

2016 T-24 Lighting Alteration Categories, Market shares, and regulation coverage

						Regulation by requirement type					
Main-categories of Lighting Alterations	Estimated Market Shares of main-categories	Sub-Categories of Lighting Alteration	Sub-category market share in corresponding Main-category	Estimated Market Shares of Sub-categories	Regulated by 2016 T24?	140.6 LPD	130.1(a) Area Control	130.1(b) Multi-level	130.1(c) Shut-off	130.1(d) Day-lighting	130.1(e) DR Control
Section 141.0(b)2I Entire Luminaire Alterations	64%	1a. Entire Luminaire Alterations. Section 141.0(b)2I i. > 85% LPD	8%	5%	Yes	Yes	Yes	Yes	Yes	Yes	
		1b. Entire Luminaire Alterations. Section 141.0(b)2I i. < 85% LPD	33%	21%	Yes	Yes	Yes	bi-level	Yes		
		1c. Entire Luminaire Alterations. Section 141.0(b)2I ii., 35% power reduction	59%	38%	Yes	Equivalent	Yes		Yes		
Section 141.0(b)2J Luminaire Component Modifications	30%	2a. Luminaire Comp. Modifications. Section 141.0(b)2J i: >70 Luminaire / floor, meet LPD	31%	9%	Yes	Yes	Yes		Yes		
		2b. Luminaire Comp. Modifications. Section 141.0(b)2J ii: >70 Luminaire / floor, 35% power reduction	46%	14%	Yes	Equivalent	Yes		Yes		
		2c. Luminaire Comp. Modifications. Section 141.0(b)2J ii: <70 Luminaire / floor	23%	7%	No						
Section 141.0(b)2K Lighting Wiring Alterations	5%	3. Lighting Wiring Alterations.	100%	5.0%	Yes	Yes	Yes	bi-level	partial	partial	
Exempted Alterations	1%	4. Exempted entire luminaire alterations, luminaire component modifications, and lighting wiring alterations	100%	1%	No						

Total Market Share 100%

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California Energy Commission

