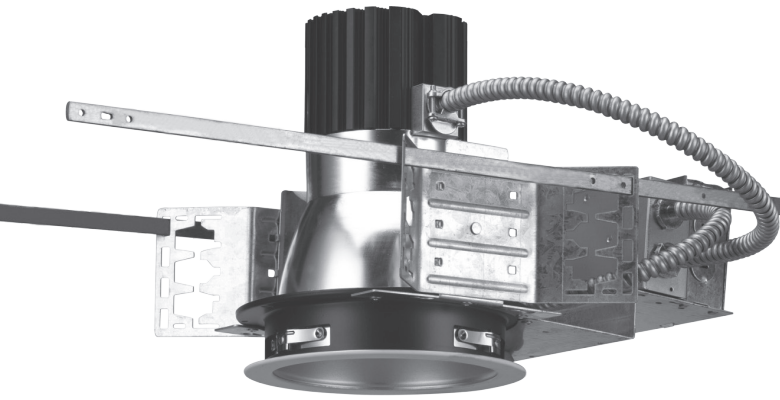


PacLights

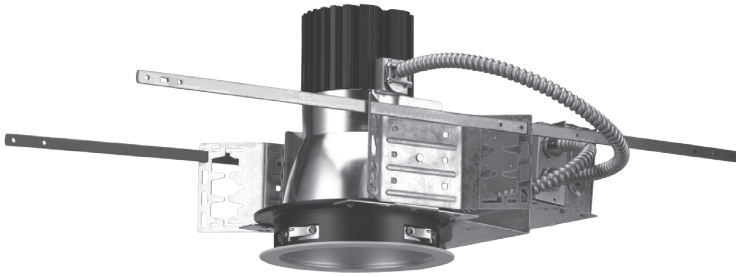
Commercial Lighting



The
FDLRTM
Series

Deep Regressed Downlights





Deep Regressed Downlights



PROJECT: _____

DATE: _____

TYPE: _____

PREPARED BY: _____



KEY FEATURES

- Deep Regressed, minimize direct glare
- Retrofit or New Construction. 6", 8" and 10" Trim options
- Serviceable external LED driver w/ Quick Disconnect
- Color & Power Selectable on selected models
- Emergency Battery Backup options

TECHNICAL SPECIFICATIONS

COMPLIANCE

UL Listed

UL 1598 Suitable for damp locations
Type IC: FDLR-40/27/18 models
Type Non-IC: FDLR-80/65/50 models

IESNA LM79 & LM-80 Testing

PacLights LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

LED CHARACTERISTICS

LEDs

Long-life, high-efficacy, surface-mount LEDs

Correlated Color Temperature

3000K, 3500K and 4000K. Selectable with a dip switch on FDLR-40/27/18 models

Lifespan

60,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations

Color Rendering Index

>82

Color Uniformity

PacLights' range of Correlated Color Temperature follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017

OTHER

5-Year Limited Warranty**

The PacLights 5-year, limited warranty covers light output, driver performance and paint finish.

**PacLights's warranty is subject to all terms and conditions found at paclights.com/warranty

CONSTRUCTION

Ambient Temperature

Suitable for up to 50° C (122° F) ambient temperature

Cold Weather Starting

The minimum starting temperature is -4 F°/-20° C

Housing

Aluminum heatsink.

Mounting Methods

- Retrofit with spring steel friction clips on existing open frame (standard)
- New construction frame (optional)

Green Technology

Mercury and UV free, and RoHS compliant. Polyester powder coat finish formulated without the use of VOC or toxic heavy metals.

Diffuser & Reflector

PMMA frosted diffuser, spun aluminum reflector

ELECTRICAL

Drivers

Class 2. Input Voltage: 120-277V, 50-60 Hz

Power Factor : > 0.95, THD< 20%. 0-10V continuous dimming, can be dim to off

Serviceable External Driver w/ Quick Disconnect

The light engine is linked to an external replaceable LED driver (UL Class 2) through a quick disconnect, with the driver box featuring a 1/2" conduit whip for streamlined connection to the power supply.

