay only.

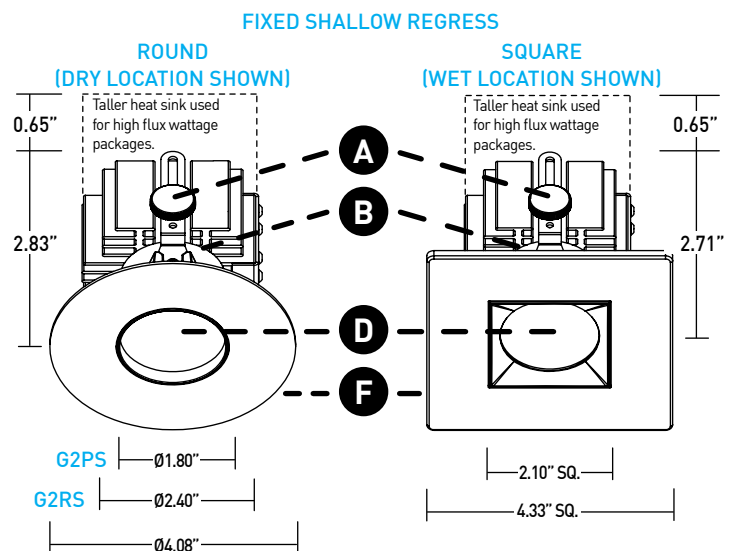
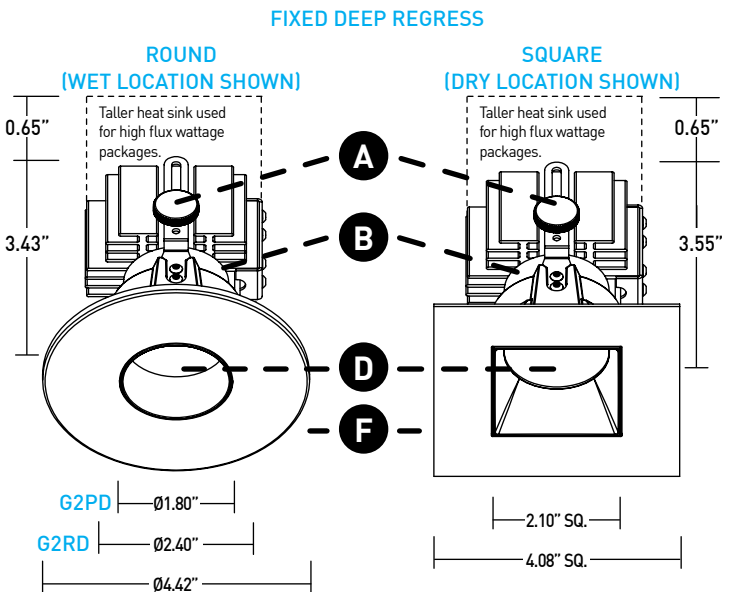
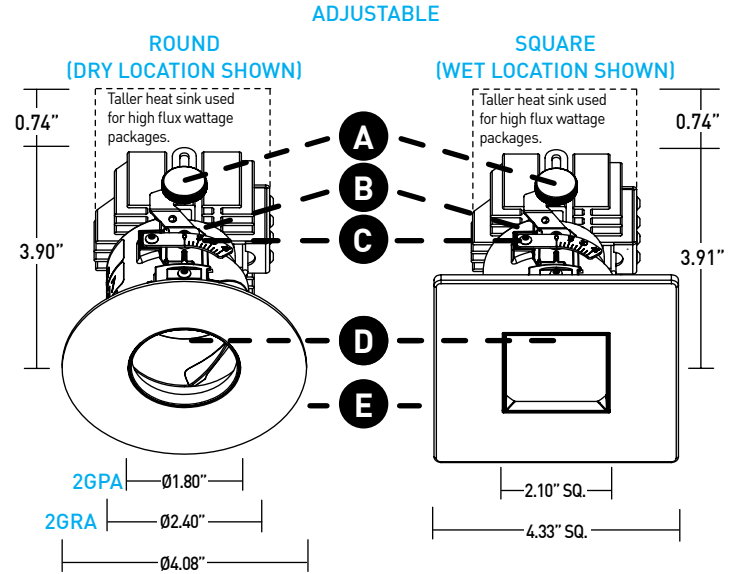
## ADJUSTABLE TILT CHART

Chart references abbreviated ceiling thickness and use of 1 media.

