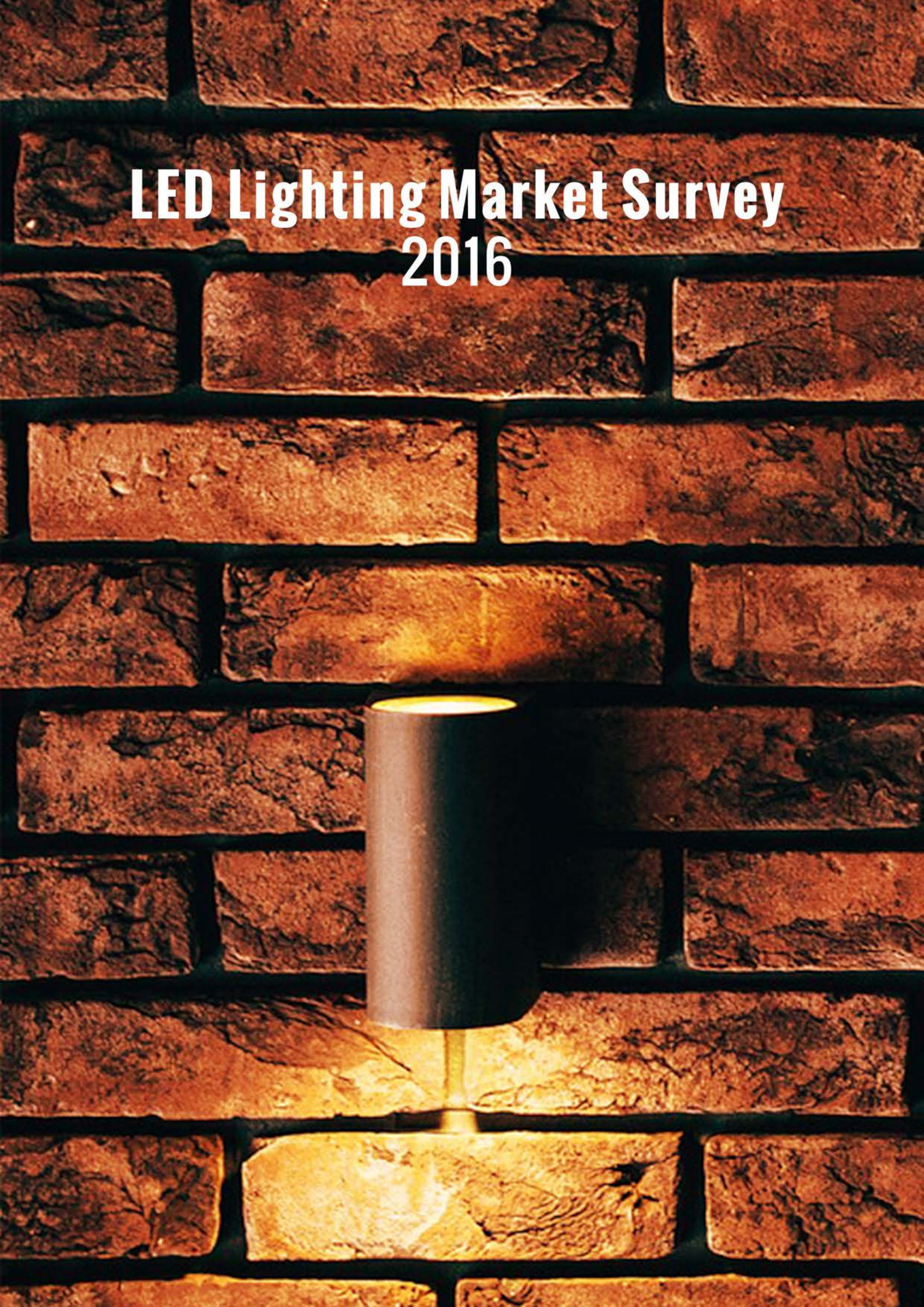
LED Lighting Market Survey 2016



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INTRODUCTION

With a 38% growth in 2015, relative to 2014 within the UK LED lighting market, the demand for such lighting products is constantly on the rise.

The journey of how LED light bulbs came to be can be traced back to 2008, with the announcement of the Bright Tomorrow Lighting Prize. Tasking companies with creating a light bulb to replace a 60w incandescent globe, this competition paved the way for domestic use LEDs.

Although the competition started in 2008, a winner was not decided upon until August 2011, by which time LEDs with a domestic application had already been on the market for nearly a year. Since they were made available for use in the UK households, the LED market has been on a meteoric rise to arrive where it is today.

Unlike in 2008 and even 2010, you can now very easily find LED spotlights and LED light bulbs featuring the newest technology in lighting.

This spectacular expansion means that manufacturers are developing new and more energy-efficient technologies and, as a consequence, the end product is constantly being improved for the customer.

With such a fast growth rate, the typical customer is becoming more defined and, as such, there is no better time to study the customer profile and behaviour/attitude toward the products.

As the first initiative of this kind, this study aims to evaluate the preferences that exist amongst the typical LED lighting consumer, and to look into the way that lighting solutions are perceived within the UK.

With knowledge and experience accrued as one of the top retailers of LED lighting within the UK market, and with a history dating back to December 2010, we were in a position to pursue this study. Alongside this, a large customer base that is expanding by tens of thousands per year means there was considerable data available to be extracted and presented to the general public.

Taking into account the sample size that is detailed in the Survey, the data found can be considered representative for the UK LED lighting market as a whole.

The Survey not only presents the general perception of LEDs throughout Britain, but also introduces useful marketing specifics for retailers; data which can then be used to educate the population on matters worth addressing in regard to new lighting technology.

Sincerely,

Amit Soni,
Company Director

Wholesale LED Lights (WLED)

www.wholesaleledlights.co.uk

ABOUT THE SURVEY

The Survey took place between 15th April 2016 and 15th September 2016 and was aimed at collecting relevant data for the preferences of the typical consumer of LED lighting products.

With a sample size of 2,824 random respondents taken directly from our customer base, the selection of individuals was kept unique from question to question, with each being asked to a randomly selected number of people, ranging from 1,031 to 1,812.

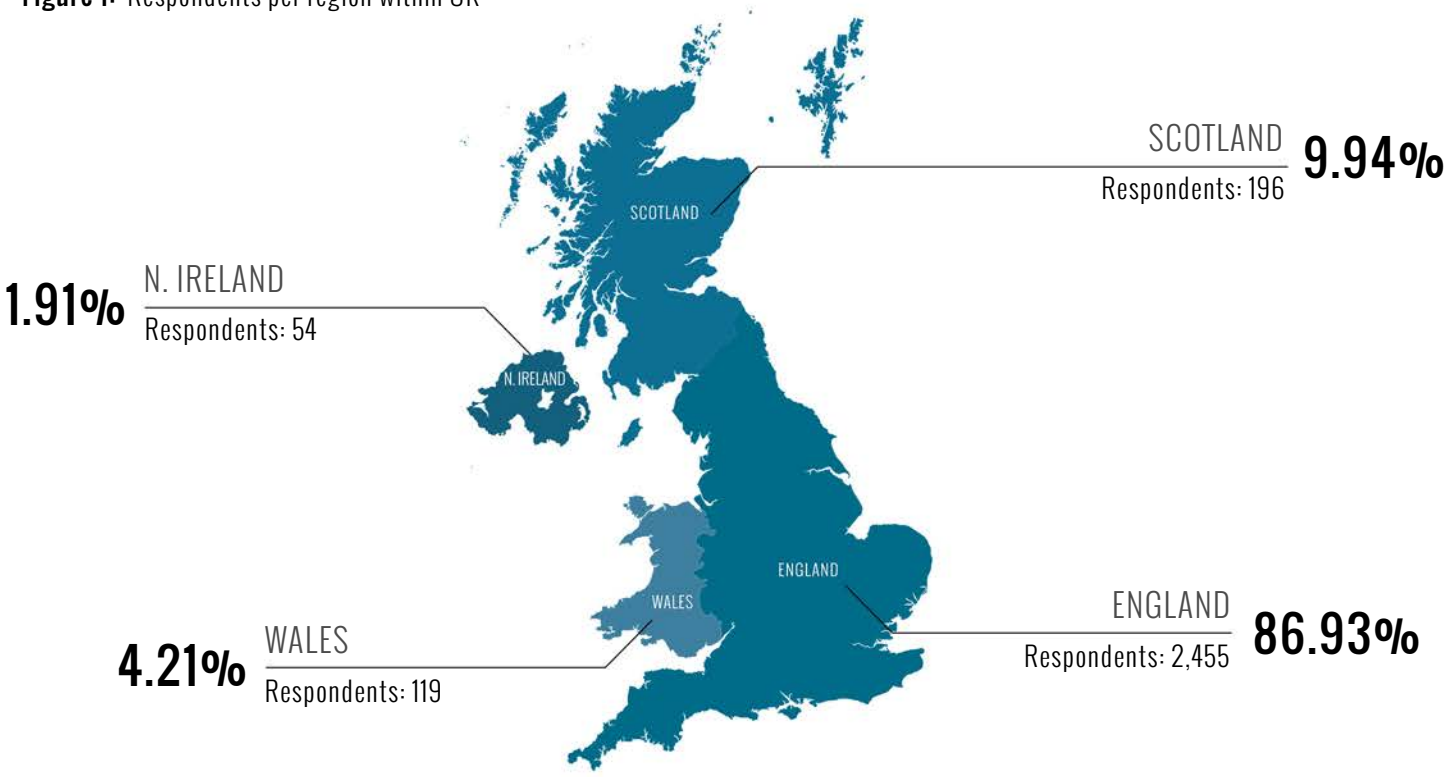
The survey collected the necessary quantitative and qualitative data by 3 modes of administration:

- Online survey - customers responded to questionnaires that were posted within the website;
- Telephone - customers answered questions asked by our customer service team at the end of telephone conversations;
- Showroom discussions - customers who purchased directly from the showroom were interviewed.

Aside from the above, a sample of 8,200 orders placed during the period of the Survey (between 15th April 2016 and 15th September 2016) were analysed in order to determine some aspects of the customer profile.

Upon the finalisation of the Survey and data analysis, it was revealed that the sample of respondents (Figure 1) and order data (Figure 2) analysed have a similar distribution per UK region to that of the Projected no. of households in Figure 3.

Figure 1: Respondents per region within UK



TOTAL: 2,824

Figure 2: No. of orders per region within UK

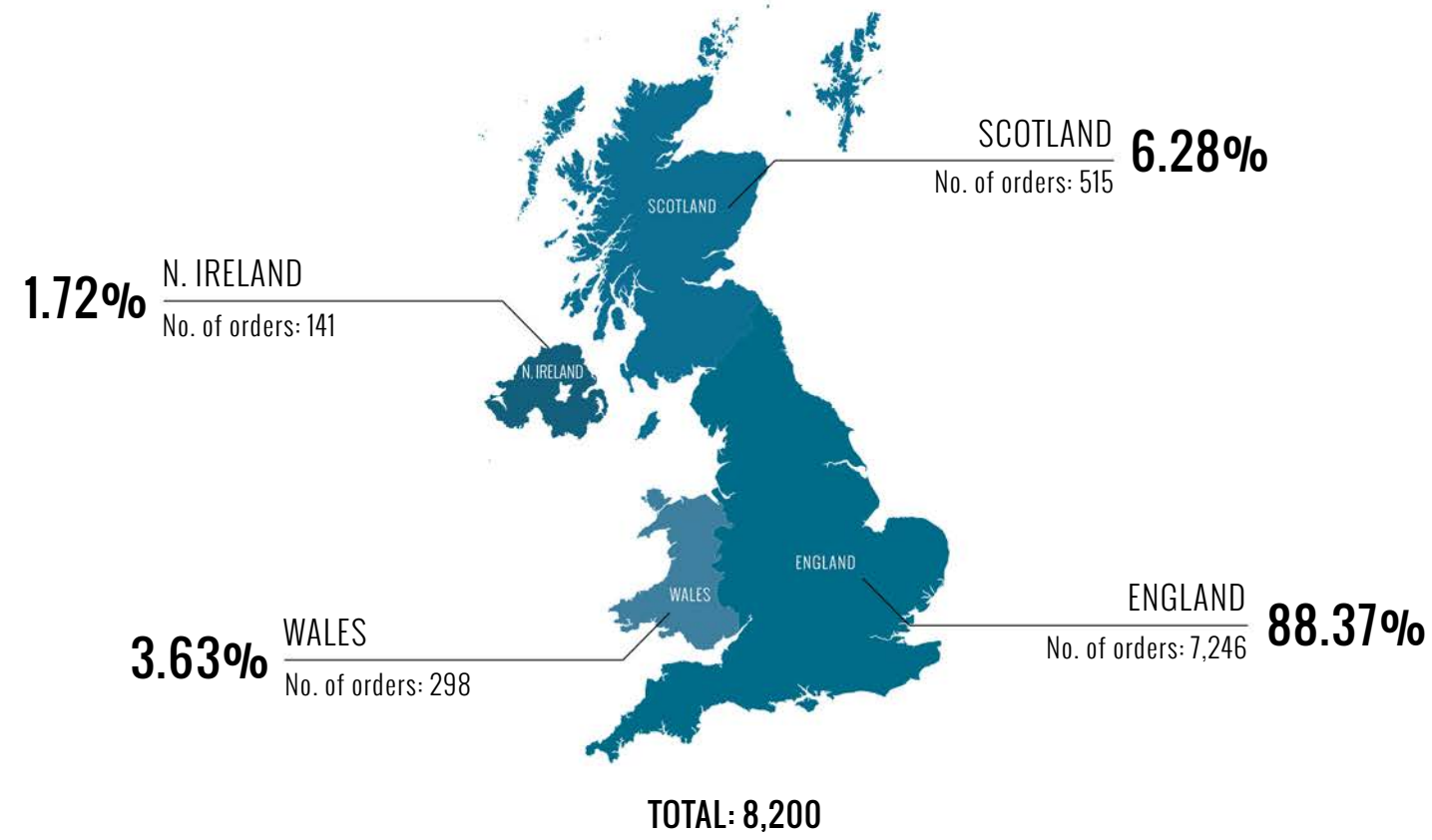
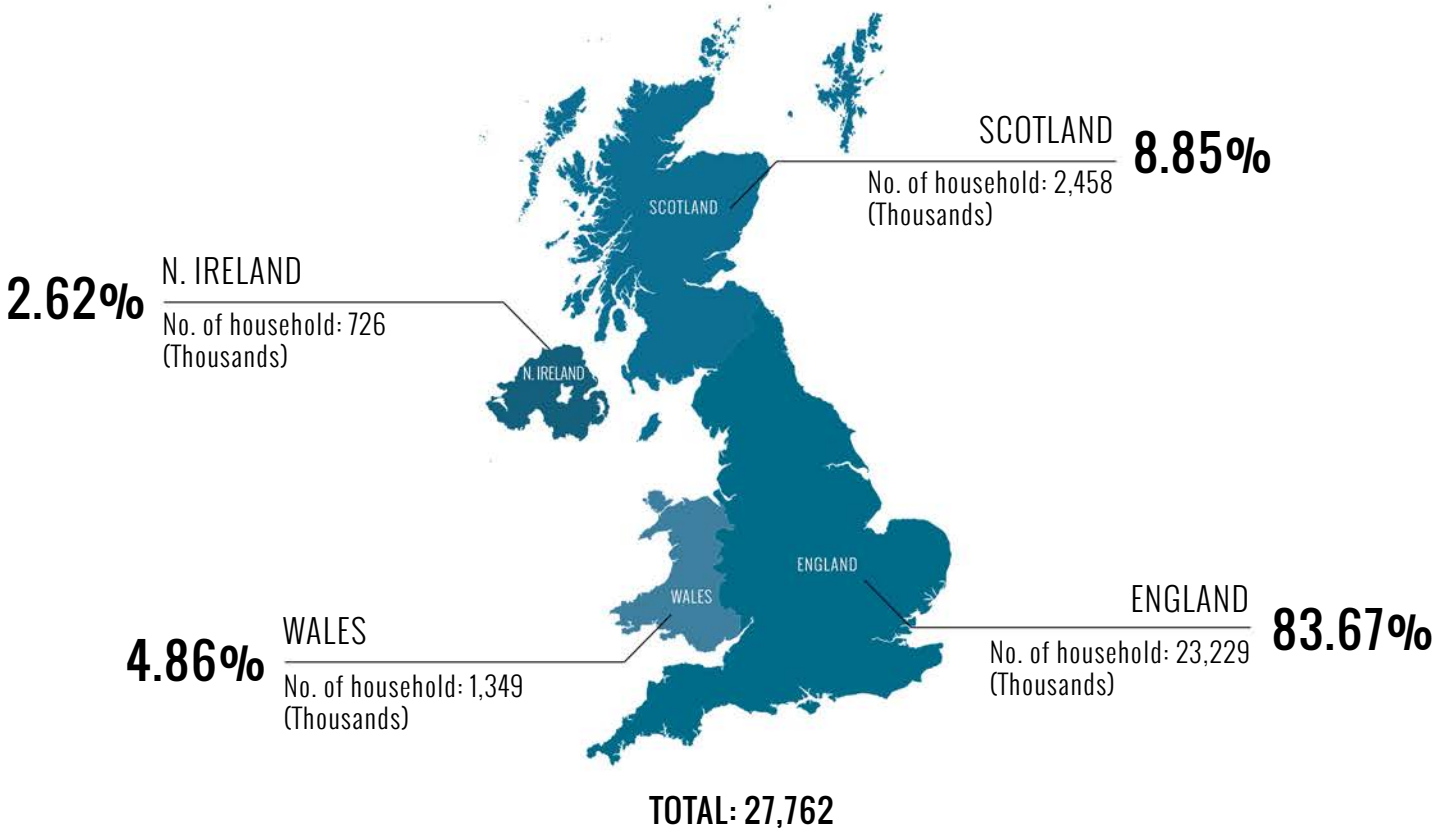


