

PROJECT: \_\_\_\_\_  
 TYPE: \_\_\_\_\_



## 3" SQUARE FLANGED

NON-IC & IC NEW CONSTRUCTION / REMODEL

Spectrum's Infinium 3" recessed square downlight series features a shallow plenum housing and variety of trims for accent and general illumination.



NOMINAL LUMENS / WATTAGE DATA				
CURRENT PART NUMBER EXAMPLE	PREVIOUS PART NUMBER EXAMPLE	DELIVERED LUMENS <sup>1</sup>	SYSTEM WATTS	LPW
IF03SMF 007	N/A	359	7	49
IF03SMF 010	SDF03OC 10L	503	9	54
IF03SMF 015	N/A	700	12	57
IF03SMF 020	SDF03OC 20L	898	15	60

<sup>1</sup> Nominal Delivered Lumens at 835 DL FL GP MW MF

### AVAILABLE HOUSING TYPES



HOUSING						HOUSING OPTIONS						
SERIES	TYPE	EMITTER	CRI/CCT	LUMENS	OPTIONS	DIMMING		MOUNTING		BATTERY		
IF03SMF	NC	New Construction	PC	90 Minimum	PR 1.25" Ceiling Extension	D1 1% Non-Dimming Electronic Driver D3 1% ELV/MLV Phase-Cut (120V)	1 120V 2 277V	NC/IC	B1 Expandable Bar Hangers	E1 7W Integral Battery ER 7W Remote Battery	Not Available in IC New Construction Available in All Types	
	IC	IC New Construction		922 2200K								010 503 Lm
	RT	Remodel Construction		927 2700K								015 700 Lm
				930 3000K								020 898 Lm
			80 Minimum	Nominal Delivered Lumens at 835 DL FL GP MW		1 120V	RT	B0 No Bar Hangers				
			827 2700K									
			830 3000K									
			835 3500K									
			840 4000K									

### AVAILABLE TRIM / MODULE TYPES



TRIM OPTIONS					
TRIM TYPE	BEAM <sup>1</sup>	LENS	FINISH	FLANGE FINISH	OPTION
DL Downlight	SP Spot (25°)	GN No Lens Not Available in Wet Location	MW Matte White	MF Matching Flange	WL Wet Location Requires GP or GC Lens
PH Pinhole Downlight	NF Narrow Flood (31°)	GP Solite™ Micro Prism Lens	MB Matte Black	WF White Flange For Use with Non-White Trim Finish	
	FL Flood (41°)	GC Clear Glass Lens	PT Platinum Silver		
	WF Wide Flood (53°)		CC Custom Color		
AA Adjustable Accent	NF Narrow Flood (32°)				
	FL Flood (38°)				
	WF Wide Flood (42°)				
WW Wall Wash	WF Wide Flood	LW Wall Wash Lens			

<sup>1</sup> Nominal Beam Angles Shown

**QUICK SHIP**

EXAMPLE: IF03SMFNCPC927007/D12B1/DLNFPGPMWFWL

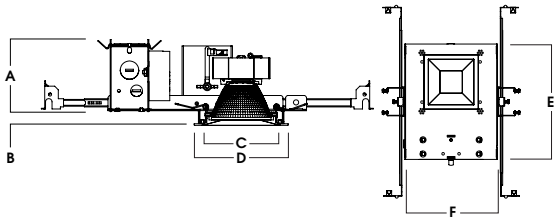
Dimensions and values shown are nominal. Spectrum Lighting continually works to improve products and reserves the right to make changes which may alter the performance or appearance of products.

SEPARATE	
ADDITIONAL ACCESSORIES	
ORDER SEPARATELY	
GOOF RING	
GRIF03S	MW Matte White
	MB Matte Black
	PT Platinum Silver
	CC Custom Color
BAR HANGERS	
B2	27" Solid Bar Hangers
B4	24" C-Channel Bar Hangers

## HOUSING DIMENSIONS

### IF03SMF NC - NEW CONSTRUCTION

Non-IC rated, thermally protected frame-in kit for new construction. Non-IC designation requires insulation must be minimum of 3" from housing.



