



رمز المنتج بالمختبر: C-032



Laboratory name	Saudi Inspection & Testing Co.(SAITCO)
Address	1st Industrial Area St. No. 4,5,6,7 –Riyadh
Country	Saudi Arabia

Date or period of tests	03 / 02 / 2022 – 09 / 03 / 2023
Date of report issue	09 / 03 / 2023
Laboratory test report number	E-230107
Client Reference No. / Date	01002013E/23
Client Name & address	Signify Saudi Arabia PO Box 25609 Riyadh 11476, K.S.A.
Manufacturer name& address:	Signify (China) Investment Co., Ltd Building No. 9, Lane 888, Tianlin Road, Minhang, 200233 Shanghai, P.R.China

Product description	Led bulb
Brand name or trademark	PHILIPS
Model / Type	9290011404
Country of origin	CHINA

Product category	Self-ballasted LED-lamps for general lighting services
Standards	SASO IEC 62612, SASO IEC 62560,
Conformity to articles tested	☒ Yes ☐ No

Test case verdicts	
Test case does not apply to the test object	: N (. A.)
Test item does meet the requirement	: P(ass)
Test item does not meet the requirement	: F(ail)

Note: The result recorded in this document only related to the item tested.

ملاحظة : النتائج المدونة في تقرير التحكم في النتائج لا تمثل إلا العينة المختبرة



ELECTRICAL LAB
TECHNICAL Dep

Signature

Signature

SASO IEC 62560			
Clause	Requirement-Test	Result-Remarks	Verdict
5	Marking		
5.1	Lamps shall be clearly and durably marked with the following mandatory markings:	-	P
	The manufacturer's name or trade mark	PHILIPS	P
	Rated Voltage	220-240V	P
	Rated wattage	6W	P
	Nature of supply	-	N
	Rated Frequency	50/60Hz	P
5.2	In addition, the following information shall be given by the lamp manufacturer on the lamp or immediate lamp wrapping or container or in installation instruction.	-	P
	a. Rated current	35mA	P
	b. Restriction according the lamp weight, if applicable	-	N
	c. Special conditions and restriction for lamp operation (example: in dimming circuits) 	Provided	P
	a. Lamps with bulbs not suitable for water contact shall be marked with the symbol according to Figure 6. The marking shall be provided on the packaging or accompanying information. The height of the graphical symbol shall be at least 5mm. The symbol is not needed if a written cautionary notice is provided such as "Use in Dry Locations only".  Figure 6 – Lamp not suitable for use under dust and moisture	marked	P
5.3	Compliance is checked by the following:	-	P
	Presence and legibility of the marking required in 5.1- by visual inspection	-	P
	The durability of the marking is checked by trying to remove it by rubbing lightly for 15 s with a piece of cloth soaked with water and, after drying, for a further 15 s with a piece of cloth soaked with hexane	-	P
	The marking shall be legible after the test	Durable	P
5.2 IEC 62612			
	a- Rated luminous flux / rated color / beam angle (directional lamp)	470 / 2700K / Indirect lamp	P
	b- Lamp photometric code	-	N
	c- Rated life (h) and the rated lumen maintenance (x)	25000 h 12500 x	P
	d- Failure fraction (F _v) corresponding to the rated life	-	N
	f- directional lamp only, peak intensity (cd)	-	N
	g- Rated colour rendering index	-	N
	h- Aging time (h) if different to 0 h	-	N
	I- Rated efficacy	96.6m/W	P
	j- dimension, including dimensional tolerances	Provided	P
	k- displacement factor	-	N



F 07-08-02 A

Page 2 of 33

Issued By: QGM - Approved By: GM

SAITCO, First Industrial City area, Riyadh Station area beside dry customs St.4,5,6,7 Building No.2433 , Riyadh 11427,

PO 27711 , Tel: +966 11 2043000,Fax +966 11 2042888, www.saitco.com.sa

الشركة السعودية للفحص والاختبار - الرياض - المدينة الصناعية الأولى ، منطقة محطة القطار بجوار جمرات الرياض الجاف ش7,6,5,4



8.2	Humidity test			
	The lamp shall be conditioned for 48hours in a cabinet containing air with a relative humidity between 91% and 95%.	95%	P	
	The temperature is maintained within 1°C of any convenient value between 20°C and 30°C.	25°C	P	
8.2	Insulation resistance and electric strength			
	Insulation resistance R between:	Required R (MΩ)	R (MΩ)	-
	- between live parts of the cap and accessible parts of the lamp	4	>99.99	P
	- SELV	1	-	N

8.3	Electric Strength			
	Voltage applied between:	Test Voltage (V)	Breakdown (Y/N)	-
	Supply contacts and accessible parts of insulating material of the cap (4U +2000)	2960	No	P
	SELV	-	-	N

SASO IEC 62612			
Clause	Requirement-Test	Result-Remarks	Verdict

8.1	Lamp wattage			
	The initial power consumed by each individual Led lamp in the measured sample shall not exceed more than 10% Maximum Power dissipation = 6.6 W	Rated power (W)	Measured Power(W)	-
	Sample no.1 @ 120V	6W	6.33	P
	Sample no.2 @ 120V		5.89	P
	Sample no.3 @ 120V		5.89	P
	Sample no.4 @ 230V		5.88	P
	Sample no.5 @ 230V		6.13	P
	Sample no.6 @ 230V		5.81	P
	Sample no.7 @ 230V		5.77	P
	Sample no.8 @ 230V		5.75	P
	Sample no.9 @ 230V		6.67	P
	Sample no.10 @ 230V		6.43	P
	Sample no.11 @ 230V		6.29	P
	Sample no.12 @ 230V		5.92	P
	Sample no.13 @ 230V		6.62	P
	Sample no.14 @ 230V		6.32	P
	Sample no.15 @ 230V		6.20	P
	Sample no.16 @ 230V		6.10	P
	Sample no.17 @ 230V		6.73	P
	Sample no.18 @ 230V		6.45	P
	Sample no.19 @ 230V		6.31	P
	Sample no.20 @ 230V		6.06	P
	Average	6.17	P	

F 07-08-02 A

Page 3 of 33

Issued By: QGM - Approved By: GM

SAITCO, First Industrial City area, Riyadh Station area beside dry customs St.4,5,6,7 Building No.2433 , Riyadh 11427,

PO 27711 , Tel: +966 11 2043000,Fax +966 11 2042888, www.saitco.com.sa

الشركة السعودية للفحص والاختبار - الرياض - المدينة الصناعية الأولى ، منطقة محطة القطر بجوار جمر ك الرياض الجاف ش7,6,5,4

9.1	Luminous flux			
	The initial luminous flux each individual Led lamp in the measured sample shall not exceed more than 10% Minimum Luminous Flux Limit = 423 Lm	Rated (ϕ) lm	Measured (ϕ) lm	-
	Sample no.1 @ 120V	470Lm	603.5	P
	Sample no.2 @ 120V		560.7	P
	Sample no.3 @ 120V		560.3	P
	Sample no.4 @ 230V		560.1	P
	Sample no.5 @ 230V		578.3	P
	Sample no.6 @ 230V		554.6	P
	Sample no.7 @ 230V		551.2	P
	Sample no.8 @ 230V		550.9	P
	Sample no.9 @ 230V		635.7	P
	Sample no.10 @ 230V		598.2	P
	Sample no.11 @ 230V		576.5	P
	Sample no.12 @ 230V		548.6	P
	Sample no.13 @ 230V		646.6	P
	Sample no.14 @ 230V		607.0	P
	Sample no.15 @ 230V		589.9	P
	Sample no.16 @ 230V		578.6	P
	Sample no.17 @ 230V		640.4	P
	Sample no.18 @ 230V		601.5	P
	Sample no.19 @ 230V		581.2	P
	Sample no.20 @ 230V		560.0	P
	Average		584.19	P

4.0	Requirements for indirect and direct lamps		
4.1	Energy efficiency requirements	-	-
	Lamps listed in Annex A of this Standard shall comply with the energy efficiency requirements specified in Annex C (indirect lamps) according to Table 2, and Annex F (direct lamps) according to Table 8.	-	P
	Energy efficiency classes and the methods of calculating the EEI for lamps are detailed in Annex C (indirect lamps) and Annex F (direct lamps).	-	P
Addition (2870 2021)	It is allowable to use same test report for models in SLS system that are different in color temperature only and have same technical specifications of the product.	-	-
4.2	Functionality requirements	-	P
	Lamps listed in Annex A of this Standard shall comply with the functionality requirements specified in Annex D (indirect lamps) and Annex G (direct lamps).	-	P
4.3	Marking requirements	-	-
	Instruction manuals supplied with products shall be in the Arabic and English language.	-	N
	Cautionary and/or any safety warnings for the direct user or consumer shall be in the Arabic and English language.	-	P
	Internationally accepted pictograms is permitted instead of verbally expressed language.	-	P

	Lamps listed in Annex A of this Standard shall comply with the marking requirements specified in Annex E (indirect lamps) and Annex H (direct lamps).	-	P
Replace (2870) 2021)	"Special purpose" lamps (Annex B-3) do not need to comply with the marking requirements specified in Annex E and Annex H. Instead, the following information shall be clearly and prominently indicated on their packaging and in all forms of product information accompanying the lamp when it is placed on the market:	-	N
	☐ Brand Name	-	N
	☐ Model number	-	N
	☐ Rated power(Watt)	-	N
	☐ Rated Voltage (Voltage)	-	N
	☐ Rated Lumen(lumen)	-	N
	☐ Rated color temperature (Kelvin)	-	N
	☐ Country of origin	-	N
	☐ Their intended purpose	-	N
4.4	Hazardous chemicals: Substance restrictions for lamps		
	Products specified in Annex A and Annex B shall comply with the maximum hazardous substance limits according to Annex I, Tables 16, 17 and 18.	Led	N
4.5	Energy efficiency label	-	-
	Products requiring compliance to energy efficiency requirements shall bear the energy efficiency label as per Annex J.	-	-
5.0	Testing requirements	-	-
	Lamps listed in this Standard shall be tested under the requirements mentioned in Annex K.	-	P

SASO 2870

Clause	Requirement-Test	Result-Remarks	Verdict
4.0	Requirements for indirect and direct lamps		
	Lamps listed in Annex A of this Standard shall comply with the energy efficiency requirements specified in Annex C (indirect lamps) according to Table 2, and Annex F (direct lamps) according to Table 8.	Indirect lamp Annex C	P
	Energy efficiency classes and the methods of calculating the EEI for lamps are detailed in Annex C (indirect lamps) and Annex F (direct lamps).	-	P

ANNEX C	Energy efficiency requirements for indirect lamps		
C1	Calculation of energy efficiency index	Indirect lamp	P
	For the calculation of the energy efficiency index (EEI) of a model, its corrected rated power for any control gear losses is compared with its reference power	-	P
	The EEI is calculated as follows and rounded to two decimal places: EEI= P_{cor} / P_{ref}	EEI =0.121	P
P_{cor}	For models without external control gear: P_{cor} = P_{rated}	6W	P
-	For models with external control gear, P _{cor} is the rated power (P _{rated}) corrected in accordance with the corrections factors listed below:	Without external control gear	N



F 07-08-02 A

Page 5 of 33

Issued By: QGM - Approved By: GM

SAITCO, First Industrial City area, Riyadh Station area beside dry customs St.4,5,6,7 Building No.2433 , Riyadh 11427,

PO 27711 , Tel: +966 11 2043000,Fax +966 11 2042888, www.saitco.com.sa

الشركة السعودية للفحص والاختبار - الرياض - المدينة الصناعية الأولى ، منطقة محطة القطر بجوار جمر ك الرياض الجاف ش7,6,5,4



	Lamps operating on external halogen lamp control gear: $(P_{cor}) = Prated \times 1.06$	-	N
	Lamps operating on external LED lamp control gear: $(P_{cor}) = Prated \times 1.10$	-	N
	The rated power ($Prated$) of the lamps is measured at their nominal input voltage.	220-240V	P
Pref	Pref is the reference power obtained from the useful luminous flux of the model (Φ_{use}) by the following formula:	-	P
	For models with $\Phi_{use} < 1\,300$ lumen: $Pref = 0.88\sqrt{\Phi_{use}} + 0.049\Phi_{use}$	$Pref = 49.61$	P
	For models with $\Phi_{use} \geq 1\,300$ lumen: $Pref = 0.07341\Phi_{use}$	-	N
	luminous flux (Φ_{use}) = Total rated luminous flux (Φ)	-	-

