

## The Automotive Research Association of India

(Research Institute of the Automotive Industry with Ministry of Heavy Industries, Govt. of India)

## Non-Transferable

Non-Transferable  DEVELOPMENTAL TEST REPORT							
No. SI	HL/16/2023-2024/310001791	9/DT/4895	Date: 03.11.2023				
1.0	NAME AND ADDRESS OF THE CUSTOMER :		ALCOLITE INDIA ROAD SAFETY PRIVATE LIMITED. Ground Floor, 37/23, Village Mundka West Delhi, Delhi. West Delhi-110041				
	Contact Person		Mr. Miraj Farooqui				
	Tel No.		09096089298				
	Email Address		alcolite2013@gmail.com				
2.0	CUSTOMER LETTER REF	. :	Email dated:13.07.2023				
2.1	CSP RECEIPT DATE :		18.08.2022				
3.0							
	Retro Reflective Raised Pa Color's: White, Yellow, Red Marking on the sample: "A						
	White		Yellow	Red			
	Top view						
	5HL/3/000/79/9/W/01	de 1	(1 HY <mark>alooo17919/V/o1</mark> side 1	R1 SHL/3100017919/R/01 side 1			
	Side View						
	1992 1990 1990 1990 1990 1990 1990 1990	\$ 600 mg					
	PREPARED BY	VERIFII	ED BY	APPROVED BY			
Promise of the second		9	Bradon & B.V.				
P. V. PARLIKAR Mrs. J. N DEPUTY GENERAL MANAGER DEPUTY D			DR. B. V. SHAMSUNDARA DEPUTY DIRECTOR In Charge-Safety and Homologation Laboratory				

An ISO 9001, ISO 14001, ISO 45001 and ISO/IEC 27001 Certified Organization



DEVELOPMENTAL TEST REPORT No. SHL/16/2023-2024/3100017919/DT/4895							
4.0	OBJECTIVE AND TEST PROCEDURE:						
	At the specific request of the customer to carry out the below test as per MoRTH,						
	1. Coefficient of Luminous Intensity tests as per MoRTH 804 (Cl. No. 804.4.2) (table no. 800-13),						
	2. Slope of Reflecting surface (Cl. No. 804.3),						
	3. Height of Marker (Cl. No. 804.7.1),						
	4. Width of Marker (Cl. No. 804.7.1),						
	5. Area of Reflecting Surface (Cl. No. 804.3)						
5.0	TEST RESULTS: Please refer Photometry and Colorimetry Test Results in Sr. No. 6.0.						
5.1	TEST DURATION:	Start Date: 03.10.2023	End Date: 11.10.2023				

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  Rules and their provisions as amended from time to time or any other statutory orders under which ARAI is authorized. Other Rules/ Acts
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Place of Issue: Kothrud, PUNE	Laboratory		





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6.0	Test Results							
6.1	Co-efficient of luminous intensity as per as per MoRTH 804 (Cl. No. 804.4.2) (table no. 800-13):							
6.1.1	For White colour	For White colour Road stud with shank						
	Observation angle (°)	Entrance	trance Minimum Required gle (°) Values (mcd/lx)	Measured Values (mcd/lx) (Average of three samples)				
	angle (*)	aligie (*)		Side 1	Side 2			
		0	220	943.33	785.33			
	0.3	-5	220	832.33	733.67			
		+5	220	838.67	746.33			
		0	120	428.67	425.00			
	0.5	-10	120	306.67	292.00			
		+10	120	318.67	321.00			
6.1.2	For Red colour R	oad stud with sh	nank					
	Observation	Entrance	Minimum Required	Measured Values (mcd/lx) (Average of three samples)				
	angle ( <sup>0</sup> )	angle ( <sup>0</sup> )	Values (mcd/lx)	Side 1	Side 2			
	0.3	0	44	346.00	286.00			
		-5	44	310.33	249.00			
		+5	44	292.00	230.00			
	0.5	0	24	163.60	148.23			
		-10	24	108.37	98.00			
		+10	24	105.60	88.70			
6.1.3	For Yellow colour Road stud with shank							
	Observation	Entrance angle ( <sup>0</sup> )	Minimum Required Values (mcd/lx)	Measured Values (mcd/lx) (Average of three samples)				
	angle ( <sup>o</sup> )	angle (*)	values (IIICu/IX)	Side 1	Side 2			
		0	110	734.00	664.33			
	0.3	-5	110	667.00	551.67			
		+5	110	644.67	639.00			
		0	60	382.33	315.33			
	0.5	-10	60	289.00	215.00			
		+10	60	259.33	263.00			
PREPARED BY			VERIFIED BY	APPROVED BY				
Parents.		1	Das.	Bradon	13.V.			
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## DEVELOPMENTAL TEST REPORT No. SHL/16/2023-2024/3100017919/DT/4895 6.2 Dimensional measurement as per MoRTH 804 6.2.1 Slope of Retro Reflecting Surface as per MoRTH Cl. no. 804.3 **Measured Angle** Requirement White Red Yellow Side 01 Side 02 Side 01 Side 02 Side 01 Side 02 The slope of retro reflecting surface shall preferably be 35° 35° 35° 35° 35° 35° $35 \pm 5^{\circ}$ to the base. 6.2.2 Height of Marker as per MoRTH Cl. no. 804.7.1 **Measured Height** Requirement White Red Yellow Marker height shall not be less than 10 19.92 mm 19.97mm 19.88 mm mm and shall not exceed 20 mm 6.2.3 Width of Marker as per MoRTH Cl. no. 804.7.1 Requirement: Marker width shall not exceed 130 mm **Measured Width** White Yellow Red SHL/3100017919/R/01 side1 SHY/3/00017919/Y/01 SHL/3/000/79/9/W/1 103.61 mm 103.38 mm 103.61 mm WI SHL/3/00017919 side 2 92.74 mm 92.84 mm 92.78 mm **PREPARED BY VERIFIED BY APPROVED BY** DR. B. V. SHAMSUNDARA P. V. PARLIKAR **DEPUTY DIRECTOR** Mrs. J. M. KIRVE **DEPUTY GENERAL MANAGER DEPUTY DIRECTOR** In Charge-Safety and Homologation Laboratory