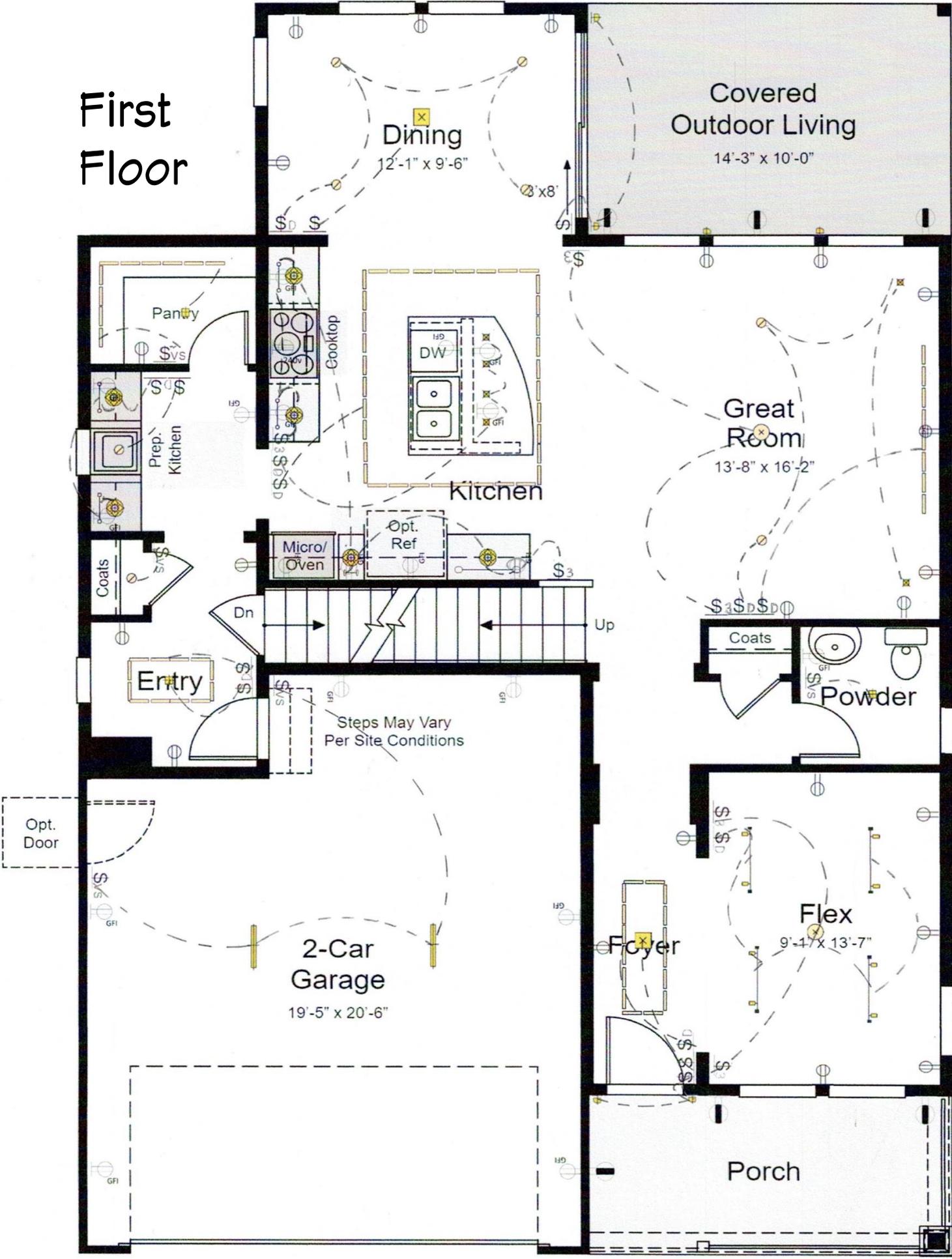
