

LED Test Report

Product Mark

Product Type : F52-R600-140H12 RED

Manufacturer :

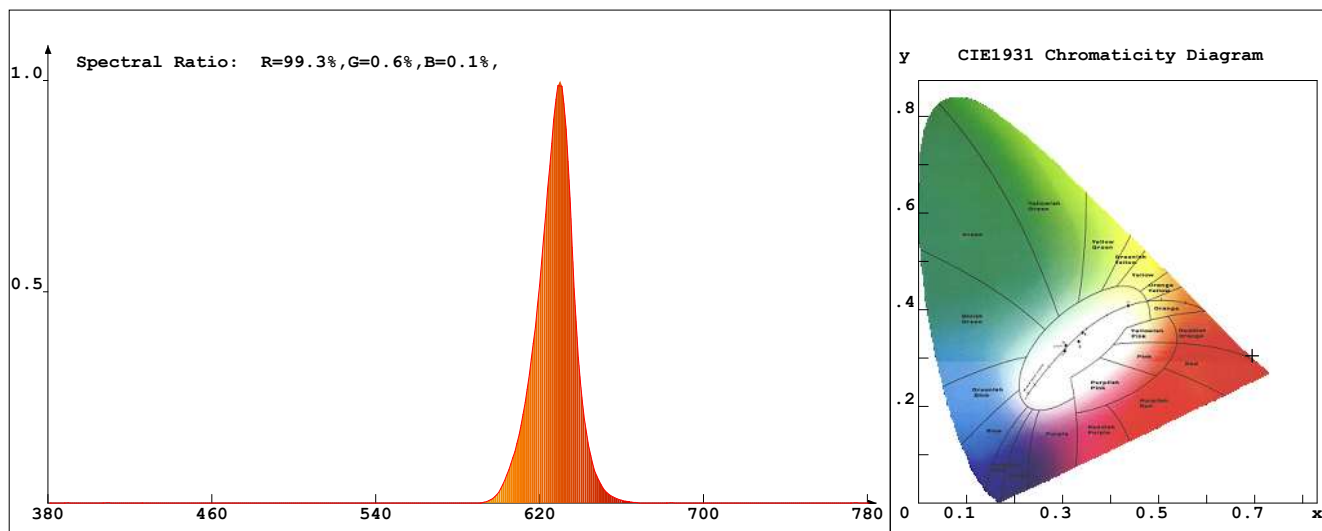
Temperature : CRI'C

Humidity : %

Operator :

Test Date : 01-03-22 15:49:47

Remark: BIN 60-3 R620 G520 B465 LOTTO 477



Chroma Parameters

Chro.Coord.:x=0.6949 y=0.3047 u=0.5277 v=0.3471 duv=-0.0007

CCT: 1351K Dominant Wave.:621.9nm Purity:99.9% Centre Wave:627.4nm

Flux RGB Ratio:R=98.6%,G=1.4%,B=0.0% Peak Wave:628.6nm Half Width:17.6nm

Rendering Index:Ra=-22.7 CRI=107.3

R1 =-48 R2 =53 R3 =8 R4 =-78 R5 =-43 R6 =54 R7 =-12 R8 =-115

R9 =-352 R10=40 R11=-91 R12=21 R13=-20 R14=38 R15=-85

PPF:3.247umol/s (400-700nm)

PRF:0.6mW (400-700nm)

PAR:0.6mW (400-700nm)

Photo Parameters

Flux:131.77lm Effi.:30.8lm/W Radiant:620.4mW Iv:0.0mcd

Scotopic Flux:6.4Plm Effi.:0.0Plm/W S/P:0.0

Efficiency:0.00

Effi Level:A++ (EU 874-2012) Photon Flux:3248.730umol/s (380-780nm)

Ele. Parameters

Voltage:U=23.94V

Current:I=0.1790A

Power:P=4.310W

Power Factor:PF=1.000

Instrument state

Instrument:Lisun

Integral Time: 100.000ms

VPeak: 14952

VDark: 1368

Scan Range: 380-780nm

Product ID: 201508924

IES TM-30-2015 Test Report

Product Mark

Product Type : F52-R600-140H12 RED

Manufacturer :

Temperature : CRI'C

Humidity : %

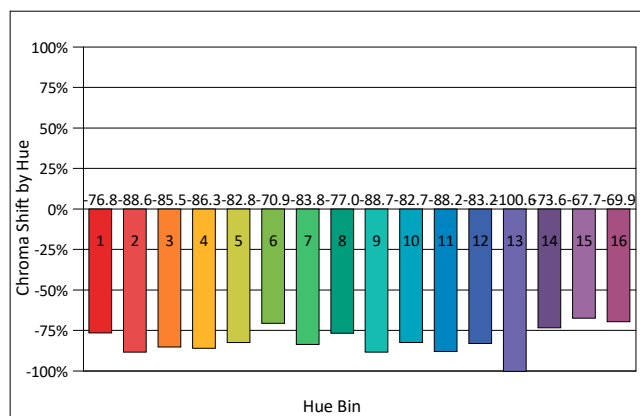
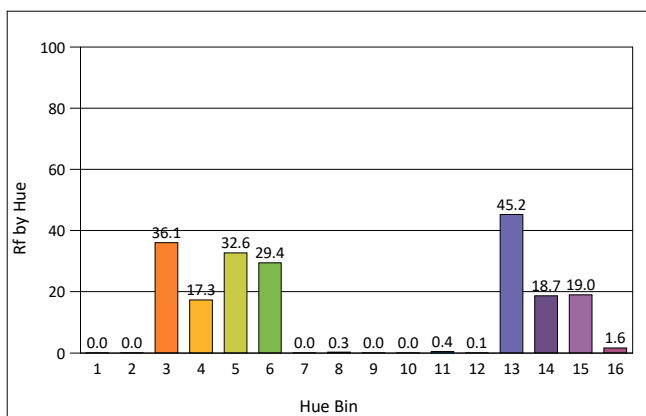
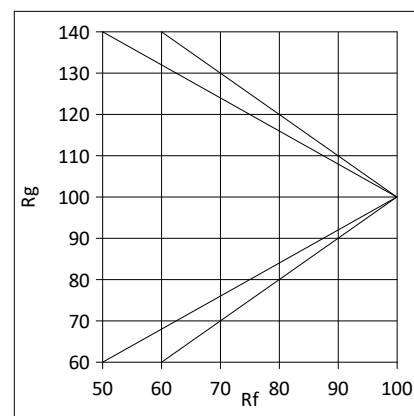
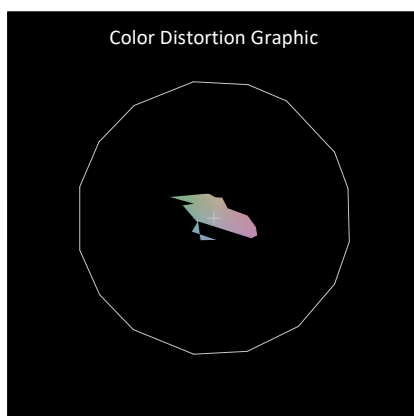
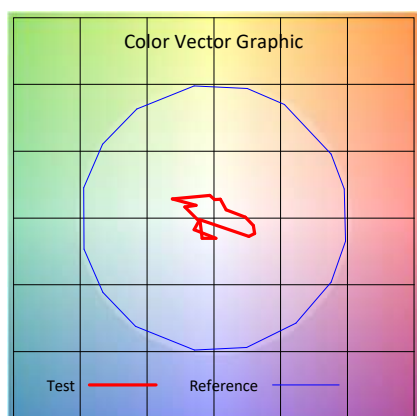
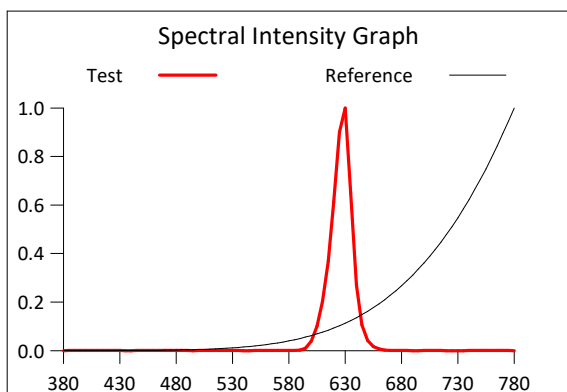
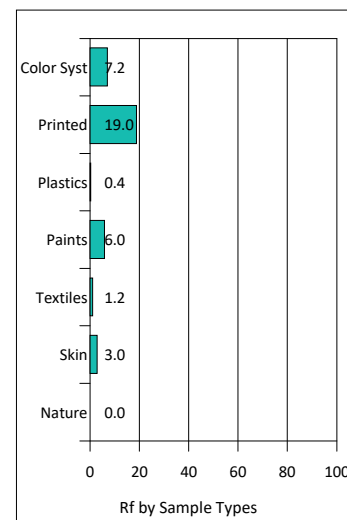
Operator :

