The Sign Syndicate.com - June 2013 Project Analysis

Questions? Contact us admin@thesignsyndicate.com

MANUFACTURER	OPERATE HOURS	**GLASS / MODS USED	PRODUCT COST	***TOTAL LIGHT SOUCE COST	VOLTS	AMPS	WATTS	FOOT CANDLE HIGH	FOOT CANDLE LOW	CURRENT FOOT CANDLE AVG.	INITAL FC FROM START	FC LOSS vs. INITIAL FC	FC AVG. LAST PERIOD	STATUS	MODIFY DATE	SECTION TEMP. F	FC CHANGE FROM PREVIOUS PERIOD	*15 channel letters, 10 hrs a day annual cost	FOOT CANDLES PER WATT
GE (Power White)	33115	12 mods	$27 per foot 2/foot	$162.00	115.3	0.20	14	126	108	117	195.5	40.15%	120.5	Active		97	2.90%	$69.35	8.36
Elite Lamp (13mm 65D 30ma)	33115	7'	$5.25 foot	$31.50	116.3	0.21	23	162	144	153	282.5	45.84%	127.5	Active		104	-20.00%	$113.93	6.65
EGL Veritas (1watt)	11432	12 LEDs		$0.00	115	0.20	15	187	165	176	181	2.76%	183	Active	Activated 6/6/11	99	3.83%	$74.30	11.73
Principal LED (The Spec)	12672	12 mods			116.1	0.20	15	145	130	137.5	206.5	33.41%	149	Active	Activated 04/10/11	100	7.72%	$74.30	9.17
Axiom (AX-LE3)	33115	12 mods	$4.50 per mod 2/foot	$54.00	116	0.30	18	130	119	124.5	221	43.67%	125.5	Active		99	0.80%	$89.16	6.92
Ventex (Venbrite VL-w200)	23862	12 mods	$14.38 a foot 2/foot	$86.28	118	0.11	12	141	123	132	213	38.03%	135.5	Active		100	2.58%	$59.44	11.00
International Light technologies	6898	12 Mods	$5.25 per ft. - 2/ft.	$34.20	116.5	0.17	12	209	187	198	193.5	-2.33%	197.5	Active	Added 11/15/11	97	-0.25%	$59.44	16.50
EGL (13mm DL71 30ma)	33115	7'			115.3	0.21	23	144	135	139.5	264	47.16%	110.5	Active		105	-26.24%	$113.93	6.07
AXIOM (AXLE9XB-65)	6308	12 mods	$4.00 per ft 2/ft	$24.00	114.7	0.22	23	186	167	176.5	178	0.84%	174.5	Active		100	-1.15%	$113.93	7.67
Light Engines (1x12)	12672	6 Mods			114.2	0.25	28	241	179	210	228.5	8.10%	219	Active	Activated 04/10/11	101	4.11%	$138.70	7.50
EGL (15mm 6500 30ma)	33115	7'			114.3	0.18	20	75	64	69.5	155.5	55.31%	63	Active		106	-10.32%	$99.07	3.48
EGL (15mm DL 71 60ma)	33115	7'			116.2	0.36	40	209	200	204.5	393.5	48.03%	185	Active		109	-10.54%	$188.24	5.11
	0																		
	0																		
Permlight (El Plato)	26918	6 Mods	$17.99 per mod 1/foot	$107.94	116.6	0.33	23	180	159	169.5	267.5	36.64%	167.5	Active		100	-1.19%	$113.93	7.37
Sloan LED (GW3)	26142	8 Mods	$11.99 Per Mod	$95.92	116	0.27	21	97	89	93	138	32.61%	97.5	Active		100	4.62%	$104.02	4.43
	0																		
	0																		
Permlight Twister Nitro	24404	12 mods	$6.08 per mod	$72.96	118	0.23	17	114	104	109	157.5	30.79%	111	Active		96	1.80%	$84.21	6.41
Lumitext (LumiString)	8022	14 Mods	$1.98 per module	$27.72	116.5	0.13	11	139	127	133	139.5	4.66%	127.5		Added 11/22/11	95	-4.31%	$54.48	12.09
	0																		
Sylvania H2F Chain HE	20954	10 Mods	$20.85 per mod	$208.50	116	0.28	18	211	193	202	236	14.41%	206	Active		93	1.94%	$89.16	11.22
	0																		
FMS Neon (12mm Brillite 30ma)	0	7'			116.1	0.20	22	227	215	221				Inactive	Added 06/07/13				10.05

AMBIENT TEMPERATURE: 73 F | 02/08/13 +1250 hrs

* This figure reflects the annual consumption rate it would cost a client to run the sign 10 hours in a 365 day period.

