



# Product Summary Sheet

Disclaimers: Letter designations in the product number, after the color temperature indicating number (1 or 0), denote the brand of LED used and is subject to change as our sources change.

Guarantee is in hours or (/) years; whichever comes first. Guarantee is to the L70 point.

## OPTO product family

## ULE21VW



Model number	ULE21VW0C-F-25W	ULE21VW1C-F-25W K40C80L120	ULE21VW1C-F-25W	ULE21VW0C-F-38W
<b>Light data</b>				
Light color options	Warm	Neutral	Cool	Warm
Color temperature (°K)	3000	4000	6500	3000
Light output (lumens)	120	120	130	240
Beam angle (°)	120	120	120	120
Efficacy	55	55	59	56
CRI	CRI>80	CRI>80	70	CRI>80
Expected Lifespan (Hr)	>50,000	>50,000	>50,000	>50,000
<b>Electrical data</b>				
Input voltage (V DC)	10 to 14	10 to 14	10 to 14	10 to 14
Input voltage (V AC)	10 to 14	10 to 14	10 to 14	10 to 14
Wattage (W)	2.2	2.2	2.2	4.3
<b>Certifications and ratings</b>				
Safety Certifications (i.e. UL or CSA)	Yes	Yes	Yes	Yes
NSF	Yes	Yes	Yes	Yes
ROHS	Yes	Yes	Yes	Yes
IP rating	IP66	IP66	IP66	IP66
<b>Electronics</b>				
Thermal foldback (y/n)	Yes	Yes	Yes	Yes
Power correction factor	0.8	0.8	0.8	0.8
Over temp. protection	No	No	No	No
Guarantee	35000/ 5	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	additional heatsinking required	additional heatsinking required	additional heatsinking required	additional heatsinking required
Operating (environmental) temperature range	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C
<b>Other Product Features</b>				

## OPTO product family

## ULE21VW



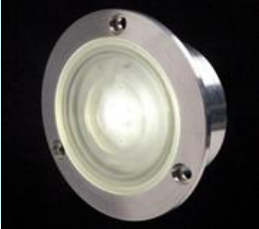

Model number	ULE21VW1C-F-38W K40C80L240	ULE21VW1C-F-38W	ULE21VW0C-F-45W
<b>Light data</b>			
Light color options	Neutral	Cool	Warm
Color temperature (°K)	4000	6500	3000
Light output (lumens)	240	260	360
Beam angle (°)	120	120	120
Efficacy	56	60	55
CRI	CRI>80	70	CRI>80
Expected Lifespan (Hr)	>50,000	>50,000	>50,000
<b>Electrical data</b>			
Input voltage (V DC)	10 to 14	10 to 14	10 to 14
Input voltage (V AC)	10 to 14	10 to 14	10 to 14
Wattage (W)	4.3	4.3	6.5
<b>Certifications and ratings</b>			
Safety Certifications (i.e. UL or CSA)	Yes	Yes	Yes
NSF	Yes	Yes	Yes
ROHS	Yes	Yes	Yes
IP rating	IP66	IP66	IP66
<b>Electronics</b>			
Thermal foldback (y/n)	Yes	Yes	Yes
Power correction factor	0.8	0.8	0.8
Over temp. protection	No	No	No
Guarantee	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	additional heatsinking required	additional heatsinking required	additional heatsinking required
Operating (environmental) temperature range	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C
<b>Other Product Features</b>			




## OPTO product family



## ULE21VW



Model number	ULE21VW1C-F-45W K40C80L360	ULE21VW1C-F-45W	ULE21VW0C-F45W HO K30C80L450
<b>Light data</b>			
Light color options	Neutral	Cool	Warm
Color temperature (°K)	4000	6500	3000
Light output (lumens)	360	390	450
Beam angle (°)	120	120	120
Efficacy	55	60	69
CRI	CRI>80	70	CRI>80
Expected Lifespan (Hr)	>50,000	>50,000	>50,000
<b>Electrical data</b>			
Input voltage (V DC)	10 to 14	10 to 14	10 to 14
Input voltage (V AC)	10 to 14	10 to 14	10 to 14
Wattage (W)	6.5	6.5	6.5
<b>Certifications and ratings</b>			
Safety Certifications (i.e. UL or CSA)	Yes	Yes	Yes
NSF	Yes	Yes	Yes
ROHS	Yes	Yes	Yes
IP rating	IP66	IP66	IP66
<b>Electronics</b>			
Thermal foldback (y/n)	Yes	Yes	Yes
Power correction factor	0.8	0.8	0.8
Over temp. protection	No	No	No
Guarantee	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	additional heatsinking required	additional heatsinking required	additional heatsinking required
Operating (environmental) temperature range	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C
<b>Other Product Features</b>			

OPTO product family	ULE21VW		ULE26VW
			
Model number	ULE21VW1C-F-45W HO K40C60L500	ULE21VW1C-F-45W HO K65C65L500	ULE26VW1A-F-25W
Light data			
Light color options	Neutral	Cool	Cool
Color temperature (°K)	4000	6500	6000
Light output (lumens)	500	500	160
Beam angle (°)	120	120	120
Efficacy	77	77	73
CRI	65	65	70
Expected Lifespan (Hr)	>50,000	>50,000	>50,000
Electrical data			
Input voltage (V DC)	10 to 14	10 to 14	32 to 40
Input voltage (V AC)	10 to 14	10 to 14	No
Wattage (W)	6.5	6.5	2.2
Certifications and ratings			
Safety Certifications (i.e. UL or CSA)	Yes	Yes	Yes
NSF	Yes	Yes	Yes
ROHS	Yes	Yes	Yes
IP rating	IP66	IP66	
Electronics			
Thermal foldback (y/n)	Yes	Yes	Yes
Power correction factor	0.8	0.8	0.8
Over temp. protection	No	No	No
Guarantee	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	additional heatsinking required	additional heatsinking required	additional heatsinking required
Operating (environmental) temperature range	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C
Other Product Features			

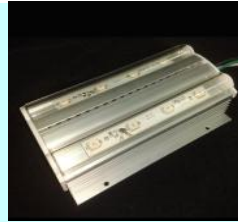
OPTO product family	26VW	ULE3000	ULE3000	
				
Model number	ULE26VW1A-F-38W	ULE3000B-1	ULE3001B-1	ULE3010 K30C80L70
<b>Light data</b>				
Light color options	Cool	Warm	Cool	Warm
Color temperature (°K)	6000	3000	6000	3000
Light output (lumens)	320	80	100	70
Beam angle (°)	120	30	30	110
Efficacy	74	67	83	Not Applicable
CRI	70	CRI>80	75	CRI>80
Expected Lifespan (Hr)	>50,000	>50,000	>50,000	>50,000
<b>Electrical data</b>				
Input voltage (V DC)	32 to 40	3.4	3.4	3
Input voltage (V AC)	No	No	No	No
Wattage (W)	4.3	1.2	1.2	1.05
<b>Certifications and ratings</b>				
Safety Certifications (i.e. UL or CSA)	Yes	No	No	No
NSF	Yes	No	No	No
ROHS	Yes	Yes	Yes	Yes
IP rating		IP65	IP65	IP65
<b>Electronics</b>				
Thermal foldback (y/n)	Yes	No	No	No
Power correction factor	0.8	Not Applicable	Not Applicable	Not Applicable
Over temp. protection	No	Not Applicable	Not Applicable	Not Applicable
Guarantee	35000/ 5	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	additional heatsinking required	additional heatsinking required + 100mA max	additional heatsinking required + 100mA max	additional heatsinking required + 100mA max
Operating (environmental) temperature range	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C
<b>Other Product Features</b>				

