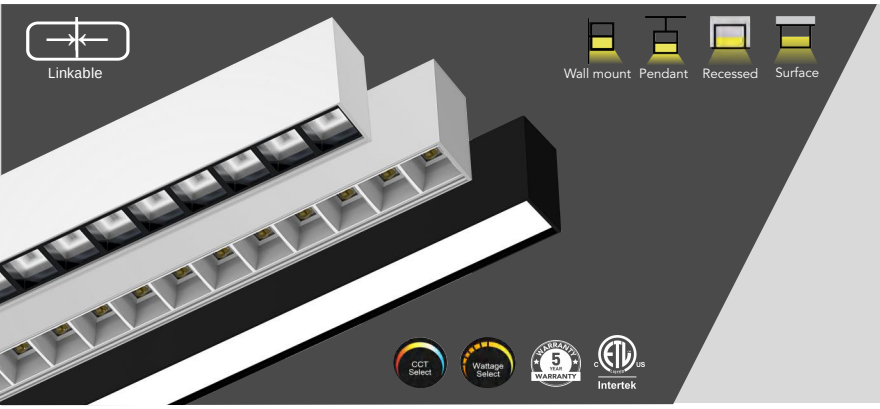
Dense 199

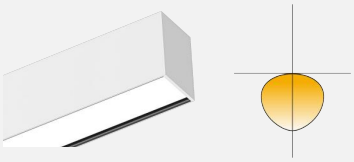
2"FLUSH GEN21 Linear Light

WISDOM LIGHT



The Dense 199 product line embodies a deliberate, low-glare control system. Its standout feature is the dual-level optical control, providing exceptional visual comfort through direct lighting distributions. Offering versatility, it comes in sizes of 2', 4', and 8', and supports continuous runs, boasting a diverse array of independently controllable direct distribution options.
Dense 199 features a modular design that allows for quick replacement of the entire lower module or just the optical lens of the lower module, making it convenient for customers to reduce their inventory of finished products. Dense 199 promises to significantly enhance the user experience while maintaining top -notch energy efficiency.

BEAM ANGLES



PC OPTIC

110° Beam Angle : Wide & uniform ambient lighting



DF40 OPTICS



60° Beam Angle : Controlled beam for accent lighting
90° Beam Angle : Balanced output for general lighting



DAISY OPTICS

Wall Wash : Uniform vertical surface illumination
Asymmetric 25° : Forward-directed beam with reduced spill
Forward Throw : Enhanced forward light distribution
25×70° : Elongated beam for linear highlighting
35° : Soft focused light for subtle accents
50° : Balanced beam for flexible applications
80°: Wide distribution for soft ambient lighting



Model	Dimension	Watt select	Lumens	Beam Angles	Nominal Efficacy	CCT Select	Voltage	Dimming	CRI
WL-21LSD2FT20WB2D1HV (XXK-XXK-XXK)-XXXX-YY-ZZ	2FT	12W/16W/20W	1380Lm/1840Lm/2300Lm	110° 35° 50° 80° 60° 90° Wall Wash Ashmmetric Forward Throw	115 lm/W	3000K 3500K 4000K	AC120-347V	0-10V (1-100%)	>80
WL-21LSD4FT40WB2D1HV (XXK-XXK-XXK)-XXXX-YY-ZZ	4FT	24W/32W/40W	2760Lm/3680Lm/4600Lm						
WL-21LSD8FT80WB2D1HV (XXK-XXK-XXK)-XXXX-YY-ZZ	8FT	48W/64W/80W	5520Lm/7360Lm/9200Lm						

* Remark: CRI 90 or 130Lm/W are available. Standard SDCM⩽5 (Single CCT) , SDCM⩽(7Mixed CCT); SDCM⩽3 or SDCM ⩽5, are available.

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Email. sales@wisdomled.net
www.wisdomled.com

Contact us for the latest product information.

Dense 199

2"FLUSH GEN21 Linear Light

WISDOM LIGHT

Order Guide

Sample Model#: Dense 199-WL-21LSD4FT40WB2D1HV(30K-35K-40K)060-YY-ZZ

Dense 199	WL-21LSD									
Luminaire ID	Mode	Length	Wattage	Series	Dimming	Voltage	CCT	Beam Angle	Finish	Installation Mode
Dense 199	WL-21LSD	2FT 4FT 8FT	20W= 10W/15W/20W Select 40W= 24W/32W/40W Select 80W= 40W/60W/80W Select	B2= 3CCT Select, 3Watt Select (external dip-switch)	D1= 0-10V (1%-100%)	HV=120-347V	(XXK-XXK-XXK)= (30K-35K-40K)= 3000K/3500K/ 4000K CCT Select	XXXX= 035=35° 050=50° 060=60° 080=80° 090=90 110=110° WAL=Wall wash ASY=Asymmetric 25° FRT=Forward Throw	YY= BK=Black WH=White CUS=Custom	ZZ= SP= Suspended air craftcable SC= Suspended Canopyand aircraft cable WM= Wall Mount

