

## VOLTAGE DROP WORKSHEET

<b>Project</b>	Carolina Crossroads 2	<b>Location</b>	STA 178+37.67
<b>Cabinet</b>	A	<b>Cable Size</b>	#2
<b>Luminaire Voltage</b>	240 V	<b>Conductor</b>	Cu
<b>System Voltage</b>	240 V		

Circuit		Number of Luminaires	Current/ Luminaire	Load	NEC	Use Breaker	Total V <sub>d</sub>
1,3		3	8.19	24.57	30.71	40	2.7100%
2,4		1	8.19	8.19	10.24	30	2.6731%
5,7		SPARE			0.00	20	
6,8		SPARE			0.00	20	
10		AUXILIARY		16.00	20.00	20	1.2684%
<b>Actual Load (A):</b>			<b>48.76</b>	Distance		Resistivity	
Used Breaker Size:			100	50	2	0.000201	0.9801

Percent Voltage Drop = **0.408%**



# VOLTAGE DROP WORKSHEET

<b>Project</b>	Carolina Crossroads 2	<b>Location</b>	STA 178+37.67
<b>Cabinet</b>	A	<b>Cable Size</b>	#4
<b>Circuit</b>	1/3	<b>Conductor</b>	Cu
<b>System Voltage</b>	240 V	<b>Luminaire Voltage</b>	240 V

Pole No.	to	Pole No.	Number of Luminaires	Current/ Luminaire	Distance	2x	Resistivity	V <sub>d</sub>
Controller	to	HM2	3	8.19	50	2	0.000321	0.7891
HM2	to	HM3	1	8.19	900	2	0.000321	4.7348
<b>Total =</b>								<b>5.5239</b>

LOAD 24.58

Percent Voltage Drop = **2.302%**

	WATTS	CURRENT
American Electric - ATB0_P302_R2_4K_5K_HSS	83	0.38
American Electric - ATB0_P304_R4_4K_5K_HSS	124	0.57
Holophane - HMLED4_P2_40K	1770	8.19
Holophane - TNLEDMED_PK1_40K_UDP	57	0.26



## VOLTAGE DROP WORKSHEET

<b>Project</b>	Carolina Crossroads 2	<b>Location</b>	STA 178+37.67
<b>Cabinet</b>	A	<b>Cable Size</b>	#2
<b>Circuit</b>	2/4	<b>Conductor</b>	Cu
<b>System Voltage</b>	240 V	<b>Luminaire Voltage</b>	240 V

Pole No.	to	Pole No.	Number of Luminaires	Current/ Luminaire	Distance	2x	Resistivity	V <sub>d</sub>
Controller	to	HM4	1	8.19	1650	2	0.000201	5.4354
							<b>Total =</b>	<b>5.4354</b>

LOAD                      8.19

Percent Voltage Drop =    **2.265%**

	WATTS	CURRENT
American Electric - ATB0_P302_R2_4K_5K_HSS	83	0.38
American Electric - ATB0_P304_R4_4K_5K_HSS	124	0.57
Holophane - HMLED4_P2_40K	1770	8.19
Holophane - TNLEDMED_PK1_40K_UDP	57	0.26



# VOLTAGE DROP WORKSHEET

<b>Project</b>	Carolina Crossroads 2	<b>Location</b>	STA 178+37.67
<b>Cabinet</b>	A	<b>Cable Size</b>	#10
<b>Circuit</b>	10	<b>Conductor</b>	Cu
<b>System Voltage</b>	240 V	<b>Luminaire Voltage</b>	120 V

Pole No.	to	Pole No.	Number of Luminaires	Current/ Luminaire	Distance	2x	Resistivity	V <sub>d</sub>
Controller	to	AUXILIARY	1	16.00	50	2	0.00129	2.0640
<b>Total =</b>								<b>2.0640</b>

LOAD 16.00

Percent Voltage Drop = **1.720%**

	WATTS	CURRENT
American Electric - ATB0_P302_R2_4K_5K_HSS	83	0.77
American Electric - ATB0_P304_R4_4K_5K_HSS	124	1.15
Holophane - HMLED4_P2_40K	1770	16.39
Holophane - TNLEDMED_PK1_40K_UDF	57	0.53



