

## SPECIFICATION SHEET

**UR3F****3-1/2" Series**

Project \_\_\_\_\_

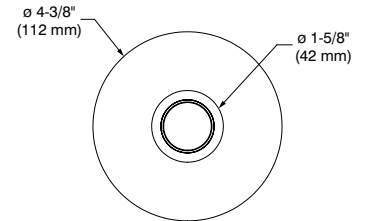
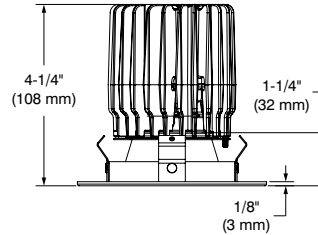
Notes \_\_\_\_\_

Fixture Type \_\_\_\_\_

Date \_\_\_\_\_

**Round Downlight Regressed Trim with Pinhole Aperture**

UR3FC-2222 (illustrated)



## SPECIFICATIONS

## LED MODULE

**STANDARD (SOLID WHITE)**

Lumileds Luxeon CoB 1203 GEN4

L<sub>70</sub> @ 50,000 hours of operation. 3-Step MacAdam ellipse (3 SDCM)

Color temperatures: 2,700K - 3,000K - 3,500K - 4,000K

CRI: 80+ (only 2,700K and 3,000K), 90+

Delivered Lumens: Performance 1 (10W) - 723 lumens @ 3,000K, 72 lm/W  
 Performance 2 (15W) - 942 lumens @ 3,000K, 63 lm/W  
 Performance 3 (24W) - 1,413 lumens @ 3,000K, 59 lm/W

Power supply (*determined by the choice of housing*): 120V, 277V or 120V/277V

Several driver models available in three performances (10W, 15W and 24W) offered in two dimming options:

ELV: 120V only 0-10V: 120V / 277V

Consult housing specification sheet for more details.

**WARM DIMMING (WD)**

LTF LED Module mimicking the halogen lamp dimming conditions by lowering color temperature from 3,050K at full intensity down to 1,800K at low-end while ensuring 90+ CRI throughout the whole process.

L<sub>70</sub> @ 50,000 hours of operation. 3-Step MacAdam ellipse (3 SDCM)

Color Temperature: 3,050K to 1,800K

CRI: 90+ (over the entire dimming range)

Delivered Lumens: Performance 1 (10W) - up to 425 lumens  
 Performance 2 (15W) - up to 560 lumens  
 Performance 3 (24W) - up to 820 lumens

Power supply (*determined by the choice of housing*): 120V, 277V or 120V/277V

Several driver models available in three performances (10W, 15W and 24W) offered in two dimming options:

ELV: 120V only 0-10V: 120V / 277V

Consult housing specification sheet for more details.

## CEILING CUTOUT

**ø 3-3/4" (95 mm)**

## CERTIFICATION

cULus **E343977** for damp locations

## WARRANTY

1 year limited warranty on components against manufacturing defects  
 5-year limited warranty on LED arrays and drivers

**CONTRASTE**2020-10  
Revision 6

PRINTED IN CANADA

1009, rue du Parc Industriel  
 Lévis (Québec) G6Z 1C5 Canada  
 Tel.: 1-888-839-4624  
 Fax.: 1-877-839-7057  
 contrastlighting.com  
 info@contrastlighting.com

© 2020 Contrast Lighting M.L. Inc.  
 All rights reserved

Contrast Lighting M.L. Inc. reserves the right to make changes in specifications and/or to discontinue any product at any time without notice or obligation and will not be liable for any consequences resulting from the use of this publication.