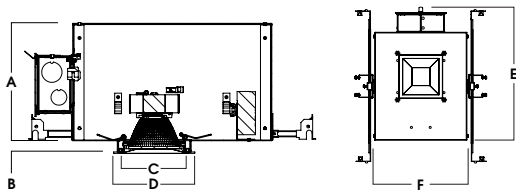
A	B	C	D	E	F
3.4	.625	3.8	4.5	9.5	7.6
86.4 mm	15.9 mm	96.5 mm	114.3 mm	241.3 mm	193.0 mm

Fixture Weight: 4.0 lbs

Ceiling Cutout: 4.1" Sq

### IF03SMF IC - IC NEW CONSTRUCTION

IC rated frame-in kit for new construction with direct insulation contact and CCEA (Chicago Plenum) compatibility.



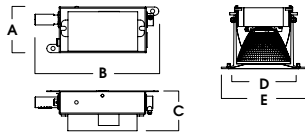
A	B	C	D	E	F
6.5	.625	3.8	4.5	13.2	9.5
165.1 mm	15.9 mm	96.5 mm	114.3 mm	335.3 mm	241.3 mm

Fixture Weight: 5.0 lbs

Ceiling Cutout: 4.1" Sq

### IF03SMF RT - REMODEL CONSTRUCTION

Non-IC rated frame-in kit for existing construction. Non-IC designation requires insulation must be minimum of 3" from housing.



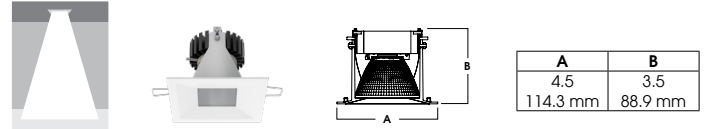
A	B	C	D	E
2.8	7.5	2.4	3.8	4.5
71.1 mm	190.5 mm	61.0 mm	96.5 mm	114.3 mm

Fixture Weight: 2.0 lbs

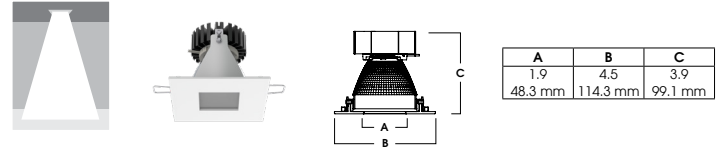
Ceiling Cutout: 4" Sq

## TRIM / MODULE DATA

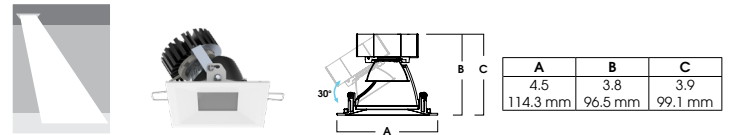
### DL - DOWNLIGHT MODULE



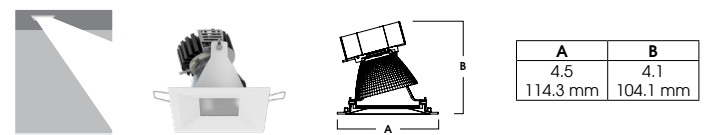
### PH - PINHOLE DOWNLIGHT MODULE



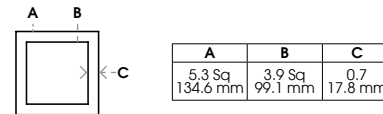
### AA - ADJUSTABLE MODULE (30°)



### WW - WALL WASH MODULE



### GRIF03S - 3" SQUARE GOOF RING



## FEATURES

### QUICK SHIP

Quick Ship highlights products that can ship in 3 - 5 working days.

### APPLICATIONS

Versatile shallow plenum 3" square recessed LED luminaire features downlight, adjustable accent, wall wash and pinhole downlight trim options with new construction, insulated ceiling and retrofit housings.

### FEATURES

Two-stage optical system for smooth low glare light distribution. Zhaga International Standard LED module for ease of maintenance and replacement. Shallow plenum design. Tool-less LED module, driver, and J-Box access. Multi-Bar mounting brackets. Expandable bar hangers with horizontal range of 14.2"-26", and vertical adjustment of 1.75" for Non-IC housing and 2.325" for IC housings. Post-lock trim retention springs. Integral 0.625" collar, works with up to 1" ceiling. For thicker ceilings consult factory.

### TRIM FINISH

A variety of architectural powdercoat finishes are available. Trims available with and without lens. Specify trim finish and flange finish.

