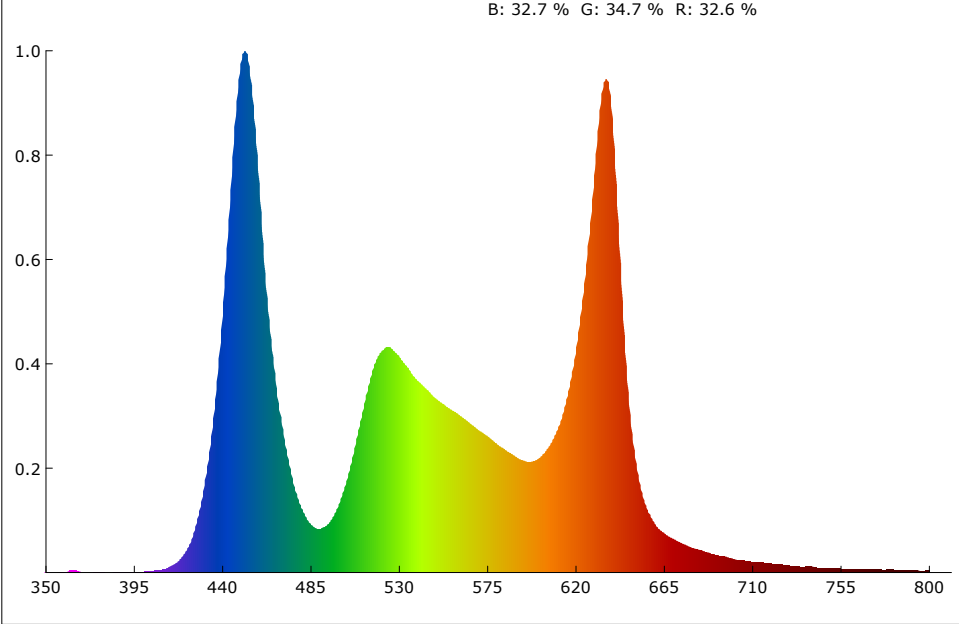
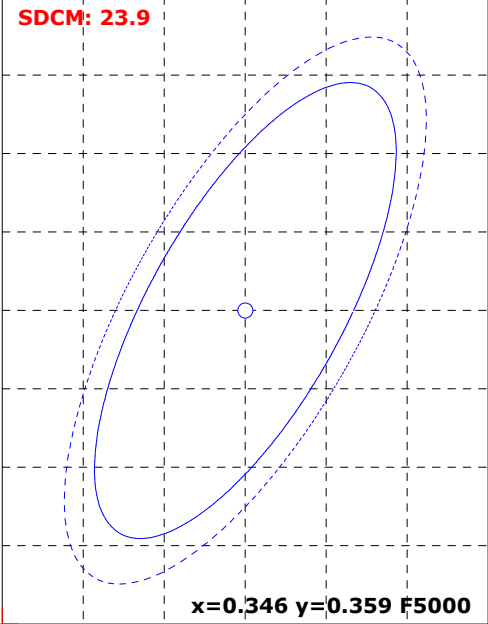


Spectrogram



SDCM



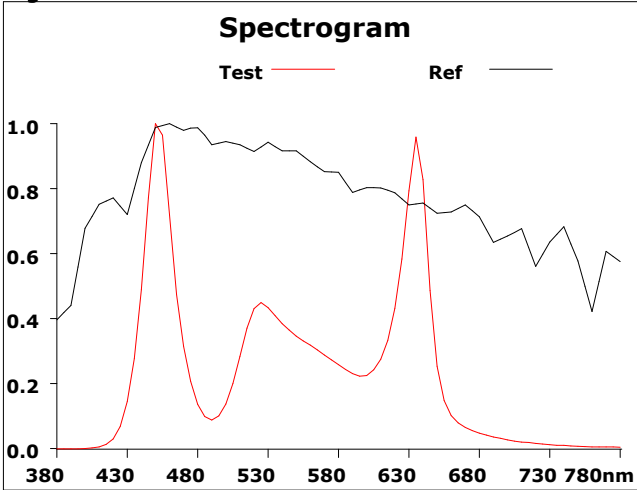
Color Parameter:

x: 0.3218	y: 0.2908	u: 0.2202	v: 0.2985	u': 0.2202	v': 0.4478		
R_ratio: 32.6 %	G_ratio: 34.7 %	B_ratio: 32.7 %	RedRatio: 21.2 %	GreenRatio: 74.6 %	BlueRatio: 4.2 %		
Ra: 68.5		AvgR: 59.8					
R1: 63.6	R2: 89.0	R3: 65.4	R4: 60.6	R5: 72.1	R6: 87.7	R7: 75.5	R8: 34.8
R9: -61.2	R10: 87.5	R11: 55.1	R12: 74.0	R13: 70.3	R14: 76.6	R15: 46.2	
CCT: 6220 K		Flux: 2635.980 lm	PeakWave: 452.1 nm	SDCM: 23.9			
S/P: 2.3		CentralWave: 452.1 nm	DominantWave: 0.0 nm	CentroidWave: 547.5 nm			
HalfWidth: 23.0 nm		duv: -0.02295	purity: 0.0 %	CQS: 79.4			
LER(TM-30): 263.6		Ep: 9998.6 mw	Rg: 118.6	Rf: 75.2			
Red Ep: 3220.2 mw		Near red Ep: 115.5 mw	Near infrared Ep: 12.2 mw				

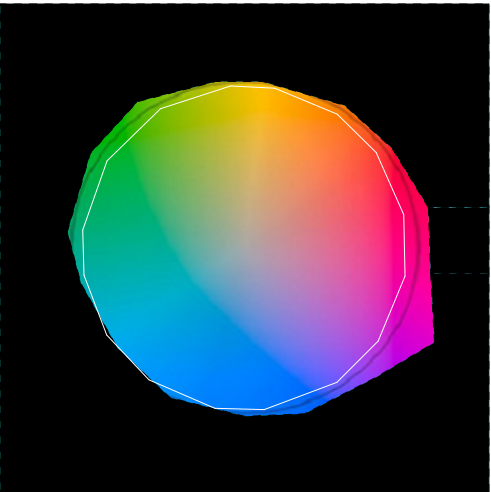
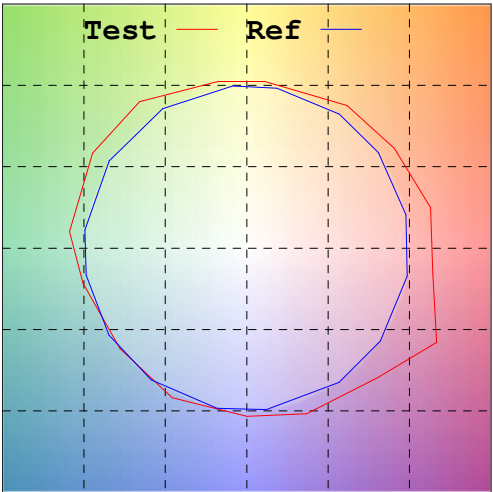
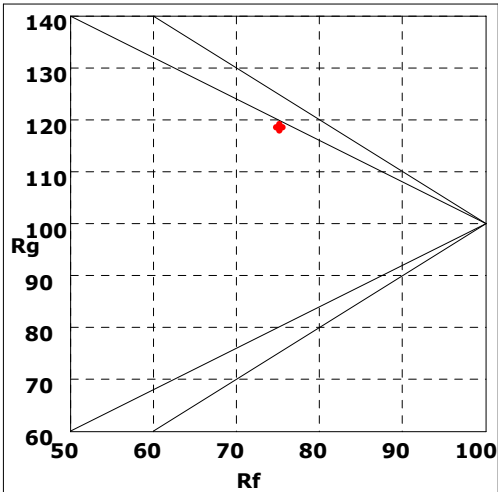
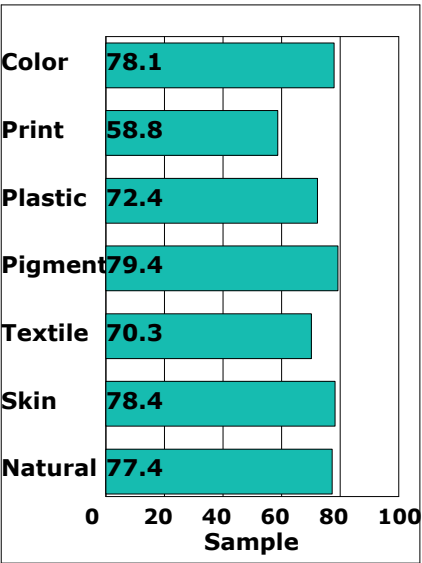
Electrical parameters:

