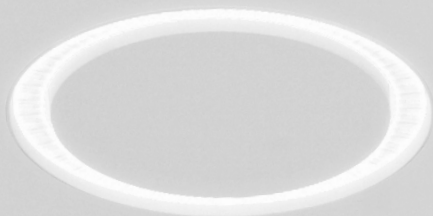


PORTAL RECESSED 5.5" (TC1-R05)

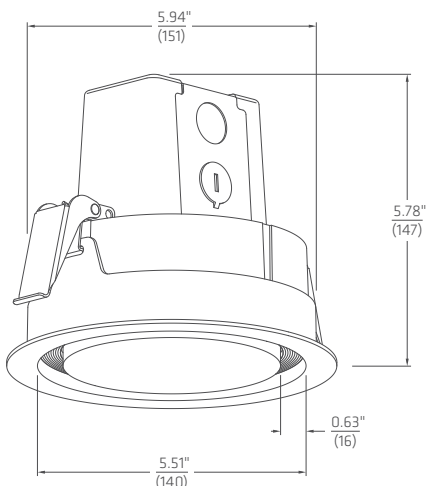


CATALOG #

PROJECT

NOTES

DIMENSIONS

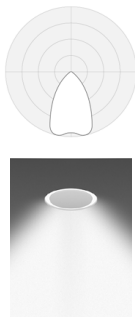
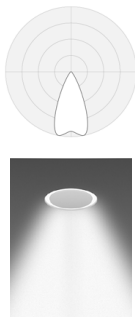
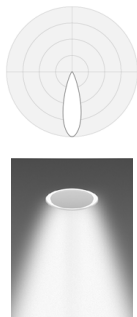


BEAM ANGLES

Narrow Beam (30°)

Medium Beam (45°)

Wide Beam (65°)



PERFORMANCE FOCUS

5.5" Medium Beam, 80 CRI 4000 K

	Energy (W)	Light (lm)	Efficacy (lm/W)	Certified
A	9 W	1300	138	ENERGY STAR
B	12 W	1750	139	
C	16 W	2350	142	TITLE 24 JA8 (90 CRI)
D	21 W	3000	137	
Color Matching (SDCM)		Lumen Maintenance (hr)		
< 2		L80 per TM21	L70 Estimate	
		> 72,000	> 120,000	

Nominal values, refer to back pages for full performance data.

FEATURES

- Portal reimagines directional and general area illumination. Proprietary optics deliver exceptional lighting control from a minimalist aesthetic.
- To support your design vision, both 5.5" & 9" sizes are available in six mounting variants – Recessed, Semi-Recessed, Semi-Recessed Adjustable, Surface, Surface Adjustable & Pendant.
- Light outputs range from 1200 lm (5.5") to 4100 lm (9") with efficacies exceeding 150 lm/W.
- Flexible lighting schemes are enabled by several beam angles – 30°, 45° & 65° for the 5.5" – and direct/indirect pendant distributions – 20|80 and 50|50.
- White, Metallic Silver & Black powdercoat finishes (plus RAL colors) can be combined to augment the ceiling design.
- 80 and 90 CRI LEDs are available in four CCTs – 2700 K, 3000 K, 3500 K, 4000 K.



SPECIFICATION DATA
PORTAL RECESSED 5.5" (TC1-R05)

ORDER GUIDE

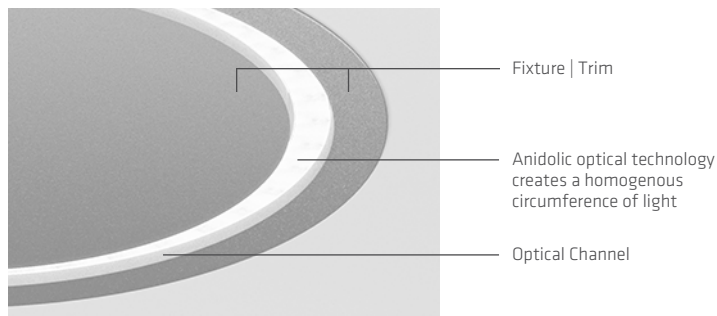
1	2	3	4	5	6	7	8	9	10	11	12	OPTIONS
TC1	-	R	05									

1	FAMILY	2	VERSION	3	SIZE	4	CEILING	5	HOUSING / TRIM
TC1	Portal	-	R Recessed	05	5.5"	D	Drywall	K1	Trim Flange
				09	9"	G	Grid	K2	Drywall Trimless
								L1	Shallow Housing - Trim Flange ¹
								L2	Shallow Housing - Drywall Trimless ¹
									¹ For 5.5", detached driver. 9" always shallow.

