Customer Name:

Gonitetime Address: DECOR Day Phone:

Lighti

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1	1.1	9	1	0	1	a	11	9	u	L. 1	u.	0	0	1

1	0	11	Ť.	rt.	0	0	rs	
	\sim	-	6	1	9	~	12	

Light	11.9	 	

Wiring Information								
Run	Wiring Method	Wire Size						
1	Т	12						
1	Т	12						

	Amp	Load Form	ula			Voltage Drop Formula										
# of Lamps	(X) Lamp Size	(=) Watt Load	÷ 12	(=) * Amp Load	* Amp Load	(X) Home Run (ft)	(=) Total	(X) 2	(=) Total	(X) Resistance per foot	(=) Voltage Drop	+	12	** Tap Needed		
2	36	172	÷ 12	14.33	14.33	40	573.2	(X) 2	1146.4	0.00162	1.857	+	12	14		
2	50											+	12			
	Amp	Load Form	ula			Voltage Drop Formula										
# of Lamps			l – – – – – – – – – – – – – – – – – – –	(=) * Amp Load	* Amp Load	(X) Home Run (ft)	(=) Total	(X) 2		1	(=) Voltage Drop	+	12	** Tap Needed		
			÷ 12					(X) 2				+	12	12.00		
			÷ 12					(X) 2				+	12	12.00		
			÷ 12					(X) 2				+	12	12.00		
			÷ 12					(X) 2				÷	12	12.00		
			÷ 12					(X) 2				+	12	12.00		
			÷ 12					(X) 2				+	12	12.00		
			÷ 12					(X) 2				÷	12	12.00		
			÷ 12					(X) 2				÷	12	12.00		
			÷ 12					(X) 2				+	12	12.00		
			÷ 12					(X) 2				÷	12	12.00		
			÷ 12					(X) 2				+	12	12.00		

Wi	ring Info	mation			
Run	Wiring Method	Wire Size			
	н				
	н				
	н				
	н				
	н				
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	Н				
	Н				
	н				

	Amp	Load Form	ula						Voltage	e Drop Formula				
# of Lamps	(X) Lamp Size	(=) Watt Load		(=) * Amp Load	* Amp Load	(X) Home Run (ft)	(=)	(X) 2	(=) Total	(X) Resistance per foot	(=) Voltage Drop	+	12	** Tap Needed
2	36	172	÷ 12	14.33	14.33	40	573.2	(X) 2	1146.4	0.00162	1.857	+	12	14
2	50											+	12	
	Amp	Load Form	ula						Voltage	Drop Formula				
# of Lamps				(=) * Amp Load	* Amp Load	(X) Home Run (ft)	(=) Total	(X) 2	1		(=) Voltage Drop	+	12	** Tap Needed
			÷ 12					(X) 2				+	12	12.00
			÷ 12					(X) 2				+	12	12.00
			÷ 12					(X) 2				+	12	12.00
			÷ 12					(X) 2				+	12	12.00
			÷ 12					(X) 2				÷	12	12.00
			÷ 12					(X) 2				+	12	12.00
			÷ 12					(X) 2				÷	12	12.00
			÷ 12					(X) 2				÷	12	12.00
			÷ 12					(X) 2				+	12	12.00
			+ 12					(X) 2				÷	12	12.00
			÷ 12					(X) 2				+	12	12.00
00w 50	0w 360w	300w			Trans	former #	1N	lin Tra	nsformer S	Size (at 8	30%)			

Тар	1120w	840w	600w	500w	360w	300w
12	Х	х	х	Х	Х	Х
13	Х	х	х	х	х	Х
14	Х	х	х	х	х	
15	Х	Х	Х	х	х	
16	Х	х	х	Х		
17			х	Х		
18	Х	х				
20	Х	х				
22	Х					





12 Volt Transformer Load Calculation Sheet

	Transformer	#1	*** Total Watts => Transformer size					
	Location:				Arrest Property			
oltage Dro	p Resistance per	Foot	*					
Vire = .0065	1		· · · · · · · · · · · · · · · · · · ·	Next the second s				
Vire = .0040	9		Wiring Methods					
Vire = .0025	8		L = Loop Method	D = Daisy Chain				
Vire = .0016	2		T = T Method	H = Homerun Fixtur	е			
Vire = .0010	8		H = Hub Method					
Vire = .0006	4							
and the second second second		No. of the second second						

Voltage Drop = Amp Load x Length of Run x 2 x Resistance per Foot

-	
Date:	
Date.	

