



Philips EvoKit LED Retrofit kit gen 5 is an energy efficient LED alternative to traditional linear fluorescent troffers that also helps reduce maintenance costs due to its long lifetime. Simple construction helps decrease installation times offering an installed LED solution within minutes.

Products can be found on the DLC QPL by searching the 6 digit product number. Additional information can be found at [www.philips.com/evokit](http://www.philips.com/evokit).

Project: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Cat.No: \_\_\_\_\_  
 Type: \_\_\_\_\_  
 Lamps: \_\_\_\_\_ Qty: \_\_\_\_\_  
 Notes: \_\_\_\_\_

#### EvoKit with 0-10V Dimming ordering guide

Product No. (6NC)	Model No. (12NC)	Description	Watts (W) <sup>1</sup>	Volts (V)	Lumen Maintenance (hours) <sup>2</sup>	Approx. Lumens (lm) <sup>3</sup>	Color Temp. (K)	Efficacy (lm/W)	
<b>0-10V Dimming</b>									
◆ 527978	929002714213	EvoKit 2x2 21L 15W 835 UNV 0-10 G5	15W	120-277	70,000	2100	3500	140	
◆ 527986	929002714313	EvoKit 2x2 21L 14W 840 UNV 0-10 G5	14W	120-277	70,000	2100	4000	150	
	527994	929002714413	EvoKit 2x2 21L 14W 850 UNV 0-10 G5	14W	120-277	70,000	2100	5000	150
◆ 528000	929002714513	EvoKit 2x2 31L 22W 835 UNV 0-10 G5	22W	120-277	70,000	3100	3500	135	
◆ 528018	929002714613	EvoKit 2x2 31L 22W 840 UNV 0-10 G5	22W	120-277	70,000	3100	4000	141	
	528026	929002714713	EvoKit 2x2 31L 22W 850 UNV 0-10 G5	22W	120-277	70,000	3100	5000	141
	528455	929002719013	EvoKit 2x2 31L 23W 935 UNV 0-10 G5	23W	120-277	70,000	3100	3500	135
	528034	929002714813	EvoKit 2x4 36L 25W 835 UNV 0-10 G5	25W	120-277	70,000	3600	3500	144
◆ 528042	929002714913	EvoKit 2x4 36L 25W 840 UNV 0-10 G5	25W	120-277	70,000	3600	4000	144	
	528059	929002715013	EvoKit 2x4 36L 25W 850 UNV 0-10 G5	25W	120-277	70,000	3600	5000	144
◆ 528067	929002715113	EvoKit 2x4 42L 28W 835 UNV 0-10 G5	28W	120-277	70,000	4200	3500	145	
◆ 528075	929002715213	EvoKit 2x4 42L 28W 840 UNV 0-10 G5	28W	120-277	70,000	4200	4000	150	
	528083	929002715313	EvoKit 2x4 42L 28W 850 UNV 0-10 G5	28W	120-277	70,000	4200	5000	150
	528463	929002719113	EvoKit 2x4 42L 32W 935 UNV 0-10 G5	32W	120-277	70,000	4200	3500	131
<b>High Efficiency 0-10 V Dimming</b>									
◆ 528091	929002715413	EvoKit HE 2x2 21L 14W 835 UNV 0-10 G5	14W	120-277	70,000	2100	3500	153	
◆ 528109	929002715513	EvoKit HE 2x2 21L 13W 840 UNV 0-10 G5	13W	120-277	70,000	2100	4000	162	
◆ 528125	929002715713	EvoKit HE 2x2 31L 21W 835 UNV 0-10 G5	21W	120-277	70,000	3100	3500	148	
◆ 528133	929002715813	EvoKit HE 2x2 31L 20W 840 UNV 0-10 G5	20W	120-277	70,000	3100	4000	155	
	528141	929002715913	EvoKit HE 2x2 31L 20W 850 UNV 0-10 G5	20W	120-277	70,000	3100	5000	155
	528158	929002716013	EvoKit HE 2x4 30L 19W 835 UNV 0-10 G5	19W	120-277	70,000	3000	3500	158
	528166	929002716113	EvoKit HE 2x4 30L 19W 840 UNV 0-10 G5	19W	120-277	70,000	3000	4000	158
◆ 528174	929002716213	EvoKit HE 2x4 36L 23W 835 UNV 0-10 G5	23W	120-277	70,000	3600	3500	157	
◆ 528182	929002716313	EvoKit HE 2x4 36L 22W 840 UNV 0-10 G5	22W	120-277	70,000	3600	4000	164	
◆ 528208	929002716513	EvoKit HE 2x4 42L 26W 835 UNV 0-10 G5	26W	120-277	70,000	4200	3500	158	
◆ 528216	929002716613	EvoKit HE 2x4 42L 26W 840 UNV 0-10 G5	26W	120-277	70,000	4200	4000	162	
	528224	929002716713	EvoKit HE 2x4 42L 26W 850 UNV 0-10 G5	26W	120-277	70,000	4200	5000	162
	528232	929002716813	EvoKit HE 2x4 47L 31W 835 UNV 0-10 G5	31W	120-277	70,000	4700	3500	152
	528240	929002716913	EvoKit HE 2x4 47L 30W 840 UNV 0-10 G5	30W	120-277	70,000	4700	4000	157
<b>0-10V Step Dimming</b>									
	528299	929002717413	EvoKit HE 2x2 31L 22W 835 UNV STEP G5	22W	120-277	70,000	3100	3500	142
	528307	929002717513	EvoKit HE 2x2 31L 21W 840 UNV STEP G5	21W	120-277	70,000	3100	4000	148
	528315	929002717613	EvoKit HE 2x4 42L 28W 835 UNV STEP G5	28W	120-277	70,000	4200	3500	150
	528323	929002717713	EvoKit HE 2x4 42L 28W 840 UNV STEP G5	28W	120-277	70,000	4200	4000	150

