



Lightolier LED 3D Printed 3" Cylinders, ICY Series allows for thousands of different combinations, tailored to seamlessly match any indoor environment. Create dynamic new decorative styles for your projects by selecting from a variety of visually rich surface colors and textures. Unleash your inner creator and select from the many options these cylinders have to offer.

This portfolio of luminaires is powered by myCreation, Genlyte's advanced additive manufacturing technology that enables rapid production of high-quality, customizable luminaires. It streamlines design-to-delivery with on-demand colors, textures, and configurations—while reducing components and using 3D-printed parts made from at least 75% recycled or mass-balanced, bio-circular materials.

Project: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Cat.No: \_\_\_\_\_  
 Type: \_\_\_\_\_  
 Qty: \_\_\_\_\_  
 Notes: \_\_\_\_\_

examples: 3DP ICY3 BKST QT 23L NB 27K CBK CO BKST  
 3DP ICY3 BKST QT 23L NB 27K STBK 36

**Fixture** Now including AccuRender technology for the highest color quality at the highest efficacy.

Series	Colors	Textures	Lumens	Beams	CRI/CCT	Mounting	Options	Colors
<b>3DP ICY3</b>								
3DP ICY3 ICY Series 3D Cylinder 3 inch	<b>BKST</b> Satin Black	<b>LF</b> Layered Fine	<b>10L</b> 1000lm	<b>NB</b> Narrow (17°)	<b>27K</b> 90 CRI / 2700K	Cable Mount Only		
	<b>BSST</b> Satin Brass	<b>FC</b> Facets	<b>15L</b> 1500lm	<b>MB</b> Medium (22°)	<b>30K</b> 90 CRI / 3000K	<b>Cable</b>	<b>Canopy</b>	<b>Satin Essentials</b>
	<b>BZST</b> Satin Bronze	<b>WA</b> Wavy	<b>23L</b> 2300lm	<b>WB</b> Wide (34°)	<b>35K</b> 90 CRI / 3500K	<b>CC</b> Clear Cable	<b>CO</b> Conical	<b>BKST</b> Black
	<b>CAPP</b> Satin Cappuccino	<b>QT</b> Quilted		<b>VWB</b> Very Wide (60°)	<b>40K</b> 90 CRI / 4000K	<b>CBK</b> Black Cable	<b>DI</b> Disk	<b>BSST</b> Brass
	<b>GYST</b> Satin Grey					<b>CWH</b> White Cable		<b>BZST</b> Bronze
	<b>ROSE</b> Satin Rose							<b>CAPP</b> Cappuccino
	<b>SAGE</b> Satin Sage							<b>GYST</b> Grey
	<b>WHST</b> Satin White							<b>ROSE</b> Satin Rose
								<b>SAGE</b> Sage
								<b>WHST</b> White
						Stem Mount Only		
						<b>Stem*</b>	<b>Color</b>	<b>Length</b>
						<b>ST<sup>1</sup></b> Stem	<b>BK</b> Black Stem <b>WH</b> White Stem	<b>36</b> 36" <b>48</b> 48" <b>60</b> 60" <b>72</b> 72"

\* Note the stem must be ordered separately as an accessory.

**Note:** Different colors are available upon request but will require a longer lead time.

1. Stem accessory to be ordered separately. See Mounting section for more ordering details.

### Features

- Customizable:** choose from wide variety of colors & textures to help personalize customer options.
- Sustainable:** 3D Printed products produce less carbon emissions compared to traditional, conventional luminaires.
- Local production:** Printed & assembled in Littlestown, PA.
- Quick delivery:** Created on demand, shipped in weeks.
- Color Rendering Index:** Standard 90CRI.
- Lifetime:** L90B50 lumen maint. at 65,000 hrs.
- Weight:** 2.5lbs.
- Cable Length:** 10 ft

### Mounting

**Stem:** Available in Black and White.

**Canopy:** Two styles to choose from in any color.

Stem Mount Black:		Stem Mount White:	
<b>CASK36BK</b>	36" Stem Kit	<b>CASK36WH</b>	36" Stem Kit
<b>CASK48BK</b>	48" Stem Kit	<b>CASK48WH</b>	48" Stem Kit
<b>CASK60BK</b>	60" Stem Kit	<b>CASK60WH</b>	60" Stem Kit
<b>CASK72BK</b>	72" Stem Kit	<b>CASK72WH</b>	72" Stem Kit

### Mounting:

- Cord:** Clear, Black and White; 10 ft.
- Stem:** Available in black and white
- Canopy:** Junction Box
- Junction Box:** Cover plate supplied to allow mounting to industry standard 4-inch box.