### ELECTRONICS

LED module features high brightness Philips LEDs. 3-step MacAdam Ellipse binning and 80 and 90 CRI available. 0-10V or phase-cut dimming to 1% standard. Variety of 120V/277V drivers available. 2200K closely resembles candle light or high pressure sodium lamps.

### CONSTRUCTION

Housing/frame constructed of #20 ga. galvanized steel to resist corrosion. Self-flanged one piece die-cast aluminum trim is finished to specification. Passive machined aluminum heatsink.

### CODE COMPLIANCE

BAA Compliant. ETL certified to meet US and Canadian standards. Suitable for dry or damp locations. Optional Wet Location. Manufactured and tested to UL standards No. 1598/8750. City of Chicago Environmental Air (CCEA), and Insulated Ceiling (IC) options available.



# PHOTOMETRIC DATA - 3" SQUARE DOWNLIGHT

IF03SMx xx 835 020 DLSPGP MW

CANDLEPOWER CURVE TEST SP-00764_2	INTENSITY CANDELA 0° AZIMUTH	ZONAL LUMENS	SINGLE UNIT: PERFORMANCE DIRECT FOOTCANDLES BASED ON DOWNLIGHT ONLY	MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT																																								
	0°	0° - 10° 221 24%	Mounting Height AFF	<table border="1"> <thead> <tr> <th rowspan="2">Ceiling Height</th> <th rowspan="2">Fixture Spacing</th> <th colspan="2">RCR 4</th> <th colspan="2">RCR 6</th> </tr> <tr> <th>FC +</th> <th>W/Sq. Ft.</th> <th>FC +</th> <th>W/Sq. Ft.</th> </tr> </thead> <tbody> <tr> <td>18'</td> <td>4'</td> <td>46</td> <td>0.81</td> <td>42</td> <td>0.82</td> </tr> <tr> <td>22'</td> <td>6'</td> <td>23</td> <td>0.40</td> <td>18</td> <td>0.36</td> </tr> <tr> <td>26'</td> <td>8'</td> <td>12</td> <td>0.21</td> <td>13</td> <td>0.25</td> </tr> <tr> <td colspan="2">Delivered Illuminance Rating: (DIR)</td> <td colspan="2">57 FC per W/Sq. Ft.</td> <td colspan="2">52 FC per W/Sq. Ft.</td> </tr> <tr> <td colspan="6">Recessed mounting Square rooms used for multiple units: RCR 4: Length &amp; Width = Ceiling Ht. - 2.5' x 2.50 RCR 6: Length &amp; Width = Ceiling Ht. - 2.5' x 1.66 * Average Footcandles at 2.5' Above Floor</td> </tr> </tbody> </table>	Ceiling Height	Fixture Spacing	RCR 4		RCR 6		FC +	W/Sq. Ft.	FC +	W/Sq. Ft.	18'	4'	46	0.81	42	0.82	22'	6'	23	0.40	18	0.36	26'	8'	12	0.21	13	0.25	Delivered Illuminance Rating: (DIR)		57 FC per W/Sq. Ft.		52 FC per W/Sq. Ft.		Recessed mounting Square rooms used for multiple units: RCR 4: Length & Width = Ceiling Ht. - 2.5' x 2.50 RCR 6: Length & Width = Ceiling Ht. - 2.5' x 1.66 * Average Footcandles at 2.5' Above Floor					
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	0° 2881	0° - 20° 550 59%	8' 45 fc 3.6' 21 fc																																									
	5° 2475	0° - 30° 770 82%	10' 29 fc 4.5' 13 fc																																									
15° 1206	0° - 40° 847 90%	12' 20 fc 5.4' 9 fc																																										
25° 446	0° - 60° 904 97%	14' 15 fc 6.4' 7 fc																																										
35° 78	0° - 80° 934 100%	16' 11 fc 7.3' 5 fc																																										
45° 25	0° - 90° 936 100%	20' 7 fc 9.1' 3 fc																																										
55° 36	Total 936 100%	24' 5 fc 10.9' 2 fc																																										
90° 1		28' 4 fc 12.7' 2 fc																																										

Delivered Lumens: 936  
Luminaire Watts: 15  
LER: 62.40

CP at 0° (Nadir): 2881  
CRI: 80

Beam Angle: 25°  
Spacing Ratio: 0.42

Lumen Multiplier: 07L x 0.40, 10L x 0.56, 15L x 0.78  
CCT Multiplier: 40K x 1.03

