Day-Brite CFI

Recessed

ClearAppeal 1x4

1CAX up to 4500 lumens

Project: _____

Location: _____

Cat.No: _____

Type: _____

Qty: _____

Notes: _____

Day-Brite / CFI ClearAppeal LED recessed is a fully luminous aperture luminaire providing modern appeal to architectural spaces. Featuring a regressed aesthetic with balanced glare gradient, ClearAppeal delivers high performing even illumination and high visual comfort. Its architectural style, coupled with controls options, makes ClearAppeal an ideal choice for applications such as office, institutional, and healthcare, where energy savings and customized effect are desired.

Now available with AccuRender technology for the highest color quality at the highest efficacy.

Base configurations are indicated in blue. Standard configurations are available with all choices, unless otherwise noted.

Ordering guide (standard & wireless controls)

example: 1CAXG38L840-4-DS-UNV-DIM-SWZCS

Series	Ceiling Type	Lumens (nominal delivered)	Efficacy	Color (CRI/CCT)	–	Length	–	Center Diffuser	–	Voltage	–	Driver	–	Options
1CAX	**G**					**4**		**DS**						
1CAX 1' ClearAppeal Gen 2	G Grid	**Base configs** **38B** 3800 **Standard configs** **30L** 3000 **38L** 3800 **45L** 4500 Other lumen packages may be ordered in increments of 100lm from 3000 to 4500 lumens	**Blank** Standard **H**[5] High	**830** 80 CRI, 3000K **835** 80 CRI, 3500K **840** 80 CRI, 4000K **850** 80 CRI, 5000K **AccuRender**[8,9] **930** 90 CRI, 3000K **935** 90 CRI, 3500K **940** 90 CRI, 4000K		**4** 4'		**DS** Diffuse (smooth)		**UNV** Universal Voltage, 120-277V **347** 347V		**DIM**[1] Dimming **SDIM** Step dimming to 40% input power **LDEH** Lutron LDE1, 1% dimming **DALI** DALI dimming		**F1** 3/8" flex, 18ga. 6'; 3 leads include hot, neutral, ground **F2** 3/8" flex, 18ga. 6'; 4 leads include 2 hots, neutral, ground **F1/D** 3/8" twin flex, 18ga. 6' (for dimmable); Flex 1: 3 leads include hot, neutral, ground Flex 2: 2 leads, Dim+ / Dim- **F2/5W** 3/8" single flex, 18ga. 6' (for dimmable); 5 leads include hot, neutral, ground, Dim+ / Dim- **F2/6W** 3/8" single flex, 18ga. 6' (for dim & EM); 6 leads include 2 hot, neutral, ground, Dim+ / Dim- **GLR** Fusing, fast blow **DSC** Quick driver disconnect **CHIC**[3] Chicago Plenum rated **BSL6LST**[4] Bodine 6W selftesting battery pack **BSL10LST**[4] Bodine 10W selftesting battery pack **ER100**[4,6,7] UL924 listed sensor bypass relay, factory installed between driver & sensor **GTD/E**[4,6] UL924 listed Bodine GTD factory installed on driver input **GTD/SNSR**[4,6,7] UL924 listed Bodine GTD factory installed between driver & sensor **SWZCS**[2,10] Interact wireless sensor with integral daylight & occupancy sensing, advanced grouping with dwell time **RADIO**[2] Interact RF sensor for wireless connectivity only, no sensing **IAOSB**[2,10] Interact Pro wireless sensor with occupancy, daylight, and environmental sensing capabilities **AG** Antimicrobial Finish **WL** Wet location listed