### Electrical

**Wattage:**

- 1000 lm = 9.5W
- 1500 lm = 13.5W
- 2300 lm = 22.5W

**Dimming:** 0-10V

**Mounting:** Cable & Stem

**Input Voltage:** 120/277V

**Frequency:** 50/60Hz

**Power Factor:** 0.9

### Labels

UL, cULus, IP20, RoHS

Declare. LBC Red List Approved.



Unleash your inner creator

To configure your custom 3D-printed luminaire, scan this QR Code with your smartphone's camera or visit us at: <https://www.3dprinted.lighting.lightolier.com/en/us/ICY-Series/>

Declare.



# ICY Series

## 3D Cylinders (1000lm, 1500lm, 2300lm)

### AccuRender Technology (CRI 90+)

The right light brings colors to life. Our new AccuRender technology helps ensure colors are rendered more accurately and consistently, while doing so as efficiently as CRI 80 products.



Standard CRI 80

Good color rendering and high efficacy



Standard CRI 90

Better color rendering and low efficacy



AccuRender

Best color rendering, color preference and high efficacy

#### Promote savings

##### High efficacy, with no penalty:

- Energy efficacy compares well to conventional CRI80
- Up to 25% more energy savings vs competitor CRI90<sup>1</sup>
- Helps you meet Title 24 requirements

#### Enjoy design flexibility

##### Full range of products and options:

- Available soon in across Lightolier portfolio for application flexibility
- Multiple CCTs and lumen packages offered

1. Based on comparison of published specification sheet data, most competitor offerings reflect a 15 to 25% efficacy loss for CRI 90 compared to CRI 80, while Lightolier AccuRender results in only ≤5% drop compared to CRI 80.

#### Bolster wellbeing

##### High MDER:

- AccuRender has a Melanopic Daylight Efficacy Ratio up to 0.80
- Helps support Circadian Rhythm<sup>2</sup>
- Earns points towards WELL Building Standard

#### Contribute to productivity

##### High MDER:

- Supports daytime vitality<sup>3</sup> and alertness<sup>4</sup>
- Supports mood, thermo-regulation, and learning centers in the brain<sup>5</sup>
- May positively influence work engagement by helping make the environment more attractive<sup>6</sup>

2. Czeisler, 1999; Dijk & Archer, 2009; Lucas 2012, 2019

3. Partonen 2000

4. Viola 2008, Smolders 2012; Geerdink 2017

5. Fernandez 2018; Rupp, 2019

#### Show your true colors

##### High color rendering:

- **CRI:**  
R<sub>a</sub> up to 94, R<sub>9</sub> up to 67, G<sub>a</sub> up to 99, C<sub>9</sub> up to 94
- **TM-30:**  
R<sub>r</sub> up to 92, R<sub>f,hi</sub> up to 91, R<sub>g</sub> up to 100, R<sub>cs,hi</sub> up to -5%
- **True to life colors** to help energize your environment and render better flesh tones critical for Healthcare, Hospitality and Retail

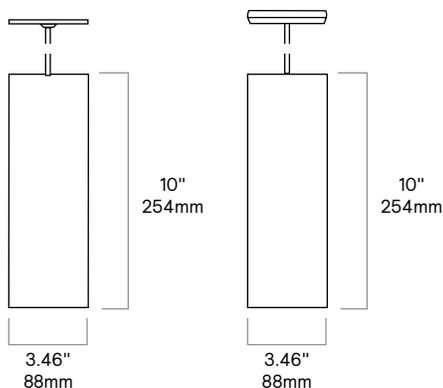
#### Achieve color balance

##### Best in class color consistency:

- ≤ 2 SDCM promotes aesthetic harmony

6. Veitch, Jennifer & Stokkermans, Mariska & R. Newsham, Guy. (2013). Linking Lighting Appraisals to Work Behaviors. Environment and Behavior. 45. 198-214. 10.1177/0013916511420560.

#### Dimensions



#### Interact Pro Scalable System

Interact Pro scalable system with its simple wireless offering can make your smart building journey easy and cost effective. This system can help you boost your energy savings, reach your sustainability targets, and enhance occupancy comfort levels immediately from day one. 3D printed luminaires can be integrated into the Interact Pro scalable system using the System Bridge Accessory SBA module or the RFSR10 control module. For more information please visit: [www.interact-lighting.com/enus/what-is-possible/interact-pro/scalable-system](http://www.interact-lighting.com/enus/what-is-possible/interact-pro/scalable-system).

#### Buy American Act 1933 (BAA)

This product is manufactured in one of our US factories and, as of the date of this document, this product was considered a commercially available off-the-shelf (COTS) item meeting the requirements of the BAA. This BAA designation hereunder does not address (i) the applicability of, or availability of a waiver under, the Trade Agreements Act, or (ii) the "Buy America" domestic content requirements imposed on states, localities, and other non-federal entities as a condition of receiving funds administered by the Department of Transportation or other federal agencies. Prior to ordering, please visit [www.signify.com/baa](http://www.signify.com/baa) to view a current list of BAA-compliant products to confirm this product's current compliance.

