

Test Report
No. : TW065-A0-180024
ECE Regulation No.65



Type : PY-9171-A
Manufacturer : MANY WAIN ENTERPRISE CO., LTD.

Test Report

Agreement

concerning the adoption of uniform technical prescriptions for the wheeled vehicles, equipment and parts which can be fitted and/or be used on wheeled vehicles and the conditions for reciprocal recognition of approvals granted on the basis of these prescriptions

Uniform provisions concerning the approval of special warning lamps for power-driven vehicles and their trailers

ECE-Regulation 65

including all amendments until

Series of Amendments: 00
supplement 10

dated: October 10, 2017

Approval status	
ECE	Number of approval
	E4*65R00/10*6677*00



Test Report
No. : TW065-A0-180024
ECE Regulation No.65



Type : PY-9171-A
Manufacturer : MANY WAIN ENTERPRISE CO., LTD.

Test object(s) and general test information

Test object(s)

Identification number : PY-9171-A
Version : Special Warning Lamp
By category of lamp : Category X
Worst case : Not applicable

General test information

Order issued by
(if different from manufacturer) : ---
Test object / test vehicle received
on : not applicable
Test date : Finished on February 22, 2018
Test site : MANY WAIN ENTERPRISE CO., LTD.
No. 10, Lane 808, Chung Shan Rd. Shin Hwa Dist.
71243 TAINAN Taiwan
Remark : ---

Test minutes

Test facilities : The test facilities are in compliance with the
requirements of the regulation.
Test results : See enclosure.
Temperature/Relative Humidity of
laboratory : 26.5 °C / 62 %



Test Report
No. : TW065-A0-180024
ECE Regulation No.65

Type : PY-9171-A
Manufacturer : MANY WAIN ENTERPRISE CO., LTD.

Markings : The trade mark is marked clearly legible and indelible on the housing of the lamp.

~~The light source and rated wattage of the light source are clearly legible and indelible marked on the housing of the lamp.~~

The rated voltage and rated wattage of the non-replaceable light source are clearly legible and indelible marked on the housing.

Space for the approval mark and for additional symbols is provided on the housing of the lamp.

General specifications : The special warning lamps must be so designed and constructed that in normal conditions of use, and notwithstanding the vibrations to which they may be subjected in such use, their satisfactory operation remains assured and they retain the characteristics prescribed by Paragraph 5 of this Regulation.

The special warning lamp shall be powered directly from the voltage supply network of the vehicle by direct connection or usual connectors (e.g. cigarette lighter plug).

All measurements, photometric and colorimetric, on the lamp equipped with non-replaceable light sources LEDs were made at ~~6.75V~~ 13.5V or 28.0V.

Starting and correct functioning of the special warning lamp shall remain assured at the conditions described in paragraph 5.6. and Annex 4.

And the frequency of the flash shall remain between 2.0 and 4.0 HZ.



Test Report
No. : TW065-A0-180024
ECE Regulation No.65



Type : PY-9171-A
Manufacturer : MANY WAIN ENTERPRISE CO., LTD.

Photometric tests : The light source of lamp emitted was obtained by means of LEDs stated in Appendix L-4, ~~producing the required luminous flux.~~

For any lamp, the luminous intensities measured after one minute and after the light output from the special warning lamp has reached photometric stability (deviation of less than ± 5 per cent in the last 15 minutes of operation) shall comply with the minimum and maximum requirements. The luminous intensity distribution after one minute of operation can be calculated by applying the ratio achieved at HV between one minute and at photometric stability

The light distribution angles and levels of intensity have been measured in accordance with Annex 5 of the Regulation, based on the manufacturer's indication of the centre of reference and axis of reference.

Frequency tests : The frequency f , the "on" time t_H and the "off" time t_D shall correspond to the values indicated in the table in Annex 5 to this Regulation. They shall be measured at an ambient temperature of $+23\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$ and with voltages at the terminals of the device which are between 90 per cent and 115 per cent of the rated voltage.



Test Report
No. : TW065-A0-180024
ECE Regulation No.65

Type : PY-9171-A
 Manufacturer : MANY WAIN ENTERPRISE CO., LTD.

Frequency, time and intensity of the emitted light **(Single Flash)**

Sample 1

		Requirement	Results of Frequency tests	
		Colour blue or amber or red	Amber / Blue / Red	
		Rotating system or flash light sources (Categories T and X)	Categories T or X	
		Rated voltage	12V	24V
Frequency f (Hz)	max.	4	2.0458	2.0446
	min.	2		
"ON" time tH (s)	max.	0.4/f	0.1657	0.1658
"OFF" time tD (s)	min.	0.1	0.3231	0.3233

Decision : ☒ Pass or ☐ Failed

Sample 2

		Requirement	Results of Frequency tests	
		Colour blue or amber or red	Amber / Blue / Red	
		Rotating system or flash light sources (Categories T and X)	Categories T or X	
		Rated voltage	12V	24V
Frequency f (Hz)	max.	4	2.0437	2.0429
	min.	2		
"ON" time tH (s)	max.	0.4/f	0.1659	0.1659
"OFF" time tD (s)	min.	0.1	0.3234	0.3236

Decision : ☒ Pass or ☐ Failed



Test Report
No. : TW065-A0-180024
ECE Regulation No.65

Type : PY-9171-A
 Manufacturer : MANY WAIN ENTERPRISE CO., LTD.

Frequency, time and intensity of the emitted light (**Double Flash**)

Sample 1

		Requirement	Results of Frequency tests	
		Colour blue or amber or red	Amber / Blue / Red	
		Rotating system or flash light sources (Categories T and X)	Categories T or X	
		Rated voltage	12V	24V
Frequency f (Hz)	max.	4	2.0442	2.0433
	min.	2		
"ON" time tH (s)	max.	0.4/f	0.1799	0.1799
"OFF" time tD (s)	min.	0.1	0.3093	0.3095

Decision : ☒ Pass or ☐ Failed

Sample 2

		Requirement	Results of Frequency tests	
		Colour blue or amber or red	Amber / Blue / Red	
		Rotating system or flash light sources (Categories T and X)	Categories T or X	
		Rated voltage	12V	24V
Frequency f (Hz)	max.	4	2.0437	2.0446
	min.	2		
"ON" time tH (s)	max.	0.4/f	0.1799	0.1799
"OFF" time tD (s)	min.	0.1	0.3093	0.3093

Decision : ☒ Pass or ☐ Failed



Test Report
No. : TW065-A0-180024
ECE Regulation No.65

Type : PY-9171-A
 Manufacturer : MANY WAIN ENTERPRISE CO., LTD.

Frequency, time and intensity of the emitted light (**Quad Flash**)

Sample 1

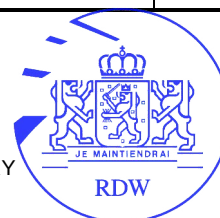
		Requirement	Results of Frequency tests	
		Colour blue or amber or red	Amber / Blue / Red	
		Rotating system or flash light sources (Categories T and X)	Categories T or X	
		Rated voltage	12V	24V
Frequency f (Hz)	max.	4	2.5082	2.5050
	min.	2		
"ON" time tH (s)	max.	0.4/f	0.1558	0.1559
"OFF" time tD (s)	min.	0.1	0.2429	0.2433

Decision : ☒ Pass or ☐ Failed

Sample 2

		Requirement	Results of Frequency tests	
		Colour blue or amber or red	Amber / Blue / Red	
		Rotating system or flash light sources (Categories T and X)	Categories T or X	
		Rated voltage	12V	24V
Frequency f (Hz)	max.	4	2.5044	2.5013
	min.	2		
"ON" time tH (s)	max.	0.4/f	0.1560	0.1562
"OFF" time tD (s)	min.	0.1	0.2433	0.2436

Decision : ☒ Pass or ☐ Failed



Test Report
No. : TW065-A0-180024
ECE Regulation No.65



Type : PY-9171-A
 Manufacturer : MANY WAIN ENTERPRISE CO., LTD.

Results of photometric tests of the Special warning lamp Category X

Requirement

Category X					
			Colour		
			blue	amber	red
Minimum value of the effective luminous intensity J_e on the reference axis	H = 0° V = 0°	by day	200	400	200
		by night	100	200	100
Maximum value of the effective luminous intensity J_e	inside H = ±10° V = ±4°	by day	3,000	3,000	3,000
		by night	1,500	1,500	1,500
	inside H = ±20° V = ±8°	by day	1,500	1,500	1,500
		by night	600	600	600
	outside the above areas	by day	1,000	1,000	1,000
		by night	300	300	300



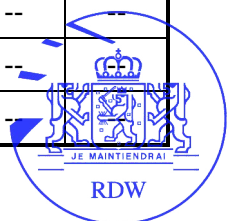
Test Report
No. : TW065-A0-180024
ECE Regulation No.65

Type : PY-9171-A
 Manufacturer : MANY WAIN ENTERPRISE CO., LTD.