Formula: Watts x 15 x 10 hrs. x 365 days x $.095 / 1050 (HPF)

** Glass footage has one extra foot to account for electrodes but is not reflected in cost. We have 6 linear footage of glass, but using 7 to account for the electrodes.

***Total cost for Neon lamp or LED modules only, wholesale.

OPERATE HOURS - Number of operating hours this product has been used in the test. Each product is cycled twice per day i.e. on 10 hours, off 2, turned on 10 hours off 2 in a 24 hour period

MODS USED - Number of LED modules used for that test compartment of that product

COST - The cost at a wholesale price per modules or by the foot

TOTAL COST - The total cost of modules used for that compartment

VOLTS - Volts to LED Power Supply at individual recording

AMPS - Amp draw at time of individual recording at 100% efficiency

WATTS - The energy consumption running at 100% efficiency and not taking the power supplies efficiency into account.

FOOT CANDLE MEASURING-----

For The Great White Hope Project we measure a small surface area on the face of each acrylic lens in the same area that is 6" x 7". We take the high and low measurement of each lens's surface light measurements in Foot Candles and average them out.

FOOT CANDLE HIGH - The highest light surface measurement taken on the acrylic lens

FOOT CANDLES LOW - The highest lowest surface measurement taken on the acrylic lens

CURRENT FOOT CANDLE AVG - The average between the high and low light measurements on the acrylic lens surface

INITIAL FC FROM START - This is the initial recorded light measurements for that compartment when the product entered into the test

FC LOSS VS INITIAL FC - The current light measurements versus the initial light measurements from the start

STATUS - Whether the product is active or inactive in the comparison

MODIFY DATE - The date when the product was activated or deactivated from the test

FC LOSS VS 1 MONTH AGO - The current light measurements vs the measurements from the previous month or evaluation

15 CHANNEL LETTER, 10 HRS A DAY ANNUAL COST - This is where we put this light source into a scenario where we multiply the single light source by 15 to simulate 15 letters. We then add in the cost of operation for a year running at 10 hours a day and on for 365 day a year. WATTS x 15 (simulated letters) x 1.15 (LED Power Supply efficiency averaged to 85%) x 10 (hours) x 365 (days a year) x $.95 (Kwh) / 1050 (HPF, Power Correction) =

FOOT CANDLES PER WATT - The measurement of surface foot candles per watt, **Current Foot Candle AVG / Watts** =

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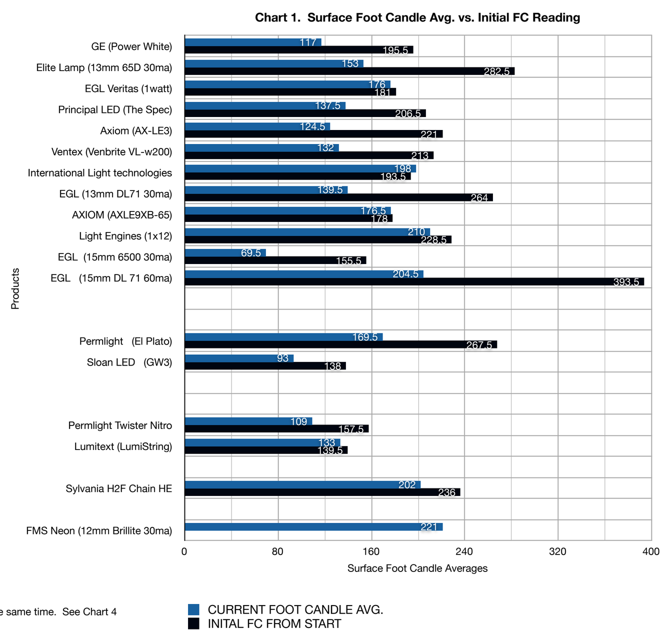
PRODUCT LIST LINK

HRS LAST MONTH	HRS THIS MONTH	TOTAL OPERATION HOURS
31865	1250	33115
31865	1250	33115
10182	1250	11432
11422	1250	12672
31865	1250	33115
22612	1250	23862
0		0
31865	1250	33115
5058	1250	6308
11422	1250	12672
31865	1250	33115
31865	1250	33115
0		0
0		0
25668	1250	26918
24892	1250	26142
0		0
0		0
23154	1250	24404
6772	1250	8022
0		0
19704	1250	20954
0		0
0	0	0

