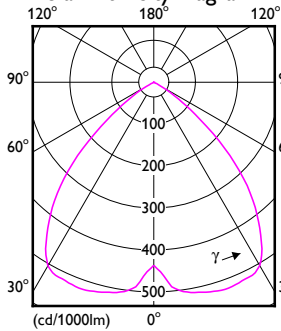


**DN498 1xDLED830 UGR22 1 x LGIT7030**

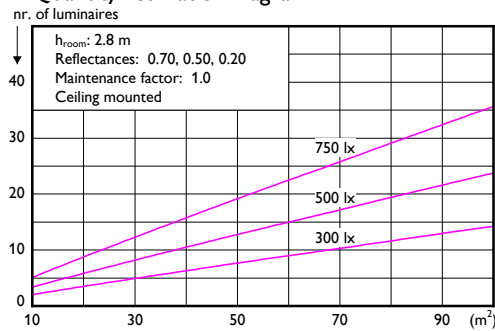
1 x 2074 lm

**Polar intensity diagram**

Light output ratio 1.00  
Service upward 0.00  
Service downward 1.00

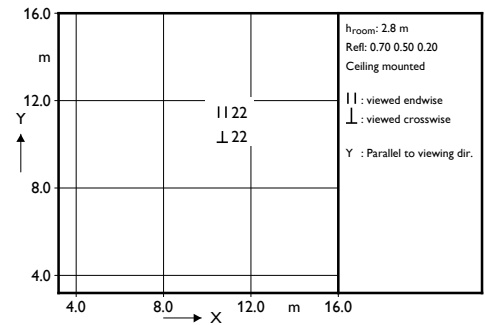
CIE flux code 74 99 100 100 100

UGRcen (4Hx8H, 0.25H) 21  
EN12464-1 65 deg, 1000 cd/m<sup>2</sup>  
CIBSE: LG3 65 deg, 500 cd/m<sup>2</sup>

**Quantity estimation diagram****Utilisation factor table**

Room Index k	Reflectances (%) for ceiling, walls and working plane (CIE)											
	0.80			0.70			0.50			0.30		
	0.80	0.50	0.30	0.80	0.50	0.30	0.80	0.50	0.30	0.80	0.50	0.30
0.60	0.65	0.62	0.60	0.64	0.63	0.61	0.56	0.55	0.52	0.55	0.52	0.50
0.80	0.76	0.71	0.75	0.72	0.70	0.65	0.64	0.61	0.64	0.61	0.64	0.59
1.00	0.84	0.78	0.83	0.80	0.77	0.72	0.72	0.68	0.71	0.68	0.71	0.66
1.25	0.92	0.84	0.90	0.87	0.83	0.79	0.78	0.75	0.77	0.75	0.77	0.73
1.50	0.97	0.88	0.95	0.91	0.88	0.84	0.83	0.80	0.82	0.79	0.82	0.77
2.00	1.05	0.94	1.03	0.98	0.93	0.90	0.89	0.87	0.88	0.86	0.88	0.84
2.50	1.10	0.98	1.08	1.02	0.97	0.94	0.93	0.91	0.91	0.90	0.91	0.88
3.00	1.14	1.00	1.11	1.05	0.99	0.97	0.95	0.94	0.94	0.92	0.94	0.90
4.00	1.18	1.02	1.15	1.07	1.01	0.99	0.98	0.96	0.96	0.95	0.96	0.93
5.00	1.20	1.03	1.17	1.09	1.02	1.01	0.99	0.98	0.97	0.96	0.97	0.94

Ceiling mounted

**UGR diagram****Luminance Table**

Plane Cone	0.0	15.0	30.0	45.0	60.0	75.0	90.0
45.0	32557	32557	32557	32557	32557	32557	32557
50.0	21521	21521	21521	21521	21521	21521	21521
55.0	12066	12066	12066	12066	12066	12066	12066
60.0	4619	4619	4619	4619	4619	4619	4619
65.0	359	359	359	359	359	359	359
70.0	345	345	345	345	345	345	345
75.0	423	423	423	423	423	423	423
80.0	485	485	485	485	485	485	485
85.0	484	484	484	484	484	484	484
90.0	-	-	-	-	-	-	-