Test Date : 01-03-22 15:49:47

Remark: BIN 60-3 R620 G520 B465 LOTTO 477

Rf: 0.7 CCT(K): 1351 u': 0.5277
 Rg: 2.6 LER: 212.6 Duv: -0.0007 v': 0.3471

Hue Bin	Rf	Graphic Shifts (%)	
		Chroma	Hue
1	0.0	-76.8%	-6.1%
2	0.0	-88.6%	8.9%
3	36.1	-85.5%	0.4%
4	17.3	-86.3%	7.9%
5	32.6	-82.8%	4.5%
6	29.4	-70.9%	15.4%
7	0.0	-83.8%	-0.7%
8	0.3	-77.0%	-0.5%
9	0.0	-88.7%	-3.9%
10	0.0	-82.7%	-1.1%
11	0.4	-88.2%	13.2%
12	0.1	-83.2%	-10.6%
13	45.2	-100.6%	-15.7%
14	18.7	-73.6%	6.8%
15	19.0	-67.7%	-1.5%
16	1.6	-69.9%	-2.1%



IES TM-30-2015 Test Report

Product Mark

Product Type : F52-R600-140H12 RED

Manufacturer :

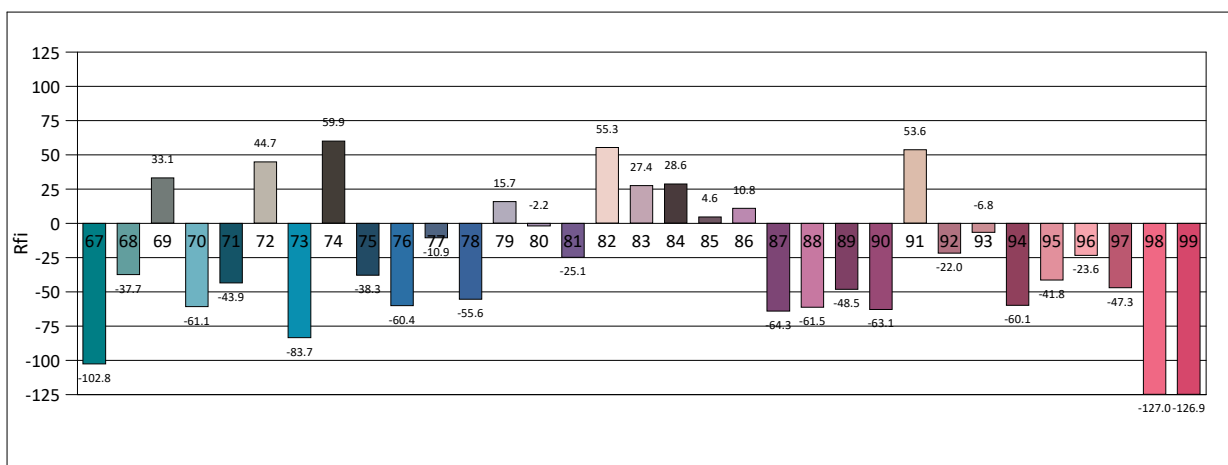
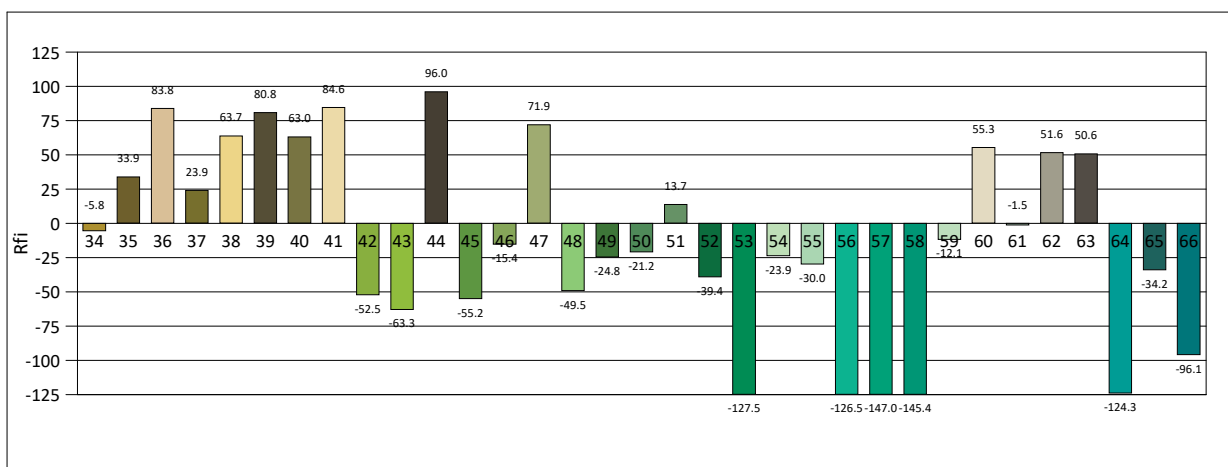
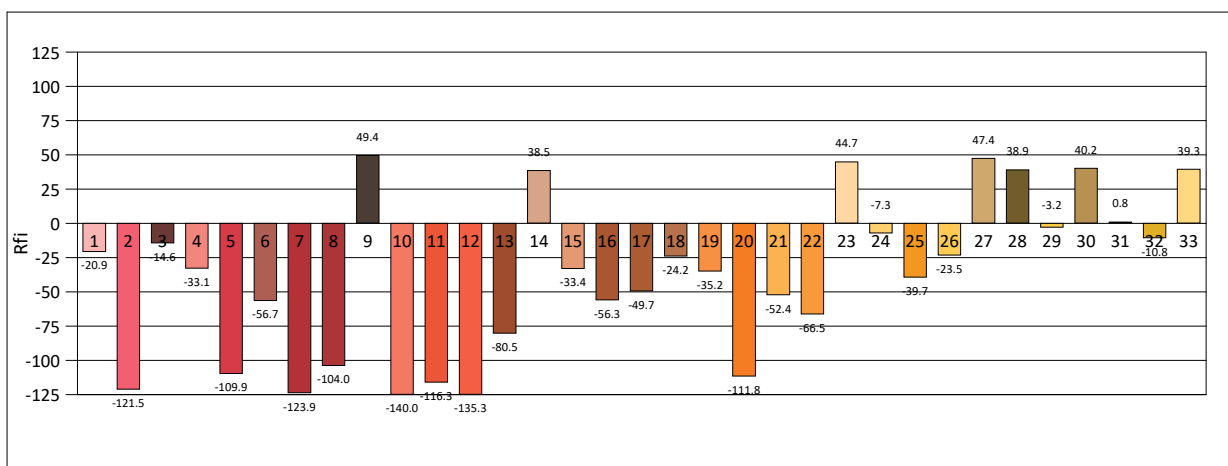
Temperature : CRI'C

