



COMMERCIAL DOWNLIGHT SERIES BY SPECTRUM

### 3" ROUND FLANGED

NON-IC & IC NEW CONSTRUCTION / REMODEL

Spectrum's Infinium 3" recessed round 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
IF03RMF 007	N/A	537	7	73
IF03RMF 010	RDF03OC 10L	751	9	81
IF03RMF 015	N/A	1046	12	86
IF03RMF 020	RDF03OC 20L	1341	15	89

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

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



#### AVAILABLE HOUSING TYPES

<b>IF03RMF NC</b> - New Construction 	<b>IF03RMF IC</b> - IC New Construction 	<b>IF03RMF RT</b> - Remodel Construction 
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HOUSING						HOUSING OPTIONS							
SERIES	TYPE	EMITTER	CRI/CCT	LUMENS	OPTIONS	DIMMING		MOUNTING		BATTERY			
IF03RMF	NC	New Construction	PC	90 Minimum	PR 1.25" Ceiling Extension	N1 Non-Dimming Electronic Driver	D1 1%, 0-10V	1 120V	2 277V	NC/IC	E1 7W Integral Battery Not Available in IC New Construction		
	IC	IC New Construction		922 2200K								010 537 Lm	B1 Expandable Bar Hangers
	IC	IC New Construction		927 2700K								015 1046 Lm	
	RT	Remodel Construction		930 3000K								020 1341 Lm	
		80 Minimum	Nominal Delivered Lumens at 835 DL FL GP MW	D3 1%, ELV/MLV Phase-Cut (120V)	1 120V	RT	ER 7W Remote Battery Available in All Types						
		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 (24°)	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 (28°)	GP Solite™ Micro Prism Lens	MB Matte Black	WF White Flange For Use with Non-White Trim Finish	
	FL Flood (38°)	GC Clear Glass Lens	PT Platinum Silver		
	WF Wide Flood (61°)		CC Custom Color		
AA Adjustable Accent	NF Narrow Flood (35°)				
	FL Flood (43°)				
	WF Wide Flood (48°)				
WW Wall Wash	WF Wide Flood	LW Wall Wash Lens			

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

**QUICK SHIP**

EXAMPLE: IF03RMFNCPC927007/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.

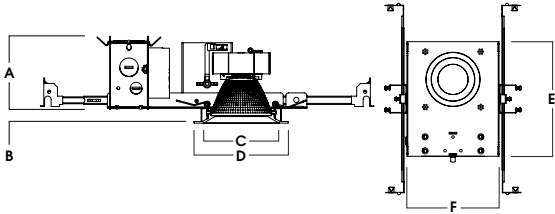
SEPARATE ADDITIONAL ACCESSORIES	
ORDER SEPARATELY	
GOOF RING	
GRIF03R	MW Matte White
	MB Matte Black
	PT Platinum Silver
	CC Custom Color
BAR HANGERS	
B2	27" Solid Bar Hangers
B4	24" C-Channel Bar Hangers



## HOUSING DIMENSIONS

### IF03RMF 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.



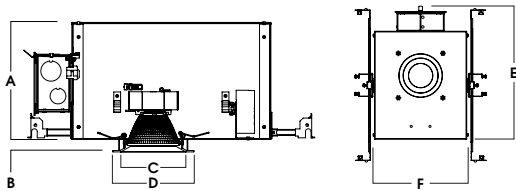
A	B	C	D	E	F
3.4	.625	3.6	4.5	9.5	7.6
86.4 mm	15.9 mm	91.4 mm	114.3 mm	241.3 mm	193.0 mm

Fixture Weight: 4.0 lbs

Ceiling Cutout: Ø 3<sup>7/8</sup>"

### IF03RMF IC - IC NEW CONSTRUCTION

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



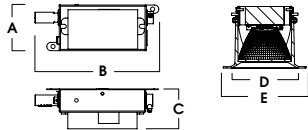
A	B	C	D	E	F
6.5	.625	3.6	4.5	13.2	9.5
165.1 mm	15.9 mm	91.4 mm	114.3 mm	335.3 mm	241.3 mm

Fixture Weight: 5.0 lbs

Ceiling Cutout: Ø 3<sup>7/8</sup>"

