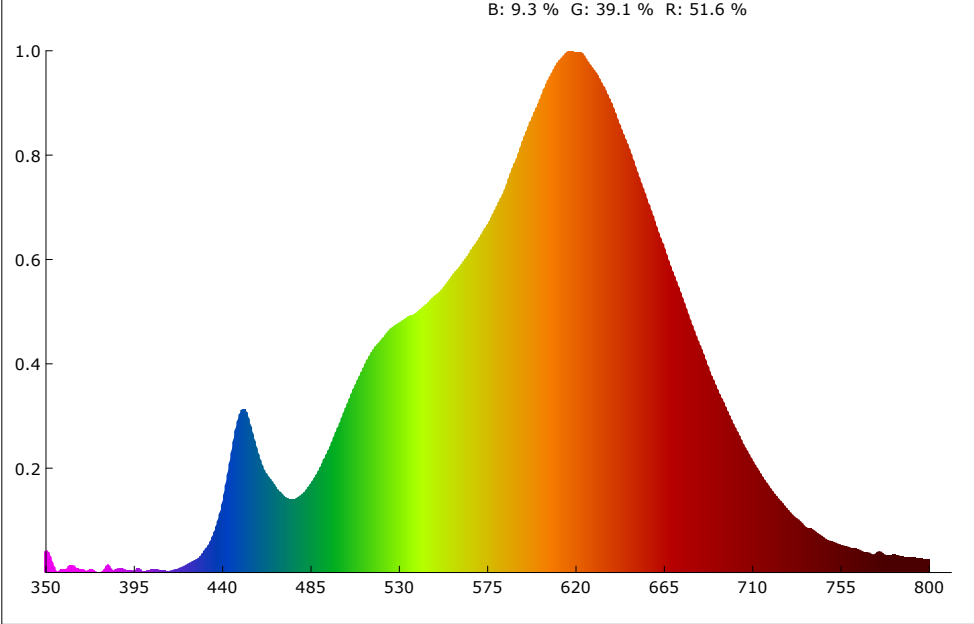
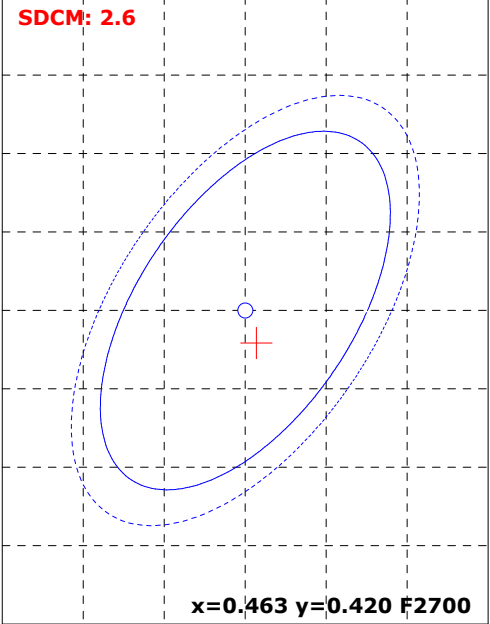


Spectrogram



SDCM



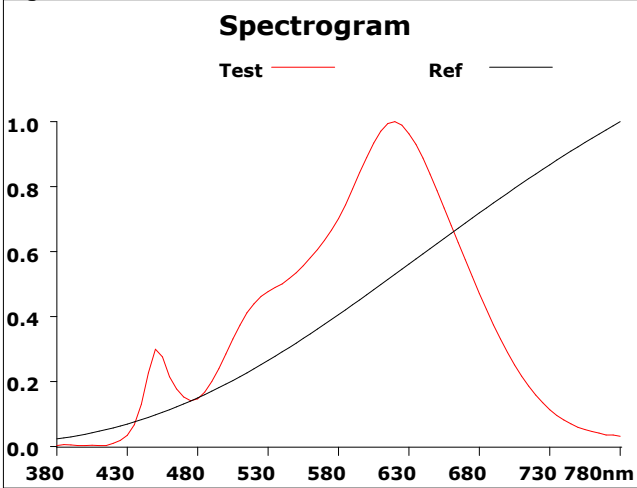
Color Parameter:

x: 0.4657	y: 0.4179	u: 0.2630	v: 0.3540	u': 0.2630	v': 0.5310		
R_ratio: 51.6 %	G_ratio: 39.1 %	B_ratio: 9.3 %	RedRatio: 25.9 %	GreenRatio: 72.9 %	BlueRatio: 1.3 %		
Ra: 92.6		AvgR: 89.5					
R1: 92.8	R2: 95.7	R3: 98.3	R4: 94.7	R5: 92.8	R6: 96.6	R7: 91.5	R8: 78.8
R9: 52.2	R10: 89.6	R11: 97.1	R12: 83.7	R13: 93.6	R14: 98.0	R15: 86.7	
CCT: 2675 K		Flux: 2095.779 lm	PeakWave: 617.6 nm	SDCM: 2.6			
S/P: 1.2		CentralWave: 608.9 nm	DominantWave: 583.6 nm	CentroidWave: 599.6 nm			
HalfWidth: 135.5 nm		duv: 0.00220	purity: 65.2 %	CQS: 89.1			
LER(TM-30): 291.0		Ep: 7201.9 mw	Rg: 98.3	Rf: 91.7			
Red Ep: 3475.1 mw		Near red Ep: 410.3 mw	Near infrared Ep: 30.0 mw				