Ordering guide – PoE controls

example: 1CAXG38L840-4-DS-LV-POE-IAO

Family	Ceiling Type	Lumens (nom. delivered)	Efficacy	Color	–	Length	–	Center Diffuser	–	Voltage	–	Driver	–	Driver
1CAX	**G**					**4**		**DS**		**LV**		**POE**		
1CAX 1' ClearAppeal gen 2	G Grid	**Std. configs** **30L** 3000 **38L** 3800 **45L** 4500	**Blank** Standard	**830** 80 CRI, 3000K **835** 80 CRI, 3500K **840** 80 CRI, 4000K **850** 80 CRI, 5000K		**4** 4'		**DS** Diffuse (smooth)		**LV** Low voltage		**POE** Power over Ethernet		**EMPOE** 600lm integral emergency driver and battery pack **IAO** Integral Interact Office daylighting and occupancy sensor, enables wireless connected lighting control **IAOSB** Interact Office advanced wired sensor bundle, integral SC2000 w/IoT capabilities for enterprise scale projects

Footnotes

1. Integral controls options dimmable to 5% via wireless wall switch. Non-controls options are 0-10v dimmable to 1% for Standard configurations, and to 10% for Base configurations.
2. Specify only with –DIM driver option.
3. CHIC option not provided with air return functionality.
4. Not available with 347V.
5. High efficacy option may only be ordered with Standard lumen configurations.
6. Must be installed in conjunction with a UL1008 device.
7. Must be ordered with an integral sensing option.
8. AccuRender is 90CRI with R_9>50.
9. Option is qualified as Engineered-to-Order (ETO) ready. Lead times and minimum order quantities may vary, please consult factory. (DLC Standard efficacy only)
10. Must order IRT9015 Interact commissioning remote with each system order.

Accessories (order separately)

- FSF414 – 1'x4' surface mount field installation kit (field assembled)
- FMA14 – 1'x4' "F" mounting frame for NEMA "F" ceiling
- CAXGDS14L – 1'x4' ClearAppeal Gen2 replacement lens
- CAXGDS14LC – 1'x4' ClearAppeal Gen2 with controls replacement lens

SWZCS accessories (order separately)

- IRT9015 – handheld remote for grouping and configuration (at least one remote required for any SWZCS installation).

Not all product variations listed on this page are DLC qualified. To ensure that a specific model is qualified, visit www.designlights.org/search

1CAX ClearAppeal recessed 1x4

up to 4500 lumens

Application

- Ideal for modern offices, institutional, retail, and healthcare applications.
- Modern architectural styling to complementary space.
- Full width luminous lens provides smooth brightness and high visual comfort.
- Directs a controlled amount of light to higher angles to eliminate "cave effect" without creating glare.
- Available in standard efficacy and high efficacy (H) configurations up to 130lm/W.
- 80 CRI minimum source provides a balanced spectral power distribution.
- AccuRender 90 CRI source provides preferred color quality.
- Suitable for use with NEMA G (15/16") and NFG (9/16") suspended t-grid ceilings. NEMA F flange ceilings require the FMA24 accessory (ordered separately).

Environment

- Rated for dry or damp locations in operating ambient temperatures 0-30°C (32-86°F). Many luminaire components, such as reflectors, refractors, lenses, sockets, lampholders, and LEDs are made from various types of plastics which can be adversely affected by airborne contaminants. If sulfur based chemicals, petroleum based products, cleaning solutions, or other contaminants are expected in the intended area of use, consult factory for compatibility. Not suitable for natatorium environments.

Construction/Finish

- Robust and durable die-formed embossed steel housing and end caps.
- Molded one-piece acrylic diffuser may be removed without tools for access to LED boards and driver(s).
- Unique spring retainers ensure the diffuser is centered in the housing opening at all times.
- T-bar grid clips are built into luminaire end caps for quick and easy installation, no extra parts.
- Air return functionality is standard for all configurations. See air flow and noise data on page 4.
- Suitable for end to end continuous row mounting. 1" gap between luminaires requires chase nipple to accommodate through wiring (by others).
- Sheet metal components are multi-stage phosphate treated for maximum corrosion resistance and finish coat is high reflectance basked white enamel.
- Integral louvers on housing ends allow air from the heated space to return to a pressurized plenum.