Chart 1. Surface Foot Candle Avg. vs. Initial FC Reading



*Note: Not all products started at the same time. See Chart 4

Chart 2. Foot Candles per Watt

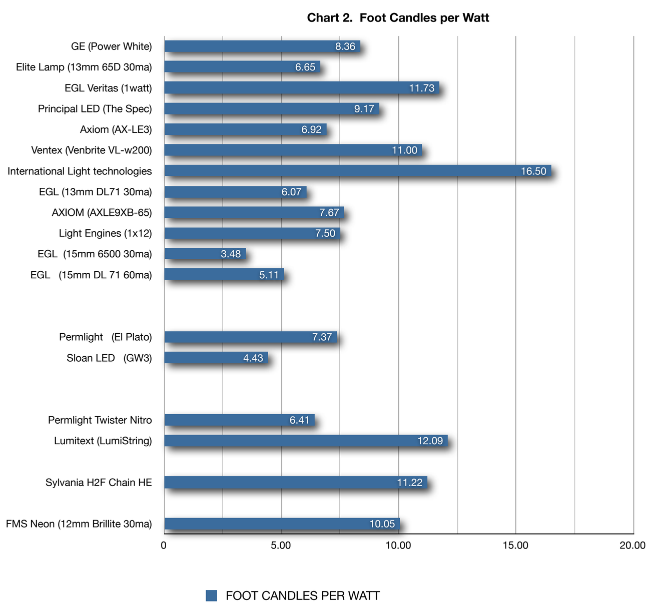
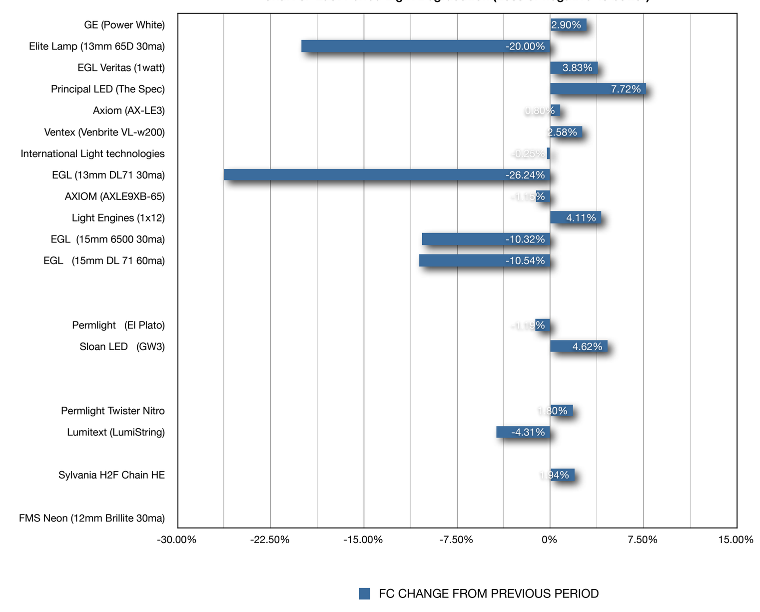
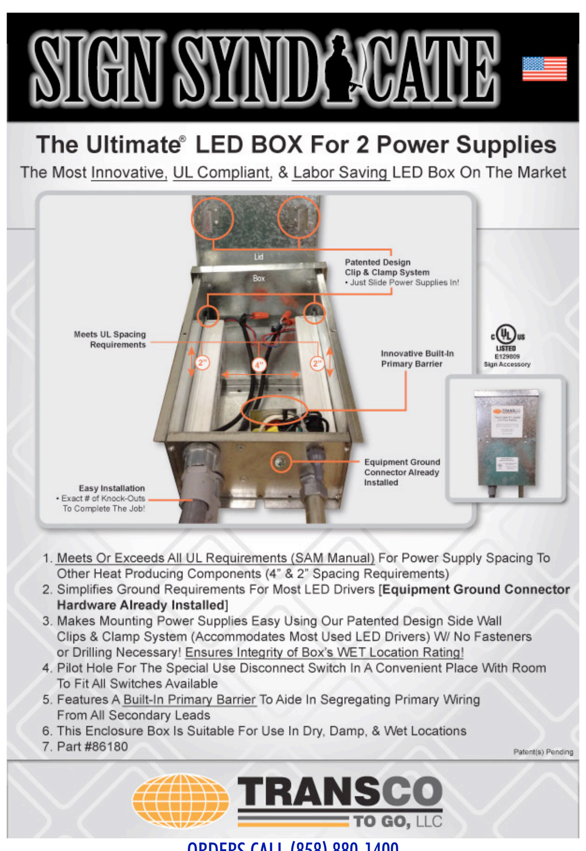


Chart 3. Last Period Light Degradation (Less or negative is better)





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Surface Foot Candle Averages Over Project Span