OPTO product family	ULE3010		ULE4000	
				
Model number	ULE3011 K50C70L80	ULE3014 W470L20	ULE4360C-5-55W	ULE4361C-5-55W K40C70L1150
Light data				
Light color options	Cool	Blue	Warm	Neutral
Color temperature (°K)	5000	470nm	3000	4000
Light output (lumens)	80	20	1050	1150
Beam angle (°)	110	110	125	125
Efficacy	Not Applicable	Not Applicable	58	64
CRI	72	Not Applicable	CRI>80	70
Expected Lifespan (Hr)	>50,000	>50,000	>50,000	>50,000
Electrical data				
Input voltage (V DC)	3	3	No	No
Input voltage (V AC)	No	No	100 to 277	100 to 277
Wattage (W)	1.05	1.05	18	18
Certifications and ratings				
Safety Certifications (i.e. UL or CSA)	No	No	Yes	Yes
NSF	No	No	No	No
ROHS	Yes	Yes	Yes	Yes
IP rating	IP65	IP65		
Electronics				
Thermal foldback (y/n)	No	No	Yes	Yes
Power correction factor	Not Applicable	Not Applicable	0.9	0.9
Over temp. protection	Not Applicable	Not Applicable	No	No
Guarantee	35000/ 5	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	additional heatsinking required + 100mA max	additional heatsinking required + 100mA max	no additional heatsinking required	no additional heatsinking required
Operating (environmental) temperature range	-20°C to 50°C	-20°C to 50°C	-10°C to 50°C	-10°C to 50°C
Other Product Features			End-of-Life. Replaced with ULF24000	

## OPTO product family

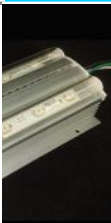
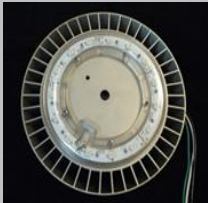
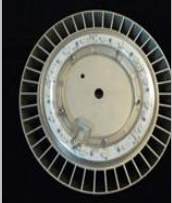
## ULE4000

## ULE




Model number	ULE4361C-5-55W	ULE4360C-5-55W K30C80L750 FR	ULE4360C-5-55W K40C70L800 FR
<b>Light data</b>			
Light color options	Cool	Warm	Neutral
Color temperature (°K)	6000	3000	4000
Light output (lumens)	1150	750	800
Beam angle (°)	125	125	125
Efficacy	64	42	44
CRI	70	CRI>80	70
Expected Lifespan (Hr)	>50,000	>50,000	>50,000
<b>Electrical data</b>			
Input voltage (V DC)	No	No	No
Input voltage (V AC)	100 to 277	100 to 277	100 to 277
Wattage (W)	18	18	18
<b>Certifications and ratings</b>			
Safety Certifications (i.e. UL or CSA)	Yes	Yes	Yes
NSF	No	No	No
ROHS	Yes	Yes	Yes
IP rating			
<b>Electronics</b>			
Thermal foldback (y/n)	Yes	Yes	Yes
Power correction factor	0.9	0.9	0.9
Over temp. protection	No	No	No
Guarantee	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	no additional heatsinking required	no additional heatsinking required	no additional heatsinking required
Operating (environmental) temperature range	-10°C to 50°C	-10°C to 50°C	-10°C to 50°C
Other Product Features		Forsted Lens	Frosted Lens
	End-of-Life. Replaced with ULF24000		End-of-Life. Replaced with ULF24000



OPTO product family	4000	ULE5000	ULE5000
			
Model number	ULE4361C-5-55W K60C80L800 FR	ULE5360C-T-15	ULE5361C-T-15 K40C70L1650
Light data			
Light color options	Cool	Warm	Neutral
Color temperature (°K)	6000	3000	4000
Light output (lumens)	800	1400	1650
Beam angle (°)	125	110	100
Efficacy	44	44	52
CRI	70	CRI>80	70
Expected Lifespan (Hr)	>50,000	>50,000	>50,000
Electrical data			
Input voltage (V DC)	No	No	No
Input voltage (V AC)	100 to 277	120	120
Wattage (W)	18	32	32
Certifications and ratings			
Safety Certifications (i.e. UL or CSA)	Yes	Yes	Yes
NSF	No	No	No
ROHS	Yes	Yes	Yes
IP rating			
Electronics			
Thermal foldback (y/n)	Yes	Yes	Yes
Power correction factor	0.9	0.8	0.8
Over temp. protection	No	No	No
Guarantee	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	no additional heatsinking required	no additional heatsinking required	no additional heatsinking required
Operating (environmental) temperature range	-10°C to 50°C	-10°C to 50°C	-10°C to 50°C
Other Product Features	Frosted Lens		
	End-of-Life. Replaced with ULF24000	End-of-Life. Replaced with ULE16000	

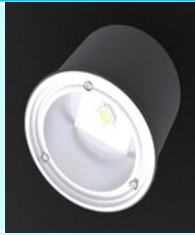
## OPTO product family

## ULE7000

					
Model number	ULE5361C-T-15	ULE71NS0C-01	ULE71NF0C-01	ULE71WF0C-01	ULE71NS1C-01
Light data					
Light color options	Cool	Warm	Warm	Warm	Cool
Color temperature (°K)	6000	3000	3000	3000	6000
Light output (lumens)	1650	65	65	65	80
Beam angle (°)	100	15	30	45	15
Efficacy	52	30	30	30	36
CRI	70	CRI>80	CRI>80	CRI>80	CRI>80
Expected Lifespan (Hr)	>50,000	>50,000	>50,000	>50,000	>50,000
Electrical data					
Input voltage (V DC)	No	10 to 14	10 to 14	10 to 14	10 to 14
Input voltage (V AC)	120	10 to 14	10 to 14	10 to 14	10 to 14
Wattage (W)	32	2.2	2.2	2.2	2.2
Certifications and ratings					
Safety Certifications (i.e. UL or CSA)	Yes	Yes	Yes	Yes	Yes
NSF	No	No	No	No	No
ROHS	Yes	Yes	Yes	Yes	Yes
IP rating		IP67	IP67	IP67	IP67
Electronics					
Thermal foldback (y/n)	Yes	Yes	Yes	Yes	Yes
Power correction factor	0.8	0.8	0.8	0.8	0.8
Over temp. protection	No	No	No	No	No
Guarantee	35000/ 5	35000/ 5	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	no additional heatsinking required	additional heatsinking required	additional heatsinking required	additional heatsinking required	additional heatsinking required
Operating (environmental) temperature range	-10°C to 50°C	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C
Other Product Features					

## OPTO product family

## ULE7000



Model number	ULE71NF1C-01	ULE71WF1C-01	ULE71NS0C-02	ULE71NF0C-02	ULE71WF0C-02
<b>Light data</b>					
Light color options	Cool	Cool	Warm	Warm	Warm
Color temperature (°K)	6000	6000	3000	3000	3000
Light output (lumens)	80	80	130	130	130
Beam angle (°)	30	45	15	30	45
Efficacy	36	36	30	30	30
CRI	CRI>80	CRI>80	CRI>80	CRI>80	CRI>80
Expected Lifespan (Hr)	>50,000	>50,000	>50,000	>50,000	>50,000
<b>Electrical data</b>					
Input voltage (V DC)	10 to 14	10 to 14	10 to 14	10 to 14	10 to 14
Input voltage (V AC)	10 to 14	10 to 14	10 to 14	10 to 14	10 to 14
Wattage (W)	2.2	2.2	4.4	4.4	4.4
<b>Certifications and ratings</b>					
Safety Certifications (i.e. UL or CSA)	Yes	Yes	Yes	Yes	Yes
NSF	No	No	No	No	No
ROHS	Yes	Yes	Yes	Yes	Yes
IP rating	IP67	IP67	IP67	IP67	IP67
<b>Electronics</b>					
Thermal foldback (y/n)	Yes	Yes	Yes	Yes	Yes
Power correction factor	0.8	0.8	0.8	0.8	0.8
Over temp. protection	No	No	No	No	No
Guarantee	35000/ 5	35000/ 5	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	additional heatsinking required	additional heatsinking required	additional heatsinking required	additional heatsinking required	additional heatsinking required
Operating (environmental) temperature range	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C
Other Product Features					