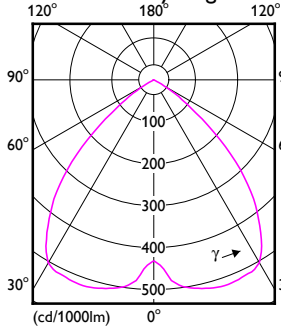
(cd/m<sup>2</sup>)

LVC2130858

2013-07-08

**DN498 1xDLED840 UGR22 1 x LGIT7030**

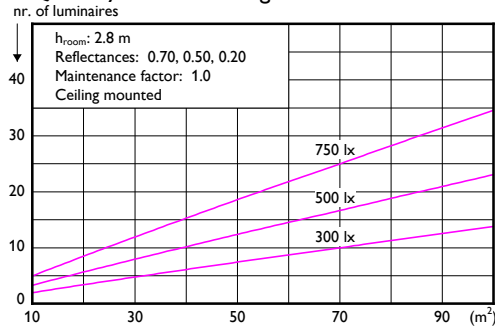
1 x 2138 lm

**Polar intensity diagram**

Light output ratio 1.00  
Service upward 0.00  
Service downward 1.00

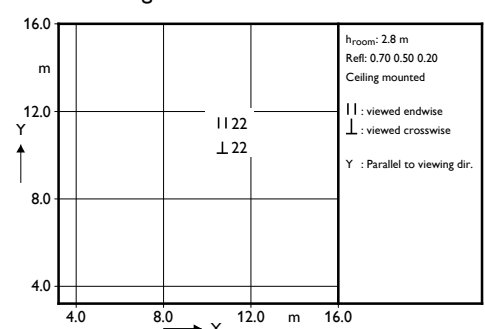
CIE flux code 74 99 100 100 100

UGRcen (4Hx8H, 0.25H) 21  
EN12464-1 65 deg, 1000 cd/m<sup>2</sup>  
CIBSE: LG3 65 deg, 1000 cd/m<sup>2</sup>

**Quantity estimation diagram****Utilisation factor table**

Room Index k	Reflectances (%) for ceiling, walls and working plane (CIE)											
	0.80			0.70			0.50			0.30		
	0.80	0.50	0.30	0.80	0.50	0.30	0.80	0.50	0.30	0.80	0.50	0.30
0.60	0.65	0.62	0.60	0.64	0.63	0.61	0.56	0.55	0.52	0.55	0.52	0.50
0.80	0.76	0.71	0.75	0.72	0.70	0.65	0.64	0.61	0.64	0.61	0.64	0.59
1.00	0.84	0.78	0.83	0.80	0.77	0.72	0.72	0.68	0.71	0.68	0.71	0.66
1.25	0.92	0.84	0.90	0.87	0.83	0.79	0.78	0.75	0.77	0.75	0.77	0.73
1.50	0.97	0.88	0.95	0.91	0.88	0.84	0.83	0.80	0.82	0.79	0.82	0.77
2.00	1.05	0.94	1.03	0.98	0.93	0.90	0.89	0.87	0.88	0.86	0.88	0.84
2.50	1.10	0.98	1.08	1.02	0.97	0.94	0.93	0.91	0.91	0.90	0.91	0.88
3.00	1.14	1.00	1.11	1.05	0.99	0.97	0.95	0.94	0.94	0.92	0.94	0.90
4.00	1.18	1.02	1.15	1.07	1.01	0.99	0.98	0.96	0.96	0.95	0.96	0.93
5.00	1.20	1.03	1.17	1.09	1.02	1.01	0.99	0.98	0.97	0.96	0.97	0.94

Ceiling mounted

**UGR diagram****Luminance Table**

Plane Cone	0.0	15.0	30.0	45.0	60.0	75.0	90.0
45.0	33877	33877	33877	33877	33877	33877	33877
50.0	22695	22695	22695	22695	22695	22695	22695
55.0	12573	12573	12573	12573	12573	12573	12573
60.0	4866	4866	4866	4866	4866	4866	4866
65.0	370	370	370	370	370	370	370
70.0	356	356	356	356	356	356	356
75.0	436	436	436	436	436	436	436
80.0	500	500	500	500	500	500	500
85.0	498	498	498	498	498	498	498
90.0	-	-	-	-	-	-	-