See footnotes on the last page.



# EvoKit LED retrofit kit gen 5

## EvoKit with Spacewise SWZDT ordering guide

Product No. (6NC)	Model No. (12NC)	Description	Watts (W) <sup>1</sup>	Volts (V)	Lumen Maintenance (hours) <sup>2</sup>	Approx. Lumens (lm) <sup>3</sup>	Color Temp. (K)	Efficacy (lm/W)
<b>Spacewise SWZDT</b>								
528471	929002719213	EvoKit 2x2 31L 23W 935 UNV SWZDT G5	23W	120-277	70,000	3100	3500	135
528489	929002719313	EvoKit 2x4 42L 32W 935 UNV SWZDT G5	32W	120-277	70,000	4200	3500	131
<b>High Efficiency Spacewise SWZDT</b>								
◆ 528331	929002717813	EvoKit HE 2x2 31L 20W 835 UNV SWZDT G5	20W	120-277	70,000	3100	3500	152
◆ 528349	929002717913	EvoKit HE 2x2 31L 20W 840 UNV SWZDT G5	20W	120-277	70,000	3100	4000	155
528356	929002718013	EvoKit HE 2x2 31L 20W 850 UNV SWZDT G5	20W	120-277	70,000	3100	5000	155
◆ 528380	929002718313	EvoKit HE 2x4 42L 26W 835 UNV SWZDT G5	26W	120-277	70,000	4200	3500	159
◆ 528398	929002718413	EvoKit HE 2x4 42L 26W 840 UNV SWZDT G5	26W	120-277	70,000	4200	4000	162
528406	929002718513	EvoKit HE 2x4 42L 26W 850 UNV SWZDT G5	26W	120-277	70,000	4200	5000	162
528414	929002718613	EvoKit HE 2x4 47L 31W 835 UNV SWZDT G5	31W	120-277	70,000	4700	3500	152
528422	929002718713	EvoKit HE 2x4 47L 30W 840 UNV SWZDT G5	30W	120-277	70,000	4700	4000	157

See footnotes on the last page.

