



ELECTROTECHNICAL TESTING INSTITUTE
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No. of pages: 26
No. of annexes/No. of an. pages: 0/0

No. of the Test Report: 701590-01/02

Issued: 4. 8. 2017



TEST REPORT

Name of product: Fixed general purpose luminaires, recessed luminaires

Type of product: URBINI LED class II

Ratings: 220-240 V, 50/60Hz, 14 W, 20 W, 28 W, 42 W, IK 09, IP 66 Class II

Serial number: --

Manufacturer: LUG Light Factory Sp. z o.o., ul. Gorzowska 11, 65-127 Zielona Góra, Polsko

Production site: LUG Light Factory Sp. z o.o., ul. Gorzowska 11, 65-127 Zielona Góra, Poland

Ordering firm: LUG Light Factory Sp. z o.o., ul. Gorzowska 11, 65-127 Zielona Góra, Polsko

Number of tested samples: 1, type representative: 130232.5L232.1X1

Samples submitted on: 3. 7. 2017

Location of testing: EZÚ

Tested from 27. 7. 2017 **through** 31. 7. 2017

Other data: -

The product was tested according to: ČSN EN 55015 ed. 4:14,
ČSN EN 61547: ed. 2:10,
ČSN EN 61000-3-3 ed. 3 :14,
ČSN EN 61000-3-2 ed. 4:15

Compiled by: David Nádherný



Approved by: Miroslav Vondra
Testing laboratory technical manager

Test results stated in the test report apply only to the tested subject and unless specified otherwise in the test report, the tests were performed using the method and under the conditions determined in the test regulations, technical norm, instructions for use and information provided by the manufacturer on the tested subject and using accessories required by the manufacturer.
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1. Emission

- (ČSN) EN 55015:2013 *Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment*
- (ČSN) EN 61000-3-2:2014 *Electromagnetic compatibility (EMC) - Limits - Limits for harmonic current emission*
- (ČSN) EN 61000-3-3 :2013 *Electromagnetic compatibility (EMC) -Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤16A per phase and not subject to conditional connection*
-

Product: Fixed general purpose luminaires, recessed luminaires

Type: URBINI LED, class II

Type representative: 130232.5L232.1X1

Requirements at tests:

Standard	Frequency band	Allowed values	Note
(ČSN) EN 55015 Art. 4.3.3	f [MHz] 0.15 - 0.5 0.05 - 30	QP / AV [dB(μV)] 84 - 74 / 74 - 64 74 / 64	Not applicable *1)
(ČSN) EN 55015 Art. 4.3.1	f [MHz] 0.009 - 0.05 0.05 - 0.15 0.15 - 0.5 0.5 - 5 5 - 30	QP / AV [dB(μV)] 110 / --- 90-80 / --- 66-56 / 56-46 56 / 46 60 / 50	Pass
(ČSN) EN 55015 Art. 4.4.1 (d=2m)	f [MHz] 0.009 - 0.07 0.07 - 0.15 0.15 - 3 3 - 30	QP [dB(μA)] 88 88-58 58-22 22	Pass
(ČSN) EN 55015 Art. 4.4.2	f [MHz] 30 - 230 230 - 300	QP [dB(μV/m)] 30 d=10m 37	Pass
(ČSN) EN 6100-3-2 Art. 7.3	0 - 2 kHz	Class C	Pass
(ČSN) EN 6100-3-3	50 Hz	---	Not applicable *2)

Notes:

The results of the tests specified in the protocol relating to device with electronic ballast:
130232.5L232.1X1: PHILIPS Xi LP 40W 0.3-1.0A SI 230V C123 sXt

*1) The luminaire does not contains relevant terminals.

*2) According to EN 61000-3-3, Art. A2 (LED luminaires with power input ≤ 200W)

Test result: Pass

Compiled by: Nádherný

Measured at: EZÚ



Measurement of interference voltages introduced into the mains
According to: (ČSN) EN 55015 - art. 4.3.1

Product: Fixed general purpose luminaires, recessed luminaires

Type: URBINI LED, class II

Operating conditions:

230V, 50Hz, minimally 15 minutes in operation

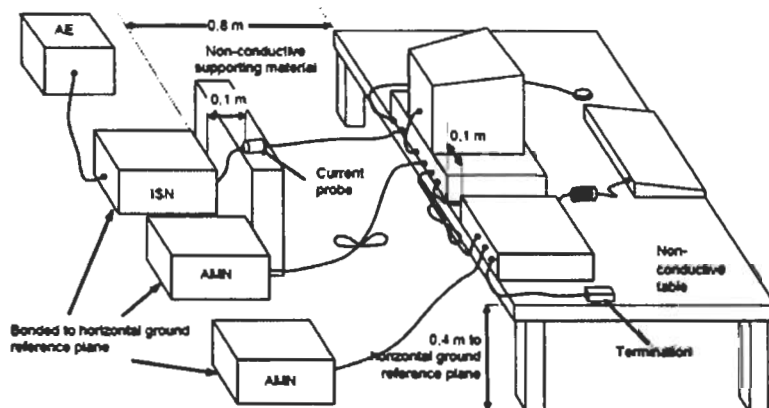
Temperature: 23°C

Rel. humidity: 30 – 45 %

Applied limits:

Band	Limits dB(μ V), quasi-peak/average
9kHz - 50kHz	110 /--
50kHz - 150kHz	90 - 80 /--
150kHz - 0,5MHz	66 - 56 / 56 - 46
0,5MHz - 5,0MHz	56 / 46
5,0MHz - 30MHz	60 / 50

Measuring arrangement:



Notes:

For measured values see next page.

