TF1A Series LED High Bay Light (Ver2.2)

Applications

- Warehouse lighting
- Factory lighting
- Showroom & Convention center lighting

Standard Colors

White

Blue

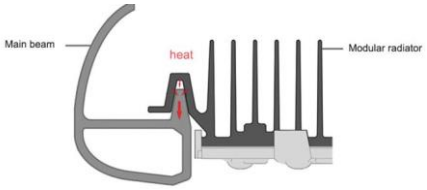
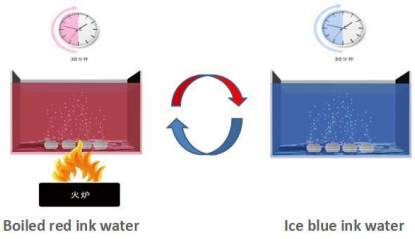
Black

Gray

Features

- Unique patented IP68 (highest protection level) LED light engines;
- Ergonomic and dedicated lighting distributions available for warehouse, workshop, hall lighting, etc;
- Whole structure heating dissipation design with best thermal conduction, radiation and convection;
- Flexible to reach desired power selections by choosing appropriate light engines;
- Tool-free onsite replacements of light engines greatly reduce maintenance cost;
- Unmatched lighting performance, driver stability and desirable lifespan;
- Angle adjustable within ±60° with mounting brackets.

HPWINNER's Technical Advantages

		
Air Convection Effect	Whole-structure Heat Dissipation	Tool-less Maintenance
		
Double-coupling IP68 Protection	High-efficacy LED Light Source	Flexible Combinations of Modules

Electrical & Photometric

✧ Average efficacy option

Model	Input Voltage (V) Frequency Range(Hz)	Drive Current (mA)	Power (w)	M1/M2		M8		Power Factor	Power Efficiency	LED Brand	CCT (k)	CRI
				Efficacy (lm/w)	Lumens (lm)	Efficacy (lm/w)	Lumens (lm)					
TF1A-1	AC100-240 50/60	700	40	105±5	4200±200	125±5	5000±200	0.95	88%	Lumileds	3000 4000 5000 5700	≥70
		860	50	100±5	5000±250	120±5	6000±250					
		1050	60	95±5	5700±300	112±5	6720±300					
TF1A-2	AC100-240 50/60	700	80	110±5	8800±400	130±5	10400±400	0.95	91%			
		860	100	105±5	10500±500	125±5	12500±500					
		1050	120	100±5	12000±600	117±5	14040±600					
TF1A-3	AC100-240 50/60	700	120	110±5	13200±600	130±5	15600±600	0.95	91%			
		860	150	105±5	15750±750	125±5	18750±750					
		1050	180	100±5	18000±900	117±5	21060±900					
TF1A-4	AC100-240 50/60	700	160	110±5	17600±800	130±5	20800±800	0.95	91%			
		860	200	105±5	21000±1000	125±5	25000±1000					
		1050	240	100±5	24000±1200	117±5	28080±1200					
TF1A-5	AC100-240 50/60	700	200	110±5	22000±1000	130±5	26000±1000	0.95	91%			
		860	250	105±5	26250±1250	125±5	31250±1250					
		1050	300	100±5	30000±1500	117±5	35100±1500					
TF1A-6	AC100-240 50/60	700	240	110±5	26400±1200	130±5	31200±1200	0.95	91%			
		860	300	105±5	31500±1500	125±5	37500±1500					
		1050	360	100±5	36000±1800	117±5	42120±1800					
TF1A-7	AC100-240 50/60	700	280	110±5	30800±1400	130±5	36400±1400	0.95	91%			
		860	350	105±5	36750±1750	125±5	43750±1750					
		1050	420	100±5	42000±2100	117±5	49140±2100					

*Efficacy of 3000K is 5% lower than other CCTs.