Humidity : %

Operator :

Test Date : 01-03-22 15:49:47

Remark: BIN 60-3 R620 G520 B465 LOTTO 477



LED Test Report

Product Mark

Product Type : F52-R600-140H12 GREEN

Manufacturer :

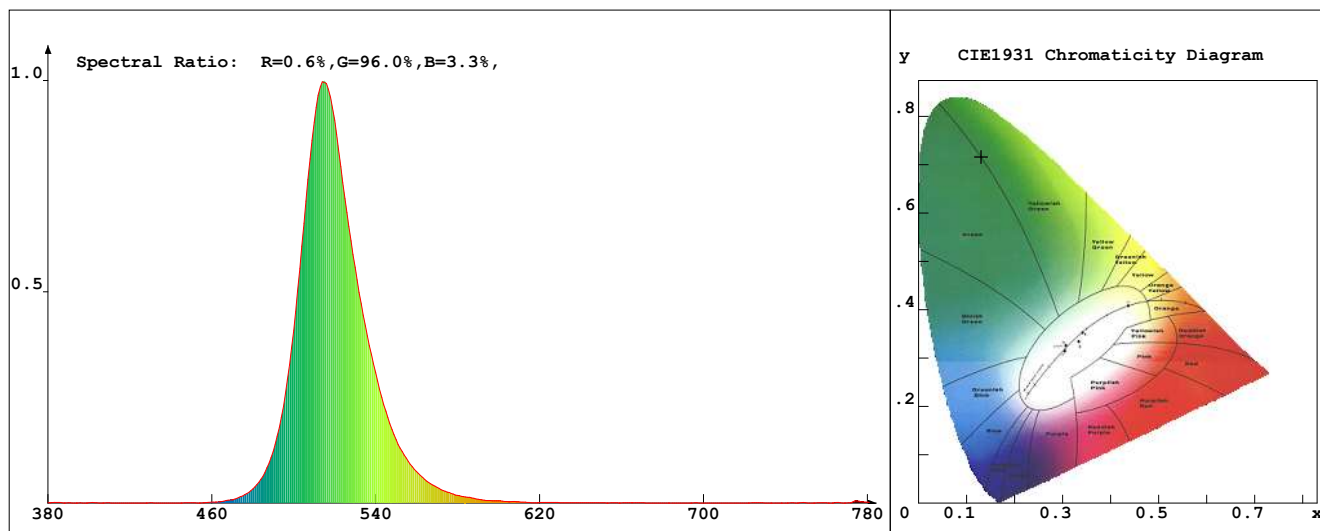
Temperature : CRI'C

Humidity : %

Operator :

Test Date : 01-03-22 15:52:30

Remark: BIN 60-3 R620 G520 B465 LOTTO 477



Chroma Parameters

Chro.Coord.: $x=0.1306$ $y=0.7160$ $u=0.0461$ $v=0.3791$ $duv=0.1676$

CCT: 8667K Dominant Wave.: 519.3nm Purity: 76.6% Centre Wave: 516.0nm

Flux RGB Ratio: $R=0.2\%$, $G=99.0\%$, $B=0.8\%$ Peak Wave: 513.6nm Half Width: 29.9nm

Rendering Index: $R_a=-27.5$ CRI=103.7

R1 = -35	R2 = -12	R3 = -32	R4 = -68	R5 = -10	R6 = -20	R7 = -10	R8 = -31
----------	----------	----------	----------	----------	----------	----------	----------

R9 = -353	R10 = -115	R11 = -96	R12 = -36	R13 = -43	R14 = 34	R15 = -31	
-----------	------------	-----------	-----------	-----------	----------	-----------	--

PPF: 2.778 $\mu\text{mol/s}$ (400-700nm)

PRF: 0.6mW (400-700nm)

PAR: 0.5mW (400-700nm)

Photo Parameters

Flux: 319.12lm Effi.: 74.1lm/W Radiant: 641.9mW Iv: 0.0mcd

Scotopic Flux: 1074.7Plm Effi.: 0.0Plm/W S/P: 3.4

Efficiency: 0.00

Effi Level: A++ (EU 874-2012) Photon Flux: 2790.070 $\mu\text{mol/s}$ (380-780nm)

Ele. Parameters

Voltage: $U=24.62\text{V}$ Current: $I=0.1750\text{A}$ Power: $P=4.330\text{W}$ Power Factor: $PF=1.000$

Instrument state

Instrument: Lisun

Integral Time: 163.131ms

VPeak: 15512

VDark: 1392

Scan Range: 380-780nm

Product ID: 201508924

IES TM-30-2015 Test Report

Product Mark

Product Type : F52-R600-140H12 GREEN

Manufacturer :

