



A	B	C	D	S1	S2
4.9 124.5 mm	0.625 17.4 mm	17.4 442.0 mm	13.4 340.4 mm	11.4 289.6 mm	13.1 332.7 mm

SGE12LEDOS - TRIM FLANGE / NON-IC RATED

APPLICATION

12" LED Recessed open aperture downlight for general downlighting.

FEATURES

Two-stage optical system for smooth light distribution. Zhaga International Standard LED module for ease of maintenance and replacement. Shallow plenum design. Tool-less LED module, driver and J-Box access. Multi-Bar mounting brackets. BH27 Standard mounting bars included. Posi-lock trim retention torsion springs. Integral 0.625" collar.

TRIM FINISH

A variety of architectural powdercoat and anodized finishes are available. Matte white flange is standard.

ELECTRONICS

LED module features high brightness white Osram LEDs. 3-step MacAdam Ellipse binning and CRI 84 minimum. Full range of electronic 120V/277V and dimming drivers.

CONSTRUCTION

Housing/frame constructed of #20 ga. galvanized steel to resist corrosion. Self-flanged one piece trim spun from 0.063" thick high purity aluminum and finished to specification. Passive machined aluminum heatsink.

CODE COMPLIANCE

BAA Compliant. Non-IC rated. ETL certified to meet US and Canadian standards. Suitable for dry or damp locations. Optional Wet location. LM79/LM80/TM21 data available. Manufactured and tested to UL standards No. 1598/8750.

WATTAGE TO LUMENS UPDATE

PART NUMBER	SOURCE LUMENS ¹	DELIVERED LUMENS ²	SYSTEM WATTS	LPW
SGE12LEDOS10L	1000	1039	8.7	119
SGE12LEDOS15L	1500	1446	13.5	107
SGE12LEDOS20L	2000	1898	19.2	99
SGE12LEDOS30L	3000	2711	22.7	119
SGE12LEDOS45L	4500	4518	40	113

SERIES	LUMENS ¹	CCT	DRIVER / VOLTAGE ³	OPTIONS ⁴	TRIM	FINISH	TRIM OPTIONS		
SGE12LEDOS	10L	1100 Lm	27K 2700K	E_ Electronic Driver	1 120V 2 277V	BH27 ⁵ 27" Solid Bars H12 12" - 24" Expandable Bars H06 6" - 12" Expandable Bars CB24 24" C-Channel Bars FS Fusing EB Fixture Painted Black CR Corrosion Resistant PR ⁶ Deep Ceiling Extension GR Goof Ring ZIG ⁷ ZigBee Module BLU ⁷ Bluetooth LE EM ⁸ 7W Emergency Battery Test Switch Remote EMIT ⁹ 7W Emergency Battery Test Switch in Trim AMB Anti-Microbial Finish	AR1223OS	MW ¹⁰ Matte White MB Matte Black SG Semi-Diffuse HZ Haze Full Diffuse PT Platinum Silver BZ Bronze OB Oil Rubbed Bronze AC Anodic Natural AS Anodic Sapphire AN Anodic Natural AC Anodic Champagne AZ Anodic Bronze AK Anodic Black AM Anodic Malachite SN Sun Gold CO Copper Metallic GH Graphite CC ¹¹ Custom Color	SO ¹² Micro Prism Solite™ Lens GL Clear Glass Lens FG Frosted Glass Lens GS Gasket WL Wet Location EMIT ⁹ Emergency Test Switch in Trim PF ¹³ Polished Flange AMB Anti-Microbial Finish
	15L	1500 Lm	30K 3000K	DS10_ 10%, 0-10V					
	20L	2000 Lm	35K 3500K	DO10_ 1%, 0-10V					
	30L	3000 Lm	40K 4000K	DS2W1 1%, ELV/MLV, 120V					
	45L	4500 Lm	40K 4000K	DLTE1 1% Lutron® 2-Wire Forward Phase, 120V DL3E_ 1% Lutron® EcoSystem®, Fade EL10_ 1%, eldoLED ED01_ 0.1%, eldoLED DALI_ DALI Control					

