Lumecon
WORKMEN SERIES

LWS - LSL
LED Street Luminaire

Catalog Number:	
Project:	
Comments:	
Prepared By:	Date:

Description

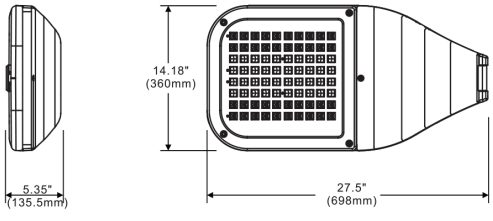
The LWS-LSL Street light combines a robust, stylish fixture design with best-in-class energy efficiency. Equipped with 10 year Heavy Duty LED Light Engines to illuminate local, collector and major roadways; also suitable for highway access ramps and some area lighting applications. The LWS-LSL Series performs efficiently and reliably against rugged outdoor environment. Constructed of die-cast aluminum the LWS-LSL utilizes the Lumecon ETD™ Thermal Design backed by a 10 year performance warranty, is Dark Sky friendly and is protected against surge with a best in Class 40kA surge suppression system.

Performance Data

Model	Watts	Equiv	Delivered Lumens	Efficacy
LWS-LSL-30 (Type V)	31W	175W	4,555 Lm	148 LPW
LWS-LSL-30 (Type III)	31W	175W	4,549 Lm	149 LPW
LWS-LSL-30 (Type II)	31W	175W	4,342 Lm	141 LPW
LWS-LSL-60 (Type V)	58W	250W	8,655 Lm	150 LPW
LWS-LSL-60 (Type III)	58W	250W	8,618 Lm	149 LPW
LWS-LSL-60 (Type II)	58W	250W	8,201 Lm	141 LPW
LWS-LSL-80 (Type V)	75W	400W	11,190 Lm	150 LPW
LWS-LSL-80 (Type III)	75W	400W	11,175 Lm	149 LPW
LWS-LSL-80 (Type II)	75W	400W	10,605 Lm	141 LPW
LWS-LSL-110 (Type V)	102W	400W	15,280 Lm	150 LPW
LWS-LSL-110 (Type III)	99W	400W	14,600 Lm	148 LPW
LWS-LSL-110 (Type II)	100W	400W	14,830 Lm	149 LPW

Dimensions & Weights

Model	Width	Height	Depth	Weight
LWS-LSL	14.18”	5.35”	27.5”	15 lbs.



Technical Specifications

Input Voltage: 120-277V or 347-480V

Custom Optics: Lumecon meticulously engineered premium acrylic optical lenses to maximize the distribution and uniformity of light while minimizing cost. Our arrays distribute light at least 21% further and with 29% more uniformity than leading competitors. Lumecon custom lenses create a uniform, well-lit environment that mitigates illuminance “hot spots” and use less wattage than typical LED area lights.

Lens: Tempered clear glass lens.

Mounting: Mounts to a Tenon Arm with a max O.D. of 2 3/8”

Color Temperature: 2700K, 3000K, 4000K, and 5000K.

LED Lifetime: All LED’s are rated for a minimum of 100,000 hours of continuous operation at ambient temperatures from -40°F/-40°C to 95°F/35°C.

Color Rendering Index (CRI): Minimum of 70 or higher.

Dimming: 0-10V standard dimming capability.

Surge Protection: Thermally protected 40kV varistor type surge suppressor is included and meets ANSI C136.2-2015: Extreme Level. Also meets IEC61643-11 Class II / EN61643-11 Type 2, and US Dept of Energy MSSLC Model Spec for surge protection. The device is wired in series with the luminaire input power in order to interrupt power to the luminaire when consumed, protecting the LED power supply and circuit boards from additional electrical surges.

Lumecon ETD™ System: The enhanced thermal dissipation system engines are thermally bonded to provide maximum thermal dissipation to the exterior of the fixture to ensure long life. To protect the light engine panel from moisture and corrosion, the LED light engine panel is uniformly coated with a UV stabilized acrylic polymer resin that meets MIL and ASTM dielectric standards, UL, and IPC standards for flammability, moisture resistance and thermal shock.