# UR3F

**3-1/2" Series****Round Downlight Regressed Trim with Pinhole Aperture**

## SPECIFICATIONS (CONT'D)

## COMPATIBLE HOUSINGS

	Remodel Housings	New Construction Housings	IC Housings
<b>Performance 1</b> 10W  Warm Dimming not compatible	<b>IC Air Tight</b> REUR3-120D1 REUR3-120E1 REUR3-277D1 REUR3-UV1	<b>IC Air Tight</b> NWUR3-120D1 NWUR3-120E1 NWUR3-277D1 NWUR3-UV1  <b>Non-IC Air Tight Emergency Driver</b> NWUR3-120D1-EM NWUR3-120E1-EM NWUR3-277D1-EM NWUR3-UV1-EM	<b>IC Air Tight</b> ISUR3-120D1 ISUR3-120E1 ISUR3-277D1 ISUR3-UV1  <b>IC Air Tight Chicago Plenum and Polyurethane</b> ISUR3-120D1P ISUR3-120E1P ISUR3-277D1P ISUR3-UV1P
<b>Performance 2</b> 15W MAX	<b>Non-IC Air Tight</b> REUR3-120D2 REUR3-120E2 REUR3-120EB2 REUR3-2772 REUR3-277D2 REUR3-UV2	<b>Non-IC Air Tight</b> NWUR3-120D2 NWUR3-120E2 NWUR3-120EB2 NWUR3-2772 NWUR3-277D2 NWUR3-UV2  <b>Non-IC Air Tight Emergency Driver</b> NWUR3-120D2-EM NWUR3-120E2-EM NWUR3-120EB2-EM NWUR3-2772-EM NWUR3-277D2-EM NWUR3-UV2-EM	<b>IC Air Tight</b> ISUR3-120D2 ISUR3-120E2 ISUR3-120EB2 ISUR3-2772 ISUR3-277D2 ISUR3-UV2  <b>IC Air Tight Chicago Plenum</b> ISUR3-120D2P ISUR3-120E2P ISUR3-120EB2P ISUR3-2772P ISUR3-277D2P ISUR3-UV2P
<b>Performance 3</b> 24W MAX	N/A	<b>Non-IC Non-Air Tight</b> NWUR3-UV3  <b>Non-IC Non-Air Tight Emergency Driver</b> NWUR3-UV3-EM	N/A

For dimming, please visit our Web site frequently to find our suggested compatible dimmers list:  
[www.contrastlighting.com](http://www.contrastlighting.com)

Contraste suggests ordering  
**EB2 (ELV (+Value)/15W), D2 (0-10V/15W)**  
or  
**UV2 (ELV/0-10V/15W) and UV3 (ELV/0-10V/24W)**  
dimming type and performance to use with Warm Dimming

# CONTRASTE

## SPECIFICATION SHEET

**UR3F**

3-1/2" Series

**Round Downlight Regressed Trim with Pinhole Aperture**

## SPECIFICATIONS (CONT'D)

TRIM	Powder coat painted or plated die-formed steel. <b>Different finishes available:</b> White <b>(-01)</b> , Brushed Chrome <b>(-04BR)</b> , Matte White <b>(-11)</b> , Brushed Nickel <b>(-12BR)</b> , <b>Satin Nickel (-13)</b> , Matte Black <b>(-22)</b> and Polar Grey <b>(-25)</b>						
REFLECTOR	<b>PEINT</b> Matte Black <b>(22)</b>						
HEAT SINK	High quality aluminum injected heat sink ensuring maximum heat dissipation						
OPTIC SYSTEM	Optical reflectors and lenses available to customize your lighting. <b>Choice of available lenses:</b> <b>Standard (without lens)</b> <b>Clear (C)</b> <b>Frosted (F)</b> <b>Honeycomb (H):</b> the honeycomb louver reduces glare <b>Linear (L):</b> the linear lens directs the lamp beam to create a strip of light <b>Prismatic (P):</b> the prismatic lens diffuses and spreads the light in an even overall pattern <b>Solite (S):</b> the solite lens softens the light in an even overall pattern <b>Optical reflectors available:</b> Spot, Narrow Flood <table border="1" style="margin-left: auto; margin-right: auto;"><thead><tr><th colspan="2" style="text-align: center;">Standard</th></tr></thead><tbody><tr><td>Spot <b>(S)</b></td><td style="text-align: center;">16°</td></tr><tr><td>Narrow Flood <b>(M)</b></td><td style="text-align: center;">32°</td></tr></tbody></table> <b>* Average beams shown. Consult .ies files on our Website for more details.</b>	Standard		Spot <b>(S)</b>	16°	Narrow Flood <b>(M)</b>	32°
Standard							
Spot <b>(S)</b>	16°						
Narrow Flood <b>(M)</b>	32°						
ACCESSORIES	<ul style="list-style-type: none"> <li>• Goof Rings (see ordering code)</li> <li>• Opening Adaptor (see ordering code)</li> </ul>						

**CONTRASTE**2020-10  
Revision 6

PRINTED IN CANADA

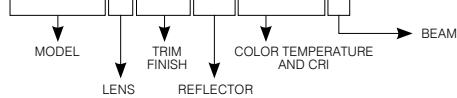
1009, rue du Parc Industriel  
Lévis (Québec) G6Z 1C5 Canada  
Tel.: 1-888-839-4624  
Fax.: 1-877-839-7057  
contrastlighting.com  
info@contrastlighting.com© 2020 Contrast Lighting M.L. Inc.  
All rights reserved

Contrast Lighting M.L. Inc. reserves the right to make changes in specifications and/or to discontinue any product at any time without notice or obligation and will not be liable for any consequences resulting from the use of this publication.

