

Test Report No.:

180110312a 001

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Client: Hangzhou Hikvision Digital Technology Co., Ltd.
No.555 Qianmo Road,Binjiang District Hangzhou310052,China

Test item(s): LAN Cable

Test Model No(s): DS-1LN6-UE,DS-1LN6U-W/CCA, DS-ZC6PO/PE,
DS-ZC6P-W/LS, DS-ZC6AP-W/LS

Reference Style No(s). Refer to page 2

Sample Receiving date: 2019-07-17

Delivery condition: Apparent good, Samples tested as received

Test specification:**Test result:****Overall results according to tests performed**

1. Cadmium, Lead, Chromium (VI), Mercury, Polybrominated biphenyls (PBB) and Polybrominated diphenyl ethers (PBDE) Benzylbutyl phthalate (BBP), Dibutyl phthalate (DBP), Bis(2-ethylhexyl) phthalate (DEHP), Diisobutyl phthalate (DIBP)
According to RoHS (recast): Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment, 2011/65/EU Annex II and its amendment Directive (EU) 2015/863

PASS**Other Information:**

Test period: 2019-07-17 ~ 2019-07-26

Factory name: 1. Hangzhou Hikvision Technology Co., Ltd.

No.700, Dongliu Road, Binjiang District, Hangzhou City, Zhejiang, 310052, China

2. Hangzhou Hikvision Electronics Co., Ltd.

No.299, Qiushi Road, Tonglu Economic Development Zone, Tonglu Country, Hangzhou, Zhejiang, 310052, China.

3. Hangzhou Hikvision Communication Technology Co., Ltd.

Building A, No. 555, Qianmo Road, Binjiang District, Hangzhou City, Zhejiang, 310052, China

Remark: The testing items in the report were subcontracted to the lab which complied with ISO17025

For and on behalf of
TÜV Rheinland / CCIC (Ningbo) Co., Ltd.

2019-07-27

Date

Tom Xie Department Manager

Name/Position

Geprüft und Genehmigt
(Reviewed and approved)

TÜV Rheinland Group

*Test result is drawn according to the kind and extent of tests performed.**This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.*

Remark:

Hangzhou Hikvision Digital Technology Co., Ltd. declared that:

The following models and test model DS-1LN6-UE, DS-1LN6U-W/CCA, DS-ZC6PO/PE, DS-ZC6P-W/LS, DS-ZC6AP-W/LS are the same serials, all components were made by the same raw material but different in shapes and sizes. Hangzhou Hikvision Digital Technology Co., Ltd. will be responsible for this statement.

DS-1LN6-UE-W, DS-1LN5E-S/E, DS-1LN5E-E/E, DS-1LN5EO-UU/E, DS-1LN5EU-HC3/E, DS-1LN5EOU-SCE/E, DS-1LN5E-S/E-100, DS-1LN5E-S, DS-1LN6-UU, DS-1LN5EU-W/CMR, DS-1LN5EU-B/CMR, DS-1LN6U-W/CMR, DS-1LN6U-B/CMR, DS-1LN5EU-W/CMP, DS-1LN5EU-B/CMP, DS-1LN6U-W/CMP, DS-1LN6U-B/CMP, DS-1LN6U-G, DS-1LN6U-SC0, NC-6AU-W, NC-5EAU-G, HWC-5EAU-G, HWC-6AU-W, DS-1LN5EU-G/CCA, DS-ZC5EU-W/CM, DS-ZC5EU-W/LS, DS-ZC5EP-B/CM, DS-ZC5EUO/PE, DS-ZC5EPO/PE, DS-ZC6US-B/CM, DS-ZC6US-A/CM, DS-ZC6US-Y/CM, DS-ZC6U-W/CM, DS-ZC6US-W/LS, DS-ZC6U-A/LS, DS-ZC6U-W/LS, DS-ZC6U-B/LS, DS-ZC6U-Y/LS, DS-ZC6UO/PE, DS-ZC6UO-PVC/PE, DS-ZCYU-4/PVC, DS-ZC3U-25/LS, DS-ZC3U-50/LS, DS-ZC3U-100/LS, DS-1LN5EU-G/CCA-100, DS-1LN6-FU, DS-1LN6-UU/E, DS-1LN6-S, DS-1LN6-UU-W/E, DS-1LN6-UU-G/E, DS-1LNXXXXXXXXXXXXXXXXXXXXX(X=0-9 or A-Z or / or *or blank), DS-ZCXXXXXXXXXXXXXXXXXXXXX(X=0-9 or A-Z or / or *or blank).