Accessories

MOUNTING ACCESSORIES	CANOPY TYPE	PATTERN
STF=Aircraft Cable(F type)	SCKA=D5"XH0.8"Canopy	DLLS=L-Shape Connector(Lit-Pattern with Downlight)
SDS=Drywall Pendant mount	SCKB=D5'XH0.31"Slim Canopy	DTLS=T-Shape Connector(Lit-Pattern with Downlight)
SCS=Drop ceiling Pendant mount	SCKC=D1.7"X0.31"Slim Canopy	DXLS=X-Shape Connector(Lit-Pattern with Downlight
SMC=C-Type Mounting Screw Kit	CANOPY FINISH	DCLS=120°-Shape Connector(Lit-Pattern with Downlight)
RML=C-type recessed	BC=Black	DYLS=Y-Shape Connector(Lit-Pattern with Downlight
RMG=Frame Type recessed	WC=White	OTHER ACCESSORIES
WMB=B-type wall mount	CUS=Custom	LBKB=Linckble bracket with hook
CABLE		MAC=Multi-Directional Power Harness
73AC-5C=7'5-core 300V Cable		CBM=Wireless Control Box /Metal
73AC-6C=7'6-core 300V Cable		
76AC-5C=7'5-core 600V Cable		
76AC-6C=7'6-core 600V Cable		



| 73AC-5C=7'5-core 300V Cable
73AC-6C=7'6-core 300V Cable
76AC-5C=7'5-core 600V Cable
76AC-6C=7'6-core 600V Cable



| CBM=Wireless Control Box /Metal



| LBKB=Linkabel bracket

Dense 199

2"FLUSH GEN21 Linear Light

WISDOM LIGHT

Product Specifications

Construction

- Precision cut housing extruded from 6063 aluminum
- Die-casting end-caps ensure a robust and clean construction
- Nominal 2'- 8' illuminated sections with various connectors for continuous runs and shapes
- Standard white, black, silver and custom powder coating

Light Engine for diffuser

- Standard 3-CCT Select,3000K/3500K/4000K.3500K/4000K/5000K are available
- Standard CRI Ra≥80, optional Ra≥90;Standard SMCM ≤ 5(Single CCT) or ≤ 7SDCM(Mixed CCT);If SDCM ≤ 3SDCM are available.
- 3-Watts select

Light Engine for optic lens

- Standard single CCT,2700K,3000K,3500K,4000K,5000K are available
- Standard CRI Ra≥80, optional Ra≥90;Standard SMCM ≤ 5 ;If SDCM ≤ 3SDCM are available.
- 3-Watts select

LED Drivers

- Class II UL certified driver
- Traditional electronic drivers are available for AC120- 347V
- Flicker free <5%, PFC>0.9, THD<20%

Controls and Integrated Sensors

- Equipped standard with a 0-10V(1-100%) continuous dimming driver, Compatible with most standard dimming devices
- Additional control types are available (DALI & Lutron)

Mounting

- Pendant
- Wall Mount
- Surface Mount
- Recessed

LINKABLE FUNCTION

- Max number after interconnection
  2FT=7 units 4FT=7 units 8FT=4 units
- Total connected load is <420W at 120V & <960W at 277V &<1200W at 347V

Lengths

- Available in 2FT,4FT,8FT length .
- Additional fixture lengths are available please consult factory.

Electrical

- 0-10V Dimming provided as standard
- Dimming wires capped with wire nuts for non-dimming applications
- Battery backup options provided
- Default battery location is internal to the the fixture
- Default emergency section is from 4ft to 8ft, except 2ft
- Estimated lumen output = battery wattage * nominal efficacy
- The EPC option will bypass local controls and dimming upon loss of normal power. This option is required when the fixture has both integrated sensors and emergency circuiting

Weight

- Approximately 1.3lbs per foot, Weight may vary depending on mounting and additional options selected

Environment

- Suited for damp location installations.
- Operating temperature range: -25° C to 50° C

Approvals

- ETL - listed for damp locations
- Tested to IESNA LM-79 and LM-80

Warranty

- Five years warranty as standard.

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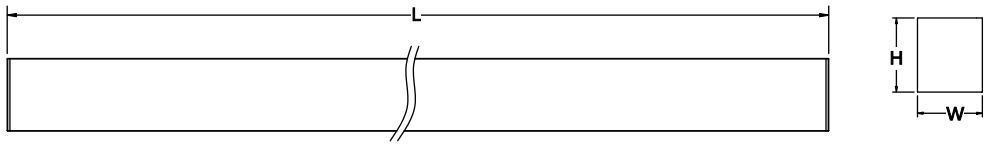
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Dense 199

