Zhongshan Ousike Light Co.,Ltd

TEST REPORT

SCOPE OF WORK
ENERGY EFFICIENCY TESTING - CEILING FAN WITH LIGHT KITS- [See Page 2 “Model(s)"]

REPORT NUMBER
220516148GZU-001

ISSUE DATE	[REVISED DATE]
20-May-2022	NONE

PAGES
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Report No. 220516148GZU-001

Testing Laboratory:	Intertek Testing Services Shenzhen Ltd. Guangzhou Branch
Address:	Room 02, & 101/E201/E301/E401/E501/E601/E701/E801 of Room 01 1-8/F., No. 7-2. Caipin Road, Science City, GETDD, Guangzhou, Guangdong, China
Applicant/Manufacturer:	Zhongshan Ousike Light Co.,Ltd
Address:	No.601-3-20 Xinteng Road,Guzhen Town,Zhongshan City,Guangdong Province
Manufacturing site:	Same as the applicant
Address:	Same as the applicant's address
Testing Location:	Same as the Testing Laboratory
Address:	Same as the Testing Laboratory's address
Product:	Ceiling Fan with Light Kit
Brand Name:	OCIOC, Roomratv, TALOYA
Description:	The product covered by this report is a household, indoor use, fix connected ceiling fan.
Model(s):	TLYCFL002;TLYCFL003; LYCFL004;TLYCFL005
Model Similarity:	All models are identical except for the specific model name and colors
Ratings:	120V 60HZ
Date of receipt of sample(s):	16-May-2022
Date Range of Test:	19-May-2022
Test standard(s) or criteria(s):	10 CFR 430, Appendix U to subpart B Uniform Test Method for Measuring the Energy Consumption of Ceiling Fans

Conclusion:	The product tested complies with the Energy Efficiency Standard of DOE , starting on January 21, 2020.

Prepared by:	Jacky Liang	Approved by:	Taylor Cai
Title:	Engineer	Title:	Sr. Project Engineer

Signature: _____ Signature: _____

Photos:

Photo 1 - Overall view

Product Details

Item	Data
Model number of Unit Under Tested	TLYCFL002
Serial number	NA
Condition of sample(s)	Prototype
Product Type	Ceiling Fan with Light Kit
Product Class	Hugger
Fan Size [in]	22
Number of fan speeds	6
Type of Fan Speed Control	Remote control
Fan speed controls separate from lighting controls?	Yes
The capability of reversible fan action?	Yes
Airflow direction	Reversible
Thickness of edges of blades [mm]	3.88
Thickness of edges of blades [inch]	0.153
Maximum distance between lowest point on the fan blades and the ceiling [inch]	9.00
Minimum distance between lowest point on the fan blades and the ceiling [inch]	9.00
Maximum Tip speed threshold [m/s]	9.95
Maximum Tip speed threshold [fpm]	1958

Critical Components

Name	Manufacturer / trademark	Type / model	Technical data
Fan motor	zhongshanshi jingjiu motor Co.,Ltd	J9999-8815-128	30±10W 24VDC

NOTE
"Various" means any type, from any manufacturer that complies with the "Technical data and securement means" can be used.

Sample 1, Air Delivery Test at Low Speed - First Set

Item	*Unit*	Value	Item	*Unit*	Value
Barometric pressure	*hPa*	1013	Voltage	*V*	120.2
Room temperature	*°F*	69.9	Frequency	*Hz*	60
Relative humidity	*%*	52.4	Current	*A*	0.10
Rotate speed	*RPM*	180	Power	*W*	5.69

Sensor #	Velocity in FPM - Axis #				Average Vel. [FPM]	Circle area [sq. Ft.]	Airflow [CFM]
	A	B	C	D			
1	82.55	85.56	100.31	63.42	82.96	0.0873	7.24
2	135.48	141.31	158.11	118.47	138.34	0.6981	96.58
3	203.97	203.14	200.82	183.83	197.94	1.3963	276.38
4	199.55	201.22	180.47	203.96	196.30	2.7271	535.33
5							
6							
7							
8							
9							
10							
11							
12							
						Total airflow [CFM]:	915.52