C2	Maximum allowable EEI for indirect lamps	-	P
-----------	---	---	---

Table 2: Maximum energy efficiency index (EEI)

Range	Stage 1 (1 May 2016)				Stage 2 (1 May 2017)				Stage 3 (1 Jan 2019)			
	Incandescent	High voltage halogen	Low voltage halogen	CFLI & LED	Incandescent	High voltage halogen	Low voltage halogen	CFLI & LED	Incandescent	High voltage halogen ¹	Low voltage halogen	CFLI & LED
All lamps with power < 60W	n/a	n/a	n/a	n/a	0.95	0.95	0.5	0.24	0.95	0.5	0.5	0.24
All lamps with power $\geq 60W$	0.95	0.95	0.5	0.24	0.95	0.95	0.5	0.24	0.95	0.5	0.5	0.24

Note: For labelling purposes, the Arabic letters should be used. The equivalent English version is only provided for informational purposes

	Sample no.1 @ 120V	EEI = 0.12	EEI Class = B
	Sample no.2 @ 120V	EEI = 0.12	EEI Class = B
	Sample no.3 @ 120V	EEI = 0.12	EEI Class = B
	Sample no.4 @ 230V	EEI = 0.12	EEI Class = B
	Sample no.5 @ 230V	EEI = 0.12	EEI Class = B
	Sample no.6 @ 230V	EEI = 0.12	EEI Class = B
	Sample no.7 @ 230V	EEI = 0.12	EEI Class = B
	Sample no.8 @ 230V	EEI = 0.12	EEI Class = B
	Sample no.9 @ 230V	EEI = 0.13	EEI Class = B
	Sample no.10 @ 230V	EEI = 0.13	EEI Class = B
	Sample no.11 @ 230V	EEI = 0.13	EEI Class = B
	Sample no.12 @ 230V	EEI = 0.12	EEI Class = B
	Sample no.13 @ 230V	EEI = 0.12	EEI Class = B
	Sample no.14 @ 230V	EEI = 0.12	EEI Class = B
	Sample no.15 @ 230V	EEI = 0.12	EEI Class = B
	Sample no.16 @ 230V	EEI = 0.12	EEI Class = B
	Sample no.17 @ 230V	EEI = 0.13	EEI Class = B
	Sample no.18 @ 230V	EEI = 0.13	EEI Class = B
	Sample no.19 @ 230V	EEI = 0.13	EEI Class = B
	Sample no.20 @ 230V	EEI = 0.13	EEI Class = B

C3	Energy efficiency classes		P
	The energy efficiency rating of lamps shall be determined on the basis of their energy efficiency index (EEI) as outlined in Table 3.		-
	EEI = P_{cor} / P_{ref}		-
	Table 3: Energy efficiency classes for indirect lamps		
	EEI ≤ 0.11	أ	A
	0.11 < EEI ≤ 0.13	ب	B
	0.13 < EEI ≤ 0.18	ج	C
	0.18 < EEI ≤ 0.24	د	D
	0.24 < EEI ≤ 0.50	هـ	E
	0.50 < EEI ≤ 0.95	و	F
	0.95 < EEI ≤ 1.75	ز	G

ANNEX E	Marking requirements for Indirect lamps		
-	The following should be printed on the bulb with non-removable ink:		-
	• Brand Name	PHILIPS	P
	• Input Voltage	220-240Vac	P
	• Nominal Power	6W	P
	• Country of Origin	CHINA	P
Information shall be visibly displayed prior to purchase to end-users on the packaging ² and/or on an accompanying catalogue, in addition the information should be displayed on free access websites (English and/or Arabic).			
The information does not need to be specified using the exact wording of the list below. It may be displayed using graphs, figures or symbols rather than text:			
	• Brand name	PHILIPS	P
	• Model number	9290011404	P
	• Input voltage	220-240V	P
	• Lamp type (Indirect)	Indirect	P
	• Country of origin	CHINA	P
	• Lamp technology (Incandescent/Halogen/CFLi/LED)	LED	P
	• Cap type	E14	P
	• Nominal power (in watt)	6W	P
	• Nominal luminous flux (in lumens)	580Lm	P
	• Nominal efficacy (in lumens per watt)	96.6 Lm/W	P
	• Nominal life time (in hours)	250000h	P
	• Number of switching cycles before up to B50 lifetime	15000 x	P
	• Color temperature	2700K	P
	• Lamp mercury content as X.X mg (applicable only to lamps that contains mercury)	RoHS	P
	• Indication on which website to consult in case of accidental lamp breakage	www.signify.com	P

ANNEX F	Energy efficiency requirements for direct lamps		
F1	Calculation of energy efficiency index	Indirect lamp Applied Annex C	N
	The energy efficiency index (EEI) of the lamp is calculated as follows and rounded to two decimal places: EEI= Pcor / Pref	-	N
Pcor	□□□□ is the rated power (□□□□□□) measured at nominal input voltage and corrected where appropriate in accordance with Table 7. The correction factors are cumulative where appropriate.	Indirect lamp Applied Annex C	N
-	Lamps operating on external halogen lamp control gear: □□□□□□ × 1.06	-	N
	Lamps operating on external LED lamp control gear: □□□□□□ × 1.10	-	N
	Compact fluorescent lamps with color rendering index ≥ 90 : □□□□□□ × 0.85	-	N
	Lamps with anti-glare shield: □□□□□□ × 0.80	-	N
Pref	□□□□ is the reference power obtained from the useful luminous flux of the lamp (□□□□) by using the following formula:	Indirect lamp Applied Annex C	N
-	For models with □□□□ < 1300 lumen: □□□□ = 0.88√□□□□ + 0.049□□□□	-	N
	For models with □□□□ ≥ 1300 lumen: □□□□ = 0.07341□□□□	-	N
	□□□□ is defined as:	-	N
	Rated luminous flux present in a 120° cone (□120°) for direct lamps meeting all the following conditions: - Having a beam angle ≥ 90° - Being of type different than a filament lamp - Carrying a warning on their packaging in accordance with point (j) of Annex H (Information requirements on packaging and free access websites)	- -	N
	Rated luminous flux present in a 90° cone (□90°) for all other direct lamps	-	N

F2	Maximum allowable EEI for direct lamps								-				N	
	Table 8: Maximum energy efficiency index (EEI)													
	Range	Stage 1 (1 May 2016)				Stage 2 (1 May 2017)				Stage 3 (1 Jan 2019)				
		Incandescent	High voltage halogen	Low voltage halogen	CFLI & LED	Incandescent	High voltage halogen	Low voltage halogen	CFLI & LED	Incandescent	High voltage halogen	Low voltage halogen	CFLI & LED	
		All lamps with power < 60W	n/a	n/a	n/a	n/a	0.95	1.75	0.95	0.24	0.95	0.95	0.95	0.24
		All lamps with power ≥ 60W	0.95	1.75	0.95	0.24	0.95	1.75	0.95	0.24	0.95	0.95	0.95	0.24
	Sample 1				EEI = -				EEI Class = -					
	Sample 2				EEI = -				EEI Class = -					
	Sample 3				EEI = -				EEI Class = -					



F 07-08-02 A

Page 8 of 33

Issued By: QGM - Approved By: GM

SAITCO, First Industrial City area, Riyadh Station area beside dry customs St.4,5,6,7 Building No.2433 , Riyadh 11427,

PO 27711 , Tel: +966 11 2043000,Fax +966 11 2042888, www.saitco.com.sa

الشركة السعودية للفحص والاختبار - الرياض - المدينة الصناعية الأولى ، منطقة محطة القطار بجوار جمرات الرياض الجاف ش7,6,5,4



F3	Energy efficiency classes	N
	The energy efficiency rating of lamps shall be determined on the basis of their energy efficiency index (EEI) as outlined in Table 9.	N
	$EEI = P_{cor} / P_{ref}$	N
	Table 9: Energy efficiency classes for direct lamps	
	EEI ≤ 0.11	A
	0.11 < EEI ≤ 0.13	B
	0.13 < EEI ≤ 0.18	C
	0.18 < EEI ≤ 0.24	D
	0.24 < EEI ≤ 0.50	E
	0.50 < EEI ≤ 0.95	F
	0.95 < EEI ≤ 1.75	G
	Note: For labelling purposes, the Arabic letters should be used. The equivalent English version is only provided for informational purposes	

ANNEX H	Marking requirements for Direct lamps		
-	The following should be printed on the bulb with non-removable ink:		-
	• Brand Name	Indirect lamp Applied Annex C	N
	• Input Voltage	-	N
	• Nominal Power	-	N
	• Country of Origin	-	N
	Information shall be visibly displayed prior to purchase to end-users on the packaging and/or on an accompanying catalogue, in addition the information should be displayed on free access websites (English and/or Arabic).		N
	The information does not need to be specified using the exact wording of the list below. It may be displayed using graphs, figures or symbols rather than text:		N
	• Brand name	Indirect lamp Applied Annex C	N
	• Model number	-	N
	• Input voltage	-	N
	• Lamp type (Direct)	-	N
	• Country of origin	-	N
	• Lamp technology (Incandescent/Halogen/CFLi/LED)	-	N
	• Cap type	-	N
	• Nominal useful luminous flux displayed in a font at least twice as large as any display of the nominal lamp power.	-	N
	• Nominal life time of the lamp in hours (should not longer than the rated life time).	-	N
	• Color temperature, as a value in Kelvins and also expressed graphically or in words.	-	N
	• Number of switching cycles before premature failure.	-	N
	• Warm-up time up to 60 % of the full light output (may be indicated as 'instant full light' if less than 1 second).	-	N
	• A warning if the lamp cannot be dimmed or can be dimmed only on specific dimmers; in the latter case, a list of compatible dimmers shall be also provided on the manufacturer's website.	-	N

	If designed for optimum use in non-standard conditions (such as ambient temperature $T_a \neq 25^\circ\text{C}$ or specific thermal management is necessary), provide information on those conditions.	-	N
	Lamp dimensions in millimeters (length and largest diameter).	-	N
	Nominal beam angle in degrees.	-	N
	If the lamp's beam angle is $\geq 90^\circ$ and its useful luminous flux as defined in Annex F is to be measured in a 120° cone, a warning that the lamp is not suitable for accent lighting.	-	N
	If the lamp cap is a standardized type also used with filament lamps, but the lamp's dimensions are different from the dimensions of the filament lamp(s) that the lamp is meant to replace, provide a drawing comparing the lamp's dimensions to the dimensions of the filament lamp(s) it replaces.	-	N
	An indication that the lamp is of a type listed in the first column of Table 13 may be displayed only if the luminous flux of the lamp in a 90° cone ($\square 90^\circ$) is not lower than the reference luminous flux indicated in Table 13 for the smallest wattage among the lamps of the type concerned. The reference luminous flux shall be multiplied by the correction factor in Table 14. For LED lamps, it shall be in addition multiplied by the correction factor in Table 15.	-	N
	- An equivalence claim involving the power of a replaced lamp type may be displayed only if the lamp type is listed in Table 13 and if the luminous flux of the lamp in a 90° cone ($\square 90^\circ$) is not lower than the corresponding reference luminous flux in Table 13. The reference luminous flux shall be multiplied by the correction factor in Table 14. - For LED lamps, it shall be in addition multiplied by the correction factor in Table 15. The intermediate values of both the luminous flux and the claimed equivalent lamp power (rounded to the nearest 1 W) shall be calculated by linear interpolation between the two adjacent values.	-	N



F 07-08-02 A

Page 10 of 33

Issued By: QGM - Approved By: GM

SAITCO, First Industrial City area, Riyadh Station area beside dry customs St.4,5,6,7 Building No.2433 , Riyadh 11427,

PO 27711 , Tel: +966 11 2043000,Fax +966 11 2042888, www.saitco.com.sa

الشركة السعودية للفحص والاختبار - الرياض - المدينة الصناعية الأولى ، منطقة محطة القطر بجوار جمر ك الرياض الجاف ش 4,5,6,7