Results of photometric tests of the Special warning lamp Category X **(Single Flash)**
 Results of measurements (12V)

distribution of the intensity of the lamps in [cd]												
		Wide angle effect		Narrow angle effect							Wide angle effect	
horizontal angle		L90°	L45°	L30°	L20°	L10°	V	R10°	R20°	R30 °	R45°	R90°
Minimum value of the effective luminous intensity Je	U8°	--	--	--	--	100	--	100	--	--	--	--
	U6°	--	--	--	100	--	150	--	100	--	--	--
	U4°	40	40	40	--	200	--	200	--	40	40	40
	H	100	100	100	150	--	200	--	150	100	100	100
	D4°	40	40	40	--	200	--	200	--	40	40	40
	D6°	--	--	--	100	--	150	--	100	--	--	--
	D8°	--	--	--	--	100	--	100	--	--	--	--
vertical angle sample 1	U8°	--	--	--	--	301.8	--	292.1	--	--	--	--
	U6°	--	--	--	248.2	--	378.4	--	230.0	--	--	--
	U4°	--	--	158.6	--	390.4	--	373.7	--	139.8	--	--
	H	--	--	169.6	296.6	--	451.3	--	263.9	144.4	--	--
	D4°	--	--	157.5	--	379.4	--	353.8	--	130.1	--	--
	D6°	--	--	--	245.2	--	355.0	--	211.6	--	--	--
	D8°	--	--	--	--	290.8	--	268.1	--	--	--	--
vertical angle sample 2	U8°	--	--	--	--	291.8	--	281.4	--	--	--	--
	U6°	--	--	--	236.2	--	379.0	--	222.8	--	--	--
	U4°	--	--	152.7	--	386.0	--	360.8	--	133.8	--	--
	H	--	--	169.0	272.4	--	456.6	--	249.5	135.9	--	--
	D4°	--	--	161.8	--	387.7	--	338.0	--	120.9	--	--
	D6°	--	--	--	252.5	--	361.4	--	196.3	--	--	--
	D8°	--	--	--	--	300.7	--	254.2	--	--	--	--

Decision : ☒ Pass or ☐ Failed



Test Report
No. : TW065-A0-180024
ECE Regulation No.65

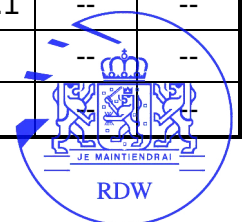


Type : PY-9171-A
 Manufacturer : MANY WAIN ENTERPRISE CO., LTD.

Results of photometric tests of the Special warning lamp Category X **(Single Flash)**
 Results of measurements (24V)

distribution of the intensity of the lamps in [cd]												
		Wide angle effect		Narrow angle effect							Wide angle effect	
horizontal angle		L90°	L45°	L30°	L20°	L10°	V	R10°	R20°	R30 °	R45°	R90°
Minimum value of the effective luminous intensity Je	U8°	--	--	--	--	100	--	100	--	--	--	--
	U6°	--	--	--	100	--	150	--	100	--	--	--
	U4°	40	40	40	--	200	--	200	--	40	40	40
	H	100	100	100	150	--	200	--	150	100	100	100
	D4°	40	40	40	--	200	--	200	--	40	40	40
	D6°	--	--	--	100	--	150	--	100	--	--	--
	D8°	--	--	--	--	100	--	100	--	--	--	--
vertical angle sample 1	U8°	--	--	--	--	301.9	--	291.7	--	--	--	--
	U6°	--	--	--	248.7	--	379.2	--	229.9	--	--	--
	U4°	--	--	158.9	--	389.8	--	373.4	--	139.4	--	--
	H	--	--	173.8	301.4	--	452.1	--	263.3	144.6	--	--
	D4°	--	--	163.2	--	383.2	--	356.1	--	129.6	--	--
	D6°	--	--	--	244.7	--	354.1	--	211.0	--	--	--
	D8°	--	--	--	--	289.7	--	266.5	--	--	--	--
vertical angle sample 2	U8°	--	--	--	--	298.9	--	287.9	--	--	--	--
	U6°	--	--	--	240.2	--	386.4	--	226.8	--	--	--
	U4°	--	--	155.0	--	391.9	--	365.0	--	136.0	--	--
	H	--	--	171.0	297.6	--	461.3	--	252.5	138.0	--	--
	D4°	--	--	163.3	--	391.7	--	341.4	--	122.1	--	--
	D6°	--	--	--	254.5	--	364.2	--	198.0	--	--	--
	D8°	--	--	--	--	302.5	--	256.3	--	--	--	--

Decision : ☒ Pass or ☐ Failed



Test Report
No. : TW065-A0-180024
ECE Regulation No.65



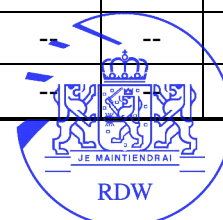
Type : PY-9171-A
 Manufacturer : MANY WAIN ENTERPRISE CO., LTD.

Results of photometric tests of the Special warning lamp Category X **(Double Flash)**

Results of measurements (12V)

distribution of the intensity of the lamps in [cd]												
		Wide angle effect		Narrow angle effect							Wide angle effect	
horizontal angle		L90°	L45°	L30°	L20°	L10°	V	R10°	R20°	R30 °	R45°	R90°
Minimum value of the effective luminous intensity Je	U8°	--	--	--	--	100	--	100	--	--	--	--
	U6°	--	--	--	100	--	150	--	100	--	--	--
	U4°	40	40	40	--	200	--	200	--	40	40	40
	H	100	100	100	150	--	200	--	150	100	100	100
	D4°	40	40	40	--	200	--	200	--	40	40	40
	D6°	--	--	--	100	--	150	--	100	--	--	--
	D8°	--	--	--	--	100	--	100	--	--	--	--
vertical angle sample 1	U8°	--	--	--	--	304.4	--	293.0	--	--	--	--
	U6°	--	--	--	249.3	--	379.8	--	230.6	--	--	--
	U4°	--	--	159.3	--	390.5	--	373.6	--	139.4	--	--
	H	--	--	168.9	295.7	--	448.8	--	262.4	144.1	--	--
	D4°	--	--	157.2	--	377.0	--	351.5	--	129.4	--	--
	D6°	--	--	--	243.5	--	352.2	--	210.4	--	--	--
	D8°	--	--	--	--	288.0	--	265.0	--	--	--	--
vertical angle sample 2	U8°	--	--	--	--	295.6	--	284.2	--	--	--	--
	U6°	--	--	--	237.3	--	381.3	--	223.9	--	--	--
	U4°	--	--	153.0	--	389.6	--	364.9	--	147.5	--	--
	H	--	--	169.5	294.8	--	464.0	--	255.9	142.1	--	--
	D4°	--	--	169.5	--	392.6	--	341.8	--	126.9	--	--
	D6°	--	--	--	252.7	--	367.3	--	202.4	--	--	--
	D8°	--	--	--	--	301.2	--	254.9	--	--	--	--

Decision : ☒ Pass or ☐ Failed



Test Report
No. : TW065-A0-180024
ECE Regulation No.65

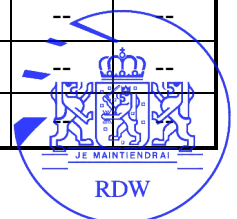


Type : PY-9171-A
 Manufacturer : MANY WAIN ENTERPRISE CO., LTD.

Results of photometric tests of the Special warning lamp Category X **(Double Flash)**
 Results of measurements (24V)

distribution of the intensity of the lamps in [cd]												
		Wide angle effect		Narrow angle effect							Wide angle effect	
horizontal angle		L90°	L45°	L30°	L20°	L10°	V	R10°	R20°	R30 °	R45°	R90°
Minimum value of the effective luminous intensity Je	U8°	--	--	--	--	100	--	100	--	--	--	--
	U6°	--	--	--	100	--	150	--	100	--	--	--
	U4°	40	40	40	--	200	--	200	--	40	40	40
	H	100	100	100	150	--	200	--	150	100	100	100
	D4°	40	40	40	--	200	--	200	--	40	40	40
	D6°	--	--	--	100	--	150	--	100	--	--	--
	D8°	--	--	--	--	100	--	100	--	--	--	--
vertical angle sample 1	U8°	--	--	--	--	308.4	--	297.5	--	--	--	--
	U6°	--	--	--	251.3	--	383.2	--	233.5	--	--	--
	U4°	--	--	160.2	--	392.6	--	375.1	--	140.2	--	--
	H	--	--	169.5	296.1	--	451.0	--	263.5	145.1	--	--
	D4°	--	--	158.1	--	378.6	--	352.9	--	129.5	--	--
	D6°	--	--	--	243.3	--	352.2	--	210.1	--	--	--
	D8°	--	--	--	--	288.6	--	265.1	--	--	--	--
vertical angle sample 2	U8°	--	--	--	--	292.9	--	282.0	--	--	--	--
	U6°	--	--	--	236.2	--	379.0	--	223.3	--	--	--
	U4°	--	--	152.5	--	384.7	--	359.2	--	134.2	--	--
	H	--	--	168.5	293.7	--	455.5	--	249.0	136.1	--	--
	D4°	--	--	161.3	--	387.2	--	336.9	--	120.7	--	--
	D6°	--	--	--	251.7	--	359.7	--	195.8	--	--	--
	D8°	--	--	--	--	299.5	--	253.4	--	--	--	--

Decision : ☒ Pass or ☐ Failed



Test Report
No. : TW065-A0-180024
ECE Regulation No.65



Type : PY-9171-A
 Manufacturer : MANY WAIN ENTERPRISE CO., LTD.

Results of photometric tests of the Special warning lamp Category X **(QUAD Flash)**

Results of measurements (12V)

distribution of the intensity of the lamps in [cd]												
		Wide angle effect		Narrow angle effect							Wide angle effect	
horizontal angle		L90°	L45°	L30°	L20°	L10°	V	R10°	R20°	R30 °	R45°	R90°
Minimum value of the effective luminous intensity Je	U8°	--	--	--	--	100	--	100	--	--	--	--
	U6°	--	--	--	100	--	150	--	100	--	--	--
	U4°	40	40	40	--	200	--	200	--	40	40	40
	H	100	100	100	150	--	200	--	150	100	100	100
	D4°	40	40	40	--	200	--	200	--	40	40	40
	D6°	--	--	--	100	--	150	--	100	--	--	--
	D8°	--	--	--	--	100	--	100	--	--	--	--
vertical angle sample 1	U8°	--	--	--	--	266.8	--	257.5	--	--	--	--
	U6°	--	--	--	218.0	--	332.0	--	202.4	--	--	--
	U4°	--	--	139.3	--	341.4	--	326.8	--	122.3	--	--
	H	--	--	147.9	258.5	--	392.1	--	229.3	126.2	--	--
	D4°	--	--	137.7	--	329.8	--	307.4	--	113.3	--	--
	D6°	--	--	--	213.2	--	308.0	--	183.7	--	--	--
	D8°	--	--	--	--	251.7	--	231.4	--	--	--	--
vertical angle sample 2	U8°	--	--	--	--	250.0	--	240.5	--	--	--	--
	U6°	--	--	--	200.8	--	323.2	--	189.5	--	--	--
	U4°	--	--	129.9	--	327.4	--	306.3	--	113.8	--	--
	H	--	--	143.5	249.6	--	386.9	--	212.2	115.8	--	--
	D4°	--	--	137.2	--	329.6	--	287.3	--	102.8	--	--
	D6°	--	--	--	214.3	--	306.4	--	166.8	--	--	--
	D8°	--	--	--	--	255.4	--	216.4	--	--	--	--

Decision : ☒ Pass or ☐ Failed



Test Report
No. : TW065-A0-180024
ECE Regulation No.65



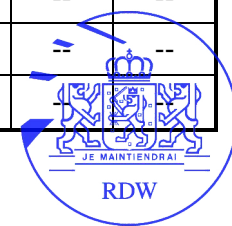
Type : PY-9171-A
 Manufacturer : MANY WAIN ENTERPRISE CO., LTD.