2"FLUSH GEN21 Linear Light

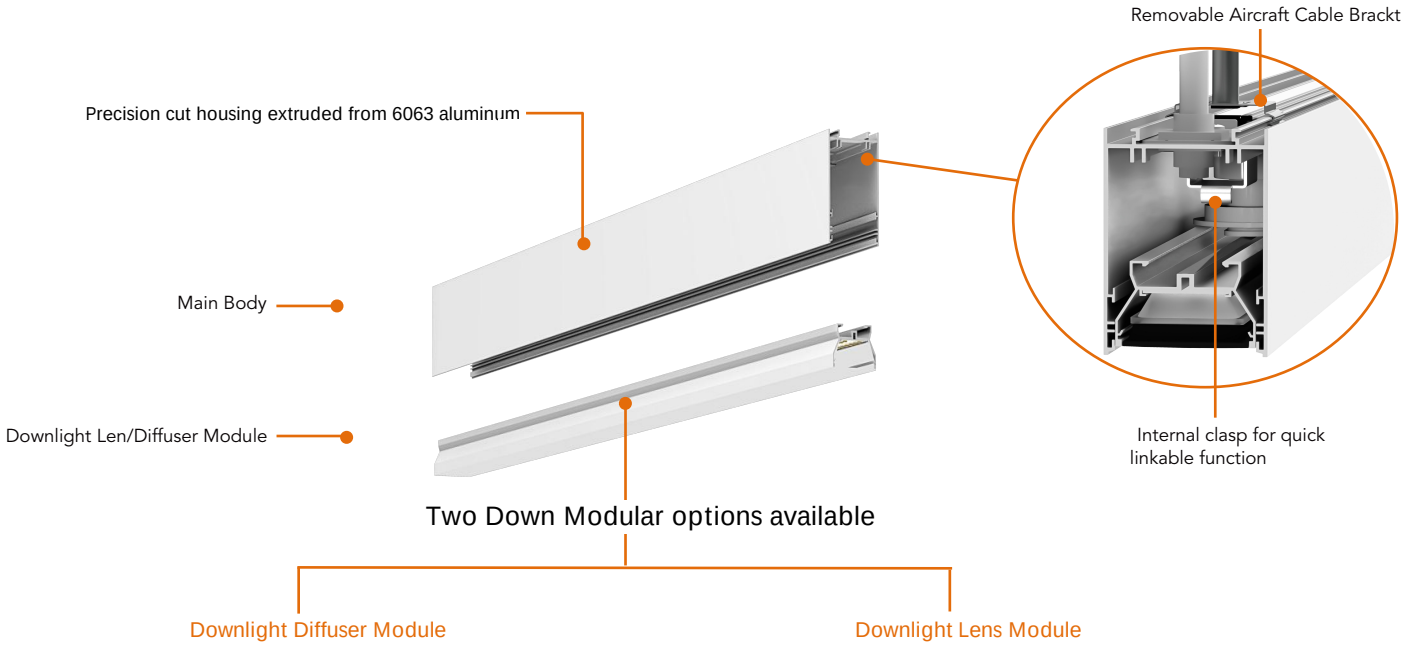
WISDOM LIGHT

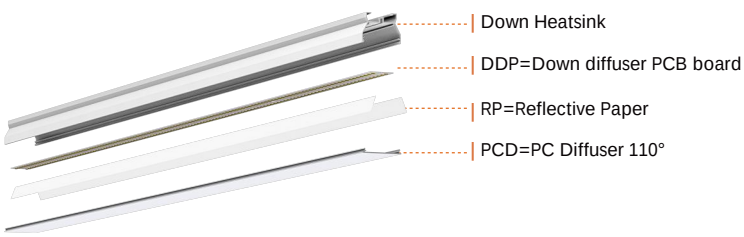
Dimension

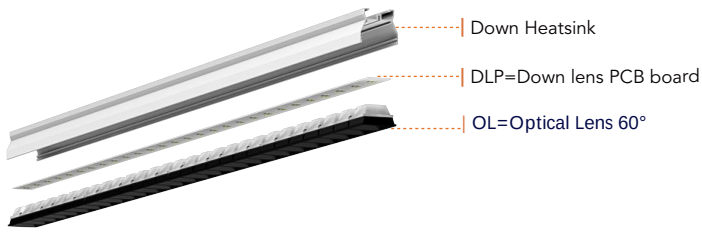


MODEL	L=Length	W=Width	H=Height
WL-21LSD2FT20WE3D1HV	22.3"(566mm)	2.05"(52mm)	3.35"(85mm)
WL-21LSD4FT40WE3D1HV	44.3"(1126mm)		
WL-21LSD8FT80WE3D1HV	88.4"(2246mm)		

Features







| The down diffuser modular can be easy modified to down lens modular by changing the down diffser PCB board ,reflective paper, pc diffuser to down lens PCB board, optical lens. And vice versa.

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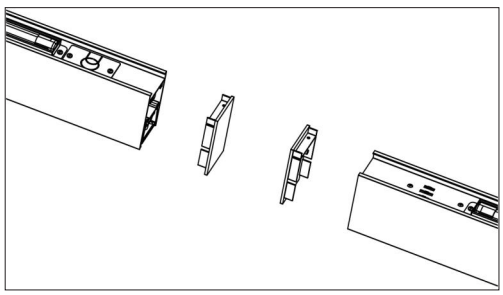
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Dense 199