PRODUCT	NOV 08'	DEC 08'	JAN 09'	FEB 09'	MAR 09'	APRIL 09'	MAY 09'	JUNE 09'	JULY 09'	AUG 09'	SEP 09'	OCT 09'	Nov 09'	DEC 09'	JAN 10'	FEB 10'	Mar 10, 20	APRL 10'	MAY 10'	JUN 10'	JUL 10'	AUG 10'	SEPT 10'	OCT 10'
AMBIENT TEMPERATURE																								
PRODUCT	NOV 08'	DEC 08'	JAN 09'	FEB 09'	MAR 09'	APRIL 09'	MAY 09'	JUNE 09'	JULY 09'	AUG 09'	SEP 09'	OCT 09'	Nov 09'	DEC 09'	JAN 10'	FEB 10'	Mar 10, 20	APRL 10'	MAY 10'	JUN 10'	JUL 10'	AUG 10'	SEPT 10'	OCT 10'
GE (Power White)	196.5	193	193	191	184.5	187	182.5	180	176.5	164.5	159.5	155.5	152	156	152	145	148.5	141	138.5	135	125.5	126	126	130
Elite Lamp (13mm 65D 30ma)	282.5	253	217.5	231.5	240	222	227	223.5	228	223	218	194	196.5	144	194.5	196	195.25	189	194	187.5	192.5	188.5	186	172
EGL Veritas																								
Principal LED (The Spec)																								
Axiom (AX-LE3)	221	220	215.5	212.5	207.5	201	198	197	193.5	184.5	181.5	177.5	177	175	172	168	170	166	163	162	157	153.5	152	151.5
Ventex Venbrites													213	223.5	214	211	212.5	208	204.5	200	188.5	182	181	181
EGL (13mm DL71 30ma)	264	135	196.5	210.5	222	206.5	213.5	205.5	211.5	207	202	188	189	131.5	182	180	181	177	175.5	175.5	180	175.5	174.5	163.5
Axiom (AXLE9XB-65)																								
Light Engines (1x12)																								
EGL (15mm 6500 30ma)	155.5	138.5	115	118	121	113.5	116	113	112.5	108.5	105	99	99	75.5	103	104	103.5	102	131	143	89	85	87	86
EGL (15mm DL 71 60ma)	393.5	362	339.5	342.5	344	330	333.5	310	310.5	299.5	293.5	287.5	283.5	191.5	264.5	275.5	270	260	265	258.5	258.5	244.5	253	247.5
International Light Tech																								
Permlight (El Plato)									267.5	244.5	237.5	237.5	239.5	239	235	232.5	231	229.5	227	219	216.5	208	210	208
Sloan LED (GW3)									138	137	135	135	134.5	139	131	130.5	132	127.5	124.5	123	117	115	117	116.5
Permlight Twister Nitro's													157.5	155	154	153.5	153.5	159	157	154.5	150	146.5	144.5	142.5
LumiText LumiString																								
Sylvania HF2 Chain HE																	236	237	234	232	225.5	217.5	223.5	226
FMS Neon Brillite 12mm/30ma																								

