

## GLAND & CLEAT SELECTOR CHART

Conductor Size (mm <sup>2</sup> )	No. of cores	XLPE/PVC/SWA to BS5467		LSF/LSF/SWA to BS6724		Telecleats	Cable Cleats		
		Indoor - BW	Outdoor - CW	Indoor - BW	Outdoor - CW				
1.5	2	NL20SBWN	NL20SCWN	NL20BWLSFN	NL20CWLSFN	NL38501	NLCC5		
	3						NL38502	NLCC6	
	4				NL20BWN	NL25CWN		NL20BWLSFN	NL25CWLSFN
	7	NL25BWLSFN	NL32CWLSFN	NLCC9					
	12			NL32BWN			NL32CWN	NL32BWLSFN	NL38505
	19	NL38506	NLCC11						
	27	NL38505	NL38506	NL38505	NL38506	NLCC12			
37	NLCC12								
2.5	2	NL20SBWN	NL20SCWN	NL20BWLSFN	NL20CWLSFN	NL38501	NLCC6		
	3						NL38502	NLCC6	
	4				NL20BWN	NL20CWN		NL20BWLSFN	NL20CWLSFN
	7	NL25BWN	NL25CWN	NL25BWLSFN			NL25CWLSFN		
	12							NL32CWN	NL32CWLSFN
	19	NL32BWN	NL40CWN	NL32BWLSFN			NL40CWLSFN		
	27				NL38506	NL38506		NL38506	NL38506
	37	NLCC14							
4	2	NL20SBWN	NL20SCWN	NL20BWLSFN	NL20CWLSFN	NL38502	NLCC6		
	3						NL20BWN	NL20CWN	NL20BWLSFN
	4	NLCC7							
6	2	NL20SBWN	NL20CWN	NL20BWLSFN	NL20CWLSFN	NL38502			
	3						NL20BWN	NL20CWN	NL20BWLSFN
	4	NLCC8							
10	2	NL20BWN	NL20CWN	NL20BWLSFN	NL20CWLSFN	NL38503			
	3						NL25CWN	NL25CWLSFN	NL38504
	4		NLCC10						
16	2	NL25BWN	NL25CWN	NL20BWLSFN	NL20CWLSFN	NL38504			
	3						NL25BWLSFN	NL25CWLSFN	NL38505
	4			NLCC10					
25	2	NL25BWN	NL25CWN	NL25BWLSFN	NL25CWLSFN	NL38504			
	3						NL32CWN	NL32CWLSFN	NL38505
	4	NL32BWN	NL32BWLSFN	NL32CWLSFN	NL38506	NLCC12			
35	2	NL32BWN	NL32CWN	NL32BWLSFN	NL32CWLSFN	NL38505			
	3						NL38506	NLCC14	
	4					NLCC14			
50	2	NL25BWN	NL25CWN	NL25BWLSFN	NL25CWLSFN	NL38505			NLCC11
	3	NL32BWN	NL32CWN	NL32BWLSFN	NL32CWLSFN	NL38506	NLCC12		
	4						NLCC14		
70	2	NL32BWN	NL32CWN	NL32BWLSFN	NL32CWLSFN	NL38506	NLCC12		
	3						NL38507	NLCC14	
	4					NL40BWN			NL40CWN
95	2	NL32BWN	NL40CWN	NL32BWLSFN	NL32CWLSFN	NL38506			NLCC14
	3	NL40BWN		NL40BWLSFN	NL40CWLSFN	NL38507	NLCC16		
	4		NL50CWN					NL50CWLSFN	NL38508
120	2	NL40BWN	NL40CWN	NL40BWLSFN	NL40CWLSFN	NL38507	NLCC16		
	3	NL50BWN	NL50CWN		NL50BWLSFN		NL50CWLSFN	NL38508	NLCC18
	4			NLCC20					
150	2	NL40BWN	NL40CWN	NL40BWLSFN	NL40CWLSFN	NL38507	NLCC18		
	3	NL50BWN	NL50CWN	NL50BWLSFN	NL50CWLSFN	NL38508	NLCC20		
	4						-		
185	2	NL50BWN	NL50CWN	NL50BWLSFN	NL50CWLSFN	NL38508	NLCC20		
	3						-	-	
	4					NL63BWN			NL63CWN
240	2	NL50BWN	NL50CWN	NL50BWLSFN	NL50CWLSFN	NL38508			-
	3				NL63CWN		NL63BWLSFN	NL63CWLSFN	-
	4	NL63BWN	-						
300	2	NL50BWN	NL63CWN	NL50BWLSFN		NL63CWLSFN			NL38508
	3	NL63BWN		NL63BWLSFN	-				
	4	NL75BWN	NL75CWN	NL75BWLSFN	NL75CWLSFN	-			
400	2	NL63BWN	NL63CWN	NL63BWLSFN	NL63CWLSFN	-	-		
	3						NL75CWN	NL75BWLSFN	NL75CWLSFN
	4	-							

CABLE JUNCTION BOXES - CAPACITY GUIDE

ORDER CODE	MODEL NO.	TERMINALS	CONDUCTOR CAPACITY PER POLE
1000016008	NL9025	5 pole terminal block	6x1.5mm <sup>2</sup> Solid 4x2.5mm <sup>2</sup> Solid 3x4mm <sup>2</sup> Solid 2x6mm <sup>2</sup> Solid
1050151877	NL9041	10 terminals	2x1.55mm <sup>2</sup> Stranded 2x2.55mm <sup>2</sup> Solid 2x4mm <sup>2</sup> Stranded with/without Ferrule
1000016009	NL9045	5 pole terminal block	6x1.5mm <sup>2</sup> Solid 4x2.5mm <sup>2</sup> Solid 3x4mm <sup>2</sup> Solid 2x6mm <sup>2</sup> Solid
1000016010	NL9065	5 pole terminal block	4x2.5mm <sup>2</sup> Solid 4x4mm <sup>2</sup> Solid 3x6mm <sup>2</sup> Solid 2x10mm <sup>2</sup> Solid
1000009021	NL9105	5 pole terminal block	6x2.5mm <sup>2</sup> Solid 4x4mm <sup>2</sup> Solid 4x6mm <sup>2</sup> Solid 4x10mm <sup>2</sup> Solid 2x16mm <sup>2</sup> Stranded
1050151876	NL9145	5 pole terminal block	6x1.5mm <sup>2</sup> Solid 4x2.5mm <sup>2</sup> Solid 3x4mm <sup>2</sup> Solid 2x6mm <sup>2</sup> Solid
1050151876	NL9255	5 pole terminal block	6x6mm <sup>2</sup> Solid 6x10mm <sup>2</sup> Solid 4x16mm <sup>2</sup> Stranded 4x25mm <sup>2</sup> Stranded 2x35mm <sup>2</sup> Stranded
1000009020	NL9325	5 pole terminal block	6x1.5mm <sup>2</sup> Solid 4x2.5mm <sup>2</sup> Solid 3x4mm <sup>2</sup> Solid 2x6mm <sup>2</sup> Solid

## LUMINAIRE EFFICIENCY FACTOR

The Luminaire Efficiency Factor (LEF) for our luminaires as indicated by Part L2 of the Building Regulations can be simply calculated.