(cd/m<sup>2</sup>)

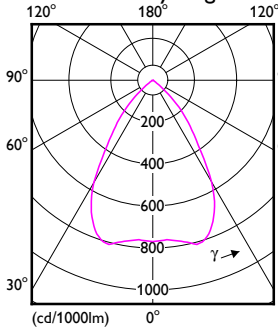
LVC2130859

2013-07-08

**DN499 1xDLED830 UGR19 1 x LGIT7030**

1 x 1847 lm

Polar intensity diagram

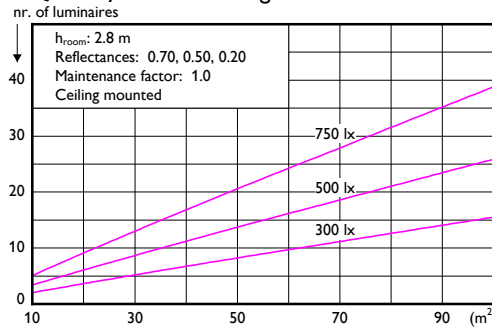


Light output ratio 1.00  
Service upward 0.00  
Service downward 1.00

CIE flux code 88 100 100 100 100

UGRcen (4Hx8H, 0.25H) 17  
EN12464-1 65 deg, 1000 cd/m<sup>2</sup>  
CIBSE: LG3 65 deg, 500 cd/m<sup>2</sup>

Quantity estimation diagram

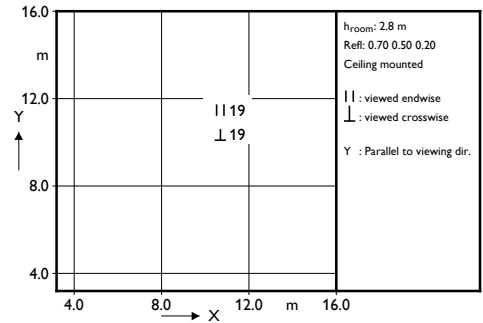


Utilisation factor table

Room Index k	Reflectances (%) for ceiling, walls and working plane (CIE)											
	0.80			0.70			0.50			0.30		
	0.80	0.50	0.30	0.80	0.50	0.30	0.80	0.50	0.30	0.80	0.50	0.30
0.60	0.76	0.72	0.75	0.74	0.72	0.68	0.67	0.64	0.67	0.64	0.63	0.63
0.80	0.84	0.79	0.83	0.81	0.79	0.74	0.74	0.71	0.73	0.71	0.69	0.69
1.00	0.92	0.85	0.90	0.87	0.84	0.80	0.80	0.77	0.79	0.77	0.75	0.75
1.25	0.98	0.90	0.96	0.92	0.89	0.85	0.85	0.82	0.84	0.82	0.80	0.80
1.50	1.02	0.93	1.00	0.96	0.92	0.89	0.88	0.86	0.87	0.85	0.84	0.84
2.00	1.09	0.98	1.07	1.02	0.97	0.94	0.93	0.92	0.92	0.91	0.89	0.89
2.50	1.14	1.01	1.11	1.05	1.00	0.98	0.97	0.95	0.95	0.94	0.92	0.92
3.00	1.17	1.02	1.14	1.07	1.02	1.00	0.99	0.98	0.97	0.96	0.94	0.94
4.00	1.21	1.04	1.17	1.10	1.03	1.02	1.01	1.00	0.99	0.98	0.96	0.96
5.00	1.23	1.05	1.19	1.11	1.04	1.03	1.02	1.01	1.00	1.00	0.97	0.97

Ceiling mounted

UGR diagram



Luminance Table

Plane Cone	0.0	15.0	30.0	45.0	60.0	75.0	90.0
45.0	16782	16782	16782	16782	16782	16782	16782
50.0	7719	7719	7719	7719	7719	7719	7719
55.0	1884	1884	1884	1884	1884	1884	1884
60.0	555	555	555	555	555	555	555
65.0	497	497	497	497	497	497	497
70.0	241	241	241	241	241	241	241
75.0	145	145	145	145	145	145	145
80.0	86	86	86	86	86	86	86
85.0	0	0	0	0	0	0	0
90.0	-	-	-	-	-	-	-

(cd/m<sup>2</sup>)