Validation

- cETLus listed for use in damp locations
- When ordered with -WL option code, suitable for use in wet locations with covered ceilings
- Rated for direct contact with insulation (IC)
- CCEA Chicago Plenum listed
- ClearAppeal luminaires are Designlights Consortium® qualified. Please see the DLC QPL list for exact catalog numbers, www.designlights.org/QPL

Electrical

- Driver and LED board are accessible from below by easy removal of lens.
- Non-controls Base configurations 0-10V dimmable to 10%.
- Non-controls Standard configurations 0-10V dimmable to 1%.
- Standard configurations with controls options dimmable via wireless switches (see below).
- Predicted L70 lumen maintenance up to 85,000 hours at 25°C ambient for all configurations.
- Emergency battery packs accessible from above. To estimate lumen output in emergency mode, multiply emergency pack wattage by luminaire efficacy, then by 1.10.
- The GTD/E option is used to bypass wall switches and allow luminaire operation on auxiliary power. Generator transfer requires installation in conjunction with a UL1008 listed device.
- The GTD/SNSR option is used to bypass integrated sensor control in the event of utility power loss. Generator transfer requires installation in conjunction with a UL1008 listed device.
- Compliance to CAN ICES-005-A/ NEB-005-A and FCC Part 15-A.

Warranty

- 5 year manufacturer's limited warranty. Visit signify.com/warranties for complete warranty information.

Energy data

Configuration	Nominal CCT/CRI	Flux (lm)	Input Power (W)	Efficacy (LPW)	DLC
1CAXG38B835	3500K/80	4034	34	118	Standard
1CAXG38B840	4000K/80	4029	34	117	Standard
1CAXG30L835	3500K/80	3054	26	116	Standard
1CAXG30L840	4000K/80	3054	27	115	Standard
1CAXG30LH835	3500K/80	3014	24	124	Standard
1CAXG30LH840	4000K/80	3086	24	127	Premium
1CAXG38L835	3500K/80	3885	34	114	Standard
1CAXG38L840	4000K/80	3888	34	114	Standard
1CAXG38LH835	3500K/80	3777	30	126	Premium
1CAXG38LH840	4000K/80	3873	30	130	Premium
1CAXG45L835	3500K/80	4619	41	112	Standard
1CAXG45L840	4000K/80	4620	42	111	Standard
1CAXG45LH835	3500K/80	4590	36	126	Premium
1CAXG45LH840	4000K/80	4706	36	130	Premium

1CAX ClearAppeal recessed 1x4

up to 4500 lumens

Wireless controls options

Interact

- SWZCS is a connected sensor with integral occupancy and daylight sensing and supports wireless mesh connectivity.
- The sensor works in the standalone mode (similar to SpaceWise) when configured without a gateway or in a cloud connected mode if a compatible gateway is used.
- Interact includes an App, a portal and a broad portfolio of wireless luminaires, lamps and retrofit kits all working on the same system.
- Startup is implemented via Interact Pro App (Android or iPhone) & BlueTooth connectivity. The App provides flexibility to choose between a gateway or non gateway mode for setup.
- Setup with the gateway requires wired internet access to the gateway. It is possible to add a gateway at a later point.
- Prepare project configuration steps remotely and use IRT9015 remote on-site to identify and group devices together.
  Compatible with:
  - SWS200 & UID8465 wireless scene switch
  - Battery powered IP42 presence sensor OCC sensor IA CM WH 10/1
  - Battery powered IP42 presence & daylight sensor OCC-DL sensor IA CM IP42 WH
  - LCN3110: battery powered IP65 presence sensor, OCC sensor IA CM IP65W
  - LCN3120: battery powered IP65 presence & daylight sensor, OCC-DL sensor IA CM IP65 WH
- For more information on Interact visit: interact-lighting.com/interactproscalablesystem