Test result: Pass

Measured by: Nádherný

Date: 27.7. 2017

Measured at: EZÚ

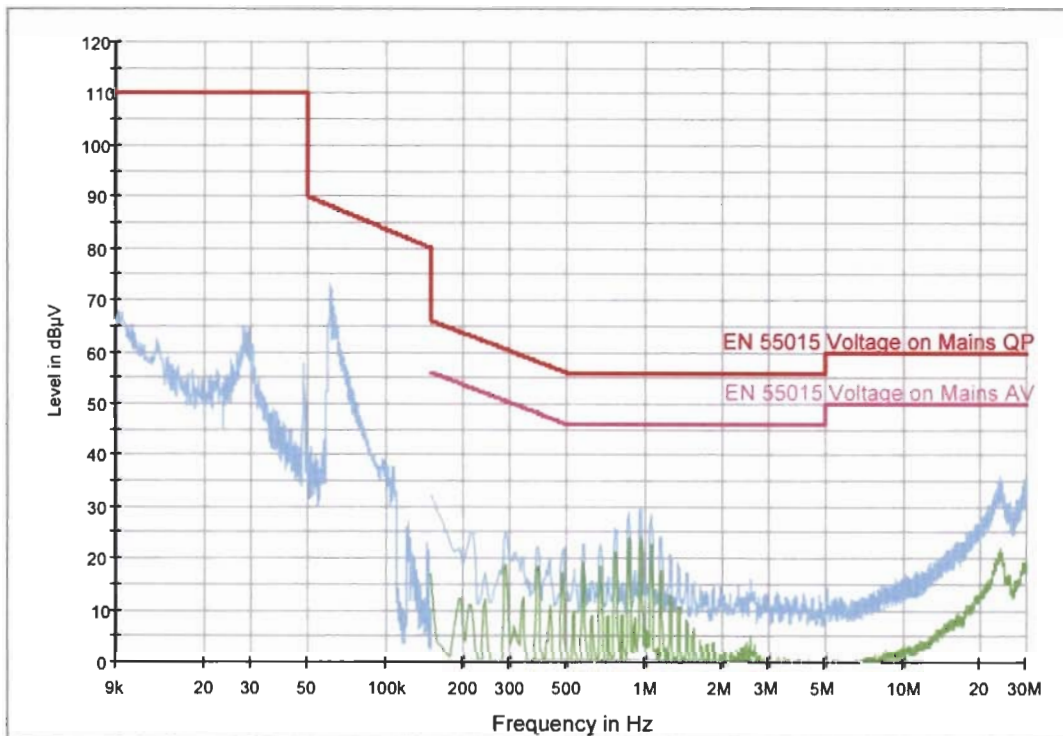


EMI Measurement

Common Information

EUT Name:	Fixed general purpose luminaires, recessed luminaires
Type:	URBINI LED, class II (130232.5L232.1X1)
Test Description:	EN 55015
Operation Conditions:	230 V, 50 Hz
Operator Name:	Nadhery
Comment 1:	L, N - Mains

Voltage EN 55015tab2a





**Measurement of interfering radiation in the 9 kHz - 30 MHz band
According to: (ČSN) EN 55015 - art 4.4.1**

Product: Fixed general purpose luminaires, recessed luminaires

Type: URBINI LED, class II

Operating conditions:

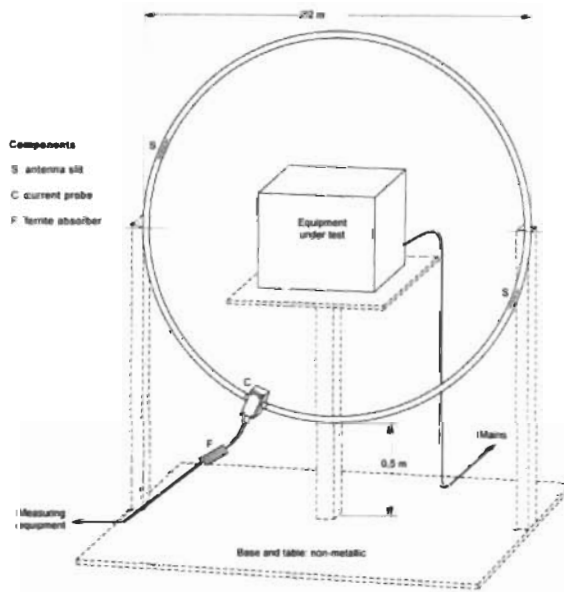
230V, 50Hz, minimally 15 minutes in operation

Temperature: 23°C Rel. humidity: 30 – 45 %

Applied limits:

Band	Limits dB(μA), quasi-peak
9 - 70 kHz	88
70 - 150 kHz	88 - 58
150 kHz - 3 MHz	58 - 22
3 - 30 MHz	22

Measuring arrangement:



Notes:

For measured values see next pages

Test result: Pass

Measured by: Nádherný

Date: 31.7. 2017

Measured at: EZÚ

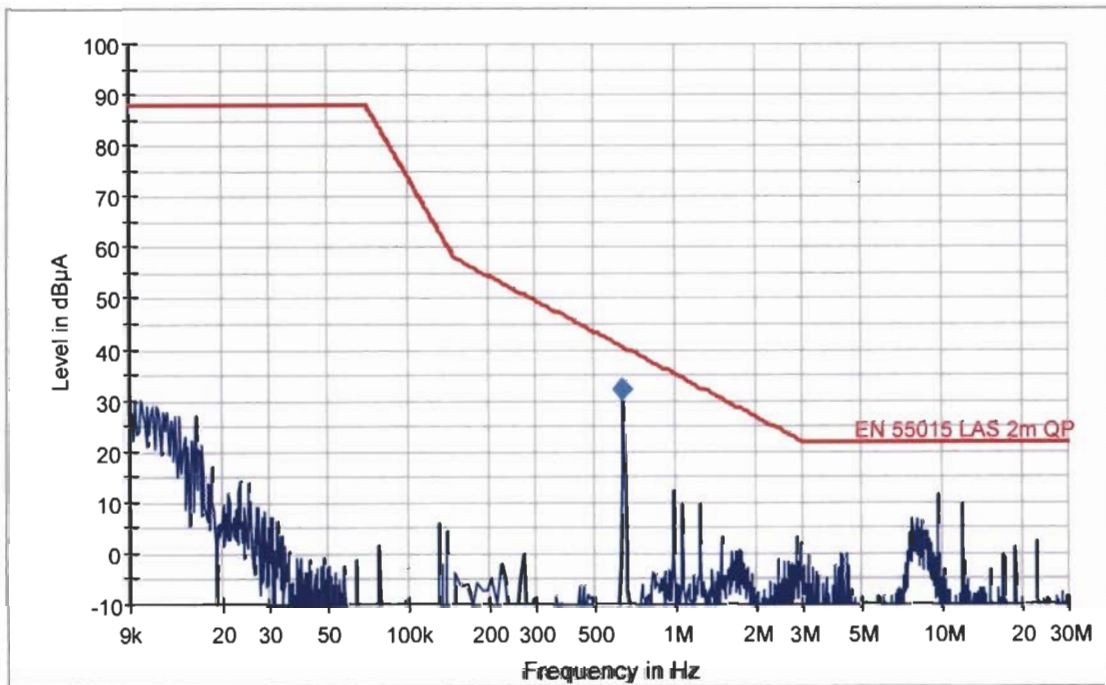


EMI Measurement

Common Information

EUT Name: Fixed general purpose luminaires, recessed luminaires
Type: URBINI LED, class II (130232.5L232.1X1)
Test Description: EN 55015
Operating Conditions: 230V, 50Hz
Operator Name: Nadherny
Comment: Axis X