To assist in LEF calculations the following lamp data are provided as a guide to the Total Circuit Power (W) for single lamps within a circuit. The tables provide figures for both copper/iron (Cu/fe) and high frequency electronic ballasts (HF). Cu/fe information is shown within brackets.

For certain ambient and linear products where you may have both direct (DLOR) and indirect light (ULOR), the LOR used in the equation must be the sum of both. In the case of multiple lamps within a luminaire, simply multiply the circuit watts by the number of lamps employed.

### Guide to calculation of LEF

Part L2 calls for luminaires to aim to achieve an LEF of >45 lumens per circuit watt. This can be determined by using a simple calculation as follows:

$$\text{LEF} = \frac{\text{Total Lamp Lumens (TLL)} \times \text{Light Output Ratio (LOR as a decimal)}}{\text{Total Circuit Power (TCP)}}$$

E.g. - using Newlec 2x58W T8 HF indirect surface fluorescent (NL5596)

TLL	=	9200 Initial lumens (IL)	
LOR	=	0.65 (%)	
TCP	=	96 (watts)	
LEF	=	$\frac{9200 \times 0.65}{96}$	= 62.29

It is important to recognise that not all luminaires in a scheme have to be compliant. It is the overall efficiency of an installation that is judged. Certain luminaires, because of their nature are unlikely to achieve a rating of >45 lumens per circuit watt. Depending on the installation, these can be compensated for with other luminaires that exceed the minimum rating, and bring the overall efficiency of the scheme within the recommended parameters.

## LUMINAIRE EFFICIENCY FACTOR TABLE

MODEL NO.	DESCRIPTION	LAMP TYPE USED FOR CALC.	TOTAL LAMPS LUMENS (TLL)	LIGHT OUTPUT RATIO (LOR)	TOTAL CIRCUIT POWER (TCP)	LUMINAIRE EFFICIENCY FACTOR (LEF)
NL101S3	NEWLEC 28W 2D HF CIRC WHI BASE OPAL P/CARB DIF 350X118MM	TRIPHOSPHOR	2050	0.467	28.7	33.36
NL101S4	NEWLEC 38W 2D HF CIRC WHI BASE OPAL P/CARB DIF 350X118MM	TRIPHOSPHOR	2580	0.42	39.7	27.29
NL2D28	NEWLEC 28W 2D S/S CIRC WHI BASE OPAL P/CARB DIF 350X118MM	TRIPHOSPHOR	2050	0.461	36	26.25
NL2D28E	NEWLEC 28W 2D HF E3 CIRC WHI BASE OPAL P/CARB DIF 350X118MM	TRIPHOSPHOR	2050	0.467	28.7	33.36
NL2D38	NEWLEC 38W 2D S/S CIRC WHI BASE OPAL P/CARB DIF 350X118MM	TRIPHOSPHOR	2580	0.42	48	22.58
NL2D38E	NEWLEC 38W 2D HF E3 CIRC WHI BASE OPAL P/CARB DIF 350X118MM	TRIPHOSPHOR	2580	0.421	39.7	27.36
NL3522	NEWLEC 5FT 1X58W T8 S/S PREMIER SURFACE FLUORESCENT	TRIPHOSPHOR	5200	0.52	69	39.19
NL3522HF	NEWLEC 5FT 1X58W T8 HF PREMIER SURFACE FLUORESCENT	TRIPHOSPHOR	5200	0.55	54.5	52.48
NL3524	NEWLEC 6FT 1X70W T8 S/S PREMIER SURFACE FLUORESCENT	TRIPHOSPHOR	6550	0.52	81	42.05
NL3524HF	NEWLEC 6FT 1X70W T8 HF PREMIER SURFACE FLUORESCENT	TRIPHOSPHOR	6550	0.55	68	52.98
NL3526	NEWLEC 4FT 2X36W T8 S/S PREMIER SURFACE FLUORESCENT	TRIPHOSPHOR	6700	0.53	96	36.99
NL3526HF	NEWLEC 4FT 2X36W T8 HF PREMIER SURFACE FLUORESCENT	TRIPHOSPHOR	6700	0.54	72	50.25
NL3528	NEWLEC 5FT 2X58W T8 S/S PREMIER SURFACE FLUORESCENT	TRIPHOSPHOR	10400	0.53	138	39.94
NL3528HF	NEWLEC 5FT 2X58W T8 HF PREMIER SURFACE FLUORESCENT	TRIPHOSPHOR	10400	0.54	110	51.05
NL3530	NEWLEC 6FT 2X70W T8 S/S PREMIER SURFACE FLUORESCENT	TRIPHOSPHOR	13100	0.53	162	42.86
NL3530HF	NEWLEC 6FT 2X70W T8 HF PREMIER SURFACE FLUORESCENT	TRIPHOSPHOR	13100	0.54	130	54.42
NL3532	NEWLEC 4X18W T8 S/S PREMIER SURFACE FLUORESCENT	TRIPHOSPHOR	5400	0.54	96	30.38
NL3532HF	NEWLEC 4X18W T8 HF PREMIER SURFACE FLUORESCENT	TRIPHOSPHOR	5400	0.54	73.4	39.73
NL3546	NEWLEC 4FT 2X36W T8 S/S E3 PREMIER SURFACE FLUORESCENT	TRIPHOSPHOR	6700	0.53	96	36.99
NL3546HF	NEWLEC 4FT 2X36W T8 HF E3 PREMIER SURFACE FLUORESCENT	TRIPHOSPHOR	6700	0.54	72	50.25
NL3548	NEWLEC 5FT 2X58W T8 S/S E3 PREMIER SURFACE FLUORESCENT	TRIPHOSPHOR	10400	0.53	138	39.94
NL3548HF	NEWLEC 5FT 2X58W T8 HF E3 PREMIER SURFACE FLUORESCENT	TRIPHOSPHOR	10400	0.54	110	51.05
NL3550	NEWLEC 6FT 2X70W T8 S/S E3 PREMIER SURFACE FLUORESCENT	TRIPHOSPHOR	13100	0.53	162	42.86
NL3550HF	NEWLEC 6FT 2X70W T8 HF E3 PREMIER SURFACE FLUORESCENT	TRIPHOSPHOR	13100	0.54	130	54.42