CEILING THICKNESS	≤ 0.75" (19mm)	≤ 1.25" (32mm)	≤ 2.00" (50mm)	≤ 2.25" (57mm)	≤ 3.00" (76mm)
	"-1" collar	"-2" collar	"-3" collar	"-4" collar	"-4" collar
Low Flux	45°	30°	10°	5°	4°
High Flux	45°	35°	13°	5°	4°

Note: Max tilt of High Flux trims when aimed 180° apart along long axis of housing is 33°.

## DIMENSIONS / DRAWINGS



# 2 SERIES LED GEMINI

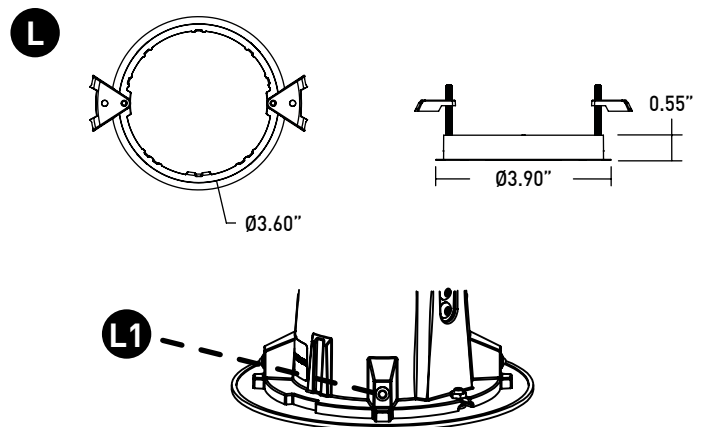
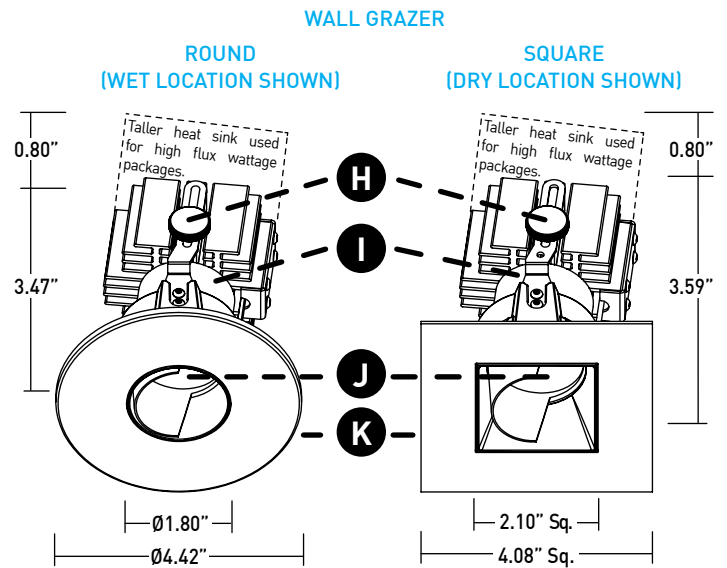
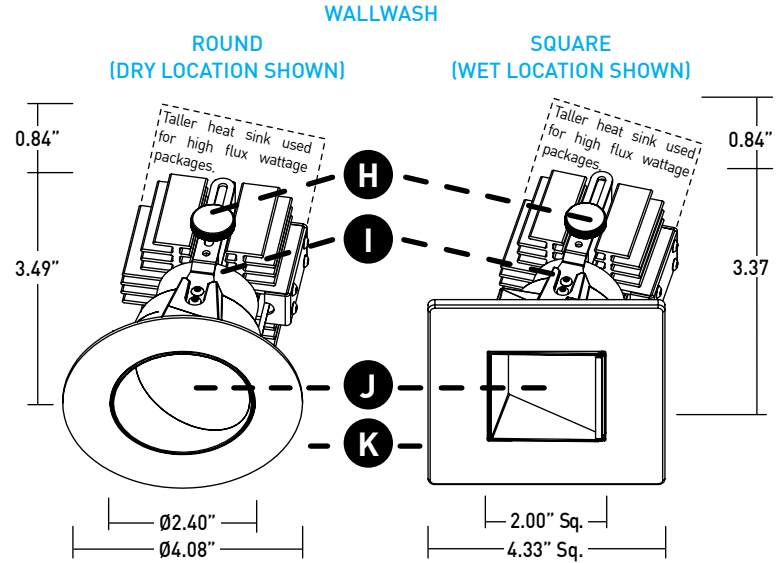
## DOWNLIGHT