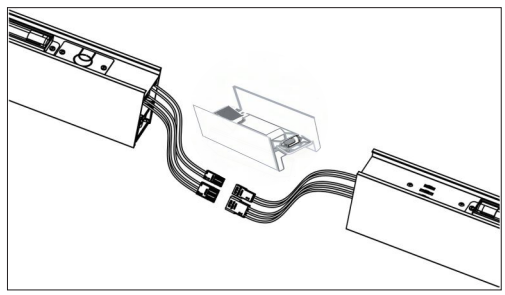
2"FLUSH GEN21 Linear Light

WISDOM LIGHT

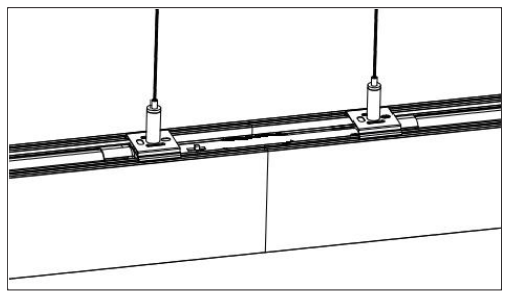
Quick linkable function



Step 1: Remove the end cap of the two fixtures

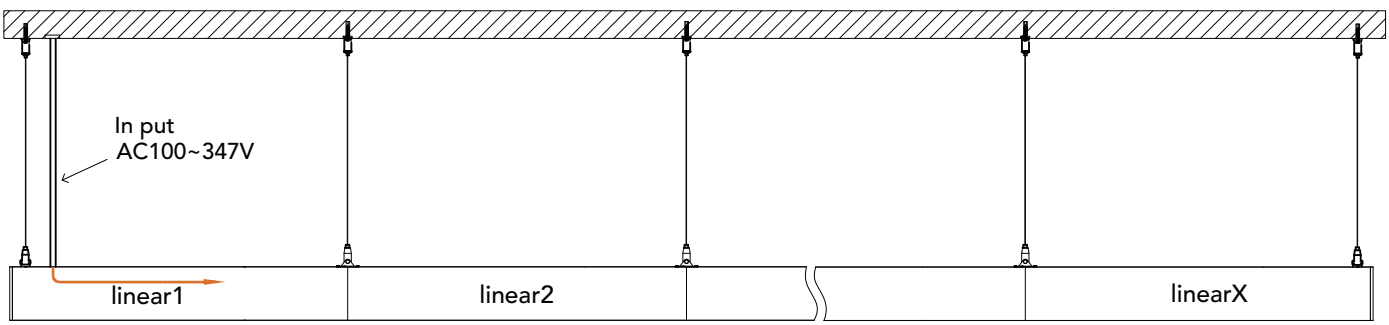


Step 2: Connect wiring via included quick connects, insert linkable bracket,slide the fixtures together by the internal magnets.

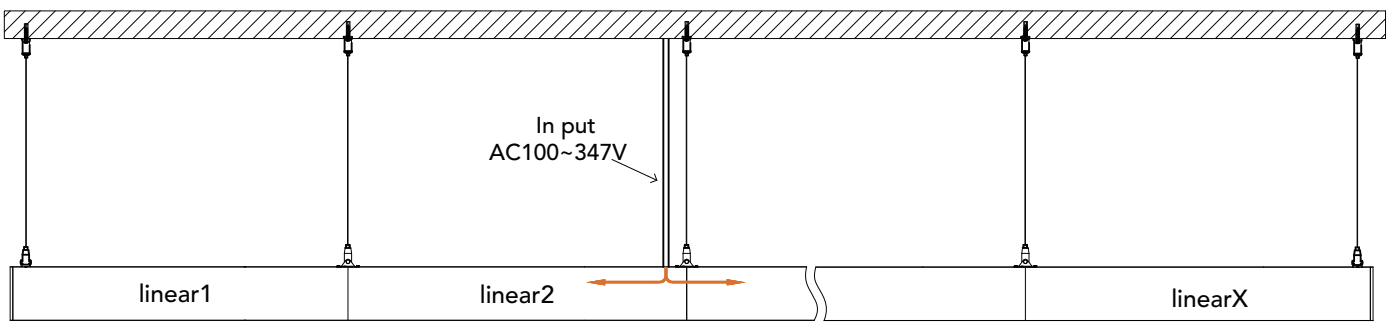


Step 3 : Install the aircraft cable, and adjust to the target position

Single Direction



Multi-Direction



Max number after interconnection

2FT= 7 units 4FT=7 units 8FT=4 units

Total connected load is <420W at 120V & <960W at 277V & <1200W at 347V

* For Multi-Direction wiring requires use of accessory MAC



MAC(Multi-direction harmness)

Wire Harness Kit for Mulidirectional Power feed. Used in conjunction with an input power cord, when the feed location is in center of run.

