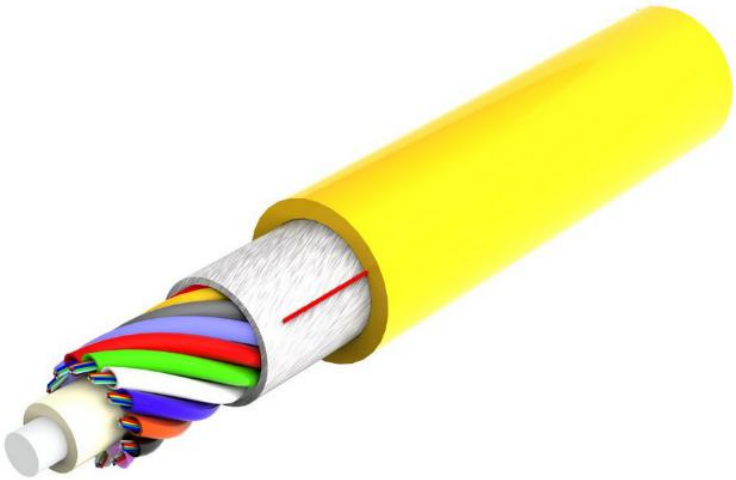
ENVIRONMENTAL PRODUCT DECLARATION (EPD)
CommScope Fiber Optic Cable (L-LN)



At CommScope, we believe that corporate responsibility and sustainability means making decisions that have a positive impact on our people, planet and bottom line.

CommScope's leaders have adopted a philosophy on corporate responsibility that embraces our core company values and holds us accountable to produce smart solutions that respect our people and our planet:

Meaningful integrity is a decisive personal and company-wide commitment to enable faster, smarter and more sustainable solutions while demonstrating the utmost respect for our human and natural resources.

This philosophy finds form in three pillars:

- Environmental

- Social

- Governance

Our commitment enables us to invest wisely in our future. By utilizing innovative technology, intelligent engineering and energy-efficient designs, we're building sustainable networks that make our customers more agile while also preserving the natural ecosystems from which we source our raw materials.

ASTM INTERNATIONAL

This declaration is an environmental product declaration (EPD) in accordance with ISO 14025, EN 15804 + A2. EPDs rely on Life Cycle Assessment (LCA) to provide information on a number of environmental impacts of products over their life cycle. Exclusions: EPDs do not indicate that any environmental or social performance benchmarks are met, and there may be impacts that they do not encompass. LCAs do not typically address the site-specific environmental impacts of raw material extraction, nor are they meant to assess human health toxicity. EPDs can complement but cannot replace tools and certifications that are designed to address these impacts and/or set performance thresholds – e.g. Type 1 certifications, health assessments and declarations, environmental impact assessments, etc. Accuracy of Results: EPDs regularly rely on estimations of impacts, and the level of accuracy in estimation of effect differs for any particular product line and reported impact. Comparability: EPDs are not comparative assertions and are either not comparable or have limited comparability when they cover different life cycle stages, are based on different product category rules or are missing relevant environmental impacts. EPDs from different programs may not be comparable.

EPD PROGRAM AND PROGRAM OPERATOR NAME, ADDRESS, LOGO, AND WEBSITE	ASTM International, 100 barr harbor drive west conshohocken, PA 19428
GENERAL PROGRAM INSTRUCTIONS AND VERSION NUMBER	General Program Instructions. Version 8.0. April 29, 2020
MANUFACTURER NAME AND ADDRESS	CommScope, Inc. 3642 E US Highway 70, Claremont, North Carolina 28610
DECLARATION NUMBER	EPD 1197
DECLARED PRODUCT & FUNCTIONAL UNIT OR DECLARED UNIT	CommScope® Fiber Optic Cable (L-LN) Functional Unit: one optical fiber used to transmit communication signals on 1m at the wavelength of 1310nm (for single mode cable), with a service life of 30 years, at a rate of use of 70% in accordance with the standards in force for building non-LAN use.
REFERENCE PCR AND VERSION NUMBER	PEP ecopassport Program: Part A PCR for Electrical, Electronic and HVAC-R Products and Part B PSR Specific Rules for Wire Cables and Accessories
DESCRIPTION OF PRODUCT APPLICATION/USE	CommScope fiber optic cable products are primarily used in commercial and residential settings
PRODUCT RSL DESCRIPTION (IF APPL.)	30 Years
MARKETS OF APPLICABILITY	EMEA
DATE OF ISSUE	May 27, 2026
PERIOD OF VALIDITY	5 Years
EPD TYPE	Product Specific
RANGE OF DATASET VARIABILITY	N/A
EPD SCOPE	Cradle-to-Grave
YEAR(S) OF REPORTED PRIMARY DATA	2025
LCA SOFTWARE DATABASE(S) & VERSION NUMBER	SimaPro 10.2.0.0 & Ecoinvent 3.11
LCIA METHODOLOGY & VERSION NUMBER	CML- IA Baseline 3.11, TRACI 2.2 and EN15804+A2 (adapted) 1.03

The sub-category PCR review was conducted by:	
This declaration was independently verified in accordance with ISO 14025: 2006. The "PEP ecopassport Program PCR for electrical, electronic and HVAC-R products", v4.0, 2021 based on EN 15804:2012 + A2:2019, serves as the core PCR. ☐ INTERNAL ☒EXTERNAL	Timothy S Brooke ASTM International
This life cycle assessment was conducted in accordance with ISO 14044 and the reference PCR by:	
This life cycle assessment was independently verified in accordance with ISO 14044 and reference PCR by:	Thomas P. Gloria, Ph. D. Industrial Ecology Consultants

Environmental declarations from different programs (ISO 14025) may not be comparable. Comparison of the environmental performance using EPD information shall consider all relevant information modules over the full life cycle of the products within the building. This PCR allows EPD comparability only when the same functional requirements between products are ensured and the requirements of EN 15804:2012+A2:2019 are met. It should be noted that different LCA software and background LCI datasets may lead to different results for upstream or downstream of the life cycle stages declared.

