LUM·TECH LIGHTING

LED

Architectural Downlight

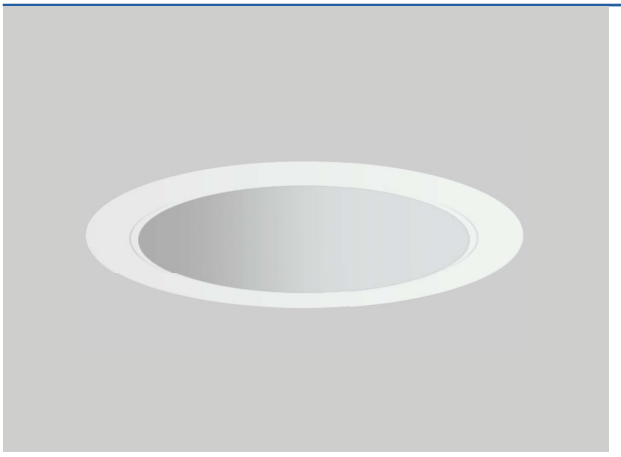
CONCENTRA®

Lighting Company

L E D • D O W N L I G H T • D E S I G N

ICED-9521, DLED-9521 (Special Order Fixtures)

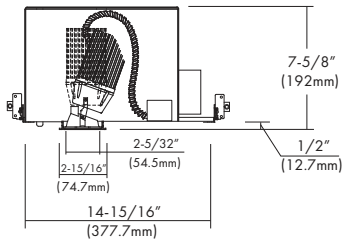
Universal 120-277VAC LED, 2" LED, IC and Non-IC type
Round Architectural Recessed Lights



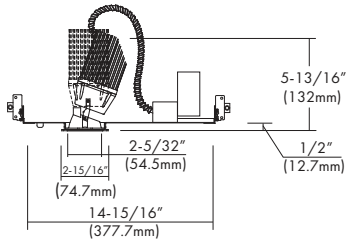
Test Specification			
ICED9521	TML-112R-ST-xx-830-UZTD-WH-WH-M		
LED Quantity	1EA (COB)		
Input Voltage	120V-277VAC		
Wattage (+/-5%)	**10W**	**15W**	**23W***
Lumen (+/-5%)	870	1,200	1,800
Efficacy (LPW) (+/-5%)	87	80	78.3
CCT (Color +/-5%)	2700K, 3000K, 3500K, 4000K		
CRI (Typical)	80, 90		
Dimming	Triac, ELV & 0-10V Dimming		
LED Module	5 yr or 50K hr		
Environment	Indoor, Damp		

*23W DLED Housing Only

ICED-9521
[IC rated with outer box]



DLED-9521
[Non-IC rated]



Ceiling Cut-out : 2-11/16" (68.3mm)

Design Features

- Three different beam distributions available: Narrow, Medium, and Wide
- Designed for ceiling thickness up to 1-1/4".
- All results are according to IESNA LM-79-2008 : Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The US. Department of Energy (DOE) verifies product test data and results. LED chips provided with fixtures are in compliance with LM80.
- Listing: CSA us

Trims : Various trims for straight down lights (-ST), Adjustable (-AJ)

TML-112R-ST

- Straight reflector cone.
- Included "Solite" soft focus lens.

TML-112R-AJ

30° Angle accurately aiming for vertical surface through aperture from below ceiling, and 350° rotatable.

ICED-9521, DLED-9521 (Special Order Fixtures)

Universal 120-277VAC LED, 2" IC and Non-IC type
Round Architectural Recessed Lights

Ordering Information

Housing _____
ICED-9521 = 2" Round IC Housing
DLED-9521 = 2" Round Non-IC Housing

LED Trim / Module _____
TML-112R-ST = Straight
TML-112R-AJ = Adjustable

-Watts _____
-10 = 10W
-15 = 15W
-23 = 23W

-CRI _____
-8 = 80
-9 = 90

Color Temp.** _____
27 = 2700K
30 = 3000K
35 = 3500K
40 = 4000K

Driver* _____
UZTD = 120~277V, with Triac,
ELV & 0-10V Dimming

**Option : Emergency (Non-IC only)*
-EM = Emergency Battery Backup _____
NOTE: Requires access above the ceiling or install an access panel to service emergency battery and LED driver.

-Finish _____
Reflector:
-WH = White
-SI = Silver
-BRZ = Bronze
-BK = Black

Trim: _____
-WH = White
-SI = Silver
-BRZ = Bronze
-BK = Black

-Beam Angle _____
-N = Narrow
-M = Medium
-W = Wide

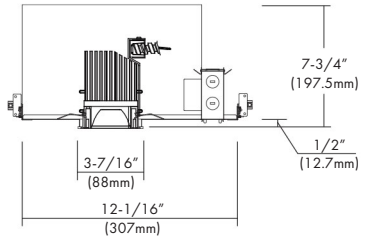
** Consult factory for other Color Temperatures and Finishes

ICED9531, DLED9531

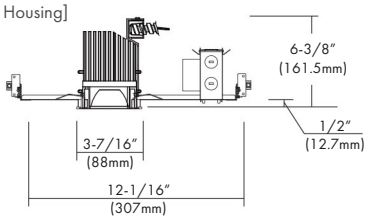
3" IC and Non-IC Architectural LED Downlights

Specification			
LED Quantity	1EA (COB)		
Input Voltage	120V-277VAC		
Wattage (+/-5%)	**10W**	**14W**	**23W**
Lumen (+/-5%)	845	1161	2000
Efficacy (LPW) (+/-5%)	84.5	77.4	86.9
CCT (Color +/-5%)	2700K, 3000K, 3500K, 4000K		
CRI (Typical)	80, 90		
Dimming	0~10V, ELV & TRIAC		
LED Module	5 yr or 50K hr		
Environment	Damp Location & optional Wet Location		

ICED9531
[IC Rated Housing]



DLED9531
[Non-IC Rated Housing]



Ceiling Cut-out : 3-1/8"(80mm)

Design Features

- Interchangeable reflectors to achieve different beam distributions.
- Designed for ceiling thickness up to 1-1/4".
- Minimum Trim reveals are 0.12" thick.
- Multiple reflector distribution patterns available: pinhole trim with Narrow Spot (NS), Narrow beam (N), Medium beam (M), and Wide beam (W).
- Dimming capability is standard with 0-10V dimmer switches.
- The ICED9531 luminaire is listed as Type IC and is suitable for direct contact with insulation.
- Certified to IESNA LM-79: 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. LED chip sets are in compliance with LM80.
- cETLus Listed.

Trims : Various finishes available for Straight , Adjustable, Adjustable Pinhole and Wall Wash down lights.

TML224RST
Straight reflector cone.

TML225RAJ
Accurate vertical & horizontal aiming through the aperture from below ceiling.

TML2341ST
With 1-5/16" surface pinhole formation.

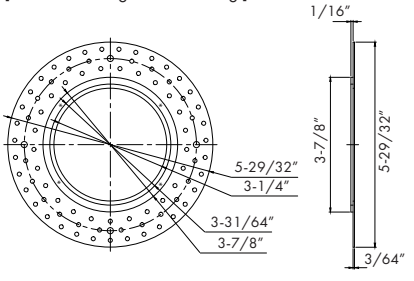
TML234PAJ
1-5/16" pinhole aperture with adjustable to 30° with angle cut slope reflector.

TML225RGWW
1-5/16" pinhole aperture with adjustable to 30° with angle cut slope reflector.

Option

TML-224R/225R-MUD

[3" Round Flangeless Mud Ring]



TEL: 856-234-2211 FAX: 856-234-0881 www.lum-techlighting.com

ICED9531, DLED9531

3" IC and Non-IC Architectural LED Downlights

Ordering Information

Housing _____

ICED9531 = IC

DLED9531 = Non-IC

-Watts _____

-10 = 10W
-14 = 14W
-23 = 23W

Driver* _____

UZTD = 120~277V, with Triac, ELV & 0-10V Dimming

**Option : Emergency (Non-IC only)*

-EM = Emergency Battery Backup _____

NOTE: Requires access above the ceiling or install an access panel to service emergency battery and LED driver.