Figure 3: Projected no. of households for 2016 within UK per region as released by Housing and Planning Analysis Division. DCLG



Source: Housing and Planning Analysis Division. DCLG. See Table 401: Household projections. United Kingdom. 1961-2039

This reasonably suggests that the figures and conclusions extracted from the survey can be extrapolated to a national level.

FINDINGS

Consumer gender

One of the first aspects for defining the conventional consumer of LEDs is to take the proportion of genders of those who are ordering lighting products.

From the 1,605 people who were surveyed, a resounding 1,175 (73.21%) of the respondents were Male, leaving only 430 (26.79%) as Female.

TOTAL: 1,605

(Please specify your gender.)

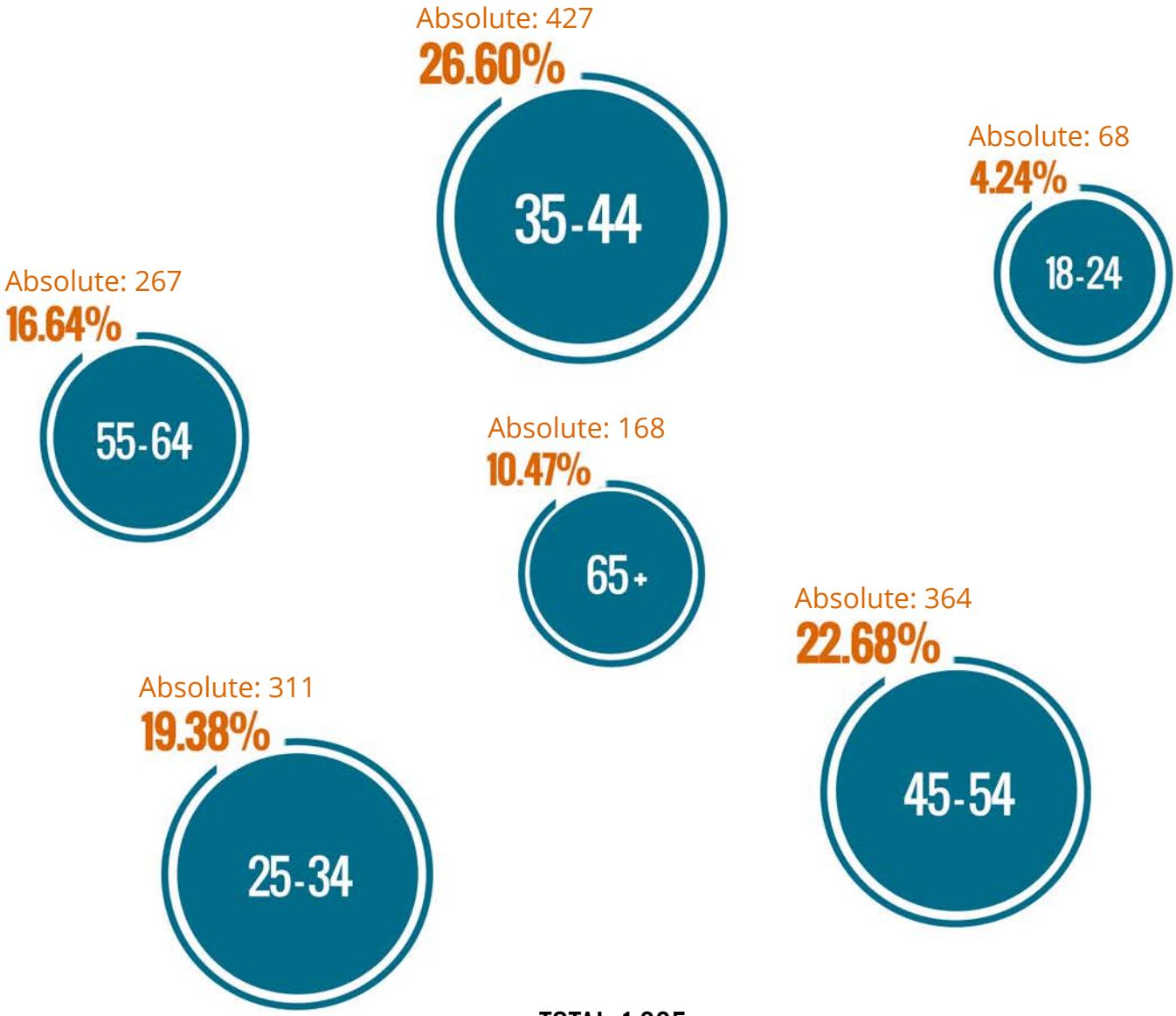
Firstly, the ratio provides clear evidence of the predominant gender amongst consumers of lighting products.

Secondly, it allows specialised retailers, and even those of similar products, to tailor any future business planning and marketing towards a style or design to which a male demographic would be more receptive.

Consumer age group

Besides the gender, the customer age is also a relevant aspect in determining the typical LED consumer profile.

Out of the total 1,605 respondents that were interviewed about their gender and age, the most represented age group, with 26.60%, was that of 35-44 year olds. The next best represented age group, with 22.68% is that of 45-54 year olds. The least represented group, amounting to only 4.24% were those between the ages of 18 and 24.



TOTAL: 1,605

(Please specify which age group do you belong to?)

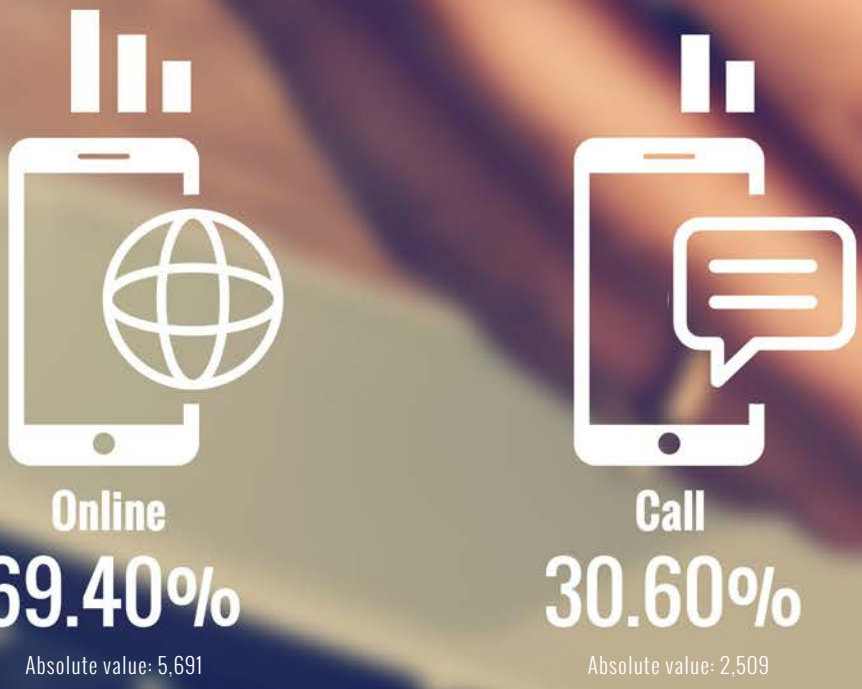
This suggests that there is a significantly higher interest from the more mature householders than the younger population, in either developing a home and/or designing a new room or office with LED downlights or spotlight fittings.

Preferred method of purchasing

The way in which consumers order their light bulbs and similar products provides insight into whether or not they are fully conversant with the product they are ordering. It also reveals how confident they feel to order products, such as LED ceiling lights or LED high bay lights, directly online without support or having seen the products beforehand.

After analysing the 8,200 orders, the results are relatively one-sided, with 69.4% (5,691) of customers opting not to contact the retailer before ordering and preferring to carry out the online transaction unaided.

The remaining 30.6% (2,509) opted to get in contact via phone to proceed further with the order.



(Through what medium are orders placed with a specialised lighting retailer?)

This suggests that the majority of consumers purchasing LED lights are confident in their knowledge of the products and their ability to finalise their orders without help.

Preferred day of the week

The day or days of the week upon which most purchases of lighting products are made can provide valuable information with regard to the most popular time within the week, for the highest number of consumers.

Taken from the 8,200 order sample that has been analysed, it was found that orders placed on Mondays accounted for 17% of the total amount.

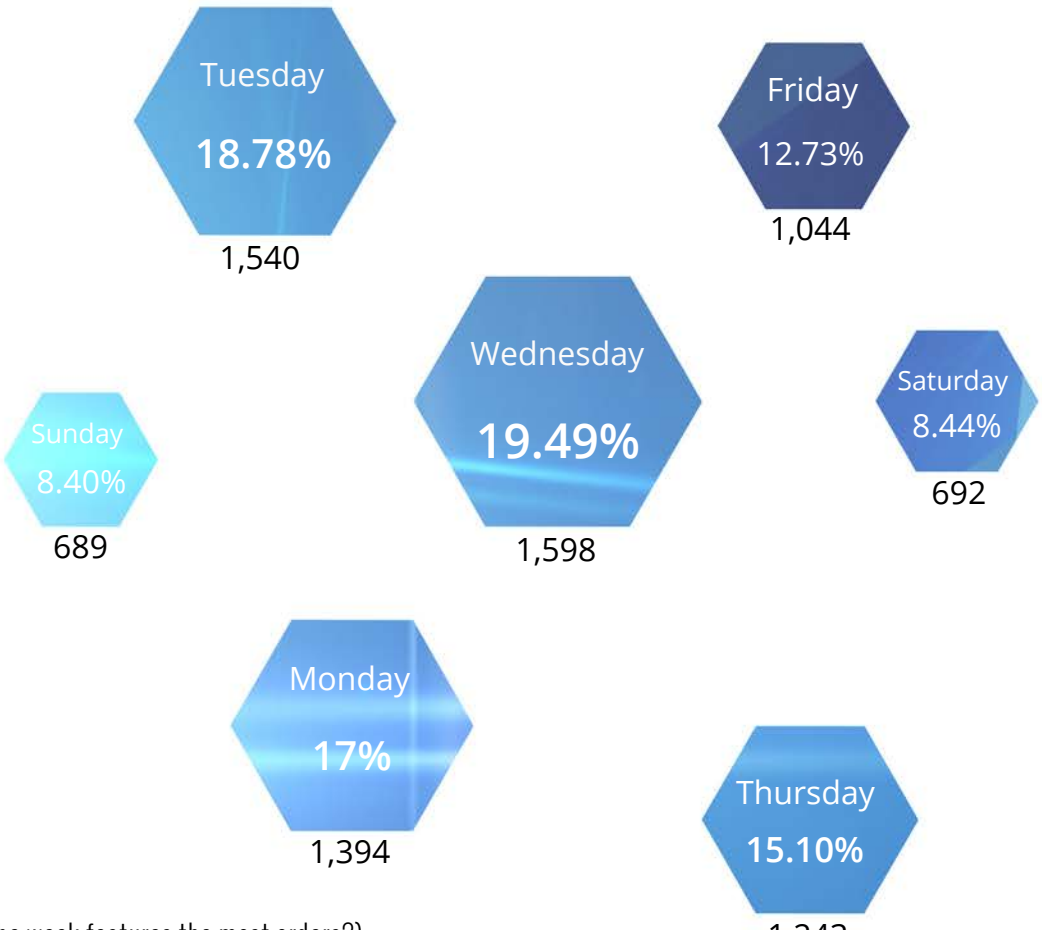
Tuesdays then account for 18.78% of the total, which is equivalent to 1,540 records of the 8,200.

19.49% of orders were placed on Wednesdays, making it the most frequently used day of the week upon which to order lighting products.

Thursday accounts for 15.16% of the total number of purchases, with Friday totalling 12.73% of orders.

Orders on Saturdays and Sundays are split closely with 8.44% and 8.40% respectively. In total, weekends account for 16.84% of all orders.

This suggests that LED lighting solutions, such as LED wall lights, aren't considered to be luxury items, with purchases primarily being made at the beginning of the week, and with more people presumably looking towards more social purchases at the weekend.



(Which day of the week features the most orders?)

TOTAL: 8,200

Preferred time during the day

The LED lighting market follows a similar pattern to most markets within the UK, in regard to the time range during the day that consumers opt for.

