

# Pacific Northwest National Laboratory

Operated by Battelle for the U.S. Department of Energy



Manufacturer: GE  
 Lamp Model: FLE26/2/PAR38/XL  
 Test Facility: Luminaire Testing Laboratory, Allentown, PA  
 Date Provided: 10/1/2007  
 Test Number: 09331

Lumen Maintenance (interpolated)	
Rated Life	10,000
1000 hr.	89.15%
40% of Rated Life	4000 80.44%

## Life and Lumen Maintenance Report

LUMEN MAINTENANCE (values in fc)																			
Date	1/4/06	1/11/06	1/18/06	1/25/06	2/1/06	2/8/06	2/15/06	3/1/06	3/15/06	3/29/06	4/12/06	4/26/06	5/10/06	5/24/06	6/7/06	6/21/06	7/5/06	7/19/06	8/2/06
"ON" hrs.	0.0	151.2	302.4	453.6	604.8	756.0	907.2	1209.6	1512.0	1814.4	2116.8	2419.2	2721.6	3024.0	3326.4	3628.8	3931.2	4233.6	4536.0
<b>Lamp Cell</b>																			
B2	44.14	41.66	40.56	39.94	39.18	38.77	37.86	37.10	36.45	35.46	35.03	34.77	34.20	33.58	33.72	33.17	32.95	32.76	32.47
B3	47.04	45.53	43.21	43.91	43.30	43.21	42.47	42.09	41.35	40.37	40.30	40.03	39.64	39.01	39.13	38.96	38.72	38.43	37.62
B4	47.26	45.09	43.29	43.30	42.49	42.16	41.18	40.89	39.88	38.60	38.29	37.97	37.55	36.82	37.16	36.69	35.54	35.84	35.35
B5	45.44	42.95	42.37	42.09	41.71	41.58	41.42	40.46	40.10	39.53	39.52	39.19	39.15	38.34	38.15	38.54	37.95	37.92	37.48
B6	45.58	43.19	41.53	41.36	40.90	40.66	40.06	39.59	39.11	38.18	37.70	37.49	37.07	36.51	36.66	36.32	36.05	35.37	35.11
B7	48.41	46.50	44.87	45.23	44.39	44.98	44.43	44.30	43.18	41.95	42.41	41.83	41.27	40.92	40.78	40.25	39.57	39.30	38.26
B8	45.44	44.20	43.34	43.11	42.72	42.83	42.19	41.73	41.31	40.42	40.19	39.76	39.32	38.86	38.87	38.83	38.46	37.98	37.58
B9	45.02	43.15	41.98	41.29	40.64	40.70	39.97	39.41	39.15	38.26	38.08	37.73	37.94	37.23	37.58	36.57	36.10	35.83	35.70
G2	44.83	42.82	41.25	41.10	40.50	40.26	39.59	39.05	38.62	37.61	37.22	36.94	36.69	35.91	35.76	36.47	35.97	35.13	34.92
H2	43.45	41.29	40.32	40.24	39.72	39.76	39.30	39.24	38.78	37.92	37.87	37.75	37.54	37.32	37.40	37.37	36.70	36.26	36.17
<b>Average</b>	45.7	43.6	42.3	42.2	41.6	41.5	40.8	40.4	39.8	38.8	38.7	38.3	38.0	37.5	37.5	37.3	36.8	36.5	36.1
<b>Average Lumen Maint.</b>	100.0%	95.6%	92.6%	92.3%	91.0%	90.9%	89.5%	88.4%	87.1%	85.0%	84.7%	84.0%	83.3%	82.0%	82.2%	81.7%	80.5%	79.8%	78.9%

