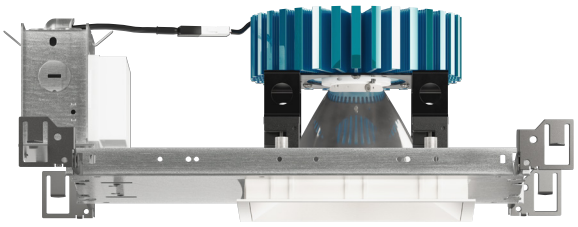
alphabet

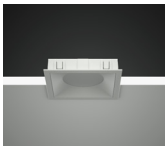
PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

NU6

6" Square High Performance Downlight Standard White

NSF · AT airtight · DF dead-front · wet rated





Trim

20° -75° BEAM (Note: Specifications are subject to change without notice)		
22mm COB PERFORMANCE DATA		
LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	SYSTEM WATTAGE
50LM	4960LM @30K/90CRI	39W
60LM	5990LM @30K/90CRI	49W
70LM	7010LM @30K/90CRI	58W
80LM	7990LM @30K/90CRI	69W
90LM	8990LM @30K/90CRI	84W
Notes	Delivered lumens based on 20D optic with no lens, (see page 2)	

FEATURES

- Up to 9000LM delivered
- Thermally optimized for sustained efficacy and performance
- UGR <17
- 20° - 75° optical beam control
- Multiple mounting, glare control options, trims, and finishes available

DIMMING AND CONTROLS

- eldoLED flicker free 0-10V dimming to 0% and 1%
- eldoLED flicker free DALI dimming to 0% and 1%
- DMX dim to 0.1%
- Casambi dimming to 1%

CONSTRUCTION

- Lexan™ (PC) highly resistant to impact and heat (240°F).
- Optimal material for wireless signal connectivity.
- Shatter proof acrylic bezel lens
- Electrocoated 16-gauge cold-rolled steel construction
- Accommodates ceiling thickness from 1/8" to 1-5/8"

LED

- 90 CRI: SDCM = 2-step MacAdam Ellipse, Lumen Maintenance: L_{70} > 66,000 hrs

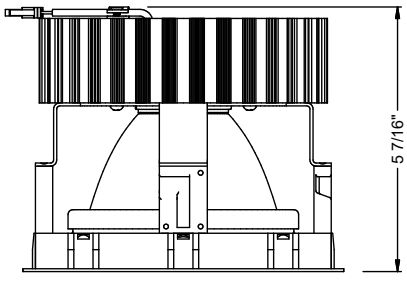
LISTING

- ULus Listed to UL1598 & UL2108; cUL Listed to CSA C22.2 #250.0
- IP65 with lens - Suitable for wet locations with lens - Suitable for damp locations without lens
- NSF/ANSI-2 with lens (Non-Food and Splash Zones)
- **Declare.** - LBC Red List Approved
- 5 Year Limited warranty

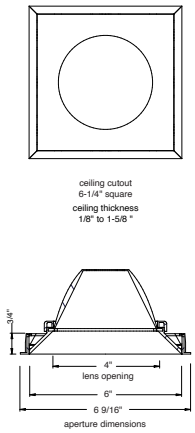
ELECTRICAL

- 120V-277V, 120 only Triac / ELV
- 2kV driver input surge protection
- Remote emergency test switch
- 7W, 10W (T20 CEC) and 12W EM 90min battery
- Max. ambient installation temperature 95°F (35°C)
- Low Voltage Luminaire option, see page 7.

FIXTURE HEIGHT



TRIMMED



alphabet

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

ORDERING CODE

SERIES	**NU6**	NU6
TYPE	**QDX**	square downlight high lumen
LED	**SW**	standard white
DELIVERED LUMENS	**50LM**	4960 lm
	60LM	5990 lm
	70LM	7010 lm
	80LM	7990 lm
	90LM[1]	8990 lm
	Standard Configuration: 3000K 80CRI 20D **NL**	
	Calculated Delivered Lumens = [Delivered Lumen Value] x [CCT Multiplier] x [Reflector Multiplier]	
CCT	**27K**	2700K
	30K	3000K
	35K	3500K
	40K	4000K