LUMINAIRE EFFICIENCY FACTOR TABLE

MODEL NO.	DESCRIPTION	LAMP TYPE USED FOR CALC.	TOTAL LAMPS LUMENS (TLL)	LIGHT OUTPUT RATIO (LOR)	TOTAL CIRCUIT POWER (TCP)	LUMINAIRE EFFICIENCY FACTOR (LEF)
NL3552	NEWLEC 4X18W T8 S/S E3 PREMIER SURFACE FLUORESCENT	TRIPHOSPHOR	5400	0.54	96	30.38
NL3552HF	NEWLEC 4X18W T8 HF E3 PREMIER SURFACE FLUORESCENT	TRIPHOSPHOR	5400	0.54	73.4	39.73
NL3700N	NEWLEC 2FT 1X18W T8 S/S ANTI-C & ACRYLIC DIFFUSER	TRIPHOSPHOR	1350	0.76	25.3	40.55
NL3701N	NEWLEC 2FT 2X18W T8 S/S ANTI-C & ACRYLIC DIFFUSER	TRIPHOSPHOR	2700	0.76	50.6	40.55
NL3702N	NEWLEC 4FT 1X36W T8 S/S ANTI-C & ACRYLIC DIFFUSER	TRIPHOSPHOR	3350	0.76	46	55.35
NL3703N	NEWLEC 4FT 2X36W T8 S/S ANTI-C & ACRYLIC DIFFUSER	TRIPHOSPHOR	6700	0.76	92	55.35
NL3704N	NEWLEC 5FT 1X58W T8 S/S ANTI-C & ACRYLIC DIFFUSER	TRIPHOSPHOR	5200	0.76	69	57.28
NL3705N	NEWLEC 5FT 2X58W T8 S/S ANTI-C & ACRYLIC DIFFUSER	TRIPHOSPHOR	10400	0.76	138	57.28
NL3706N	NEWLEC 6FT 1X70W T8 S/S ANTI-C & ACRYLIC DIFFUSER	TRIPHOSPHOR	6000	0.76	80.5	56.65
NL3707N	NEWLEC 6FT 2X70W T8 S/S ANTI-C & ACRYLIC DIFFUSER	TRIPHOSPHOR	12000	0.76	161	56.65
NL3708N	NEWLEC 2FT 1X18W T8 HF ANTI-C & ACRYLIC DIFFUSER	TRIPHOSPHOR	1350	0.76	18.5	55.46
NL3709N	NEWLEC 2FT 2X18W T8 HF ANTI-C & ACRYLIC DIFFUSER	TRIPHOSPHOR	2700	0.76	36.5	56.22
NL3710N	NEWLEC 4FT 1X36W T8 HF ANTI-C & ACRYLIC DIFFUSER	TRIPHOSPHOR	3350	0.76	35.5	71.72
NL3711N	NEWLEC 4FT 2X36W T8 HF ANTI-C & ACRYLIC DIFFUSER	TRIPHOSPHOR	6700	0.76	72	70.72
NL3712N	NEWLEC 5FT 1X58W T8 HF ANTI-C & ACRYLIC DIFFUSER	TRIPHOSPHOR	5200	0.76	54.5	72.51
NL3713N	NEWLEC 5FT 2X58W T8 HF ANTI-C & ACRYLIC DIFFUSER	TRIPHOSPHOR	10400	0.76	107	73.87
NL3714N	NEWLEC 6FT 1X70W T8 HF ANTI-C & ACRYLIC DIFFUSER	TRIPHOSPHOR	6000	0.76	68	67.06
NL3715N	NEWLEC 6FT 2X70W T8 HF ANTI-C & ACRYLIC DIFFUSER	TRIPHOSPHOR	12000	0.76	130	70.15
NL3716N	NEWLEC 2FT 1X18W T8 S/S ANTI-C & POLYCARB DIFFUSER	TRIPHOSPHOR	1350	0.76	25.3	40.55
NL3717N	NEWLEC 2FT 2X18W T8 S/S ANTI-C & POLYCARB DIFFUSER	TRIPHOSPHOR	2700	0.76	50.6	40.55
NL3718N	NEWLEC 4FT 1X36W T8 S/S ANTI-C & POLYCARB DIFFUSER	TRIPHOSPHOR	3350	0.76	46	55.35
NL3719N	NEWLEC 4FT 2X36W T8 S/S ANTI-C & POLYCARB DIFFUSER	TRIPHOSPHOR	6700	0.76	92	55.35
NL3720N	NEWLEC 5FT 1X58W T8 S/S ANTI-C & POLYCARB DIFFUSER	TRIPHOSPHOR	5200	0.76	69	57.28
NL3721N	NEWLEC 5FT 2X58W T8 S/S ANTI-C & POLYCARB DIFFUSER	TRIPHOSPHOR	10400	0.76	138	57.28
NL3722N	NEWLEC 6FT 1X70W T8 S/S ANTI-C & POLYCARB DIFFUSER	TRIPHOSPHOR	6000	0.76	80.5	56.65
NL3723N	NEWLEC 6FT 2X70W T8 S/S ANTI-C & POLYCARB DIFFUSER	TRIPHOSPHOR	12000	0.76	161	56.65
NL3724N	NEWLEC 2FT 1X18W T8 HF ANTI-C & POLYCARB DIFFUSER	TRIPHOSPHOR	1350	0.76	18.5	55.46
NL3725N	NEWLEC 2FT 2X18W T8 HF ANTI-C & POLYCARB DIFFUSER	TRIPHOSPHOR	2700	0.76	36.5	56.22
NL3726N	NEWLEC 4FT 1X36W T8 HF ANTI-C & POLYCARB DIFFUSER	TRIPHOSPHOR	3350	0.76	35.5	71.72