IF03SMxxx835020/DLNFPGMWMF

CANDLEPOWER CURVE TEST SP-00763_2	INTENSITY CANDELA 0° AZIMUTH	ZONAL LUMENS	SINGLE UNIT: PERFORMANCE DIRECT FOOTCANDLES BASED ON DOWNLIGHT ONLY	MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT																																								
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	0° 2306	0° - 20° 524 56%	8' 36 fc 4.5' 16 fc																																									
	5° 2133	0° - 30° 758 82%	10' 23 fc 5.7' 10 fc																																									
15° 1218	0° - 40° 844 91%	12' 16 fc 6.8' 7 fc																																										
25° 492	0° - 60° 897 97%	14' 12 fc 8.0' 5 fc																																										
35° 92	0° - 80° 926 100%	16' 9 fc 9.1' 4 fc																																										
45° 31	0° - 90° 928 100%	20' 6 fc 11.4' 3 fc																																										
55° 23	Total 928 100%	24' 4 fc 13.6' 2 fc																																										
90° 1		28' 3 fc 15.9' 1 fc																																										

Delivered Lumens: 928  
Luminaire Watts: 15  
LER: 61.87

CP at 0° (Nadir): 2306  
CRI: 80

Beam Angle: 31°  
Spacing Ratio: 0.51

Lumen Multiplier: 07L x 0.40, 10L x 0.56, 15L x 0.78  
CCT Multiplier: 40K x 1.03

IF03SMx xx 835 020 DLFLGP MW

CANDLEPOWER CURVE TEST SP-00762_2	INTENSITY CANDELA 0° AZIMUTH	ZONAL LUMENS	SINGLE UNIT: PERFORMANCE DIRECT FOOTCANDLES BASED ON DOWNLIGHT ONLY	MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT																																								
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	0° 1480	0° - 20° 420 47%	8' 23 fc 6.0' 10 fc																																									
	5° 1426	0° - 30° 661 74%	10' 15 fc 7.5' 6 fc																																									
15° 1039	0° - 40° 779 87%	12' 10 fc 9.0' 4 fc																																										
25° 501	0° - 60° 862 96%	14' 8 fc 10.4' 3 fc																																										
35° 168	0° - 80° 895 100%	16' 6 fc 11.9' 2 fc																																										
45° 62	0° - 90° 898 100%	20' 4 fc 14.9' 2 fc																																										
55° 34	Total 898 100%	24' 3 fc 17.9' 1 fc																																										
90° 1		28' 2 fc 20.9' 1 fc																																										

Delivered Lumens: 898  
Luminaire Watts: 15  
LER: 59.87

CP at 0° (Nadir): 1480  
CRI: 80

Beam Angle: 41°  
Spacing Ratio: 0.65

Lumen Multiplier: 07L x 0.40, 10L x 0.56, 15L x 0.78  
CCT Multiplier: 40K x 1.03



# PHOTOMETRIC DATA - 3" SQUARE DOWNLIGHT

IF03SMx xx 835 020 DLWFGP MW

CANDLEPOWER CURVE TEST SP-00765_2	INTENSITY CANDELA 0° AZIMUTH	ZONAL LUMENS	SINGLE UNIT: PERFORMANCE DIRECT FOOTCANDLES BASED ON DOWNLIGHT ONLY	MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT											
	0°	942	0° - 10°	90	10%	Mounting Height AFF	FC at Center on Floor	Beam Diameter	FC at Beam Edge	Ceiling Height	Fixture Spacing	RCR 2		RCR 4	
	0°	942	0° - 20°	322	36%	8'	15 fc	8.0'	5 fc	10'	6'	FC *	W/Sq. Ft.	FC *	W/Sq. Ft.
	5°	934	0° - 30°	573	63%	10'	9 fc	10.0'	3 fc	14'	8'	23	0.38	20	0.38
	15°	832	0° - 40°	738	82%	12'	7 fc	12.0'	2 fc	18'	10'	13	0.22	8	0.16
	25°	528	0° - 60°	873	97%	14'	5 fc	14.0'	2 fc	Delivered Illuminance Rating: (DIR)		60 FC per W/Sq. Ft.		51 FC per W/Sq. Ft.	
	35°	247	0° - 80°	903	100%	16'	4 fc	16.0'	1 fc	Recessed mounting Square rooms used for multiple units: RCR 2: Length & Width = Ceiling Ht. - 2.5' x 5.00 RCR 4: Length & Width = Ceiling Ht. - 2.5' x 2.50 * Average Footcandles at 2.5' Above Floor					
	45°	113	0° - 90°	905	100%	20'	2 fc	20.0'	1 fc						
	55°	50	Total	905	100%	24'	2 fc	24.1'	1 fc						
	90°	1				28'	1 fc	28.1'	0 fc						