Radio only sensor (RA or RADIO)

- Integral RA or RADIO only sensor simply enables wireless mesh connectivity to the luminaire without any occupancy or daylight sensing.
- Ideal for applications where sensing functionality is managed by other Interact devices and the luminaire only needs to have wireless connectivity.
- Interact includes an App, a portal and a broad portfolio of wireless luminaires, lamps and retrofit kits all working on the same system.
- Startup is implemented via Interact Pro App (Android or iPhone) & Bluetooth connectivity. The App provides flexibility to choose between a gateway or non-gateway mode for setup.
- Setup with the gateway requires wired internet access to the gateway. It is possible to add a gateway at a later point.
- Prepare project configuration steps remotely, identify and group devices together onsite.
- Compatible with SWS200 and UID8465 wireless scene switch, wireless Occ sensor (OCC SENSOR IA CM IP42 WH 10/1) and wireless Day/Occ sensor (OCC MULTI SENSOR IA CM WH 10/1).
- For more information on Interact visit: interact-lighting.com/interactproscalablesystem

SofTrace shown with integral sensor

Sensor bundle (IAOSB or SB)

- A wireless IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.
- View all your projects under one dashboard and easily compare insights from multiple projects in one view.
- Compatible with SWS200 wireless scene switch, wireless Occ sensor (OCC SENSORIA CM IP42 WH 10/1) and wireless Day/Occ sensor (OCC MULTI SENSOR IA CM WH 10/1) and wireless Occupancy or Daylight & Occupancy sensors available.• Use Interact software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- IAOSB or SB option in addition to occupancy and daylights sensing supports advanced IoT capabilities, such as people estimation analysis, desk level temperature & humidity sensing, noise classification, and BLE beacon.
- Requires compatible Gateway and internet connectivity for commissioning.
- For more information, visit: interact-lighting.com/interactproscalablesystem

Emergency Options (ER100)

- **Power Sensing** (factory default) – Recommended UL924 option requires unswitched power sense line, absence of voltage on the normal circuit triggers luminaire to 100% output.
- **Power Interruption Detection** (field option) – Detects AC power interruption >30ms triggers 90 minute emergency mode with luminaire at 100% output.

Interact supported sensor option codes across Genlyte Solutions product lines

	Evokit	Day-Brite	Ledalite	Lightolier
ZigBee + Bluetooth + Sensing	SWZCS	SWZCS	CS	SBA accessory (external)
ZigBee + Bluetooth	RADIO	RADIO	RA	RA
ZigBee + Bluetooth + Sensing + Environmental data	IAOSB	IAOSB	SB	SB
ZigBee + Highbay + Sensing	–	SWZCSH	–	–

Wired Controls Options

Interact Office Wired (PoE)

- PoE based IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.
- Use Interact software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- IAOSB option in addition to occupancy and daylight sensing supports advanced IoT capabilities such as people estimation analysis, desk level temperature & humidity sensing, noise classification, and BLE beacon.
- PoE lighting controller is accessible from below.

- Integral sensor option for occupancy sensing (PIR) and/or daylight harvesting available for additional energy savings.
- Optional integral emergency controller and battery pack provides 600lm nominal output. Test switch and indicator light mounted on side of chassis on one end.
- Emergency battery has a 3 month pre-installed shelf life, and must be stored and installed in environments of 20C to 30C (-4F to 86F) ambient, and 45-85% relative humidity.
- For more information, visit: www.interact-lighting.com/office or www.usa.lighting.philips.com/systems/system-areas/offices

Energy Data (PoE)

Configuration	Nominal CCT/CRI	Flux (lm)	DC Power (W)*	Efficacy (LPW)
2STXG38L840	4000K/80	3895	30	129
2STXG43L840	4000K/80	4356	34	127
2STXG48L840	4000K/80	4891	39	124