Trim/LED Kit* _____

TML224RST = Straight
TML225RAJ = Adjustable
TML2341ST = Straight Surface Pinhole
TML234PAJ = Adjustable Pinhole
TML225RGWW = Wall Wash

-Wattage _____

-10 = 10W
-14 = 14W
-23 = 23W

-CRI _____

-8 = 80
-9 = 90

Color Temp.** _____

27 = 2700K
30 = 3000K
35 = 3500K
40 = 4000K

Beam Angle _____

NS = Narrow Spot 15˚
N = Narrow 28˚
M = Medium 36˚
W = Wide 60˚

-Finishes** _____

Reflector:
-WH = White
-BK = Black
-HC = Haze Clear

*TML2341ST with White or Black finish ONLY

Trim: _____
-WH = White
-BK = Black

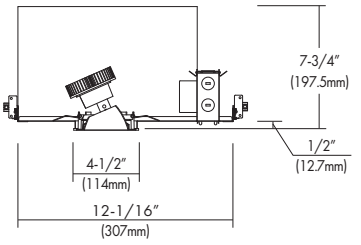
**Option :*
-WRL = Wet Location Regressed Lens _____
-TML-224R/225R-MUD = Flangeless Mud Ring

** Consult factory for other Color Temperatures and Finishes

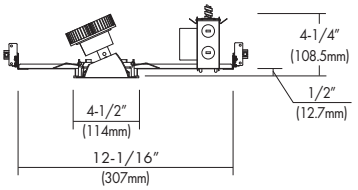
ICED9535, DLED9535

3.5″ IC and Non-IC Architectural LED Downlights

ICED9535
[IC Rated Housing]



DLED9535
[Non-IC Rated Housing]



Ceiling Cut-out : 4-1/16″(102mm)
Mounting Frame : 12-1/8″(307.3mm) x 7-5/8″(193.8mm)

Test Specification [ICED9535-xx UZTD TML324ST-xx-830W-WHWH]			
LED Quantity	1EA (COB)		
Input Voltage	120V or 277V		
Wattage (+/-5%)	**10W**	**14W**	**23W**
Lumen (+/-5%)	845	1,187.2	2,000
Efficacy (LPW) (+/-5%)	84.5	79.2	86.9
Luminaire Beam	49°	49°	43.5°
CCT (Color +/-5%)	2700K, 3000K, 3500K, 4000K		
CRI (Typical)	80, 90		
Dimming	0~10V, ELV & TRIAC Optional Lutron Drivers		
LED Module	5 yr or 50K hr		
Environment	Damp Location & optional Wet Location		

Design Features

- Interchangeable reflectors to achieve different beam distributions.
- Minimum Trim reveals are 0.12″ thick.
- Multiple reflector distribution patterns available: pinhole trim with Narrow Spot (NS), Narrow beam (N), Medium beam (M), and Wide beam (W).
- Designed for ceiling thickness up to 1-1/4″.
- Adjustable trims allow engine to be angled 0°~30° tilt with a 356° rotation for precise, lockable aiming.
- Wall Wash trim with angled slope reflector. Molded spread lens for great uniformity.
- Dimming capability is standard with 0-10V dimmer switches.
- Optional Lutron Hi-lume A-Series, LED drivers and EcoSystem 5-Series LED drivers are available. Lutron drivers provide flicker-free, smooth, continuous dimming down to 1% for Hi-lume and 5% for EcoSystem. (Contact factory for dimming system requirements)
- The ICED9535 luminaire is listed as Type IC and is suitable for direct contact with insulation.
- Certified to IESNA LM-79: 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. LED chip sets are in compliance with LM80.
- cETLus Listed.

Trims : Various finishes available for straight (ST), Adjustable (AJ), Adjustable Pinhole (PAJ) and wall wash (WW) down lights.

TML324RST
Straight down symmetrical reflector.

TML325RAJ
Accurate vertical & horizontal aiming through the aperture from below ceiling.

TML334PAJ
1-1/16″ pinhole on surface of aperture adjustable to 30° with angle cut slope reflector.

TML325RGWW
Angle cut wall wash reflector with flood lens.

ICED9535, DLED9535

3.5" IC and Non-IC Architectural LED Downlights

Ordering Information

Housing _____

ICED9535 = IC
DLED9535 = Non-IC

-Watts _____

-10 = 10W
-14 = 14W
-23 = 23W

Driver* _____

ZTD = 0~10V, ELV & Triac dimmable
(Dimming range varies from 1~10%)
L1D = Lutron 1% EcoSystem
SoftOn/FadeToBlack
L5D = Lutron 5% EcoSystem
LTE = 2-Wire 120V Lutron Dimming

*Option : Emergency (Non-IC only) _____
-EM = Emergency Battery Backup

Voltage* _____

*IC Only
U = 120~277V

*Non-IC Only
1 = 120V
2 = 277V

Trim/LED Kit* _____

TML324RST = Straight
TML325RAJ = Adjustable
TML334PAJ = Pinhole Adjustable
TML325RGWW = Wall Wash

*Option : Sealed Lens _____
-WRL = Wet Location

-Wattage _____

-10 = 10W
-14 = 14W
-23 = 23W

-CRI _____

-8 = 80
-9 = 90

Color Temp.** _____

27 = 2700K
30 = 3000K
35 = 3500K
40 = 4000K

Beam Angle _____

Upper Reflector:
NS = Narrow Spot 15˚
N = Narrow 24˚
M = Medium 38˚
W = Wide 60˚

-Finishes** _____

Reflector:
-WH = White
-HC = Haze Clear

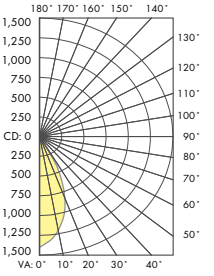
Trim: _____
-WH = White
-BK = Black

** Consult factory for other Color Temperatures and Finishes

PHOTOMETRIC REPORT*

* Contact Factory for IES File

Polar Candela Distribution



Illuminance at a Distance

	Center Beam FC	Beam Width
2.0ft	350.5 fc	1.8 ft
4.0ft	87.6 fc	3.7 ft
6.0ft	38.9 fc	5.5 ft
8.0ft	21.9 fc	7.3 ft
10.0ft	14.0 fc	9.2 ft
12.0ft	9.7 fc	11.0 ft

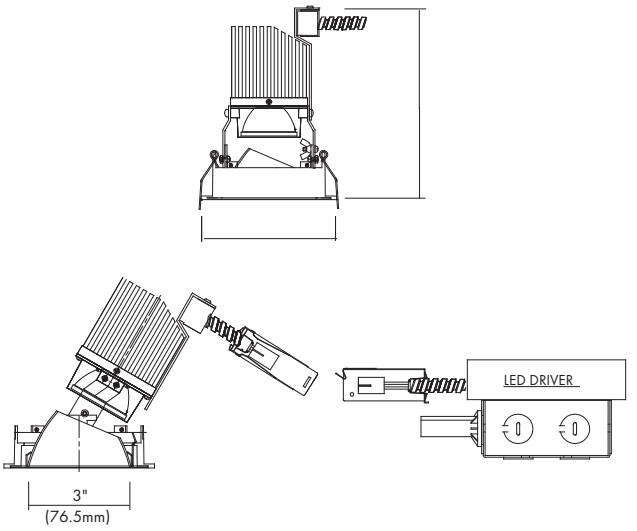
Beam Spread: 49˚

[TML324RST-10-830W]