Table 5: Functionality requirements for indirect LED lamps

Functionality parameter	Requirement	Result(s)	P
Lamp survival factor at 6 000h	≥ 0.90	≥ 0.90	P
Lumen Maintenance at 6 000h	≥ 0.80	≥ 0.80	P
Number of switching cycles before failure	$\geq 15\ 000$ if rated lamp life $\geq 30000h$ otherwise:	$\geq 15\ 000$	P
	$\geq$ half the rated lamp life expressed in hours	-	N
Starting time	$< 0.5s$	0.011S	
Premature failure rate	$\leq 5.0\%$ at 1,000h	0	P
Premature failure rate	$\leq 5.0\%$ at 1 000h	≥ 80	P
Color rendering (Ra)	≥ 80 / ≥ 65 if the lamp is intended for outdoor or industrial applications	-	N
Color consistency	Variation of chromaticity coordinates within a six-step Mac Adam ellipse or less.	-	N
Lamp power factor (PF) for lamps with integrated control gear	$P \leq 2W$: no requirement	-	N
	$2W < P \leq 5W$: $DF \geq 0.4$	> 0.7	P
	$5W < P \leq 25W$: $DF \geq 0.7$	-	N
	$P > 25W$: $DF \geq 0.9$	-	N

Table 11: Functionality requirements for direct LED lamps

Functionality parameter	Requirement	Result(s)	
Lamp survival factor at 6 000h	≥ 0.90	-	N
Lumen Maintenance at 6 000h	≥ 0.80	-	N
Number of switching cycles before failure	$\geq 15\ 000$ if rated lamp life $\geq 30000h$ otherwise:	-	N
	$\geq$ half the rated lamp life expressed in hours	-	N
Starting time	$< 0.5\ s$	-	N
Premature failure rate	$\leq 5.0\%$ at 1 000h	-	N
Color rendering (Ra)	≥ 80 ≥ 65 if the lamp is intended for outdoor or industrial applications	-	N
Color consistency	Variation of chromaticity coordinates within a six-step Mac Adam ellipse or less.	-	N
Lamp power factor (PF) for lamps with integrated control gear	$P \leq 2W$: no requirement	-	N
	$2W < P \leq 5W$: $DF > 0.4$	-	N
	$5W < P \leq 25W$: $DF > 0.7$	-	N
	$P > 25W$: $DF > 0.9$	-	N



F 07-08-02 A

Page 11 of 33

Issued By: QGM - Approved By: GM

SAITCO, First Industrial City area, Riyadh Station area beside dry customs St.4,5,6,7 Building No.2433 , Riyadh 11427,

PO 27711 , Tel: +966 11 2043000, Fax +966 11 2042888, www.saitco.com.sa

الشركة السعودية للفحص والاختبار - الرياض - المدينة الصناعية الأولى ، منطقة محطة القطر بجوار جمرک الرياض الجاف ش 7,6,5,4



Table 5: Functionality requirements for indirect LED lamps

No. of sample	Test Voltage (V)	Luminous Flux (lm)		Lumen Maintenance (%)	Premature failure rate	Lamp survival Factor	Ra	Power factor	CCT (K)
		Initial	6000H	6000H	At 1000H				
1	230	603.5	548.7	90.91	Pass	Pass	80.8	0.83	2676
2	230	560.7	487.6	86.96	Pass	Pass	80.8	0.8	2691
3	230	560.3	484.4	86.45	Pass	Pass	80.8	0.8	2693
4	230	560.1	485.5	86.68	Pass	Pass	80.8	0.8	2693
5	230	578.3	488.8	84.52	Pass	Pass	80.6	0.81	2672
6	230	554.6	494.9	89.23	Pass	Pass	80.6	0.79	2671
7	230	551.2	434.5	78.82	Pass	Pass	80.7	0.79	2674
8	230	550.9	441.3	80.10	Pass	Pass	80.8	0.79	2671
9	230	635.7	498.4	78.40	Pass	Pass	81.1	0.83	2659
10	230	598.2	424.8	71.0	Pass	Pass	80.9	0.83	2668
11	230	576.5	473.0	82.04	Pass	Pass	80.8	0.82	2675
12	230	548.6	413.1	75.3	Pass	Pass	80.8	0.8	2678
13	230	646.6	576.8	89.20	Pass	Pass	80.8	0.83	2662
14	230	607.0	571.1	94.08	Pass	Pass	80.6	0.82	2674
15	230	589.9	434.4	73.63	Pass	Pass	80.5	0.82	2679
16	230	578.6	475.3	82.14	Pass	Pass	80.5	0.81	2684
17	230	640.4	499.3	77.96	Pass	Pass	81.5	0.83	2639
18	230	601.5	489.3	81.34	Pass	Pass	81.2	0.83	2651
19	230	581.2	487.8	83.92	Pass	Pass	81.1	0.82	2659
20	230	560.0	482.1	86.08	Pass	Pass	81.1	0.81	2657
Average	230	584.19	484.55	82.93	Pass	Pass	80.84	0.813	2671
Requirement	-	-	-	≥80%	≤5%	≥90%	≥80	2W < P ≤ 5W : PF > 0.4	-

Annex N Criteria for market surveillance (table 38)

Parameter	Rated	Measured (average)	Limit	Verdict
Energy Efficacy	96.6lm/W	94.68lm/W	Min. 10% rated efficacy	P
Color rendering (Ra)	80	80.84	Min. -3, Max. +3.9	P
Beam angle	-	-	±25% rated beam angle	P
Peak intensity	-	-	Min. 75% rated intensity	-
Lamp displacement factor	0.9	0.813	±10% rated	P
Color temperature	2700K	2671.3	±10% rated	P
Color consistency	-	-	±10% rated	-
Power	6W	6.17	±10% rated	P
Luminous Flux	580 lm	584.19	-10% rated	P
Calculated Rated EEI	0.121	0.12	±10% rated	P

REMARK:

Photo no.1 (Marking)

Brand Name	PHILIPS
Model Number :	9290011404
Input Voltage	220-240Vac
Nominal Power	6W
Country of Origin	CHINA

Brand name	PHILIPS
Model number	9290011404
Input voltage	220-240V
Lamp type (Indirect)	Indirect
Country of origin	CHINA
Lamp technology (Incandescent/Halogen/CFLi/LED)	LED
Cap type	E14
Nominal power (in watt)	6W
Nominal luminous flux (in lumens)	580Lm
Nominal efficacy (in lumens per watt)	96.6lm/W
Nominal life time (in hours)	25000h
Number of switching cycles before up to B50 lifetime	15000 x
Color temperature	2700K
Lamp mercury content as X.Xmg (applicable only to lamps that contains mercury)	RoHS
Indication on which website to consult in case of accidental lamp breakage	www.signify.com

Photo no.2 (General view / External package)



[Signature]

F 07-08-02 A

Page 13 of 33

Issued By: QGM - Approved By: GM

SAITCO, First Industrial City area, Riyadh Station area beside dry customs St.4,5,6,7 Building No.2433 , Riyadh 11427,

PO 27711 , Tel: +966 11 2043000,Fax +966 11 2042888, www.saitco.com.sa

الشركة السعودية للفحص والاختبار - الرياض - المدينة الصناعية الأولى ، منطقة محطة القطر بجوار جمر ك الرياض الجاف ش4,5,6,7

[Signature]

Product Remark

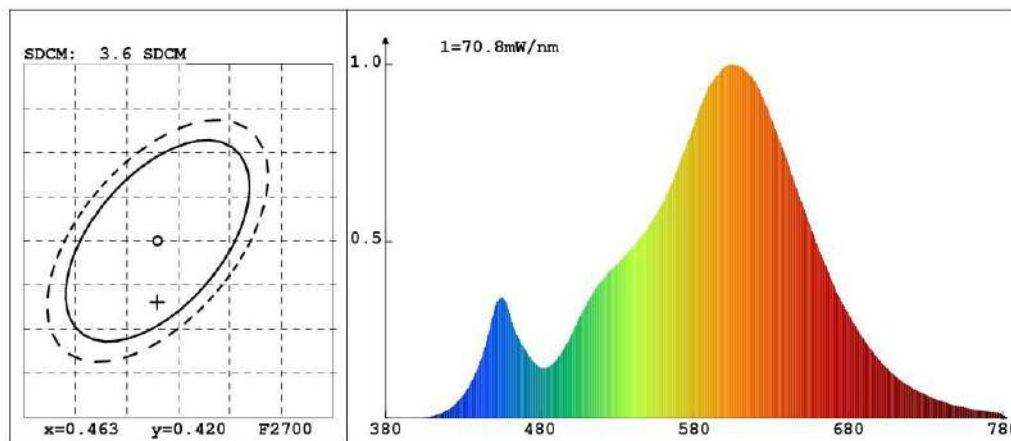
Type: LED lamp	NO.: 230107	Manufacturer: PHILIPS
TempIn: 23.5C	TempOut: 23.8C	Humidity: %
Operator: NOURA	Time: 09:01:16	Date: 2023-2-12

CIE Color Parameter

Chromaticity Coordinate: $x=0.4630$ $y=0.4131$ $u=0.2634$ $v=0.3525$ $duv=0.0006$
 CCT: $T_c=2676K$ DominantW.: 585.1nm Purity: 63.0%
 Peak Wave: 605nm Half Wave: 115.3nm Ratio: R=27.0% G=71.6% B=1.4%

RIndex: Ra= 80.8

R1 =79	R2 =90	R3 =96	R4 =78	R5 =79	R6 =89	R7 =81	R8 =55
R9 =1	R10=78	R11=77	R12=71	R13=82	R14=99	R15=71	

**Rated Parameter**

Voltage: 230.0 V	Power: 6.0 W	Flux: 470.0 lm	EEI: 0.00
EEI Level: C	Standard: SASO 2870	Country of Origin: CHINA	

Photo Parameter

Flux: 603.5 lm	Efficacy: 95.3lm/W	Lumi.Pow: 1.963W
Scotopic Flux: 711.85 Plm	Efficacy: 112.46Plm/W	S/P: 1.1795
EEI: 0.12	EEI Level: B	

Electrical Parameter

Voltage: 230.0V	Current: 0.033A	Power: 6.33W	PF: 0.830
-----------------	-----------------	--------------	-----------

Instrument Status

Instrument: HopooHSP6000	Lamp: A2856K/821.7lm	Scan Range: 380nm-780nm
TestModel: Exact	Interval: 5nm	PMT Temp: 25.2C
Main: 7	Id: 68	Ip: 54358
Reference: 3	REF: 26550	Undulation: -0.595%

Saudi Inspection and Testing Company (SAITCO)




Product Remark

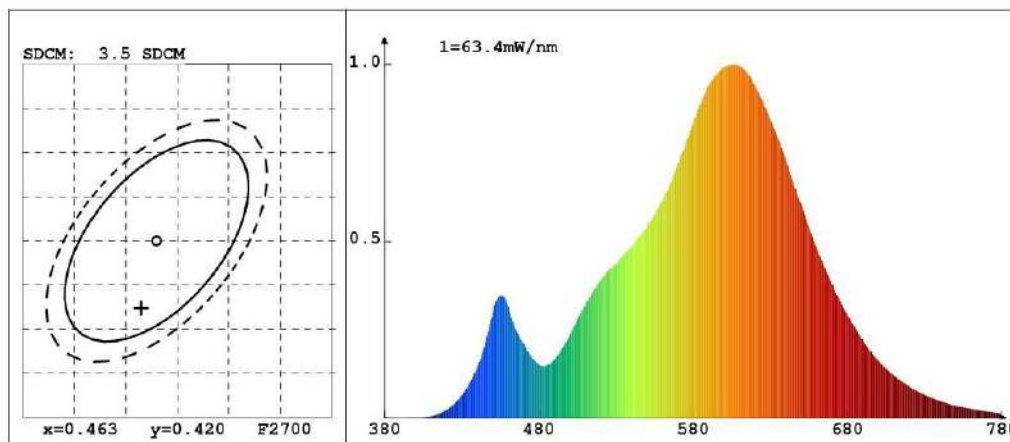
Type: LED lamp	NO.: 230107	Manufacturer: PHILIPS
TempIn: 23.7C	TempOut: 24.0C	Humidity: %
Operator: NOURA	Time: 09:28:23	Date: 2022-2-12

CIE Color Parameter

Chromaticity Coordinate: $x=0.4615$ $y=0.4124$ $u=0.2628$ $v=0.3522$ $duv=0.0005$
 CCT: $T_c=2691K$ DominantW.: 585.1nm Purity: 62.3%
 Peak Wave: 606nm Half Wave: 115.2nm Ratio: R=26.8% G=71.7% B=1.5%