LUMEN MAINTENANCE (values in fc) continued																			
Date	8/16/06	8/30/06	9/13/06	9/27/06	10/11/06	10/25/06	11/8/06	11/22/06	12/6/06	12/20/06	1/3/07	1/17/07	1/31/07	2/14/07	2/28/07	3/14/07	3/28/07	4/11/07	4/25/07
"ON" hrs.	4838.4	5140.8	5443.2	5745.6	6048.0	6350.4	6652.8	6955.2	7257.6	7560.0	7862.4	8164.8	8467.2	8769.6	9072.0	9374.4	9676.8	9979.2	10281.6
<b>Lamp Cell</b>																			
B2	32.12	32.34	31.62	31.40	31.51	31.91	31.27	31.46	31.70	31.99	31.65	31.88	32.12	31.85	31.89	31.08	31.13	30.94	31.04
B3																			
B4	35.47	34.98	34.22	34.31	34.49	35.18	34.81	34.40	34.90	34.04	34.70	35.64	35.12	34.43	34.64	33.73	33.68	33.43	33.86
B5	37.11	37.26	37.26	36.90	37.21	37.54	37.05	37.00	37.50	37.43	36.75	37.76	37.47	37.14	37.06	36.10	35.86	36.05	35.91
B6	34.67	34.66	34.02	33.97	34.09	34.32	33.90	33.70	34.46	34.23	33.93	34.37	33.86	33.90	34.20	33.39	33.39	33.32	33.35
B7	38.08	38.14	37.66	36.80	36.81	37.97	37.01	37.06	37.70	37.25	37.04	37.48	36.99	36.51	37.31	36.05	35.99	36.17	36.89
B8	36.99	37.37	37.00	36.50	36.86	36.63	36.23	36.08	36.61	36.67	36.45	36.82	36.60	36.19	36.33	35.51	35.51	24.87	22.50
B9	35.35	35.68	35.55	34.91	35.10	35.02	34.16	34.09	34.64	34.60	34.73	35.17	34.60	34.30	34.57	33.55	33.64	33.90	33.69
G2	34.12	33.53	34.05	33.79	34.23	33.71	33.73	33.12	33.83	33.96	34.18	34.70	33.71	34.46	33.77	33.23	32.63	24.29	24.78
H2	35.72	35.66	35.21	35.15	35.30	35.32	35.50	35.14	35.89	35.92	35.14	35.59	35.74	35.17	35.19	34.81	34.98	34.75	34.86
<b>Average</b>	35.5	35.5	35.2	34.9	35.1	35.3	34.9	34.7	35.2	35.1	35.0	35.5	35.1	34.9	35.0	34.2	34.1	32.0	31.9
<b>Average Lumen Maint.</b>	77.7%	77.7%	77.0%	76.3%	76.7%	77.2%	76.3%	75.9%	77.1%	76.9%	76.5%	77.7%	76.9%	76.3%	76.6%	74.8%	74.6%	70.0%	69.7%

Comments: Lamp Cell B3 Failed on 8/4/06 at 4499.3 hrs

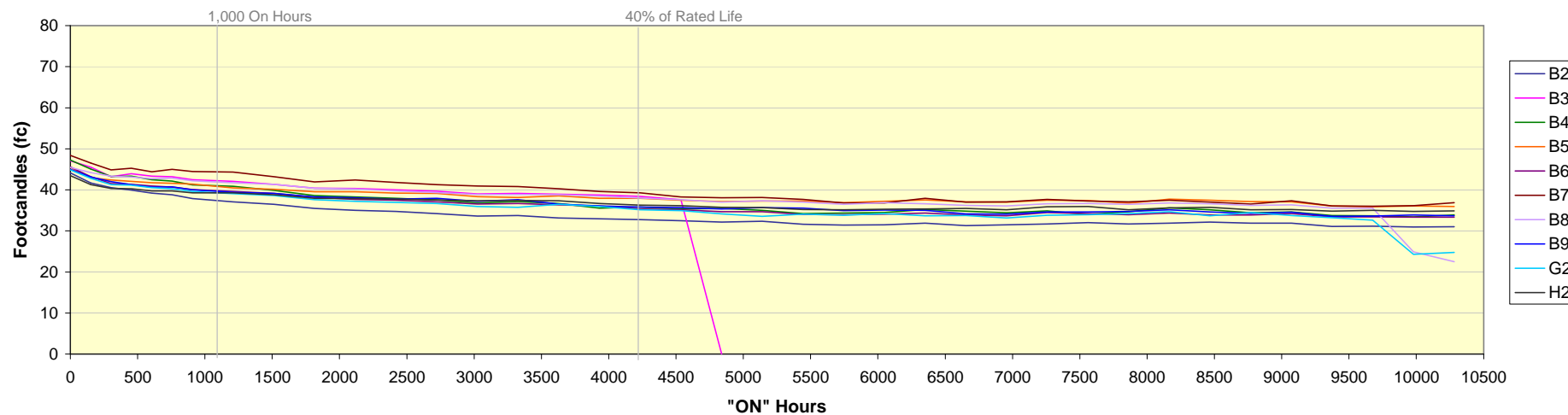
Successfully completed 10,000 hours Elevated Temperature Life Testing



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1000 hr.	89.15%
40% of Rated Life	80.44%

## Individual Lamp Illuminance and Life



## Average Lumen Maintenance

