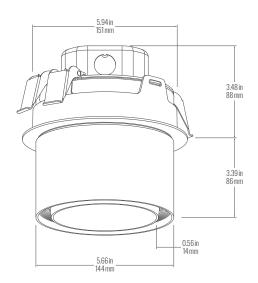
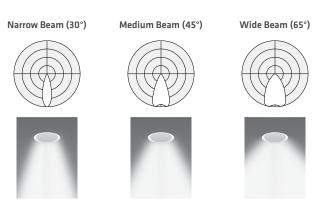
FLUXWER<u>X</u>,



DIMENSIONS



BEAM ANGLES



SPECIFICATION DATA

PORTAL SEMI-RECESSED 5.5" (TC1-H05, TC1-J05)

CATALOG#	
PROJECT	
NOTES	

PERFORMANCE FOCUS

5.5" Medium Beam, 80 CRI 4000 K

	Energy (W)	Light (Im)	Efficacy (Im/W)	Certified
Α	9 W	1300	138	ENERGY
В	12 W	1750	139	STAR
С	16 W	2350	142	JA8
D	21 W	3000	137	(90 CRI)

Color Matching	Lumen Main	tenance (hr)
(SDCM)	L80 per TM21	L70 Estimate
< 2	> 72,000	> 130,000

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 beam angles of 30°, 45° & 65°, as well as 20 | 80 and 50 | 50 direct/indirect pendant distributions.
- 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.











FLUXWERX.

SPECIFICATION DATA

PORTAL SEMI-RECESSED 5.5" (TC1-H05, TC1-J05)

ORDER GUIDE

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

1 FAMILY	2 VERSION	3 SIZE	4 CEILING TYPE	5 TRIM
TC1 Portal –	H Semi-RecessedJ Semi-Recessed Adjustable	▶ 05 5.5" 09 9"	D DrywallG GridR Remote Driver	K1 Trim Flange K2 Drywall Trimless

6 FINISH		7 BEAM SPRI	EAD 8 CRI	9 CCT	10 ENERGY ²
FIXTURE FINISH B Black Powdercoat S Metallic Silver Powdercoat W White Powdercoat C Custom Color (RAL)	CANOPY / TRIM FINISH 1 B Black Powdercoat S Metallic Silver Powdercoat W White Powdercoat C Custom Color (RAL) 1 Only outer trim in fixed version.	N1 Narrow (30 M1 Medium (4 W1 Wide (65°)	5°) 9 90 CRI	27 2700 K 30 3000 K 35 3500 K 40 4000 K	A 9 W B 12 W C 16 W D 21 W 3 Nominal input power. Add 4 W for BP and 2 W for 347 V.

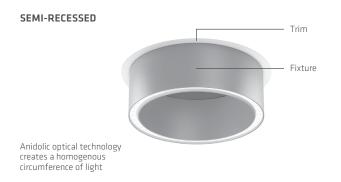
11	DRIVER	12 VOLTAGE	OPTIONS	CONTROLS	
F1	Non-Dim	M 120-277 V	B Battery Pack ⁶	TYPE & LOCATION 8	BRAND & PROTOCOL 8
F2 F4	0-10 V Dim 3% Line Voltage Dim (Fwd/Rev) 3% 120 V	1 120 V ⁴ 2 277 V ⁴ 3 347 V ⁵	C Chicago PlenumF 6' Flex WhipH Emergency Switch	R Remote Sensor / Controller on Ceiling	N1 Acuity nLight Wired ⁹ N2 Acuity nLight Air rIO ⁹
E1	eldoLED ECO 0-10 V Dim 1%		(GTD) ⁷	V Controller on Driver / Plenum Side	N3 Acuity nLight Air RPP20 ⁹
E2	eldoLED SOLO 0-10 V Dim 0.1%				E1 Enlighted Smart Sensor 10
E3 E4	eldoLED ECO DALI-2 DT6 Dim 1% eldoLED SOLO DALI-2 DT6 Dim 0.1%				L1 Lutron Athena Wireless M1 Legrand
L1	Lutron Hi-Lume 1% EcoSystem (LDE1)				Wattstopper PLUS V1 Leviton Intellect Wireless
L3 ³ Max E	Lutron Hi-Lume Premier 0.1% EcoSystem (PEQ0) ³	⁴ Fixed voltage only for (F4) Line Dim Driver or nLight controls. ⁵ 347V: Remote with transformer.	⁶ BP & GTD: Detached & prewired with Trim (K1); Remote driver with Trimless (K2). ⁷ GTD not compatible with (F4) Line Dim driver.	⁸ Controls selection may be limited by version, protocol or other features – see Controls page.	⁹ nLight: Controller (V) only. ¹⁰ Enlighted: Sensor/Controller (R) only.