Wallwash - Die-cast baffle and precision kick reflector provide dynamic wallwashing and minimal aperture glare.

Wall Grazer - Die-cast baffle and precision kick reflector provide dynamic wall grazing and minimal aperture glare.

- H** **ADJUSTABLE YOKE**  
Adjustable yoke allows for quick access to media.
- I** **OPTIC**  
40° optic for optimal wallwashing or wall grazing.
- J** **MEDIA**  
Wallwasher or wall grazer lens included and sealed in place on wet location fixtures
- K** **TRIM PLATE**  
Wet location features integral silicone gasket.
  - Dry / Damp Location: Thickness measures 0.065"
  - Wet Location: 0.15" return, installed as flange overlay only.
- L** **DOWNLIGHT TRIM ADAPTER**  
Included with fixture and required for installation. Uses (2) #6-32 flat-head screws with varying lengths to accommodate ceiling depth. Installed after ceiling is complete. Requires 3.75" (95mm) diameter cutout for flange overlay applications.
- L1** **RETENTION**  
Engineered integral ball plungers correspond to trim adapter ensuring snug fit against finished ceiling.

## DIMENSIONS / DRAWINGS



# 2 SERIES LED GEMINI

## HOUSING

- N NO INSULATION CONTACT (NON-IC) HOUSING**
- Included with NC and NR install types.
  - Minimum 0.50" setback from combustible and non-combustible materials on all sides and top of housing.
  - Minimum 3.00" setback from insulation material having max R-Value 30 on all sides and top of housing.
  - Minimum 6.00" setback from polycell spray foam insulation having max R-Value 60.
- INSULATION CONTACT (IC) HOUSING**
- Included with IC, IR, AT, and AR install types.
  - No setback from polycell spray foam insulation having max R-Value of 60 on all sides and top of housing.

## HOUSING MOUNTING NOTES

- AT and AR install types are required for CCEA, Airtight and Title 24 (JA8) applications.
- Do not install in environments where ambient temperatures exceed 40°C (104°F).
- Power supply compartment and all splice connections may be serviced from room side.
- Consult factory for spacing requirements for any installations exceeding R-Value 60.
- Hanger bars fitted to short side of housing; extend from 14.0" to 24.0", but may be field cut to accommodate narrow stud spacing. Can be extended up to 46" maximum with 2S-HBE-46 kit.
- Hanger bars and brackets add 4.00" to the overall dimension, but are exclusive of the setback requirements.
- Driver assembly ships with trim, not housing. Housing and trim feature mating quick-connect plugs for ease of installation.

## REMOTE POWER SUPPLY

- O** Gemini configurations require two power supplies, provided with install types IR, AR NR, and RR. Consult factory for maximum remote mounting distances.

