



DOB Light Engine Specification

Model:RL-TOD4036A00XXXV

RL-TOD4257A00XXXV

Key Features

- ✧ High total efficiency up to 110lm/W
- ✧ Various CCT available: 2700/3000/3500/4000/5000/5700/6500K
- ✧ CRI:80/90 options
- ✧ Macadam 3/5 steps color bin
- ✧ Solutions for Spot light/track light/low bay/wall light
- ✧ AC line voltage 230V /120V input directly
- ✧ Power factor higher than 0.95
- ✧ Low THDI:<15%
- ✧ Low thermal resistance:0.1°C/W

General application



Spot light



Track light



Low bay



Wall light

Applied standards



- ✧ EN 62321
- ✧ EMC: EN 55015 EN 61547EN 61000-3-2 EN 61000-3-3
- ✧ EMI: EN55015 EN61000-3-2 EN61000-3-3
- ✧ EMS: EN61547
- ✧ EMF: EN62493
- ✧ LVD: EN62471 EN62031

General information

P/N	Size	Input	Power	PF	Flux	Efficiency	CCT	CRI
	mm	Vac	W	-	Lm	Lm/W	K	-
RL-TOD4036A0005HV-830	40*36	230	5	0.95	500	100	3000	80
RL-TOD4036A0010HV-830	40*36	230	10	0.95	1000	100	3000	80
RL-TOD4257A0020HV-830	42*57	230	20	0.95	2000	100	3000	80
RL-TOD4257A0030HV-830	42*57	230	30	0.95	3000	100	3000	80
RL-TOD4036A0005LV-830	40*36	120	5	0.95	500	100	3000	80
RL-TOD4036A0010LV-830	40*36	120	10	0.95	1000	100	3000	80
RL-TOD4257A0020LV-830	42*57	120	20	0.95	2000	100	3000	80
RL-TOD4257A0030LV-830	42*57	120	30	0.95	3000	100	3000	80

Note: 1-Variou CCT available (2700-6500K); RL-TODXXXXXXXXXX-830 (8-80CRI;30-3000K CCT)
 2-Typical Optical-electronic parameters above @ Ta=25°C

Selection guide Example: RL-TOD4036A0005HV

P/N	Size	Input	Power	PF	Flux	Efficiency	CCT	CRI
	mm	Vac	W	-	Lm	Lm/W	K	-
RL-TOD4036A0005HV-827	40*36	230	5	0.95	475	95	2700	80
RL-TOD4036A0005HV-830					500	100	3000	
RL-TOD4036A0005HV-835					500	100	3500	
RL-TOD4036A0005HV-840					550	110	4000	
RL-TOD4036A0005HV-850					550	110	5000	
RL-TOD4036A0005HV-857					500	100	5700	
RL-TOD4036A0005HV-865					500	100	6500	
RL-TOD4036A0005HV-927					425	85	2700	
RL-TOD4036A0005HV-930					450	90	3000	
RL-TOD4036A0005HV-935					450	90	3500	
RL-TOD4036A0005HV-940	40*36	230	5	0.95	500	100	4000	90
RL-TOD4036A0005HV-950					500	100	5000	
RL-TOD4036A0005HV-957					450	90	5700	
RL-TOD4036A0005HV-965					450	90	6500	

Part Number & Explanation

RL	-	TOD	40	36	A	0	005	HV	-	8	30
1		2	3	4	5	6	7	8		9	10

1	Relight
2	DOB series; Driver on board (Thermal ,Optical, Driver)
3	Length
4	Width
5	A: Aluminum P: CEM3 F: FR4 C: Copper (PCB material)
6	0: Round emitting area ; F : Rectange emitting area
7	Power
8	LV: 120Vac HV: 230Vac
9	CRI (8:80;9:90;U95;V:98)
10	CCT; 27:2700K ...

