

# Panel Board Arc Flash Report

Method of Computation: IEEE Standard 1584 With NFPA 70E PPE Requirements

Incidental Energy Computed At 100%

Prepared By: John Ritchey, EIT

Company: Hershey Entertainment and Resort

Wednesday, May. 07, 2008

Item Name	Ø	Voltage	Hz	Gnd	SCA (sym)	Type	OCPD	Trip (sec)	Gap (mm)	E (cal/cm <sup>2</sup> )	L working (in.)	Min. Boundry (in.)	PPE Level
F-01-09954-P1-27-S1A	1	208	60	Yes	22 A	CB	Std	0.017	25 mm	< 0.10	18	0.4	0
F-01-09954-P1-34-S1B	1	208	60	Yes	44 A	CB	Std	0.017	25 mm	0.10	18	0.5	0
F-01-09954-M1-2-P1	3	208	60	Yes	1,420 A	CB	Std	0.017	25 mm	0.90	18	2.6	0
F-01-07109-M1	3	480	60	Yes	2,094 A	CB	Std	0.017	25 mm	1.40	18	3.5	0
F-02-07152-M2	3	208	60	Yes	2,531 A	CB	Std	0.017	25 mm	1.40	18	3.4	0
F-03-07170-M3-1-P3A	3	208	60	Yes	1,420 A	CB	Std	0.017	25 mm	0.90	18	2.6	0
F-03-07170-P3B-25-S3B	3	208	60	Yes	49 A	CB	Std	0.017	25 mm	0.10	18	0.6	0
F-03-07170-M3-2-P3B	3	208	60	Yes	1,528 A	CB	Std	0.017	25 mm	0.90	18	2.7	0
F-03-07170-P3C-36-S3C	3	208	60	Yes	54 A	CB	Std	0.017	25 mm	0.10	18	0.6	0
F-03-07170-M3-5-P3C	3	208	60	Yes	1,655 A	CB	Std	0.017	25 mm	1.00	18	2.8	0
F-03-07109-M3	3	480	60	Yes	2,645 A	CB	Std	0.017	25 mm	1.80	18	4	0
F-04-07109-MCC4	3	480	60	Yes	5,011 A	CB	Std	0.017	25 mm	3.20	18	5.8	1
F-05-07160-M5-1-R5	3	480	60	Yes	2,308 A	CB	Std	0.017	25 mm	1.60	18	3.7	0
F-05-07160-F5-1-P5	3	208	60	Yes	53 A	CB	Std	0.017	25 mm	0.10	18	0.6	0
F-05-07160-M5-2-F5	3	480	60	Yes	2,608 A	CB	Std	0.017	25 mm	1.80	18	4	0
F-05-07109-M5	3	480	60	Yes	4,825 A	CB	Std	0.017	25 mm	3.10	18	5.7	1
F-06-07109-M6	3	480	60	Yes	2,393 A	CB	Std	0.017	25 mm	1.60	18	3.8	0
F-07-07124-M7-2-P7	3	208	60	Yes	3,502 A	CB	Std	0.017	25 mm	1.80	18	4	0
F-07-07109-M7	3	480	60	Yes	5,447 A	CB	Std	0.017	25 mm	3.50	18	6.1	1
F-08-07140-P8A-29-S8A	3	208	60	Yes	79 A	CB	Std	0.017	25 mm	0.10	18	0.7	0
F-08-07140-F8-1-P8A	3	208	60	Yes	352 A	CB	Std	0.017	25 mm	0.30	18	1.4	0
F-08-07140-F8-2-P8B	3	208	60	Yes	300 A	CB	Std	0.017	25 mm	0.30	18	1.3	0
F-08-07140-P8C-8-R8B	3	208	60	Yes	87 A	CB	Std	0.017	25 mm	0.10	18	0.7	0
F-08-07140-P8C-13-R8C	3	208	60	Yes	93 A	CB	Std	0.017	25 mm	0.10	18	0.7	0
F-08-07140-F8-3-P8C	3	208	60	Yes	692 A	CB	Std	0.017	25 mm	0.50	18	1.9	0
F-08-07149-P8E-1-S8E	3	208	60	Yes	88 A	CB	Std	0.017	25 mm	0.10	18	0.7	0
F-08-07140-F8-4-P8DE	3	208	60	Yes	294 A	CB	Std	0.017	25 mm	0.30	18	1.3	0

