

Light efficiency:



Output: 1442 lm



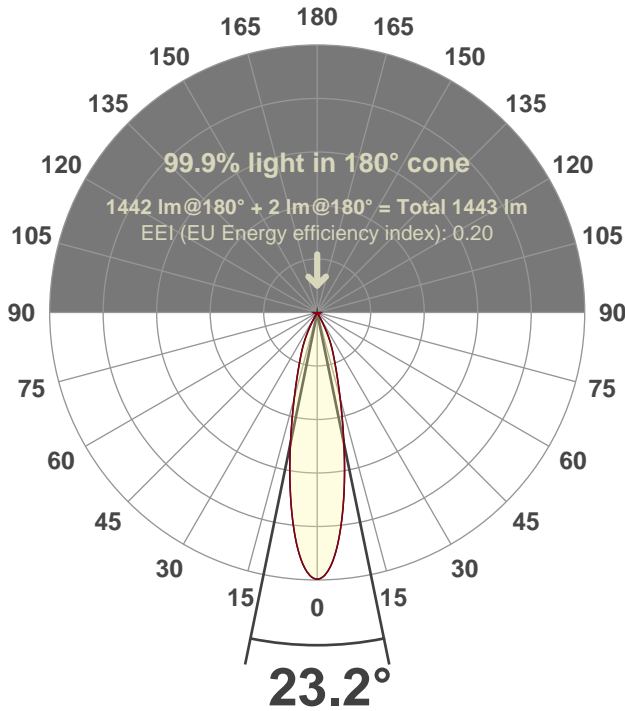
Light quality:



Peak: 6477 cd

Power: 21.1 W

Beam angle



Test number:

CR4D-R-DR-C20-30k-24° (4001-CZ20-NF)

Luminaire Model:

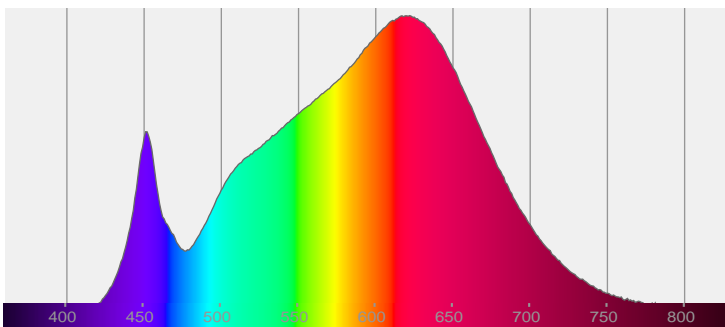
Core 4" Round Deep Regress C20 30k 24°

Date and time:

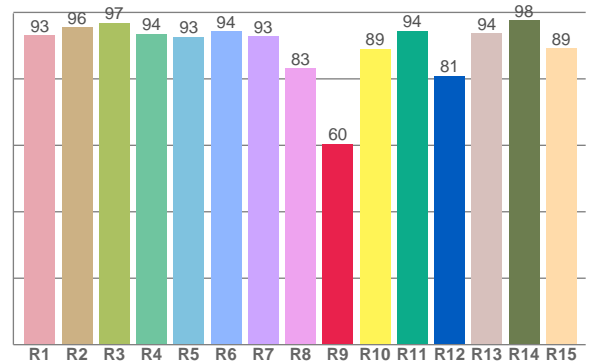
6/14/2017 12:25:18 PM

LUM: 1442

Spectra



CRI: 92.8 (R1-R8)