Sample 1, Air Delivery Test at Low Speed - Second Set

Item	*Unit*	Value	Item	*Unit*	Value
Barometric pressure	*hPa*	1013	Voltage	*V*	120.1
Room temperature	*°F*	70.4	Frequency	*Hz*	60
Relative humidity	*%*	52.2	Current	*A*	0.10
Rotate speed	*RPM*	180	Power	*W*	5.71

Sensor #	Velocity in FPM - Axis #				Average Vel. [FPM]	Circle area [sq. Ft.]	Airflow [CFM]
	A	B	C	D			
1	88.40	72.36	84.61	94.09	84.86	0.0873	7.41
2	146.34	122.96	140.76	148.50	139.64	0.6981	97.49
3	213.07	185.25	199.31	209.39	201.75	1.3963	281.70
4	204.41	187.15	185.79	195.59	193.24	2.7271	526.97
5							
6							
7							
8							
9							
10							
11							
12							
						Total airflow [CFM]:	913.56

Sample 1, Air Delivery Test at High Speed - First Set

Item	*Unit*	Value	Item	*Unit*	Value
Barometric pressure	*hPa*	1013	Voltage	*V*	120.1
Room temperature	*°F*	71.6	Frequency	*Hz*	60
Relative humidity	*%*	51.8	Current	*A*	0.39
Rotate speed	*RPM*	340	Power	*W*	28.16

Sensor #	Velocity in FPM - Axis #				Average Vel. [FPM]	Circle area [sq. Ft.]	Airflow [CFM]
	A	B	C	D			
1	171.37	198.03	201.16	194.55	191.28	0.0873	16.69
2	290.94	280.27	306.60	293.20	292.75	0.6981	204.38
3	399.40	384.16	398.65	406.21	397.10	1.3963	554.46
4	364.80	375.03	354.69	374.14	367.17	2.7271	1001.29
5							
6							
7							
8							
9							
10							
11							
12							
						Total airflow [CFM]:	1776.83

Sample 1, Air Delivery Test at High Speed - Second Set

Item	*Unit*	Value	Item	*Unit*	Value
Barometric pressure	*hPa*	1013	Voltage	*V*	120.1
Room temperature	*°F*	72.2	Frequency	*Hz*	60
Relative humidity	*%*	51.6	Current	*A*	0.39
Rotate speed	*RPM*	340	Power	*W*	28.09

Sensor #	Velocity in FPM - Axis #				Average Vel. [FPM]	Circle area [sq. Ft.]	Airflow [CFM]
	A	B	C	D			
1	195.71	187.93	201.13	194.67	194.86	0.0873	17.00
2	294.55	299.03	317.03	303.50	303.53	0.6981	211.90
3	421.28	401.57	399.28	413.89	409.01	1.3963	571.08
4	385.99	362.82	355.42	384.70	372.23	2.7271	1015.11
5							
6							
7							
8							
9							
10							
11							
12							
						Total airflow [CFM]:	1815.09

Sample 2, Air Delivery Test at Low Speed - First Set

Item	*Unit*	Value	Item	*Unit*	Value
Barometric pressure	*hPa*	1009	Voltage	*V*	120.2
Room temperature	*°F*	71.4	Frequency	*Hz*	60
Relative humidity	*%*	52.7	Current	*A*	0.11
Rotate speed	*RPM*	180	Power	*W*	5.68

Sensor #	Velocity in FPM - Axis #				Average Vel. [FPM]	Circle area [sq. Ft.]	Airflow [CFM]
	A	B	C	D			
1	83.79	85.15	104.91	132.39	101.56	0.0873	8.86
2	134.74	78.53	146.96	199.12	139.84	0.6981	97.63
3	195.96	152.25	201.00	218.73	191.99	1.3963	268.06
4	185.00	187.30	189.51	181.81	185.90	2.7271	506.98
5							
6							
7							
8							
9							
10							
11							
12							
						Total airflow [CFM]:	881.53

Sample 2, Air Delivery Test at Low Speed - Second Set

Item	*Unit*	Value	Item	*Unit*	Value
Barometric pressure	*hPa*	1009	Voltage	*V*	120.2
Room temperature	*°F*	72.2	Frequency	*Hz*	60
Relative humidity	*%*	52.5	Current	*A*	0.11
Rotate speed	*RPM*	180	Power	*W*	5.65