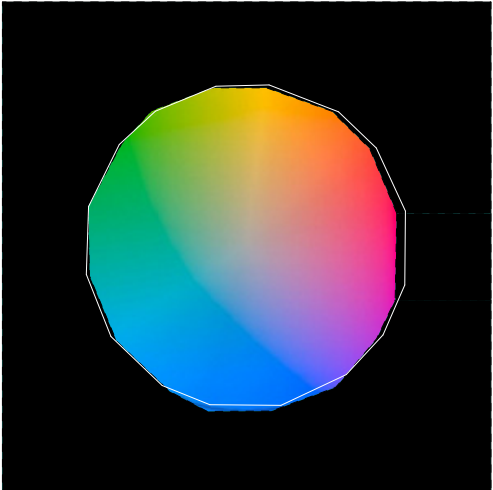
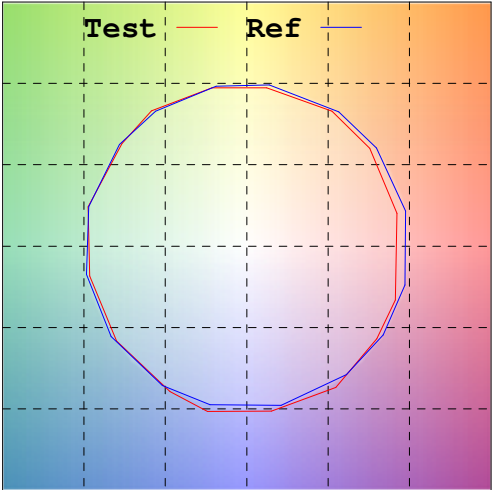
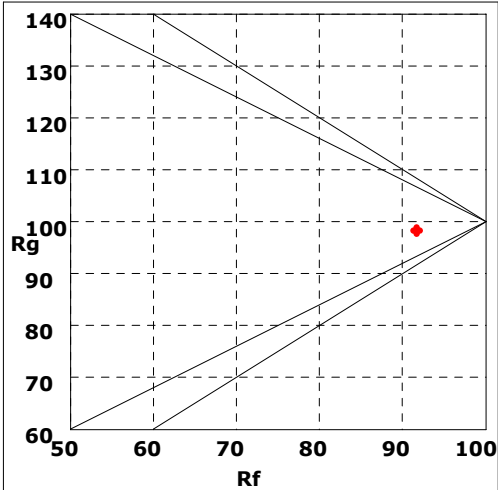
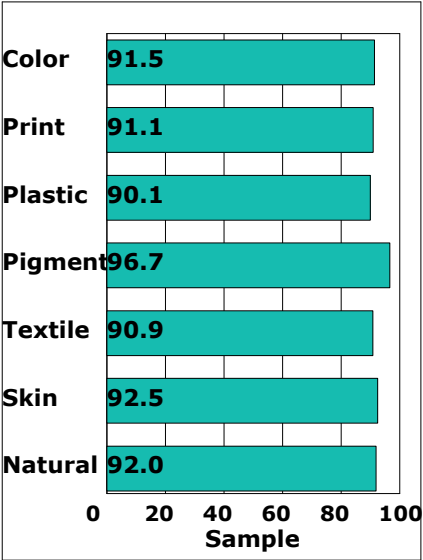
Electrical parameters:

Effic: 37.0 Lm/W	Energy: 40.3	Effi: G	
U: 219.8 V	I: 0.425 A	P: 56.610 W	Pf: 0.605

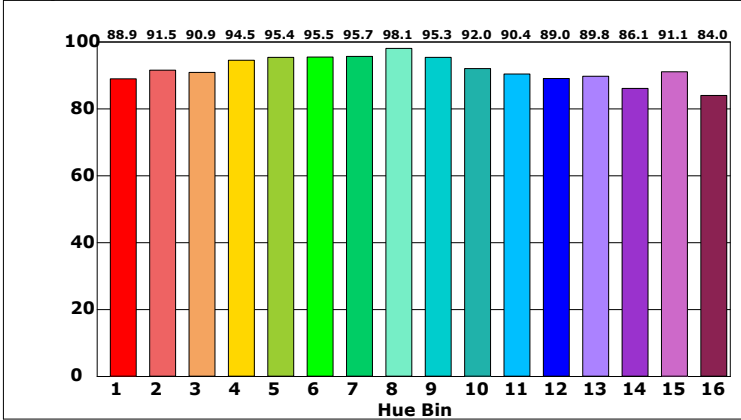
Rf: 91.7 CCT: 2675K u': 0.2630
Rg: 98.3 LER: 291.0 Duv: 0.00220 v': 0.5310



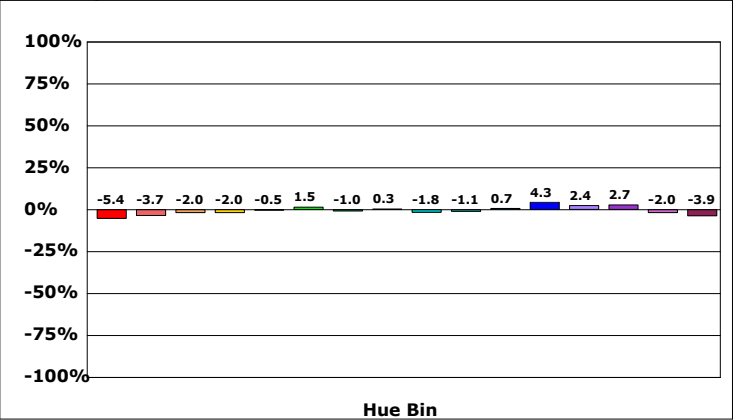
500			
Hue Bin	Rf	Chroma	Hue
1	88.9	-5.4%	-0.2%
2	91.5	-3.7%	2.1%
3	90.9	-2.0%	3.7%
4	94.5	-2.0%	1.2%
5	95.4	-0.5%	2.8%
6	95.5	1.5%	2.0%
7	95.7	-1.0%	-1.3%
8	98.1	0.3%	0.3%
9	95.3	-1.8%	1.3%
10	92.0	-1.1%	4.2%
11	90.4	0.7%	6.1%
12	89.0	4.3%	-0.7%
13	89.8	2.4%	-6.6%
14	86.1	2.7%	-9.8%
15	91.1	-2.0%	-4.2%
16	84.0	-3.9%	-10.2%