PRODUCT	NOV 10'	JAN 11'	FEB 11'	MAR 11'	APRL 11'	MAY 11'	JUNE 11'	JULY 11'	AUG 11'	SEPT 11'	OCT 11'	NOV 11'	DEC 11'	JAN 12'	FEB 12'	MAR 12'	APR 12'	MAY 12'	JULY 12'	AUG 12'	SEPT 12	NOV 12'	FEB 13'	JUNE 13'
AMBIENT TEMPERATURE															70F	71 F	81 F	83 F	86 F	94 F	83 F	62 F	57F	73 F
PRODUCT	NOV 10'	JAN 11'	FEB 11'	MAR 11'	APRL 11'	MAY 11'	JUNE 11'	JULY 11'	AUG 11'	SEPT 11'	OCT 11'	NOV 11'	DEC 11'	JAN 12'	FEB 12'	MAR 12'	APR 12'	MAY 12'	JULY 12'	AUG 12'	SEPT 12'	NOV 12'	FEB 13'	JUNE 13'
GE (Power White)	128.5	130	148.5	126	127.5	121	121.5	119.5	116	118.5	118.5	120.5	125.5	122	123.5	121.5	116	115	115.5	112	115.5	119.5	120.5	117
Elite Lamp (13mm 65D 30ma)	166.5	140	174.5	169	147	173	172.5	173.5	170.5	170	168	155.5	125	151	155.5	151.5	162.5	161.5	161	157	158.5	135	127.5	153
EGL Veritas							181	178.5	177.5	177.5	178.5	185	194.5	186.5	184	186.5	177	174.5	170	166.5	170	182	183	176
Principal LED (The Spec)					206.5	207.5	207	204.5	203.5	203	200.5	203	207	202.5	204	203	197	192.5	184	172	161	156.5	149	137.5
Axiom (AX-LE3)	151	147.5	144.5	140	144	141.5	141.5	140	138	136	136	136	135.5	134.5	133.5	134	130	130	127.5	125	125.5	126.5	125.5	124.5
Ventex Venbrites	176.5	174	164	166	165.5	157	155	155	147	144.5	143.5	144.5	147	143	140	140	135	133.5	129	127.5	129	132.5	135.5	132
EGL (13mm DL71 30ma)	156	119.5	157	148.5	129.5	159.5	162	160.5	160	159.5	157	145.5	108	140.5	136.5	135.5	150	149	150.5	148.5	148	117.5	110.5	139.5
Axiom (AXLE9XB-65)															178	179	178.5	180.5	179	177	177	176	174.5	176.5
Light Engines (1x12)					228.5	224.5	226	220	223	223.5	220	226	234	226.5	225.5	224	222.5	219.5	217	207.5	211	219.5	219	210
EGL (15mm 6500 30ma)	79.5	67.5	78.5	77.5	74	79.5	79.5	77.5	78	77.5	76.5	74.5	58	71.5	71.5	71.5	73.5	72.5	72	71.5	72.5	65.5	63	69.5
EGL (15mm DL 71 60ma)	237.5	208	225.5	229.5	213.5	233	231.5	229	230	229	224.5	212	164	190.5	194.5	198	209	208	209.5	202	202.5	191.5	185	204.5
International Light Tech												193.5	202.5	199.5	199.5	198.5	196	194.5	192	188.5	193.5	197.5	198	
Permlight (El Plato)	204	199	192	192.5	192	187	187.5	184.5	181	179	175.5	176.5	176.5	175	174	170.5	171.5	167.5	162.5	161	163.5	167.5	167.5	169.5
Sloan LED (GW3)	118	118	112	113	116	109.5	109	106.5	103.5	103.5	103.5	107	110	106	104.5	104	101	98.5	97	93	94	98	97.5	93
Permlight Twister Nitro's	141.5	137.5	133	133	132	130	128	125.5	123	120	119	120	119	117	116.5	115.5	114.5	112.5	112	109	110	110.5	111	109
LumiText LumiString												139.5	147	145	140	135.5	126	119.5	114.5	111.5	114	114	127.5	133
Sylvania HF2 Chain HE	226.5	226.5	219.5	220.5	223	216.5	218	212.5	211.5	208	210	211	213.5	211	210.5	207.5	208.5	203	204	197.5	200	203.5	206	202
FMS Neon Brillite 12mm/30ma																								221

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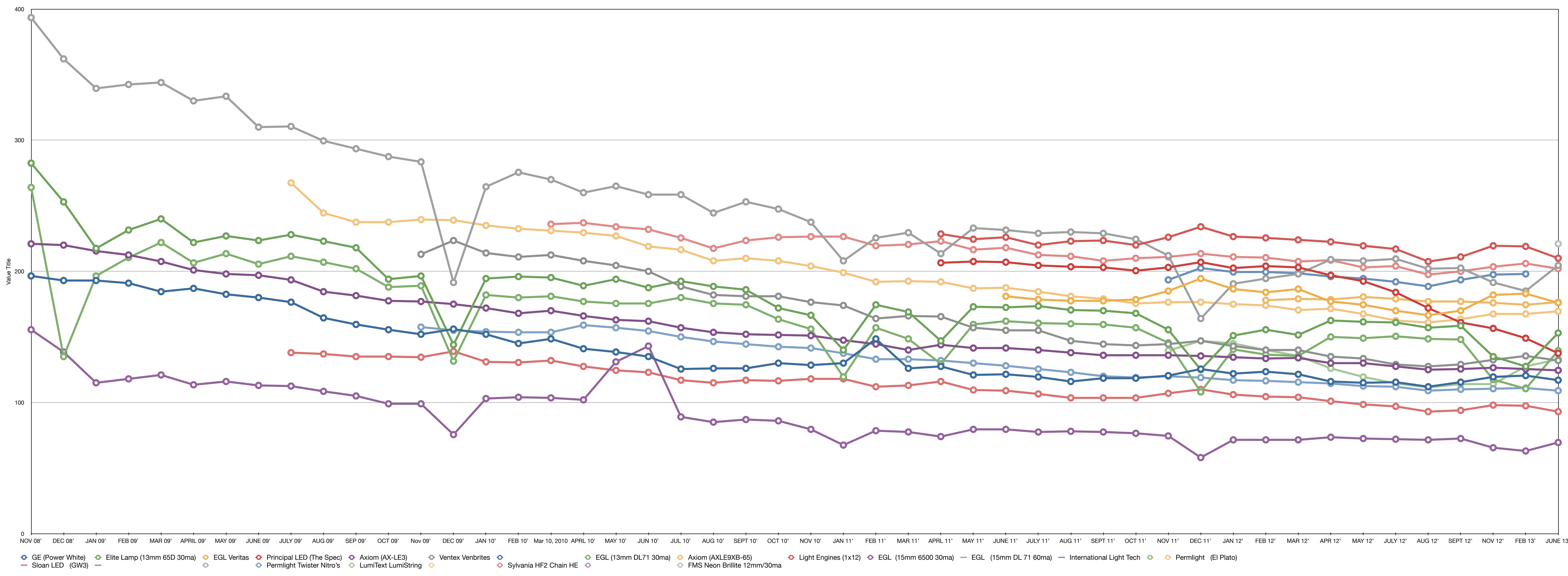