Results of photometric tests of the Special warning lamp Category X (QUAD Flash)

Results of measurements (24V)

distribution of the intensity of the lamps in [cd]												
		Wide angle effect		Narrow angle effect							Wide angle effect	
horizontal angle		L90°	L45°	L30°	L20°	L10°	V	R10°	R20°	R30 °	R45°	R90°
Minimum value of the effective luminous intensity Je	U8°	--	--	--	--	100	--	100	--	--	--	--
	U6°	--	--	--	100	--	150	--	100	--	--	--
	U4°	40	40	40	--	200	--	200	--	40	40	40
	H	100	100	100	150	--	200	--	150	100	100	100
	D4°	40	40	40	--	200	--	200	--	40	40	40
	D6°	--	--	--	100	--	150	--	100	--	--	--
	D8°	--	--	--	--	100	--	100	--	--	--	--
vertical angle sample 1	U8°	--	--	--	--	264.0	--	254.7	--	--	--	--
	U6°	--	--	--	216.0	--	328.9	--	200.6	--	--	--
	U4°	--	--	137.9	--	338.0	--	323.0	--	120.7	--	--
	H	--	--	146.2	255.9	--	388.0	--	227.3	125.0	--	--
	D4°	--	--	136.2	--	325.8	--	303.8	--	111.9	--	--
	D6°	--	--	--	210.5	--	305.0	--	181.7	--	--	--
	D8°	--	--	--	--	248.8	--	228.8	--	--	--	--
vertical angle sample 2	U8°	--	--	--	--	247.0	--	238.5	--	--	--	--
	U6°	--	--	--	199.8	--	320.7	--	188.6	--	--	--
	U4°	--	--	129.0	--	325.7	--	304.6	--	113.4	--	--
	H	--	--	143.0	248.8	--	385.3	--	211.2	115.0	--	--
	D4°	--	--	136.8	--	328.4	--	286.6	--	102.2	--	--
	D6°	--	--	--	213.1	--	305.2	--	166.0	--	--	--
	D8°	--	--	--	--	253.9	--	215.3	--	--	--	--

Decision : ☒ Pass or ☐ Failed



Test Report
No. : TW065-A0-180024
ECE Regulation No.65



Type : PY-9171-A
 Manufacturer : MANY WAIN ENTERPRISE CO., LTD.

Rain test : A sample of the special warning lamp, fitted in its normal operating position, with all the drainage apertures open if they exist, shall be subjected to a precipitation of 2.5 mm of water per minute, the water being directed at an angle of 45° and from a nozzle producing a full conical jet.

During the test, the device shall turn on its vertical axis at a rate of four turns per minute.

The test shall last for 12 hours continuously after which the water jet shall be stopped.

One hour later, the sample shall be examined and shall be regarded as having passed the test if the accumulated volume of water does not exceed 2 cm³

Decision : ☒ Pass or ☐ Failed

Frequency checked after Rain test :

(Single Flash)

	Results of Frequency tests	
	Amber / Blue / Red	
	Categories Y or X	
	12V	24V
Frequency f (Hz)	2.0458	2.0429
"ON" time tH (s)	0.1657	0.1659
"OFF" time tD (s)	0.3231	0.3236

Decision : ☒ Pass or ☐ Failed



Test Report
No. : TW065-A0-180024
ECE Regulation No.65



Type : PY-9171-A
 Manufacturer : MANY WAIN ENTERPRISE CO., LTD.

(Double Flash)

	Results of Frequency tests	
	Amber / Blue / Red	
	Categories ≠ or X	
	12V	24V
Frequency f (Hz)	2.0437	2.0446
"ON" time tH (s)	0.1799	0.1799
"OFF" time tD (s)	0.3093	0.3093

Decision : ☒ Pass or ☐ Failed

(QUAD Flash)

	Results of Frequency tests	
	Amber / Blue / Red	
	Categories ≠ or X	
	12V	24V
Frequency f (Hz)	2.5082	2.5013
"ON" time tH (s)	0.1558	0.1562
"OFF" time tD (s)	0.2429	0.2436

Decision : ☒ Pass or ☐ Failed



Test Report
No. : TW065-A0-180024
ECE Regulation No.65



Type : PY-9171-A
Manufacturer : MANY WAIN ENTERPRISE CO., LTD.

The colouring beam is obtained through : Amber / ~~Blue~~ / ~~Red~~

The colour complies with the colorimetric boundaries prescribed in Annex 3 to the Regulation.

Under the conditions of paragraph 7. of this Regulation, the trichromatic co-ordinates of light emitted through the filters used for special warning lamps shall lie within the following boundaries:

Amber Color

Limit towards green: $y \leq x - 0.120$

Limit towards red: $y \geq 0.390$

Limit towards white: $y \geq 0.790 - 0.670 x$

Blue Color

Limit towards green: $y = 0.065 + 0.805 x$

Limit towards white: $y = 0.400 - x$

Limit towards purple: $y = 1.667x - 0.222$

Red Color

Limit towards purple: $y \geq 0.980 - x$

Limit towards yellow: $y \leq 0.335$

The chromaticity coordinates (x,y) of the light emitted (Reference axis)	Special warning lamp	
	12V	24V
x	0.5555	0.5564
y	0.4202	0.4205

Decision : ☒ Pass or ☐ Failed

Explanatory note : Not applicable



Test Report
No. : TW065-A0-180024
ECE Regulation No.65



Type : PY-9171-A
Manufacturer : MANY WAIN ENTERPRISE CO., LTD.

Remark concerning tested object(s)

All versions of the lamps as stated in the information document are covered with the tested version(s) and test object(s) respectively.

Appendices

- L Technical information about the lamp type according to Annex 1 for the communication of the ECE Regulation No.65 -type approval
- 0 List of modifications : Not attached
- 1 Information folder no. : PY-9171-A-00

Statement of conformity

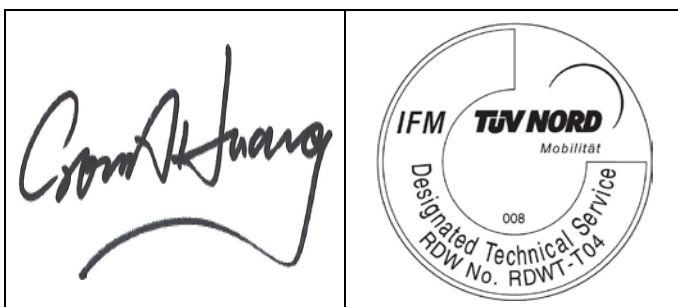
The information folder and the type described there comply with the requirements in the above mentioned ~~directive~~ regulation.

The samples / test vehicles used were representative in terms of the type to be approved.

The technical report (including appendix L) consists of pages 1 to 19 and shall not be reproduced except in full without the written approval of the testing laboratory.

Designated Technical Service: RDWT-T04

Taipei, March 16, 2018
IFM/#



Cronus Huang
Engineer



Test Report
No. : TW065-A0-180024
ECE Regulation No.65

Type : PY-9171-A
Manufacturer : MANY WAIN ENTERPRISE CO., LTD.

Technical information about the lamp type according to Annex 1
for the communication of the ECE Regulation No.65 type approval

Appendix L

1. Special warning lamp / ~~rotating / stationary flashing lamp~~ / directional flashing lamp /
~~complete bar / half bar / blue / amber / red~~
2. Special warning lamp has one ~~two~~ levels of intensity
Special warning lamp consists of one separate units
4. Used light source

category of filament lamp : Not applicable

gas discharge light source : Not applicable or,

LED : ~~yes~~/no or,

Light source module : ~~yes~~/no or,

Light source module specific
identification code : Not applicable
5. Rated voltage of special warning
lamp : 12V / 24V
6. Trade name or mark : **MANY WAIN**
7. Manufacturer's name and
address : MANY WAIN ENTERPRISE CO., LTD.
No. 10, Lane 808, Chung Shan Rd. Shin Hwa Dist.
71243 TAINAN Taiwan
8. If applicable, name and address
of manufacturer's representative : not applicable
9. Submitted for approval on : January 17, 2018
11. Date of report issued by that
service : March 16, 2018
14. Reason(s) for extension : not applicable



1. Specification Data

February 22, 2018

Type No.		PY-9171-A
Function		Special warning lamps
Category		Category X
Color		Amber
Level of intensity		Class 1 (by night)
Minimum horizontal angular range for category x		Narrow angle effect
Rated	Voltage	12 V / 24 V
	Wattage	8.5 W
Application Regulation (ECE)		ECE Regulation 65
Light source category		LED x 6
Location of marking	Trade mark	MANY WAIN
		On the housing
	Approval mark	On the housing

Remark: 1. This device with three kinds of flash mode : Single Flash/ Double Flash/ Quad Flash