The 8,200 order analysis indicates that 7.04% of the market's sales are made between 9:00 and 9:59, the typical start of the working day.

Sales at the **start** of the working day

Sales: 577

This percentage is comparable with the 7.45% of sales made between the times of 16:00 and 16:59, the time in which the working day normally ends.

Sales at the **end** of the working day

Sales: 611

TOTAL: 8,200

(Which hour of the day features the most orders?)

Peak times of sales

Sales: 799

During the day, most purchases occur between the times of 11:00 and 11:59 with 9.74% of the orders taking place within that time frame.

Compared to the rest of the intervals, this can be considered the peak time frame.

Despite the periods between 12:00 to 12:59 and 13:00 to 13:59 being traditionally considered "lunch hours", purchases during these times amount to 8.66% during the former and 8.73% during the latter, making this interval the second most popular time of day in which to place an order.

Sales during **lunch** period

Sales: 1,426

(Which hour of the day features the most orders?)

Between 17:00 and 17:59 purchases decrease to 5.09% of the day.

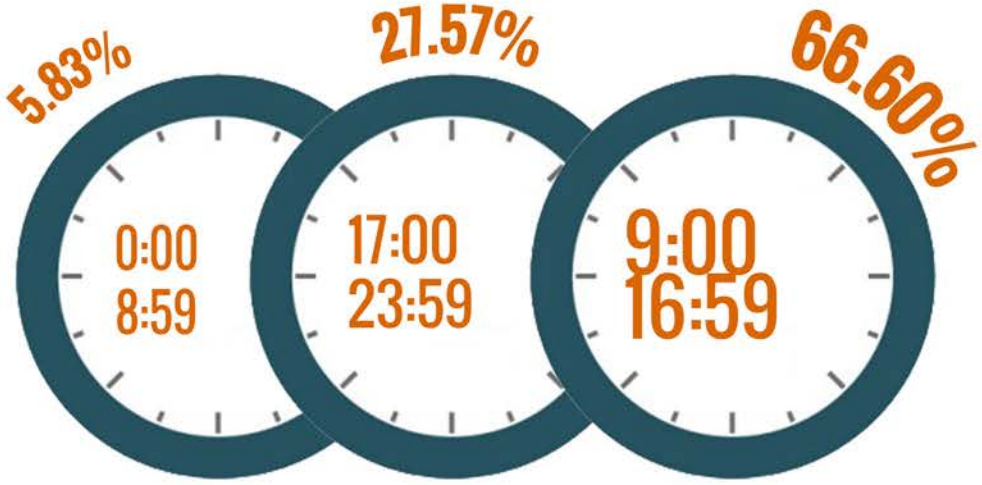
This can be attributed to the fact that consumers are aware that, during this period, the majority of retailers close their phone lines and the working day is finished.

Sales once retailer **closed**

Sales: 417

Within the hours of 9:00 to 16:59 (8 hours), 66.60% of the day's orders are placed.

The evening interval between 17:00 and 23:59 (7 hours) amounts to 27.57%, while during the early hours of the morning: 0:00 and 8:59, only 5.83% of the total daily orders are placed.



Sales periods of the day

Sales: 8,200

(Which hour of the day features the most orders?)

The above figures indicate that the absence of professional advice may deter a proportion of consumers from placing orders during the evening and the early hours.

Average order value

The willingness to spend money on products defines their worth to the consumer. The price of LEDs continues to fall which means they're becoming more affordable, whilst still retaining the advantages that set them apart from traditional fittings.

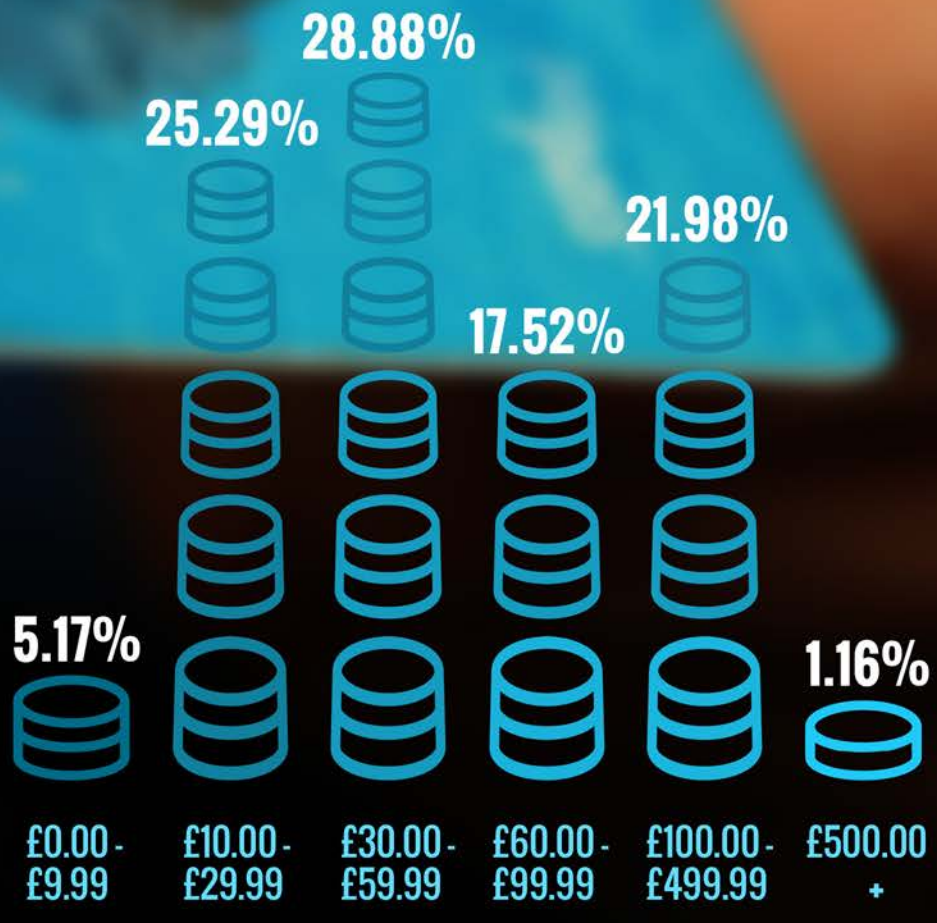
By looking at the average order value, the amount consumers are willing to spend on newer lighting products and technology is noticeable.

From the 8,200 orders taken as a sample, 1.16% were over £500. At the other end, 5.17% of orders were £9.99 or less.

The next represented order value range, with 17.52% is that between £60 and £99.99. This is followed by 21.98% of orders with an average value ranging from £100 to £499.99.

These two sets of numbers reveal that a significant selection of the population is willing to expand the design of their home with different, more complex LED products such as LED drivers, power supplies, and LED tape or strip light kits requiring multiple components.

With 28.88% of orders between £30 and £59.99, many consumers are willing to spend a considerable amount; generally sufficient to replace the light bulbs within one room.



(What is the average order value?)

TOTAL: 8,200

Reasons for buying light bulbs

The reasons for purchasing any type of product offer insight into consumer behaviour and helps retailers improve the way in which they address consumer needs.

1,782 respondents were asked the reason for their purchase of LED lighting products. Three responses were put forward to the respondents to ascertain which suited them better.

The majority of respondents, amounting to 75.65%, reported that they needed to replace a failed light fitting.

Replace a failed light fitting

75.65%

Absolute: 1,348

Most of the remaining respondents, amounting to 20.37%, reported that they purchased LED lights for another reason.

Another reason eg. home improvement, reducing bills

20.37%

Absolute: 363

Only 3.98% of respondents reported that they purchased lighting products for use as a first instalment in a new home/room and/or office.

A first instalment in the case of a new home/room and/or office

3.98%

Absolute: 71

TOTAL: 1,782

(Which is the reason for replacing lighting products that are currently in use?)

Reasons for replacing lights currently in use

The 20.37% of respondents that have reported buying LED lights for another reason in the previous item have been asked a follow-up question. This was set to narrow down the reason of purchase in case still functioning lights were replaced.

From the sample of 363 respondents who addressed this question, the majority, 58.4% reported that they wanted to reduce the running costs for lighting in the future. 25.90% stated that they purchased lights to match their current décor, whilst the remaining respondents, 15.70% opted to renew their lights in order to stay up-to-date with the latest trends.

From the above, it appears that when it comes to changing currently in-use lights, the prospect of reducing electricity bills remains the main trigger for consumers.

Consumers view on the most valuable advantage of LED lights

With LEDs' increasing prominence in the lighting market, it adds value to determine which aspects of LEDs are the most attractive. 1,772 of the respondents were asked about which particular benefit of LED lighting products is the most valuable in their opinion.

The question was followed by a choice of four answers, listing the most common advantages of LEDs, a choice for other advantages and one for those who were unsure.

(Which is the reason for replacing lighting products that are currently in use?)

Less energy consumption

51.24%
Absolute: 908

A resounding 51.24% of the respondents agreed that the lower energy consumption offered by LEDs is the most valuable to them, given the resultant energy savings. Typically, 1w in LED lighting is equivalent to 10w in halogen.

Longer lifespan

30.59%
Absolute: 542

The second most popular answer was with regard to the long lifespan of LEDs, with a total of 30.59% respondents feeling that this is the most appealing characteristic of LEDs for them.

Being environmentally friendly

7.34%
Absolute: 130

7.34% of interviewees reported that the environmentally friendly advantage of LEDs, both during their lifespan and afterwards, is the most valuable feature in their opinion.

Better light output

5.42%
Absolute: 96

5.42% of respondents agreed that the better light quality provided by LEDs, compared to their halogen counterparts, is the advantage they found most valuable.

Other advantages

3.89%
Absolute: 69

Out of the total of interviewees, 3.89% find LED lights advantageous for a different reason than those stated in the above and only 1.52% stated that they were not sure which benefit they found most valuable from those provided.

Not sure what to say

1.52%
Absolute: 27

Aside from the insight into the consumer's perception on the benefits of LEDs, the figures above indicate that, within this market, the vast majority are aware of the advantages offered by these lighting products.

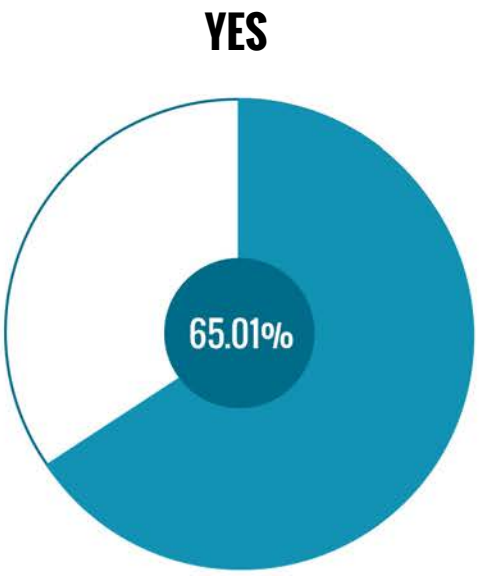
TOTAL: 1,772

Proportion of new and established consumers

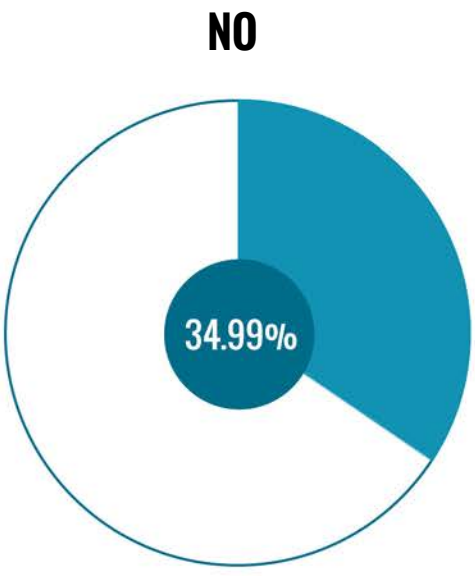
LEDs are a relatively new product and are still finding their way onto the mass market. Due to the relatively early stage they're currently at in their life cycle, hundreds of thousands of new LED consumers are being added every year.

1,772 of respondents were asked if they are first time buyers of LED lights or not, regardless of the country of purchase or retailer.

65.01% reported that they hadn't previously purchased any domestic LED products.



Absolute: 1152



Absolute: 620

(Are you a first time buyer of LED lights?)

TOTAL: 1,772

The remaining 34.99% stated that they had bought domestic use LEDs before, so can be considered established consumers.

These percentages indicate that the number of LED consumers is expanding at a high rate. This comes along with the fact that LED lighting is becoming increasingly accessible for purchase.

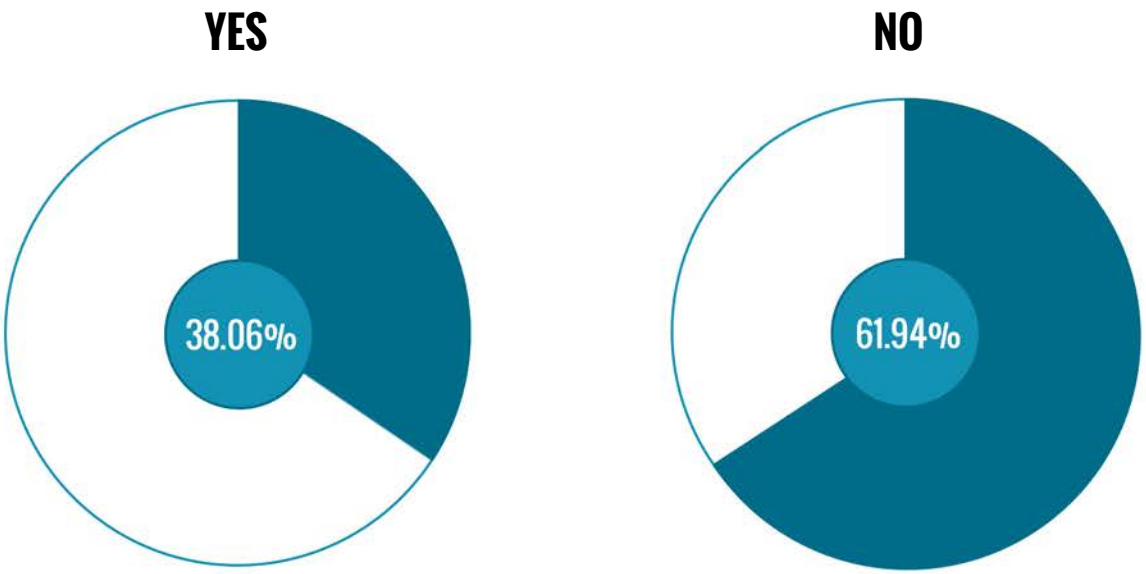
Attitude towards monitoring energy savings

With LEDs requiring 10% of the energy of halogen bulbs, and lower energy consumption being one of the main characteristics of LEDs, this item of the Survey was aimed at gaining some insight on the attitude towards a conscious monitoring of the energy savings.

The 34.99% of respondents that reported buying LED lights in the past have been asked a follow up question about whether they monitor the savings made after switching to LED lights.