## SPECIFICATION SHEET

**UR3F****3-1/2" Series****Round Downlight Regressed Trim with Pinhole Aperture**

## CODIFICATION EXAMPLE

**UR3FC-11222790S***Options in red may generate a longer production lead time.*

## ORDERING CODES

MODEL	LENSES	TRIM FINISHES	REFLECTOR FINISH	COLOR TEMPERATURE AND CRI	BEAMS
<b>UR3F</b>			<b>22</b>		
<b>UR3F</b>	Whitout lens (std)	<b>-01</b> White	<b>PAINTED</b>	<b>2780</b> 2,700K (80+ CRI)	<b>S</b> Spot (16°) <b>M</b> Narrow Flood (32°) <i>Not available with Warm Dimming</i>
<b>C</b>	Clear	<b>-04BR</b> Brushed Chrome	<b>22</b> Matte Black	<b>3080</b> 3,000K (80+ CRI)	
<b>F</b>	Frosted	<b>-11</b> Matte White		<b>2790</b> 2,700K (90+ CRI)	<i>Not available with Warm Dimming</i>
<b>H</b>	Honeycomb	<b>-12BR</b> Brushed Nickel		<b>3090</b> 3,000K (90+ CRI)	
<b>L</b>	Linear	<b>-22</b> Matte Black		<b>3590</b> 3,500K (90+ CRI)	
<b>P</b>	Prismatic	<b>-25</b> Polar Grey		<b>4090</b> 4,000K (90+ CRI)	
<b>S</b>	Solite	<b>-13</b> <i>Satin Nickel</i>			
				<b>WD90</b> Warm Dimming 3,050K to 1,800K (90+ CRI)	

*Compatible with 15W and 24W drivers only (EB2, D2, UV2 and UV3)*

## GOOF RINGS

Goof rings will help you fix larger than necessary or damaged ceiling cutouts.

**Code: RR3-01** (white)  
**RR3-04BR** (brushed chrome)  
**RR3-11** (matte white)  
**RR3-12BR** (brushed nickel)  
**RR3-13** (satin nickel)  
**RR3-22** (matte black)  
**RR3-25** (polar grey)

Outside diameter:  $\varnothing$  6-1/8" (156 mm)  
 Inside diameter:  $\varnothing$  3-11/16" (94 mm)

## OPENING ADAPTOR

Can lip adaptor for 3-1/2" (89 mm) pot in a 4-1/4" (108 mm) opening.

**Finish:** Galvanized steel

**Code: 312296**

Outside diameter:  $\varnothing$  4-5/16" (110 mm)  
 Inside diameter:  $\varnothing$  3-5/8" (92 mm)

**CONTRASTE**

2020-10  
Revision 6

PRINTED IN CANADA

1009, rue du Parc Industriel  
 Lévis (Québec) G6Z 1C5 Canada  
 Tel.: 1-888-839-4624  
 Fax.: 1-877-839-7057  
 contrastlighting.com  
 info@contrastlighting.com

© 2020 Contrast Lighting M.L. Inc.  
 All rights reserved

Contrast Lighting M.L. Inc. reserves the right to make changes in specifications and/or to discontinue any product at any time without notice or obligation and will not be liable for any consequences resulting from the use of this publication.

## SPECIFICATION SHEET

**UR3F****3-1/2" Series****Round Downlight Regressed Trim with Pinhole Aperture**

## PHOTOMETRIC DATA



In order to obtain the accurate photometric data, multiply the lumens relative to your product selection by the applicable factor(s). Take note these factors also need to be implemented in the .ies files available on our website.