Wattage / Input Voltage/ Input Current

Wattage/power selectable with a dip switch

Models	MAX Watt.	Watt. Selectable Levels	120v	208v	240v	277v
FDLR-40/27/18	40w	40w-27w-18w	0.37A	0.21A	0.19A	0.16A
FDLR-80/65/50	80w	80w-65w-50w	0.74A	0.43A	0.37A	0.32A

ORDERING INFORMATION

FDLR™

FAMILY		LIGHT ENGINE		CCT		TRIM		EMERGENCY BACKUP		MOUNTS
FDLR	—		—		—		—		—	

Create an ordering number by populating it with the CODE(s) listed in the tables below, following the format shown above.

EXAMPLE: FDLR - 40/27/18 - 8CT - 6TRWH

EXAMPLE: FDLR - 65 - 3500 - 8TRWH - EM1000 - NCF

EXAMPLE: FDLR - 80/65/50 - 4000 - 10TRWH - NCF

The PART#, if shown in the tables below, can be ordered separately from the FDLR.

LIGHT ENGINE

* Must select one. See page 4.

PART# FDLR-40/27/18		PART# FDLR-80/65/50	
CODE	WATTAGE	CODE	WATTAGE
18	18w	50	50w
27	27w	65	65w
40	40w	80	80w
40/27/18	40/27/18w Selectable	80/65/50	80/65/50w Selectable

CCT

* Must select one

CODE	CRI	CCT	LIGHT ENGINE COMPATIBILITY
8CT	> 82	3000K/3500K/4000K Selectable	All Except: FDLR-80/65/50
3000		3000K	All Light Engines
3500		3500K	All Light Engines
4000		4000K	All Light Engines

TRIM

* Must select one. See page 5.

CODE	PART#	SIZE	LIGHT ENGINE COMPATIBILITY	SHAPE	REFLECTOR	RING	TYPE	INSTALL
6TRWH	AC-DLR-6TRWH	6"	All Light Engines	Round	Haze	White	Deep Regressed	FIELD
8TRWH	AC-DLR-8TRWH	8"	All Light Engines					
10TRWH	AC-DLR-10TRWH	10"	All Light Engines					

EMERGENCY BATTERY BACKUP

* Optional. Leave blank, or select one

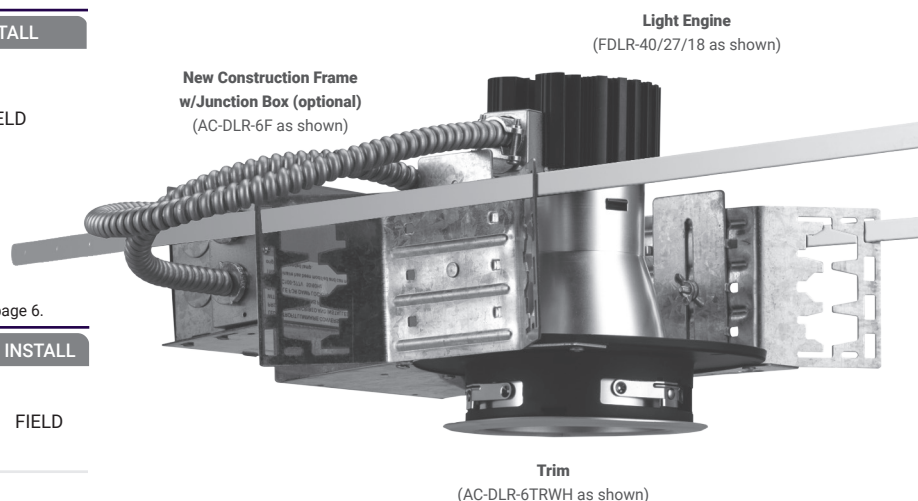
CODE	PART#	WATT	EMERGENCY LUMEN	INSTALL
EM700	EMH-8	8w	700 Lumen	FIELD
EM1300	EMH-15	15w	1,300 Lumen	
EM1700	EMH-20	20w	1,700 Lumen	
EM2200	EMH-25	25w	2,200 Lumen	

CA CEC TITLE 20 MODEL# BLD-HMXXD-YYY EMERGENCY RUNTIME >90 mins
The emergency lumen output is limited by the lumen capacity of the light engine.

MOUNTS

* Optional. Leave blank for retrofit w/ spring clips, or select one. See page 6.