Certification Data: CSA Listed to UL 1598, UL 8750 and CSA 22.2 No. 250 for Wet Locations. *Full compliance and test documentation is available for TM-21, LM-79, LM-80.

Luminaire Vibration Testing: Passed ANSI C136.31 Vibration testing for both “Normal” and “Bridge/Overpass” acceleration applications, simulating wind- and traffic-induced vibrations. The testing utilized the predetermined resonant frequency of the fixture, and was tested to 100,000 cycles in all 3 axes to a peak acceleration level of 3G.

Manufacturing Origin: US Manufactured and Assembled.

Buy American Act: The product is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS, and DOT regulations.

Warranty: 10 Year L70 performance based warranty. For full warranty terms, please visit our website: www.lumecon.com

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Ordering Information

LWS-LSL - Options / Ordering Example: LWS-LSL-60-GR-1-T3-NW-X-X

Wattage	Color	Voltage	Distribution	Color Temperature	Photocell	Occupancy Sensor
30 - 30 Watts	GR - Gray	1 - 120v-277v	T2 - Type II	WW - 2700K	X - None	X - None
60 - 60 Watts		2 - 347v-480v	T3 - Type III	OW - 3000K	R - Receptacle Only	OC1 - On/Off [2]
80 - 80 Watts			T5 - Type V	NW - 4000K	RS - Receptacle Only with Shorting Cap	OC2 - Dim/High [2,3]
110 - 110 Watts				CW - 5000K	7P - Seven-pin Twist Lock Photocell Receptacle Only[1]	
					PC1 - 120v-277v Twist Lock Photocell	
					PC4 - 347v-480v Twist Lock Photocell	

Notes:
1. For units with 7P the mounting must be restricted to +/-45º from horizontal aim per ANSI C1136.10-2010. If more than a 45º Tilt, use PC1 or PC4
2. Must note on PO Mounting Height for proper lens application
3. See Occupancy Sensor Default Settings Table

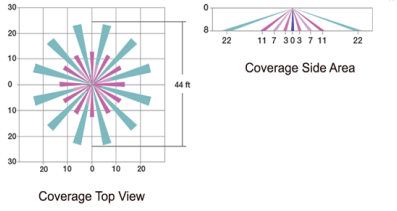
If OCC Sensor Option is selected, mounting height specifications need to be clarified:

If Mounting height and parameter settings not specified when ordered. Default mounting height is 10-40' lens and preset factory settings.

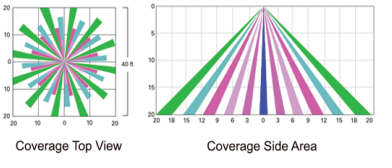
- ☐ Mounting height between 0' - 10'
- ☐ Mounting height between 10' - 40'
- ☐ Mounting height over 40'+

OCC Sensor Patterns

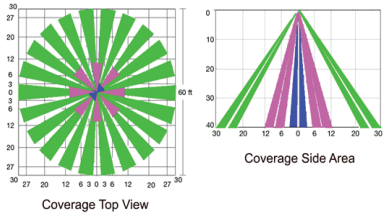
0' - 10' Mounting Height



10' - 40' Mounting Height



40' + Mounting Height



Occupancy Sensor Default Settings - Option OC2						
Option	Dimmed State (Unoccupied)	High Level (When occupied)	Photocell Operation (OC4 Option Only*)	Dwell Time (Occupancy time delay)	Ramp-up Time (From unoccupied to occupied)	Ramp-up Time (From occupied to unoccupied)
OC2 and OC4	Approx. 20% Output	100% Output	Enabled @ 1.5 FC*	5 Minutes	Disabled	Disabled

*Note: OC2 and OC4 settings including photocell set point, high/low dim rates, and occupancy sensor time delay are all configurable by using the Wattstopper® App. If any other settings are desired to be set at the factory, please note these changes on Purchase Order.