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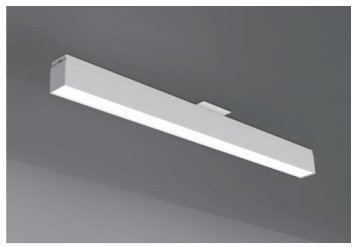
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Mounting Options

Wall Mount



Surface



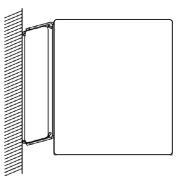
Recessed



Pendant

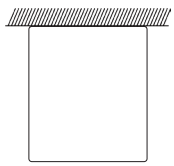


Wallmount



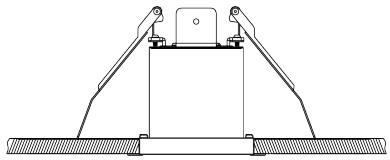
1. WMB-Wall Mount Kits B-Type

Surface Mount

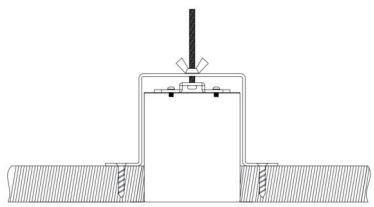


2. SMC=C-Type Surface Mount

Recessed



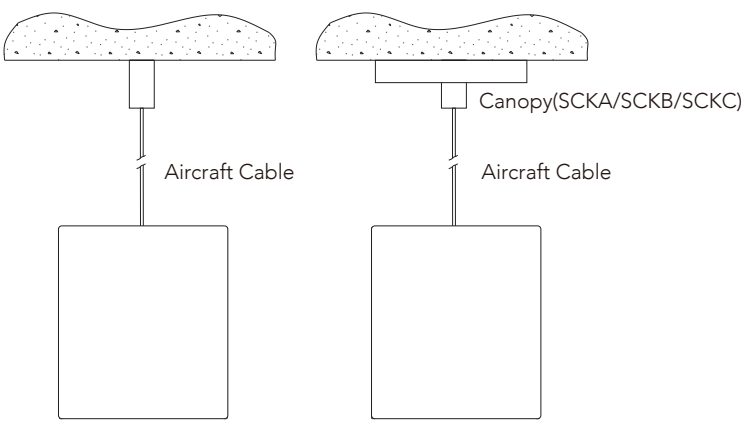
3.1 SMC=C-Type Surface Mount



3.2 RML=C-type Flangeless recessed

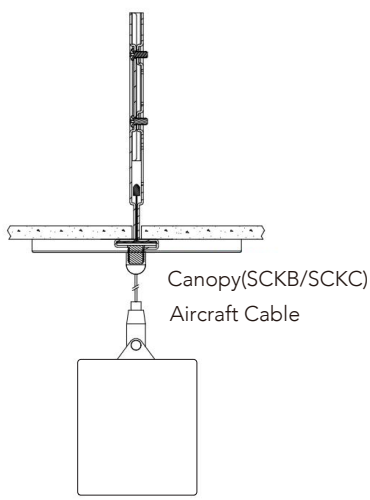
Pendant

4.1 Dry Ceiling Suspension



Aircraft Cable　　Aircraft Cable & Canopy

4.2 Drop Ceiling Suspension

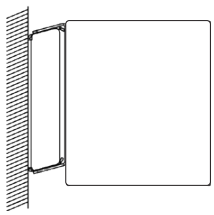


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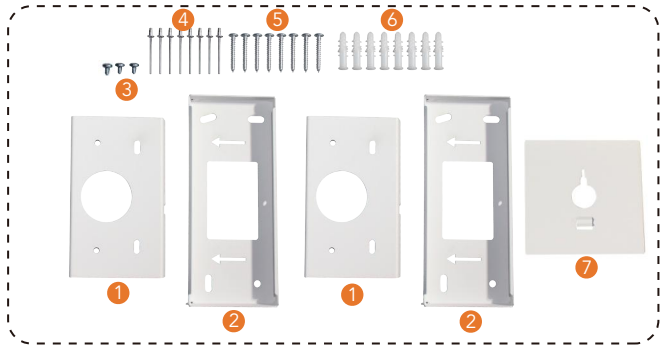
2"FLUSH GEN21 Linear Light

WISDOM LIGHT

1. WMB-Wall Mount Kits B-Type

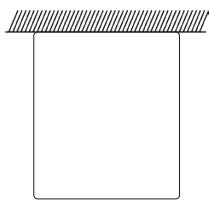






1	B Wall-mount Bracket-1(On fixture)	2PCS	4	Rivet	8PCS	7	Decorative plate	1PCS
2	B Wall-mount Bracket-2(On wall)	2PCS	5	Screw BA4x30MM	8PCS			
3	Screw PM4x6MM	3PCS	6	Plastic Anchor	8PCS			

2. SMC=C-Type Surface Mount Kits

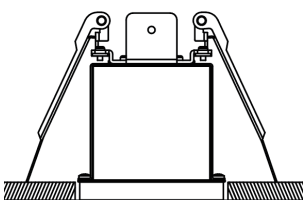




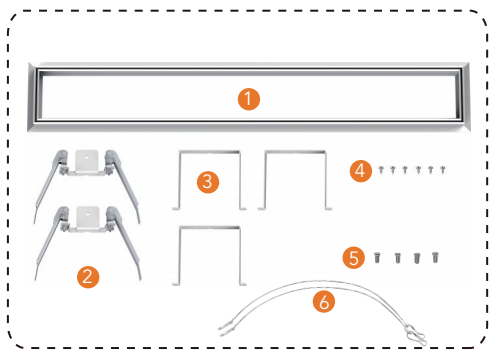


1	T-shaped screw M5*6	2PCS
2	Plastic Anchor	4PCS
3	Screw PA4*30	4PCS

3.1 RMG-Frame Type Recessed Mount Kits







Recommended hole size		
Fixture Size	Length(in)	Width(in)
2FT	24.73	2.82
4FT	48.34	2.82
8FT	95.61	2.82

