

INT21PA

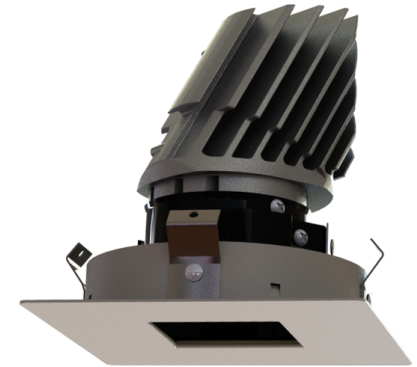
4" Series

Project
Notes
Fixture Type
Date

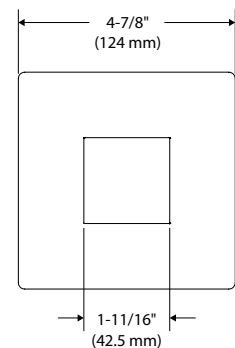
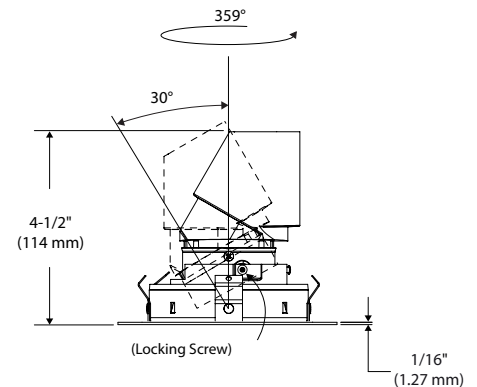
Ultra-Thin Profile Square Adjustable Regressed Trim with Pinhole Aperture

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: 875 lumens Performance 2: 1,225 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°			
AJUSTABILITY	Swivel: 359° 30° tilt and with locking position. Choose aiming angle then tighten screws to lock into position.			
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	Insulated Housing
(Trims work with either performance 1 and 2 housings.)	Performance 1 (875 lumens)	Not Available	NWLD200LD1 NWLD200LA1	Not Available
	Performance 2 (1,225 lumens)	Not Available	NWLD200LE2 NWLD200LD2 NWLD200LA2	Not Available
For dimming, please consult frequently our Web site to find our dimmer compatibility list: www.contrastlighting.com				
CERTIFICATION	cULus E343977 for damp locations			
WARRANTY	1 year for standard finishes and 5 years on LED module.			



INT21PA-12BR
(illustrated)



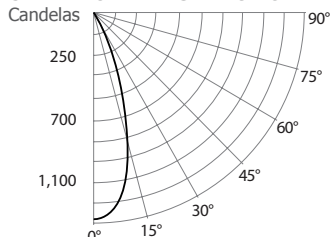
INT21PA

4" Series

PHOTOMETRIC DATA

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

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	37.6	3.7
08'	21.2	4.9
10'	13.5	6.1
12'	9.4	7.4
14'	6.9	8.6
16'	5.3	9.8

Beam: 34°
Beam Edge defined as 50% of Maximum Nadir Candle-power.

LUMINAIRE

Performance 1 LED	3,000K	Narrow Flood
CBCP / Lumens	1,354	/ 546.1
Watts	120V	277V
	16W	16.5W
Operating AMPS	0.13A	0.059A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	+ 90	
Lumens/Watt	34.1	
Spacing Criteria	0.58	

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	100	96	95	91	92	89	89	89
	4	89	83	85	81	83	79	79	79
	6	80	75	78	73	76	72	72	72
	8	74	68	72	67	71	67	67	67
	10	68	63	67	63	66	62	62	62

Zonal Cavity Method
Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	428.3	78.4%
0-40	445.1	81.5%
0-60	479.2	87.7%
60-90	62	11.4%
0-180	546.1	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	26	0.71
6'	14	0.4
7'	10	0.28
8'	10	0.28
9'	6	0.18

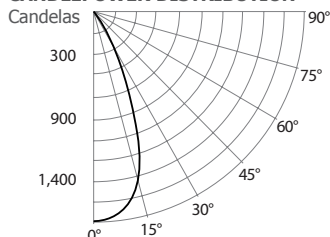
Local 38' x 38' x 10'. Workplan located 2-1/2' (30°).
Reflection factor of 80%/50%/30%.

CANDELAS DISTRIBUTION

DEGREES/VERTICAL	CANDELAS	DEGREES/VERTICAL	CANDELAS
0	1,354	45	21
5	1,321	55	20
10	1,135	65	21
15	825	75	20
20	462	85	20
25	176	90	18
35	25		

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

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	49.1	4.6
08'	27.6	6.1
10'	17.7	7.6
12'	12.3	9.1
14'	9.0	10.7
16'	6.9	12.2

Beam: 42°
Beam Edge defined as 50% of Maximum Nadir Candle-power.

LUMINAIRE

Performance 2 LED	3,000K	Narrow Flood
CBCP / Lumens	1,767	/ 904.3
Watts	120V	277V
	23W	23.5W
Operating AMPS	0.19A	0.084A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	+ 90	
Lumens/Watt	39.3	
Spacing Criteria	0.71	

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	100	96	95	92	92	89	89	89
	4	89	83	85	81	83	79	79	79
	6	80	74	77	73	76	72	72	72
	8	73	67	71	66	70	66	66	66
	10	67	62	66	61	65	61	61	61

Zonal Cavity Method
Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	723.8	80%
0-40	753.3	83.3%
0-60	803.3	88.8%
60-90	93.7	10.4%
0-180	904.3	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/SQ. FT.
5'	42	1.06
6'	24	0.6
7'	17	0.41
8'	17	0.41
9'	11	0.26

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	1,767	45	30
5	1,768	55	29
10	1,630	65	32
15	1,397	75	36
20	973	85	34
25	441	90	27
35	33		



INT21PA

4" Series

INT21PA MODEL PHOTOMETRIC DATA

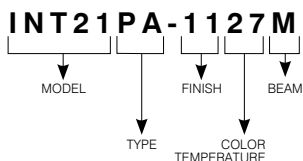
With performance 1 housing

	Narrow Flood	
2,700K with 90 CRI	518 Lms	32 lm/W
3,000K with 90 CRI	546 Lms	34 lm/W
3,500K with 90 CRI	590 Lms	37 lm/W
4,000K with 90 CRI	590 Lms	37 lm/W

With performance 2 housing

	Narrow Flood	
2,700K with 90 CRI	857 Lms	37 lm/W
3,000K with 90 CRI	904 Lms	39 lm/W
3,500K with 90 CRI	958 Lms	42 lm/W
4,000K with 90 CRI	976 Lms	42 lm/W

CODIFICATION EXAMPLE



ORDERING CODES

MODEL	TYPE	TRIM FINISHES	COLOR TEMPERATURE	BEAM
INT21	PA			M
INT21 Intermezzo Square	PA Ajustable 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