### IF03RMF RT - REMODEL CONSTRUCTION

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



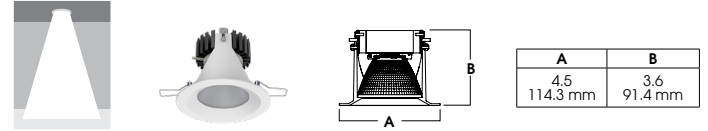
A	B	C	D	E
2.8	7.5	2.4	3.6	4.5
71.1 mm	190.5 mm	61.0 mm	91.4 mm	114.3 mm

Fixture Weight: 2.0 lbs

Ceiling Cutout: Ø 3<sup>3/4</sup>"

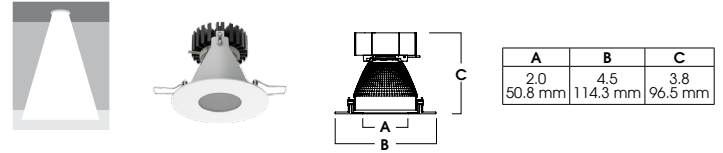
## TRIM / MODULE DATA

### DL - DOWNLIGHT MODULE



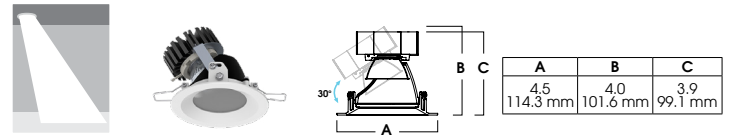
A	B
4.5	3.6
114.3 mm	91.4 mm

### PH - PINHOLE DOWNLIGHT MODULE



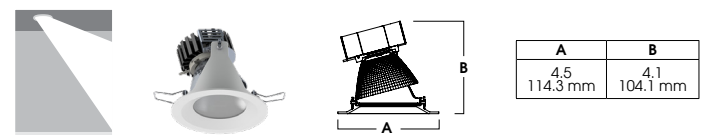
A	B	C
2.0	4.5	3.8
50.8 mm	114.3 mm	96.5 mm

### AA - ADJUSTABLE MODULE (30°)



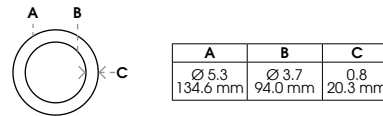
A	B	C
4.5	4.0	3.9
114.3 mm	101.6 mm	99.1 mm

### WW - WALL WASH MODULE



A	B
4.5	4.1
114.3 mm	104.1 mm

### GRIF03R - 3" ROUND GOOF RING



A	B	C
Ø 5.3	Ø 3.7	0.8
134.6 mm	94.0 mm	20.3 mm

## FEATURES

#### QUICK SHIP

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

#### APPLICATIONS

Versatile shallow plenum 3" round 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, consult factory. 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.

infinium

SPECTRUM  
LIGHTING INC.

# PHOTOMETRIC DATA - 3" ROUND DOWNLIGHT

IF03RMx xx 835 020 DLSPGP MW

CANDLEPOWER CURVE TEST SP-00760_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					
			Mounting Height AFF	FC at Center on Floor	Beam Diameter	FC at Beam Edge	Ceiling Height	Fixture Spacing	RCR 4		RCR 6	
	0°	0° - 10° 356 26%	8' 74 fc	3.4'	35 fc	18'	4'	FC +	W/Sq. Ft.	FC +	W/Sq. Ft.	
	0° - 20° 832 61%	10'	47 fc	4.2'	22 fc							68
	5° 4195	0° - 30° 1145 84%	12'	33 fc	5.1'			15 fc	34	0.40	28	0.36
	15° 1707	0° - 40° 1285 94%	14'	24 fc	5.9'	11 fc	26'	8'	18	0.21	19	0.25
	25° 675	0° - 60° 1340 98%	16'	18 fc	6.8'	9 fc	Delivered Illuminance Rating: (DIR)		84 FC per W/Sq. Ft.		77 FC per W/Sq. Ft.	
	35° 211	0° - 80° 1363 100%	20'	12 fc	8.4'	6 fc	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					
	45° 36	0° - 90° 1364 100%	24'	8 fc	10.1'	4 fc						
	55° 24	Total 1365 100%	28'	6 fc	11.8'	3 fc						
	90° 1											