1	Recessed Frame	1PCS	4	ScrewPB3.5*8	4pcs(2') 6pcs(3'/4') 10pcs(6'/8')
2	Fixture Spring Clips	2pcs(2'/3'/4') 3pcs(6'/8')	5	Screw PM4*8	4pcs(2'/3'/4') 6pcs(6'/8')
3	U Bracket	2pcs(2')3pcs(3'/4') 5pcs(6'/8')	6	Safety Cable	2pcs(2'/3'/4') 3pcs(6'/8')

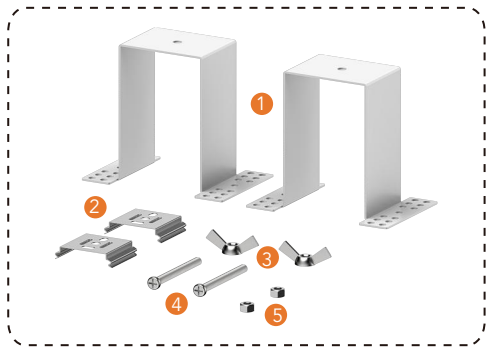
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3.2 RML- C-Type/Flangeless Recessed Mount

Recommended hole size		
Fixture Size	Length(in)	Width(in)
2FT	23.94	2.83
4FT	47.56	2.83
8FT	94.81	2.83

1	U Bracket	2PCS	4	Screw PM5*50	2PCS
2	Fixed Bracket	2PCS	5	Lock Washer	2PCS
3	M5 Wing nut	2PCS			



4.1 Dry Ceiling Suspension

Canopy Type Power feed/None Power feed

SCKA D5"*H0.8"


Non Power feed


Power feed

SCKB Slim D5"*H0.3"

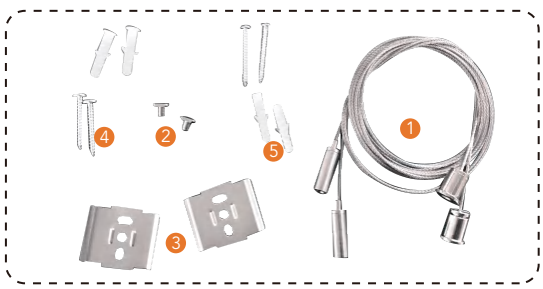

Non Power feed


Power feed

SCKC Slim D1.7"*H0.3"

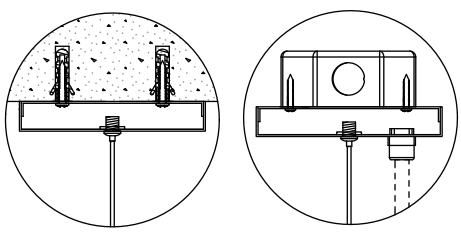

Non Power feed

STF-Aircraft Cable Kits-F Type



1	F Type Aircraft cable	2PCS
2	T-shaped screw M5*6	2PCS
3	Bracket	2PCS
4	Screw PA4*30	4PCS
5	Plastic Anchor	4PCS

SCKA-5'' Standard Canopy Kits







1	Non-power feed round canopy (5 inches)	1PCS	5	Plastic Anchor	1PCS
2	Power feed round canopy (5inches)	1PCS	6	Screw PA4*30	4PCS
3	U Bracket with Ground	2PCS	7	Screw M4*8	4PCS
4	U Bracket	1PCS	8	Waterproof Connector	1PCS

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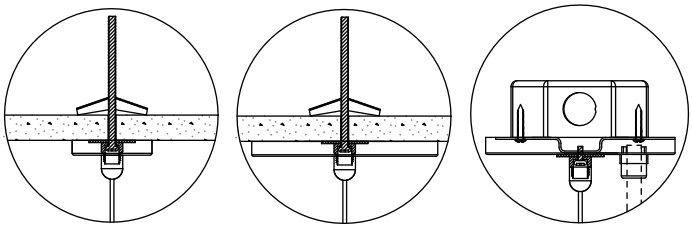
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Dense 199

