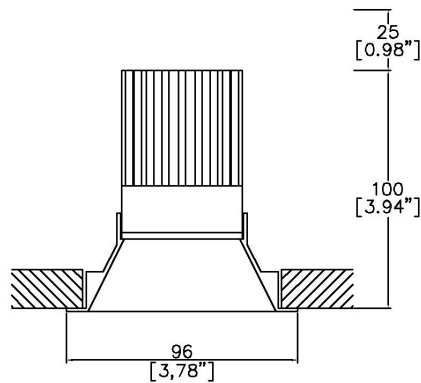


# Trim Fixed



Trim (Round and Square) provides high performance electronics and architectural aesthetics in 3.8” and 3.8” x 3.8” trim. Trim products include adjustable, fixed and wallwash with flange. Tray, retrofit and housing installation methods (NIC, IC, AT, T24 and CCEA) Lucent modules available in a wide range of color temperatures, beam angles, intensities, and effects (Ambiance WarmDim and Dynamic Tuneable White). MR16 and GU10 LED lamp options available. TRIAC/Phase, 0-10v/1-10v, DMX and DALI/Digital dimming.



A960-LED  
Cut-out 3.29” (83.5mm) Ø

LED Source	LED51TW	LED51TW
CCT (5000K - 2000K)	@ 3000K	@ 3000K
Drive Current (max per channel)	700mA	700mA
Power inc Driver	15.1W	15.1W
Beam Angle	25°	35°
Delivered Lumens	676	740
Delivered Intensity cd	2350	1370
Efficacy lm/w	45	49
Forward Volt (max per channel)	18.4V	18.4V
CRI	≥95 CRI	≥95 CRI

Project Ref: \_\_\_\_\_

Location Ref: \_\_\_\_\_

Specify fixture part number (All boxes must be filled in to correctly order)

<b>A960-LED</b>				<b>LED5ITW</b>	<b>5020</b>									
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Finish  
**WH** White  
**BK** Black

Location  
**XX** Dry  
**DP** Damp  
**WT** Wet

Ceiling Thickness  
**SC** Standard Ceiling (1/2"-5/8"-3/4")  
**C** Custom

LED Type  
**LED5ITW** LED5ITW (95CRI)

CCT  
**5020** 5000K - 2000K

Beam Angles  
**25** 25  
**35** 35

Housing/Tray  
**LMT-13-NIC** Mounting Tray Non-Insulated ceilings  
**LH-6.75-NIC** Housing 6.75" Non-Insulated ceilings  
**LH-8.50-AT/IC** Housing 8.50" Insulated/Air-tight ceilings and Chicago Plenum

Mounting Hardware  
**09** 9" to 15.25" - Adjustable Bar Hanger Lengths  
**14** 14" to 24" - Adjustable Bar Hanger Lengths  
**36** 28" to 36" - Adjustable Bar Hanger Lengths  
**BB** Butterfly Bracket  
**CB** Caterpillar Bracket

Supply Voltage  
**120** 120V  
**277** 277V

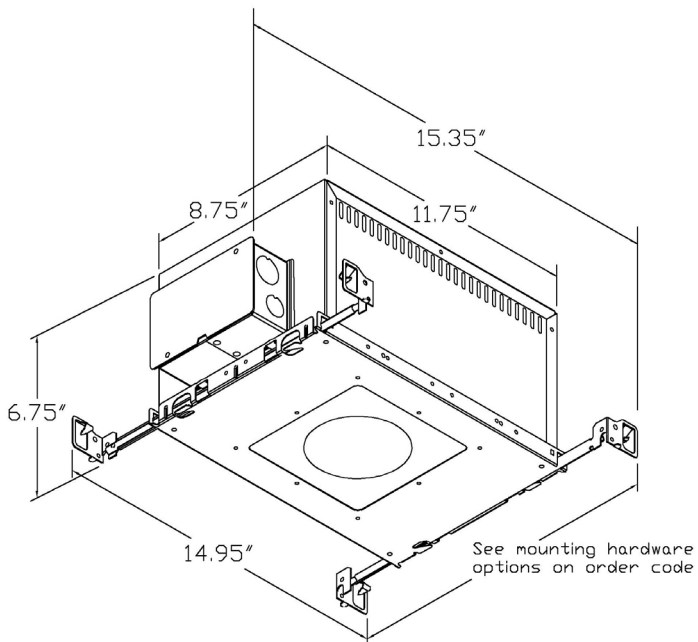
Dimming Protocol  
**A2** Analogue (0-10V) 2-Channel (0.1% Dimming)  
**D6** DALI Type 6\*\* (0.1% Dimming)  
**D8** DALI Type 8\*\* (0.1% Dimming)  
**L** Lutron (Consult Factory)

