

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: P239291

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P239291
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-LO-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

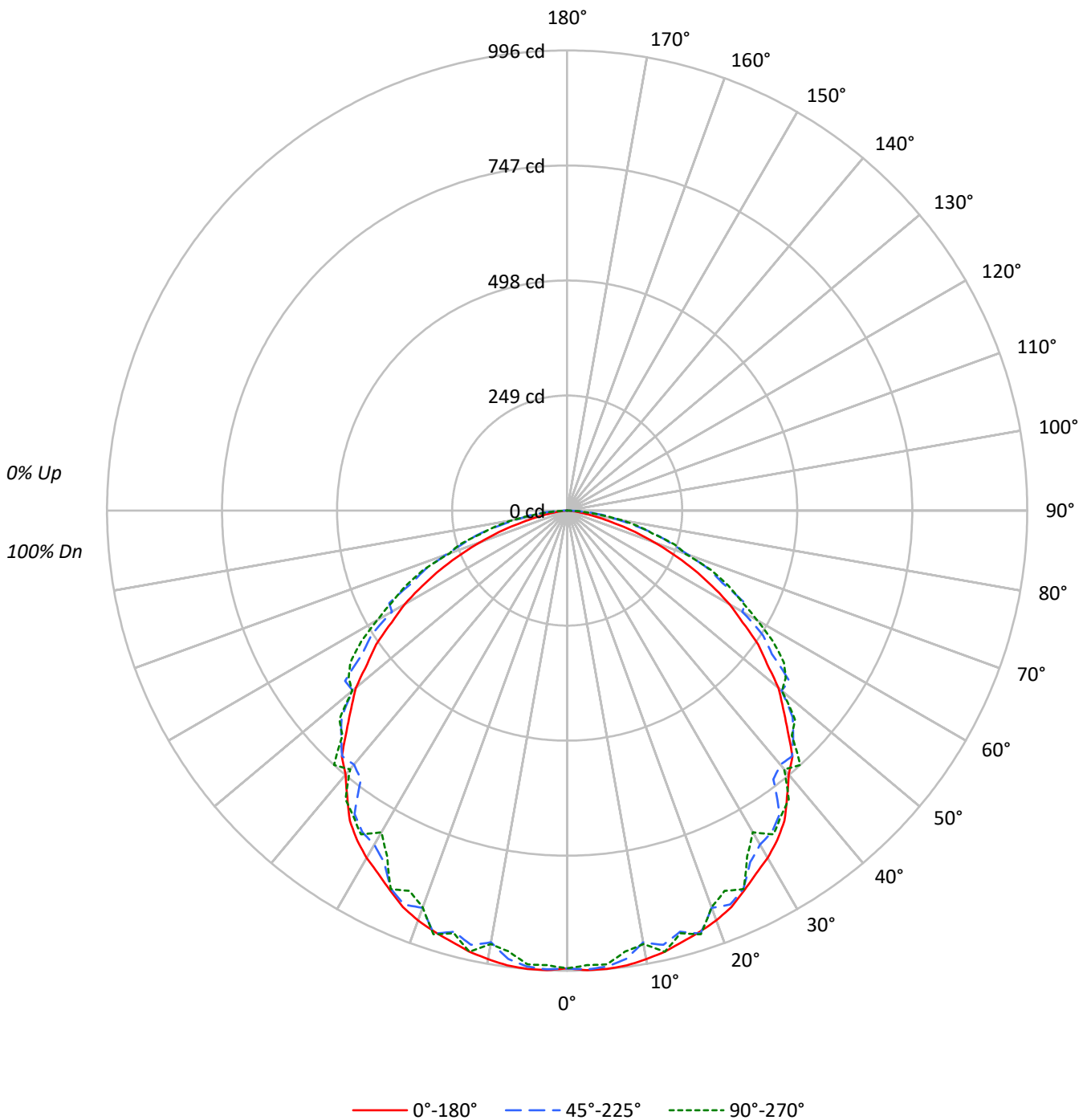
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2862.0 lumens
Efficiency: N/A
Efficacy: 115.9 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): 24.7
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

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Luminous Intensity Polar Plot





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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9141	9141	9141
5°	9223	9176	9130
10°	9236	8889	8926
15°	9225	9015	9044
20°	9267	8982	8972
25°	9231	9191	9201
30°	9246	8895	8564
35°	9235	9032	9088
40°	8984	8646	8803
45°	8806	9028	8976
50°	8568	8697	8711
55°	8122	8701	9215
60°	7490	8080	8763
65°	6613	8097	8403
70°	5422	7472	7310
75°	3814	7094	6809
80°	2178	5844	6429
85°	1059	5081	4129



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.5	3.3
10°-20°	269.5	9.4
20°-30°	409.5	14.3
30°-40°	499.5	17.5
40°-50°	526.1	18.4
50°-60°	474.9	16.6
60°-70°	353.9	12.4
70°-80°	188.1	6.6
80°-90°	47.2	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°	772.4	27.0
0°-40°	1271.9	44.4
0°-60°	2272.9	79.4
0°-90°	2862.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2862.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	991	991	991	991	991	
5°	996	997	991	989	986	95
15°	966	943	944	945	947	273
25°	907	881	903	871	904	419
35°	820	800	802	804	807	510
45°	675	663	692	719	688	521
55°	505	484	541	571	573	447
65°	303	323	371	383	385	299
75°	107	159	199	198	191	119
85°	10	37	48	46	39	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	990.8	990.8	990.8	990.8	990.8
2.5°	995.8	989.8	993.8	986.8	984.8
5°	995.8	996.8	990.8	988.8	985.8
7.5°	992.8	996.8	978.8	945.8	962.8
10°	985.8	987.8	948.8	959.8	952.8
12.5°	977.8	979.8	962.8	960.8	977.8
15°	965.8	942.8	943.8	944.8	946.8
17.5°	955.8	915.8	959.8	955.8	961.8
20°	943.8	926.8	914.8	932.8	913.8
22.5°	928.8	911.8	922.8	892.8	890.8
25°	906.8	880.9	902.8	870.9	903.8
27.5°	885.8	866.9	857.9	882.8	843.9
30°	867.9	864.9	834.9	811.9	803.9
32.5°	845.9	827.9	824.9	793.9	830.9
35°	819.9	799.9	801.9	803.9	806.9
37.5°	781.9	793.9	732.9	776.9	787.9
40°	745.9	756.9	717.9	756.9	730.9
42.5°	721.9	696.9	720.9	708.9	746.9
45°	674.9	662.9	691.9	718.9	687.9
47.5°	633.9	616.9	661.9	655.9	668.9
50°	596.9	585.9	605.9	629.9	606.9
52.5°	544.9	549.9	605.9	570.9	595.9
55°	504.9	483.9	540.9	570.9	572.9
57.5°	449.9	439.9	502.9	521.9	528.9
60°	405.9	425.9	437.9	487.9	474.9
62.5°	353.9	373.9	433.9	430.9	425.9
65°	302.9	322.9	370.9	382.9	384.9
67.5°	250.0	291.0	331.9	333.9	337.9
70°	201.0	249.0	277.0	292.0	271.0
72.5°	154.0	191.0	234.0	251.0	244.0
75°	107.0	159.0	199.0	198.0	191.0
77.5°	70.0	123.0	149.0	159.0	159.0
80°	41.0	88.0	110.0	124.0	121.0
82.5°	22.0	58.0	82.0	81.0	73.0
85°	10.0	37.0	48.0	46.0	39.0
87.5°	5.0	21.0	22.0	17.0	12.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)