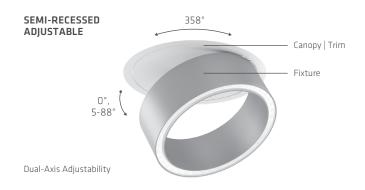
FLUXWERX.

SPECIFICATION DATA

PORTAL SEMI-RECESSED 5.5" (TC1-H05, TC1-J05)

PRODUCT DETAILS





FINISHES

All finishes high temperature powder coated. Trim housing shown.

FIXED



BLACK FIXTURE BLACK TRIM



SILVER FIXTURE SILVER TRIM



WHITE FIXTURE WHITE TRIM



BLACK FIXTURE WHITE TRIM



SILVER FIXTURE WHITE TRIM



ADJUSTABLE



BLACK FIXTURE BLACK CANOPY/TRIM



SILVER FIXTURE SILVER CANOPY / TRIM



WHITE FIXTURE WHITE CANOPY / TRIM



BLACK FIXTURE WHITE CANOPY/TRIM



SILVER FIXTURE WHITE CANOPY / TRIM



FLUXWERX

SPECIFICATION DATA

PORTAL SEMI-RECESSED 5.5" (TC1-H05, TC1-J05)

CEILING INTEGRATION

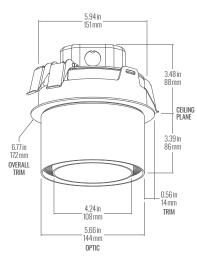
(H) SEMI-RECESSED

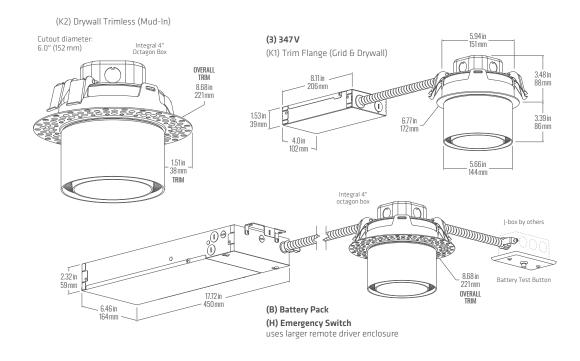
(K1) Trim Flange (Grid & Drywall)

Cutout diameter: 6.0" (152 mm)

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

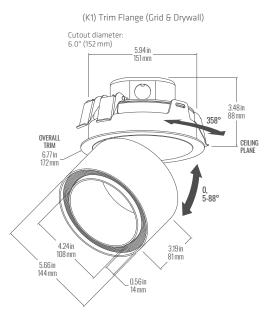
Ceiling thickness: 0.5"-1.5" (e.g. acoustic tile, GWB, wood)

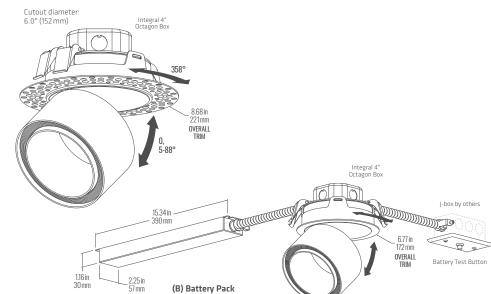




(K2) Drywall Trimless (Mud-In)

(J) SEMI-RECESSED ADJUSTABLE





(H) Emergency Switch uses larger remote driver enclosure

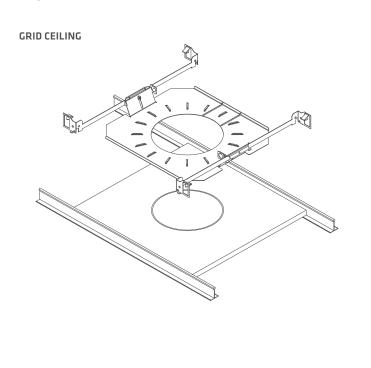
FLUXWERX.