NL3727N	NEWLEC 4FT 2X36W T8 HF ANTI-C & POLYCARB DIFFUSER	TRIPHOSPHOR	6700	0.76	72	70.72
NL3728N	NEWLEC 5FT 1X58W T8 HF ANTI-C & POLYCARB DIFFUSER	TRIPHOSPHOR	5200	0.76	69	57.28
NL3729N	NEWLEC 5FT 2X58W T8 HF ANTI-C & POLYCARB DIFFUSER	TRIPHOSPHOR	10400	0.76	107	73.87
NL3730N	NEWLEC 6FT 1X70W T8 HF ANTI-C & POLYCARB DIFFUSER	TRIPHOSPHOR	6000	0.76	80.5	56.65
NL3731N	NEWLEC 6FT 2X70W T8 HF ANTI-C & POLYCARB DIFFUSER	TRIPHOSPHOR	12000	0.76	130	70.15
NL3732N	NEWLEC 4FT 1X36W T8 S/S E3 ANTI-C & POLYCARB DIFFUSER	TRIPHOSPHOR	3350	0.76	46	55.35
NL3733N	NEWLEC 4FT 2X36W T8 S/S E3 ANTI-C & POLYCARB DIFFUSER	TRIPHOSPHOR	6700	0.76	92	55.35
NL3734N	NEWLEC 5FT 1X58W T8 S/S E3 ANTI-C & POLYCARB DIFFUSER	TRIPHOSPHOR	5200	0.76	69	57.28
NL3735N	NEWLEC 5FT 2X58W T8 S/S E3 ANTI-C & POLYCARB DIFFUSER	TRIPHOSPHOR	10400	0.76	138	57.28
NL3736N	NEWLEC 6FT 1X70W T8 S/S E3 ANTI-C & POLYCARB DIFFUSER	TRIPHOSPHOR	6000	0.76	80.5	56.65
NL3737N	NEWLEC 6FT 2X70W T8 S/S E3 ANTI-C & POLYCARB DIFFUSER	TRIPHOSPHOR	12000	0.76	161	56.65
NL3738N	NEWLEC 4FT 1X36W T8 HF E3 ANTI-C & POLYCARB DIFFUSER	TRIPHOSPHOR	3350	0.76	35.5	71.72
NL3739N	NEWLEC 4FT 2X36W T8 HF E3 ANTI-C & POLYCARB DIFFUSER	TRIPHOSPHOR	6700	0.76	72	70.72
NL3740N	NEWLEC 5FT 1X58W T8 HF E3 ANTI-C & POLYCARB DIFFUSER	TRIPHOSPHOR	5200	0.76	54.5	72.51
NL3741N	NEWLEC 5FT 2X58W T8 HF E3 ANTI-C & POLYCARB DIFFUSER	TRIPHOSPHOR	10400	0.76	107	73.87
NL3742N	NEWLEC 6FT 1X70W T8 HF E3 ANTI-C & POLYCARB DIFFUSER	TRIPHOSPHOR	6000	0.763	68	67.32
NL3743N	NEWLEC 6FT 2X70W T8 HF E3 ANTI-C & POLYCARB DIFFUSER	TRIPHOSPHOR	12000	0.762	130	70.34
NL3750	NEWLEC 16W 2D CIRC BLK BULKHEAD OPAL DIFFUSER	TRIPHOSPHOR	1050	0.53	23	24.20
NL3751	NEWLEC 16W 2D CIRC BLK BULKHEAD PRISMATIC DIFF	TRIPHOSPHOR	1050	0.67	23	30.59
NL3752	NEWLEC 16W 2D CIRC WHI BULKHEAD PRISMATIC DIFF	TRIPHOSPHOR	1050	0.68	23	31.04
NL3753	NEWLEC 16W 2D CIRC WHI BULKHEAD OPAL DIFFUSER	TRIPHOSPHOR	1050	0.68	23	31.04
NL3754	NEWLEC 16W 2D PC CIRC WHI BULKHEAD OPAL DIFFUSER	TRIPHOSPHOR	1050	0.68	23	31.04
NL3755	NEWLEC 16W 2D SQUARE BLK BULKHEAD OPAL DIFFUSER	TRIPHOSPHOR	1050	0.55	23	25.11
NL3756	NEWLEC 16W 2D SQUARE BLK BULKHEAD PRISMATIC DIFF	TRIPHOSPHOR	1050	0.67	23	30.59
NL3757	NEWLEC 16W 2D SQUARE WHI BULKHEAD PRISMATIC DIFF	TRIPHOSPHOR	1050	0.70	23	31.96
NL3758	NEWLEC 16W 2D SQUARE WHI BULKHEAD OPAL DIFFUSER	TRIPHOSPHOR	1050	0.58	23	26.48
NL3759	NEWLEC 16W 2D PC SQUARE BLK BULKHEAD OPAL DIFF	TRIPHOSPHOR	1050	0.55	23	25.11
NL3760	NEWLEC 28W 2D CIRC BLK BULKHEAD OPAL DIFFUSER	TRIPHOSPHOR	2050	0.55	36	31.32
NL3761	NEWLEC 28W 2D CIRC BLK BULKHEAD PRISMATIC DIFF	TRIPHOSPHOR	2050	0.70	36	39.86
NL3762	NEWLEC 28W 2D CIRC WHI BULKHEAD OPAL DIFFUSER	TRIPHOSPHOR	2050	0.61	36	34.74
NL3763	NEWLEC 28W 2D CIRC WHI BULKHEAD PRISMATIC DIFF	TRIPHOSPHOR	2050	0.73	36	41.57

