

# LUMILUX® T5 HE

Good light output, efficiency and economy



LUMILUX® T5 HE



QTi DALI/DIM / QTi GII / QTP5



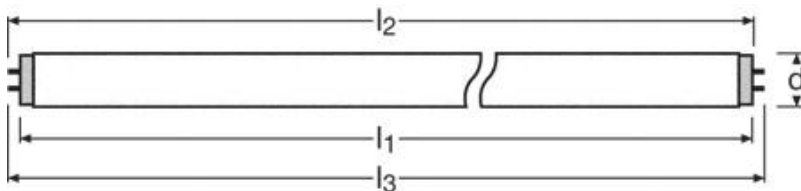
## Benefits

- Good economy and efficiency
- Up to 20% more efficient than Standard T8
- Minimum luminaire dimensions, with the same light output as T8 luminaires but up to 50 % smaller
- Natural color indication

## Product Features

- Up to 104 lm/W
- Long average life time: up to 24,000 h (with QUICKTRONIC®)
- Good color Rendering Group 1B (Ra 80-89)
- Dimmable with appropriate ECG
- Available light colors: Cool Daylight (865), Cool White (840), White (835), Warm White (830), INTERNA (827)

## Dimensions



Description	Base	Length (l1) [mm]	Length (l2) min [mm]	Length (l2) max [mm]	Length (l3) [mm]	Tube Diameter (d) max [mm]
LUMILUX® T5 HE 14 W	G5	549	553.7	556.1	563.2	17
LUMILUX® T5 HE 21 W	G5	849	853.7	856.1	863.2	17
LUMILUX® T5 HE 28 W	G5	1149	1153.7	1156.1	1163.2	17
LUMILUX® T5 HE 35 W	G5	1449	1453.7	1456.1	1463.2	17

## Electrical Data<sup>1</sup>

LUMILUX® T5 HE	Lamp Voltage in HF <sup>2</sup> mode rated [V]	Lamp Current in HF mode rated [mA]	Pre-heat current rated [mA]
14 W	86	165	210
21 W	126	165	210
28 W	166	170	210
35 W	205	175	210

<sup>1</sup> According to IEC 60081 (measurement with reference control gear)

<sup>2</sup> High Frequency

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## Photometrical Data<sup>3</sup>