Delivered Lumens: 1365  
Luminaire Watts: 15  
LER: 91.00

CP at 0° (Nadir): 4733  
CRI: 80

Beam Angle: 24°  
Spacing Ratio: 0.40

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

IF03RMx xx 835 020 DLNFGP MW

CANDLEPOWER CURVE TEST SP-00759_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					
			Mounting Height AFF	FC at Center on Floor	Beam Diameter	FC at Beam Edge	Ceiling Height	Fixture Spacing	RCR 3		RCR 5	
	0°	0° - 10° 315 23%	8' 60 fc	4.1'	27 fc	14'	6"	FC +	W/Sq. Ft.	FC +	W/Sq. Ft.	
	0° - 20° 801 59%	10'	38 fc	5.1'	17 fc							32
	5° 3595	0° - 30° 1124 83%	12'	26 fc	6.1'			12 fc	18'	8"	18	0.20
	15° 1725	0° - 40° 1271 94%	14'	19 fc	7.1'	9 fc	22'	10"	15	0.17	12	0.16
	25° 669	0° - 60° 1324 98%	16'	15 fc	8.1'	7 fc	Delivered Illuminance Rating: (DIR)		87 FC per W/Sq. Ft.		79 FC per W/Sq. Ft.	
	35° 192	0° - 80° 1345 100%	20'	10 fc	10.2'	4 fc	Recessed mounting Square rooms used for multiple units: RCR 3: Length & Width = Ceiling Ht. - 2.5' x 3.33 RCR 5: Length & Width = Ceiling Ht. - 2.5' x 2.00 * Average Footcandles at 2.5' Above Floor * Exceeds Spacing Ratio by 11% ** Exceeds Spacing Ratio by 10% *** Exceeds Spacing Ratio by 9%					
	45° 35	0° - 90° 1347 100%	24'	7 fc	12.2'	3 fc						
	55° 19	Total 1347 100%	28'	5 fc	14.2'	2 fc						
	90° 1											

Delivered Lumens: 1347  
Luminaire Watts: 15  
LER: 89.80

CP at 0° (Nadir): 3815  
CRI: 80

Beam Angle: 28°  
Spacing Ratio: 0.47

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

IF03RMx xx 835 020 DLFLGP MW

CANDLEPOWER CURVE TEST SP-00758_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					
			Mounting Height AFF	FC at Center on Floor	Beam Diameter	FC at Beam Edge	Ceiling Height	Fixture Spacing	RCR 3		RCR 5	
	0°	0° - 10° 236 18%	8' 42 fc	5.5'	18 fc	14'	6'	FC +	W/Sq. Ft.	FC +	W/Sq. Ft.	
	0° - 20° 712 53%	10'	27 fc	6.9'	11 fc							32
	5° 2550	0° - 30° 1102 82%	12'	19 fc	8.3'			8 fc	18'	8'	17	0.20
	15° 1723	0° - 40° 1267 94%	14'	14 fc	9.7'	6 fc	22'	10'	11	0.13	12	0.16
	25° 852	0° - 60° 1321 98%	16'	11 fc	11.0'	4 fc	Delivered Illuminance Rating: (DIR)		86 FC per W/Sq. Ft.		77 FC per W/Sq. Ft.	
	35° 261	0° - 80° 1340 100%	20'	7 fc	13.8'	3 fc	Recessed mounting Square rooms used for multiple units: RCR 3: Length & Width = Ceiling Ht. - 2.5' x 3.33 RCR 5: Length & Width = Ceiling Ht. - 2.5' x 2.00 * Average Footcandles at 2.5' Above Floor					
	45° 38	0° - 90° 1341 100%	24'	5 fc	16.6'	2 fc						
	55° 16	Total 1341 100%	28'	3 fc	19.3'	1 fc						
	90° 1											

Delivered Lumens: 1341  
Luminaire Watts: 15  
LER: 89.40

CP at 0° (Nadir): 2698  
CRI: 80

Beam Angle: 38°  
Spacing Ratio: 0.60

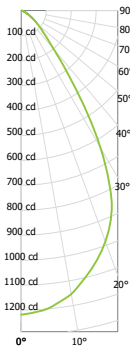
Lumen Multiplier: 07L x 0.40, 10L x 0.56, 15L x 0.78  
CCT Multiplier: 40K x 1.03