RIndex: Ra= 80.8

R1 =79	R2 =90	R3 =96	R4 =78	R5 =79	R6 =89	R7 =81	R8 =55
R9 =1	R10=78	R11=77	R12=71	R13=82	R14=99	R15=71	

**Rated Parameter**

Voltage: 230.0 V	Power: 6.0 W	Flux: 470.0 lm	EEI: 0.00
EEI Level: C	Standard: SASO 2870	Country of Origin: CHINA	

Photo Parameter

Flux: 560.7 lm	Efficacy: 95.2lm/W	Lumi.Pow: 1.762W
Scotopic Flux: 666.67 Plm	Efficacy: 113.19Plm/W	S/P: 1.1891
EEI: 0.12	EEI Level: B	

Electrical Parameter

Voltage: 230.1V	Current: 0.031A	Power: 5.89W	PF: 0.800
-----------------	-----------------	--------------	-----------

Instrument Status

Instrument: HopooHSP6000	Lamp: A2856K/821.7lm	Scan Range: 380nm-780nm
TestModel: Exact	Interval: 5nm	PMT Temp: 27.2C
Main: 7	Id: 74	Ip: 48948
Reference: 3	REF: 24552	Undulation: 0.057%

Saudi Inspection and Testing Company (SAITCO)

Product Remark

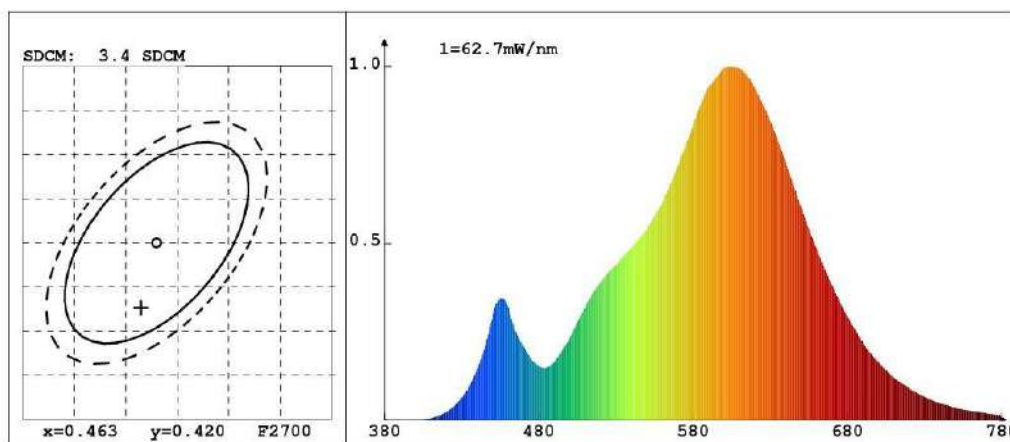
Type: LED lamp	NO.: 230107	Manufacturer: PHILIPS
TempIn: 23.8C	TempOut: 24.2C	Humidity: %
Operator: NOURA	Time: 09:39:30	Date: 2022-2-12

CIE Color Parameter

Chromaticity Coordinate: $x=0.4615$ $y=0.4126$ $u=0.2626$ $v=0.3522$ $duv=0.0006$
 CCT: $T_c=2693K$ DominantW.: 585.0nm Purity: 62.4%
 Peak Wave: 605nm Half Wave: 115.6nm Ratio: R=26.8% G=71.7% B=1.5%

RIndex: Ra= 80.8

R1 =79	R2 =90	R3 =96	R4 =78	R5 =79	R6 =89	R7 =81	R8 =55
R9 =1	R10=78	R11=77	R12=71	R13=82	R14=99	R15=71	

**Rated Parameter**

Voltage: 230.0 V	Power: 6.0 W	Flux: 470.0 lm	EEI: 0.00
EEI Level: C	Standard: SASO 2870	Country of Origin: CHINA	

Photo Parameter

Flux: 560.3 lm	Efficacy: 95.1lm/W	Lumi.Pow: 1.742W
Scotopic Flux: 665.94 Plm	Efficacy: 113.06Plm/W	S/P: 1.1886
EEI: 0.12	EEI Level: B	

Electrical Parameter

Voltage: 230.2V	Current: 0.031A	Power: 5.89W	PF: 0.800
-----------------	-----------------	--------------	-----------

Instrument Status

Instrument: HopooHSP6000	Lamp: A2856K/821.7lm	Scan Range: 380nm-780nm
TestModel: Exact	Interval: 5nm	PMT Temp: 27.7C
Main: 7	Id: 75	Ip: 48375
Reference: 3	REF: 24533	Undulation: 0.049%

Saudi Inspection and Testing Company (SAITCO)

Product Remark

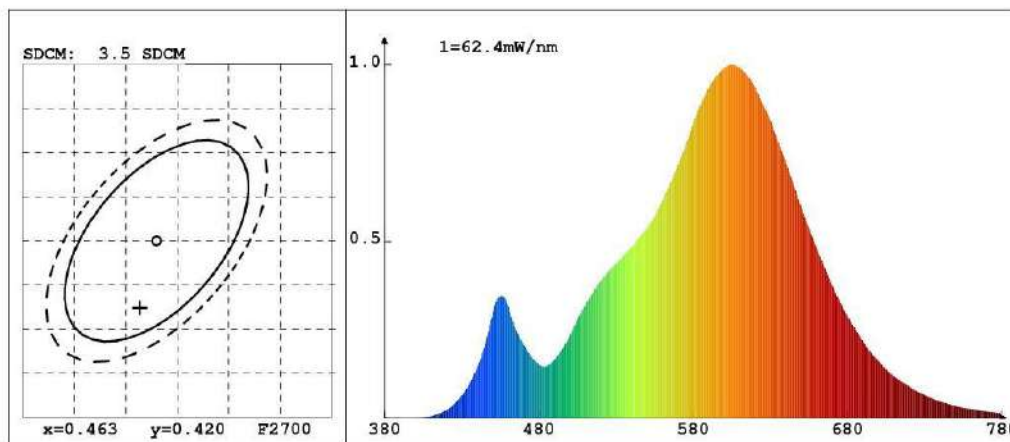
Type: LED lamp	NO.: 230107	Manufacturer: PHILIPS
TempIn: 23.9C	TempOut: 24.3C	Humidity: %
Operator: NOURA	Time: 09:50:34	Date: 2022-2-12

CIE Color Parameter

Chromaticity Coordinate: $x=0.4614$ $y=0.4124$ $u=0.2627$ $v=0.3522$ $duv=0.0005$
 CCT: $T_c=2693K$ DominantW.: 585.1nm Purity: 62.3%
 Peak Wave: 605nm Half Wave: 114.7nm Ratio: R=26.8% G=71.7% B=1.5%

RIndex: Ra= 80.8

R1 =79	R2 =90	R3 =96	R4 =78	R5 =79	R6 =89	R7 =81	R8 =54
R9 =1	R10=78	R11=77	R12=71	R13=82	R14=99	R15=71	

**Rated Parameter**

Voltage: 230.0 V	Power: 6.0 W	Flux: 470.0 lm	EEI: 0.00
EEI Level: C	Standard: SASO 2870	Country of Origin: CHINA	

Photo Parameter

Flux: 560.1 lm	Efficacy: 95.3lm/W	Lumi.Pow: 1.724W
Scotopic Flux: 666.15 Plm	Efficacy: 113.29Plm/W	S/P: 1.1894
EEI: 0.12	EEI Level: B	

Electrical Parameter

Voltage: 230.1V	Current: 0.031A	Power: 5.88W	PF: 0.800
-----------------	-----------------	--------------	-----------

Instrument Status

Instrument: HopooHSP6000	Lamp: A2856K/821.7lm	Scan Range: 380nm-780nm
TestModel: Exact	Interval: 5nm	PMT Temp: 28.1C
Main: 7	Id: 76	Ip: 48143
Reference: 3	REF: 24526	Undulation: 0.041%

Saudi Inspection and Testing Company (SAITCO)

Product Remark

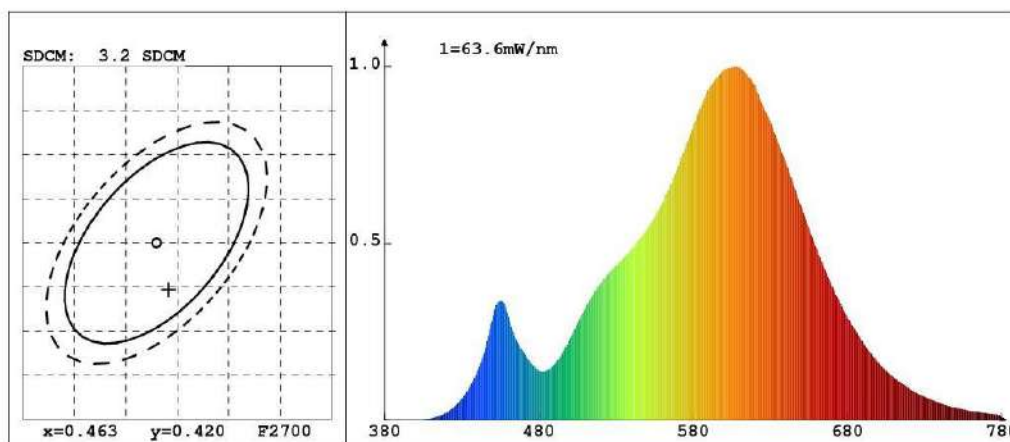
Type: LED lamp	NO.: 230107	Manufacturer: PHILIPS
TempIn: 24.0C	TempOut: 24.3C	Humidity: %
Operator: NOURA	Time: 10:10:34	Date: 2022-2-12

CIE Color Parameter

Chromaticity Coordinate: $x=0.4642$ $y=0.4147$ $u=0.2634$ $v=0.3530$ $duv=0.0011$
 CCT: $T_c=2672K$ DominantW.: 585.0nm Purity: 63.8%
 Peak Wave: 608nm Half Wave: 115.1nm Ratio: R=26.9% G=71.7% B=1.4%

RIndex: Ra= 80.6

R1 =79	R2 =90	R3 =96	R4 =78	R5 =78	R6 =88	R7 =81	R8 =54
R9 =0	R10=77	R11=77	R12=69	R13=81	R14=99	R15=70	

**Rated Parameter**

Voltage: 230.0 V	Power: 6.0 W	Flux: 470.0 lm	EEI: 0.00
EEI Level: C	Standard: SASO 2870	Country of Origin: CHINA	

Photo Parameter

Flux: 578.3 lm	Efficacy: 94.3lm/W	Lumi.Pow: 1.755W
Scotopic Flux: 677.07 Plm	Efficacy: 110.45Plm/W	S/P: 1.1707
EEI: 0.12	EEI Level: B	

Electrical Parameter

Voltage: 230.2V	Current: 0.032A	Power: 6.13W	PF: 0.810
-----------------	-----------------	--------------	-----------

Instrument Status

Instrument: HopooHSP6000	Lamp: A2856K/821.7lm	Scan Range: 380nm-780nm
TestModel: Exact	Interval: 5nm	PMT Temp: 28.7C
Main: 7	Id: 72	Ip: 48766
Reference: 3	REF: 25467	Undulation: -0.723%

Saudi Inspection and Testing Company (SAITCO)

Product Remark

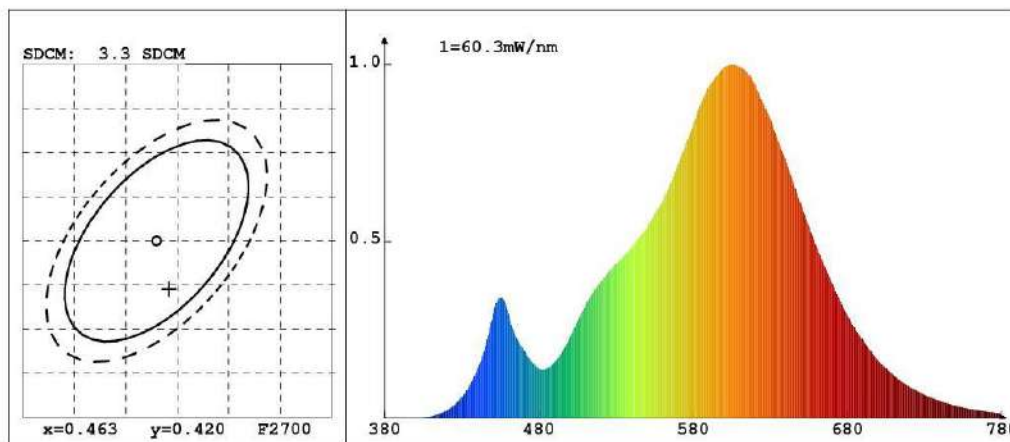
Type: LED lamp	NO.: 230107	Manufacturer: PHILIPS
TempIn: 24.0C	TempOut: 24.3C	Humidity: %
Operator: NOURA	Time: 10:18:00	Date: 2022-2-12

