



# Grid Mounted Luminaires' 12 Benefits & Features

**DĀLUME**  
Dynamic Architectural Lumination

## Features & Benefits



### HIGH OUTPUT PERFORMANCE

227Lm to 1300Lm  
Delivered per Foot  
packages



### MULTIPLE CONTROL OPTIONS

ELV, U-10V, DMX,  
Zigbee DALI & more



### UNLIMITED CCT COLOR TEMPERATURES TO SELECT FROM

Amber, 2700K-4000K  
& RGBW



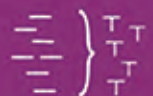
### COMPATIBLE WITH COMMON GRIDS SYSTEMS INCLUDING

15/16, 9/16 T-Grid  
& Screw-Slot



### EASY INSTALLATION

Snap-in or Screw-into  
mounting to Acoustic  
Grid System



### MODIFY LIGHTING SCHEME ON DEMAND

Redesign lighting for  
tenant improvements  
or change of use



**IDEAL FOR BOTH REMODEL  
AND NEW CONSTRUCTION  
INSTALLATIONS**



### LOW PROFILE CEILING FOOTPRINT

Two profile options available  
1" x 3/8" OR 1 3/4" x 5/8"

### MODERN & CLEAN CEILING



Great substitute to  
standard 2x2 & 2x4  
LED Troffers



### MEASURED TO SIZE

Section length ordered  
to 2 inch increments



### QUICK SHIP PRODUCT

Available with 1 week  
lead time\*



### BUDGET FRIENDLY

Save in labor and material  
cost



**DCG1: 1" PROFILE**



**DCG2: 2" PROFILE**

## DCG 1" & 2" Grid-Lyte



**HOUSING:** Continuous, 6063-T5 extruded aluminum profile available in 1" & 2" profiles wide x 2', 4', 8' feet standard lengths (+/- 1.0") plus custom lengths available. Systems more than 8' lengths, specify DCGS\_plus the # of feet and inches (+/- 1.0"). LEED compliant. 65% recycled materials.

120-277V, or 347V input, ELV, 0-10V, DALI dimming protocols

**GRID MOUNTING:**

Universal mounting to acoustic 9/16", 15/16" T-grid & Screw-slot grid systems with standard spring metal clips.

**REMOTE POWER SUPPLY:**

120-277V, or 347V input, ELV, 0-10V, DALI dimming protocols. Surface mount remote electrical enclosure with multiple knockouts & removable access plate for maintenance. Pre-wired In/Out wiring terminals for clean and easy installation. Recommended 75' or less distance to luminaire with 16 AWG wire. See Power Source Specifications for longer distances and other details. For recessed enclosure, consult factory.

**SHIELDING/OPTICS:** 3 LED lumen output packages from 224Lm to 1300Lm delivered with quality binned 80 CRI and multiple Color Temperature options. LED boards are protected from environmental dust and moisture with white PVC snap-in lens.

**FINISHES:** Standard interior color white. (Smooth Gloss: Cardinal T007-WH121/RAL9003) white. For custom RAL colors (CC) are available, please specify RAL# or Cardinal Paint#.

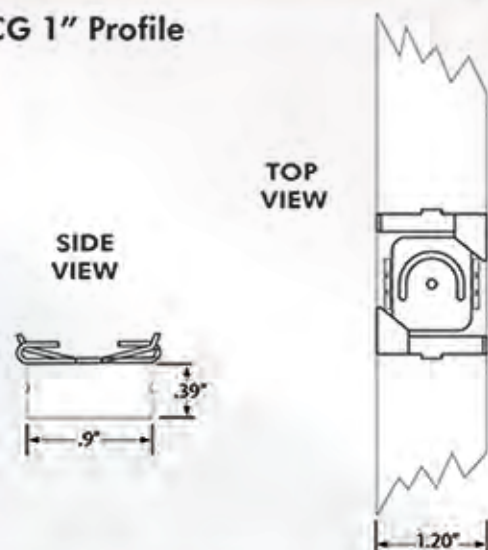
**Listing:** ETL listed to UL Standards for dry or damp locations.

