



## LABORATORY'S REPORT



INDÚSTRIAS ARTEB S/A  
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PHYSICAL LABORATORY ( )  
 CHEMICAL LABORATORY ( )  
 PERFORMANCE LABORATORY ( )  
 PHOTOMETRIC LABORATORY (X)

DENOMINATION: HEADLAMP RENAULT KWIND

CODE / NUMBER: KWIND / MINDA

Note: Commercial name of the models that use this headlamp design according to: Anexo\_3692\_Lista de Aplicação.

CUSTOMER: Lumileds Iluminação do Brasil Ltda

SOLICITED BY: Leonardo Figueiredo

CUSTOMER ADDRESS: Al. Rio Negro, 585 Ed. Jaçari - 4° A Conjunto 44,45 CEP: 06454-000 Barueri - SP – Brazil

SS N°

NUMBER OF SAMPLES: 02

ANALYST: ALEX FONSECA DE OLIVEIRA

BEGIN'S DATE: 22/06/2018

TEMPERATURE: 23,0 °C

HUMIDITY: 60%

EQUIPAMENTOS UTILIZADOS:

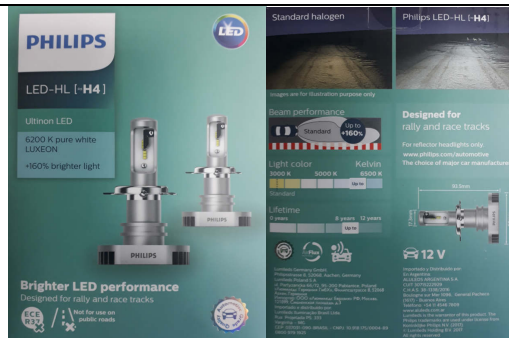
PHOTOMETER ILFF 002 - CERTIFICATE: 85.278 / 85.279 /  
 CALIBRATE: 03/30/2017 - NEXT CALIBRATION: 30/03/2019  
 POWER SUPPLY ILFF 002/02 - CERTIFICATE: R0674 / 2017  
 CALIBRATED: 27/03/2017-- - NEXT CALIBRATION: 27/03/2019  
 SPECTRORADIOMETRO EL-10 - CERTIFICATE: L-001-17  
 CALIBRATE: 09/20/2017 - NEXT CALIBRATION: 20/09/2018

SPECIFICATIONS: ECE R112 / CONTRAN

OBSERVATIONS: Lumileds Illumination Brasil LTDA are responsible about the control of Anexo\_3692\_Lista de Aplicação.

INFORMATION ABOUT LOW BEAM & HIGH BEAM :

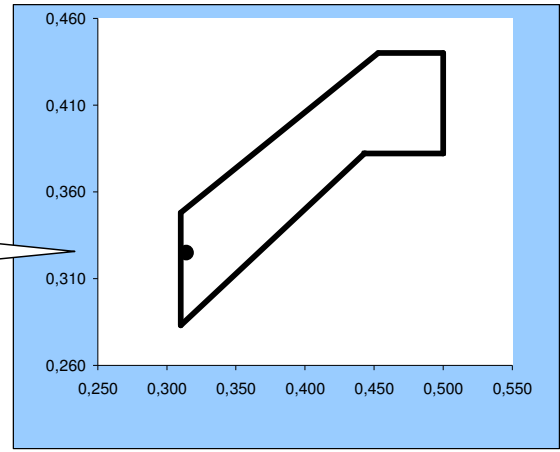
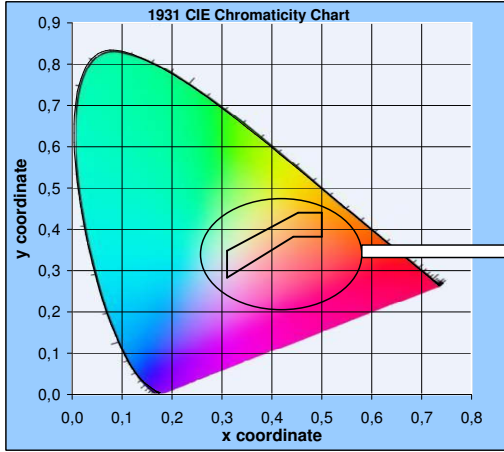
VOLTAGE : 13,50 V  
 PRODUTO: LED-HL [-H4],  
 PART NUMBER 11342xxxx  
 MARCA: PHILIPS