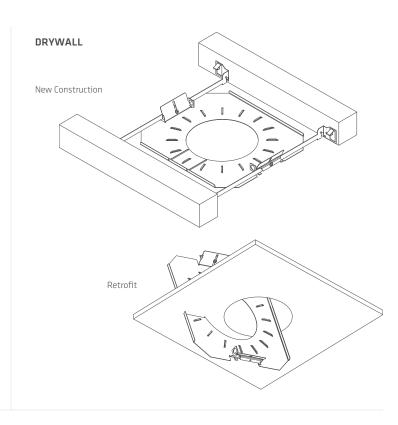
SPECIFICATION DATA

PORTAL SEMI-RECESSED 5.5" (TC1-H05, TC1-J05)

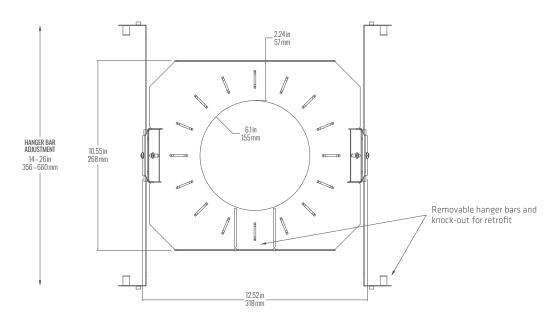
CEILING INTEGRATION - ROUGH-IN FRAME

Rough-in frame included with fixture.





FRAME DIMENSIONS



FLUXWERX

SPECIFICATION DATA

PORTAL SEMI-RECESSED 5.5" (TC1-H05, TC1-J05)

CONTROLS & SENSORS

LUMINAIRE INTEGRATION



VController,
Enclosure/Plenum Side



(N1) Acuity nLight Wired



nLight wired, digital network. Model: nPS-80-EZ or nPS-80-EZ-ER (with **H** – Emergency Switching)



VN1 nLight Wired Controller, Remote Enclosure

(N2, N3) Acuity nLight Air



Acuity nLight wireless network interfaces. Models: rIO. rPP20



VN2 nLight rIO Controller, Remote EnclosureVN3 nLight rPP20 Controller, Remote Enclosure

(E1) Siemens Enlighted



Siemens Enlighted wireless smart sensor-controllers.

Model: SU-5E-CL



RE1 Enlighted Smart Sensor, Remote/on Ceiling

(L1) Lutron Athena

LUTRONAthena

Lutron Athena wireless smart controllers & sensors.

Models: A-WN-D01-RF, A-WN-D01-OCC

For YL1 and SL1:
Default Athena color to match fixture/canopy color

Canopy Athena WH WH

WH WH

For VL1 and RL1: default WH



VL1 Athena Controller, Enclosure/Plenum Side

Athena Sensor, Remote/on Ceiling

(M1) Legrand Encelium X

la legrand[®]

ENCELIUM

Encelium X wireless smart controllers & sensors.

Models: ZBHA-CLM, EN-CLM-PIR



VM1 X Control Module, Enclosure/Plenum Side

RM1 SensiLUM Sensor, Remote/on Ceiling

(V1) Leviton Intellect



Leviton Intellect wireless smart controllers & sensors.

Models: ZL0x0, ZL0xS



RV1

Intellect Controller, Enclosure/Plenum Side
Intellect Sensor, Remote/on Ceiling

Ask us about...

Wattstopper

Pass & Seymour®







CASAMBI

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FLUXWE<u>R</u>X。

SPECIFICATION DATA

PORTAL SEMI-RECESSED 5.5" (TC1-H05, TC1-J05)

CONTROLS & SENSORS

LUMINAIRE INTEGRATION



V Controller, Enclosure/Plenum Side



R Sensor, Remote/on Ceiling

(N1) Acuity nLight Wired



nLight wired, digital network. Model: nPS-80-EZ or nPS-80-EZ-ER (with **H** – Emergency Switching)



/N1 nLight Wired Controller, Remote Enclosure

(N2, N3) Acuity nLight Air



Acuity nLight wireless network interfaces.