2. Construction and Material :

Construction	Material	Remarks
Lens	Polycarbonate	Clear
Housing	Aluminum	--

3. Name and Address of Manufactory : MANY WAIN ENTERPRISE CO., LTD.
No. 10, Lane 808, Chung Shan Rd. Shin Hwa Dist.
71243 TAINAN Taiwan

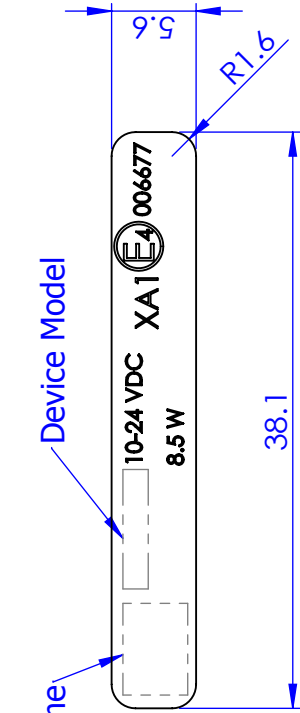


4. Picture of tested sample



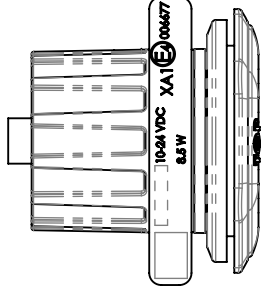
Sample 1

This document (including drawing) consists of 17 pages



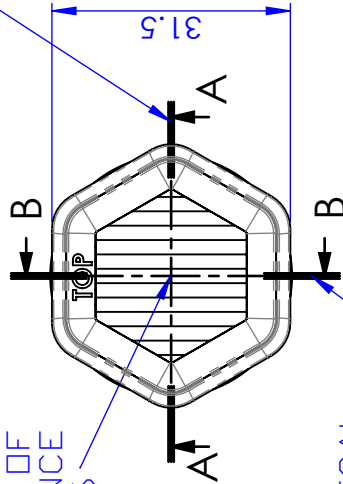
Trade Name

Device Model

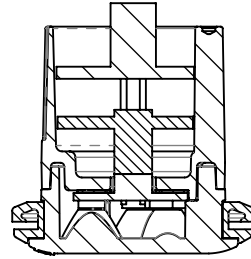
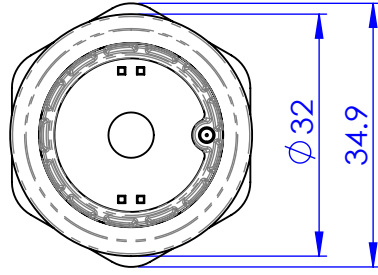
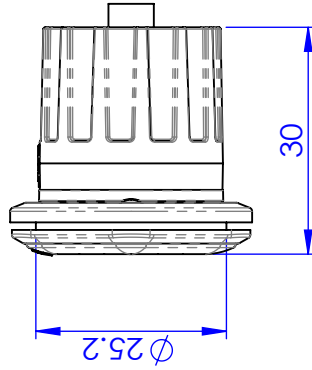