CIE Color Parameter

Chromaticity Coordinate: $x=0.4642$ $y=0.4145$ $u=0.2635$ $v=0.3530$ $duv=0.0011$
 CCT: $T_c=2671K$ DominantW.: 585.0nm Purity: 63.8%
 Peak Wave: 606nm Half Wave: 115.1nm Ratio: R=27.0% G=71.7% B=1.4%

RIndex: Ra= 80.6

R1 =79	R2 =90	R3 =96	R4 =78	R5 =78	R6 =88	R7 =81	R8 =54
R9 =0	R10=77	R11=76	R12=69	R13=81	R14=99	R15=70	

**Rated Parameter**

Voltage: 230.0 V	Power: 6.0 W	Flux: 470.0 lm	EEI: 0.00
EEI Level: C	Standard: SASO 2870	Country of Origin: CHINA	

Photo Parameter

Flux: 554.6 lm	Efficacy: 95.5lm/W	Lumi.Pow: 1.664W
Scotopic Flux: 649.26 Plm	Efficacy: 111.75Plm/W	S/P: 1.1707
EEI: 0.12	EEI Level: B	

Electrical Parameter

Voltage: 230.2V	Current: 0.031A	Power: 5.81W	PF: 0.790
-----------------	-----------------	--------------	-----------

Instrument Status

Instrument: HopooHSP6000	Lamp: A2856K/821.7lm	Scan Range: 380nm-780nm
TestModel: Exact	Interval: 5nm	PMT Temp: 28.9C
Main: 7	Id: 77	Ip: 46555
Reference: 3	REF: 24305	Undulation: -0.128%

Saudi Inspection and Testing Company (SAITCO)

Product Remark

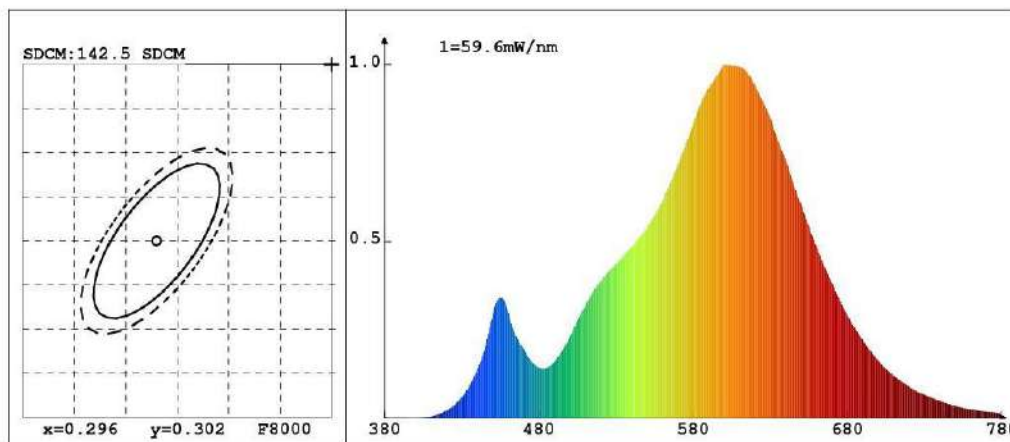
Type: LED lamp	NO.: 230107	Manufacturer: PHILIPS
TempIn: 24.1C	TempOut: 24.3C	Humidity: %
Operator: NOURA	Time: 10:25:04	Date: 2022-2-12

CIE Color Parameter

Chromaticity Coordinate: $x=0.4639$ $y=0.4144$ $u=0.2634$ $v=0.3529$ $duv=0.0011$
 CCT: $T_c=2674K$ DominantW.: 585.0nm Purity: 63.7%
 Peak Wave: 600nm Half Wave: 115.0nm Ratio: R=27.0% G=71.6% B=1.4%

RIndex: Ra= 80.7

R1 =79	R2 =90	R3 =96	R4 =78	R5 =79	R6 =88	R7 =81	R8 =54
R9 =0	R10=77	R11=77	R12=70	R13=81	R14=99	R15=71	

**Rated Parameter**

Voltage: 230.0 V	Power: 6.0 W	Flux: 470.0 lm	EEI: 0.00
EEI Level: C	Standard: SASO 2870	Country of Origin: CHINA	

Photo Parameter

Flux: 551.2 lm	Efficacy: 95.5lm/W	Lumi.Pow: 1.645W
Scotopic Flux: 646.95 Plm	Efficacy: 112.12Plm/W	S/P: 1.1737
EEI: 0.12	EEI Level: B	

Electrical Parameter

Voltage: 230.2V	Current: 0.031A	Power: 5.77W	PF: 0.790
-----------------	-----------------	--------------	-----------

Instrument Status

Instrument: HopooHSP6000	Lamp: A2856K/821.7lm	Scan Range: 380nm-780nm
TestModel: Exact	Interval: 5nm	PMT Temp: 29.0C
Main: 7	Id: 77	Ip: 45955
Reference: 3	REF: 24134	Undulation: 0.075%

Saudi Inspection and Testing Company (SAITCO)

Product Remark

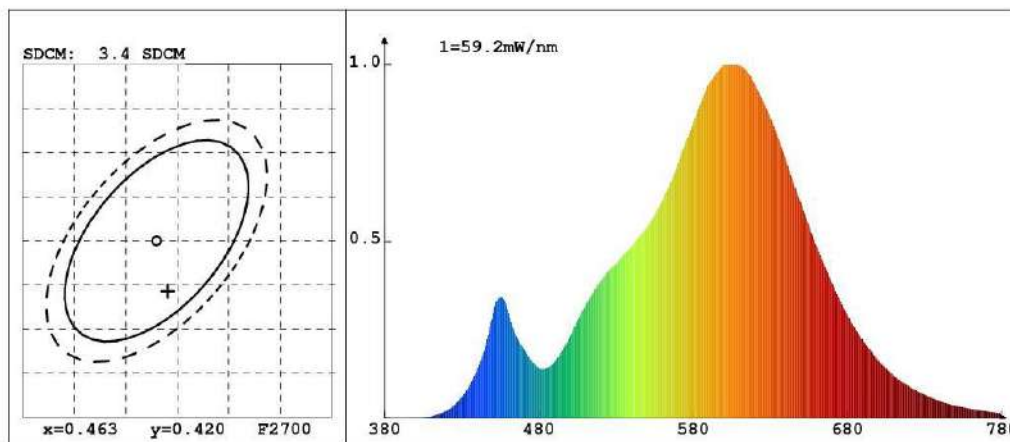
Type: LED lamp	NO.: 230107	Manufacturer: PHILIPS
TempIn: 24.1C	TempOut: 24.4C	Humidity: %
Operator: NOURA	Time: 10:31:32	Date: 2022-2-12

CIE Color Parameter

Chromaticity Coordinate: $x=0.4641$ $y=0.4143$ $u=0.2635$ $v=0.3529$ $duv=0.0010$
 CCT: $T_c=2671K$ DominantW.: 585.0nm Purity: 63.7%
 Peak Wave: 604nm Half Wave: 115.4nm Ratio: R=26.9% G=71.7% B=1.4%

RIndex: Ra= 80.5

R1 =79	R2 =90	R3 =96	R4 =78	R5 =78	R6 =88	R7 =81	R8 =54
R9 =0	R10=77	R11=76	R12=70	R13=81	R14=99	R15=70	

**Rated Parameter**

Voltage: 230.0 V	Power: 6.0 W	Flux: 470.0 lm	EEI: 0.00
EEI Level: C	Standard: SASO 2870	Country of Origin: CHINA	

Photo Parameter

Flux: 550.9 lm	Efficacy: 95.8lm/W	Lumi.Pow: 1.639W
Scotopic Flux: 645.39 Plm	Efficacy: 112.24Plm/W	S/P: 1.1716
EEI: 0.12	EEI Level: B	

Electrical Parameter

Voltage: 230.2V	Current: 0.031A	Power: 5.75W	PF: 0.790
-----------------	-----------------	--------------	-----------

Instrument Status

Instrument: HopooHSP6000	Lamp: A2856K/821.7lm	Scan Range: 380nm-780nm
TestModel: Exact	Interval: 5nm	PMT Temp: 29.2C
Main: 7	Id: 75	Ip: 45692
Reference: 3	REF: 24126	Undulation: -0.033%

Saudi Inspection and Testing Company (SAITCO)

Product Remark

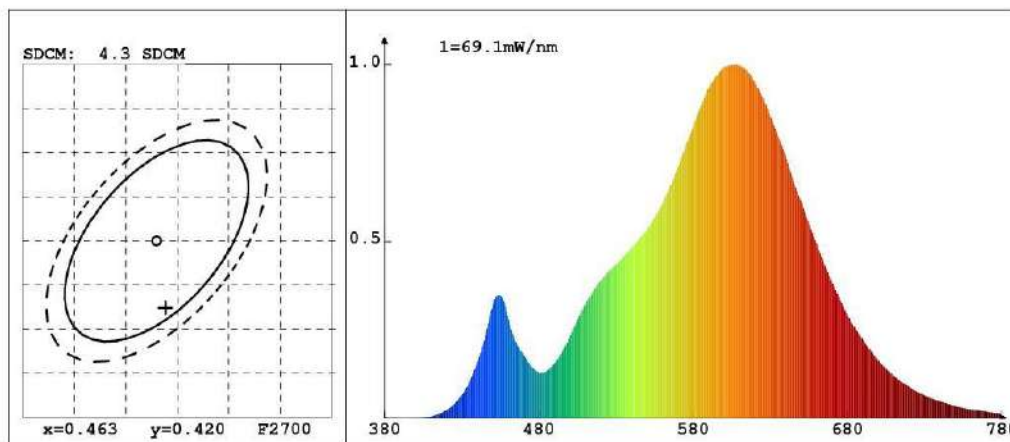
Type: LED lamp	NO.: 230107	Manufacturer: PHILIPS
TempIn: 24.1C	TempOut: 24.4C	Humidity: %
Operator: NOURA	Time: 10:38:41	Date: 2022-2-12

CIE Color Parameter

Chromaticity Coordinate: $x=0.4639$ $y=0.4124$ $u=0.2643$ $v=0.3524$ $duv=0.0003$
 CCT: $T_c=2659K$ DominantW.: 585.3nm Purity: 63.0%
 Peak Wave: 607nm Half Wave: 115.2nm Ratio: R=27.2% G=71.5% B=1.4%

RIndex: Ra= 81.1

R1 =79	R2 =90	R3 =96	R4 =79	R5 =79	R6 =89	R7 =81	R8 =55
R9 =2	R10=78	R11=78	R12=71	R13=82	R14=99	R15=71	

**Rated Parameter**

Voltage: 230.0 V	Power: 6.0 W	Flux: 470.0 lm	EEI: 0.00
EEI Level: C	Standard: SASO 2870	Country of Origin: CHINA	

Photo Parameter

Flux: 635.7 lm	Efficacy: 95.3lm/W	Lumi.Pow: 1.911W
Scotopic Flux: 743.94 Plm	Efficacy: 111.54Plm/W	S/P: 1.1702
EEI: 0.13	EEI Level: B	

Electrical Parameter

Voltage: 230.2V	Current: 0.034A	Power: 6.67W	PF: 0.830
-----------------	-----------------	--------------	-----------

Instrument Status

Instrument: HopooHSP6000	Lamp: A2856K/821.7lm	Scan Range: 380nm-780nm
TestModel: Exact	Interval: 5nm	PMT Temp: 29.3C
Main: 7	Id: 79	Ip: 53117
Reference: 3	REF: 27940	Undulation: -0.705%

Saudi Inspection and Testing Company (SAITCO)