## WITH PERFORMANCE 1 HOUSING (10W)

	Spot (16°)		Narrow Flood (32°)	
	lm	lm/W	lm	lm/W
<b>2,700K with 80+ CRI</b>	572	57	705	71
<b>3,000K with 80+ CRI</b>	586	59	723	72

<b>2,700K with 90+ CRI</b>	475	48	586	59
<b>3,000K with 90+ CRI</b>	492	49	606	61
<b>3,500K with 90+ CRI</b>	519	52	639	64
<b>4,000K with 90+ CRI</b>	532	53	657	66
<b>Warm Dimming with 90+ CRI</b>	Not available		425	42.5

Performance 1 Housings Factors	
<b>XXUR-120E1</b>	0.90
<b>XXUR-120D1 or XXUR-277D1</b>	1

Lens Factors			
<b>STD</b>	1	<b>F</b>	0.68
<b>C</b>	0.97	<b>H</b>	0.54

## WITH PERFORMANCE 2 HOUSING (15W)

	Spot (16°)		Narrow Flood (32°)	
	lm	lm/W	lm	lm/W
<b>2,700K with 80+ CRI</b>	745	50	919	61
<b>3,000K with 80+ CRI</b>	764	51	942	63

<b>2,700K with 90+ CRI</b>	619	41	764	51
<b>3,000K with 90+ CRI</b>	640	43	789	53
<b>3,500K with 90+ CRI</b>	676	45	833	56
<b>4,000K with 90+ CRI</b>	693	46	855	57
<b>Warm Dimming with 90+ CRI</b>	Not available		560	37

Performance 2 Housings Factors	
<b>XXUR-120E2</b>	0.95
<b>XXUR-120EB2, XXUR-120D2, XXUR-2772 or XXUR-277D2</b>	1

Lens Factors			
<b>STD</b>	1	<b>F</b>	0.68
<b>C</b>	0.97	<b>H</b>	0.54

**CONTRASTE**2020-10  
Revision 6

PRINTED IN CANADA

1009, rue du Parc Industriel  
Lévis (Québec) G6Z 1C5 Canada  
Tel.: 1-888-839-4624  
Fax.: 1-877-839-7057  
contrastlighting.com  
info@contrastlighting.com© 2020 Contrast Lighting M.L. Inc.  
All rights reserved

Contrast Lighting M.L. Inc. reserves the right to make changes in specifications and/or to discontinue any product at any time without notice or obligation and will not be liable for any consequences resulting from the use of this publication.

## SPECIFICATION SHEET

**UR3F**

3-1/2" Series

**Round Downlight Regressed Trim with Pinhole Aperture**

## PHOTOMETRIC DATA



WITH PERFORMANCE 3 HOUSING (24W)

	Spot (16°)		Narrow Flood (32°)	
	lm	lm/W	lm	lm/W
<b>2,700K with 80+ CRI</b>	1,118	47	1,379	57
<b>3,000K with 80+ CRI</b>	1,145	48	1,413	59

<b>2,700K with 90+ CRI</b>	928	39	1,145	48
<b>3,000K with 90+ CRI</b>	961	40	1,184	49
<b>3,500K with 90+ CRI</b>	1,014	42	1,249	52
<b>4,000K with 90+ CRI</b>	1,040	43	1,283	53
<b>Warm Dimming with 90+ CRI</b>	Not available		820	34

Lens Factors			
<b>STD</b>	1	<b>F</b>	0.68
<b>C</b>	0.97	<b>H</b>	0.54

**CONTRASTE**2020-10  
Revision 6

PRINTED IN CANADA

1009, rue du Parc Industriel  
Lévis (Québec) G6Z 1C5 Canada  
Tel.: 1-888-839-4624  
Fax.: 1-877-839-7057  
contrastlighting.com  
info@contrastlighting.com© 2020 Contrast Lighting M.L. Inc.  
All rights reserved

Contrast Lighting M.L. Inc. reserves the right to make changes in specifications and/or to discontinue any product at any time without notice or obligation and will not be liable for any consequences resulting from the use of this publication.

# UR3F

## 3-1/2" Series

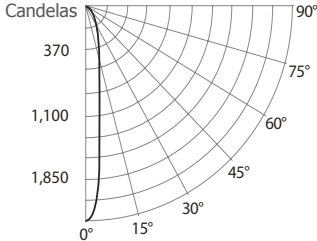
### Round Downlight Regressed Trim with Pinhole Aperture

### PHOTOMETRIC DATA



#### 3,000K, 90+ CRI, Spot, Performance 1

##### CANDLEPOWER DISTRIBUTION



##### LIGHT CONE

Distance	FC	DIA
06'	60.8	1.7'
08'	34.2	2.3'
10'	21.9	2.8'
12'	15.2	3.4'
14'	11.2	4.0'
16'	8.5	4.5'

Beam: 16.1°  
Beam Edge defined as 50% of Maximum Nadir Candle-power.