Effic: 25.8 Lm/W	Energy: 28.1	Effi: G	
U: 220.9 V	I: 0.722 A	P: 102.000 W	Pf: 0.639

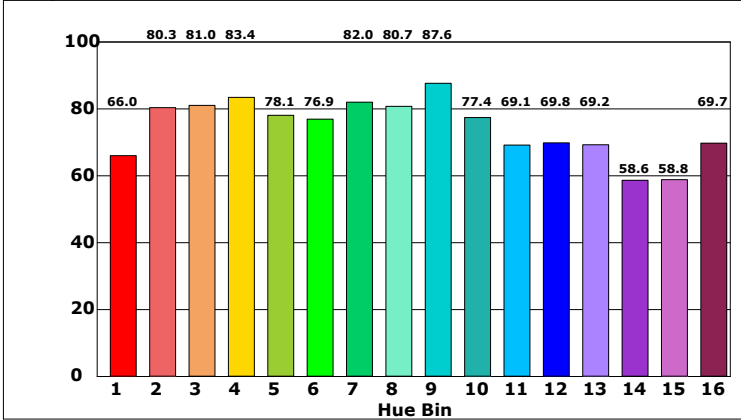
Rf: 75.2 CCT: 6220K u': 0.2202
Rg: 118.6 LER: 263.6 Duv: -0.02295 v': 0.4478



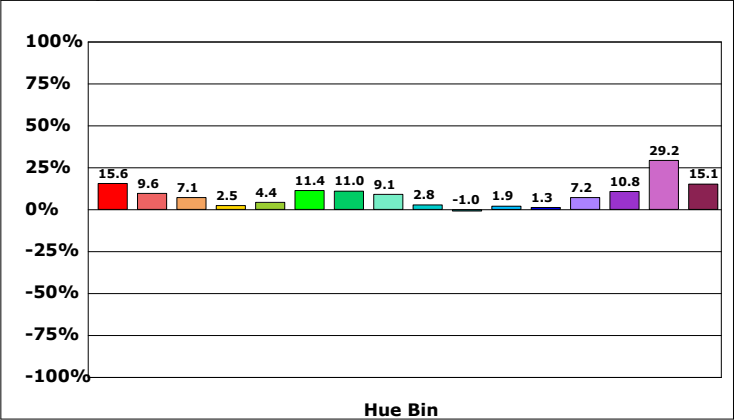
500			
Hue Bin	Rf	Chroma	Hue
1	66.0	15.6%	1.3%
2	80.3	9.6%	-3.3%
3	81.0	7.1%	-0.9%
4	83.4	2.5%	8.1%
5	78.1	4.4%	8.4%
6	76.9	11.4%	9.4%
7	82.0	11.0%	1.8%
8	80.7	9.1%	2.8%
9	87.6	2.8%	4.5%
10	77.4	-1.0%	10.8%
11	69.1	1.9%	17.1%
12	69.8	1.3%	18.9%
13	69.2	7.2%	23.8%
14	58.6	10.8%	21.4%
15	58.8	29.2%	18.5%
16	69.7	15.1%	4.7%