CCT	2700K	3000K	3500K	4000K
CCT MULTIPLIER FOR LUMEN OUTPUT	90+	90+	90+	90+
EML RATIO	0.96	1	1.01	1.02

CRI	**90**	90 CRI	
OPTIC & LM MULTIPLIER SEE PAGE 3	**20D**	20 degrees	(1.00)
	25D	25 degrees	(0.99)
	40D	40 degrees	(0.98)
	65D	65 degrees	(0.98)
	75D	75 degrees	(0.94)
ACCESSORY SEE PAGE 3	**HCL**[2]	honeycomb louver	(0.72)
BEZEL LENS SEE PAGE 3	**NL**[3]	no lens	
	CL	clear lens	(0.96)
	DL	diffused lens	
	HET	high efficiency textured lens, similar to Solite™	
	SBL	smoothing beam lens	
	E[4]	elliptical lens, 30° X 60°	
TRIM COLOR SEE PAGE 3	**BK**	black	
	WH	white	
	MC	matte chrome	
	BZ	bronze	
	CC[5]	custom color, consult factory for details	
	Antimicrobial finish, add **AM** to black, white or matte chrome i.e. BKAM.		
BEZEL COLOR SEE PAGE 3	**BK**	black	(0.98)
	WH	white	(1.00)
	MC	matte chrome	(0.99)
	BZ	bronze	(0.98)
	CC[5]	custom color, consult factory for details	
	Antimicrobial finish, add **AM** to black, white or matte chrome i.e. BKAM.		

ORDERING CODE

MOUNTING OPTIONS SEE PAGE 6	**NC**	new construction plate
	RET	retrofit, no ceiling plate
VOLTAGE	**UNV**	120V-277V
	LVL[6]	low voltage luminaire
DIMMING	**DIM10**	eldoLED flicker free 0-10V dim to 1%
	DIM10Z	eldoLED flicker free 0-10V dim 0.1%
	DALI	eldoLED flicker free DALI-2 dim to 1%
	DALIZ	eldoLED flicker free DALI-2 dim to 0.1%
	DMX-RJ45	DMX control dimming to 0.1% with RJ45 connection
	DMX-WL	DMX-512/RDM dim to 0% with lead wire input
	DMX-XLR	DMX-512/RDM dim to 0% with XLR input
	CAS	Casambi control with flicker free 1% dimming
	ND	No Driver Included. Customer to supply PoE system components or order remote driver separately. Refer to PoE/Remote Driver reference sheet for additional details.
ELECTRICAL OPTIONS	**EM7**	remote emergency battery, 90 min at 7W
	EM12	remote emergency battery, 90 min at 12W
	EM10CA20	remote emergency battery, 90 min at 10W

ADDITIONAL MOUNTING INFO

New Construction Bar Hangers (included)	Mounting Length: 14-3/4" to 26"
Extension Kit p/n: K20266 (ordered separately, 1 per fixture)	*Extends a pair of Bar Hangers* Total Mounting Length: 29" to 48"

YOUR COMPLETED ORDERING CODE

Follow the steps to specify your fixture, example:

NU6 - QDX - SW - 90LM - 30K - 90 - 40D - SBL - WH - WH - NC - UNV - DIM10 - EM7

NOTES

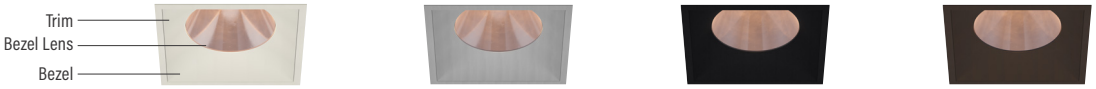
1. Lens options not available in 90LM.
2. HCL not available with lens.
3. NL option does not meet requirement for AT/DF/WET/NSF listing.
4. Actual beam distributions for optic (20D= 37° x 65°, 25D=42° x 70°, 40D= 49° x 76°, 65D= 67° x 93°, 75D= 85° x 100°).
5. Custom set up fee plus minimum quantity required per color.
6. Must select ND dimming code, for remote driver or POE specification. See page 7.