The results presented in the present Document have restricted significance and they are only applied to the rehearsed sample. The reproduction of the document for another ends can only be made integrally, without any alteration

**COLORIMETRY ECE R112 / CONTRAN 227/07**

**LOW BEAM / HIGH BEAM H4 LED COLOUR (WHITE) TEMP: 7245 K**

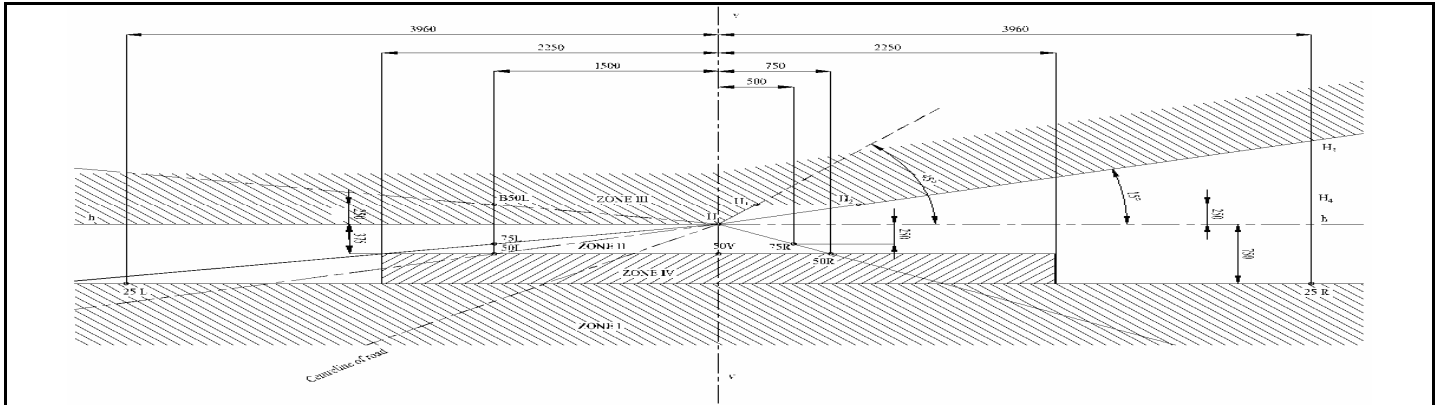


Standardization	Limit the Green	$y = 0.150 + 0.640 x$	<b>X :</b>	<b>0,314</b>
	Limit with the Green-Yellowish	$y = 0.440$	<b>Y :</b>	<b>0,325</b>
	Limit with Yellow	$x = 0.500$	<b>Z :</b>	<b>0,361</b>
	Limit with Purpura-Reddish	$y = 0.382$	<b>Values</b>	
	Limit with Purpura-Reddish	$y = 0.050 + 0.750 x$		
	Limit with Blue	$x = 0.310$		