# ICY Series

3D Cylinders (1000lm, 1500lm, 2300lm)

## Colors & Textures



**BKST:** Satin Black  
**FC:** Facet texture



**BKST:** Satin Black  
**LF:** Layered Fine texture



**BKST:** Satin Black  
**QT:** Quilted texture



**BKST:** Satin Black  
**WA:** Wavy texture



**BSST:** Satin Brass  
**FC:** Facet texture



**BSST:** Satin Brass  
**LF:** Layered Fine texture



**BSST:** Satin Brass  
**QT:** Quilted texture



**BSST:** Satin Brass  
**WA:** Wavy texture



**BZST:** Satin Bronze  
**FC:** Facet texture



**BZST:** Satin Bronze  
**LF:** Layered Fine texture



**BZST:** Satin Bronze  
**QT:** Quilted texture



**BZST:** Satin Bronze  
**WA:** Wavy texture



**CAPP:** Satin Cappuccino  
**FC:** Facet texture



**CAPP:** Satin Cappuccino  
**LF:** Layered Fine texture



**CAPP:** Satin Cappuccino  
**QT:** Quilted texture

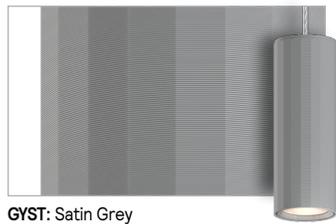


**CAPP:** Satin Cappuccino  
**WA:** Wavy texture

# ICY Series

3D Cylinders (1000lm, 1500lm, 2300lm)

## Colors & Textures



**GYST: Satin Grey**  
**FC: Facet texture**



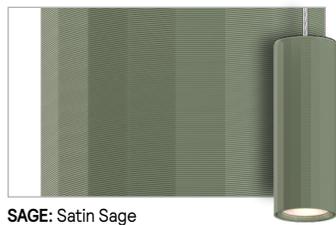
**GYST: Satin Grey**  
**LF: Layered Fine texture**



**GYST: Satin Grey**  
**QT: Quilted texture**



**GYST: Satin Grey**  
**WA: Wavy texture**



**SAGE: Satin Sage**  
**FC: Facet texture**



**SAGE: Satin Sage**  
**LF: Layered Fine texture**



**SAGE: Satin Sage**  
**QT: Quilted texture**



**SAGE: Satin Sage**  
**WA: Wavy texture**



**ROSE: Satin Rose**  
**FC: Facet texture**



**ROSE: Satin Rose**  
**LF: Layered Fine texture**



**ROSE: Satin Rose**  
**QT: Quilted texture**



**ROSE: Satin Rose**  
**WA: Wavy texture**



**WHST: Satin White**  
**FC: Facet texture**



**WHST: Satin White**  
**LF: Layered Fine texture**



**WHST: Satin White**  
**QT: Quilted texture**



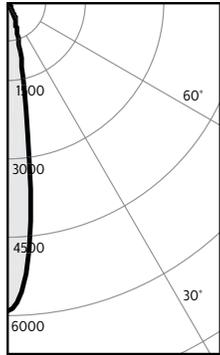
**WHST: Satin White**  
**WA: Wavy texture**

# ICY Series

## 3D Cylinders (1000lm)

### Downlight, Narrow beam, 1075lm Engine, 107.5lm/w at 10.0W

#### Candela Curves



#### 3DPICY3 1000 LUMEN NARROW

Output lumens: 1075 lms  
 Input watts<sup>1</sup>: 10.0 W  
 CRI: 90 min  
 CCT<sup>2</sup>: 3000K  
 Beam Angle: 16°  
 Spacing Crit.: 0.3

#### Zonal summary

Zone	Lumens	%Luminaire
0-30	1013	94.2%
0-40	1071	99.6%
0-60	1074	99.9%
0-90	1075	100.0%

Angle	Mean CP	Lumens
0	7350	
5	5901	
10	2623	446
15	1188	
20	665	351
25	472	
30	297	216
35	62	
40	9	58
45	2	
50	1	2
55	1	
60	1	1
65	1	
70	1	1
75	0	
80	0	0
85	0	
90	0	0

#### Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
6'	91	1.8'
7'	73	2.1'
8'	61	2.4'
9'	51	2.7'
10'	43	3.0'

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

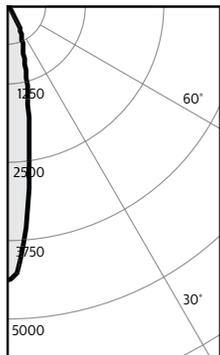
Efficacy: 107.5 lm/w  
 Report#: FO44196.PSO