General Information

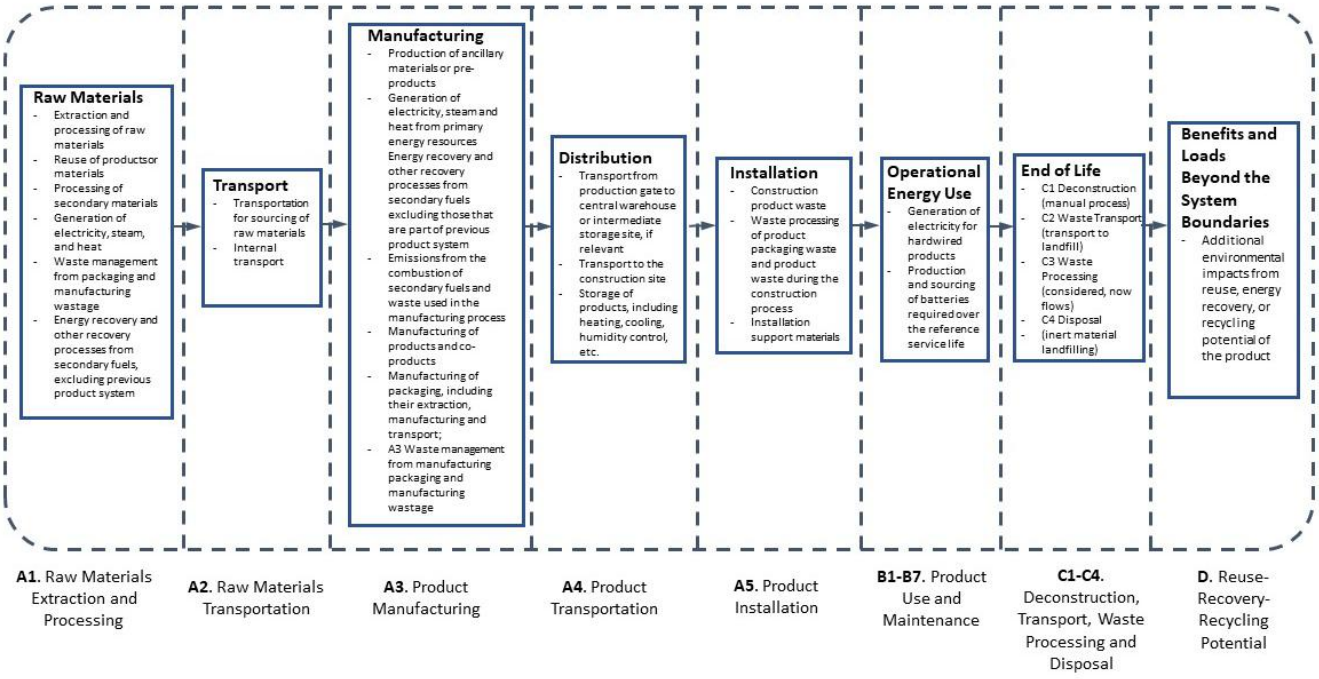
Description of Company/Organization

CommScope helps design, build and manage wired and wireless networks around the world. Corporate responsibility and sustainability drive us to make decisions that benefit people, society, the planet and our bottom line. We enable faster, smarter and more sustainable solutions while respecting human and natural resources. Innovative technology, intelligent engineering and energy-efficient design help us meet our goals. CommScope builds sustainable networks that make our customers more agile, simultaneously helping to preserve the natural ecosystems from which we source components and materials.

Product Description

CommScope's L-LN fiber optic cable group is indoor zero halogen, CPR-only flame rated cable, with stranded loose tube all-dielectric characteristics. This EPD covers L-LN fiber optic cables with 2 sub-groups: L-LN-14D-AY; L-LN-15D. Detailed cable configuration can be found in Ordering Tree (Page 5).

Flow Diagram



Manufacturer Specific EPD

This product-specific EPD was developed based on the cradle-to-grave (modules A1-C4) Life Cycle Assessment. The EPD accounts for raw material extraction and processing, transport, product manufacturing, distribution, installation, disposal, and potential benefits and loads following the end-of-life disposal. For each sub-group in L-LN cables, an impact assessment was completed for each case with different fiber numbers in one cable and the highest impacts were reported as representations of the sub-group (per one fiber). The rest of the products in each sub-group are represented through scaling factor tables and can be independently calculated. Details are explained on Page 18.

Material Composition

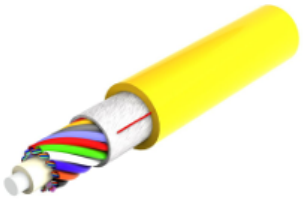
The primary product components and/or materials must be indicated as a percentage mass to enable the user of the EPD to understand the composition of the product in delivery status.

The compositions of each sub-group in L-LN cables are given below. The set of values is based on the cables with highest number of fibers in each sub-group. Both L-LN-14D-AY and L-LN-15D contain 144 fibers as the highest.

	Total Weight per fiber (g/m)	Outer Jacket	Inner Jacket	Aramid Yarn	Tape	GRP Rod	Ripcord	Optic Fiber
L-LN-14D-AY	0.645	30.09%	12.28%	21.33%	0.00%	25.31%	0.12%	10.88%
L-LN-15D	0.855	59.40%	9.41%	0.00%	2.84%	19.76%	0.41%	8.18%

Technical Details

For the declared product, the following technical data in the delivery status must be provided with reference to the test standard:



Fiber Optic Cable, Indoor Zero Halogen, CPR-only flame rated, Stranded Loose Tube All-Dielectric

- CommScope's indoor fiber cables are positioned for Data Center or Central Office applications
- Superior mechanical and optical performance with unmatched stability and quality
- Available Jacket Colors: Aqua and Yellow

Product Classification

Regional Availability	Asia | Australia/New Zealand | EMEA | Latin America | North America
Portfolio	CommScope®
Product Type	Fiber indoor cable
Product Series	L-LN

General Specifications

Cable Type	Stranded microsheath tube
Construction Type	Non-armored
Subunit Type	Gel-free
Jacket Marking Text	MFOG20074D/CC OXG INDOORKABEL COMMSCOPE OPTICAL CABLE 760244553 [MM/YYYY] 048 EN 50575 CLASS D [SERIAL NUMBER] [METRE MARK]

Ordering Tree

Cable family	
O	Outdoor Arid Core Gel-Filled Tubes
D	Outdoor Arid Core Gel-Free Tubes
B	Micro Cable for Air-Blown Installation
M	Messenger Self-Support
S	ADSS
C	In/Out Zero Halogen, CPR-only flame rated
Z	In/Out Zero Halogen, Dual listed
L	Indoor Zero Halogen, CPR-only flame rated
N	Indoor Zero Halogen, Dual listed

Fiber count	
001-999	This field specifies the total fiber count in the cable. A value of "002" means 2 fiber strands, "048" means 48 fiber strands. Valid fiber counts are: 002, 004, 006, 008, 012, 024, 036, 048, 72, 96 144, 288.

Cable construction	
LN	Stranded Loose Tube All-Dielectric
LA	Stranded Loose Tube CST Armored
CN	Central Tube All-Dielectric
CA	Central Tube Armored
DN	Drop Dielectric
RD	Retractable Dielectric
MP	Loose-tube Cordage
DS	Distribution Cable

Fiber type	
8W	G.652.D / G.657.A1
8F	G.657.A1
8G	G.657.A2
8G2	G.657.B3
RB	Matrix Flat Ribbon
RR	Rollable Ribbon

Unit of measure	
M	Marked in meters
F	Marked in Feet
X	Special print

Subunit Fiber Count	
01-24	"01" means 1 fiber per sub unit (tube).

CPR Rating	
B	Bca rated cable
C	Cca rated cable
D	Dca rated cabe
E	Eca rated cable

Special Cable Construction	
HTS	High Tensile Strength
GY	Glass Yarn Strength Elements
AY	Aramid Yarns Strength Elements
GRPA	GRP Rod Dielctric Armored
NR	No Ripcord

Specialty Material jackets	
AJ	Alternative Jacket (Rodent Resistant)
HD	High Density Polyethylene
PA	Nylon Jacket

Tube Size & Type	
15G	1.5 mm Gel-Filled / B-LN cable 250µ
17T200	1.7 mm Gel-filled / B-LN cable 200µ
14	1.4 mm Micro sheath cable
16G	1.60 mm Gel-Filled / Other BL-N cable
25D	2.50 mm Gel-Free
20G	2.00 mm Gel-Filled
25G	2.50 mm Gel-Filled / SLT & Central Tube
40T	4.00 mm Gel-Filled / Central Tube & Drop
60T	6.0 mm Gel-filled / Central Tube & Drop

Tracer Color or Jacket Color			
NS	No Stripe	WH	White
3G	3 Green Stripes	RD	Red
BL	Blue	BK	Black
OR	Orange	YL	Yellow
GR	Green	VI	Violet
BR	Brown	RS	Rose
SL	Slate	AQ	Aqua

Material Specifications

Inner Jacket Material	Low Smoke Zero Halogen (LSZH)

Environmental Specifications

Installation temperature	0 °C to +50 °C (+32 °F to +122 °F)
Operating Temperature	-10 °C to +60 °C (+14 °F to +140 °F)
Storage Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Environmental Space	Low Smoke Zero Halogen (LSZH)

* Footnotes

Operating Temperature	Specification applicable to non-terminated bulk fiber cable

Methodological Framework

Functional Unit

The declaration refers to the functional unit of one optical fiber used to transmit communication signals on 1m at the wavelength of 1310nm (for single mode cable), with a service life of 30 years, at a rate of use of 70% in accordance with the standards in force for building non-LAN use.

