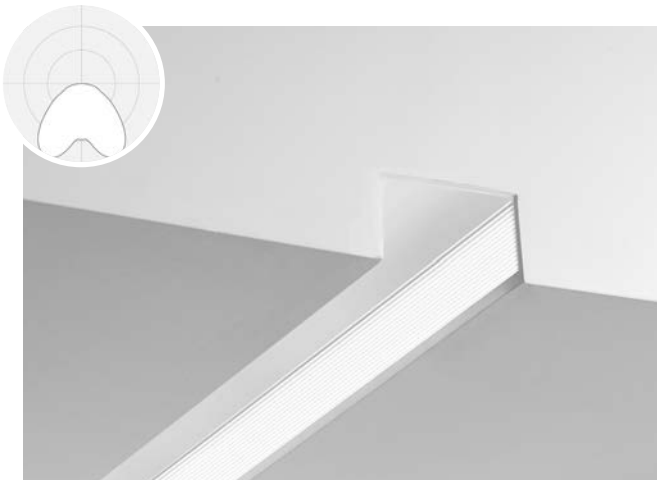




NOTCH 4 - 100 Dn Symmetric - NF1-B

Specification Data



D2 - Drywall Trimless shown with (E) Dado Endcap option

Luminaire	NOTCH 4 - 100 Dn Symmetric - (NF1-B)	Type
Project		
Product		
Notes		

Performance Summary	Area 100 Dn Symmetric			
	A	B	C	D
Light (lm/ft)	500	650	750	1025
Energy (W/ft)	5.00	6.00	7.25	9.50
Efficacy (lm/W)	110	110	108	109
Color Rendering (CRI)	80+	80+	80+	80+
Color Accuracy (SDCM)	< 2	< 2	< 2	< 2
L70 Estimate (h)	200,000	200,000	200,000	200,000
Lumen Maintenance per TM21 (@ 60,000 h)	L90	L90	L90	L90

Summary values are nominal and based on 4000K CCT
 DLC qualified for each lumen output (A, B, C, D) in
 3000K, 3500K and 4000K.



SPECIFICATION

NF1		B										OPTIONS			
1	2	3	4	5	6	7	8	9							
1. FAMILY		2. VERSION		3. TRIM / CEILING		4. DISTRIBUTION		5. LIGHT + ENERGY ²		6. CCT					
NF1 Area 100 Dn Sym 4.3 aperture		L Linear Row P Pattern		D1 Drywall - Trim Flange D2 Drywall - Trimless D3 Drywall - Drop Radius D4 Drywall - Drop Square G1 Grid - 9/16" or 15/16" Flat-T G1 9/16" Tegular or Bolt-Slot G1 6" Armstrong TechZone® or 6" USG Logix®		B Symmetric		A 500 lm + 5w/ft B 650 lm + 6w/ft C 750 lm + 7.5w/ft D 1025 lm + 9.5w/ft		30 3000 K 35 3500 K 40 4000 K					
		PATTERN ¹ P0 Square P1 Rectangle P2 2-rows 1-corner P3 3-rows 2-corner P4 4-rows 3-corner P5 5-rows 4-corner													
7. DRIVER				8. VOLTAGE		9. LENGTH ⁴		OPTIONS							
E1 eldoLED ECO 0-10V Dim 1% E2 eldoLED SOLO 0-10V Dim 0.1% E3 eldoLED ECO DALI 1% E4 eldoLED SOLO DALI Dim 0.1% F1 Factory Non- Dim F2 Factory 0-10V Dim 3% L1 Lutron Hi-Lume 1%-H EcoSystem				M 120 - 277 V 3 347 V ³		XX Drywall - Specify 1ft Increments XX Grid - Specify 2ft Increments LC 2 ft x 2ft Corner		A Alternate Wiring (AV) B Battery Pack ⁵ C Chicago Plenum E Dado Endcap ⁶ F 6' Flex Whip (Standalone Only) K Black Trim and Endcap M EM or NL (2nd neutral) T Throughwire Circuit U Throughwire (w / neutral)							

NOTES					
¹ Other pattern options available. See page 3 and/or consult factory	² Add 1w/ft for 347V with E1-4/L1	³ 347V Driver for F1/F2, 347V Transformer & Driver for E1-4/L1	⁴ Minimum length is 2 feet	⁵ Available for 120-277V in 4 or 8 foot	⁶ Available with D2 trim option. Default option is to install in one end only. Call factory for options.