Emergency  
**E** 3hr Emergency  
**ES** 3hr Self Test

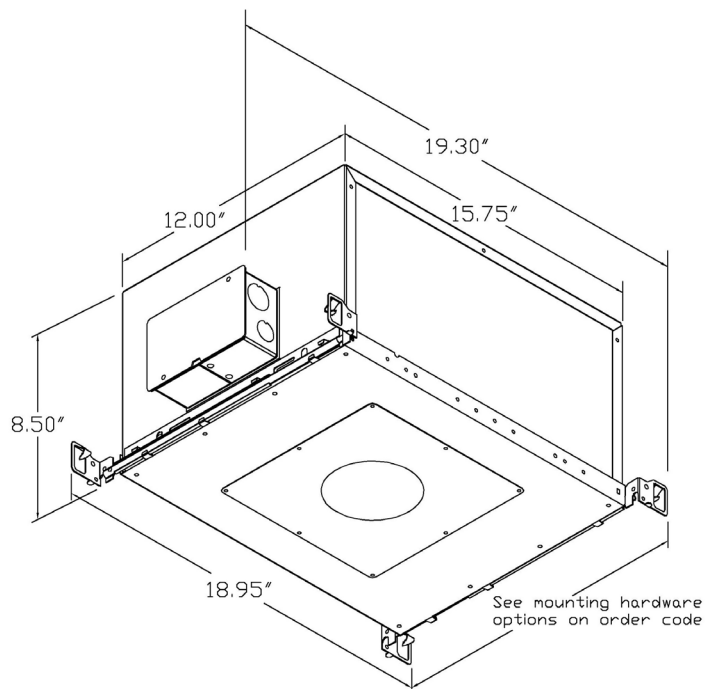
Louvre/Lens  
**XX** Not required  
**LL45** Honeycomb  
**LLCC** Warm Tone  
**LLUV** UV  
**LLDF** Solite/Diffusing  
**LLFR** Frosted Lens  
**LLLS** Linear Spread  
**LLHS** Heavy Spread

\*Refer to Technical Details for more information

Housing dimensions

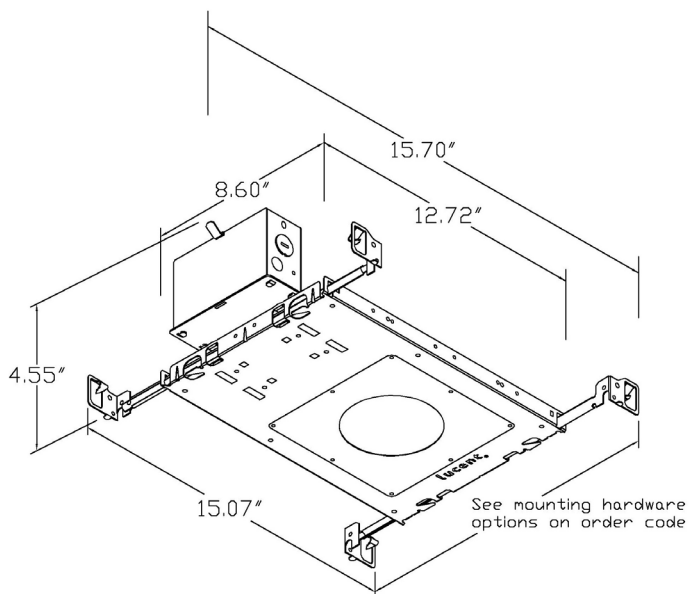


LH-6.75  
Non-insulated ceilings

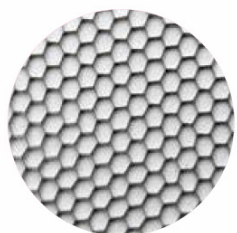


LH-8.50  
Insulated/air-tight ceilings and  
Chicago Plenum

Tray dimensions



LMT-13  
Non-insulated ceilings



**Honeycomb Louvre (LL45)**



**Solite/Diffusing Lens (LLDF)**



**Frosted Lens (LLFR)**



**Heavy Spread Lens (LLHS)**



**Linear Spread Lens (LLLS)**



**Warm Tone (LLCC)**

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## Technical Details

\*Custom color requires a paint chip or RAL code and may increase price and lead-time

It is the responsibility of the specifier/integrator/installer to check and ensure compatibility of any control equipment used. Additional cabling may be required depending on the dimming protocol specified.