Temperature : CRI'C

Humidity : %

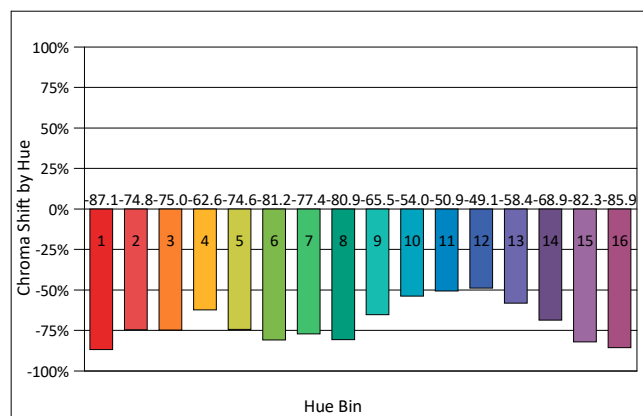
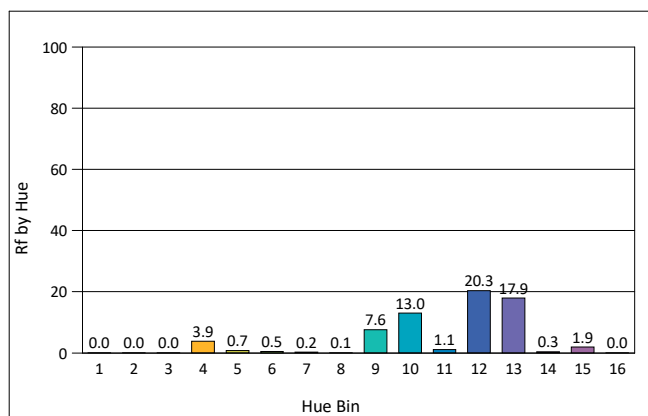
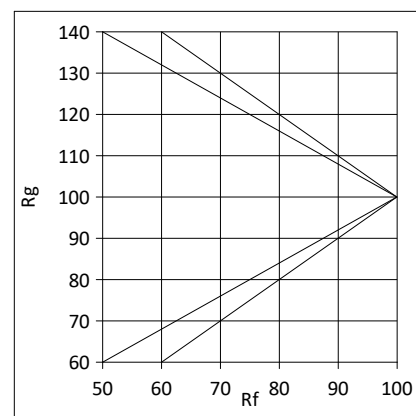
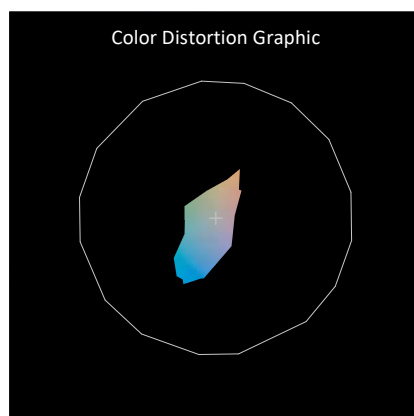
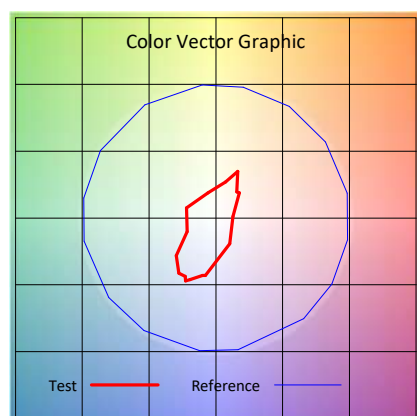
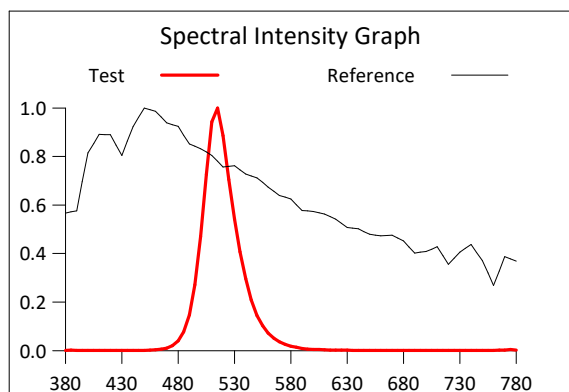
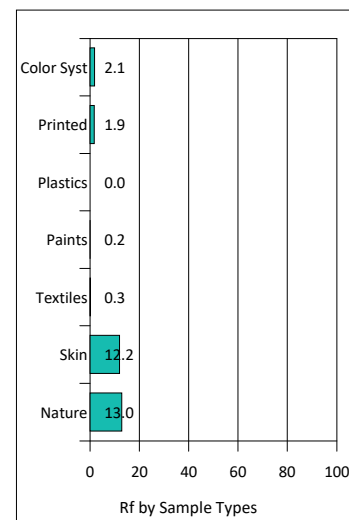
Operator :

Test Date : 01-03-22 15:52:30

Remark: BIN 60-3 R620 G520 B465 LOTTO 477

Rf: 0.5 CCT(K): 8667 u': 0.0461
 Rg: 6.7 LER: 434.5 Duv: 0.1676 v': 0.3791

Hue Bin	Rf	Graphic Shifts (%)	
		Chroma	Hue
1	0.0	-87.1%	-0.6%
2	0.0	-74.8%	4.1%
3	0.0	-75.0%	-3.1%
4	3.9	-62.6%	-8.3%
5	0.7	-74.6%	-3.0%
6	0.5	-81.2%	-2.7%
7	0.2	-77.4%	-0.0%
8	0.1	-80.9%	9.5%
9	7.6	-65.5%	24.2%
10	13.0	-54.0%	14.0%
11	1.1	-50.9%	3.2%
12	20.3	-49.1%	-20.4%
13	17.9	-58.4%	-24.9%
14	0.3	-68.9%	-45.1%
15	1.9	-82.3%	-47.0%
16	0.0	-85.9%	-20.1%



IES TM-30-2015 Test Report

Product Mark

Product Type : F52-R600-140H12 GREEN

Manufacturer :

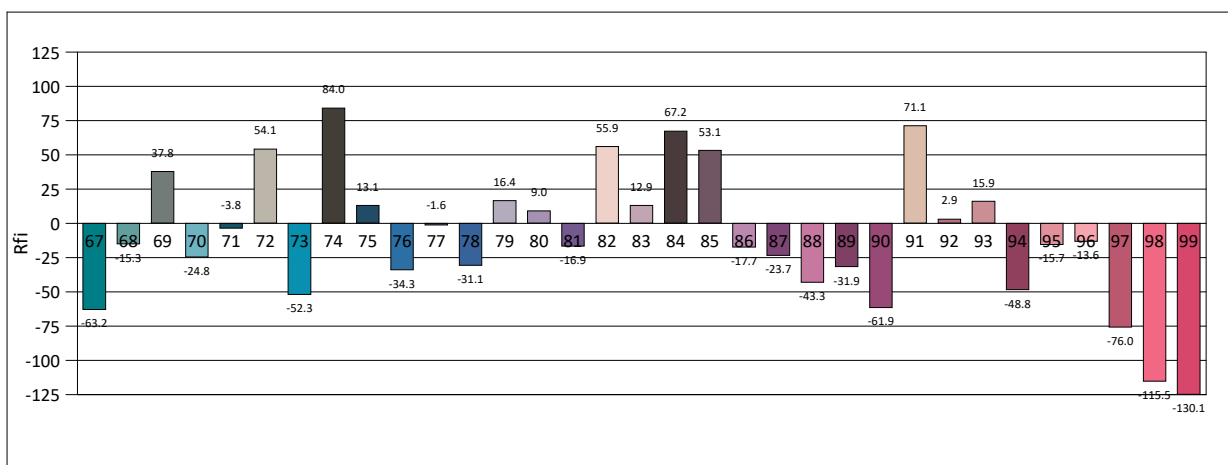
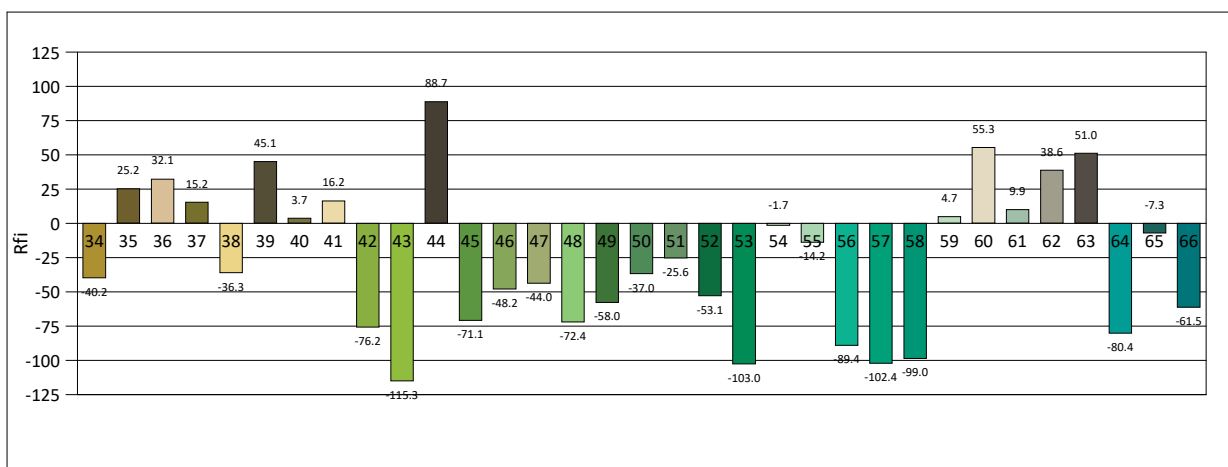
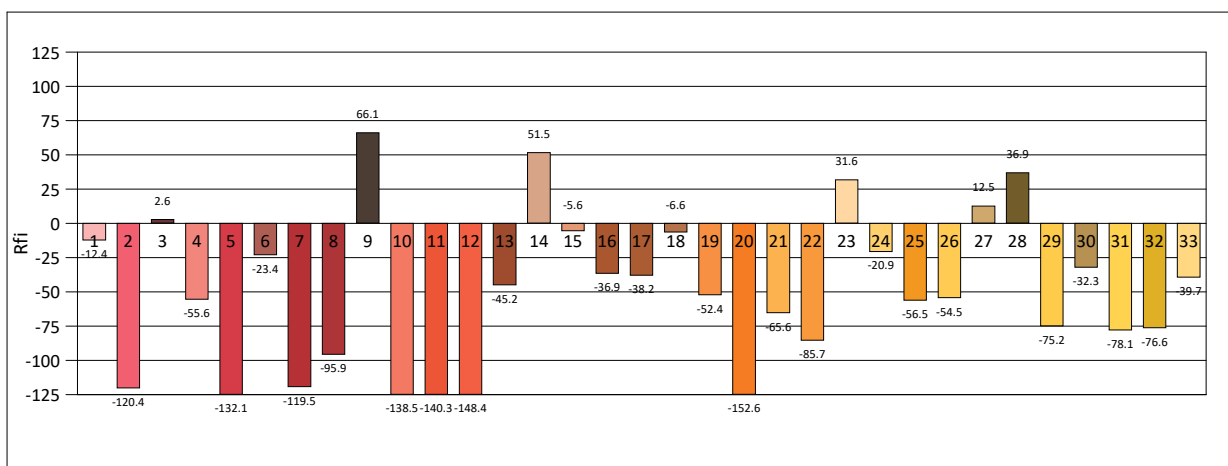
Temperature : CRI'C