TRIM OPTIONS

TRIM



D1 - Drywall Trim Flange

TRIMLESS



D2 - Drywall Trimless

DROP TRIM



D3 - Drywall Drop Radius

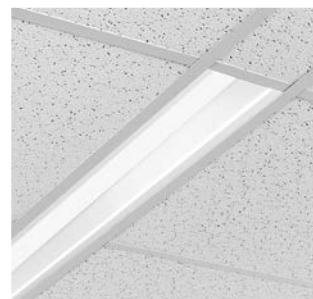


D4 - Drywall Drop Square

GRID



G1 - 9/16" Grid Flat T



G1 - 15/16" Grid Flat T



G1 - 9/16" Tegular | Slot Grid

NOTE: Use **G1** for 6" Armstrong TechZone® or 6" USG Logix®

OPTICAL

- Anidolic optical system with linear light extraction elements
- Precision extruded high transmittance clear acrylic lenses
- Long life LED system designed for TM21 lumen maintenance \geq L90 @ 60,000 h
- Available in CCTs 3000 K, 3500 K or 4000 K with CRI \geq 80 and R9 \geq 0, all with color accurate binning \leq 2 SDCM

CONSTRUCTION

- 20 ga. satin coat steel housing
- Extruded aluminum flange options available for drywall trim, trimless and t-bar grid ceilings

ELECTRICAL

- Integral high efficiency drivers 120 - 277 V or 347 V; 50 - 60 Hz
- Optional Battery Pack
- Optional flex whip: 6' prewired for standalone
- Surge Protection: Meets ANSI C82.11 spec and ANSI/IEEE C62.41
- Inrush Current: Meets NEMA 410

ENVIRONMENTAL

- Designed for use in damp or dry indoor environments with room side operating temperatures of 0 - 30° C (32 - 86° F)