Rf by Bue

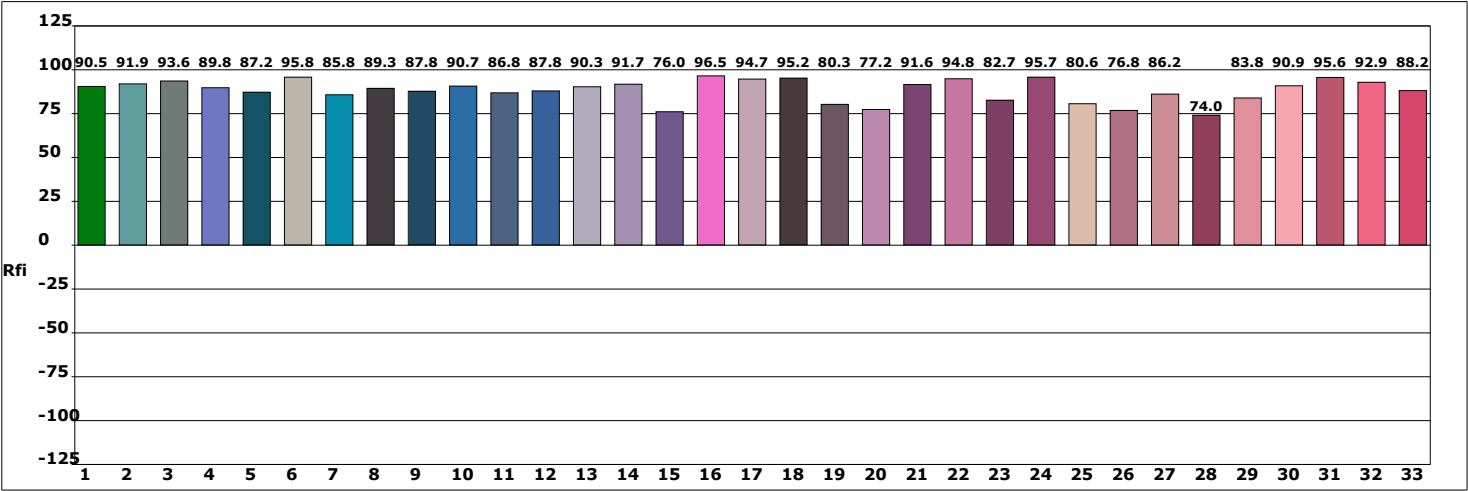
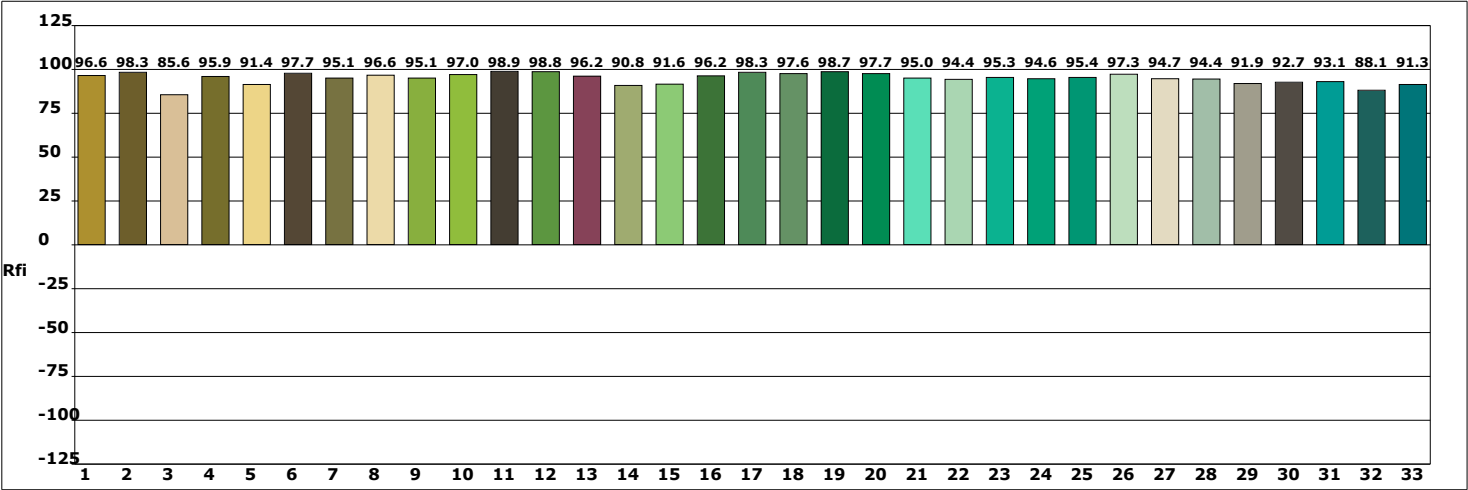
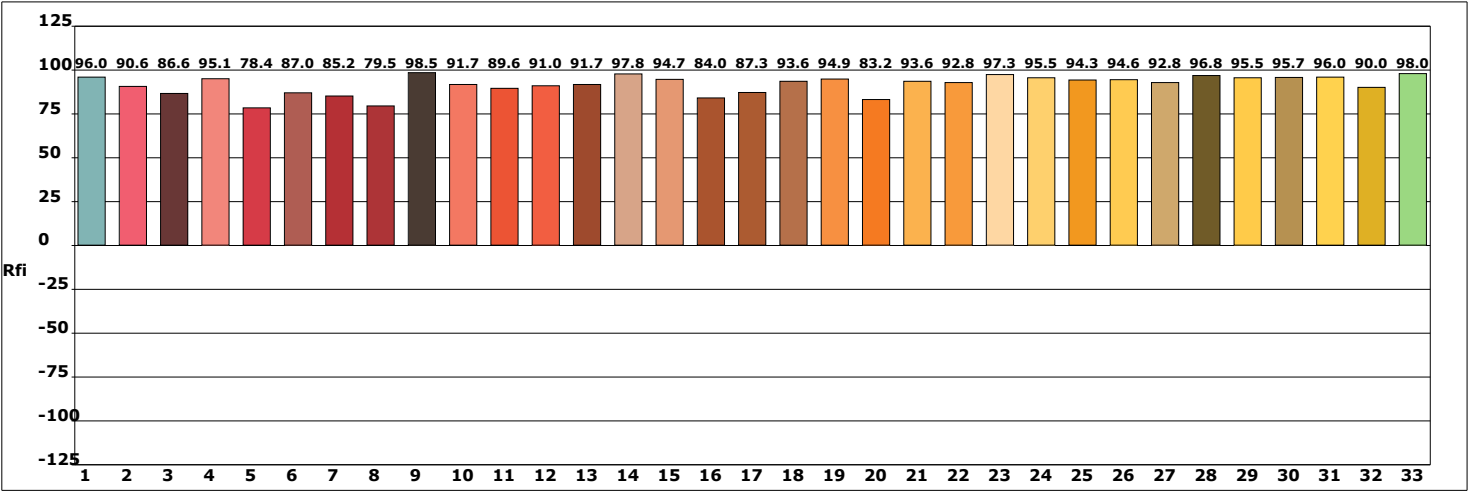