## OPTO product family

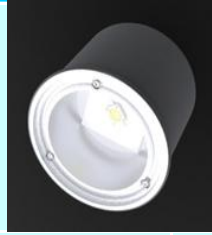
## ULE7000



Model number	ULE71NS1C-02	ULE71NF1C-02	ULE71WF1C-02	ULE71NS1C-03	ULE71WF1C-03
<b>Light data</b>					
Light color options	Cool	Cool	Cool	Cool	Cool
Color temperature (°K)	6000	6000	6000	6000	6000
Light output (lumens)	160	160	160	240	240
Beam angle (°)	15	30	45	15	45
Efficacy	36	36	36	37	37
CRI	CRI>80	CRI>80	CRI>80	CRI>80	CRI>80
Expected Lifespan (Hr)	>50,000	>50,000	>50,000	>50,000	>50,000
<b>Electrical data</b>					
Input voltage (V DC)	10 to 14	10 to 14	10 to 14	10 to 14	10 to 14
Input voltage (V AC)	10 to 14	10 to 14	10 to 14	10 to 14	10 to 14
Wattage (W)	4.4	4.4	4.4	6.5	6.5
<b>Certifications and ratings</b>					
Safety Certifications (i.e. UL or CSA)	Yes	Yes	Yes	Yes	Yes
NSF	No	No	No	No	No
ROHS	Yes	Yes	Yes	Yes	Yes
IP rating	IP67	IP67	IP67	IP67	IP67
<b>Electronics</b>					
Thermal foldback (y/n)	Yes	Yes	Yes	Yes	Yes
Power correction factor	0.8	0.8	0.8	0.8	0.8
Over temp. protection	No	No	No	No	No
Guarantee	35000/ 5	35000/ 5	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	additional heatsinking required	additional heatsinking required	additional heatsinking required	additional heatsinking required	additional heatsinking required
Operating (environmental) temperature range	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C
<b>Other Product Features</b>					

## OPTO product family

## ULE7000



Model number	ULE71NF1C-03	ULE71NS0C-03	ULE71NS1C-03 K40C85L330	ULE71NF0C-03
<b>Light data</b>				
Light color options	Cool	Warm	Neutral	Warm
Color temperature (°K)	6000	3000	4000	3000
Light output (lumens)	240	330	330	330
Beam angle (°)	30	15	15	30
Efficacy	37	51	51	51
CRI	CRI>80	CRI>80	CRI>80	CRI>80
Expected Lifespan (Hr)	>50,000	>50,000	>50,000	>50,000
<b>Electrical data</b>				
Input voltage (V DC)	10 to 14	10 to 14	10 to 14	10 to 14
Input voltage (V AC)	10 to 14	10 to 14	10 to 14	10 to 14
Wattage (W)	6.5	6.5	6.5	6.5
<b>Certifications and ratings</b>				
Safety Certifications (i.e. UL or CSA)	Yes	Yes	Yes	Yes
NSF	No	No	No	No
ROHS	Yes	Yes	Yes	Yes
IP rating	IP67	IP67	IP67	IP67
<b>Electronics</b>				
Thermal foldback (y/n)	Yes	Yes	Yes	Yes
Power correction factor	0.8	0.8	0.8	0.8
Over temp. protection	No	No	No	No
Guarantee	35000/ 5	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	additional heatsinking required	additional heatsinking required	additional heatsinking required	additional heatsinking required
Operating (environmental) temperature range	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C
<b>Other Product Features</b>				

## OPTO product family

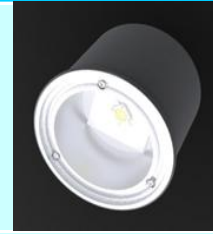
## ULE7000



	ULE71NF1C-03 K40C85L330	ULE71WF0C-03	ULE71WF1C-03 K40C85L330
Model number	ULE71NF1C-03 K40C85L330	ULE71WF0C-03	ULE71WF1C-03 K40C85L330
Light data			
Light color options	Neutral	Warm	Neutral
Color temperature (°K)	4000	3000	4000
Light output (lumens)	330	330	330
Beam angle (°)	30	45	45
Efficacy	51	51	51
CRI	CRI>80	CRI>80	CRI>80
Expected Lifespan (Hr)	>50,000	>50,000	>50,000
Electrical data			
Input voltage (V DC)	10 to 14	10 to 14	10 to 14
Input voltage (V AC)	10 to 14	10 to 14	10 to 14
Wattage (W)	6.5	6.5	6.5
Certifications and ratings			
Safety Certifications (i.e. UL or CSA)	Yes	Yes	Yes
NSF	No	No	No
ROHS	Yes	Yes	Yes
IP rating	IP67	IP67	IP67
Electronics			
Thermal foldback (y/n)	Yes	Yes	Yes
Power correction factor	0.8	0.8	0.8
Over temp. protection	No	No	No
Guarantee	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	additional heatsinking required	additional heatsinking required	additional heatsinking required
Operating (environmental) temperature range	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C
Other Product Features			

OPTO product family

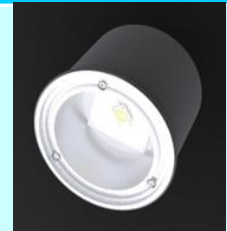
ULE7000



Model number	ULE71NS0C-03 HO K30C80L400	ULE71NF0C-03 HO K30C80L400
Light data		
Light color options	Warm	Warm
Color temperature (°K)	3000	3000
Light output (lumens)	400	400
Beam angle (°)	15	30
Efficacy	62	62
CRI	CRI>80	CRI>80
Expected Lifespan (Hr)	>50,000	>50,000
Electrical data		
Input voltage (V DC)	10 to 14	10 to 14
Input voltage (V AC)	10 to 14	10 to 14
Wattage (W)	6.5	6.5
Certifications and ratings		
Safety Certifications (i.e. UL or CSA)	Yes	Yes
NSF	No	No
ROHS	Yes	Yes
IP rating	IP67	IP67
Electronics		
Thermal foldback (y/n)	Yes	Yes
Power correction factor	0.8	0.8
Over temp. protection	No	No
Guarantee	35000/ 5	35000/ 5
Mounting requirements/ limitations	additional heatsinking required	additional heatsinking required
Operating (environmental) temperature range	-10°C to 50°C	-10°C to 50°C
Other Product Features		

## OPTO product family

## ULE7000



Model number	ULE71WF0C-03 HO K30C80L400	ULE71NS1C-03 HO K40C60L450	ULE71NF1C-03 HO K40C60L450
<b>Light data</b>			
Light color options	Warm	Neutral	Neutral
Color temperature (°K)	3000	4000	4000
Light output (lumens)	400	450	450
Beam angle (°)	45	15	30
Efficacy	62	69	69
CRI	CRI>80	65	65
Expected Lifespan (Hr)	>50,000	>50,000	>50,000
<b>Electrical data</b>			
Input voltage (V DC)	10 to 14	10 to 14	10 to 14
Input voltage (V AC)	10 to 14	10 to 14	10 to 14
Wattage (W)	6.5	6.5	6.5
<b>Certifications and ratings</b>			
Safety Certifications (i.e. UL or CSA)	Yes	Yes	Yes
NSF	No	No	No
ROHS	Yes	Yes	Yes
IP rating	IP67	IP67	IP67
<b>Electronics</b>			
Thermal foldback (y/n)	Yes	Yes	Yes
Power correction factor	0.8	0.8	0.8
Over temp. protection	No	No	No
Guarantee	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	additional heatsinking required	additional heatsinking required	additional heatsinking required
Operating (environmental) temperature range	-10°C to 50°C	-10°C to 50°C	-10°C to 50°C
<b>Other Product Features</b>			