6	FINISH	7	BEAM SPREAD	8	CRI	9	CCT
FIXTURE / TRIM FINISH	OPTIC CHANNEL FINISH	N1	Narrow (30°)	8	80 CRI	27	2700 K
B Black Powdercoat	B Black Powdercoat	M1	Medium (45°)	9	90 CRI	30	3000 K
S Metallic Silver Powdercoat	S Metallic Silver Powdercoat	W1	Wide (65°)			35	3500 K
W White Powdercoat	W White Powdercoat					40	4000 K
C Custom Color (RAL)	C Custom Color (RAL)						

10	ENERGY ²	11	DRIVER	12	VOLTAGE	OPTIONS	
A	9 W	F1	Non-Dim	M	120-277 V	B	Battery Pack ⁶
B	12 W	F2	0-10 V Dim 3%	1	120 V ⁴	C	Chicago Plenum
C	16 W	E1	eldoLED ECO 0-10 V Dim 1%	2	277 V ⁴	F	6' Flex Whip
D	21 W	E2	eldoLED SOLO 0-10 V Dim 0.1%	3	347 V ⁵	H	Emergency Switch (CTD) ⁷
		E3	eldoLED ECO DALI Dim 1%				
		E4	eldoLED SOLO DALI Dim 0.1%				
		L1	Lutron Hi-Lume 1% EcoSystem (LDE1)				
		L2	Lutron Hi-Lume 1% 2-Wire 120 V (LTEA)				
		L3	Lutron Hi-Lume Premier 0.1% EcoSystem (PEQ0) ³				
	² Nominal input power. Add 4 W for BP and 2 W for 347 V.		³ Max Energy C (16 W).		⁴ Fixed voltage only for L2 Driver or nLight controls. ⁵ Detached driver/transformer for 5.5".		⁶ Detached, prewired BP, not shallow housing. ⁷ For 5.5", detached GTD, not shallow housing.

PRODUCT DETAILS

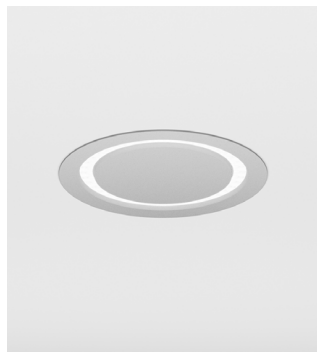


FINISHES

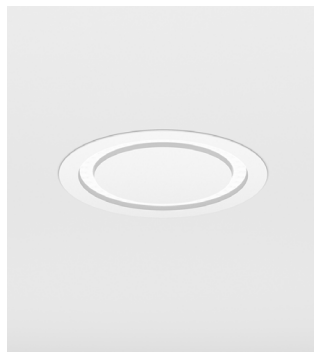
All finishes high temperature powder coated. Fixture with trim shown.