✧ High efficacy option

Model	Input Voltage (V) Frequency Range (Hz)	Drive Current (mA)	Power (w)	M16		Power Factor	Power Efficiency	LED Brand	CCT (k)	CRI
				Efficacy (lm/w)	Lumens (lm)					
TF1A-1	AC100-240 50/60	600(9P2S)	30	150±8	4500±240	0.95	88%	Lumileds	3000 4000 5000 5700	≥70
		600(14P2S)	30	158±8	4740±240					
		800(9P2S)	40	145±8	5800±320					
		800(14P2S)	40	153±8	6120±320					
		1000(9P2S)	50	138±8	6900±400					
		1000(14P2S)	50	147±8	7350±400					
		1200(9P2S)	60	130±8	7800±480					
		1200(14P2S)	60	140±8	8400±480					

Electrical & Photometric

✧ High efficacy option

Model	Input Voltage (V) Frequency Range(Hz)	Drive Current (mA)	Power (w)	M16		Power Factor	Power Efficiency	LED Brand	CCT (k)	CRI
				Efficacy (lm/w)	Lumens (lm)					
TF1A-2	AC100-240 50/60	800(9P2S)	80	150±8	12000±640	0.95	91%	Lumileds	3000 4000 5000 5700	≥70
		800(14P2S)	80	158±8	12640±640					
		1000(9P2S)	100	143±8	14300±800					
		1000(14P2S)	100	152±8	15200±800					
		1200(9P2S)	120	135±8	16200±960					
		1200(14P2S)	120	145±8	17400±960					
TF1A-3	AC100-240 50/60	800(9P2S)	120	150±8	18000±960	0.95	91%			
		800(14P2S)	120	158±8	18960±960					
		1000(9P2S)	150	143±8	21450±1200					
		1000(14P2S)	150	152±8	22800±1200					
		1200(9P2S)	180	135±8	24300±1440					
		1200(14P2S)	180	145±8	26100±1440					
TF1A-4	AC100-240 50/60	800(9P2S)	160	150±8	24000±1280	0.95	91%			
		800(14P2S)	160	158±8	25280±1280					
		1000(9P2S)	200	143±8	28600±1600					
		1000(14P2S)	200	152±8	30400±1600					
		1200(9P2S)	240	135±8	32400±1920					
		1200(14P2S)	240	145±8	34800±1920					
TF1A-5	AC100-240 50/60	800(9P2S)	200	150±8	30000±1600	0.95	91%			
		800(14P2S)	200	158±8	31600±1600					
		1000(9P2S)	250	143±8	35750±2000					
		1000(14P2S)	250	152±8	38000±2000					
		1200(9P2S)	300	135±8	40500±2400					
		1200(14P2S)	300	145±8	43500±2400					

Electrical & Photometric

✧ High efficacy option

Model	Input Voltage (V) Frequency Range(Hz)	Drive Current (mA)	Power (w)	M16		Power Factor	Power Efficiency	LED Brand	CCT (k)	CRI
				Efficacy (lm/w)	Lumens (lm)					
TF1A-6	AC100-240 50/60	800(9P2S)	240	150±8	36000±1920	0.95	91%	Lumileds	3000 4000 5000 5700	≥70
		800(14P2S)	240	158±8	37920±1920					
		1000(9P2S)	300	143±8	42900±2400					
		1000(14P2S)	300	152±8	45600±2400					
		1200(9P2S)	360	135±8	48600±2880					
		1200(14P2S)	360	145±8	52200±2880					
TF1A-7	AC100-240 50/60	800(9P2S)	280	150±8	42000±2240	0.95	91%			
		800(14P2S)	280	158±8	44240±2240					
		1000(9P2S)	350	143±8	50050±2800					
		1000(14P2S)	350	152±8	53200±2800					
		1200(9P2S)	420	135±8	56700±3360					
		1200(14P2S)	420	145±8	60900±3360					

Working environment & Packing

Model	Product Dimensions (mm)	Carton Size (mm)	N.W (kg)	G.W (kg)	Working Environment	Storage Temperature	IP Rating	Surge Protection	LED Life Span (h)	Housing Material
TF1A-1	350*340*335	450*430*230	4.8	5.9	-40℃ ~+50℃, 10%~90%RH.	-40℃ ~+50℃	Whole Fixture IP67	≥10	>50,000	Metal
TF1A-2	430*340*335	520*430*230	6.4	7.9						
TF1A-3	510*340*335	600*430*230	7.4	8.9						
TF1A-4	590*340*335	680*430*230	8.3	9.9						
TF1A-5	670*340*475	785*430*230	11.1	12.9						
TF1A-6	750*340*475	840*430*230	12.5	14.4						
TF1A-7	830*340*475	920*430*230	13.7	15.6						