Models: rIO, rPP20



/N2 nLight rIO Controller, Remote Enclosure

10, rPP20 VN3 nLight rPP20 Controller, Remote Enclosure

(E1) Siemens Enlighted



Siemens Enlighted wireless smart sensor-controllers.

Model: SU-5E-CL



E1 Enlighted Smart Sensor, Remote/on Ceiling

(L1) Lutron Athena



Lutron Athena wireless smart controllers & sensors.

Models: A-WN-D01-RF, A-WN-D01-OCC

For YL1 and SL1:

Default Athena color to match fixture/canopy color

Canopy Athena WH WH SV BK BK BK

For VL1 and RL1: default WH



VL1 Athena Controller, Enclosure/Plenum Side

Athena Sensor, Remote/on Ceiling

(M1) Legrand
Wattstopper
PLUS

La legrand

WATTSTOPPER® PLUS

Wattstopper PLUS wireless smart controllers & sensors.

Models: ZBHA-CLM, EN-CLM-PIR



VM1 Wattstopper PLUS Control Module,

Enclosure/Plenum Side

M1 SensiLUM Sensor, Remote/on Ceiling

(V1) Leviton Intellect



Leviton Intellect wireless smart controllers & sensors.

Models: ZL0x0, ZL0xS



RV1

Intellect Controller, Enclosure/Plenum Side
Intellect Sensor, Remote/on Ceiling

Ask us about...

Pass & Seymour®







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SPECIFICATION DATA

PORTAL SEMI-RECESSED 5.5" (TC1-H05, TC1-J05)

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 ≥ L80 @ 72,000 h
- Available in 2700 K, 3000 K, 3500 K, 4000 K with CRI ≥ 80 and R9 ≥ 0, or CRI ≥ 90 and R9 ≥ 50, all with color accurate binning ≤ 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 flex whip: 6' prewired
- Surge Protection: Meets ANSI C82.11 spec and ANSI/IEEE C62.41
- Inrush Current: Meets NEMA 410

EMERGENCY

- 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

WIRE GAUGE

 Recommended low voltage wire gauge (AWG) for minimal losses over distance when REMOTE mounting:

30 ft | 18 ga

50 ft | 14 ga

80 ft | 12 ga

ENVIRONMENTAL & CARE

- Designed for use in dry or damp indoor locations with ambient temperatures of 0-30° C (32-86° F)
- 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.
- Not suitable for natatorium environments, e.g. swimming pools, hot tubs and saunas.
- Clean only by wiping with a slightly water-damp, soft, clean cloth.

WEIGHT

- Maximum 7.1lbs (3.2 kg) with driver only
- Maximum 10.6 lbs (4.8 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 JA8-2019 (90 CRI versions)
- Living Building Challenge (LBC)
 Declared

DRIVERS + EMERGENCY

STANDARD DRIVER OPTIONS **OPTOTRONIC®** F1 Non-Dim **ADVANCE F2** 0-10 V Dim 3% Line Voltage Dim 3% (Forward/Reverse) 120 V E1 eldoLED ECO 0-10 V Dim 1% E2 eldoLED SOLO 0-10 V Dim 0.1% eldoLED eldoLED ECO DALI-2 DT6 Dim 1% eldoLED SOLO DALI-2 DT6 Dim 0.1% L1 Lutron Hi-Lume 1% EcoSystem (LDE1) **LUTRON** 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

Driver and emergency selection may be limited by product or version. For further options, contact Fluxwerx.

FLUXW<u>ERX</u>

SPECIFICATION DATA

PORTAL SEMI-RECESSED 5.5" (TC1-H05, TC1-J05)

FAMILY PERFORMANCE

COLOR

80 CRI	4000 K	3500 K	3000 K	2700 K	
Color Rendering (CRI)	83	82	82	83	
Red Index (R9)	5	3	3	5	
Fidelity (TM-30 R _f)	84	83	84	86	
Gamut (TM-30 R _g)	93	96	94	95	
Color Matching (SDCM)	< 2				

90 CRI	4000 K	3500 K	3000 K	2700 K	
Color Rendering (CRI)	93	93	93	93	
Red Index (R9)	59	57	57	57	
Fidelity (TM-30 R _f)	90	89	90	91	
Gamut (TM-30 R _g)	97	99	97	97	
Color Matching (SDCM)	< 2				

Typical colorimetry values.