Rf by Bue

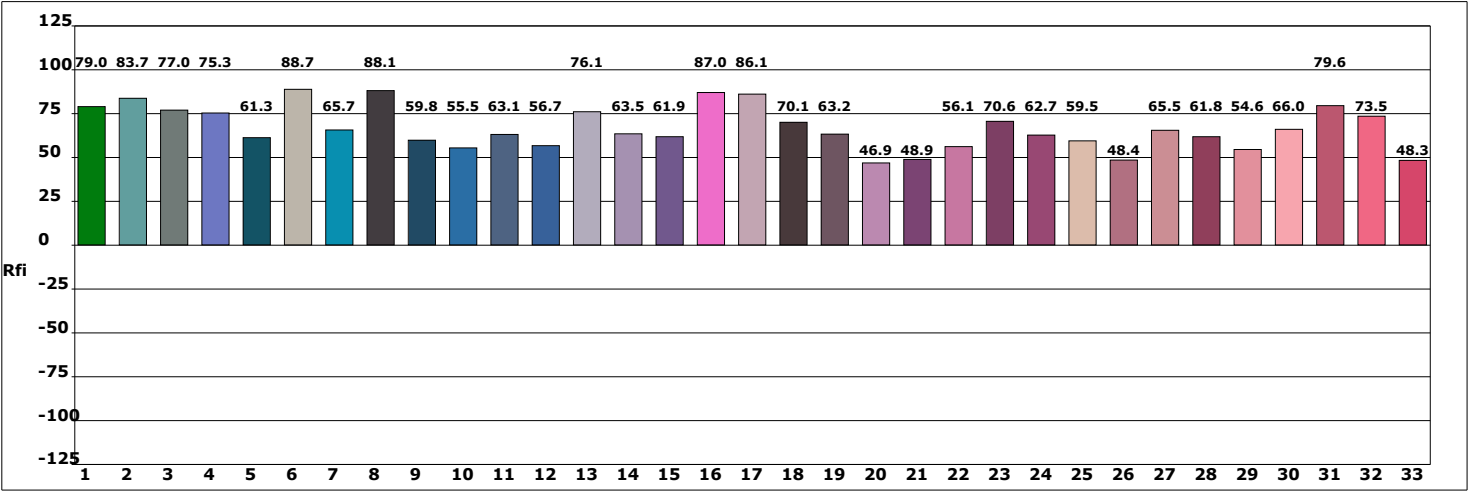
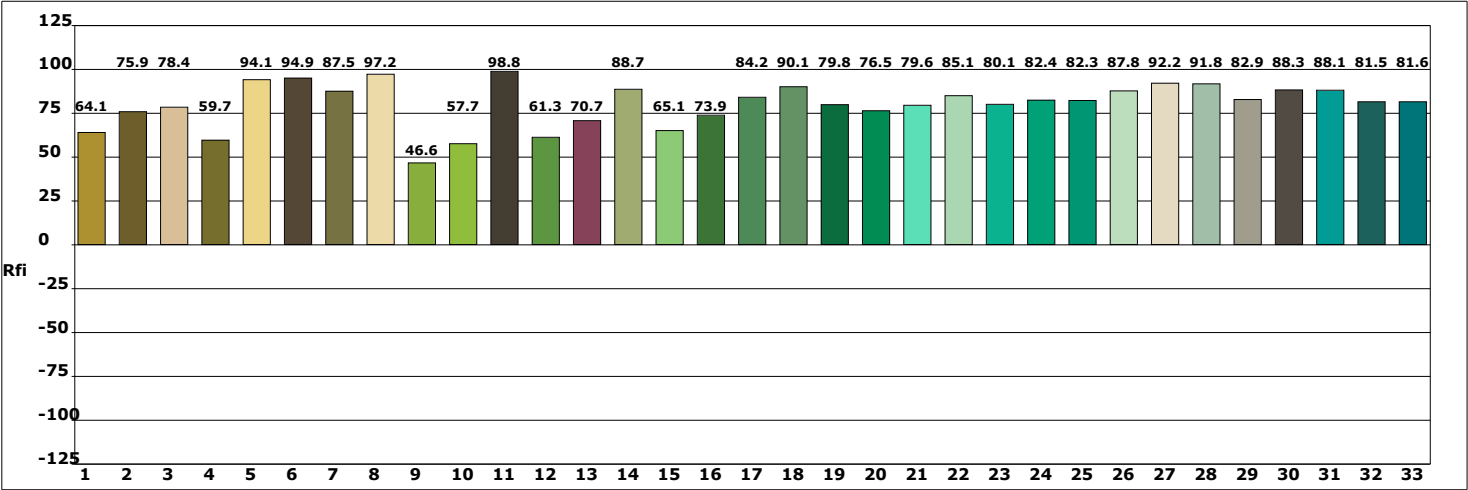
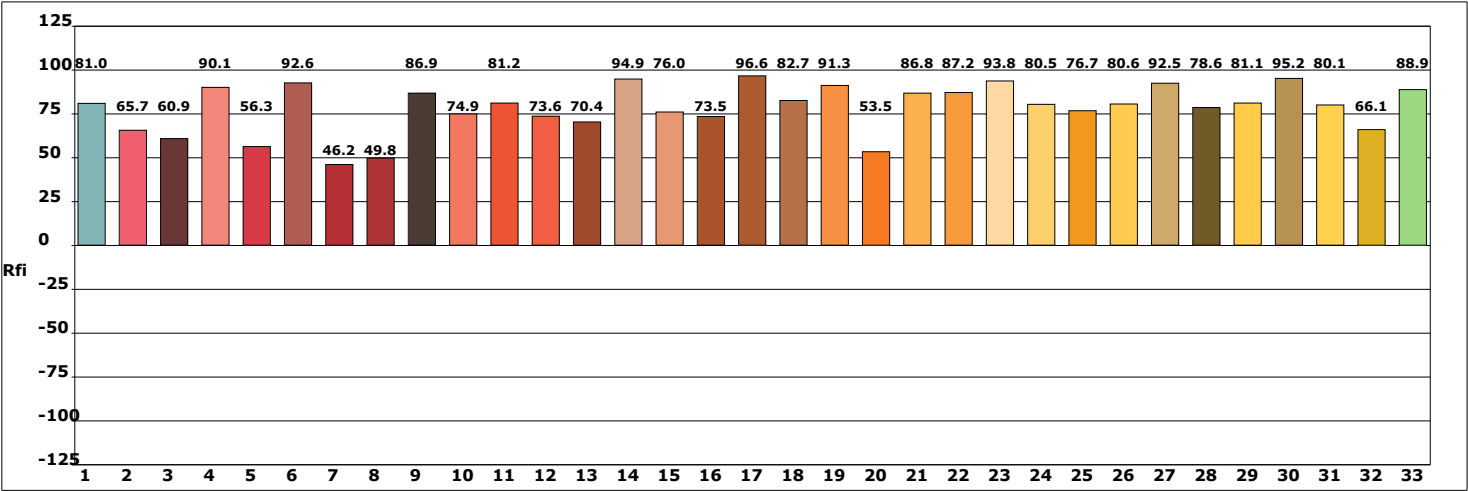


Chroma by Bue



Product model:
Product number:
Tester:
Remarks:

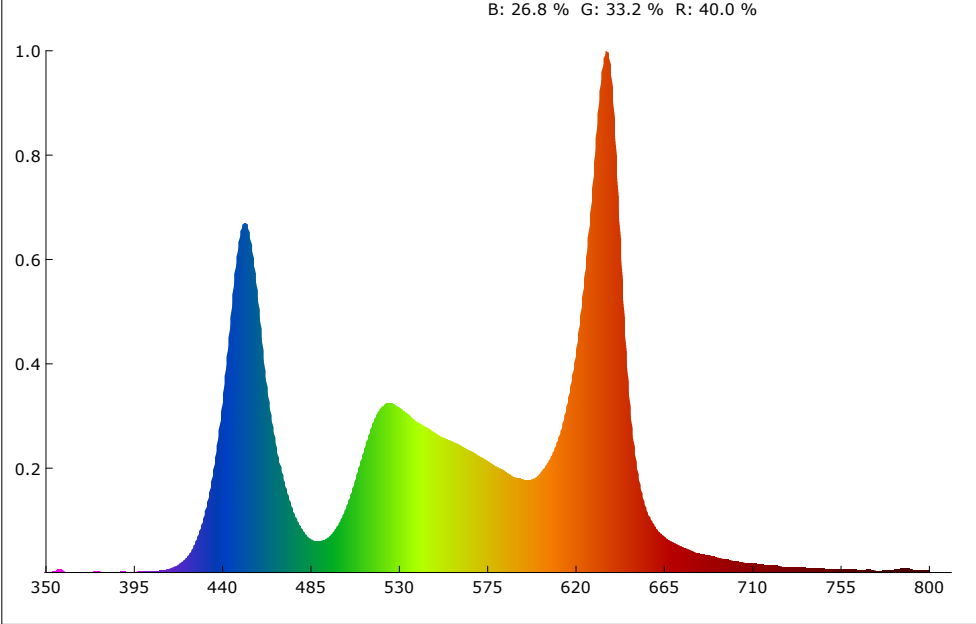
Manufacturer: Guangzhou Hotion Technology Co.,
Test unit:
Date of observation: 03/17/14