From the sample of 620 respondents, 38.06% reported that they frequently monitor their savings in their energy bills since switching to LED lights.

The majority though, 61.94% answered 'no' to the question, meaning they don't monitor their savings frequently or don't monitor them at all.



Absolute: 236

Absolute: 384

(As user of LED lighting products, do you frequently monitor the savings made after switching to LED?)

TOTAL: 620

On the other hand, the figures above can also lead to the assumption that some of the 61.94% respondents not consciously monitoring their savings may feel reliably informed from either the retailer or manufacturer as to the savings that are to be made with LEDs.

LED influencing features for first time buyers

The LED market in the UK continues to grow steadily and it is relevant to understand what the ultimate factor is that convinces a first time buyer to try this type of lighting solution.

The 1,152 respondents who admitted that they are first time buyers of LED lights were asked about what persuaded them to make their first purchase.

The given answer choices consisted of 4 features that commonly differentiate LEDs from other types of lighting, a choice for another purchase reason and one for those who were unsure.

(As a first time buyer, which of the following persuaded you to purchase an LED lighting product?)

Less energy consumption

54.08%
Absolute: 623

54.08% of respondents stated that the low energy consumption/high energy efficiency rating is the most convincing factor in their purchasing decision. This shouldn't come as a surprise, since the low energy requirement is one of the most singularly marketable features of LEDs.

Longer lifespan

32.38%
Absolute: 373

Another selling point of LEDs consists of their long lifespan compared to traditional lighting products. 32.38% of respondents recognized this as their purchase trigger.

Being environmentally friendly

6.25%
Absolute: 72

6.25% of interviewees said that they were convinced to buy LED lighting because of its eco-friendliness. The LEDs' sustainable design and the possibility of being recycled once they have reached the end of their lifespan are considered the most influential by only 72 out of the 1,152 respondents.

Better light output

4.25%
Absolute: 49

Although the quality of light output increases more and more as newer technologies for LED lighting become available, only 4.25% of respondents have reported being most influenced in their purchase by this aspect.

Other advantages

2.17%
Absolute: 25

2.17% of interviewees stated that their purchase decision was influenced by another factor other than the ones provided.

Not sure what to say

0.87%
Absolute: 10

The remaining 0.87% stated that they weren't sure what persuaded them most.

TOTAL: 1,152

Price perception: LEDs compared to traditional lighting

Due to constant research into improving LEDs and the fact that they are more technologically advanced than other light bulbs, LEDs typically cost more than mainstream lighting.

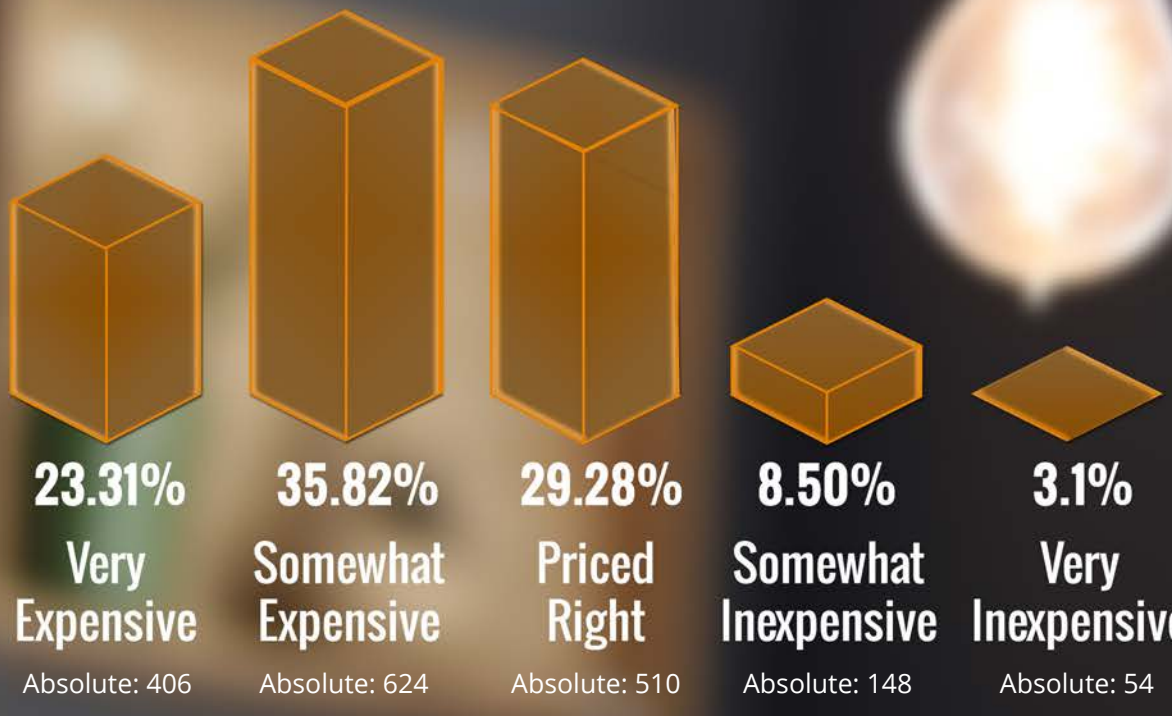
The above presumably contributes to the general public perception that LEDs are more expensive, although their prices have been steadily converging with those of traditional lighting for the past few years.

1,742 respondents were questioned in regard to their perception of the price of LED lights in comparison to that of traditional lighting.

A significant number of respondents, 35.82%, agreed with the statement that LEDs are 'somewhat expensive', while 23.31% of those questioned perceived LED pricing as 'very expensive'.

The fact that LED pricing is becoming increasingly competitive seems to have been recognised by the general public, with 29.28% of respondents agreeing that the LEDs are priced correctly. 8.50% of respondents believe the pricing is 'somewhat inexpensive' and only 3.10% of those questioned found the pricing to be 'very inexpensive'. With 59.13% of respondents agreeing with statements that LEDs are very or somewhat expensive compared to traditional lighting, the presumption introduced about the perception on pricing having not changed, seems to be confirmed.

However, with a total of 40.87% of those questioned considering the pricing of LEDs to be 'correct', 'somewhat' or 'very' inexpensive compared to that of traditional lighting, the possibility of further shift in the pricing perception should still be taken into account.



(How do you find the price of LED lights in comparison to traditional lighting?)

TOTAL: 1,742

Major criteria in the purchasing decision of lighting products

In order to obtain insight into what consumers find to be key in the process of purchasing lighting products, 1,645 respondents have been asked about the criteria they find most important related to this kind of purchase.

To match the requirements/ specifications

43.04%
Absolute: 708

Matching the requirements/specifications of products is the most commonly met aspect for most respondents, 43.04% out of those questioned.

Price

39.33%
Absolute: 647

With 39.33% of the respondents agreeing that the price was the main influence on deciding to purchase specific lighting products, pricing is the second major criteria.

Warranty

8.94%
Absolute: 147

The warranty offered on the products is something that consumers can evaluate and compare when browsing lighting products. In total, 8.94% of respondents said that the warranty on a product would be a decisive factor for them.

Longer lifespan

4.26%
Absolute: 70

4.26% of respondents reported that the long life span of specific light products is what interests them most when deciding if and what to purchase.

Energy efficiency

2.07%
Absolute: 34

Although the energy efficiency component of specific lighting products is one of the generally marketable features, only 2.07% of the interviewees consider it the most important feature.

Other aspect

1.82%
Absolute: 30

1.82% of respondents stated that other aspects, beside the ones given explicitly, influence their purchase decision.

Not sure/prefer not to say

0.55%
Absolute: 9

A further 0.55% reported that they weren't sure on what influenced the decision or that they would prefer not to say.

(As a first time buyer, which of the following persuaded you to purchase an LED lighting product?)
TOTAL: 1,645

Preferred go-to place for advice

Similar to any other purchase, consumers of lighting products often require information and advice from different sources. This item in the Survey was set to find out where consumers go for advice and whose opinions they value most.

Internet

25.11%

Absolute: 347

25.11% of the 1,382 respondents reported that they preferred to seek out advice on the Internet, meaning that they browse different websites to gather information before making a final decision on the products they wish to buy.

Professional advice was reported to be sought by 18.45% of respondents, meaning they prefer to get in touch with specialist for accurate information.

Professionals

18.45%

Absolute: 255

Family

12.30%

Absolute: 170

A further 12.30% listed their families as the go-to choice for advice. This can mean that consumers either consult with their families before purchasing lighting products, similar to the way in which they purchase other important products, or because the decision, like the product, will be shared by other family members.

8.61% of respondents reported that they would ask one or more of their friends for advice before purchasing lighting products.

Friends

8.61%

Absolute: 119

Two or more from above

35.53%

Absolute: 491

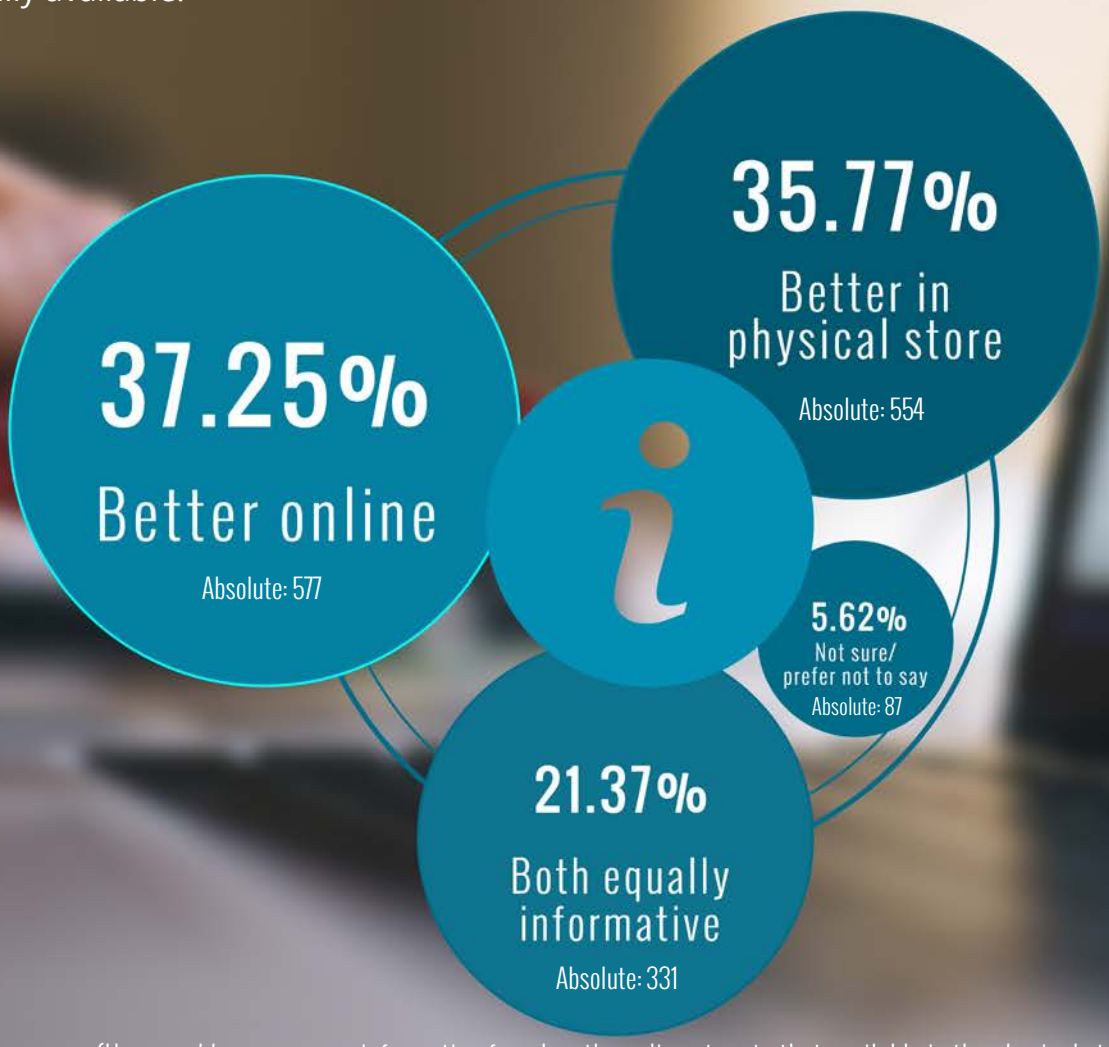
35.53%, of the 1,382 questioned, reported that they prefer to go to several sources of advice from those listed in the item (i.e. Family, Friends, Professionals, Internet) before making their final decision.

(Where do you go to for advice before ordering lighting products?)

TOTAL: 1,382

Information online VS. physical store

Information on specific lighting products can be accessed through various means. This item aims to show how consumers perceive information found online compared to that obtained in physical stores, and to offer retailers direction in regard to where accurate information should be made readily available.



(How would you compare information found on the online store to that available in the physical store?)

TOTAL: 1,549

37.25% of those questioned stated that they found online information to be better, compared to that found in physical stores.

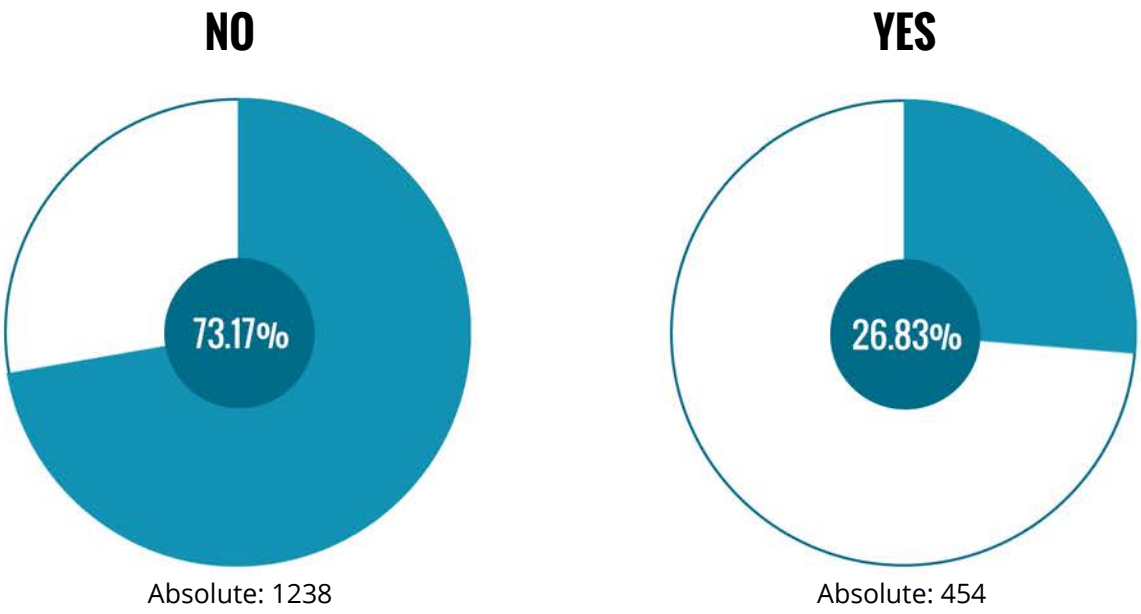
A slightly lower proportion of 35.77% respondents stated that, in their opinion, information provided in physical stores is better. 21.37% of interviewees agreed that they view both sources as equally informative, while the remaining proportion of 5.62% respondents indicated that they were not sure or that they preferred not to say.