*DC power supply

1CAX   ClearAppeal recessed 1x4

up to 4500 lumens

interact

	Standalone	Option 1	Option 2
		Gateway Connected	
Dimming, grouping, and zoning	✓	✓	✓
Bluetooth and ZigBee enabled	✓	✓	✓
Motion sensing and daylight harvesting	✓	✓	✓
Integration with 0–10V and phase dimming fixtures	✓	✓	✓
Code compliance	✓	✓	✓
Granular dimming and dwell time	✓	✓	✓
Correlated color temperature (CCT) tuning by switch **New**	✓	✓	✓
Support for sensor-based Tunable White luminaires **New**	✓	✓	✓
Energy reporting and monitoring		✓	✓
Scheduling		✓	✓
Demand response		✓	✓
BMS integration (BACnet)			✓
Floor plan visualization			✓
IoT sensors for wellness			✓
IoT Apps for productivity			✓

Currently supported maximum system size

To be able to design the lighting system correctly for the customer, it is important to know the prime characteristics of the system, its possibilities and limitations.

System level	
Total number of gateways	Unlimited
Total number of devices	200 per network
· Luminaires with integrated sensors	150
· Smart TLEDS	150
· Zones + groups	64
Total number of ZGP devices (sensors and switches)	50
· Sensors	30
· Switches	50

Group level	
Recommended number of lights	40 (maximum 150)
Number of ZGP devices	5
Number of scenes	16
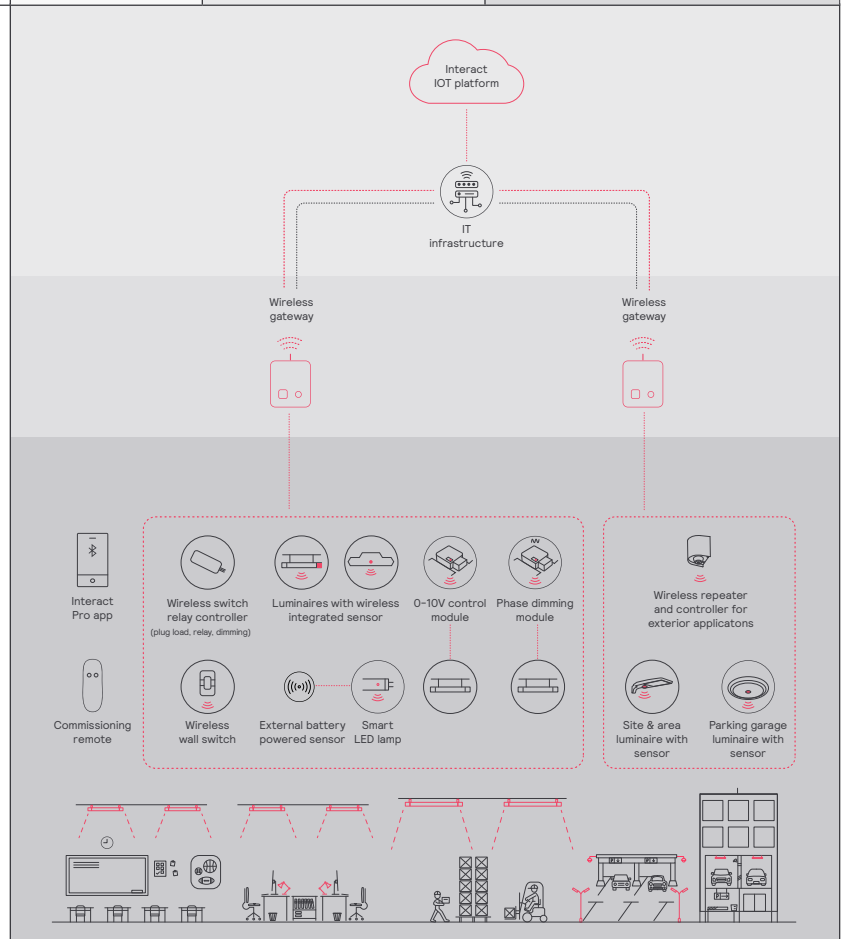
1CAX   ClearAppeal recessed 1x4

up to 4500 lumens

Dimensions

11-3/4"
(298mm)