EFS with Scans EZU KRUH2M2



Final Result 1

Frequency (MHz)	QuasiPeak (dBµA)	Meas. Time (ms)	Bandwidth (kHz)	Corr. (dB)	Margin (dB)	Limit (dBµA)
0.638000	32.2	1000.00	9.000	1.0	8.4	40.6

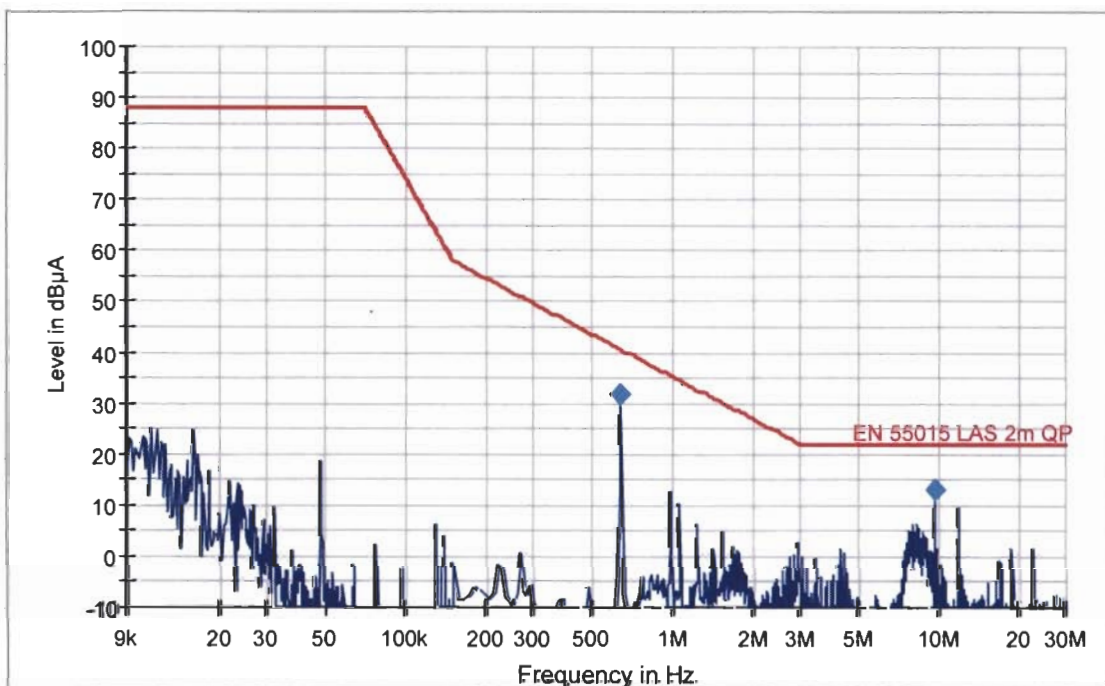


EMI Measurement

Common Information

EUT Name: Fixed general purpose luminaires, recessed luminaires
Type: URBINI LED, class II (130232.5L232.1X1)
Test Description: EN 55015
Operating Conditions: 230V, 50Hz
Operator Name: Nadherny
Comment: Axis Y

EFS with Scans EZU KRUH2M2



Final Result 1

Frequency (MHz)	QuasiPeak (dBµA)	Mess. Time (ms)	Bandwidth (kHz)	Corr. (dB)	Margin (dB)	Limit (dBµA)
0.638000	31.9	1000.00	9.000	1.0	8.7	40.6
9.588000	13.1	1000.00	9.000	0.8	8.9	22.0

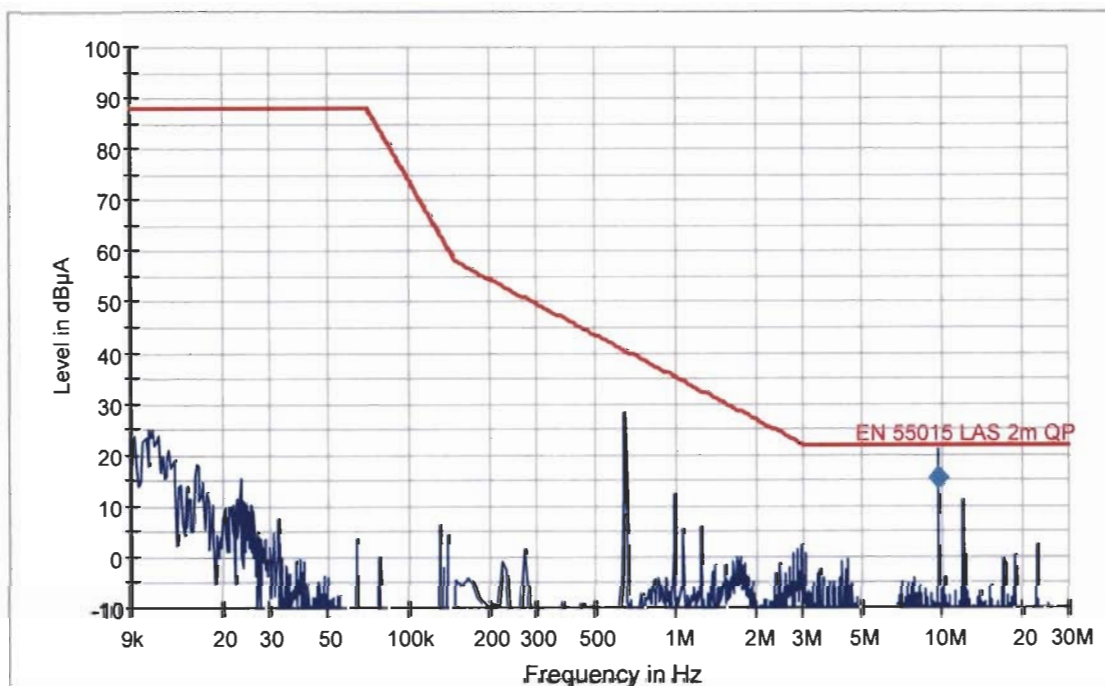


EMI Measurement

Common Information

EUT Name: Fixed general purpose luminaires, recessed luminaires
Type: URBINI LED, class II (130232.5L232.1X1)
Test Description: EN 55015
Operating Conditions: 230V, 50Hz
Operator Name: Nadherny
Comment: Axis Z

EFS with Scans EZU KRUH2M2



Final Result 1

Frequency (MHz)	QuasiPeak (dBµA)	Meas. Time (ms)	Bandwidth (kHz)	Corr. (dB)	Margin (dB)	Limit (dBµA)
9.598000	15.4	1000.00	9.000	0.8	6.6	22.0