The fact that the first two figures are extremely close and that a significant amount of the rest of interviewees, 331 out of 1,549, consider both sources to be equally relevant, leads to the assumption that both channels remain of close interest for consumers and should both be attended to by retailers.

Professional assistance before ordering

When buying products with which they are unfamiliar, consumers may find themselves requiring advice from a professional. 1,692 respondents were asked whether they needed any professional assistance before making their order.

The number of interviewees who answered ‘no’ significantly outweighed the ones who said they would require advice, with 73.17% saying that they didn’t require any professional opinion.



Absolute: 1238

Absolute: 454

(Do you need professional assistance before ordering new lighting products?)

TOTAL: 1,692

The remaining 26.83% respondents indicating that they do require professional assistance reveals that, despite the fact that there is generally a good understanding of lighting products, and that 3 out of 4 consumers reported that they don’t require assistance, there is still a reasonable proportion of consumers who aren’t 100% sure.

Perceived challenges when ordering lighting products

Depending on the setup, ordering lighting solutions can potentially present challenges for the consumer. Revealing the most common challenges allows specialists and retailers to improve their customer service departments and the information that is readily available to the consumer in the online stores, via phone or in physical shops.

Finding the right product

41.32%
Absolute: 662

At 41.32%, a significant proportion of the 1,602 interviewees, reported that the biggest challenge they have is that of finding the right product. This figure seems to be supported by the fact that at one of the previous items in the Survey, 43.04% of respondents out of 1,645 agreed that the major criteria in their purchasing decision is that of the product matching the requirements/ specifications.

Ordering the right quantity for the installation

20.66%
Absolute: 331

A further 20.66% reported that ordering the right quantity was what they considered to be the greatest challenge, and it is only natural to be so, given the complexity of certain lighting products such as 2D LED lights, LED panels, or even LED lamp fittings.

Both finding the right product and ordering the appropriate quantity?

34.27%
Absolute: 549

A combination of the two previously discussed challenges; both finding the correct product and ordering the right quantity, was reported as the biggest difficulty by 34.27% of those questioned.

Other challenge(s)

0.50%
Absolute: 8

Another type of challenge, beside the ones explicitly given, was chosen by 0.50% of respondents.

No challenge

1.56%
Absolute: 25

Only 1.56% of the interviewees were confident to report that they had not encountered any challenges when ordering a lighting product, leaving scope for retailers to improve the above mentioned customer support areas for the vast majority of consumers who feel the ordering process poses different challenges.

Not sure/prefer not to say

1.69%
Absolute: 27

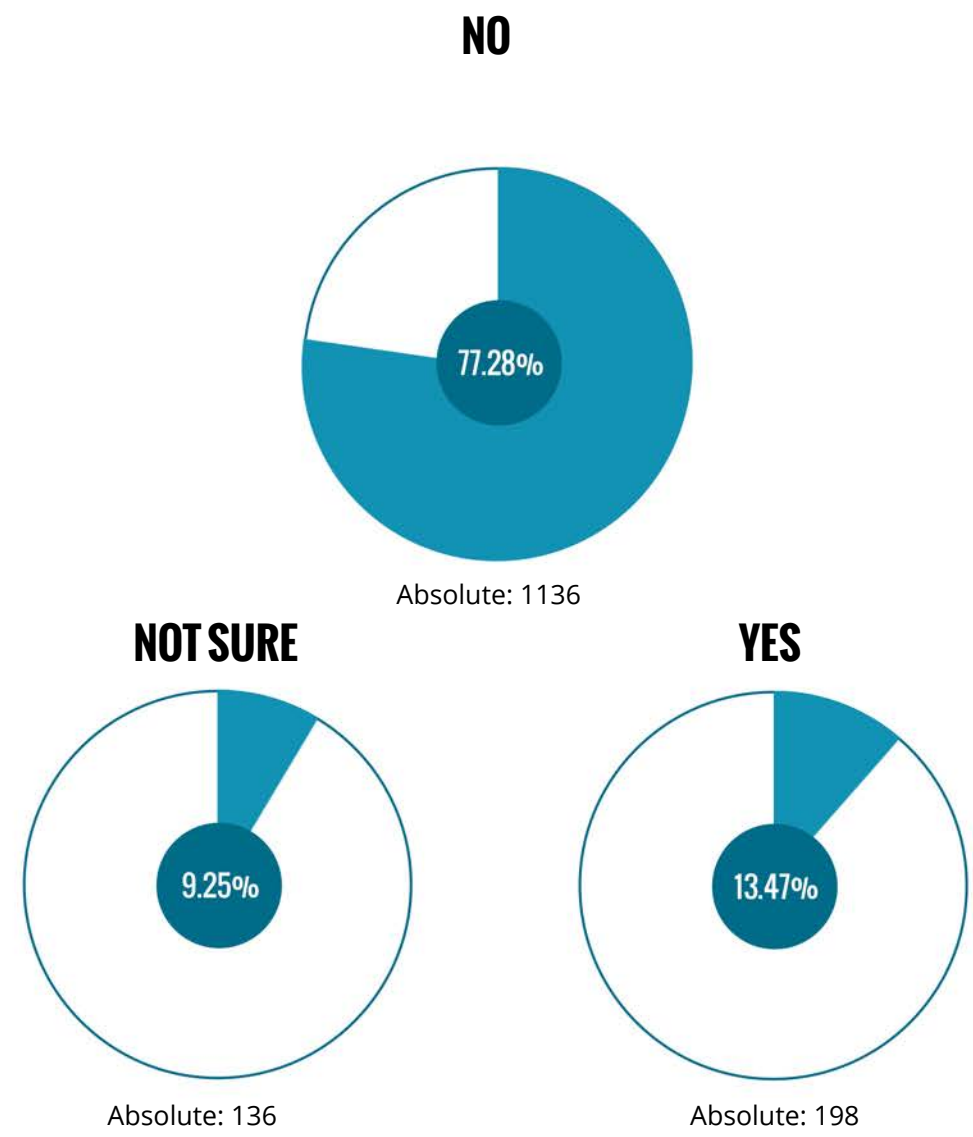
A further 1.69% of respondents were those undecided, either unsure whether they had encountered a challenge or that they preferred not to say.

(Which of the following you consider to be the biggest challenge when ordering lighting products?)
TOTAL: 1,602

Attitudes towards buying incentives

Starting from the assumption discussed above, that most consumers generally prefer to buy the quantity of lighting products they need, it is relevant to discover to what extent special discounts and promotions incentivise consumers to order a greater quantity of LED lights than originally intended.

Contrary to the general belief or market strategies, of the 1,470 respondents, 77.28% reported they don't feel incentivised by discounts and promotions and would not buy larger quantities than they already planned.



(In general, would special discounts and promotions incentivise you to order a bigger quantity of lighting products than originally intended?)

TOTAL: 1,470

13.47% of those questioned indicated that they would feel incentivised to buy larger quantities. The remaining 9.25% indicated that they were unsure whether discounts or promotions would impact their purchases or not.

These figures contribute to the hypothesis that LED lighting products are not necessarily the type of product that abides to common marketing incentives.

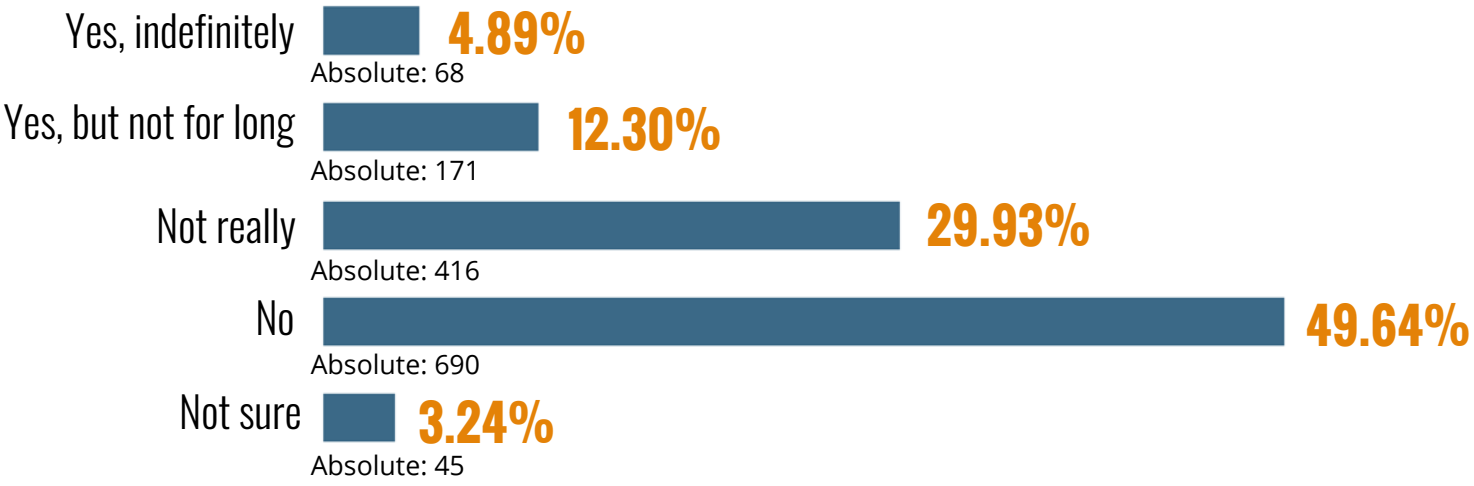
Willingness to delay purchase to wait for a discount

This item aims to reveal to what extent consumers are willing to delay purchasing lighting products in exchange for obtaining a better price, i.e. discount.

49.64% of the 1,390 respondents indicated that they would go forward with their purchase and would not postpone it in order to get a discount.

The second proportion of respondents, 29.93%, represents those that seem to have a divided opinion and would, in certain circumstances, delay their purchase, while in other cases, would not, i.e. not really.

The third proportion of respondents, 17.19%, indicated that they would be willing to delay a prospective purchase in order to obtain a discounted rate, with 4.89% of the total 1,390 respondents, prepared to delay indefinitely and 12.30% being disposed to delay their purchase but only for a subjective period of time, i.e. yes, but not for long.



(Would you be willing to postpone the purchase of a product to benefit from a discount?)

TOTAL: 1,390

The remaining 3.24% of those questioned stated that they are not sure or prefer not to say whether they would postpone the purchase or not.

Discussing order structure based on individual products

The average number of individual products purchased per order can reveal whether consumers feel confident to purchase multiple types of lighting products in different quantities per order. Items such as LED decking lights with multiple components count as one product.

50.25% of the 1,811 respondents have declared that they typically buy 1 to 2 individual products.

Furthermore, 34.57% of interviewees stated that they buy 3 to 5 individual products per order, and the remaining 15.18% reported individual purchases of 5 or more, per shopping session.

(On average, how many individual lighting products do you purchase per order?)

TOTAL: 1,811

The above figures seem to support the assumption that, given the complexity of certain lighting products and their installation, such as T5 LED tube lights, T8 LED tube lights, and LED strips, plus the challenges felt by consumers when ordering, the majority of them prefer to simplify their orders, purchasing 1 or 2 individual products at once.

Attitude towards the order quantity

The quantity of lighting products purchased per order provides information on how confident the consumer is with the knowledge they have on the product, perceived quality, pricing and how much the potential product matches their personal requirements.

The vast majority of respondents, 86.12% reported that, when ordering, they buy the exact quantity they require. This figure comes to augment the fact that for 43.04% out of the 1,645 of those questioned, matching the requirements/specification is the most important consideration when making a purchase decision.

7.53% of respondents stated that they prefer to buy less than they actually need and, for example, take samples. This shows that for a proportion of consumers, there is great interest in choosing the right product for the scope of purchase, with consumers delaying the final order until the point by which they have tested the products themselves.

The remaining 6.35% of those questioned reported that they buy more than the exact quantity they require. This can potentially be put down to the fact that they either prefer to have a backup quantity during the installation process, or replacements readily available.

(When ordering lighting products do you?)

TOTAL: 1,779

This behaviour contradicts the assumption that, given the reported difficulty and perceived importance of finding the right product, consumers would buy more than the quantity they need when they have found the right product for them.

On the other hand, the small percentage of respondents buying a greater quantity than is immediately required may reveal two other hypotheses.

Firstly, the fact that consumers are confident in the long life-span of the product and are not interested in storing a replacement, especially if they won't require it imminently.

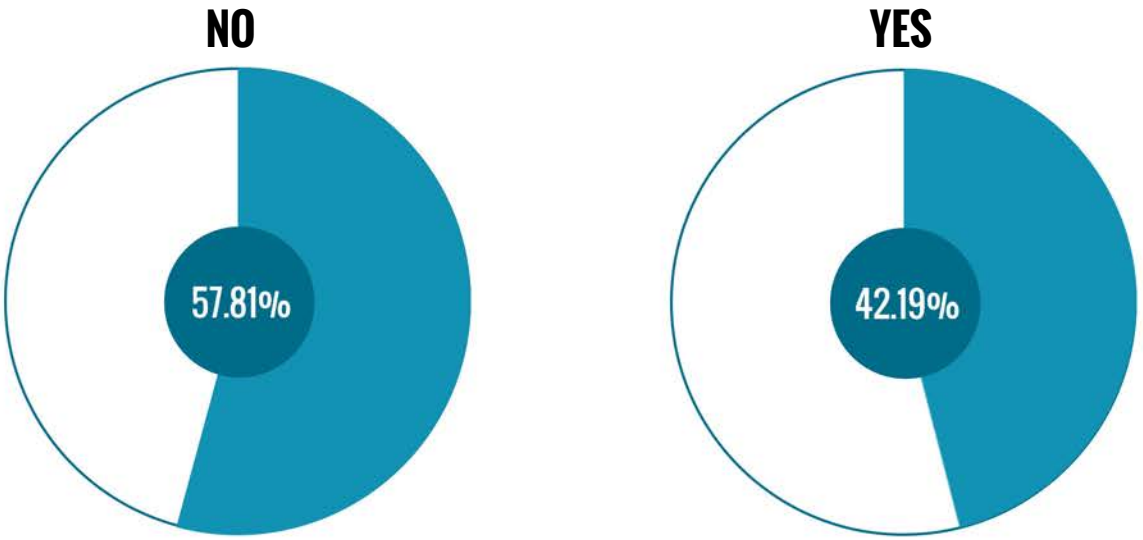
Secondly, it may show that consumers are aware of the rapid technological advance and price competitiveness in the market and prefer to keep their purchases up-to-date.