#### 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	115	113	111	109	111	108	107	104	103	101	97
	2	111	108	105	102	106	101	103	99	100	97	94
	3	108	103	100	97	102	96	99	95	97	93	91
	4	105	99	95	92	98	92	96	91	94	90	88
	5	102	96	92	89	95	88	93	88	92	87	85
	6	99	93	88	85	92	85	90	85	89	84	83
	7	96	90	85	83	89	82	88	82	87	82	80
	8	93	87	83	80	86	80	86	80	85	79	78
	9	91	84	80	78	84	78	83	77	83	77	76
	10	89	82	78	76	82	76	81	75	81	75	74

### Downlight, Medium beam, 1177lm Engine, 117.7lm/W at 10.0W

#### Candela Curves



#### 3DPICY3 1000 LUMEN MEDIUM

Output lumens: 1177 lms  
 Input watts<sup>1</sup>: 10.0 W  
 CRI: 90 min  
 CCT<sup>2</sup>: 3000K  
 Beam Angle: 19°  
 Spacing Crit.: 0.34

#### Zonal summary

Zone	Lumens	%Luminaire
0-30	1083	92.0%
0-40	1165	99.0%
0-60	1173	99.7%
0-90	1177	100.0%

Angle	Mean CP	Lumens
0	5453	
5	4421	
10	2554	358
15	1483	
20	940	421
25	670	
30	392	304
35	94	
40	27	82
45	6	
50	2	7
55	2	
60	2	1
65	2	
70	1	1
75	1	
80	1	1
85	1	
90	0	0

#### Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
6'	67	2.0'
7'	55	2.4'
8'	45	2.7'
9'	38	3.1'
10'	32	3.4'

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

Efficacy: 117.7 lm/w  
 Report#: FO44193.PSO

#### 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	115	112	110	109	110	107	106	104	103	101	96
	2	111	107	103	101	105	100	102	98	99	95	92
	3	107	102	98	95	100	94	98	92	95	91	88
	4	103	97	93	90	96	89	94	88	92	87	85
	5	99	93	89	85	92	85	90	84	89	83	82
	6	96	89	85	81	89	81	87	81	86	80	79
	7	93	86	81	78	85	78	84	78	83	77	76
	8	90	83	78	75	82	75	81	75	80	74	73
	9	87	80	75	72	79	72	79	72	78	72	71
	10	85	77	73	70	77	70	76	70	75	70	68

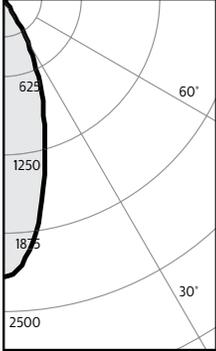
1. Wattage: controlled to within 5%  
 2. Correlated Color Temperature: within specs as defined in ANSI\_NEMA\_ANSI C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.  
 3. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

# ICY Series

## 3D Cylinders (1000lm)

### Downlight, Wide beam, 1138lm Engine, 113.8lm/W at 10.0W

Candela Curves



**3DPICY3 1000 LUMEN WIDE**

Output lumens: 1138 lms  
 Input watts<sup>1</sup>: 10.0 W  
 CRI: 90 min  
 CCT<sup>2</sup>: 3000K  
 Beam Angle: 35°  
 Spacing Crit.: 0.56

Zonal summary

Zone	Lumens	%Luminaire
0-30	1032	90.7%
0-40	1130	99.3%
0-60	1139	100.1%
0-90	1138	100.0%

Angle	Mean CP	Lumens
0	2762	
5	2587	
10	2149	233
15	1593	
20	1168	443
25	782	
30	435	356
35	113	
40	24	98
45	7	
50	4	7
55	2	
60	2	2
65	1	
70	1	1
75	1	
80	1	1
85	0	
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
6'	34	3.4'
7'	28	3.9'
8'	23	4.5'
9'	19	5.0'
10'	16	5.6'

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

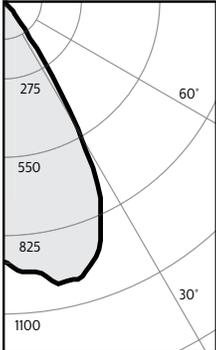
Efficacy: 113.8 lm/w  
 Report#: FO44194.PSO

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	112	110	108	110	106	106	103	102	100	95
	2	110	106	102	99	104	98	101	96	98	94	91
	3	106	100	96	93	99	92	96	91	94	89	86
	4	101	95	91	87	94	87	92	86	90	85	82
	5	98	91	86	82	90	82	88	81	87	81	79
	6	94	87	82	78	86	78	84	77	83	77	75
	7	90	83	78	74	82	74	81	74	80	73	72
	8	87	79	74	71	79	71	78	70	77	70	69
	9	84	76	71	68	76	68	75	68	74	67	66
	10	81	73	68	65	73	65	72	65	71	65	63