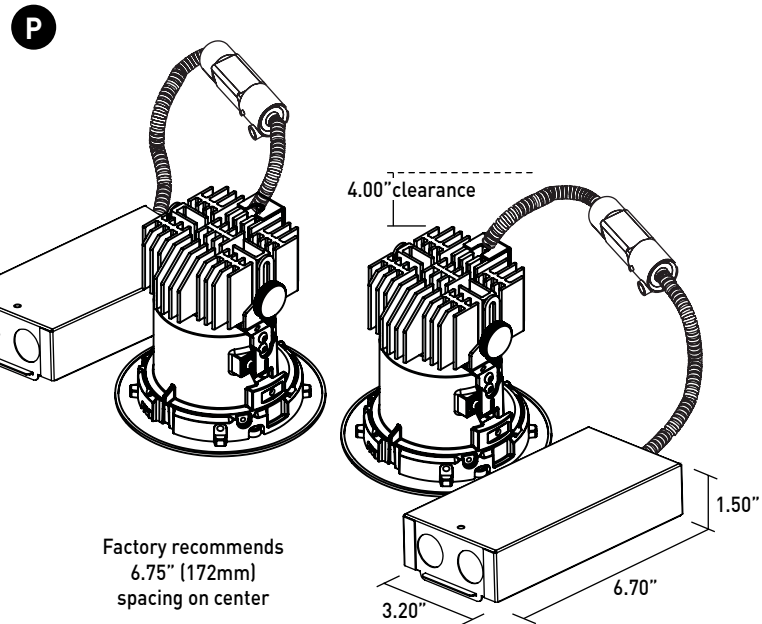
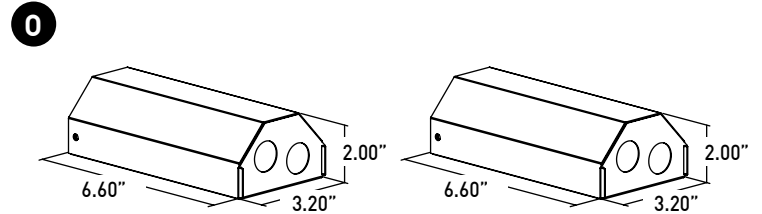
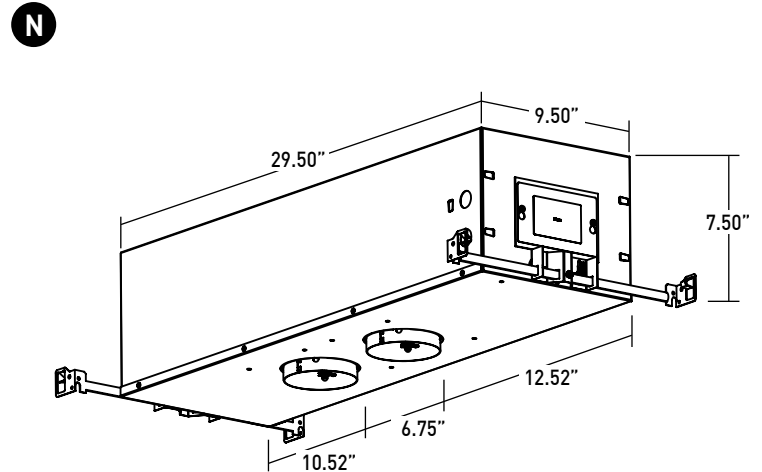
## REMODEL

- P REMODEL POWER SUPPLY**
- Included with RM Install Type.
  - UL2043 listed for air-handling plenum.
  - Fixture mounts without conventional housing using supplied downlight trim adapter.
  - Minimum 4.00" clearance from top of fixture.
  - Minimum setback from combustible and non-combustible materials of 6.63" radius from fixture centerlines.
  - Minimum 6.00" setback from surfaces of power supply / junction box if not situated within above noted radius from fixture centerline.
  - Minimum additional 6.00" setback from insulation material with max R-Value 30 from any surface of downlight fixture assembly.
  - Minimum additional 12.00" setback from polycell spray foam insulation with max R-Value 60 from any surface of downlight fixture assembly.