**RESULT: APPROVED**

**The point must be within the approved area.**

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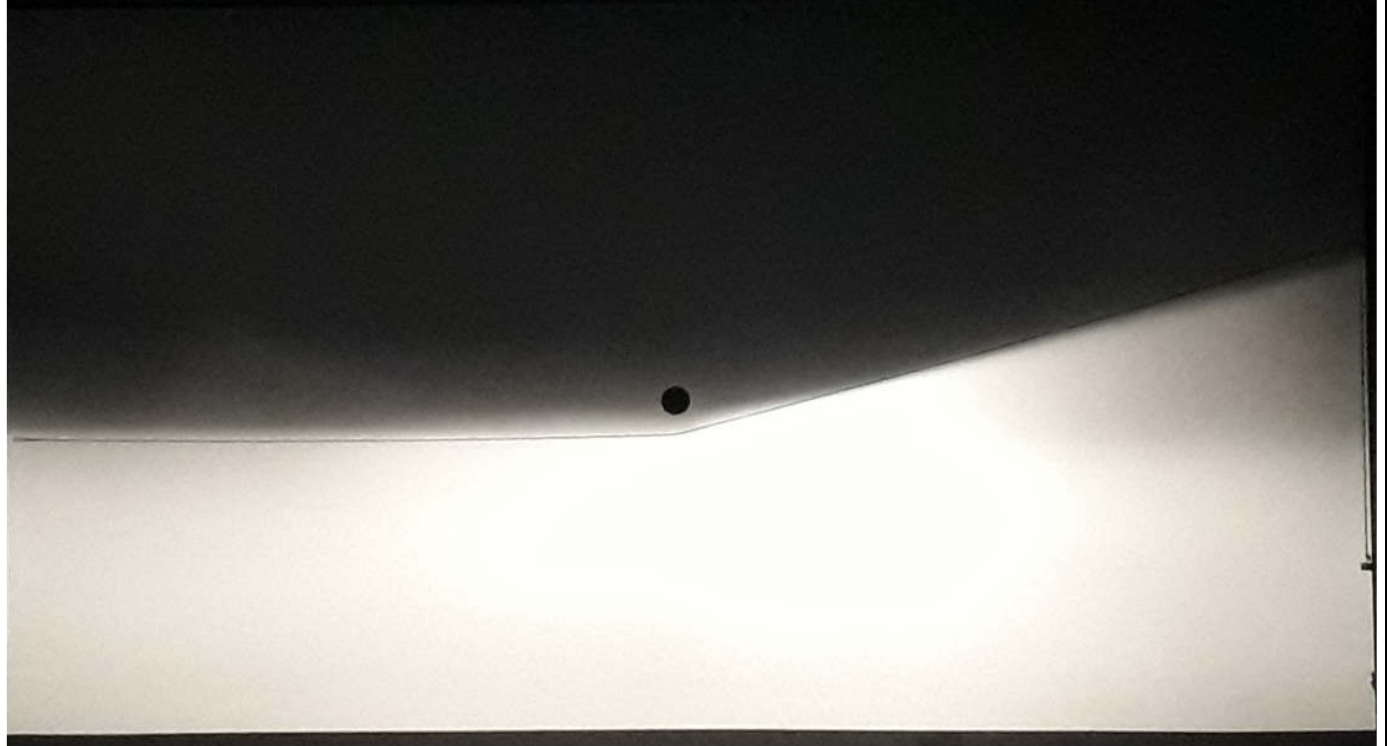
**LOW BEAM & HIGH BEAM**