## VOLTAGE DROP WORKSHEET

<b>Project</b>	Carolina Crossroads 2	<b>Location</b>	STA 203+81.35
<b>Cabinet</b>	B	<b>Cable Size</b>	#2
<b>Luminaire Voltage</b>	240 V	<b>Conductor</b>	Cu
<b>System Voltage</b>	240 V		

Circuit				Load	NEC	Use Breaker	Total V <sub>d</sub>
1,3		LIGHTING		3.44	4.31	20	1.3103%
2,4		LIGHTING		17.04	21.30	30	2.7331%
5,7		LIGHTING		9.78	12.22	20	2.2633%
6,8		LIGHTING		16.39	20.49	30	3.6130%
9,11		SPARE				20	
10,12		SPARE				20	
14		AUXILIARY		16.00	20.00	20	1.3847%
		<b>Actual Load (A):</b>	<b>62.65</b>	Distance		Resistivity	
		Used Breaker Size:	100	50	2	0.000201	1.2592

Percent Voltage Drop = **0.525%**



## VOLTAGE DROP WORKSHEET

<b>Project</b>	Carolina Crossroads 2	<b>Location</b>	STA 203+81.35
<b>Cabinet</b>	B	<b>Cable Size</b>	#8
<b>Circuit</b>	1/3	<b>Conductor</b>	Cu
<b>System Voltage</b>	240 V	<b>Luminaire Voltage</b>	240 V

Pole No.	to	Pole No.	Number of Luminaires	Current/ Luminaire	Distance	2x	Resistivity	V <sub>d</sub>
Controller	to	P4	6	0.57	270	2	0.000809	1.5047
P4		P3	3	0.57	90	2	0.000809	0.2508
P3		P2	2	0.57	50	2	0.000809	0.0929
P2		P1	1	0.57	40	2	0.000809	0.0372
<b>Total =</b>								<b>1.8856</b>

LOAD                      3.44

Percent Voltage Drop =    **0.786%**

	WATTS	CURRENT
American Electric - ATB0_P302_R2_4K_5K_HSS	83	0.38
American Electric - ATB0_P304_R4_4K_5K_HSS	124	0.57
Holophane - HMLED4_P2_40K	1770	8.19
Holophane - TNLEDMED_PK1_40K_UDP	57	0.26



## VOLTAGE DROP WORKSHEET

<b>Project</b>	Carolina Crossroads 2	<b>Location</b>	STA 203+81.35
<b>Cabinet</b>	B	<b>Cable Size</b>	#2, #8
<b>Circuit</b>	2/4	<b>Conductor</b>	Cu
<b>System Voltage</b>	240 V	<b>Luminaire Voltage</b>	240 V

Pole No.	to	Pole No.	Number of Luminaires	Current/ Luminaire	Distance	2x	Resistivity	V <sub>d</sub>
Controller	to	HMT20	2	8.19	380	2	0.000201	2.5036
HMT20	to	W1	2	0.32	600	2	0.000809	0.6292
W1	to	HMT5	1	8.19	650	2	0.000201	2.1412
HMT5	to	W2	1	0.32	50	2	0.000809	0.0262
<b>Total =</b>								<b>5.3002</b>

LOAD      17.04

Percent Voltage Drop =    **2.208%**

	WATTS	CURRENT
American Electric - ATB0_P302_R2_4K_5K_HSS	83	0.38
American Electric - ATB0_P304_R4_4K_5K_HSS	124	0.57
Holophane - HMLED4_P2_40K	1770	8.19
Holophane - TNLEDMED_PK1_40K_UDP	57	0.26
Holophane - TNLEDMED_PK2_40K_UDP	70	0.32