Sensor #	Velocity in FPM - Axis #				Average Vel. [FPM]	Circle area [sq. Ft.]	Airflow [CFM]
	A	B	C	D			
1	89.86	101.37	98.42	111.08	100.18	0.0873	8.74
2	128.95	95.86	137.29	178.71	135.20	0.6981	94.39
3	199.69	159.52	188.95	194.95	185.78	1.3963	259.39
4	188.83	197.64	192.50	178.42	189.35	2.7271	516.36
5							
6							
7							
8							
9							
10							
11							
12							
						Total airflow [CFM]:	878.89

Sample 2, Air Delivery Test at High Speed - First Set

Item	*Unit*	Value	Item	*Unit*	Value
Barometric pressure	*hPa*	1009	Voltage	*V*	120.0
Room temperature	*°F*	72.6	Frequency	*Hz*	60
Relative humidity	*%*	52.3	Current	*A*	0.39
Rotate speed	*RPM*	340	Power	*W*	28.36

Sensor #	Velocity in FPM - Axis #				Average Vel. [FPM]	Circle area [sq. Ft.]	Airflow [CFM]
	A	B	C	D			
1	236.25	206.30	209.21	215.71	216.87	0.0873	18.93
2	338.34	185.27	273.79	360.11	289.38	0.6981	202.02
3	413.95	326.67	373.40	406.16	380.04	1.3963	530.64
4	347.30	383.72	372.45	350.25	363.43	2.7271	991.10
5							
6							
7							
8							
9							
10							
11							
12							
						Total airflow [CFM]:	1742.69

Sample 2, Air Delivery Test at High Speed - Second Set

Item	*Unit*	Value	Item	*Unit*	Value
Barometric pressure	*hPa*	1009	Voltage	*V*	120.0
Room temperature	*°F*	73.1	Frequency	*Hz*	60
Relative humidity	*%*	52.2	Current	*A*	0.39
Rotate speed	*RPM*	340	Power	*W*	28.11

Sensor #	Velocity in FPM - Axis #				Average Vel. [FPM]	Circle area [sq. Ft.]	Airflow [CFM]
	A	B	C	D			
1	216.71	218.07	213.02	246.42	223.56	0.0873	19.51
2	306.89	205.89	298.23	379.43	297.61	0.6981	207.77
3	413.33	336.94	389.50	409.93	387.43	1.3963	540.95
4	371.28	393.66	356.61	348.28	367.46	2.7271	1002.09
5							
6							
7							
8							
9							
10							
11							
12							
						Total airflow [CFM]:	1770.31

Standby power

Item	*Unit*	Sample 1	Sample 2
Applied voltage	*V*	120	120
Frequency	*Hz*	60	60
Total harmonic content	*%*	1.03	1.03
Accumulated energy	*mWh*	153	153
Period of measurement	*min*	10	10
Standby or off mode power	*W*	0.92	0.92

Conclusion(Hugger)

Item	Airflow [CFM]		Power [W]		Standby [W]	Efficiency [CFM/W]
	Low	High	Low	High		
Sample 1	914.54	1795.96	5.70	28.13	0.92	68.67
Sample 2	880.21	1756.50	5.67	28.24	0.92	66.68
Number of samples	2	2	2	2	2	2
Mean	897.38	1776.23	5.68	28.18	0.92	67.68
Standard deviation	24.28	27.90	0.02	0.08	0.00	1.40
$LCL_{0.90}$/0.9 for Airflow and Efficiency	938.38	1906.12	N/A	N/A	N/A	71.81
$UCL_{0.95}$/1.1 for Power	N/A	N/A	5.27	25.94	0.83	N/A
Declarable value	897.38	1776.23	5.68	28.18	0.92	67.68
Minimum Efficiency on and after January 21, 2020						40.84
Verdict						Pass

FTC EnergyGuide(DOE)

Item	*Unit*	Hugger	Standard
Airflow (weighted-average)	*CFM*	1364	N/A
Energy Use	*W*	20	N/A
Airflow Efficiency	*CFM/W*	68	N/A
Estimated Yearly Energy Cost	*$*	6	N/A

Revision Summary

Date/ Proj # Site ID	Project Handler/ Reviewer	Item	Description of Change
			None

--THE END--