



INDÚSTRIAS ARTEB S/A
LABORATÓRIO CORPORATIVO
 Av. Piraporinha 1221 – Vila Olga
 São Bernardo do Campo -SP
 Tel. (11) 4341-9841 Fax (11) 4341-9841
 e-mail: laboratorio@arteb.com.br

LABORATORY'S REPORT



PHYSICAL LABORATORY ()
 CHEMICAL LABORATORY ()
 PERFORMANCE LABORATORY ()
 PHOTOMETRIC LABORATORY (X)

DENOMINATION: **HEADLAMP TOYOTA ETIOS**

CODE / NUMBER: 860L

Note: Commercial name of the models that use this headlamp design according to: Anexo_3693_Lista de Aplicação.

CUSTOMER: **Lumileds Iluminação do Brasil Ltda**

SOLICITED BY: **Leonardo Figueiredo**

CUSTOMER ADDRESS: **Al. Rio Negro, 585 Ed. Jaçari - 4º 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 Iluminação Brasil LTDA are responsible about the control of Anexo_3693_Lista de Aplicação.

INFORMATION ABOUT LOW BEAM & HIGH BEAM :

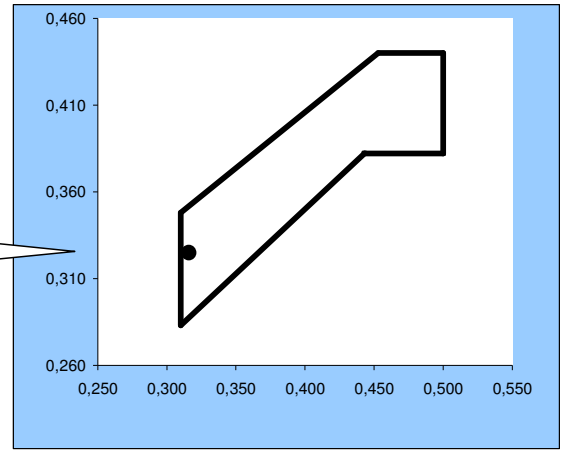
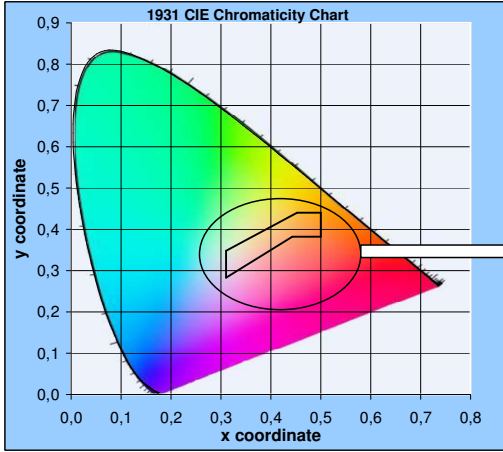
VOLTAGE : 13,50 V
 PRODUTO: LED-HL [-H4],
 PART NUMBER 11342xxxx
 MARCA: PHILIPS



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 LED COLOUR (WHITE) TEMP: 7560 K