LUMEN MAINTENANCE

	A 9W	B 12 W	C 16 W	D 21 W	
L80 per TM-21 (hr)	>72,000				
L70 Estimate (hr)	> 130,000				

OUTPUT MULTIPLIERS

MULTIPLIER	Applies To		
90 CRI	0.86	All 80 CRI	
Battery Pack	0.95	Energy B (12 W)	

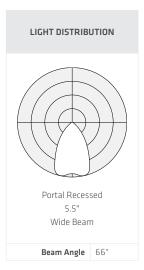
FIXTURE FINISH	Narrow Beam	Medium Beam	Wide Beam
Black	0.94	0.94	0.92
Metallic Silver	0.94	0.94	0.92

For 90 CRI, emergency BP or non-white fixtures, use multipliers to scale published Light (lm), Efficacy (lm/W), Intensity (Cd), Luminance (Cd/m²) and IES files.

VERSION PERFORMANCE

W1 - 5.5" Wide Beam, White Fixture, 80 CRI

CONFIGURATION			LIGHT & POWER				VISUAL COMFORT		
ССТ	ENE	ERGY (NOM.)	LIGHT (Im)	POWER (W)	EFFICACY (Im/W)	MAX BEAM INTENSITY (Cd)	MAX INTENSITY 45-90° (Cd)	MAX LUMINANCE 45-90° (Cd/m²)	UGR (4H x 8H)
TC1-H05-W1840 4000 K	Α	9 W	1266	9.64	131.3	1,002	201	>10,000	16.0
	В	12 W	1679	12.64	132.8	1,329	266	>10,000	17.0
	С	16 W	2247	16.56	135.7	1,778	357	>10,000	18.0
	D	21 W	2865	21.89	130.9	2,268	455	>10,000	18.8
TC1-H05-W1835 3500 K	Α	9 W	1249	9.64	129.6	989	198	>10,000	15.9
	В	12 W	1657	12.64	131.1	1,312	263	>10,000	16.9
	С	16 W	2217	16.56	133.8	1,755	352	>10,000	17.9
	D	21 W	2827	21.85	129.4	2,238	449	>10,000	18.8
TC1-H05-W1830 3000 K	Α	9 W	1205	9.64	125.0	954	191	>10,000	15.8
	В	12 W	1598	12.64	126.5	1,265	254	>10,000	16.8
	С	16 W	2139	16.56	129.1	1,693	339	>10,000	17.8
	D	21 W	2727	21.85	124.8	2,159	433	>10,000	18.7
TC1-H05-W1827 2700 K	Α	9 W	1153	9.64	119.6	912	183	>10,000	15.7
	В	12 W	1529	12.64	121.0	1,210	243	>10,000	16.6
	С	16 W	2046	16.56	123.5	1,619	325	>10,000	17.7
	D	21 W	2587	21.40	120.9	2,048	411	>10,000	18.5





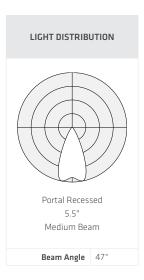
SPECIFICATION DATA

PORTAL SEMI-RECESSED 5.5" (TC1-H05, TC1-J05)

VERSION PERFORMANCE

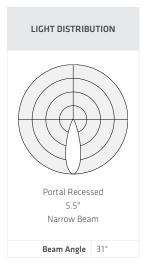
M1 - 5.5" Medium Beam, White Fixture, 80 CRI

