



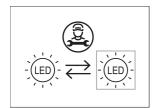


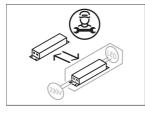






Colours	Article no.	EAN
silver	661044	4043544698612





Description

- light-head rotates through 355° and swivels through 30° by adjusting screw
- individual optics by standard recessed frame or trimless recessed frame and various front reflectors
- outstanding ease of maintenance
- no UV and thermal emissions
- thermal management with passive cooling
- light-head and heat sink made from die-cast
- main reflector made from plastic
- black anti-glare ring made from polycarbonate for accommodating honeycomb louvre
- diffuser glass pane
- light-head snaps into mounting frame without tools
- connection to ballast via luminaire cable with Mini-Clamp connector
- ballast (LED converter DALI, dimmable) included (external placement)

Standard options



Special options







Lighting data / Norms

Lamps LED Spot / CRI 80 / 3000 K
EPREL light sources 992480

L90 B50 50.000 h
Lifetime L80 B50 100.000 h
L80 B20 50.000 h

 System power
 22.0 W

 Luminaire luminous flux
 max. 1460 lm

 System efficiency
 51.36 lm/W

 Module efficiency
 157.83 lm/W

 UGR class
 ≤16

UGR class ≤16 Beam angle 40°

Supply voltage 220 - 240 V / 50 - 60 Hz

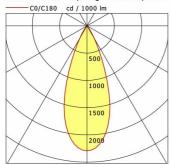
 $\begin{array}{ccc} \textbf{Protection class} & & ||| \\ \textbf{Type of protection} & & || \textbf{P20} \\ \end{array}$

Dimensions / Weights

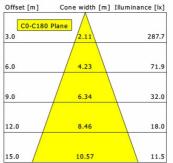
Outer diameter82 mmHeight103 mmRecessed depth135 mmDiameter of light head82 mmNet weight0.72 kgGross weight0.75 kg



Dallton Small - Spotlight Insert (DAL-S-RTR 21_SW-MATT, 1xLED 22W 830/3000K 1130lm 40 °)

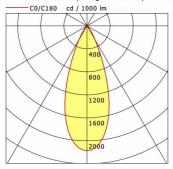


	C0	C90	C180	C270
0°	2292	2292	2292	2292
15°	1616	1616	1616	1616
30°	262	262	262	262
45°	16	16	16	16
60°	0	0	0	0
75°	0	0	0	0
90°	0	0	0	0
	cd / 1000 lm			

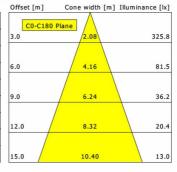


η	LED
Efficiency	51 lm/W
Direct/Indirect	↓ 100% / ↑ 0%
System Power	22 W
UGR	X=4H, Y=8H
Reflection factors	70/50/20
UGR C0/C180	10.4
UGR C90/C270	10.4
CIE Flux Codes	99 100 100 100 100
Ra/CRI	>80

Dallton Small - Spotlight Insert (DAL-S-RTR 21_SI-MATT, 1xLED 22W 830/3000K 1350lm 40 °)

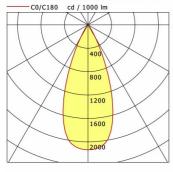


	C0	C90	C180	C270
0°	2172	2172	2172	2172
15°	1485	1485	1485	1485
30°	276	276	276	276
45°	45	45	45	45
60°	7	7	7	7
75°	0	0	0	0
90°	0	0	0	0
cd / 1000 lm				

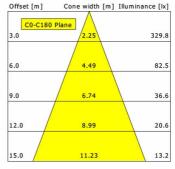


η	LE		
Efficiency	61 lm/W		
Direct/Indirect	↓ 100% / ↑ 0%		
System Power	22 W		
UGR	X=4H, Y=8H		
Reflection factors	70/50/20		
UGR C0/C180	14.1		
UGR C90/C270	14.1		
CIE Flux Codes	95 100 100 100 100		
Ra/CRI	>80		