System Boundary

This is a cradle to grave Environmental Product Declaration. The following life cycle phases were considered:

Life Cycle Stage	Life Cycle Module	Module	X = Included/ MND = Module Not Declared
Product Stage	Raw Material Supply & Parts manufacturing	A1	X
	Transport	A2	X
	Assembly process	A3	X
Construction Process Stage	Transport from gate to the site	A4	X
	Installation process	A5	X
Use Stage	Use	B1**	X
	Maintenance	B2**	X
	Repair	B3**	X
	Replacement	B4**	X
	Refurbishment	B5**	X
	Operational energy use	B6**	X
	Operational water use	B7**	X
End of Life Stage*	Deconstruction/ demolition	C1**	X
	Transport	C2	X
	Waste processing	C3	X
	Disposal	C4	X
Benefits and Loads Beyond the System Boundaries	Reuse-Recovery-Recycling potential	D	X

*This includes provision of all materials, products and energy, packaging processing and its transport, as well as waste processing up to the end-of waste state or disposal of final residues.

**There is no activity in these stages, their declared value is “0”.

Reference Service Life

The reference service life of the installed L-LN fiber optic cable is 30 years.

Allocation

Allocation was determined on a per meter basis.

Cut-off Criteria

Processes whose total contribution to the final result, with respect to their mass and in relation to all considered impact categories, is less than 1% can be neglected. The sum of the neglected processes may not exceed 5% by mass of the considered impact categories. For this, a documented assumption is permissible.

For Hazardous Substances the following requirements apply:

- The Life Cycle Inventory (LCI) of hazardous substances will be included, if the inventory is available.
- If the LCI for a hazardous substance is not available, the substance will appear as an input in the LCI of the product, if its mass represents more than 0.1% of the product composition.
- If the LCI of a hazardous substance is approximated by modeling another substance, documentation will be provided.

This EPD is in compliance with the cut-off criteria. No processes were neglected or excluded. Capital items for the production processes (machine, buildings, etc.) were not taken into consideration.

Data Sources

Primary data were collected for every process in the product system under the control of CommScope. Secondary data from the Ecoinvent 3.11 database were utilized when necessary. These data were evaluated and have temporal, geographic, and technical coverage appropriate to the scope of the product category.

Data Quality

The data sources used are complete and representative of global systems in terms of geographic and technological coverage and are a recent vintage (i.e. less than ten years old). Primary data are based on direct information from CommScope manufacturing site. Secondary data sets were used for raw materials extraction and processing, end of life, transportation, and energy production flows. Wherever secondary data is used, the study adopts critically reviewed data for consistency, precision, and reproducibility to limit uncertainty.

Period Under Review

The period under review is the full calendar year of 2025.

Treatment of Biogenic Carbon

The uptake and release of biogenic carbon throughout the product life cycle follows EN15804+A2 Section 6.4.4.

Comparability and Benchmarking

A comparison or an evaluation of EPD data is only possible if all data sets to be compared were created according to EN 15804 + A2 and the building context, respectively the product-specific characteristics of performance, are taken into account. Environmental declarations from different programs may not be comparable. Full conformance with the PCR allows for EPD comparability only when all stages of a product's life cycle have been considered. However, variations and deviations are possible.

Units

The LCA results within this EPD are reported in SI units.

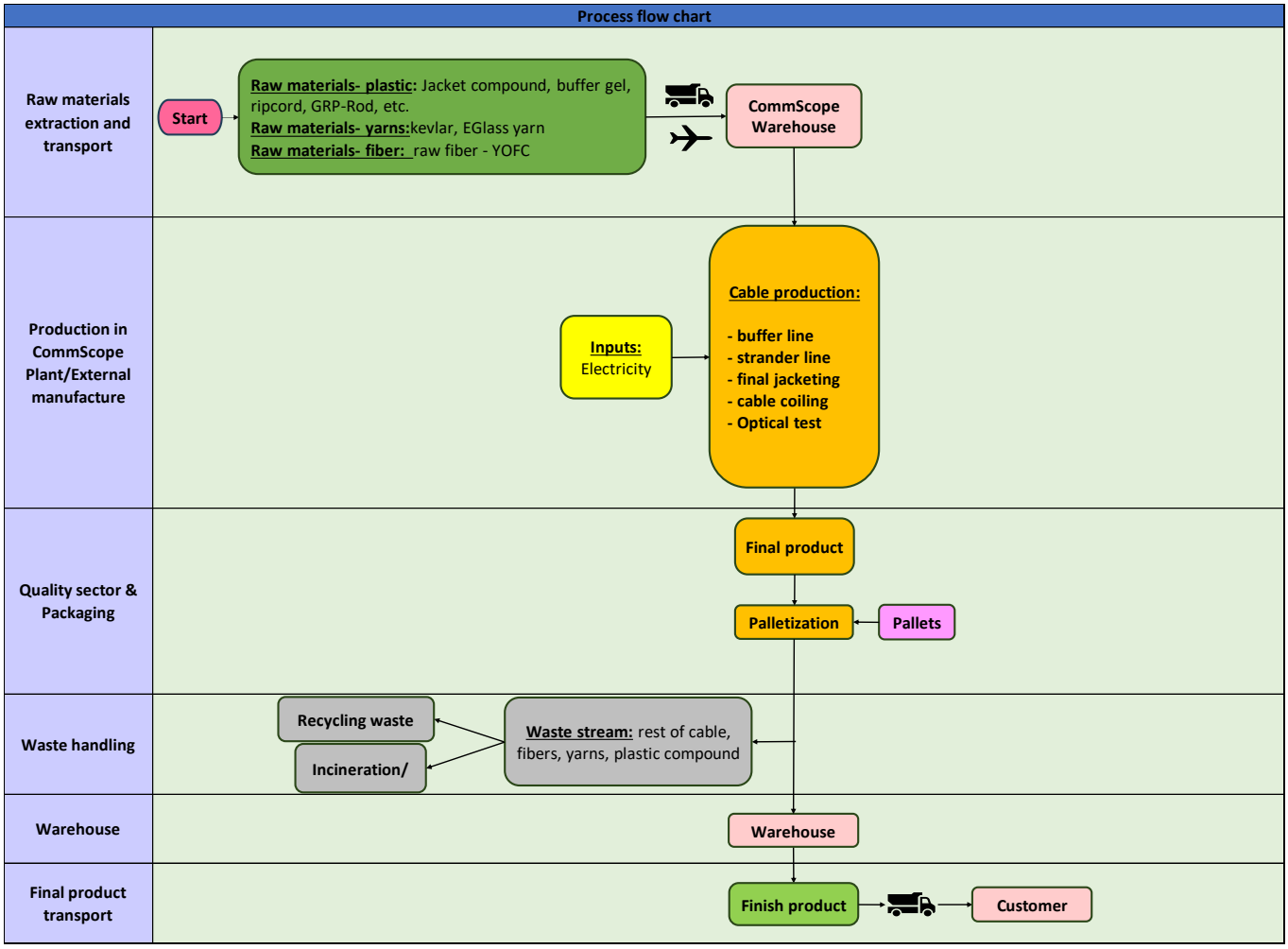
Additional Environmental Information

Background Data

For life cycle modeling of the products considered, SimaPro- LCA software tool, developed by PRé-Sustainability, is used. The Ecoinvent database contains consistent and documented datasets which are available online. To ensure comparability of results in the LCA, data from the Ecoinvent database were used for materials, energy, transportation, and waste treatment.