Characteristics

Input	100-130Vac or 200-250Vac
Frequency	50/60Hz
Rated power	Typical power (±10% tolerance)
PF	>0.95
Protection	IP20
Surge level	2.5KV
Hi-pot	1.5KVac
Storage temperature	-30-85°C
Operation temperature	-30-90°C (Ts ofled components)
Beam Angle	120 deg

Mechanical dimension (Unit: mm)

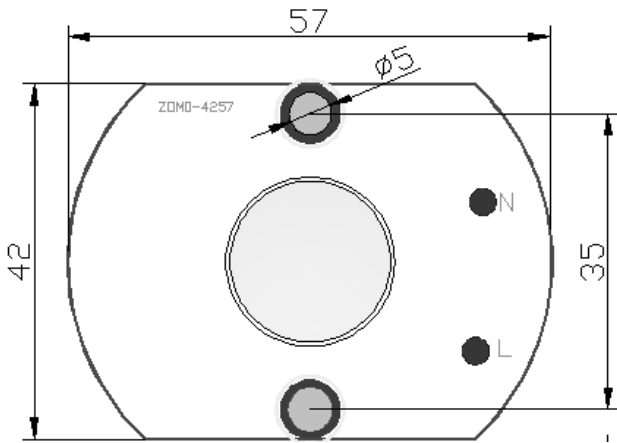
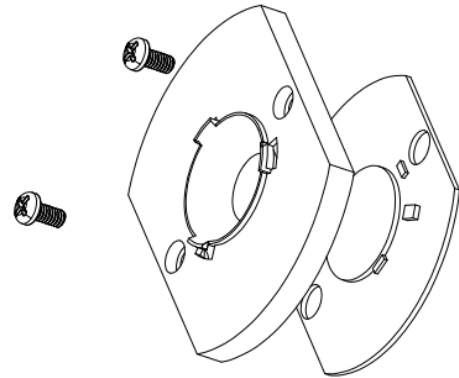


Fig1: RL-TOD4257A series outline



Fixed with cover

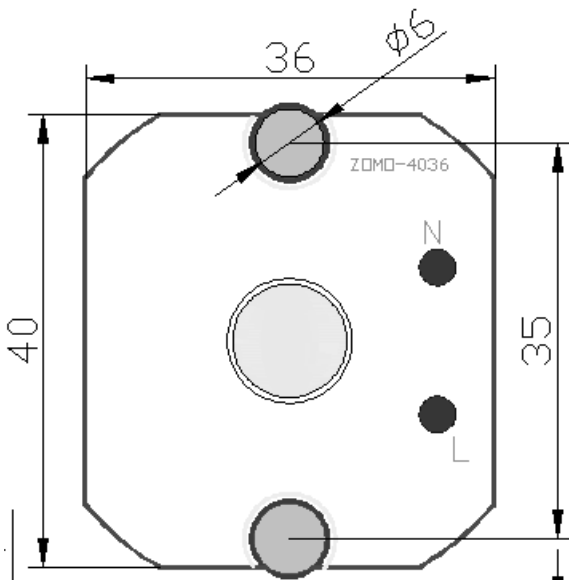
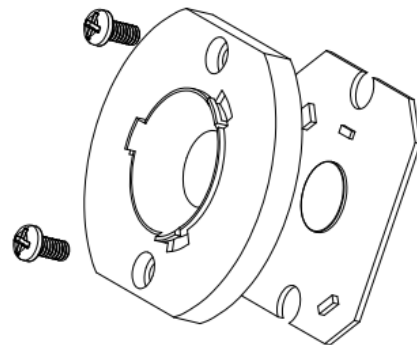
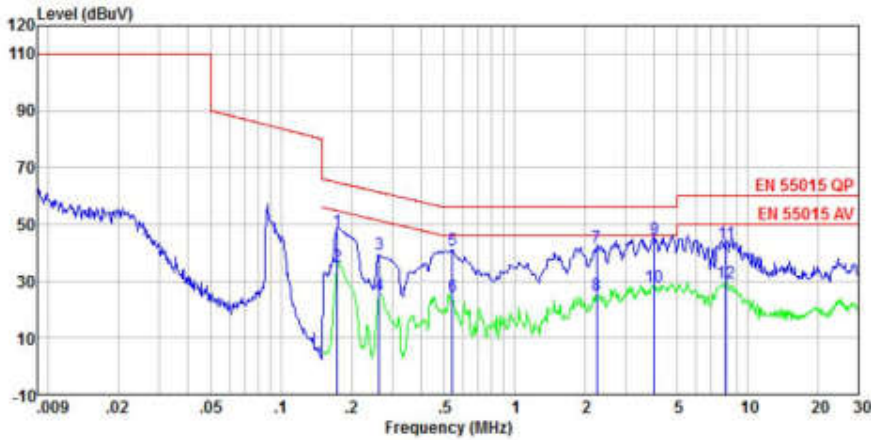


