

LX2048 • 120/277V • LED • TUNABLE WHITE 18MM • CONTROLTrack COMPATIBLE



Elegant fixed downlight designed specifically for the most demanding architecture applications.

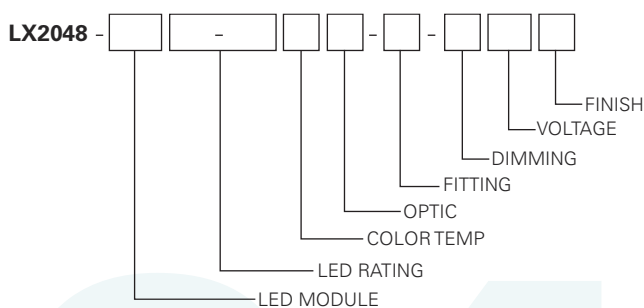
- Designed for a Tunable White LED module up to 22 Watts
- Extremely tight color consistency: 3 MacAdam Ellipses
- System efficiency up to 66 lumens/watt
- 55,000 hour life to 70% lumen output, L70 at 95°F max ambient
- Tunable White from 2700K to 6500K
- Color Rendering Index (CRI) of 92 min.
- Color Fidelity (R_f) 96 (high)
- Gamut Area Index (R_g) 99
- Tested to LM79 and LM80 Protocols, TM-30 available
- 2 Zone 0-10V Controls allow for dimming on Zone 1 and CCT control on Zone 2
- DMX compatible with dimming below 1%
- Field interchangeable optics (15°- 50°) modify the beam spread distribution
- Integral black polycarbonate accessory cartridge accepts up to two size-AA LSI filters and accessories
- Finishes: LSI Black, White, and Silver
- Fixture weight: 3.5 lbs
- All modules are field replaceable
- Fixed center stem
- Maximum stem length is 48"

FIXTURE PART NUMBERS

Please review the **ORDERING INFORMATION** section on the next page as well as the **MOUNTING OPTIONS** on page 3 to create a part number for each fixture that specifies the following:

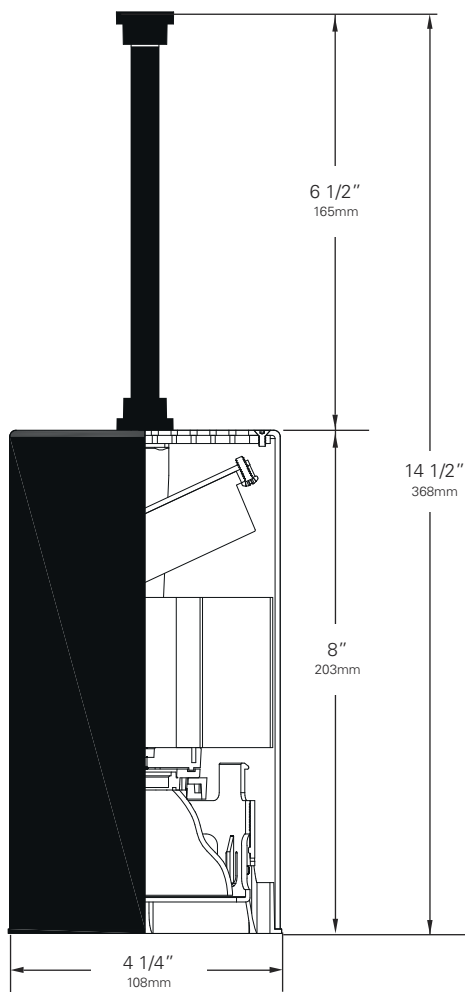
- LED Module
- LED Rating
- Color Temperature
- Optic (mm/beam spread)
- Fitting/Controls (Dimming)
- Voltage
- Finish

PART NUMBER



Example Part Number: **LX2048-B1820-92TWW2-CT3-DX120W** is a fixture with a Tunable White LED module, 2000 Lumen/92 CRI/22 Watt LED rating, Tunable White 2700K-6500K Color Temperature, 72mm 20° Optic, CT3 CONTROLTrack fitting with DMX Address knobs and DMX compatible control gear, 120V and a White finish.