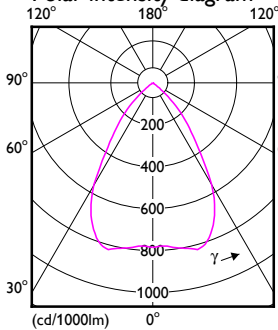
LVC2130860

2013-07-08

**DN499 1xDLED840 UGR19 1 x LGIT7030**

1 x 1946 lm

Polar intensity diagram

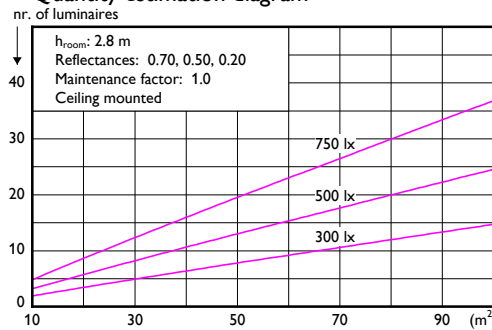


Light output ratio 1.00  
Service upward 0.00  
Service downward 1.00

CIE flux code 88 100 100 100 100

UGRcen (4Hx8H, 0.25H) 17  
EN12464-1 65 deg, 1000 cd/m<sup>2</sup>  
CIBSE: LG3 65 deg, 1000 cd/m<sup>2</sup>

Quantity estimation diagram

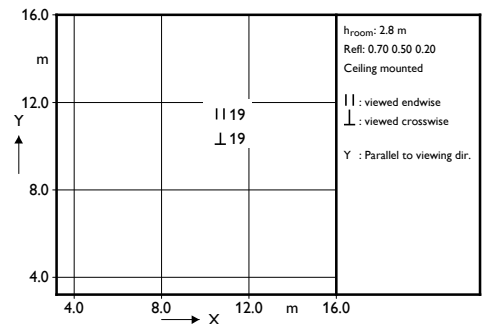


Utilisation factor table

Room Index k	Reflectances (%) for ceiling, walls and working plane (CIE)											
	0.80			0.70			0.50			0.30		
	0.80	0.50	0.30	0.80	0.50	0.30	0.80	0.50	0.30	0.80	0.50	0.30
0.60	0.76	0.72	0.75	0.74	0.72	0.68	0.67	0.64	0.67	0.64	0.63	0.63
0.80	0.84	0.79	0.83	0.81	0.79	0.74	0.74	0.71	0.73	0.71	0.69	0.69
1.00	0.92	0.85	0.90	0.87	0.84	0.80	0.80	0.77	0.79	0.77	0.75	0.75
1.25	0.98	0.90	0.96	0.92	0.89	0.85	0.85	0.82	0.84	0.82	0.80	0.80
1.50	1.02	0.93	1.00	0.96	0.92	0.89	0.88	0.86	0.87	0.85	0.84	0.84
2.00	1.09	0.98	1.07	1.02	0.97	0.94	0.93	0.92	0.92	0.91	0.89	0.89
2.50	1.14	1.01	1.11	1.05	1.00	0.98	0.97	0.95	0.95	0.94	0.92	0.92
3.00	1.17	1.02	1.14	1.07	1.02	1.00	0.99	0.98	0.97	0.96	0.94	0.94
4.00	1.21	1.04	1.17	1.10	1.03	1.02	1.01	1.00	0.99	0.98	0.96	0.96
5.00	1.23	1.05	1.19	1.11	1.04	1.03	1.02	1.01	1.00	1.00	0.97	0.97

Ceiling mounted

UGR diagram



Luminance Table

Plane Cone	0.0	15.0	30.0	45.0	60.0	75.0	90.0
45.0	17253	17253	17253	17253	17253	17253	17253
50.0	7872	7872	7872	7872	7872	7872	7872
55.0	1833	1833	1833	1833	1833	1833	1833
60.0	601	601	601	601	601	601	601
65.0	543	543	543	543	543	543	543
70.0	324	324	324	324	324	324	324
75.0	244	244	244	244	244	244	244
80.0	182	182	182	182	182	182	182
85.0	272	272	272	272	272	272	272
90.0	-	-	-	-	-	-	-

(cd/m<sup>2</sup>)

LVC2130861

2013-07-08