Discontinued or Failed Light Sources

PRODUCT	NOV 08'	DEC 08'	JAN 09'	FEB 09'	MAR 09'	APRIL 09'	MAY 09'	JUNE 09'	JULY 09'	AUG 09'	SEP 09'	OCT 09'	Nov 09'	DEC 09'	JAN 10'	FEB 10'	Mar 10, 201	APRL 10'	MAY 10'	JUN 10'	JUL 10'	AUG 10'	SEPT 10'	OCT 10'
Ventex (Venbrite VL-W100)	181	178.5	176.5	173.5	167	169.5	166	163.5	158.5	153	151	140												
YYZ (Power Stroke)	187	167.5	150.5	133	116.5																			
Phillips	74.5	75.5	74	73	70																			
AgiLight (ThinRayz Xtra)	148.5	110.5																						
Borealis						92	80																	
Aristo								102.5	97															
AVA Technology 8300																	228	177						
Philips						120.5	116.5	116	110	107	107	109.5	108.5	115	108	107	107.5	106.5	105.5	105	98.5	99	100.5	106
CAO (Lumembright)		185	183	177.5	169.5	161.5	154	148	141	135	130.5	117	126.5	130	126.5	122	124.25	115.5	112.5	110	105	103	105	107
US LED (Mega White Lightning)		156	153.5	150.5	146.5	146.5	142.5	139	133.5	125	120.5	118.5	117	119.5	114.5	111.5	110.5	107	105	101	98.5	94.5	96.5	96.5
Relume																								
Axiom (AX-LE7)														218	205.5	206.5	203.5	199.5	196	191.5	183.5	180.5	186.5	190
JT LED Alumina 9/15/11													163	172.5	165	171	162	161	167.5	158.5	155.5	149.5	152.5	151.5
AgiLight (ThinRayz Xtra)		152	152	140	134	128	122	118.5	111	105.5	102.5	104	104	110.5	117	113.5	115.25	114	111	108	103	99	99	99.5
Electra LED (Flex)								211	197.5	181.5	180	180.5	179.5	184	176	172	174	171	167	173.5	160	156	159	162
Sloan LED (GW2)								69	66	63	61	61.5	60	71.5	58.5	57.5	58	56	54	52.5	50	49	50.5	51
Eurocom Letro-LED																	168.5	165	161.5	158.5	152	149.5	152.5	151
US LED Quasar													135	138	132	130.5	129	128	126	125	121.5	121	123	124
AVA Technology																			225	211	203	204	209	215
GE (Tetra PowerMAX)																								