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TUNABLE WHITE 18MM ORDERING INFORMATION

Base Fixture Model

☐ LX2048-B18 (Tunable White 18mm)

LED Rating (Lumens/CRI/Wattage)

☐ 20-92 = 2000/92/22

Color Temperature

☐ TW= 2700K to 6500K

Optic

- ☐ WR = 72mm/ 15° Color Mixing and Field Reducer
- ☐ W2 = 72mm/ 20° Color Mixing
- ☐ W3 = 72mm/ 30° Color Mixing
- ☐ W4 = 72mm/ 40° Color Mixing
- ☐ W5 = 72mm/ 50° Color Mixing

Fitting/Controls (Dimming)

- ☐ CT2-10 = CONTROLTrack Fitting & 0-10V (<1%)
- ☐ CT3-DX = CONTROLTrack Fitting & DMX (<1%)

Voltage

☐ 120 = 120V ☐ 230 = 220-240V ☐ 277 = 277V

Finish

☐ B = Black ☐ W = White ☐ S = Silver

Example Part Number:

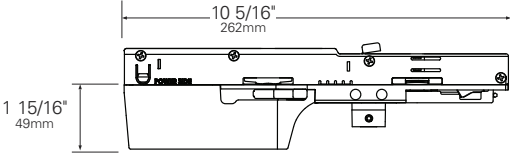
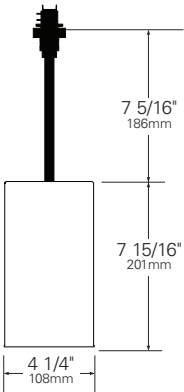
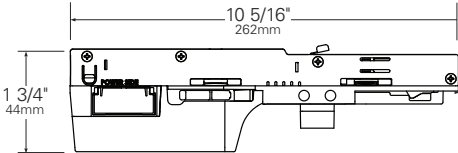
LX2048-B18 **20-92** **TW** **W2 - CT3-DX** **120** **W**
FIXTURE MODEL LED RATING COLOR TEMP OPTIC FITTING/ DIMMING VOLTAGE FINISH

Other Options (Consult Factory):

- Custom Stems, specify length (4" - 48")
- Custom color, RAL palette

LX2048

• MOUNTING OPTIONS

FITTING	SIDE VIEW	STEM LENGTH VIEW
CT2 CONTROLTrack Fitting	 <p>Technical drawing showing the side view of the CT2 CONTROLTrack Fitting. The overall length is 10 5/16" (262mm). The height of the main body is 1 15/16" (49mm).</p>	 <p>Technical drawing showing the stem length view of the CT2 CONTROLTrack Fitting. The stem length is 7 5/16" (186mm). The main body height is 7 15/16" (201mm). The base width is 4 1/4" (108mm).</p>
CT3 CONTROLTrack Fitting	 <p>Technical drawing showing the side view of the CT3 CONTROLTrack Fitting. The overall length is 10 5/16" (262mm). The height of the main body is 1 3/4" (44mm).</p>	

LX2048 • PERFORMANCE

The performance characteristics of the LumeLEX family of products can be customized based on the LED module and the optic (reflector) selected.

Each available LED module is defined by four characteristics – the color rendering index (CRI), the correlated color temperature (CCT), the power that it uses (watts), and its “available lumens.” Note that available lumens is a theoretical value that represents the light output of the module on its own – no fixture or optic attached.

In the LSI part number, the LED module is specified with a number that immediately follow the product series number.

For example, in the part number LX2048-B1820-92TWW2-CT3-DX120B, the “**B1820-92TW**” represents an LED module with an output of 2000 lumens, a CRI of 92, a power usage of 22 watts and a color temperature of 2700K- 6500K.

The available optics (reflectors) are characterized by size, beam angle, and in some cases the characteristics of the field angle (narrow or wide). The optic is specified by the two characters that follow the LED designation in the part number. For example, the “**W2**” in LX2048-B1820-92TWW2-CT3-DX120B is a 72mm diameter optic that has a 20-Degree beam.

Additional parameters, such as Center Beam Candle Power (CBCP), Delivered Lumens, and Efficiency (Lumens per Watt) are all shown in a table that is organized by LED module and optic combination.