Chroma by Bue

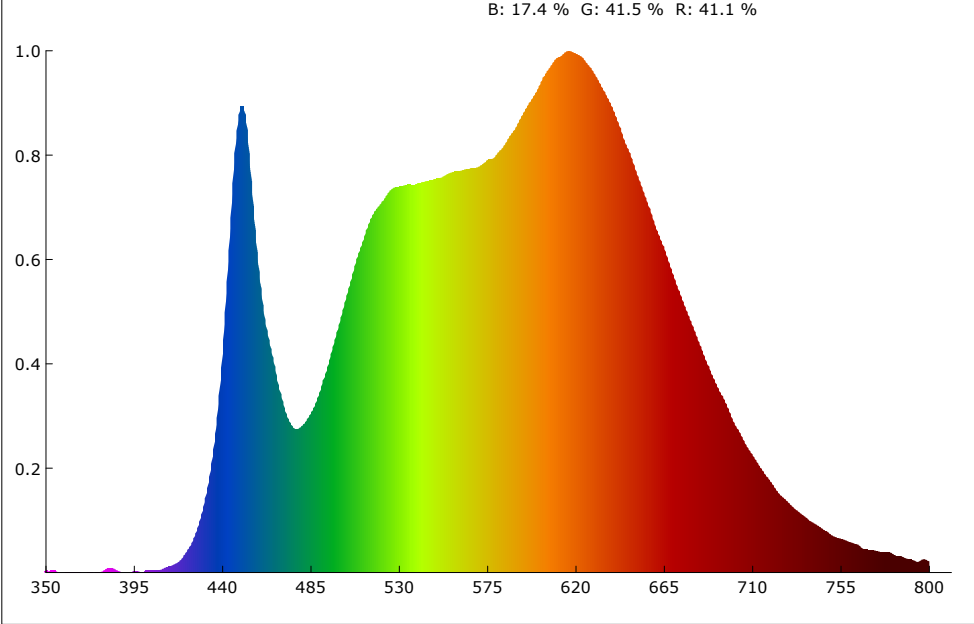


Product model:
Product number:
Tester:
Remarks:

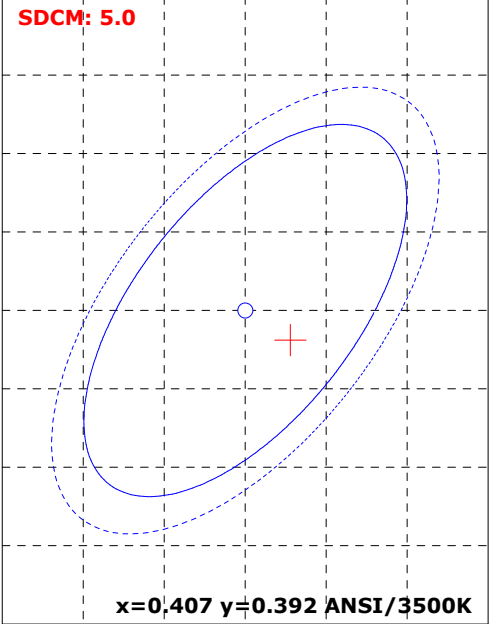
Manufacturer: Guangzhou Hotion Technology Co.,
Test unit:
Date of observation: 04/30/14



Spectrogram



SDCM



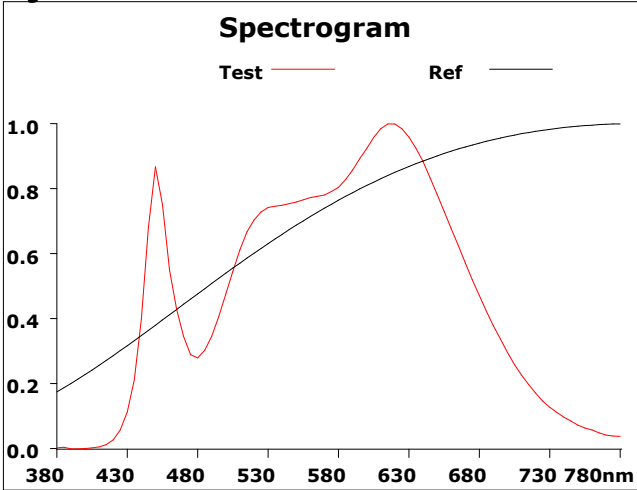
Color Parameter:

x: 0.3978	y: 0.3881	u: 0.2319	v: 0.3394	u': 0.2319	v': 0.5091		
R_ratio: 41.1 %	G_ratio: 41.5 %	B_ratio: 17.4 %	RedRatio: 20.8 %	GreenRatio: 77.0 %	BlueRatio: 2.2 %		
Ra: 94.3	AvgR: 91.3						
R1: 96.1	R2: 95.5	R3: 93.6	R4: 96.0	R5: 95.0	R6: 93.6	R7: 95.7	R8: 89.4
R9: 71.2	R10: 88.0	R11: 95.2	R12: 75.2	R13: 96.0	R14: 95.6	R15: 93.2	
CCT: 3648 K	Flux: 2037.040 lm		PeakWave: 616.6 nm		SDCM: 5.0		
S/P: 1.6	CentralWave: 588.5 nm		DominantWave: 580.1 nm		CentroidWave: 581.3 nm		
HalfWidth: 174.4 nm	duv: 0.00059		purity: 35.9 %		CQS: 90.2		
LER(TM-30): 293.6	Ep: 6938.3 mw		Rg: 100.9		Rf: 91.4		
Red Ep: 2696.8 mw	Near red Ep: 347.6 mw		Near infrared Ep: 21.5 mw				