* EldoLED uses logarithmic dimming curve as standard. For linear add **LIN** after dimming code, i.e. **DIM10LIN**.
* DMX uses logarithmic dimming curve as standard. For linear or square add **LIN** or **SQU** after dimming code, i.e. **DMXSQU-RJ45**.
* Ambient temperature = 40C max. For higher temperatures consult factory.

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

TRIM OPTIONS

TRIM/BEZEL COLORS

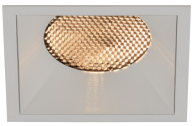


WH MC BK BZ

OPTICAL OPTIONS

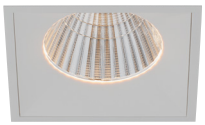
- UGR calculation based on CIE 117-1995; room size: 4H X 8H, reflectance: 70/50/20;
- UGR calculation based on 60LM fixtures, unless otherwise noted.

HCL
Honeycomb Louver



OPTIC	BEAM ANGLE	UGR
20D	19	13.3
25D	23	13.5
40D	33	14.1
65D	58	17.6
75D	65	19

NL
No Lens



OPTIC	BEAM ANGLE	UGR
20D	20	16.4
25D	25	16.6
40D	37	17
65D	66	20
75D	76	24.5

CL
Clear Lens



OPTIC	BEAM ANGLE	UGR
20D	20	16.3
25D	25	16.4
40D	37	16.9
65D	67	20.1
75D	77	24.5

DL
Diffused Lens



OPTIC	BEAM ANGLE	UGR
20D	37	20.1
25D	42	20.5
40D	50	21.3
65D	68	23.4
75D	82	25.6

HET
High Efficiency Textured Lens



OPTIC	BEAM ANGLE	UGR
20D	23	16.7
25D	29	16.9
40D	38	17.8
65D	64	20.8
75D	76	24.5

SBL
Smoothing Beam Lens



OPTIC	BEAM ANGLE	UGR
20D	21	16.3
25D	27	16.5
40D	37	17.1
65D	66	20.4
75D	76	24.4

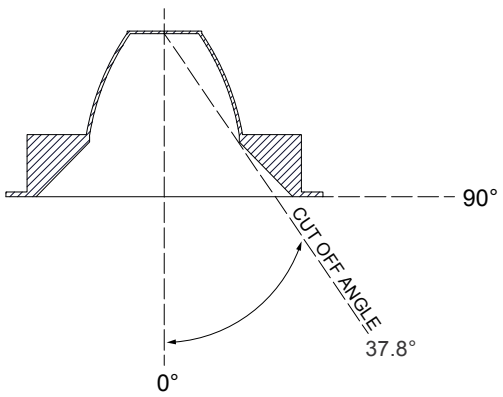
GLARE CONTROL

CUT-OFF ANGLE

Visual comfort is achieved with a lower cut-off angle due to improved glare control. The smaller the cut-off angle, the easier it is on the eye.

Alphabet downlights have been thoughtfully engineered to eliminate glare while still delivering functional illumination.

- Cutoff angle of NL and CL is 37.8 degrees;

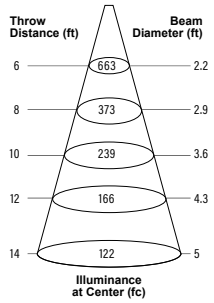


PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

PHOTOMETRIC DATA

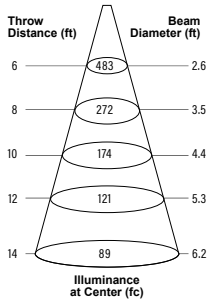
50LM CCT MULTIPLIERS	
	90CRI
2700K	0.96
3000K	1
3500K	1.01
4000K	1.02
FC Formula = CBCP / Distance^2	

20D 20° NO LENS



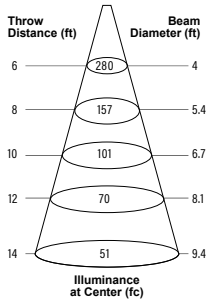
WATTS: 39	LPW: 127.3
LUMENS: 4963	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	23768
5	23183
15	4472
25	1886
35	1264
45	19

