advanced ideas, advanced solutions™

Job Name: Voltage Drop Calculations ...

Clanbro Corporation
60 Cassidy Point
Portland, ME 04102
AHJ: City of Portland Fire Department

Prepared By:

Robin Russell NICET # 110826
Protection One
10 Manuel Drive
Portland, ME 04103
(207) 347-5327

Circuit Information

Panel Name: Altronix 602 Notificatio...
Circuit Name: NAC #1
Starting Voltage: Starting Voltage = 20.4

(1.5) amp circuit
Class B @ 14 AWG
DC 24 - volt Supply

Type and Model	Candela	Current (Amps)	Tone and Volume	Dist from last device	Dist from source (ft)	12	14	16	18
Strobe SR	15	0.066		15	15	20.348	20.318	20.269	20.192
Strobe SR	15	0.066		15	30	20.301	20.242	20.149	20.000
Horn/Strobe P2R	75	0.176	Temporal, High	15	45	20.257	20.173	20.038	19.824
Strobe SR	15	0.066		35	80	20.179	20.050	19.842	19.513
Strobe SR	15	0.066		15	95	20.150	20.003	19.769	19.396
Strobe SR	15	0.066		15	110	20.125	19.963	19.705	19.294
Horn/Strobe P2R	75	0.176	Temporal, High	25	135	20.090	19.907	19.615	19.152
Horn/Strobe P2R	75	0.176	Temporal, High	25	160	20.072	19.879	19.571	19.081
Total current/amps 0.858	Total Dist: 160				voltage drop	0.328	0.521	0.829	1.319

advanced ideas. advanced solutions.

Circuit Information

Panel Name: Altronix 602 Notificatio...

Circuit Name: NAC #2

Starting Voltage: Starting Voltage = 20.4

(1) amp circuit

Class B @ 14 AWG

DC 24 - volt Supply

Type and Model	Candela	Current (Amps)	Tone and Volume	Dist from last device	Dist from source (ft)	12	14	16	18
Strobe SR	15	0.066		30	30	20.339	20.304	20.247	20.157
Horn/Strobe PC2R	95	0.194	Temporal, High	50	80	20.252	20.165	20.026	19.804
Horn/Strobe P2R	75	0.176	Temporal, High	25	105	20.228	20.126	19.964	19.707
Strobe SR	15	0.066		30	135	20.220	20.114	19.944	19.675
Total current/amps 0.502	Total Dist:135				voltage drop	0.180	0.286	0.456	0.725

advanced ideas. advanced solutions.

Circuit Information

Panel Name: Altronix 602 Notificatio...

Circuit Name: NAC #3

Starting Voltage: Starting Voltage = 20.4

(1) amp circuit

Class B @ 14 AWG

DC 24 - volt Supply

Type and Model	Candela	Current (Amps)	Tone and Volume	Dist from last device	Dist from source (ft)	12	14	16	18
Strobe SR	15	0.066		30	30	20.302	20.245	20.153	20.007
Horn/Strobe PC2R	95	0.194	Temporal, High	35	65	20.197	20.078	19.888	19.585
Strobe SCR	95	0.181		35	100	20.120	19.955	19.692	19.274
Horn/Strobe PC2R	95	0.194	Temporal, High	35	135	20.068	19.873	19.560	19.065
Horn/Strobe P2R	75	0.176	Temporal, High	35	170	20.043	19.833	19.498	18.965
Total current/amps 0.811	Total Dist: 170				voltage drop	0.357	0.567	0.902	1.435

SYSTEM SENSOR
advanced ideas, advanced solutions

Circuit Information

Panel Name: Altronix 602 Notificatio...
Circuit Name: NAC #4
Starting Voltage: Starting Voltage = 20.4

(1) amp circuit
Class B @ 14 AWG
DC 24 - volt Supply

Type and Model	Candela	Current (Amps)	Tone and Volume	Dist from last device	Dist from source (ft)	12	14	16	18
Horn/Strobe PC2R	95	0.194	Temporal, High	50	50	20.210	20.099	19.920	19.637
Strobe SCR	95	0.181		50	100	20.060	19.860	19.539	19.031
Horn/Strobe PC2R	95	0.194	Temporal, High	50	150	19.945	19.678	19.250	18.571
Strobe SCR	95	0.181		50	200	19.870	19.558	19.060	18.268
Horn/Strobe PC2R	95	0.194	Temporal, High	50	250	19.831	19.497	18.961	18.112
Total current/amps 0.944	Total Dist: 250				voltage drop	0.569	0.903	1.439	2.288