16" ALUMINUM

DCH SERIES

LUMEN MAX
HIGH BAY LUMINAIRES

ALDCH16SGV

APPLICATION

16" Lumen Max GV series designed for performance high and mid level ceiling illumination. Aluminum reflector designed for maximum downlight. Shallow design fits a variety of applications.

FEATURES

Shallow surface or pendant (DCH) for lower ceiling heights and wide distribution. Single-stage optical system for smooth light distribution. 80 CRI minimum. Consult factory for high CRI or special applications. LED module and driver designed for ease of maintenance and replacement. Posi-lock reflector retention ring will absorb shocks and impact. Optional safety cable. Variety of optical lenses and mounting methods.

FINISH

Multi-stage polyester powder-coat process applied on our dedicated paint lines. Variety of standard and custom finishes are available. All exposed materials are chromate pretreated to resist corrosion. Standard Matte White interior finish on reflectors.

ELECTRONICS

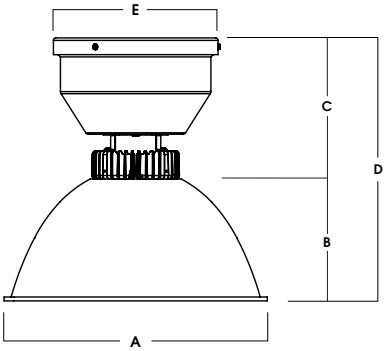
GV LED system features high brightness white Samsung LED's. 3-step MacAdam Ellipse binning. Standard CRI: 80+. Higher CRI, R9 and custom LED configurations are available; consult factory. Variety of electronic 120V/277V and dimming drivers.

CONSTRUCTION

Housing constructed of extruded and machined aluminum to resist corrosion. Graphite gasket for optimal thermal management. Die-cast aluminum heat sink. Reflector made of spun .060" aluminum.

CODE COMPLIANCE

BAA compliant. ETL certified to meet US and Canadian standards. Suitable for dry or damp locations. Manufactured and tested to UL standards No. 1598/8750.



A	B	C	D	E
16.3 414.0 mm	6.8 172.7 mm	7.9 200.7 mm	14.7 373.4 mm	10.2 259.1 mm

LUMENS / WATTAGE DATA				
PART NUMBER	SOURCE LUMENS[1]	DELIVERED LUMENS[2]	SYSTEM WATTS	LPW
ALDCH16SGV15L	1500	1192	10	119
ALDCH16SGV27L	2700	2080	18	116
ALDCH16SGV37L	3700	3051	26	117
ALDCH16SGV55L	5500	4494	39	115

SERIES	LUMENS[1]		CCT		DRIVER / DIMMING[3]		OPTIONS[4]		MOUNTING[5]		REFLECTOR		DIFFUSER OPTIONS				FINISH[12]	
ALDCH16SGV	**15L**	1500 Lm	**27K**	2700K	**EX**	Electronic Driver, 120V/277V	**FS**	Fusing	**HM**[6]	Hang Straight	**AL16SH/MWI**[10]	Matte White Inside	DOOR		LENS		**MW**[13]	Matte White
	27L	2700 Lm	**30K**	3000K	**DS10X**	10% 0-10V, 120V/277V	**347V**	347V Driver	**AT**[6]	Hang Straight All Thread	**AL16SH/FCI**	Fixture Color Inside	**DR16D**[11]	16" Spun Door	**CNFR**	Conical Frosted Lens	**MB**[13]	Matte Black
	37L	3700 Lm	**35K**	3500K	**DO10X**	1% 0-10V, 120V/277V	**SC1**	Safety Cable	**PM**[6]	Rigid Pendant					**CN**	Conical Lens	**PT**[13]	Platinum Silver
	55L	5500 Lm	**40K**	4000K			**SC2**	Safety Cable, Reflector to Door	**CD**[6]	Cord / Cable Mount					**DL**	Drop Lens	**CC**	Custom Color
									SM	Surface Mount					**FO**	White Optical Acrylic	See Page 5 for Full Range of Color Options (83-90081)	
									HC[6/7/8]	Hook & Cord					**PP**	Prismatic Polycarbonate		
									NM2[7/8/9]	½" NPT Hub					**PC**	Clear Polycarbonate		
									NM3[7/8/9]	¾" NPT Hub					**WAG16**	16" Wire Guard		
									EMERGENCY BATTERY OPTIONS									
									EMCR	10W Canopy Mounted EM								
									EMRM	7W Remote EM								
									EMEN	7W Remote with Enclosure								