25D 25° NO LENS



WATTS: 39	LPW: 127.2
LUMENS: 4960	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	17400
5	15140
15	6510
25	2148
35	1289
45	3

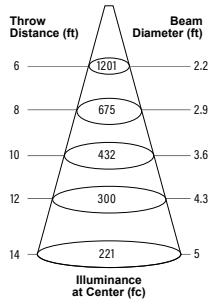
40D 37° NO LENS



WATTS: 39	LPW: 126.2
LUMENS: 4923	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	10060
5	9829
15	6596
25	2867
35	1340
45	11

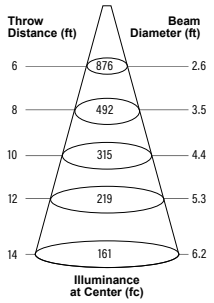
90LM CCT MULTIPLIERS	
	90CRI
2700K	0.96
3000K	1
3500K	1.01
4000K	1.02
FC Formula = CBCP / Distance^2	

20D 20° NO LENS



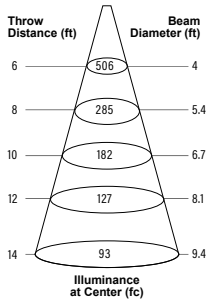
WATTS: 84	LPW: 107
LUMENS: 8991	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	43056
5	41995
15	8101
25	3417
35	2290
45	35

25D 25° NO LENS



WATTS: 84	LPW: 107
LUMENS: 8985	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	31520
5	27425
15	11793
25	3891
35	2334
45	6

40D 37° NO LENS



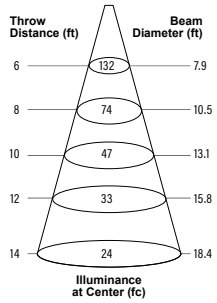
WATTS: 84	LPW: 106.2
LUMENS: 8918	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	18223
5	17805
15	11948
25	5194
35	2427
45	19

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

PHOTOMETRIC DATA

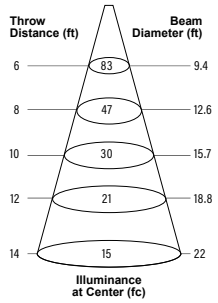
50LM CCT MULTIPLIERS	
	90CRI
2700K	0.96
3000K	1
3500K	1.01
4000K	1.02
FC Formula = CBCP / Distance^2	

65D 66° NO LENS



WATTS: 39	LPW: 123.4
LUMENS: 4814	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	4608
5	4648
15	4663
25	3628
35	1979
45	200

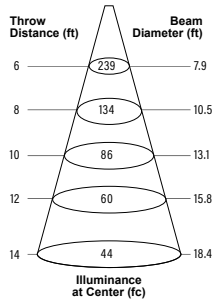
75D 76° NO LENS



WATTS: 39	LPW: 120.5
LUMENS: 4700	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	2982
5	2969
15	2861
25	2652
35	2012
45	685

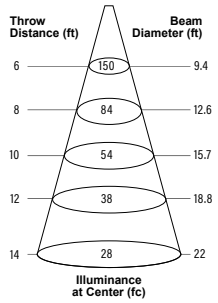
MULTIPLIER HEAD	
	90CRI
2700K	0.96
3000K	1
3500K	1.01
4000K	1.02
FC Formula = CBCP / Distance^2	

65D 66° NO LENS



WATTS: 84	LPW: 103.8
LUMENS: 8720	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	8348
5	8419
15	8447
25	6573
35	3585
45	362

75D 76° NO LENS



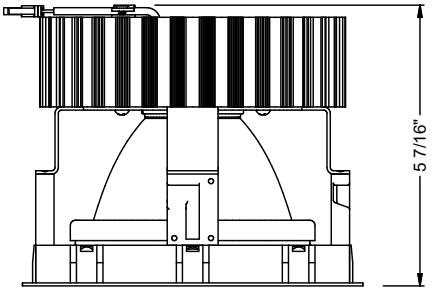
WATTS: 84	LPW: 101.4
LUMENS: 8514	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	5402
5	5378
15	5182
25	4804
35	3646
45	1241