Requiring professional assistance with installation

While some lighting products are quite easy to install, either because they are relatively simple or designed to replace existing fittings, like switches and sockets, others are more complicated and may require the assistance of a professional.

This item aims to obtain information regarding consumers requiring such help.

42.19% of the 1,562 respondents indicated that they do need professional assistance with the installation of lighting products.



Absolute: 903

Absolute: 134

(Do you require professional help when installing new lighting products?)

TOTAL: 1,562

But the majority of those questioned, amounting to 57.81%, reported they didn't require professional help.

This may show that a considerable amount of the general public possess the confidence to proceed with installation of lighting products unaided.

Average number of light fittings in dwelling

This item in the Survey aims to uncover how many lighting units, on average, consumers in the UK have in their residences, in and outside of their homes.

1,031 respondents were asked to roughly estimate the number of light units they have throughout their dwellings, and place the resulting number in one of four ranges.

A number ranging between 1 and 8 unique light fittings was reported by 13.09% of respondents.

Between 9 and 15 individual light fittings were reported by 37.34% of interviewees, making this bracket the most common amongst consumers.

16 to 20 unique light fittings could be found in the homes of 34.92% of those questioned, this range being the second most populated.

More than 20 unique light fittings have been reported by 14.65% of respondents, similar to the other extreme, i.e. 1 to 8 fittings, estimated by 13.09%.

(Roughly, how many light fittings/units (internal and external) do you estimate you have in your dwelling?)

TOTAL: 1,031

The most common fitting in the household

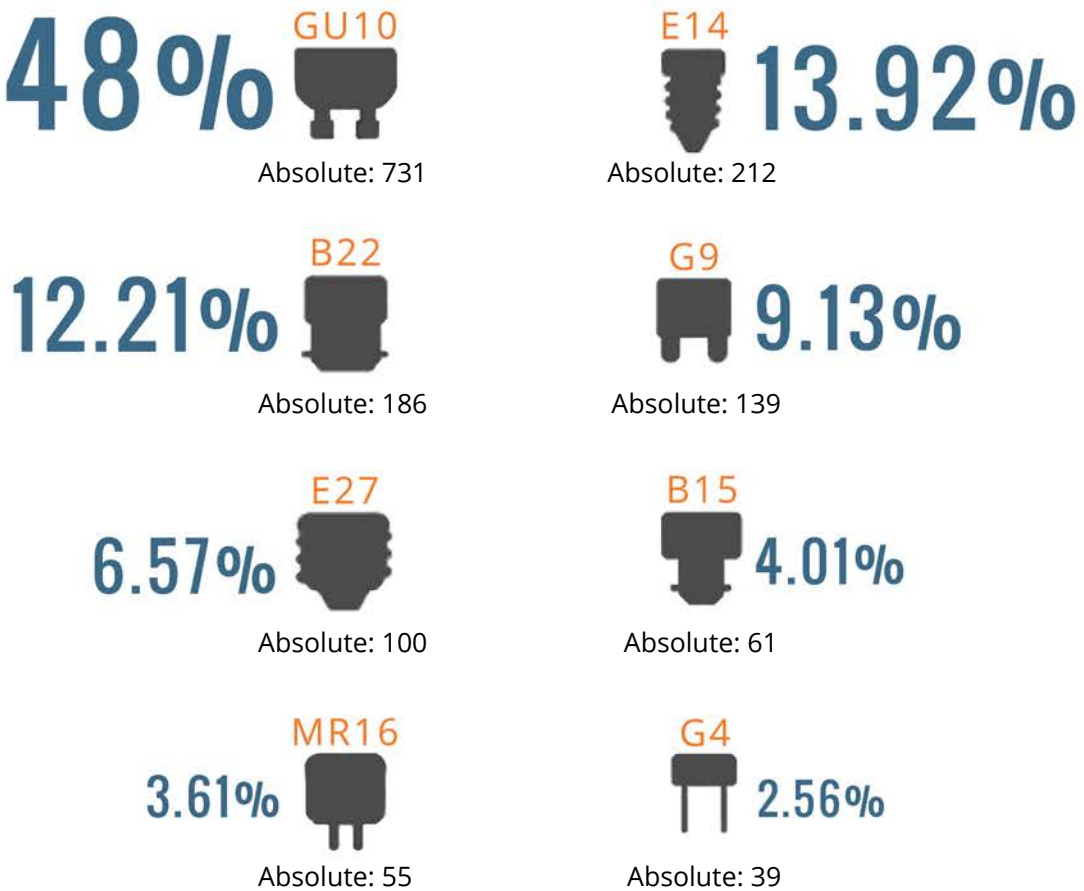
With such a wide range of fittings available for lighting product installation, this item aims to indicate which are the most commonly represented, inside and outside consumers' homes.

1,523 respondents were given a selection of 8 unique fitting choices to report which is the most common in their homes.

The GU10 was reported by 48% of those questioned as most commonly found in their homes, confirming the generally known popularity of this type of fitting.

Second most common, with 13.92% of respondents indicating it as most found in their homes, is the E14 (the Small Edison Screw), mainly due to the presence of chandeliers and smaller light fittings in UK homes.

On the other hand, the traditional Edison Screw, E27 is most found in only 6.57% respondent homes. Thanks to a standard UK lamp holder, Bayonet Cap (B22/BC) lamps are the most widely used fitting throughout the homes of 12.21% interviewees. When it comes to the Small Bayonet Cap (B15/SBC), only 4.01% of respondents indicated this fitting as the most common throughout their home.



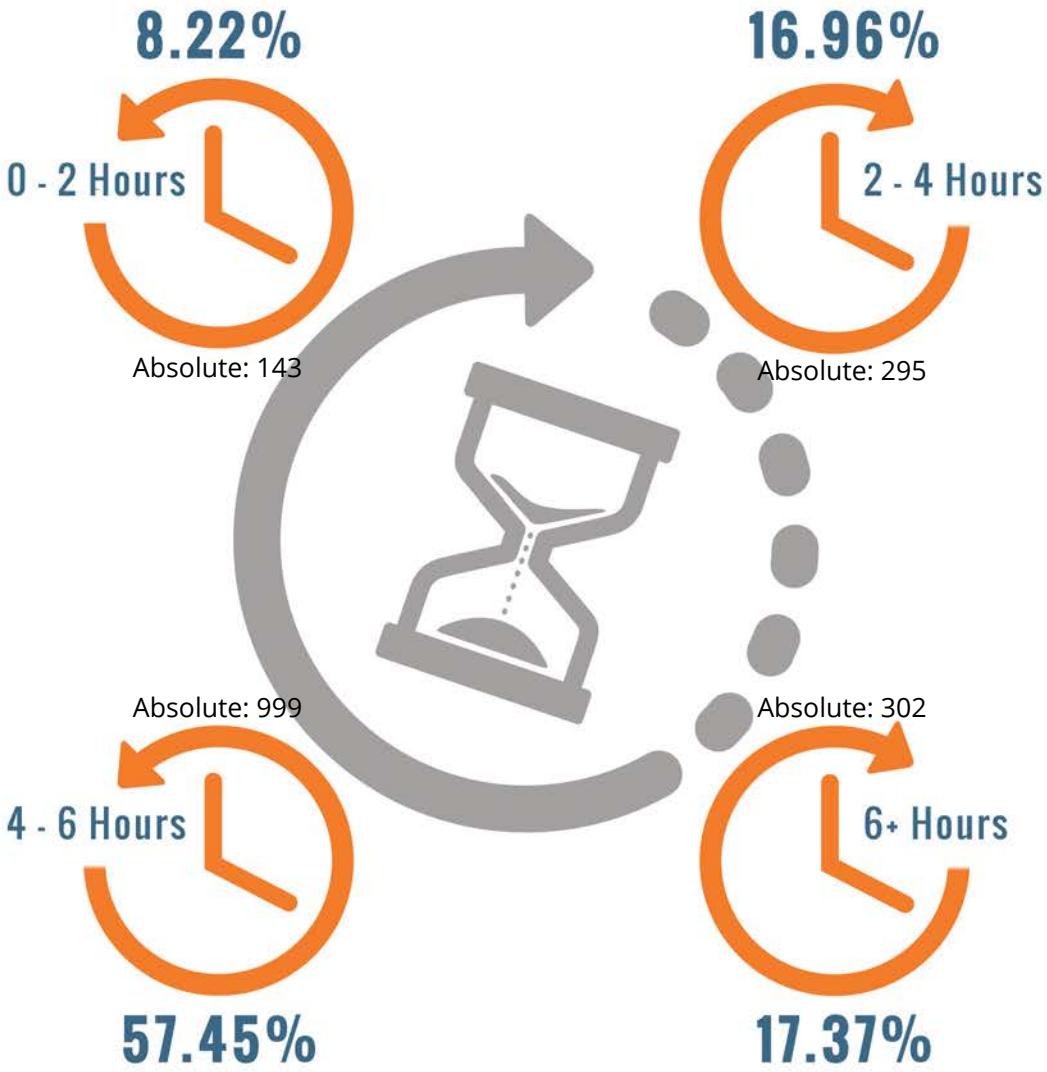
In regard to capsule light fittings, the G9 is most present in 9.13% of respondent homes, while only 2.56% of those questioned indicated the G4 as the most prevalent in their dwelling.

The remaining 3.61% of respondents revealed that the predominant fitting throughout their residence was the MR16.

Lighting usage throughout the day

A number of 1,739 respondents have been asked for how long they use lighting products throughout the day.

The majority of respondents, a significant 57.45%, claim that, on average, they have their lights switched on between 4 and 6 hours a day.



(On average, for how long do you use lighting products throughout the day?) TOTAL: 1,739

17.37% of interviewees reported that the average time they spent with lights switched on throughout the day is 6 hours or more. A very close proportion of the remaining respondents, 16.96%, indicated that their usage length of time is between 2 and 4 hours during the day.

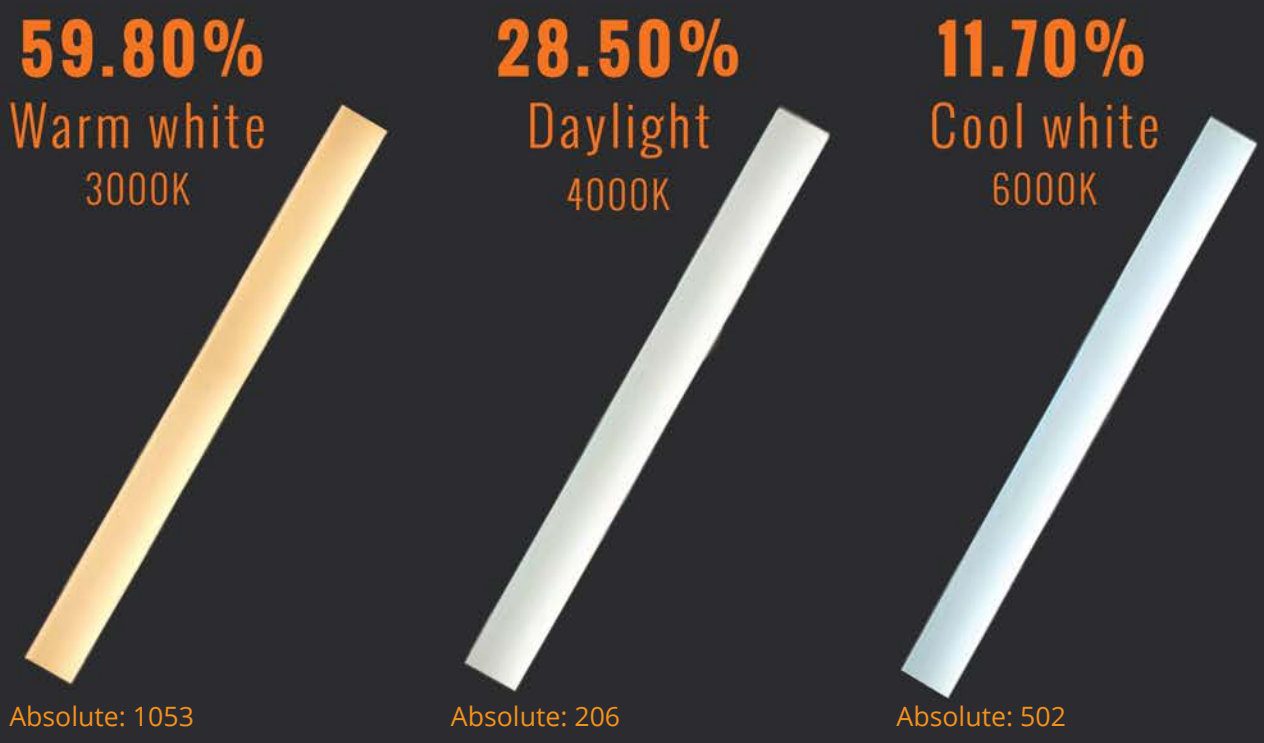
Only 8.22% of those questioned reported a daily usage of lighting products of 2 hours or less.

Preferred colour temperature

Colour temperatures are defined as the light colours that an LED product emits.

These are monitored on the Kelvin Scale, with the three main colours being Warm White (3000K), Day Light (4000K) and Cool White (6000K).This item in the Survey is intended to ascertain which, if any of the colour temperatures is most popular with consumers.

Of 1,761 respondents, 59.80% considerably differed from the rest, with Warm White being the preferred colour temperature, mainly because it provides a light output that is similar to the one offered by the existing halogen light bulbs.



(In general, which of the three main colour temperatures you prefer the most?)