EXAMPLE: ALDCH16SGV15L27KEX/HM36/AL16SH/MWI/MW

NOTES:
1 Nominal Source Lumens at Any CCT **2** Nominal Delivered Lumens at 35K **3** Contact Factory for Additional Options **4** See Product Options Page For Details **5** See Mounting Pages for EM Options and Details on Components and Finishes **6** Specify Length in Inches: See Mounting Page for Available Lengths **7** Mounting Supplied by Others **8** 12" Leads Unless Specified **9** Reflector Finished Matte White with Finish Color Out **10** Same Finish as Housing **11** See Color Page for More Options/Consult Factory for Special Finishes **12** Standard Finishes

Spectrum Lighting

PROJECT:

QUANTITY: 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. 83-20033_RD

16" ALUMINUM

DCH SERIES / FIXTURE OPTIONS

LUMEN MAX
HIGH BAY LUMINAIRES

STANDARD FINISHES

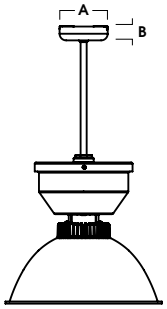
MW
MATTE WHITE

MB
MATTE BLACK

PT
PLATINUM SILVER

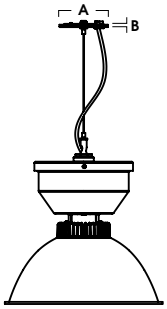
MOUNTING TYPES

HM / AT / PM
HANG STRAIGHT / ALL THREAD / PENDANT



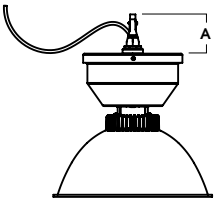
A	B
5.4 137.2 mm	2.5 63.5 mm

CD
CORD / CABLE MOUNT



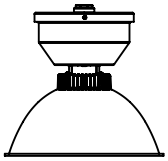
A	B
5.0 127.0 mm	.25 6.4 mm

HC
HOOK CORD



A
4.2 106.7 mm

NM
NO MOUNT



Spectrum Lighting

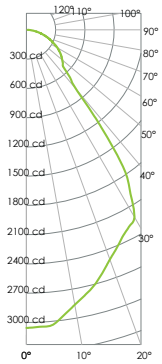
16" ALUMINUM

DCH SERIES / PHOTOMETRIC DATA

LUMEN MAX
HIGH BAY LUMINAIRES

ALxxx16LEDGV-55L-35K-EX-AL16

CANDLEPOWER CURVE



INTENSITY

	0.00°
0.00°	3,056
20.00°	2,505
40.00°	790
60.00°	367
80.00°	105
90.00°	11

ZONAL LUMENS

0° - 10°	287	6%
0° - 20°	1,043	23%
0° - 30°	2,127	47%
0° - 40°	3,131	70%
0° - 60°	3,961	88%
0° - 80°	4,431	99%
0° - 90°	4,490	100%
Total	4,490	100%

SINGLE UNIT: PERFORMANCE
INITIAL FOOTCANDLES
BASED ON IES BEAM ANGLE

Mounting Height AFF	FC at Center on Floor
8.0 '	48 fc
10.0 '	31 fc
12.0 '	21 fc
14.0 '	16 fc
16.0 '	12 fc
20.0 '	8 fc
24.0 '	5 fc
28.0 '	4 fc

MULTIPLE UNITS: PERFORMANCE
80/50/20% REFLECTANCES
INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT

Ceiling Height	Fixture Spacing	RCR 1		RCR 3	
		FC +	W/Sq. Ft.	FC +	W/Sq. Ft.
17'	12' *	35	0.29	23	0.24
21'	14' **	24	0.20	23	0.23
25'	16' ***	18	0.15	15	0.15
Delivered Illuminance Rating: (DIR)		120 FC per W/Sq. Ft.		98 FC per W/Sq. Ft.	

3' Suspension Length
Square rooms used for multiple units:
- RCR 1: Length & Width = Ceiling Ht. - 5.5' x 10.00
- RCR 3: Length & Width = Ceiling Ht. - 5.5' x 3.33

\+ Average Footcandles at 2.5' Above Floor
* Exceeds spacing criteria by -4%
** Exceeds spacing criteria by -17%
*** Exceeds spacing criteria by -25%

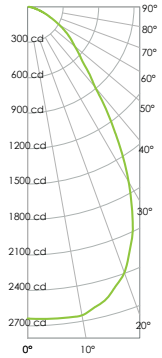
Delivered Lumens: 4,490
Luminaire Watts: 39
LER: 115.13

CP at 0deg (Nadir): 3,056
CRI: 85+

Lamp Multiplier: 15L x 0.27, 27L x 0.46, 37L x 0.68
CCT Multiplier: 50K x 1.06, 40K X 1.03, 30K X 0.985, 27K X 0.971