Humidity : %

Operator :

Test Date : 01-03-22 15:52:30

Remark: BIN 60-3 R620 G520 B465 LOTTO 477



LED Test Report

Product Mark

Product Type : F52-R600-140H12 BLUE

Manufacturer :

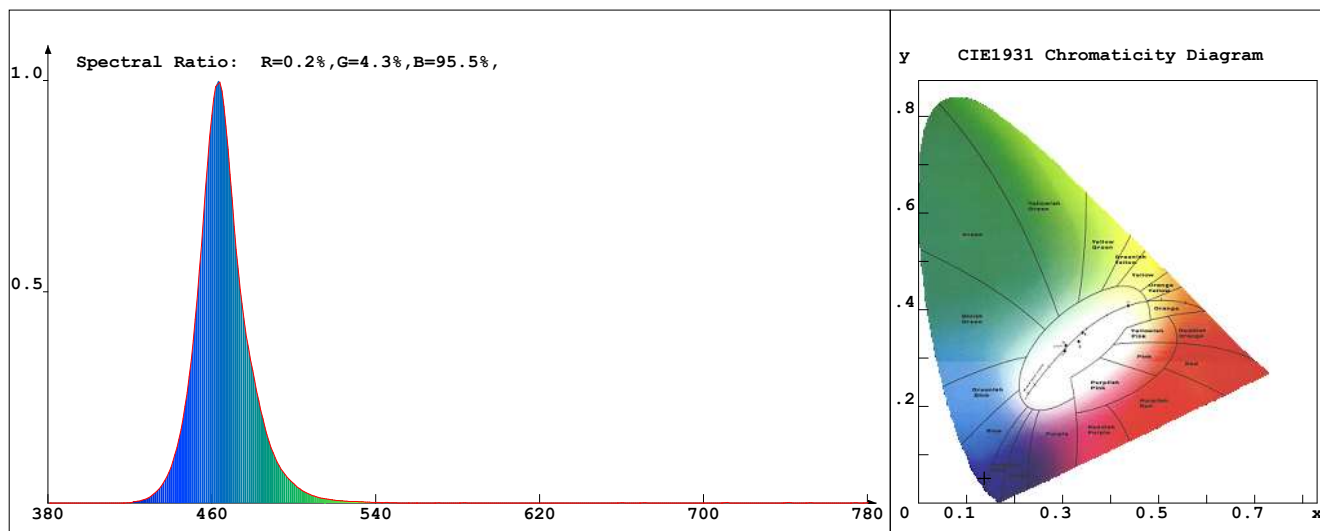
Temperature : CRI'C

Humidity : %

Operator :

Test Date : 01-03-22 15:50:52

Remark: BIN 60-3 R620 G520 B465 LOTTO 477



Chroma Parameters

Chro.Coord.:x=0.1369 y=0.0516 u=0.1637 v=0.0926 duv=-0.0266

CCT:100000K Dominant Wave.:466.6nm Purity:97.6% Centre Wave:462.6nm

Flux RGB Ratio:R=0.1%,G=18.6%,B=81.3% Peak Wave:461.7nm Half Width:21.1nm

Rendering Index:Ra=-55.5 CRI=118.6

R1 =-19 R2 =-50 R3 =-140 R4 =-86 R5 =-4 R6 =-61 R7 =-48 R8 =-36

R9 =-292 R10=-243 R11=-117 R12=-115 R13=-39 R14=-32 R15=-2

PPF:4.594umol/s (400-700nm)

PRF:1.2mW (400-700nm)

PAR:0.8mW (400-700nm)

Photo Parameters

Flux:89.33lm Effi.:20.7lm/W Radiant:1183.1mW Iv:0.0mcd

Scotopic Flux:1532.2Plm Effi.:0.0Plm/W S/P:17.2

Efficiency:0.00

Effi Level:A++ (EU 874-2012) Photon Flux:4602.510umol/s (380-780nm)

Ele. Parameters

Voltage:U=24.00V

Current:I=0.1800A

Power:P=4.321W

Power Factor:PF=1.000

Instrument state

Instrument:Lisun

Integral Time: 65.152ms

VPeak: 13496

VDark: 1375

Scan Range: 380-780nm

Product ID: 201508924

IES TM-30-2015 Test Report

Product Mark

Product Type : F52-R600-140H12 BLUE

Manufacturer :

