



Calculite LED 6" generation 3 features industry leading visual comfort, excellent uniform illumination over time, and patented installation flexibility.

Complete luminaire = Frame + Engine + Trim + Accessories (optional)

Project: _____
 Location: _____
 Cat.No: _____
 Type: _____
 Lamps: _____ Qty: _____
 Notes: _____

Frame

example: C6RN

Series	Aperture	Installation	Voltage/Options
6	R	<input type="checkbox"/>	<input type="checkbox"/>
6 6" Non-IC*	R Round	N New Construction R Remodeler	— Universal 120/277V 3 347V EM Emergency ^{1,2} LC Chicago Plenum ¹
		A Airseal IC	— Universal 120 V/277V

Engine

example: C6L10865MDUTW

Series	Lumens	CRI	CCT	Beam	Dimming	Voltage	Options
C6L							TW
C6L Calculite LED 6" aperture	10 1000lm 15 1500lm 20 2000lm 25 2500lm	8 80CRI	65 6500-2700K	M Medium (56°) W Wide (78°) ³	D Dali	U Universal 120/277V/347V	TW Tunable White
	15 1500lm 20 2000lm	8 80CRI	65 6500-2700K	M Medium (56°) W Wide (76°) ⁴	P Power over Ethernet ⁵	E Ethernet 48V DC	TW Tunable White

Trim

example: C6RDLCCP

Series	Aperture	Style	Finish	Flange
C6	R			
C6 Calculite LED 6" aperture	R Round	DL Downlight WW Open Wall Wash ³ LW Lensed Wall Wash ³ CW Corner Wall Wash ^{3,4} DW Double Wall Wash ^{3,4}	CL Specular clear CC Comfort clear CD Comfort clear diffuse CZ Champagne bronze BK Black (matte) WH White (matte)	— White (matte) P Polished F Flangeless ⁴ — White (matte) F Flangeless ⁴

Accessories

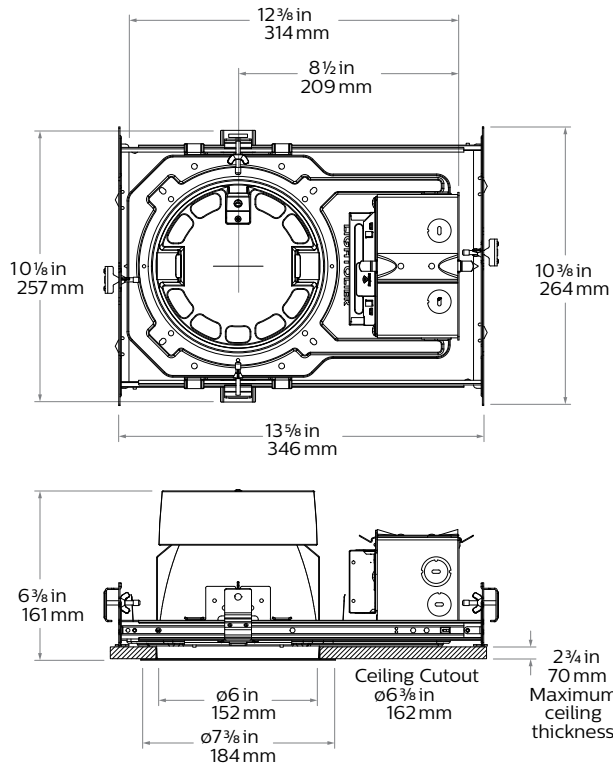
- CA6RFT** Mud-in ring for use with flangeless installations (ordered with a flangeless trim)
- CAEM** Field installable EM pack
- C6RVPWH** IP65 rated vandal proof matte white accessory that mounts onto a flangeless trim (not available for use with Lensed Wall Wash)

1. Emergency (EM) and Chicago Plenum (LC) options are only available with New construction (N) installations. Not compatible with PoE light engine.
2. Emergency (EM) frame comes with emergency battery pack and ceiling mountable test switch. Reflector mounted test switch requires above ceiling access and is only available with the downlight option. For reflector mounted test switch, order emergency frame and add "EM" suffix to reflector (example: C6RDLCCEM).
3. Wide (W) beam is ideal for all Wall Wash (LW, WW, CW, DW) applications.
4. Corner (CW) and Double (DW) wall wash are not available with flangeless (F) option.
5. Power over Ethernet (PoE) option compatible with 6RN and 6RR frames only.

