APPENDIX D

Specifications for

STANDARD HIGHWAY SIGN COLORS

This Data Sheet has been prepared by the Federal Highway Administration for the convenience of users and manufacturers of highway signs and to promote uniformity in sign colors. The Manual on Uniform Traffic Control Devices,[1] in sections 1A-8 and 2A-11, prescribe the color code for general meanings and color combinations for various classifications of highway signs. This sheet defines the six primary colors and specifies the tolerance for each color.

These Specifications for highway sign colors yellow, red, blue, green, brown, and orange have been taken from the Federal Highway Administration Color Tolerance Charts,[2] which contain color chips for each limit and the central color. The charts are designed to permit visual comparison of a sample with the standard colors.

PR Color #1 HIGHWAY YELLOW—13538*

LIMIT	CIE DATA FOR SOURCE C			MUNSELL NOTATION	
	Y	x	y	H	V C
Central	50.68	.5007	.4555	10YR	7.5/14
Value+	59.10	.4940	.4530	10YR	8.0/14
Value—	36.20	.5137	.4602	10YR	6.5/14
Hue+	50.68	.4920	.4705	2.0Y	7.5/14
Hue—	50.68	.5065	.4445	8.5YR	7.5/14
Chroma+	50.68	.5133	.4631	10YR	7.5/16
Chroma—	50.68	.4826	.4447	10YR	7.5/12

PR Color #2 HIGHWAY RED-11105*

LIMIT	CIE DATA FOR SOURCE C			MUNSELL NOTATION	
	Y	x	y	H	V C
Central	9.00	.6003	.3146	7.0R	3.5/13
Value+	12.00	.5738	.3262	7.0R	4.0/13
Value—	6.56	.6268	.3030	7.0R	3.0/13
Hue+	9.00	.5928	.3235	8.0R	3.5/13
Hue—	9.00	.5915	.3065	6.0R	3.5/13
Chroma+	9.00	.6330	.3045	7.0R	3.5/15
Chroma—	9.00	.5835	.3185	7.0R	3.5/12

PR Color #3 HIGHWAY BLUE-15090*

LIMIT	CIE DATA FOR SOURCE C			MUNSELL NOTATION	
	Y	x	y	H	V C
Central	6.56	.1780	.1833	2.5PB	3.0//8
Value+	9.00	.1887	.1963	2.5PB	3.5/8
Value—	3.13	.1540	.1530	2.5PB	2.0/8
Hue+	6.56	.1908	.1799	5.0PB	3.0/8
Hue—	6.56	.1658	.1905	10B	3.0/8
Chroma+	6.56	.1576	.1600	2.5PB	3.0/10
Chroma—	6.56	.2022	.2101	2.5PB	3.0/6

PR Color #4 HIGHWAY GREEN-14109*

LIMIT	CIE DATA FOR SOURCE C			MUNSELL NOTATION	
	Y	x	y	H	V C
Central	6.56	.2088	.4101	7.5G	3.00/8
Value+	10.43	.1942	.4228	7.5G	3.75/10
Value—	3.82	.1904	.4208	7.5G	2.25/8
Hue+	6.56	.1943	.3779	0.5BG	3.00/8
Hue—	6.56	.2228	.4380	5.0G	3.00/8
Chroma+	6.56	.1800	.4310	7.5G	3.00/10
Chroma—	6.56	.2346	.3901	7.5G	3.00/6

PR Color #5 HIGHWAY BROWN**

LIMIT	CIE DATA FOR SOURCE C			MUNSELL NOTATION	
	Y	x	y	H	V C
Central	5.52	.4766	.3816	5YR	2.75/5
Value+	7.71	.4608	.3801	5YR	3.25/5
Value—	3.81	.4955	.3826	5YR	2.25/5
Hue+	5.52	.4762	.3981	7.0YR	2.75/5
Hue—	5.52	.4728	.3607	2.5YR	2.75/5
Chroma+	5.52	.5081	.3912	5YR	2.75/6
Chroma—	5.52	.4450	.3720	5YR	2.75/4

PR Color #6 HIGHWAY ORANGE***

LIMIT	CIE DATA FOR SOURCE C			MUNSELL NOTATION	
	Y	x	y	H	V C
Central	24.58	.5609	.3950	2.5YR	5.5/14
Value+	30.05	.5488	.3947	2.5YR	6.0/14
Value—	19.77	.5731	.3953	2.5YR	5.0/14
Hue+	24.58	.5570	.4072	3.75YR	5.5/14
Hue—	24.58	.5614	.3815	1.25YR	5.5/14
Chroma+	24.58	.5713	.3970	2.5YR	5.5/15
Chroma—	24.58	.5348	.3898	2.5YR	5.5/12

* Color number in Federal Standard 595a meeting this specification.
** ISCC-NBS color designation 56-strong brown approximates this specification.
*** ISCC-NBS color designation 48-vivid orange approximates this specification.

1. *Manual on Uniform Traffic Control Devices for Streets and Highways*, 1978 edition, Federal Highway Administration. For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402. Stock No. 050-001-90001-7. Price $18.00 including subscription service for future changes.

2. *Color Tolerance Charts*, PR Colors 1-4 (June 1965), Colors 5-6 (March 1971), Federal Highway Administration, contact the Federal Highway Administration, Washington, D.C., 20590 for availability information.

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