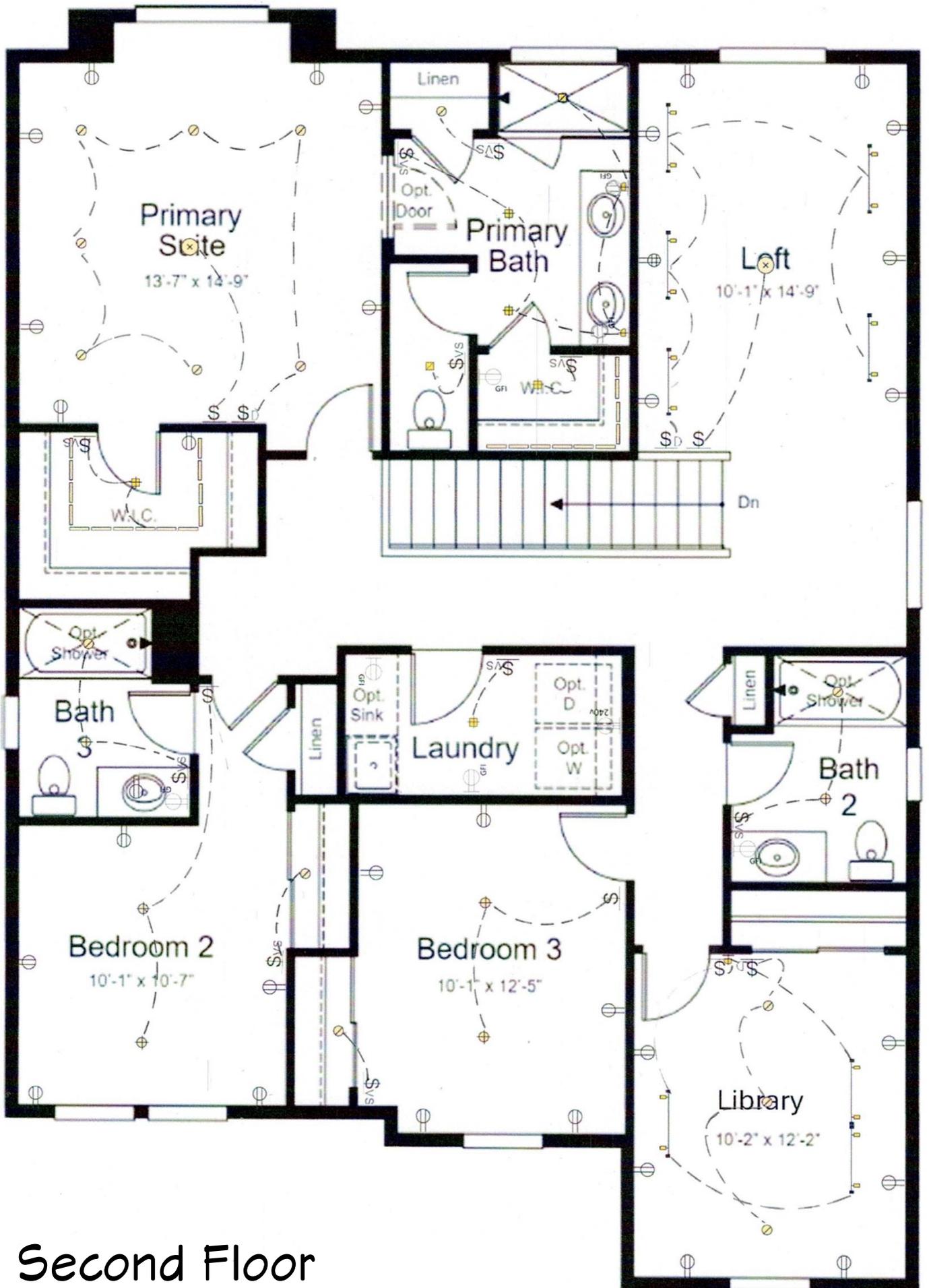