Color parameters

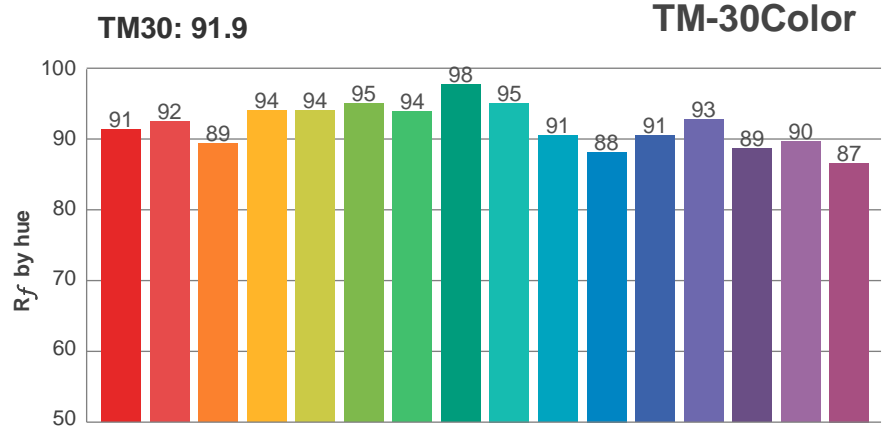
Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CRI	CRI R9	TM30 R _f	TM30 R _g	CQS	x	y	u	v	Δuv
92.8	60.5	91.9	100.3	91.0	0.429	0.400	0.247	0.346	-0.0003

R_f 91.9

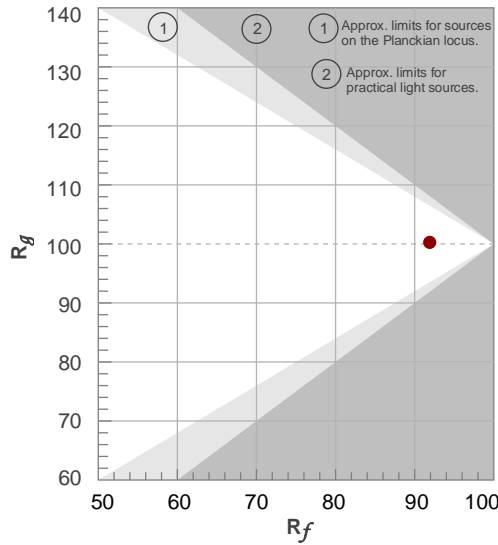
Fidelity index R_f

R_g 100.3

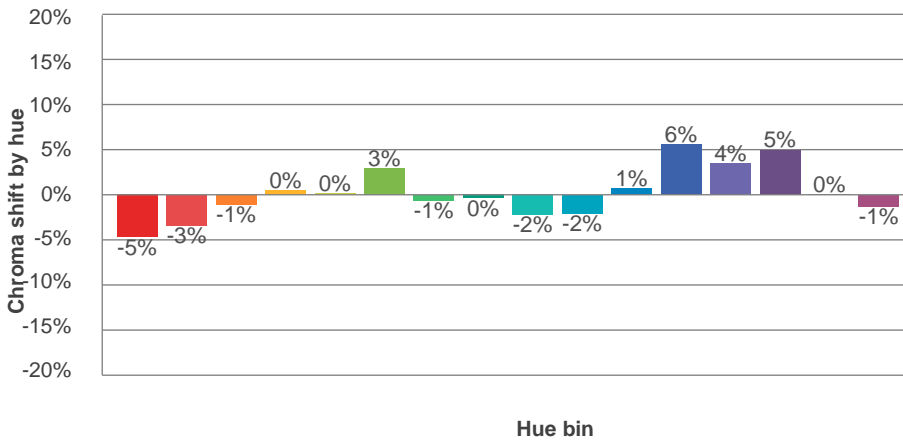
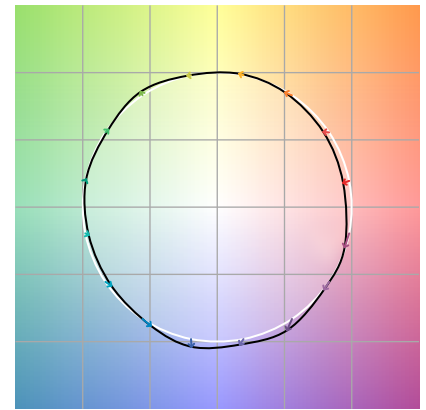
Gammut index R_g