Product Remark

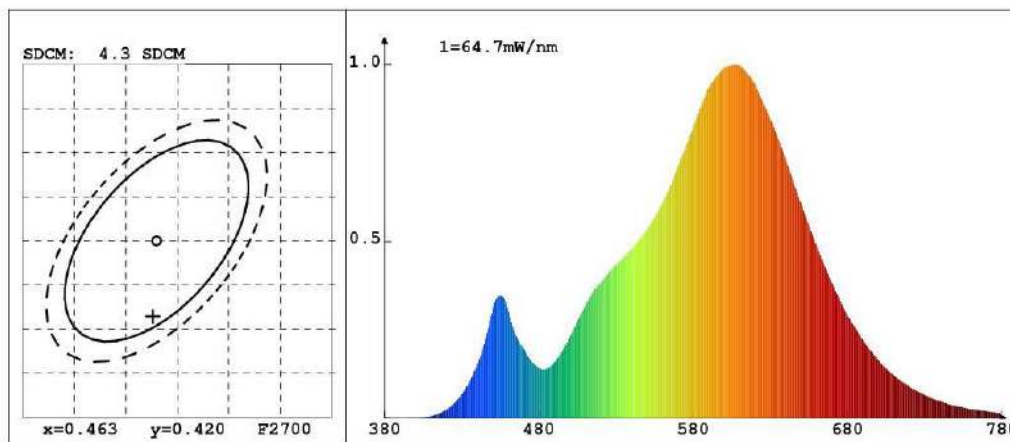
Type: LED lamp	NO.: 230107	Manufacturer: PHILIPS
TempIn: 24.1C	TempOut: 24.5C	Humidity: %
Operator: NOURA	Time: 10:44:41	Date: 2022-2-12

CIE Color Parameter

Chromaticity Coordinate: $x=0.4626$ $y=0.4114$ $u=0.2639$ $v=0.3521$ $duv=0.0001$
 CCT: $T_c=2668K$ DominantW.: 585.3nm Purity: 62.4%
 Peak Wave: 607nm Half Wave: 114.1nm Ratio: R=27.1% G=71.5% B=1.4%

RIndex: Ra= 80.9

R1 =79	R2 =90	R3 =96	R4 =78	R5 =79	R6 =89	R7 =81	R8 =55
R9 =2	R10=78	R11=77	R12=71	R13=82	R14=99	R15=71	

**Rated Parameter**

Voltage: 230.0 V	Power: 6.0 W	Flux: 470.0 lm	EEI: 0.00
EEI Level: C	Standard: SASO 2870	Country of Origin: CHINA	

Photo Parameter

Flux: 598.2 lm	Efficacy: 93.0lm/W	Lumi.Pow: 1.791W
Scotopic Flux: 705.23 Plm	Efficacy: 109.68Plm/W	S/P: 1.1790
EEI: 0.13	EEI Level: B	

Electrical Parameter

Voltage: 230.3V	Current: 0.033A	Power: 6.43W	PF: 0.830
-----------------	-----------------	--------------	-----------

Instrument Status

Instrument: HopooHSP6000	Lamp: A2856K/821.7lm	Scan Range: 380nm-780nm
TestModel: Exact	Interval: 5nm	PMT Temp: 29.5C
Main: 7	Id: 77	Ip: 49876
Reference: 3	REF: 26231	Undulation: -0.286%

Saudi Inspection and Testing Company (SAITCO)

Product Remark

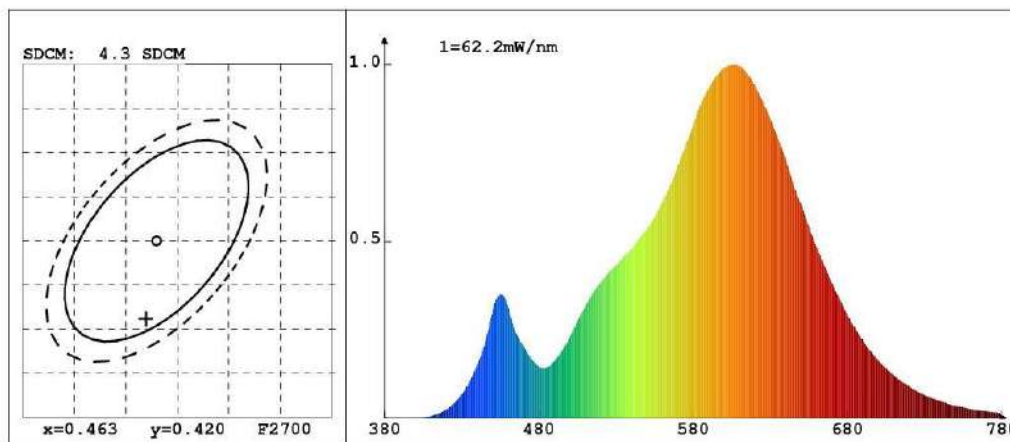
Type: LED lamp	NO.: 230107	Manufacturer: PHILIPS
TempIn: 24.1C	TempOut: 24.4C	Humidity: %
Operator: NOURA	Time: 10:50:47	Date: 2022-2-12

CIE Color Parameter

Chromaticity Coordinate: $x=0.4620$ $y=0.4112$ $u=0.2636$ $v=0.3519$ $duv=0.0000$
 CCT: $T_c=2675K$ DominantW.: 585.3nm Purity: 62.1%
 Peak Wave: 606nm Half Wave: 114.5nm Ratio: R=27.0% G=71.5% B=1.5%

RIndex: Ra= 80.8

R1 =79	R2 =91	R3 =96	R4 =78	R5 =79	R6 =89	R7 =81	R8 =55
R9 =1	R10=78	R11=77	R12=71	R13=82	R14=99	R15=71	

**Rated Parameter**

Voltage: 230.0 V	Power: 6.0 W	Flux: 470.0 lm	EEI: 0.00
EEI Level: C	Standard: SASO 2870	Country of Origin: CHINA	

Photo Parameter

Flux: 576.5 lm	Efficacy: 91.7lm/W	Lumi.Pow: 1.723W
Scotopic Flux: 681.93 Plm	Efficacy: 108.41Plm/W	S/P: 1.1828
EEI: 0.13	EEI Level: B	

Electrical Parameter

Voltage: 230.3V	Current: 0.033A	Power: 6.29W	PF: 0.820
-----------------	-----------------	--------------	-----------

Instrument Status

Instrument: HopooHSP6000	Lamp: A2856K/821.7lm	Scan Range: 380nm-780nm
TestModel: Exact	Interval: 5nm	PMT Temp: 29.6C
Main: 7	Id: 76	Ip: 47909
Reference: 3	REF: 25306	Undulation: -0.415%

Saudi Inspection and Testing Company (SAITCO)

Product Remark

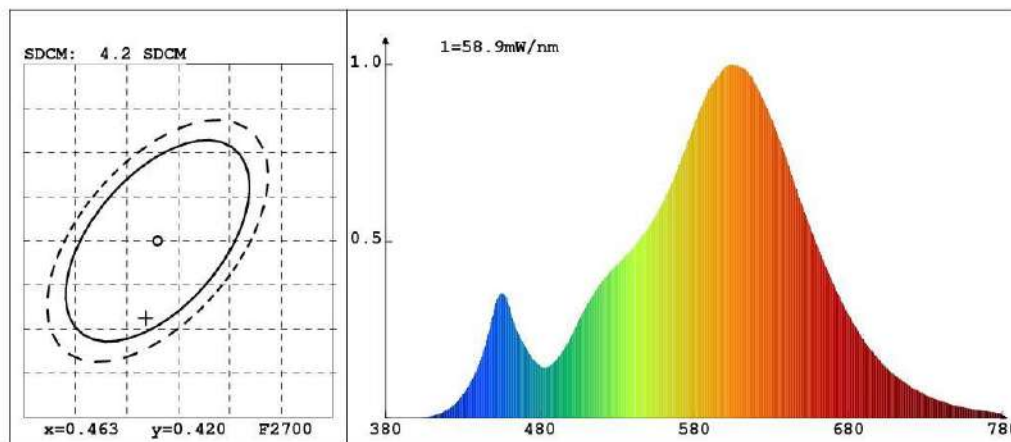
Type: LED lamp	NO.: 230107	Manufacturer: PHILIPS
TempIn: 24.2C	TempOut: 24.4C	Humidity: %
Operator: NOURA	Time: 10:57:04	Date: 2022-2-12

CIE Color Parameter

Chromaticity Coordinate: $x=0.4618$ $y=0.4112$ $u=0.2635$ $v=0.3519$ $duv=0.0001$
 CCT: $T_c=2678K$ DominantW.: 585.3nm Purity: 62.1%
 Peak Wave: 605nm Half Wave: 114.8nm Ratio: R=27.0% G=71.5% B=1.5%

RIndex: Ra= 80.8

R1 =79	R2 =91	R3 =96	R4 =78	R5 =79	R6 =89	R7 =81	R8 =55
R9 =2	R10=78	R11=77	R12=71	R13=82	R14=99	R15=71	

**Rated Parameter**

Voltage: 230.0 V	Power: 6.0 W	Flux: 470.0 lm	EEI: 0.00
EEI Level: C	Standard: SASO 2870	Country of Origin: CHINA	

Photo Parameter

Flux: 548.6 lm	Efficacy: 92.7lm/W	Lumi.Pow: 1.631W
Scotopic Flux: 649.70 Plm	Efficacy: 109.75Plm/W	S/P: 1.1843
EEI: 0.12	EEI Level: B	

Electrical Parameter

Voltage: 230.2V	Current: 0.032A	Power: 5.92W	PF: 0.800
-----------------	-----------------	--------------	-----------

Instrument Status

Instrument: HopooHSP6000	Lamp: A2856K/821.7lm	Scan Range: 380nm-780nm
TestModel: Exact	Interval: 5nm	PMT Temp: 29.8C
Main: 7	Id: 78	Ip: 45402
Reference: 3	REF: 24043	Undulation: -0.179%

Saudi Inspection and Testing Company (SAITCO)

Product Remark

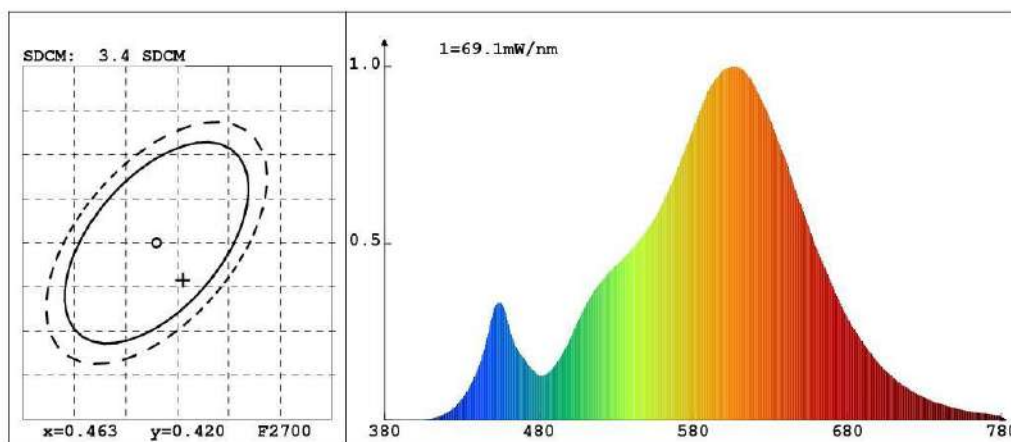
Type: LED lamp	NO.: 230107	Manufacturer: PHILIPS
TempIn: 24.2C	TempOut: 24.4C	Humidity: %
Operator: NOURA	Time: 11:04:10	Date: 2022-2-12

CIE Color Parameter

Chromaticity Coordinate: $x=0.4655$ $y=0.4158$ $u=0.2638$ $v=0.3534$ $duv=0.0014$
 CCT: $T_c=2662K$ DominantW.: 585.0nm Purity: 64.5%
 Peak Wave: 607nm Half Wave: 114.9nm Ratio: R=27.0% G=71.6% B=1.3%

RIndex: Ra= 80.8

R1 =79	R2 =90	R3 =97	R4 =78	R5 =79	R6 =88	R7 =81	R8 =55
R9 =1	R10=77	R11=77	R12=69	R13=81	R14=99	R15=71	

**Rated Parameter**

Voltage: 230.0 V	Power: 6.0 W	Flux: 470.0 lm	EEI: 0.00
EEI Level: C	Standard: SASO 2870	Country of Origin: CHINA	