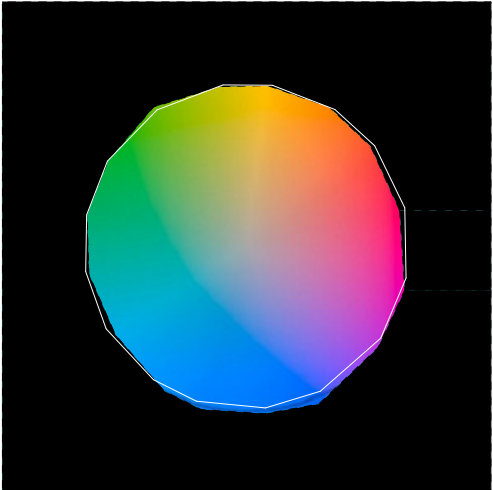
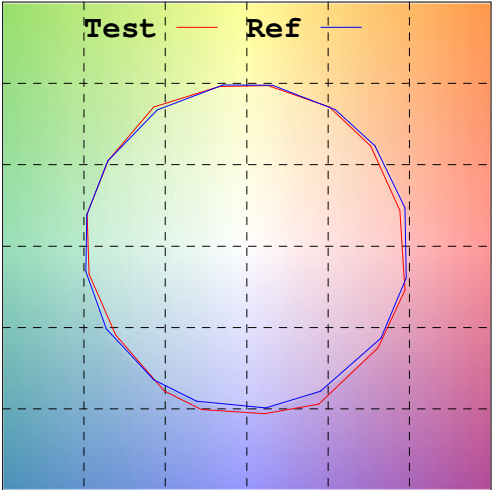
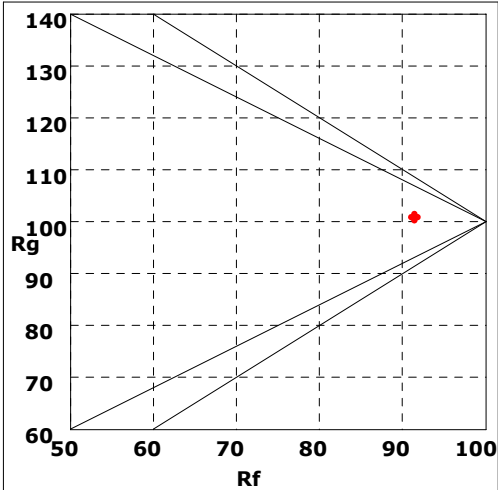
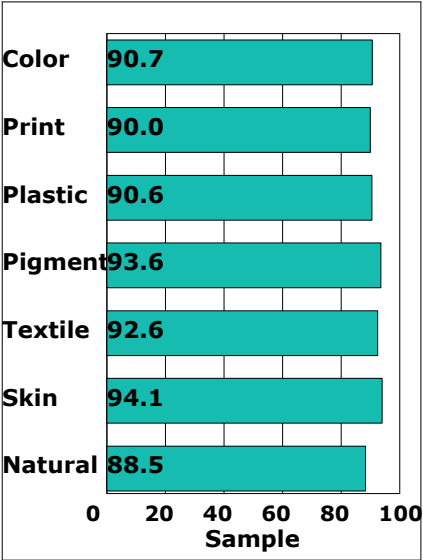
Electrical parameters:

Effic: 41.3 Lm/W	Energy: 45.0	Effi: G	
U: 219.8 V	I: 0.376 A	P: 49.320 W	Pf: 0.596

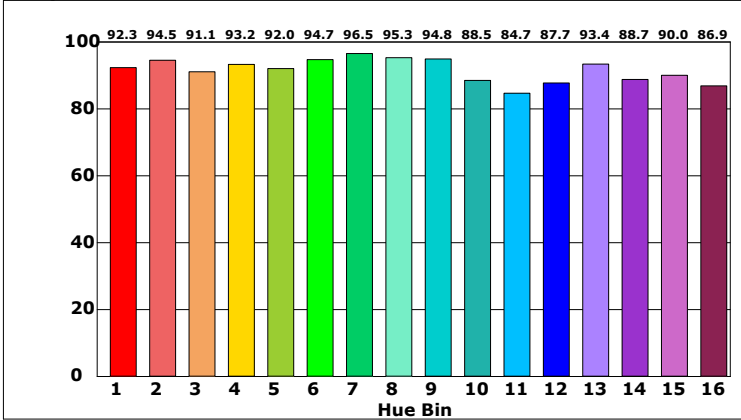
Rf: 91.4 CCT: 3648K u': 0.2319
Rg: 100.9 LER: 293.6 Duv: 0.00059 v': 0.5091



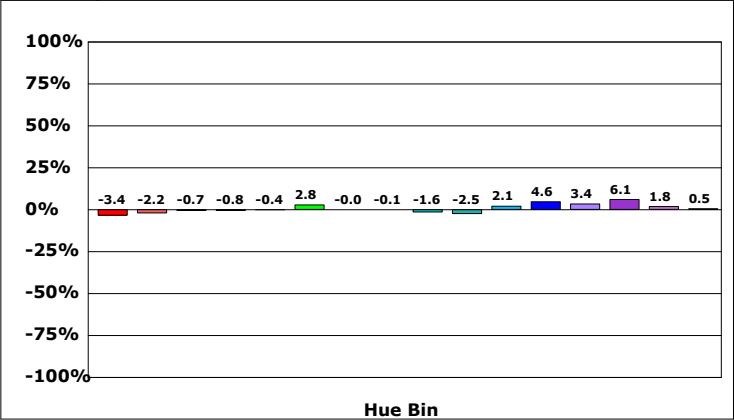
500			
Hue Bin	Rf	Chroma	Hue
1	92.3	-3.4%	-0.8%
2	94.5	-2.2%	1.3%
3	91.1	-0.7%	3.8%
4	93.2	-0.8%	2.5%
5	92.0	-0.4%	2.5%
6	94.7	2.8%	0.9%
7	96.5	-0.0%	-0.6%
8	95.3	-0.1%	-0.5%
9	94.8	-1.6%	1.9%
10	88.5	-2.5%	6.3%
11	84.7	2.1%	9.2%
12	87.7	4.6%	3.9%
13	93.4	3.4%	-1.3%
14	88.7	6.1%	-5.1%
15	90.0	1.8%	-5.7%
16	86.9	0.5%	-7.4%