Temperature : CRI'C

Humidity : %

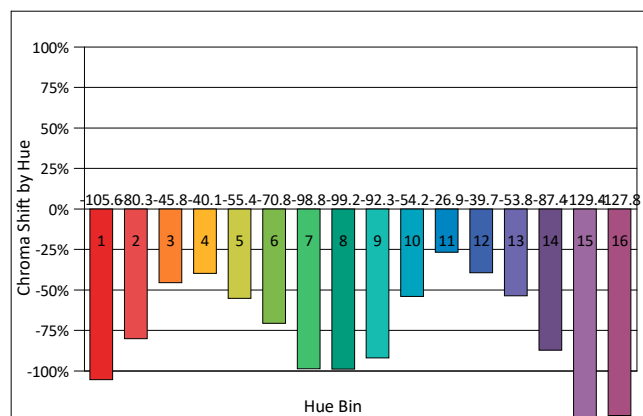
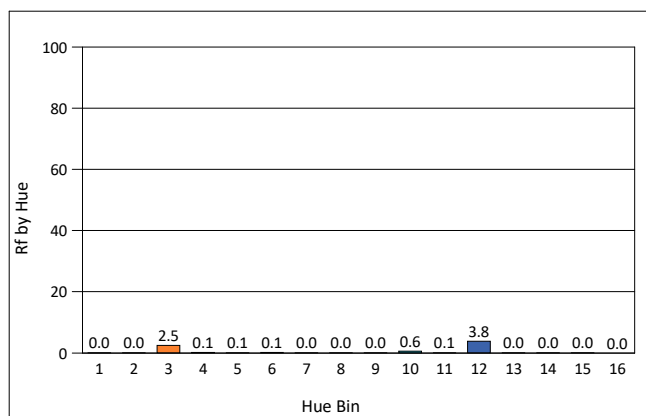
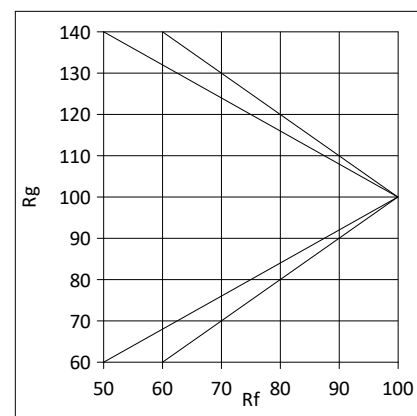
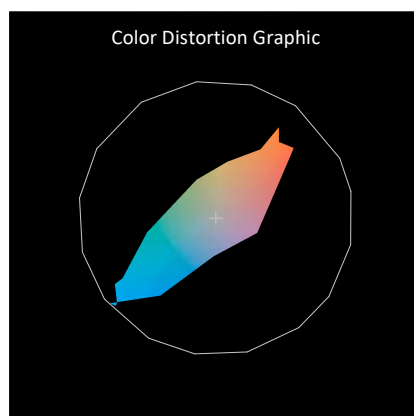
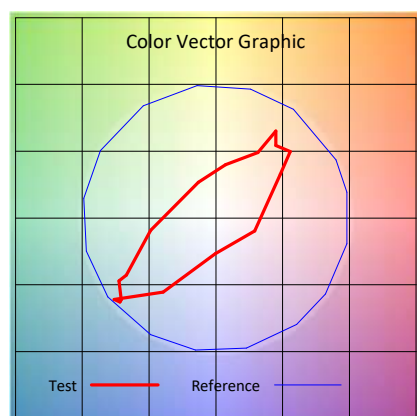
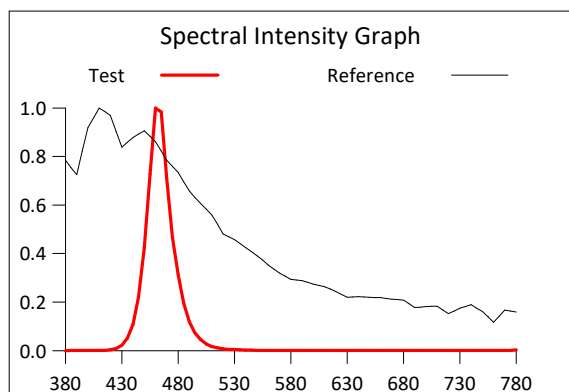
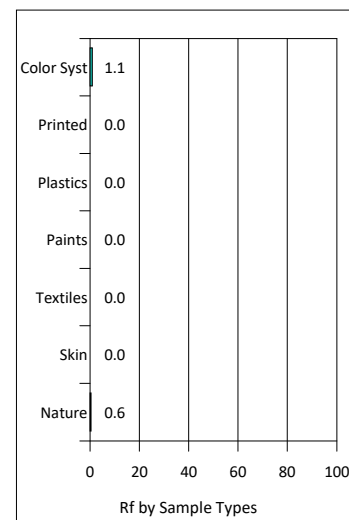
Operator :

Test Date : 01-03-22 15:50:52

Remark: BIN 60-3 R620 G520 B465 LOTTO 477

Rf: 0.0 CCT(K): 100000 u': 0.1637
 Rg: 21.3 LER: 60.8 Duv: -0.0266 v': 0.0926

Hue Bin	Rf	Graphic Shifts (%)	
		Chroma	Hue
1	0.0	-105.6%	-25.8%
2	0.0	-80.3%	-10.4%
3	2.5	-45.8%	-18.9%
4	0.1	-40.1%	-38.3%
5	0.1	-55.4%	-49.1%
6	0.1	-70.8%	-72.0%
7	0.0	-98.8%	-64.3%
8	0.0	-99.2%	-45.4%
9	0.0	-92.3%	-34.2%
10	0.6	-54.2%	-23.6%
11	0.1	-26.9%	-39.7%
12	3.8	-39.7%	-66.1%
13	0.0	-53.8%	-84.8%
14	0.0	-87.4%	-100.5%
15	0.0	-129.4%	-91.3%
16	0.0	-127.8%	-62.2%



IES TM-30-2015 Test Report

Product Mark

Product Type : F52-R600-140H12 BLUE

Manufacturer :

