

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: P239288

Luminaire Tested: **HDF-2-LD4-UNV-1-STD-50-EDC-1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P239288
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-50-EDC-1
Description: FAILSAFE HDF LED FIXTURE
2FT, 1-ROW LED BOARDS, NON-OVERLAY
Light Source: (42) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

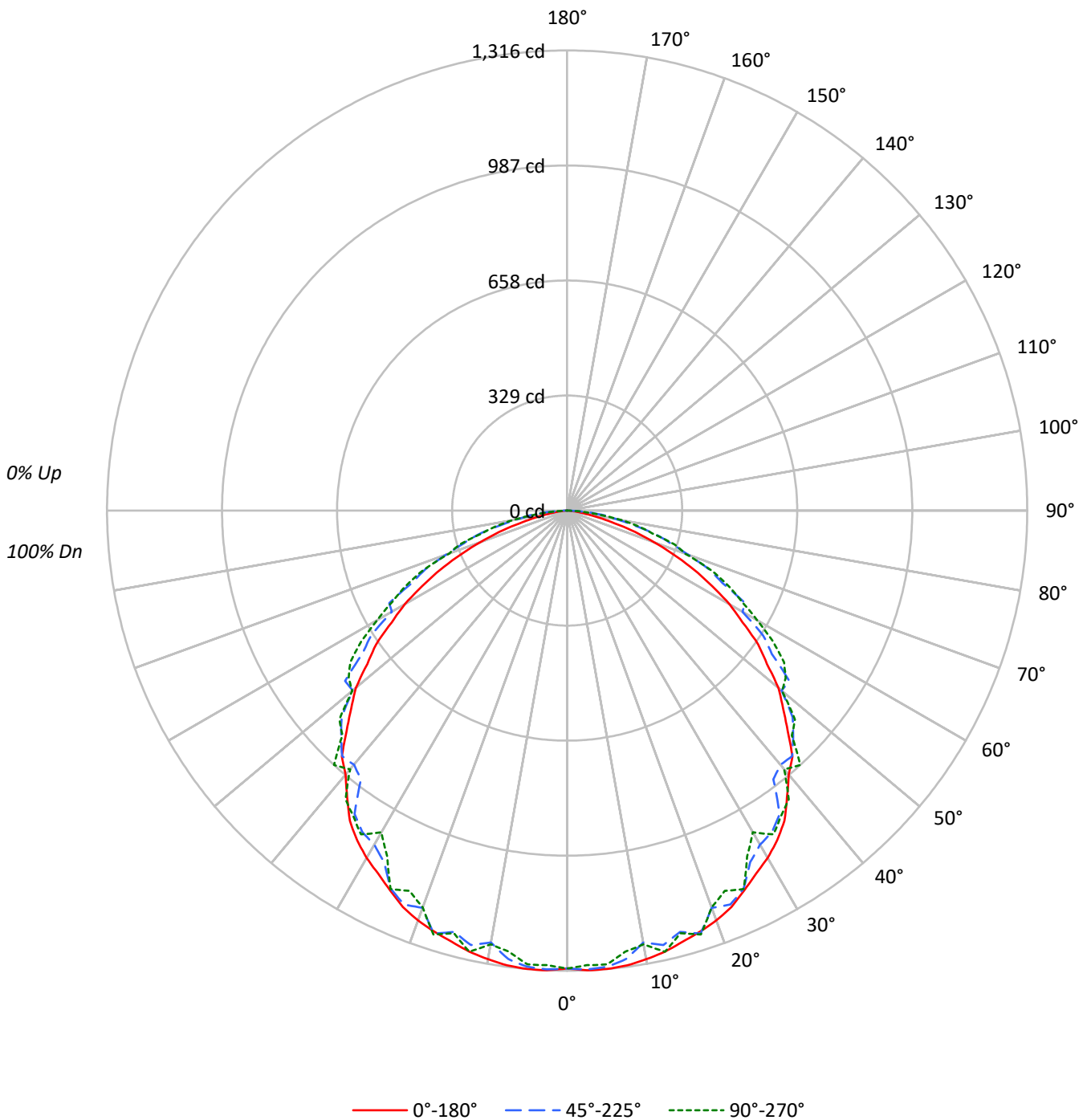
Lumens per Lamp: N/A
Luminaire Lumens: 3782.1 lumens
Efficiency: N/A
Efficacy: 105.9 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 1.28 / 1.41
Luminous Opening: Rectangular (W 0.58' x L: 2' x H: 0')
CIE Type: Direct