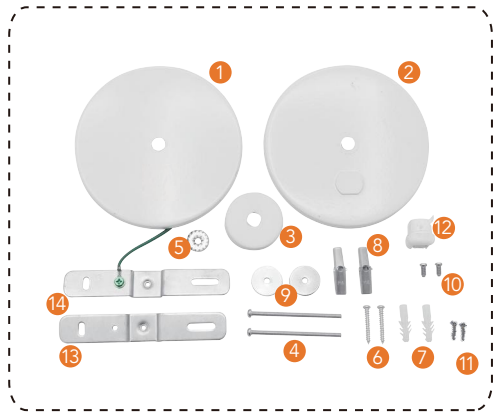
2"FLUSH GEN21 Linear Light

WISDOM LIGHT

SDS-Drywall Suspension Kits



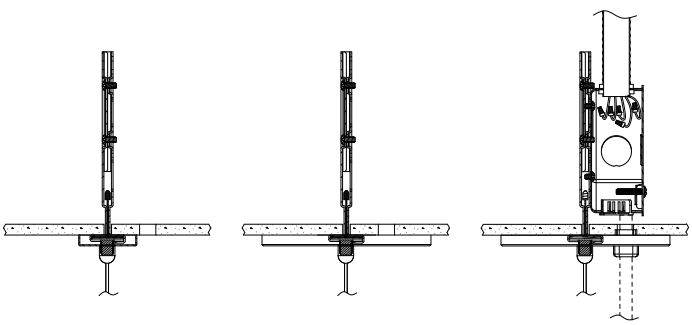




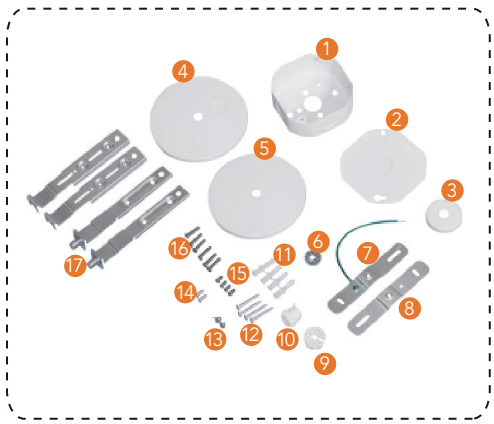
1	5''Slim Canopy (Non-Power feed)	1PCS	4	Screw PM4*70	2PCS	7	Plastic Anchor	4PCS	10	Screw PM4*10	2PCS	13	U Bracket with Ground	1PCS
2	5''Slim Canopy (Power feed)	1PCS	5	Lock Washer	1PCS	8	Butterfly Anchor	2PCS	11	Screw 8#-32*1-3/4	2PCS	14	U Bracket	1PCS
3	1.7''Slim Canopy	1PCS	6	Screw PA4*30	4PCS	9	Flat Washer	2PCS	12	Wire buckle	1PCS			

2. Drop Ceiling Suspension

4.2 SCS-Drop Ceiling Suspension Kits







1	4" J-box	1PCS	5	5''Slim Canopy (Power feed)	1PCS	9	Plastic Grommet	1PCS	13	Screw PB4*5	2PCS	17	T-Grid Clips	2 Sets
2	4" J-box Plate	1PCS	6	Lock Washer	1PCS	10	Wire buckle	1PCS	14	Screw PM4*10	2PCS			
3	1.7''Slim Canopy	1PCS	7	U Bracket with Ground	1PCS	11	Plastic Anchor	4PCS	15	Screw PM4*8	4PCS			
4	5''Slim Canopy (Non-Power feed)	1PCS	8	U Bracket	1PCS	12	Screw BA4*30	4PCS	16	Screw 8-32*1-3/4	6PCS			

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Contact us for the latest product information.

Dense 199

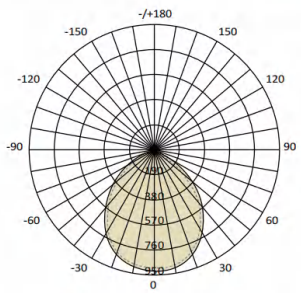
WISDOM LIGHT

2"FLUSH GEN21 Linear Light

Housing & CCT	Lumen output
White & 3000K	115LM/FT,10W/FT

All efficacy is ±5% base on different CCT and housing finish. For other CCT, housing finish please check the IES file to gain the accurate data.

Dense-198-2FT20W-840-WH
Dense-198/2'/20W/RA80/4000K/White



AVERAGE BEAM ANGLE(50%): 109.8 DEG

Lumen/ft:1213.02lm/ft
Total Lumens:2426.04lm(for 2ft)
Input Watts: 20.7W
Efficacy:117.15lm/W

Zonal Flux Diagram

Y	C0	C45	C90	C135	C180
5	896.1	896.6	900.2	904.8	904.4
10	877.0	879.9	885.8	896.1	894.8
15	850.4	854.0	864.0	878.0	876.7
20	817.0	820.9	834.1	852.1	850.1
25	776.4	782.4	799.7	818.1	815.1
30	729.5	733.7	755.2	777.1	774.7
35	676.3	683.2	704.5	729.0	726.5
40	618.2	625.5	648.0	675.7	672.6
45	552.8	563.0	586.4	616.4	613.5
50	483.9	495.5	521.2	553.1	547.6
55	412.6	424.9	451.7	484.5	478.1
60	339.0	351.1	380.0	413.3	405.6
65	264.6	276.4	306.9	339.7	331.4
70	191.0	201.9	234.0	264.3	255.9
75	120.7	130.6	162.7	190.1	182.0
80	54.59	63.83	94.49	118.9	110.2
85	4.645	9.891	34.56	54.55	44.57
90	0.1436	0.1596	0.1260	4.057	3.511
DEG	LUMINOUS INTENSITY:cd				