Photo Parameter

Flux: 646.6 lm	Efficacy: 97.7lm/W	Lumi.Pow: 1.899W
Scotopic Flux: 751.38 Plm	Efficacy: 113.50Plm/W	S/P: 1.1621
EEI: 0.12	EEI Level: B	

Electrical Parameter

Voltage: 230.3V	Current: 0.034A	Power: 6.62W	PF: 0.830
-----------------	-----------------	--------------	-----------

Instrument Status

Instrument: HopooHSP6000	Lamp: A2856K/821.7lm	Scan Range: 380nm-780nm
TestModel: Exact	Interval: 5nm	PMT Temp: 29.8C
Main: 7	Id: 78	Ip: 53065
Reference: 3	REF: 28425	Undulation: -0.735%

Saudi Inspection and Testing Company (SAITCO)

Product Remark

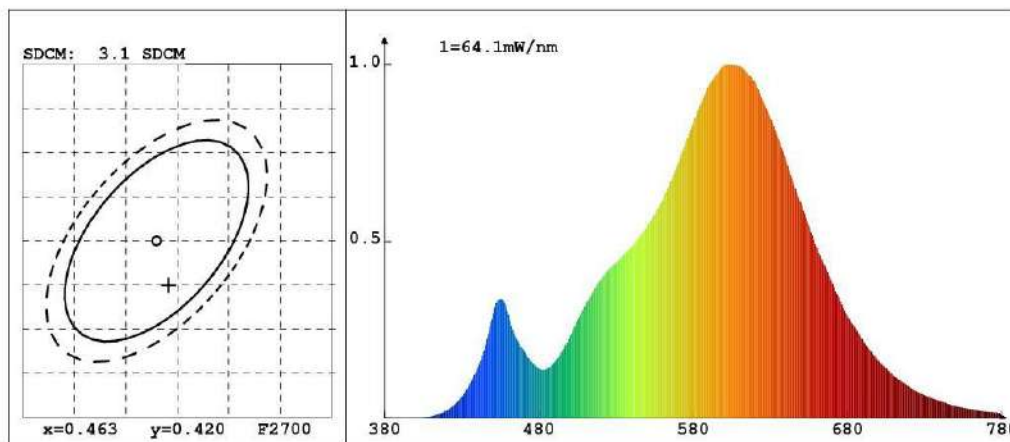
Type: LED lamp	NO.: 230107	Manufacturer: PHILIPS
TempIn: 24.2C	TempOut: 24.4C	Humidity: %
Operator: NOURA	Time: 11:10:29	Date: 2022-2-12

CIE Color Parameter

Chromaticity Coordinate: $x=0.4642$ $y=0.4150$ $u=0.2633$ $v=0.3531$ $duv=0.0012$
 CCT: $T_c=2674K$ DominantW.: 585.0nm Purity: 63.9%
 Peak Wave: 604nm Half Wave: 115.1nm Ratio: R=26.9% G=71.7% B=1.4%

RIndex: Ra= 80.6

R1 =79	R2 =90	R3 =96	R4 =78	R5 =78	R6 =88	R7 =81	R8 =54
R9 =0	R10=77	R11=77	R12=69	R13=81	R14=99	R15=70	

**Rated Parameter**

Voltage: 230.0 V	Power: 6.0 W	Flux: 470.0 lm	EEI: 0.00
EEI Level: C	Standard: SASO 2870	Country of Origin: CHINA	

Photo Parameter

Flux: 607.0 lm	Efficacy: 96.0lm/W	Lumi.Pow: 1.774W
Scotopic Flux: 710.82 Plm	Efficacy: 112.47Plm/W	S/P: 1.1711
EEI: 0.12	EEI Level: B	

Electrical Parameter

Voltage: 230.2V	Current: 0.033A	Power: 6.32W	PF: 0.820
-----------------	-----------------	--------------	-----------

Instrument Status

Instrument: HopooHSP6000	Lamp: A2856K/821.7lm	Scan Range: 380nm-780nm
TestModel: Exact	Interval: 5nm	PMT Temp: 29.9C
Main: 7	Id: 78	Ip: 49381
Reference: 3	REF: 26614	Undulation: -0.278%

Saudi Inspection and Testing Company (SAITCO)

Product Remark

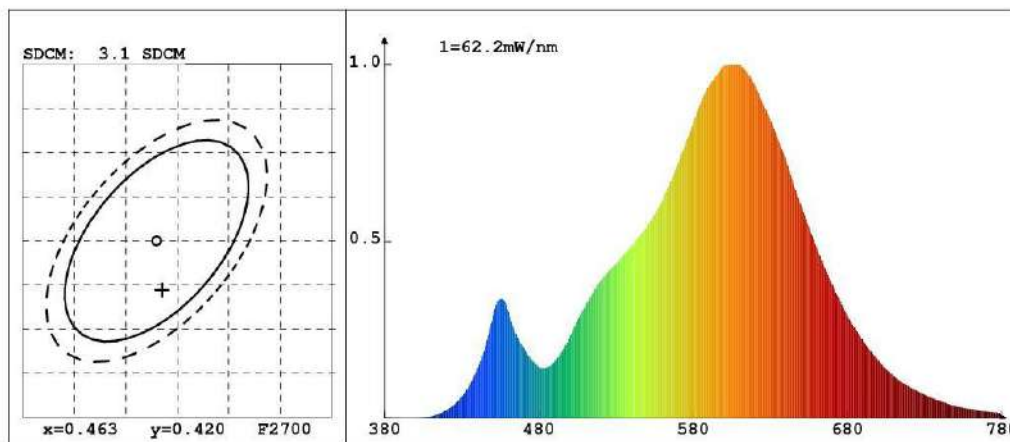
Type: LED lamp	NO.: 230107	Manufacturer: PHILIPS
TempIn: 24.2C	TempOut: 24.5C	Humidity: %
Operator: NOURA	Time: 11:17:13	Date: 2022-2-12

CIE Color Parameter

Chromaticity Coordinate: $x=0.4635$ $y=0.4144$ $u=0.2632$ $v=0.3529$ $duv=0.0011$
 CCT: $T_c=2679K$ DominantW.: 585.0nm Purity: 63.5%
 Peak Wave: 610nm Half Wave: 115.5nm Ratio: R=26.9% G=71.7% B=1.4%

RIndex: Ra= 80.5

R1 =79	R2 =90	R3 =96	R4 =78	R5 =78	R6 =88	R7 =81	R8 =54
R9 =0	R10=77	R11=76	R12=69	R13=81	R14=99	R15=70	

**Rated Parameter**

Voltage: 230.0 V	Power: 6.0 W	Flux: 470.0 lm	EEI: 0.00
EEI Level: C	Standard: SASO 2870	Country of Origin: CHINA	

Photo Parameter

Flux: 589.9 lm	Efficacy: 95.2lm/W	Lumi.Pow: 1.720W
Scotopic Flux: 692.92 Plm	Efficacy: 111.76Plm/W	S/P: 1.1746
EEI: 0.12	EEI Level: B	

Electrical Parameter

Voltage: 230.2V	Current: 0.032A	Power: 6.20W	PF: 0.820
-----------------	-----------------	--------------	-----------

Instrument Status

Instrument: HopooHSP6000	Lamp: A2856K/821.7lm	Scan Range: 380nm-780nm
TestModel: Exact	Interval: 5nm	PMT Temp: 30.0C
Main: 7	Id: 78	Ip: 47935
Reference: 3	REF: 25853	Undulation: -0.174%

Saudi Inspection and Testing Company (SAITCO)

Product Remark

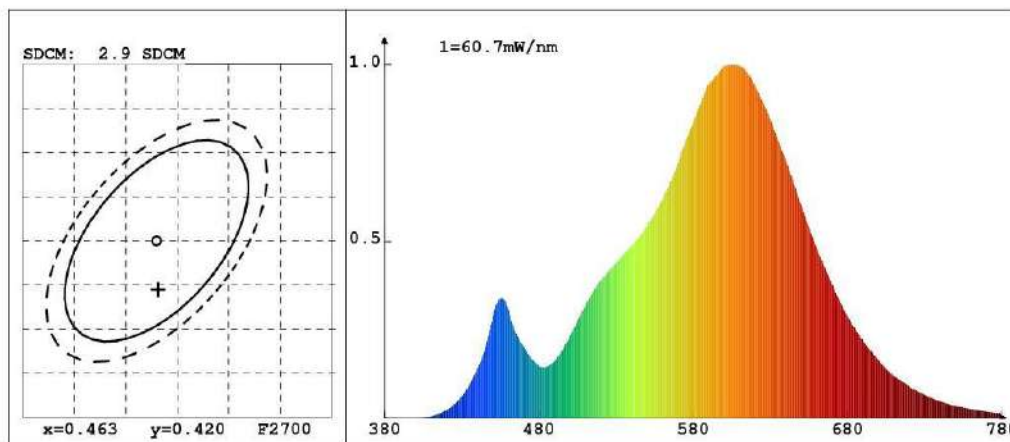
Type: LED lamp	NO.: 230107	Manufacturer: PHILIPS
TempIn: 24.3C	TempOut: 24.6C	Humidity: %
Operator: NOURA	Time: 11:25:04	Date: 2022-2-12

CIE Color Parameter

Chromaticity Coordinate: $x=0.4632$ $y=0.4145$ $u=0.2629$ $v=0.3529$ $duv=0.0011$
 CCT: $T_c=2684K$ DominantW.: 585.0nm Purity: 63.5%
 Peak Wave: 606nm Half Wave: 115.2nm Ratio: R=26.8% G=71.8% B=1.4%

RIndex: Ra= 80.5

R1 =79	R2 =90	R3 =96	R4 =78	R5 =78	R6 =88	R7 =81	R8 =54
R9 =0	R10=77	R11=76	R12=69	R13=81	R14=99	R15=70	

**Rated Parameter**

Voltage: 230.0 V	Power: 6.0 W	Flux: 470.0 lm	EEI: 0.00
EEI Level: C	Standard: SASO 2870	Country of Origin: CHINA	

Photo Parameter

Flux: 578.6 lm	Efficacy: 94.8lm/W	Lumi.Pow: 1.681W
Scotopic Flux: 681.11 Plm	Efficacy: 111.66Plm/W	S/P: 1.1773
EEI: 0.12	EEI Level: B	

Electrical Parameter

Voltage: 230.2V	Current: 0.032A	Power: 6.10W	PF: 0.810
-----------------	-----------------	--------------	-----------

Instrument Status

Instrument: HopooHSP6000	Lamp: A2856K/821.7lm	Scan Range: 380nm-780nm
TestModel: Exact	Interval: 5nm	PMT Temp: 30.1C
Main: 7	Id: 81	Ip: 46854
Reference: 3	REF: 25338	Undulation: -0.111%

Saudi Inspection and Testing Company (SAITCO)

Product Remark

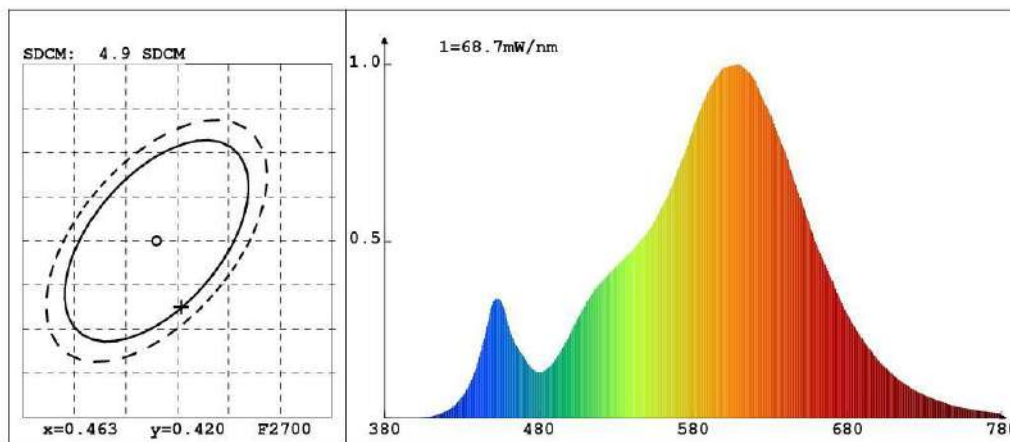
Type: LED lamp	NO.: 230107	Manufacturer: PHILIPS
TempIn: 24.3C	TempOut: 24.6C	Humidity: %
Operator: NOURA	Time: 11:32:08	Date: 2022-2-12

