

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P239287

Luminaire Tested: **HDF-2-LD4-UNV-1-STD-40-EDC-1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P239287
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1711-412-18)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: HDF-2-LD4-UNV-1-STD-40-EDC-1
Description: FAILSAFE HDF LED FIXTURE
2FT, 1-ROW LED BOARDS, NON-OVERLAY
Light Source: (42) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

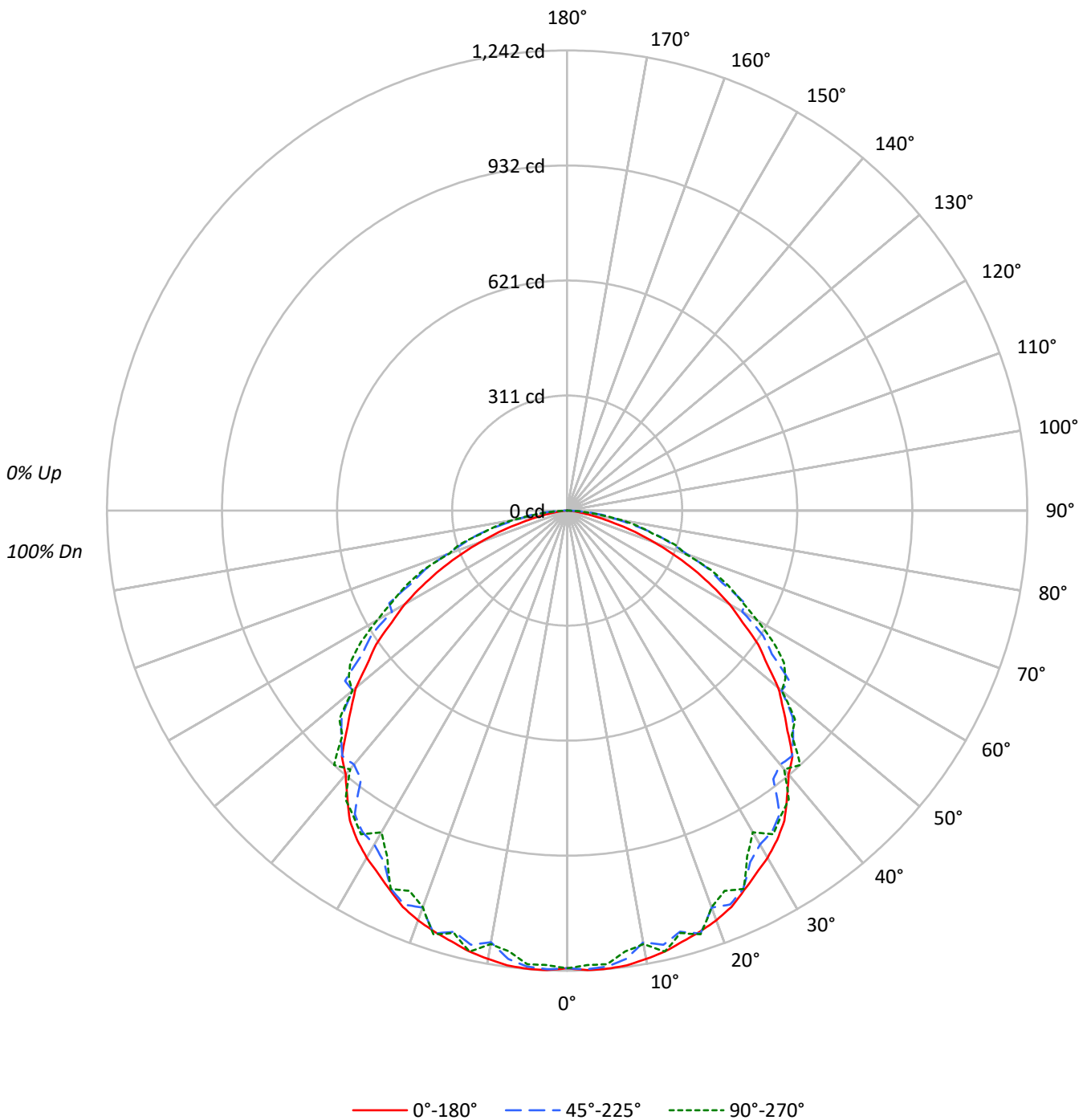
Lumens per Lamp: N/A
Luminaire Lumens: 3568.0 lumens
Efficiency: N/A
Efficacy: 99.9 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 1.28 / 1.41
Luminous Opening: Rectangular (W 0.58' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 35.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