##### LUMINAIRE

Performance 1 LED	3,000K Spot	
CBCP / Lumens	2,187	/ 491
Watts	120V	277V
	10W	10.5W
Operating AMPS	0.08A	0.038A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	90+	
Lumens/Watt	49.1	
Spacing Criteria	0.28	

##### COEFFICIENT OF UTILIZATION - %

Ceiling Reflect %	80		50		30		
Wall Reflect %	50	30	50	30	50	30	
RCR	0	119	119	111	111	106	106
	2	104	100	99	96	96	94
	4	92	87	89	85	87	84
	6	83	78	81	77	80	76
	8	76	71	75	70	74	70
	10	70	65	69	65	68	64

##### Zonal Cavity Method

Effective Floor Cavity Reflectance 20%

##### ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	376.6	76.7%
0-40	454.2	92.5%
0-60	476.2	97%
60-90	14.8	3%
0-90	491	100%

##### MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	24	0.44
6'	18	0.34
7'	13	0.25
8'	9	0.17
9'	9	0.17

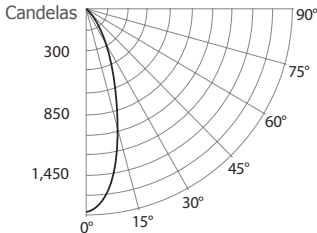
38' x 38' x 10' Room. Workplan located 2-1/2' (30").  
Reflectance factor 80%/50%/30%

##### CANDELAS DISTRIBUTION

DEGREES/VERTICAL	CANDELAS	DEGREES/VERTICAL	CANDELAS
0	2,187	45	18
5	1,662	55	9
10	798	65	6
15	485	75	5
20	348	85	3
25	237	90	0
30	167		

#### 3,000K, 90+ CRI, Narrow Flood, Performance 1

##### CANDLEPOWER DISTRIBUTION



##### LIGHT CONE

Distance	FC	DIA
06'	46.4	3.6'
08'	26.1	4.7'
10'	16.7	5.9'
12'	11.6	7.1'
14'	8.5	8.3'
16'	6.5	9.5'

Beam: 32.9°  
Beam Edge defined as 50% of Maximum Nadir Candle-power.

##### LUMINAIRE

Performance 1 LED	3,000K Narrow Flood	
CBCP / Lumens	1,669	/ 605.7
Watts	120V	277V
	10W	10.5W
Operating AMPS	0.08A	0.038A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	90+	
Lumens/Watt	60.6	
Spacing Criteria	0.56	

##### COEFFICIENT OF UTILIZATION - %

Ceiling Reflect %	80		50		30		
Wall Reflect %	50	30	50	30	50	30	
RCR	0	119	119	111	111	106	106
	2	106	103	102	99	99	97
	4	96	92	93	90	91	88
	6	88	83	86	82	85	81
	8	81	76	80	76	79	75
	10	75	71	74	70	73	70

##### Zonal Cavity Method

Effective Floor Cavity Reflectance 20%

##### ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	559.0	92.3%
0-40	601.1	99.2%
0-60	605.7	100%
60-90	0.0	0%
0-90	605.7	100%

##### MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	30	0.44
6'	23	0.34
7'	17	0.25
8'	12	0.17
9'	12	0.17

38' x 38' x 10' Room. Workplan located 2-1/2' (30").  
Reflectance factor 80%/50%/30%

##### CANDELAS DISTRIBUTION

DEGREES/VERTICAL	CANDELAS
0	1,669
15	934
30	178
45	3
60	0
75	0
90	0

# UR3F

3-1/2" Series

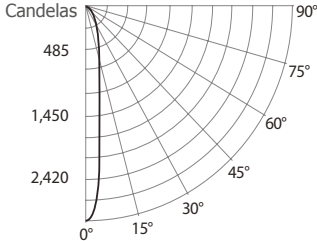
## Round Downlight Regressed Trim with Pinhole Aperture

## PHOTOMETRIC DATA



### 3,000K, 90+ CRI, Spot, Performance 2

#### CANDLEPOWER DISTRIBUTION



#### LIGHT CONE

Distance	FC	DIA
06'	79.2	1.7'
08'	44.5	2.3'
10'	28.5	2.8'
12'	19.8	3.4'
14'	14.5	4.0'
16'	11.1	4.5'

Beam: 16.1°  
Beam Edge defined as 50% of Maximum Nadir Candle-power.