## REMODEL NOTES

- Do not install in environments where ambient temperatures exceed 40°C (104°F).
- Power supply compartment and all splice connections may be serviced from room side.
- Consult factory for spacing requirements for any installations exceeding R-Value 60.

## DIMENSIONS / DRAWINGS





# 2 SERIES LED GEMINI

## ZERO-SIGHTLINE INSTALLATIONS

Zero-Sightline installations available for Dry / Damp location fixtures only. When installed according to manufacturer's instructions and ceiling conditions are met, fixture is flush with the ceiling plane. Consult 2-Series Installation Guidelines for appropriate ceiling cutouts and instructions for proper Zero-Sightline installations.

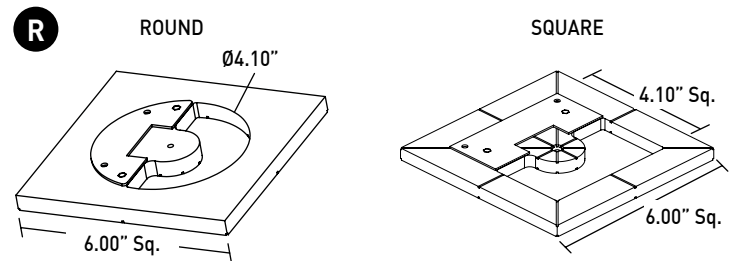
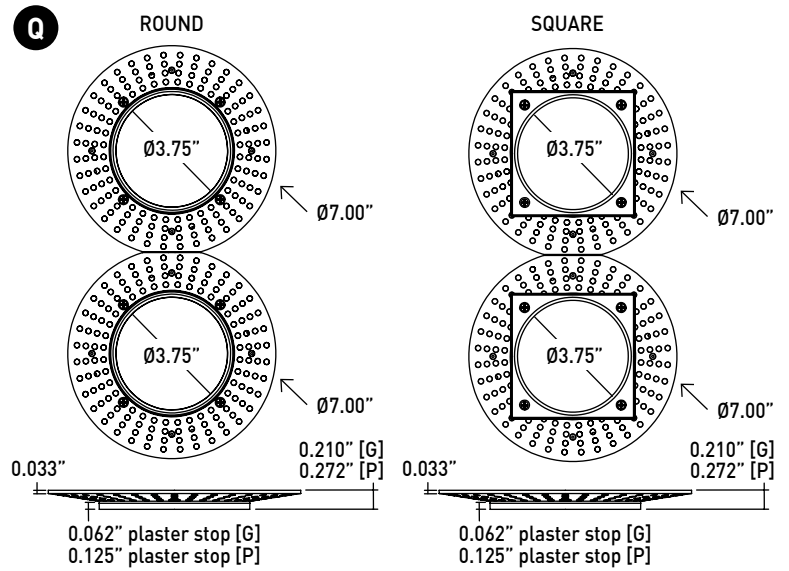
### Q APPLIQUÉ

- Specified under Flange Configuration and ships with housing.
- For use in sheetrock ceiling applications.
- 1/16" Appliqué (G Flange Configuration) recommended for gypsum ceiling installations and has plaster stop thickness of 1/16".
- Recommended for painted ceiling applications.
- 1/8" Appliqué (P Flange Configuration) offers double thick plaster stop of 1/8" where a heavier application of mud is preferred. Recommended for colorfast and venetian plaster applications.
- Not recommended for stucco applications.