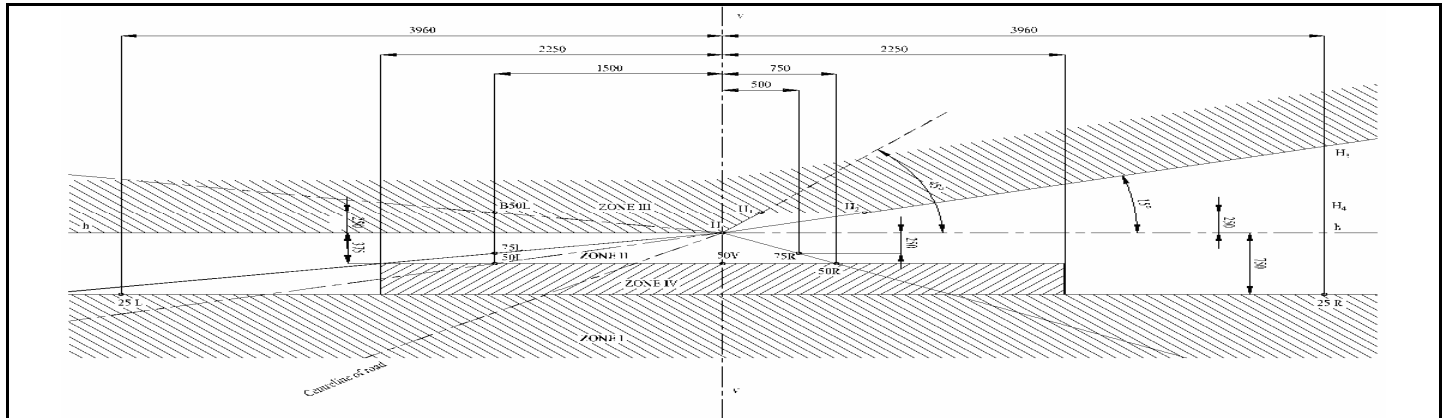


Standardization	Limit the Green	$y = 0.150 + 0.640 x$	X :	0,316
	Limit with the Green-Yellowish	$y = 0.440$	Y :	0,325
	Limit with Yellow	$x = 0.500$	Z :	0,359
	Limit with Purpura-Reddish	$y = 0.382$	Values	
	Limit with Purpura-Reddish	$y = 0.050 + 0.750 x$		
	Limit with Blue	$x = 0.310$		

RESULT: APPROVED

The point must be within the approved area.

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.



LOW BEAM & HIGH BEAM

ECE R112 / CONTRAN 22/07

Photometric Values in Lux at 25m

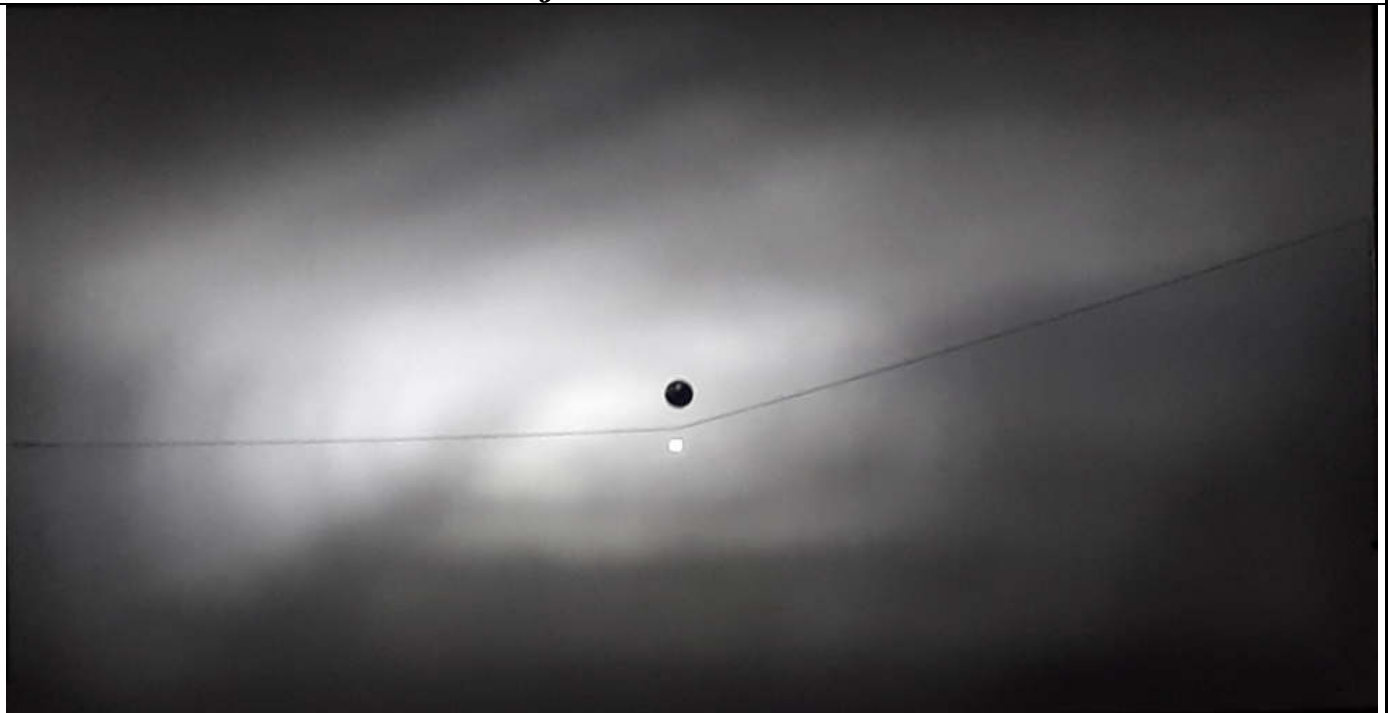
POINTS	PRODUCTION SAMPLE		VALUES	
	MIN.	MAX.	SAMPLE LH	SAMPLE RH
8L/4U	0,24	1,00	0,36	0,34
V /4U	(sum of this points)	1,00	0,34	0,32
8R/4U		1,00	0,13	0,14
4R/2U	0,48	1,00	0,23	0,23
V /2U	(sum of this points)	1,00	0,31	0,30
4L/2U		1,00	0,26	0,28
4L/ H	0,16	1,00	0,44	0,43
8L/H	0,08	1,00	0,54	0,54
H/V	-----	1,00	0,90	0,87
B50L	-----	0,60	0,26	0,25
75L	-----	14,40	1,35	1,29
75R	9,60	-----	11,58	11,74
50R	9,60	-----	22,59	21,71
50V	4,80	-----	19,33	20,12
50L	-----	17,28	5,86	5,60
25L	1,60	-----	12,84	12,21
25R	1,60	-----	7,10	8,30
ZONE IV	2,40	-----	8,45	8,04
ZONE I	-----	≤2x50R	44,89	43,31
ZONE III	-----	1,0	0,90	0,88
RESULT:			APPROVED	APPROVED
HIGH BEAM				
H/V	≥ 0,8 Emáx	288,00	52,43	51,97
5E	4,8	-----	26,65	26,09
2,5E	19,2	-----	42,13	45,28
2,5D	19,2	-----	28,56	30,79
5D	4,8	-----	11,68	11,72
EMÁX	38,40	288,00	59,36	58,48
RESULT:			APPROVED	APPROVED