CBCP = Center Beam Candle Power*

LED Module	Optic (Reflector)				
Lumens/CRI/Wattage	W2	WR	W3	W4	W5
2000/92/22	6,138	4,604	3,762	2,926	2,024

Delivered Lumens*

LED Module	Optic (Reflector)				
Lumens/CRI/Wattage	W2	WR	W3	W4	W5
2000/92/22	1,405	562	1,346	1,362	1,450

Efficacy = Lumens Per Watt*

LED Module	Optic (Reflector)				
Lumens/CRI/Wattage	W2	WR	W3	W4	W5
2000/92/22	64	26	61	62	66

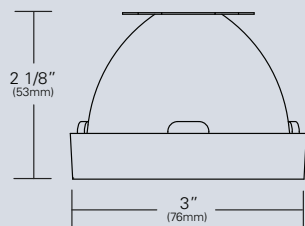
Absolute range of values are +/- 10% of typical value, and are for all color temperatures

*Preliminary Data

LED Rating Lumens/CRI/Wattage SKU Code	2200/92/22 20-92
Nominal Fixture Power (+/- 20%), Watts	22
Maximum Inrush Current Amps	10
Minimum Power Factor	0.92

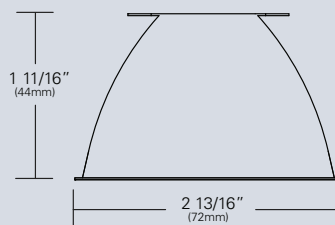
Inrush current is instantaneous current drawn by the LED only when fixture is initially powered on or instantaneously changed from full dim to full bright. For more details see Dimming Application Sheet, IS-0119.

LX2048 • OPTICS



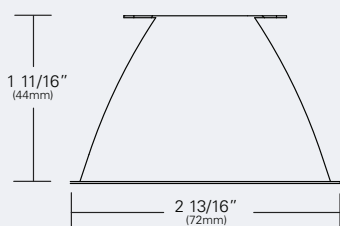
LX-WRD-REF-CLR (WR) (72mm/15°)

Color mixing and field reducer. Proprietary field reducing baffle (black) with aluminized reflector. Tool-less, twist and lock installation.



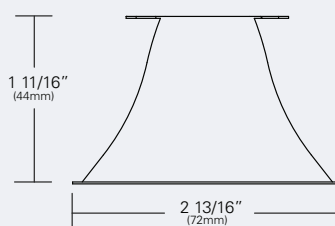
LX-W20-REF-CLR (W2) (72mm/20°)

Faceted reflectively coated metal optic. Tool-less twist and lock installation. Aluminized finish.



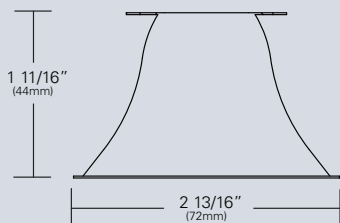
LX-W30-REF-CLR (W3) (72mm/30°)

Faceted reflectively coated metal optic. Tool-less twist and lock installation. Aluminized finish.



LX-W40-REF-CLR (W4) (72mm/40°)

Faceted reflectively coated metal optic. Tool-less twist and lock installation. Aluminized finish.



LX-W50-REF-CLR (W5) (72mm/50°)

Faceted reflectively coated metal optic. Tool-less twist and lock installation. Aluminized finish.

LX2048

• PHOTOMETRIC DATA

LED RATING: 20-92*

WR-72mm DIA Optic	
Beam Spread (minimum)	15°
(FR: Field Reducer)	
Center Beam Candlepower	4604
CRI	92
W2-72mm DIA Optic	
Beam Spread (minimum)	20°
Center Beam Candlepower	6138
CRI	92
W3-72mm DIA Optic	
Beam Spread (minimum)	30°
Center Beam Candlepower	3762
CRI	92
W4-72mm DIA Optic	
Beam Spread (minimum)	40°
Center Beam Candlepower	2926
CRI	92
W5-72mm DIA Optic	
Beam Spread (minimum)	50°
Center Beam Candlepower	2024
CRI	92

*Preliminary Data

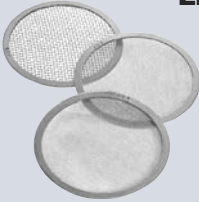
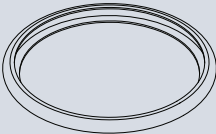
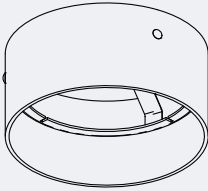

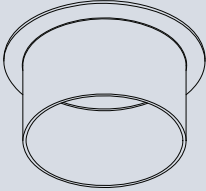
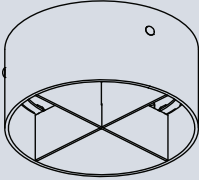
LED RATING: 25-92