Page

of

Total Watts								
* Amp Load	(X) ** Tap Needed	(=						
14.33	14	2						

* Amp Load (X) ** Tap Needed (= 12 12									
* Amp Load	(X) ** Tap Needed	(=							
	12								
	12								
	12								
	12								
	12								
	12								
	12								
	12								
	12								
	12								
	12								

*** Total Watts

	(at 80%)
ize	
	PE STORE SALAR

NEC Maximum watts on wire
16/2 Wire = 76 Watts
14/2 Wire = 96 Watts
12/2 Wire = 192 Watts
10/2 Wire = 288 Watts

		Is the run longer than 100 feet yes - use #10/2 Are there more than 100 watts lamp load on the run?
		yes - use #10/2
=) Total Watts		
200.62		
		Description
		Description
=) Total Watts	Cumm Watts	Fixture Description / Location of Runs

Cost	
Watts	-
Hrs per Day	5
Utility Rate per kw Hr	0.09
Mult	0.001
Days in Yr	365
Cost per Day	\$ -
Cost per Year	\$ -

Customer Name:

nitetime DECOR Address: Day Phone Day Phone:

Lighting for all outdoors

W	iring Info	rmation		Amp	Load Form	nula						Voltage	e Drop Formula						Total Wa	
Run	Wiring Method		# of Lamps	(X) Lamp Size	(=) Watt Load	1 7 IZ	(=) * Amp Load	* Amp Load	(X) Home Run (ft)	I(=) IOTAI	(X) 2	(=) Total	(X) Resistance per foot	(=) Voltage Drop	+	12	** Tap Needed	* Amp Load	(X) ** Tap Neede	
1	Т	12	2	36	172	÷ 12	14.33	14.33	40	573.2	(X) 2	1146.4	0.00162	1.857	+	12	14	14.33	14	
1	т	12	2	50											+	12				
W	iring Info	rmation		Amp	Load Form	nula						Voltage	e Drop Formula					Total Wa		
Run	Wiring Method		# of Lamps	(X) Lamp Size	(=) Watt Load	÷ 12	(=) * Amp Load	* Amp Load	(X) Home Run (ft)	(=) Total	(X) 2	(=) Total	(X) Resistance per foot	(=) Voltage Drop	+	12	** Tap Needed	* Amp Load	(X) ** Tap Neede	
1	н	12	2	5	10	÷ 12	0.83	0.83	25	20.83	(X) 2	41.7	0.00162	0.07	+	12	12.07	0.83	12	
2	н	12	2	4	8	÷ 12	0.67	0.67	50	33.33	(X) 2	66.7	0.00162	0.11	÷	12	12.11	0.67	12	
3	н	12	5	4	20	÷ 12	1.67	1.67	25	41.67	(X) 2	83.3	0.00162	0.14	+	12	12.14	1.67	12	
4	н	12	5	5	25	÷ 12	2.08	2.08	60	125.00	(X) 2	250.0	0.00162	0.41	+	12	12.41	2.08	12	
	н					÷ 12					(X) 2				÷	12	12.00		12	
	н					÷ 12					(X) 2				+	12	12.00		12	
	н					÷ 12					(X) 2				+	12	12.00		12	
	н					÷ 12					(X) 2				÷	12	12.00		12	
	н					÷ 12		-			(X) 2				÷	12	12.00		12	
	н					÷ 12					(X) 2				+	12	12.00		12	
	н					÷ 12					(X) 2				÷	12	12.00		12	
			14		63				160										*** Total Watt	
Тар	1120w	840w	600w 50	00w 360w				Trans	former # _	-		nsformer S		t 80%)						
12	X	X X	X X	X X X X	x			Locat	tion:	×7	* lotal	Watts => 1 ra	ansformer size							
14	x	x	X	x x			Voltage Dr	STREET, ST	tance per Fo	ot										
15	X	X	X	x x		18/	2 Wire = .006													
16	Х	Х	Х	Х			2 Wire = .004	and the second			Street in		Wiring Methods	Carlo Car Carlo Carlo Carl	4			and a state of the second s	tts on wire	
17			Х	Х		and the second se	2 Wire = .002	the second s					D = Daisy Chain		{	2	16/2 Wire :			
18	X	X 				12/2 Wire = .00162 10/2 Wire = .00108						Method b Method	H = Homerun Fixture		1		14/2 Wire = 12/2 Wire =	and the second	and the second	
20	× ×	^					2 Wire = .000				11-110	b method	L		T		10/2 Wire :			
						0	the state of the s		Amples	dylong	th of I	Zun v 2 v	Resistance per Fo	ot						