DLED9535R

3.5" Non-IC Remodeling and Retrofit Architectural LED

Test Specification [DLED9535R-xx UZTD TML324ST-xx-830W-WHWH]			
LED Quantity	1EA (COB)		
Input Voltage	120V or 277V		
Wattage (+/-5%)	**10W**	**14W**	**23W**
Lumen (+/-5%)	845	1,187.2	2,000
Efficacy (LPW) (+/-5%)	84.5	79.2	86.9
Luminaire Beam	49°	49°	43.5°
CCT (Color +/-5%)	2700K, 3000K, 3500K, 4000K		
CRI (Typical)	80, 90		
Dimming	0~10V, ELV & TRIAC Optional Lutron Drivers		
LED Module	5 yr or 50K hr		
Environment	Damp Location & optional Wet Location		



Ceiling Cut-out : 4-1/16"(102mm)

Design Features

- Interchangeable reflectors to achieve different beam distributions.
- Minimum Trim reveals are 0.12" thick.
- Multiple reflector distribution patterns available: pinhole trim with Narrow Spot (NS), Narrow beam (N), Medium beam (M), and Wide beam (W).
- Designed for ceiling thickness up to 1-1/4".
- Adjustable trims allow engine to be angled 0°~30° tilt with a 356° rotation for precise, lockable aiming.
- Wall Wash trim with angled slope reflector. Molded spread lens for great uniformity.
- Dimming capability is standard with 0-10V dimmer switches.
- Optional Lutron Hi-lume A-Series, LED drivers and EcoSystem 5-Series LED drivers are available. Lutron drivers provide flicker-free, smooth, continuous dimming down to 1% for Hi-lume and 5% for EcoSystem. (Contact factory for dimming system requirements)
- Certified to IESNA LM-79: 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. LED chip sets are in compliance with LM80.
- cETLus Listed.

Trims : Various finishes available for straight (ST), Adjustable (AJ), Adjustable Pinhole (PAJ) and wall wash (WW) down lights.

TML324RST
Straight down symmetrical reflector.

TML325RAJ
Accurate vertical & horizontal aiming through the aperture from below ceiling.

TML334PAJ
1-1/16" pinhole on surface of aperture adjustable to 30° with angle cut slope reflector.

TML325RGWW
Angle cut wall wash reflector with flood lens.

DLED9535R

3.5" Non-IC Remodeling and Retrofit Architectural LED

Ordering Information

Housing

DLED9535R

-Watts

-10 = 10W
-14 = 14W
-23 = 23W

Driver*

ZTD = 0~10V, ELV & Triac dimmable (Dimming range varies from 1~10%)
L1D = Lutron 1% EcoSystem SoftOn/FadeToBlack
L5D = Lutron 5% EcoSystem
LTE = 2-Wire 120V Lutron Dimming

**Option : Emergency*
-EM = Emergency Battery Backup

Voltage*

1 = 120V
2 = 277V

Trim/LED Kit*

TML324RST = Straight
TML325RAJ = Adjustable
TML334PAJ = Pinhole Adjustable
TML325RGWW = Wall Wash

**Option : Sealed Lens*
-WRL = Wet Location

-Wattage

-10 = 10W
-14 = 14W
-23 = 23W

-CRI

-8 = 80
-9 = 90

Color Temp.**

27 = 2700K
30 = 3000K
35 = 3500K
40 = 4000K

Beam Angle

Upper Reflector:
NS = Narrow Spot 15˚
N = Narrow 24˚
M = Medium 38˚
W = Wide 60˚

-Finishes**

Reflector:
-WH = White
-HC = Haze Clear

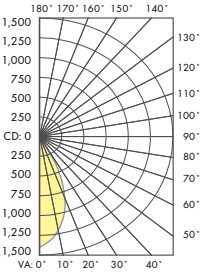
Trim:
-WH = White
-BK = Black

** Consult factory for other Color Temperatures and Finishes

PHOTOMETRIC REPORT*

* Contact Factory for IES File

Polar Candela Distribution



Illuminance at a Distance

	Center Beam FC	Beam Width
2.0ft	350.5 fc	1.8 ft
4.0ft	87.6 fc	3.7 ft
6.0ft	38.9 fc	5.5 ft
8.0ft	21.9 fc	7.3 ft
10.0ft	14.0 fc	9.2 ft
12.0ft	9.7 fc	11.0 ft

Beam Spread: 49˚

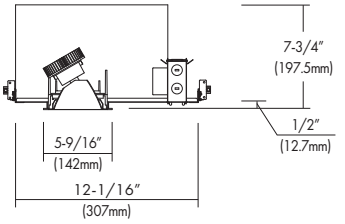
[TML324RST-10-830W]

ICED9541, DLED9541

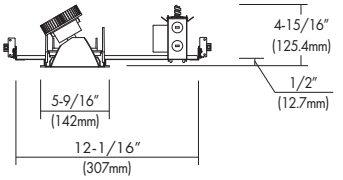
4" IC and Non-IC Architectural LED Downlights

Test Specification [ICED9541-xx UZTD TML324ST-xx-830M-WHWH]				
LED Quantity	1EA (COB)			
Input Voltage	120V or 277V			
Wattage (+/-5%)	**10W**	**14W**	**23W**	**30W**
Lumen (+/-5%)	800	1,168.4	1,850	2,500
Efficacy (LPW) (+/-5%)	80	77.9	80.4	83.3
Luminaire Beam	42°	42°	38°	38°
CCT (Color +/-5%)	2700K, 3000K, 3500K, 4000K			
CRI (Typical)	80, 90			
Dimming	0~10V, ELV & TRIAC Optional Lutron Drivers			
LED Module	5 yr or 50K hr			
Environment	Damp Location & *optional Wet Location			

ICED9541
[IC Rated Housing]



DLED9541
[Non-IC Rated Housing]



Ceiling Cut-out : 5-3/16"(132mm)
Mounting Frame : 12-1/8"(307.3mm) x 7-5/8"(193.8mm)

Design Features

- Interchangeable reflectors to achieve different beam distributions.
- Minimum Trim reveals are 0.12" thick.
- Multiple reflector distribution patterns available: pinhole trim with Narrow Spot (NS), Narrow beam (N), Medium beam (M), and Wide beam (W).
- Designed for ceiling thickness up to 1-1/4".
- Adjustable trims allow engine to be angled 0°~40° tilt with a 356° rotation for precise, lockable aiming.
- Wall Wash trim with angled slope reflector. Molded spread lens for great uniformity.
- Dimming capability is standard with 0-10V dimmer switches.
- Optional Lutron Hi-lume A-Series, LED drivers and EcoSystem 5-Series LED drivers are available. Lutron drivers provide flicker-free, smooth, continuous dimming down to 1% for Hi-lume and 5% for EcoSystem. (Contact factory for dimming system requirements)
- The ICED9541 luminaire is listed as Type IC and is suitable for direct contact with insulation.
- Certified to IESNA LM-79: 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. LED chip sets are in compliance with LM80.
- cETLus Listed.

Trims : Various finishes available for straight (ST), Adjustable (AJ), Adjustable Pinhole (PAJ) and wall wash (WW) down lights.

TML424RST
Straight down symmetrical reflector.

TML425RAJ
Angle cut reflector adjustable from 0° ~40° for accurate aiming with a screw driver from below ceiling. This allows easy, targeted illumination of desired areas.

TML434PAJ
Black or White Pinhole aperture with angle cut reflector adjustable from 0° ~40° for accurate aiming with a screw driver from below ceiling. This allows easy, targeted illumination of desired areas.

TML425RGWW
Wall Wash Trim with a fixed 40° angle provides ideal illumination of vertical and horizontal surfaces.