Manufacturing

The manufacturing process for fiber optic cable products begins with the sourcing of raw materials, primarily polymer compounds, yarns, optic fiber, buffer gel, tapes, ripcord, glass reinforced plastic rod, etc. with transportation to CommScope manufacturing plant. The optic fiber and polymer compound are first extruded from the tight buffer extrusion line where the fibers are buffered. After buffering, the tight buffered fiberglass from single mode fiber optic cables is sent to the fiber jacket extrusion line where the fibers are stranded together and wrapped with ripcord and outer jacket. Alternatively, if aramid/Kevlar, polyester yarn and GRP rods are used as raw material inputs, they are sent directly to the fiber jacket extrusion line. Once the fibers have undergone the extrusion processes, the fibers are then sent to be labeled via the printing process using printing ink and solvent. Following the printing process, the cables are tested in a laboratory before being sent to be packaged and shipped to the appropriate consumers.



Packaging

The packaging for L-LN cables is 100% recyclable plywood reel. The packaging weight and corresponding biogenic carbon content are given based on the cables with highest number of fibers in each sub-group.

	Packaging Weight per fiber (g/m)	Biogenic Carbon content (kg/C)*
L-LN-14D-AY	0.068	3.39E-05
L-LN-15D	0.068	3.39E-05

*The Biogenic Carbon Content in packaging materials is calculated based on 50% dry mass of wood.

Transformation

Transport to Installation Site (A4)		
Description	**Value**	**Unit**
Transport type	Truck/ lorry > 32 metric ton	
Fuel type/ Liters of Fuel	Diesel, compliant with EURO5	
Liters of Fuel	35	l/100 km
Transport Distance (average)	3500	km
Capacity Utilization	85	%
Weight of products transported	-	kg

Product Installation

CommScope fiber optic cables are distributed through and installed by trained technicians in accordance with applicable local and national standards. Installation involves only the management of packaging, as there is no energy consumption, material loss, or use of auxiliary materials during the process. The product is designed for complete manual installation without the need for power tools, resulting in negligible electricity use and no installation scrap. The calculated value (per fiber/m) in the table below is based on the cable with highest number of fibers.

Installation into the building (A5)		
Name	**L-LN**	**Unit**
Auxiliary materials	-	kg
Water consumption	-	m^3
Other resources	-	kg
Electricity consumption	-	kWh
Other energy carriers	-	MJ
Product loss per functional unit	0.00E+00	kg
Waste materials at construction site	0.00E+00	kg
Output substance (recycle)	0.00E+00	kg
Output substance (landfill)	0.00E+00	kg
Output substance (incineration)	0.00E+00	kg
Packaging waste (recycle)	6.80E-05	kg
Packaging waste (landfill)	0.00E+00	kg
Packaging waste (incineration)	0.00E+00	kg
Direct emissions to ambient air*, soil, and water	0.00E+00	kg CO_2
VOC emissions	-	kg

*CO2 emissions to air from disposal of packaging

Reference Service Life		
Name	**Value**	**Unit**
Reference Service Life	30	years
Declared product properties (at the gate) and finishes, etc.	-	
Design application parameters (if instructed by the manufacturer), including the references to the appropriate practices and application codes	-	
An assumed quality of work, when installed in accordance with the manufacturer's instructions	-	
Outdoor environment, (for outdoor applications), e.g. weathering, pollutants, UV and wind exposure, building orientation, shading, temperature	-	
Indoor environment (for indoor applications), e.g. temperature, moisture, chemical exposure	-	
Usage conditions, e.g. frequency of use, mechanical exposure	-	
Maintenance e.g. required frequency, type and quality and replacement of components	-	

Product Use

No cleaning, maintenance, repair, replacement or refurbishment is required. Operational energy use was modeled as use phase losses determined by the IEC 60794 standard. The maximum loss value for L-LN cables is 0.09µW/m, as the single mode fiber cable under the 10GBASE-LR protocol. It is used in stage B6 for electricity consumption calculation (per fiber).

Operational Energy Use (B6)		
Name	**Value**	**Unit**
Ancillary materials specified by material	-	kg
Net freshwater consumption	-	m^3
Electricity consumption	1.66E-05	kWh
Power output of equipment	-	kWh
Characteristic performance	-	-
Further assumptions for scenario development	-	-

Disposal

The product can be manually disassembled to separate different materials for disposal. Most components are disposed through waste incineration with energy recovery or landfilled, in accordance with the PCR. The calculated values (per fiber/m) in the table below are based on the cables with highest number of fibers in each sub-group.

End of life (C2-C4)			
Name	**L-LN-14D-AY**	**L-LN-15D**	**Unit**
Collected separately	0	0	kg
Collected as mixed waste	0	0	kg
Reuse	0	0	kg
Recycling	0	0	kg
Landfilling	3.22E-04	4.28E-04	kg
Incineration with energy recovery	3.22E-04	4.28E-04	kg
Energy conversion- Electricity	20	20	%
Energy conversion- Heat	50	50	%

Re-use Phase

Re-use of the product is not common. However, energy in the form of heat and electricity has been recovered from the waste processing of product materials at the end-of-life disposal stage (C2-C4). Energy recovery for the incineration of polymer materials was calculated according to Appendix D of the Part A PCR. The calculated values (per fiber/m) in the table below are based on the cables with highest number of fibers in each sub-group.

Energy Recovery Potential (D)			
Name	**L-LN-14D-AY**	**L-LN-15D**	**Unit**
Net energy benefit of energy recovery from packaging wastes incineration (A5-Installation) in the form of heat	0.00E+00	0.00E+00	MJ
Net energy benefit of energy recovery from packaging wastes incineration (A5-Installation) in the form of electricity	0.00E+00	0.00E+00	MJ
Net energy benefit of energy recovery from product wastes incineration (C2-C4 End of life Disposal) in the form of heat	3.96E-03	5.69E-03	MJ
Net energy benefit of energy recovery from product wastes incineration (C2-C4 End of life Disposal) in the form of electricity	1.58E-03	2.28E-03	MJ
Total Net energy benefits of energy recovery in the form of heat	3.96E-03	5.69E-03	MJ
Total Net energy benefits of energy recovery in the form of electricity	1.58E-03	2.28E-03	MJ

LCA Results

Results shown below are for L-144-LN-14D-AY cables as the maximum impact among L-LN-14D-AY sub-group.

CML-IA baseline V3.11 / EU25										
Impact category	**Unit**	**Total**	**A1-A3**	**A4**	**A5**	**B6**	**C2**	**C3**	**C4**	**D**
Abiotic depletion	kg Sb eq	2.92E-08	2.78E-08	7.39E-10	2.01E-11	7.37E-11	1.91E-10	8.04E-11	3.12E-10	-1.22E-10
Abiotic depletion (fossil fuels)	MJ	5.94E-02	5.28E-02	3.78E-03	1.03E-04	6.46E-05	9.77E-04	8.80E-04	7.99E-04	-3.40E-03
Global warming (GWP100a)	kg CO2 eq	4.29E-03	3.10E-03	2.61E-04	7.10E-06	5.53E-06	6.76E-05	7.88E-05	7.64E-04	-3.03E-04
Ozone layer depletion (ODP)	kg CFC-11 eq	8.05E-10	7.96E-10	4.59E-12	1.24E-13	8.72E-14	1.19E-12	4.21E-13	2.07E-12	-1.52E-12
Photochemical oxidation	kg C2H4 eq	8.35E-07	7.46E-07	4.01E-08	1.09E-09	1.19E-09	1.04E-08	1.24E-08	2.39E-08	-4.75E-08
Acidification	kg SO2 eq	1.23E-05	1.08E-05	6.60E-07	1.79E-08	2.71E-08	1.71E-07	3.26E-07	3.10E-07	-1.25E-06
Eutrophication	kg PO4--- eq	1.01E-05	4.31E-06	1.80E-07	4.90E-09	1.90E-08	4.66E-08	1.85E-07	5.31E-06	-7.26E-07