OPTO product family		
Model number	ULE71WF1C-03 HO K40C60L450	ULE71NS1C-03 HO K60C80L400
Light data		
Light color options	Neutral	Cool
Color temperature (°K)	4000	6000
Light output (lumens)	450	400
Beam angle (°)	45	15
Efficacy	69	62
CRI	CRI>80	CRI>80
Expected Lifespan (Hr)	>50,000	>50,000
Electrical data		
Input voltage (V DC)	10 to 14	10 to 14
Input voltage (V AC)	10 to 14	10 to 14
Wattage (W)	6.5	6.5
Certifications and ratings		
Safety Certifications (i.e. UL or CSA)	Yes	Yes
NSF	No	No
ROHS	Yes	Yes
IP rating	IP67	IP67
Electronics		
Thermal foldback (y/n)	Yes	Yes
Power correction factor	0.8	0.8
Over temp. protection	No	No
Guarantee	35000/ 5	35000/ 5
Mounting requirements/ limitations	additional heatsinking required	additional heatsinking required
Operating (environmental) temperature range	-10°C to 50°C	-10°C to 50°C
Other Product Features		

## OPTO product family

## ULE7000



Model number	ULE71NS1C-03 HO K60C60L450	ULE71NF1C-03 HO K60C80L400
<b>Light data</b>		
Light color options	Cool	Cool
Color temperature (°K)	6000	6000
Light output (lumens)	450	400
Beam angle (°)	15	30
Efficacy	69	62
CRI	65	CRI>80
Expected Lifespan (Hr)	>50,000	>50,000
<b>Electrical data</b>		
Input voltage (V DC)	10 to 14	10 to 14
Input voltage (V AC)	10 to 14	10 to 14
Wattage (W)	6.5	6.5
<b>Certifications and ratings</b>		
Safety Certifications (i.e. UL or CSA)	Yes	Yes
NSF	No	No
ROHS	Yes	Yes
IP rating	IP67	IP67
<b>Electronics</b>		
Thermal foldback (y/n)	Yes	Yes
Power correction factor	0.8	0.8
Over temp. protection	No	No
Guarantee	35000/ 5	35000/ 5
Mounting requirements/ limitations	additional heatsinking required	additional heatsinking required
Operating (environmental) temperature range	-10°C to 50°C	-10°C to 50°C
<b>Other Product Features</b>		

## OPTO product family

## ULE7000



Model number	ULE71NF1C-03 HO K60C60L450	ULE71WF1C-03 HO K60C80L400
<b>Light data</b>		
Light color options	Cool	Cool
Color temperature (°K)	6000	6000
Light output (lumens)	450	400
Beam angle (°)	30	45
Efficacy	69	62
CRI	65	CRI>80
Expected Lifespan (Hr)	>50,000	>50,000
<b>Electrical data</b>		
Input voltage (V DC)	10 to 14	10 to 14
Input voltage (V AC)	10 to 14	10 to 14
Wattage (W)	6.5	6.5
<b>Certifications and ratings</b>		
Safety Certifications (i.e. UL or CSA)	Yes	Yes
NSF	No	No
ROHS	Yes	Yes
IP rating	IP67	IP67
<b>Electronics</b>		
Thermal foldback (y/n)	Yes	Yes
Power correction factor	0.8	0.8
Over temp. protection	No	No
Guarantee	35000/ 5	35000/ 5
Mounting requirements/ limitations	additional heatsinking required	additional heatsinking required
Operating (environmental) temperature range	-10°C to 50°C	-10°C to 50°C
<b>Other Product Features</b>		

## OPTO product family

## ULE7000 HS



Model number	ULE71WF1C-03 HO K60C60L450	ULE71NS0C-03-HS	ULE71NF0C-03-HS	ULE71WF0C-03-HS
<b>Light data</b>				
Light color options	Cool	Warm	Warm	Warm
Color temperature (°K)	6000	3000	3000	3000
Light output (lumens)	450	330	330	330
Beam angle (°)	45	15	30	45
Efficacy	69	51	51	51
CRI	65	CRI>80	CRI>80	CRI>80
Expected Lifespan (Hr)	>50,000	>50,000	>50,000	>50,000
<b>Electrical data</b>				
Input voltage (V DC)	10 to 14	10 to 14	10 to 14	10 to 14
Input voltage (V AC)	10 to 14	10 to 14	10 to 14	10 to 14
Wattage (W)	6.5	6.5	6.5	6.5
<b>Certifications and ratings</b>				
Safety Certifications (i.e. UL or CSA)	Yes	Yes	Yes	Yes
NSF	No	No	No	No
ROHS	Yes	Yes	Yes	Yes
IP rating	IP67	IP66	IP66	IP66
<b>Electronics</b>				
Thermal foldback (y/n)	Yes	Yes	Yes	Yes
Power correction factor	0.8	0.8	0.8	0.8
Over temp. protection	No	No	No	No
Guarantee	35000/ 5	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	additional heatsinking required	no additional heatsinking required	no additional heatsinking required	no additional heatsinking required
Operating (environmental) temperature range	-10°C to 50°C	-10°C to 50°C	-10°C to 50°C	-10°C to 50°C
<b>Other Product Features</b>				

OPTO product family

Model number	ULE71NS0C-03-HS HO K30C80L400	ULE71NF0C-03-HS HO K30C80L400
<b>Light data</b>		
Light color options	Warm	Warm
Color temperature (°K)	3000	3000
Light output (lumens)	400	400
Beam angle (°)	15	30
Efficacy	62	62
CRI	CRI>80	CRI>80
Expected Lifespan (Hr)	>50,000	>50,000
<b>Electrical data</b>		
Input voltage (V DC)	10 to 14	10 to 14
Input voltage (V AC)	10 to 14	10 to 14
Wattage (W)	6.5	6.5
<b>Certifications and ratings</b>		
Safety Certifications (i.e. UL or CSA)	Yes	Yes
NSF	No	No
ROHS	Yes	Yes
IP rating	IP66	IP66
<b>Electronics</b>		
Thermal foldback (y/n)	Yes	Yes
Power correction factor	0.8	0.8
Over temp. protection	No	No
Guarantee	35000/ 5	35000/ 5
Mounting requirements/ limitations	no additional heatsinking required	no additional heatsinking required
Operating (environmental) temperature range	-10°C to 50°C	-10°C to 50°C
<b>Other Product Features</b>		

## OPTO product family

## ULE7000 HS



Model number	ULE71WF0C-03-HS HO K30C80L400	ULE71NS1C-03-HS K40C85L330	ULE71NF1C-03-HS K40C85L330
<b>Light data</b>			
Light color options	Warm	Neutral	Neutral
Color temperature (°K)	3000	4000	4000
Light output (lumens)	400	330	330
Beam angle (°)	45	15	30
Efficacy	62	51	51
CRI	CRI>80	CRI>80	CRI>80
Expected Lifespan (Hr)	>50,000	>50,000	>50,000
<b>Electrical data</b>			
Input voltage (V DC)	10 to 14	10 to 14	10 to 14
Input voltage (V AC)	10 to 14	10 to 14	10 to 14
Wattage (W)	6.5	6.5	6.5
<b>Certifications and ratings</b>			
Safety Certifications (i.e. UL or CSA)	Yes	Yes	Yes
NSF	No	No	No
ROHS	Yes	Yes	Yes
IP rating	IP66	IP66	IP66
<b>Electronics</b>			
Thermal foldback (y/n)	Yes	Yes	Yes
Power correction factor	0.8	0.8	0.8
Over temp. protection	No	No	No
Guarantee	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	no additional heatsinking required	no additional heatsinking required	no additional heatsinking required
Operating (environmental) temperature range	-10°C to 50°C	-10°C to 50°C	-10°C to 50°C
<b>Other Product Features</b>			