Dallton Small - Spotlight Insert (DAL-S-RFR 21, 1xLED 22W 830/3000K 1390lm 40 °)

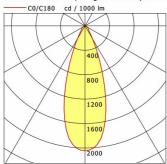


	C0	C90	C180	C270
0°	2136	2136	2136	2136
15°	1635	1635	1635	1635
30°	257	257	257	257
45°	12	12	12	12
60°	0	0	0	0
75°	0	0	0	0
90°	0	0	0	0
	cd / 1000 lm			

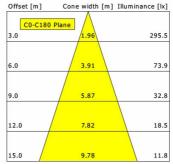


η	LED 63 lm/W		
Efficiency			
Direct/Indirect	↓ 100% / ↑ 0%		
System Power	22 W		
UGR	X=4H, Y=8H		
Reflection factors	70/50/20		
UGR C0/C180	10.2		
UGR C90/C270	10.2		
CIE Flux Codes	99 100 100 100 100		
Ra/CRI	>80		

Dallton Small - Spotlight Insert (DAL-S-RTQ 11_WS-MATT, 1xLED 22W 830/3000K 1300lm 40 °)

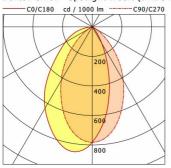


	C0	C90	C180	C270
0°	2046	2046	2046	2046
15°	1319	1319	1319	1319
30°	247	247	247	247
45°	77	77	77	77
60°	43	43	43	43
75°	6	6	6	6
90°	0	0	0	0



η	LED
Efficiency	59 lm/W
Direct/Indirect	↓ 100% / ↑ 0%
System Power	22 W
UGR	X=4H, Y=8H
Reflection factors	70/50/20
UGR C0/C180	19.0
UGR C90/C270	19.0
CIE Flux Codes	86 96 100 100 100
Ra/CRI	>80

Dallton Small - Spotlight Insert (DAL-S-RWR 21, 1xLED 22W 830/3000K 820lm 40 °)



	C0	C90	C180	C270
0°	782	782	782	782
15°	447	665	825	665
30°	129	417	637	417
45°	17	179	389	179
60°	3	30	211	30
75°	1	2	95	2
90°	0	0	0	0
	cd / 1000 lm			

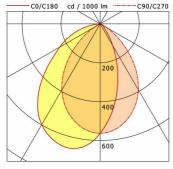
LDC unsuitable for cone representation.
Asymetric LDC.



LED Efficiency 37 lm/W ↓ 100% / ↑ 0% Direct/Indirect System Power 22 W X=4H, Y=8H Reflection factors 70/50/20 UGR C0/C180 <10.0 UGR C90/C270 CIE Flux Codes 70 91 98 100 100 Ra/CRI >80

LTS

Dallton Small - Spotlight Insert (DAL-S-RWQ 11, 1xLED 22W 830/3000K 650lm 40 °)



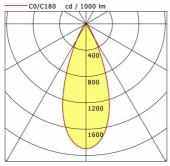
	C0	C90	C180	C270
0°	563	563	563	563
15°	341	516	659	516
30°	129	392	598	392
45°	32	202	429	202
60°	11	35	239	35
75°	3	3	99	3
90°	0	0	0	0
	cd / 1000 lm			

LDC unsuitable for cone representation.
Asymetric LDC.

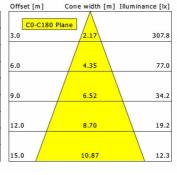
η	LED
Efficiency	30 lm/W
Direct/Indirect	↓ 100% / ↑ 0%
System Power	22 W
UGR	X=4H, Y=8H
Reflection factors	70/50/20
UGR C0/C180	<10.0
UGR C90/C270	22.5
CIE Flux Codes	62 89 98 100 100
Ra/CRI	>80

TS

Dallton Small - Spotlight Insert (DAL-S-RTR 21_WS-MATT, 1xLED 22W 830/3000K 1460lm $\,$ 40 $^{\rm o}$)