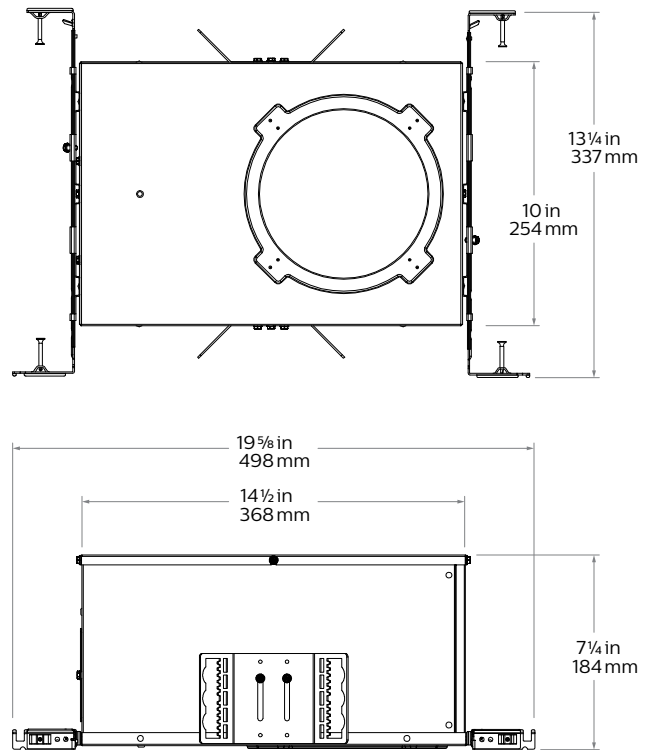
C6RTW Calculite LED 6" gen 3

Round Tunable White

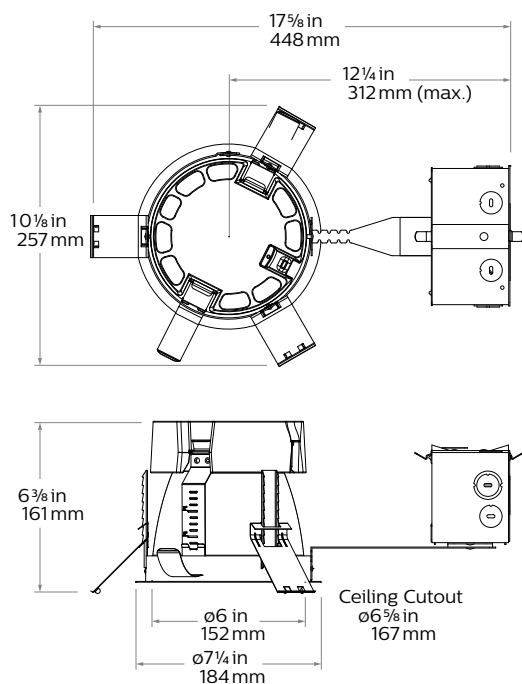
New Construction (N)



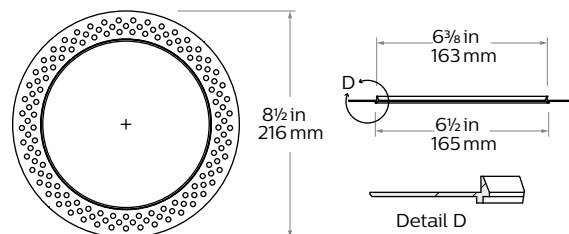
Chicago Plenum (LC)



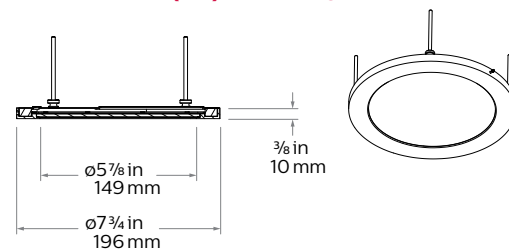
Remodeler (R)



Flangeless mud-in ring (CA6RFT) accessory



Vandal Proof (VP) accessory



C6RTW Calculite LED 6" gen 3

Round Tunable White

Disclaimers/Recommendations

For best performance, we recommend using Lightolier Dynalite products when designing your controls system.