PRODUCT	NOV 10'	JAN 11'	FEB 11'	MAR 11'	APRL 11'	MAY 11'	JUNE 11'	JULY 11'	AUG 11'	SEPT 11'	OCT 11'	NOV 11'	DEC 11'	JAN 12'	FEB 12'	MAR 12'	APR 12'	MAY 12'	JULY 12'	AUG 12'	SEPT 12'	NOV 12'	FEB 13'	JUNE 13'
Ventex (Venbrite VL-W100)																								
YYZ (Power Stroke)																								
Phillips																								
AgiLight (ThinRayz Xtra)																								
Borealis																								
Aristo																								
AVA Technology 8300																								
Philips	102																							
CAO (Lumembright)	106.5	106.5	100.5																					
US LED (Mega White Lightning)	96.5	95.5	92																					
Relume		194.5	171	171	166	166																		
Axiom (AX-LE7)	192.5	194.5	181.5	185	190.5	180.5	180.5																	
JT LED Alumina 9/15/11	150	148.5	144	145.5	149	143	142.5	141	137															
AgiLight (ThinRayz Xtra)	98.5	99	95.5	97	97	92	91	87.5	84	82.5	82	82	85	81.5										
Electra LED (Flex)	168.5	163.5	158.5	161.5	162.5	157	155.5	153	151	152	152.5	156.5	160.5	156.5	157	155	152	150	149	143.5	146.5	140	115.5	
Sloan LED (GW2)	50.5	51.5	49	49	53	50	49	49	48	48	48	49	51	48.5	48.5	47.5	47	46	45.5	42.5	45	47	47.5	
Eurocom Letro-LED	153	152.5	145	146.5	150.5	143.5	145	142.5	141.5	139.5	138	141	143.5	140.5	140	138	138	138	138	138	138	119.5	119.5	
US LED Quasar	125.5	126	123.5	124.5	126	123.5	122.5	122.5	121.5	120.5	120.5	124.5	125	124	123.5	122.5	121.5	119.5	119.5	116.5	118	119.5	121	
AVA Technology	220.5	219	205	207	211.5	196	196	190	183.5	180.5	179.5	185.5	193	185	182.5	182	177	166.5	165	154	158	168	167	
GE (Tetra PowerMAX)		163.5	167.5	165.5	173.5	167.5	167	163.5	164	164	164	168.5	171	167.5	167.5	167.5	167.5	167.5	167.5	167.5	167.5	167.5		

Chart 18

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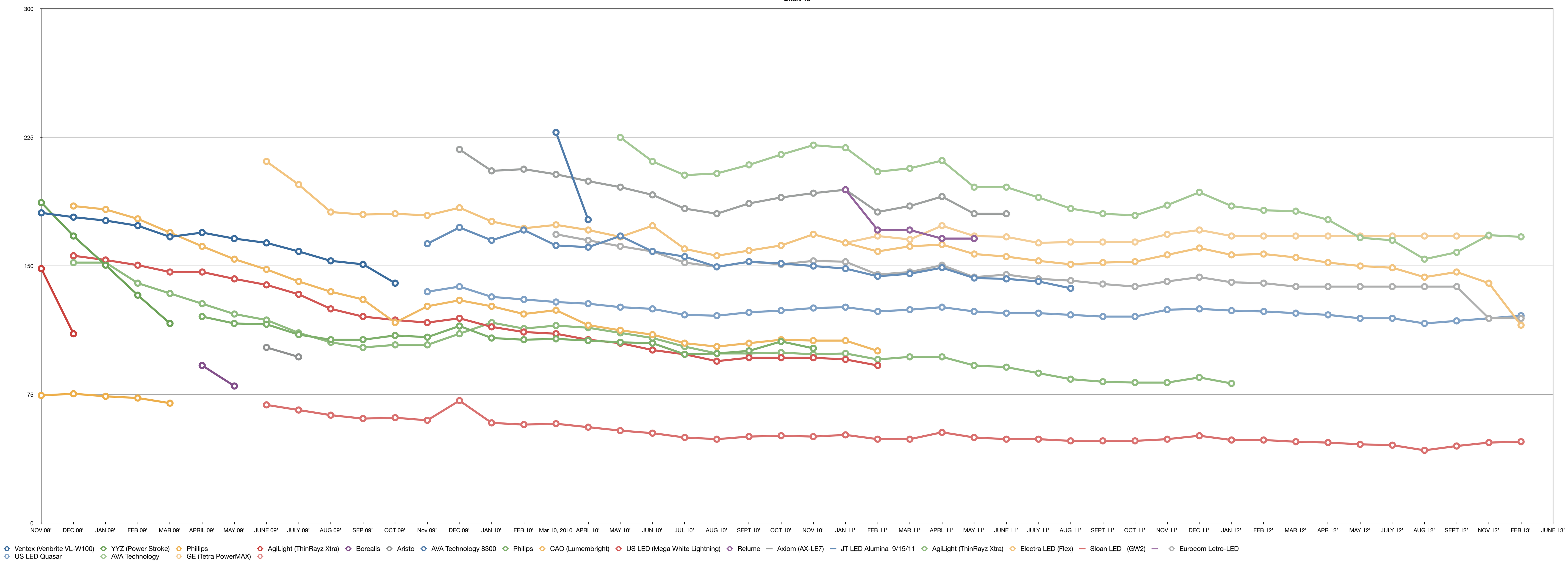

* *Italics:* These are products that were dropped out and no longer in the current project

• Ventex - Beta Units revised in test with actual stocked mods

• YYZ - Beta units failed
• Philips - Light output did not meet this test for high power
• AgiLight - Failure
• Borealis - Light output did not meet this test for high power