# PHOTOMETRIC DATA - 3" ROUND DOWNLIGHT

IF03RMx xx 835 020 DLWFGP MW

**CANDLEPOWER CURVE**  
TEST SP-00761\_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°	115	9%	Mounting Height AFF	FC at Center on Floor	Beam Diameter	FC at Beam Edge	Ceiling Height	Fixture Spacing	RCR 2		RCR 4	
0°	1218	0° - 20°	418	34%	8'	19 fc	9.4'	6 fc	10'	6'	31	0.38	27	0.38
5°	1200	0° - 30°	800	65%	10'	12 fc	11.8'	4 fc	14'	8'	18	0.22	11	0.16
15°	1076	0° - 40°	1044	85%	12'	8 fc	14.1'	3 fc	18'	10'	13	0.16	11	0.16
25°	858	0° - 60°	1201	98%	14'	6 fc	16.5'	2 fc	Delivered Illuminance Rating: (DIR)		81 FC per W/Sq. Ft.		70 FC per W/Sq. Ft.	
35°	375	0° - 80°	1227	100%	16'	5 fc	18.9'	2 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°	128	0° - 90°	1228	100%	20'	3 fc	23.6'	1 fc						
55°	56	Total	1228	100%	24'	2 fc	28.3'	1 fc						
90°	1				28'	2 fc	33.0'	0 fc						

Delivered Lumens: 1228  
Luminaire Watts: 15  
LER: 81.87

CP at 0° (Nadir): 1218  
CRI: 80

Beam Angle: 61°  
Spacing Ratio: 0.95

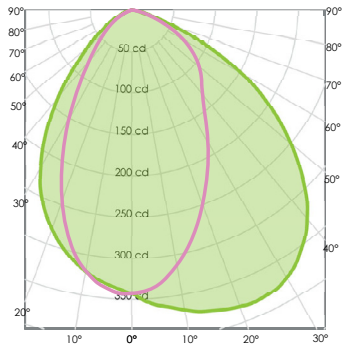
Lumen Multiplier: 07L x 0.40, 10L x 0.56, 15L x 0.78  
CCT Multiplier: 40K x 1.03



# PHOTOMETRIC DATA - 3" ROUND WALL WASH

IF03RMx xx PC 835 020 WW WF LW MW

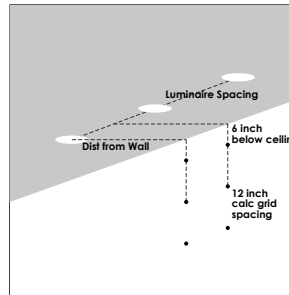
## CANDLEPOWER CURVE TEST SP-00849



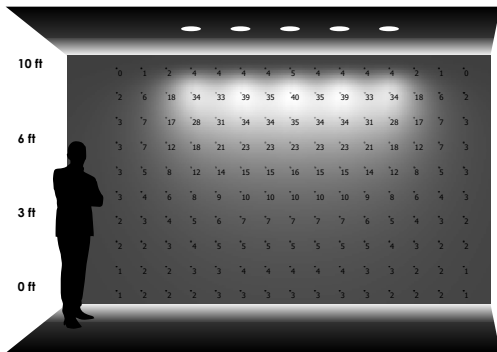
## PERFORMANCE SUMMARY

Delivered Lumens: 598  
 Luminaire Watts: 15  
 LER: 39.87  
  
 CP at 0deg (Nadir): 343  
 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

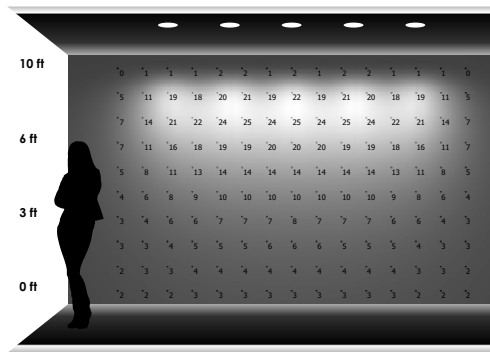
## REFERENCE DIAGRAM



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



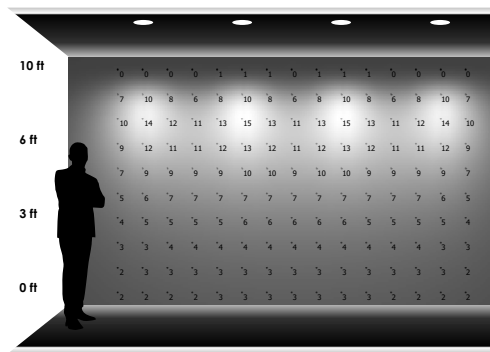
**5 LUMINAIRES**  
 2' away from wall  
 2' between luminaires



**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