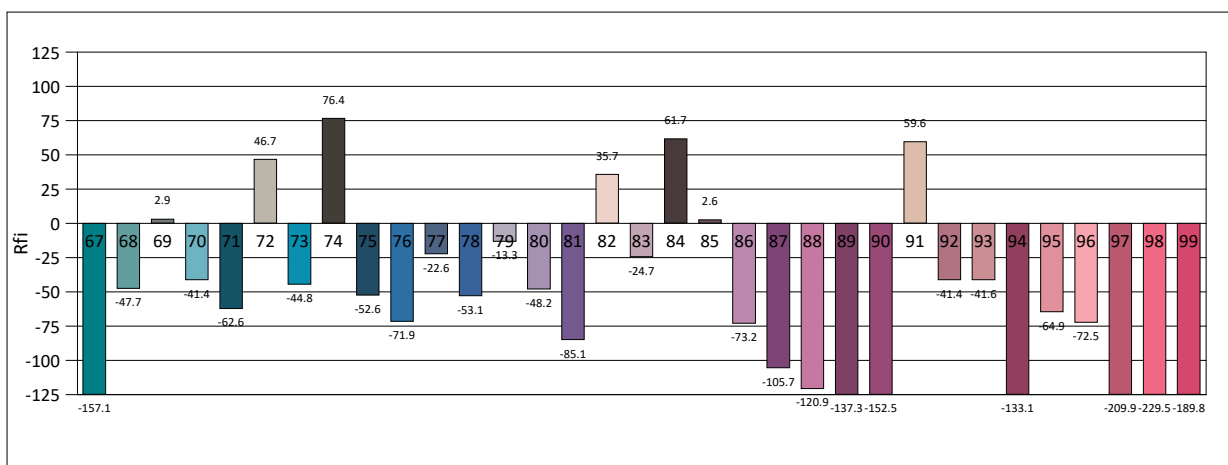
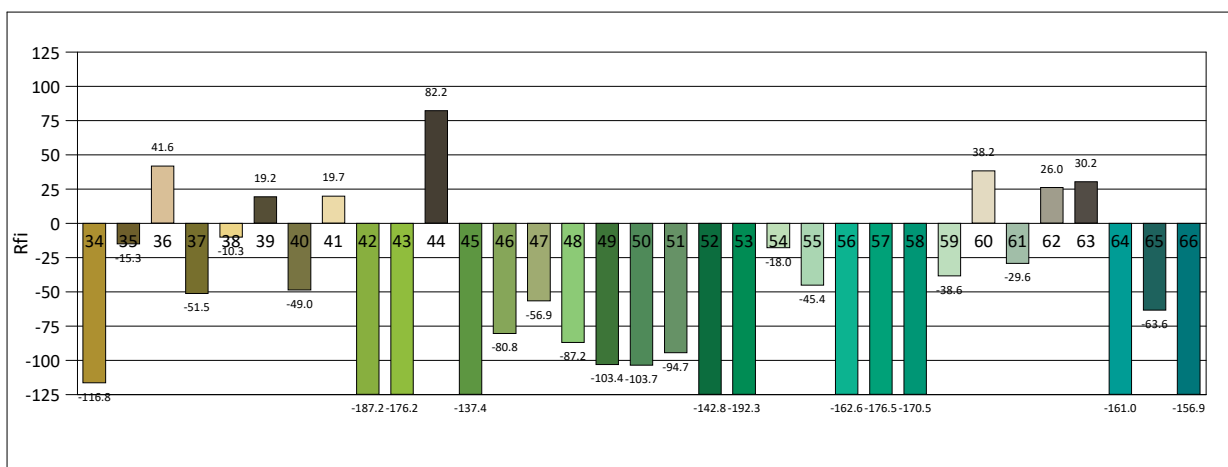
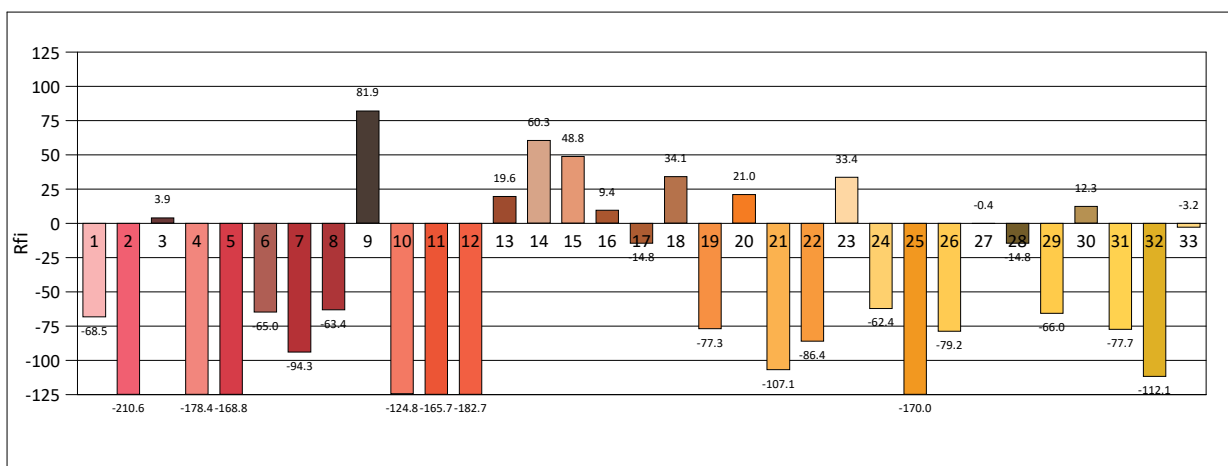
Temperature : CRI'C

Humidity : %

Operator :

Test Date : 01-03-22 15:50:52

Remark: BIN 60-3 R620 G520 B465 LOTTO 477



LED Test Report

Product Mark

Product Type : F52-R600-140H12 WHITE

Manufacturer :

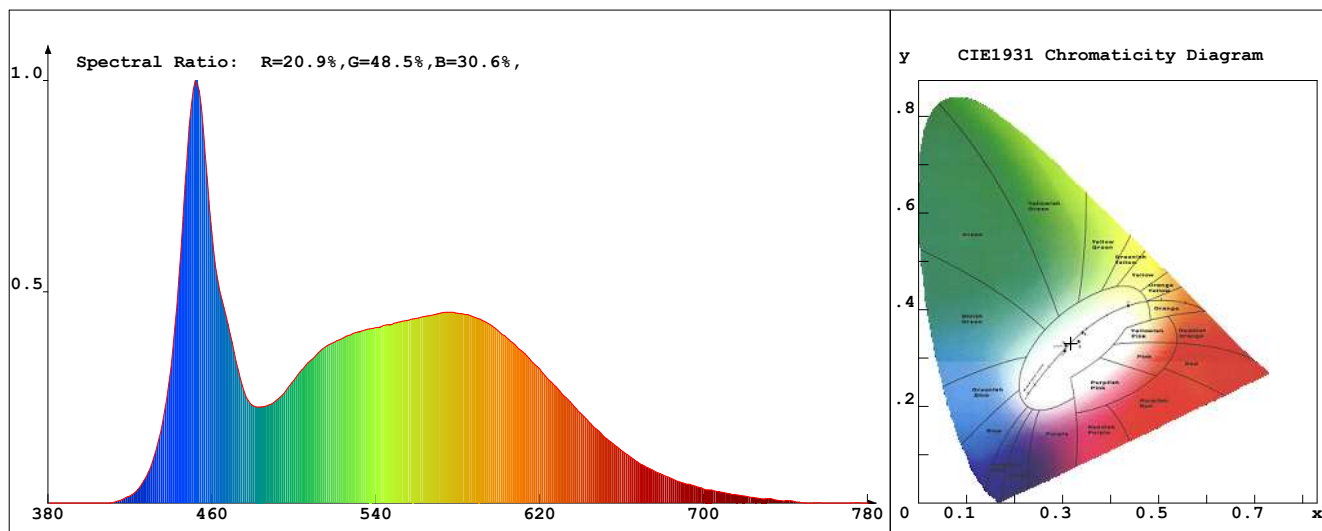
Temperature : CRI'C

Humidity : %

Operator :

Test Date : 01-03-22 15:47:52

Remark: BIN 60-3 R620 G520 B465 LOTTO 477



Chroma Parameters

Chro.Coord.: $x=0.3169$ $y=0.3303$ $u=0.2003$ $v=0.3131$ $duv=0.0017$

CCT: 6271K Dominant Wave.: 489.4nm Purity: 5.8% Centre Wave: 452.7nm

Flux RGB Ratio: $R=13.0\%$, $G=82.9\%$, $B=4.1\%$ Peak Wave: 451.6nm Half Width: 20.5nm

Rendering Index: $R_a=82.5$ CRI= 78.1

R1 =81	R2 =88	R3 =92	R4 =81	R5 =81	R6 =83	R7 =87	R8 =67
--------	--------	--------	--------	--------	--------	--------	--------