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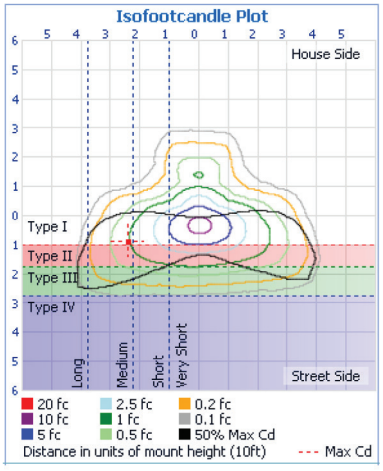
Photometric Data

For .ies files of this product, please visit the downloads tabs on the LWS-LSL product page

LWS-LSL-30-T2



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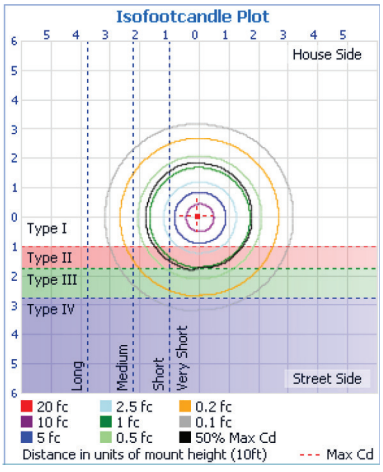
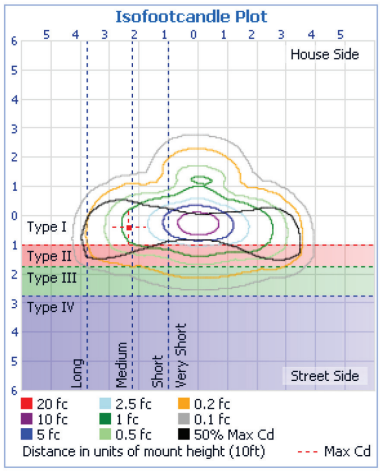
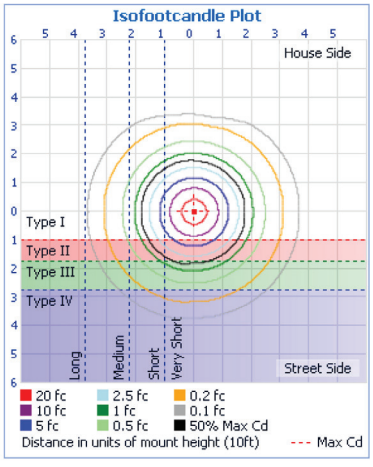


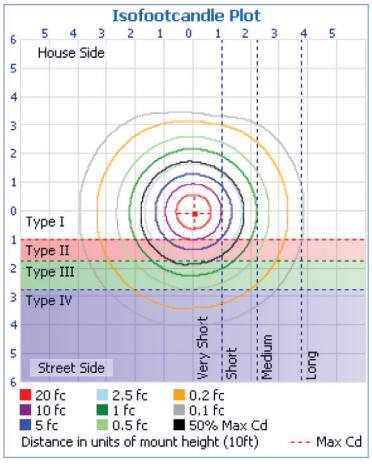
LWS-LSL-30-T5



LWS-LSL-60-T5



LWS-LSL-80-T5



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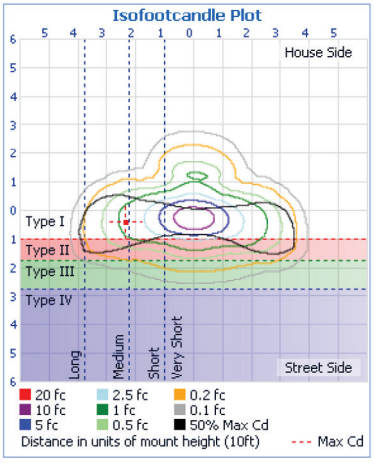