\*\*DALI Type 6 requires two DALI addresses, one for CCT control the other for intensity control. DALI Type 8 is a single DALI Type 8 address for CCT and intensity control. Please check which control system is being used before specifying.

^ Depth indicated is the minimum recess depth for the luminaire with a remote mounted LED driver. Installing a driver through either the luminaire cut-out or installation kit may require additional recess depth, please refer to the relevant installation instructions prior to purchase.

First Fix Requirement. Luminaire comprised of fixture body with ceiling trim and installation kit, which is to be fitted into the ceiling once finished. Ensure correct alignment of the installation kit before final assembly (see luminaire installation instructions for details)

Location. Tested from underside of the ceiling.

Data correct at time of publishing. It is the policy of Lucent Lighting to continually review and improve its products and therefore reserve the right to change any details of product or withdraw specifications without prior notice.

This specification sheet supersedes all previous versions.

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Please notify Lucent Lighting Inc. inaccuracies. E&OE

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Light efficiency:

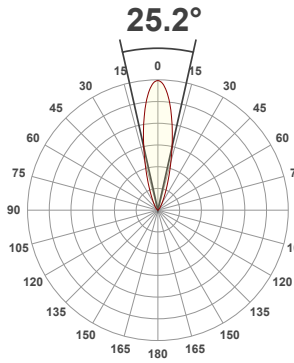
**45 Lumen/Watt**

Light quality:

**CRI: 91.4**

Color temperature:

**3000 K**



Product name:

**A960/963-LED -  
LED51TW-5020-25 @ 3000K**

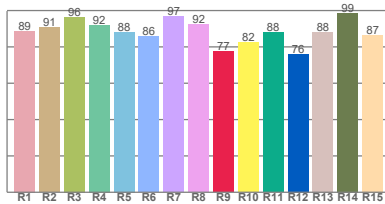
Item number:

**Trim Round Fixed\_Accent -  
LED51TW-5020-25 @ 3000K**

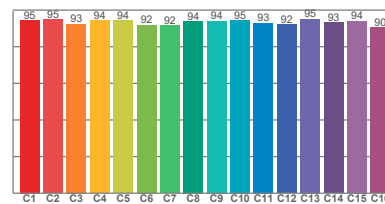
**Delivered information for above  
fixture and LED combination.**

**Output: 676 Lumen Peak intensity: 2350 cd Power consumption: 15.1**

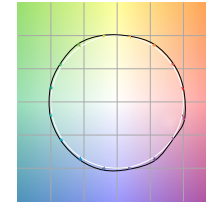
CRI R values



TM30 C Values

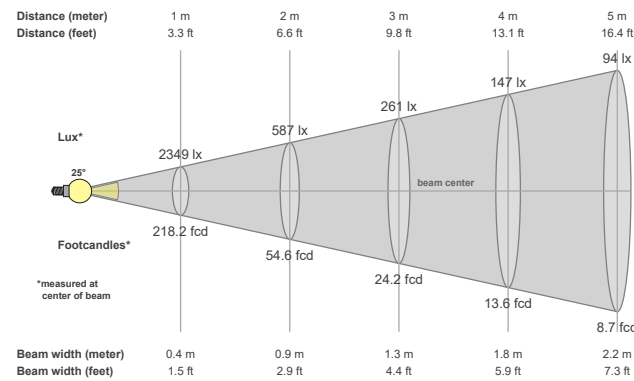


Color vector graphics



Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
3000 K	91.4	77.4	93.6	106.6	93.7	0.437	0.404	0.256	0.335	-0.0131

**Beam details**



**Beam angles**

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%
25.2°	52.8°	81.3°

**Beam intensities**

Peak intensity	Int. ratio in 120° cone	Int. ratio in 90° cone
2350 cd	98.5%	95.2%