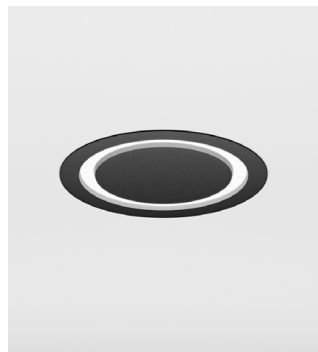
BLACK FIXTURE / TRIM
BLACK OPTIC CHANNEL



SILVER FIXTURE / TRIM
SILVER OPTIC CHANNEL



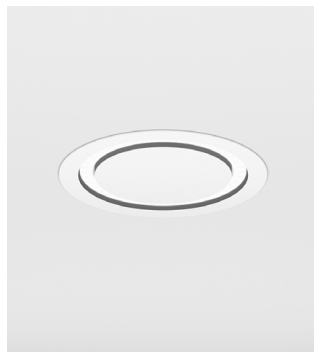
WHITE FIXTURE / TRIM
WHITE OPTIC CHANNEL



BLACK FIXTURE / TRIM
WHITE OPTIC CHANNEL



SILVER FIXTURE / TRIM
BLACK OPTIC CHANNEL



WHITE FIXTURE / TRIM
BLACK OPTIC CHANNEL

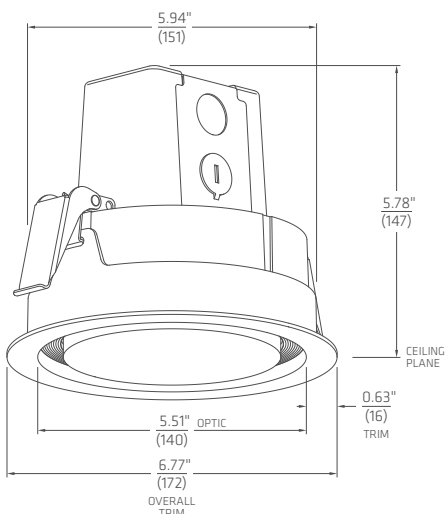


RAL

CEILING INTEGRATION – HOUSING

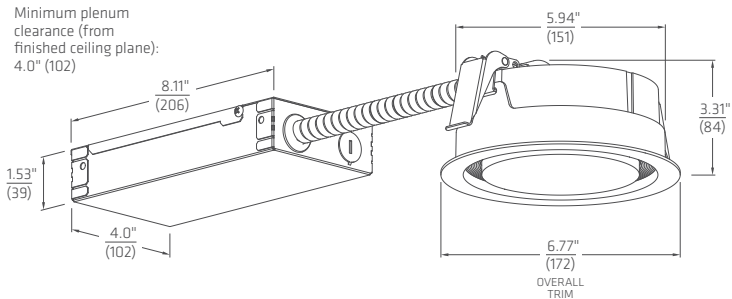
TRIM FLANGE (GRID & DRYWALL)

Cutout diameter:
6.0" (152)
Minimum plenum
clearance (from
finished ceiling plane):
7.0" (178)

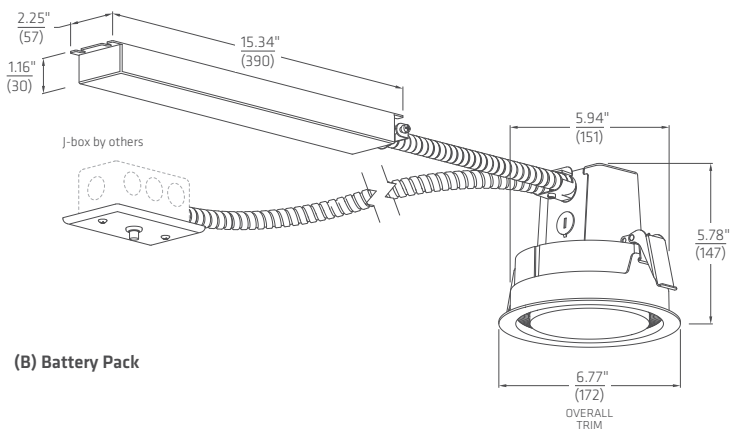


(K1) Internal driver

Minimum plenum
clearance (from
finished ceiling plane):
4.0" (102)



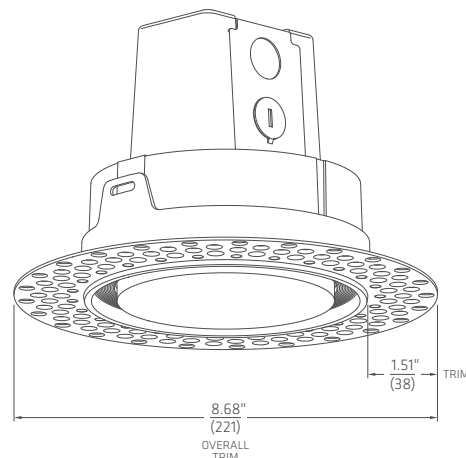
(L1) Shallow or (3) 347 V



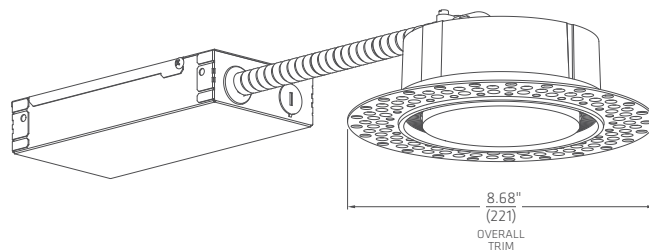
(B) Battery Pack

DRYWALL TRIMLESS (MUD-IN)