All Max. Footcandles at 0° Beam Axis	W5 (50°)	W4 (40°)	W3 (30°)	W2 (20°)	WR (15°)	All Distances in Feet											
	2024	2926	3762	6138	4604	6	4	2	0	2	4	6					
	506	732	941	1535	1151								1				
	225	325	418	682	512								2				
	127	185	235	384	288								3				
	81	117	150	246	184								4				
	56	81	105	171	128								5				
	41	60	77	125	94								6				
	32	46	59	96	72								7				
	25	36	46	76	57								8				
	20	29	38	61	46								9				
	17	24	31	51	38								10				
	14	20	26	43	32								11				
	12	17	22	36	27								12				
	10	15	19	31	23								13				
	9	13	17	27	20								14				
	8	11	15	24	18								15				
	7	10	13	21	16								16				
	6	9	12	19	14								17				
	6	8	10	17	13								18				
	5	7	9	15	12								19				
	5	7	9	14	10								20				
	4	6	8	13	10								21				
	4	6	7	12	9								22				
	4	5	7	11	8								23				
	3	5	6	10	7								24				
													25				

Photometric Data based on LED Rating: 20-92 (2000 Lumens/92CRI/22watts)

LX2048

• ACCESSORIES

<div></div> <div><div>1LIGHT BLOCKING SCREENS AA</div><div>Stainless steel mesh screens used alone or in combinations will block from approximately 20% to 90% of the transmitted light without changing color temperature of the light.</div><table><tr><th>No.</th><th>% of Light Blocked</th></tr><tr><td>AA801S</td><td>20</td></tr><tr><td>AA802S</td><td>30</td></tr><tr><td>AA803S</td><td>40</td></tr></table></div>	No.	% of Light Blocked	AA801S	20	AA802S	30	AA803S	40	<div></div> <div><div>BACKER RING AAB</div><div>Aluminum ring to hold gel when no other size AA accessories are being used. Black finish.</div></div>
No.	% of Light Blocked								
AA801S	20								
AA802S	30								
AA803S	40								
<div></div> <div><div>HOOD-EXT-LX44-NXB-X</div><div>Externally mounted cylindrical metal hood controls spill light and glare. Does not include cross baffle. Specify finish as follows: HOOD-EXT-LX44-NXB-B (BLACK) HOOD-EXT-LX44-NXB-W (WHITE) HOOD-EXT-LX44-NXB-S (SILVER)</div></div>	<div></div> <div><div>LOUVER HEX AAB</div><div>1/8" thick Hexcell black metal louver used for thin profile. Black finish.</div></div>								
<div></div> <div><div>HOOD AAX</div><div>Internally mounted cylindrical metal hood controls spill light and glare. Specify finish as follows: HOOD AAB (BLACK) HOOD AAW (WHITE) HOOD AAS (SILVER)</div></div>	<div></div> <div><div>HOOD-EXT-LX44-WXB-X</div><div>Externally mounted cylindrical metal hood controls spill light and glare. Includes cross baffle. Specify finish as follows: HOOD-EXT-LX44-WXB-B (BLACK) HOOD-EXT-LX44-WXB-W (WHITE) HOOD-EXT-LX44-WXB-S (SILVER)</div></div>								

1. Figures vary based upon LED Module/Optic being used and relationship of screen(s) to LED Module/Optic and to each other.

LX2048 • GELS

As the foremost innovator in accent lighting, LSI offers a complete range of pre-cut Gels to modify the spread and color of light for the LumeLEX LED Series.



LumeLEX® SPREAD GELS

Size: AA (76 mm diameter)	Spread Gel
GEL-L1-AA	1° Spread Gel
GEL-L5-AA	5° Spread Gel
GEL-L10-AA	10° Spread Gel
GEL-L20-AA	20° Spread Gel
GEL-L30-AA	30° Spread Gel
GEL-L40-AA	40° Spread Gel
GEL-L60-AA	60° Spread Gel
GEL-L80-AA	80° Spread Gel
GEL-L30X5-AA	30° by 5° Spread Gel
GEL-L40X1-AA	40° by 1° Spread Gel
GEL-L60X1-AA	60° by 1° Spread Gel
GEL-L60X10-AA	60° by 10° Spread Gel
GEL-L75X45-AA	75° by 45° Spread Gel
GEL-L90X60-AA	90° by 60° Spread Gel
GEL-R101-AA	Beam Softener