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

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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	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°	12081	12081	12081
5°	12188	12127	12066
10°	12205	11747	11797
15°	12191	11914	11951
20°	12246	11869	11857
25°	12200	12146	12159
30°	12219	11753	11317
35°	12202	11934	12010
40°	11872	11426	11632
45°	11636	11930	11860
50°	11322	11493	11511
55°	10732	11498	12178
60°	9898	10678	11581
65°	8739	10702	11105
70°	7165	9873	9660
75°	5041	9372	8997
80°	2880	7720	8496
85°	1397	6711	5452



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.6	3.3
10°-20°	356.1	9.4
20°-30°	541.1	14.3
30°-40°	660.0	17.5
40°-50°	695.2	18.4
50°-60°	627.5	16.6
60°-70°	467.7	12.4
70°-80°	248.5	6.6
80°-90°	62.3	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°	1020.8	27.0
0°-40°	1680.8	44.4
0°-60°	3003.6	79.4
0°-90°	3782.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3782.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1309	1309	1309	1309	1309	
5°	1316	1317	1309	1307	1303	125
15°	1276	1246	1247	1249	1251	361
25°	1198	1164	1193	1151	1194	553
35°	1083	1057	1060	1062	1066	673
45°	892	876	914	950	909	689
55°	667	640	715	754	757	591
65°	400	427	490	506	509	395
75°	141	210	263	262	252	157
85°	13	49	63	61	52	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1309.4	1309.4	1309.4	1309.4	1309.4
2.5°	1316.0	1308.0	1313.3	1304.1	1301.4
5°	1316.0	1317.3	1309.4	1306.7	1302.8
7.5°	1312.0	1317.3	1293.5	1249.9	1272.4
10°	1302.8	1305.4	1253.9	1268.4	1259.2
12.5°	1292.2	1294.8	1272.4	1269.7	1292.2
15°	1276.3	1245.9	1247.3	1248.6	1251.2
17.5°	1263.1	1210.3	1268.4	1263.1	1271.0
20°	1247.3	1224.8	1208.9	1232.7	1207.6
22.5°	1227.4	1205.0	1219.5	1179.9	1177.2
25°	1198.4	1164.0	1193.1	1150.8	1194.4
27.5°	1170.6	1145.5	1133.6	1166.7	1115.1
30°	1146.9	1142.9	1103.2	1072.9	1062.3
32.5°	1117.8	1094.0	1090.0	1049.1	1098.0
35°	1083.4	1057.0	1059.6	1062.3	1066.3
37.5°	1033.2	1049.1	968.5	1026.6	1041.2
40°	985.7	1000.2	948.7	1000.2	965.8
42.5°	953.9	920.9	952.6	936.8	987.0
45°	891.8	876.0	914.3	950.0	909.0
47.5°	837.7	815.2	874.7	866.7	883.9
50°	788.8	774.3	800.7	832.4	802.0
52.5°	720.1	726.7	800.7	754.4	787.5
55°	667.2	639.5	714.8	754.4	757.1
57.5°	594.6	581.4	664.6	689.7	698.9
60°	536.4	562.9	578.7	644.8	627.6
62.5°	467.7	494.2	573.4	569.5	562.9
65°	400.3	426.8	490.2	506.0	508.7
67.5°	330.3	384.5	438.7	441.3	446.6
70°	265.6	329.0	366.0	385.8	358.1
72.5°	203.5	252.4	309.2	331.6	322.4
75°	141.4	210.1	262.9	261.6	252.4
77.5°	92.5	162.5	196.9	210.1	210.1
80°	54.2	116.3	145.3	163.8	159.9
82.5°	29.1	76.6	108.3	107.0	96.5
85°	13.2	48.9	63.4	60.8	51.5
87.5°	6.6	27.7	29.1	22.5	15.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)