### Downlight, Very Wide beam, 1126lm Engine, 112.6lm/W at 10.0W

Candela Curves



**3DPICY3 1000 LUMEN V.WIDE**

Output lumens: 1126 lms  
 Input watts<sup>1</sup>: 10.0 W  
 CRI: 90 min  
 CCT<sup>2</sup>: 3000K  
 Beam Angle: 57°  
 Spacing Crit.: 1.08

Zonal summary

Zone	Lumens	%Luminaire
0-30	912	81.0%
0-40	1091	96.9%
0-60	1120	99.5%
0-90	1126	100.0%

Angle	Mean CP	Lumens
0	1136	
5	1187	
10	1242	115
15	1257	
20	1188	351
25	1010	
30	647	446
35	259	
40	80	179
45	19	
50	11	22
55	8	
60	5	7
65	3	
70	2	3
75	2	
80	1	1
85	1	
90	0	1

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
4'	14	4.3'
5'	11	5.4'
6'	9	6.5'
7'	8	7.6'
8'	7	8.6'

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

Efficacy: 112.6 lm/w  
 Report#: FO44195.PSO

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
	2	108	104	100	97	102	96	99	94	96	92	88
	3	103	97	92	89	96	88	93	87	91	85	82
	4	98	91	86	82	90	82	88	81	86	80	77
	5	94	86	80	76	85	76	83	75	82	75	73
	6	89	81	75	71	80	71	79	70	77	70	68
	7	85	76	71	67	76	66	74	66	73	66	64
	8	81	72	67	63	72	62	71	62	70	62	60
	9	78	68	63	59	68	59	67	59	66	58	57
	10	74	65	59	56	64	56	64	55	63	55	54

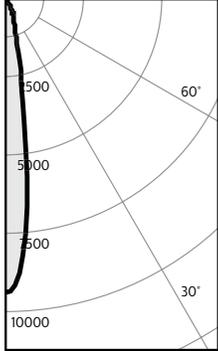
1. Wattage: controlled to within 5%  
 2. Correlated Color Temperature: within specs as defined in ANSI\_NEMA\_ANSI C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.  
 3. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

# ICY Series

## 3D Cylinders (1500lm)

### Downlight, Narrow beam, 1581lm Engine, 112.9lm/W at 14.0W

Candela Curves



**3DPICY3 1500 LUMEN NARROW**

Output lumens: 1581 lms  
 Input watts<sup>1</sup>: 14.0 W  
 CRI: 90 min  
 CCT<sup>2</sup>: 3000K  
 Beam Angle: 16°  
 Spacing Crit.: 0.3

**Zonal summary**

Zone	Lumens	%Luminaire
0-30	1488	94.1%
0-40	1574	99.6%
0-60	1579	99.9%
0-90	1581	100.0%

Angle	Mean CP	Lumens
0	10809	
5	8679	
10	3857	655
15	1747	
20	978	516
25	695	
30	437	317
35	91	
40	14	86
45	4	
50	2	4
55	1	
60	1	1
65	1	
70	1	1
75	1	
80	1	1
85	0	
90	0	0

**Single unit data**

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
6'	133	1.8'
7'	108	2.1'
8'	89	2.4'
9'	75	2.7'
10'	64	3.0'

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

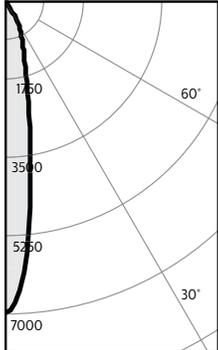
**Efficacy: 112.9 lm/w**  
 Report<sup>3</sup>: FO44196.PSO

**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	115	113	111	109	111	108	107	104	103	101	97
	2	111	108	105	102	106	101	103	99	100	97	94
	3	108	103	100	97	102	96	99	95	97	93	91
	4	105	99	95	92	98	92	96	91	94	90	88
	5	102	96	92	89	95	88	93	88	92	87	85
	6	99	93	88	85	92	85	90	85	89	84	83
	7	96	90	85	83	89	82	88	82	87	82	80
	8	93	87	83	80	86	80	86	80	85	79	78
	9	91	84	80	78	84	78	83	77	83	77	76
	10	89	82	78	76	82	76	81	75	81	75	74

### Downlight, Medium beam, 1731lm Engine, 123.6lm/W at 14.0W

Candela Curves



**3DPICY3 1500 LUMEN MEDIUM**

Output lumens: 1731 lms  
 Input watts<sup>1</sup>: 14.0 W  
 CRI: 90 min  
 CCT<sup>2</sup>: 3000K  
 Beam Angle: 19°  
 Spacing Crit.: 0.34