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

Projection LOW BEAM

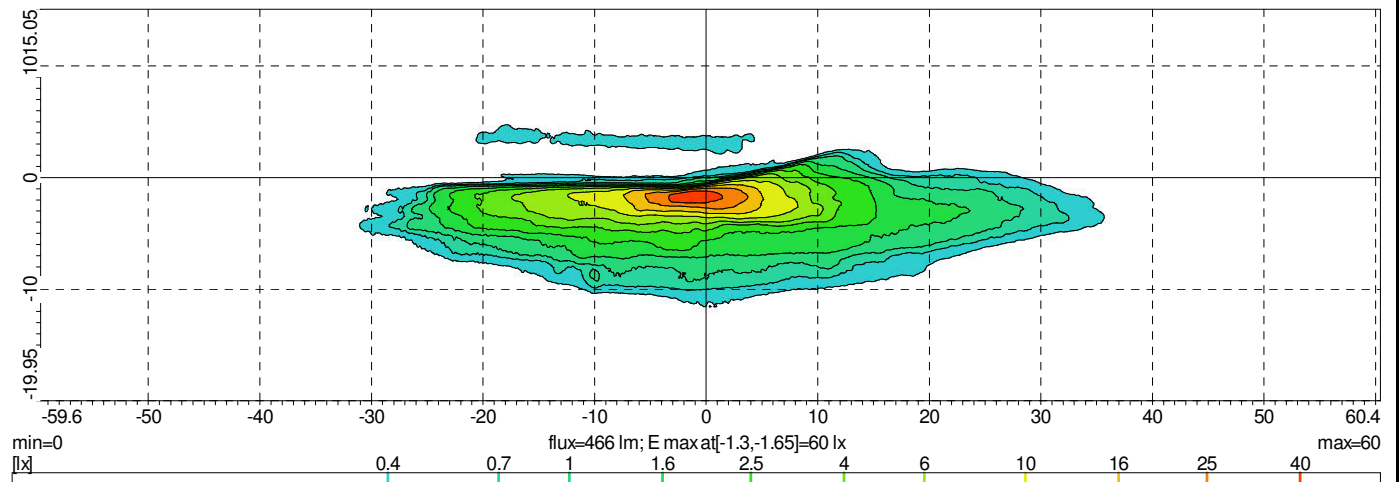


Projection HIGH BEAM

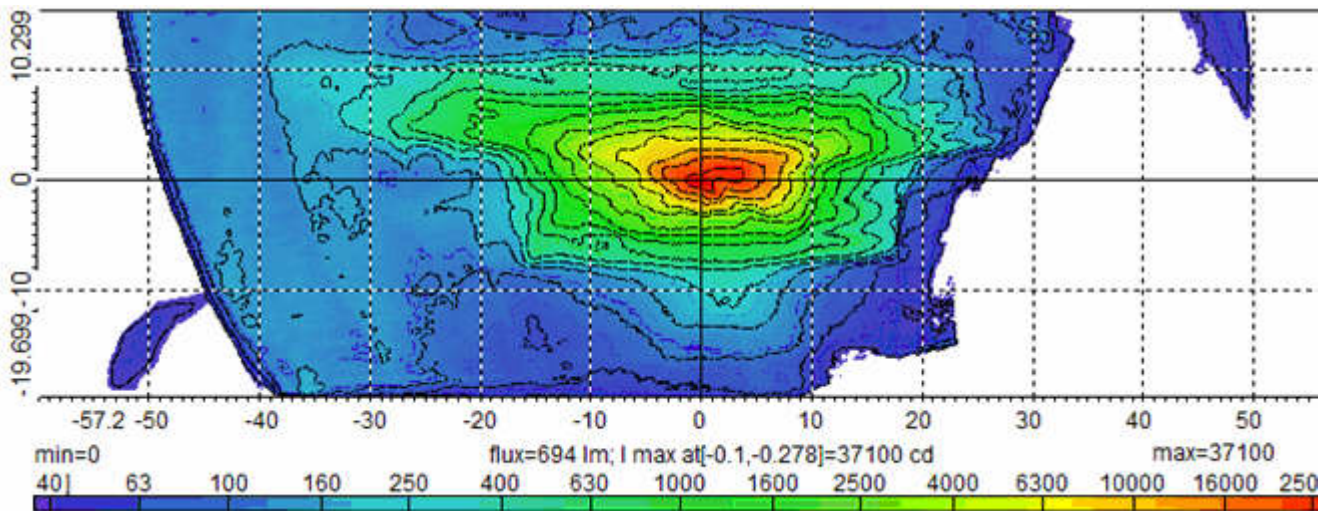


The results presented in the present Document have restricted significance and they are only applied to the rehearsed sample. The reproduction of the document for another ends can only be made integrally, without any alteration

ISOLUX Wall View Low Beam



ISOLUX Wall View High Beam



EXIT DATE: 11/07/2018

ANALYST:
ALEX FONSECA DE OLIVEIRA

SUPERVISION:
JARBAS ENZENBERG
MÁRCIO CLAUDINO

COPIES DISTRIBUTION:
Leonardo Figueiredo

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

ANEXO - LABORATORY'S REPORT Nº 3693-18

Lista de marca/modelos/versão/ano equipadas com farol utilizado no ensaio Nº 3693-18

Toyota Etios Hatch 1.3 16V Flex 4P 2012, 2013, 2014, 2015
Toyota Etios Hatch Cross 1.5 16V câmbio automático Flex 4P 2016, 2017, 2018
Toyota Etios Hatch Cross 1.5 16V Flex 4P 2013, 2014, 2015, 2016, 2017, 2018
Toyota Etios Hatch Platinum 1.5 16V câmbio automático Flex 4P 2016, 2017, 2018
Toyota Etios Hatch Platinum 1.5 16V Flex 4P 2014, 2015, 2016
Toyota Etios Hatch Ready 1.5 16V câmbio automático Flex 4P 2016, 2017, 2018
Toyota Etios Hatch X 1.3 16V câmbio automático Flex 4P 2016, 2017, 2018
Toyota Etios Hatch X 1.3 16V Flex 4P 2012, 2013, 2014, 2015, 2016, 2017, 2018