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1. Screening Test by XRF Spectroscopy

Test Method: Cadmium, Lead, Mercury, Chromium, Bromine
- With reference to IEC 62321-3-1: 2013

Testing Period: 2019-07-17 ~ 2019-07-26

No.	Material Description	Cd	Pb	Cr [^]	Hg	Br [^]
1	White/blue plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
2	Blue plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
3	White/orange plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
4	Orange plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
5	White/green plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
6	Green plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
7	White/brown plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
8	Brown plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
9	Transparent plastic wire core	n.d.	n.d.	n.d.	n.d.	n.d.
10	Transparent plastic sleeve	n.d.	n.d.	n.d.	n.d.	n.d.
11	Blue foil	n.d.	n.d.	n.d.	n.d.	N.A.
12	White plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
13	White fiber wire core	n.d.	n.d.	n.d.	n.d.	n.d.
14	White plastic wire core	n.d.	n.d.	n.d.	n.d.	n.d.
15	Orange plastic wire sleeve	n.d.	n.d.	n.d.	n.d.	n.d.
16	Silvery metal wire core	n.d.	n.d.	n.d.	n.d.	N.A.
17	Black plastic wire sleeve	n.d.	n.d.	n.d.	n.d.	n.d.
18	White plastic wire sleeve	n.d.	n.d.	n.d.	n.d.	n.d.
19	White plastic wire sleeve	n.d.	n.d.	n.d.	n.d.	n.d.
20	White/brown plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
21	Brown plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
22	White/green plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
23	Green plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
24	Blue plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
25	Brown plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
26	Green plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
27	Blue plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
28	White plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
29	White/blue plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
30	White/orange plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
31	Orange plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
32	Brown plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.

No.	Material Description	Cd	Pb	Cr^	Hg	Br^
33	Brown plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
34	White/brown plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
35	White/green plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
36	Green plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
37	White/orange plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
38	Orange plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
39	White/blue plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
40	Blue plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
41	Green plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
42	White/green plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
43	Brown plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
44	White/brown plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
45	Orange plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
46	White/orange plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
47	White/blue plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.
48	Blue plastic wire sheath	n.d.	n.d.	n.d.	n.d.	n.d.

Abbreviation:

Pb	denotes Lead
Cd	denotes Cadmium
Hg	denotes Mercury
Cr	denotes Chromium
Cr(VI)	denotes Chromium(VI)
Br	denotes Bromine
PBBs	denotes Total Polybrominated Biphenyls
PBDEs	denotes Total Polybrominated Diphenyl Ethers
<	denotes less than
N.A.	denotes Not Applicable
n.d.	denotes Not Detected
d	denotes Detected

Remark:

(^1) The screening result was found in the inconclusive region (X), thus the further wet chemistry tests are suggested.

(^2) The Chromium (VI) content in surface layer has been confirmed with reference to IEC 62321-7-1: 2015.

XRF Screening limits for different materials:

Materials	Concentration (mg/kg)				
	Cd	Cr	Pb	Hg	Br
Metallic material	$P \leq 60 < X \leq 140 < F$	$P \leq 640 < X$	$P \leq 670 < X \leq 1360 < F$	$P \leq 660 < X \leq 1340 < F$	NA
Polymeric material	$P \leq 60 < X \leq 140 < F$	$P \leq 640 < X$	$P \leq 670 < X \leq 1360 < F$	$P \leq 660 < X \leq 1340 < F$	$P \leq 290 < X$
Electronic material	$P \leq 40 < X \leq 160 < F$	$P \leq 440 < X$	$P \leq 470 < X \leq 1640 < F$	$P \leq 460 < X \leq 1540 < F$	$P \leq 240 < X$

2. BBP, DBP, DEHP, DIBP content

Test method: Organic solvent extraction, analyzed by GCMS (Ref. to DIN EN 62321-8: 2014 (IEC 111/321/CD: 2013))

Testing Period: 2019-07-17 ~ 2019-07-26

Test result:

	BBP	DBP	DEHP	DIBP
Maximum permissible Limit (%)	0.1	0.1	0.1	0.1

Test No.	Material No.	Results (%)			
		BBP	DBP	DEHP	DIBP
		RL (%)			
		0.005	0.005	0.005	0.005
T001	1+2	n.d.	n.d.	n.d.	n.d.
T002	3+4	n.d.	n.d.	n.d.	n.d.
T003	5+6	n.d.	n.d.	n.d.	n.d.
T004	7+8	n.d.	n.d.	n.d.	n.d.
T005	9+10+12	n.d.	n.d.	n.d.	n.d.
T006	13+14	n.d.	n.d.	n.d.	n.d.
T007	15+17	n.d.	n.d.	n.d.	n.d.
T008	18+19	n.d.	n.d.	n.d.	n.d.
T009	20+21+22	n.d.	n.d.	n.d.	n.d.
T010	23+24+25	n.d.	n.d.	n.d.	n.d.
T011	26+27+28	n.d.	n.d.	n.d.	n.d.
T012	29+30	n.d.	n.d.	n.d.	n.d.
T013	31+32	n.d.	n.d.	n.d.	n.d.
T014	33+34+35	n.d.	n.d.	n.d.	n.d.
T015	36+37+38	n.d.	n.d.	n.d.	n.d.
T016	39+40	n.d.	n.d.	n.d.	n.d.
T017	41+42+43	n.d.	n.d.	n.d.	n.d.
T018	44+45+46	n.d.	n.d.	n.d.	n.d.
T019	47+48	n.d.	n.d.	n.d.	n.d.

Abbreviation: BBP= Benzylbutyl phthalate
 DBP= Dibutyl phthalate
 DEHP= Bis(2-ethylhexyl) phthalate
 DIBP= Diisobutyl phthalate
 n.d.= Not Detected (< Reporting Limit)
 RL = Reporting Limit
 N.A. = Not Applicable
 % = percentage

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Sample Photo(s):