LumeLEX® COLOR GELS

Size: AA (76 mm diameter)	Gel Color	% of Light Transmission	Size: AA (76 mm diameter)	Gel Color	% of Light Transmission
GEL-R2-AA	Bastard Amber	78	GEL-R312-AA	Canary	85
GEL-R7-AA	Pale Yellow	96	GEL-R331-AA	Shell Pink	68
GEL-R12-AA	Straw	88	GEL-R383-AA	Sapphire Blue	4
GEL-R13-AA	Straw Tint	78	GEL-R397-AA	Pale Grey	70
GEL-R14-AA	Medium Straw	68	GEL-R2001-AA	Storaro Red	12
GEL-R21-AA	Golden Amber	43	GEL-R2004-AA	Storaro Green	15
GEL-R25-AA	Orange Red	14	GEL-R2009-AA	Storaro Violet	3
GEL-R26-AA	Light Red	12	GEL-R3202-AA	Full Blue	36
GEL-R27-AA	Medium Red	4	GEL-R3204-AA	Half Blue	52
GEL-R57-AA	Lavender	24	GEL-R3206-AA	Third Blue	64
GEL-R62-AA	Booster Blue	54	GEL-R3216-AA	Eighth Blue (Boosts 3200K to 3300K)	81
GEL-R71-AA	Sea Blue	30	GEL-R3318-AA	Tough 1/8 Minusgreen	89
GEL-R72-AA	Azure Blue	44	GEL-R3410-AA	Roscoun (1/8 CTO) (Reduces 5500K to 4900K)	92
GEL-R91-AA	Primary Green	7	GEL-R3441-AA	Full Straw (CTS)	50
GEL-R97-AA	Light Grey	50	GEL-R3443-AA	Quarter Straw (CTS)	81
GEL-R98-AA	Medium Grey	25	GEL-R4330-AA	CalColor 30 Cyan	63
GEL-R101-AA	Light Frost	N/A	GEL-R4415-AA	CalColor 15 Green	67
GEL-R104-AA	Tough Silk	N/A	GEL-R4490-AA	CalColor 90 Green	25
GEL-R119-AA	Lt. Hamburg Frost	N/A	GEL-R4860-AA	CalColor 60 Pink	46
GEL-R121-AA	Blue Diffusion	N/A	GEL-R4890-AA	CalColor 90 Pink	38
GEL-R305-AA	Rose Gold	75	GEL-R4930-AA	CalColor 30 Lavender	47

* Backer Ring AAB required to hold gels when no other rimmed "AA" accessories are used.

LSI ROSCO GEL CCT CONVERSION CHART FROM 3000K			
Type	ROSCO #	ROSCO Description	Resulting CCT
Amber Filters Lower CCT	3420	Double CTO	1531
	3407	Sun CTO	1999
	3401	Sun 85	2154
	3411	Sun 3/4 CTO	2154
	3408	Sun 1/2 CTO	2414
	3409	Sun 1/4 CTO	2664
	3410	Sun 1/8 CTO	2830
	3114	UV Filter	2930
Blue Filters Raise CCT	3220	Double Blue	N/A
	3202	Full Blue	4942
	3203	Three-Quarter Blue	4286
	3204	Half Blue	3769
	3206	Third Blue	3517
	3208	Quarter Blue	3297
	3216	Eighth Blue	3112

COLOR MEDIA

COLOR FILTERS

As the foremost innovator in accent lighting, LSI offers a complete range of permanent fade-free glass color filters, which are available in four stock diameters. All glass color filters are rimmed in a seamless aluminum ring and are slotted for heat expansion.



Size	Diameter	LSI Fixture Series
AAA	2 3/8"	LumeLEX® 2020/2030/2031/2038, SSLCX16, SSL260
AA	3"	LumeLEX® 2044, LumeLEX 2048
A	3 1/2"	LumeLEX® 2060, SSL230, SSLCX30, SSLGR30CL
C	4 3/4"	LumeLEX® 2084, LumeLEX® 2088, SSL238, SSLCX36, SSLCX38, SSLGR38CL