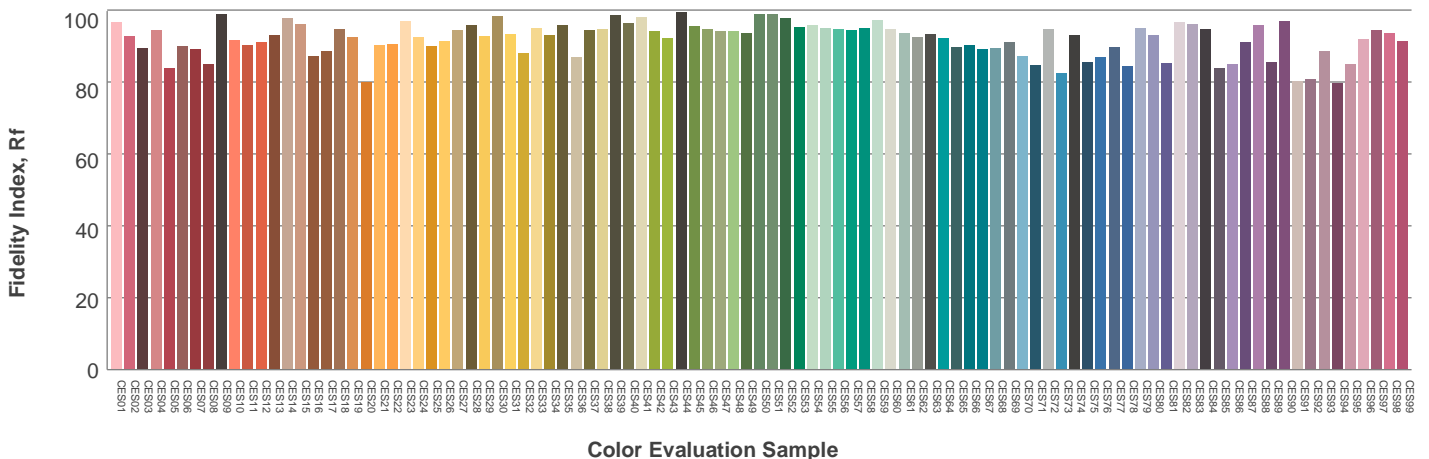
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	91	-5%	-1%
2	92	-3%	3%
3	89	-1%	5%
4	94	0%	3%
5	94	0%	3%
6	95	3%	0%
7	94	-1%	-3%
8	98	0%	-1%
9	95	-2%	2%
10	91	-2%	5%
11	88	1%	8%
12	91	6%	2%
13	93	4%	-3%
14	89	5%	-8%
15	90	0%	-7%
16	87	-1%	-11%