Wiring Information											
Run	Wiring Method	Wire Size									
1	н	12									
2	Н	12									
3	Н	12									
4	Н	12									
	н										
	Н										
	Н										
	Н										
	Н										
	Н										
	н										

	Amp	Load Form	ula							Voltage	Drop	Formula						Total Wat
# of Lamps	(X) Lamp Size	(=) Watt Load	÷ 12	(=) * Amp Load	* Amp Load	(X) Home Run (ft)	(=) = 0	(X)	2	(=) Total	(X)	Resistance per foot	(=) Voltage Drop	+	12	** Tap Needed	* Amp Load	(X) ** Tap Neede
2	36	172	÷ 12	14.33	14.33	40	573.2	(X)	2	1146.4		0.00162	1.857	+	12	14	14.33	14
2	50													+	12			
	L	I					I											
	Amp	Load Form	ula							Voltage	Drop	Formula						Total Wa
# of Lamps	(X) Lamp Size	(=) Watt Load	÷ 12	(=) * Amp Load	* Amp Load	(X) Home Run (ft)	(=) Total	(X)	2	(=) Total	(X)	Resistance per foot	(=) Voltage Drop	+	12	** Tap Needed	* Amp Load	(X) ** Tap Neede
2	5	10	÷ 12	0.83	0.83	25	20.83	(X)	2	41.7		0.00162	0.07	+	12	12.07	0.83	12
2	4	8	÷ 12	0.67	0.67	50	33.33	(X)	2	66.7		0.00162	0.11	+	12	12.11	0.67	12
5	4	20	÷ 12	1.67	1.67	25	41.67	(X)	2	83.3		0.00162	0.14	+	12	12.14	1.67	12
5	5	25	÷ 12	2.08	2.08	60	125.00	(X)	2	250.0		0.00162	0.41	÷	12	12.41	2.08	12
			÷ 12					(X)	2					+	12	12.00		12
			÷ 12					(X)	2					+	12	12.00		12
			÷ 12					(X)	2					+	12	12.00		12
			÷ 12					(X)	2					÷	12	12.00		12
			÷ 12					(X)	2					÷	12	12.00		12
			÷ 12					(X)	2					+	12	12.00		12
-			÷ 12					(X)	2					÷	12	12.00		12
14		63				160												*** Total Watts
600w 50	0w 360w				Trans	former #	· _			nsformer S		the break a standard state and a sector state and	80%)					
X	X X	X			Locati	ion:	*	** Tot	al V	Natts => Tra	insfor	mer size						
X	<u>x x</u> x x	X	5	Voltage Dr	STREET, STREET	ance per Fo	ot											
X	x x		18/	2 Wire = .006														
Х	Х		16/	2 Wire = .004	109		5		S.S.		-	ing Methods						atts on wire
Х	Х			2 Wire = .002	And the second second second second					op Method		for the second se				16/2 Wire :		
				2 Wire = .001							H = H	omerun Fixture				14/2 Wire :		
				0/2 Wire = .00108 H = Hub Method 12/2 Wire = 12/2 Wire														
			8/	2 Wire = .000	the state of the second se	A		the e			Deel	stance per Fo	-+			10/2 Wire =	- 200 vva	.15