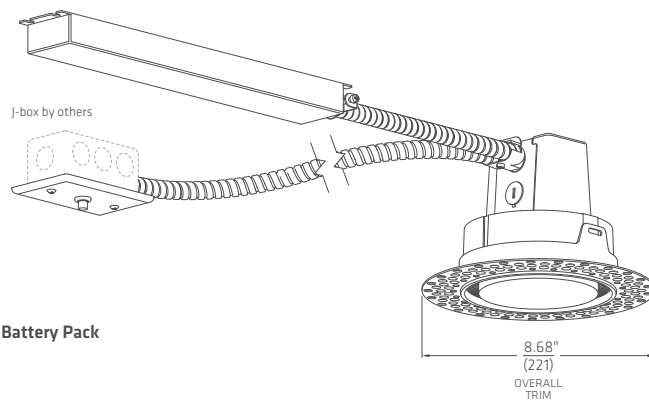
Cutout diameter:
6.0" (152)



(K2) Internal driver



(L2) Shallow or (3) 347 V



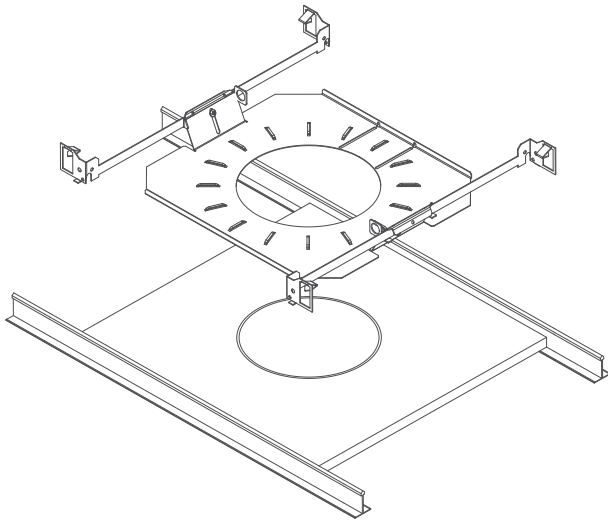
(B) Battery Pack

SPECIFICATION DATA
PORTAL RECESSED 5.5" (TC1-R05)

CEILING INTEGRATION – ROUGH-IN FRAME

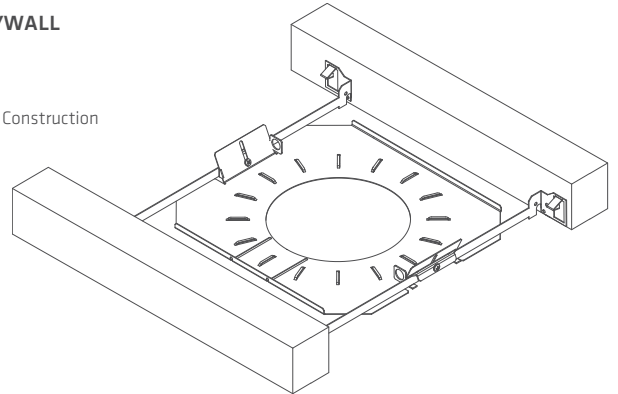
Rough-in frame included with fixture.