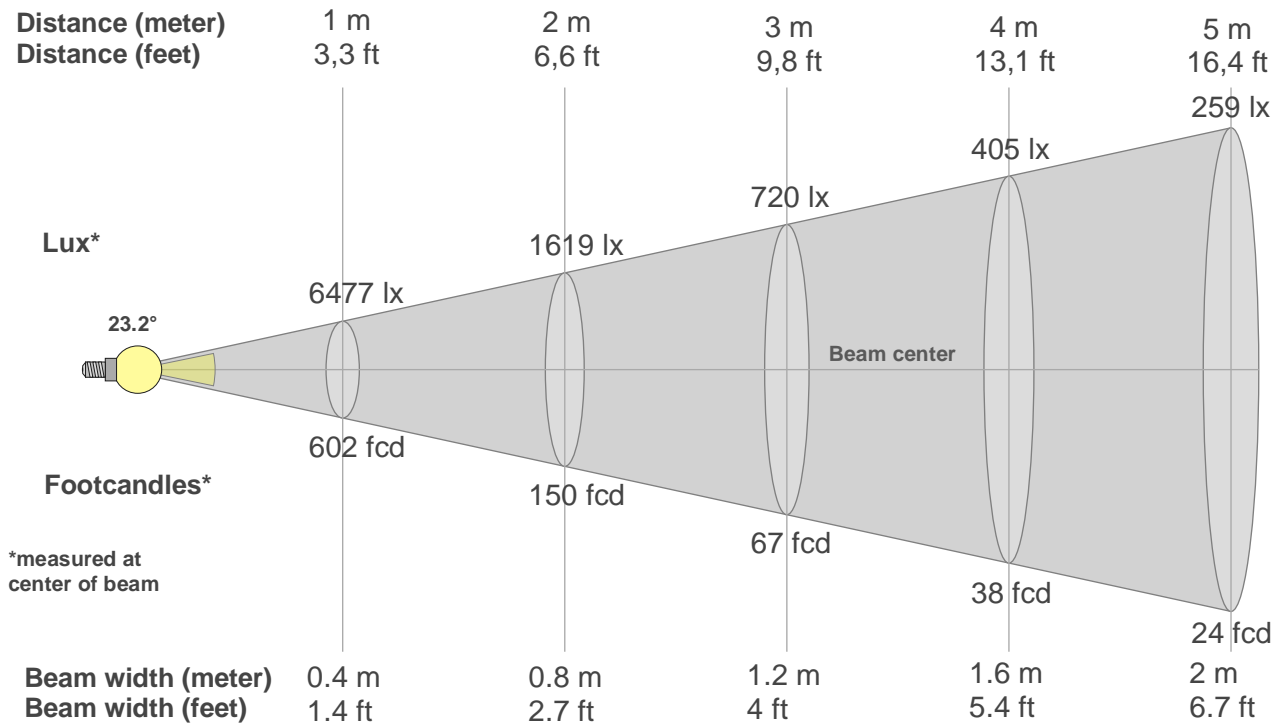
Color vector graphics



Color distortion



Beam details



Beam intensities from 1-20m

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
6477lx	1619lx	720lx	405lx	259lx	180lx	132lx	101lx	80lx	65lx	54lx	45lx	38lx	33lx	29lx	25lx	22lx	20lx	18lx	16lx
601.7fcd	150.4fcd	66.9fcd	37.6fcd	24.1fcd	16.7fcd	12.3fcd	9.4fcd	7.4fcd	6fcd	5fcd	4.2fcd	3.6fcd	3.1fcd	2.7fcd	2.4fcd	2.1fcd	1.9fcd	1.7fcd	1.5fcd

Intensities in 0° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
6477	6338	5950	5344	4612	3835	3088	2444	1922	1527	1228	994	782	556	330	153	64	45	37	31
100%	98%	92%	83%	71%	59%	48%	38%	30%	24%	19%	15%	12%	9%	5%	2%	1%	1%	1%	0%

Intensities in 90° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
6477	6338	5950	5344	4612	3835	3088	2444	1922	1527	1228	994	782	556	330	153	64	45	37	31
100%	98%	92%	83%	71%	59%	48%	38%	30%	24%	19%	15%	12%	9%	5%	2%	1%	1%	1%	0%

Intensities in 180° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
6477	6338	5950	5344	4612	3835	3088	2444	1922	1527	1228	994	782	556	330	153	64	45	37	31
100%	98%	92%	83%	71%	59%	48%	38%	30%	24%	19%	15%	12%	9%	5%	2%	1%	1%	1%	0%