			14	1		63
Тар	1120w	840w	600w	500w	360w	300w
12	Х	х	х	х	х	х
13	Х	х	х	х	х	х
14	Х	х	х	х	х	
15	Х	х	х	х	х	
16	Х	Х	х	х		
17			Х	х		
18	Х	х				
20	Х	Х				
22	х					





12 Volt Transformer Load Calculation Sheet

Date:



of

				le the run longer than 100 feet
				Is the run longer than 100 feet yes - use #10/2
				Are there more than 100 watts lamp load on the run?
	Total Watts	5		yes - use #10/2
* Amp	(X) ** Tap	, Total		
Load	(X) Needed	(=) Watts		
		000.00		
14.33	14	200.62		
	Total Watts	5		Description
* Amp	(X) ** Tap	() Total	Cumm	Fixture Description / Location of Runs
Load	(X) Needed	(=) Watts	Watts	Fixible Description / Location of Runs
0.83	12	10.1	10.1	wash on grass / rock / spruce + aw on Japanese
				maple
0.67	12	8.1	18.1	2 mw on upper eaves
1.67	12	20.2	38.4	5 area lights on lhs walkway
2.08	12	25.8	64.2	2 iw on 2 maples + shrub on rhs plus 2 area lights for transition
	12		64.2	
	12		64.2	
	12		64.2	
	12		64.2	
	12		64.2	
	12		64.2	
	12		64.2	
	*** Total Watts	64.20		
				Cost
				Watts 64
				Hrs per Day 5
imum wa	tts on wire			Utility Rate per kw Hr 0.09
76 Watts				Mult 0.001 Days in Yr 365
96 Watts				Cost per Day \$ 0.03
192 Wat				Cost per Year \$ 10.54
288 Wat	ts			

				Is the run longer than 100 feet					
				yes - use #10/2					
				Are there more than 100 watts lamp					
				load on the run?					
	Total Watts	5		yes - use #10/2					
* Amp	** Tan	, Total							
Load	(X) ** Tap Needed	(=) Watts							
14.33	14	200.62							
L	I	I							
	Total Watts	5		Description					
* Amp	(X) ** Tap	(=) Total	Cumm	Fixture Description / Location of Runs					
Load	Needed	(-) Watts	Watts						
0.83	12	10.1	10.1	wash on grass / rock / spruce + aw on Japanese					
0.03	12	10.1	10.1	maple					
0.67	12	8.1	18.1	2 mw on upper eaves					
1.67	12	20.2	38.4 5 area lights on lhs walkway						
			2 iw on 2 maples + shrub on rhs plus 2 area lights						
2.08	12	25.8	64.2 for transition						
Res Sets S	12	1003833	64.2						
	12		04.2						
	12		64.2						
	12		64.2						
	12		64.2						
	10		64.2						
	12		04.2						
	12		64.2						
Telephone -	12	020000	64.2						
	*** 7								
	*** Total Watts	64.20							
				Cost					
				Watts 64					
				Hrs per Day 5					
				Utility Rate per kw Hr 0.09					
and the second state of th	tts on wire			Mult 0.001					
76 Watts				Days in Yr 365					
96 Watts 192 Wat				Cost per Day\$0.03Cost per Year\$10.54					
288 Wat									

Voltage Drop = Amp Load x Length of Run x 2 x Resistance per Foot