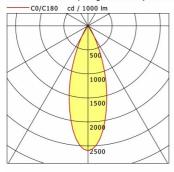
	C0	C90	C180	C270
0°	1898	1898	1898	1898
15°	1362	1362	1362	1362
30°	276	276	276	276
45°	64	64	64	64
60°	29	29	29	29
75°	5	5	5	5
90°	0	0	0	0
	cc	i / 1000 I	m	



η	LED		
Efficiency	66 lm/W		
Direct/Indirect	↓ 100% / ↑ 0%		
System Power	22 W		
UGR	X=4H, Y=8H		
Reflection factors	70/50/20		
UGR C0/C180	18.9		
UGR C90/C270	18.9		
CIE Flux Codes	89 97 100 100 100		
Ra/CRI	>80		

LTS

Dallton Small - Spotlight Insert (DAL-S-RTR 21_CH, 1xLED 22W 830/3000K 1430lm 40 °)



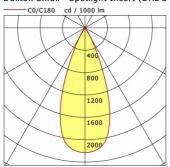
	C0	C90	C180	C270
0°	2600	2600	2600	2600
15°	1510	1510	1510	1510
30°	261	261	261	261
45°	32	32	32	32
60°	0	0	0	0
75°	0	0	0	0
90°	0	0	0	0
cd / 1000 lm				

Offset [m]	Cone width [m]	Illuminance [lx]
C0-C180		
3.0	1.84	413.2
6.0	3.68	103.3
1		17117-1715
9.0	5.52	45.9
12.0	7.36	25.8
- /		_
15.0	9.20	16.5

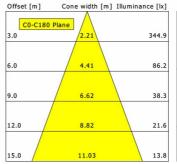
η	LED		
Efficiency	65 lm/W		
Direct/Indirect	↓ 100% / ↑ 0%		
System Power	22 W		
UGR	X=4H, Y=8H		
Reflection factors	70/50/20		
UGR C0/C180	12.6		
UGR C90/C270	12.6		
CIE Flux Codes	97 100 100 100 100		
Ra/CRI	>80		



Dallton Small - Spotlight Insert (DAL-S-RFQ 11, 1xLED 22W 830/3000K 1390lm 40 °)

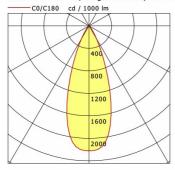


	C0	C90	C180	C270
0°	2233	2233	2233	2233
15°	1707	1707	1707	1707
30°	210	210	210	210
45°	14	14	14	14
60°	3	3	3	3
75°	0	0	0	0
90°	0	0	0	0

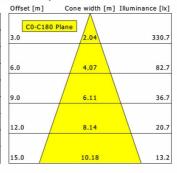


LED
63 lm/W
↓ 100% / ↑ 0%
22 W
X=4H, Y=8H
70/50/20
<10.0
<10.0
98 100 100 100 100
>80

Dallton Small - Spotlight Insert (DAL-S-RTQ 11_CH, 1xLED 22W 830/3000K 1340lm 40 °)

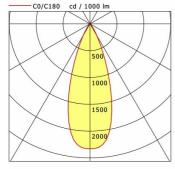


	C0	C90	C180	C270
0°	2221	2221	2221	2221
15°	1520	1520	1520	1520
30°	268	268	268	268
45°	39	39	39	39
60°	6	6	6	6
75°	0	0	0	0
90°	0	0	0	0
	co	1 / 1000 I	m	



η	LEC		
Efficiency	61 lm/W		
Direct/Indirect	↓ 100% / ↑ 0%		
System Power 2			
UGR	X=4H, Y=8H		
Reflection factors	70/50/20		
UGR C0/C180	12.2		
UGR C90/C270	12.2		
CIE Flux Codes	96 100 100 100 100		
Ra/CRI	>80		

Dallton Small - Spotlight Insert (DAL-S-RTQ 11_CH-SW, 1xLED 22W 830/3000K 1250lm 40 °)

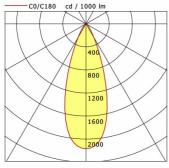


	C0	C90	C180	C270
0°	2329	2329	2329	2329
15°	1569	1569	1569	1569
30°	254	254	254	254
45°	31	31	31	31
60°	4	4	4	4
75°	0	0	0	0
90°	0	0	0	0
	cc	i / 1000 I	m	