Rachel Best  
ITMD 116-350  
Fundamentals of Lighting  
October 8, 2024

# Residential Lighting Case Study

# First Floor





Second Floor

## Lighting Schedule - Smith Granby House

Symbol	Luminaire Type	Lamp	Quantity	CRI	CCT	Watts	Total Watts	Lumens	Total Lumens	Efficacy (lm/W)	JAB Certified	Website
<b>KITCHEN</b>												
—○	LED Undercabinet	Dedicated LED	21'							#DIV/0!		
—	LED tape lite	Dedicated LED	41'	95+	2200K	2.8	114.8	299	12259	106.78571	No, Title 24, UL 2108	<a href="https://www.diodeled.com/custom/download/productFile/filename/DI-24V-VLX-Specification%20Sheet.pdf">https://www.diodeled.com/custom/download/productFile/filename/DI-24V-VLX-Specification%20Sheet.pdf</a>
⊗	Pendant	Dedicated LED	4	90	2700K	10	40	750	3000	75	Yes	<a href="https://www.alconlighting.com/alcon-12302-p-dm-led-cylinder-half-moon-dome-pendant-light.html">https://www.alconlighting.com/alcon-12302-p-dm-led-cylinder-half-moon-dome-pendant-light.html</a>
⊙	Recessed downlight	Dedicated LED	1	90	2700K	15	15	1300	1300	86.666667	Yes	<a href="https://www.usalighting.com/site/download.php?id=39659">https://www.usalighting.com/site/download.php?id=39659</a>
⊕	Cabinet light (with auto shut-off when dorr is closed)	Dedicated LED	6							#DIV/0!		
<b>PRIMARY BEDROOM</b>												
⊕	Ceiling mount	Dedicated LED	1	90	2700K	14.5	14.5	986	986	68	No, Title 24, Energy Star	<a href="https://www.build.com/designers-fountain-evdk690d27/s1924135?uid=4546415#overview">https://www.build.com/designers-fountain-evdk690d27/s1924135?uid=4546415#overview</a>
⊙	Recessed downlight	Dedicated LED	7	90	2700K	15	105	1300	9100	86.666667	Yes	<a href="https://www.usalighting.com/site/download.php?id=39659">https://www.usalighting.com/site/download.php?id=39659</a>
<b>PRIMARY BATHROOM</b>												
⊕	Ceiling mount	Dedicated LED	2	90	2700K	14.5	30	986	1972	68	No, Title 24, Energy Star	<a href="https://www.build.com/designers-fountain-evdk690d27/s1924135?uid=4546415#overview">https://www.build.com/designers-fountain-evdk690d27/s1924135?uid=4546415#overview</a>
⊕	Indoor wall sconce	Dedicated LED	2	90	3000K	10	20	700	1400	70	Yes	<a href="https://s1.img-b.com/build.com/mediabase/specifications/miseno/1796806/miseno-mi14273-specification-sheet.pdf">https://s1.img-b.com/build.com/mediabase/specifications/miseno/1796806/miseno-mi14273-specification-sheet.pdf</a>
⊙	Recessed downlight	Dedicated LED	1	90	2700K	15	15	1300	1300	86.666667	Yes	<a href="https://www.usalighting.com/site/download.php?id=39659">https://www.usalighting.com/site/download.php?id=39659</a>
<b>POWDER ROOM/WALK-IN CLOSET</b>												
⊕	Ceiling mount	Dedicated LED	1	90	2700K	14.5	14.5	986	986	68	No, Title 24, Energy Star	<a href="https://www.build.com/designers-fountain-evdk690d27/s1924135?uid=4546415#overview">https://www.build.com/designers-fountain-evdk690d27/s1924135?uid=4546415#overview</a>
—	LED tape lite	Dedicated LED	22'	95+	2200K	2.8	61.6	299	6578	106.78571	No, Title 24, UL 2108	<a href="https://www.diodeled.com/custom/download/productFile/filename/DI-24V-VLX-Specification%20Sheet.pdf">https://www.diodeled.com/custom/download/productFile/filename/DI-24V-VLX-Specification%20Sheet.pdf</a>
<b>BEDROOM 1</b>												
⊕	Ceiling mount	Dedicated LED	2	90	2700K	14.5	30	986	1972	68	No, Title 24, Energy Star	<a href="https://www.build.com/designers-fountain-evdk690d27/s1924135?uid=4546415#overview">https://www.build.com/designers-fountain-evdk690d27/s1924135?uid=4546415#overview</a>
⊙	Recessed downlight	Dedicated LED	1	90	2700K	15	15	1300	1300	86.666667	Yes	<a href="https://www.usalighting.com/site/download.php?id=39659">https://www.usalighting.com/site/download.php?id=39659</a>
<b>BEDROOM 2</b>												
⊕	Ceiling mount	Dedicated LED	2	90	2700K	14.5	30	986	1972	68	No, Title 24, Energy Star	<a href="https://www.build.com/designers-fountain-evdk690d27/s1924135?uid=4546415#overview">https://www.build.com/designers-fountain-evdk690d27/s1924135?uid=4546415#overview</a>
⊙	Recessed downlight	Dedicated LED	1	90	2700K	15	15	1300	1300	86.666667	Yes	<a href="https://www.usalighting.com/site/download.php?id=39659">https://www.usalighting.com/site/download.php?id=39659</a>
<b>BATHROOM 1</b>												
⊕	Ceiling mount	Dedicated LED	1	90	2700K	15	15	1300	1300	86.666667	No, Title 24, Energy Star	<a href="https://www.build.com/designers-fountain-evdk690d27/s1924135?uid=4546415#overview">https://www.build.com/designers-fountain-evdk690d27/s1924135?uid=4546415#overview</a>
<b>BATHROOM 2</b>												
⊕	Ceiling mount	Dedicated LED	1	90	2700K	15	15	1300	1300	86.666667	No, Title 24, Energy Star	<a href="https://www.build.com/designers-fountain-evdk690d27/s1924135?uid=4546415#overview">https://www.build.com/designers-fountain-evdk690d27/s1924135?uid=4546415#overview</a>
<b>DINING ROOM</b>												
⊗	Chandelier	Dedicated LED	1							#DIV/0!		
⊙	Recessed downlight	Dedicated LED	4	90	2700K	15	60	1300	5200	86.666667	Yes	<a href="https://www.usalighting.com/site/download.php?id=39659">https://www.usalighting.com/site/download.php?id=39659</a>
<b>LIVING ROOM</b>												
⊕	Ceiling mount	Dedicated LED	1	90	2700K	15	15	1300	1300	86.666667	No, Title 24, Energy Star	<a href="https://www.build.com/designers-fountain-evdk690d27/s1924135?uid=4546415#overview">https://www.build.com/designers-fountain-evdk690d27/s1924135?uid=4546415#overview</a>
⊗	Pendant	Dedicated LED	2	90	2700K	10	20	750	1500	75	Yes	<a href="https://www.alconlighting.com/alcon-12302-p-dm-led-cylinder-half-moon-dome-pendant-light.html">https://www.alconlighting.com/alcon-12302-p-dm-led-cylinder-half-moon-dome-pendant-light.html</a>
⊙	Recessed downlight	Dedicated LED	2	90	2700K	15	30	1300	2600	86.666667	Yes	<a href="https://www.usalighting.com/site/download.php?id=39659">https://www.usalighting.com/site/download.php?id=39659</a>