CODE	PART#	TYPE	COMPATIBILITY	INSTALL
CLP	AC-DLR-6C	Direct Mount Tension Clips	6" Trim	FIELD
	AC-DLR-8C		8" Trim	
	AC-DLR-10C		10" Trim	
NCF	AC-DLR-6F	New Construction Frame with Junction Box	6" Trim	FIELD
	AC-DLR-8F		8" Trim	
	AC-DLR-10F		10" Trim	



LIGHT ENGINE & PERFORMANCE

Engine	Lumen Package	Wattage	CCT Setting	Lumen Output
Delivered Lumens, 82 CRI	1,500	18w	3000K	1,480
			3500K	1,540
			4000K	1,590
	2,300	27w	3000K	2,220
			3500K	2,300
			4000K	2,380
	3,500	40w	3000K	3,280
			3500K	3,400
			4000K	3,520
FDLR-40/27/18				



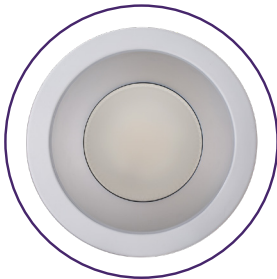
Engine	Lumen Package	Wattage	CCT Setting	Lumen Output
Delivered Lumens, 82 CRI	4,200	50w	3000K	4,100
			3500K	4,250
			4000K	4,400
	5,500	65w	3000K	5,330
			3500K	5,530
			4000K	5,720
	6,800	80w	3000K	6,560
			3500K	6,800
			4000K	7,040
FDLR-80/65/50				



STANDARD FEATURES

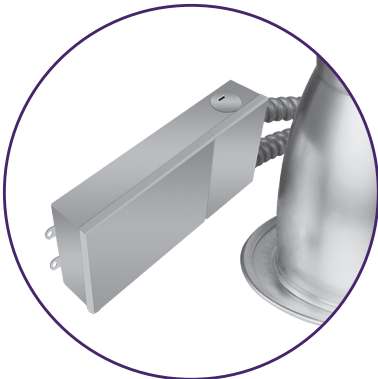
DEEP REGRESSED

The FDLR deep regressed downlight features a recessed light source set further back within the housing, reducing visibility from most viewing angles and significantly minimizing direct glare for enhanced visual comfort. This design also enables narrower beam angles and more focused illumination, making it ideal for accent lighting and highlighting architectural elements. The deep trim effectively contains and directs the light precisely where it's needed, preventing spill onto walls or other unintended areas.



SERVICEABLE EXTERNAL LED DRIVER

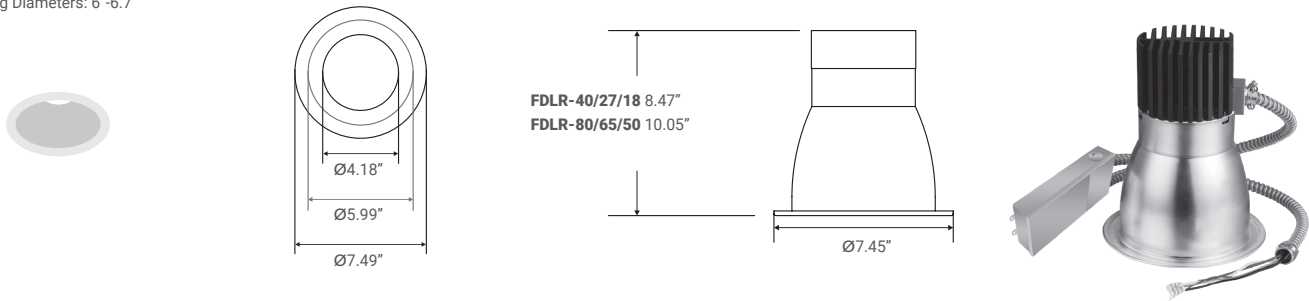
The light engine is linked to an external replaceable LED driver (UL Class 2) through a quick disconnect, with the driver box featuring a 1/2" conduit whip for streamlined connection to the power supply.