**All use phase and disposal stages have been considered and only those with non-zero values have been reported.*

TRACI 2.2 V1.00 / US-Canadian 2008										
Impact category	**Unit**	**Total**	**A1-A3**	**A4**	**A5**	**B6**	**C2**	**C3**	**C4**	**D**
Ozone depletion	kg CFC-11 eq	1.07E-09	1.06E-09	6.06E-12	1.65E-13	1.08E-13	1.57E-12	5.35E-13	2.27E-12	-1.92E-12
Global warming	kg CO2 eq	4.24E-03	3.06E-03	2.59E-04	7.04E-06	5.50E-06	6.70E-05	7.83E-05	7.62E-04	-3.02E-04
Smog	kg O3 eq	2.07E-04	1.72E-04	1.85E-05	5.02E-07	2.42E-07	4.78E-06	4.53E-06	6.69E-06	-1.77E-05
Acidification	kg SO2 eq	1.30E-05	1.12E-05	7.71E-07	2.09E-08	2.59E-08	1.99E-07	3.38E-07	3.96E-07	-1.30E-06
Respiratory effects	kg PM2.5 eq	1.78E-06	1.41E-06	1.56E-07	4.24E-09	3.81E-09	4.03E-08	1.14E-07	5.27E-08	-4.41E-07
Freshwater eutrophication	kg P eq	1.14E-06	3.88E-07	1.08E-08	2.93E-10	2.49E-09	2.80E-09	2.27E-08	7.14E-07	-8.93E-08
Marine eutrophication	kg N eq	2.42E-06	1.78E-06	1.58E-07	4.30E-09	2.40E-09	4.09E-08	4.04E-08	3.95E-07	-1.57E-07

**All use phase and disposal stages have been considered and only those with non-zero values have been reported.*

EN 15804 + A2 (adapted) V1.03 / EF 3.1 normalization and weighting set										
Impact category	**Unit**	**Total**	**A1-A3**	**A4**	**A5**	**B6**	**C2**	**C3**	**C4**	**D**
Acidification	mol H+ eq	1.52E-05	1.33E-05	8.70E-07	2.36E-08	3.18E-08	2.25E-07	3.93E-07	3.98E-07	-1.51E-06
Climate change	kg CO2 eq	4.18E-03	2.99E-03	2.63E-04	7.15E-06	5.73E-06	6.81E-05	7.95E-05	7.66E-04	-3.43E-04
Climate change - Biogenic	kg CO2 eq	-1.38E-04	-1.40E-04	1.61E-07	4.37E-09	1.79E-07	4.16E-08	4.75E-07	7.26E-07	-3.86E-05
Climate change - Fossil	kg CO2 eq	4.32E-03	3.13E-03	2.63E-04	7.14E-06	5.53E-06	6.80E-05	7.88E-05	7.65E-04	-3.03E-04
Climate change - Land use and LU change	kg CO2 eq	2.25E-06	1.89E-06	9.44E-08	2.56E-09	1.63E-08	2.44E-08	1.66E-07	5.80E-08	-6.43E-07
Ecotoxicity, freshwater	CTUe	3.22E-02	7.27E-03	4.51E-04	1.22E-05	1.81E-05	1.17E-04	1.76E-04	2.42E-02	-6.64E-04
Ecotoxicity, freshwater - inorganics	CTUe	3.14E-02	6.50E-03	4.33E-04	1.18E-05	1.79E-05	1.12E-04	1.72E-04	2.42E-02	-6.50E-04
Ecotoxicity, freshwater - organics	CTUe	8.14E-04	7.73E-04	1.79E-05	4.87E-07	1.58E-07	4.64E-06	3.66E-06	1.37E-05	-1.42E-05
Particulate matter	disease inc.	1.66E-10	1.24E-10	2.66E-11	7.23E-13	1.13E-13	6.88E-12	3.65E-12	3.72E-12	-1.41E-11
Eutrophication, marine	kg N eq	5.36E-06	4.11E-06	2.96E-07	8.02E-09	5.07E-09	7.64E-08	7.97E-08	7.78E-07	-3.12E-07
Eutrophication, freshwater	kg P eq	6.62E-07	5.73E-07	1.86E-08	5.04E-10	5.31E-09	4.80E-09	3.80E-08	2.17E-08	-1.50E-07
Eutrophication, terrestrial	mol N eq	3.73E-05	3.11E-05	3.22E-06	8.73E-08	4.49E-08	8.32E-07	8.00E-07	1.20E-06	-3.11E-06
Human toxicity, cancer	CTUh	1.26E-12	1.05E-12	4.30E-14	1.17E-15	1.52E-15	1.11E-14	8.32E-15	1.44E-13	-3.33E-14
Human toxicity, cancer - inorganics	CTUh	4.20E-13	3.30E-13	1.85E-14	5.01E-16	9.28E-16	4.78E-15	5.36E-15	6.06E-14	-2.18E-14
Human toxicity, cancer - organics	CTUh	8.41E-13	7.23E-13	2.45E-14	6.65E-16	5.96E-16	6.33E-15	2.97E-15	8.30E-14	-1.15E-14
Human toxicity, non-cancer	CTUh	3.31E-11	2.65E-11	2.48E-12	6.72E-14	8.55E-14	6.40E-13	4.41E-13	2.84E-12	-1.66E-12
Human toxicity, non-cancer - inorganics	CTUh	3.10E-11	2.47E-11	2.32E-12	6.31E-14	8.16E-14	6.01E-13	4.27E-13	2.78E-12	-1.61E-12
Human toxicity, non-cancer - organics	CTUh	2.06E-12	1.79E-12	1.54E-13	4.17E-15	3.93E-15	3.97E-14	1.39E-14	6.04E-14	-4.51E-14

Ionising radiation	kBq U-235 eq	2.18E-04	1.95E-04	4.31E-06	1.17E-07	3.52E-06	1.11E-06	1.11E-05	2.81E-06	-4.28E-05
Land use	Pt	2.76E-02	2.19E-02	3.87E-03	1.05E-04	2.47E-05	1.00E-03	1.54E-04	5.29E-04	-5.73E-04
Ozone depletion	kg CFC11 eq	1.19E-09	1.18E-09	5.75E-12	1.56E-13	1.04E-13	1.49E-12	5.08E-13	2.19E-12	-1.80E-12
Photochemical ozone formation	kg NMVOC eq	1.66E-05	1.42E-05	1.38E-06	3.74E-08	1.44E-08	3.57E-07	2.36E-07	3.83E-07	-9.18E-07
Resource use, fossils	MJ	6.51E-02	5.81E-02	3.85E-03	1.04E-04	1.27E-04	9.95E-04	1.06E-03	8.44E-04	-4.09E-03
Resource use, minerals and metals	kg Sb eq	2.92E-08	2.78E-08	7.39E-10	2.01E-11	7.36E-11	1.91E-10	7.99E-11	3.11E-10	-1.20E-10
Water use	m3 depriv.	2.67E-03	2.33E-03	1.75E-05	4.75E-07	1.34E-06	4.52E-06	1.08E-05	3.05E-04	-4.19E-05

**All use phase and disposal stages have been considered and only those with non-zero values have been reported.*

EN15804+A2: Resource Use

Parameter	Unit	Total	A1-A3	A4	A5	B6	C2	C3	C4	D
PERE	MJ	9.34E-03	9.57E-03	5.94E-05	1.61E-06	3.36E-05	1.53E-05	1.41E-04	6.62E-05	-5.43E-04
PERM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	9.34E-03	9.57E-03	5.94E-05	1.61E-06	3.36E-05	1.53E-05	1.41E-04	6.62E-05	-5.43E-04
PENRE	MJ	6.55E-02	6.24E-02	4.09E-03	1.11E-04	1.32E-04	1.06E-03	1.12E-03	9.01E-04	-4.35E-03
PENRM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	6.55E-02	6.24E-02	4.09E-03	1.11E-04	1.32E-04	1.06E-03	1.12E-03	9.01E-04	-4.35E-03
SM	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m3	2.54E-03	2.25E-03	1.75E-05	4.76E-07	1.34E-06	4.53E-06	1.11E-05	3.02E-04	-4.29E-05