**Beam intensities from 1-20m**

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
2349lx	587lx	261lx	147lx	94lx	65lx	48lx	37lx	29lx	23lx	19lx	16lx	14lx	12lx	10lx	9lx	8lx	7lx	7lx	6lx
218.2fcd	54.6fcd	24.2fcd	13.6fcd	8.7fcd	6.1fcd	4.5fcd	3.4fcd	2.7fcd	2.2fcd	1.8fcd	1.5fcd	1.3fcd	1.1fcd	1fcd	0.9fcd	0.8fcd	0.7fcd	0.6fcd	0.5fcd

All the above information for fixtures with LED51TW-5020 modules are tested at 3000K

Factors to adjust lumen output for the following CCTs at 100% output for the colour are as follows:

2000K = 0.67

2700K = 0.84

3500K = 1.085

4000K = 1.113

5000K = 1.087

**Light efficiency:**

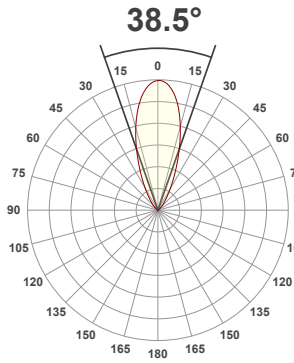
**49 Lumen/Watt**

**Light quality:**

**CRI: 91.5**

**Color temperature:**

**3000 K**



Product name:

**A960/963-LED - LED51TW-5020-35 @ 3000K**

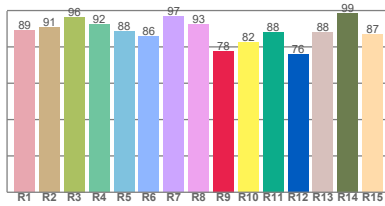
Item number:

**Trim Round Fixed\_Accent - LED51TW-5020-35 @ 3000K**

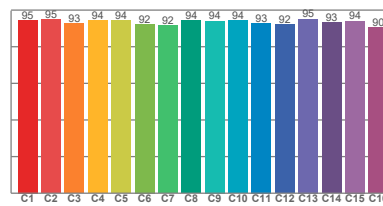
**Delivered information for above fixture and LED combination.**

**Output: 740 Lumen Peak intensity: 1370 cd Power consumption: 15.1**

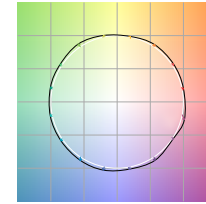
**CRI R values**



**TM30 C Values**

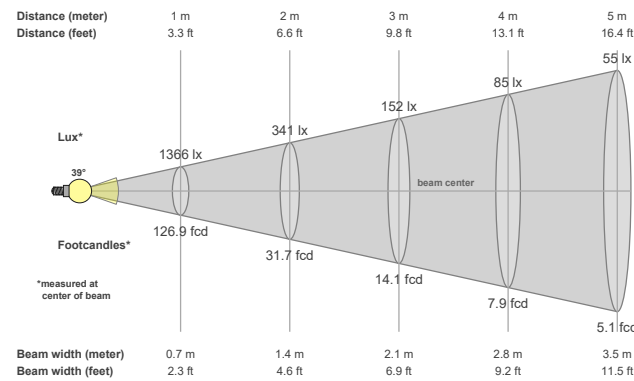


**Color vector graphics**



Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
3000 K	91.5	77.7	93.6	106.4	93.8	0.437	0.404	0.256	0.336	-0.0129

**Beam details**



**Beam angles**

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%
38.5°	73.5°	97.4°

**Beam intensities**

Peak intensity	Int. ratio in 120° cone	Int. ratio in 90° cone
1370 cd	98.5%	94.1%

**Beam intensities from 1-20m**

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
1366lx	341lx	152lx	85lx	55lx	38lx	28lx	21lx	17lx	14lx	11lx	9lx	8lx	7lx	6lx	5lx	5lx	4lx	4lx	3lx
126.9fcd	31.7fcd	14.1fcd	7.9fcd	5.1fcd	3.5fcd	2.6fcd	2fcd	1.6fcd	1.3fcd	1fcd	0.9fcd	0.8fcd	0.6fcd	0.6fcd	0.5fcd	0.4fcd	0.4fcd	0.4fcd	0.3fcd

All the above information for fixtures with LED51TW-5020 modules are tested at 3000K

Factors to adjust lumen output for the following CCTs at 100% output for the colour are as follows:

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3500K = 1.085

4000K = 1.113

5000K = 1.087