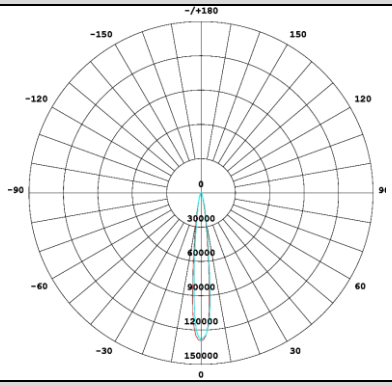
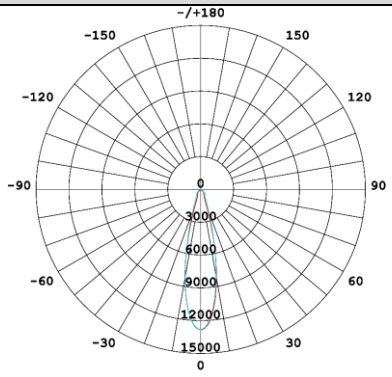
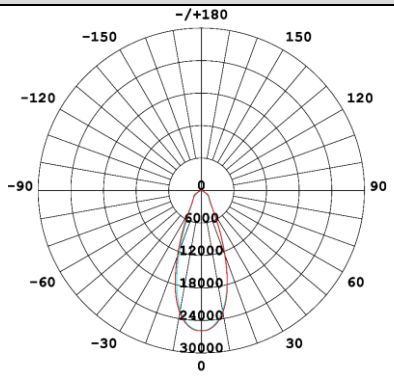
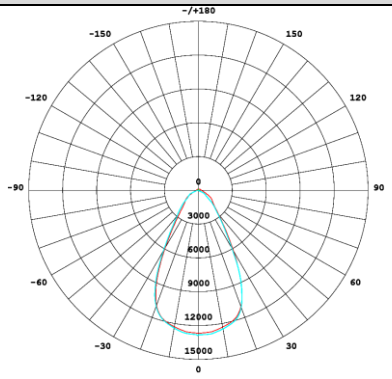
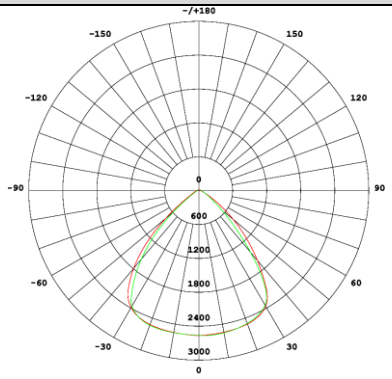
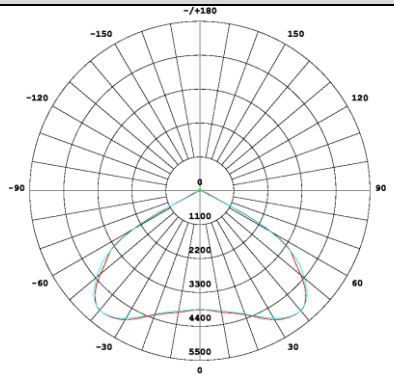
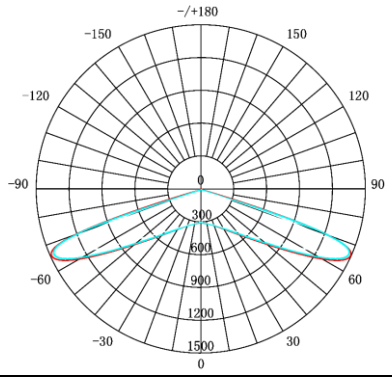
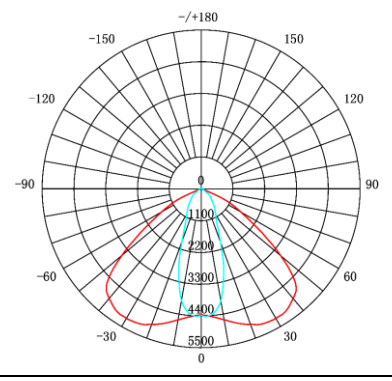
Note: Above data of weight are calculated based on MOSO brand driver, 50W/each module.

Warranty

5-year limited warranty is standard on luminaire and components.