GRID CEILING

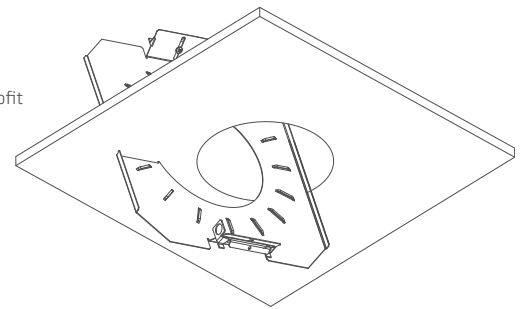


DRYWALL

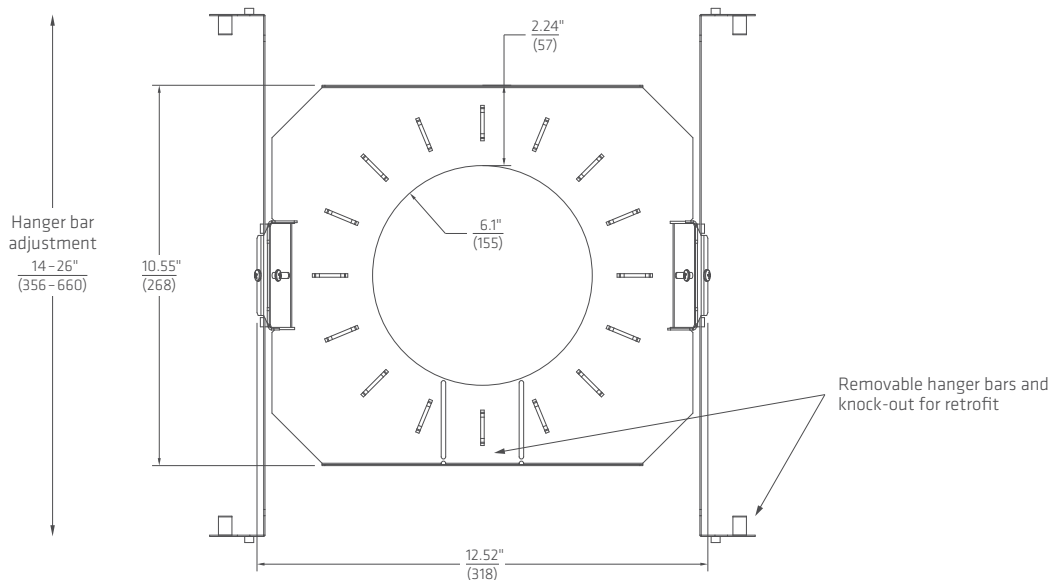
New Construction



Retrofit



FRAME DIMENSIONS



SPECIFICATION DATA
PORTAL RECESSED 5.5" (TC1-R05)

NOTES

CONSTRUCTION

- Architectural grade aluminum and 22 ga. steel housings
- Trim flange and drywall trimless housings suitable for new build or retrofit in grid or GWB ceilings
- White, metallic silver or black textured powdercoat standard finishes

OPTICAL

- Circular anidolic optical structures
- Precision molded high transmittance clear acrylic lenses
- Long life LED system designed for typical TM21 lumen maintenance \geq L80 @ 72,000 h
- Available in 2700 K, 3000 K, 3500 K, 4000 K with CRI \geq 80 and R9 \geq 0, or CRI \geq 90 and R9 \geq 50, all with color accurate binning \leq 2 SDCM

ELECTRICAL

- Integral high efficiency drivers for 50–60 Hz, 120–277 V or 347 V
- Power Factor: $>$ 0.87 (Drivers F1, F2, E1-E4) $>$ 0.70 (Driver L1, Energy B-E)
- Total Harmonic Distortion: $<$ 20 % (Drivers F1, F2, E1-E4)
- Dim level: Standard 3%, optional 1% or 0.1%
- Optional Battery Pack delivers 10 W Class 2 rated output for 90 min. See Family Performance for estimated emergency output
- Optional GTD (Generator Transfer Switch), 120–277 V, disables 0–10 V control during emergency for full light output
- Optional flex whip: 6' prewired
- Surge Protection: Meets ANSI C82.11 spec and ANSI/IEEE C62.41
- Inrush Current: Meets NEMA 410

ENVIRONMENTAL & CARE

- Designed for use in dry or damp indoor locations with ambient temperatures of 0–30° C (32–86° F)
- Not suitable for natatorium environments, e.g. swimming pools, hot tubs and saunas. The luminaire may be damaged by chemicals such as chlorine, solvents, ammonia, alcohol or sulfur in the area of operation or in cleaning products. Damage from contaminants is not covered under warranty.
- Clean only by wiping with a slightly water-damp, soft, clean cloth.