CCT targeting table is for guidance only. Lightolier cannot guarantee color targeting precision, accuracy, or general performance with third party controls.

Lightolier cannot provide post sales configuration or commissioning support when using control systems that are not in the Lightolier product offering. Please contact your controls manufacturer for support.

Lightolier cannot provide guidance on programming dynamic show behaviors (circadian rhythm, daylight mimicry, etc.).

Any configuration, commissioning, or support is solely owned by the sales agent/rep/specifier.

Objective

Provide an application note to reps/agents/trade channel partners that provides information for integration of Lightolier tunable white luminaires with third party controllers.

All Lightolier tunable white luminaires leave the factory with the following settings:

Cool white CCT: 6500K

Warm white CCT: 2700K

When either channel is at 100% brightness

Warm white = Cool white
lumen output = lumen output

Communication protocol:

DALI 2.0 (Device Type 6)

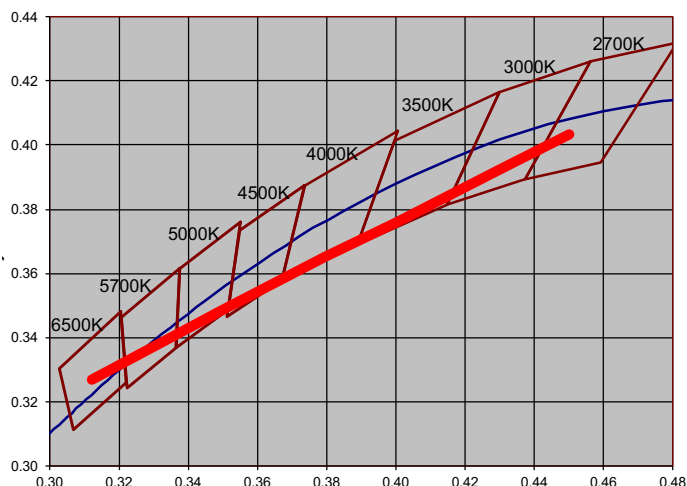
Power over Ethernet 48V

CCT targeting guidance

Target CCT	WW%	CW%
2700K	100	0
3000K	82	18
3500K	66	34
4000K	49	51
5000K	24	76
6500K	0	100

Color information (Dali)

6" 2000lm	2700K	3000K	3500K	4000K	5000K	6500K
Flux (lms)	1927	1856	1863	1937	1848	1790
Power (W)	19.21	18.12	17.62	17.93	17.14	16.84
Efficacy (lm/W)	100.3	102.4	105.7	108.0	107.8	106.3
CCT	2785	3008	3499	3936	4818	6549
CRI	86	87	88	89	88	84
R9	20	26	33	36	33	15
x	0.4501	0.4311	0.3999	0.3794	0.3495	0.3122
y	0.4033	0.393	0.376	0.3649	0.3484	0.3269
Duv	-0.0018	-0.0037	-0.0054	-0.0054	-0.0034	0.0024



Lifetime (TM-21) data

Lumens	Narrow beam	Medium/Wide beam
500lm	L90 @ 60,000hrs.	L90 @ 60,000hrs.
1000lm		
1500lm	L90 @ 60,000hrs.	L85 @ 60,000hrs.
2000lm		
2500lm		

Color information (PoE)

Flux (lm)	1300	1275	1284	1279	1266	1248	1221	1223
Power (W)	11.62	11.55	11.16	11	10.92	10.9	10.98	10.85
Efficacy (lm/W)	111.9	110.4	115.1	116.2	115.9	114.5	111.2	112.7
CCT	2729	2987	3508	4019	4536	5076	5869	6480
CRI	85	86	88	88	87	86	85	83
Color Rendering Index (R9)	16.5	23.1	31	33.9	33	28.6	22.3	14.1
x	0.4564	0.4336	0.3998	0.3762	0.3579	0.3425	0.3245	0.3132
y	0.4084	0.396	0.3773	0.3639	0.3535	0.3446	0.3342	0.3276
Duv	-0.0005	-0.0028	-0.0048	-0.0049	-0.0040	-0.0025	0.0001	0.0023
TM30 Rf	86	86	87	87	86	85	84	84
TM30 Rg	98	100	100	100	100	100	99	98

C6RTW Calculite LED 6" gen 3

Round Tunable White

Reflector



Specular clear (CL): Most specular and most efficient finish, delivers maximum photometric performance but can produce a mirror image effect of the interior space.