**Zonal summary**

Zone	Lumens	%Luminaire
0-30	1593	92.0%
0-40	1714	99.0%
0-60	1727	99.8%
0-90	1731	100.0%

Angle	Mean CP	Lumens
0	8019	
5	6501	
10	3756	527
15	2181	
20	1383	619
25	985	
30	577	447
35	138	
40	40	121
45	9	
50	4	11
55	3	
60	2	2
65	2	
70	2	2
75	2	
80	2	1
85	1	
90	0	0

**Single unit data**

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
6'	99	2.0'
7'	80	2.4'
8'	66	2.7'
9'	56	3.1'
10'	47	3.4'

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

**Efficacy: 123.6 lm/w**  
 Report<sup>3</sup>: FO44193.PSO

**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	115	112	110	109	110	107	106	104	103	101	96
	2	111	107	103	101	105	100	102	98	99	95	92
	3	107	102	98	95	100	94	98	92	95	91	88
	4	103	97	93	90	96	89	94	88	92	87	85
	5	99	93	89	85	92	85	90	84	89	83	82
	6	96	89	85	81	89	81	87	81	86	80	79
	7	93	86	81	78	85	78	84	78	83	77	76
	8	90	83	78	75	82	75	81	75	80	74	73
	9	87	80	75	72	79	72	79	72	78	72	71
	10	85	77	73	70	77	70	76	70	75	69	68

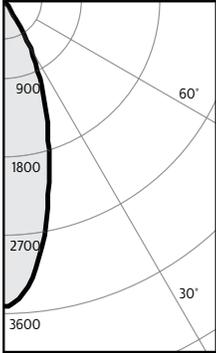
1. Wattage: controlled to within 5%  
 2. Correlated Color Temperature: within specs as defined in ANSI\_NEMA\_ANSI C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.  
 3. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

# ICY Series

## 3D Cylinders (1500lm)

### Downlight, Wide beam, 1674lm Engine, 119.6lm/W at 14.0W

Candela Curves



3DPICY3 1500 LUMEN WIDE

Output lumens: 1674 lms  
 Input watts<sup>1</sup>: 14.0 W  
 CRI: 90 min  
 CCT<sup>2</sup>: 3000K  
 Beam Angle: 35°  
 Spacing Crit.: 0.56

Zonal summary

Zone	Lumens	%Luminaire
0-30	1519	90.7%
0-40	1656	98.9%
0-60	1670	99.8%
0-90	1674	100.0%

Angle	Mean CP	Lumens
0	4061	
5	3805	
10	3160	343
15	2342	
20	1718	652
25	1149	
30	639	524
35	166	
40	36	137
45	11	
50	6	11
55	4	
60	2	3
65	2	
70	2	2
75	1	
80	1	1
85	1	
90	0	1

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
6'	50	3.4'
7'	41	3.9'
8'	34	4.5'
9'	28	5.0'
10'	24	5.6'

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

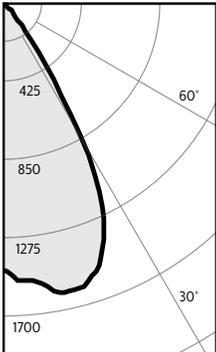
Efficacy: 119.6 lm/w  
 Report#: FO44194.PSO

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	112	110	108	110	106	106	103	102	100	95
	2	110	106	102	100	104	98	101	96	98	94	91
	3	106	100	96	93	99	92	96	91	94	89	86
	4	102	95	91	87	94	87	92	86	90	85	82
	5	98	91	86	82	90	82	88	81	87	81	79
	6	94	87	82	78	86	78	84	77	83	77	75
	7	90	83	78	74	82	74	81	74	80	73	72
	8	87	79	74	71	79	71	78	71	77	70	69
	9	84	76	71	68	76	68	75	68	74	67	66
	10	81	73	68	65	73	65	72	65	71	65	63

### Downlight, Very Wide beam, 1655lm Engine, 118.2lm/W at 14.0W

Candela Curves



3DPICY3 1500 LUMEN V.WIDE

Output lumens: 1655 lms  
 Input watts<sup>1</sup>: 14.0 W  
 CRI: 90 min  
 CCT<sup>2</sup>: 3000K  
 Beam Angle: 57°  
 Spacing Crit.: 1.08

Zonal summary

Zone	Lumens	%Luminaire
0-30	1340	81.0%
0-40	1603	96.9%
0-60	1647	99.5%
0-90	1655	100.0%

Angle	Mean CP	Lumens
0	1670	
5	1746	
10	1827	168
15	1848	
20	1747	516
25	1485	
30	952	656
35	381	
40	118	263
45	28	
50	16	33
55	12	
60	8	11
65	5	
70	3	4
75	2	
80	2	2
85	1	
90	0	1