**All use phase and disposal stages have been considered and only those with non-zero values have been reported.*
***The abbreviations' detailed meaning in parameter column can be found at the end of LCA results section.*

EN15804+A2: Waste Categories and Output Flows

Parameter	Unit	Total	A1-A3	A4	A5	B6	C2	C3	C4	D
HWD	kg	1.70E-05	2.99E-06	1.10E-07	2.98E-09	6.16E-09	2.84E-08	4.31E-08	1.75E-05	-3.75E-06
NHWD	kg	1.03E-03	2.25E-04	3.32E-04	9.01E-06	4.80E-07	8.58E-05	2.06E-06	3.85E-04	-7.85E-06
RWD	kg	4.45E-08	4.93E-08	1.06E-09	2.87E-11	9.04E-10	2.74E-10	2.70E-09	7.17E-10	-1.04E-08
CRU	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MER	kg	3.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.22E-04	0.00E+00
EE	MJ	5.54E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.54E-03	0.00E+00

**All use phase and disposal stages have been considered and only those with non-zero values have been reported.*
***The abbreviations' detailed meaning in parameter column can be found at the end of LCA results section.*

Results shown below are for L-144-LN-15D cables as the maximum impact among L-LN-15D sub-group.

CML-IA baseline V3.11 / EU25

Impact category	Unit	Total	A1-A3	A4	A5	B6	C2	C3	C4	D
Abiotic depletion	kg Sb eq	3.29E-08	3.11E-08	8.87E-10	2.01E-11	7.37E-11	2.54E-10	1.07E-10	4.13E-10	-1.76E-10
Abiotic depletion (fossil fuels)	MJ	6.87E-02	6.05E-02	4.53E-03	1.03E-04	6.46E-05	1.30E-03	1.17E-03	1.06E-03	-4.90E-03
Global warming (GWP100a)	kg CO2 eq	4.61E-03	3.07E-03	3.14E-04	7.10E-06	5.53E-06	8.97E-05	1.05E-04	1.01E-03	-4.37E-04
Ozone layer depletion (ODP)	kg CFC-11 eq	8.59E-10	8.49E-10	5.51E-12	1.25E-13	8.72E-14	1.57E-12	5.59E-13	2.74E-12	-2.19E-12
Photochemical oxidation	kg C2H4 eq	9.93E-07	8.81E-07	4.82E-08	1.09E-09	1.19E-09	1.38E-08	1.65E-08	3.17E-08	-6.83E-08
Acidification	kg SO2 eq	1.16E-05	9.72E-06	7.93E-07	1.79E-08	2.71E-08	2.26E-07	4.32E-07	4.12E-07	-1.80E-06

Eutrophication	kg PO4--- eq	1.19E-05	4.33E-06	2.17E-07	4.90E-09	1.90E-08	6.19E-08	2.45E-07	7.04E-06	-1.05E-06

**All use phase and disposal stages have been considered and only those with non-zero values have been reported.*

TRACI 2.2 V1.00 / US-Canadian 2008

Impact category	Unit	Total	A1-A3	A4	A5	B6	C2	C3	C4	D
Ozone depletion	kg CFC-11 eq	1.15E-09	1.13E-09	7.28E-12	1.65E-13	1.08E-13	2.08E-12	7.10E-13	3.01E-12	-2.77E-12
Global warming	kg CO2 eq	4.56E-03	3.03E-03	3.11E-04	7.04E-06	5.50E-06	8.89E-05	1.04E-04	1.01E-03	-4.34E-04
Smog	kg O3 eq	2.47E-04	2.03E-04	2.22E-05	5.02E-07	2.42E-07	6.34E-06	6.01E-06	8.87E-06	-2.55E-05
Acidification	kg SO2 eq	1.29E-05	1.07E-05	9.25E-07	2.09E-08	2.59E-08	2.64E-07	4.48E-07	5.25E-07	-1.87E-06
Respiratory effects	kg PM2.5 eq	1.79E-06	1.32E-06	1.87E-07	4.24E-09	3.81E-09	5.35E-08	1.52E-07	6.99E-08	-6.34E-07
Freshwater eutrophication	kg P eq	1.44E-06	4.47E-07	1.30E-08	2.94E-10	2.49E-09	3.71E-09	3.02E-08	9.48E-07	-1.28E-07
Marine eutrophication	kg N eq	2.62E-06	1.80E-06	1.90E-07	4.30E-09	2.40E-09	5.43E-08	5.35E-08	5.24E-07	-2.26E-07

**All use phase and disposal stages have been considered and only those with non-zero values have been reported.*

EN 15804 + A2 (adapted) V1.03 / EF 3.1 normalization and weighting set

Impact category	Unit	Total	A1-A3	A4	A5	B6	C2	C3	C4	D
Acidification	mol H+ eq	1.47E-05	1.23E-05	1.04E-06	2.36E-08	3.18E-08	2.99E-07	5.22E-07	5.28E-07	-2.17E-06
Climate change	kg CO2 eq	4.47E-03	2.93E-03	3.16E-04	7.15E-06	5.73E-06	9.03E-05	1.05E-04	1.02E-03	-4.93E-04
Climate change - Biogenic	kg CO2 eq	-1.61E-04	-1.63E-04	1.93E-07	4.37E-09	1.79E-07	5.52E-08	6.31E-07	9.63E-07	-5.56E-05
Climate change - Fossil	kg CO2 eq	4.63E-03	3.09E-03	3.16E-04	7.14E-06	5.53E-06	9.02E-05	1.05E-04	1.01E-03	-4.37E-04
Climate change - Land use and LU change	kg CO2 eq	2.82E-06	2.36E-06	1.13E-07	2.56E-09	1.63E-08	3.24E-08	2.21E-07	7.69E-08	-9.25E-07
Ecotoxicity, freshwater	CTUe	4.08E-02	7.70E-03	5.41E-04	1.22E-05	1.81E-05	1.55E-04	2.33E-04	3.21E-02	-9.56E-04
Ecotoxicity, freshwater - inorganics	CTUe	3.99E-02	6.85E-03	5.20E-04	1.18E-05	1.79E-05	1.49E-04	2.29E-04	3.21E-02	-9.36E-04
Ecotoxicity, freshwater - organics	CTUe	8.98E-04	8.47E-04	2.15E-05	4.87E-07	1.58E-07	6.15E-06	4.85E-06	1.82E-05	-2.04E-05
Particulate matter	disease inc.	1.39E-10	8.74E-11	3.20E-11	7.23E-13	1.13E-13	9.13E-12	4.84E-12	4.93E-12	-2.02E-11
Eutrophication, marine	kg N eq	5.05E-06	3.44E-06	3.55E-07	8.03E-09	5.07E-09	1.01E-07	1.06E-07	1.03E-06	-4.49E-07
Eutrophication, freshwater	kg P eq	7.77E-07	6.64E-07	2.23E-08	5.04E-10	5.31E-09	6.37E-09	5.04E-08	2.88E-08	-2.15E-07
Eutrophication, terrestrial	mol N eq	4.29E-05	3.52E-05	3.86E-06	8.73E-08	4.49E-08	1.10E-06	1.06E-06	1.59E-06	-4.47E-06
Human toxicity, cancer	CTUh	1.53E-12	1.26E-12	5.16E-14	1.17E-15	1.52E-15	1.47E-14	1.10E-14	1.90E-13	-4.79E-14
Human toxicity, cancer - inorganics	CTUh	5.25E-13	4.08E-13	2.22E-14	5.01E-16	9.28E-16	6.34E-15	7.11E-15	8.03E-14	-3.14E-14
Human toxicity, cancer - organics	CTUh	1.01E-12	8.54E-13	2.94E-14	6.65E-16	5.96E-16	8.40E-15	3.93E-15	1.10E-13	-1.65E-14
Human toxicity, non-cancer	CTUh	4.54E-11	3.71E-11	2.97E-12	6.73E-14	8.55E-14	8.50E-13	5.85E-13	3.77E-12	-2.38E-12
Human toxicity, non-cancer - inorganics	CTUh	4.32E-11	3.52E-11	2.79E-12	6.31E-14	8.16E-14	7.97E-13	5.67E-13	3.69E-12	-2.32E-12
Human toxicity, non-cancer - organics	CTUh	2.23E-12	1.88E-12	1.84E-13	4.17E-15	3.93E-15	5.27E-14	1.84E-14	8.02E-14	-6.49E-14
Ionising radiation	kBq U-235 eq	3.20E-04	2.91E-04	5.17E-06	1.17E-07	3.52E-06	1.48E-06	1.47E-05	3.72E-06	-6.16E-05
Land use	Pt	3.23E-02	2.53E-02	4.65E-03	1.05E-04	2.47E-05	1.33E-03	2.04E-04	7.01E-04	-8.25E-04
Ozone depletion	kg CFC11 eq	1.26E-09	1.25E-09	6.91E-12	1.56E-13	1.04E-13	1.97E-12	6.74E-13	2.90E-12	-2.59E-12
Photochemical ozone formation	kg NMVOC eq	1.97E-05	1.67E-05	1.66E-06	3.75E-08	1.44E-08	4.73E-07	3.13E-07	5.08E-07	-1.32E-06
Resource use, fossils	MJ	7.42E-02	6.56E-02	4.62E-03	1.04E-04	1.27E-04	1.32E-03	1.40E-03	1.12E-03	-5.89E-03
Resource use, minerals and metals	kg Sb eq	3.28E-08	3.11E-08	8.87E-10	2.01E-11	7.36E-11	2.53E-10	1.06E-10	4.13E-10	-1.73E-10
Water use	m3 depriv.	1.99E-03	1.54E-03	2.10E-05	4.75E-07	1.34E-06	6.00E-06	1.44E-05	4.05E-04	-6.04E-05