**ECE R112 / CONTRAN 22/07**

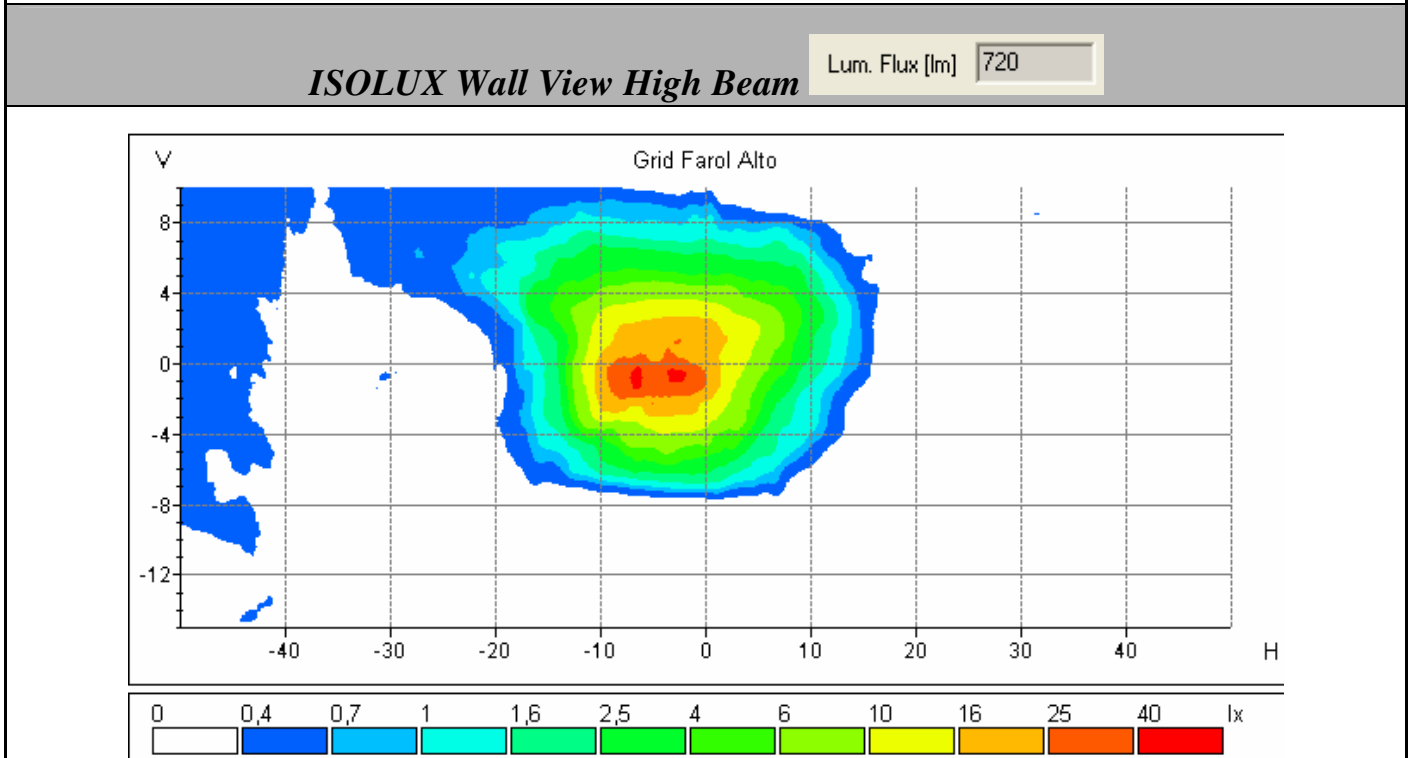
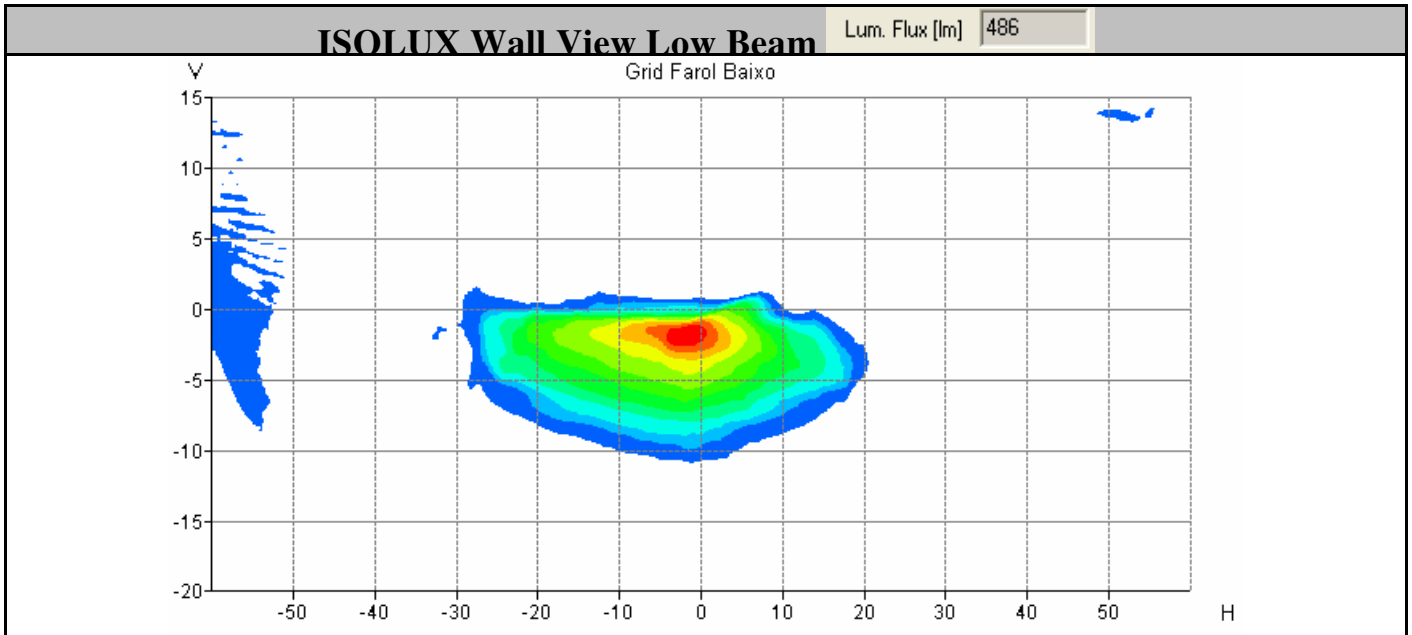
**Photometric Values in Lux at 25m**