OPTO product family

**ULE7000 HS**



Model number	ULE71WF1C-03-HS K40C85L330	ULE71NS1C-03-HS HO K40C60L450
<b>Light data</b>		
Light color options	Neutral	Neutral
Color temperature (°K)	4000	4000
Light output (lumens)	330	450
Beam angle (°)	45	15
Efficacy	51	69
CRI	CRI>80	65
Expected Lifespan (Hr)	>50,000	>50,000
<b>Electrical data</b>		
Input voltage (V DC)	10 to 14	10 to 14
Input voltage (V AC)	10 to 14	10 to 14
Wattage (W)	6.5	6.5
<b>Certifications and ratings</b>		
Safety Certifications (i.e. UL or CSA)	Yes	Yes
NSF	No	No
ROHS	Yes	Yes
IP rating	IP66	IP66
<b>Electronics</b>		
Thermal foldback (y/n)	Yes	Yes
Power correction factor	0.8	0.8
Over temp. protection	No	No
Guarantee	35000/ 5	35000/ 5
Mounting requirements/ limitations	no additional heatsinking required	no additional heatsinking required
Operating (environmental) temperature range	-10°C to 50°C	-10°C to 50°C
<b>Other Product Features</b>		

## OPTO product family

## ULE7000 HS



Model number	ULE71NF1C-03-HS HO K40C60L450	ULE71WF1C-03-HS HO K40C60L450	ULE71NS1C-03-HS
<b>Light data</b>			
Light color options	Neutral	Neutral	Cool
Color temperature (°K)	4000	4000	6000
Light output (lumens)	450	450	240
Beam angle (°)	30	45	15
Efficacy	69	69	36
CRI	65	65	CRI>80
Expected Lifespan (Hr)	>50,000	>50,000	>50,000
<b>Electrical data</b>			
Input voltage (V DC)	10 to 14	10 to 14	10 to 14
Input voltage (V AC)	10 to 14	10 to 14	10 to 14
Wattage (W)	6.5	6.5	6.6
<b>Certifications and ratings</b>			
Safety Certifications (i.e. UL or CSA)	Yes	Yes	Yes
NSF	No	No	No
ROHS	Yes	Yes	Yes
IP rating	IP66	IP66	IP66
<b>Electronics</b>			
Thermal foldback (y/n)	Yes	Yes	Yes
Power correction factor	0.8	0.8	0.8
Over temp. protection	No	No	No
Guarantee	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	no additional heatsinking required	no additional heatsinking required	no additional heatsinking required
Operating (environmental) temperature range	-10°C to 50°C	-10°C to 50°C	-10°C to 50°C
<b>Other Product Features</b>			



## OPTO product family

## ULE7000 HS



Model number	ULE71NF1C-03-HS	ULE71WF1C-03-HS	ULE71NS1C-03-HS HO K60C60L450
<b>Light data</b>			
Light color options	Cool	Cool	Cool
Color temperature (°K)	6000	6000	6000
Light output (lumens)	240	240	450
Beam angle (°)	30	45	15
Efficacy	36	36	68
CRI	CRI>80	CRI>80	65
Expected Lifespan (Hr)	>50,000	>50,000	>50,000
<b>Electrical data</b>			
Input voltage (V DC)	10 to 14	10 to 14	10 to 14
Input voltage (V AC)	10 to 14	10 to 14	10 to 14
Wattage (W)	6.6	6.6	6.6
<b>Certifications and ratings</b>			
Safety Certifications (i.e. UL or CSA)	Yes	Yes	Yes
NSF	No	No	No
ROHS	Yes	Yes	Yes
IP rating	IP66	IP66	IP66
<b>Electronics</b>			
Thermal foldback (y/n)	Yes	Yes	Yes
Power correction factor	0.8	0.8	0.8
Over temp. protection	No	No	No
Guarantee	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	no additional heatsinking required	no additional heatsinking required	no additional heatsinking required
Operating (environmental) temperature range	-10°C to 50°C	-10°C to 50°C	-10°C to 50°C
<b>Other Product Features</b>			



## OPTO product family

## ULE7000 HS




	ULE71NF1C-03-HS HO K60C60L450	ULE71WF1C-03-HS HO K60C60L450
Model number	ULE71NF1C-03-HS HO K60C60L450	ULE71WF1C-03-HS HO K60C60L450
Light data		
Light color options	Cool	Cool
Color temperature (°K)	6000	6000
Light output (lumens)	450	450
Beam angle (°)	30	45
Efficacy	68	68
CRI	65	65
Expected Lifespan (Hr)	>50,000	>50,000
Electrical data		
Input voltage (V DC)	10 to 14	10 to 14
Input voltage (V AC)	10 to 14	10 to 14
Wattage (W)	6.6	6.6
Certifications and ratings		
Safety Certifications (i.e. UL or CSA)	Yes	Yes
NSF	No	No
ROHS	Yes	Yes
IP rating	IP66	IP66
Electronics		
Thermal foldback (y/n)	Yes	Yes
Power correction factor	0.8	0.8
Over temp. protection	No	No
Guarantee	35000/ 5	35000/ 5
Mounting requirements/ limitations	no additional heatsinking required	no additional heatsinking required
Operating (environmental) temperature range	-10°C to 50°C	-10°C to 50°C
Other Product Features		



## OPTO product family

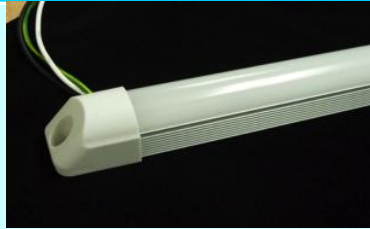
	ULE16000		ULE16000
			
Model number	ULE163VW0 42 K30C80L1200	ULE163VW1 42 K40C80L1200	ULE163VW0 42 K60C80L1200
Light data			
Light color options	Warm	Neutral	Cool
Color temperature (°K)	3000	4000	6000
Light output (lumens)	1200	1200	1200
Beam angle (°)	120	120	120
Efficacy	75	75	75
CRI	CRI>80	CRI>80	CRI>80
Expected Lifespan (Hr)	>50,000	>50,000	>50,000
Electrical data			
Input voltage (V DC)	No	No	No
Input voltage (V AC)	120	120	120
Wattage (W)	16	16	16
Certifications and ratings			
Safety Certifications (i.e. UL or CSA)	Yes	Yes	Yes
NSF	Yes	Yes	Yes
ROHS	Yes	Yes	Yes
IP rating			
Electronics			
Thermal foldback (y/n)	No	No	No
Power correction factor	0.9	0.9	0.9
Over temp. protection	No	No	No
Guarantee	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	no additional heatsinking required	no additional heatsinking required	no additional heatsinking required
Operating (environmental) temperature range	-20°C to 55°C	-20°C to 55°C	-20°C to 55°C
Other Product Features	Energy Star Approved	Energy Star Approved	Energy Star Approved

## OPTO product family

	URB1000 LC	ULF4000		ULF4000
				
Model number	URB11WF1 01-LC	ULF43WF0-08	ULF43WF1-08	ULF43VW1B-08
Light data				
Light color options	Cool	Warm	Neutral	Cool
Color temperature (°K)	6000	3000	4000	6000
Light output (lumens)	100	720	1100	1300
Beam angle (°)	35	110	113	120
Efficacy	50	40	63	65
CRI	CRI>80	CRI>80	70	70
Expected Lifespan (Hr)	15,000	>50,000	>50,000	>50,000
Electrical data				
Input voltage (V DC)	12	No	No	No
Input voltage (V AC)	12	100 to 277	100 to 277	100 to 277
Wattage (W)	2	18	17.5	20
Certifications and ratings				
Safety Certifications (i.e. UL or CSA)	No	Yes	Yes	Yes
NSF	Not required	No	No	No
ROHS	Yes	Yes	Yes	Yes
IP rating	IP65	IP66	IP66	IP66
Electronics				
Thermal foldback (y/n)	No	Yes	Yes	Yes
Power correction factor	Not required	0.9	0.9	0.9
Over temp. protection	No	No	No	No
Guarantee	10000/ 1	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	no additional heatsinking required	no additional heatsinking required	no additional heatsinking required	no additional heatsinking required
Operating (environmental) temperature range	-20°C to 50°C	-20°C to 50°C	-10°C to 50°C	-20°C to 50°C
Other Product Features	Fits in standard bayonet mount			