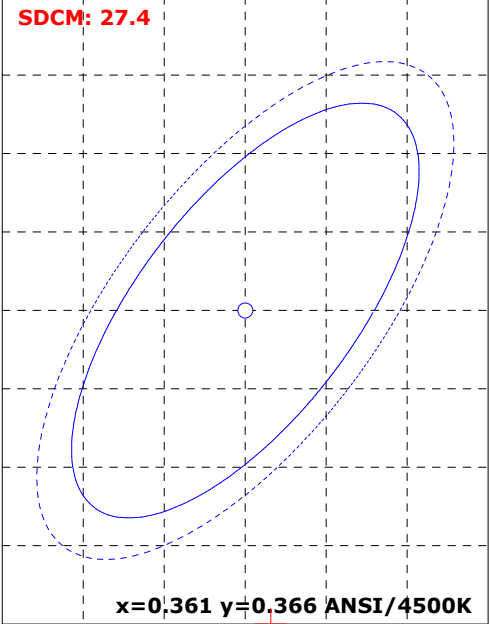
Product model:
Product number:
Tester:
Remarks:

Manufacturer: Guangzhou Hotion Technology Co.,
Test unit:
Date of observation: 03/17/14

Spectrogram



SDCM



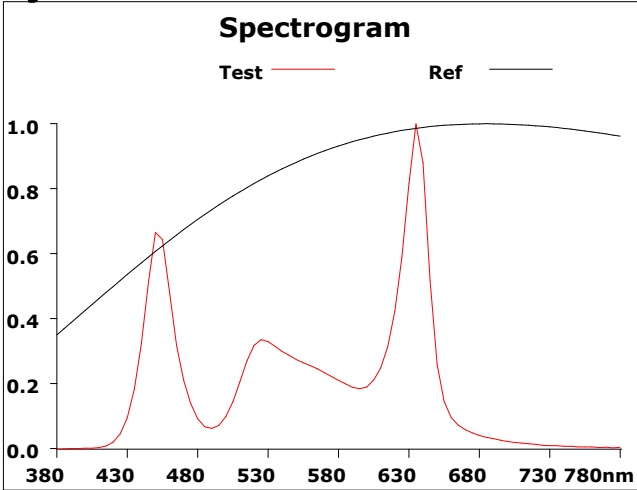
Color Parameter:

x: 0.3566	y: 0.3085	u: 0.2382	v: 0.3091	u': 0.2382	v': 0.4636
R_ratio: 40.0 %	G_ratio: 33.2 %	B_ratio: 26.8 %	RedRatio: 25.4 %	GreenRatio: 71.1 %	BlueRatio: 3.5 %
Ra: 65.6	AvgR: 57.2				
R1: 58.7	R2: 84.4	R3: 71.4	R4: 58.5	R5: 65.3	R6: 82.8
R7: 75.6	R8: 28.5	R9: -60.2	R10: 78.9	R11: 52.0	R12: 77.5
R13: 64.4	R14: 79.3	R15: 41.5			
CCT: 4232 K	Flux: 2625.410 lm	PeakWave: 636.5 nm	SDCM: 27.4		
S/P: 2.0	CentralWave: 633.9 nm	DominantWave: 0.0 nm	CentroidWave: 559.6 nm		
HalfWidth: 21.3 nm	duv: -0.02818	purity: 0.0 %	CQS: 73.9		
LER(TM-30): 265.3	Ep: 9897.2 mw	Rg: 120.9	Rf: 76.4		
Red Ep: 3900.5 mw	Near red Ep: 114.9 mw	Near infrared Ep: 18.5 mw			

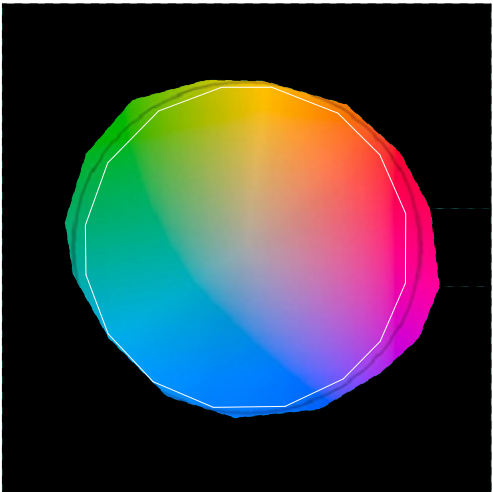
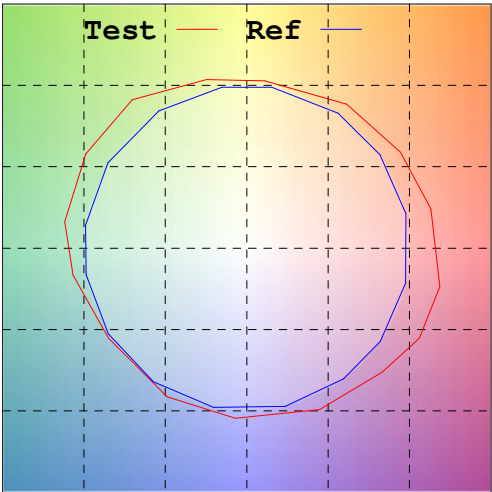
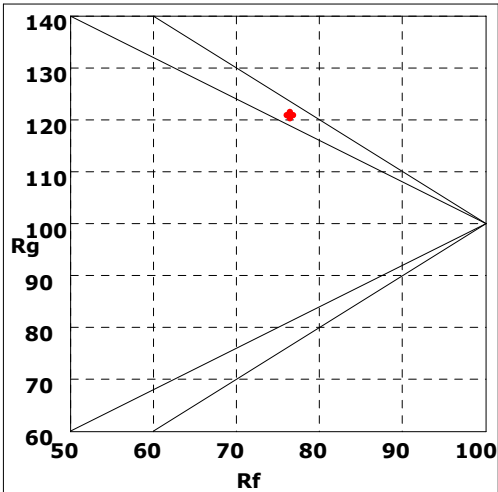
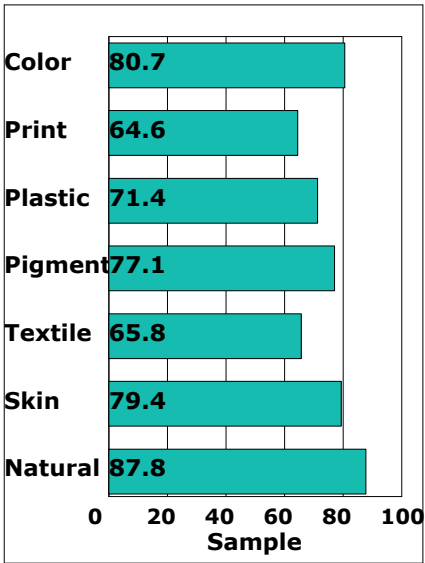
Electrical parameters:

Effic: 25.7 Lm/W	Energy: 27.9	Effi: G	
U: 220.8 V	I: 0.725 A	P: 102.300 W	Pf: 0.638