WARRANTY

- 5 year limited warranty on all components and workmanship

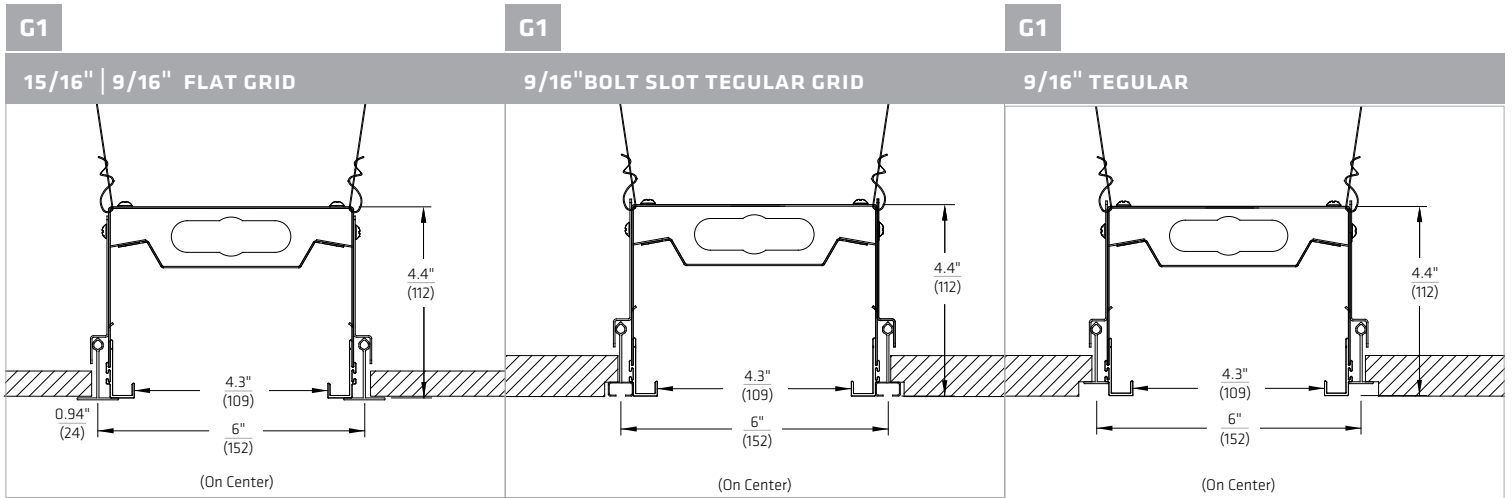
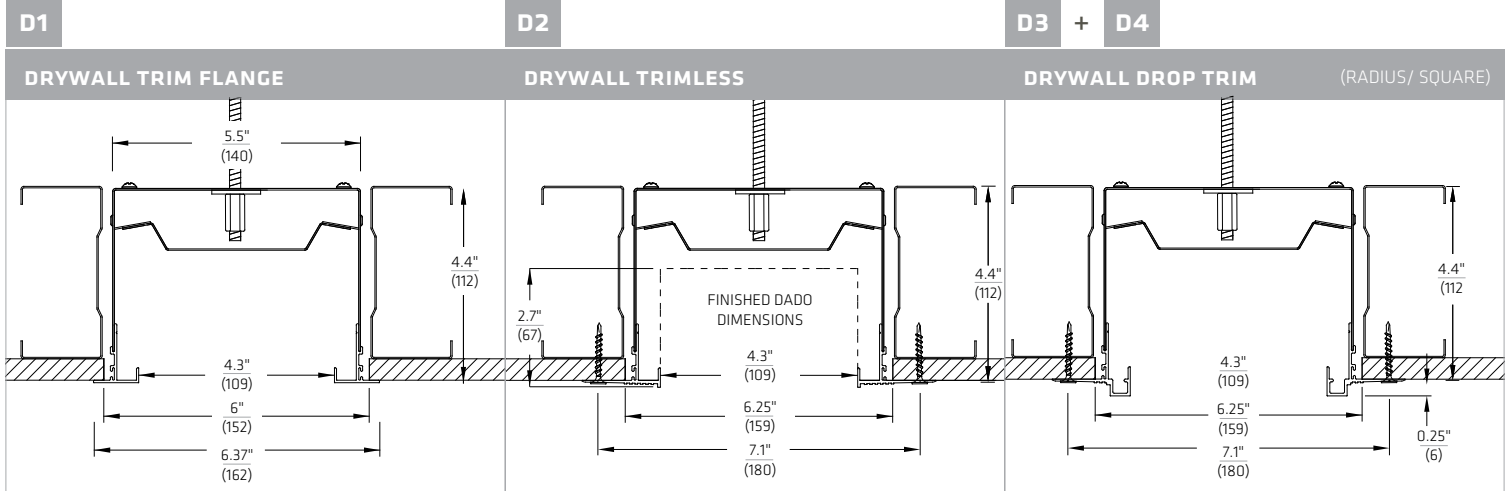
INDEPENDENT TESTING

- IESNA LM79
- IESNA LM80 (LED@ 10,000 h)

APPROVALS

- UL Listed (USA + Canada)
- CCEA Chicago Plenum
- DesignLights Consortium®
- Lighting Facts®
- IC Rated

DIMENSIONS $\frac{\text{inches}}{\text{(mm)}}$



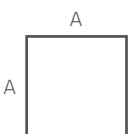
Grid (G1) is compatible with 6" Armstrong TechZone® and 6" USG Logix® Ceiling Systems

PATTERNS

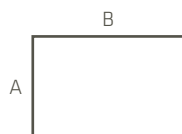
For patterns, design your own layout using the trim and corner options available or choose from our patterns for simpler specification.