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F-08-07140-F8-5-P8F	3	208	60	Yes	387 A	CB	Std	0.017	25 mm	0.30	18	1.4	0
F-08-07140-F8-6-P8G	3	208	60	Yes	221 A	CB	Std	0.017	25 mm	0.20	18	1.1	0
F-08-07140-M8-1-F8	3	480	60	Yes	4,059 A	CB	Std	0.017	25 mm	2.70	18	5.1	1
F-08-07248-P8H-39-S8H	1	208	60	Yes	302 A	CB	Std	0.017	25 mm	0.30	18	1.3	0
F-08-07109-M8-2-P8H	3	208	60	Yes	5,276 A	CB	Std	0.017	25 mm	2.40	18	4.8	1
F-08-07140-M8-3-R8A	3	480	60	Yes	4,295 A	CB	Std	0.017	25 mm	2.80	18	5.3	1
F-08-07109-M8	3	480	60	Yes	9,390 A	CB	Std	0.017	25 mm	5.80	18	8.2	2
F-09-09124-M9-10-P9A	3	208	60	Yes	5,400 A	CB	Std	0.017	25 mm	2.50	18	4.9	1
F-09-09124-P9B-38-S9A	3	208	60	Yes	164 A	CB	Std	0.017	25 mm	0.20	18	1	0
F-09-09124-P9C-2-S9B	3	208	60	Yes	270 A	CB	Std	0.017	25 mm	0.30	18	1.2	0
F-09-09124-M9-15-P9BC	3	208	60	Yes	5,946 A	CB	Std	0.017	25 mm	2.70	18	5.1	1
F-09-09124-M9-21-P9D	3	208	60	Yes	6,022 A	CB	Std	0.017	25 mm	2.70	18	5.1	1
F-09-09124-M9-28-P9E	3	208	60	Yes	6,044 A	CB	Std	0.017	25 mm	2.70	18	5.2	1
F-09-07109-M9	3	480	60	Yes	9,850 A	CB	Std	0.017	25 mm	6.10	18	8.5	2
F-10-07114-M10-1-P10A	3	208	60	Yes	698 A	CB	Std	0.017	25 mm	0.50	18	1.9	0
F-10-07114-M10-2-P10B	3	208	60	Yes	699 A	CB	Std	0.017	25 mm	0.50	18	1.9	0
F-10-07114-M10	3	208	60	Yes	790 A	CB	Std	0.017	25 mm	0.60	18	2	0
Motors	3	208	60	Yes	675 A	CB	Std	0.017	25 mm	0.50	18	1.9	0
Lighting	3	208	60	Yes	675 A	CB	Std	0.017	25 mm	0.50	18	1.9	0
F-11-07513-R11	3	208	60	Yes	758 A	CB	Std	0.017	25 mm	0.60	18	2	0
F-12-07109-M12-2-P12A	3	208	60	Yes	2,287 A	CB	Std	0.017	25 mm	1.30	18	3.3	0
F-12-07109-M12-8-P12B	1	208	60	Yes	3,961 A	CB	Std	0.017	25 mm	2.00	18	4.2	0
F-12-07109-M12-22-P12C	3	208	60	Yes	2,287 A	CB	Std	0.017	25 mm	1.30	18	3.3	0
F-07-07109-M12-38-P12D	3	208	60	Yes	2,287 A	CB	Std	0.017	25 mm	1.30	18	3.3	0
F-12-07109-M12	3	208	60	Yes	3,601 A	CB	Std	0.017	25 mm	1.80	18	4.1	0
F-13-07164-M13-11-P13A	1	208	60	Yes	2,286 A	CB	Std	0.017	25 mm	1.30	18	3.3	0
F-13-07164-M13-31-P13B	1	208	60	Yes	2,287 A	CB	Std	0.017	25 mm	1.30	18	3.3	0
F-13-07164-M13	3	208	60	Yes	1,669 A	CB	Std	0.017	25 mm	1.00	18	2.8	0
Motors	3	208	60	Yes	949 A	CB	Std	0.017	25 mm	0.70	18	2.2	0

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Lighting	3	208	60	Yes	950 A	CB	Std	0.017	25 mm	0.70	18	2.2	0
F-14-07525-R14	3	208	60	Yes	1,116 A	CB	Std	0.017	25 mm	0.70	18	2.4	0
F-15-07617-M15	3	208	60	Yes	1,114 A	CB	Std	0.017	25 mm	0.70	18	2.4	0
F-16-06172-M16	3	208	60	Yes	2,108 A	CB	Std	0.017	25 mm	1.20	18	3.2	0
SW-F-07109	3	480	60	Yes	143,616 A	CB	Std	0.017	32 mm	62.80	18	37.9	Exceeds PPE

- PPE Category    Required PPE**
- 0            Untreated Cotton - 1 layer
  - 1            FR Shirt & Pants - 1 layer
  - 2            Cotton Underware + FR Shirt & Pants - 1 or 2 layers
  - 3            Cotton Underware + FR Shirt & Pants + FR Coverall - 2 or 3 layers
  - 4            Cotton Underware + FR Shirt & Pants + Multi Layer Flash Suit - 3 or more layers
  - Exceeds PPE    No PPE Available - Energized Work Prohibited