OPTO product family

## ULF8000



Model number	ULF89VW1 LP21 K30C80L400	ULF89VW1 LP21 K40C80L400	ULF89VW1 LP21 K65C80L500
<b>Light data</b>			
Light color options	Warm	Neutral	Cool
Color temperature (°K)	3000	4000	6500
Light output (lumens)	400	400	500
Beam angle (°)	110	110	110
Efficacy	63	63	63
CRI	CRI>80	CRI>80	CRI>80
Expected Lifespan (Hr)	>50,000	>50,000	>50,000
<b>Electrical data</b>			
Input voltage (V DC)	No	No	No
Input voltage (V AC)	110 to 277	110 to 277	110 to 277
Wattage (W)	16	16	16
<b>Certifications and ratings</b>			
Safety Certifications (i.e. UL or CSA)	Yes	Yes	Yes
NSF	Yes	Yes	Yes
ROHS	Yes	Yes	Yes
IP rating	IP65	IP65	IP65
<b>Electronics</b>			
Thermal foldback (y/n)	No	No	No
Power correction factor	0.85	0.85	0.85
Over temp. protection	No	No	No
Guarantee	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	no additional heatsinking required	no additional heatsinking required	no additional heatsinking required
Operating (environmental) temperature range	-10°C to 40°C	-10°C to 40°C	-10°C to 40°C
Other Product Features	21" Model- Eligible for Energy Star	21" Model- Eligible for Energy Star	21" Model- Eligible for Energy Star

## OPTO product family

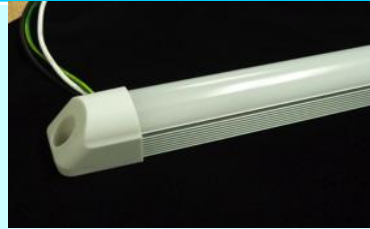
## ULF8000



Model number	ULF89VW1 LP21 K30C80L800	ULF89VW1 LP21 K40C80L800	ULF89VW1 LP21 K65C80L1000
<b>Light data</b>			
Light color options	Warm	Neutral	Cool
Color temperature (°K)	3000	4000	6500
Light output (lumens)	800	800	1000
Beam angle (°)	110	110	110
Efficacy	63	63	63
CRI	CRI>80	CRI>80	CRI>80
Expected Lifespan (Hr)	>50,000	>50,000	>50,000
<b>Electrical data</b>			
Input voltage (V DC)	No	No	No
Input voltage (V AC)	110 to 277	110 to 277	110 to 277
Wattage (W)	16	16	16
<b>Certifications and ratings</b>			
Safety Certifications (i.e. UL or CSA)	Yes	Yes	Yes
NSF	Yes	Yes	Yes
ROHS	Yes	Yes	Yes
IP rating	IP65	IP65	IP65
<b>Electronics</b>			
Thermal foldback (y/n)	No	No	Yes
Power correction factor	0.85	0.85	0.9
Over temp. protection	No	No	No
Guarantee	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	no additional heatsinking required	no additional heatsinking required	no additional heatsinking required
Operating (environmental) temperature range	-10°C to 40°C	-10°C to 40°C	-10°C to 40°C
Other Product Features	21" Model- Eligible for Energy Star	21" Model- Eligible for Energy Star	21" Model- Eligible for Energy Star



## OPTO product family

## ULF8000



Model number	ULF89VW1 LP48 K30C80L1200	ULF89VW1 LP48 K40C80L1200	ULF89VW1 LP48 K65C80L1200
<b>Light data</b>			
Light color options	Warm	Neutral	Cool
Color temperature (°K)	3000	4000	6500
Light output (lumens)	1200	1200	1200
Beam angle (°)	110	110	110
Efficacy	57	57	57
CRI	CRI>80	CRI>80	CRI>80
Expected Lifespan (Hr)	>50,000	>50,000	>50,000
<b>Electrical data</b>			
Input voltage (V DC)	No	No	No
Input voltage (V AC)	110 to 277	110 to 277	110 to 277
Wattage (W)	21	21	21
<b>Certifications and ratings</b>			
Safety Certifications (i.e. UL or CSA)	Yes	Yes	Yes
NSF	Yes	Yes	Yes
ROHS	Yes	Yes	Yes
IP rating	IP65	IP65	IP65
<b>Electronics</b>			
Thermal foldback (y/n)	Yes	No	No
Power correction factor	0.9	0.9	0.9
Over temp. protection	No	No	No
Guarantee	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	no additional heatsinking required	no additional heatsinking required	no additional heatsinking required
Operating (environmental) temperature range	-10°C to 40°C	-10°C to 40°C	-10°C to 40°C
Other Product Features	48" Model- Eligible for Energy Star	48" Model- Eligible for Energy Star	48" Model- Eligible for Energy Star

## OPTO product family

	ULF8000		ULF8000
			
Model number	ULF89VW1 LP48 K30C80L2400	ULF89VW1 LP48 K40C80L2400	ULF89VW1 LP48 K65C80L2400
Light data			
Light color options	Warm	Neutral	Cool
Color temperature (°K)	3000	4000	6500
Light output (lumens)	2400	2400	2400
Beam angle (°)	110	110	110
Efficacy	92	92	92
CRI	CRI>80	CRI>80	CRI>80
Expected Lifespan (Hr)	>50,000	>50,000	>50,000
Electrical data			
Input voltage (V DC)	No	No	No
Input voltage (V AC)	110 to 277	110 to 277	110 to 277
Wattage (W)	26	26	26
Certifications and ratings			
Safety Certifications (i.e. UL or CSA)	Yes	Yes	Yes
NSF	Yes	Yes	Yes
ROHS	Yes	Yes	Yes
IP rating	IP65	IP65	IP65
Electronics			
Thermal foldback (y/n)	Yes	No	No
Power correction factor	0.9	0.9	0.9
Over temp. protection	No	No	No
Guarantee	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	no additional heatsinking required	no additional heatsinking required	no additional heatsinking required
Operating (environmental) temperature range	-10°C to 40°C	-10°C to 40°C	-10°C to 40°C
Other Product Features	48" Model- Eligible for Energy Star	48" Model- Eligible for Energy Star	48" Model- Eligible for Energy Star



## OPTO product family

## ULF11000



Model number	ULF119WE1 K30C80L1500	ULF119WF0 K25C80L3000	ULF119WF0 K30C80L1500
<b>Light data</b>			
Light color options	Warm	Warm	Warm
Color temperature (°K)	3000	3000	3000
Light output (lumens)	1500	3000	1500
Beam angle (°)	60	90	90
Efficacy	56	111	56
CRI	CRI>80	CRI>80	CRI>80
Expected Lifespan (Hr)	>50,000	>50,000	>50,000
<b>Electrical data</b>			
Input voltage (V DC)	No	No	No
Input voltage (V AC)	100 to 277	100 to 277	100 to 277
Wattage (W)	27	27	27
<b>Certifications and ratings</b>			
Safety Certifications (i.e. UL or CSA)	Components Certified	Components Certified	Components Certified
NSF	No	No	No
ROHS	Yes	Yes	Yes
IP rating	IP66	IP66	IP66
<b>Electronics</b>			
Thermal foldback (y/n)	No	No	No
Power correction factor	0.88/0.9/0.99	0.88/0.9/0.99	0.88/0.9/0.99
Over temp. protection	No	No	No
Guarantee	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	no additional heatsinking required	no additional heatsinking required	no additional heatsinking required
Operating (environmental) temperature range	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C
Other Product Features	DLC Eligible	DLC Certified	DLC Certified