### Features

- Occupancy sensing, daylight harvesting and task tuning in one device
- Granular dimming (occupancy sharing)
- Dwell time
- Scene setting
- Configuration of sensor parameters – if desired – using NFC or IR via intuitive Android-based Philips field apps
- Quick task tuning in the field to optimize light and power levels
- Enables auto-off/manual-on and auto-off/partial-on application
- DLC qualified: Listed on the QPL for Networked Lighting Controls

### Benefits

- Installation savings – integral wireless controls factory installed. No need to order separate components.
- Minimal startup and configuration expertise – savings on labor time & effort
- Deep energy savings & code compliance strategies
- Faster ROI with attractive payback periods (varies depending on luminaire choices)

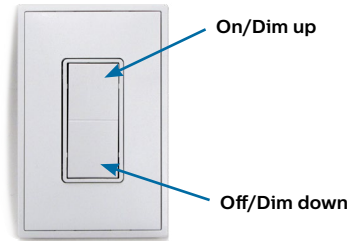
### Applications

Conference rooms, individual offices, open offices, classrooms, storage and break areas, restrooms, lobbies.

### SpaceWise wireless switch

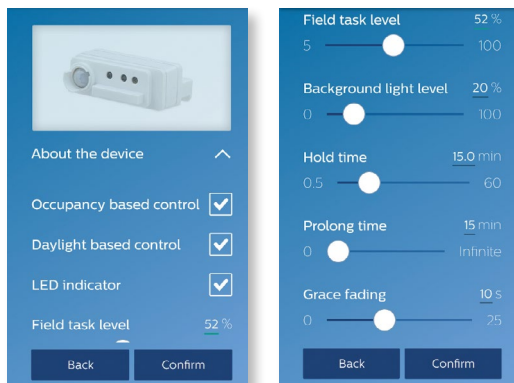
To complete the SpaceWise System a wireless switch may be added.

Ordering code: UID8451/10



### New configuration tool

An Android phone is needed for commissioning the system. Please refer to [www.usa.lighting.philips.com/systems/lighting/systems/spacewise](http://www.usa.lighting.philips.com/systems/lighting/systems/spacewise) for full list of compatible phones.



### Refer to the website for registration details:

[www.usa.lighting.philips.com/support/support/tools/](http://www.usa.lighting.philips.com/support/support/tools/)

Sensor parameters can be configured via Philips field apps. Two versions are available:

1. **NFC** – This app allows configuring sensor parameters only when you can physically access the sensor with a smartphone.
2. **IR** – This app allows configuring sensor parameters plus enables grouping to a wireless switch, which can be done with the IR feature of applicable phones from floor level.



You must first register for the app to receive a username and password, then download Philips field apps from the Google Play Store.

# EvoKit LED retrofit kit gen 5

## EvoKit with air return ordering guide

Product No. (6NC)	Model No. (12NC)	Description	Watts (W)	Volts (V)	Lumen Maintenance (hours) <sup>2</sup>	Approx. Lumens (lm) <sup>3</sup>	Color Temp. (K)	Efficacy (lm/W)
<b>High Efficiency 0-10 V Dimming - Air Return</b>								
528257	929002717013	Evokit HE 2x2 A 31L 21W 835 UNV 0-10 G5	21W	120-277	70,000	3100	3500	148
528265	929002717113	Evokit HE 2x2 A 31L 20W 840 UNV 0-10 G5	20W	120-277	70,000	3100	4000	155
528273	929002717213	Evokit HE 2x4 A 47L 31W 835 UNV 0-10 G5	31W	120-277	70,000	4700	3500	152
528281	929002717313	Evokit HE 2x4 A 47L 30W 840 UNV 0-10 G5	30W	120-277	70,000	4700	4000	157
<b>High Efficiency Spacewise - Air Return</b>								
528364	929002718113	Evokit HE 2x2 A 31L 20W 835 UNV SWZDT G5	20W	120-277	70,000	3100	3500	152
528372	929002718213	Evokit HE 2x2 A 31L 20W 840 UNV SWZDT G5	20W	120-277	70,000	3100	4000	155
528430	929002718813	Evokit HE 2x4 A 47L 31W 835 UNV SWZDT G5	31W	120-277	70,000	4700	3500	152
528448	929002718913	Evokit HE 2x4 A 47L 30W 840 UNV SWZDT G5	30W	120-277	70,000	4700	4000	157

See footnotes on the last page.

## Air Return data

The air return versions of EvoKit are suitable for retrofitting listed air return troffers.