ICED9541, DLED9541

4" IC and Non-IC Architectural LED Downlights

Ordering Information

Housing _____

ICED9541 = IC
DLED9541 = Non-IC

-Watts _____

-10 = 10W
-14 = 14W
-23 = 23W
-30 = 30W

Driver* _____

ZTD = 0~10V, ELV & Triac dimmable
(Dimming range varies from 1~10%)
L1D = Lutron 1% EcoSystem
SoftOn/FadeToBlack
L5D = Lutron 5% EcoSystem
LTE = 2-Wire 120V Lutron dimming

**Option : Emergency (Non-IC only)*
-EM = Emergency Battery Backup _____

Voltage* _____

**IC Only*
U = 120~277V

**Non-IC Only*
1 = 120V
2 = 277V

Trim/LED Kit* _____

TML424RST = Straight
TML425RAJ = Adjustable
TML434PAJ = Pinhole Adjustable
TML425RGWW = Wall Wash

-Wattage _____

-10 = 10W
-14 = 14W
-23 = 23W
-30 = 30W

-CRI _____

-8 = 80
-9 = 90

Color Temp.** _____

27 = 2700K
30 = 3000K
35 = 3500K
40 = 4000K

Beam Angle _____

Upper Reflector:
NS = Narrow Spot 15˚
N = Narrow 24˚
M = Medium 38˚
W = Wide 60˚

-Finishes** _____

Reflector:
-WH = White
-HC = Haze Clear

Trim: _____
-WH = White
-BK = Black

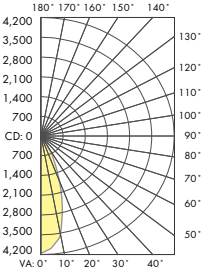
**Option :*
-WRL = Wet Location Sealed Lens _____
-ML = Mist Lens

** Consult factory for other Color Temperatures and Finishes

PHOTOMETRIC REPORT*

* Contact Factory for IES File

Polar Candela Distribution



Illuminance at a Distance

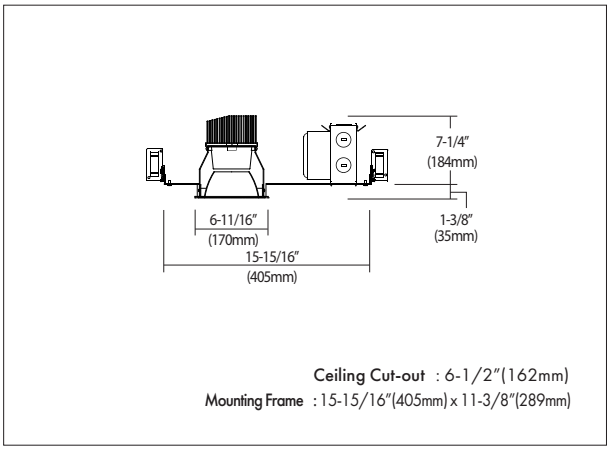
	Center Beam FC	Beam Width
2.0ft	1,093.4 fc	1.4 ft
4.0ft	259.9 fc	2.7 ft
6.0ft	115.5 fc	4.1 ft
8.0ft	65.0 fc	5.5 ft
10.0ft	41.6 fc	6.8 ft
12.0ft	28.9 fc	8.2 ft

Beam Spread: 38˚

[TML424RST-23-830M]

DLED9562

6" Non-IC Architectural LED Downlight



Ceiling Cut-out : 6-1/2"(162mm)
Mounting Frame : 15-15/16"(405mm) x 11-3/8"(289mm)

Test Specification [DLED9562-xx ZTD1 TML665ST-xx-830W-WHWH]				
LED Quantity	1EA (COB)			
Input Voltage	120V or 277V			
Wattage (+/-5%)	**14W**	**23W**	**30W**	**45W**
Lumen (+/-5%)	955	1,830	2,515	2,955
Efficacy (LPW) (+/-5%)	68.2	79.6	83.8	65.7
Luminaire Beam	24˚	35˚	34˚	35˚
CCT (Color +/-5%)	2700K, 3000K, 3500K, 4000K			
CRI (Typical)	80, 90			
Dimming	0~10V, ELV & TRIAC Optional Lutron Drivers			
LED Module	5 yr or 50K hr			
Environment	Damp Location & *optional Wet Location			

Design Features

- Interchangeable reflectors to achieve different beam distributions.
- Designed for ceiling thickness up to 1-1/4".
- Trims for straight downlight, adjustable and wall wash application.
- Sloped angle cut reflectors for direcional adjustment of different beam spread reflector on LED light engines.
- 0~30˚ tilt and 358˚ rotation with positive locking.
- Dimming capability is standard with 0-10V dimmer switches.
- Optional Lutron Hi-lume A-Series, LED drivers and EcoSystem 5-Series LED drivers are available. Lutron drivers provide flicker-free, smooth, continuous dimming down to 1% for Hi-lume and 5% for EcoSystem. (Contact factory for dimming system requirements)
- Certified to IESNA LM-79: 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. LED chip sets are in compliance with LM80.
- cETLus Listed.

Trims : Various finishes available for straight (ST), Adjustable (AJ) and wall wash (WW) down lights.

TML665RST
Open straight reflector cone, with beam spread 60˚FLD.

TML625RAJ
Accurate vertical & horizontal aiming through the aperture from below ceiling.

TML625RGWW
Slope angled reflector with spread lens for wall wash and wet location applications. Different distributions are achieved from upper reflectors: Narrow 24˚, Medium 38˚ and Wide 60˚.

DLED9562

6" Non-IC Architectural LED Downlight

Ordering Information

Housing
DLED9562

-Watts
-14 = 14W
-23 = 23W
-30 = 30W
-45 = 45W

Driver*
ZTD = 0~10V, ELV & Triac dimmable
(Dimming range varies from 1~10%)
L1D = Lutron Hi-lume 1% dimming
L5D = Lutron EcoSystem 5% dimming
LTE = Lutron Hi-lume 1% 2-Wire dimming

**Option : Emergency*
-EM = Emergency Battery Backup

Voltage*
1 = 120V
2 = 277V

Trim/LED Kit*
TML665RST = Straight
TML625RAJ = Adjustable
TML625RGWW = Wall Wash

**Option : Sealed Lens*
-WRL = Wet Location

-Wattage
-14 = 14W
-23 = 23W
-30 = 30W
-45 = 45W

-CRI
-8 = 80
-9 = 90

Color Temp.**
27 = 2700K
30 = 3000K
35 = 3500K
40 = 4000K

Beam Angle
Upper Reflector:
N = Narrow 24˚
M = Medium 38˚
W = Wide 60˚

-Finishes**
Reflector:
-WH = White
-HC = Haze Clear

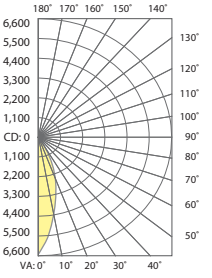
Trim:
-WH = White
-BK = Black

** Consult factory for other Color Temperatures and Finishes

PHOTOMETRIC REPORT*

* Contact Factory for IES File

Polar Candela Distribution



[TML665RST-30-830W]

Illuminance at a Distance

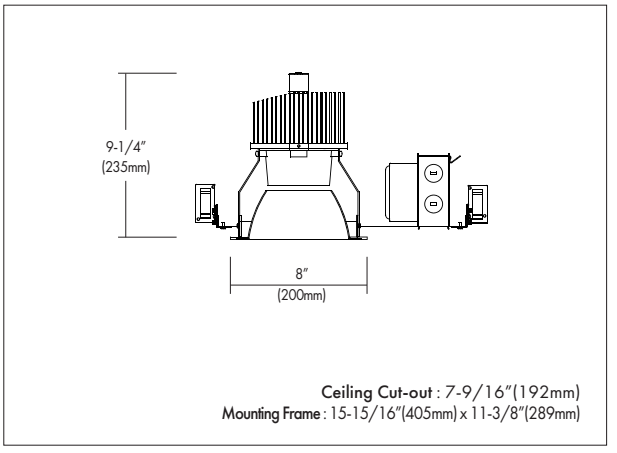
	Center Beam FC	Beam Width
2.0ft	1,632.2 fc	1.2 ft
4.0ft	408.1 fc	2.5 ft
6.0ft	181.4 fc	3.7 ft
8.0ft	102.0 fc	4.9 ft
10.0ft	65.3 fc	6.1 ft
12.0ft	45.3 fc	7.4 ft