R9 =0	R10=72	R11=80	R12=57	R13=83	R14=96	R15=76	
-------	--------	--------	--------	--------	--------	--------	--

PPF: 22.576 $\mu\text{mol/s}$ (400-700nm)

PRF: 5.0mW (400-700nm)

PAR: 4.2mW (400-700nm)

Photo Parameters

Flux: 1735.58lm Effi.: 133.4lm/W Radiant: 5064.7mW Iv: 0.0mcd

Scotopic Flux: 3828.0Plm Effi.: 0.0Plm/W S/P: 2.2

Efficiency: 0.00

Effi Level: A++ (EU 874-2012) Photon Flux: 22818.500 $\mu\text{mol/s}$ (380-780nm)

Ele. Parameters

Voltage: $U=24.10\text{V}$ Current: $I=0.5400\text{A}$ Power: $P=13.031\text{W}$ Power Factor: $PF=1.000$

Instrument state

Instrument: Lisun

Integral Time: 46.053ms

VPeak: 13656

VDark: 1364

Scan Range: 380-780nm

Product ID: 201508924

IES TM-30-2015 Test Report

Product Mark

Product Type : F52-R600-140H12 WHITE

Manufacturer :

Temperature : CRI'C

Humidity : %

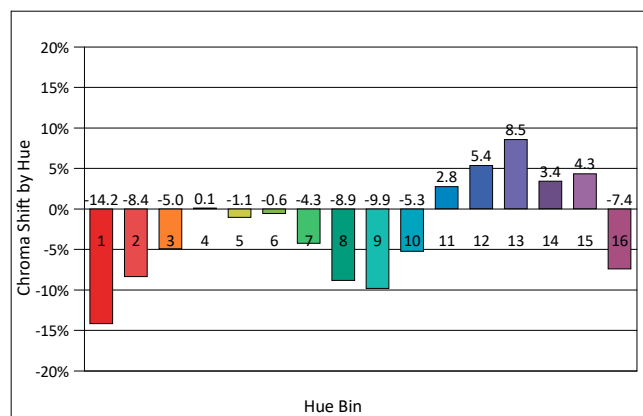
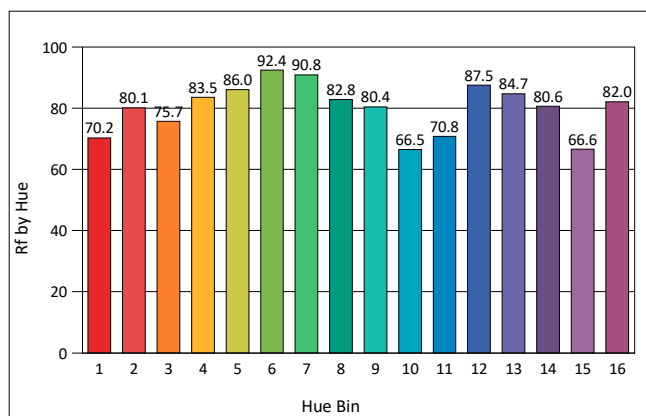
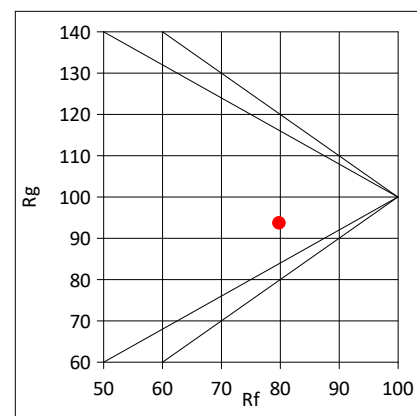
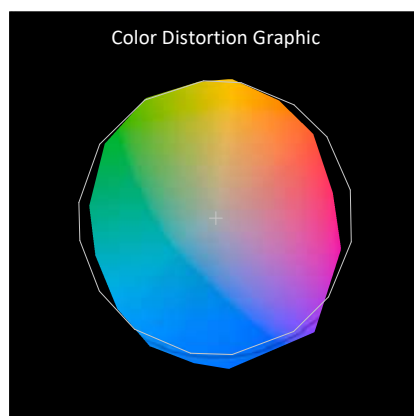
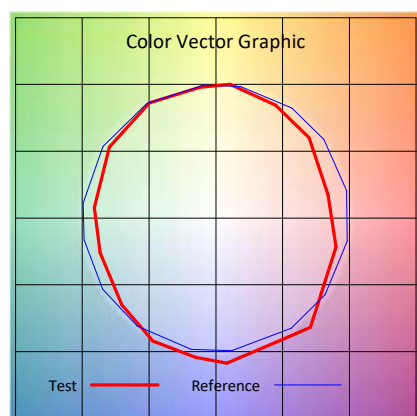
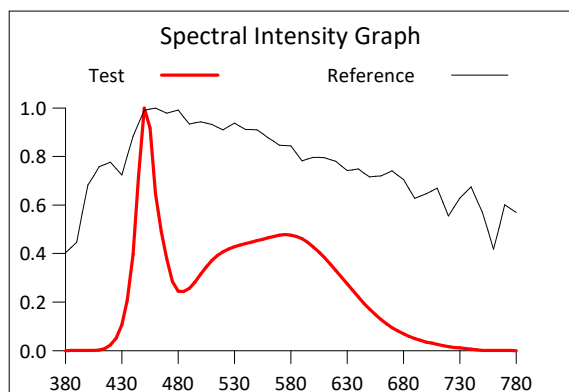
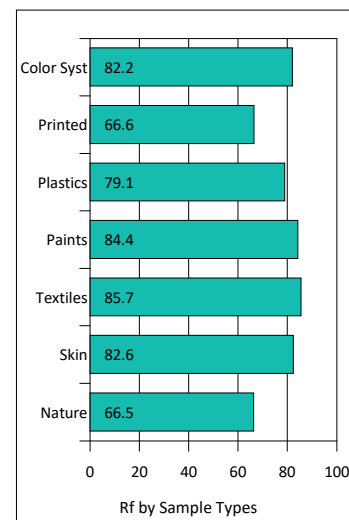
Operator :

Test Date : 01-03-22 15:47:52

Remark: BIN 60-3 R620 G520 B465 LOTTO 477

Rf: 79.8 CCT(K): 6271 u': 0.2003
 Rg: 93.7 LER: 315.9 Duv: 0.0017 v': 0.3131

Hue Bin	Rf	Graphic Shifts (%)	
		Chroma	Hue
1	70.2	-14.2%	-0.4%
2	80.1	-8.4%	7.0%
3	75.7	-5.0%	11.1%
4	83.5	0.1%	8.1%
5	86.0	-1.1%	3.3%
6	92.4	-0.6%	-1.8%
7	90.8	-4.3%	-2.1%
8	82.8	-8.9%	1.7%
9	80.4	-9.9%	11.9%
10	66.5	-5.3%	17.7%
11	70.8	2.8%	16.1%
12	87.5	5.4%	4.5%
13	84.7	8.5%	-5.4%
14	80.6	3.4%	-9.7%
15	66.6	4.3%	-26.6%
16	82.0	-7.4%	-5.9%



IES TM-30-2015 Test Report

Product Mark

Product Type : F52-R600-140H12 WHITE

Manufacturer :

Temperature : CRI'C

Humidity : %

Operator :

Test Date : 01-03-22 15:47:52

Remark: BIN 60-3 R620 G520 B465 LOTTO 477

