

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: P239282

Luminaire Tested: **HDF-2-LD4-UNV-1-HI-35-EDC-1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P239282
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-HI-35-EDC-1
Description: FAILSAFE HDF LED FIXTURE
2FT, 1-ROW LED BOARDS, NON-OVERLAY
Light Source: (42) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

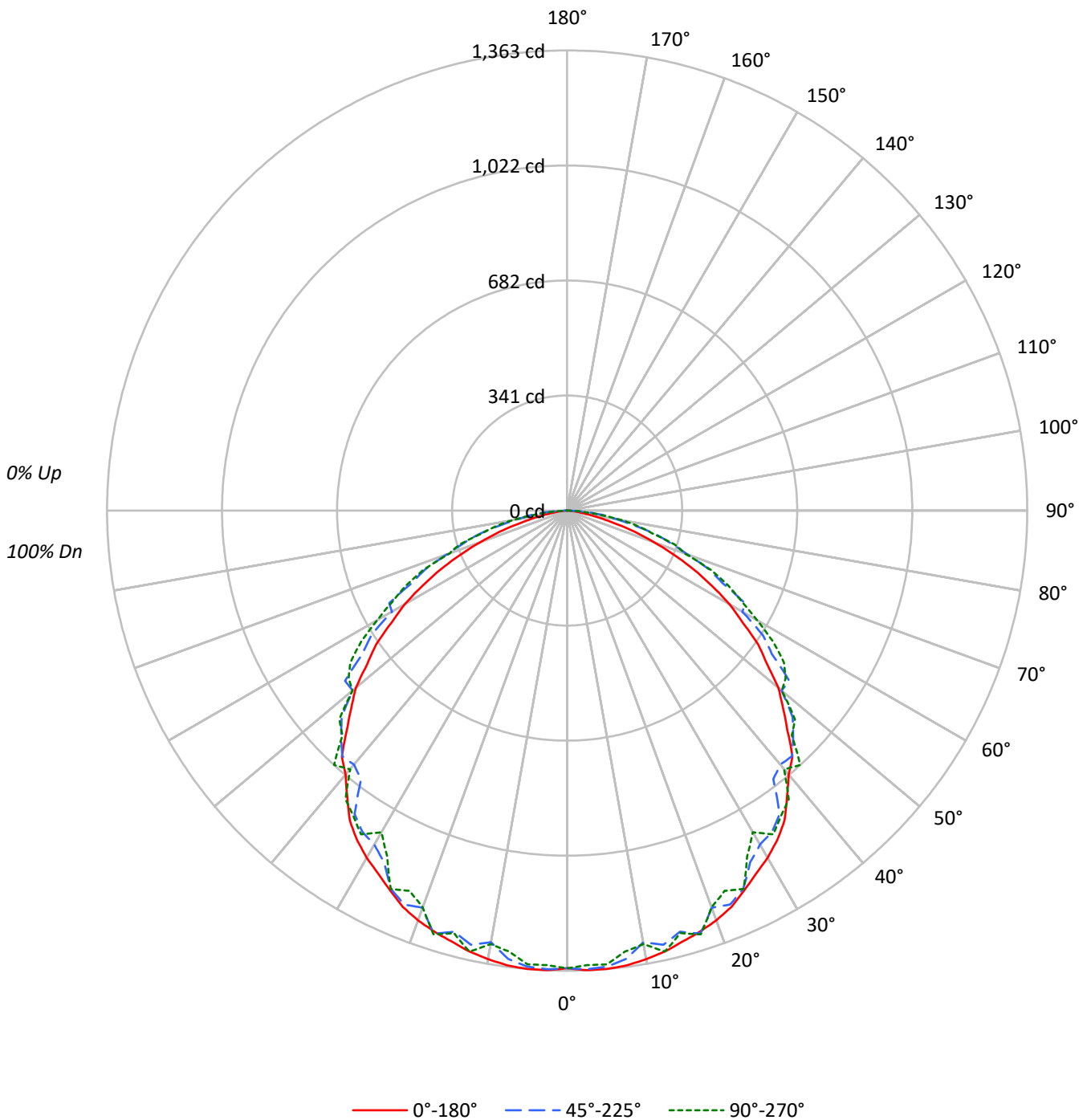
Lumens per Lamp: N/A
Luminaire Lumens: 3916.0 lumens
Efficiency: N/A
Efficacy: 82.1 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 1.28 / 1.41
Luminous Opening: Rectangular (W 0.58' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 47.7
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	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°	12508	12508	12508
5°	12620	12556	12493
10°	12637	12163	12214
15°	12623	12335	12374
20°	12679	12291	12277
25°	12631	12575	12590
30°	12651	12170	11718
35°	12635	12358	12434
40°	12292	11831	12044
45°	12048	12352	12281
50°	11722	11899	11919
55°	11113	11905	12609
60°	10248	11057	11990
65°	9049	11079	11498
70°	7418	10221	10000
75°	5219	9703	9315
80°	2981	7996	8793
85°	1450	6955	5653