Comfort clear (CC): Semi-specular finish that softens the light at the source of the reflector and creates a subtle, even luminance from the reflector cone.



Comfort clear diffuse (CD): Slightly diffuse clear finish, that eliminates iridescence and reduces the mirror image effect inherent with specular finishes.



Vandal proof (VP): Provides an elegant solution for vandal resistant needs. One piece machined aluminum ring with impact resistant clear lens. Flangeless (F) flange must be ordered. Provides the luminaire with an IK10 impact and IP65 rating.



Champagne bronze (CZ): Semi-specular finish that softens light at the source of the reflector while providing a warmer reflector appearance (slightly warmer).



White (WH): (matte) Brightest illuminated aperture and provides the smoothest transition to most ceilings when off (white is only available with a white flange).



Black (BK): (matte) Specular finish that provides the lowest aperture brightness possible and significantly reduces source identification in a ceiling.

Flange



White (-): (matte) Provides the smoothest transition to ceilings when off.



Polished (P): (matches aperture) Produces a continuous look throughout the reflector (aperture matching).



Flangeless (F): (flush-mount) Creates a flush, virtually seamless transition from aperture to ceiling.

Frame-in-kits

New Construction

Galvanized stamped steel for dry or plaster ceilings. Preinstalled telescoping mounting bars from 13" to 24". For 4' distances, use 1/2" EMT, 1-1/2" x 1/2" U or C channel.

Max ceiling thickness is 2".

AirSeal

Black painted steel housing for dry or plaster ceilings. Pre-installed telescoping mounting bars from 13" to 24".

Patented install Mounting frame

With no driver attached, this versatile frame is independent of driver accommodating a wide range of lumen packages, driver types and CCTs, including 120V and 277V inputs.

Close-cut aperture design eliminates possibility of gap between ceiling opening & reflector flange.

Separate wiring compartment for wiring frame to building allows inspection prior to light engine install.

Simple plug-and-play connection between frame and light engine from below ceiling eliminates need for wiring between frame and LED driver, and also saves time during installation and future replacements/upgrades. Plug-and-play receptacle accommodates technology upgrade of light engines and replacements for the life of the building.

Drivers

- EldoLED ECoDrive Dali 1% Dimming

Rated life

60,000 hrs at 70% lumen maintenance based on IES LM-80-08 and TM-21-11.

Power over Ethernet

Powered via Lightolier PoE lighting controller:

Complies with FCC rules per Title 47 part 15 (Class A) for EMI / RFI (conducted & radiated). PoE lighting controller accessible from below ceiling.

Optical systems

Comfort throughout the space:

Patented optical system combines primary and secondary optics to provide a true 50° physical cutoff and 45° reflected cutoff virtually eliminating the view of the light source and bright spots in the reflector. A new reflector curve reduces reflector brightness by up to 50% compared to existing products, allowing for the use of higher lumen packages in smaller apertures without creating bright spots in the ceiling.

Light Engine

Quick connect power pack comprised of light source and driver allow for easy installation and replacement from below ceiling with no need for additional wiring. This allows for

- Frame and ceiling installation to be performed while still finalizing details such as lumen packages, CCT and control type.
- Easy replacement of electronics at end of life with minimal wasted material and labor required.
- Ease and upgradability of technology.

Options and Accessories

Flangeless mud-in ring: Use CA6RFT for use with flangeless installations.

Sloped ceilings: Compatible with sloped ceiling adapters (see SCA spec sheet).

Labels and Listings

- cULus listed for wet locations (downlights)
- RoHS certified

Warranty



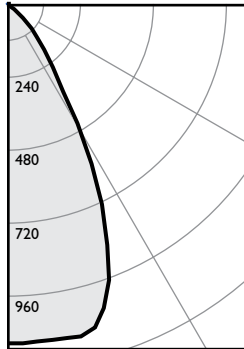
5 year limited warranty
Visit [Signify.com/warranties](https://www.signify.com/warranties) for more information on Signify's standard 5-year limited warranty on complete luminaire systems.