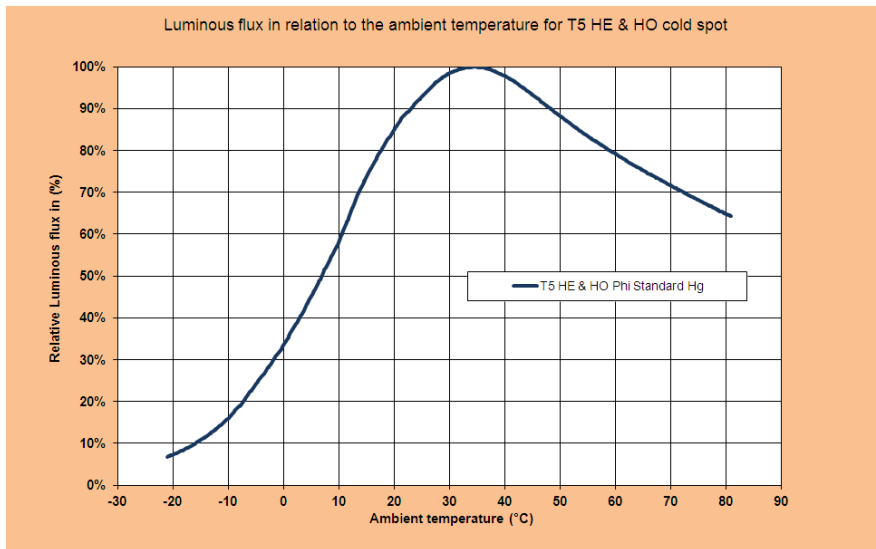
LUMILUX® T5 HE	Light Color LUMILUX®	Color Rendering Index (CRI), Ra	Target Color Coordinate X	Target Color Coordinate Y	Color Temperature [K]	Nominal Luminous Flux [lm]	Max. Luminous Flux [lm]
14 W	827 INTERNA	80 ... 89	0.463	0.420	2700	1200	1350
14 W	830 Warm White	80 ... 89	0.440	0.403	3000	1200	1350
14 W	835 White	80 ... 89	0.409	0.394	3500	1200	1350
14 W	840 Cool White	80 ... 89	0.380	0.380	4000	1200	1350
14 W	865 Cool Daylight	80 ... 89	0.313	0.337	6500	1100	1300
14 W	880 SKYWHITE	80 ... 89	0.294	0.309	8000	1080	1150
21 W	827 INTERNA	80 ... 89	0.463	0.420	2700	1900	2100
21 W	830 Warm White	80 ... 89	0.440	0.403	3000	1900	2100
21 W	835 White	80 ... 89	0.409	0.394	3500	1900	2100
21 W	840 Cool White	80 ... 89	0.380	0.380	4000	1900	2100
21 W	865 Cool Daylight	80 ... 89	0.313	0.337	6500	1750	2000
21 W	880 SKYWHITE	80 ... 89	0.294	0.309	8000	1700	1850
28 W	827 INTERNA	80 ... 89	0.463	0.420	2700	2600	2900
28 W	830 Warm White	80 ... 89	0.440	0.403	3000	2600	2900
28 W	835 White	80 ... 89	0.409	0.394	3500	2600	2900
28 W	840 Cool White	80 ... 89	0.380	0.380	4000	2600	2900
28 W	865 Cool Daylight	80 ... 89	0.313	0.337	6500	2400	2750
28 W	880 SKYWHITE	80 ... 89	0.294	0.309	8000	2350	2690
35 W	827 INTERNA	80 ... 89	0.463	0.420	2700	3320	3650
35 W	830 Warm White	80 ... 89	0.440	0.403	3000	3320	3650
35 W	835 White	80 ... 89	0.409	0.394	3500	3320	3650
35 W	840 Cool White	80 ... 89	0.380	0.380	4000	3320	3650
35 W	865 Cool Daylight	80 ... 89	0.313	0.337	6500	3050	3500
35 W	880 SKYWHITE	80 ... 89	0.294	0.309	8800	3000	3450

<sup>3</sup> Measurement in accordance with EN 60081, annex C and the relevant annex on rated colour characteristics in IEC 60081.

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## Relative Luminous Flux / Ambient Temperature



For more detailed information please refer to our technical guide for Fluorescent Lamps. Free download at [www.osram.com](http://www.osram.com)

## Lifetime<sup>4</sup>

	ECG <sup>5</sup> (IEC 60929) preheat IEC 60081 switching cycle <sup>6</sup>
<b>B50<sup>7</sup></b>	24,000 h
<b>Service life time<sup>8</sup></b>	19,000 h
<b>LLMF<sup>9</sup> 20.000 h</b>	0.89
<b>LLMF 16.000 h</b>	0.90
<b>LLMF 12.000 h</b>	0.90
<b>LLMF 8.000 h</b>	0.90
<b>LLMF 6.000 h</b>	0.91
<b>LLMF 4.000 h</b>	0.92
<b>LLMF 2.000 h</b>	0.95
<b>LSF<sup>10</sup> 20.000 h</b>	0.85
<b>LSF 16.000 h</b>	0.97
<b>LSF 12.000 h</b>	0.99
<b>LSF 8.000 h</b>	0.99
<b>LSF 6.000 h</b>	0.99
<b>LSF 4.000 h</b>	0.99
<b>LSF 2.000 h</b>	0.99

<sup>4</sup> Measurement in accordance with EN 60081, annex C.

<sup>5</sup> Electronic Control Gear

<sup>6</sup> Switching cycle 165 min. on, 15 min. off (according to IEC)

<sup>7</sup> Average rated lamp life (B50) is the average value of the life time for an entity of lamps operated under standardized conditions until 50% failure. In other words, this is the operation time at which, for a standardized 3-hour switching cycle (165 minutes on / 15 minutes off (according to IEC)), 50% of a sample population of lamps have failed.

<sup>8</sup> Service life time is the mathematical life time (maintenance multiplied with the % of failed lamps e.g. B10) for lamps in an installation after which the installation luminous flux (100 h value) decreased with 20 % (decrease in luminous flux and failed lamps) for indoor lighting.