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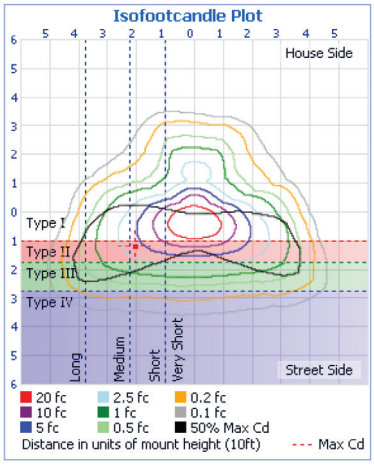

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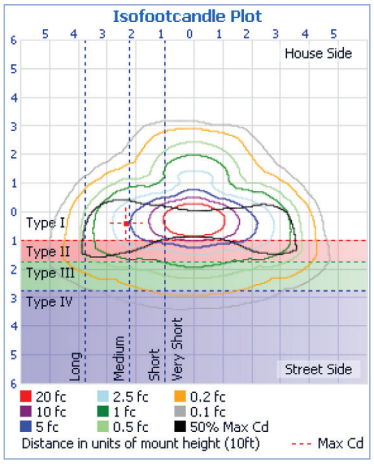

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Photometric Illustration

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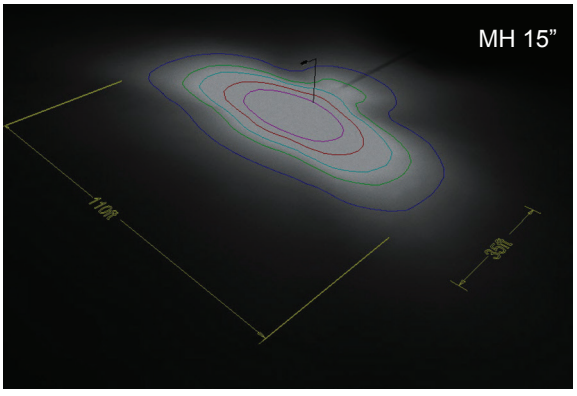
LWS-LSL-30-T2



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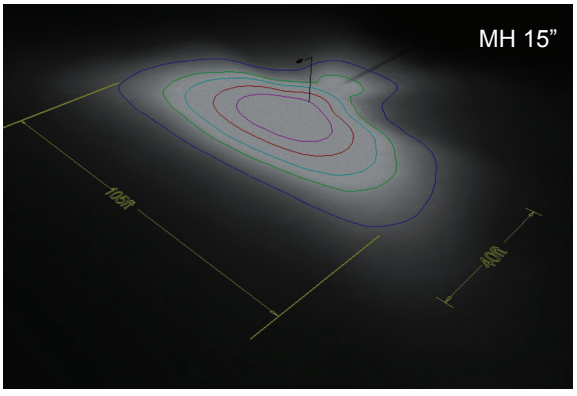

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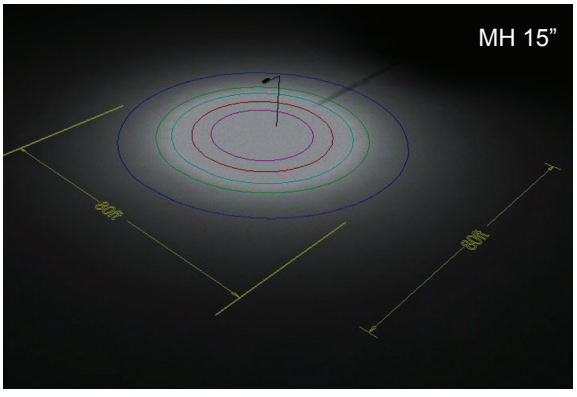

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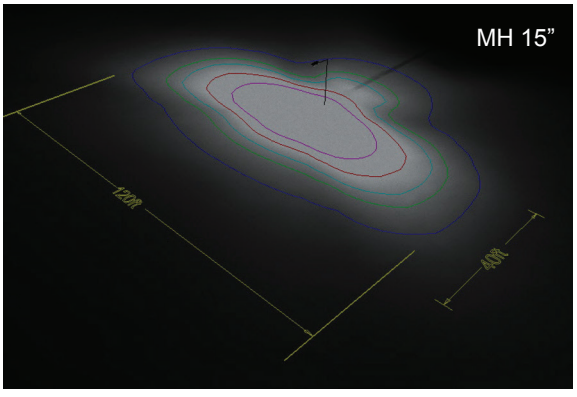