NOTE: Minimum corner to corner length - 4ft in drywall (4' x 4' square) | 6ft in grid (6' x 6' square)

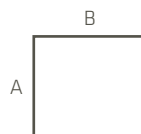
P0 - SQUARE



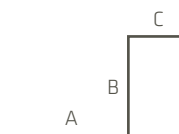
P1 - RECTANGLE



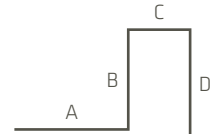
P2 - 2 SIDES | 1 CORNER



P3 - 3 SIDES | 2 CORNER



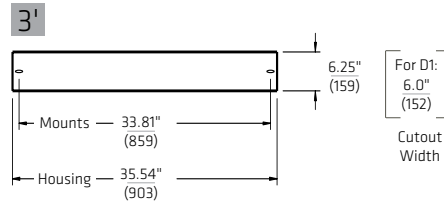
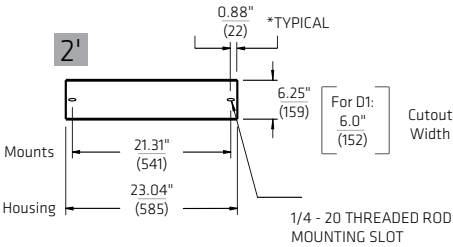
P4 - 4 SIDES | 3 CORNER



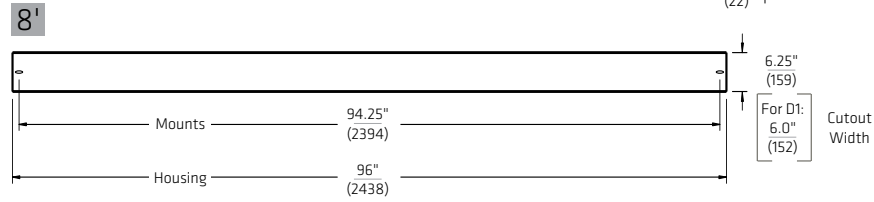
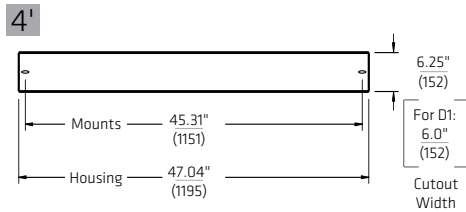
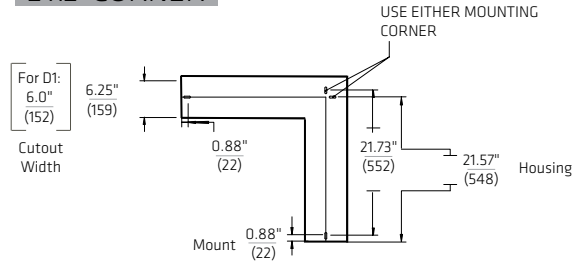
DRYWALL CUT OUT DIMENSIONS

inches
(mm)

Continuous rows are available in nominal 1' increment in drywall ceilings and in 2' increments on-grid for T-bar ceilings. Standalone fixtures are available in nominal 2', 3', 4' or 8' sizes.