<sup>9</sup> Lamp Lumen Maintenance Factor (lamp luminous flux in %): Ratio of the luminous flux of a specific quantity of lamps at a defined number of hours of operation to their luminous flux at 100 h

<sup>10</sup> Lamp Survival Factor (lamp survival in %): Ratio of the number of electrically intact lamps to the total number of lamps

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## Energy labelling<sup>11</sup>

Description	Energy efficiency class	Weighted energy consumption E <sub>c</sub> [kWh/1000h]
LUMILUX® T5 HE 14W/827	A+	16
LUMILUX® T5 HE 14W/830	A+	16
LUMILUX® T5 HE 14W/835	A+	16
LUMILUX® T5 HE 14W/840	A+	16
LUMILUX® T5 HE 14W/865	A+	16
LUMILUX® T5 HE 14W/880	A+	16
LUMILUX® T5 HE 21W/827	A+	23
LUMILUX® T5 HE 21W/830	A+	23
LUMILUX® T5 HE 21W/835	A+	23
LUMILUX® T5 HE 21W/840	A+	23
LUMILUX® T5 HE 21W/865	A+	23
LUMILUX® T5 HE 21W/880	A+	23
LUMILUX® T5 HE 28W/827	A+	31
LUMILUX® T5 HE 28W/830	A+	31
LUMILUX® T5 HE 28W/835	A+	31
LUMILUX® T5 HE 28W/840	A+	31
LUMILUX® T5 HE 28W/865	A+	31
LUMILUX® T5 HE 28W/880	A+	31
LUMILUX® T5 HE 35W/827	A+	40
LUMILUX® T5 HE 35W/830	A+	40
LUMILUX® T5 HE 35W/835	A+	40
LUMILUX® T5 HE 35W/840	A+	40
LUMILUX® T5 HE 35W/865	A+	40
LUMILUX® T5 HE 35W/880	A+	40

<sup>11</sup> According to Regulation (EU) No 874/2012 of July 12, 2012  
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## Logistic Data

Description	EAN 10	EAN 40	Packaging Unit
LUMILUX® T5 HE 14W/827	4050300645933	4050300645940	40
LUMILUX® T5 HE 14W/830	4050300464824	4050300464831	40
LUMILUX® T5 HE 14W/835	4050300771991	4050300772004	20
LUMILUX® T5 HE 14W/840	4050300464688	4050300464695	40
LUMILUX® T5 HE 14W/865	4050300464848	4050300464855	40
LUMILUX® T5 HE 14W/880	4008321225009	4008321225016	20
LUMILUX® T5 HE 21W/827	4050300645971	4050300645988	40
LUMILUX® T5 HE 21W/830	4050300464800	4050300464817	40
LUMILUX® T5 HE 21W/835	4050300776149	4050300776156	20
LUMILUX® T5 HE 21W/840	4050300464701	4050300464718	40
LUMILUX® T5 HE 21W/865	4050300464626	4050300464633	40
LUMILUX® T5 HE 21W/880	4008321224989	4008321224996	20
LUMILUX® T5 HE 28W/827	4050300646015	4050300646022	40
LUMILUX® T5 HE 28W/830	4050300464787	4050300464794	40
LUMILUX® T5 HE 28W/835	4050300776552	4050300776569	40
LUMILUX® T5 HE 28W/840	4050300464725	4050300464732	40
LUMILUX® T5 HE 28W/865	4050300464640	4050300464657	40
LUMILUX® T5 HE 28W/880	4008321153517	4008321153524	20
LUMILUX® T5 HE 35W/827	4050300646053	4050300646060	40
LUMILUX® T5 HE 35W/830	4050300464763	4050300464770	40
LUMILUX® T5 HE 35W/835	4050300776415	4050300776422	20
LUMILUX® T5 HE 35W/840	4050300464749	4050300464756	40
LUMILUX® T5 HE 35W/865	4050300464664	4050300464671	40
LUMILUX® T5 HE 35W/880	4008321153531	4008321153548	20

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## Lamp/ECG System Combination