**All use phase and disposal stages have been considered and only those with non-zero values have been reported.*

EN15804+A2: Resource Use

Parameter	Unit	Total	A1-A3	A4	A5	B6	C2	C3	C4	D
PERE	MJ	1.08E-02	1.12E-02	7.13E-05	1.61E-06	3.36E-05	2.04E-05	1.87E-04	8.79E-05	-7.82E-04

PERM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	1.08E-02	1.12E-02	7.13E-05	1.61E-06	3.36E-05	2.04E-05	1.87E-04	8.79E-05	-7.82E-04
PENRE	MJ	7.32E-02	7.02E-02	4.91E-03	1.11E-04	1.32E-04	1.40E-03	1.49E-03	1.19E-03	-6.26E-03
PENRM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	7.32E-02	7.02E-02	4.91E-03	1.11E-04	1.32E-04	1.40E-03	1.49E-03	1.19E-03	-6.26E-03
SM	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m3	1.87E-03	1.49E-03	2.10E-05	4.76E-07	1.34E-06	6.01E-06	1.47E-05	4.01E-04	-6.18E-05

**All use phase and disposal stages have been considered and only those with non-zero values have been reported.*
***The abbreviations' detailed meaning in parameter column can be found at the end of LCA results section.*

EN15804+A2: Waste Categories and Output Flows

Parameter	Unit	Total	A1-A3	A4	A5	B6	C2	C3	C4	D
HWD	kg	2.10E-05	2.87E-06	1.32E-07	2.98E-09	6.16E-09	3.77E-08	5.72E-08	2.33E-05	-5.40E-06
NHWD	kg	1.26E-03	2.34E-04	3.98E-04	9.01E-06	4.80E-07	1.14E-04	2.73E-06	5.11E-04	-1.13E-05
RWD	kg	6.61E-08	7.40E-08	1.27E-09	2.87E-11	9.04E-10	3.63E-10	3.58E-09	9.51E-10	-1.50E-08
CRU	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MER	kg	4.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.28E-04	0.00E+00
EE	MJ	7.97E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.97E-03	0.00E+00

**All use phase and disposal stages have been considered and only those with non-zero values have been reported.*
***The abbreviations' detailed meaning in parameter column can be found at the end of LCA results section.*

Disclaimer 1: The environmental impact category "Ionsing radiation" in "EN15804+A2 (adapted) V1.03 / EF 3.1 normalization and weighting set" deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

Disclaimer 2: The results of environmental impact indicators "Human toxicity, cancer & non-cancer" in "EN15804+A2 (adapted) V1.03 / EF 3.1 normalization and weighting set" and the results from "EN15804+A2: Resource Use" shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicators.

EN15804+A2: Resource Use (Abbreviation)	
PERE	Use of renwable primary energy excluding renewable primary energy resources used as raw materials
PERM	Use of renewable primary energy resources used as raw materials
PERT	Total use of renewable primary energy resources
PENRE	Use of non-renwable primary energy excluding renewable primary energy resources used as raw materials
PENRM	Use of non-renewable primary energy resources used as raw materials
PENRT	Total use of non-renewable primary energy resources
SM	Use of secondary material
RSF	Use of renewable secondary fuels

NRSF	Use of non-renewable secondary fuels
FW	Net use of fresh water

EN15804+A2: Waste Categories and Output Flows (Abbreviation)	
HWD	Hazardous waste disposed
NHWD	Non-hazardous waste disposed
RWD	Radioactive waste disposed
CRU	Components for re-use
MFR	Materials for recycling
MER	Materials for energy recovery
EE	Exported energy

Scaling Factor Tables

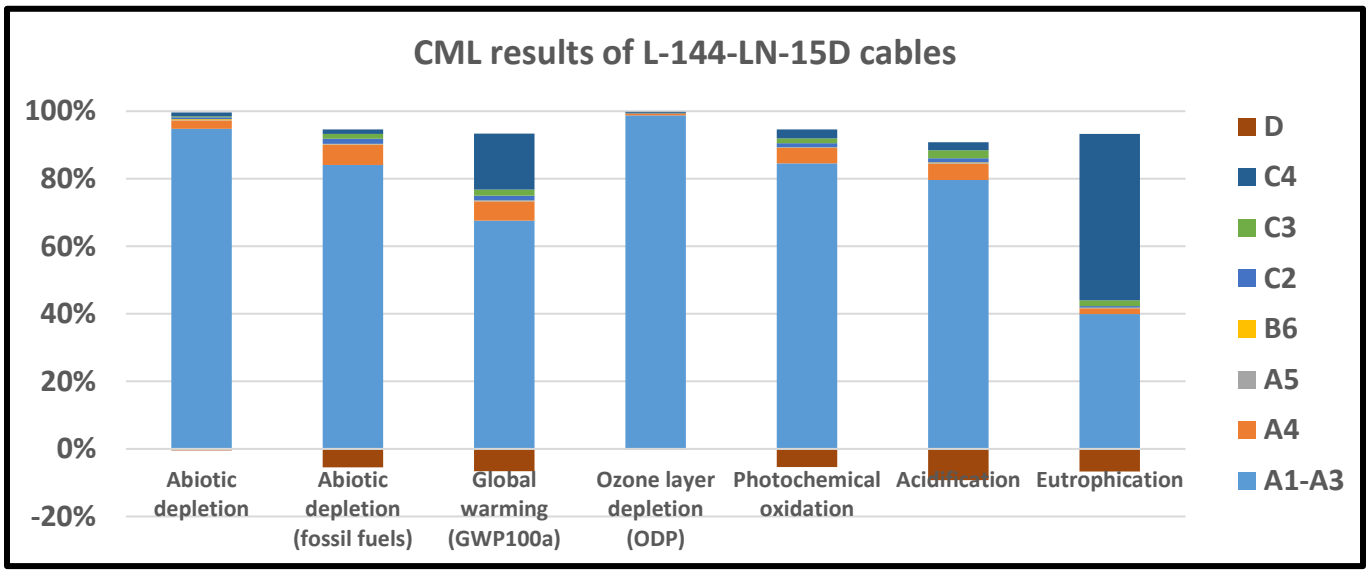
For each sub-group in L-LN cables, an impact assessment was completed for each case with different fiber numbers in one cable and the highest impacts were reported as representations of the sub-group (per one fiber), as shown in **LCA results** section. The rest of the products in each group are represented through scaling factor tables and can be independently calculated by multiplying the values from LCA results section with the scaling factor from the table below. For stage A1-A3, the scaling factors are given separately with 7 different environmental impacts; for the rest of the stages, the scaling factors given apply to all the different environmental impacts. For instance, the GWP result @A1-A3 of 1 meter L-LN-14D-AY cables with 12 fibers is 4.29E-03*60.28 = 2.59E-01 kg CO_2 eq.