C6RTW Calculite LED 6" gen 3

Round Tunable White (with Dali driver)

Medium beam, 2000lm Engine, 100.3 lm/W

Candela Curve



Frame: **6RN**
 Engine: **C6L20865MDUTW**
 Trim: **C6RDLC**

Output lumens: 1927 lms
 Input watts: 19.2 W
 CRI: 80 min
 CCT¹: 2700K
 Spacing Crit.: 0.8
 Beam Angle: 56°

Zonal summary

Zone	Lumens	%Luminaire
0-30	1472	76.4%
0-40	1808	93.8%
0-60	1923	99.8%
0-90	1927	100.0%

Angle	Mean CP	Lumens
0	2229	
5	2223	212
10	2227	
15	2194	605
20	1930	
25	1459	655
30	916	
35	511	337
40	298	
45	137	108
50	17	
55	7	7
60	4	
65	3	3
70	2	
75	1	1
80	1	
85	0	0
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	89	4.0'
6'	62	4.8'
7'	45	5.6'
8'	35	6.4'
9'	28	7.2'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5'	88.4	0.85
6'	58.0	0.56
7'	41.4	0.40
8'	34.5	0.33
9'	27.6	0.27

38' x 38' x 10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Efficacy: 100.3 lm/w
 Report#: 1212GFR

Adjustment factors

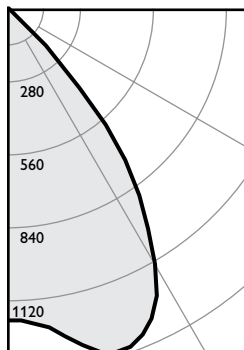
Finish	CCT	Lumens
CL = 100%	80CRI 4000K = 103%	2500lm = ???%
CC = 95%	80CRI 3500K = 100%	2000lm = 100%
CD = 87%	80CRI 3000K = 95%	1500lm = 75%
CZ = 63%	80CRI 2700K = 93%	1000lm = 50%
WH = 87%	90CRI 3000K = 83%	
BK = 57%	90CRI 2700K = 78%	

Coefficients of utilization

Ceiling	80%				70%		50%		30%		0%	
	70	50	30	10	50	10	50	10	50	10	0	
Wall	70	50	30	10	50	10	50	10	50	10	0	
RCR	Zonal cavity method - Effective floor reflectance = 20%											
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100
1	114	111	109	106	109	105	105	102	101	99	94	94
2	108	104	100	97	102	95	99	93	96	91	88	88
3	103	97	92	88	96	88	93	86	91	85	82	82
4	98	91	86	82	90	81	88	80	86	79	77	77
5	93	85	80	76	84	75	83	75	81	74	72	72
6	89	80	75	71	80	70	78	70	77	69	67	67
7	85	76	70	66	75	66	74	65	73	65	63	63
8	81	72	66	62	71	62	70	62	69	61	60	60
9	77	68	62	58	67	58	66	58	66	58	56	56
10	74	64	59	55	64	55	63	55	62	55	53	53

Wide beam, 2000lm Engine, 95.2 lm/W

Candela Curve



Frame: **6RN**
 Engine: **C6L20865WDUTW**
 Trim: **C6RDLC**

Output lumens: 1828 lms
 Input watts: 19.2 W
 CRI: 80 min
 CCT¹: 2700K
 Spacing Crit.: 1.2
 Beam Angle: 78°

Zonal summary

Zone	Lumens	%Luminaire
0-30	1091	59.7%
0-40	1628	89.1%
0-60	1823	99.7%
0-90	1828	100.0%

Angle	Mean CP	Lumens
0	1192	
5	1207	117
10	1268	
15	1358	382
20	1373	
25	1306	592
30	1130	
35	869	537
40	584	
45	205	185
50	23	
55	10	10
60	6	
65	3	4
70	2	
75	1	1
80	1	
85	0	0
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	48	6.0'
6'	33	7.2'
7'	24	8.4'
8'	19	9.6'
9'	15	10.8'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5'	82.4	0.85
6'	54.1	0.56
7'	38.6	0.40
8'	32.2	0.33
9'	25.7	0.27

38' x 38' x 10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Efficacy: 95.2 lm/w
 Report#: 1214GFR

Adjustment factors

Finish	CCT	Lumens
CL = 100%	80CRI 4000K = 102%	2500lm = ???%
CC = 95%	80CRI 3500K = 100%	2000lm = 100%
CD = 87%	80CRI 3000K = 97%	1500lm = 75%
CZ = 63%	80CRI 2700K = 87%	1000lm = 50%
WH = 87%	90CRI 3000K = 77%	
BK = 57%	90CRI 2700K = 73%	