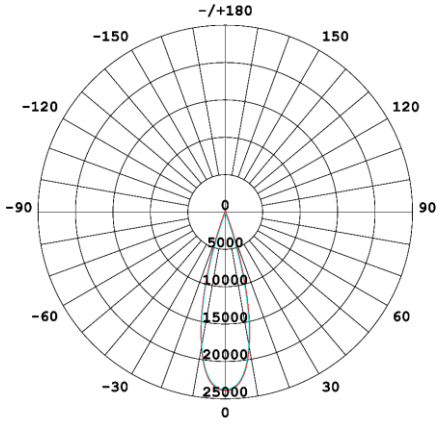
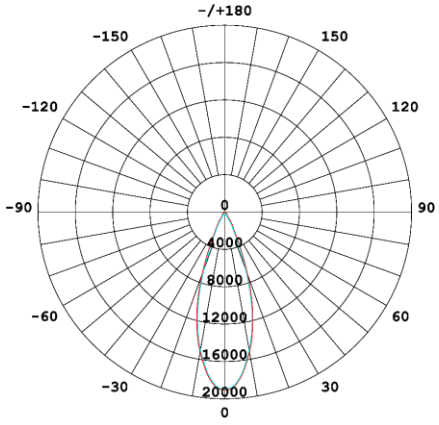
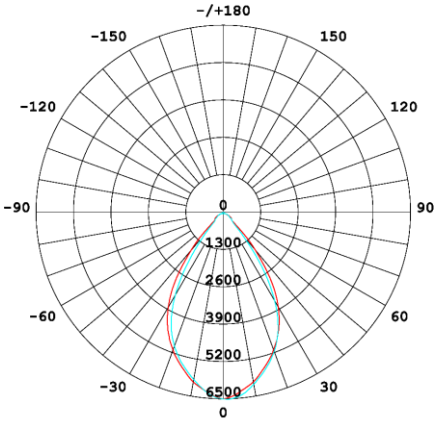
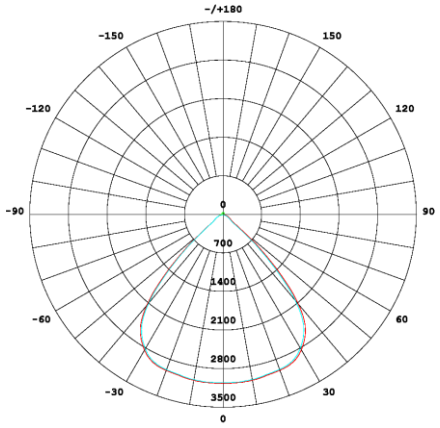
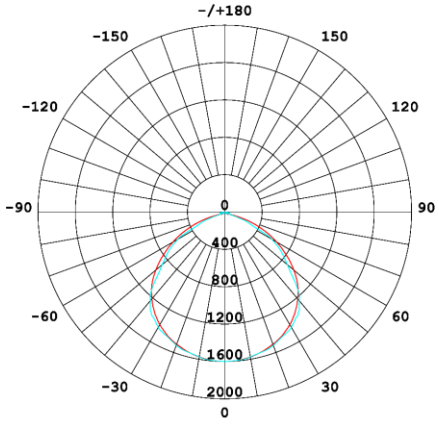
Light Distributions

- M1A/M2 LED module

12D1908	25D3725	40D3540
Beam Angle (50%) 12DEG	Beam Angle (50%) 25DEG	Beam Angle (50%) 40DEG
		
60D3560	90D3590	00D1010
Beam Angle (50%) 60DEG	Beam Angle (50%) 90DEG	Beam Angle (50%) 110DEG
		
T5S3040	11D3030	
IESNA Type V Short	Beam Angle(50%)110x40DEG	
		

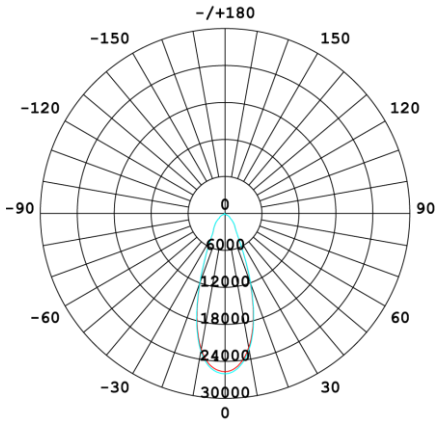
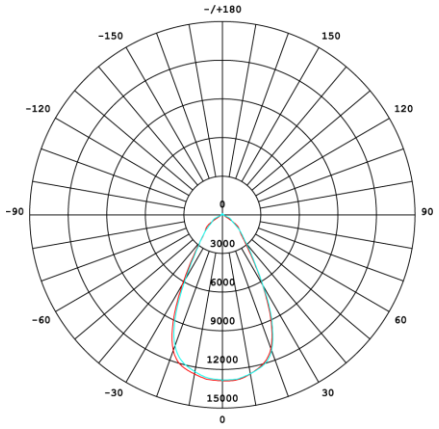
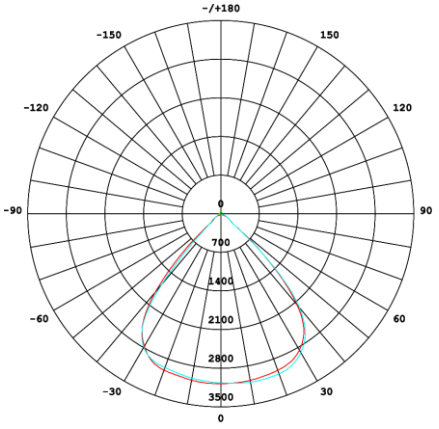
Light Distributions