TOTAL: 1,761

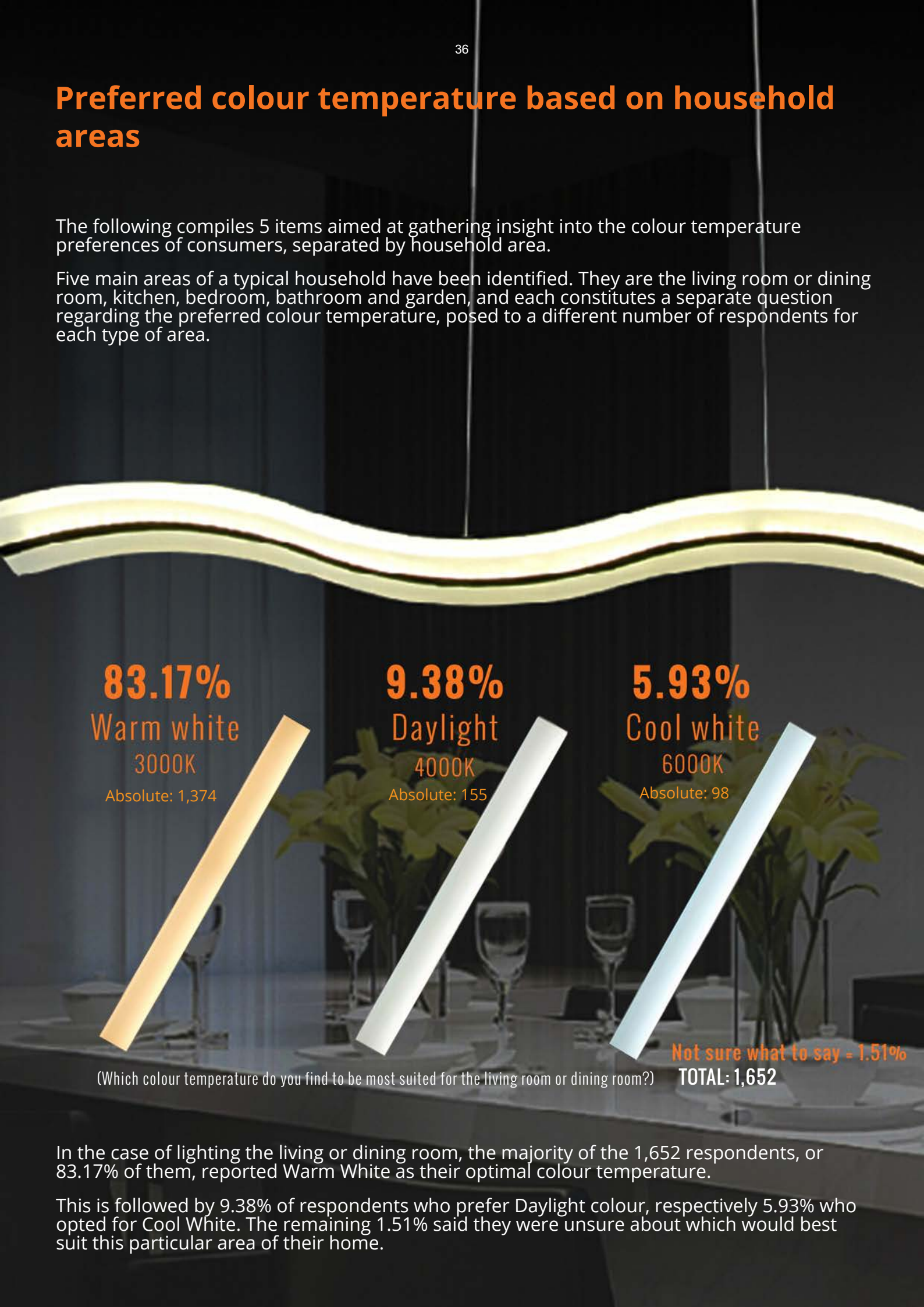
A further 28.50% of respondents declared that they prefer Cool White due to its clean and bright effect.The remaining 11.70% of interviewees reported that their preferred colour is Daylight.

Most of the respondents who chose Daylight stated that they liked the effect of mixing both the Warm and Cool White colour temperatures.

Preferred colour temperature based on household areas

The following compiles 5 items aimed at gathering insight into the colour temperature preferences of consumers, separated by household area.

Five main areas of a typical household have been identified. They are the living room or dining room, kitchen, bedroom, bathroom and garden, and each constitutes a separate question regarding the preferred colour temperature, posed to a different number of respondents for each type of area.

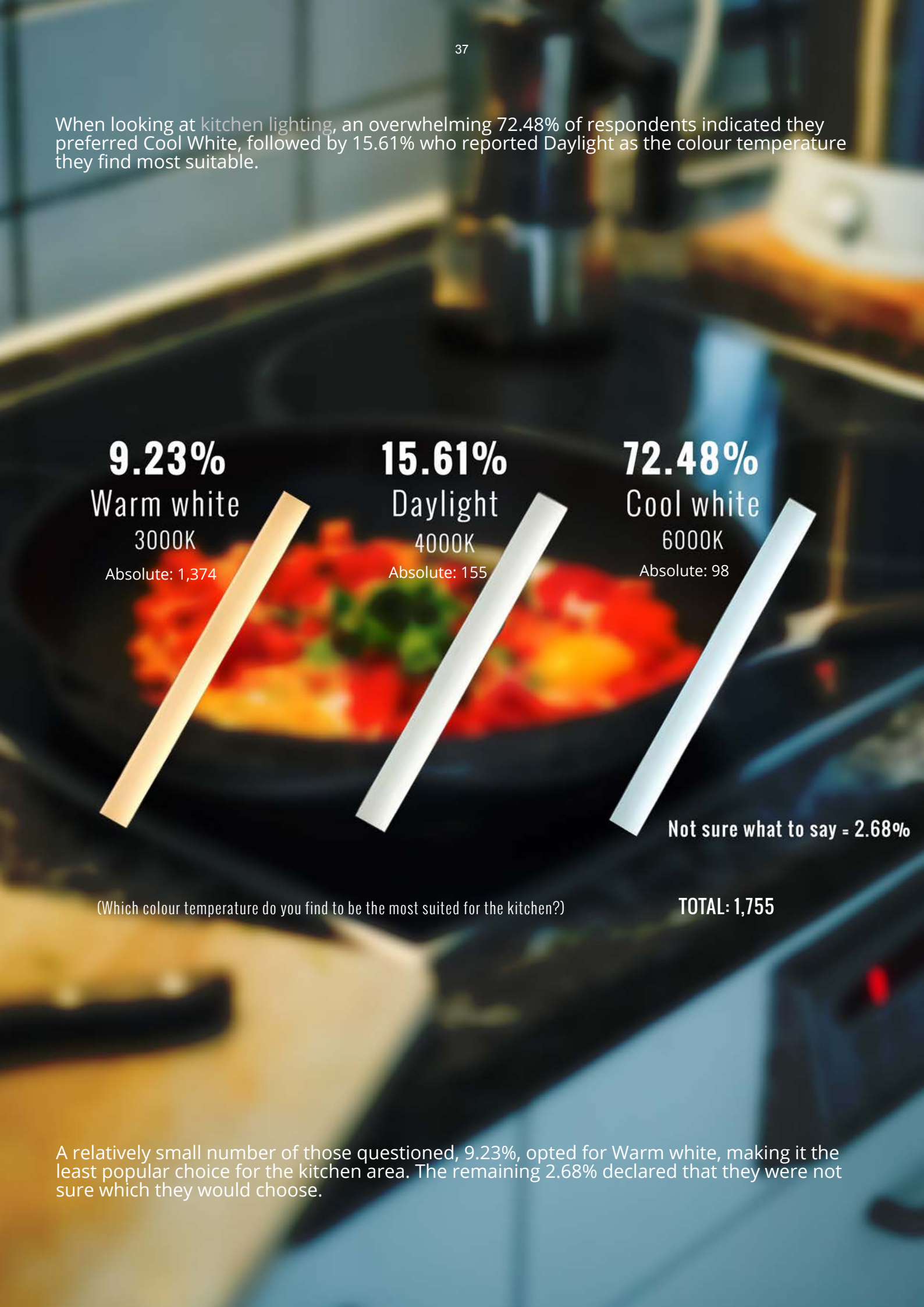


(Which colour temperature do you find to be most suited for the living room or dining room?)

In the case of lighting the living or dining room, the majority of the 1,652 respondents, or 83.17% of them, reported Warm White as their optimal colour temperature.

This is followed by 9.38% of respondents who prefer Daylight colour, respectively 5.93% who opted for Cool White. The remaining 1.51% said they were unsure about which would best suit this particular area of their home.

When looking at kitchen lighting, an overwhelming 72.48% of respondents indicated they preferred Cool White, followed by 15.61% who reported Daylight as the colour temperature they find most suitable.



A relatively small number of those questioned, 9.23%, opted for Warm white, making it the least popular choice for the kitchen area. The remaining 2.68% declared that they were not sure which they would choose.

1,645 respondents were asked about the colour temperature they find to be most suitable for their bedroom.

At 78.05% the majority reported that they preferred Warm White, a similar result to that registered in the case of the living and dining room.

(Which colour temperature do you find to be the most suited for the bedroom?)

TOTAL: 1,645

11.31% of those questioned opted for Daylight as their preferred choice. The least popular colour temperature proved to be Cool White, with only 7.54% of respondents agreeing that it would be suitable for their bedroom.

The remaining 3.10% were not sure which of the three choices would be the most suitable.

When it comes to the most suitable colour temperature to use in the bathroom, the vast majority, 84.23% of the 1,592 respondents, opted for Cool White.

The Daylight and the Warm White option are preferred by close proportions of those questioned, the former by 7.35% and the latter 6.91%. For this item, only 1.51% of respondents declared that they were not sure.

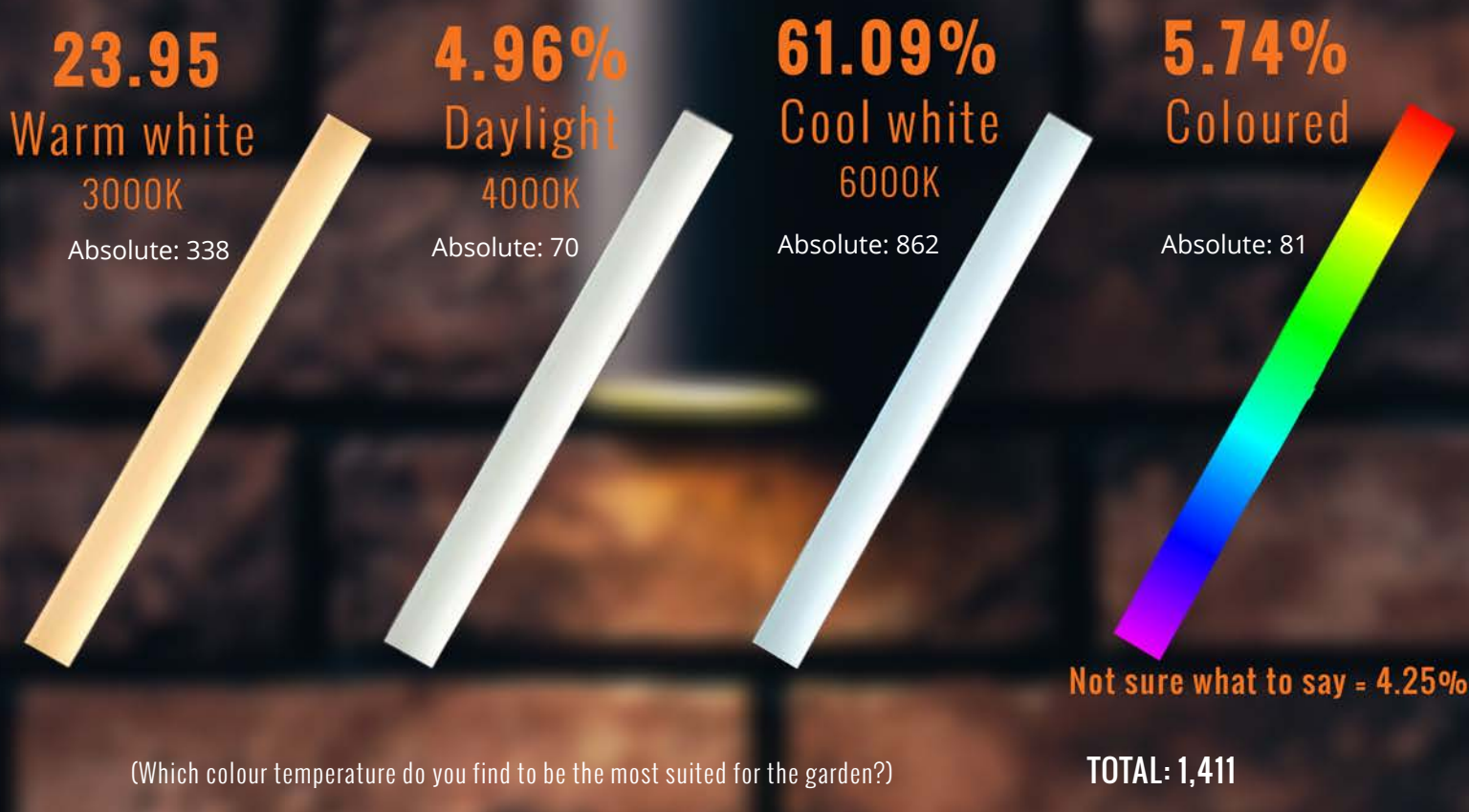
(Which colour temperature do you find to be the most suited for the bathroom?)

TOTAL: 1,592

The fifth household area considered was the garden, where many people use LED flood lights, and it introduces a fourth colour temperature option under the choice of coloured, which indicates coloured LED lights.

The majority, 61.09% of the 1,411 respondents opted for Cool White as preferred choice.

The second most popular colour temperature is Warm White, preferred by 23.95% of those questioned. 5.74% interviewees reported Coloured as their choice, followed by 4.96% which opted for Daylight. The remaining 4.25% respondents were not sure what to say.



(Which colour temperature do you find to be the most suited for the garden?)

TOTAL: 1,411

The following can be extracted from the above figures. Firstly, it is clear that there is a different preference of colour temperatures, divided by home areas.

Secondly, in areas in which people generally relax, such as the living room or the bedroom, Warm White is the preferred colour temperature choice, to some extent due to the fact that it creates a similar atmosphere to that of the traditional halogen light bulb.

Thirdly, for areas in which domestic but still powerful illumination is required, such as the bathroom and kitchen, Cool White is the most popular choice.

Fourthly, despite being a midpoint between Warm and Cool White, Daylight isn't as commonly used in household areas.

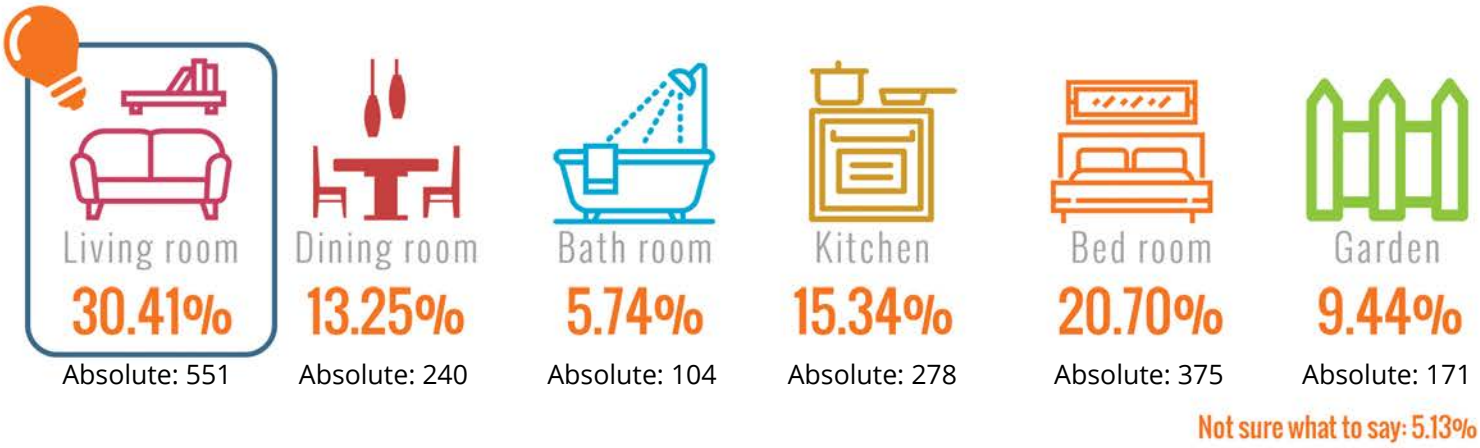
Which room do people prioritise for lighting and decorating

This item aims to reveal the ways in which consumers prioritise lighting and decoration in their homes. Specifically targeted are those areas in which lighting and decoration are given the most attention by consumers.