## VOLTAGE DROP WORKSHEET

<b>Project</b>	Carolina Crossroads 2	<b>Location</b>	STA 203+81.35
<b>Cabinet</b>	B	<b>Cable Size</b>	#8
<b>Circuit</b>	5/7	<b>Conductor</b>	Cu
<b>System Voltage</b>	240 V	<b>Luminaire Voltage</b>	240 V

Pole No.	to	Pole No.	Number of Luminaires	Current/ Luminaire	Distance	2x	Resistivity	V <sub>d</sub>
Controller	to	HMT7	1	8.19	240	2	0.000809	3.1821
HMT7	to	W7	6	0.26	350	2	0.000809	0.8966
W7	to	W8	2	0.26	100	2	0.000809	0.0854
W8	to	W9	1	0.26	20	2	0.000809	0.0085
<b>Total =</b>								<b>4.1726</b>

LOAD            9.78

Percent Voltage Drop =    **1.739%**

	WATTS	CURRENT
American Electric - ATB0_P302_R2_4K_5K_HSS	83	0.38
American Electric - ATB0_P304_R4_4K_5K_HSS	124	0.57
Holophane - HMLED4_P2_40K	1770	8.19
Holophane - TNLEDMED_PK1_40K_UDP	57	0.26
Holophane - HMLED4_P2_40K	1770	8.19
Holophane - HMLED4_P2_40K	2360	10.93



## VOLTAGE DROP WORKSHEET

<b>Project</b>	Carolina Crossroads 2	<b>Location</b>	STA 203+81.35
<b>Cabinet</b>	B	<b>Cable Size</b>	#2
<b>Circuit</b>	6/8	<b>Conductor</b>	Cu
<b>System Voltage</b>	240 V	<b>Luminaire Voltage</b>	240 V

Pole No.	to	Pole No.	Number of Luminaires	Current/ Luminaire	Distance	2x	Resistivity	V <sub>d</sub>
Controller	to	HMT9	2	8.19	650	2	0.000201	4.2824
HMT9	to	HMT11	1	8.19	950	2	0.000201	3.1295
<b>Total =</b>								<b>7.4119</b>

LOAD      16.39

Percent Voltage Drop =    **3.088%**

	WATTS	CURRENT
American Electric - ATB0_P302_R2_4K_5K_HSS	83	0.38
American Electric - ATB0_P304_R4_4K_5K_HSS	124	0.57
Holophane - HMLED4_P2_40K	1770	8.19
Holophane - TNLEDMED_PK1_40K_UDP	57	0.26



## VOLTAGE DROP WORKSHEET

<b>Project</b>	Carolina Crossroads 2	<b>Location</b>	STA 203+81.35
<b>Cabinet</b>	B	<b>Cable Size</b>	#10
<b>Circuit</b>	14	<b>Conductor</b>	Cu
<b>System Voltage</b>	240 V	<b>Luminaire Voltage</b>	120 V

Pole No.	to	Pole No.	Number of Luminaires	Current/ Luminaire	Distance	2x	Resistivity	V <sub>d</sub>
Controller	to	AUXILIARY	1	16.00	50	2	0.00129	2.0640
<b>Total =</b>								<b>2.0640</b>

LOAD      16.00

Percent Voltage Drop =      **1.720%**

	WATTS	CURRENT
American Electric - ATB0_P302_R2_4K_5K_HSS	83	0.77
American Electric - ATB0_P304_R4_4K_5K_HSS	124	1.15
Holophane - HML4_P2_40K	1770	16.39
Holophane - TNLEDMED_PK1_40K_UDf	57	0.53



## VOLTAGE DROP WORKSHEET

<b>Project</b>	Carolina Crossroads 2	<b>Location</b>	STA 234+13.55
<b>Cabinet</b>	C	<b>Cable Size</b>	#2
<b>Luminaire Voltage</b>	240 V	<b>Conductor</b>	Cu
<b>System Voltage</b>	240 V		