Coefficients of utilization

Ceiling	80%				70%		50%		30%		0%	
	70	50	30	10	50	10	50	10	50	10	0	
Wall	70	50	30	10	50	10	50	10	50	10	0	
RCR	Zonal cavity method - Effective floor reflectance = 20%											
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100
1	113	110	108	105	108	104	104	100	100	97	93	93
2	107	102	98	94	100	93	97	91	94	89	85	85
3	101	94	89	85	93	84	90	82	88	81	78	78
4	95	87	81	77	86	76	84	75	82	74	72	72
5	90	81	75	70	80	70	78	69	76	68	66	66
6	85	75	69	64	74	64	73	63	71	63	61	61
7	80	70	63	59	69	59	68	58	67	58	56	56
8	75	65	59	54	65	54	63	54	62	54	52	52
9	71	61	54	50	60	50	59	50	58	50	48	48
10	68	57	51	47	57	46	56	46	55	46	45	45

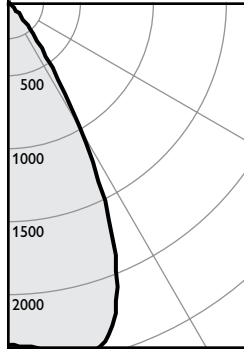
1. Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSI C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
 2. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

C6RTW Calculite LED 6" gen 3

Round Tunable White (with PoE driver)

Medium beam, 1500lm Engine, 123.1 lm/W

Candela Curve



Frame: **6RN**
 Engine: **C6L15865MPETW**
 Trim: **C6RDLC**

Output lumens: 1619 lms
 Input watts: 13.2 W
 CRI: 80 min
 CCT¹: 2700K
 Spacing Crit.: 0.8
 Beam Angle: 53°

Zonal summary

Zone	Lumens	%Luminaire
0-30	1308	80.8%
0-40	1556	96.1%
0-60	1616	99.8%
0-90	1619	100.0%

Angle	Mean CP	Lumens
0	1880	
5	1904	183
10	1948	
15	1951	540
20	1742	
25	1314	585
30	782	
35	370	248
40	169	
45	70	56
50	9	
55	4	4
60	3	
65	2	2
70	1	
75	1	1
80	0	
85	0	0
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	75	4.0'
6'	52	4.8'
7'	38	5.6'
8'	29	6.4'
9'	23	7.2'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5'		0.58
6'		0.38
7'		0.27
8'		0.23
9'		0.18

38' x 38' x 10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Efficacy: 123.1 lm/w
 Report#: 1646GFR

Adjustment factors

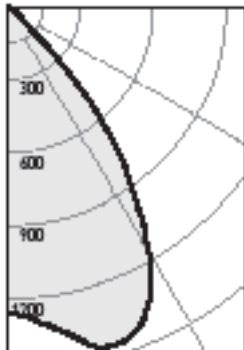
Finish	CCT	Lumens
CL = 100%	80CRI 4000K = 103%	2500lm = ???%
CC = 95%	80CRI 3500K = 100%	2000lm = 100%
CD = 87%	80CRI 3000K = 95%	1500lm = 75%
CZ = 63%	80CRI 2700K = 93%	1000lm = 50%
WH = 87%	90CRI 3000K = 83%	
BK = 57%	90CRI 2700K = 78%	

Coefficients of utilization

Ceiling	80%		70%		50%		30%		0%			
	70	50	30	10	50	10	50	10	50	10		
Wall	70	50	30	10	50	10	50	10	50	10		
RCR	Zonal cavity method - Effective floor reflectance = 20%											
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100
1	114	111	109	107	109	105	105	102	101	99	94	94
2	109	104	100	97	102	96	99	94	96	92	88	88
3	104	98	93	89	96	89	94	87	91	86	83	83
4	99	92	87	83	91	82	89	81	87	80	78	78
5	94	86	81	77	85	77	84	76	82	75	73	73
6	90	82	76	72	81	72	79	71	78	71	69	69
7	86	77	71	68	76	67	75	67	74	67	65	65
8	82	73	67	64	72	63	71	63	70	63	61	61
9	78	69	64	60	69	60	68	60	67	59	58	58
10	75	66	60	57	65	57	65	56	64	56	55	55