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

MOUNTING OPTIONS

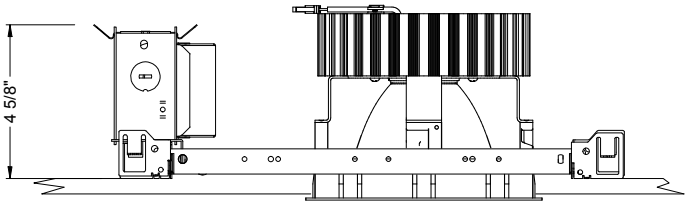
FIXTURE HEIGHT

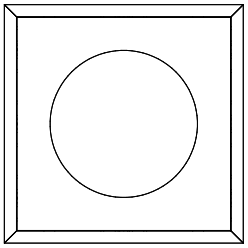
LED LIGHT ENGINE: 50LM-100LM



NC - NEW CONSTRUCTION

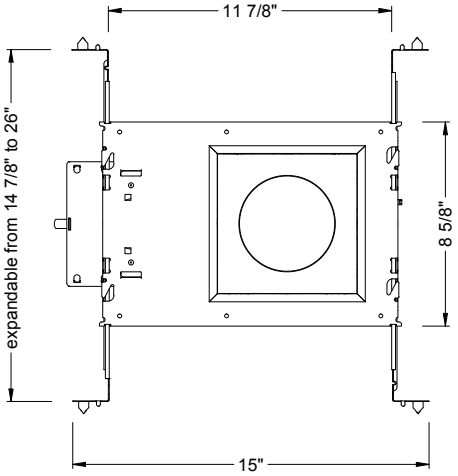
TRIM

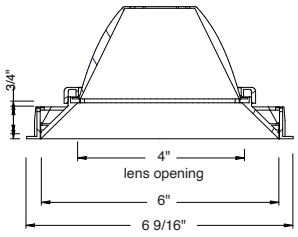




ceiling cutout
6-1/4" square

ceiling thickness
1/8" to 1-5/8 "

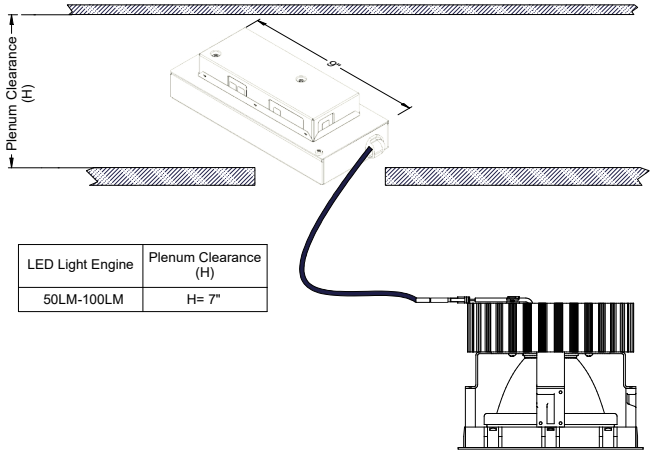




aperture dimensions

RET - RETRO

TRIM/TRIMLESS



LED Light Engine	Plenum Clearance (H)
50LM-100LM	H= 7"

RATINGS / CERTIFICATIONS	NC	RET
TYPE NON-IC	✔	✔
SUITABLE FOR AIR HANDLING PLENUMS		
REDUCED AIRFLOW (WITH LENS) ASTM E283	✔	✔

CEILING THICKNESS	
FIXTURE TYPE	MOUNTING TYPE
	NC, RET
TRIM	1/8" to 1-5/8"

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

BATTERY OPTIONS

EMERGENCY BATTERY

IOTA's ILB Battery Backups are UL Listed LED emergency drivers that allow the same LED fixture to be used for both normal and emergency operation. In the event of a power failure, the ILB switches to the emergency mode and operates the existing fixture for 90 minutes. The unit contains a battery, charger, and converter circuit in a single can. The Constant Power design of the ILB maintains the output wattage to the LED array even as the system voltage diminishes. UL 924 Listed for U.S. and Canada. UL 1310 Certified, Output Class 2 Compliant. Includes single-piece TBTS test switch and charge indicator accessory kit. For use with switched and unswitched fixtures, and includes Two-wire universal AC input. Meets or exceeds all National Electric Code and Life Safety Code Emergency Lighting Requirements. Rated for use in Plenum, Damp Location, Recessed Type IC, and Enclosed and Gasketed Luminares.