### R ROUTER TOOL GUIDE

- Specified separately and used with Flange Overlay configurations.
- For use in wood ceiling applications.
- **DLA-RTG-2S-RD** or **DLA-RTG-2S-SQ** required for wood Zero-Sightline ceiling installations.
- Router tool guide is reusable and suitable for multiple fixtures.

## DIMENSIONS / DRAWINGS



# 2 SERIES LED GEMINI

## TECHNICAL INFORMATION

### CONSTRUCTION

**Downlight:** Steel and aluminum; extruded aluminum heat-sink; painted finishes are granulated powder coat. 304 corrosion resistant stainless steel faceplate for wet location fixtures.

**Trim Adapter:** High-impact composite and stainless steel.

**Housing:** 22 Gauge galvanized steel.

**Appliqué:** Zinc alloy and galvanized steel

### LED

2-step MacAdam ellipse LED module available in 80+, 90+ and 97+ CRI configurations in color temperatures of 2700K, 3000K, 3500K and 4000K. Average rated lamp life: 50,000 hours. LED and driver assemblies are field-replaceable.

### WARM DIM LED

3-step MacAdam ellipse warm dim LED module available in 90+ CRI configuration. 3000K or 2700K at full brightness, warming to 1800K at full dim. Average rated lamp life of 50,000 hours. LED and driver assemblies are field-replaceable.

### POWER SUPPLY PERFORMANCE AND DIMMING INFORMATION

Power Supply	PHASE	ECO			0-10V				DALI-2	
	TR2	LH1	LP1	EA2	LA2	AN4	LN2	ED1	LD1	
Minimum °C	-20 °C	0 °C	0 °C	-20 °C	-20 °C	-20 °C	-20 °C	-20 °C	-20 °C	
Maximum °C	40 °C	40 °C	40 °C	40 °C	40 °C	40 °C	40 °C	40 °C	40 °C	
Dimming %	2.0%	1.0%	0.1%	0.1%	0.1%	1.0%	1.0%	0.1%	0.1%	

Note: For TR2, LH1, LP1, AN4, EA2 and LA2 drivers consult chart on page 9 to confirm appropriate dimming curve for compatibility with selected control.

### MAXIMUM ALLOWABLE REMOTE DRIVER WIRING DISTANCES

DRIVER	WIRE AWG				
	12	14	16	18	20
TR2, AN4, LN2	285'	180'	113'	71'	45'
LH1, LP1	60'	40'	25'	15'	-
EA2, LA2, ED1, LD1	-	-	118'	72'	46'

### SPACING

**Wallwash:** Recommended fixture spacing is 36" on center with 36" setback from wall plane.

**Wall Grazer:** Recommended fixture spacing is 22" to 28" on center with 16" to 18" setback from wall plane.

**Remodel:** Recommended spacing between fixtures is 6.75" on center.

### LISTING

cTUVus listed to UL1598 standard for Dry / Damp and Wet locations. CCEA, Airtight and Title 24 JA8-2022 Listed. NEMA 410 compliant.

### LIMITED WARRANTY

Manufacturer's Limited Warranty guarantees product(s) listed to be free from defects in material and workmanship under normal use and service for 1-year. LED and power supplies are warranted to operate with 70% of original flux and remain within a range of 3 duv for a period of 5-years.

10-year Lutron Advantage limited warranty available on Lutron equipped systems. Warranty period begins from the date of shipment by Seller.

[Consult website for full warranty terms and conditions.](#)

### CHANGE LOG

- 01/12/2021: ADDED 2400K, 2700K-1800K WARM DIM AND 10 DEGREE OPTIC OFFERINGS.
- 08/12/2021: ADDED RM AND RR INSTALL TYPES FOR USE WITH ZERO-SIGHTLINE.
- 10/17/2022: REMOVED 90WA12H 3200K-1800K WARM DIM AND ADDED 90WA12H 3000K-1800K WARM DIM.
- 08/08/2023: UPDATED WITH NEW LED AND OPTIC SYSTEM.
- 07/15/2024: REMOVED L23 DRIVER OFFERING.