TRIMS & DIMENSIONS

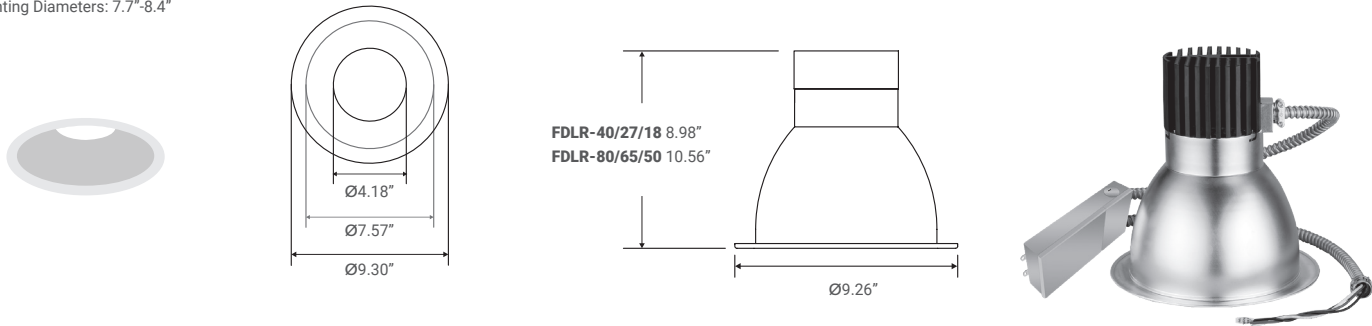
6" TRIM

Mounting Diameters: 6"-6.7"



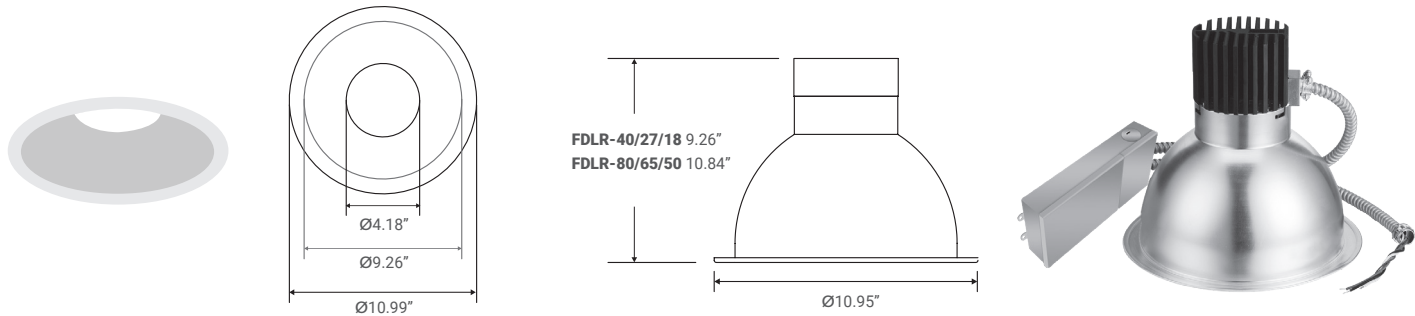
8" TRIM

Mounting Diameters: 7.7"-8.4"

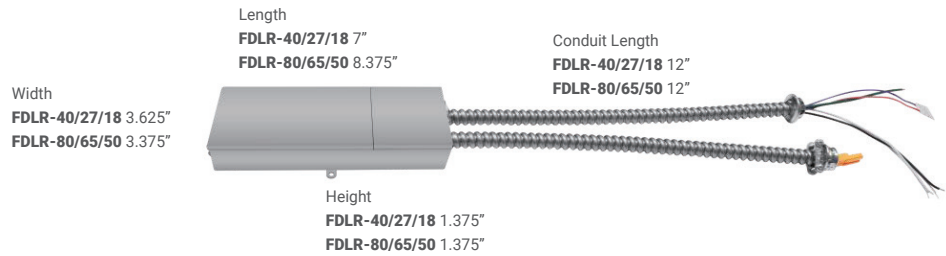


10" TRIM

Mounting Diameters: 10"-10.7"



LED DRIVER



EMERGENCY BACKUP Option

EMERGENCY BATTERY BACKUP (OPTION: -EM700, -EM1300, -EM1700, -EM2200)



When there is a power outage, the optional emergency backup driver and battery will power the FDLR to an reduced brightness for at least 90 mins.

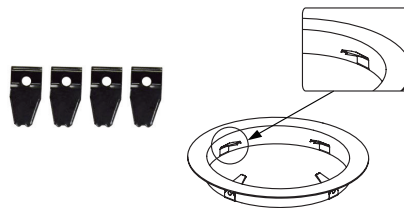
* FIELD INSTALLED



MOUNTS Option

RETROFIT (STANDARD)

To retrofit, first remove the existing fixture from the open frame. If the frame does not already have spring steel friction clips, attach the included ones. Complete the electrical connections, then insert the FDLR fixture into the frame opening.