REMOTE TEST SWITCH

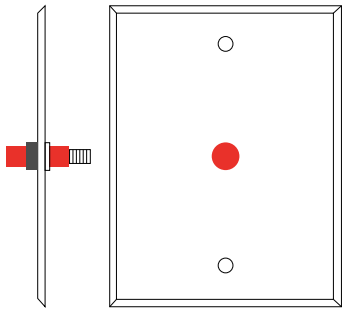
The Remote Test Switch may be mounted adjacent to the LED Fixture by others.

EMERGENCY BATTERY ACCESS

Above ceiling access is recommended for ease of service, but LED Fixture Sizes of 4" and Larger are capable of below ceiling access. IC/ICAT/CP Box and ITS option require an access panel in the ceiling (or other form of access) adjacent to the installation location of the Emergency Battery.

REMOTE LOCATION

Maximum remote mounting distance of the emergency driver shall be 50 feet. Remote location wiring provided by others. Follow all Local and National Electric/ Building Codes.

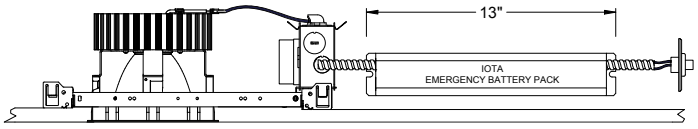


Remote Test Switch

EM MODE OUTPUT (DELIVERED LUMENS)			
LUMEN ORDERING CODE	EM7	EM10	EM12
ALL OPTIONS (50LM TO 1000LM)	900LM	1200LM	1500LM
Notes: Based on 30K, 80CRI			

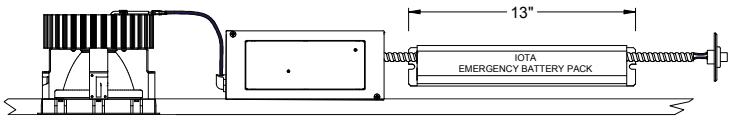
NC - NEW CONSTRUCTION

WITH EM BATTERY (REMOTE TEST SWITCH)



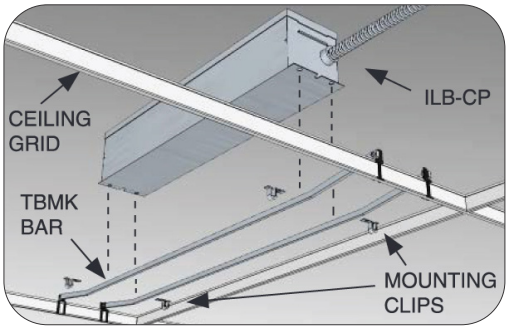
RET - RETROFIT

WITH EM BATTERY (REMOTE TEST SWITCH)



Accessory

76066 Optional T-Grid Mounting Kit[1]



1. Can be used with any of the Emergency Battery Backups. Must be ordered as a separate line item.

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

LOW VOLTAGE OPTIONS

20° -75° BEAM (Note: Specifications are subject to change without notice)			
22mm COB PERFORMANCE DATA			
LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	DRIVE CURRENT	LED WATTAGE
50LM	4960LM @30K/90CRI	950mA	39W
60LM	5990LM @30K/90CRI	1175mA	49W
70LM	7010LM @30K/90CRI	1425mA	58W
80LM	7990LM @30K/90CRI	1675mA	69W
90LM	8990LM @30K/90CRI	1950mA	84W
NOTES	Delivered lumens based on 20D optic with no lens, (see page 2)		

NOMINAL LED VOLTAGE: 36VDC

Customer to order CC Remote Driver separately or POE Node by others.