## OPTO product family

## ULF11000



Model number	ULF119WF0 K30C80L3000	ULF119WE0 K40C80L1500	ULF119WF0 K40C80L1500
<b>Light data</b>			
Light color options	Warm	Neutral	Neutral
Color temperature (°K)	3000	4000	4000
Light output (lumens)	3000	4000	4000
Beam angle (°)	90	60	90
Efficacy	60	80	80
CRI	CRI>80	70	70
Expected Lifespan (Hr)	>50,000	>50,000	>50,000
<b>Electrical data</b>			
Input voltage (V DC)	No	No	No
Input voltage (V AC)	100 to 277	100 to 277	100 to 277
Wattage (W)	50	50	50
<b>Certifications and ratings</b>			
Safety Certifications (i.e. UL or CSA)	Components Certified	Components Certified	Components Certified
NSF	No	No	No
ROHS	Yes	Yes	Yes
IP rating	IP66	IP66	IP66
<b>Electronics</b>			
Thermal foldback (y/n)	No	No	No
Power correction factor	0.88/0.9/0.99	0.88/0.9/0.99	0.88/0.9/0.99
Over temp. protection	No	No	No
Guarantee	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	no additional heatsinking required	no additional heatsinking required	no additional heatsinking required
Operating (environmental) temperature range	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C
Other Product Features	DLC Certified	DLC Eligible	DLC Certified

## OPTO product family

## ULF11000



Model number	ULF119WE1 K40C70L2000	ULF119WF1 K40C70L2000	ULF119WE1 K50C70L2000
Light data			
Light color options	Neutral	Neutral	Cool
Color temperature (°K)	4000	4000	5000
Light output (lumens)	2000	2000	2000
Beam angle (°)	60	90	60
Efficacy	74	74	74
CRI	70	70	70
Expected Lifespan (Hr)	>50,000	>50,000	>50,000
Electrical data			
Input voltage (V DC)	No	No	No
Input voltage (V AC)	100 to 277	100 to 277	100 to 277
Wattage (W)	27	27	27
Certifications and ratings			
Safety Certifications (i.e. UL or CSA)	Components Certified	Components Certified	Components Certified
NSF	No	No	No
ROHS	Yes	Yes	Yes
IP rating	IP66	IP66	IP66
Electronics			
Thermal foldback (y/n)	No	No	No
Power correction factor	0.88/0.9/0.99	0.88/0.9/0.99	0.88/0.9/0.99
Over temp. protection	No	No	No
Guarantee	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	no additional heatsinking required	no additional heatsinking required	no additional heatsinking required
Operating (environmental) temperature range	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C
Other Product Features	DLC Eligible	DLC Certified	DLC Eligible

## OPTO product family

## ULF11000



Model number	ULF119WF1 K50C70L2000	ULF119WE1 K50C70L4000	ULF119WF1 K50C70L4000
<b>Light data</b>			
Light color options	Cool	Cool	Cool
Color temperature (°K)	5000	5000	5000
Light output (lumens)	2000	4000	4000
Beam angle (°)	90	60	90
Efficacy	74	80	80
CRI	CRI>80	70	CRI>80
Expected Lifespan (Hr)	>50,000	>50,000	>50,000
<b>Electrical data</b>			
Input voltage (V DC)	No	No	No
Input voltage (V AC)	100 to 277	100 to 277	100 to 277
Wattage (W)	27	50	50
<b>Certifications and ratings</b>			
Safety Certifications (i.e. UL or CSA)	Components Certified	Components Certified	Components Certified
NSF	No	No	No
ROHS	Yes	Yes	Yes
IP rating	IP66	IP66	IP66
<b>Electronics</b>			
Thermal foldback (y/n)	No	No	No
Power correction factor	0.88/0.9/0.99	0.88/0.9/0.99	0.88/0.9/0.99
Over temp. protection	No	No	No
Guarantee	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	no additional heatsinking required	no additional heatsinking required	no additional heatsinking required
Operating (environmental) temperature range	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C
Other Product Features	DLC Certified	DLC Eligible	DLC Certified

## OPTO product family

## ULF12000

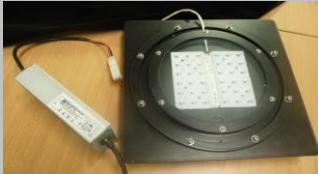
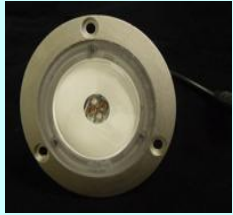


	ULF129WF1 K50C70L8000	ULF129VB1 K50C70L8000	ULF129WF1 K50C70L12000
Model number	ULF129WF1 K50C70L8000	ULF129VB1 K50C70L8000	ULF129WF1 K50C70L12000
Light data			
Light color options	Cool	Cool	Cool
Color temperature (°K)	5000	5000	5000
Light output (lumens)	8000	8000	12000
Beam angle (°)	90	160	90
Efficacy	80	80	75
CRI	70	70	70
Expected Lifespan (Hr)	>50,000	>50,000	>50,000
Electrical data			
Input voltage (V DC)	No	No	No
Input voltage (V AC)	100 to 277	100 to 277	100 to 277
Wattage (W)	100	100	160
Certifications and ratings			
Safety Certifications (i.e. UL or CSA)	No	No	No
NSF	No	No	No
ROHS	No	No	No
IP rating	IP66	IP66	IP66
Electronics			
Thermal foldback (y/n)	No	No	No
Power correction factor	0.9/0.95/0.99	0.9/0.95/0.99	0.9/0.95/0.99
Over temp. protection	No	No	No
Guarantee	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	no additional heatsinking required	no additional heatsinking required	no additional heatsinking required
Operating (environmental) temperature range	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C
Other Product Features	DLC Certified	UL Listed Power Supply	DLC Certified

OPTO product family

	ULF12000		ULF12000
			
Model number	ULF129VB1 K50C70L12000	ULF129WF1 K50C70L22000	ULF129VB1 K50C70L22000
Light data			
Light color options	Cool	Cool	Cool
Color temperature (°K)	5000	5000	5000
Light output (lumens)	12000	22000	22000
Beam angle (°)	160	90	160
Efficacy	75	138	138
CRI	70	70	70
Expected Lifespan (Hr)	>50,000	>50,000	>50,000
Electrical data			
Input voltage (V DC)	No	No	No
Input voltage (V AC)	100 to 277	100 to 277	100 to 277
Wattage (W)	160	160	160
Certifications and ratings			
Safety Certifications (i.e. UL or CSA)	No	Components Certified	Components Certified
NSF	No	No	No
ROHS	No	No	No
IP rating	IP66	IP66	IP66
Electronics			
Thermal foldback (y/n)	No	No	No
Power correction factor	0.9/0.95/0.99	0.9/0.95/0.99	0.9/0.95/0.99
Over temp. protection	No	No	No
Guarantee	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	no additional heatsinking required	no additional heatsinking required	no additional heatsinking required
Operating (environmental) temperature range	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C
Other Product Features	UL Listed Power Supply	DLC Certified	UL Listed Power Supply