Scaling factor for L-LN-14D-AY cables based on CML results							
Fiber numbers		**12**	**24**	**36**	**48**	**96**	**144**
A1-A3	Abiotic depletion	14.93	15.26	15.55	15.85	126.08	144.00
	Abiotic depletion (fossil fuels)	60.45	60.96	61.40	61.89	106.04	144.00
	Global warming (GWP100a)	60.28	61.63	62.93	64.26	112.83	144.00
	Ozone layer depletion (ODP)	14.83	25.72	36.29	46.88	93.39	144.00
	Photochemical oxidation	61.98	61.53	61.00	60.53	104.80	144.00
	Acidification	58.88	60.39	61.84	63.31	117.05	144.00
	Eutrophication	57.69	58.56	59.37	60.22	111.65	144.00
A4		60.10	59.37	58.63	57.90	104.88	144.00
A5		84.92	84.92	84.92	84.92	144.00	144.00
B6		12.00	24.00	36.00	48.00	96.00	144.00
C2, C3, C4		57.50	56.68	55.87	55.06	100.77	144.00
C3		57.50	56.68	55.87	55.06	100.77	144.00
C4		57.50	56.68	55.87	55.06	100.77	144.00
D		70.50	67.74	64.98	62.22	94.46	144.00

Scaling factor for L-LN-15D cables based on CML results								
Fiber numbers		**12**	**24**	**36**	**48**	**72**	**96**	**144**
A1-A3	Abiotic depletion	42.01	42.35	42.67	42.99	63.58	122.79	144.00
	Abiotic depletion (fossil fuels)	47.66	49.51	51.34	53.18	76.38	93.02	144.00
	Global warming (GWP100a)	41.14	44.58	48.01	51.44	74.52	95.13	144.00
	Ozone layer depletion (ODP)	20.66	30.81	40.95	51.10	73.38	95.55	144.00
	Photochemical oxidation	53.36	53.72	54.05	54.38	77.44	94.29	144.00
	Acidification	40.10	43.72	47.33	50.94	73.31	98.98	144.00
	Eutrophication	46.99	48.78	50.55	52.32	75.35	97.47	144.00
A4		63.09	62.51	61.92	61.33	88.90	102.85	144.00
A5		84.92	84.92	84.92	84.92	84.92	144.00	144.00
B6		12.00	24.00	36.00	48.00	72.00	96.00	144.00
C2, C3, C4		56.37	55.78	55.19	54.61	80.35	95.26	144.00
C3		56.37	55.78	55.19	54.61	80.35	95.26	144.00
C4		56.37	55.78	55.19	54.61	80.35	95.26	144.00
D		62.06	60.18	58.29	56.40	83.26	90.41	144.00

LCA Interpretation

The figure below shows the CML result of L-144-LN-15D cable group as representative for all the L-LN cables. The production stages A1-A3 are the dominant contributors across most environmental impact categories. This is due to the upstream production of raw materials used in the product, along with electricity usage in the manufacturing of parts. Only for Eutrophication, stage C4 is particularly significant due to the 50% landfill of the cable at the end of life. This highlights the importance of targeting the stages A1-A3 to effectively reduce global warming potential and most other environmental impacts. In addition, to develop better recycling/reuse strategy of cable components to replace the landfill treatment.



Additional Environmental Information

Environmental and Health During Manufacturing

CommScope values employees' health, safety and well-being. To this end, we maintain a robust company-wide environment, health and safety (EHS) management system. This is an integrated program based on the requirements of the International Standards of ISO45001 and ISO14001. To support this integrated EHS management system, CommScope utilizes a web-based platform, the BSI Entropy™ tool. This tool supports the management of our EHS processes and operations at the corporate and facility level. All EHS management system records (policies, procedures, method statements, health and safety risk assessments, environmental aspect/impact assessments, legal requirements, permits, training, internal and external audits, incidents and implemented CAPA, KPIs, and other records related to EHS) are maintained and managed in Entropy. In addition, 90% of CommScope manufacturing facilities are certified according to the ISO14001 and ISO45001 standards. Our vision and commitments are detailed in our EHS Policy.

CommScope understands the need to address the environmental impacts of its products and services. CommScope engages product development teams in designing innovative and more sustainable solutions across a product's life cycle—from design and manufacturing to product use and end of life.

CommScope is committed to demonstrating a high standard of global product compliance practices. Through this commitment, we actively monitor global environmental trends and emerging regulatory requirements that may affect our products, operations, supply chain, and customer base. We are committed to be compliant with all applicable environmental product related legal and other requirements. To achieve this, we have a global organization comprising environmental specialists, engineers, and product compliance experts who are constantly ensuring our compliance status is maintained. We manage our compliance using a cross-functional approach with our engineers, designers, quality organization, supply chain organization, and production.

CommScope is committed to upholding the human rights of its employees. To ensure our employees are treated with dignity and respect, we follow a well-established Code of Ethics and Business Conduct and Labor Policy that align with recognized standards and guidelines from the International Labor Organization, the United Nations Global Compact, the UN Universal Declaration of Human Rights, SA8000 and applicable laws.

Environmental and Health During Installation

There is no harmful emissive potential. No damage to health or impairment is expected under normal use corresponding to the intended use of the product.

Extraordinary Effects

Fire

No extraordinary effects to the environment can be anticipated during exposure to fire.

Water

Contains no substances that have any impact on water in case of flood.

Mechanical Destruction

No danger to the environment can be anticipated during mechanical destruction.

Delayed Emissions

Global warming potential is calculated using the CML- IA Baseline 3.11, TRACI 2.2 and EN15804+A2 (adapted) 1.03 impact assessment methodologies. Delayed emissions are not considered.

Environmental Activities and Certifications

Our Sustainability Report details CommScope's efforts to operate the business ethically and with integrity; protect the environment; maintain the health, safety and well-being of our workforce; and support the communities in which we operate. To learn more, view our comprehensive Sustainability Report at https://www.commscope.com/corporate-responsibility-and-sustainability/.

CommScope maintains a variety of certifications based on the widely accepted industry standards:

- Quality Management System certification (ISO9001/TL9000)
- Environmental Management System certification (ISO14001)
- Health and Safety Management System certification (ISO45001)

These certificates can be downloaded from our company website:

https://www.commscope.com/corporate-responsibility-and-sustainability/philosophy/#certifications

Product sustainability certifications including EPDs and Health Product Declarations (HPDs) can be downloaded from our company website:

https://www.commscope.com/corporate-responsibility-and-sustainability/product-sustainability/certifications/

Further Information

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Contact Information

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