Circuit		Number of Luminaires	Current/ Luminaire	Load	NEC	Use Breaker	Total V <sub>d</sub>
1,3		1	8.19	8.19	10.24	20	2.3850%
2,4		2	8.19	16.39	20.49	30	3.1705%
5,7		1	8.19	8.19	10.24	20	2.4284%
6,8		SPARE				20	
9,11		SPARE				20	
10		AUXILIARY		16.00	20.00	20	1.2685%
<b>Actual Load (A):</b>			<b>48.78</b>	Distance		Resistivity	
Used Breaker Size:			100	50	2	0.000201	0.9804

Percent Voltage Drop = **0.409%**



## VOLTAGE DROP WORKSHEET

<b>Project</b>	Carolina Crossroads 2	<b>Location</b>	STA 234+13.55
<b>Cabinet</b>	C	<b>Cable Size</b>	#2
<b>Circuit</b>	1/3	<b>Conductor</b>	Cu
<b>System Voltage</b>	240 V	<b>Luminaire Voltage</b>	240 V

Pole No.	to	Pole No.	Number of Luminaires	Current/ Luminaire	Distance	2x	Resistivity	V <sub>d</sub>
Controller	to	HMT12	1	8.19	1440	2	0.000201	4.7436
HMT12								
<b>Total =</b>								<b>4.7436</b>

LOAD            8.19

Percent Voltage Drop =    **1.977%**

	WATTS	CURRENT
American Electric - ATB0_P302_R2_4K_5K_HSS	83	0.38
American Electric - ATB0_P304_R4_4K_5K_HSS	124	0.57
Holophane - HMLED4_P2_40K	1770	8.19
Holophane - TNLEDMED_PK1_40K_UDP	57	0.26



# VOLTAGE DROP WORKSHEET

<b>Project</b>	Carolina Crossroads 2	<b>Location</b>	STA 234+13.55
<b>Cabinet</b>	C	<b>Cable Size</b>	#4
<b>Circuit</b>	2/4	<b>Conductor</b>	Cu
<b>System Voltage</b>	240 V	<b>Luminaire Voltage</b>	240 V

Pole No.	to	Pole No.	Number of Luminaires	Current/ Luminaire	Distance	2x	Resistivity	V <sub>d</sub>
Controller	to	HMT14	2	8.19	310	2	0.000321	3.2617
HMT14	to	HMT13	1	8.19	640	2	0.000321	3.3669
<b>Total =</b>								<b>6.6287</b>

LOAD 16.39

Percent Voltage Drop = **2.762%**

	WATTS	CURRENT
American Electric - ATB0_P302_R2_4K_5K_HSS	83	0.38
American Electric - ATB0_P304_R4_4K_5K_HSS	124	0.57
Holophane - HMLED4_P2_40K	1770	8.19
Holophane - TNLEDMED_PK1_40K_UDP	57	0.26



## VOLTAGE DROP WORKSHEET

<b>Project</b>	Carolina Crossroads 2	<b>Location</b>	STA 234+13.55
<b>Cabinet</b>	C	<b>Cable Size</b>	#6
<b>Circuit</b>	5/7	<b>Conductor</b>	Cu
<b>System Voltage</b>	240 V	<b>Luminaire Voltage</b>	240 V

Pole No.	to	Pole No.	Number of Luminaires	Current/ Luminaire	Distance	2x	Resistivity	V <sub>d</sub>
Controller	to	HMT15	1	8.19	580	2	0.00051	4.8478
<b>Total =</b>								<b>4.8478</b>

LOAD            8.19

Percent Voltage Drop =    **2.020%**

	WATTS	CURRENT
American Electric - ATB0_P302_R2_4K_5K_HSS	83	0.38
American Electric - ATB0_P303_R4_4K_5K_HSS	106	0.49
Holophane - HMLED4_P2_40K	1770	8.19
Holophane - TNLEDMED_PK1_40K_UDP	57	0.26



## VOLTAGE DROP WORKSHEET

<b>Project</b>	Carolina Crossroads 2	<b>Location</b>	STA 234+13.55
<b>Cabinet</b>	C	<b>Cable Size</b>	#10
<b>Circuit</b>	10	<b>Conductor</b>	Cu
<b>System Voltage</b>	240 V	<b>Luminaire Voltage</b>	120 V