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.0	3.3
10°-20°	368.7	9.4
20°-30°	560.3	14.3
30°-40°	683.4	17.5
40°-50°	719.8	18.4
50°-60°	649.8	16.6
60°-70°	484.2	12.4
70°-80°	257.3	6.6
80°-90°	64.6	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°	1056.9	27.0
0°-40°	1740.3	44.4
0°-60°	3109.9	79.4
0°-90°	3916.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3916.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1356	1356	1356	1356	1356	
5°	1363	1364	1356	1353	1349	130
15°	1322	1290	1291	1293	1296	374
25°	1241	1205	1235	1192	1237	573
35°	1122	1094	1097	1100	1104	697
45°	923	907	947	984	941	713
55°	691	662	740	781	784	612
65°	414	442	508	524	527	409
75°	146	218	272	271	261	163
85°	14	51	66	63	53	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1355.7	1355.7	1355.7	1355.7	1355.7
2.5°	1362.6	1354.4	1359.8	1350.3	1347.5
5°	1362.6	1363.9	1355.7	1353.0	1348.9
7.5°	1358.5	1363.9	1339.3	1294.2	1317.4
10°	1348.9	1351.6	1298.3	1313.3	1303.7
12.5°	1337.9	1340.7	1317.4	1314.7	1337.9
15°	1321.5	1290.1	1291.4	1292.8	1295.5
17.5°	1307.8	1253.1	1313.3	1307.8	1316.1
20°	1291.4	1268.2	1251.8	1276.4	1250.4
22.5°	1270.9	1247.7	1262.7	1221.7	1218.9
25°	1240.8	1205.2	1235.3	1191.6	1236.7
27.5°	1212.1	1186.1	1173.8	1208.0	1154.6
30°	1187.5	1183.4	1142.3	1110.8	1099.9
32.5°	1157.4	1132.7	1128.6	1086.2	1136.8
35°	1121.8	1094.4	1097.2	1099.9	1104.0
37.5°	1069.8	1086.2	1002.8	1063.0	1078.0
40°	1020.6	1035.6	982.3	1035.6	1000.0
42.5°	987.7	953.5	986.4	969.9	1021.9
45°	923.4	907.0	946.7	983.6	941.2
47.5°	867.3	844.1	905.6	897.4	915.2
50°	816.7	801.7	829.0	861.9	830.4
52.5°	745.6	752.4	829.0	781.2	815.4
55°	690.9	662.1	740.1	781.2	783.9
57.5°	615.6	601.9	688.1	714.1	723.7
60°	555.4	582.8	599.2	667.6	649.8
62.5°	484.3	511.6	593.7	589.6	582.8
65°	414.5	441.9	507.5	524.0	526.7
67.5°	342.0	398.1	454.2	456.9	462.4
70°	275.0	340.6	378.9	399.5	370.7
72.5°	210.7	261.3	320.1	343.4	333.8
75°	146.4	217.5	272.2	270.9	261.3
77.5°	95.8	168.3	203.8	217.5	217.5
80°	56.1	120.4	150.5	169.6	165.5
82.5°	30.1	79.3	112.2	110.8	99.9
85°	13.7	50.6	65.7	62.9	53.4
87.5°	6.8	28.7	30.1	23.3	16.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)