## LUMINAIRE EFFICIENCY FACTOR TABLE

MODEL NO.	DESCRIPTION	LAMP TYPE USED FOR CALC.	TOTAL LAMPS LUMENS (TLL)	LIGHT OUTPUT RATIO (LOR)	TOTAL CIRCUIT POWER (TCP)	LUMINAIRE EFFICIENCY FACTOR (LEF)
NL3764	NEWLEC 28W 2D SQUARE BLK BULKHEAD OPAL DIFFUSER	TRIPHOSPHOR	2050	0.56	36	31.89
NL3765	NEWLEC 28W 2D SQUARE BLK BULKHEAD PRISMATIC DIFF	TRIPHOSPHOR	2050	0.70	36	39.86
NL3766	NEWLEC 28W 2D SQUARE WHI BULKHEAD OPAL DIFFUSER	TRIPHOSPHOR	2050	0.63	36	35.88
NL3767	NEWLEC 28W 2D SQUARE WHI BULKHEAD PRISMATIC DIFF	TRIPHOSPHOR	2050	0.79	36	44.99
NL3768	NEWLEC 28W 2D E3 CIRC WHI BULKHEAD PRISMATIC DIFF	TRIPHOSPHOR	2050	0.79	26	62.29
NL3769	NEWLEC 28W 2D E3 SQUARE BLK BULKHEAD PRISMATIC DIFF	TRIPHOSPHOR	2050	0.77	26	60.71
NL3770	NEWLEC 28W 2D E3 CIRC WHI BULKHEAD OPAL DIFFUSER	TRIPHOSPHOR	2050	0.65	26	51.25
NL3771	NEWLEC 38W 2D CIRC WHI BULKHEAD PRISMATIC DIFF	TRIPHOSPHOR	2700	0.58	48	32.63
NL3816	NEWLEC 1X55W TC-L HF WALLWASH	TRIPHOSPHOR	4850	0.43	61	34.19
NL3817	NEWLEC 2X55W TC-L HF WALLWASH	TRIPHOSPHOR	9700	0.43	120	34.76
NL3823N	NEWLEC 150W SON-T E40 LOWBAY	SON	15000	0.746	170.2	65.75
NL3824N	NEWLEC 250W SON-T E40 LOWBAY	SON	27500	0.778	289.8	73.83
NL3825N	NEWLEC 400W SON-T E40 LOWBAY	SON	50000	0.736	434	84.79
NL3826N	NEWLEC 250W HQI-T E40 LOWBAY	HQI	20000	0.687	276	49.78
NL3827N	NEWLEC 400W HQI-T E40 LOWBAY	HQI	38000	0.731	425.5	65.28
NL5515PI	NEWLEC 4X18W T8 S/S REC MOD PLUG-IN C/W LOUVRE	HALOPHOSPHOR	4600	0.609	104	26.94
NL5516PI	NEWLEC 4X36W T8 S/S REC MOD PLUG-IN C/W LOUVRE	HALOPHOSPHOR	11400	0.566	172	37.51
NL5532PI	NEWLEC 4X18W T8 HF E3 REC MOD PLUG-IN C/W LOUVRE	TRIPHOSPHOR	5400	0.609	70.2	46.85
NL5532SPI	NEWLEC 4X18W T8 S/S E3 REC MOD PLUG-IN C/W LOUVRE	HALOPHOSPHOR	4600	0.609	104	26.94
NL5533PI	NEWLEC 4X36W T8 HF E3 REC MOD PLUG-IN C/W LOUVRE	TRIPHOSPHOR	13400	0.566	144	52.67
NL5533SPI	NEWLEC 4X36W T8 S/S E3 REC MOD PLUG-IN C/W LOUVRE	HALOPHOSPHOR	11400	0.566	172	37.51
NL5547PI	NEWLEC 4X18W T8 HF REC MOD PLUG-IN C/W LOUVRE	TRIPHOSPHOR	5400	0.609	70.2	46.85
NL5548PI	NEWLEC 4X36W T8 HF REC MOD PLUG-IN C/W LOUVRE	TRIPHOSPHOR	13400	0.566	144	52.67
NL5590	NEWLEC 2X40W TC-L HF REC INDIRECT MOD 600X600MM	TRIPHOSPHOR	7000	0.52	88	41.36
NL5591	NEWLEC 2X55W TC-L HF REC INDIRECT MOD 600X600MM	TRIPHOSPHOR	9700	0.52	120	42.03
NL5596	NEWLEC 2X58W T8 HF INDIRECT SURFACE FLUORESCENT	HALOPHOSPHOR	9200	0.65	96	62.29
NL5597	NEWLEC 2X58W T8 HF E3 INDIRECT SURFACE FLUORESCENT	HALOPHOSPHOR	9200	0.65	110	54.36
NL7501HF	NEWLEC 4FT 1X36W T8 HF SURFACE FLUORESCENT	TRIPHOSPHOR	3350	0.42	35.5	39.63
NL7502	NEWLEC 5FT 1X58W T8 S/S SURFACE FLUORESCENT	TRIPHOSPHOR	5200	0.42	69	31.65
NL7502HF	NEWLEC 5FT 1X58W T8 HF SURFACE FLUORESCENT	TRIPHOSPHOR	5200	0.42	54.5	40.07
NL7503	NEWLEC 6FT 1X70W T8 S/S SURFACE FLUORESCENT	TRIPHOSPHOR	6550	0.42	81	33.96
NL7503HF	NEWLEC 6FT 1X70W T8 HF SURFACE FLUORESCENT	TRIPHOSPHOR	6550	0.42	68	40.46
NL7504	NEWLEC 4FT 2X36W T8 S/S SURFACE FLUORESCENT	TRIPHOSPHOR	6700	0.44	96	30.71
NL7504HF	NEWLEC 4FT 2X36W T8 HF SURFACE FLUORESCENT	TRIPHOSPHOR	6700	0.44	72	40.94
NL7505	NEWLEC 5FT 2X58W T8 S/S SURFACE FLUORESCENT	TRIPHOSPHOR	10400	0.44	138	33.16
NL7505HF	NEWLEC 5FT 2X58W T8 HF SURFACE FLUORESCENT	TRIPHOSPHOR	10400	0.44	110	41.60
NL7506	NEWLEC 6FT 2X70W T8 S/S SURFACE FLUORESCENT	TRIPHOSPHOR	13100	0.44	162	35.58
NL7506HF	NEWLEC 6FT 2X70W T8 HF SURFACE FLUORESCENT	TRIPHOSPHOR	13100	0.44	130	44.34
NL7507HF	NEWLEC 4FT 1X36W T8 HF E3 SURFACE FLUORESCENT	TRIPHOSPHOR	3350	0.42	35.5	39.63
NL7508	NEWLEC 5FT 1X58W T8 S/S E3 SURFACE FLUORESCENT	TRIPHOSPHOR	5200	0.42	69	31.65
NL7508HF	NEWLEC 5FT 1X58W T8 HF E3 SURFACE FLUORESCENT	TRIPHOSPHOR	5200	0.42	54.5	40.07
NL7509	NEWLEC 6FT 1X70W T8 S/S E3 SURFACE FLUORESCENT	TRIPHOSPHOR	6550	0.42	81	33.96
NL7509HF	NEWLEC 6FT 1X70W T8 HF E3 SURFACE FLUORESCENT	TRIPHOSPHOR	6550	0.42	68	40.46
NL7510	NEWLEC 4FT 2X36W T8 S/S E3 SURFACE FLUORESCENT	TRIPHOSPHOR	6700	0.44	96	30.71
NL7510HF	NEWLEC 4FT 2X36W T8 HF E3 SURFACE FLUORESCENT	TRIPHOSPHOR	6700	0.44	72	40.94
NL7511	NEWLEC 5FT 2X58W T8 S/S E3 SURFACE FLUORESCENT	TRIPHOSPHOR	10400	0.44	138	33.16
NL7511HF	NEWLEC 5FT 2X58W T8 HF E3 SURFACE FLUORESCENT	TRIPHOSPHOR	10400	0.44	110	41.60
NL7512	NEWLEC 6FT 2X70W T8 S/S E3 SURFACE FLUORESCENT	TRIPHOSPHOR	13100	0.44	162	35.58
NL7512HF	NEWLEC 6FT 2X70W T8 HF E3 SURFACE FLUORESCENT	TRIPHOSPHOR	13100	0.44	130	44.34
NL7520	NEWLEC 4X18W T8 HF REC MOD 600X600MM BODY ONLY	TRIPHOSPHOR	5400	0.62	73.4	45.61
NL7521	NEWLEC 4X18W T8 HF E3 REC MOD 600X600MM BODY ONLY	TRIPHOSPHOR	5400	0.62	73.4	45.61
NL7522	NEWLEC 4X36W T8 HF REC MOD 1200X600MM BODY ONLY	TRIPHOSPHOR	13400	0.62	144	57.69
NL7523	NEWLEC 4X36W T8 HF E3 REC MOD 1200X600MM BODY ONLY	TRIPHOSPHOR	13400	0.62	144	57.69
NL7524	NEWLEC 4X18W T8 S/S REC MOD 600X600MM BODY ONLY	TRIPHOSPHOR	5400	0.62	96	34.88
NL7525	NEWLEC 4X18W T8 S/S E3 REC MOD 600X600MM BODY ONLY	TRIPHOSPHOR	5400	0.62	96	34.88
NL7526	NEWLEC 4X36W T8 S/S REC MOD 1200X600MM BODY ONLY	TRIPHOSPHOR	13400	0.62	192	43.27
NL7527	NEWLEC 4X36W T8 S/S E3 REC MOD 1200X600MM BODY ONLY	TRIPHOSPHOR	13400	0.62	192	43.27
NL7536	NEWLEC 3X18W T8 HF REC MOD 600X600MM C/W LOUVRE	TRIPHOSPHOR	4050	0.67	55.2	49.16
NL7537	NEWLEC 3X18W T8 HF E3 REC MOD 600X600MM C/W LOUVRE	TRIPHOSPHOR	4050	0.67	55.2	49.16
NL7538	NEWLEC 4X18W T8 HF REC MOD 600X600MM C/W LOUVRE	TRIPHOSPHOR	5400	0.62	73.4	45.61