Fig2: RL-TOD4036A series outline

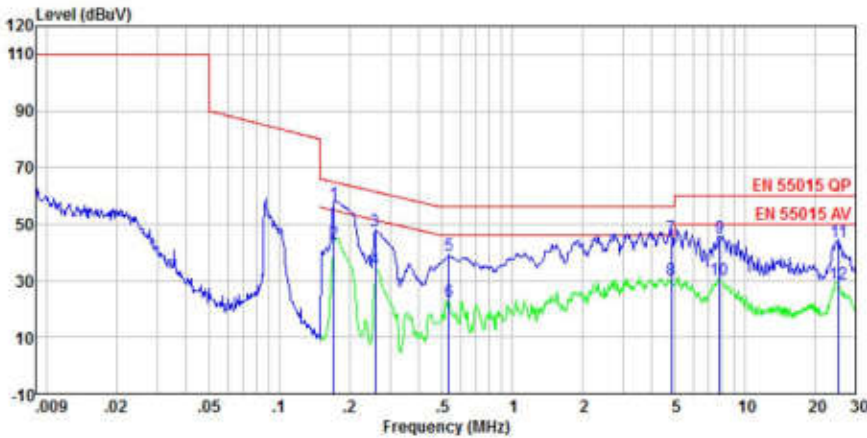


Fixed with cover

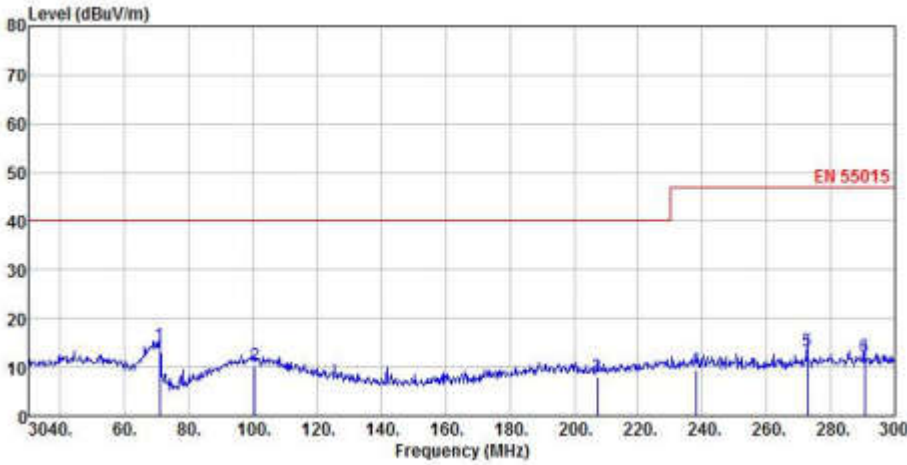
EMC report



	Read Freq	Read Level	Level	Cable Loss	LISN Factor	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.174	47.05	47.33	0.13	0.15	64.77	-17.44	QP
2	0.174	34.76	35.04	0.13	0.15	54.77	-19.73	Average
3	0.263	39.09	39.31	0.11	0.11	61.34	-22.03	QP
4	0.263	24.89	25.11	0.11	0.11	51.34	-26.23	Average
5	0.541	40.71	40.95	0.11	0.13	56.00	-15.05	QP
6	0.541	24.38	24.62	0.11	0.13	46.00	-21.38	Average
7	2.256	41.49	41.77	0.15	0.13	56.00	-14.23	QP
8	2.256	24.95	25.23	0.15	0.13	46.00	-20.77	Average
9	3.980	44.49	44.84	0.15	0.20	56.00	-11.16	QP
10	3.980	27.77	28.12	0.15	0.20	46.00	-17.88	Average
11	8.127	42.57	43.02	0.18	0.27	60.00	-16.98	QP
12	8.127	28.72	29.17	0.18	0.27	50.00	-20.83	Average