POINTS	INITIAL SAMPLE		VALUES	
	MIN. ECE	MAX.	SAMPLE RH	02 SAMPLE LH
<b>LOW BEAM</b>				
8L/4U	190	----	87,5	113,78
V /4U	(sum of this points)	----	64,375	96,01
8R/4U		----	64,375	83,94
4R/2U		----	83,125	91,70
V /2U	(sum of this points)	----	91,25	103,98
4L/2U		----	91,875	96,45
8L/H	65	----	483,75	500,64
4L/ H	125	----	553,13	575,47
H/V	----	625	601,25	593,08
B50L	----	350	270,00	286,86
BR	----	1750	215,00	220,67
75R	10100	----	12544	12294,34
75L	----	10600	3931,30	3880,54
50L	----	13200	5312,50	5233,79
50R	10100	----	15463,00	15190,98
50V	5100	----	8562,50	8415,52
25L	1700	----	3456,30	3408,58
25R	1700	----	3662,50	3594,19
ZONE III	----	625	621,250	608,84
ZONE IV	2500	----	4462,50	4407,66
ZONE I	----	(50R*2)	10725,0	11309,24
<b>RESULT:</b>			<b>APPROVED</b>	<b>APPROVED</b>
<b>HIGH BEAM</b>				
<b>PRODUCTION SAMPLE</b>				
H/V	≥ 0,8 IMAX ()	----	29125	29544
5L	4080	----	17313	17488
2.5L	16240	----	27563	27274
2.5R	16240	----	28500	28454
5R	4080	----	17000	17756
IMAX	32400	258000	35000	34726
<b>RESULT:</b>			<b>APPROVED</b>	<b>APPROVED</b>

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*Projection LOW BEAM**Projection HIGH BEAM*

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<b>EXIT DATE: 11/07/2018</b>		
<b>ANALYST:</b> ALEX FONSECA DE OLIVEIRA  	<b>SUPERVISION:</b> JARBAS ENZENBERG MÁRCIO CLAUDINO  	<b>COPIES DISTRIBUTION:</b> Leonardo Figueiredo

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## ANEXO - LABORATORY'S REPORT Nº 3692-18

### Lista de marca/modelos/versão/ano equipadas com farol utilizado no ensaio Nº 3692-18

Renault kwid Intense 1.0 12V SCe Flex 4P 2017, 2018
Renault kwid Ionic 1.0 12V SCe Flex 4P 2017, 2018
Renault kwid Life 1.0 12V SCe Flex 4P 2017, 2018
Renault kwid Urban 1.0 12V SCe Flex 4P 2017, 2018
Renault kwid Urban Easyr 1.0 12V SCe Flex 4P 2017, 2018
Renault kwid Zen 1.0 12V SCe Flex 4P 2017, 2018