**Measurement of interfering radiation in the 30 - 300 MHz band
According to: (ČSN) EN 55015 Art. 4.4.2**

Product: Fixed general purpose luminaires, recessed luminaires

Type: URBINI LED, class II

Operating conditions:

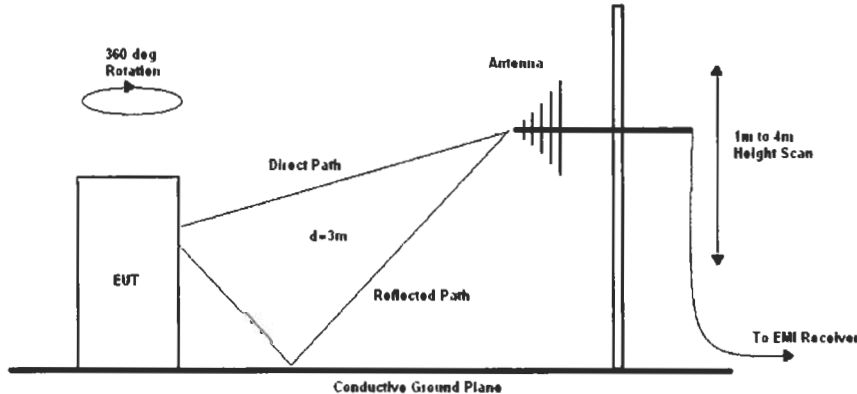
230V, 50Hz, minimally 15 minutes in operation

Temperature: 22°C Rel. humidity: 30 – 45 %

Applied limits:

Band (MHz)	Limits dB(μV/m), quasi-peak	
30 - 300	*)	30 (d=10m)
230 - 300	*)	37 (d=10m)

Measuring arrangement:



Notes:

For measured values see next pages

*) Limits and values converted to 3 m measuring distance

Test result: Pass

Measured by: Nádler

Date: 28.7. 2017

Measured at: EZÚ

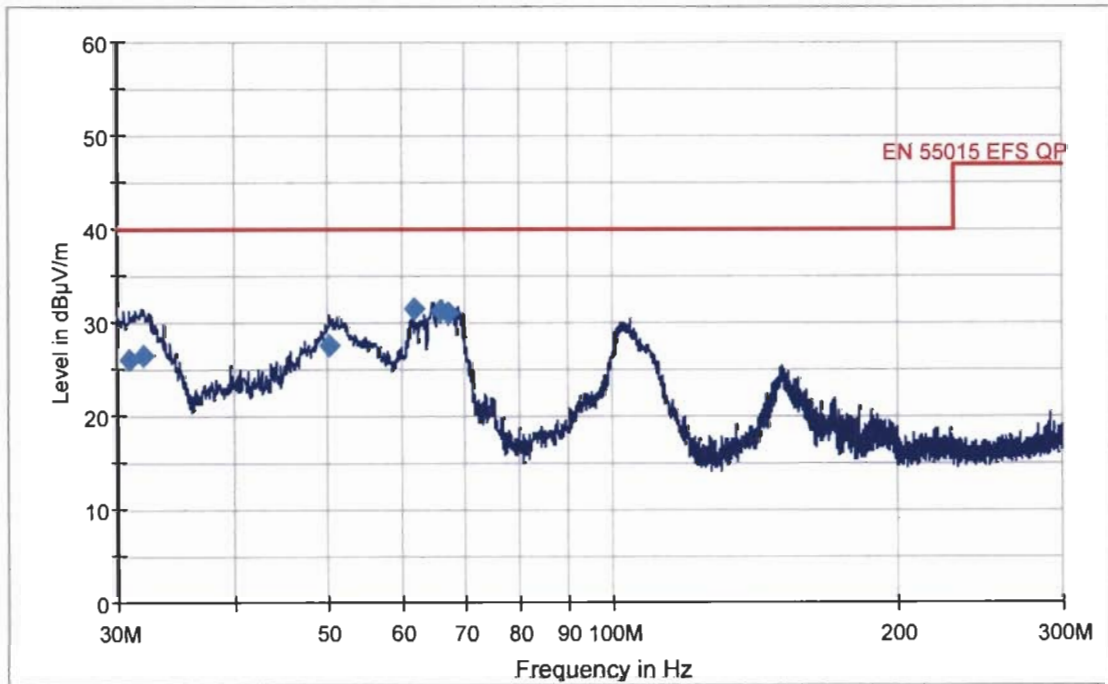


EMI Measurement

Common Information

EUT Name: Fixed general purpose luminaires, recessed luminaires
 Type: URBINI LED, class II (130232.5L232.1X1)
 Test Description: EN 55015
 Operating Conditions: 230V, 50Hz
 Operator Name: Nadherny
 Comment: V, H polarization

EFS EZU Luminaire



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
30.900000	26.0	174.0	H	204.0	30.2	14.0	40.0
32.040000	26.5	390.0	H	149.0	30.6	13.5	40.0
50.400000	27.7	115.0	V	277.0	19.7	12.3	40.0
61.740000	31.6	215.0	V	33.0	13.7	8.4	40.0
66.000000	31.3	215.0	V	25.0	12.0	8.7	40.0
67.200000	31.0	110.0	V	33.0	11.6	9.0	40.0



**Electromagnetic compatibility (EMC) - Limits -
Limits for harmonic current emission
According to: (ČSN) EN 61000-3-2 - art. 7.3**

Product: Fixed general purpose luminaires, recessed luminaires

Type: URBINI LED, class II

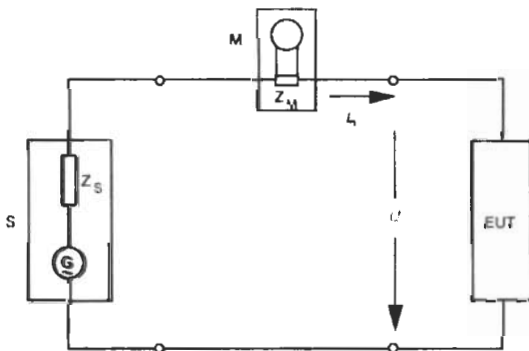
Operating conditions:

230V, 50Hz, minimally 15 minutes in operation

Teplota - Temperature: 24°C

Rel. vlhkost - Rel. humidity: 30 – 45 %

Measuring arrangement:



- S napájecí zdroj - source
- EUT zkoušené zařízení - tested equipment
- M analyzátor harmonických - harmonic analyser
- Z_M měřicí bočník - measuring shunt
- Z_S vnitřní impedance napájecího zdroje - internal impedance of source
- I_n n-té harmonické proudy ve fázovém/středním vodiči - nth harmonic component of current in the phase/neutral line

Applied limits:

Order of harmonics	Limit (%I1)
	P > 25W
2	2
3	30.λ
5	10
7	7
9	5
n 11 - 39 (only odd)	3

λ = účinník - power factor

Notes:

Equipment class C, In version with rated power P=42W was measured P=28W.