Rf by Bue

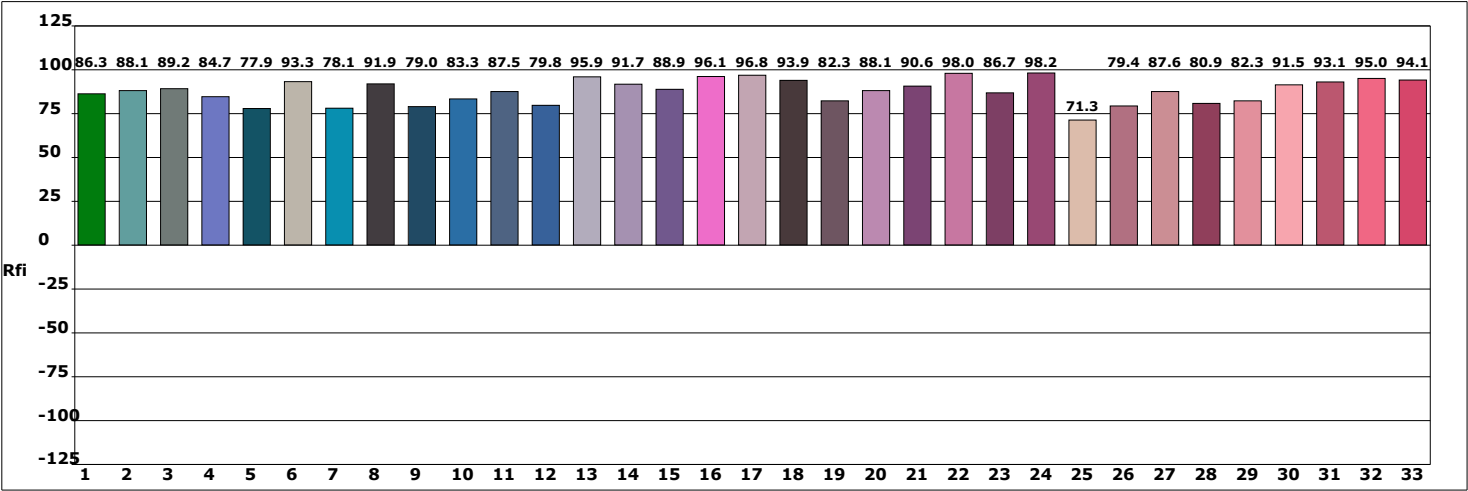
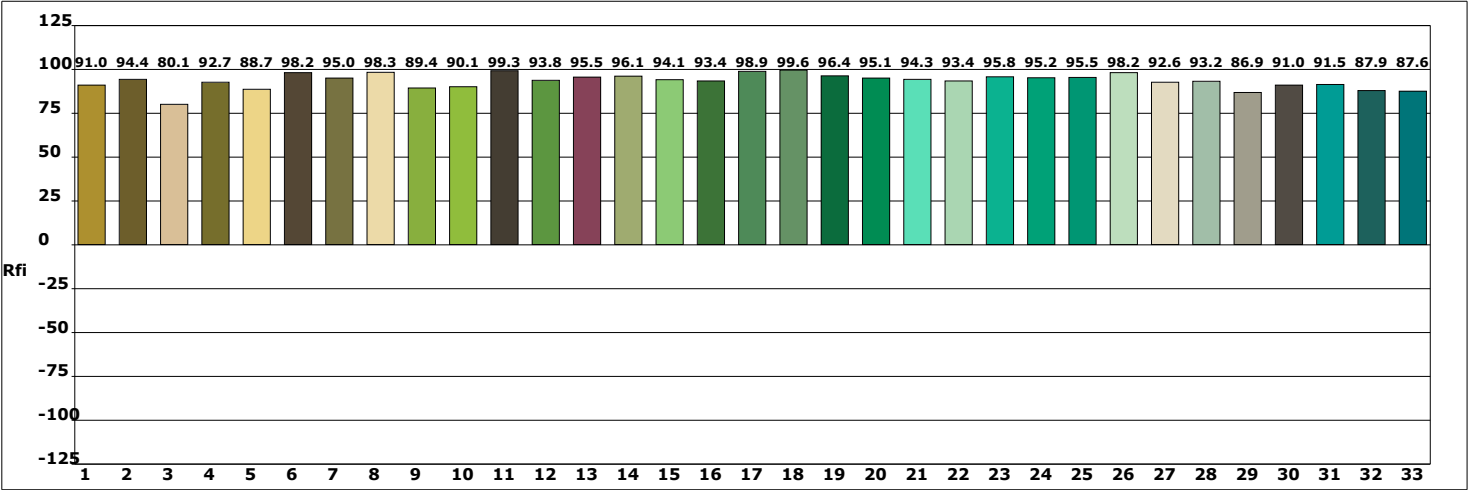
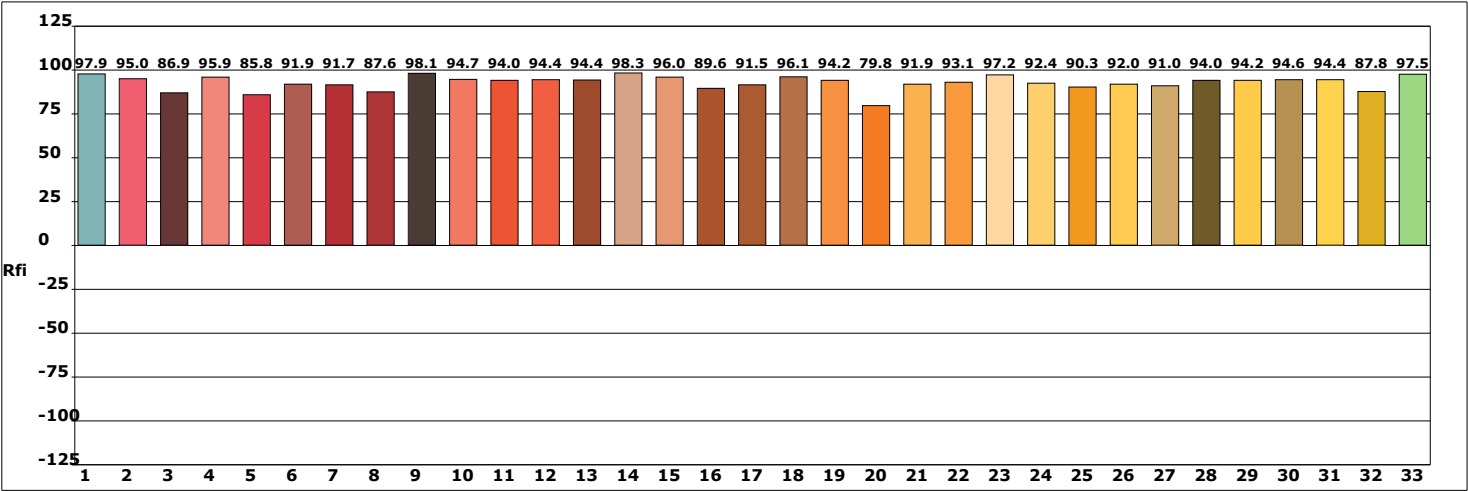