Wide beam, 1500lm Engine, 114.7 lm/W

Candela Curve



Frame: **6RN**
 Engine: **C6L15865WPETW**
 Trim: **C6RDLC**

Output lumens: 1508 lms
 Input watts: 13.2 W
 CRI: 80 min
 CCT¹: 2700K
 Spacing Crit.: 1.1
 Beam Angle: 71°

Zonal summary

Zone	Lumens	%Luminaire
0-30	920	61.0%
0-40	1355	89.9%
0-60	1505	99.8%
0-90	1508	100.0%

Angle	Mean CP	Lumens
0	1009	
5	1032	100
10	1086	
15	1157	325
20	1159	
25	1091	494
30	928	
35	704	436
40	464	
45	161	143
50	15	
55	7	7
60	4	
65	2	2
70	1	
75	1	1
80	0	
85	0	0
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	40	5.5'
6'	28	6.6'
7'	21	7.7'
8'	16	8.8'
9'	12	9.9'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5'		0.58
6'		0.38
7'		0.27
8'		0.23
9'		0.18

38' x 38' x 10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Efficacy: 114.7 lm/w
 Report#: 1640GFR

Adjustment factors

Finish	CCT	Lumens
CL = 100%	80CRI 4000K = 102%	2500lm = ???%
CC = 95%	80CRI 3500K = 100%	2000lm = 100%
CD = 87%	80CRI 3000K = 97%	1500lm = 75%
CZ = 63%	80CRI 2700K = 87%	1000lm = 50%
WH = 87%	90CRI 3000K = 77%	
BK = 57%	90CRI 2700K = 73%	

Coefficients of utilization

Ceiling	80%		70%		50%		30%		0%			
	70	50	30	10	50	10	50	10	50	10		
Wall	70	50	30	10	50	10	50	10	50	10		
RCR	Zonal cavity method - Effective floor reflectance = 20%											
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100
1	113	110	108	105	108	104	104	100	100	97	93	93
2	107	102	98	94	100	93	97	91	94	89	85	85
3	101	94	89	85	93	84	90	83	88	82	79	79
4	96	87	82	77	86	77	84	76	82	75	72	72
5	90	81	75	70	80	70	78	69	77	69	67	67
6	85	75	69	64	75	64	73	64	72	63	61	61
7	80	70	64	59	70	59	68	59	67	58	57	57
8	76	66	59	55	65	55	64	54	63	54	52	52
9	72	61	55	51	61	51	60	50	59	50	49	49
10	68	58	51	47	57	47	56	47	55	47	45	45

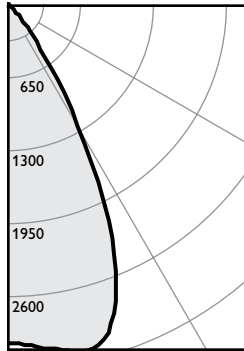
1. Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSI C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
 2. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

C6RTW Calculite LED 6" gen 3

Round Tunable White (with PoE driver)

Medium beam, 2000lm Engine, 121.1 lm/W

Candela Curve



Frame: **6RN**
 Engine: **C6L20865MPETW**
 Trim: **C6RDLCL**

Output lumens: 2082 lms
 Input watts: 17.2 W
 CRI: 80 min
 CCT¹: 2700K
 Spacing Crit.: 0.8
 Beam Angle: 53°

Zonal summary

Zone	Lumens	%Luminaire
0-30	1685	80.9%
0-40	2002	96.1%
0-60	2079	99.8%
0-90	2082	100.0%

Angle	Mean CP	Lumens
0	2416	
5	2448	235
10	2506	
15	2508	694
20	2247	
25	1699	755
30	1002	
35	471	317
40	218	
45	89	72
50	12	
55	6	5
60	4	
65	2	2
70	2	
75	1	1
80	0	
85	0	0
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	97	4.0'
6'	67	4.8'
7'	49	5.6'
8'	38	6.4'
9'	30	7.2'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5'		0.76
6'		0.50
7'		0.36
8'		0.30
9'		0.24

38' x 38' x 10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Efficacy: 121.1 lm/w