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15-BSTD-01

TN 76029

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2016 T-24

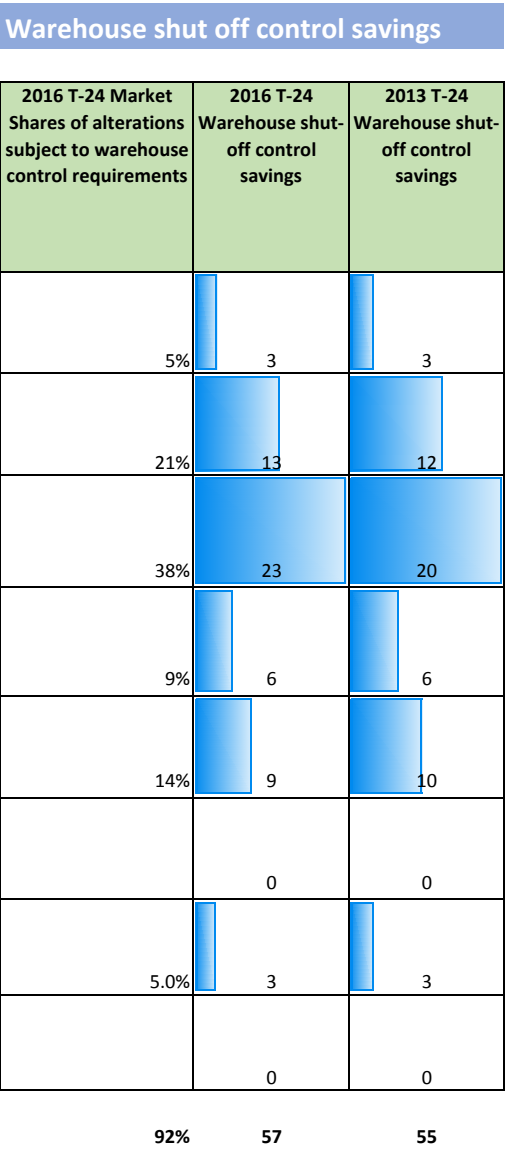
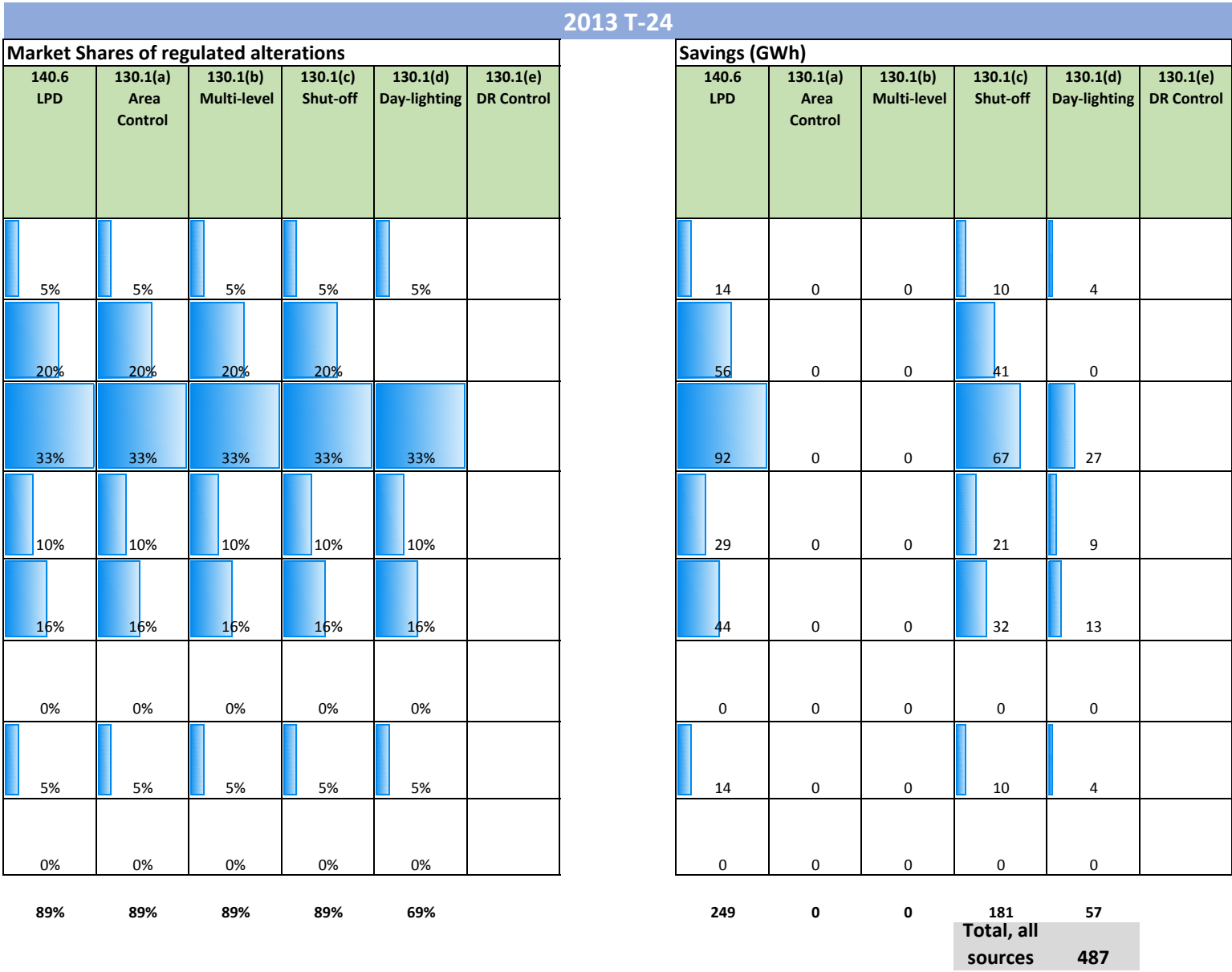
Market Shares of regulated alterations					
140.6 LPD	130.1(a) Area Control	130.1(b) Multi-level	130.1(c) Shut-off	130.1(d) Daylighting	130.1(e) DR Control
5%	5%	5%	5%	5%	
21%	21%		21%		
38%	38%		38%		
9%	9%		9%		
14%	14%		14%		
5%	5%	5%	5%	4%	