Pole No.	to	Pole No.	Number of Luminaires	Current/ Luminaire	Distance	2x	Resistivity	V <sub>d</sub>
Controller	to	AUXILIARY	1	16.00	50	2	0.00129	2.0640
<b>Total =</b>								<b>2.0640</b>

LOAD          16.00

Percent Voltage Drop =      **1.720%**

	WATTS	CURRENT
American Electric - ATB0_P302_R2_4K_5K_HSS	83	0.77
American Electric - ATB0_P303_R4_4K_5K_HSS	106	0.98
Holophane - HMLED4_P2_40K	1770	16.39
Holophane - TNLEDMED_PK1_40K_UDP	57	0.53



## VOLTAGE DROP WORKSHEET

<b>Project</b>	Carolina Crossroads 2	<b>Location</b>	STA 249+96.19
<b>Cabinet</b>	D	<b>Cable Size</b>	#2
<b>Luminaire Voltage</b>	240 V	<b>Conductor</b>	Cu
<b>System Voltage</b>	240 V		

Circuit		Number of Luminaires	Current/ Luminaire	Load	NEC	Use Breaker	Total V <sub>d</sub>
1,3		2	8.19	16.39	20.49	30	2.7759%
2,4		1	8.19	8.19	10.24	20	2.4674%
5,7		1	8.19	8.19	10.24	20	2.6722%
6,8		SPARE				20	
9,11		SPARE				20	
10		AUXILIARY		16.00	20.00	20	1.2685%
<b>Actual Load (A):</b>			<b>48.78</b>	Distance		Resistivity	
Used Breaker Size:			100	50	2	0.000201	0.9804

Percent Voltage Drop = **0.409%**



## VOLTAGE DROP WORKSHEET

<b>Project</b>	Carolina Crossroads 2	<b>Location</b>	STA 249+96.19
<b>Cabinet</b>	D	<b>Cable Size</b>	#4
<b>Circuit</b>	1/3	<b>Conductor</b>	Cu
<b>System Voltage</b>	240 V	<b>Luminaire Voltage</b>	240 V

Pole No.	to	Pole No.	Number of Luminaires	Current/ Luminaire	Distance	2x	Resistivity	V <sub>d</sub>
Controller	to	HMT17	2	8.19	140	2	0.000321	1.4730
HMT17	to	HMT18	1	8.19	800	2	0.000321	4.2087
<b>Total =</b>								<b>5.6817</b>

LOAD          16.39

Percent Voltage Drop =    **2.367%**

	WATTS	CURRENT
American Electric - ATB0_P302_R2_4K_5K_HSS	83	0.38
American Electric - ATB0_P304_R4_4K_5K_HSS	124	0.57
Holophane - HMLED4_P2_40K	1770	8.19
Holophane - TNLEDMED_PK1_40K_UDP	57	0.26



## VOLTAGE DROP WORKSHEET

<b>Project</b>	Carolina Crossroads 2	<b>Location</b>	STA 249+96.19
<b>Cabinet</b>	D	<b>Cable Size</b>	#2
<b>Circuit</b>	2/4	<b>Conductor</b>	Cu
<b>System Voltage</b>	240 V	<b>Luminaire Voltage</b>	240 V

Pole No.	to	Pole No.	Number of Luminaires	Current/ Luminaire	Distance	2x	Resistivity	V <sub>d</sub>
Controller	to	HMT19	1	8.19	1500	2	0.000201	4.9413
<b>Total =</b>								<b>4.9413</b>

LOAD            8.19

Percent Voltage Drop =    **2.059%**

	WATTS	CURRENT
American Electric - ATB0_P302_R2_4K_5K_HSS	83	0.38
American Electric - ATB0_P304_R4_4K_5K_HSS	124	0.57
Holophane - HMLED4_P2_40K	1770	8.19
Holophane - TNLEDMED_PK1_40K_UDP	57	0.26