ALxxx16LEDGV-55L-35K-EX-AL16-xx16-FO90

CANDLEPOWER CURVE



INTENSITY

	0.00°
0.00°	2,638
5.00°	2,649
10.00°	2,651
15.00°	2,563
20.00°	2,394
30.00°	1,711
40.00°	891
50.00°	520
60.00°	314
70.00°	141
80.00°	43
90.00°	6

ZONAL LUMENS

0° - 10°	256	6%
0° - 20°	974	25%
0° - 30°	1,932	49%
0° - 40°	2,736	69%
0° - 60°	3,631	92%
0° - 80°	3,941	99%
0° - 90°	3,966	100%
Total	3,966	100%

SINGLE UNIT: PERFORMANCE
INITIAL FOOTCANDLES
BASED ON IES BEAM ANGLE

Mounting Height AFF	FC at Center on Floor	Beam Diameter	FC at Beam Edge
8.0 '	41 fc	11.0 '	20 fc
10.0 '	26 fc	13.7 '	13 fc
12.0 '	18 fc	16.5 '	9 fc
14.0 '	13 fc	19.2 '	7 fc
16.0 '	10 fc	21.9 '	5 fc
20.0 '	7 fc	27.4 '	3 fc
24.0 '	5 fc	32.9 '	2 fc
28.0 '	3 fc	38.4 '	2 fc

MULTIPLE UNITS: PERFORMANCE
80/50/20% REFLECTANCES
INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT

Ceiling Height	Fixture Spacing	RCR 1		RCR 3	
		FC +	W/Sq. Ft.	FC +	W/Sq. Ft.
17'	12' *	31	0.29	21	0.24
21'	14' **	21	0.20	21	0.23
25'	16' ***	16	0.15	13	0.15
Delivered Illuminance Rating: (DIR)		107 FC per W/Sq. Ft.		88 FC per W/Sq. Ft.	

3' Suspension Length
Square rooms used for multiple units:
- RCR 1: Length & Width = Ceiling Ht. - 5.5' x 10.00
- RCR 3: Length & Width = Ceiling Ht. - 5.5' x 3.33

\+ Average Footcandles at 2.5' Above Floor
* Exceeds spacing criteria by 0%
** Exceeds spacing criteria by -13%
*** Exceeds spacing criteria by -21%

Delivered Lumens: 3,966
Luminaire Watts: 39
LER: 101.69

CP at 0deg (Nadir): 2,638
CRI: 80+

Beam Angle: 68.81
Spacing Ratio: 1.04

Lamp Multiplier: 15L x x 0.27, 27L x 0.46, 37L x 0.68
CCT Multiplier: 50K x 1.06, 40K X 1.03, 30K X 0.985, 27K X 0.971

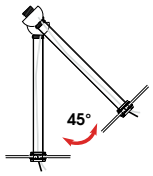
MOUNTING & ACCESSORIES

SOME OPTIONS NOT AVAILABLE ON ALL FIXTURES, CONSULT SPECIFICATION SHEETS. SEE INDIVIDUAL SPECIFICATION SHEETS OR CONSULT FACTORY FOR ADDITIONAL INFORMATION.
NOTE: THIS IS TYPICAL OF LUMEN MAX SPECIFICATION FOR PENDANT MOUNTING. INDIVIDUAL FIXTURES OR PROJECTS MAY HAVE SPECIALIZED REQUIREMENTS.

LUMEN MAX
HIGH BAY LUMINAIRES

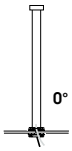
MOUNTING TYPES

HM*
HANG STRAIGHT
45° SWIVEL 5/8" OD STEM - 3/8" IP



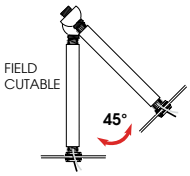
ORDER: **HM** (Length)
SPECIFY LENGTH:
HM3 - 3" **HM24 -** 24"
HM6 - 6" **HM36 -** 36"
HM12 - 12" **HM48 -** 48"
HM18 - 18" **HM72 -** 72"
HMLC(XX)
Custom Length
(Specify in Inches)

PM*
RIDGID PENDANT MOUNT
RIGID 5/8" OD STEM - 3/8" IP

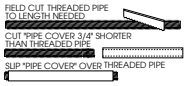


ORDER: **PM** (Length)
SPECIFY LENGTH:
PM3 - 3" **PM24 -** 24"
PM6 - 6" **PM36 -** 36"
PM12 - 12" **PM48 -** 48"
PM18 - 18" **PM72 -** 72"
PMLC(XX)
Custom Length
(Specify in Inches)

AT**
HANG STRAIGHT ALL THREAD
45° SWIVEL 5/8" OD STEM - 1/4" IP



ORDER: **AT** (Length)
SPECIFY LENGTH:
AT12 - 12"
AT24 - 24"
AT36 - 36"

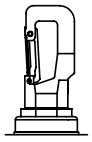


*MAXIMUM ONE PIECE STEM LENGTH IS 72". **MAXIMUM ONE PIECE STEM LENGTH IS 36".
LONGER LENGTHS ARE POSSIBLE USING MULTIPLE STEMS AND COUPLERS.