Level of stringency compared to 2013 T-24					
140.6 LPD	130.1(a) Area Control	130.1(b) Multi-level	130.1(c) Shut-off	130.1(d) Day-lighting	130.1(e) DR Control
100%	100%	100%	100%	100%	
100%	100%		100%		
175%	100%		98%		
100%	100%		98%		
175%	100%		98%		
100%	100%	100%	98%	100%	

Savings					
140.6 LPD	130.1(a) Area Control	130.1(b) Multi-level	130.1(c) Shut-off	130.1(d) Daylighting	130.1(e) DR Control
15	0	0	11	4	
59	0	0	43		
184	0	0	75	0	
26	0	0	18	0	
68	0	0	28	0	
14	0	0	10	4	

Total 92% 92% 10% 92% 10%

366 0 0 185 8
Total, all
sources 559



Impact of 2016 T-24 Lighting Alteration Requirements

Lighting Alteration Sub-Category	Section 140.6 LPD	Section 130.1(a) Area Controls	Section 130.1(b) Multi-level Controls	Section 130.1(c) Shut-off Controls	Section 130.1(d) Daylighting Controls	Total
1a. Entire Luminaire Alterations. Section 141.0(b)2I i. > 85% LPD	1	0	0	1	0	2
1b. Entire Luminaire Alterations. Section 141.0(b)2I i. < 85% LPD	3	0	0	3	0	6
1c. Entire Luminaire Alterations. Section 141.0(b)2I ii., 35% power reduction	92	0	0	11	-27	76
2a. Luminaire Comp. Modifications. Section 141.0(b)2J i: >70 Luminaire / floor, meet LPD	-3	0	0	-3	-9	-15
2b. Luminaire Comp. Modifications. Section 141.0(b)2J ii: >70 Luminaire / floor, 35% power reduction	24	0	0	-5	-13	6
2c. Luminaire Comp. Modifications. Section 141.0(b)2J ii: <70 Luminaire / floor	0	0	0	0	0	0
3. Lighting Wiring Alterations.	0	0	0	0	-1	-1
4. Exempted entire luminaire alterations, luminaire component modifications, and lighting wiring alterations	0	0	0	0	0	0
Sub-Total	117	0	0	6	-49	74
Total Energy Impact Reduction	74 GWh/year					

2016 T-24 Lighting Alteration Savings Analysis

2013 T24 Regulation Coverage	87%	89%	89%	89%	89%	69%
2016 T24 Regulation Coverage	92%	92%	92%	10%	92%	10%
Covered by 2013 but NOT by 2016 T-24	-5%	-3%	-3%	79%	-3%	59%
		0.0%	0.0%	0.0%	0.0%	0.0%
Lost due to Changes to Luminaire Alt		-6.1%	-6.1%	52.6%	-6.1%	32.6%
Lost due to Changes to Lamp & Ballast Alt		2.9%	2.9%	26.0%	2.9%	26.0%
Lost due to Changes to Wiring Alt		0.0%	0.0%	0.0%	0.0%	0.8%
			130.1(a)	130.1(b)	130.1(c)	130.1(d)
	Total	140.6 LPD	Area Control	Multi-level	Shut-off	Daylighting
2013 T-24	542	249	0	0	236	57
2016 T-24	616	366	0	0	242	8
	-74					