Lamp	ECG	EAN 10 ECG	Luminous Flux @25°C [lm]	System Power [W]	IN [A]	Power Factor ECG [λ]	System Luminous Efficacy [lm/W]	Length [mm]	Width [mm]	Height [mm]	Distance between holes [mm]	T <sub>a</sub> [°C]
LUMILUX® T5 HE 14 W	QTi DALI 1x14/24/220-240 DIM	4050300870380	1200	15.4	0.07	0.95	78	360	30	21	350	+10...+50
	QTi DALI 2x14/24/220-240 DIM	4050300870861	2400	30.6	0.14	0.95	78	423	30	21	415	+10...+50
	QTi DALI 3x14/24/220-240 DIM	4008321069955	3600	45.3	0.20	0.97	79	360	40	21	350	+10...+50
	QTi DALI 4x14/24/220-240 DIM	4008321070036	4800	60.4	0.27	0.97	79	360	40	21	350	+10...+50
	QTi 1x14/24/220-240 DIM	4050300870922	1200	15.4	0.07	0.96	78	360	30	21	350	+10...+50
	QTi 2x14/24/220-240 DIM	4050300870946	2400	30.6	0.14	0.96	78	423	30	21	415	+10...+50
	QTi 3x14/24/220-240 DIM	4008321069719	3600	45.3	0.20	0.97	79	360	40	21	350	+10...+50
	QTi 4x14/24/220-240 DIM	4008321069993	4800	60.4	0.27	0.97	79	360	40	21	350	+10...+50
	QTi 1x14/24/21/39 GII	4008321383334	1200	16	0.08	0.92 c	78	360	30	21	350	-20...+50
	QTi 2x14/24/21/39 GII	4008321383396	2400	31	0.15	0.95	77	360	30	21	350	-20...+50
	QTi 1x28/54/35/49 GII	4008321383358	1275	16	0.08	0.93 c	80	360	30	21	350	-20...+50
	QTi 2x28/54/35/49 GII	4008321383419	2550	32	0.15	0.93 c	80	360	30	21	350	-20...+50
	QTi 1x35/49/80 GII	4008321383372	1275	16	0.08	0.93 c	80	360	30	21	350	-20...+50
	QTP5 1x14-35	4008321329035	1200	16	0.08	0.90 c	78	280	30	21	270	-20...+50
	QTP5 2x14-35	4008321329073	2400	30	0.14	0.98	80	360	30	21	350	-20...+50
	QT-ECO 1x4-16/220-240 L	4050300660370	1150	15	0.10	0.60 c	77	150	22	22	140	-15...+50
	QT-ECO 1x4-16/220-240 S	4050300638584	1150	15	0.10	0.60 c	77	80	40	22	72-75	-15...+50

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Lamp	ECG	EAN 10 ECG	Luminous Flux @25°C [lm]	System Power [W]	IN [A]	Power Factor ECG [λ]	System Luminous Efficacy [lm/W]	Length [mm]	Width [mm]	Height [mm]	Distance between holes [mm]	T <sub>a</sub> [°C]
<b>LUMILUX® T5 HE 21 W</b>	QTi DALI 1x21/39/220-240 DIM	4050300870366	1900	23.1	0.11	0.95	82	360	30	21	350	+10...+50
	QTi DALI 2x21/39/220-240 DIM	4050300870489	3800	45	0.21	0.95	84	423	30	21	415	+10...+50
	QTi 1x21/39/220-240 DIM	4050300870564	1900	23.1	0.11	0.96	82	360	30	21	350	+10...+50
	QTi 2x21/39/220-240 DIM	4050300870694	3800	45	0.21	0.96	84	423	30	21	415	+10...+50
	QTi 1x14/24/21/39 GII	4008321383334	1900	24	0.11	0.94 c	79	360	30	21	350	-20...+50
	QTi 2x14/24/21/39 GII	4008321383396	3800	45	0.20	0.96	84	360	30	21	350	-20...+50
	QTi 1x28/54/35/49 GII	4008321383358	1900	24	0.11	0.94 c	79	360	30	21	350	-20...+50
	QTi 2x28/54/35/49 GII	4008321383419	3800	45	0.20	0.96	84	360	30	21	350	-20...+50
	QTi 1x35/49/80 GII	4008321383372	1900	25	0.11	0.99	76	360	30	21	350	-20...+50
	QTP5 1x14-35	4008321329035	1900	24	0.11	0.95	79	280	30	21	270	-20...+50
	QTP5 2x14-35	4008321329073	3800	45	0.20	0.98	84	360	30	21	350	-20...+50
	QT-ECO 1x18-21/220-240 S	4050300794907	1800	23	0.17	0.60 c	78	80	40	22	72-75	-15...+50
<b>LUMILUX® T5 HE 28 W</b>	QTi DALI 1x28/54/220-240 DIM	4050300870809	2600	30.1	0.14	0.97	86	360	30	21	350	+10...+50
	QTi DALI 2x28/54/220-240 DIM	4050300870502	5200	60.2	0.27	0.97	86	423	30	21	415	+10...+50
	QTi 1x28/54/220-240 DIM	4050300870588	2600	30.1	0.14	0.97	86	360	30	21	350	+10...+50
	QTi 2x28/54/220-240 DIM	4050300870717	5200	60.2	0.27	0.27	86	423	30	21	415	+10...+50
	QTi 1x14/24/21/39 GII	4008321383334	2700	33	0.15	0.99	82	360	30	21	350	-20...+50
	QTi 2x14/24/21/39 GII	4008321383396	5300	63	0.29	0.99	84	360	30	21	350	-20...+50
	QTi 1x28/54/35/49 GII	4008321383358	2600	32	0.15	0.95	81	360	30	21	350	-20...+50
	QTi 2x28/54/35/49 GII	4008321383419	5200	61	0.28	0.96	85	360	30	21	350	-20...+50
	QTi 1x35/49/80 GII	4008321383372	2700	33	0.15	0.99	82	360	30	21	350	-20...+50
	QTP5 1x14-35	4008321329035	2600	31	0.14	0.96	84	280	30	21	270	-20...+50
	QTP5 2x14-35	4008321329073	5200	60	0.26	0.98	87	360	30	21	350	-20...+50