No.	Color	% of Light Transmission
902	Medium Pink	36
903	Deep Pink	37
904	Flesh Pink	73
906	Pale Lavender	14
907	Surprise Pink	19
908	Lilac	21
910	Warm Red	10
911	Strawberry	6
912	Ruby	4
913	Magenta	1
914	Light Amethyst	25
915	Medium Amethyst	16
916	Deep Amethyst	4
917	Olive	18
918	Light Green	68
920	Medium Green	25
921	Deep Green	7
922	Silver green	65
923	Yellow Green	49
924	Emerald Green	12
925	Light Turquoise	68
926	Medium Turquoise	40
927	Deep Turquoise	17
928	Light Blue	34
930	Medium Blue	3
932	Daylight	59
933	Gene Moore Blue	18
936	Grey	56
937	Light Blue Green	17
939	Light Amber	68
940	Medium Amber	48
941	Deep Amber	43
942	Straw	78
943	Gold	87
944	Canary Yellow	84
945	Lemon	81
946	Pumpkin	32
947	Tangerine	20
948	Orange	23
949	Pink Gold	54
950	Bronze	48
951	Brass	11
952	Autumn Tan	11
953	Leaf Brown	19
954	Butter Pecan	3
955	Toasted Almond	1

Notes:

1. Values given are approximate due to slight variations in glass color and thickness.

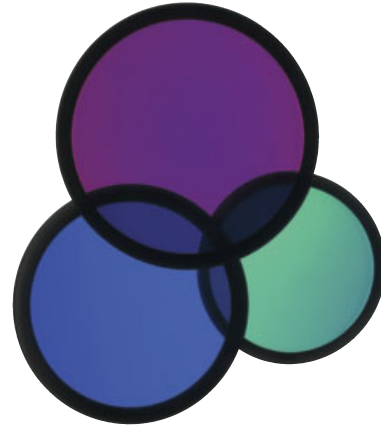
COLOR MEDIA

DICHROIC COLOR FILTERS

In addition to our complete line of glass color filters, LSI now offers dichroic glass color filters that achieve purer, more saturated, richer color by selective wavelength transmission. Since these filters reflect rather than absorb the unwanted color wavelengths, a higher intensity of colored light can be obtained with fewer or lower wattage fixtures. In addition, this selective transmission allows for very accurate color matching from filter to filter.

All standard LSI filter sizes are available in a wide palette of well chosen dichroic colors that can be used with all LSI fixtures that accept accessories.

LSI dichroic glass color filters have the added benefit of being rimmed for extra durability to allow for frequent usage without fear of breakage or edge chipping.



Size	Diameter	LSI Fixture Series	Technical Data	No.	Color	% of Light Transmission
AAA	2 3/8"	LumeLEX® 2020/2030/2031/2038, SSLCX16, SSL260	Dichroic color filters are created in a vacuum chamber by multi-layer vapor deposits of different minerals onto low expansion, chemically resistant Borosilicate glass.	2001	Light Pink	69
AA	3"	LumeLEX® 2044, LumeLEX 2048	Deposits are made in alternating layers of varying microscopic thickness which allow very narrow color wavelengths to be selectively transmitted and all other wavelengths to be reflected.	2002	Medium Pink	43
A	3 1/2"	LumeLEX® 2060, SSL230, SSLCX30, SSLGR30CL	LSI does not recommend using dichroic color filters with lamps or fixtures that have beam spreads greater than 40° because a secondary color aura is created by the wide angular transmitted wavelengths that are different than the desired color wavelength.	2003	Hot Pink	11
C	4 3/4"	LumeLEX® 2084, LumeLEX® 2088, SSL238, SSLCX36, SSLCX38, SSLGR38CL	Since there is mainly transmission and reflection of the color wavelengths by the dichroic filter and very little absorption, the dichroic filter can be used with many high temperature lights that normally would not accept color filters.	2004	Pale Pink	55
				2010	Deep Magenta	29
				2011	Lavender	24
				2012	Vivid Magenta	31
				2013	Lavender Accent	48
				2014	Lilac	37
				2015	Purple Fusion	12
				2020	Sky Blue	39
				2021	Sea Blue	39
				2022	Cyan	33
				2023	Light Blue Green	30
				2024	Primary Blue	24
				2025	Medium Red Blue	15
				2026	Deep Purple	16
				2027	Peacock Blue	53
				2028	Mediterranean Blue	20
				2029	Boost Blue	51
				2040	Light Yellow Green	64
				2041	Fern Green	47
				2042	Turquoise	35
				2043	Primary Green	31
				2044	Industrial Green	64
				2050	Yellow	80
				2051	Amber	71
				2052	Amber Blush	38
				2053	Bastard Amber	71
				2054	Goldenrod	63
				2055	Bright Straw	56
				2060	Medium Orange	51
				2061	Orange	44
				2070	Flame Red	27
				2071	Primary Red	25