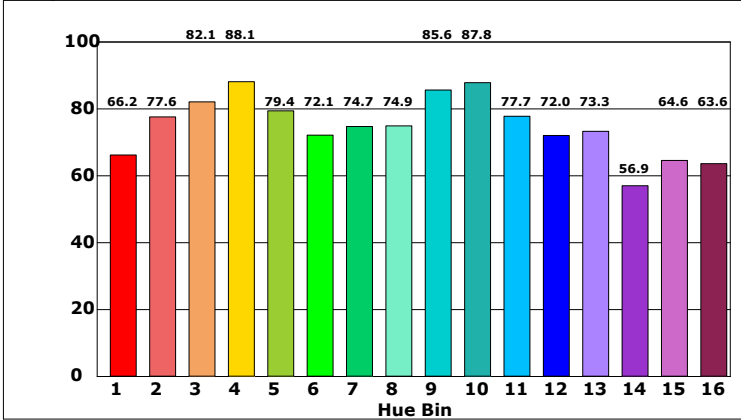
Rf: 76.4 CCT: 4232K u': 0.2382
Rg: 120.9 LER: 265.3 Duv: -0.02818 v': 0.4636



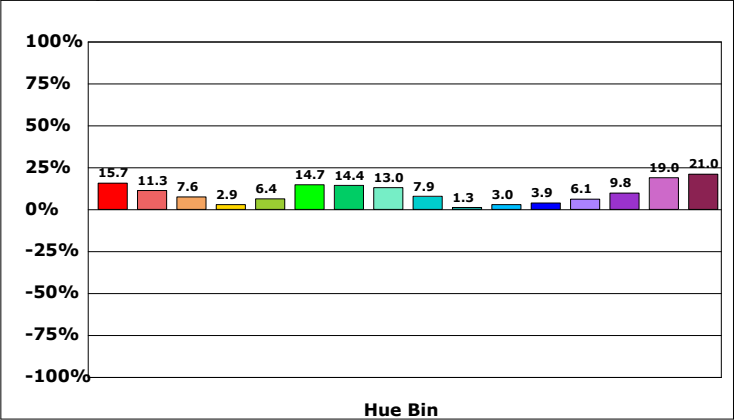
500			
Hue Bin	Rf	Chroma	Hue
1	66.2	15.7%	-0.2%
2	77.6	11.3%	-5.7%
3	82.1	7.6%	-1.4%
4	88.1	2.9%	5.1%
5	79.4	6.4%	8.3%
6	72.1	14.7%	9.7%
7	74.7	14.4%	3.1%
8	74.9	13.0%	0.3%
9	85.6	7.9%	-1.3%
10	87.8	1.3%	2.4%
11	77.7	3.0%	12.2%
12	72.0	3.9%	14.4%
13	73.3	6.1%	20.2%
14	56.9	9.8%	22.1%
15	64.6	19.0%	14.9%
16	63.6	21.0%	2.0%



Rf by Bue

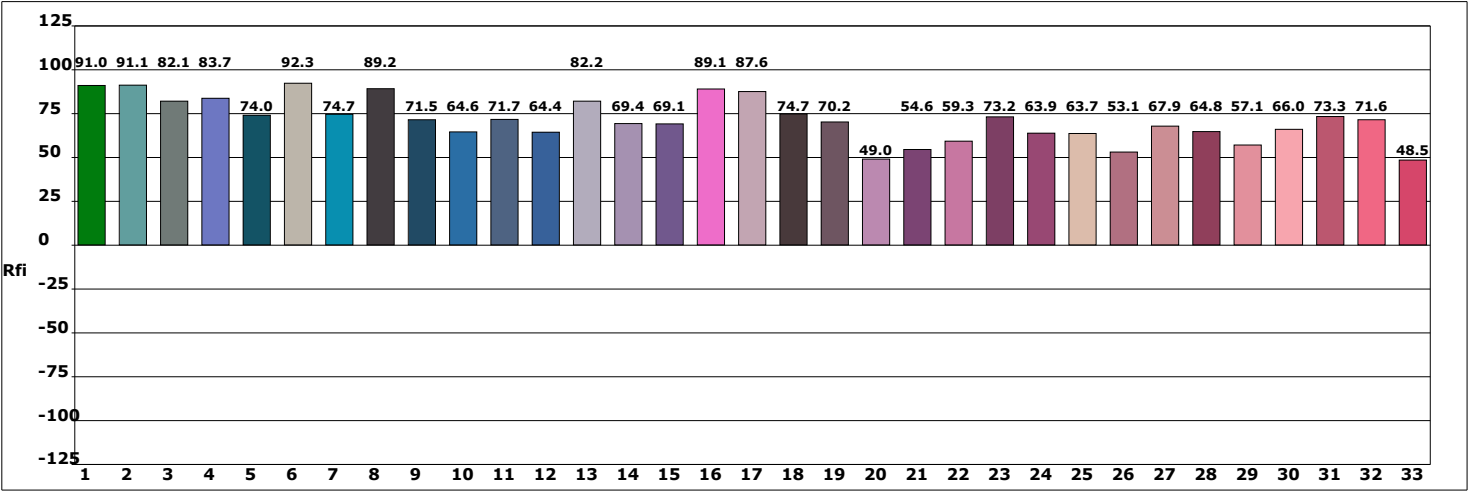
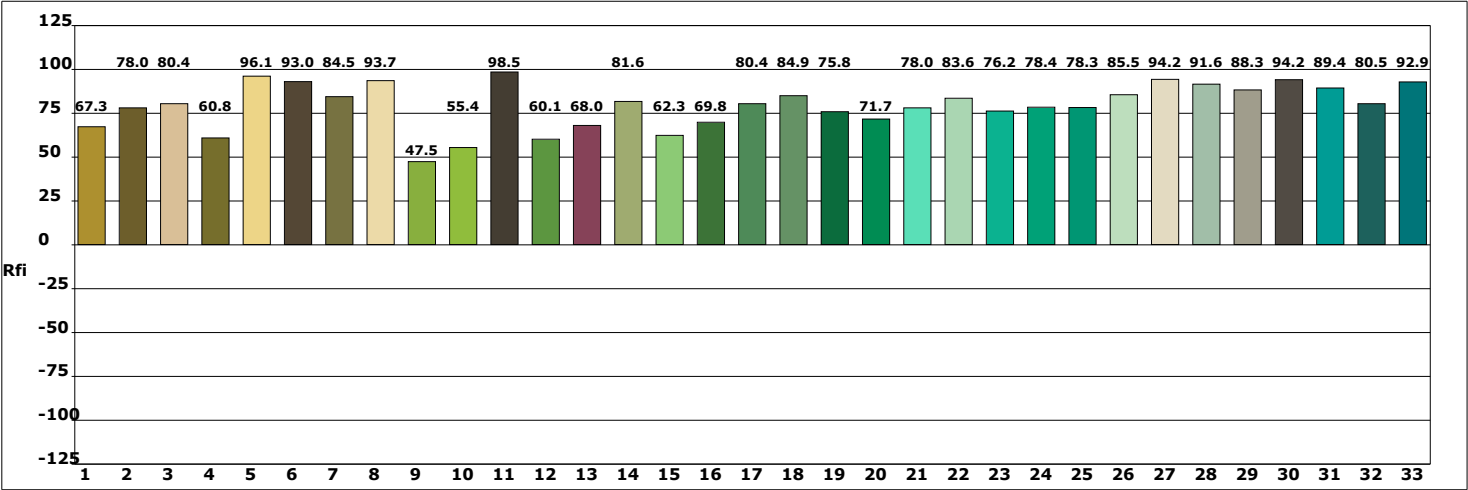
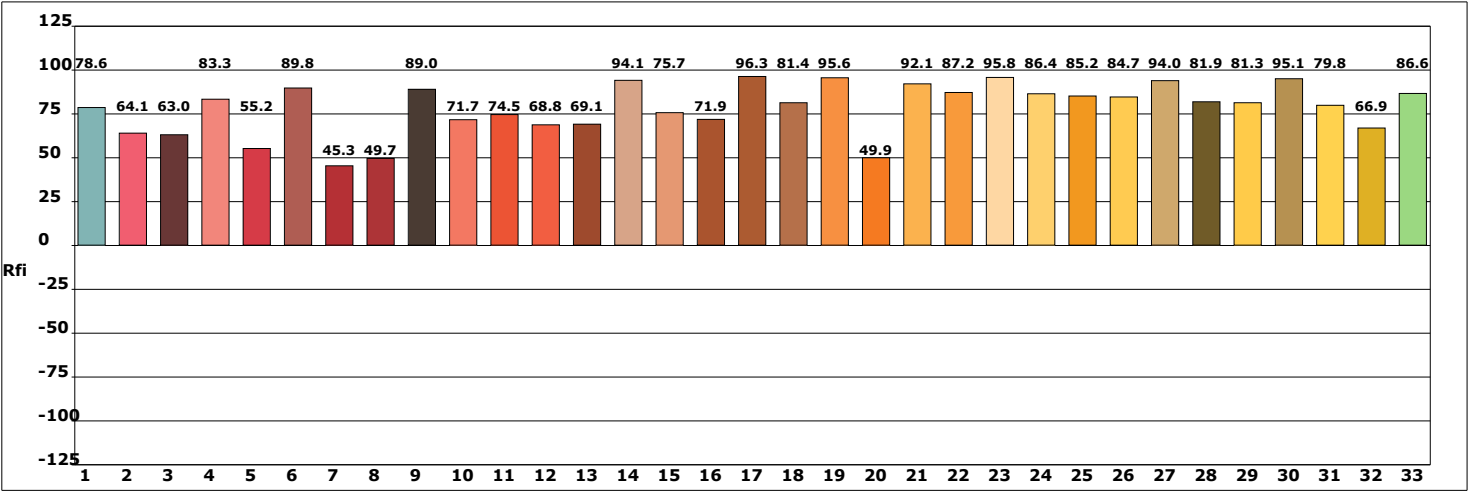


