

INT20PR

4" Series

Project	
Notes	
Fixture Type	
Date	

Ultra-Thin Profile Round Fixed Regressed Trim with Pinhole Aperture

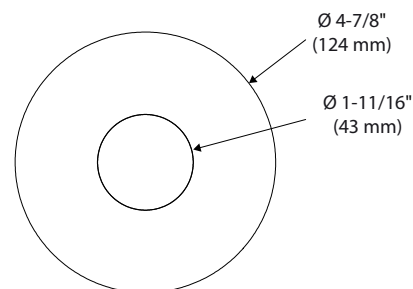
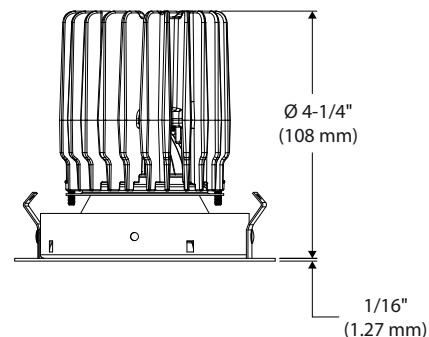
SPECIFICATIONS

COLOR TEMPERATURE	2,700K / 3,000K / 3,500K / 4,000K		
CRI	90 +		
POWER SUPPLY	Several driver models available giving you 3 dimming options: ELV, 0-10V or Pulse Width Modulation (PWM).		
LED MODULE	Bridgelux Vero 18, delivers a lumen maintenance greater than 70% after 50,000 hours of operation (L ₇₀). Provides a high quality true color and a clean white light without hot spots. Binning within 3 steps on MacAdam ellipse. Surpasses ANSI binning requirements.		
HOT LUMENS (Determined by the choice of housing)	Performance 1: 600 lumens Performance 2: 1,000 lumens		
TRIM	Powder coated paint or plated die-formed steel.		
OPTIC SYSTEM	Protection lens covered with a high-performance film 98% effective. Lens of 1/8" (3 mm) thick and 1.9" (49 mm) Ø. Lens: Clear Optical Reflector: M: Narrow Flood → 35°		
HEAT SINK	High quality aluminum injected heat sink ensuring maximum heat dissipation.		
REFLECTOR	Painted Black (02)		
CEILING CUTOUT	Ø 4-1/4" (108 mm)		
COMPATIBLE HOUSINGS		Remodel Housing	New Construction Housing
(Trims work with either performance 1 and 2 housings.)	Performance 1 (600 lumens)	Not Available	NWLD200LD1 NWLD200LA1
	Performance 2 (1,000 lumens)	Not Available	NWLD200LE2 NWLD200LD2 NWLD200LA2
			Insulated Housing
			Not Available
			Not Available
CERTIFICATION	cULus E343977 for damp locations		
WARRANTY	1 year for standard finishes and 5 years on LED module.		

For dimming, please consult frequently our Web site to find our dimmer compatibility list:
www.contrastlighting.com



INT20PR-12BR
(illustrated)



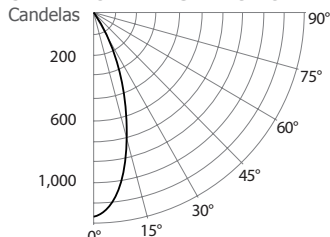
INT20PR

4" Series

PHOTOMETRIC DATA

3,000K, 90 + of CRI, Narrow Flood with Performance 1 Housing

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	32.4	3.4
08'	18.2	4.6
10'	11.7	5.7
12'	8.1	6.9
14'	5.9	8.0
16'	4.6	9.2

Beam: 32°
Beam Edge defined as 50% of Maximum Nadir Candle-power.