TEST NUMBER: P239287

CATALOG NUMBER: HDF-2-LD4-UNV-1-STD-40-EDC-1

Luminous Intensity Polar Plot





TEST NUMBER: P239287

CATALOG NUMBER: HDF-2-LD4-UNV-1-STD-40-EDC-1

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	94	98	94	91	94	91	89	90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	78	74	79	75	72	70
3	90	80	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43
6	70	56	47	41	68	56	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11397	11397	11397
5°	11498	11441	11382
10°	11514	11082	11129
15°	11501	11239	11275
20°	11553	11198	11186
25°	11508	11459	11471
30°	11526	11088	10677
35°	11512	11260	11330
40°	11200	10779	10974
45°	10978	11255	11190
50°	10680	10843	10860
55°	10126	10846	11488
60°	9339	10075	10926
65°	8246	10095	10477
70°	6757	9315	9112
75°	4755	8841	8488
80°	2715	7284	8012
85°	1323	6330	5145



TEST NUMBER: P239287

CATALOG NUMBER: HDF-2-LD4-UNV-1-STD-40-EDC-1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.6	3.3
10°-20°	335.9	9.4
20°-30°	510.5	14.3
30°-40°	622.7	17.5
40°-50°	655.9	18.4
50°-60°	592.0	16.6
60°-70°	441.2	12.4
70°-80°	234.4	6.6
80°-90°	58.8	1.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	963.0	27.0
0°-40°	1585.7	44.4
0°-60°	2833.6	79.4
0°-90°	3568.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3568.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1235	1235	1235	1235	1235	
5°	1242	1243	1235	1233	1229	118
15°	1204	1175	1177	1178	1180	341
25°	1130	1098	1126	1086	1127	522
35°	1022	997	1000	1002	1006	635
45°	841	826	863	896	858	650
55°	630	603	674	712	714	558
65°	378	403	462	477	480	373
75°	133	198	248	247	238	148
85°	12	46	60	57	49	19
90°	0	0	0	0	0	



TEST NUMBER: P239287

CATALOG NUMBER: HDF-2-LD4-UNV-1-STD-40-EDC-1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1235.3	1235.3	1235.3	1235.3	1235.3
2.5°	1241.5	1234.0	1239.0	1230.3	1227.8
5°	1241.5	1242.7	1235.3	1232.8	1229.0
7.5°	1237.7	1242.7	1220.3	1179.2	1200.3
10°	1229.0	1231.5	1182.9	1196.6	1187.9
12.5°	1219.0	1221.5	1200.3	1197.9	1219.0
15°	1204.1	1175.4	1176.7	1177.9	1180.4
17.5°	1191.6	1141.8	1196.6	1191.6	1199.1
20°	1176.7	1155.5	1140.5	1163.0	1139.3
22.5°	1158.0	1136.8	1150.5	1113.1	1110.6
25°	1130.5	1098.1	1125.6	1085.7	1126.8
27.5°	1104.4	1080.7	1069.5	1100.6	1052.0
30°	1081.9	1078.2	1040.8	1012.1	1002.2
32.5°	1054.5	1032.1	1028.3	989.7	1035.8
35°	1022.1	997.2	999.7	1002.2	1005.9
37.5°	974.7	989.7	913.7	968.5	982.2
40°	929.9	943.6	895.0	943.6	911.2
42.5°	900.0	868.8	898.7	883.7	931.1
45°	841.4	826.4	862.6	896.2	857.6
47.5°	790.3	769.1	825.2	817.7	833.9
50°	744.1	730.4	755.4	785.3	756.6
52.5°	679.3	685.6	755.4	711.7	742.9
55°	629.5	603.3	674.3	711.7	714.2
57.5°	560.9	548.4	627.0	650.7	659.4
60°	506.1	531.0	546.0	608.3	592.1
62.5°	441.2	466.2	541.0	537.2	531.0
65°	377.7	402.6	462.4	477.4	479.9
67.5°	311.6	362.7	413.8	416.3	421.3
70°	250.5	310.4	345.3	364.0	337.8
72.5°	192.0	238.1	291.7	312.9	304.1
75°	133.4	198.2	248.0	246.8	238.1
77.5°	87.3	153.3	185.7	198.2	198.2
80°	51.1	109.7	137.1	154.6	150.8
82.5°	27.4	72.3	102.2	101.0	91.0
85°	12.5	46.1	59.8	57.3	48.6
87.5°	6.2	26.2	27.4	21.2	15.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)