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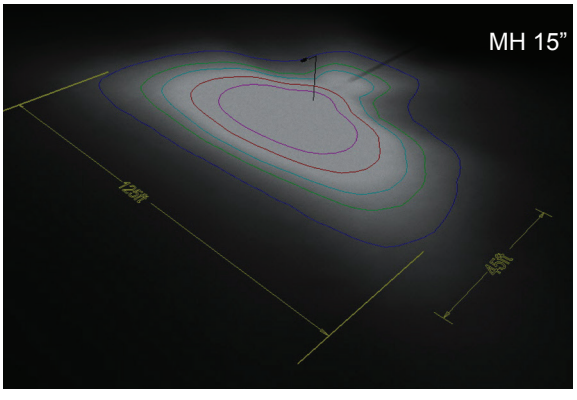

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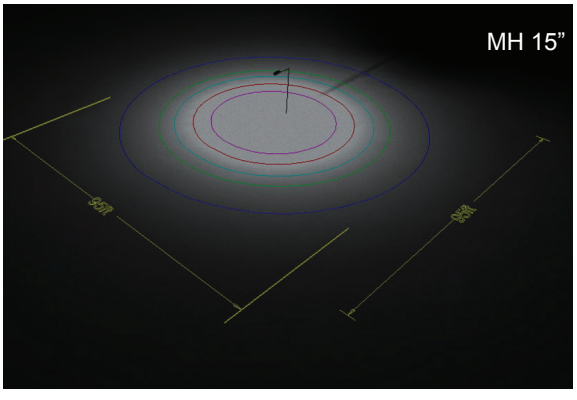

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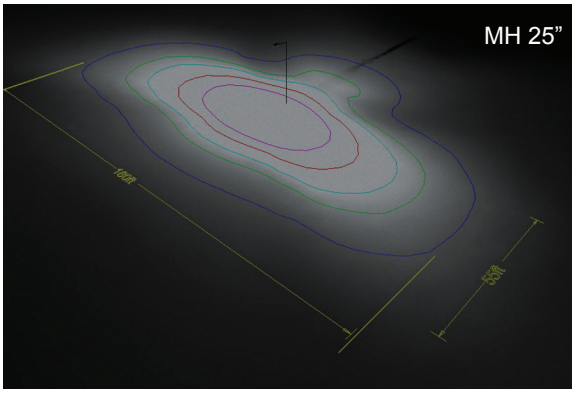
Photometric Illustration cont.

LWS-LSL-80-T2



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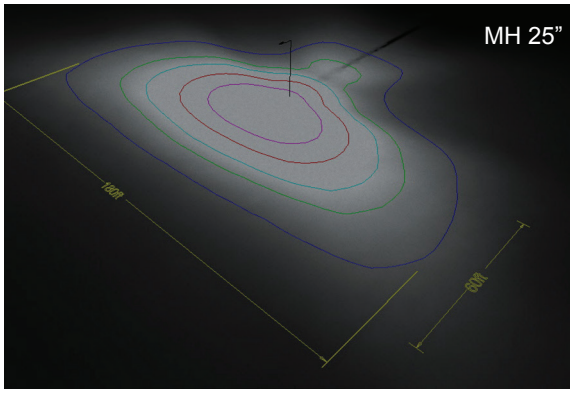
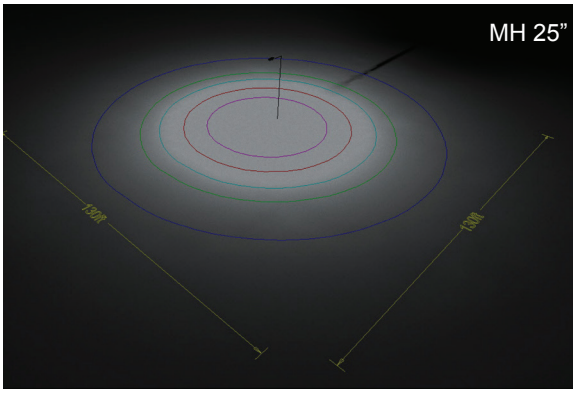
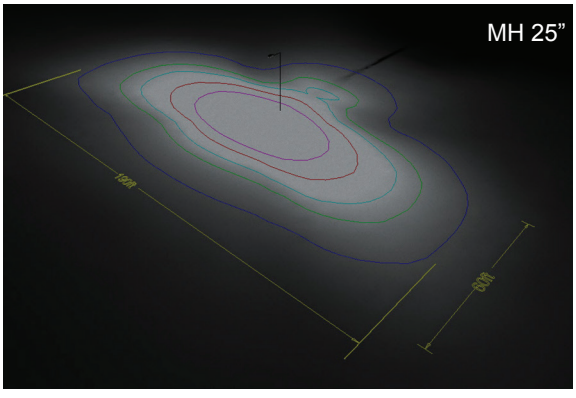