Chroma by Bue

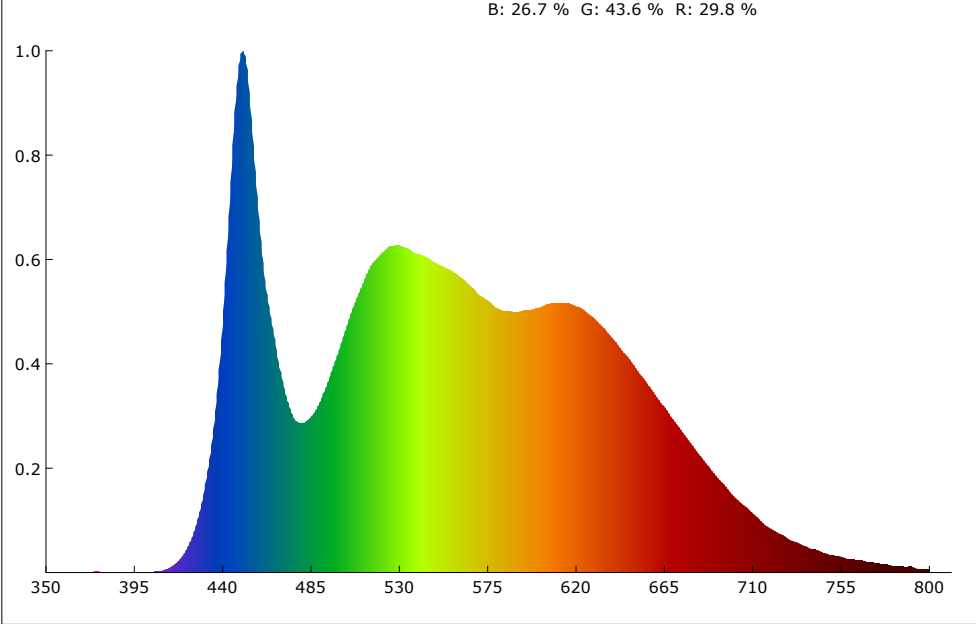


Product model:
Product number:
Tester:
Remarks:

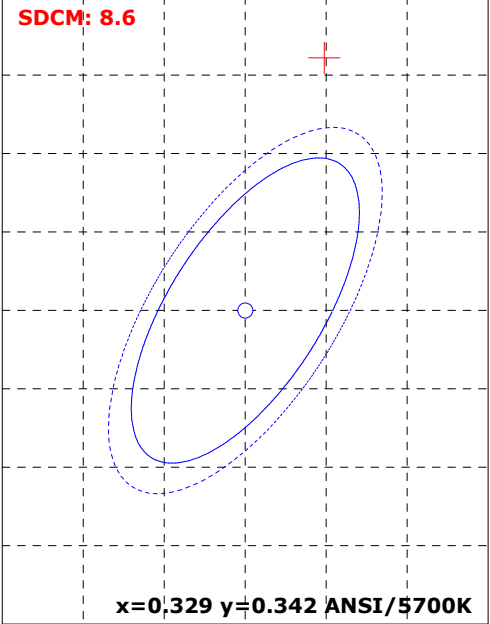
Manufacturer: Guangzhou Hotion Technology Co.,
Test unit:
Date of observation: 04/30/14



Spectrogram



SDCM



Color Parameter:

x: 0.3336 y: 0.3578 u: 0.2014 v: 0.3240 u': 0.2014 v': 0.4860
R_ratio: 29.8 % G_ratio: 43.6 % B_ratio: 26.7 % RedRatio: 15.3 % GreenRatio: 81.3 % BlueRatio: 3.4 %

Ra: 90.6 AvgR: 86.3
R1: 90.7 R2: 90.9 R3: 90.4 R4: 91.8 R5: 89.7 R6: 87.4 R7: 95.5 R8: 88.4
R9: 62.5 R10: 78.0 R11: 90.4 R12: 65.3 R13: 90.4 R14: 94.5 R15: 88.8

CCT: 5456 K Flux: 2543.192 lm PeakWave: 450.6 nm SDCM: 8.6
S/P: 2.1 CentralWave: 452.7 nm DominantWave: 555.0 nm CentroidWave: 559.0 nm
HalfWidth: 23.5 nm duv: 0.00783 purity: 7.5 % CQS: 93.1
LER(TM-30): 296.1 Ep: 8588.6 mw Rg: 99.0 Rf: 89.0
Red Ep: 2461.7 mw Near red Ep: 300.8 mw Near infrared Ep: 14.5 mw

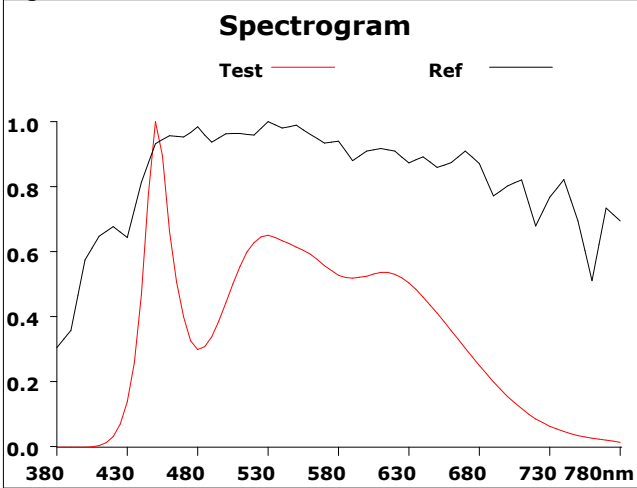
Electrical parameters:

Effic: 42.3 Lm/W Energy: 46.1 Effi: G
U: 219.7 V I: 0.447 A P: 60.060 W Pf: 0.610