## VOLTAGE DROP WORKSHEET

<b>Project</b>	Carolina Crossroads 2	<b>Location</b>	STA 249+96.19
<b>Cabinet</b>	D	<b>Cable Size</b>	#6
<b>Circuit</b>	5/7	<b>Conductor</b>	Cu
<b>System Voltage</b>	240 V	<b>Luminaire Voltage</b>	240 V

Pole No.	to	Pole No.	Number of Luminaires	Current/ Luminaire	Distance	2x	Resistivity	V <sub>d</sub>
Controller	to	HMT16	1	8.19	650	2	0.00051	5.4329
<b>Total =</b>								<b>5.4329</b>

LOAD            8.19

Percent Voltage Drop =    **2.264%**

	WATTS	CURRENT
American Electric - ATB0_P302_R2_4K_5K_HSS	83	0.38
American Electric - ATB0_P304_R4_4K_5K_HSS	124	0.57
Holophane - HMLED4_P2_40K	1770	8.19
Holophane - TNLEDMED_PK1_40K_UDP	57	0.26



## VOLTAGE DROP WORKSHEET

<b>Project</b>	Carolina Crossroads 2	<b>Location</b>	STA 249+96.19
<b>Cabinet</b>	D	<b>Cable Size</b>	#10
<b>Circuit</b>	10	<b>Conductor</b>	Cu
<b>System Voltage</b>	240 V	<b>Luminaire Voltage</b>	120 V

Pole No.	to	Pole No.	Number of Luminaires	Current/ Luminaire	Distance	2x	Resistivity	V <sub>d</sub>
Controller	to	AUXILIARY	1	16.00	50	2	0.00129	2.0640
<b>Total =</b>								<b>2.0640</b>

LOAD          16.00

Percent Voltage Drop =      **1.720%**

	WATTS	CURRENT
American Electric - ATB0_P302_R2_4K_5K_HSS	83	0.77
American Electric - ATB0_P304_R4_4K_5K_HSS	124	1.15
Holophane - HMLED4_P2_40K	1770	16.39
Holophane - TNLEDMED_PK1_40K_UDP	57	0.53



## VOLTAGE DROP WORKSHEET

<b>Project</b>	Carolina Crossroads 2	<b>Location</b>	STA 420+76.57
<b>Cabinet</b>	E	<b>Cable Size</b>	#2
<b>Luminaire Voltage</b>	240 V	<b>Conductor</b>	Cu
<b>System Voltage</b>	240 V		

Circuit				Load	NEC	Use Breaker	Total V <sub>d</sub>
1,3		LIGHTING		19.12	23.90	30	3.0144%
2,4		LIGHTING		4.02	5.02	20	0.9926%
5,7		LIGHTING		17.18	21.48	30	3.2712%
6,8		SPARE				20	
9,11		SPARE				20	
10		AUXILIARY		16.00	20.00	20	1.3317%
		<b>Actual Load (A):</b>	<b>56.32</b>	Distance		Resistivity	
		Used Breaker Size:	100	50	2	0.000201	1.1320

Percent Voltage Drop = **0.472%**



# VOLTAGE DROP WORKSHEET

<b>Project</b>	Carolina Crossroads 2	<b>Location</b>	STA 420+76.57
<b>Cabinet</b>	E	<b>Cable Size</b>	#4
<b>Circuit</b>	1/3	<b>Conductor</b>	Cu
<b>System Voltage</b>	240 V	<b>Luminaire Voltage</b>	240 V

Pole No.	to	Pole No.	Number of Luminaires	Current/ Luminaire	Distance	2x	Resistivity	V <sub>d</sub>
Controller	to	HMT21	2	8.19	300	2	0.000321	3.1565
HMT21		HMT6	1	10.93	420	2	0.000321	2.9461
<b>Total =</b>								<b>6.1026</b>

LOAD 19.12

Percent Voltage Drop = **2.543%**

	WATTS	CURRENT
American Electric - ATB0_P302_R2_4K_5K_HSS	83	0.38
American Electric - ATB0_P304_R4_4K_5K_HSS	124	0.57
Holophane - HMLED4_P2_40K	1770	8.19
Holophane - TNLEDMED_PK1_40K_UDP	57	0.26
Holophane - HMLED4_P2_40K	2360	10.93