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	21	4.3'
6'	17	5.4'
7'	14	6.5'
8'	12	7.6'
9'	10	8.6'

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

Efficacy: 118.2 lm/w  
 Report#: FO44195.PSO

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
	2	108	104	100	97	102	96	99	94	96	92	88
	3	103	97	92	89	96	88	93	87	91	85	82
	4	98	91	86	82	90	82	88	81	86	80	77
	5	94	86	80	76	85	76	83	75	82	75	73
	6	89	81	75	71	80	71	79	70	77	70	68
	7	85	76	71	67	76	66	74	66	73	66	64
	8	81	72	67	63	72	62	71	62	70	62	60
	9	78	68	63	59	68	59	67	59	66	58	57
	10	74	65	59	56	64	56	64	55	63	55	54

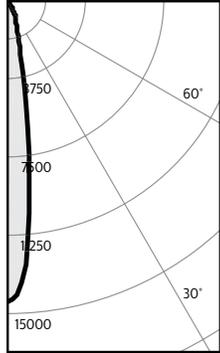
1. Wattage: controlled to within 5%  
 2. Correlated Color Temperature: within specs as defined in ANSI\_NEMA\_ANSI C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.  
 3. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

# ICY Series

## 3D Cylinders (2300lm)

### Downlight, Narrow beam, 2318 lm Engine, 100.8 lm/W at 23.0W

Candela Curves



**3DPICY3 2300 LUMEN NARROW**

Output lumens: 2318 lms  
 Input watts<sup>1</sup>: 23.0 W  
 CRI: 90 min  
 CCT<sup>2</sup>: 3000K  
 Beam Angle: 16°  
 Spacing Crit.: 0.3

Zonal summary

Zone	Lumens	%Luminaire
0-30	2183	94.2%
0-40	2308	99.6%
0-60	2315	99.9%
0-90	2318	100.0%

Angle	Mean CP	Lumens
0	15853	
5	12728	
10	5657	961
15	2563	
20	1434	757
25	1019	
30	642	465
35	133	
40	20	125
45	5	
50	3	5
55	2	
60	2	2
65	1	
70	1	1
75	1	
80	1	1
85	0	
90	0	0

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
6'	196	1.8'
7'	159	2.1'
8'	131	2.4'
9'	110	2.7'
10'	94	3.0'

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

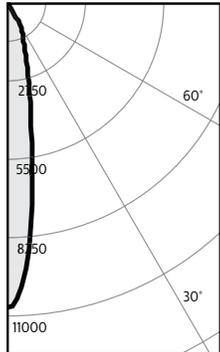
Efficacy: 100.8 lm/w  
 Report#: FO44196.PSO

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	115	113	111	109	111	108	107	104	103	101	97
	2	111	108	105	102	106	101	103	99	100	97	94
	3	108	103	100	97	102	96	99	95	97	93	91
	4	105	99	95	92	98	92	96	91	94	90	88
	5	102	96	92	89	95	88	93	88	92	87	85
	6	99	93	88	85	92	85	90	85	89	84	83
	7	96	90	85	83	89	82	88	82	87	82	80
	8	93	87	83	80	86	80	86	80	85	79	78
	9	91	84	80	78	84	78	83	77	83	77	76
	10	89	82	78	76	82	76	81	75	81	75	74

### Downlight, Medium beam, 2539 lm Engine, 110.4 lm/W at 23.0W

Candela Curves



**3DPICY3 2300 LUMEN MEDIUM**

Output lumens: 2539 lms  
 Input watts<sup>1</sup>: 23.0 W  
 CRI: 90 min  
 CCT<sup>2</sup>: 3000K  
 Beam Angle: 19°  
 Spacing Crit.: 0.34

Zonal summary

Zone	Lumens	%Luminaire
0-30	2335	92.0%
0-40	2512	98.9%
0-60	2530	99.6%
0-90	2539	100.0%

Angle	Mean CP	Lumens
0	11761	
5	9535	
10	5509	772
15	3200	
20	2028	908
25	1445	
30	846	655
35	203	
40	59	177
45	13	
50	5	15
55	4	
60	3	3
65	3	
70	3	3
75	3	
80	2	3
85	1	
90	0	1

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
6'	145	2.0'
7'	118	2.4'
8'	97	2.7'
9'	82	3.1'
10'	70	3.4'