CD
CORD / CABLE MOUNT
SJ CORD WITH 1/16 SS CABLE

ORDER: **CD** (Length)
SPECIFY LENGTH:
CD36 - 36"
CD72 - 72"
CD144 - 144"
CDLC(XX)
Custom Length
(Specify in Inches)

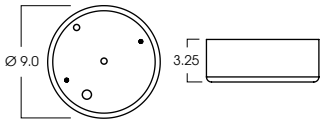
HC
HOOK & CORD
FOR INDEPENDENT MOUNTING



ORDER: **HC**

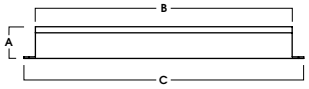
EMERGENCY BATTERY OPTIONS

EMCR - LARGE DRIVER CANOPY FOR 10W EMERGENCY BATTERY



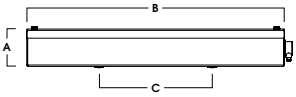
REMOTE EMERGENCY BATTERY OPTIONS

EMRM* - 7W REMOTE EMERGENCY BATTERY (50' MAX)



A	B	C
1.3	12.6	13.0

EMEN* - 7W REMOTE EMERGENCY BATTERY WITH ENCLOSURE (50' MAX)



A	B	C
2.0	17.0	6.2

*OTHER EM BATTERY SIZES AVAILABLE, CONSULT FACTORY

ADDITIONS

FS - FUSING

Slow blow type fuse protects fixture against voltage surges. Factory installed.

LSP10 - SM - SURGE PROTECTOR

Surge protector absorbs transient electrical spikes and protects fixtures and electronics 120/277v. Re-sets after surge. Factory Installed.

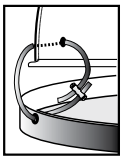
SAFETY CABLE OPTIONS

SC1 - SAFETY CABLE

1/16" stainless steel safety cable for added support. Standard kit is 18" and double barrel locks are provided. Approved for California seismic requirements.
Rated at 50 lbs.

SC2 - SAFETY CABLE

1/16" Stainless steel cable holds door to fixture



Spectrum Lighting

COLOR OPTIONS - POWDER COAT PAINT FINISHES

NOTE: NO PRINTED IMAGE CAN EQUAL THE EXACT COLOR OF FINISH ON METAL.
SEE INDIVIDUAL SPECIFICATION SHEETS OR CONSULT FACTORY FOR ADDITIONAL INFORMATION.

SPECTRUM
POWDER COAT COLORS

STANDARD CORD / STEM / CANOPY FINISHES

FIXTURE COLOR	STANDARD CORD COLOR	STANDARD CANOPY / STEM COLOR
Matte White, Textured White	Matte White	Matte White
Gloss White	Matte White	Gloss White
Matte Black, Gloss Black, Textured Black	Matte Black	Matte Black
All Others	Matte Black	Same Color as Fixture
Custom Color	Contact Factory	Contact Factory

PAINT TIMES

TIER	COST	AVERAGE PAINT TIME*
Tier 1 - Standard Finishes	$	🕒
Tier 2 - Typical Finishes	$$	🕒🕒
Custom Color	Contact Factory	Contact Factory

*CONTACT FACTORY FOR SPECIFIC PRODUCT LEAD TIMES

TIER 1 - STANDARD FINISHES

MW Matte White
GW Gloss White
PT Platinum Silver
MB Matte Black
GB Gloss Black
BZ Bronze

TIER 2 - TYPICAL FINISHES

TW Textured White
TB Textured Black
MT* Textured Silver
OB* Oil Rubbed Bronze
SN Sun Gold
CO Copper Metallic
BR Brecchia
GH Graphite
CH Charcoal
AL Almond
VE Verde Green

BL Blue Streak
RD Red Baron
OR Orange
CM Camel
PL Purple
PG Pub Green
TQ Turquoise
SF Sea Foam
PK Pink
AY Aero Yellow
EG Evergreen

LG Lime Green
LB Light Blue
BY Burgundy
AK Anodic Black
AM Anodic Malachite
AZ Anodic Bronze
AS Anodic Sapphire
AN Anodic Natural
AC Anodic Champagne

CUSTOM COLOR FINISHES

CONTACT FACTORY

CC
Custom Color

CC

*UNAVAILABLE FOR WET LOCATION

Spectrum Lighting