#### LUMINAIRE

Performance 2 LED	3,000K Spot	
CBCP / Lumens	2,850 / 641.2	
Watts	120V	277V
	15W	15.5W
Operating AMPS	0.12A	0.055A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	90+	
Lumens/Watt	42.7	
Spacing Criteria	0.28	

#### COEFFICIENT OF UTILIZATION - %

Ceiling Reflect %	80			50			30		
Wall Reflect %	50	30	50	30	50	30	50	30	50
RCR	0	119	119	111	111	106	106	106	106
	2	104	100	99	96	96	94	94	94
	4	92	87	89	85	87	84	84	84
	6	83	78	81	77	80	76	76	76
	8	76	71	75	70	74	69	69	69
	10	70	65	69	64	68	64	64	64

#### Zonal Cavity Method

Effective Floor Cavity Reflectance 20%

#### ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	490.9	76.6%
0-40	592.0	92.3%
0-60	621.1	96.9%
60-90	20.1	3.1%
0-90	641.2	100%

#### MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	31	0.66
6'	24	0.51
7'	17	0.37
8'	12	0.26
9'	12	0.26

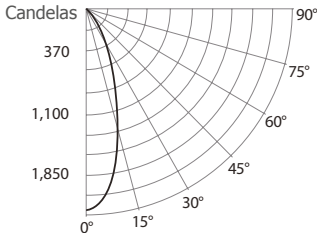
38' x 38' x 10' Room. Workplan located 2-1/2' (30").  
Reflectance factor 80%/50%/30%

#### CANDELAS DISTRIBUTION

DEGREES/VERTICAL	CANDELAS	DEGREES/VERTICAL	CANDELAS
0	2,850	45	24
5	2,166	55	12
10	1,041	65	9
15	633	75	8
20	453	85	4
25	309	90	0
30	218		

### 3,000K, 90+ CRI, Narrow Flood, Performance 2

#### CANDLEPOWER DISTRIBUTION



#### LIGHT CONE

Distance	FC	DIA
06'	59.9	3.5'
08'	33.7	4.7'
10'	21.6	5.9'
12'	14.9	7.1'
14'	11.0	8.3'
16'	8.4	9.5'

Beam: 32.9°  
Beam Edge defined as 50% of Maximum Nadir Candle-power.

#### LUMINAIRE

Performance 2 LED	3,000K Narrow Flood	
CBCP/ Lumens	2,157 / 783	
Watts	120V	277V
	15W	15.5W
Operating AMPS	0.12A	0.055A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	90+	
Lumens/Watt	52.2	
Spacing Criteria	0.56	

#### COEFFICIENT OF UTILIZATION - %

Ceiling Reflect %	80			50			30		
Wall Reflect %	50	30	50	30	50	30	50	30	50
RCR	0	119	119	111	111	106	106	106	106
	2	106	103	102	99	99	97	97	97
	4	96	92	93	90	91	88	88	88
	6	88	83	86	82	85	81	81	81
	8	81	76	80	76	79	75	75	75
	10	75	71	74	70	73	70	70	70

#### Zonal Cavity Method

Effective Floor Cavity Reflectance 20%

#### ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	722.2	92.2%
0-40	776.7	99.2%
0-60	782.9	100%
60-90	0.1	0%
0-90	783	100%

#### MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	29	0.50
6'	30	0.51
7'	22	0.37
8'	15	0.26
9'	15	0.26

38' x 38' x 10' Room. Workplan located 2-1/2' (30").  
Reflectance factor 80%/50%/30%

#### CANDELAS DISTRIBUTION

DEGREES/VERTICAL	CANDELAS	DEGREES/VERTICAL	CANDELAS
0	2,157	45	24
15	1,207	55	12
30	231	65	9
45	5	75	8
60	0	85	4
75	0	90	0
90	0		