3-15/16"
(99mm)

Integral grid clips
upper and lower tabs

Ceiling grid

47-3/4"
(1213mm)

3-13/16"
(97mm)

2-3/4"
(70mm)
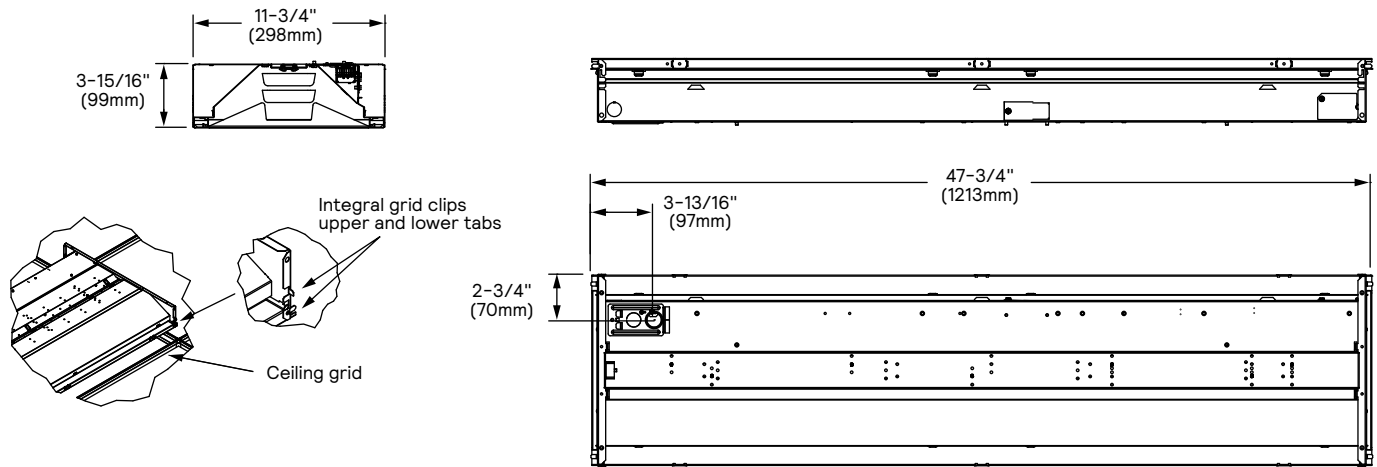
Air return

Integral louvers on housing ends allow air from the heated space to return to a pressurized plenum.

Return Air (CFM)

120

100

80

60

40

20

0

0.05   0.1   0.15   0.2   0.25   0.3   0.4   0.5   0.55

Plenum Presssure, Inches W.G.