2'x2' CORNER



ENDCAP ALLOWANCE

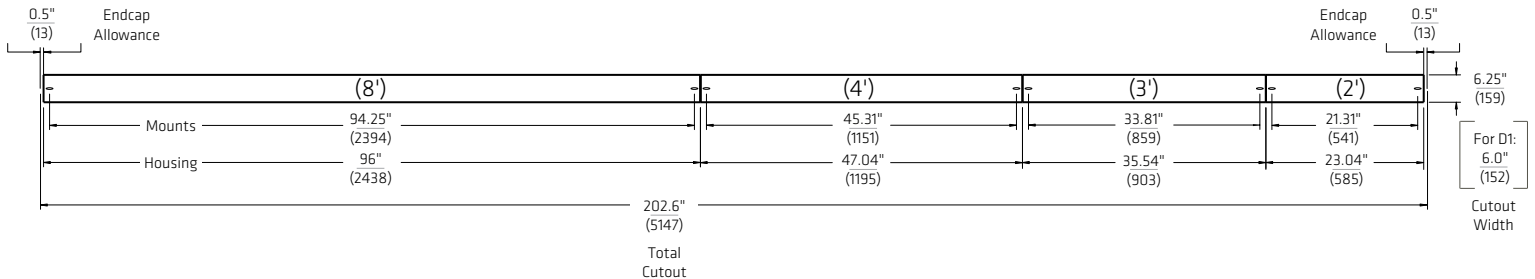
For overall ceiling cut-out length, add an endcap allowance to each end of a straight run, or final leg of an open pattern: 1/2" for standard end (D1-D4), 3/16" for Dado endcap.

DO NOT add this allowance for closed patterns or corner legs in an open pattern. Instead, use centerline dimensions and cutout width to determine the opening.

INSTALLATION NOTES:

- Cutout dimensions apply to all drywall trim options.
- A minimum depth of 4.75" above ceiling plane is required.
- Ensure 1/4 -20 threaded rod length is cut between 3.125" - 3.75" above finished ceiling plane
- 2 threaded rods required for each linear housing (3 for corner housing)

Example of a drywall cutout for a 17' run



Light + Energy	A - 500 lm + 5.00w/ft	Description	Performance Summary					Light (lm)	Energy (W)	Efficacy (lm/W)	Color Accuracy		
Version	NF1-BA40	4ft luminaire 100 Dn, A lumens CCT 4000 K	CCT Color Temperature	4000 K	2001	18.16	110.2	83.1	8.1	< 2			
Report	11921916.03			3500 K	1973	18.16	108.6	83.1	8.1	< 2			
				3000K	1945	18.33	106.1	83.3	7.4	< 2			

100% Dn

CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle				Zonal Lumens
	0°	22.5°	45°	67.5°	90°
0°	475	475	475	475	475
5°	477	472	472	477	481
15°	463	477	549	601	619
25°	435	504	623	674	686
35°	393	516	626	635	627
45°	339	497	557	508	476
55°	274	441	438	336	313
65°	200	358	272	201	188
75°	122	242	128	114	112
85°	39	57	31	26	24
90°					43

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0-30°	473	N.A.	24
0-60°	1546	N.A.	77
0-90°	2001	N.A.	100
90-180°	0	N.A.	0
Total Luminaire	2001	N.A.	100

LUMINANCE DATA (CD/M²)

Vertical Angle	0°	45°	90°
45°	3621	5958	5093
55°	3606	5781	4132
65°	3586	4859	3370
75°	3556	3737	3258
85°	3402	2647	2074

CO-EFFICIENTS OF UTILIZATION

Floor Ceiling Wall	80				70				20					
	70	50	30	10	70	50	30	10	50	10	50	10		
0	119	119	119	119	116	116	116	111	111	106	106	102	102	100
1	108	103	99	95	105	101	93	97	90	93	87	89	85	83
2	98	89	82	76	95	87	75	84	74	81	72	77	70	68
3	89	78	69	63	86	76	62	73	61	71	60	68	59	57
4	81	69	60	53	79	67	52	65	51	62	51	60	50	48
5	74	61	52	45	72	60	45	58	44	56	44	54	43	41
6	68	55	45	39	66	54	39	52	38	50	38	48	37	35
7	63	49	40	34	61	48	34	47	33	45	33	44	33	31
8	59	45	36	30	57	44	30	43	30	41	29	40	29	27
9	55	41	32	27	53	40	27	39	26	38	26	37	26	24
10	51	38	29	24	50	37	24	36	24	35	24	34	24	22

Integrating Sphere and Photometric results at 4000K by an independent accredited testing laboratory per IES LM-79-2008 and ANSI C78.377-2011. Results for 3000K, 3500K scaled based on integrating sphere results at 19W (A). Candlepower Distribution scaled per total lumens of Integrating Sphere results.