Chroma by Bue



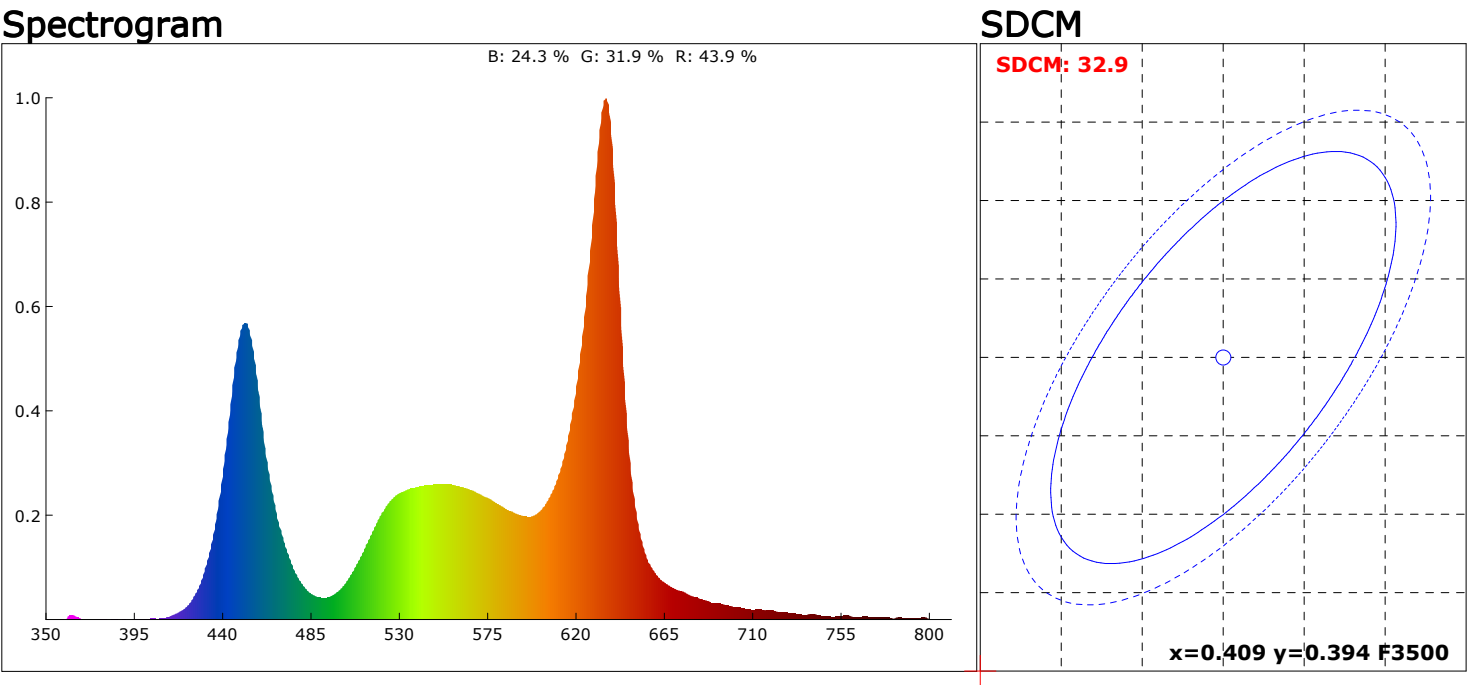
Product model:
Product number:
Tester:
Remarks:

Manufacturer: Guangzhou Hotion Technology Co.,
Test unit:
Date of observation: 03/17/14



Product model:
Product number:
Tester:
Remarks:

Manufacturer: Guangzhou Hotion Technology Co.,
Test unit:
Date of observation: 03/17/14