Delivered Lumens: **905**  
Luminaire Watts: **15**  
LER: **60.33**

CP at 0° (Nadir): **942**  
CRI: **80**

Beam Angle: **53°**  
Spacing Ratio: **0.84**

Lumen Multiplier: **07L x 0.40, 10L x 0.56, 15L x 0.78**  
CCT Multiplier: **40K x 1.03**

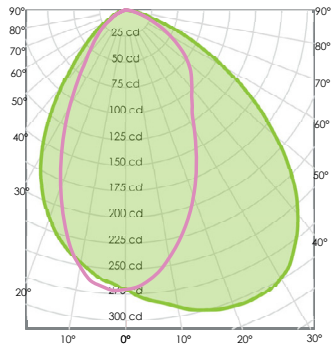
See Page 1 for System Watts for all outputs



# PHOTOMETRIC DATA - 3" SQUARE WALL WASH

IF03SMx xx PC 835 020 WW WF LW MW

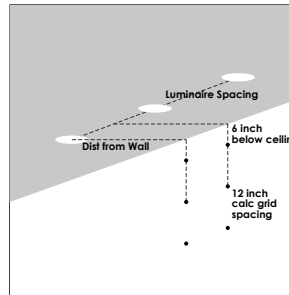
## CANDLEPOWER CURVE TEST SP-00850



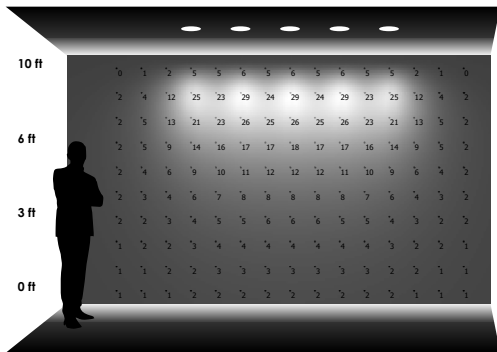
## PERFORMANCE SUMMARY

Delivered Lumens: 452  
 Luminaire Watts: 15  
 LER: 30.13  
 CP at 0deg (Nadir): 270  
 CRI: 80+  
 Lumen Multiplier: 07L x 0.40, 10L x 0.56, 15L x 0.78  
 CCT Multiplier: 27K x 0.95, 30K x 0.98, 40K x 1.03

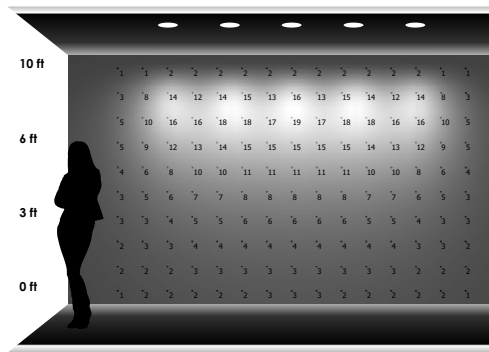
## REFERENCE DIAGRAM



## PERFORMANCE DATA - INITIAL ILLUMINATION (FOOTCANDLES) ON WALL - DIRECT LIGHT ONLY



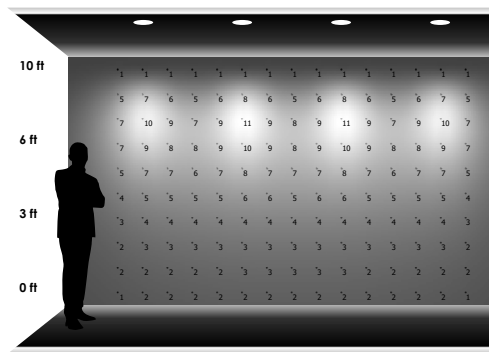
**5 LUMINAIRES**  
 2' away from wall  
 2' between luminaires



**5 LUMINAIRES**  
 2'-6" away from wall  
 2'-6" between luminaires



**5 LUMINAIRES**  
 3' away from wall  
 3' between luminaires



**4 LUMINAIRES**  
 3' away from wall  
 4' between luminaires