HORIZONTAL
REFERENCE
AXIS

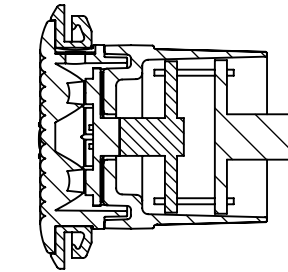
CENTER OF
REFERENCE
LED * 6



VERTICAL
REFERENCE
AXIS



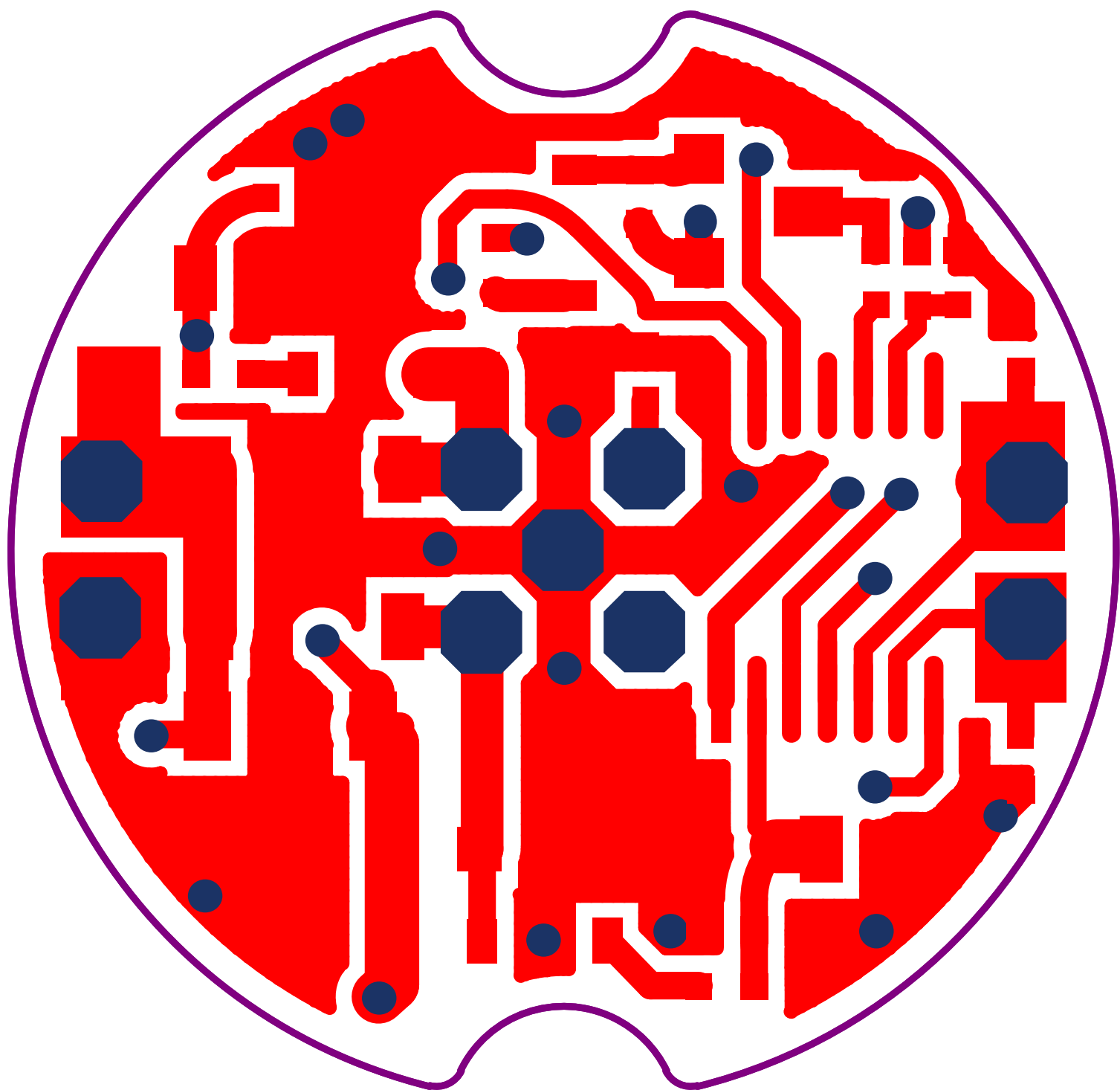
剖面圖 A-A

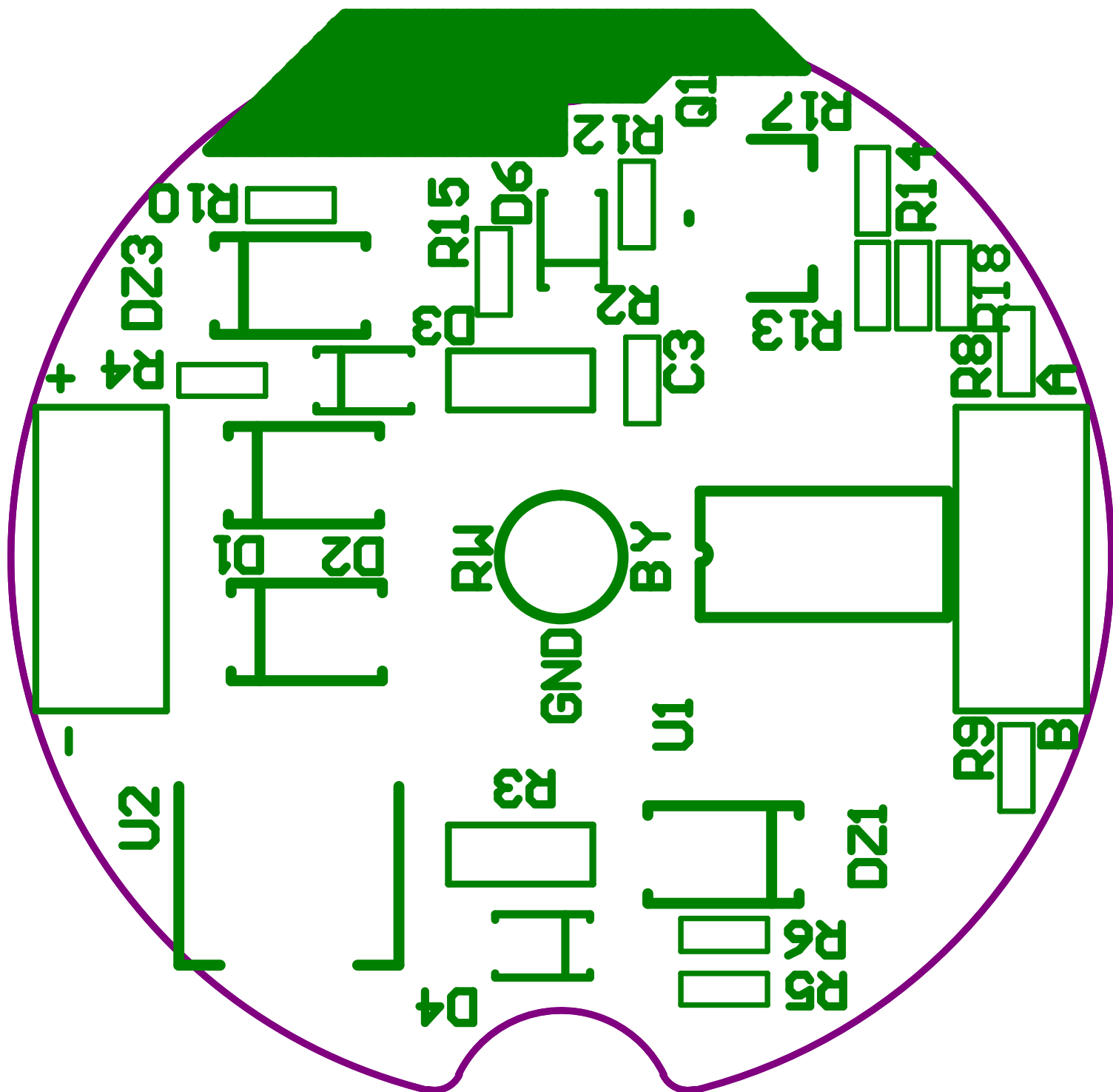


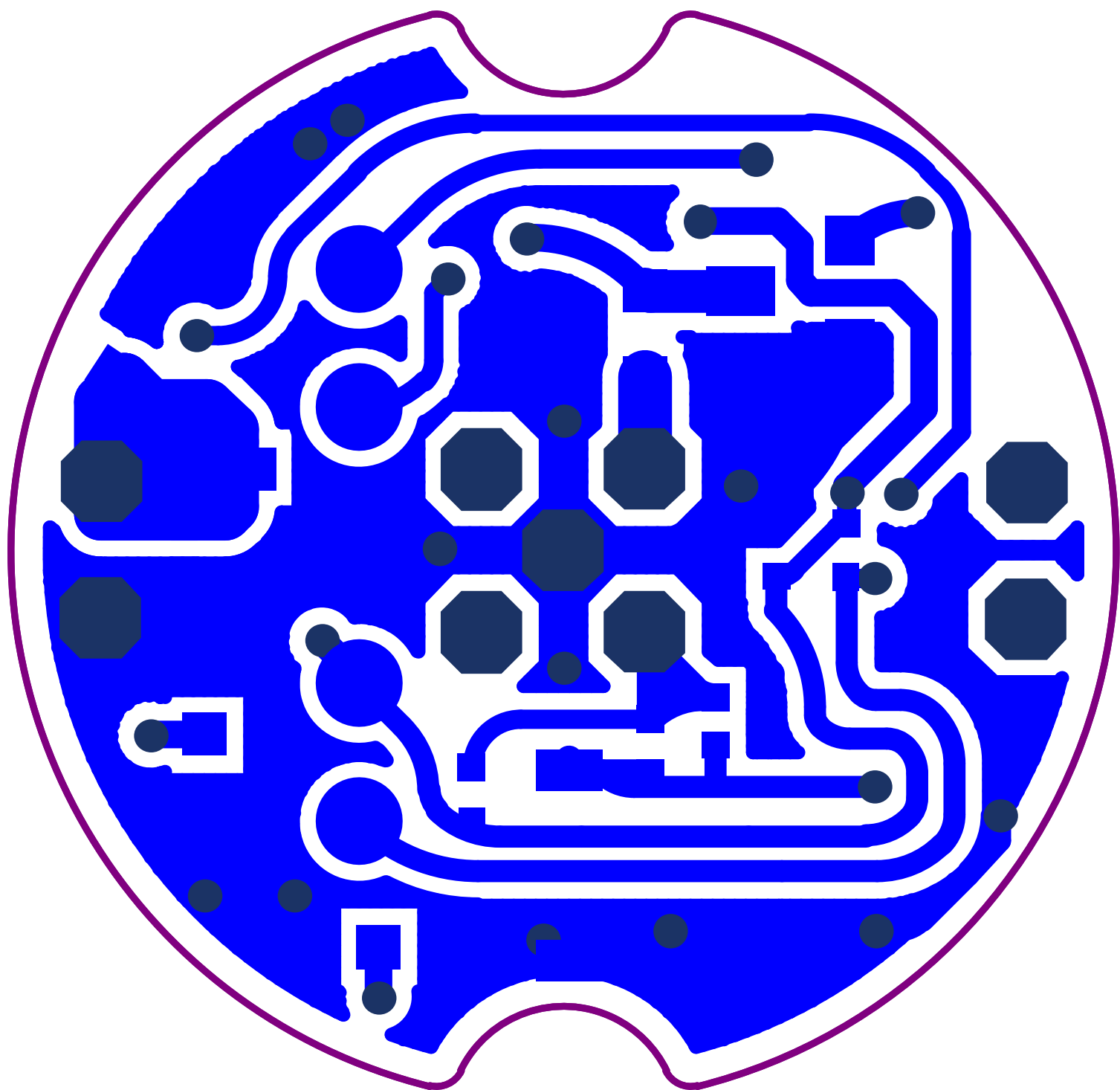
剖面圖 B-B

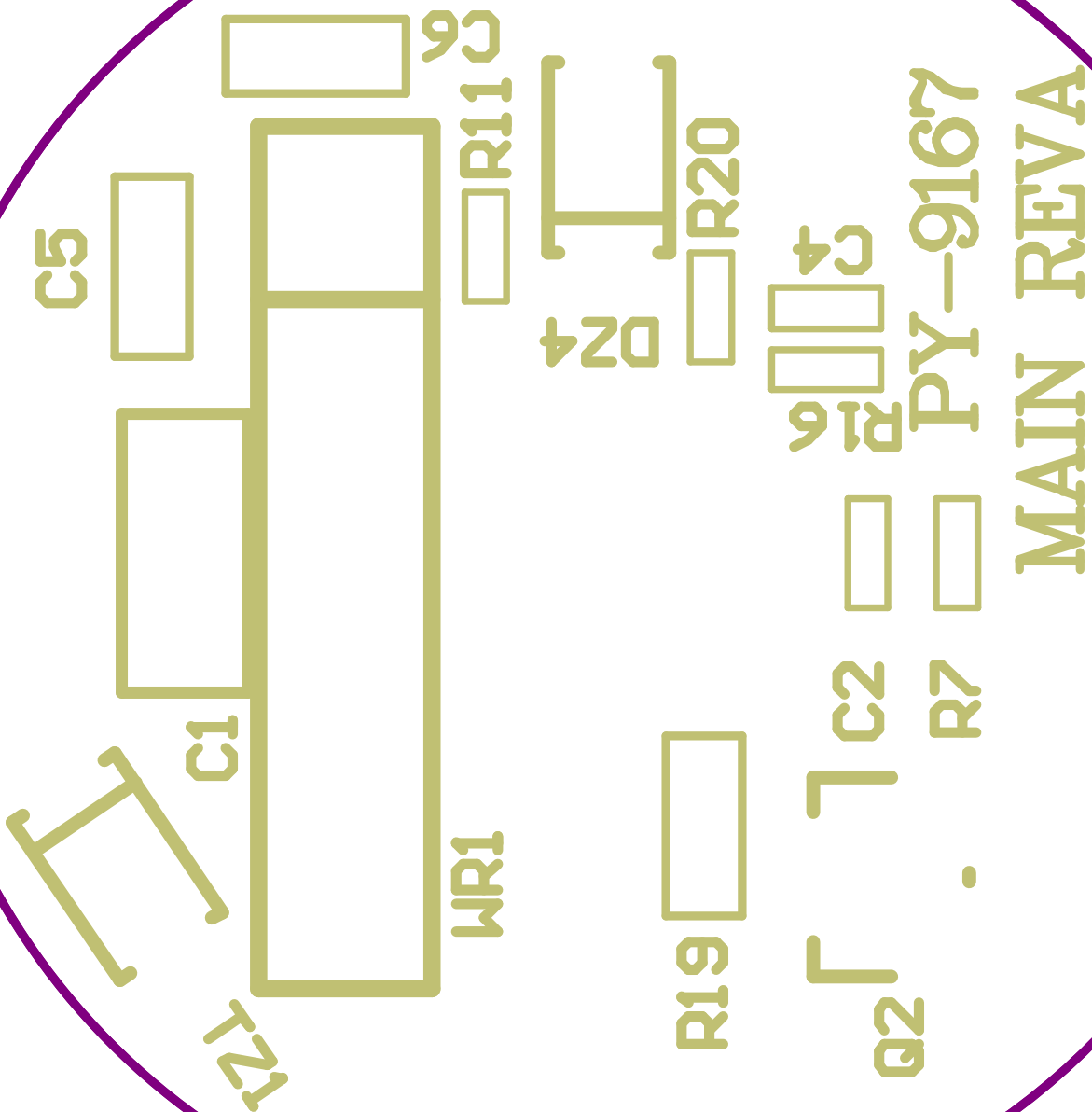


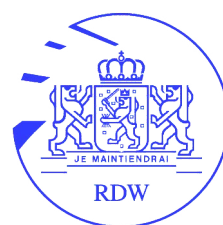
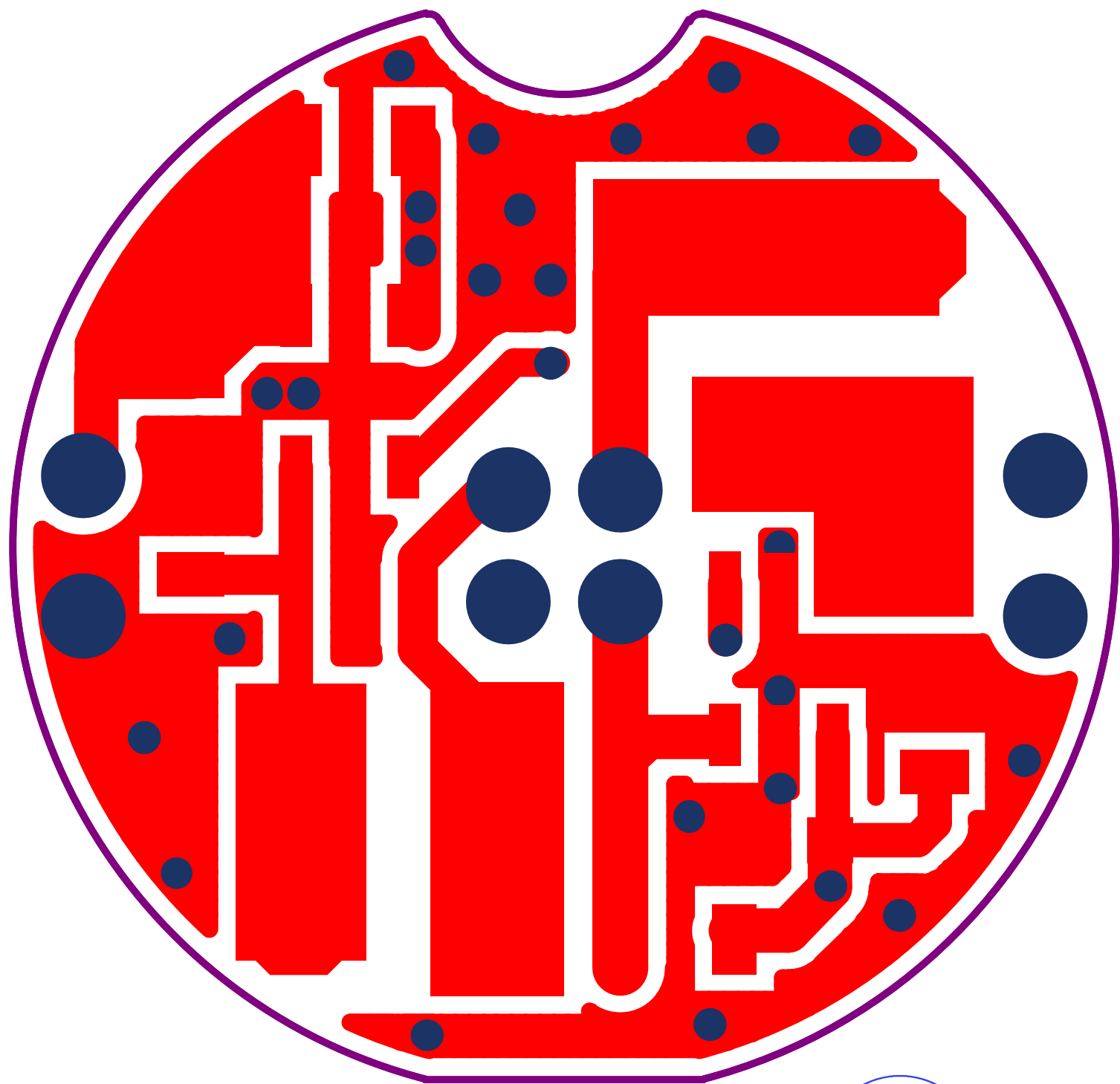
TOLERANCE				Check				Design			
				百盈實業股份有限公司 MANY WAIN ENTERPRISE CO., LTD				劉尚達			
				Material				Drawing			
				Finish				沈亮光			
				Color				Item No.			
				A4				PY-9171-A			
				SIZE				Rev			
				ANGLE				Date			
				±1°				18.03.08			
				±0.2				mm			
				±0.1				1:1			
				±0.8				Scale			
				±0.6				Approved			
				±0.08				Item Name			
				300~600				9171黃色認證			
				0~6				Drawing No.			
				±0.6				1010.10000.00.2			
				30~120				Drawing			
				120~300				沈亮光			
				±0.4				Item No.			
				±0.1				PY-9171-A			
				±0.08				Rev			
				±0.6				2			
				±0.1				Page			
				±0.08				1/1			
				±0.1				Date			
				±0.08				18.03.08			
				±0.1				Rev			
				±0.08				2			
				±0.1				Page			
				±0.08				1/1			