EXAMPLE: SGE12LEDOS20L35KE1/AR1223OSMWSO

NOTES:
¹ Nominal Source Lumens at 35K ² Nominal Delivered Lumens at 35K with MW-SO ³ Contact Factory for Additional Options ⁴ See Product Options Page for Details ⁵ Standard Bar Hangers ⁶ Contact Factory
⁷ Order DS10/2 When Specifying ZIG or BLU ⁸ Standard EM ⁹ EMIT Suffix Required on Trim and Housing ¹⁰ Standard Finish ¹¹ Contact Factory for Special Finishes ¹² Standard Lens ¹³ Flange and Reflector Same Finish



PROJECT: _____
 TYPE: _____



Dimensions and values shown are nominal. Spectrum Lighting continually works to improve products and reserves the right to make changes which may alter the performance or appearance of products.

12" ROUND DOWNLIGHT OS SERIES / PHOTOMETRIC DATA

recessed
fixtures



SGE12LEDOS 45L 35K XX AR1223OS MW SO

CANDLEPOWER CURVE TEST SP-01197_2	INTENSITY CANDELA 0° AZIMUTH	ZONAL LUMENS	SINGLE UNIT: PERFORMANCE DIRECT FOOTCANDLES BASED ON DOWNLIGHT ONLY				MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT					
			Mounting Height AFF	FC at Center on Floor	Beam Diameter	FC at Beam Edge	Ceiling Height	Fixture Spacing	RCR 2		RCR 4	
	0°	0° - 10° 232 5%	5.5'	80 fc	5.4'	14 fc	9'	6'	102	0.95	122	1.36
	0°	0° - 20° 889 20%	6.5'	57 fc	6.4'	10 fc	12'	8'	69	0.64	57	0.64
	5°	0° - 30° 1881 42%	7.5'	43 fc	7.4'	8 fc	16'	10'	34	0.32	28	0.32
	15°	0° - 40° 2997 66%	8.5'	33 fc	8.4'	6 fc	Delivered Illuminance Rating: (DIR)					
	25°	0° - 60° 4355 96%	10.0'	24 fc	9.8'	4 fc	108 FC per W/Sq. Ft.		89 FC per W/Sq. Ft.			
	35°	0° - 80° 4502 100%	12.0'	17 fc	11.8'	3 fc	Recessed mounting Square rooms used for multiple units: RCR 2: Length & Width = Ceiling Ht. - 2.5' x 5.00 RCR 4: Length & Width = Ceiling Ht. - 2.5' x 2.50 * Average Footcandles at 2.5' Above Floor					
	45°	0° - 90° 4506 100%	14.0'	12 fc	13.8'	2 fc						
	55°	90° 2	16.0'	9 fc	15.7'	2 fc						
	90°	Total	4518 100%									

Delivered Lumens: 4518
Luminaire Watts: 40
LER: 112.95

CP at 0° (Nadir): 2411
CRI: 80+

Beam Angle: 89°
Spacing Ratio: 1.23

Lumen Multiplier: 10L x 0.23, 15L x 0.32, 20L x 0.42, 30L x 0.6
CCT Multiplier: 27K x 0.96, 30K x 0.99, 40K x 1.03