For measured values see next pages

Test result: Pass

Measured by: Nádherný

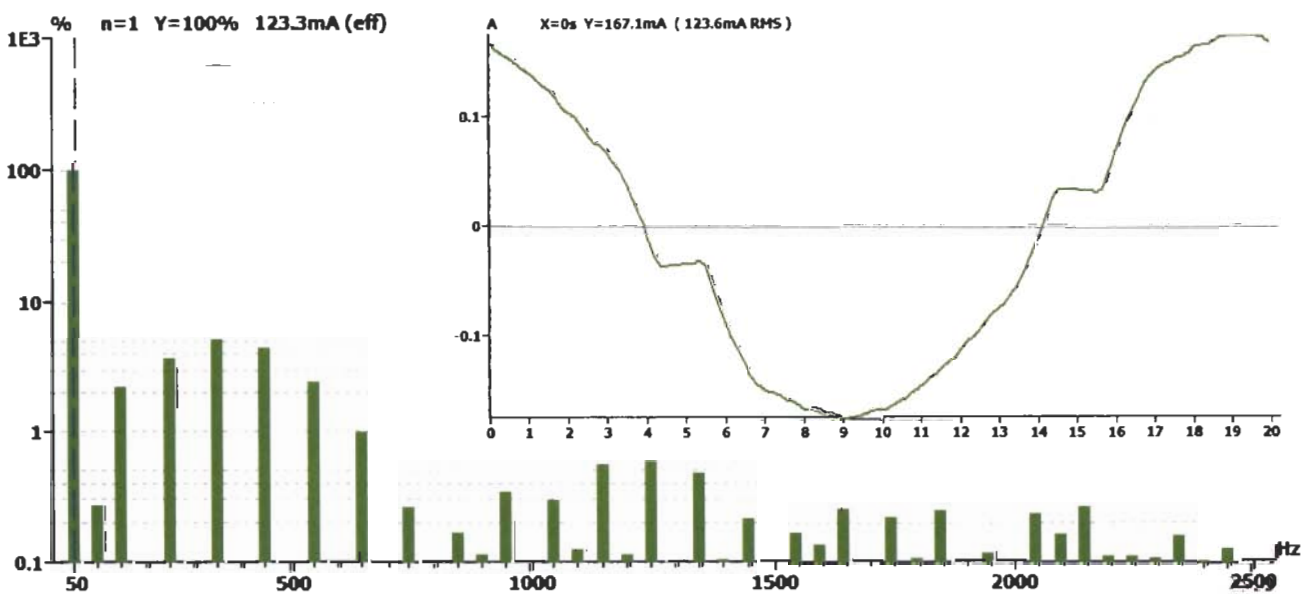
Date: 28.7. 2017

Measured at: EZÚ



Report title:	701590-01/02
Company Name:	EZU
Date of test:	11:04 28.Jul 2017
Measurement file name:	Harmonics_3_2_Ed4.rsd
Tester:	Nadherny
Standard used:	EN/IEC 61000-3-2 Ed.4 Quasi-stationary Equipment class C
Observation time:	30s
Windows width:	10 periods - (EN/IEC 61000-4-7 Edition 2002 + A1:2008)
Customer:	LUG
E. U. T.:	URBINI LED, class II (130232.5L232.1X1)
Temperature :	24
Humidity :	40
Comment:	230 V, 50 Hz, 28W
Measurement smoothed data:	Fund. Current: 0.123A Power Factor: 0.967

Test Result	
E. U. T.:	PASS
Power Source:	PASS





E. U. T. Result

Check harmonics 2..40 [exception odd 21..39]:

Harmonic(s) > 150%:	
Order (n):	None
Harmonic(s) with average > 100%:	
Order (n):	None

Check odd harmonics 21..39:

All Partial Odd Harmonics below partial limits.	
Harmonic(s) > 150%:	
Order (n):	None
Harmonic(s) with average > 150%:	
Order (n):	None

Power Source Result

First dataset out of limit:	
DS (time):	None
Harmonic(s) out of limit:	
Order (n):	None

**Average harmonic current results**

Hn	I _{eff} [A]	I _{eff} [%]	Limit [%]	Result
1	123.280E-3	99.907		
2	324.091E-6	0.263		PASS
3	2.813E-3	2.280		PASS
4	351.411E-6	0.285		PASS
5	4.428E-3	3.588		PASS
6	330.102E-6	0.268		PASS
7	6.121E-3	4.960	7.00	PASS
8	296.798E-6	0.241		PASS
9	5.347E-3	4.333	5.00	PASS
10	270.946E-6	0.220		PASS
11	2.903E-3	2.352		PASS
12	313.741E-6	0.254		PASS
13	1.257E-3	1.019		PASS
14	286.977E-6	0.233		PASS
15	400.349E-6	0.324		PASS
16	300.614E-6	0.244		PASS
17	301.497E-6	0.244		PASS
18	301.786E-6	0.245		PASS
19	456.361E-6	0.370		PASS
20	287.852E-6	0.233		PASS
21	469.269E-6	0.380		PASS
22	293.163E-6	0.238		PASS
23	717.341E-6	0.581		PASS
24	351.525E-6	0.285		PASS
25	729.527E-6	0.591		PASS
26	317.073E-6	0.257		PASS
27	635.536E-6	0.515		PASS
28	301.578E-6	0.244		PASS
29	404.126E-6	0.328		PASS
30	282.523E-6	0.229		PASS
31	295.819E-6	0.240		PASS
32	373.165E-6	0.302		PASS
33	415.038E-6	0.336		PASS
34	312.305E-6	0.253		PASS
35	391.554E-6	0.317		PASS
36	332.212E-6	0.269		PASS
37	390.578E-6	0.317		PASS
38	310.746E-6	0.252		PASS
39	326.989E-6	0.265		PASS
40	264.810E-6	0.215		PASS

Harmonic currents less than 0.6% of the input current measured under the test conditions, or less than 5 mA, whichever is greater, are disregarded.