CIE Color Parameter

Chromaticity Coordinate: $x=0.4654$ $y=0.4125$ $u=0.2652$ $v=0.3526$ $duv=0.0003$
 CCT: $T_c=2639K$ DominantW.: 585.5nm Purity: 63.6%
 Peak Wave: 610nm Half Wave: 113.3nm Ratio: R=27.4% G=71.2% B=1.4%

RIndex: Ra= 81.5

R1 =80	R2 =91	R3 =96	R4 =79	R5 =80	R6 =90	R7 =81	R8 =55
R9 =3	R10=79	R11=79	R12=73	R13=82	R14=99	R15=72	

**Rated Parameter**

Voltage: 230.0 V	Power: 6.0 W	Flux: 470.0 lm	EEI: 0.00
EEI Level: C	Standard: SASO 2870	Country of Origin: CHINA	

Photo Parameter

Flux: 640.4 lm	Efficacy: 95.2lm/W	Lumi.Pow: 1.892W
Scotopic Flux: 748.65 Plm	Efficacy: 111.24Plm/W	S/P: 1.1691
EEI: 0.13	EEI Level: B	

Electrical Parameter

Voltage: 230.3V	Current: 0.035A	Power: 6.73W	PF: 0.830
-----------------	-----------------	--------------	-----------

Instrument Status

Instrument: HopooHSP6000	Lamp: A2856K/821.7lm	Scan Range: 380nm-780nm
TestModel: Exact	Interval: 5nm	PMT Temp: 30.2C
Main: 7	Id: 78	Ip: 52629
Reference: 3	REF: 28149	Undulation: -0.750%

Saudi Inspection and Testing Company (SAITCO)

Product Remark

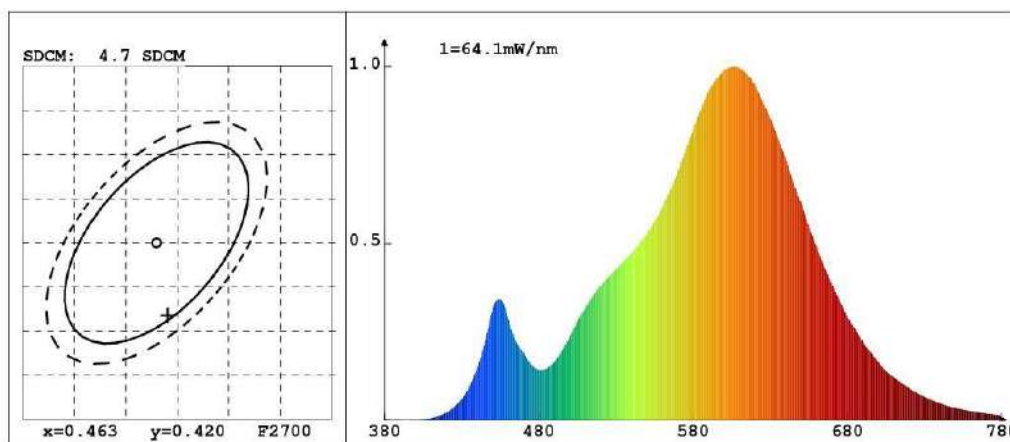
Type: LED lamp	NO.: 230107	Manufacturer: PHILIPS
TempIn: 24.3C	TempOut: 24.6C	Humidity: %
Operator: NOURA	Time: 11:38:13	Date: 2022-2-12

CIE Color Parameter

Chromaticity Coordinate: $x=0.4641$ $y=0.4118$ $u=0.2647$ $v=0.3523$ $duv=0.0001$
 CCT: $T_c=2651K$ DominantW.: 585.5nm Purity: 62.9%
 Peak Wave: 607nm Half Wave: 113.4nm Ratio: R=27.3% G=71.3% B=1.4%

RIndex: Ra= 81.2

R1 =80	R2 =91	R3 =96	R4 =79	R5 =80	R6 =90	R7 =81	R8 =55
R9 =3	R10=79	R11=78	R12=73	R13=82	R14=98	R15=71	

**Rated Parameter**

Voltage: 230.0 V	Power: 6.0 W	Flux: 470.0 lm	EEI: 0.00
EEI Level: C	Standard: SASO 2870	Country of Origin: CHINA	

Photo Parameter

Flux: 601.5 lm	Efficacy: 93.3lm/W	Lumi.Pow: 1.769W
Scotopic Flux: 707.94 Plm	Efficacy: 109.76Plm/W	S/P: 1.1769
EEI: 0.13	EEI Level: B	

Electrical Parameter

Voltage: 230.2V	Current: 0.033A	Power: 6.45W	PF: 0.830
-----------------	-----------------	--------------	-----------

Instrument Status

Instrument: HopooHSP6000	Lamp: A2856K/821.7lm	Scan Range: 380nm-780nm
TestModel: Exact	Interval: 5nm	PMT Temp: 30.3C
Main: 7	Id: 79	Ip: 49391
Reference: 3	REF: 26376	Undulation: -0.315%

Saudi Inspection and Testing Company (SAITCO)

Product Remark

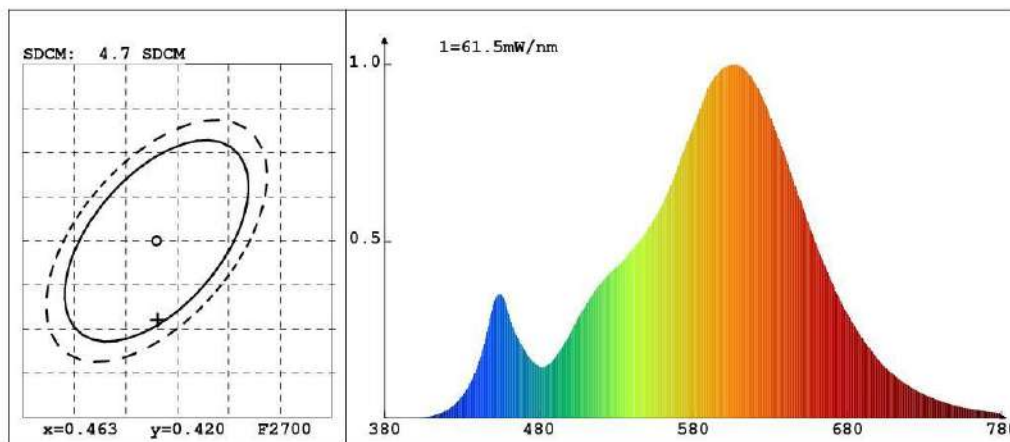
Type: LED lamp	NO.: 230107	Manufacturer: PHILIPS
TempIn: 24.3C	TempOut: 24.7C	Humidity: %
Operator: NOURA	Time: 11:44:14	Date: 2022-2-12

CIE Color Parameter

Chromaticity Coordinate: $x=0.4631$ $y=0.4110$ $u=0.2644$ $v=0.3520$ $duv=-0.0001$
 CCT: $T_c=2659K$ DominantW.: 585.5nm Purity: 62.4%
 Peak Wave: 607nm Half Wave: 113.6nm Ratio: R=27.2% G=71.3% B=1.5%

RIndex: Ra= 81.1

R1 =80	R2 =91	R3 =95	R4 =78	R5 =80	R6 =90	R7 =80	R8 =55
R9 =2	R10=80	R11=77	R12=73	R13=82	R14=98	R15=71	

**Rated Parameter**

Voltage: 230.0 V	Power: 6.0 W	Flux: 470.0 lm	EEI: 0.00
EEI Level: C	Standard: SASO 2870	Country of Origin: CHINA	

Photo Parameter

Flux: 581.2 lm	Efficacy: 92.1lm/W	Lumi.Pow: 1.706W
Scotopic Flux: 687.37 Plm	Efficacy: 108.93Plm/W	S/P: 1.1827
EEI: 0.13	EEI Level: B	

Electrical Parameter

Voltage: 230.1V	Current: 0.033A	Power: 6.31W	PF: 0.820
-----------------	-----------------	--------------	-----------

Instrument Status

Instrument: HopooHSP6000	Lamp: A2856K/821.7lm	Scan Range: 380nm-780nm
TestModel: Exact	Interval: 5nm	PMT Temp: 30.3C
Main: 7	Id: 79	Ip: 47427
Reference: 3	REF: 25479	Undulation: -0.275%

Saudi Inspection and Testing Company (SAITCO)

Product Remark

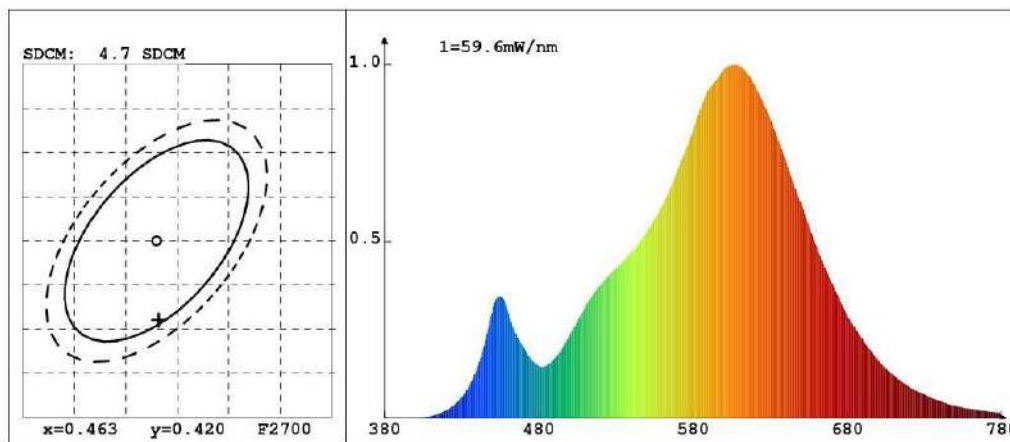
Type: LED lamp	NO.: 230107	Manufacturer: PHILIPS
TempIn: 24.4C	TempOut: 24.8C	Humidity: %
Operator: NOURA	Time: 11:50:46	Date: 2022-2-12

CIE Color Parameter

Chromaticity Coordinate: $x=0.4632$ $y=0.4110$ $u=0.2645$ $v=0.3520$ $duv=-0.0001$
 CCT: $T_c = 2657K$ DominantW.: 585.5nm Purity: 62.4%
 Peak Wave: 607nm Half Wave: 112.5nm Ratio: R=27.3% G=71.3% B=1.5%

RIndex: Ra= 81.1

R1 =80	R2 =91	R3 =95	R4 =78	R5 =80	R6 =90	R7 =80	R8 =55
R9 =2	R10=80	R11=77	R12=73	R13=82	R14=98	R15=71	

**Rated Parameter**

Voltage: 230.0 V	Power: 6.0 W	Flux: 470.0 lm	EEI: 0.00
EEI Level: C	Standard: SASO 2870	Country of Origin: CHINA	

Photo Parameter

Flux: 560.0 lm	Efficacy: 92.4lm/W	Lumi.Pow: 1.640W
Scotopic Flux: 662.49 Plm	Efficacy: 109.32Plm/W	S/P: 1.1830
EEI: 0.13	EEI Level: B	

Electrical Parameter

Voltage: 230.1V	Current: 0.032A	Power: 6.06W	PF: 0.810
-----------------	-----------------	--------------	-----------

Instrument Status

Instrument: HopooHSP6000	Lamp: A2856K/821.7lm	Scan Range: 380nm-780nm
TestModel: Exact	Interval: 5nm	PMT Temp: 30.4C
Main: 7	Id: 78	Ip: 45968
Reference: 3	REF: 24542	Undulation: -0.167%

Saudi Inspection and Testing Company (SAITCO)

Inspected by

Sign
Date**REMARK :*****SOFT COPY OF THE CONTROL TEST RESULT SHEET IS AUDITED BY THE LAB SUPERVISOR**

<<End of control of test result sheet >>



F 07-08-02 A

SAITCO, First Industrial City area, Riyadh

PO 27711, Tel: +96

بار بجوار جمرک الرياض الجاف ش 7,6,5,4




Issued By: QGM - Approved By: GM

,6,7 Building No.2433, Riyadh 11427,

www.saitco.com.sa

الشركة السعودية للفحص والاختبار - الرد