# UR3F

3-1/2" Series

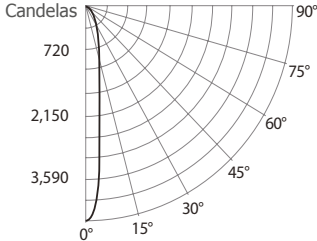
## Round Downlight Regressed Trim with Pinhole Aperture

## PHOTOMETRIC DATA



### 3,000K, 90+ CRI, Spot, Performance 3

#### CANDLEPOWER DISTRIBUTION



#### LIGHT CONE

Distance	FC	DIA
06'	118.8	1.7'
08'	66.8	2.3'
10'	42.8	2.8'
12'	29.7	3.4'
14'	21.8	4.0'
16'	16.7	4.5'

Beam: 16.1°  
Beam Edge defined as 50% of Maximum Nadir Candle-power.

#### LUMINAIRE

Performance 3 LED	3,000K Spot	
CBCP / Lumens	4,275	/ 961.8
Watts	120V	277V
	24W	24.5W
Operating AMPS	0.20A	0.088A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	90+	
Lumens/Watt	40.1	
Spacing Criteria	0.28	

#### COEFFICIENT OF UTILIZATION - %

Ceiling Reflect %	80			50			30		
Wall Reflect %	50	30	50	30	50	30	50	30	
RCR	0	119	119	111	111	106	106	106	
	2	104	100	99	96	96	94	94	
	4	92	87	89	85	87	84	84	
	6	83	78	81	77	80	76	76	
	8	76	71	75	70	74	69	69	
	10	70	65	69	64	68	64	64	

Zonal Cavity Method  
Effective Floor Cavity Reflectance 20%

#### ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	736.3	76.6%
0-40	888.0	92.3%
0-60	931.6	96.9%
60-90	30.2	3.1%
0-90	961.8	100%

#### MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	29	0.66
6'	31	0.70
7'	26	0.60
8'	18	0.42
9'	18	0.42

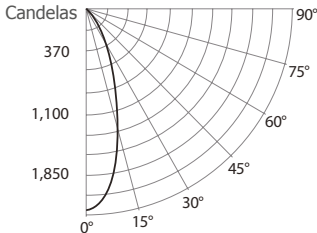
38' x 38' x 10' Room. Workplan located 2-1/2' (30").  
Reflectance factor 80%/50%/30%

#### CANDELAS DISTRIBUTION

DEGREES/VERTICAL	CANDELAS	DEGREES/VERTICAL	CANDELAS
0	4,275	45	36
5	3,250	55	18
10	1,562	65	13
15	949	75	11
20	679	85	6
25	463	90	0
30	327		

### 3,000K, 90+ CRI, Narrow Flood, Performance 3

#### CANDLEPOWER DISTRIBUTION



#### LIGHT CONE

Distance	FC	DIA
06'	90.4	3.5'
08'	50.9	4.7'
10'	32.6	5.9'
12'	22.6	7.1'
14'	16.6	8.3'
16'	12.7	9.5'

Beam: 32.9°  
Beam Edge defined as 50% of Maximum Nadir Candle-power.

#### LUMINAIRE

Performance 3 LED	3,000K Narrow Flood	
CBCP/ Lumens	3,255	/ 1,181.7
Watts	120V	277V
	24W	24.5W
Operating AMPS	0.20A	0.088A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	90+	
Lumens/Watt	49.2	
Spacing Criteria	0.56	

#### COEFFICIENT OF UTILIZATION - %

Ceiling Reflect %	80			50			30		
Wall Reflect %	50	30	50	30	50	30	50	30	
RCR	0	119	119	111	111	106	106	106	
	2	106	103	102	99	99	97	97	
	4	96	92	93	90	91	88	88	
	6	88	83	86	82	85	81	81	
	8	81	76	80	76	79	75	75	
	10	75	71	74	70	73	70	70	

Zonal Cavity Method  
Effective Floor Cavity Reflectance 20%

#### ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	1,090.0	92.2%
0-40	1,172.2	99.2%
0-60	1,181.6	100%
60-90	0.1	0%
0-90	1,181.7	100%

#### MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	29	0.53
6'	32	0.58
7'	33	0.60
8'	23	0.42
9'	23	0.42

38' x 38' x 10' Room. Workplan located 2-1/2' (30").  
Reflectance factor 80%/50%/30%

#### CANDELAS DISTRIBUTION

DEGREES/VERTICAL	CANDELAS
0	3,255
15	1,821
30	348
45	7
60	1
75	0
90	0