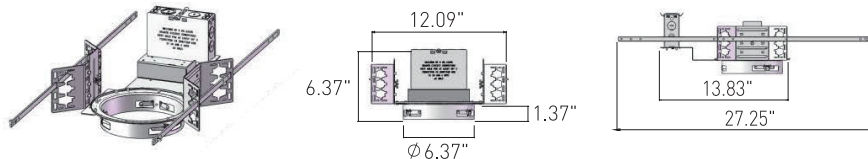
DIRECT MOUNT TENSION CLIPS (OPTION: -CLP)

Optional tension clips provide additional support for direct mounting when the existing plate or frame opening cannot securely hold the FDLR using the included spring clips alone.

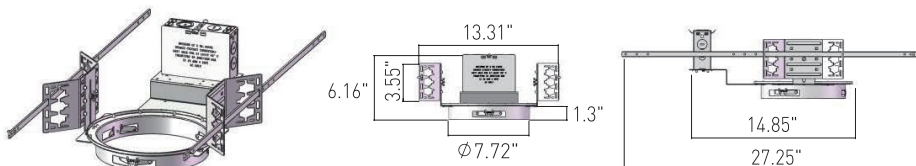


NEW CONSTRUCTION FRAME W/ JUNCTION BOX (OPTION: -NCF)

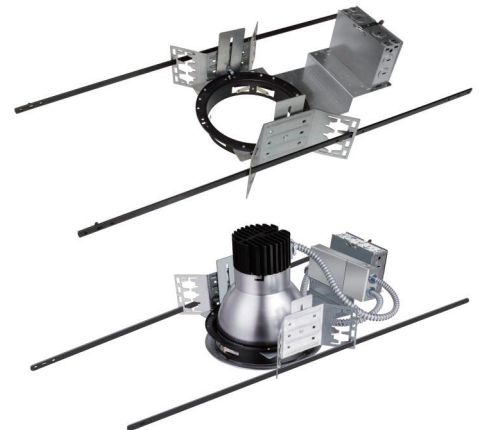
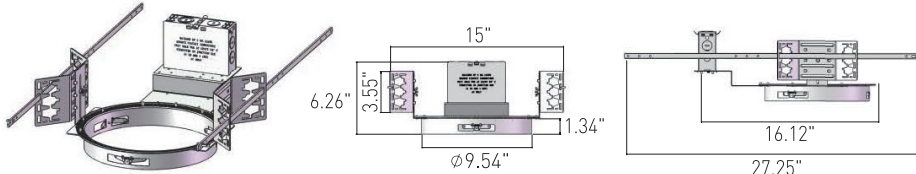
Frame for 6" Trim
Part# AC-DLR-6F



Frame for 8" Trim
Part# AC-DLR-8F



Frame for 10" Trim
Part# AC-DLR-10F



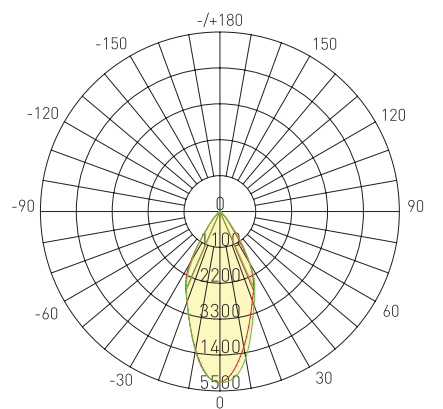
Example of FDLR 10" New Construction Kit
Order# FDLR-40/27/18-10TRWH-NCF

Light Engine FDLR-40/27/18 as shown
Trim AC-DLR-10TRWH as shown
Frame AC-DLR-10F as shown