### 2x2 air return data

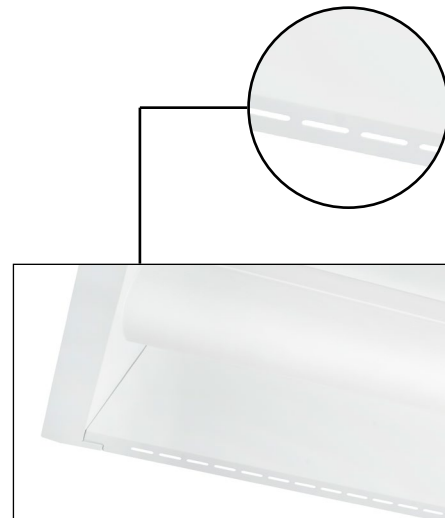
Return Air Volume, SCFM.	61	69	80	97	112	131
Negative Static Pressure, in. H <sub>2</sub> O	0.11	0.15	0.20	0.30	0.40	0.55
Noise Criteria (NC)*	17	21	25	31	34	38

Note: 24 total air slots, each 30mm x 6mm.

### 2x4 air return data

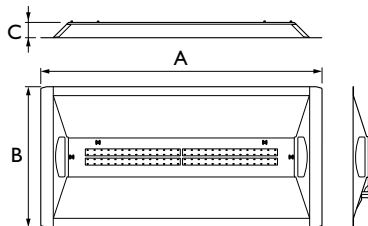
Return Air Volume, SCFM.	105	119	128	162	259	272
Negative Static Pressure, in. H <sub>2</sub> O	0.05	0.08	0.10	0.20	0.45	0.55
Noise Criteria (NC)*	<15	32	32	36	38	40

Note: 50 total air slots, each 30mm x 6mm.



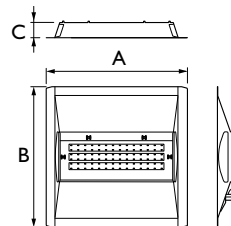
## Dimensions 2x4

A Face Plate Length	B Face Plate Width	C Face Plate Height
47.83"	23.9"	2.95"



## Dimensions 2x2

A Face Plate Length	B Face Plate Width	C Face Plate Height
23.9"	23.9"	2.95"



# EvoKit LED retrofit kit gen 5

## Application

- A highly efficient, visually comfortable, architecturally styled LED retrofit kit designed to replace recessed linear fluorescent troffers.
- Unique modular design offers refreshing new look in the ceiling when compared to traditional fluorescent luminaires.
- Single light bar combined with slanted troffer helps reflect light to reduce glare and provide uniform light distribution making it ideal for applications such as offices, schools, healthcare and retail.
- Excellent color rendering with a CRI above 80.
- Extremely high efficacies up to 164 lumens per watt.
- LEDs are an excellent source for use with controls since dimming or frequent switching does not degrade the performance or life of the source.
- Designed for use with standard grid (NEMA "G") or Narrow Grid (NEMA "NFG") ceiling T-Grids.
- High efficiency source and luminaire design help significantly reduce energy consumption and more easily comply with known energy codes.
- Helps meet regulation requirements such as ASHRAE 90.1 and Title 24 when matched with suitable controls.

## Construction/Finish

- Simple design allows for quick installation in existing luminaire without the need to break the ceiling plenum.
- Constructed using galvanized steel which helps fight rust and makes for more durable product.
- Integrated securement tabs for securement to existing troffer housing.
- Minimum depth of only 3" necessary to allow proper clearance and installation of the EvoKit.
- Retrofit kit is powder coated after fabrication with high quality, durable finish to ensure no unfinished edges and avoid future potential of corrosion.
- Components fit together easily without the need for tools during installation.

## Electrical

- Multiple driver options available
  - Philips Advance Xitanium SR driver enables SpaceWise DT control system.
  - Philips Advance drivers with 0-10V dimming allow for maximum fixture efficiency and provide 10% dimming.
- 7-year limited warranty in the HE (High Efficiency) units or 5-year limited warranty the other units includes all components of the retrofit kit, including driver, LED board and nonelectrical components.\* Visit [signify.com/warranties](http://signify.com/warranties) for complete Warranty information.
- Listed with UL and Design Lights Consortium\*\* to ensure quality performance and safety standards are met.
- High efficiency LEDs have a minimum 70,000 hour rated life (L70).

## Enclosure

- Diffuser requires no frames or fasteners and can be easily removed from below without tools if needed.