Beam Spread: 34˚

DLED9582

8" Non-IC Architectural LED Downlights

Test Specification [DLED9582-xx ZTD1 TML865ST-xx-830W-WHWH]				
LED Quantity	1EA (COB)			
Input Voltage	120V and/or 277V			
Wattage (+/-5%)	**14W**	**23W**	**30W**	**45W**
Lumen (+/-5%)	1,090	2,060	2,790	3,360
Efficacy (LPW) (+/-5%)	77.9	89.6	93	74.7
Luminaire Beam	29°	36°	36°	36°
CCT (Color +/-5%)	2700K, 3000K, 3500K, 4000K			
CRI (Typical)	80, 90			
Dimming	0~10V, ELV & TRIAC Optional Lutron Drivers			
LED Module	5 yr or 50K hr			
Environment	Damp Location & *optional Wet Location			



Ceiling Cut-out : 7-9/16"(192mm)
Mounting Frame : 15-15/16"(405mm) x 11-3/8"(289mm)

Design Features

- Interchangeable reflectors to achieve different beam distributions.
- Designed for ceiling thickness up to 1-1/4".
- Trims for straight downlight, adjustable and wall wash application.
- Sloped angle cut reflectors for direcional adjustment for flexible illumination of targeted areas.
- 0~30° tilt and 358° rotation with positive locking.
- Dimming capability is standard with 0-10V dimmer switches.
- Optional Lutron Hi-lume A-Series, LED drivers and EcoSystem 5-Series LED drivers are available. Lutron drivers provide flicker-free, smooth, continuous dimming down to 1% for Hi-lume and 5% for EcoSystem. (Contact factory for dimming system requirements)
- Certified to IESNA LM-79: 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. LED chip sets are in compliance with LM80.
- cETLus Listed.

Trims : Various finishes available for straight (ST), Adjustable (AJ) and wall wash (WW) down lights.

TML865RST
Open straight reflector cone, with beam spread 60° FLD.

TML825RAJ
Open sloped reflector for adjustable 0~30° angle on vertical and horizontal surfaces.

TML825RGWW
Slope angled reflector with spread lens for wall wash and wet location applications. Different distributions are achieved from upper reflectors: Narrow 24°, Medium 38° and Wide 60°.

DLED9582

8" Non-IC Architectural LED Downlights

Ordering Information

Housing
DLED9582

-Watts
-14 = 14W
-23 = 23W
-30 = 30W
-45 = 45W

Driver*
ZTD = 0~10V, ELV & Triac dimmable
(Dimming range varies from 1~10%)
L1D = Lutron Hi-lume 1% dimming
L5D = Lutron EcoSystem 5% dimming
LTE = Lutron Hi-lume 1% 2-Wire dimming

**Option : Emergency*
-EM = Emergency Battery Backup

Voltage*
1 = 120V
2 = 277V

Trim/LED Kit*
TML865RST = Straight
TML825RAJ = Adjustable
TML825RGWW = Wall Wash

**Option : Sealed Lens*
-WRL = Wet Location

-Wattage
-14 = 14W
-23 = 23W
-30 = 30W
-45 = 45W

-CRI
-8 = 80
-9 = 90

Color Temp.**
27 = 2700K
30 = 3000K
35 = 3500K
40 = 4000K

Beam Angle
Upper Reflector:
N = Narrow 24˚
M = Medium 38˚
W = Wide 60˚

-Finishes**
Reflector:
-WH = White
-HC = Haze Clear

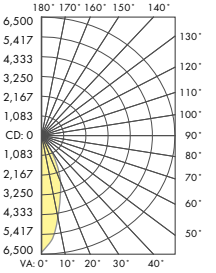
Trim:
-WH = White
-BK = Black

** Consult factory for other Color Temperatures and Finishes

PHOTOMETRIC REPORT*

* Contact Factory for IES File

Polar Candela Distribution



[TML865RST-30-830W]

Illuminance at a Distance

	Center Beam FC	Beam Width
2.0ft	1,601.9 fc	1.3 ft
4.0ft	400.5 fc	2.6 ft
6.0ft	178.0 fc	3.9 ft
8.0ft	100.1 fc	5.2 ft
10.0ft	64.1 fc	6.5 ft
12.0ft	44.5 fc	7.8 ft

Beam Spread: 36˚

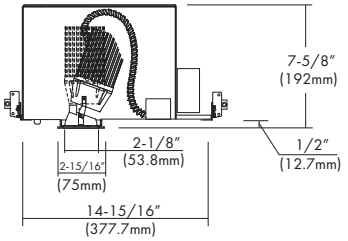
ICED-9521S, DLED-9521S (Special Order Fixtures)

Universal 120-277VAC LED, 2" LED, IC and Non-IC type
Square Architectural Recessed Lights

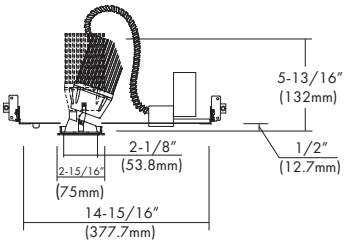
Test Specification			
ICED9521S	TML-112S-ST-xx-830-UZTD-WH-WH-M		
LED Quantity	1EA (COB)		
Input Voltage	120V-277VAC		
Wattage (+/-5%)	10W	15W	23W*
Lumen (+/-5%)	870	1,200	1,800
Efficacy (LPW) (+/-5%)	87	80	78.3
CCT (Color +/-5%)	2700K, 3000K, 3500K, 4000K		
CRI (Typical)	80, 90		
Dimming	Triac, ELV & 0-10V Dimming		
LED Module	5 yr or 50K hr		
Environment	Indoor, Damp		

*23W DLED Housing Only

ICED-9521S
[IC rated with outer box]



DLED-9521S
[Non-IC rated]



Ceiling Cut-out : SQ.2-7/8" (SQ.72mm)

Design Features

- Four different beam distributions available: Narrow Spot, Narrow, Medium and Wide
- Designed for ceiling thickness up to 1-1/4".
- All results are according to IESNA LM-79-2008 : Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The US. Department of Energy (DOE) verifies product test data and results. LED chips provided with fixtures are in compliance with LM80.
- Listing: CSA us

Trims : Various trims for straight down lights (-ST), Adjustable (-AJ)

TML-112S-ST

- Straight fixed lamp
- Included "Solite" soft focus lens.

TML-112S-AJ

- Adjustable 0~30° tilt

ICED-9521S, DLED-9521S (Special Order Fixtures)

Universal 120-277VAC LED, 2" IC and Non-IC type
Square Architectural Recessed Lights

Ordering Information

Housing _____

ICED-9521S = 2" Square IC Housing
DLED-9521S = 2" Square Non-IC Housing

LED Trim / Module _____

TML-112S-ST = Straight
TML-112S-AJ = Adjustable

-Watts _____

-10 = 10W
-15 = 15W
-23 = 23W

-CRI _____

-8 = 80
-9 = 90

Color Temp.** _____

27 = 2700K
30 = 3000K
35 = 3500K
40 = 4000K

Driver* _____

UZTD = 120~277V, with Triac,
ELV & 0-10V Dimming

**Option : Emergency (Non-IC only)*
-EM = Emergency Battery Backup _____

NOTE: Requires access above the ceiling or install an access panel to service emergency battery and LED driver.