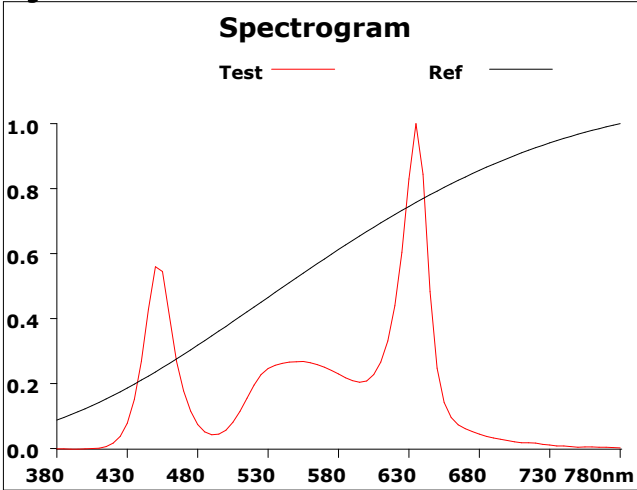
Color Parameter:

x: 0.3843	y: 0.3127	u: 0.2569	v: 0.3135	u': 0.2569	v': 0.4702		
R_ratio: 43.9 %	G_ratio: 31.9 %	B_ratio: 24.3 %	RedRatio: 27.9 %	GreenRatio: 69.1 %	BlueRatio: 3.1 %		
Ra: 75.7	AvgR: 69.4						
R1: 70.3	R2: 85.0	R3: 79.0	R4: 75.8	R5: 75.2	R6: 83.3	R7: 86.7	R8: 50.6
R9: -8.3	R10: 82.9	R11: 74.9	R12: 75.5	R13: 72.6	R14: 83.3	R15: 54.5	
CCT: 3234 K	Flux: 2033.116 lm	PeakWave: 635.5 nm	SDCM: 32.9				
S/P: 1.7	CentralWave: 633.3 nm	DominantWave: 0.0 nm	CentroidWave: 567.0 nm				
HalfWidth: 21.7 nm	duv: -0.03392	purity: 0.0 %	CQS: 62.6				
LER(TM-30): 269.2	Ep: 7553.1 mw	Rg: 120.7	Rf: 76.3				
Red Ep: 3259.8 mw	Near red Ep: 104.9 mw	Near infrared Ep: 8.5 mw					

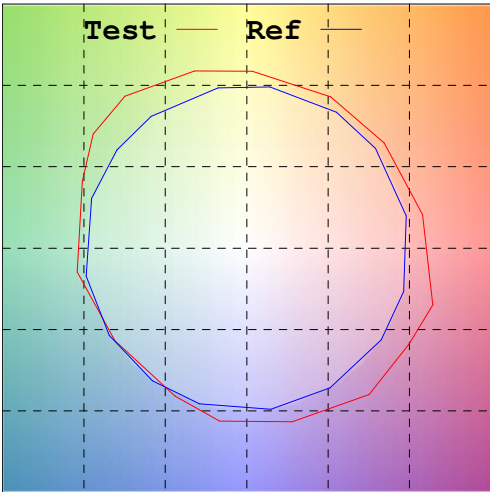
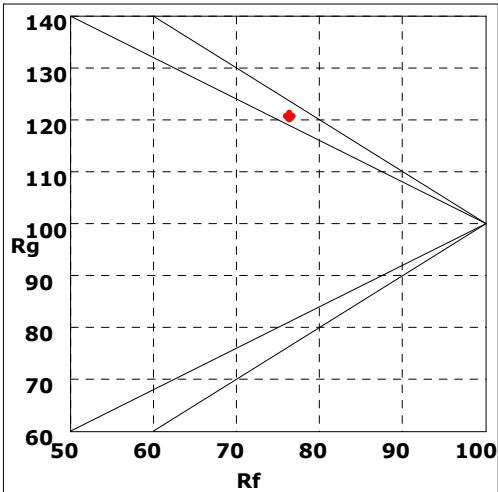
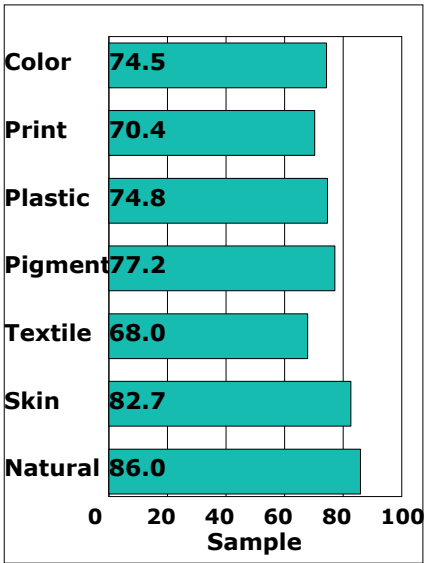
Electrical parameters:

Effic: 24.3 Lm/W	Energy: 26.5	Effi: G	
U: 220.9 V	I: 0.604 A	P: 83.640 W	Pf: 0.626

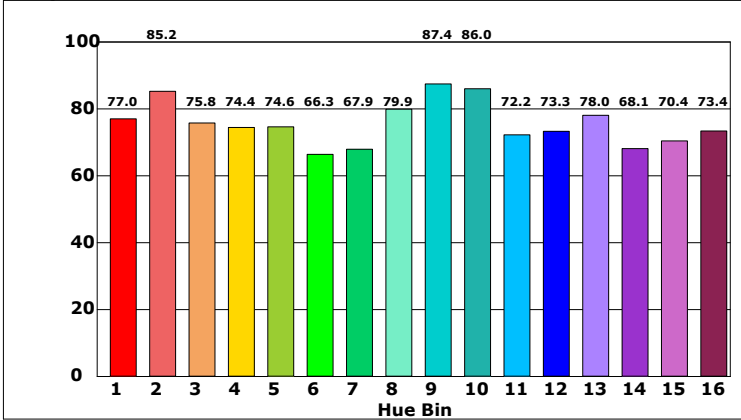
Rf: 76.3 CCT: 3234K u': 0.2569
Rg: 120.7 LER: 269.2 Duv: -0.03392 v': 0.4702



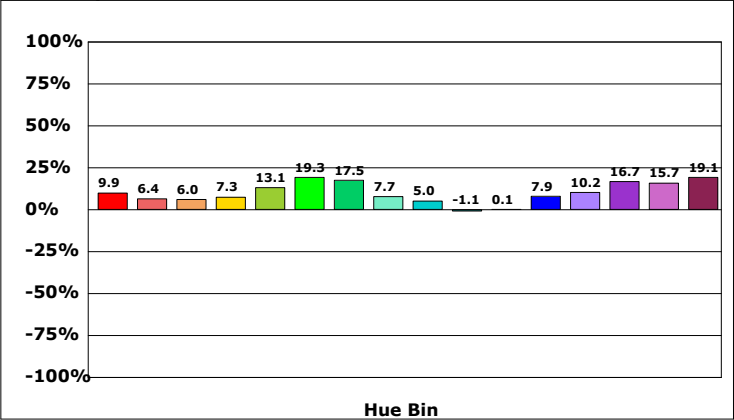
500			
Hue Bin	Rf	Chroma	Hue
1	77.0	9.9%	-1.1%
2	85.2	6.4%	-0.2%
3	75.8	6.0%	8.2%
4	74.4	7.3%	12.6%
5	74.6	13.1%	12.0%
6	66.3	19.3%	6.6%
7	67.9	17.5%	-0.1%
8	79.9	7.7%	-8.9%
9	87.4	5.0%	-3.7%
10	86.0	-1.1%	4.8%
11	72.2	0.1%	16.9%
12	73.3	7.9%	14.2%
13	78.0	10.2%	11.4%
14	68.1	16.7%	17.8%
15	70.4	15.7%	7.6%
16	73.4	19.1%	-4.6%