## Accessories

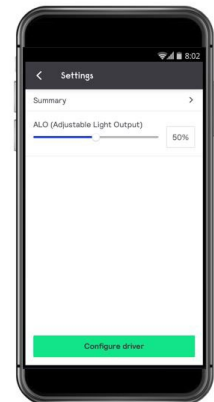
- Suitable for use with Philips 503441 emergency backup.
- Earthquake cables available for additional securement to the existing troffer for areas where required.

Prod. No.	Description
502435	Earthquake cable 317mm
517987	EvoKit 2x4 replacement lens ribbed
517748	EvoKit 2x4 replacement lens smooth
517979	EvoKit 2x2 replacement lens ribbed
517755	EvoKit 2x2 replacement lens smooth
503441	EvoKit field installed emergency battery backup (requires the use of bracket)
517730	EvoKit emergency battery backup bracket (comes in pack of 4). Two emergency brackets needed per battery pack.

\* Please visit [www.philips.com/warranties](http://www.philips.com/warranties) for full details.  
 \*\* Evokit luminaires are Design Lights Consortium qualified. Please see the DLC QPL list for exact catalog numbers (<http://www.designlights.org/QPL>).

## EvoKit with new SimpleSet technology for wireless lumen level programming

EvoKit with new SimpleSet technology allows the maximum lumen level to be set prior to installation using a smartphone-based app without requiring power to the luminaire. Available in HE versions only. The app can be downloaded at Google Play. Please contact your Philips representative for the current list of approved Android smartphones. Distributors can set lumen levels prior to shipping, and contractors can set lumen levels prior to installation. Lumen level is quickly and easily set in two steps:

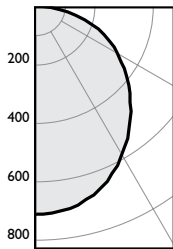


Step 1: Place the smartphone next to the NFC antenna on the driver.

Step 2: Follow the on-screen instructions.

# EvoKit LED retrofit kit gen 5

## EvoKit gen 5 LED, 2'x2', 21L, 14W, 80 CRI, 3500K CCT, UNV 0-10, 2100 delivered lumens



**Cat. No.**  
527978  
**Test No.**  
104271456CHI-001  
**S/MH**  
1.2  
**Lumens/Watt**  
136  
**Input Watts**  
15

The photometric results were obtained in the Design Lights Consortium Test Lab which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on tests performed in compliance with LM-79.

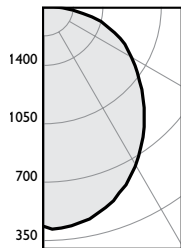
Candlepower					
	0	22.5	45	67.5	90
0	708	708	708	708	708
5	704	705	704	705	706
10	699	697	699	699	699
15	684	680	681	683	684
20	659	654	656	658	659
25	626	619	623	626	628
30	588	580	585	590	588
35	544	537	544	549	592
40	495	488	497	505	508
45	442	437	448	458	462
50	389	385	399	413	418
55	335	333	351	367	373
60	282	282	303	282	328
70	175	183	208	322	231
75	123	135	158	172	176
80	73	88	105	114	116
85	32	41	52	57	58
90	0	0	0	0	0

Zonal lumens & percentages		
Zone	Lumens	%Fixture
0-20	259	13%
0-30	545	27%
0-40	884	44%
0-60	1541	77%
0-80	1949	94%
0-90	2000	100%

Average Luminance			
Angle	0°	45°	90°
45	841	851	879
55	786	822	875
65	724	816	894
75	637	821	913
85	486	797	898

Coefficients of utilization									
Ceiling	80%			70%			50%		
	70	50	30	70	50	30	50	30	
Wall	70	50	30	70	50	30	50	30	
RCR	Zonal cavity method - Effective floor reflectance = 20%								
Room Cavity Ratio	0	119	119	119	116	116	116	111	111
1	108	104	99	106	101	97	97	94	
2	98	90	83	96	88	82	84	79	
3	90	79	71	87	77	70	74	68	
4	82	70	61	80	68	60	66	59	
5	75	62	53	73	61	53	59	51	
6	70	56	47	68	55	47	53	46	
7	64	51	42	63	50	42	48	41	
8	60	46	38	58	46	37	44	37	
9	56	43	34	55	42	34	41	33	
10	53	39	31	51	39	31	38	31	

## EvoKit gen 5 LED, 2'x4', 37L, 26W, 80 CRI, 3500K CCT, UNV 0-10, 3600 delivered lumens



**Cat. No.**  
528034  
**Test No.**  
104271456CHI-003  
**S/MH**  
1.2  
**Lumens/Watt**  
142  
**Input Watts**  
26

The photometric results were obtained in the Design Lights Consortium Test Lab which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on tests performed in compliance with LM-79.