-Finish _____

Reflector:
-WH = White
-SI = Silver
-BRZ = Bronze
-BK = Black

Trim: _____
-WH = White
-SI = Silver
-BRZ = Bronze
-BK = Black

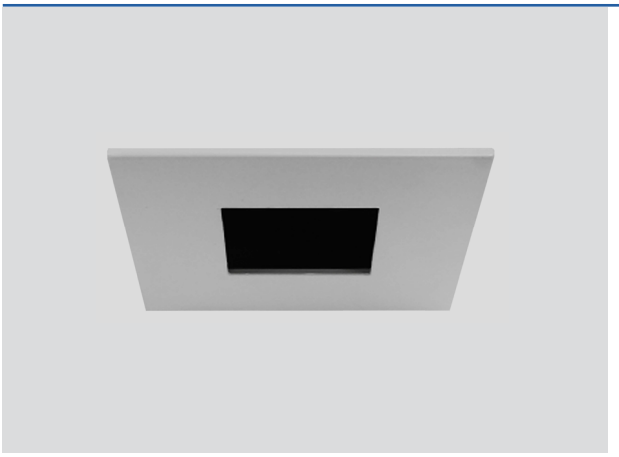
-Beam Angle _____

-NS = Narrow Spot
-N = Narrow
-M = Medium
-W = Wide

** Consult factory for other Color Temperatures and Finishes

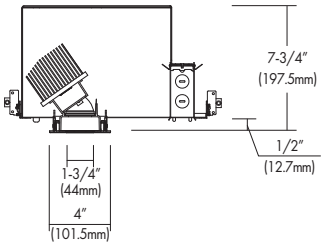
ICED95331S, DLED95331S

3.6" X 3.6" IC and Non-IC Square Architectural LED Series Downlight

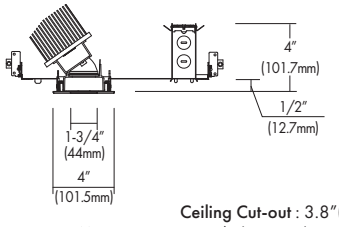


Test Specification [ICED95331S-xx UZTD TML252ST-xx-830N-WHWH]			
LED Quantity	1EA (COB)		
Input Voltage	120V or 277V		
Wattage (+/-5%)	**10W**	**14W**	**23W**
Lumen (+/-5%)	725	950	1,525
Efficacy (LPW) (+/-5%)	72	68	66
Luminaire Beam	24˚	24˚	25˚
CCT (Color +/-5%)	2700K, 3000K, 3500K, 4000K		
CRI (Typical)	80, 90		
Dimming	0~10V, ELV & TRIAC		
LED Module	5 yr or 50K hr		
Environment	Damp Location & *optional Wet Location		

ICED95331S
[IC Rated Housing]



DLED95331S
[Non-IC Rated Housing]



Ceiling Cut-out : 3.8"(96.5mm)SQ
Mounting Frame : 12-1/8"(307.3mm) x 7-5/8"(193.8mm)

Design Features

- Light-weight aluminum housing, adjusts for ceilings up to 1-1/4" thick.
- Driver is remotely installed onto the J-box to isolate it from the LED module.
- Dimming capability is standard with 0-10V dimmer switches.
- Multiple reflector distribution patterns available: pinhole trim with Narrow Spot (NS), Narrow beam (N), Medium beam (M), and Wide beam (W).
- Precision diecast aluminum trim frame painted and available with Trim or Trimless design with Drywall Mud Frame kit.
- Cold forged aluminum heat sink is painted for efficient heat dissipation.
- The ICED95331S luminaire is listed as Type IC and is suitable for direct contact with insulation.
- Certified to IESNA LM-79: Electrical and Photometric Testing for Solid State Lighting. LED chip set is LM80 compliant.
- cETLus Listed.

Trims : Various finishes available for straight (ST), Adjustable (AJ) and Shower Lens (SH) down lights. Optional Trimless Kits also available.

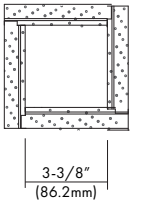
TML252ST
- Straight fixed lamp

TML252AJ
- Adjustable 0~30˚ tilt.

TML256SH
- Fixed lamp position
- Lens trim for shower or wet location option

Option

[Trimless Drywall Mud Frame]



Trimless Ceiling Cut-out : 4-1/4"(107mm)SQ

ICED95331S, DLED95331S

3.6" X 3.6" IC and Non-IC Square Architectural LED Series Downlight

Ordering Information

Housing _____

IC Housing:
ICED95331S = Trim
ICEDL95331S = Trimless

Non-IC Housing:
DLED95331S = Trim
DLEDL95331S = Trimless

-Watts _____

-10 = 10W
-14 = 14W
-23 = 23W

Driver* _____

ZTD = 0-10, ELV & Triac dimmable
(Dimming range varies 1~10%)

**Option: Emergency (Non-IC only)*
-EM = Emergency Battery Backup _____

Voltage* _____

**IC Only*
U = 120~277V

**Non-IC Only*
1 = 120V
2 = 277V

Trim/LED Kit* _____

TML252ST = Straight
TML252AJ = Adjustable
TML256SH = Shower Lens

**-Option: Sealed Lens*
WRL = Wet Location _____

-Wattage _____

-10 = 10W
-14 = 14W
-23 = 23W

-CRI _____

-8 = 80
-9 = 90

Color Temp.** _____

27 = 2700K
30 = 3000K
35 = 3500K
40 = 4000K

Beam Angle _____

Upper Reflector:
NS = Narrow Spot 15˚
N = Narrow 24˚
M = Medium 38˚
W = Wide 60˚

-Finishes** _____

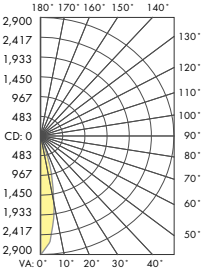
-WH = White
-BK = Black

** Consult factory for other Color Temperatures and Finishes

PHOTOMETRIC REPORT*

* Contact Factory for IES File

Polar Candela Distribution



Illuminance at a Distance

	Center Beam FC	Beam Width
2.0ft	723.8 fc	0.8 ft
4.0ft	181.0 fc	1.7 ft
6.0ft	80.4 fc	2.5 ft
8.0ft	45.2 fc	3.4 ft
10.0ft	29.0 fc	4.2 ft
12.0ft	20.1 fc	5.1 ft

Beam Spread: 24˚

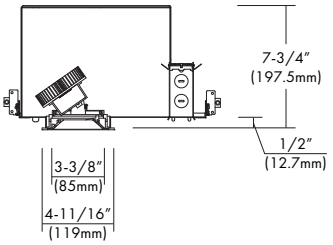
[TML252ST-10-830N]

ICED9541S, DLED9541S

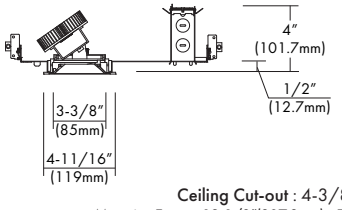
4" X 4" IC and Non-IC Square Architectural LED Series Downlight

Test Specification [ICED9541S-xx UZTD TML352ST-xx-830M-WHWH]				
LED Quantity	1EA (COB)			
Input Voltage	120V or 277V			
Wattage (+/-5%)	10W	14W	23W	30W
Lumen (+/-5%)	850	1,070	1,600	2,630
Efficacy (LPW) (+/-5%)	85	76.4	69.6	87.7
Luminaire Beam	36°	36°	42°	48°
CCT (Color +/-5%)	2700K, 3000K, 3500K, 4000K			
CRI (Typical)	80, 90			
Dimming	0~10V, ELV & TRIAC Optional Lutron Drivers			
LED Module	5 yr or 50K hr			
Environment	Damp Location & *optional Wet Location			

ICED9541S
[IC Rated Housing]