Rf by Bue

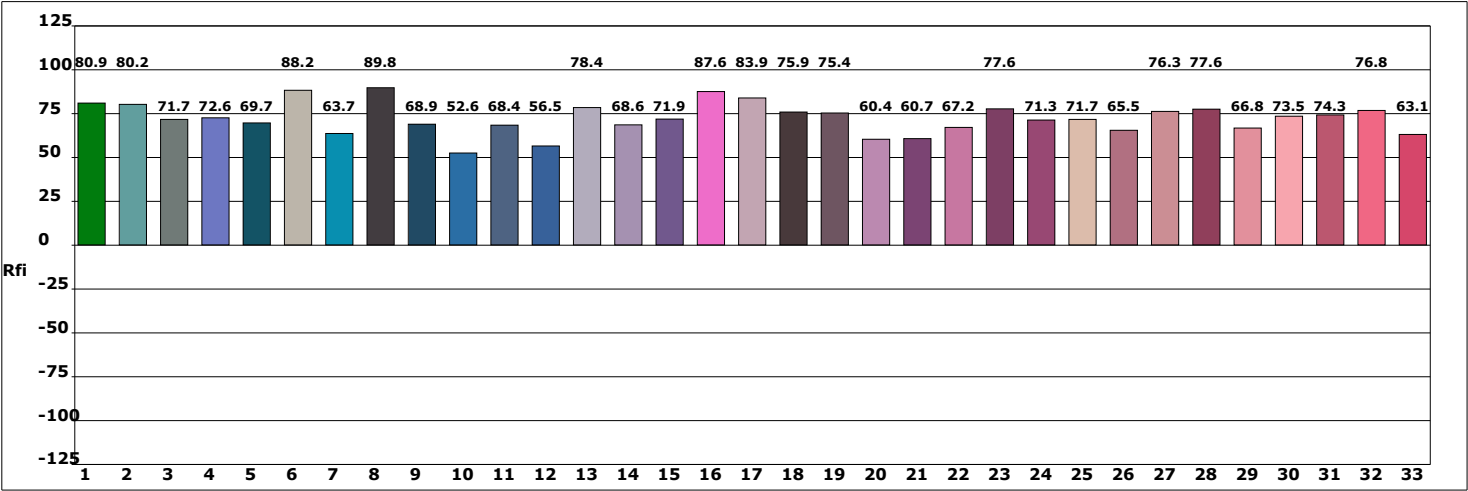
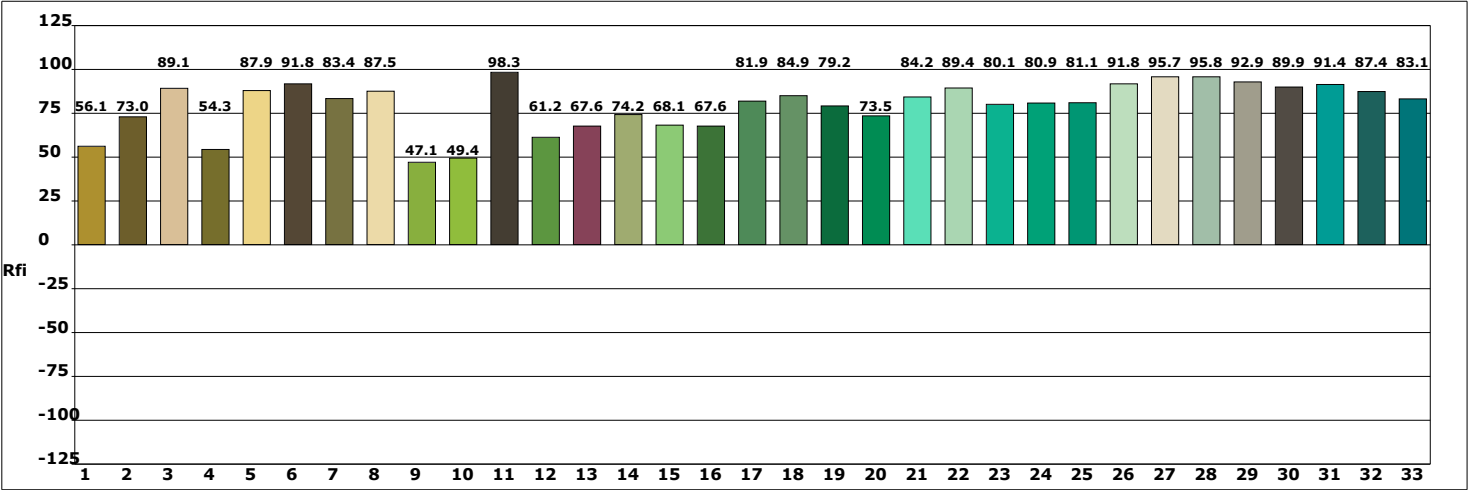
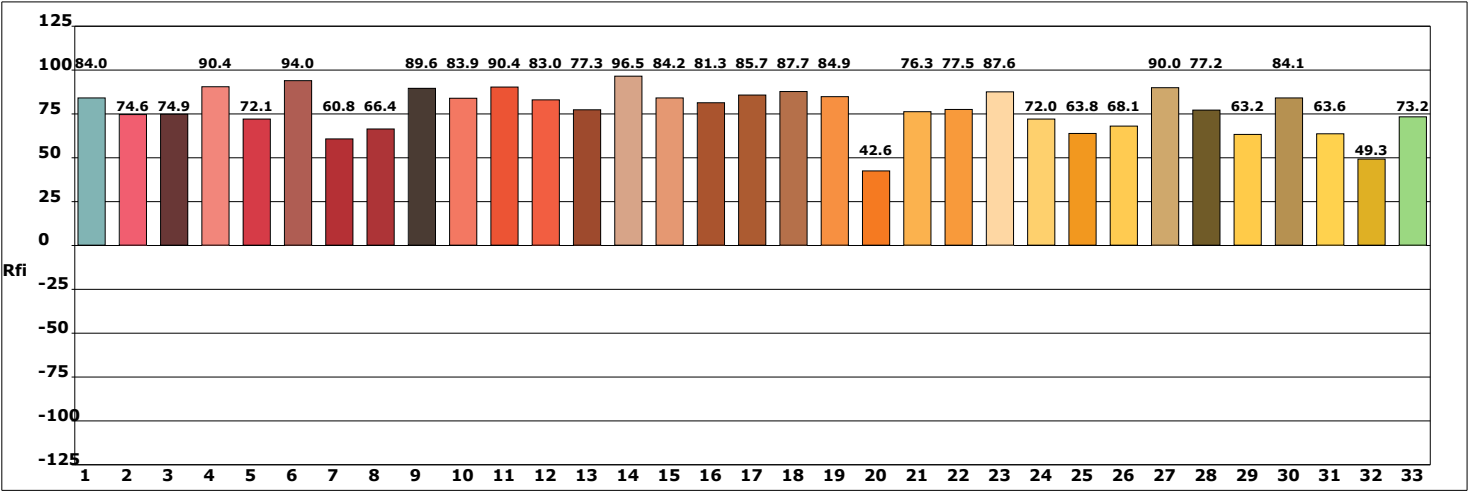


Chroma by Bue



Product model:
Product number:
Tester:
Remarks:

Manufacturer: Guangzhou Hotion Technology Co.,
Test unit:
Date of observation: 03/17/14



Product model:
Product number:
Tester:
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Manufacturer: Guangzhou Hotion Technology Co.,
Test unit:
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