## LUMINAIRE EFFICIENCY FACTOR TABLE

MODEL NO.	DESCRIPTION	LAMP TYPE USED FOR CALC.	TOTAL LAMPS LUMENS (TLL)	LIGHT OUTPUT RATIO (LOR)	TOTAL CIRCUIT POWER (TCP)	LUMINAIRE EFFICIENCY FACTOR (LEF)
NL7539	NEWLEC 4X18W T8 HF E3 REC MOD 600X600MM C/W LOUVRE	TRIPHOSPHOR	5400	0.62	73.4	45.61
NL7540	NEWLEC 4X36W T8 HF REC MOD 600X600MM C/W LOUVRE	TRIPHOSPHOR	13400	0.62	144	57.69
NL7541	NEWLEC 4X36W T8 HF E3 REC MOD 600X600MM C/W LOUVRE	TRIPHOSPHOR	13400	0.62	144	57.69
NL7542	NEWLEC 3X18W T8 S/S REC MOD 600X600MM C/W LOUVRE	TRIPHOSPHOR	4050	0.67	72	37.69
NL7543	NEWLEC 3X18W T8 S/S REC MOD 600X600MM C/W LOUVRE	TRIPHOSPHOR	4050	0.67	72	37.69
NL7544	NEWLEC 4X18W T8 S/S REC MOD 600X600MM C/W LOUVRE	TRIPHOSPHOR	5400	0.62	96	34.88
NL7545	NEWLEC 4X18W T8 S/S E3 REC MOD 600X600MM C/W LOUVRE	TRIPHOSPHOR	5400	0.62	96	34.88
NL7546	NEWLEC 3X18W T8 S/S E3 REC MOD 600X600MM C/W LOUVRE	TRIPHOSPHOR	13400	0.61	192	42.57
NL7547	NEWLEC 4X36W T8 S/S E3 REC MOD 600X600MM C/W LOUVRE	TRIPHOSPHOR	13400	0.61	192	42.57
NLBF1100N	NEWLEC 8FT 1X100W T12 S/S BATTEN	HALOPHOSPHOR	8600	0.96	117	70.56
NLBF118N	NEWLEC 2FT 1X18W T8 S/S BATTEN	HALOPHOSPHOR	1200	0.96	24	48.00
NLBF136EN	NEWLEC 4FT 1X36W T8 S/S E3 BATTEN	HALOPHOSPHOR	2900	0.96	48	58.00
NLBF136N	NEWLEC 4FT 1X36W T8 S/S BATTEN	HALOPHOSPHOR	2900	0.96	48	58.00
NLBF158EN	NEWLEC 5FT 1X58W T8 S/S E3 BATTEN	HALOPHOSPHOR	4800	0.96	69	66.78
NLBF158N	NEWLEC 5FT 1X58W T8 S/S BATTEN	HALOPHOSPHOR	4800	0.96	69	66.78
NLBF170EN	NEWLEC 6FT 1X70W T8 S/S E3 BATTEN	HALOPHOSPHOR	5800	0.96	81	68.74
NLBF170N	NEWLEC 6FT 1X70W T8 S/S BATTEN	HALOPHOSPHOR	5800	0.96	81	68.74
NLBF2100N	NEWLEC 8FT 2X100W T12 S/S BATTEN	HALOPHOSPHOR	17200	0.96	234	70.56
NLBF218N	NEWLEC 2FT 2X18W T8 S/S BATTEN	HALOPHOSPHOR	2400	0.96	48	48.00
NLBF236EN	NEWLEC 4FT 2X36W T8 S/S E3 BATTEN	HALOPHOSPHOR	5800	0.96	96	58.00
NLBF236N	NEWLEC 4FT 2X36W T8 S/S BATTEN	HALOPHOSPHOR	5800	0.96	96	58.00
NLBF258EN	NEWLEC 5FT 2X58W T8 S/S E3 BATTEN	HALOPHOSPHOR	9600	0.96	138	66.78
NLBF258N	NEWLEC 5FT 2X58W T8 S/S BATTEN	HALOPHOSPHOR	9600	0.96	138	66.78
NLBF270EN	NEWLEC 6FT 2X70W T8 S/S E3 BATTEN	HALOPHOSPHOR	11600	0.96	162	68.74
NLBF270N	NEWLEC 6FT 2X70W T8 S/S BATTEN	HALOPHOSPHOR	11600	0.96	162	68.74
NLCFD13	NEWLEC 1X13W TC-DE S/S CFL DOWNLIGHT	TRIPHOSPHOR	900	TBA	17.8	TBA
NLCFD13E3	NEWLEC 1X13W TC-DE S/S E3 CFL DOWNLIGHT	TRIPHOSPHOR	900	TBA	16	TBA
NLCFD18	NEWLEC 1X18W TC-DE S/S CFL DOWNLIGHT	TRIPHOSPHOR	1200	0.57	22	31.09
NLCFD18E3	NEWLEC 1X18W TC-DE S/S E3 CFL DOWNLIGHT	TRIPHOSPHOR	1200	0.57	26	26.31
NLCFD18E3HF	NEWLEC 1X18W TC-DE HF E3 CFL DOWNLIGHT	TRIPHOSPHOR	1200	0.57	22	31.09
NLCFD18HF	NEWLEC 1X18W TC-DE HF CFL DOWNLIGHT	TRIPHOSPHOR	1200	0.57	20.5	33.37
NLCFD26	NEWLEC 1X26W TC-DE S/S CFL DOWNLIGHT	TRIPHOSPHOR	1800	0.5	32.8	27.44
NLCFD26E3	NEWLEC 1X26W TC-DE S/S E3 CFL DOWNLIGHT	TRIPHOSPHOR	1800	0.5	32	28.13
NLCFD26E3HF	NEWLEC 1X26W TC-DE HF E3 CFL DOWNLIGHT	TRIPHOSPHOR	1800	0.5	32	28.13
NLCFD26HF	NEWLEC 1X26W TC-DE HF CFL DOWNLIGHT	TRIPHOSPHOR	1800	0.5	28.5	31.58
NLCFD2X13	NEWLEC 2X13W TC-DE S/S CFL DOWNLIGHT	TRIPHOSPHOR	1800	TBA	TBA	TBA
NLCFD2X13E3	NEWLEC 2X13W TC-DE S/S E3 CFL DOWNLIGHT	TRIPHOSPHOR	1800	TBA	30	TBA
NLCFD2X18	NEWLEC 2X18W TC-DE S/S CFL DOWNLIGHT	TRIPHOSPHOR	2400	0.53	43.3	29.38
NLCFD2X18E3	NEWLEC 2X18W TC-DE S/S E3 CFL DOWNLIGHT	TRIPHOSPHOR	2400	0.53	52	24.46
NLCFD2X18E3HF	NEWLEC 2X18W TC-DE HF E3 CFL DOWNLIGHT	TRIPHOSPHOR	2400	0.53	44	28.91
NLCFD2X18HF	NEWLEC 2X18W TC-DE HF CFL DOWNLIGHT	TRIPHOSPHOR	2400	0.53	40	31.80
NLCFD2X26	NEWLEC 2X26W TC-DE S/S CFL DOWNLIGHT	TRIPHOSPHOR	3600	0.46	65.5	25.28
NLCFD2X26E3	NEWLEC 2X26W TC-DE S/S E3 CFL DOWNLIGHT	TRIPHOSPHOR	3600	0.46	60	27.60
NLCFD2X26E3HF	NEWLEC 2X26W TC-DE HF E3 CFL DOWNLIGHT	TRIPHOSPHOR	3600	0.46	60	27.60
NLCFD2X26HF	NEWLEC 2X26W TC-DE HF CFL DOWNLIGHT	TRIPHOSPHOR	3600	0.46	56	29.57
NLHF136EN	NEWLEC 4FT 1X36W T8 HF E3 BATTEN	HALOPHOSPHOR	3350	0.96	35.5	90.59
NLHF136N	NEWLEC 4FT 1X36W T8 HF BATTEN	HALOPHOSPHOR	3350	0.96	35.5	90.59
NLHF158EN	NEWLEC 5FT 1X58W T8 HF E3 BATTEN	HALOPHOSPHOR	5200	0.96	54.5	91.60
NLHF158N	NEWLEC 5FT 1X58W T8 HF BATTEN	HALOPHOSPHOR	5200	0.96	54.5	91.60
NLHF170EN	NEWLEC 6FT 1X70W T8 HF E3 BATTEN	HALOPHOSPHOR	6350	0.96	68	89.65
NLHF170N	NEWLEC 6FT 1X70W T8 HF BATTEN	HALOPHOSPHOR	6350	0.96	68	89.65
NLHF236EN	NEWLEC 4FT 2X36W T8 HF E3 BATTEN	HALOPHOSPHOR	6700	0.96	72	89.33
NLHF236N	NEWLEC 4FT 2X36W T8 HF BATTEN	HALOPHOSPHOR	6700	0.96	72	89.33
NLHF258EN	NEWLEC 5FT 2X58W T8 HF E3 BATTEN	HALOPHOSPHOR	10400	0.96	110	90.76
NLHF258N	NEWLEC 5FT 2X58W T8 HF BATTEN	HALOPHOSPHOR	10400	0.96	110	90.76
NLHF270EN	NEWLEC 6FT 2X70W T8 HF E3 BATTEN	HALOPHOSPHOR	12700	0.96	130	93.78
NLHF270N	NEWLEC 6FT 2X70W T8 HF BATTEN	HALOPHOSPHOR	12700	0.96	130	93.78