* FIELD INSTALLED

PHOTOMETRICS

FDLR-40, 8" TRIM



AVERAGE BEAM ANGLE(50%): 46.9°

Lumens: 3454.8 Lm
Watts: 40 W
LPW: 86.37 Lm/W
CCT: 3000K

UNIT: cd
— C0/180,23.6,23.1
— C90/270,23.2,24.0

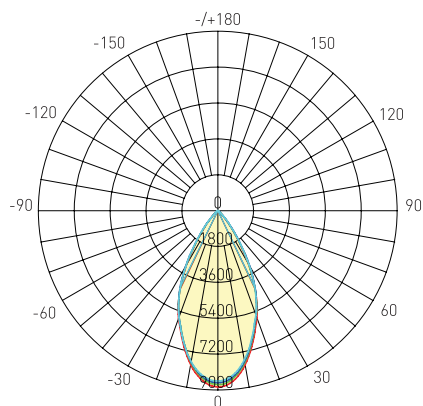
Zonal Flux Diagram

τ	C0	C45	C90	C135	C180
10	4207	4415	4558	4486	4303
20	2908	2989	3048	3017	2951
30	1783	1845	1841	1886	1860
40	404.4	449.3	484.6	473.0	456.1
50	86.32	93.34	102.6	97.79	98.80
60	28.65	31.97	35.80	31.96	31.76
70	11.68	13.27	14.63	12.86	12.69
80	4.325	4.949	5.424	4.908	4.774
90	0.0042	0.0048	0.0057	0.0085	0.0064
100	0.0030	0.0028	0.0022	0.0028	0.0042
110	0.0069	0.0047	0.0056	0.0044	0.0083
120	0.0130	0.0125	0.0130	0.0125	0.0155
130	0.0296	0.0321	0.0255	0.0322	0.0305
140	0.0873	0.0858	0.0741	0.0856	0.0737
150	0.1587	0.1440	0.1159	0.1539	0.1406
160	0.1934	0.2072	0.1962	0.2238	0.2125
170	0.1596	0.2089	0.2004	0.2279	0.2055
180	0.1087	0.1105	0.1023	0.0966	0.1065
DEG	LUMINOUS INTENSITY:cd				

Zonal Lumens

τ	φ total
0-10	456.9
10-20	1464
20-30	2576
30-40	3195
40-50	3372
50-60	3423
60-70	3443
70-80	3452
80-90	3454
90-100	3454
100-110	3454
110-120	3455
120-130	3455
130-140	3455
140-150	3455
150-160	3455
160-170	3455
170-180	3455
UNIT: lm	

FDLR-80, 8" TRIM



AVERAGE BEAM ANGLE(50%): 51.6°

Lumens: 6288.5 Lm
Watts: 80 W
LPW: 78.61 Lm/W
CCT: 3000K

UNIT: cd
— C0/180,51.0 °
— C30/210,51.4 °
— C60/240,51.9 °
— C90/270,52.0 °

Zonal Flux Diagram

τ	C0	C45	C90	C135	C180
10	7872	7743	7625	7552	7858
20	5741	5648	5579	5538	5777
30	3072	3196	3154	3133	3168
40	863.6	934.3	953.4	979.2	923.3
50	154.7	156.7	165.2	184.7	180.9
60	31.91	32.07	35.00	42.64	40.87
70	11.69	11.21	11.99	13.96	13.43
80	4.327	4.261	4.534	4.810	4.632
90	0.1629	0.1966	0.1448	0.1684	0.1504
100	0.1616	0.1471	0.1497	0.1443	0.1623
110	0.2522	0.2166	0.2029	0.2166	0.2211
120	0.5132	0.4694	0.4464	0.4604	0.4604
130	1.495	1.490	1.513	1.454	1.427
140	4.095	4.071	4.131	3.953	4.054
150	8.045	7.940	7.982	7.733	7.987
160	12.49	12.36	12.22	11.98	12.40
170	16.29	16.02	15.74	15.54	16.30
180	17.76	17.60	17.17	17.10	17.83
DEG	LUMINOUS INTENSITY:cd				

Zonal Lumens

τ	φ total
0-10	775.2
10-20	2630
20-30	4656
30-40	5823
40-50	6169
50-60	6241
60-70	6261
70-80	6269
80-90	6271
90-100	6271
100-110	6272
110-120	6272
120-130	6273
130-140	6275
140-150	6278
150-160	6283
160-170	6287
170-180	6288
UNIT: lm	

Luminance cd/(m2)

G(DEG)	C0/180	C90/270
85	466	681
80	880	923
75	1033	1049
70	1207	1239
65	1530	1617
60	2255	2474
55	4114	4540
50	8505	9079
45	18529	21493