1x4
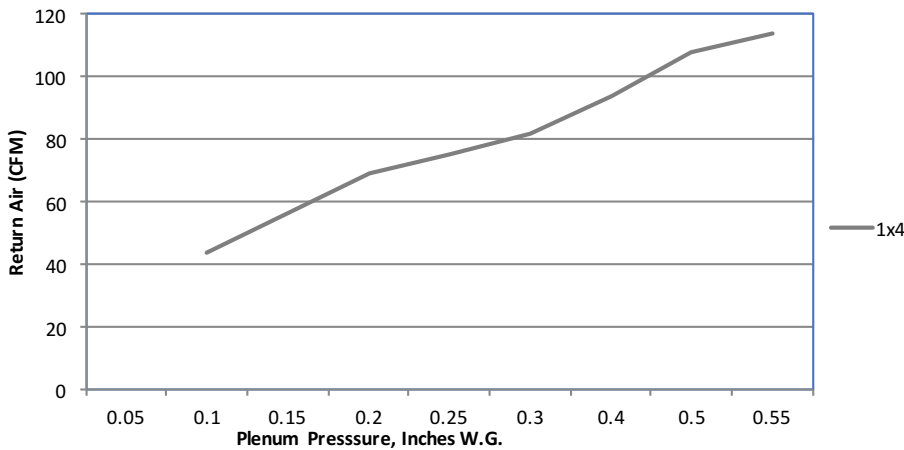
	2x4 Return Air – noise criteria						
CFM		44	56.5	69	75.5	82	94	108
NC (dB)	<15	19	21.5	24	27	30	35	39
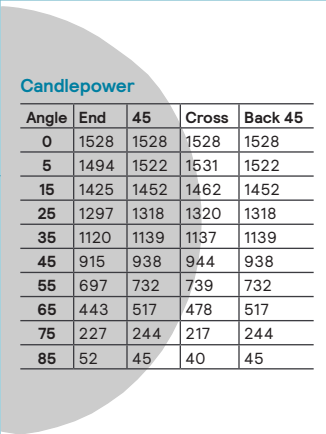
1CAX ClearAppeal recessed 1x4

up to 4500 lumens

Photometry
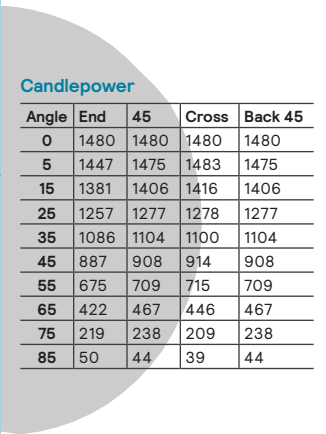
1x4 ClearAppeal recessed LED, base configuration, 3800 nominal delivered lumens

Catalog No. 1CAXG38B840-4-DS-UNV-DIM
Test No. 40617
S/MH 1.2
Lamp Type LED
Lumens 4033
Input Watts 34

Comparative yearly lighting energy cost per 1000 lumens – **$2.05** based on 3000 hrs. and $.08 pwr KWH.

The photometric results were obtained in the Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

Candlepower

Angle	End	45	Cross	Back 45
0	1528	1528	1528	1528
5	1494	1522	1531	1522
15	1425	1452	1462	1452
25	1297	1318	1320	1318
35	1120	1139	1137	1139
45	915	938	944	938
55	697	732	739	732
65	443	517	478	517
75	227	244	217	244
85	52	45	40	45

Light Distribution

Degrees	Lumens	% Luminaire
0-30	1158	28.7
0-40	1868	46.3
0-60	3237	80.3
0-90	4033	100
0-180	4033	100

Average Luminance

Zone	End	45°	Cross
45	4436	4544	4574
55	4164	4372	4413
65	3593	4196	3876
75	3005	3236	2870
85	2029	1762	1585

Coefficients of Utilization

Effective Floor Cavity Reflectance 20 Per (pfc=0.20)

pfc =		20						
Ceil	80	70	50					
Wall	70	50	30	70	50	30	50	30
RCR								
0	118	118	118	115	115	115	111	111
1	109	104	100	106	102	97	97	94
2	98	91	83	96	89	82	85	81
3	91	80	71	88	79	70	76	68
4	82	70	61	81	69	61	67	59
5	76	64	55	73	63	54	59	53
6	70	56	48	68	56	47	55	46
7	66	52	42	64	51	42	50	41
8	60	47	39	58	46	39	46	38
9	56	44	35	56	42	34	41	34
10	53	40	32	52	40	32	39	32
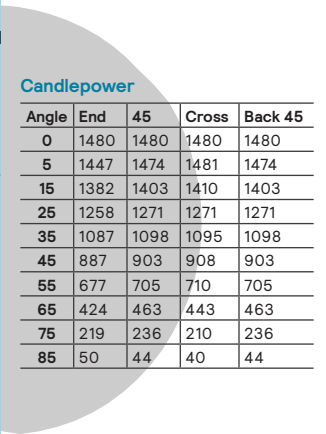
1x4 ClearAppeal recessed LED, standard configuration, 3800 nominal delivered lumens

Catalog No. 1CAXG38L840-4-DS-UNV-DIM
Test No. 40615
S/MH 1.2
Lamp Type LED
Lumens 3888
Input Watts 34

Comparative yearly lighting energy cost per 1000 lumens – **$2.11** based on 3000 hrs. and $.08 pwr KWH.