	LED tape lite	Dedicated LED	11'	95+	2200K	2.8	30.8	299	3289	106.78571	No, Title 24, UL 2108	<a href="https://www.diodeled.com/custom/download/productFile/fileName/DI-24V-VLX-Specification%20Sheet.pdf">https://www.diodeled.com/custom/download/productFile/fileName/DI-24V-VLX-Specification%20Sheet.pdf</a>
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**LIBRARY**

	Recessed downlight	Dedicated LED	3	90	2700K	15	45	1300	3900	86.666667	Yes	<a href="https://www.usalighting.com/site/download.php?id=39659">https://www.usalighting.com/site/download.php?id=39659</a>
	LED track light	Dedicated LED	(1) 4' track (1) 8' track 6 luminares	90	3000K	8.25	49.5	375	2250	45.454545	No, Energy Star rated, low watt lamps, CRI 90	<a href="https://www.build.com/wac-lighting-tk-49534/s1153789?uid=2758389#overview">https://www.build.com/wac-lighting-tk-49534/s1153789?uid=2758389#overview</a>
	Indoor wall sconce	Dedicated LED	1	90	3000K	10	10	700	700	70	Yes	<a href="https://s1.img-b.com/build.com/mediabase/specifications/miseno/1796806/miseno-ml14273-specification-sheet.pdf">https://s1.img-b.com/build.com/mediabase/specifications/miseno/1796806/miseno-ml14273-specification-sheet.pdf</a>

**FOYER**

	LED tape lite	Dedicated LED	22'	95+	2200K	2.8	61.6	299	6578	106.78571	No, Title 24, UL 2108	<a href="https://www.diodeled.com/custom/download/productFile/fileName/DI-24V-VLX-Specification%20Sheet.pdf">https://www.diodeled.com/custom/download/productFile/fileName/DI-24V-VLX-Specification%20Sheet.pdf</a>
	LED track light	Dedicated LED	(4) 4' tracks 8 luminares	90	3000K	8.25	66	375	3000	45.454545	No, Energy Star rated, low watt lamps	<a href="https://www.build.com/wac-lighting-tk-49534/s1153789?uid=2758389#overview">https://www.build.com/wac-lighting-tk-49534/s1153789?uid=2758389#overview</a>
	Chandelier	Dedicated LED	1							#DIV/0!		

**LAUNDRY**

	Ceiling mount	Dedicated LED	1	90	2700K	15	15	1300	1300	86.666667	No, Title 24, Energy Star	<a href="https://www.build.com/designers-fountain-evdk690d27/s1924135?uid=4546415#overview">https://www.build.com/designers-fountain-evdk690d27/s1924135?uid=4546415#overview</a>
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**UTILITY**

	Recessed downlight	Dedicated LED	1	90	2700K	15	15	1300	1300	86.666667	Yes	<a href="https://www.usalighting.com/site/download.php?id=39659">https://www.usalighting.com/site/download.php?id=39659</a>
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**GARAGE**

	Garage Pendant	Dedicated LED	2							#DIV/0!		
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**FRONT PORCH**

	Outdoor wall sconce (with photocell and motion sensor)	Dedicated LED	2							#DIV/0!		
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**PATIO**

	Outdoor wall sconce (with photocell and motion sensor)	Dedicated LED	4							#DIV/0!		
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**Controls**

	Single Switch
	Switch with Vacancy Sensor
	Dimmer Switch
	3-way Switch

**Outlets**

	Duplex Outlet
	GFCI Outlet
	Quad Outlet
	240v Outlet
	Outdoor Outlet