WEIGHT

- Maximum 6.2 lbs (2.8 kg) with driver only
- Maximum 9.8 lbs (4.4 kg) with battery pack or 347 V transformer

WARRANTY

- 5 year limited warranty on all components and workmanship




INDEPENDENT TESTING



- IESNA LM79
- IESNA LM80 (LED @ 12,000 h)

APPROVALS

- UL Listed (USA + Canada)
- CCEA Chicago Plenum
- IC Rated
- Energy Star
- Title 24 JA8 (90 CRI versions)

DRIVERS + EMERGENCY

STANDARD DRIVER OPTIONS	
 ADVANCE	F1 Non-Dim F2 0–10 V Dim 3%
	E1 eldoLED ECO 0–10 V Dim 1% E2 eldoLED SOLO 0–10 V Dim 0.1% E3 eldoLED ECO DALI Dim 1% E4 eldoLED SOLO DALI Dim 0.1%
	L1 Lutron Hi-Lume 1% EcoSystem (LDE1) L2 Lutron Hi-Lume 1% 2-Wire 120 V (LTEA) L3 Lutron Hi-Lume Premier 0.1% EcoSystem (PEQ0)

EMERGENCY OPTIONS	
 	B Battery Pack Bodine BSL310 (10 W) H Emergency Switching Functional Devices ESRB Emergency Lighting Relay

SPECIFICATION DATA

PORTAL RECESSED 5.5" (TC1-R05)

FAMILY PERFORMANCE

80 CRI

COLOR	4000 K	3500 K	3000 K	2700 K
Color Rendering (CRI)	83	82	82	83
Red Index (R9)	5	3	3	5
Color Matching (SDCM)	< 2			

90 CRI

COLOR	4000 K	3500 K	3000 K	2700 K
Color Rendering (CRI)	93	93	93	93
Red Index (R9)	59	57	57	57
Color Matching (SDCM)	< 2			

Typical CRI and R9 values.



LUMEN MAINTENANCE	A 9 W	B 12 W	C 16 W	D 21 W
L80 per TM-21 (hr)	> 72,000			
L70 Estimate (hr)	> 120,000			

BATTERY OUTPUT - 80 CRI	4000 K	3500 K	3000 K	2700 K
10 W BP Light (Est. lm)	1590	1570	1510	1450

OUTPUT MULTIPLIERS

90 CRI	4000 K	3500 K	3000 K	2700 K
90 CRI Multiplier	0.86	0.86	0.86	0.86

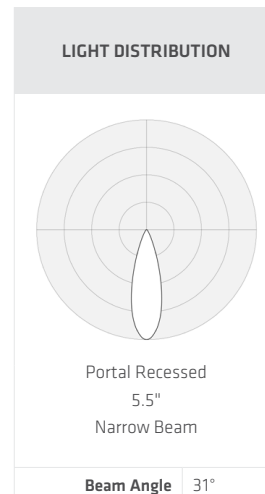
OPTIC CHANNEL FINISH	Narrow Beam	Medium Beam	Wide Beam
Black	0.94	0.94	0.92
Metallic Silver	0.94	0.94	0.92

For 90 CRI or non-white Optic Channel, use multipliers to scale published Light (lm), Efficacy (lm/W), Intensity (Cd) or Luminance (Cd/m²).

VERSION PERFORMANCE

5.5" Narrow Beam, 80 CRI, White Optic Channel

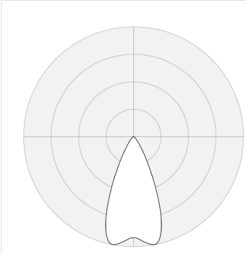
CONFIGURATION	LIGHT & POWER		EFFECTICACY (lm/W)	
	LIGHT (lm)	POWER (W)		
TC1-R05-N1840 4000 K	A 9 W	1319	9.64	136.9
	B 12 W	1750	12.64	138.4
	C 16 W	2341	16.56	141.4
	D 21 W	2985	21.87	136.5
TC1-R05-N1835 3500 K	A 9 W	1302	9.64	135.0
	B 12 W	1727	12.64	136.6
	C 16 W	2310	16.56	139.5
	D 21 W	2946	21.87	134.7
TC1-R05-N1830 3000 K	A 9 W	1256	9.64	130.3
	B 12 W	1666	12.64	131.8
	C 16 W	2229	16.56	134.6
	D 21 W	2842	21.87	129.9
TC1-R05-N1827 2700 K	A 9 W	1201	9.64	124.6
	B 12 W	1593	12.64	126.1
	C 16 W	2132	16.56	128.7
	D 21 W	2719	21.87	124.3



Photometry Reports: 3500 K; 13694183.01 (21 W)

Integrating Sphere and Photometric results by an independent accredited testing laboratory per IES LM-79-2008 and ANSI C78.377-2011. Results for 2700K, 3000K, 3500K and 4000K scaled based on integrating sphere results of TC1-R05 Narrow Beam 21W (D) and TC1-R05 Wide Beam and TC1-P05 Wide Beam 50/50. Candlepower Distribution scaled per total lumens of Integrating Sphere results.