**Maximum harmonic current results**

Hn	I _{eff} [A]	I _{eff} [%]	Limit [%]	Result
1	123.395E-3	100.000		
2	354.338E-6	0.287		PASS
3	2.850E-3	2.310		PASS
4	393.317E-6	0.319		PASS
5	4.474E-3	3.625		PASS
6	360.713E-6	0.292		PASS
7	6.177E-3	5.006	10.50	PASS
8	329.867E-6	0.267		PASS
9	5.398E-3	4.375	7.50	PASS
10	307.491E-6	0.249		PASS
11	2.963E-3	2.401		PASS
12	349.753E-6	0.283		PASS
13	1.310E-3	1.062		PASS
14	322.444E-6	0.261		PASS
15	424.791E-6	0.344		PASS
16	327.203E-6	0.265		PASS
17	323.249E-6	0.262		PASS
18	324.346E-6	0.263		PASS
19	486.265E-6	0.394		PASS
20	313.761E-6	0.254		PASS
21	502.098E-6	0.407		PASS
22	315.339E-6	0.256		PASS
23	754.783E-6	0.612		PASS
24	388.131E-6	0.315		PASS
25	753.366E-6	0.611		PASS
26	335.611E-6	0.272		PASS
27	672.644E-6	0.545		PASS
28	316.449E-6	0.256		PASS
29	429.470E-6	0.348		PASS
30	298.605E-6	0.242		PASS
31	327.914E-6	0.266		PASS
32	402.187E-6	0.326		PASS
33	448.208E-6	0.363		PASS
34	332.428E-6	0.269		PASS
35	418.871E-6	0.339		PASS
36	363.314E-6	0.294		PASS
37	426.836E-6	0.346		PASS
38	343.540E-6	0.278		PASS
39	350.165E-6	0.284		PASS
40	286.667E-6	0.232		PASS

Harmonic currents less than 0.6% of the input current measured under the test conditions, or less than 5 mA, whichever is greater, are disregarded.

**Maximum harmonic voltage results**

Hn	Ueff [V]	Ueff [%]	Limit [%]	Result
1	229.87	99.945		
2	92.78E-3	0.040	0.2	PASS
3	534.39E-3	0.232	0.9	PASS
4	61.35E-3	0.027	0.2	PASS
5	56.17E-3	0.024	0.4	PASS
6	42.54E-3	0.018	0.2	PASS
7	51.58E-3	0.022	0.3	PASS
8	34.45E-3	0.015	0.2	PASS
9	24.85E-3	0.011	0.2	PASS
10	25.33E-3	0.011	0.2	PASS
11	18.24E-3	0.008	0.1	PASS
12	16.92E-3	0.007	0.1	PASS
13	22.04E-3	0.010	0.1	PASS
14	20.04E-3	0.009	0.1	PASS
15	12.02E-3	0.005	0.1	PASS
16	14.85E-3	0.006	0.1	PASS
17	13.63E-3	0.006	0.1	PASS
18	14.49E-3	0.006	0.1	PASS
19	9.76E-3	0.004	0.1	PASS
20	16.78E-3	0.007	0.1	PASS
21	10.99E-3	0.005	0.1	PASS
22	11.70E-3	0.005	0.1	PASS
23	9.43E-3	0.004	0.1	PASS
24	9.37E-3	0.004	0.1	PASS
25	9.53E-3	0.004	0.1	PASS
26	10.33E-3	0.004	0.1	PASS
27	8.86E-3	0.004	0.1	PASS
28	8.98E-3	0.004	0.1	PASS
29	9.78E-3	0.004	0.1	PASS
30	8.52E-3	0.004	0.1	PASS
31	7.32E-3	0.003	0.1	PASS
32	10.83E-3	0.005	0.1	PASS
33	7.74E-3	0.003	0.1	PASS
34	6.01E-3	0.003	0.1	PASS
35	6.88E-3	0.003	0.1	PASS
36	6.98E-3	0.003	0.1	PASS
37	6.83E-3	0.003	0.1	PASS
38	6.66E-3	0.003	0.1	PASS
39	7.24E-3	0.003	0.1	PASS
40	13.87E-3	0.006	0.1	PASS



2. Immunity

(ČSN) EN 61547 *Equipment for general lighting purposes - EMC - immunity requirements*

Product: Fixed general purpose luminaires, recessed luminaires

Type: URBINI LED, class II

Type representative: 130232.5L232.1X1

Requirements at tests:

Generic standard	Level	Allowed error *1)	Note
EN61000-4-2	±4kV / ±8 kV	B	Pass
EN61000-4-3	3V/m 80 - 1000 MHz	A	Pass
EN61000-4-4	±1kV AC power, ±0,5kV signal lines	B	Pass
EN61000-4-5	±1kV / ±2kV	C	Pass
EN61000-4-6	3 V 0,15 - 80 MHz	A	Pass
EN61000-4-8	3 A/m	A	*2) Pass
EN61000-4-11	200 ms / 70% U _T 10 ms / 0% U _T	C B	Pass

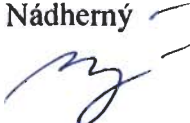
Notes:

The results of the tests specified in the protocol relating to device with electronic ballast:
130232.5L232.1X1: PHILIPS Xi LP 40W 0.3-1.0A SI 230V C123 sXt

*1) Performance criteria according (ČSN) EN 61547, art. 4.2

*2) Devices do not contain parts sensitive to the magnetic field

Test result: Pass

Compiled by: Nádherný 

Measured at: EZÚ



Test of electric discharge resistance
According to: (ČSN) EN 61000-4-2

Product: Fixed general purpose luminaires, recessed luminaires

Type: URBINI LED, class II

Operating conditions:

230V, 50Hz, minimally 15 minutes in operation

Temperature: 23°C Rel. humidity: 30 – 45 %

Allowed criterion: B

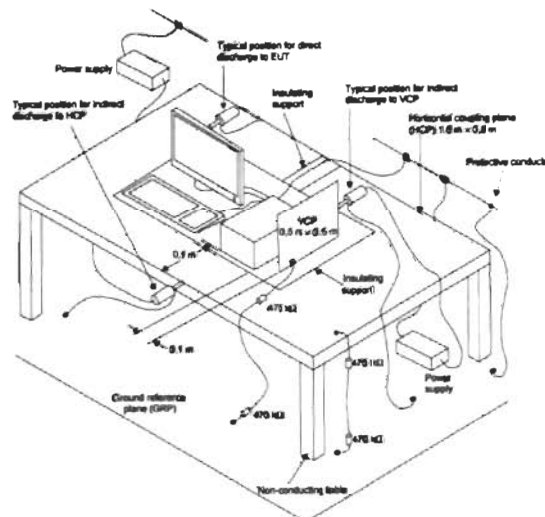
Number of testing discharges: 10/10 contact/air discharge to every test-places in each polarity, besides indirect contact discharges into a vertical and horizontal coupling plane

Tested points: Contact discharge into the metal parts and to the horizontal and vertical coupling plane. Air discharge into plastic parts. See photodocumentation.