# VOLTAGE DROP WORKSHEET

<b>Project</b>	Carolina Crossroads 2	<b>Location</b>	STA 420+76.57
<b>Cabinet</b>	E	<b>Cable Size</b>	#6
<b>Circuit</b>	2/4	<b>Conductor</b>	Cu
<b>System Voltage</b>	240 V	<b>Luminaire Voltage</b>	240 V

Pole No.	to	Pole No.	Number of Luminaires	Current/ Luminaire	Distance	2x	Resistivity	V <sub>d</sub>
Controller	to	P8	7	0.57	120	2	0.00051	0.4919
P8	to	P9	4	0.57	170	2	0.00051	0.3982
P9	to	P11	2	0.57	190	2	0.00051	0.2225
P11	to	P13	1	0.57	235	2	0.00051	0.1376
<b>Total =</b>								<b>1.2502</b>

LOAD 4.02

Percent Voltage Drop = **0.521%**

	WATTS	CURRENT
American Electric - ATB0_P302_R2_4K_5K_HSS	83	0.38
American Electric - ATB0_P304_R4_4K_5K_HSS	124	0.57
Holophane - HMLED4_P2_40K	1770	8.19
Holophane - TNLEDMED_PK1_40K_UDP	57	0.26



# VOLTAGE DROP WORKSHEET

<b>Project</b>	Carolina Crossroads 2	<b>Location</b>	STA 420+76.57
<b>Cabinet</b>	E	<b>Cable Size</b>	#2, #8
<b>Circuit</b>	5/7	<b>Conductor</b>	Cu
<b>System Voltage</b>	240 V	<b>Luminaire Voltage</b>	240 V

Pole No.	to	Pole No.	Number of Luminaires	Current/ Luminaire	Distance	2x	Resistivity	V <sub>d</sub>
Controller	to	HMT8	2	8.19	600	2	0.000201	3.9530
HMT8	to	HMT10	1	8.19	500	2	0.000201	1.6471
HMT10	to	W10	3	0.26	800	2	0.000809	1.0247
W10	to	W11	2	0.26	60	2	0.000809	0.0512
W11	to	W3	1	0.26	100	2	0.000809	0.0427
<b>Total =</b>								<b>6.7188</b>

LOAD 17.18

Percent Voltage Drop = **2.799%**

	WATTS	CURRENT
American Electric - ATB0_P302_R2_4K_5K_HSS	83	0.38
American Electric - ATB0_P304_R4_4K_5K_HSS	124	0.57
Holophane - HMLED4_P2_40K	1770	8.19
Holophane - TNLEDMED_PK1_40K_UDP	57	0.26
Holophane - HMLED4_P2_40K	1770	8.19
Holophane - HMLED4_P2_40K	2360	10.93



# VOLTAGE DROP WORKSHEET

<b>Project</b>	Carolina Crossroads 2	<b>Location</b>	STA 420+76.57
<b>Cabinet</b>	E	<b>Cable Size</b>	#10
<b>Circuit</b>	10	<b>Conductor</b>	Cu
<b>System Voltage</b>	240 V	<b>Luminaire Voltage</b>	120 V

Pole No.	to	Pole No.	Number of Luminaires	Current/ Luminaire	Distance	2x	Resistivity	V <sub>d</sub>
Controller	to	AUXILIARY	1	16.00	50	2	0.00129	2.0640
<b>Total =</b>								<b>2.0640</b>

LOAD 16.00

Percent Voltage Drop = **1.720%**

	WATTS	CURRENT
American Electric - ATB0_P302_R2_4K_5K_HSS	83	0.77
American Electric - ATB0_P304_R4_4K_5K_HSS	124	1.15
Holophane - HMLED4_P2_40K	1770	16.39
Holophane - TNLEDMED_PK1_40K_UDP	57	0.53
Holophane - HMLED4_P2_40K	2360	21.85