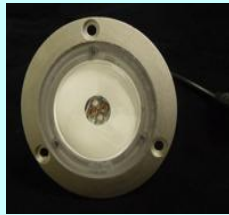
## OPTO product family

	ULF15000		UGL2000
			
Model number	ULF159VW1 K50C70L8000	ULF159VB1 K50C70L8000	UGL22WF01 04
Light data			
Light color options	Cool	Cool	75% BLUE + 25% RED
Color temperature (°K)	5000	5000	455nm + 656nm
Light output (lumens)	8000	8000	110umol @ 200mm
Beam angle (°)	90	160	80
Efficacy	80	80	not applicable
CRI	70	70	not applicable
Expected Lifespan (Hr)	>50,000	>50,000	>50,000
Electrical data			
Input voltage (V DC)	No	No	24
Input voltage (V AC)	120/240/277	120/240/277	No
Wattage (W)	100	100	6
Certifications and ratings			
Safety Certifications (i.e. UL or CSA)	Components Certified	Components Certified	No
NSF	No	No	not applicable
ROHS	No	No	Yes
IP rating	IP66	IP66	IP65
Electronics			
Thermal foldback (y/n)	No	No	Yes
Power correction factor	0.95	0.95	not applicable
Over temp. protection	No	No	No
Guarantee	35000/ 5	35000/ 5	35,000/5
Mounting requirements/ limitations	no additional heatsinking required	no additional heatsinking required	additional heatsinking required
Operating (environmental) temperature range	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C
Other Product Features			

## OPTO product family

## UGL2000

## ULE28000



OPTO product family	UGL2000	ULE28000		
Model number	UGL22WF02 04	ULE281VW K30C80L150	ULE281VW K30C80L300	ULE281VW K30C80L500
Light data				
Light color options	50% BLUE + 50% RED	Warm	Warm	Warm
Color temperature (°K)	455nm + 656nm	3000	3000	3000
Light output (lumens)	110umol @ 200mm	150	300	500
Beam angle (°)	80	110	110	110
Efficacy	not applicable	75	75	77
CRI	not applicable	80	80	80
Expected Lifespan (Hr)	>50,000	>50,000	>50,000	>50,000
Electrical data				
Input voltage (V DC)	24	11 to 15	11 to 15	11 to 15
Input voltage (V AC)	No	11.5 to 15	11.5 to 15	11.5 to 15
Wattage (W)	6	2.0	4.0	6.5
Certifications and ratings				
Safety Certifications (i.e. UL or CSA)	No	Yes	Yes	Yes
NSF	not applicable	Yes	Yes	Yes
ROHS	Yes	Yes	Yes	Yes
IP rating	IP65	IP65	IP65	IP65
Electronics				
Thermal foldback (y/n)	Yes	No	No	No
Power correction factor	not applicable	0.8	0.8	0.8
Over temp. protection	No	No	No	No
Guarantee	35,000/5	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	additional heatsinking required	additional heatsinking required	additional heatsinking required	additional heatsinking required
Operating (environmental) temperature range	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C
Other Product Features		Stand Black Housing, Optional Nickel Housing availa		




## OPTO product family

## ULE28000



Model number	ULE281VW K30C80L65C	ULE281VW K40C80L15C	ULE281VW K40C80L30C	ULE281VW K40C80L50C
<b>Light data</b>				
Light color options	Warm	Neutral	Neutral	Neutral
Color temperature (°K)	3000	4000	4000	4000
Light output (lumens)	650	150	300	500
Beam angle (°)	110	110	110	110
Efficacy	76	75	75	77
CRI	80	80	80	80
Expected Lifespan (Hr)	>50,000	>50,000	>50,000	>50,000
<b>Electrical data</b>				
Input voltage (V DC)	11 to 15	11 to 15	11 to 15	11 to 15
Input voltage (V AC)	11.5 to 15	11.5 to 15	11.5 to 15	11.5 to 15
Wattage (W)	8.5	2.0	4.0	6.5
<b>Certifications and ratings</b>				
Safety Certifications (i.e. UL or CSA)	Yes	Yes	Yes	Yes
NSF	Yes	Yes	Yes	Yes
ROHS	Yes	Yes	Yes	Yes
IP rating	IP65	IP65	IP65	IP65
<b>Electronics</b>				
Thermal foldback (y/n)	No	No	No	No
Power correction factor	0.8	0.8	0.8	0.8
Over temp. protection	No	No	No	No
Guarantee	35000/ 5	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	additional heatsinking required	additional heatsinking required	additional heatsinking required	additional heatsinking required
Operating (environmental) temperature range	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C
Other Product Features	ole	Stand Black Housing, Optional Nickel Housing available		

OPTO product family	ULF24000			
				
Model number	ULE281VW K40C80L70C	JLF249VW L09 K50C80L150C	JLF249VW L24 K50C80L250C	JLF249VW L48 K50C80L360C
Light data				
Light color options	Neutral	Cool	Cool	Cool
Color temperature (°K)	4000	5000	5000	5000
Light output (lumens)	700	1500	2500	3600
Beam angle (°)	110	110	110	110
Efficacy	82	80	83	90
CRI	80	80	80	80
Expected Lifespan (Hr)	>50,000	>50,000	>50,000	>50,000
Electrical data				
Input voltage (V DC)	11 to 15	NA	NA	NA
Input voltage (V AC)	11.5 to 15	100 to 277	100 to 277	100 to 277
Wattage (W)	8.5	19.0	30.0	40.0
Certifications and ratings				
Safety Certifications (i.e. UL or CSA)	Yes	Yes	Yes	Yes
NSF	Yes	Yes	Yes	Yes
ROHS	Yes	Yes	Yes	Yes
IP rating	IP65	IP65	IP65	IP65
Electronics				
Thermal foldback (y/n)	No	No	No	No
Power correction factor	0.8	0.9	0.9	0.9
Over temp. protection	No	No	No	No
Guarantee	35000/ 5	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	additional heatsinking required	no additional heatsinking required	no additional heatsinking required	no additional heatsinking required
Operating (environmental) temperature range	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C
Other Product Features	9 inch Length, Frosted Cover	24 inch Length, Frosted Cover	48 inch Length, Frosted Cover	

## OPTO product family

## ULE19000



OPTO product family	ULE19000		
Model number	ULE192VW K30C80L620	ULE192VW K65C80L620	ULE3010 K30C80L70
Light data			
Light color options	Warm	Cool	Warm
Color temperature (°K)	3000	6500	3000
Light output (lumens)	620	620	70
Beam angle (°)	120	120	110
Efficacy	83	83	NA
CRI	80	80	80
Expected Lifespan (Hr)	>50,000	>50,000	>50,000
Electrical data			
Input voltage (V DC)	21 to 29	21 to 29	2.85 to 3.25
Input voltage (V AC)	NA	NA	NA
Wattage (W)	7.5	7.5	2.3
Certifications and ratings			
Safety Certifications (i.e. UL or CSA)	No	No	No
NSF	No	No	No
ROHS	Yes	Yes	Yes
IP rating	No	No	No
Electronics			
Thermal foldback (y/n)	No	No	NA
Power correction factor	NA	NA	NA
Over temp. protection	No	No	NA
Guarantee	35000/ 5	35000/ 5	35000/ 5
Mounting requirements/ limitations	additional heatsinking required	additional heatsinking required	additional heatsinking required
Operating (environmental) temperature range	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C
Other Product Features	Size 14.4inch x 0.5 inch		

## OPTO product family

## ULE3010



	ULE3011 K50C70L80	ULE3014 W470L20
Model number	ULE3011 K50C70L80	ULE3014 W470L20
Light data		
Light color options	Cool	Blue
Color temperature (°K)	3000	470nm
Light output (lumens)	80	20
Beam angle (°)	110	110
Efficacy	NA	NA
CRI	80	NA
Expected Lifespan (Hr)	>50,000	>50,000
Electrical data		
Input voltage (V DC)	2.85 to 3.25	2.75 to 3.50
Input voltage (V AC)	NA	NA
Wattage (W)	2.3	2.5
Certifications and ratings		
Safety Certifications (i.e. UL or CSA)	No	No
NSF	No	No
ROHS	Yes	Yes
IP rating	No	No
Electronics		
Thermal foldback (y/n)	NA	NA
Power correction factor	NA	NA
Over temp. protection	NA	NA
Guarantee	35000/ 5	35000/ 5
Mounting requirements/ limitations	additional heatsinking required	additional heatsinking required
Operating (environmental) temperature range	-20°C to 50°C	-20°C to 50°C
Other Product Features	No Driver, LED Only	

































































