\* Green highlighted products adhere to part L2 Building Regulations

## CALCULATION DATA

### Total Lamp Lumen / Circuit Power

Initial lumens are based on 100-hour measurements. Efficacy is calculated by dividing the 100-hour lumen output by the rated lamp power. Control gear losses are not taken into account. E.g. 13W TC-D 900 Ø 13 = 69 lm/W. For reflector lamps efficacy PAR lamps, use the equivalent rated non-reflector variant e.g. PAR 38 100W use A 60 (GLS) 100W, PAR 30 75W use QT32 75W and CDM-R 35W use CMI/CDM-TC 35W. Circuit power is shown for both magnetic (Cu/fe) and electronic ballasts (HF) where applicable - circuit watts for magnetic ballasts are shown in brackets. Data sources; CELMA, GE, Osram, Philips and Sylvania.

#### Tungsten Lamps

<b>A (GLS)</b>	25W	40W	60W	75W	100W	150W	200W	300W
Total Lamp Lumens (lL)	225	410	700	915	1330	2150	3080	4550
Total Circuit Power (W)	25	40	60	75	100	150	200	300
Efficacy (lm/W)	9	10	12	12	13	14	15	15

#### Tungsten Halogen Lamps - 240 volts

<b>QT14 (satin)</b>	40W	60W
Total Lamp Lumens (lL)	460	790
Total Circuit Power (W)	40	60
Efficacy (lm/W)	12	13

<b>QT18 (clear)</b>	75W	100W	150W	250W
Total Lamp Lumens (lL)	1100	1500	2500	4350
Total Circuit Power (W)	75	100	150	250
Efficacy (lm/W)	15	15	17	17

<b>QT32 (clear)</b>	75W	100W	150W	250W
Total Lamp Lumens (lL)	1100	1500	2500	4350
Total Circuit Power (W)	75	100	150	250
Efficacy (lm/W)	15	15	17	17

<b>QT-DE12</b>	100W	150W	200W	300W	500W	750W	1000W	1500W	2000W
Total Lamp Lumens (lL)	1600	2600	3000	5000	9500	15000	22000	33000	44000
Total Circuit Power (W)	100	150	200	300	500	750	1000	1500	2000
Efficacy (lm/W)	16	17	16	17	19	20	22	22	22

#### Tungsten Halogen Lamps - 12 volts

<b>QT9 (LV)</b>	5W	10W	20W
Total Lamp Lumens (lL)	60	140	350
Total Circuit Power (W)	5	10	20
Efficacy (lm/W)	12	14	18

<b>QT12 (LV)</b>	20W	35W	50W	75W	100W	175W
Total Lamp Lumens (lL)	300	600	950	1575	2200	4900
Total Circuit Power (W)	20	35	50	75	100	175
Efficacy (lm/W)	15	17	19	21	22	28

#### Compact Fluorescent Lamps

<b>TC-DD (2D)</b>	16W	28W	38W	55W
Total Lamp Lumens (lL)	1050	2250	3000	3900
Total Circuit Power (W)	17(23)	29(36)	38(45)	61
Efficacy (lm/W)	66	80	79	71

<b>TC-S/SEL</b>	5W	7W	9W	11W
Total Lamp Lumens (lL)	250	400	600	900
Total Circuit Power (W)	7(12)	9(14)	11(16)	14(18)
Efficacy (lm/W)	50	57	67	82