Light + Energy	B - 650 lm + 6.00w/ft	Description	Performance Summary					Light (lm)	Energy (W)	Efficacy (lm/W)	Color Accuracy		
Version	NF1-BB40	4ft luminaire 100 Dn, B lumens CCT 4000 K	CCT Color Temperature	4000 K	2561	23.35	109.7	83	8	< 2			
Report	11921916.04			3500 K	2525	23.35	108.1	83	8	< 2			
				3000K	2489	23.35	106.6	83.3	7.4	< 2			

100% Dn

CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle				Zonal Lumens
	0°	22.5°	45°	67.5°	90°
0°	608	608	608	608	608
5°	611	604	604	610	616
15°	593	611	703	769	792
25°	557	645	797	863	877
35°	503	660	802	813	803
45°	433	636	713	651	610
55°	350	564	561	430	401
65°	257	458	347	257	241
75°	156	310	164	146	143
85°	50	72	39	33	31
90°					55

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0-30°	605	N.A.	24
0-60°	1978	N.A.	77
0-90°	2561	N.A.	100
90-180°	0	N.A.	0
Total Luminaire	2561	N.A.	100


LUMINANCE DATA (CD/M²)

Vertical Angle	0°	45°	90°
45°	4633	7625	6519
55°	4615	7399	5290
65°	4590	6217	4313
75°	4550	4784	4170
85°	4356	3384	2655

CO-EFFICIENTS OF UTILIZATION

Floor Ceiling Wall	80				70				20					
	70	50	30	10	70	50	30	10	50	10	50	10		
0	119	119	119	119	116	116	116	111	111	106	106	102	102	100
1	108	103	99	95	105	101	93	97	90	93	87	89	85	83
2	98	89	82	76	95	87	75	84	74	81	72	77	70	68
3	89	78	69	63	86	76	62	73	61	71	60	68	59	57
4	81	69	60	53	79	67	52	65	51	62	51	60	50	48
5	74	61	52	45	72	60	45	58	44	56	44	54	43	41
6	68	55	45	39	66	54	39	52	38	50	38	48	37	35
7	63	49	40	34	61	48	34	47	33	45	33	44	33	31
8	59	45	36	30	57	44	30	43	30	41	29	40	29	27
9	55	41	32	27	53	40	27	39	26	38	26	37	26	24
10	51	38	29	24	50	37	24	36	24	35	24	34	24	22

Light + Energy	C - 750 lm + 7.25w/ft	Description	Performance Summary					Light (lm)	Energy (W)	Efficacy (lm/W)	Color Accuracy		
Version	NF1-BC40	4ft luminaire 100 Dn, C lumens CCT 4000 K	CCT Color Temperature	4000 K	3035	28.07	108.1	83.1	8.3	< 2			
Report	11921916.13			3500 K	2993	28.07	106.6	83.1	8.3	< 2			
				3000K	2950	28.07	105.1	83.3	7.4	< 2			



100% Dn

CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle				Zonal Lumens
	0°	22.5°	45°	67.5°	
0°	720	720	720	720	720
5°	724	716	716	723	730
15°	703	724	833	911	938
25°	660	764	945	1022	1040
35°	596	783	950	963	951
45°	513	754	845	771	722
55°	415	668	665	509	475
65°	304	543	412	304	286
75°	185	367	194	173	169
85°	60	86	46	39	36
90°					
95°					
105°					
115°					
125°					
135°					
145°					
155°					
165°					
175°					
180°					

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture	
0-30°	717	N.A.	24	
0-60°	2344	N.A.	77	
0-90°	3035	N.A.	100	
90-180°	0	N.A.	0	
Total Luminaire	0-180°	3035	N.A.	100