SGE12LEDOS 45L 35K XX AR1223OS MW GL

CANDLEPOWER CURVE TEST SP-01197_1	INTENSITY CANDELA 0° AZIMUTH	ZONAL LUMENS	SINGLE UNIT: PERFORMANCE DIRECT FOOTCANDLES BASED ON DOWNLIGHT ONLY				MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT					
			Mounting Height AFF	FC at Center on Floor	Beam Diameter	FC at Beam Edge	Ceiling Height	Fixture Spacing	RCR 2		RCR 4	
	0°	0° - 10° 219 5%	5.5'	75 fc	5.6'	13 fc	9'	6'	98	0.95	116	1.36
	0°	0° - 20° 840 19%	6.5'	54 fc	6.6'	9 fc	12'	8'	66	0.64	54	0.64
	5°	0° - 30° 1784 41%	7.5'	40 fc	7.7'	7 fc	16'	10'	33	0.32	27	0.32
	15°	0° - 40° 2860 66%	8.5'	31 fc	8.7'	5 fc	Delivered Illuminance Rating: (DIR)					
	25°	0° - 60° 4176 97%	10.0'	23 fc	10.2'	4 fc	103 FC per W/Sq. Ft.		85 FC per W/Sq. Ft.			
	35°	0° - 80° 4297 100%	12.0'	16 fc	12.3'	3 fc	Recessed mounting Square rooms used for multiple units: RCR 2: Length & Width = Ceiling Ht. - 2.5' x 5.00 RCR 4: Length & Width = Ceiling Ht. - 2.5' x 2.50 * Average Footcandles at 2.5' Above Floor					
	45°	0° - 90° 4300 100%	14.0'	12 fc	14.3'	2 fc						
	55°	90° 2	16.0'	9 fc	16.4'	2 fc						
	90°	Total	4311 100%									

Delivered Lumens: 4311
Luminaire Watts: 40
LER: 107.78

CP at 0° (Nadir): 2267
CRI: 80+

Beam Angle: 91°
Spacing Ratio: 1.24

Lumen Multiplier: 10L x 0.23, 15L x 0.32, 20L x 0.42, 30L x 0.6
CCT Multiplier: 27K x 0.96, 30K x 0.99, 40K x 1.03

SGE12LEDOS 45L 35K XX AR1223OS MW FG

CANDLEPOWER CURVE TEST SP-01197	INTENSITY CANDELA 0° AZIMUTH	ZONAL LUMENS	SINGLE UNIT: PERFORMANCE DIRECT FOOTCANDLES BASED ON DOWNLIGHT ONLY				MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT					
			Mounting Height AFF	FC at Center on Floor	Beam Diameter	FC at Beam Edge	Ceiling Height	Fixture Spacing	RCR 2		RCR 4	
	0°	0° - 10° 192 5%	5.5'	66 fc	5.5'	12 fc	9'	6'	87	0.95	103	1.36
	0°	0° - 20° 725 19%	6.5'	47 fc	6.6'	8 fc	12'	8'	59	0.64	48	0.64
	5°	0° - 30° 1504 39%	7.5'	36 fc	7.6'	6 fc	16'	10'	29	0.32	24	0.32
	15°	0° - 40° 2374 61%	8.5'	28 fc	8.6'	5 fc	Delivered Illuminance Rating: (DIR)					
	25°	0° - 60° 3690 95%	10.0'	20 fc	10.1'	3 fc	92 FC per W/Sq. Ft.		75 FC per W/Sq. Ft.			
	35°	0° - 80° 3887 100%	12.0'	14 fc	12.1'	2 fc	Recessed mounting Square rooms used for multiple units: RCR 2: Length & Width = Ceiling Ht. - 2.5' x 5.00 RCR 4: Length & Width = Ceiling Ht. - 2.5' x 2.50 * Average Footcandles at 2.5' Above Floor					
	45°	0° - 90° 3892 100%	14.0'	10 fc	14.1'	2 fc						
	55°	90° 2	16.0'	8 fc	16.1'	1 fc						
	90°	Total	3903 100%									

Delivered Lumens: 3903
Luminaire Watts: 40
LER: 97.58

CP at 0° (Nadir): 2005
CRI: 80+

Beam Angle: 90°
Spacing Ratio: 1.17

Lumen Multiplier: 10L x 0.23, 15L x 0.32, 20L x 0.42, 30L x 0.6
CCT Multiplier: 27K x 0.96, 30K x 0.99, 40K x 1.03