The photometric results were obtained in the Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

Candlepower

Angle	End	45	Cross	Back 45
0	1480	1480	1480	1480
5	1447	1475	1483	1475
15	1381	1406	1416	1406
25	1257	1277	1278	1277
35	1086	1104	1100	1104
45	887	908	914	908
55	675	709	715	709
65	422	467	446	467
75	219	238	209	238
85	50	44	39	44

Light Distribution

Degrees	Lumens	% Luminaire
0-30	1121	28.8
0-40	1809	46.5
0-60	3135	80.6
0-90	3891	100
0-180	3891	100

Average Luminance

Zone	End	45°	Cross
45	4298	4402	4429
55	4034	4235	4275
65	3424	3786	3616
75	2895	3145	2770
85	1954	1711	1530

Coefficients of Utilization

Effective Floor Cavity Reflectance 20 Per (pfc=0.20)

pfc =		20						
Ceil	80	70	50					
Wall	70	50	30	70	50	30	50	30
RCR								
0	118	118	118	115	115	115	111	111
1	109	104	100	106	102	97	97	94
2	98	91	84	96	89	82	85	81
3	91	80	71	88	79	70	76	68
4	82	70	63	81	69	61	67	59
5	76	64	55	73	63	54	60	53
6	70	56	48	68	56	47	55	46
7	66	52	42	64	51	42	50	41
8	60	47	39	59	46	39	46	38
9	56	44	35	56	42	34	41	34
10	54	40	33	52	40	32	39	32

1x4 ClearAppeal recessed LED, high efficacy configuration, 3800 nominal delivered lumens

Catalog No. 1CAXG38LH840-4-DS-UNV-DIM
Test No. 40623
S/MH 1.2
Lamp Type LED
Lumens 3877
Input Watts 30

Comparative yearly lighting energy cost per 1000 lumens – **$1.85** based on 3000 hrs. and $.08 pwr KWH.

The photometric results were obtained in the Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

Candlepower

Angle	End	45	Cross	Back 45
0	1480	1480	1480	1480
5	1447	1474	1481	1474
15	1382	1403	1410	1403
25	1258	1271	1271	1271
35	1087	1098	1095	1098
45	887	903	908	903
55	677	705	710	705
65	424	463	443	463
75	219	236	210	236
85	50	44	40	44

Light Distribution

Degrees	Lumens	% Luminaire
0-30	1119	28.9
0-40	1804	46.5
0-60	3123	80.6
0-90	3876	100
0-180	3877	100

Average Luminance

Zone	End	45°	Cross
45	4301	4377	4403
55	4044	4214	4243
65	3438	3756	3595
75	2901	3126	2776
85	1950	1734	1573

Coefficients of Utilization

Effective Floor Cavity Reflectance 20 Per (pfc=0.20)

pfc =		20						
Ceil	80	70	50					
Wall	70	50	30	70	50	30	50	30
RCR								
0	118	118	118	115	115	115	111	111
1	109	104	100	106	102	97	97	94
2	98	91	84	96	89	82	85	81
3	91	80	71	88	79	70	76	68
4	82	70	63	81	69	61	67	59
5	76	64	55	73	63	54	60	53
6	70	56	48	68	56	47	55	46
7	66	52	42	64	51	42	50	41
8	60	47	39	59	46	39	46	38
9	56	44	35	56	42	34	41	34
10	54	40	33	52	40	32	39	32

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