Candlepower					
	0	22.5	45	67.5	90
0	1300	1300	1300	1300	1300
5	1281	1283	1293	1306	1317
10	1267	1268	1280	1293	1302
15	1241	1237	1248	1262	1271
20	1198	1190	1202	1216	1225
25	1142	1131	1143	1157	1165
30	1073	1060	1074	1088	1096
35	992	980	995	1010	1017
40	902	890	908	925	934
45	804	794	816	838	848
50	705	697	724	754	767
55	602	600	635	674	689
60	502	504	551	596	614
65	403	414	471	520	537
70	305	330	392	439	454
75	212	248	308	346	359
80	127	170	215	237	241
85	52	87	110	119	120
90	0	0	0	0	0

Zonal lumens & percentages		
Zone	Lumens	%Fixture
0-20	475	13%
0-30	1002	27%
0-40	1623	44%
0-60	2820	76%
0-80	3588	97%
0-90	3695	100%

Average Luminance			
Angle	0°	45°	90°
45	1528	1551	1612
55	1412	1487	1615
65	1280	1499	1709
75	1103	1602	1865
85	802	1701	1845

Coefficients of utilization									
Ceiling	80%			70%			50%		
	70	50	30	70	50	30	50	30	
Wall	70	50	30	70	50	30	50	30	
RCR	Zonal cavity method - Effective floor reflectance = 20%								
Room Cavity Ratio	0	119	119	119	116	116	116	111	111
1	108	104	99	106	101	97	97	94	
2	98	90	83	96	88	82	85	79	
3	90	79	71	87	77	70	74	68	
4	82	70	61	80	69	60	66	59	
5	75	62	53	73	61	53	59	52	
6	70	56	47	68	55	47	53	46	
7	65	51	42	63	50	42	48	41	
8	60	46	38	58	46	37	44	37	
9	56	43	34	55	42	34	41	34	
10	53	39	31	51	39	31	38	31	

# EvoKit LED retrofit kit gen 5

## Energy saving solution – EvoKit 2'x4'

### Estimated lighting costs using a standard 3 lamp T8 troffer

Present wattage	85	W
× Annual operating hours	4,380	hrs
	=	372,300 Watt-Hours
÷ 1,000 =	372.3	kWh per year (rates will vary)
× kWh rate of \$0.10 =	\$37.23	per year
× 125 fixtures	\$4,653.75	annual energy cost per space

### Estimated lighting costs using a Philips 42L 2x4 Evokit G4

Present wattage	26	W
× Annual operating hours	4,380	hrs
	=	113,880 Watt-Hours
÷ 1,000 =	113.88	kWh per year (rates will vary)
× kWh rate of \$0.10 =	\$11.39	per year
× 125 fixtures	\$1,423.50	annual energy cost per space

**Total estimated annual savings<sup>‡</sup> \$3,230.25**

<sup>‡</sup> Based on 125 fixtures per space operating 4,380 hours a year.  
125 fixtures is roughly equivalent to a 10,000 square foot space.

#### Footnotes:

1. L70 72,000 hours @ 35°C based on TM21 and LM80.
  2. Based on photometric testing consistent with IES LM-79. Actual wattage may differ by +/- 10%. Actual initial lumen output may vary between -10 and +10% of the rated lumens.
  3. 0-10V Dimming products that are not HE (High Efficiency) do not support lumen level tuning with SimpleSet technology using the MultiOne Mobile smartphone app.
- ◆ Made to stock product (Contact your Philips sales representative for stock availability and lead time).  
Restrictions on Hazardous Substances (RoHS) is a European directive (2002/95/EC) designed to limit the content of 6 substances [lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), and polybrominated diphenyl ethers (PBDE)] in electrical and electrical products. For products used in North America, compliance with RoHS is voluntary and self-certified.



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