Toyota Etios Hatch X Plus 1.5 16V câmbio automático Flex 4P 2018
Toyota Etios Hatch X Plus 1.5 16V Flex 4P 2018
Toyota Etios Hatch X STD 1.3 16V Flex 4P 2018, 2018
Toyota Etios Hatch XLS 1.5 16V câmbio automático Flex 4P 2016, 2017, 2018
Toyota Etios Hatch XLS 1.5 16V Flex 4P 2012, 2013, 2014, 2015, 2016, 2017, 2018
Toyota Etios Hatch XS 1.3 16V Flex 4P 2012, 2013
Toyota Etios Hatch XS 1.5 16V câmbio automático Flex 4P 2016, 2017, 2018
Toyota Etios Hatch XS 1.5 16V Flex 4P 2013, 2014, 2015, 2016, 2017, 2018
Toyota Etios Sedan Platinum 1.5 16V câmbio automático Flex 4P 2016, 2017, 2018
Toyota Etios Sedan Platinum 1.5 16V Flex 4P 2014, 2015, 2016
Toyota Etios Sedan X 1.5 16V câmbio automático Flex 4P 2016, 2017, 2018
Toyota Etios Sedan X 1.5 16V Flex 4P 2012, 2013, 2014, 2015, 2016, 2017, 2018
Toyota Etios Sedan X Plus 1.5 16V câmbio automático Flex 4P 2018
Toyota Etios Sedan X Plus 1.5 16V Flex 4P 2018
Toyota Etios Sedan X STD 1.5 16V Flex 4P 2018
Toyota Etios Sedan XLS 1.5 16V câmbio automático Flex 4P 2016, 2017, 2018
Toyota Etios Sedan XLS 1.5 16V Flex 4P 2012, 2013, 2014, 2015, 2016, 2017, 2018
Toyota Etios Sedan XS 1.5 16V câmbio automático Flex 4P 2016, 2017, 2018
Toyota Etios Sedan XS 1.5 16V Flex 4P 2012, 2013, 2014, 2015, 2016, 2017, 2018

Versão: 0	Atualização: Ago/2018	Resp: Lumileds Iluminação Brasil Ltda
-----------	-----------------------	---------------------------------------