Intensities in 270° c-plane

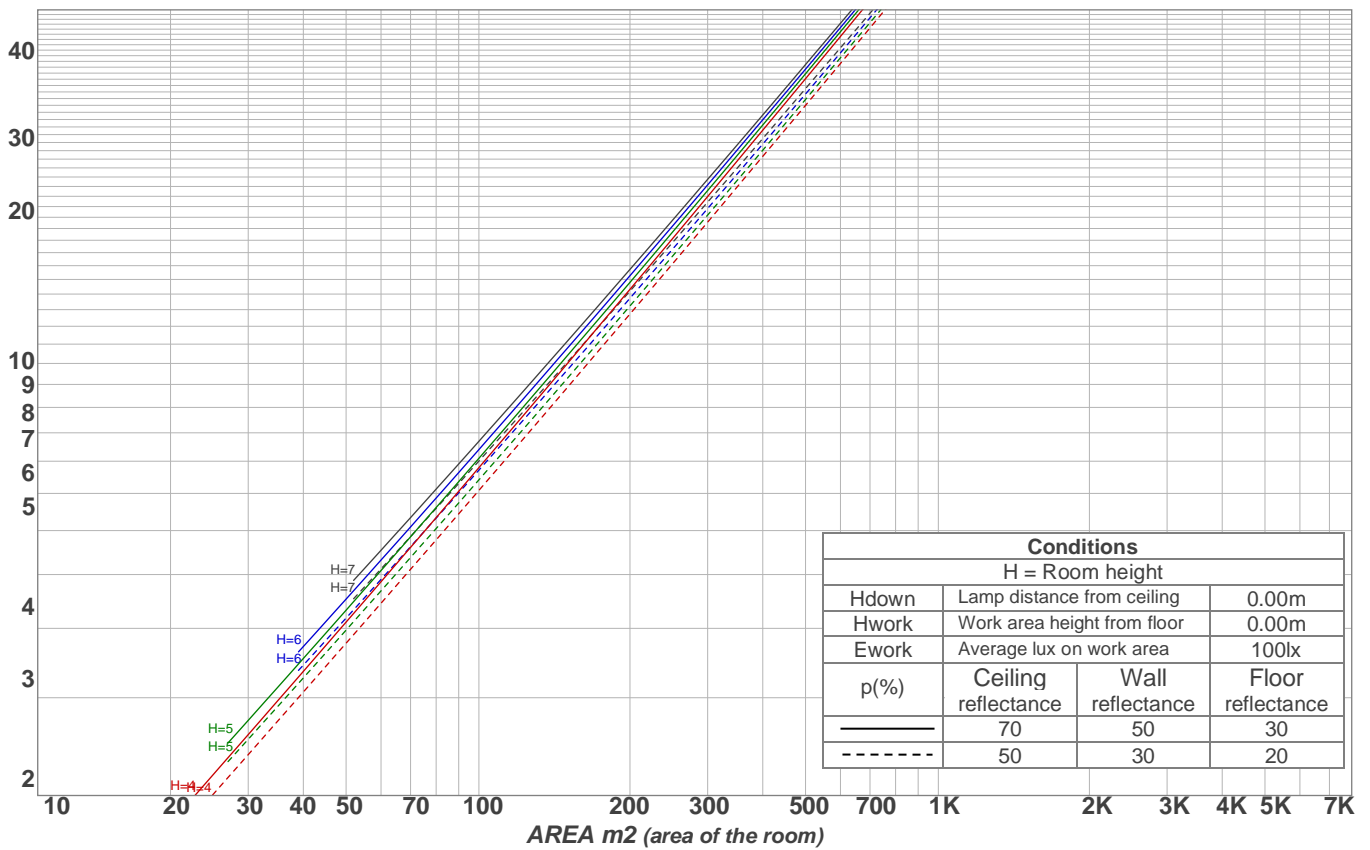
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
6477	6338	5950	5344	4612	3835	3088	2444	1922	1527	1228	994	782	556	330	153	64	45	37	31
100%	98%	92%	83%	71%	59%	48%	38%	30%	24%	19%	15%	12%	9%	5%	2%	1%	1%	1%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
23.2°	50.4°	59.7°	99.4%	98.5%