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

Efficacy: 110.4 lm/w  
 Report#: FO44193.PSO

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	115	112	110	109	110	107	106	104	103	101	96
	2	111	107	103	101	105	100	102	98	99	95	92
	3	107	102	98	95	100	94	98	92	95	91	88
	4	103	97	93	90	96	89	94	88	92	87	85
	5	99	93	89	85	92	85	90	84	89	83	82
	6	96	89	85	81	89	81	87	81	86	80	79
	7	93	86	81	78	85	78	84	78	83	77	76
	8	90	83	78	75	82	75	81	75	80	74	73
	9	87	80	75	72	79	72	79	72	78	72	71
	10	85	77	73	70	77	70	76	70	75	69	68

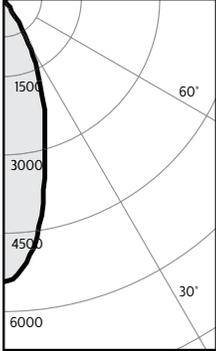
1. Wattage: controlled to within 5%  
 2. Correlated Color Temperature: within specs as defined in ANSI\_NEMA\_ANSI C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.  
 3. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

# ICY Series

## 3D Cylinders (2300lm)

### Downlight, Wide beam, 2455lm Engine, 106.7lm/W at 23.0W

#### Candela Curves



#### 3DPICY3 2300 LUMEN WIDE

Output lumens: 2455 lms  
 Input watts<sup>1</sup>: 23.0 W  
 CRI: 90 min  
 CCT<sup>2</sup>: 3000K  
 Beam Angle: 35°  
 Spacing Crit.: 0.56

#### Zonal summary

Zone	Lumens	%Luminaire
0-30	2025	82.5%
0-40	2208	89.9%
0-60	2228	90.8%
0-90	2455	100.0%

Angle	Mean CP	Lumens
0	5957	
5	5581	
10	4634	457
15	3435	
20	2519	870
25	1686	
30	938	698
35	243	
40	53	183
45	15	
50	9	15
55	5	
60	4	5
65	3	
70	2	3
75	2	
80	2	2
85	1	
90	0	1

#### Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
4'	74	2.2'
5'	60	2.8'
6'	49	3.4'
7'	41	3.9'
8'	35	4.5'

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

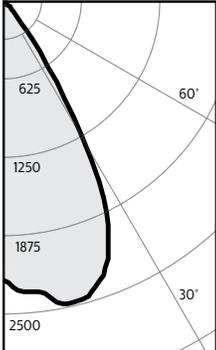
Efficacy: 106.7 lm/w  
 Report#: FO44194.PSO

#### 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	112	110	108	110	106	106	103	102	100	95
	2	110	106	102	100	104	98	101	96	98	94	91
	3	106	100	96	93	99	92	96	91	94	89	86
	4	101	95	91	87	94	87	92	86	90	85	82
	5	98	91	86	82	90	82	88	81	87	81	79
	6	94	87	82	78	86	78	84	77	83	77	75
	7	90	83	78	74	82	74	81	74	80	73	72
	8	87	79	74	71	79	71	78	71	77	70	69
	9	84	76	71	68	76	68	75	68	74	67	66
	10	81	73	68	65	73	65	72	65	71	65	63

### Downlight, Very Wide beam, 2428lm Engine, 105.6lm/W at 23.0W

#### Candela Curves



#### 3DPICY3 2300 LUMEN V.WIDE

Output lumens: 2428 lms  
 Input watts<sup>1</sup>: 23.0 W  
 CRI: 90 min  
 CCT<sup>2</sup>: 3000K  
 Beam Angle: 57°  
 Spacing Crit.: 1.08

#### Zonal summary

Zone	Lumens	%Luminaire
0-30	1966	81.0%
0-40	2351	96.8%
0-60	2414	99.4%
0-90	2428	100.0%

Angle	Mean CP	Lumens
0	2449	
5	2561	
10	2679	247
15	2711	
20	2563	757
25	2178	
30	1396	962
35	559	
40	174	385
45	41	
50	24	48
55	17	
60	11	15
65	7	
70	5	7
75	4	
80	3	4
85	2	
90	0	2

#### Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
4'	30	4.3'
5'	24	5.4'
6'	20	6.5'
7'	17	7.6'
8'	14	8.6'

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

Efficacy: 105.6 lm/w  
 Report#: FO44195.PSO

#### 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
	2	108	104	100	97	102	96	99	94	96	92	88
	3	103	97	92	89	96	88	93	87	91	85	82
	4	98	91	86	82	90	82	88	81	86	80	77
	5	94	86	80	76	85	76	83	75	82	75	73
	6	89	81	75	71	80	71	79	70	77	70	68
	7	85	76	71	67	76	66	74	66	73	66	64
	8	81	72	67	63	72	62	71	62	70	62	60
	9	78	68	63	59	68	59	67	59	66	58	57
	10	74	65	59	56	64	56	64	55	63	55	54

1. Wattage: controlled to within 5%
2. Correlated Color Temperature: within specs as defined in ANSI\_NEMA\_ANSI C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
3. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.