LWS-LSL-80-T5



LWS-LSL-110-T2



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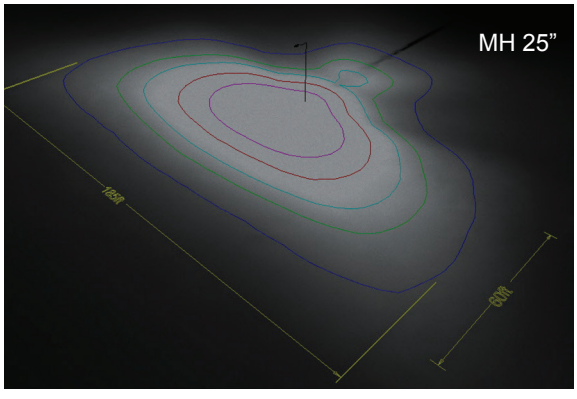

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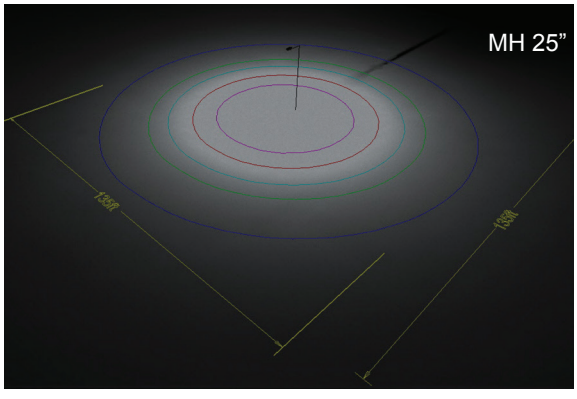

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Performance Data

Electrical Load Data

			AC Current Load (A)			
Fixture Model	Drive Current (mA)	System Watts (W)	120V	208V	240V	277V
LWS-LSL-30	350	30.5	0.28	0.16	0.14	0.12
LWS-LSL-60	350	57.0	0.53	0.30	0.26	0.23
LWS-LSL-80	350	73.8	0.68	0.39	0.34	0.30
LWS-LSL-110	350	101.1	0.94	0.54	0.47	0.41

Lumen Maintenance

Data in the table below references projected performance in a 25°C ambient and is based on 10,000 hours of LED testing. Performance data has been tested per IESNA LM-80-08 and projected per IESNA TM-21-11.

Use the lumen maintenance factor that corresponds to the desired number of operating hours below to calculate LLF.

		Lumen Maintenance Factors @ 25°C, by hours:			
Fixture Model	0	25,000	50,000	70,000	100,000
LWS-LSL-30	1.0	0.99	0.99	0.98	0.98
LWS-LSL-60	1.0	0.99	0.99	0.98	0.98
LWS-LSL-80	1.0	0.99	0.99	0.98	0.98
LWS-LSL-110	1.0	0.99	0.99	0.98	0.98

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