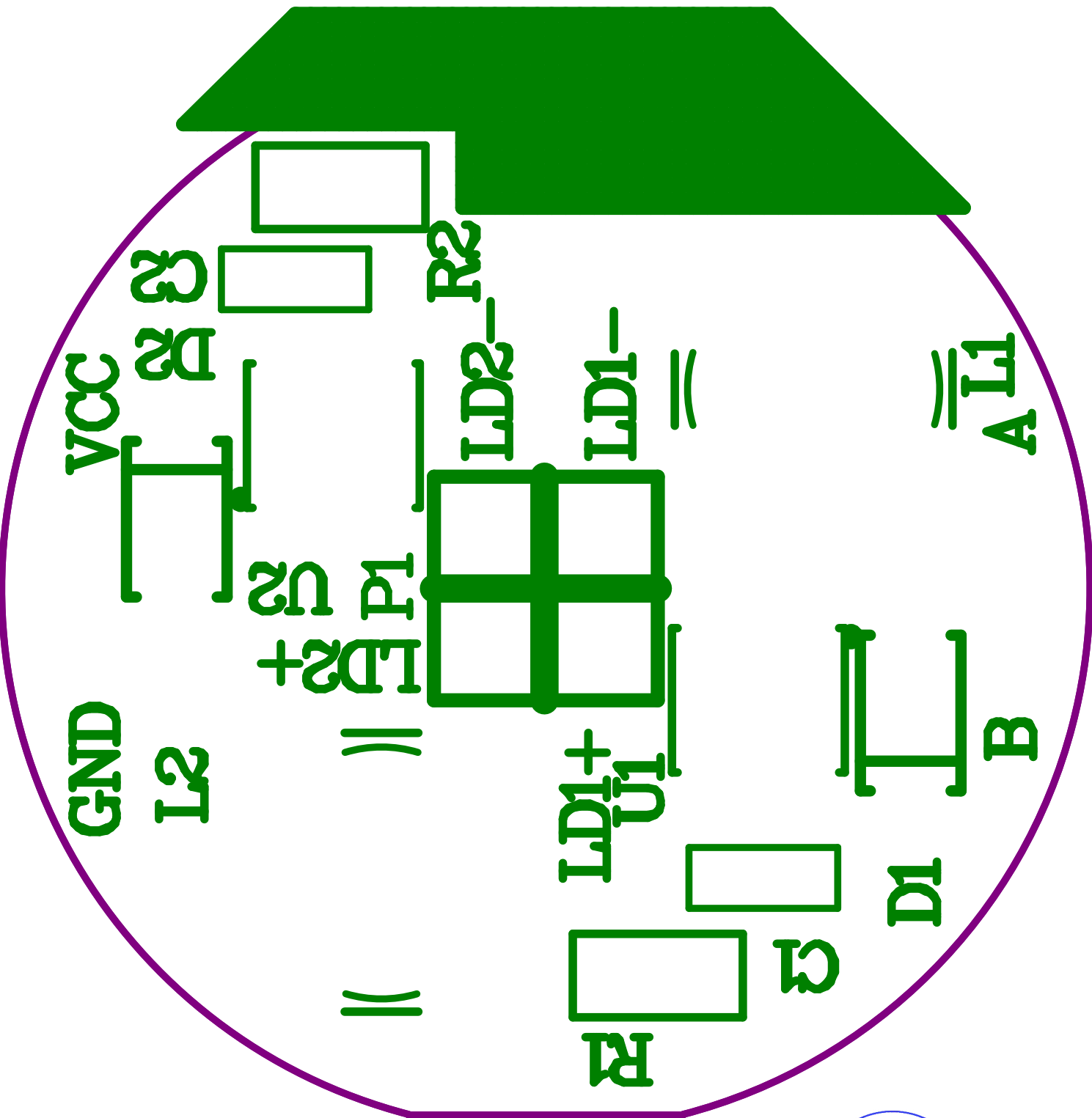


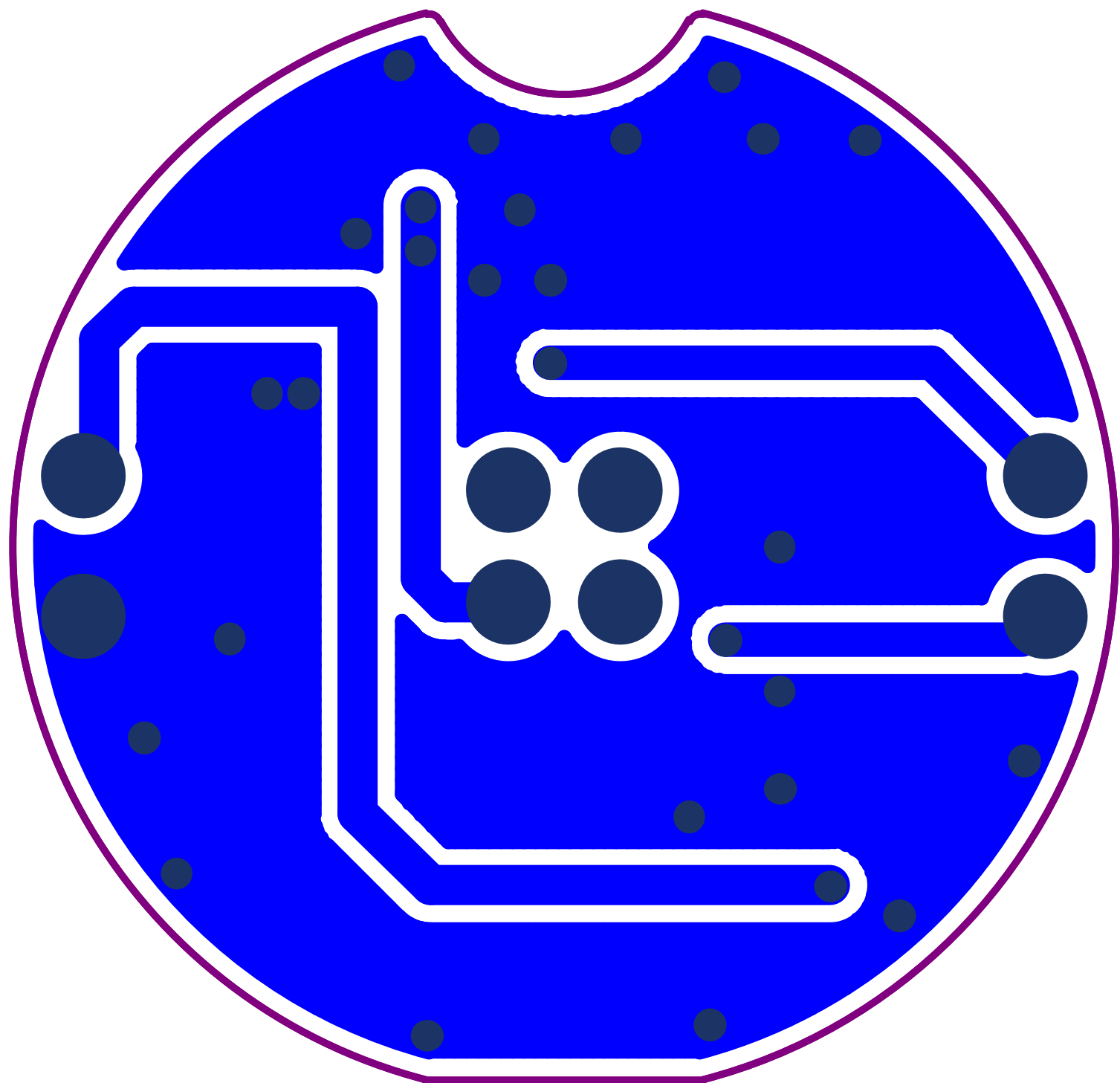








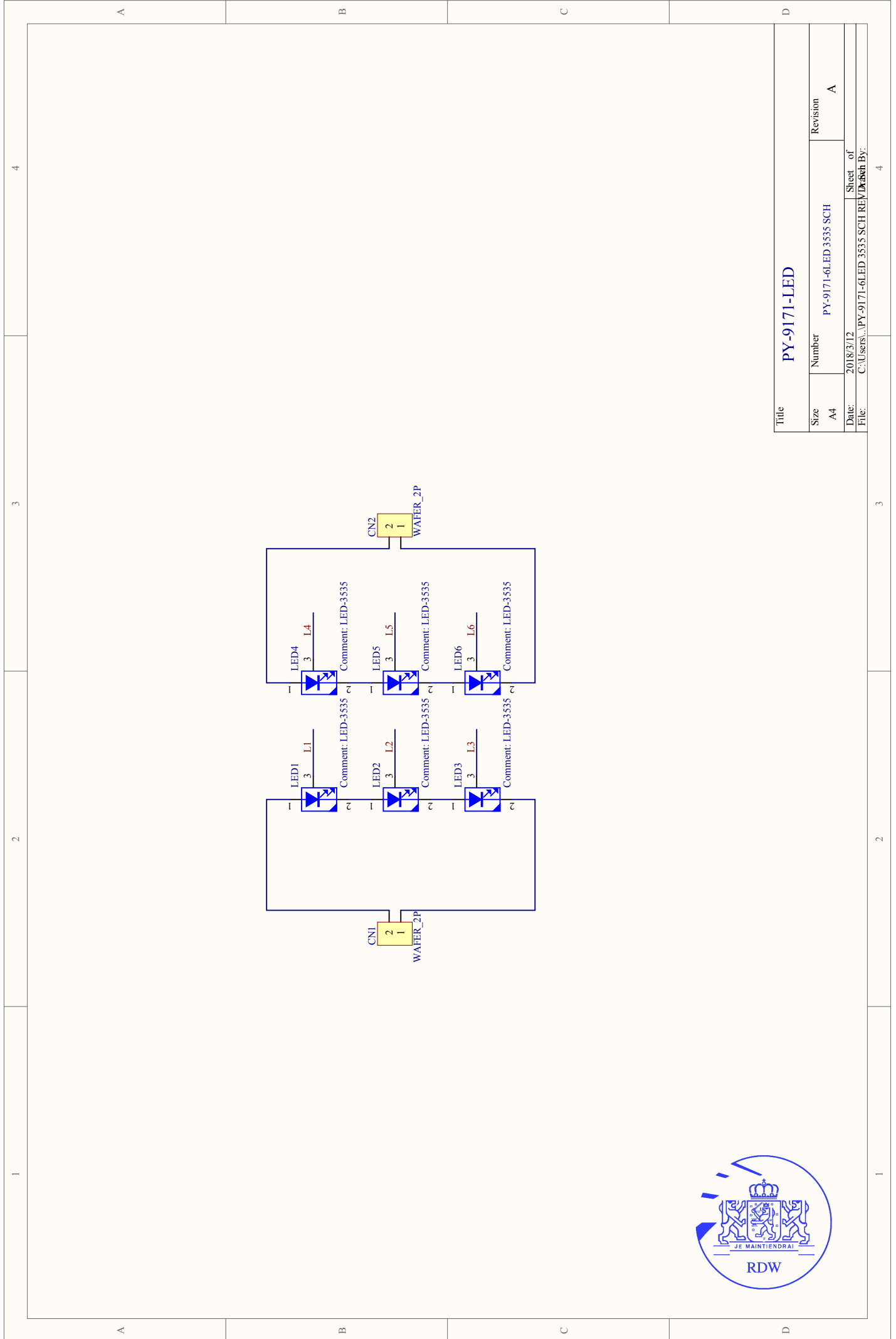


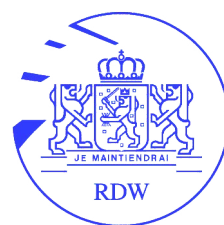
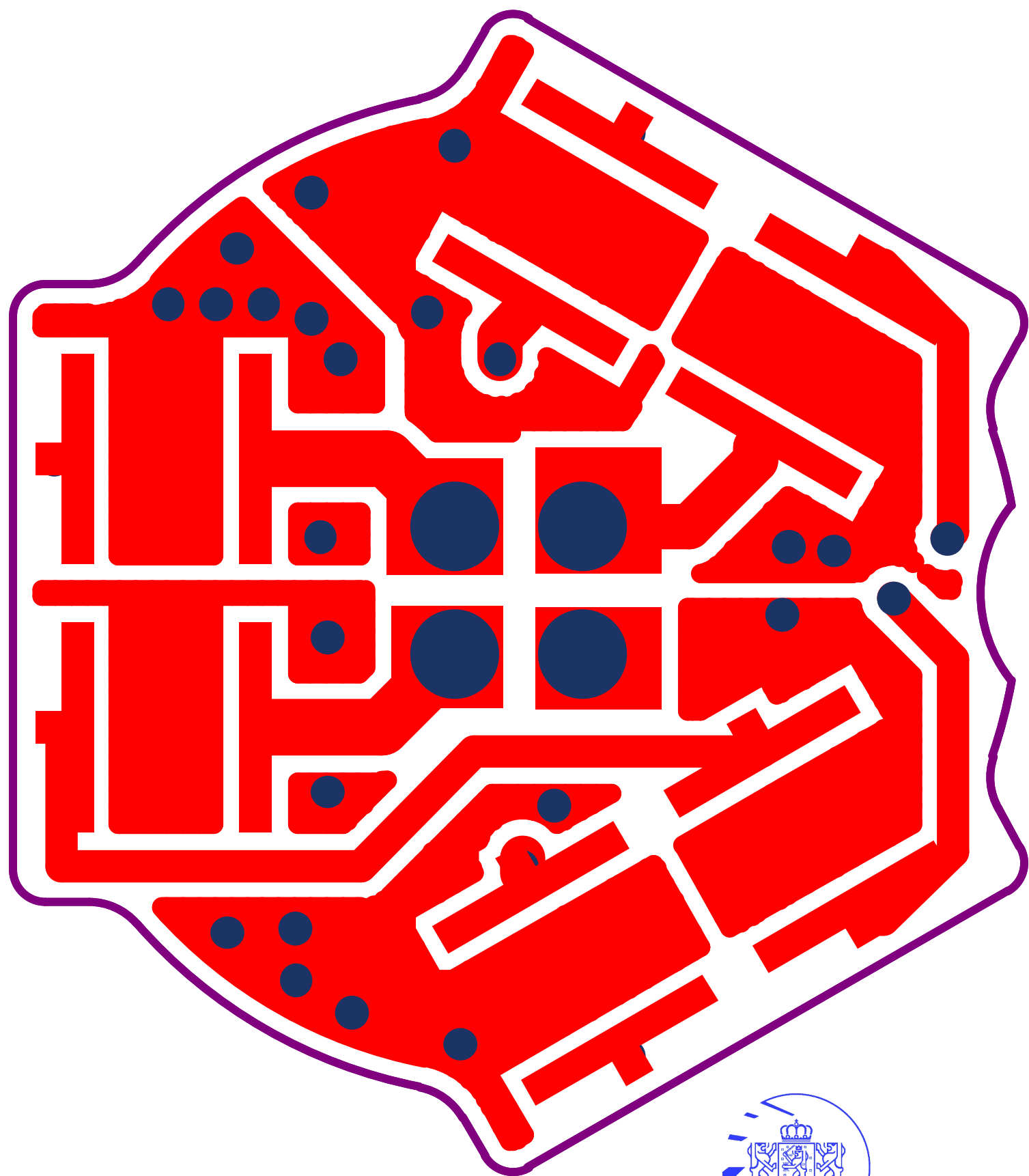