<b>TC-D/DEL</b>	10W	3W	18W	26W
Total Lamp Lumens (lL)	600	900	1200	1800
Total Circuit Power (W)	11(16)	14(19)	19(26)	27(34)
Efficacy (lm/W)	60	69	67	69

<b>TC-T</b>	13W	18W	26W	32W	42W	57W
Total Lamp Lumens (lL)	900	1200	1800	2400	3200	4300
Total Circuit Power (W)	14(19)	19(26)	27(34)	36	47	63
Efficacy (lm/W)	69	67	69	75	76	75

<b>TC-L</b>	18W	24W	36W	40W	55W
Total Lamp Lumens (lL)	1200	1800	2900	3500	4800
Total Circuit Power (W)	19(26)	25(32)	36(43)	45	61
Efficacy (lm/W)	67	75	81	88	87

<b>TC-F</b>	18W	24W	36W
Total Lamp Lumens (lL)	1100	1700	2800
Total Circuit Power (W)	19(26)	25(32)	36(43)
Efficacy (lm/W)	61	71	78

<b>T5 Circular Lamps</b>	22W	40W	55W
Total Lamp Lumens (lL)	1800	3200	4200
Total Circuit Power (W)	26	45	61
Efficacy (lm/W)	82	80	82

#### Compact Fluorescent Lamps (Integral HF electronic gear)

<b>Mini Lynx 2 limb</b>	7W	11W	15W	20W
Total Lamp Lumens (lL)	400	600	900	1250
Total Circuit Power (W)	7	11	15	20
Efficacy (lm/W)	57	55	60	63

<b>Micro-Lynx 3 limb</b>	15W	20W	23W
Total Lamp Lumens (lL)	900	1250	1500
Total Circuit Power (W)	15	20	23
Efficacy (lm/W)	60	63	65

<b>Mini Lynx F</b>	7W
Total Lamp Lumens (lL)	220
Total Circuit Power (W)	7
Efficacy (lm/W)	31

CALCULATION DATA

Total Lamp Lumen / Circuit Power

Linear Fluorescent Lamps

<b>T5 Triphosphor (HE/FH)</b>							
Total Lamp Lumens (lL)	14W	21W	28W	35W			
Total Circuit Power (W)	1350	2100	2900	3650			
Efficacy (lm/W)	17	24	32	39			
<b>T5 Triphosphor (HO/FO)</b>							
Total Lamp Lumens (lL)		24W		39W	49W	54W	80W
Total Circuit Power (W)		2000		3500	4900	5000	6130
Efficacy (lm/W)		26		43	55	60	88
<b>T5 Halophosphor</b>							
Total Lamp Lumens (lL)	4W	6W	8W	13W			
Total Circuit Power (W)	140	280	400	880			
Efficacy (lm/W)	6(11)	8(13)	11(15)	15(19)			
<b>T8 Triphosphor</b>							
Total Lamp Lumens (lL)		18W	30W	36W		58W	
Total Circuit Power (W)		1350	2300	3350		5200	
Efficacy (lm/W)		19(26)	31(38)	6(43)		55(67)	
<b>T8 Halophosphor</b>							
Total Lamp Lumens (lL)		18W	36W	58W			
Total Circuit Power (W)		1150	2850	4600			
Efficacy (lm/W)		19(26)	36(43)	55(67)			

High Intensity Discharge (HID) lamps

<b>QL (LMG-IHF)</b>							
Total Lamp Lumens (lL)				85W		165W	
Total Circuit Power (W)				6000		12000	
Efficacy (lm/W)				85		165	
<b>CDM-TC (CMI-TC/HIT-TC-CE)</b>							
Total Lamp Lumens (lL)		20W	35W	70W			
Total Circuit Power (W)		1650	3400	6200			
Efficacy (lm/W)		24	45(47)	80(82)			
<b>CDM-T (CMI-T/HIT-CE)</b>							
Total Lamp Lumens (lL)			35W	70W		150W	
Total Circuit Power (W)			3400	6200		13500	
Efficacy (lm/W)			45(47)	80(82)		162(170)	
<b>CDM-TT (HIT-CE)</b>							
Total Lamp Lumens (lL)				70W		150W	
Total Circuit Power (W)				6300		13500	
Efficacy (lm/W)				80(82)		162(170)	
<b>CDM-ET (HIE-CE)</b>							
Total Lamp Lumens (lL)				70W		150W	
Total Circuit Power (W)				5900		13000	
Efficacy (lm/W)				80(82)		162(170)	
<b>CDM-TD (CMI-TD/HIT-DE-CE)</b>							
Total Lamp Lumens (lL)				70W		150W	
Total Circuit Power (W)				6200		13000	
Efficacy (lm/W)				80(82)		162(170)	
<b>HQI-T (HSI-T/HIT-UVR)</b>							
Total Lamp Lumens (lL)			35W	70W	150W	250W	400W
Total Circuit Power (W)			2400	5200	12000	21000	40000
Efficacy (lm/W)			45(47)	80(82)	162(170)	(284)	(430)
<b>HQI-TS (HSI-TD/HIT-DE)</b>							
Total Lamp Lumens (lL)				70W	100W	150W	250W
Total Circuit Power (W)				5500	8400	13000	20000
Efficacy (lm/W)				69	(114)	162(170)	(284)
<b>Metalarc (HSI-MP/HIE-P)</b>							
Total Lamp Lumens (lL)				75W	100W	150W	
Total Circuit Power (W)				5200	7900	12500	
Efficacy (lm/W)				(97)	(114)	(170)	
<b>SDW-TG (HSI-CRI)</b>							
Total Lamp Lumens (lL)				70W			
Total Circuit Power (W)				4800			
Efficacy (lm/W)				115			
<b>SDW-T (HSI-CRI)</b>							
Total Lamp Lumens (lL)					100W		
Total Circuit Power (W)					5000		
Efficacy (lm/W)					115		
<b>SON-T (SHP-TS/HST-MF)</b>							
Total Lamp Lumens (lL)		50W	70W	100W	150W	250W	400W
Total Circuit Power (W)		4400	6000	10000	14500	28000	48000
Efficacy (lm/W)		(62)	(82)	(114)	(170)	(284)	(434)
<b>SON (SHP-S/HSE-I/E)</b>							
Total Lamp Lumens (lL)		50W	70W				
Total Circuit Power (W)		3300	5800				
Efficacy (lm/W)		(66)	(83)				
<b>NAV-TS (HST-DE)</b>							
Total Lamp Lumens (lL)			70W		150W		
Total Circuit Power (W)			6800		15000		
Efficacy (lm/W)			(82)		(170)		
<b>MBF/UL (HSL-SC/HME)</b>							
Total Lamp Lumens (lL)		50W	80W	125W	250W	400W	
Total Circuit Power (W)		2000	4000	6500	13000	22000	
Efficacy (lm/W)		59	(91)	(137)	(270)	(420)	
		40	50	52	52	55	