A number of 1,812 respondents were given the choice between 6 different areas in their dwellings, as well as the option to choose that they are not sure what to answer.

The most popular option was that of the living room, chosen by 30.41% of those questioned.

The second most popular area was designated as the bedroom, with 20.70% of respondents considering its lighting and decoration more important than that of other areas. 15.34% of interviewees opted for the kitchen and a similar amount - 13.25% - chose the dining room as their most preferred room to illuminate properly.



(Which home area do you consider to be most important for you in terms of being perfectly lit up and decorated?) **TOTAL: 1,812**

The garden is the highest priority for proper lighting in just 9.44% of respondents' opinion, however this might be due to its vital role in home security.

Only 5.74% of those questioned opted for the bathroom choice and a further 5.13% declared themselves undecided.

Based on the figures above, the assumption, that generally consumers put the most interest into the lighting and decorating of rooms designated for relaxation and/or rest, can be confirmed.

At a similar level, the kitchen occupies one of the top popularity positions, most likely in connection to the fact that given its nature and purpose of use, proper illumination is key.

Perceived impact of lighting products on overall look

This item is aimed at showing to what extent consumers believe in the impact lighting solutions can have on the overall look of a space or area.

Out of the 1,627 respondents, 69.21% agree with the fact that their lighting products have an impact on the lighted space, with 35.59% agreeing and 33.62% strongly agreeing.

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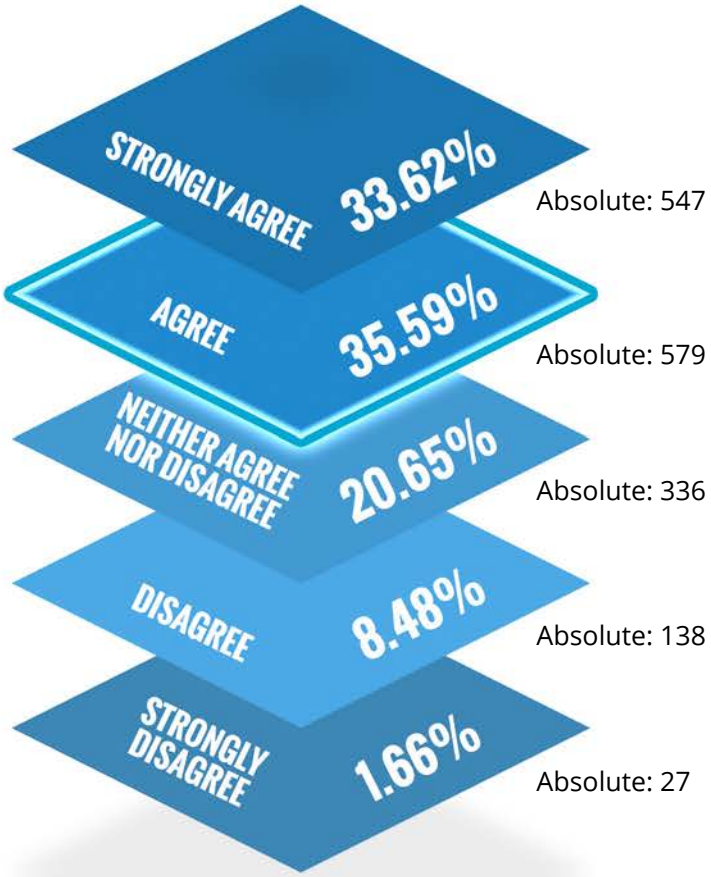


(To what extent do you agree with the fact that lighting solutions that you use have an impact on the overall look of a space or area?)

TOTAL: 1,627

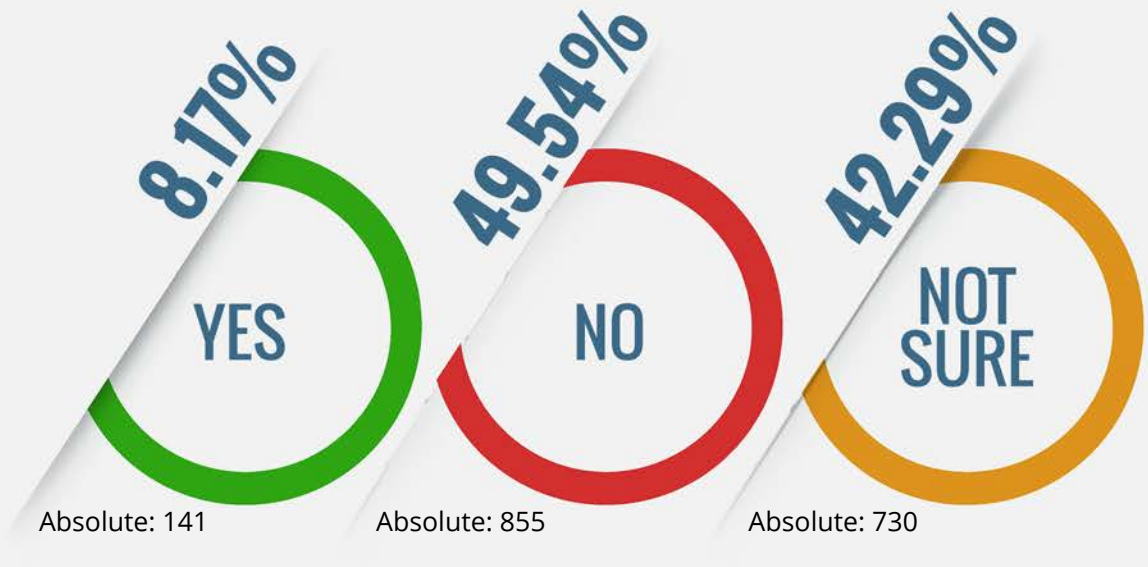
20.65% of those questioned reported that they didn't agree with the impact but also didn't disagree.

The proportion of the respondents who didn't feel that their lighting impacted the look of a room was 10.14%, with 8.48% of them disagreeing, and just 1.66% strongly disagreeing.

Proper lighting seen as factor of wellbeing and/or staying healthy

In discussions about lighting, health and wellbeing generally represent unlikely subjects. This doesn't mean, however, that proper lighting cannot be linked to a perceived state of wellbeing and/or the idea of staying healthy, for instance, the effect of lighting on one's sight.

This item aims to gather insight into how consumers perceive the connection between lighting and wellbeing, and whether they take health reasons into account when thinking about a lighting setup.



(Do you consider proper lighting to be a factor of wellbeing and/or staying healthy?) **TOTAL: 1,726**

49.54% out of the 1,726 respondents indicated that they don't consider proper lighting a factor of wellbeing and/or staying healthy.

On the opposite corner, 8.17% of interviewees reported that they do consider the effects of health that come from proper lighting.

The remaining 42.29% of those questioned stated that they are not sure whether proper lighting affects their perceived wellbeing and their staying healthy.

Awareness of impending ban on halogen lighting products

With an EU ban on less efficient GLS-Shape halogen light bulbs coming into effect on 1st September 2018, gaining information regarding the awareness of this ban throughout the British public is key in trying to decipher what effect it may have on both the LED and CFL (Compact Fluorescent Lamp) markets.

A number of 1,235 respondents were asked whether they were aware of the soon to be imposed ban on halogens. A resounding 94.41% majority indicated they were not aware that an EU wide ban on these bulbs was due to be put into place.

(Are you aware of the 2018 EU ban on halogen lighting products?) TOTAL: 1,235

The remaining 5.59% said that they were aware that the ban is soon to be implemented.

This astronomical difference can lead to the prognosis that the LED and CFL markets will see a sudden increase in customer base once the ban on 60W GLS Shape light bulbs is adopted.

Apart from the future effect on the above mentioned markets, the revealed lack of awareness supports the fact that current consumers are choosing LED lighting products voluntarily, rather than in preparation for the impending ban.

Awareness of next generation home technology

As within various other markets, smart technology is becoming more and more available in the lighting market.

Smart bulbs for example are simple light bulbs, be they colour changing or single colour, that can be controlled thorough a remote control or phone app. Home Automation is another example of a solution that has been around for some time and has continued improving but hasn't yet reached peak adopters.

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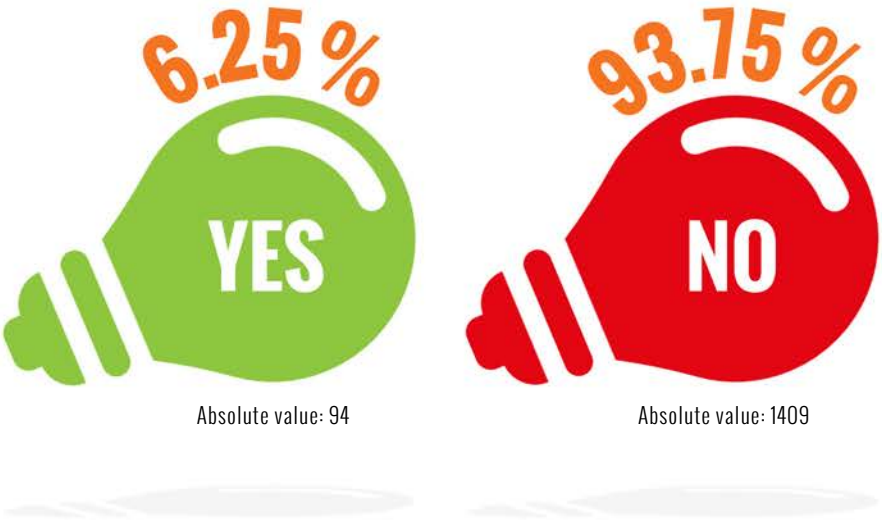

Absolute value: 94 Absolute value: 1409

(Are you aware of the latest home technologies such as Smart Bulbs and Home Automation?) **TOTAL: 1,503**

This is why it is relevant to see how aware the consumer is of the existence of the next generation home technology in lighting, especially since such technologies are in permanent development and their latest arrivals are not yet part of mainstream lighting and electronic purchases.

93.75%, of the 1,503 questioned, reported that they were not aware of the latest technologies in lighting.

The remaining 6.25% of respondents are those who admitted they are aware of them.

This massive disparity can also be attributed to the fact that news stories on the latest developments in smart lighting solutions are not generally published on platforms with a high reach.

CONCLUSION

The following will introduce conclusions about the profile, behaviour and preferences of the LED lighting consumer as derived from the Survey.

Given the sample size discussed above, the results can be considered representative for the UK LED lighting market as a whole.

The typical consumer is male, within the age group: 35-44 and tends to order lighting products with confidence and without much need for specialized support.

Most consumers prefer to place orders within the first three days of the week and their preferred time of the day remains during the working hour interval, between 9:00 and 16:59. While the majority of consumers are drawn towards shopping for lighting products when they need to replace failed light fittings, a small number tend to change currently in-use lighting units for reasons such as reducing energy costs or staying up-to-date.

Consumers are aware of the lower energy consumption benefit of LEDs, since the majority regard this as the most valuable advantage of these lighting solutions.

This doesn't mean, however, that they consciously monitor their energy bills and savings once they have switched to LEDs, with the majority denying doing so.

The slightly narrow gap between those finding LEDs very or somewhat expensive (still the majority), compared to traditional lighting, and those finding the price right, somewhat or very inexpensive, shows that the possibility of a further shift in pricing perception remains, especially with LEDs' prices becoming more affordable as technology progresses.

Both the online and physical channels of information remain of close interest for consumers and should continue to be equally monitored by retailers.

Although there seem to be sufficient sources of information and the vast majority of consumers deny the need for a professional opinion, the greatest challenge when ordering is that of finding the right product. This is followed in frequency by the challenge of finding both the right product and the right quantity to be ordered.

Given this focus on matching the specifications and their current needs when ordering lighting products, the majority of consumers tend to buy the exact quantity they decide on from the start and very few buy more or try samples beforehand.

This behaviour seems to be confirmed by the fact that the majority of consumers don't feel incentivised by discounts and promotions to buy larger quantities, nor are they willing to postpone purchases in preparation for a discount.

A tendency to simplify orders is noticed, with the majority of consumers buying 1 to 2 individual products in different quantities, per shopping session. The most common order value tends to be between £30 and £59.99.

Although the majority of consumers are not sure or don't believe that there is any connection between lighting choice and wellbeing, they tend to prioritize rooms in which they spend the most time, i.e. living room and bedroom, when buying lighting products.

When it comes to colour temperature, the most obvious choice remains Warm White (similar to the light output of halogen bulbs). This doesn't mean that consumers don't make use of the other choices available, such as Cool While and Daylight, in different areas of the household.

The consumers are not generally aware of changes and advances in the LED lighting market, with over 90% ignorant about the 2018 impending ban on halogen bulbs and about smart bulbs and Home Automation systems.

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A company run by Mirrorstone Lighting Limited

WHOLESALE LED LIGHTS - THE UK's LEADING RETAILER OF LED LIGHTS

LED SPOTLIGHTS

GU10 LED BULBS - MR16 LED SPOTLIGHTS
GU11 LED SPOTLIGHTS - MR11 LED SPOTLIGHTS
AR111 LED SPOTLIGHTS - REFLECTOR (R)

LED LIGHT BULBS

E27 LED BULBS - E14 LED BULBS
B22 LED BULBS - B15 LED BULBS
G4 LED BULBS - G9 LED BULBS

LED STRIP LIGHTS

LED TAPE - POWER SUPPLIES - CONTROLLERS
STRIP LIGHT KITS - PROFILES - LED ACCESSORIES

LED OUTDOOR LIGHTING

LED FLOOD LIGHTS - PIR SENSOR FLOOD LIGHTS
RGB LED FLOOD LIGHTS - LED WALL LIGHTS
LED DECKING LIGHTS

CEILING LIGHTS

GU10 DOWNLIGHTS - MR16 DOWNLIGHTS
LED DOWNLIGHTS - LIGHT FITTINGS
SPOTLIGHT FITTINGS - LED PANEL LIGHTS

LED TUBE LIGHTS

T5 LED TUBE LIGHTS - T8 LED TUBE LIGHTS
LED LIGHT BARS

SWITCHES & SOCKETS

TRENDI - ROTARY DIMMER - ROCKER SWITCHES
SOCKETS - TOUCH DIMMER

COMMERCIAL LIGHTING

T8 LED TUBE LIGHTS - 2D LED LAMPS/LIGHTS
LED PANEL LIGHTS - HIGH BAY LED LIGHTS

INDOOR LIGHT FITTINGS

LED CABINET LIGHTS - LED PENDANT LIGHTS
LED BATHROOM LIGHTS - LED FLOOR LIGHTS
LED TABLE LAMPS

OTHER OUTDOOR LED LIGHTS

LED POST LIGHTS - LED GROUND LIGHTS

Wholesale LED Lights

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