Testing voltage [kV]: ± 4 – contact discharge / ±8 - air discharge

Achieved criterion: A

Measuring arrangement:



Notes:--

Test result: Pass

Measured by: **Nádherný**

Date: 31.7. 2017

Measured at: EZÚ



Immunity test - radiated electromagnetic field requirements
According to: (ČSN) EN 61000-4-3

Product: Fixed general purpose luminaires, recessed luminaires

Type: URBINI LED, class II

Operating conditions:

230V, 50Hz, minimally 15 minutes in operation

Temperature: 23°C Rel. humidity: 30 – 45 %

Applied limits:

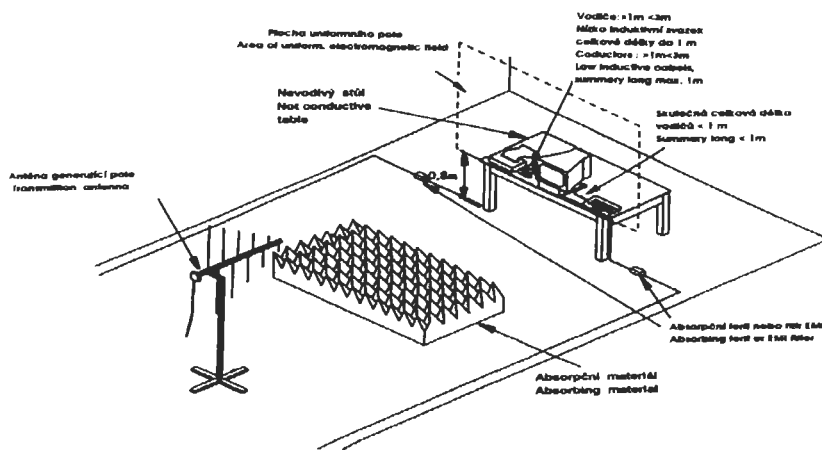
Scan spectrum: 80 - 1000 MHz

Intensity of field: 3 V/m (80% AM, 1kHz)

Allowed criterion: A

Achieved criterion: A

Measuring arrangement:



Notes: --

Test result: Pass

Measured by: Nádherný

Date: 31.7. 2017

Measured at: EZÚ



**Test by quick transient burst
According to: (ČSN) EN 61000-4-4**

Product: Fixed general purpose luminaires, recessed luminaires

Type: URBINI LED, class II

Operating conditions:

230V, 50Hz, minimally 15 minutes in operation

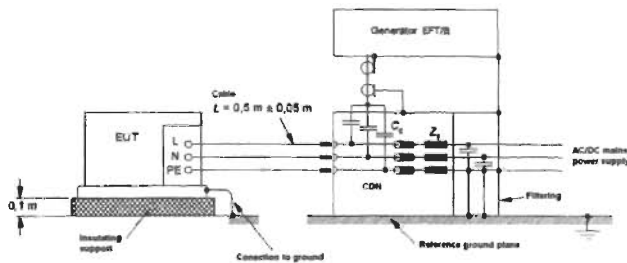
Temperature: 23°C Rel. humidity: 30 – 45 %

Allowed criterion: B

Testing voltage applied:

Applied to	Testing level	Performance criterion	Remark
L,N,L+N	±1kV	A	Coupling networks to power supply
L+PE	±1kV	--	
N+PE	±1kV	--	
L+N+PE	±1kV	--	

Measuring arrangement:



Notes: --

Test result: Pass

Measured by: Nádherný

Date: 31.7. 2017

Measured at: EZÚ



Surge immunity test
According to: (ČSN) EN 61000-4-5

Product: Fixed general purpose luminaires, recessed luminaires

Type: URBINI LED, class II

Operating conditions:

230V, 50Hz, minimally 15 minutes in operation

Temperature: 23°C

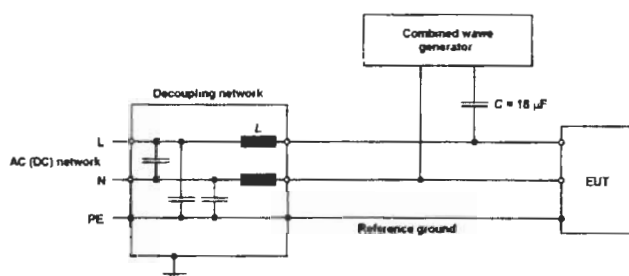
Rel. humidity: 30 – 45 %

Allowed criterion: C

Testing voltage applied:

Applied voltage	Testing level	Performance criterion	Remark
L-N	±1kV	A	90°, 270°
L-PE, N-PE, L+N-PE	±2kV	--	Not applied

Uspořádání při měření - Measuring arrangement:



Poznámky - Notes:--

Test result: Pass

Measured by: Nádherný

Date: 31.7. 2017

Measured at: EZÚ



Immunity test - conducted disturbances induced by radio-frequency fields
According to: (ČSN) EN 61000-4-6

Product: Fixed general purpose luminaires, recessed luminaires

Type: URBINI LED, class II

Operating conditions:

230V, 50Hz, minimally 15 minutes in operation

Temperature: 24 °C Rel. humidity: 30 – 45 %

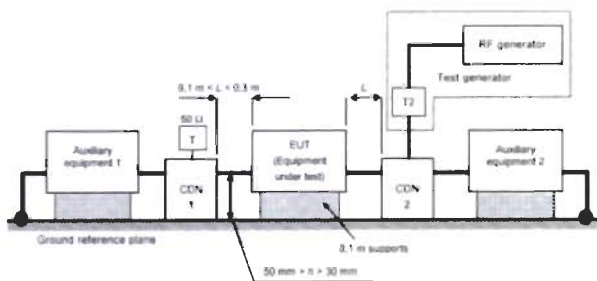
Allowed criterion: A

Testing voltage applied:

Frequency band	Testing voltage level	Note
150kHz - 80MHz	3V (mod. 80% AM / 1 kHz)	Applied by coupling network to mains

Achieved criterion: A

Measuring arrangement:



Notes:--

Test result: Pass

Measured by: Nádherný

Date: 31.7. 2017

Measured at: EZÚ



Test Report No.: 701590-01/02

Voltage dips, short interruptions and voltage variations
According to: (ČSN) EN 61000-4-11

Product: Fixed general purpose luminaires, recessed luminaires

Type: URBINI LED, class II

Operating conditions:

230V, 50/60Hz, minimally 15 minutes in operation

Temperature: 22°C Rel. humidity: 30 – 45 %

Allowed criterion: C, B

Tests requirements:

Test level [%] Ut	Duration 50 / 60Hz [ms]	Allowed criterion	Achieved criterion
0	10 / 8,3	B	A
70	200 / 167	C	A