DLED9541S
[Non-IC Rated Housing]

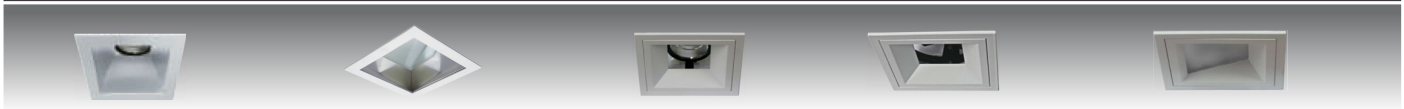


Ceiling Cut-out : 4-3/8"(111mm)SQ
Mounting Frame : 12-1/8"(307.3mm) x 7-5/8"(193.8mm)

Design Features

- Light-weight aluminum housing, adjusts for ceilings up to 1-1/4" thick.
- Driver is remotely installed onto the J-box to isolate it from the LED module.
- Dimming capability is standard with 0-10V dimmer switches.
- Optional Lutron Hi-lume A-Series LED drivers and EcoSystem 5-Series LED drivers are available. Lutron drivers provide flicker-free, smooth, continuous dimming down to 1% for Hi-lume and 5% for EcoSystem. (Contact factory for dimming system requirements)
- Hanger bars and multi-channel brackets are pre- installed.
- Multiple reflector distribution patterns available: pinhole trim with Narrow Spot (NS), Narrow beam (N), Medium beam (M), and Wide beam (W).
- Precision diecast aluminum trim frame painted and available with Trim or Trimless design with Drywall Mud Frame kit.
- Cold forged aluminum heat sink is painted for efficient heat dissipation.
- The ICED9541S luminaire is listed as Type IC and is suitable for direct contact with insulation.
- Certified to IESNA LM-79: Electrical and Photometric Testing for Solid State Lighting. LED chip set is LM80 compliant.
- cETLus Listed.

Trims : Various finishes available for straight (ST), Adjustable (AJ) and wall wash (WW) down lights. Optional Trimless Kits also available.



TML353HC
- Haze Clear Deep Reflector

TML353WWHC
- Haze Clear Lens Wall Wash Reflector

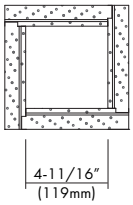
TML352ST
- Straight fixed lamp

TML352AJ
- Adjustable 0~30° tilt.

TML356WW
- Fixed lamp position
- Lens trim for wet location
- Wall Wash (TML-356-WW only)

Option

[Trimless Drywall Mud Frame]



Trimless Ceiling Cut-out : 4-15/16"(125mm)SQ

ICED9541S, DLED9541S

4" X 4" IC and Non-IC Square Architectural LED Series Downlight

Ordering Information

Housing _____

IC Housing:
ICED9541S = Trim
ICEDL9541S = Trimless

Non-IC Housing:
DLED9541S = Trim
DLEDL9541S = Trimless

-Watts _____

-10 = 10W
-14 = 14W
-23 = 23W
-30 = 30W

Driver* _____

ZTD = 0-10, ELV & Triac dimmable
(Dimming range varies 1~10%)
L1D = Lutron Hi-lume 1% dimming
L5D = Lutron EcoSystem 5% dimming
LTE = Lutron Hi-lume 1% 2-Wire dimming

**Option: Emergency (Non-IC only)*
-EM = Emergency Battery Backup _____

Voltage* _____

**IC Only*
U = 120~277V

**Non-IC Only*
1 = 120V
2 = 277V

Trim/LED Kit* _____

TML353HC = Straight
TML353WWHC = Wall Wash
TML352ST = Straight
TML352AJ = Adjustable
TML356WW = Wall Wash

**-Option: Sealed Lens*
WRL = Wet Location _____

-Wattage _____

-10 = 10W
-14 = 14W
-23 = 23W
-30 = 30W

-CRI _____

-8 = 80
-9 = 90

Color Temp.** _____

27 = 2700K
30 = 3000K
35 = 3500K
40 = 4000K

Beam Angle _____

Upper Reflector:
NS = Narrow Spot 15˚
N = Narrow 24˚
M = Medium 38˚
W = Wide 60˚

-Finishes** _____

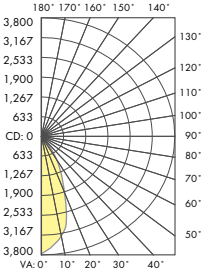
-WH = White
-BK = Black

** Consult factory for other Color Temperatures and Finishes

PHOTOMETRIC REPORT*

* Contact Factory for IES File

Polar Candela Distribution



Illuminance at a Distance

	Center Beam FC	Beam Width
2.0ft	942.8 fc	1.8 ft
4.0ft	235.7 fc	3.6 ft
6.0ft	104.8 fc	5.3 ft
8.0ft	58.9 fc	7.1 ft
10.0ft	37.7 fc	8.9 ft
12.0ft	26.2 fc	10.7 ft

Beam Spread: 48˚

[TML352ST-30-830M]

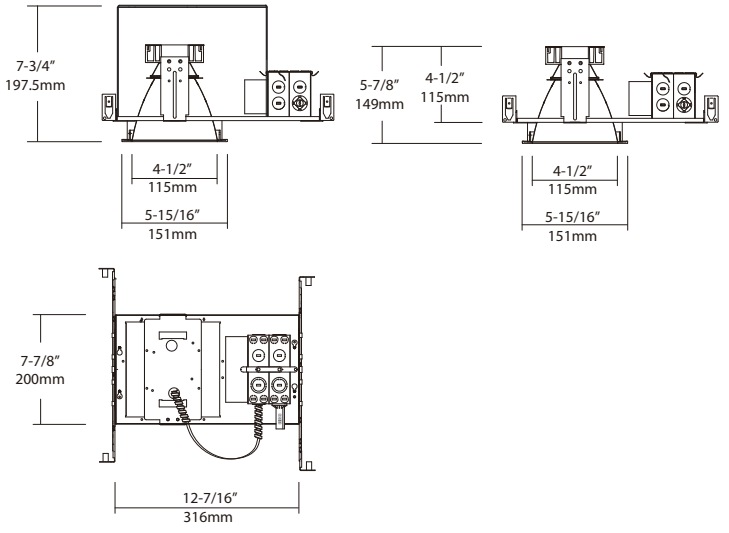
ICED466S, DLED466S

LED 4.5" IC and Non-IC, Square Architectural Downlight

Test Specification			
LED Quantity	1EA (COB)		
Input Voltage	120-277 VAC		
Wattage (+/-5%)	**14W**	**23W**	**30W**
Lumen (+/-5%)	941	1,515	2,014
Efficacy (LPW) (+/-5%)	67.2	65.9	67.1
Luminaire Beam	54˚	54˚	54˚
CCT (Color +/-5%)	2700K, 3000K, 3500K, 4000K		
CRI (Typical)	80, 90		
Dimming	0~10V, ELV & TRIAC Optional Lutron Drivers		
LED Module	5 yr or 50K hr		
Environment	Damp Location & *optional Wet Location		

ICED466S
[IC Rated Housing]

DLED466S
[Non-IC Rated Housing]

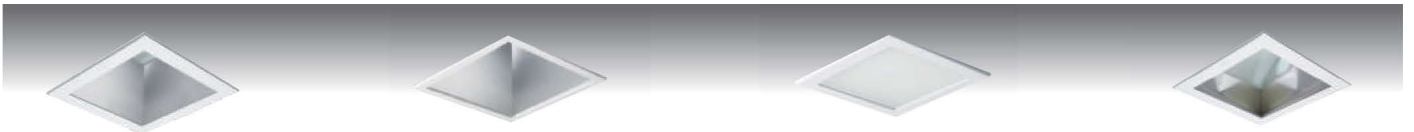


Ceiling Cut-out : 5-1/2" x 5-1/2" (140x140mm)