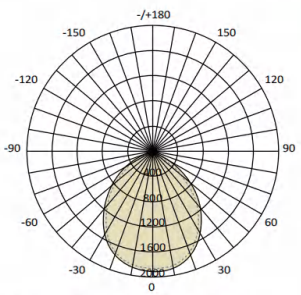
Zonal Lumens

Y	Φ zone	Φ total
0-5	21.57	21.57
5-10	63.90	85.47
10-15	103.9	189.3
15-20	140.0	329.3
20-25	171.1	500.4
25-30	196.1	696.5
30-35	214.4	910.9
35-40	225.2	1136
40-45	228.4	1365
45-50	223.7	1588
50-55	211.4	1800
55-60	192.0	1992
60-65	166.5	2158
65-70	136.0	2294
70-75	102.0	2396
75-80	66.78	2463
80-85	32.75	2496
85-90	7.464	2503

Luminance cd.lm 21

G(DEG)	C0/180	C90/270
85	2128	15880
80	12554	21794
75	18615	25179
70	22302	27404
65	25006	29083
60	27075	30440
55	28726	31543
50	30063	32476
45	31220	33218

Dense-198-4FT40W-840-WH
Dense-198/4'/40W/RA80/4000K/White



AVERAGE BEAM ANGLE(50%): 110.0 DEG

Lumen/ft:1197.48lm/ft
Total Lumens:4789.92lm(for 4ft)
Input Watts: 40.8W
Efficacy:117.4lm/W

Zonal Flux Diagram

Y	C0	C45	C90	C135	C180
5	1867	1876	1889	1900	1897
10	1823	1841	1868	1889	1882
15	1763	1790	1829	1859	1849
20	1687	1721	1774	1812	1798
25	1597	1638	1701	1747	1730
30	1494	1541	1612	1665	1647
35	1380	1431	1509	1570	1549
40	1252	1309	1393	1460	1441
45	1112	1175	1268	1340	1322
50	966.6	1032	1128	1210	1184
55	816.5	883.5	984.9	1067	1041
60	662.2	728.0	834.2	917.0	891.5
65	505.2	571.6	680.5	763.2	738.1
70	354.3	415.2	525.3	605.0	582.2
75	210.6	266.8	373.3	446.6	428.1
80	77.19	128.1	227.2	294.9	277.9
85	6.719	20.38	91.42	154.8	137.4
90	0.3234	0.2856	0.2692	30.08	19.31
DEG	LUMINOUS INTENSITY:cd				

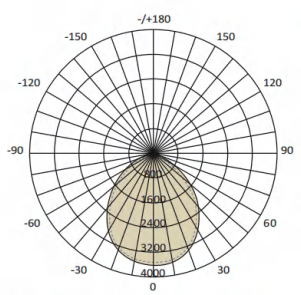
Zonal Lumens

Y	Φ zone	Φ total
0-5	45.11	45.11
5-10	133.7	178.8
10-15	217.3	396.1
15-20	293.0	689.1
20-25	358.2	1047
25-30	410.7	1458
30-35	448.9	1907
35-40	471.8	2379
40-45	478.5	2857
45-50	468.8	3326
50-55	443.4	3769
55-60	403.7	4173
60-65	351.1	4524
65-70	287.8	4812
70-75	217.5	5030
75-80	144.4	5174
80-85	74.18	5248
85-90	21.81	5270

Luminance cd.lm 21

G(DEG)	C0/180	C90/270
85	2567	34997
80	14801	43655
75	27098	48117
70	34490	51241
65	39807	53718
60	44101	55662
55	47399	57288
50	50071	58556
45	52376	59808

Dense-198-8FT80W-840-WH
Dense-198/8'/80W/RA80/4000K/White



AVERAGE BEAM ANGLE(50%): 108.5 DEG

Lumen/ft:2316.72lm/ft
Total Lumens:9266.88lm(for 8ft)
Input Watts: 78.8W
Efficacy:117.60lm/W

Zonal Flux Diagram

Y	C0	C45	C90	C135	C180
10	3562	3565	3537	3521	3476
20	3383	3385	3342	3304	3222
30	3068	3081	3022	2964	2852
40	2654	2673	2606	2532	2391
50	2148	2189	2110	2034	1853
60	1589	1643	1573	1474	1282
70	1007	1070	1011	904.7	714.0
80	452.4	512.1	479.1	363.2	177.3
90	22.47	26.29	15.91	8.692	2.478
DEG	LUMINOUS INTENSITY:cd				

Zonal Lumens

Y	Φ zone	Φ total
0-10	339.9	339.9
10-20	968.5	1308
20-30	1454	2762
30-40	1732	4494
40-50	1773	6266
50-60	1577	7844
60-70	1184	9028
70-80	671.8	9700
80-90	164.3	9864

Luminance cd.lm 21

G(DEG)	C0/180	C90/270
85	12894	15625
80	15506	16424
75	16707	17022
70	17528	17590
65	18236	18168
60	18912	18724
55	19426	19163
50	198 88	19537
45	20309	19914

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