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Issue Date:October 04, 2018 Project No. G102890084 Quote No.:Qu-00754723 Contact: Alex Hazzard Email: ahazzard@smooth-on.com Phone No. (570) 647 5617

Report No. 102890084CRT-001

Smooth-On Inc

5600 Lower Macungie Road Macungie PA 18062 Standards

U.S. Department of Transportation, Federal Aviation Administration, Advisory Circular, Specification for Obstruction Lighting Equipment, AC No. 150/5345-43H dated 9/28/2016.

Test Purpose	Performance Testing on Plastic Material
Test Dates	January 20, 2017 to May 17, 2018

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Jeffrey Davis Engineering Supervisor Lighting

Christopher W Metcalf Engineering Supervisor Lighting

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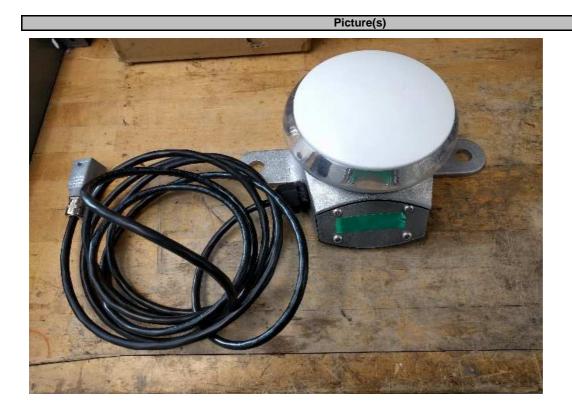
	Test Plan and Datasheets							
Client	Smooth-On Inc	Engineer	Jeffrey Davis					
Report #	102890084CRT-001A	Reviewer	Christopher W Metcalf					
Product	L-864	Model(s)	NA					
Standard	AC No. 150/5345-43H dated 9/28/2016							

Spec	Test name	Clause	Pass Fail NA
43H	Sunshine Test	4.2.8	Pass

Report No.: 102890084CRT-001A Client: Smooth-On Inc. Standard: AC No. 150/5345-43H dated 9/28/2016

	Sample Information									
Date Rec.	Intertek ID	Description	Condition	Model No.						
10/4/2017	CRT1710041126-001	Lens Material for L-864	Production	NA						

Further Sample Description							
Type:	Lens Material for L-864						
Options:	NA						
Lens:	Smooth-On Crystal Clear Series Plastics (Clear Urethane Casting Resin)						
Diameter:	Approx. 6.5"						



Sunshine Test

A sunshine test must be conducted per MIL-STD-810G, Method 505.5, paragraph 4.4.3, Procedure II, Steady State, for all obstruction lighting equipment with nonmetallic exterior parts or plastic/thermoplastic light covers

The equipment must be subjected to a minimum of 56 cycles.

Perform an operational test of the equipment after 56 cycles.

Any evidence of deterioration of plastic parts: chalking, bleaching, cracking, hazing, or color changes (yellowing) to the thermoplastic lenses of the test unit must be causes for rejection.

For plastic/thermoplastic optical lenses or covers, the photometric performance must be measured after this test.

Results

Test Set Up					
Duration	56, 24 hour cycles (1344 hrs.)				
Light Segment (per cycle)	20 hrs				
Dark segment (per cycle)	4 hrs.				
Chamber setting	0.75 w/m2 @ 340nm.				
Black Panel temperature	na				
Chamber temperature	49 degrees C				
Relative Humidity	na				
Filter Outer	Cira on type S Boro				
Filter Inner Quartz					
Filter combination recommended by Atlas for irradiance					
intensity of 1120 W/m2, Ta	able 505.5-I MIL-STD 810G				

Test Parameters					
Xenon Lamp S/N	K19268				
Hour Meter "Start"	57257.5				
Hour Meter "Stop"	58601.5				

Post Test Inspection	
Item	Yes/No
Deterioration	No
Alteration	No
Noticable Change in Light Output	No
Change in Chomaticity	No





Complies: 🗸 YES 🔄 NO

Tested By:	Mike Guy			Signature or initials:	Militan	Comp. Date	4/26/18
Reviewed By:	cwm			Signature or initials:	Awn 0		
Test Equipment Used:	45				CRT1710041126-001		
Amb (°C):	na	RH%	na		Solar Radiation Testing	g	

Sample		Туре	Color	Input	Х	у	Z
CRT171004112	26-001 L-864		Red	120 V	0.703	0.297	0.000
Boundary	Line Equation		Calc.				
Purple Boundary	y ≥ 0.980 - x		0.277				
Yellow Boundary	y ≤ 0).335	0.297				

Sample Type		Туре	Color	Input	Х	у	Z
Control L-864		Red	120 V	0.703	0.297	0.000	
Boundary	Line Equation		Calc.				
Purple Boundary	y ≥ 0.980 - x		0.277				
Yellow Boundary	y ≤ ().335	0.297				

Tested By:	Craig Small			Signature or initials:	Comp. Date 5/25/18
Reviewed By:	cwm			Signature or initials:	Parín
Test Equipment Used:				Sample:	
Amb (°C):	25.6	RH%	36	Po	ost Test Color Performance

Photometric Comparison	Voltage	Position	Measured	Factor
CRT1710041126-001	120.1	0,0	12800	NA
Control	120.1	0,0	14500	NA

Tested By:	Matthew Benninger		Signature or initials:	MP	Comp. Date	5/21/18	
Reviewed By:	cwm		Signature or initials:	Ann			
Test Equipment Used:	48,49,50			Sample:	CRT171	0041126-001	
Amb (°C):	25	RH%	49	Post 7	Test Phot	tometric Performance	

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quipment list					
#	Intertal: ID No.	Description	Manufacturar	Collibration Due	
#	Intertek ID No. Description		Manufacturer	Calibration Due	
45	B035	Weather-o-meter	Atlas	13-Aug-2018	
48	E235	Power Analyzer	Xitron	18-Apr-2018	
49	M135	Multimeter	Fluke	12-Apr-2019	
50	L061	IL1700	International Light	13-May-2018	