LUMINAIRE

Performance 1 LED	3,000K	Narrow Flood
CBCP / Lumens	1,165	/ 446.7
Watts	120V	277V
	16W	16.5W
Operating AMPS	0.13A	0.059A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	+ 90	
Lumens/Watt	27.9	
Spacing Criteria	0.55	

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	100	96	95	92	92	89	89	
	4	89	83	86	81	83	80	80	
	6	81	75	78	74	77	73	73	
	8	74	69	72	68	71	67	67	
	10	69	64	67	63	67	63	63	

Zonal Cavity Method
Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	350.8	78.5%
0-40	366.4	82%
0-60	395.1	88.4%
60-90	47.8	10.7%
0-180	446.7	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	21	0.71
6'	12	0.4
7'	8	0.28
8'	8	0.28
9'	5	0.18

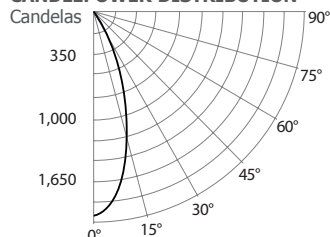
Local 38' x 38' x 10'. Workplan located 2-1/2' (30°).
Reflection factor of 80%/50%/30%.

CANDELAS DISTRIBUTION

DEGREES/VERTICAL	CANDELAS	DEGREES/VERTICAL	CANDELAS
0	1,165	45	20
5	1,086	55	16
10	901	65	15
15	653	75	17
20	369	85	16
25	141	90	14
35	23		

3,000K, 90 + of CRI, Narrow Flood with Performance 2 Housing

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	53.4	3.6
08'	30.1	4.8
10'	19.2	6.0
12'	13.4	7.2
14'	9.8	8.3
16'	7.5	9.5

Beam: 33°
Beam Edge defined as 50% of Maximum Nadir Candle-power.

LUMINAIRE

Performance 2 LED	3,000K	Narrow Flood
CBCP / Lumens	1,924	/ 740.5
Watts	120V	277V
	23W	23.5W
Operating AMPS	0.19A	0.084A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	90 +	
Lumens/Watt	32.2	
Spacing Criteria	0.57	

COEFFICIENT OF UTILIZATION - %

Ceiling Reflect %	80			50			30		
Wall Reflect %	50	30	50	30	50	30	50	30	
RCR	0	120	120	112	112	107	107	107	
	2	101	96	95	92	92	89	89	
	4	89	83	85	81	83	79	79	
	6	81	75	78	73	77	72	72	
	8	74	68	72	67	71	67	67	
	10	69	63	67	63	66	62	62	

Zonal Cavity Method
Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	568.5	77.7%
0-40	592.7	80%
0-60	642.6	86.8%
60-90	90.7	0.40%
0-180	740.5	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	34	1.08
6'	19	0.61
7'	13	0.42
8'	13	0.42
9'	9	0.27

Local 38' x 38' x 10'. Workplan located 2-1/2' (30°).
Reflection factor of 80%/50%/30%.

CANDELAS DISTRIBUTION

DEGREES/VERTICAL	CANDELAS	DEGREES/VERTICAL	CANDELAS
0	1,924	45	31
5	1,788	55	29
10	1,505	65	30
15	1,114	75	30
20	640	85	29
25	253	90	26
35	35		



INT20PR

4" Series

INT20PR MODEL PHOTOMETRIC DATA

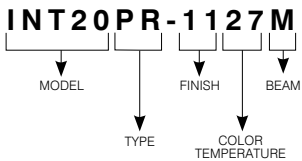
With performance 1 housing

	Narrow Flood	
2,700K with 90 CRI	442 Lms	26 lm/W
3,000K with 90 CRI	445 Lms	28 lm/W
3,500K with 90 CRI	472 Lms	30 lm/W
4,000K with 90 CRI	480 Lms	30 lm/W

With performance 2 housing

	Narrow Flood	
2,700K with 90 CRI	681 Lms	30 lm/W
3,000K with 90 CRI	718 Lms	31 lm/W
3,500K with 90 CRI	761 Lms	33 lm/W
4,000K with 90 CRI	775 Lms	34 lm/W

CODIFICATION EXAMPLE



ORDERING CODE

MODEL	TYPE	TRIM FINISHES	COLOR TEMPERATURE	BEAM
INT20	PR			M
INT20 Intermezzo Round	PR Fixed Pinhole	-11 Matte White -12BR Brushed Nickel -22 Matte Black	27 2,700K 30 3,000K 35 3,500K 40 4,000K	M Narrow Flood (35°)



CONTRASTE