# 2 SERIES LED GEMINI

## DIMMING COMPATIBILITY

### PHILIPS DRIVER COMPATIBILITY

Power supply <b>TR2</b> Manufacturer	Family/Model #
Lutron Electronics	DV-600P
Lutron Electronics	DVELV-303P
Lutron Electronics	NTELV-600
Lutron Electronics	MAELV-600
Lutron Electronics	SELV-300P
Lutron Electronics	DVLV-600P
Lutron Electronics	NFTU-5A
Lutron Electronics	CTCL-153P
Lutron Electronics	GL-600H
Lutron Electronics	S-600P
Lutron Electronics	PHPM
Power supply <b>AN4</b> Manufacturer	Family/Model #
Lutron Electronics	DVTV plus PP-DV
Lutron Electronics	DVSCTV plus PP-DV
Lutron Electronics	DVSTV
Lutron Electronics	DVSCSTV
Lutron Electronics	QSGRJ-XP plus GRX-TVI
Lutron Electronics	QSGRJ-XE plus GRX-TVI
Lutron Electronics	QSGR-XE plus GRX-TVI
Lutron Electronics	NFTV plus PP-DV
Lutron Electronics	NTSTV
Lutron Electronics	RMJ-5T
Lutron Electronics	RMJS-8T
Lutron Electronics	FCJS-010
Leviton	IllumaTch IP7 series
Philips	Sunrise - SR1200ZTUNV

### LUTRON DRIVER COMPATIBILITY

Power supply <b>LH1 / LP1</b> Lutron Product Family	Part No.
PowPak Dimming Modules	RMJ-ECO32-DV-B
PowPak Dimming Modules	FCJ/FCJS-ECO
Energi Savr Nodes	QSN-1ECO-S
GRAFIK Eye QS control unit Homeworks QS control unit	QSN-2ECO-S
GRAFIK Eye QS control unit Homeworks QS control unit	QSGRJ-_E (wireless) QSGR-_E
Quantum Hub	QP2-_ _ 2C
Quantum Hub	QP2-_ _ 4C
Quantum Hub	QP2-_ _ 6C
Quantum Hub	QP2-_ _ 8C
Homeworks QS power module myRoom Plus power module	LQSE-2ECO-D



### eldoLED DRIVER COMPATIBILITY

Power supply <b>EA2 / LA2</b> Dimmer / Switch Control Manufacturer	Family/Model #
Busch-Jaeger	2112U-101
Jung	240-10
Leviton Lighting Controls	IP710-DLX
Lightolier Controls	ZP600FAM120
Lutron Electronics	Nova T® - NTFTV
Lutron Electronics	Diva® - DDTV
Lutron Electronics	Nova® - NFTV
Merten	5729
Pass & Seymour	CD4FB-W
The Watt Stopper	DCLV1
Sensor Switch	nIO EZ
Synergy	ISD BC
Power supply <b>EA2 / LA2</b> Lighting Control Systems	Family/Model #
Lutron Electronics	GrafixEye® GRX-TVI w GRX3503
Lutron Electronics	Energy Savr Node™ - QSN-4T16-S
Lutron Electronics	TVM2 Module
Crestron®	GLX-DIMFLV8
Crestron®	GLXP-DIMFLV8
Crestron®	GLPAC-DIMFLV4-*
Crestron®	GLPAC-DIMFLV8-*
Crestron®	GLPP-DIMFLVEX-PM
Crestron®	GLPP-1DIMFLV2EX-PM
Crestron®	GLPP-1DIMFLV3EX-PM
Crestron®	DIN-A08
Crestron®	DIN-4DIMFLV4
Crestron®	CLS-EXP-DIMFLV
Crestron®	CLCI-1DIMFLV2EX
ABB	SD/S 2.16.1

## ANALOG DRIVERS AND DIMMERS