Notes:--

Test result: Pass

Measured by: Nádherný

Date: 31.7. 2017

Measured at: EZÚ

**Measuring equipment used:**

<input checked="" type="checkbox"/>	Test receiver RaS	ESC1	110213	11.2017
<input checked="" type="checkbox"/>	Měřicí přijímač- Test receiver RaS	ESIB26	110097	11.2017
<input checked="" type="checkbox"/>	Continuos wawe simulátor EM Test	CWS500N1	110232	03.2019
<input checked="" type="checkbox"/>	Harmonic analyzer EM TEST	DPA503N	110272	02.2019
<input checked="" type="checkbox"/>	Power fail simulator EM Test	PFS 500	98-6040	10.2017
<input type="checkbox"/>	Ultra Compact Simulator EM Test	UCS 500N	110235	02.2019
<input checked="" type="checkbox"/>	ESD generator	ESD30N	110196	03.2019
<input type="checkbox"/>	ESD generátor	ESD30	110090	12.2018
<input type="checkbox"/>	Artificial mains EMCO	3825/2	95-5852	07.2019
<input type="checkbox"/>	Artificial mains Narda	PMM L3-32	110250	11.2019
<input checked="" type="checkbox"/>	Artificial mains ESH	ESH4-Z5	5821/1	05.2020
<input checked="" type="checkbox"/>	Antenna Frankonia	BTA-M	00-6321	10.2017
<input type="checkbox"/>	Antenna Double Ridget	HF 907	110177	08.2017
<input type="checkbox"/>	Antenna Double Ridget Advantest	TR17206	5878	10.2017
<input checked="" type="checkbox"/>	Burst generátor Haefely	PEFT Junior	5872	12.2018
<input checked="" type="checkbox"/>	Surge generator	VCSS500-M	110114	03.2018
<input type="checkbox"/>	Měřič pole Narda – Field meter Narda	ELT-400	110130	11.2018
<input checked="" type="checkbox"/>	Current Probe R&S	EZ-17	110098	05.2019

Pomocná zařízení – Auxiliary equipment:

<input checked="" type="checkbox"/>	Supply source EM TEST	HFS300	98-6042	02.2019
<input type="checkbox"/>	Ref. impedance SCHAFFNER	LR4	X71773	02.2019
<input checked="" type="checkbox"/>	Electric Field Probe Narda	EP603	110273	01.2019
<input checked="" type="checkbox"/>	Amplifier PRÁNA	AP32 LT225	07-110145	
<input type="checkbox"/>	Amplifier MILMEGA	AS0822-100	98-6038	
<input type="checkbox"/>	Amplifier MILMEGA	AS0204-125	110144	
<input type="checkbox"/>	Amplifier MILMEGA (1.8-6GHz)	AS1860-100	110219	
<input checked="" type="checkbox"/>	Signal generator RaS	SMF100A	110167	11.2018
<input type="checkbox"/>	Signal generator RaS	SMT03	96-5874	02.2018
<input type="checkbox"/>	Multimetr - Multimeter	FLUKE189	550049	01.2018
<input type="checkbox"/>	Probe RFT	TK12	700044	06.2020
<input checked="" type="checkbox"/>	Coupling/dec. EM TEST	CDN M3N	552097	06.2018
<input checked="" type="checkbox"/>	Coupling/dec. EM TEST	CDN M2N	110233/2	11.2019
<input type="checkbox"/>	Coupling/SCHAFFNER ISN T4xx	ISN T4xx	110032	
<input type="checkbox"/>	Capacitive coupling clamp	Haefely		
<input type="checkbox"/>	Current probe	P MP-120		
<input type="checkbox"/>	Current probe	AM503	79-4221	
<input checked="" type="checkbox"/>	Current probe RFT	SMZ 11	700459	06.2018
<input checked="" type="checkbox"/>	Elektromag. kleště- Electromag. injection clamp	EM-101	110233	11.2019
<input type="checkbox"/>	Ferite clamp 1-1000 MHz	EZ-24	10003	
<input checked="" type="checkbox"/>	Anechoic chamber - Euroshield Oy	RFMSD-F/A	6341	02.2020
<input checked="" type="checkbox"/>	Notebook Dell	Dell D351	551492	
<input checked="" type="checkbox"/>	Multimeter Fluke	289	552550	06.2018
<input checked="" type="checkbox"/>	Ocelové pásmo – Metal meter	5m	N400014	12.2020
<input checked="" type="checkbox"/>	Pulse Limiter RaS	ESH3-Z2	5424	01.2019

Kabely - Cables:

- K1
- K22 , ESH3-Z2
- K14 , K15a , K16
- KB01, KB02, KB04
- KB06
- K4 , K19
- K23
- K27
- K25, K2, K4

EZU přípravky – EZU equipments:

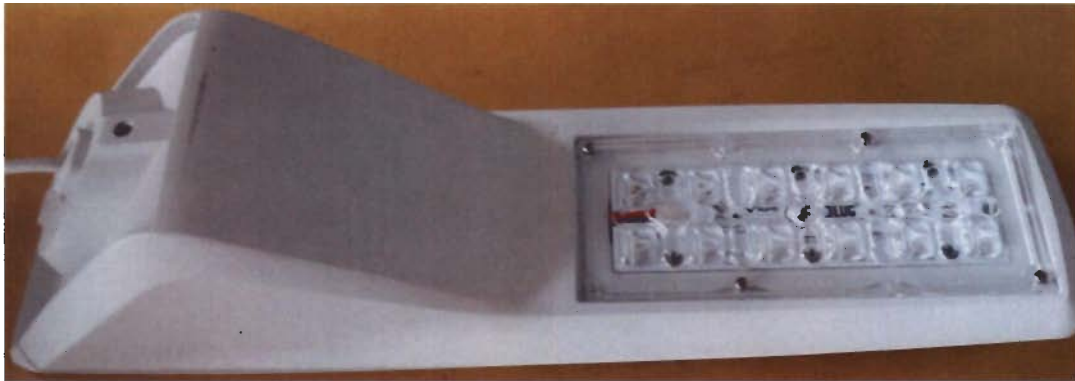
- PR 51 – EN 61000-4-2 – Vertical coupling plane
- Dummy lamp: dle - according to EN55015
- Regulating transformer - ZPA RA20
- PR-21 - Stabilized power supply BS 525
- P10 - EN55015 - Spherical cover
- P11 - EN6100-4-8 - EZÚ test setup
- P13 – Třífázový přepínač - three-phase switch
- PR45 - Loop antenna 2m



Photo-documentation

Product: Fixed general purpose luminaires, recessed luminaires

Type: URBINI LED, class II



Overview: 130232.5L232.1X1



Source and LED controller: 130232.5L232.1X1



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Name plate 130232.5L232.1X1



Electrostatic discharges – tested points ( contact discharge  air discharge)



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