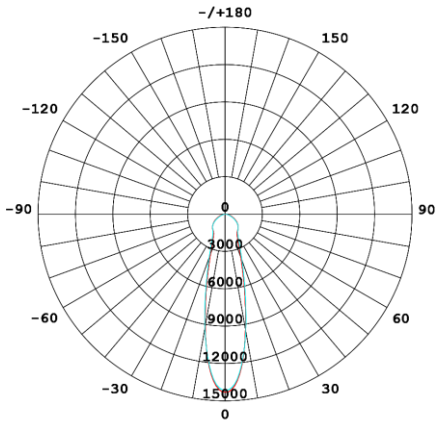
- M8B LED module

25D1325	40D5340	60D2360
Beam Angle (50%) 25DEG	Beam Angle (50%) 40DEG	Beam Angle(50%) 60DEG
		
90D5390	LBN1310	
Beam Angle(50%) 90DEG	Beam Angle (50%)110DEG	
		

Light Distributions

- M16B LED module

40D3140	60D3160	90D2190
Beam Angle (50%) 40DEG	Beam Angle(50%) 60DEG	Beam Angle(50%) 90DEG
		

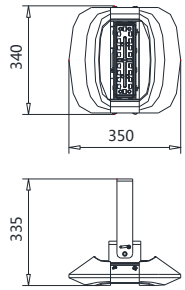
25D3125
Beam Angle (50%) 25DEG


Design Features

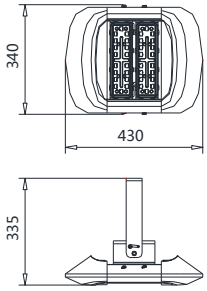
- External Design Features

Dimensions

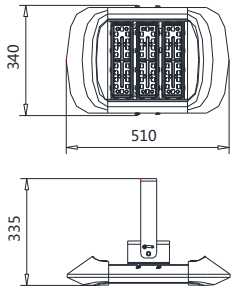
TF1A-1



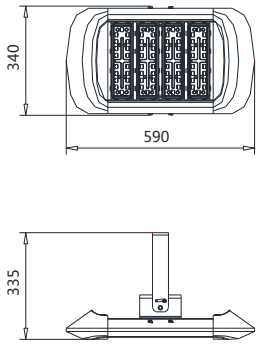
TF1A-2



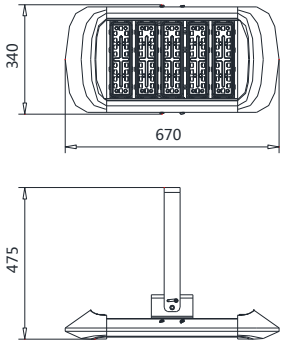
TF1A-3



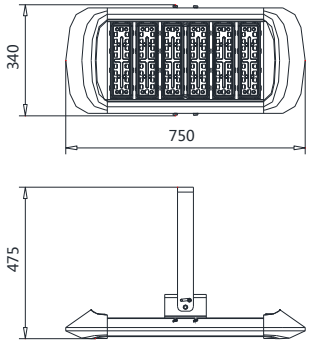
TF1A-4



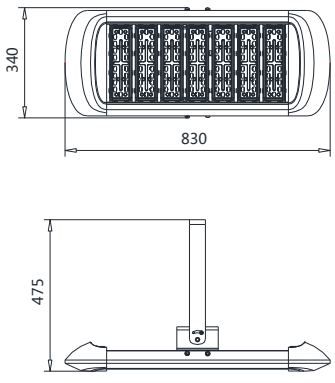
TF1A-5



TF1A-6

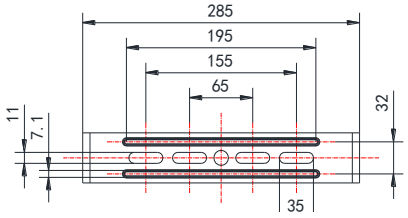


TF1A-7



Mounting Hole

TF1A-X①

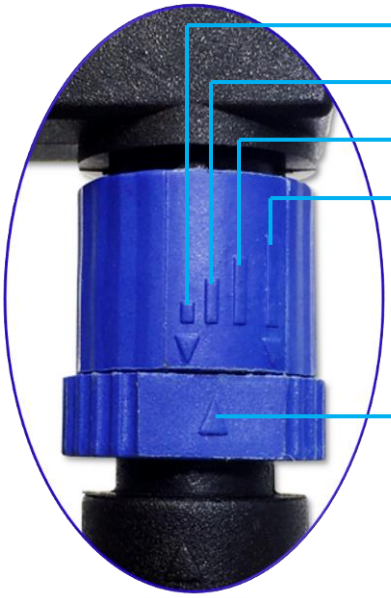


① Position of mounting hole between TF1A-1~TF1A-7 are the same.

Installation

			
1. Fix the luminary onto the mounting surface with M10 screws (provided by customer) at the bracket.	2. Connect to the AC power cable (make sure it sufficiently grounded).	3. Loosen the two M8×16 & M8x20 hexagon socket screws at bracket joint.	4. Set the lamp to the correct angle.
			
5. Tighten up the screws. Installation finished.			

Connectors Operation Guide



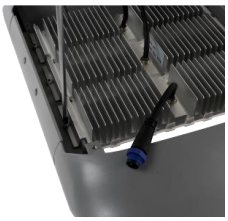
Spin the male terminal clockwise. When the male indicatrix points between indicatrix female #2 and #3, and the gap between male and female terminals is extremely small, the connectors are well connected; otherwise, there will be risks in its waterproof performance.

When the gap between male and female terminals is extremely small, if any looseness can be sensed, please spin the male terminal clockwise until tight.

Maintenance

Modules

Preparatory work: Disconnect the electric supply and put the lamp on the worktable.

			