Report#: 1642GFR

Adjustment factors

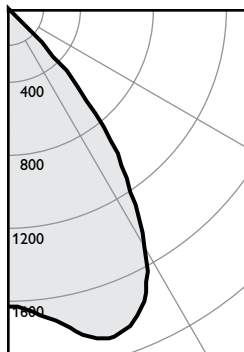
Finish	CCT	Lumens
CL = 100%	80CRI 4000K = 103%	2500lm = ???%
CC = 95%	80CRI 3500K = 100%	2000lm = 100%
CD = 87%	80CRI 3000K = 95%	1500lm = 75%
CZ = 63%	80CRI 2700K = 93%	1000lm = 50%
WH = 87%	90CRI 3000K = 83%	
BK = 57%	90CRI 2700K = 78%	

Coefficients of utilization

Ceiling	80%				70%		50%		30%		0%	
	70	50	30	10	50	10	50	10	50	10	0	
Wall	70	50	30	10	50	10	50	10	50	10	0	
RCR	Zonal cavity method - Effective floor reflectance = 20%											
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100
1	114	111	109	107	109	105	105	102	101	99	94	94
2	109	104	100	97	102	96	99	94	96	92	88	88
3	104	98	93	89	96	89	94	87	91	86	83	83
4	99	92	87	83	91	82	89	81	87	80	78	78
5	94	86	81	77	86	77	84	76	82	75	73	73
6	90	82	76	72	81	72	79	71	78	71	69	69
7	86	77	72	68	76	67	75	67	74	67	65	65
8	82	73	67	64	72	63	71	63	70	63	61	61
9	78	69	64	60	69	60	68	60	67	59	58	58
10	75	66	60	57	65	57	65	56	64	56	55	55

Wide beam, 2000lm Engine, 113.0 lm/W

Candela Curve



Frame: **6RN**
 Engine: **C6L20865WPETW**
 Trim: **C6RDLCL**

Output lumens: 1944 lms
 Input watts: 17.2 W
 CRI: 80 min
 CCT¹: 2700K
 Spacing Crit.: 1.1
 Beam Angle: 71°

Zonal summary

Zone	Lumens	%Luminaire
0-30	1185	61.0%
0-40	1747	89.9%
0-60	1939	99.8%
0-90	1944	100.0%

Angle	Mean CP	Lumens
0	1300	
5	1330	129
10	1400	
15	1491	419
20	1494	
25	1407	637
30	1196	
35	907	561
40	599	
45	209	184
50	19	
55	9	8
60	5	
65	3	3
70	2	
75	1	1
80	1	
85	0	0
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	52	5.5'
6'	36	6.6'
7'	27	7.7'
8'	20	8.8'
9'	16	9.9'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5'		0.76
6'		0.50
7'		0.36
8'		0.30
9'		0.24

38' x 38' x 10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Efficacy: 113.0 lm/w

Report#: 1641GFR

Adjustment factors

Finish	CCT	Lumens
CL = 100%	80CRI 4000K = 102%	2500lm = ???%
CC = 95%	80CRI 3500K = 100%	2000lm = 100%
CD = 87%	80CRI 3000K = 97%	1500lm = 75%
CZ = 63%	80CRI 2700K = 87%	1000lm = 50%
WH = 87%	90CRI 3000K = 77%	
BK = 57%	90CRI 2700K = 73%	

Coefficients of utilization

Ceiling	80%				70%		50%		30%		0%
	70	50	30	10	50	10	50	10	50	10	0
Wall	70	50	30	10	50	10	50	10	50	10	0
RCR	Zonal cavity method - Effective floor reflectance = 20%										
Room Cavity Ratio	0	119	119	119	116	116	111	111	106	106	100
1	113	110	108	105	108	104	104	100	100	97	93
2	107	102	98	94	100	93	97	91	94	89	85
3	101	94	89	85	93	84	90	83	88	81	79
4	96	87	82	77	86	77	84	76	82	75	72
5	90	81	75	70	80	70	78	69	77	69	67
6	85	75	69	64	75	64	73	64	72	63	61
7	80	70	64	59	70	59	68	59	67	58	57
8	76	66	59	55	65	55	64	54	63	54	52
9	72	61	55	51	61	51	60	50	59	50	49
10	68	58	51	47	57	47	56	47	55	47	45

1. Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSI C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
 2. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

The information presented in this document is not intended as any commercial offer and does not form part of any quotation or contract.