Offset [m]	Cone width [m] Illu	minance [lx]
C0-C180	Plane	
3.0	2.00	323.5
6.0	4.01	80.9
9.0	6.01	35.9
12.0	8.01	20.2
/		\
15.0	10.02	12.9

η	LED		
Efficiency	57 lm/W		
Direct/Indirect	↓ 100% / ↑ 0%		
System Power 2			
UGR	X=4H, Y=8H		
Reflection factors	70/50/20		
UGR C0/C180	10.8		
UGR C90/C270	10.8		
CIE Flux Codes	97 100 100 100 100		
Ra/CRI	>80		

Dallton Small - Spotlight Insert (DAL-S-RTQ 11_SI-MATT, 1xLED 22W 830/3000K 1280lm $\,$ 40 °)



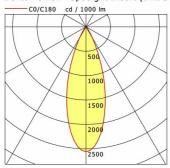
	C0	C90	C180	C270
0°	2168	2168	2168	2168
15°	1417	1417	1417	1417
30°	273	273	273	273
45°	61	61	61	61
60°	16	16	16	16
75°	1	1	1	1
90°	0	0	0	0
	co	i / 1000 I	m	

Offset [m]	Cone width [m] Illu	uminance [lx]
C0-C180		
3.0	1.98	308.4
6.0	3.96	77.1
6.0	3.96	//.1
9.0	5.94	34.3
12.0	7.92	19.3
15.0	9.90	12.3

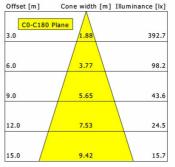
η	LED
Efficiency	58 lm/W
Direct/Indirect	↓ 100% / ↑ 0%
System Power	22 W
UGR	X=4H, Y=8H
Reflection factors	70/50/20
UGR C0/C180	14.6
UGR C90/C270	14.6
CIE Flux Codes	92 99 100 100 100
Ra/CRI	>80



Dallton Small - Spotlight Insert (DAL-S-RTR 21_CH-SW, 1xLED 22W 830/3000K 1380lm 40 °)



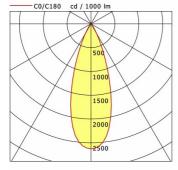
	C0	C90	C180	C270
0°	2561	2561	2561	2561
15°	1528	1528	1528	1528
30°	261	261	261	261
45°	28	28	28	28
60°	0	0	0	0
75°	0	0	0	0
90°	0	0	0	0
	co	i / 1000 I	m	

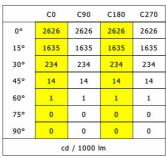


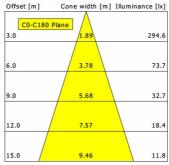
ໆ Efficiency	LED 63 lm/W
Direct/Indirect	↓ 100% / ↑ 0%
System Power	22 W
UGR	X=4H, Y=8H
Reflection factors	70/50/20
UGR C0/C180	12.1
UGR C90/C270	12.1
CIE Flux Codes Ra/CRI	98 100 100 100 100 >80

LTS

Dallton Small - Spotlight Insert (DAL-S-RTQ 11_SW-MATT, 1xLED 22W 830/3000K 1010lm 40 °)







η	LED
Efficiency	46 lm/W
Direct/Indirect	↓ 100% / ↑ 0%
System Power	22 W
UGR	X=4H, Y=8H
Reflection factors	70/50/20
UGR C0/C180	<10.0
UGR C90/C270	<10.0
CIE Flux Codes	99 100 100 100 100
Ra/CRI	>80

Recessed Spotlights · Dallton Small System

DAL-S-LK 101.830.40/DALI

Accessories





DAL-S-ZBW 11.21 honeycomb louvre



ZB-OR DONGLE Organic Response IR dongle kit



ZB-OR GATEWAYOrganic Response IoT Gateway Cascade Series



ZB-OR-R SENSOROrganic Response sensor for recessed mounting