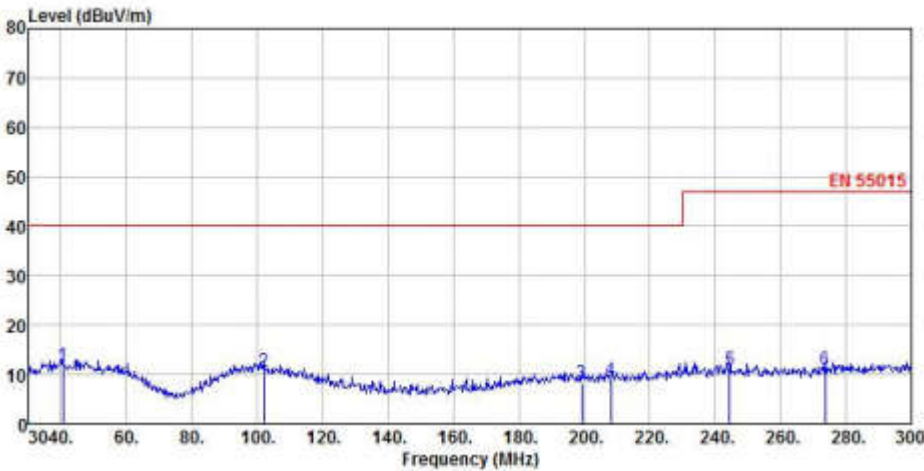


	Read Freq	Read Level	Level	Cable Loss	LISN Factor	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.172	57.01	57.20	0.12	0.07	64.86	-7.66	QP
2	0.172	43.08	43.27	0.12	0.07	54.86	-11.59	Average
3	0.259	47.16	47.33	0.11	0.06	61.47	-14.14	QP
4	0.259	33.85	34.02	0.11	0.06	51.47	-17.45	Average
5	0.537	38.86	39.04	0.11	0.07	56.00	-16.96	QP
6	0.537	22.55	22.73	0.11	0.07	46.00	-23.27	Average
7	4.836	44.88	45.18	0.15	0.15	56.00	-10.82	QP
8	4.836	30.08	30.38	0.15	0.15	46.00	-15.62	Average
9	7.804	44.59	44.96	0.18	0.19	60.00	-15.04	QP
10	7.804	29.78	30.15	0.18	0.19	50.00	-19.85	Average
11	25.301	42.43	43.70	0.23	1.04	60.00	-16.30	QP
12	25.301	27.70	28.97	0.23	1.04	50.00	-21.03	Average



Condition : EN 55015 VULB9163-2013M HORIZONTAL
 Job No. : 0635
 Test Mode : On mode
 Test Engineer: Chen

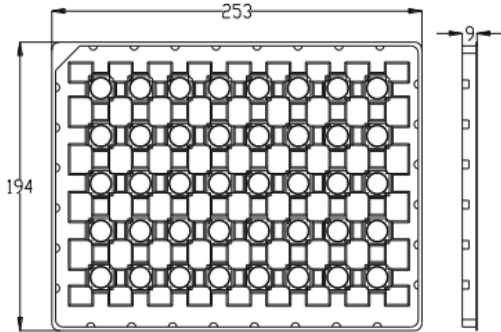
	Freq	ReadAntenna	Cable Preamp	Level	Limit	Over	Remark
	MHz	Level	Loss Factor	dB	Line	Limit	
		dBuV	dB/m	dB	dBuV/m	dBuV/m	dB
1	70.770	32.85	10.52	0.95 29.85	14.47	40.00	-25.53 QP
2	100.470	23.75	15.11	1.19 29.70	10.35	40.00	-29.65 QP
3	207.120	22.70	12.80	1.88 29.27	8.11	40.00	-31.89 QP
4	237.900	22.91	13.99	2.06 29.55	9.41	47.00	-37.59 QP
5	272.730	26.45	14.46	2.24 29.82	13.33	47.00	-33.67 QP
6	290.550	24.86	14.86	2.32 29.94	12.10	47.00	-34.90 QP