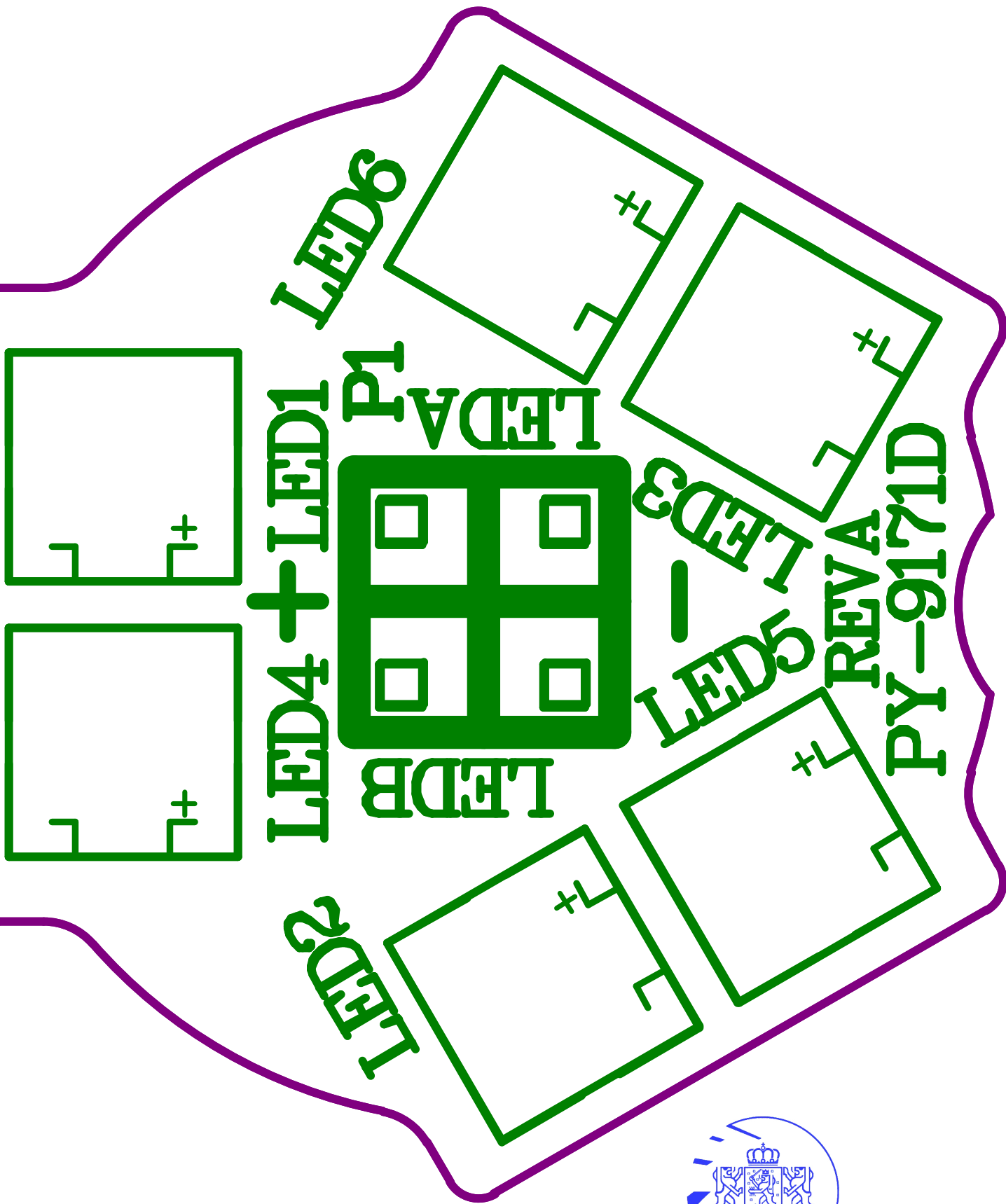


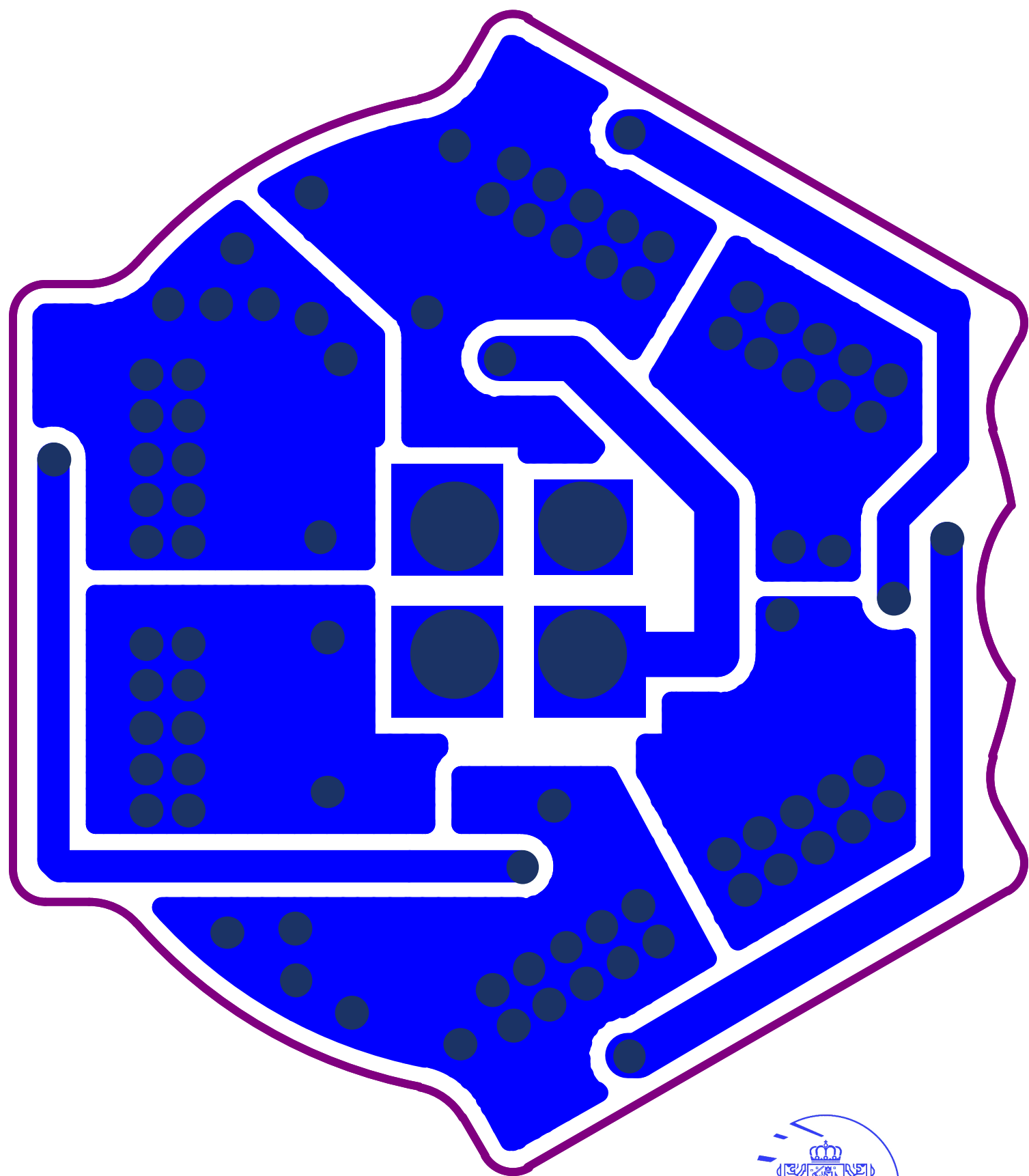
PY-9171 DRIVER
12V-24V REV A











THE NETHERLANDS
(N E D E R L A N D)



COMMUNICATION

Concerning ⁽¹⁾:

- approval granted
- ~~- approval extended~~
- ~~- approval refused~~
- ~~- approval withdrawn~~
- ~~- production definitely discontinued~~

of a type of special warning lamp for motor vehicles, pursuant to Regulation number 65.

Approval number: E4*65R00/10*6677*00

1. Special warning lamp / ~~rotating / stationary flashing lamp~~ / directional flashing lamp / ~~complete bar / half bar / blue / amber / red~~ ⁽¹⁾: PY-9171-A
2. Special warning lamp has one/~~two~~ levels of intensity ⁽¹⁾
Special warning lamp consists of one separate units
3. For special warning lamps having two levels of intensity, indicate the system used to obtain increased intensity at daytime : Not applicable
4. Used light source,
 - category of filament lamp : Not applicable
 - gas discharge light source : Not applicable or,
 - LED : yes/~~no~~ ⁽¹⁾ or,
 - Light source module : ~~yes~~/no ⁽¹⁾ or,
 - Light source module specific identification code : Not applicable
5. Rated voltage of special warning lamp : 12V/24V
6. Trade name or mark : **MANY WAIN**



7. Manufacturer's name and address : MANY WAIN ENTERPRISE CO., LTD.
No. 10, Lane 808, Chung Shan Rd. Shin Hwa Dist.
71243 TAINAN Taiwan
8. If applicable, name and address of the manufacturer's representative : Not applicable
9. Submitted for approval on : January 17, 2018
10. Technical service responsible for conducting approval tests : TÜV NORD Mobilität GmbH & Co. KG
Institut für Fahrzeugtechnik und Mobilität
Adlerstrasse 7, D-45307 Essen
11. Date of report issued by that service : March 16, 2018
12. Number of report issued by that service : TW065-A0-180024
13. Approval : granted/~~extended/refused/withdrawn~~⁽¹⁾
14. Reason(s) for extension (if applicable) : Not applicable
15. Place : Zoetermeer
16. Date : 22-MAR-2018
17. Signature :


Uwe Löbig

18. The list of documents filed with the administration service which has granted approval and available on request is annexed to this communication.

⁽¹⁾ Strike out what does not apply.