Light planning

Luminaire budgetary diagram

LAMPS (number of lamps)
50



Luminaire budgetary diagram
AREA m2 (area of the room)
Coefficients of Utilization

Ceiling reflectance	80				70				50			30			10			0			
Wall reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
Floor reflectance	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	0
RCR	(RCR: Room Cavity Ratio)																				
	Room Values are expressed as percentage of Lumens delivered to the task surface																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	115	113	111	109	112	111	109	107	107	105	104	103	102	101	100	99	98	98	96	94	96
2	111	107	104	102	109	106	103	100	102	100	98	100	98	96	97	96	94	94	92	91	93
3	107	103	99	96	106	101	98	95	99	96	94	96	94	92	94	92	91	91	89	88	90
4	104	98	94	91	102	97	94	91	95	92	90	93	91	89	92	90	88	88	86	85	86
5	101	95	90	87	99	94	90	87	92	89	86	91	88	85	89	87	85	86	84	83	84
6	98	91	87	84	96	91	87	84	89	86	83	88	85	83	87	84	82	84	82	80	81
7	95	88	84	81	94	88	84	81	86	83	80	85	82	80	84	82	80	82	80	78	78
8	92	85	81	78	91	85	81	78	84	80	78	83	80	77	82	79	77	80	77	75	76
9	90	83	79	76	89	82	78	76	81	78	75	81	77	75	80	77	75	78	75	73	74
10	87	80	76	73	86	80	76	73	79	76	73	79	75	73	78	75	73	76	73	71	72

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
480 lm	610 lm	294 lm	31.0 lm	12.8 lm	7.73 lm	3.14 lm	1.77 lm	1.39 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm

UGR

p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	19.4	19.8	19.5	20.0	20.2	19.4	19.8	19.5	20.0	20.2
	3H	19.4	20.0	19.8	20.2	20.4	19.4	20.0	19.8	20.2	20.4
	4H	19.6	20.1	19.9	20.3	20.6	19.6	20.1	19.9	20.3	20.6
	6H	19.8	20.3	20.1	20.6	20.9	19.8	20.3	20.1	20.6	20.9
	8H	20.0	20.4	20.3	20.8	21.1	20.0	20.4	20.3	20.8	21.1
	12H	20.2	20.7	20.6	21.0	21.4	20.2	20.7	20.6	21.0	21.4
4H	2H	19.3	19.9	19.7	20.1	20.3	19.3	19.9	19.7	20.1	20.3
	3H	19.7	20.1	20.0	20.4	20.9	19.7	20.1	20.0	20.4	20.9
	4H	19.8	20.2	20.2	20.6	21.1	19.8	20.2	20.2	20.6	21.1
	6H	20.2	20.6	20.7	20.9	21.3	20.2	20.6	20.7	20.9	21.3
	8H	20.4	20.9	20.9	21.2	21.5	20.4	20.9	20.9	21.2	21.5
	12H	20.8	21.1	21.3	21.5	22.0	20.8	21.1	21.3	21.5	22.0
8H	4H	19.8	20.3	20.4	20.6	21.0	19.8	20.3	20.4	20.6	21.0
	6H	20.4	20.7	20.9	21.1	21.6	20.4	20.7	20.9	21.1	21.6
	8H	20.9	21.1	21.4	21.6	22.2	20.9	21.1	21.4	21.6	22.2
	12H	21.5	21.6	22.0	22.1	22.7	21.5	21.6	22.0	22.1	22.7
12H	4H	19.8	20.2	20.3	20.6	21.0	19.8	20.2	20.3	20.6	21.0
	6H	20.5	20.7	21.0	21.2	21.9	20.5	20.7	21.0	21.2	21.9
	8H	21.0	21.2	21.6	21.7	22.3	21.0	21.2	21.6	21.7	22.3
Corrected glare indices referring to 1442 lm total luminous flux											