**Warranty:** Complete 5 year Warranty.

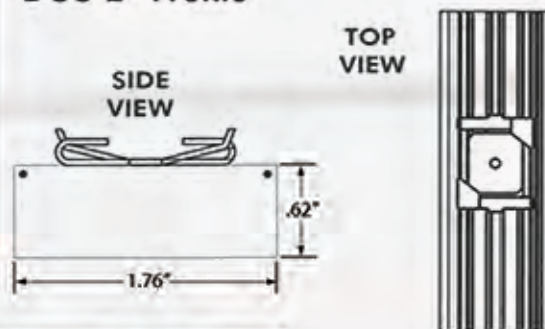
**Made in USA.**



**DCG 1" Profile**



**DCG 2" Profile**



**Ordering:**

Example DCG1-04-35K-UD-EM

Ordering	Length	Lumen Package per Foot	COLOR TEMP	REMOTE DRIVER	OPTIONS
DCG1 1" PROFILE	2: 2 Ft.	-04: LO (227 LM)	-AMB: Warm Amber*	-ELV: 120V*	-EM: EM Back-Up
	4: 4 Ft.	-9W: SO (624 LM)	-27K: Incandescent White**	-UD: 0-10V (120/277V)	-CC*: Custom Color*
	8: 8 Ft.	-12W: HO (833 LM)	-30K: Warm White*	-34V: 347V	-T9: 9/16" T-Bar
	S_: X Ft.		-35K: Neutral White	-DL: DALI	-T15: 15/16" T-Bar
			-40K: Cool White		-TS: Screw Slot
			-RGBW: Color Changing*		
Ordering	Length	Lumen Package per Foot			
DCG2 2" PROFILE	2: 2 Ft.	-8W: LO (448 LM)			
	4: 4 Ft.	-18W: SO (973 LM)			
	8: 8 Ft.	-24W: HO (1298 LM)			
	S_: X Ft.				

\*: Extended lead time  
 \*\*: 12W per ft, not available.

4.

## DCG 1" & 2" Grid-Lyte

### POWER SUPPLY SPECIFICATIONS

Surface mount remote electrical enclosure with input and output knockouts and removable access plate for maintenance. Prewired Input and Output wiring terminals for clean and easy installation. Total weight 6 to 12lbs.

### ELECTRICAL BOX SPECS

Remote LED Dimmable Drivers are class 2 rated and customly configured to operate with Dalume's 1" & 2" Continuum series lighting package. All Drivers equipped with Over voltage, Over temperature & Overload protection plus short circuit protection per UL8750.

1 Driver per luminaire, contact Factory for details of luminaires greater than 8 feet.

For standard wiring please reference wiring diagram, for special circuit wiring, contact factory.

### 0-10V ANALOG DIMMING

120-277V 50 - 60 (Hz) input, 1% dimming. -40°C to 45°C Operating Temp. EMI and RFI; Meets FCC part 15 (Class A)

### ELV, MLV/INCANDESCENT 3WIRE DIMMING

120V 50Hz or 277V 60Hz input. -20°C to 45°C Operating Temp. For RGBW, DALI specifications, contact Factory. 1/2"

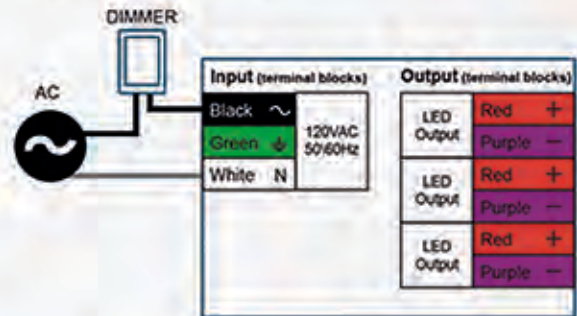
### DEJ101

1 Driver Capacity / 1 Circuit Remote Enclosure:  
NEMA 1 Wall mount design includes removable covers fastened with plated steel screws with a unpainted 16ga. steel enclosure finish. Knockouts included: (6) x 1/2" to 3/4" K.O's, (2) 3/4"-1" K.O's.