Design Features

- 20 gauge 4.5" x 4.5" square aperture housing adjusts ceilings up to 1-1/4" thick.
- Semi-matte diffuse lower reflectors under the upper reflector.
- 60˚ cut-055 to light source.
- Multiple Trim options available.
- Light engine and driver can be replaceable through aperture below ceiling.
- Universal, 120~277V input, high efficacy drivers with dimming capability by ① a Triac 120V low voltage electronic dimmer switches or ② 0-10V, Triac & ELV dimmer switches.
- Provided listed j-box and adjustable height and multiple channel brackets.
- Optional Lutron Hi-lume A-Series, LED drivers and EcoSystem 5-Series LED drivers are available. Lutron drivers provide flicker-free, smooth, continuous dimming down to 1% for Hi-lume and 5% for EcoSystem. (Contact factory for dimming system requirements)

Trims



QT522
Haze Clear Square Reflector with Regressed Frosted Lens

QT529
Haze Clear Square Reflector

QT535R
Haze Clear Square Reflector with Flat Frosted Lens

QT538
Haze Clear Square Wall Wash Reflector with Linear Spread Lens

ICED466S, DLED466S

4.5" Square Architectural Downlight

ENERGY STAR

Ordering Information

Housing _____

ICED466S = IC Housing
DLED466S = Non-IC Housing

-Watts _____

-14 = 14W
-23 = 23W
-30 = 30W

-CRI _____

-8 = 80
-9 = 90

Color Temp.** _____

27 = 2700K
30 = 3000K
35 = 3500K
40 = 4000K

Driver* _____

UZTD = 0-10V, ELV & Triac dimmable
(Dimming range varies 1~10%)
L1D = Lutron Hi-lume 1% dimming
L5D = Lutron EcoSystem 5% dimming
LTE = Lutron Hi-lume 1% 2-Wire dimming

**Option: Emergency*
-EM = Emergency Battery Backup with Remote Test Switch _____

Trim/LED Kit* _____

QT522
QT529
QT535R
QT538

-Finishes**

Reflector:
-HC = Haze Clear _____

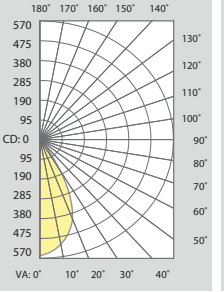
Trim:
-WH = White _____

** Consult factory for other Color Temperatures and Finishes

PHOTOMETRIC REPORT*

* Contact Factory for IES File

Polar Candela Distribution



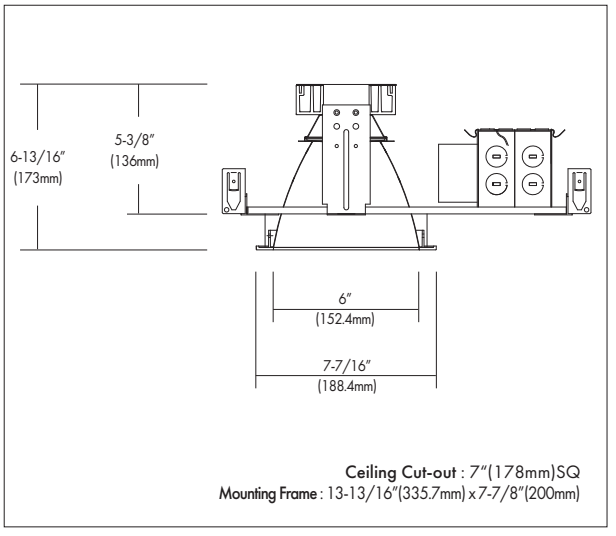
Illuminance at a Distance

	Center Beam FC	Beam Width
2.0ft	656.4 fc	2.0 ft
4.0ft	164.1 fc	4.0 ft
6.0ft	72.9 fc	6.0 ft
8.0ft	41.0 fc	8.0 ft
10.0ft	26.3 fc	10.0 ft
12.0ft	18.2 fc	12.0 ft

Beam Spread: 54°

DLED666S

120V-277VAC LED 6", Non-IC, Square Architectural Downlights



Test Specification [DLED666S-xx UZTD TML614ST-xx-830-WHWH]				
LED Quantity	1EA (COB)			
Input Voltage	120-277 VAC			
Wattage (+/-5%)	**14W**	**23W**	**30W**	**45W**
Lumen (+/-5%)	950	1,790	2,235	3,220
Efficacy (LPW) (+/-5%)	67.9	77.8	74.5	71.5
Luminaire Beam	43˚	43˚	43˚	43˚
CCT (Color +/-5%)	2700K, 3000K, 3500K, 4000K			
CRI (Typical)	80, 90			
Dimming	0~10V, ELV & TRIAC Optional Lutron Drivers			
LED Module	5 yr or 50K hr			
Environment	Damp Location & *optional Wet Location			

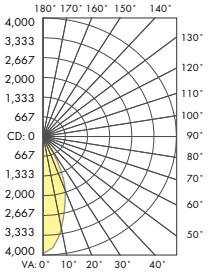
Design Features

- 20 gauge galvanized steel 6" X 6" square aperture housing adjusts for ceiling up to 1-1/4" thick.
- Semi-matte diffuse lower reflectors under the upper reflector.
- 60˚ cutoff viewing angle of light source.
- Trims for straight downlight with flood lens.
- Light engine and driver can be replaceable through aperture below ceiling.
- Dimmable driver for 0~10V dimmer is standard, (consult factory on other options for Dali, PMW etc).
- Optional Lutron Hi-lume A-Series, LED drivers and EcoSystem 5-Series LED drivers are available. Lutron drivers provide flicker-free, smooth, continuous dimming down to 1% for Hi-lume and 5% for EcoSystem. (Contact factory for dimming system requirements)
- Provided listed j-box and adjustable height and multiple channel brackets.
- cETLus Listed.

PHOTOMETRIC REPORT*

* Contact Factory for IES File

Polar Candela Distribution



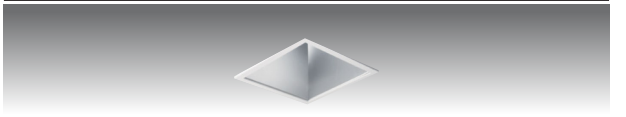
Illuminance at a Distance

	Center Beam FC	Beam Width
2.0ft	992.7 fc	1.6 ft
4.0ft	248.2 fc	3.2 ft
6.0ft	110.3 fc	4.8 ft
8.0ft	62.0 fc	6.4 ft
10.0ft	39.7 fc	7.9 ft
12.0ft	27.6 fc	9.5 ft

Beam Spread: 43˚

[TML614SST-30-830]

Trims : Various finishes available for straight (ST) down lights.



TML614SST
Upper Straight down reflector

DLED666S

6" Non-IC Square Architectural LED Downlights

ENERGY STAR

Ordering Information

Housing _____

DLED666S = 6" Architectural Downlight

-Watts _____

-14 = 14W
-23 = 23W
-30 = 30W
-45 = 45W

-CRI _____

-8 = 80
-9 = 90

Color Temp.** _____

27 = 2700K
30 = 3000K
35 = 3500K
40 = 4000K

Driver* _____

UZTD = 0-10V, ELV & Triac dimmable (Dimming range varies 1~10%)
L1D = Lutron Hi-lume 1% dimming
L5D = Lutron EcoSystem 5% dimming
LTE = Lutron Hi-lume 1% 2-Wire dimming

**Option: Emergency*
-EM = Emergency Battery Backup _____

Trim/LED Kit* _____

TML614SST = Straight

**Option: Sealed Lens*
-WRL = Wet Location _____

-Finishes** _____

Reflector:
-WH = White
-HC = Haze Clear
-BK = Black

Trim: _____
-WH = White
-BK = Black

** Consult factory for other Color Temperatures and Finishes