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Lamp	ECG	EAN 10 ECG	Lumino us Flux @25°C [lm]	System Power [W]	IN [A]	Power Factor ECG [λ]	System Luminous Efficacy [lm/W]	Length [mm]	Width [mm]	Height [mm]	Distance between holes [mm]	T <sub>a</sub> [°C]
<b>LUMILUX® T5 HE 35 W</b>	QTi DALI 1x35/49/80/220-240 DIM	4050300870342	3300	37.8	0.17	0.95	87	360	30	21	350	+10...+50
	QTi DALI 2x35/49/220-240 DIM	4050300870465	6600	74.5	0.33	0.98	89	423	30	21	415	+10...+50
	QTi DALI 2x35/49/80/220-240 DIM	4050300870441	6600	74	0.34	0.98	89	423	30	21	415	+10...+50
	QTi 1x35/49/80/220-240 DIM	4050300870540	3300	37.8	0.17	0.96	87	360	30	21	350	+10...+50
	QTi 2x35/49/80/220-240 DIM	4050300870984	6600	74	0.34	0.95	89	423	30	21	415	+10...+50
	QTi 2x35/49/220-240 DIM	4050300870670	6600	74.5	0.33	0.95	89	423	30	21	415	+10...+50
	QTi 1x14/24/21/39 GII	4008321383334	3300	39	0.18	0.97	85	360	30	21	350	-20...+50
	QTi 2x14/24/21/39 GII	4008321383396	6600	76	0.35	0.96	87	360	30	21	350	-20...+50
	QTi 1x28/54/35/49 GII	4008321383358	3300	38	0.17	0.97	87	360	30	21	350	-20...+50
	QTi 2x28/54/35/49 GII	4008321383419	6600	76	0.35	0.96	87	360	30	21	350	-20...+50
	QTi 1x35/49/80 GII	4008321383372	3300	38	0.17	0.97	87	360	30	21	350	-20...+50
	QTi 2x35/49/80/220-240	4008321174291	6600	79	0.34	0.95	84	425	30	21	415	-20...+50
	QTP5 1x14-35	4008321329035	3300	38	0.17	0.97	87	280	30	21	270	-20...+50
	QTP5 2x14-35	4008321329073	6600	75	0.33	0.98	88	360	30	21	350	-20...+50

For more information on ECG refer to <http://www.osram.com/ecg>

For more information on System Guarantee refer to <http://www.osram.com/guarantee>

In case of lamp breakage: [www.osram.com/brokenlamp](http://www.osram.com/brokenlamp)

For more information technical Information see Technical guide. Free download at [www.osram.com](http://www.osram.com)