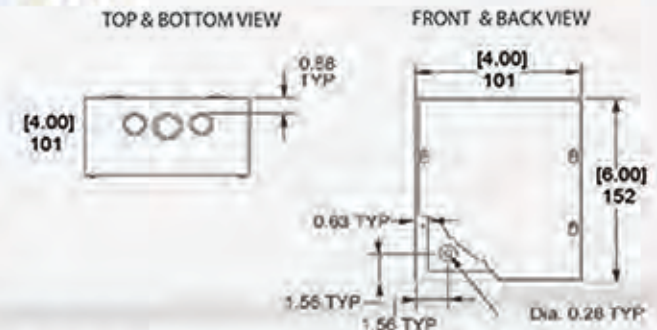
### DEJ301

2-3 Driver Capacity / 1 Circuit Remote Enclosure:  
Wall mount design includes ventilation slots, removable covers fastened with plated steel screws with a white powder coat enclosure finish. Knockouts included: (6) x 3/8" K.O's.

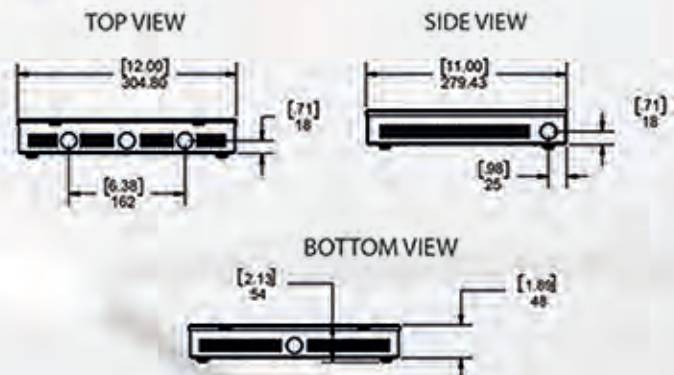
### WIRING DIAGRAM



### DEJ10



### DEJ30



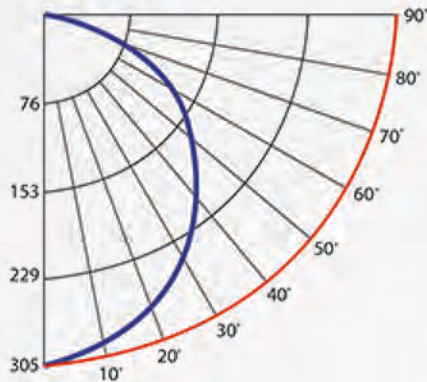
Total Nominal Wattage of Driver	Maximum Cable Length (feet) at Full Load		
	12 Gauge	14 Gauge	16 Gauge
45W	100'	N/A	N/A
120W	75'	100'	125'
200W	Do Not Use	75'	100'
300W	Do Not Use	Do Not Use	75'

# DĀLUME®

## DCG 1" Grid-Lyte

### OUTPUT PERFORMANCE

IES INDOOR REPORT TOTAL RATED LAMP LUMENS 833  
 DCG1-12W-35K-UD.IES CCT: 3500K/12W



### Performance

#### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	52798	47183	44218
55	54772	41400	37932
65	51089	34419	30591
75	46008	24933	20973
85	36629	10788	8123

#### ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	28.85
10-20	81.97
20-30	122.33
30-40	144.58
40-50	147.15
50-60	131.29
60-70	100.33
70-80	59.01
80-90	17.62
90-100	.63
100-110	.02
110-120	.02
120-130	.02
130-140	.02
140-150	.01
150-160	.01
160-170	.01
170-180	0

#### COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

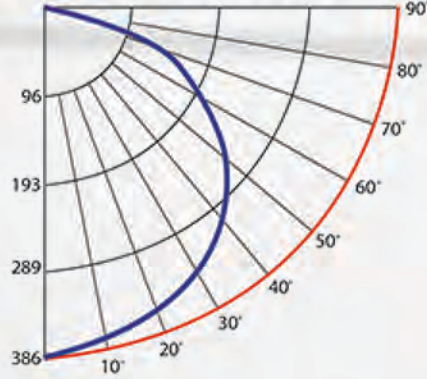
EFFECTIVE FLOOR CAVITY REFLECTANCE: 0.20

RC	80				70				50				30				10				0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84			
2	99	91	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70			
3	90	80	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59			
4	83	71	62	55	80	69	61	55	67	59	54	64	58	53	62	57	52	50			
5	76	63	54	47	74	62	53	47	60	52	47	58	51	46	56	50	46	43			
6	70	57	48	41	68	56	47	41	54	46	41	52	46	40	51	45	40	38			
7	65	52	43	37	63	51	42	36	49	42	36	48	41	36	46	40	36	34			
8	61	47	39	33	59	46	38	33	45	38	32	44	37	32	43	36	32	30			
9	57	43	35	29	55	43	35	29	41	34	29	40	34	29	39	33	29	27			
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	37	31	26	25			

## DCG 2" Grid-Lyte

### OUTPUT PERFORMANCE

IES INDOOR REPORT TOTAL RATED LAMP LUMENS 1295  
 DCG2-24W-35K-UD.IES CCT: 3500K/24W



### Performance

#### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	84214	68636	64218
55	83960	63543	58293
65	83122	56217	50159
75	81095	44736	38319
85	96326	30048	24029

#### ZONAL LUMEN SUMMARY

Zone	Lumens
0 - 10	36.56
10 - 20	105.47
20 - 30	162.14
30 - 40	199.91
40 - 50	213.73
50 - 60	201.53
60 - 70	164.25
70 - 80	107.79
80 - 90	51.18
90 - 100	19.84
100 - 110	11.86

#### COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

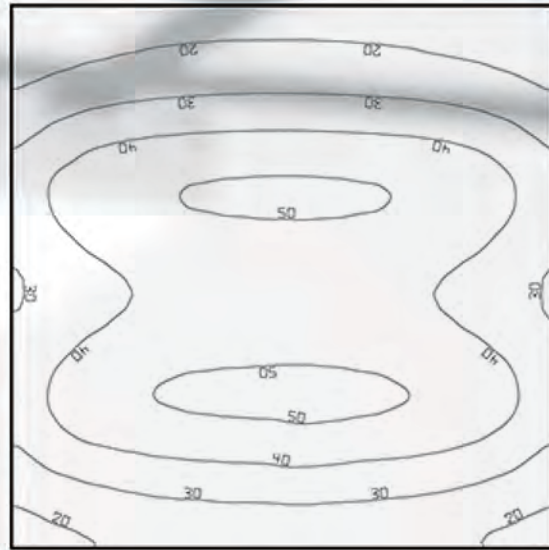
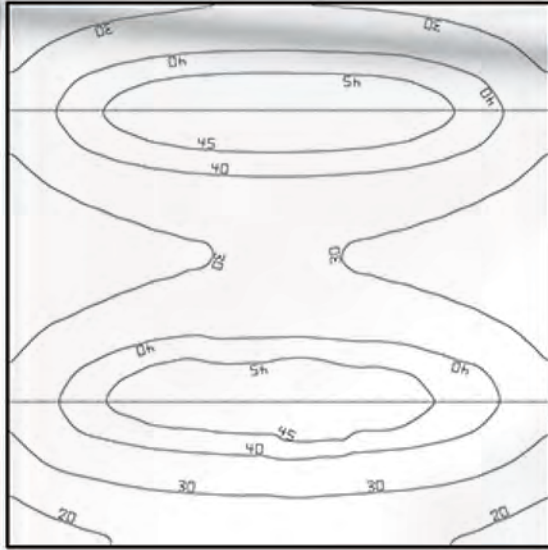
EFFECTIVE FLOOR CAVITY REFLECTANCE: 0.20