CONFIGURATION			LIGHT & POWER				VISUAL COMFORT		
ССТ	ENE	RGY (NOM.)	LIGHT (Im)	POWER (W)	EFFICACY (Im/W)	MAX BEAM INTENSITY (Cd)	MAX INTENSITY 45-90° (Cd)	MAX LUMINANCE 45-90° (Cd/m²)	UGR (4H x 8H)
TC1-H05-M1840 4000 K	Α	9 W	1325	9.64	137.5	2,054	54	5,000	14.0
	В	12 W	1758	12.64	139.1	2,725	72	6,630	15.0
	С	16 W	2352	16.56	142.1	3,645	96	8,860	16.0
	D	21 W	3000	21.84	9.64 137.5 2,054 54 5,000 12.64 139.1 2,725 72 6,630 16.56 142.1 3,645 96 8,860 21.84 137.3 4,648 122 >10,000 9.64 135.7 2,027 53 4,930 12.64 137.3 2,689 71 6,540 16.56 140.2 3,597 95 8,750 21.84 135.5 4,587 121 >10,000 9.64 130.9 1,955 52 4,760 12.64 132.4 2,594 68 6,310 16.56 135.2 3,470 91 8,440 21.84 130.7 4,425 116 >10,000	>10,000	16.9		
	Α	9 W	1308	9.64	135.7	2,027	53	4,930	14.0
TC1-H05-M1835	В	12 W	1735	12.64	137.3	2,689	71	6,540	15.0
3500 K	С	16 W	2321	16.56	140.2	3,597	95	8,750	16.0
	D	21 W	2960	21.84	135.5	4,587	121	>10,000	16.8
	Α	9 W	1262	9.64	130.9	1,955	52	4,760	13.8
TC1-H05-M1830	В	12 W	1674	12.64	132.4	2,594	68	6,310	14.8
3000 K	С	16 W	2239	16.56	135.2	3,470	91	8,440	15.8
	D	21 W	2855	21.84	130.7	4,425	116	>10,000	16.7
	Α	9 W	1207	9.64	125.2	1,870	49	4,550	13.7
TC1-H05-M1827 2700 K	В	12 W	1601	12.64	126.7	2,481	65	6,030	14.7
	С	16 W	2142	16.56	129.4	3,320	87	8,080	15.7
	D	21 W	2731	21.84	125.1	4,233	111	>10,000	16.5



N1 - 5.5" Narrow Beam, White Fixture, 80 CRI

CONFIGURATION			LIGHT & POWER				VISUAL COMFORT		
ССТ	ENE	ERGY (NOM.)	LIGHT (Im)	POWER (W)	EFFICACY (Im/W)	MAX BEAM INTENSITY (Cd)	MAX INTENSITY 45-90° (Cd)	MAX LUMINANCE 45-90° (Cd/m²)	UGR (4H x 8H)
TC1-H05-N1840 4000 K	Α	9 W	1319	9.64	136.9	4,052	40	3,710	12.3
	В	12 W	1750	12.64	138.4	5,376	53	4,930	13.3
	С	16 W	2341	16.56	141.4	7,193	71	6,600	14.3
	D	21 W	2985	21.87	136.5	9,172	91	8,410	15.2
TC1-H05-N1835 3500 K	Α	9 W	1302	9.64	135.0	3,999	40	3,670	12.3
	В	12 W	1727	12.64	136.6	5,305	53	4,860	13.3
	С	16 W	2310	16.56	139.5	7,098	70	6,510	14.3
	D	21 W	2946	21.87	134.7	9,050	90	8,300	15.1
TC1-H05-N1830 3000 K	Α	9 W	1256	9.64	130.3	3,857	38	3,540	12.2
	В	12 W	1666	12.64	131.8	5,117	51	4,690	13.2
	С	16 W	2229	16.56	134.6	6,847	68	6,270	14.2
	D	21 W	2842	21.87	129.9	8,731	87	8,000	15.0
TC1-H05-N1827 2700 K	Α	9 W	1201	9.64	124.6	3,690	37	3,380	12.0
	В	12 W	1593	12.64	126.1	4,895	49	4,490	13.0
	С	16 W	2132	16.56	128.7	6,550	65	6,010	14.0
	D	21 W	2719	21.87	124.3	8,352	83	7,660	14.9



Photometry Reports: 13694183.01-08

Photometry baseline established with integrating sphere and goniophotometer results from an independent accredited testing laboratory per IES LM-79, ANSI 78.377. Remaining values scaled from baseline data. Output and power may vary by up to 5%.