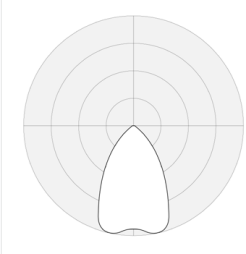
VERSION PERFORMANCE
5.5" Medium Beam, 80 CRI, White Optic Channel

CONFIGURATION			LIGHT & POWER			LIGHT DISTRIBUTION
CCT	ENERGY (NOM.)		LIGHT (lm)	POWER (W)	EFFICACY (lm/W)	
TC1-R05-M1840 4000 K	A	9 W	1325	9.64	137.5	 <p>Portal Recessed 5.5" Medium Beam</p> <p>Beam Angle 47°</p>
	B	12 W	1758	12.64	139.1	
	C	16 W	2352	16.56	142.1	
	D	21 W	3000	21.84	137.3	
TC1-R05-M1835 3500 K	A	9 W	1308	9.64	135.7	
	B	12 W	1735	12.64	137.3	
	C	16 W	2321	16.56	140.2	
	D	21 W	2960	21.84	135.5	
TC1-R05-M1830 3000 K	A	9 W	1262	9.64	130.9	
	B	12 W	1674	12.64	132.4	
	C	16 W	2239	16.56	135.2	
	D	21 W	2855	21.84	130.7	
TC1-R05-M1827 2700 K	A	9 W	1207	9.64	125.2	
	B	12 W	1601	12.64	126.7	
	C	16 W	2142	16.56	129.4	
	D	21 W	2731	21.84	125.1	

Photometry Reports: 3500 K; 13694183.02 (21 W)

Integrating Sphere and Photometric results by an independent accredited testing laboratory per IES LM-79-2008 and ANSI C78.377-2011. Results for 2700K, 3000K, 3500K and 4000K scaled based on integrating sphere results of TC1-R05 Medium Beam 21W (D) and TC1-R05 Wide Beam and TC1-P05 Wide Beam 50/50. Candlepower Distribution scaled per total lumens of Integrating Sphere results.

5.5" Wide Beam, 80 CRI, White Optic Channel

CONFIGURATION			LIGHT & POWER			LIGHT DISTRIBUTION
CCT	ENERGY (NOM.)		LIGHT (lm)	POWER (W)	EFFICACY (lm/W)	
TC1-R05-W1840 4000 K	A	9 W	1266	9.64	131.3	 <p>Portal Recessed 5.5" Wide Beam</p> <p>Beam Angle 66°</p>
	B	12 W	1679	12.64	132.8	
	C	16 W	2247	16.56	135.7	
	D	21 W	2865	21.89	130.9	
TC1-R05-W1835 3500 K	A	9 W	1249	9.64	129.6	
	B	12 W	1657	12.64	131.1	
	C	16 W	2217	16.56	133.8	
	D	21 W	2827	21.85	129.4	
TC1-R05-W1830 3000 K	A	9 W	1205	9.64	125.0	
	B	12 W	1598	12.64	126.5	
	C	16 W	2139	16.56	129.1	
	D	21 W	2727	21.85	124.8	
TC1-R05-W1827 2700 K	A	9 W	1153	9.64	119.6	
	B	12 W	1529	12.64	121.0	
	C	16 W	2046	16.56	123.5	
	D	21 W	2587	21.40	120.9	

Photometry Reports: 3500 K; 13694183.06 (9 W), 13694183.07 (12 W), 13694183.08A (16 W), 13694183.03 (21 W)

Integrating Sphere and Photometric results by an independent accredited testing laboratory per IES LM-79-2008 and ANSI C78.377-2011. Results for 2700K, 3000K and 4000K scaled based on integrating sphere results of TC1-P05 Wide Beam 50/50. Candlepower Distribution scaled per total lumens of Integrating Sphere results.