RC	80				70				50				30				10				0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
0	118	118	118	118	115	115	115	115	109	109	109	103	103	103	98	98	98	96			
1	107	101	97	92	103	99	94	90	94	90	87	89	86	83	85	82	80	78			
2	96	88	80	74	93	85	79	73	81	75	70	77	72	68	73	70	66	64			
3	88	76	68	61	85	74	66	60	71	64	58	67	62	57	64	59	55	53			
4	80	67	58	51	77	66	57	51	63	55	49	60	53	48	57	52	47	45			
5	73	60	51	44	71	59	50	43	56	48	42	53	47	42	51	45	41	38			
6	68	54	45	38	65	53	44	38	50	43	37	48	41	36	46	40	36	33			
7	63	49	40	33	61	48	39	33	46	38	32	44	37	32	42	36	31	29			
8	58	44	36	30	56	43	35	29	42	34	29	40	33	28	39	33	28	26			
9	54	41	32	26	53	40	32	26	38	31	26	37	30	26	36	30	25	23			
10	51	37	29	24	49	37	29	24	35	28	23	34	28	23	33	27	23	21			

## DCG 1" Typical Layout

**OFFICE APPLICATION:**  
 - 30' (L) x 30' (W) x 10' (H) 900sf.  
 - LUMINAIRE: 2x DCGS130-12W-35K-UD  
 2x 30' LED System

**PERFORMANCE:**  
 12.3W/Ft., 833Lm/Ft. 69.4 Lm/W  
 Total Load/Lumens: 738W / 51,217Lm  
 Power Density: 0.82 W/sq ft = 0.21 W/sq ft/10 fc  
 Layout: 12' & 16' Luminaire on center spacing



Reflection factors: Ceiling 80.0%, Walls 50.0%, Floor 20.0%, Light loss factor: 0.90

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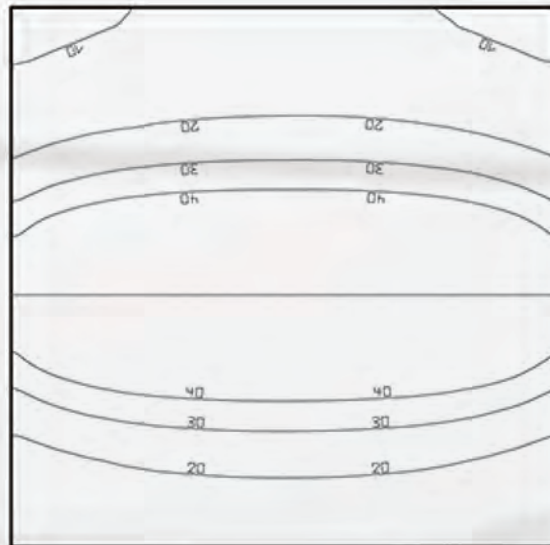
Surface	Average	Min	Max
Workplane Height: 2.5 ft. with 16' Spacing on Center	35.02	15.43	51.31

Surface	Average	Min	Max
Workplane Height: 2.5 ft. with 12' Spacing on Center	36.07	12.15	52.34

## DCG 2" Typical Layout

**OFFICE APPLICATION:**  
 - 30' (L) x 30' (W) x 10' (H) 900sf.  
 - LUMINAIRE: 1x DCGS230-24W-35K-UD  
 1x 30' LED System

**PERFORMANCE:**  
 24.6W/Ft., 1298Lm/Ft. 56.2 Lm/W  
 Power Density: 0.82 W/sq ft = 0.23 W/sq ft/1 fc



Height of room: 10 ft, Reflection factors: Ceiling 80.0%, Walls 50.0%, Floor 20.0%, Light loss factor: 0.90

Surface	Average	Min	Max
Workplane Height: 2.5 ft.	33.74	8.0	77.01