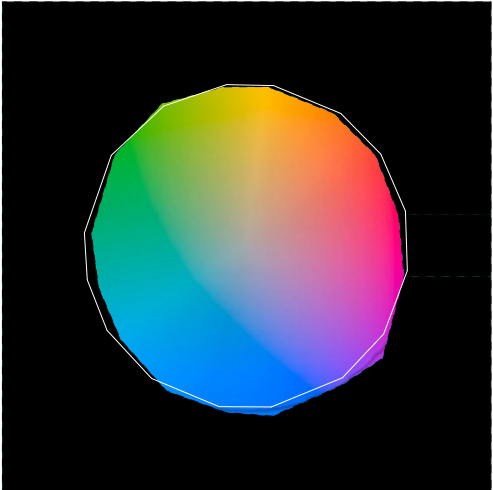
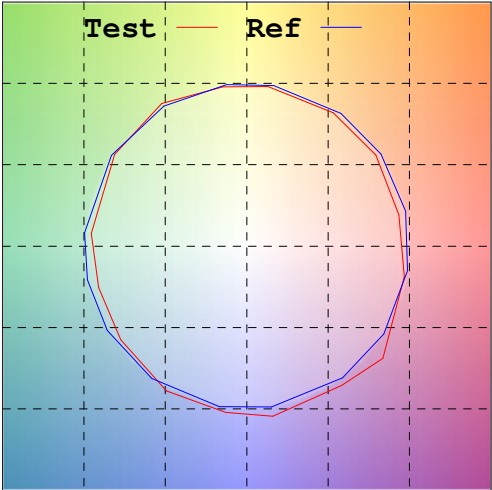
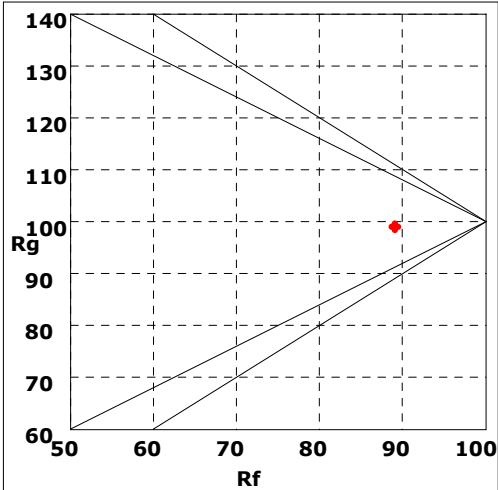
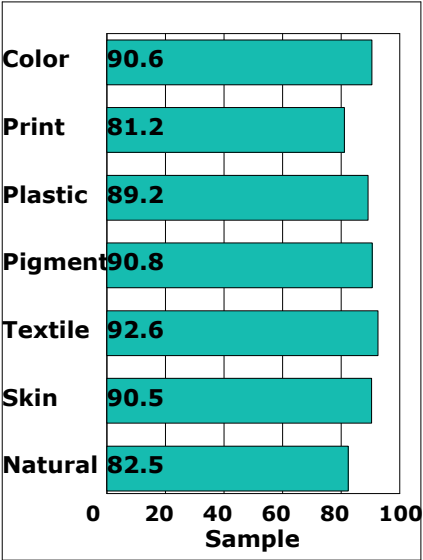
Product model:
Product number:
Tester:
Remarks:

Manufacturer: Guangzhou Hotion Technology Co.,
Test unit:
Date of observation: 04/30/14

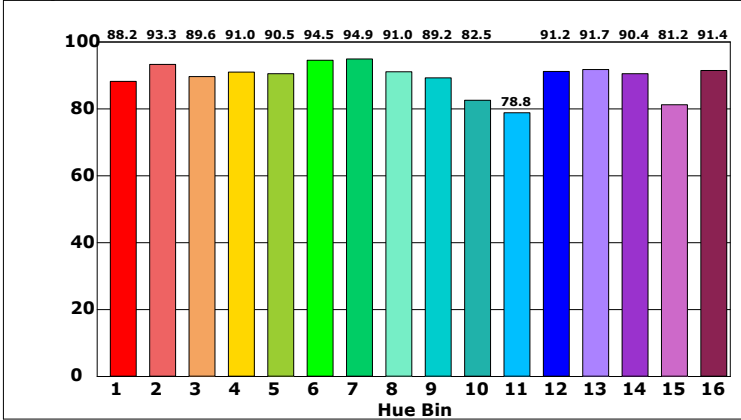
Rf: 89.0 CCT: 5456K u': 0.2014
Rg: 99.0 LER: 296.1 Duv: 0.00783 v': 0.4860



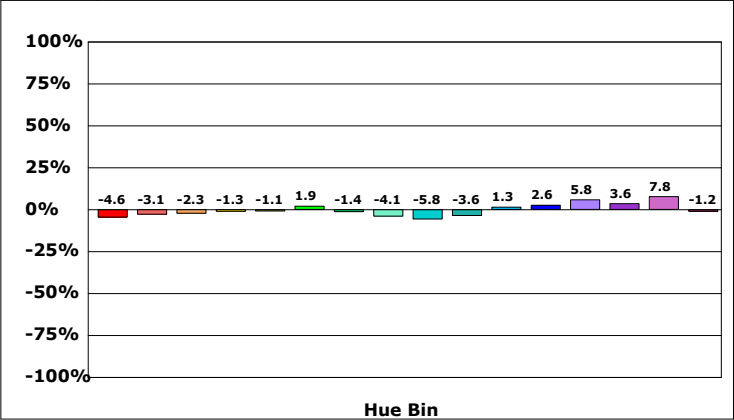
500			
Hue Bin	Rf	Chroma	Hue
1	88.2	-4.6%	-1.4%
2	93.3	-3.1%	1.2%
3	89.6	-2.3%	4.1%
4	91.0	-1.3%	3.5%
5	90.5	-1.1%	2.5%
6	94.5	1.9%	0.3%
7	94.9	-1.4%	-1.6%
8	91.0	-4.1%	-0.4%
9	89.2	-5.8%	5.9%
10	82.5	-3.6%	9.1%
11	78.8	1.3%	11.9%
12	91.2	2.6%	4.6%
13	91.7	5.8%	-0.4%
14	90.4	3.6%	-3.1%
15	81.2	7.8%	-12.8%
16	91.4	-1.2%	-4.0%



Rf by Bue



Chroma by Bue



Product model:
Product number:
Tester:
Remarks:

Manufacturer: Guangzhou Hotion Technology Co.,
Test unit:
Date of observation: 04/30/14