LUMINANCE DATA (CD/M²)

Vertical Angle	0°			45°			90°		
	0°	45°	90°	0°	45°	90°	0°	45°	90°
45°	5491	9037	7726						
55°	5470	8767	6269						
65°	5440	7368	5111						
75°	5394	5672	4941						
85°	5163	4018	3150						

LED lighting facts
A Program of the U.S. DOE

Light Output (Lumens) **3035**
Watts **28.07**
Lumens per Watt (Efficacy) **108.12**

Color Accuracy
Color Rendering Index (CRI) **83**

Light Color
Color Temperature (CCT) **4000 (Bright White)**

Warm White 2700K 3000K 4000K Daylight 6500K


All results are according to IESNA LM-79-2008. Approved Method for the Electrical and Photometric Testing of Solid State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the Label Reference Guide.

Registration Number: XAAR-BJAP3C (1/1/2018)
Model Number: NF1-BC40P1F2E1E2E3E4P0K4
Type: Luminaire - Linear

Integrating Sphere and Photometric results at 4000K by an independent accredited testing laboratory per IES LM-79-2008 and ANSI C78.377-2011. Results for 3000K, 3500K scaled based on integrating sphere results at 19W (A). Candlepower Distribution scaled per total lumens of Integrating Sphere results.

Light + Energy	D - 1025 lm + 9.5w/ft	Description	Performance Summary					Light (lm)	Energy (W)	Efficacy (lm/W)	Color Accuracy		
Version	NF1-BD40	4ft luminaire 100 Dn, D lumens CCT 4000 K	CCT Color Temperature	4000 K	4084	37.61	108.6	82.8	6.4	< 2			
Report	12141772.01A			3500 K	3953	37.61	105.1	82.8	6.4	< 2			
				3000K	3821	37.87	100.9	83.1	6.3	< 2			



100% Dn

CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle				Zonal Lumens
	0°	22.5°	45°	67.5°	
0°	969	969	969	969	969
5°	974	963	964	973	982
15°	946	974	1121	1226	1263
25°	888	1029	1271	1376	1399
35°	802	1053	1278	1296	1280
45°	691	1015	1137	1037	972
55°	558	899	895	685	640
65°	409	731	554	410	384
75°	248	494	261	232	228
85°	80	116	62	52	49
90°	0	0	0	0	0
95°	0	0	0	0	0
105°	0	0	0	0	0
115°	0	0	0	0	0
125°	0	0	0	0	0
135°	0	0	0	0	0
145°	0	0	0	0	0
155°	0	0	0	0	0
165°	0	0	0	0	0
175°	0	0	0	0	0
180°	0	0	0	0	0

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture	
0-30°	965	N.A.	24	
0-60°	3154	N.A.	77	
0-90°	4084	N.A.	100	
90-180°	0	N.A.	0	
Total Luminaire	0-180°	4084	N.A.	100

LUMINANCE DATA (CD/M²)

Vertical Angle	0°			45°			90°		
	0°	45°	90°	0°	45°	90°	0°	45°	90°
45°	7389	12160	10395						
55°	7359	11799	8435						
65°	7321	9914	6877						
75°	7256	7630	6648						
85°	6942	5406	4235						

LED lighting facts
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Light Output (Lumens) **4084**
Watts **37.61**
Lumens per Watt (Efficacy) **108.59**

Color Accuracy
Color Rendering Index (CRI) **82**

Light Color
Color Temperature (CCT) **4000 (Bright White)**

Warm White 2700K 3000K 4000K Daylight 6500K

All results are according to IESNA LM-79-2008. Approved Method for the Electrical and Photometric Testing of Solid State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the Label Reference Guide.

Registration Number: XAAR-01900T (1/1/2018)
Model Number: NF1-BD40P1F2E1E2E3E4P0K4
Type: Luminaire - Linear