1. Unscrew the four M8x16 hexagon socket screws to open the back cover.	2. Take the back cover from the lamp.	3. Disconnect the module from the connector to the drivers.	4. Unscrew the two M4x10 screws at both ends of the failed module.
			
5. Replace the failed module with a new one.	6. Connect and tighten up each part back step by step. Maintenance finished.		

Maintenance

Driver & Electrical Parts

Preparatory work: Disconnect the electric supply and put the lamp on the worktable.

			
1. Unscrew the four M8x16 & M6×20 hexagon socket screws at the bracket. Put the bracket down.	2. Unscrew the M4x10 screws at the ends of the driver set. Unscrew the M4x12 cross recessed pan head screws on the cable clip	3. Disconnect the module from the connector to the drivers.	4. Replace the failed driver with a new one.
			
5. Connect and tighten up each part back step by step. Maintenance finished.			

Ordering Information

- **Example: TF1A-2-100GY-M1L1010-740-MO-D**

Luminary Type	Luminary Series	Module Qty.	System Power	Housing Color	LED Module Type	LED Brand
TF High bay light	**1A** 1A series	**1** 1 modules **2** 2 modules **3** 3 modules **4** 4 modules **5** 5 modules **6** 6 modules **7** 7 modules	**30** 30W **40** 40W **50** 50W **60** 60W **80** 80W **100** 100W	**BL** Blue **GY** Gray **BK** Black **WH** White	**M1** M1 Series **M8** M8 Series **M16** M16 Series	**L** Lumileds

Lens Code	CRI	CCT	Driver Brand	Option of Driver
3560 60 Degree **3725** 25 Degree **3590** 90 Degree **5340** 40 Degree **5390** 90 Degree	**7** Ra≥70 **8** Ra≥80 **OTH** Others	**30** 3000K **40** 4000K **50** 5000K **57** 5700K	**MO** MOSO **MW** MEAN WELL **PH** PHILIPS **IN** INVENTRONICS **AD** ADAYO **OTH** OTHER	**D** Dimming **S** Non-dimming

Version History

Change Date	Version	Description of Change		
		Item	From	To
2016/12/22	Ver2.0	Datasheets release		
2017/05/09	Ver2.1	Light distribution		Updated
2017/11/29	Ver2.2	M8 Efficacy & Dimensions		Updated