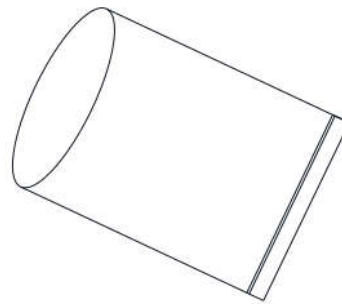
Condition : EN 55015 VULB9163-2013M VERTICAL
 Job No. : 0635
 Test Mode : On mode
 Test Engineer: Chen

	Freq	ReadAntenna	Cable Preamp	Level	Limit	Over	Remark
	MHz	Level	Loss Factor	dB	Line	Limit	
		dBuV	dB/m	dB	dBuV/m	dBuV/m	dB
1	40.530	25.52	15.58	0.67 30.04	11.73	40.00	-28.27 QP
2	102.090	24.08	14.97	1.21 29.69	10.57	40.00	-29.43 QP
3	199.290	23.12	12.57	1.84 29.20	8.33	40.00	-31.67 QP
4	208.200	23.39	12.84	1.89 29.28	8.84	40.00	-31.16 QP
5	244.380	24.28	14.08	2.09 29.59	10.86	47.00	-36.14 QP
6	273.540	23.96	14.46	2.24 29.82	10.84	47.00	-36.16 QP

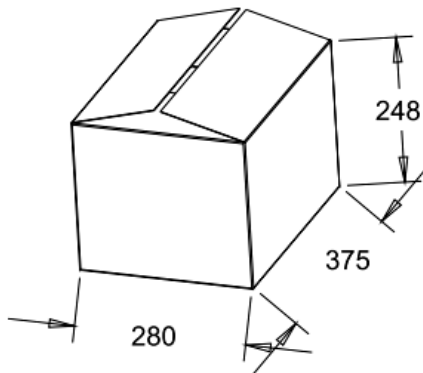
Packing Information



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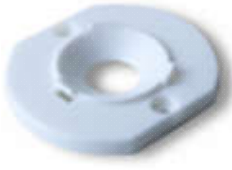



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		Per Trayset	Per carton
DOB	----pcs	10	200
Weight	----Kg	0.05	10
Dimension	----mm	253*194*9	280*375*248

Fixed cover and reflector

Product	RL-TOD4036A0	RL-TOD4257A0
picture		
Cover		
	DK50-11-AC-K	DK60-20-AC-K
Reflector		
	DK69XX-REF-K DK75XX-REF-K DK85XX-REF-K DK92XX-REF-K DK95XX-REF-K DK110XX-REF-K	DK69XX-REF-K DK75XX-REF-K DK85XX-REF-K DK92XX-REF-K DK95XX-REF-K DK110XX-REF-K
Beam Angle	24/40/60 deg 15 only for DK95	24/40/60 deg 15 only for DK95

Safety Information

1. The LED module and all its components shall not be subjected to mechanical stress
2. Correct electrical polarity, or not module may be damaged
3. Ensure the power supply is suitable for the total load.
4. Electrostatic Discharge (ESD) precautions shall be incorporated when handling or installing the module.
5. Installation of LED modules shall be made referring to all applicable electrical and safety standards.
6. Suitable for luminaire of protection class 1, grounding is mandatory to comply with safety standards
7. The AC light engine needs to be mounted to a heat sink with thermal interface material between them
8. It is better to use the AC led module with safety cover
9. Modules may be hot to the touch. Use caution when handling.

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