• Aristo - Not enough product for test
• AVA 8300 - Chips loose on PCB Board, replaced with new board and correct Kelvin Temp

• Philips - Discontinued & Non-Supportive

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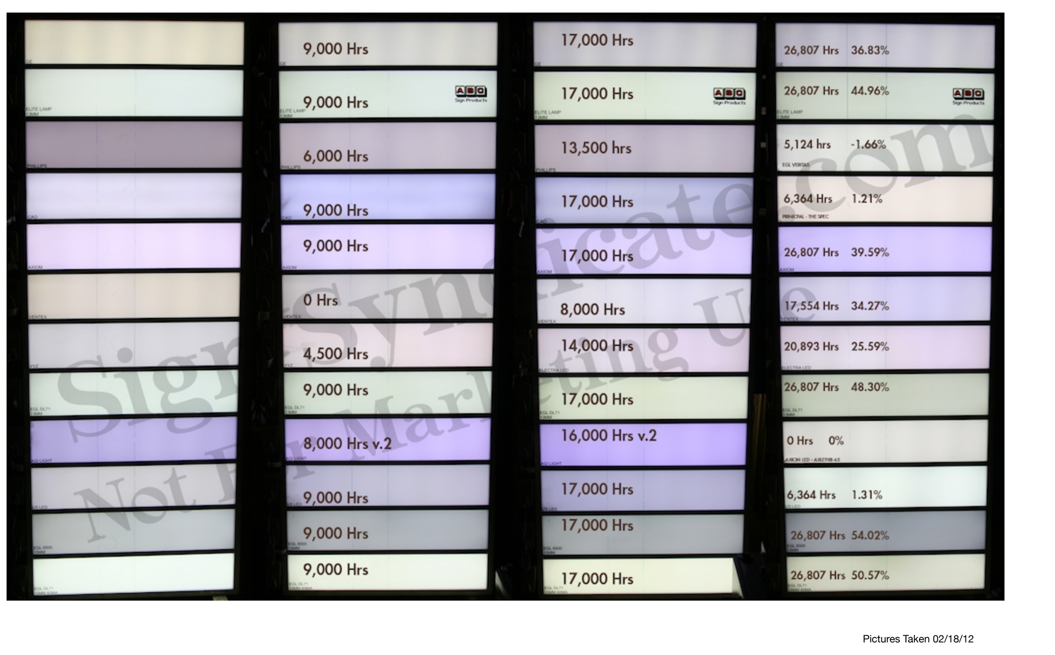
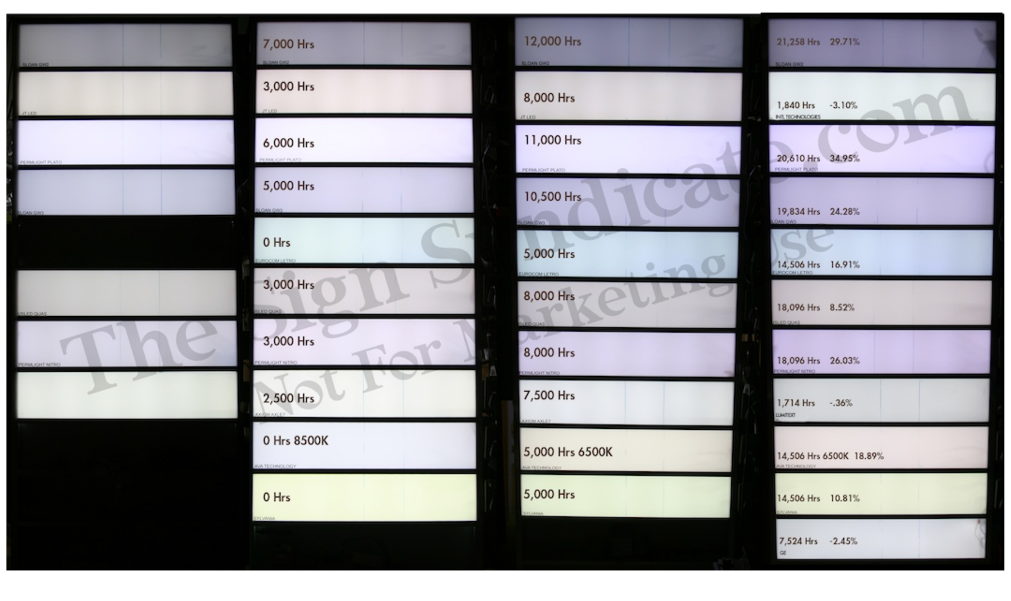
PRODUCT LIST LINK

CABINET 1



Pictures Taken 02/18/12

CABINET 2