

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: FAIL-SAFE

Report Number: P973251

Luminaire Tested: FLR2-14-42HE-L940-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973251
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-14-42HE-L940-CA080
Description: 1*4 FLR-2.0 4200 Lumen High Efficacy at 4000CCT & 90cri with Clear Aryalic (0.080" thickness)

Light Source:
Ballast/Driver: -

Summary

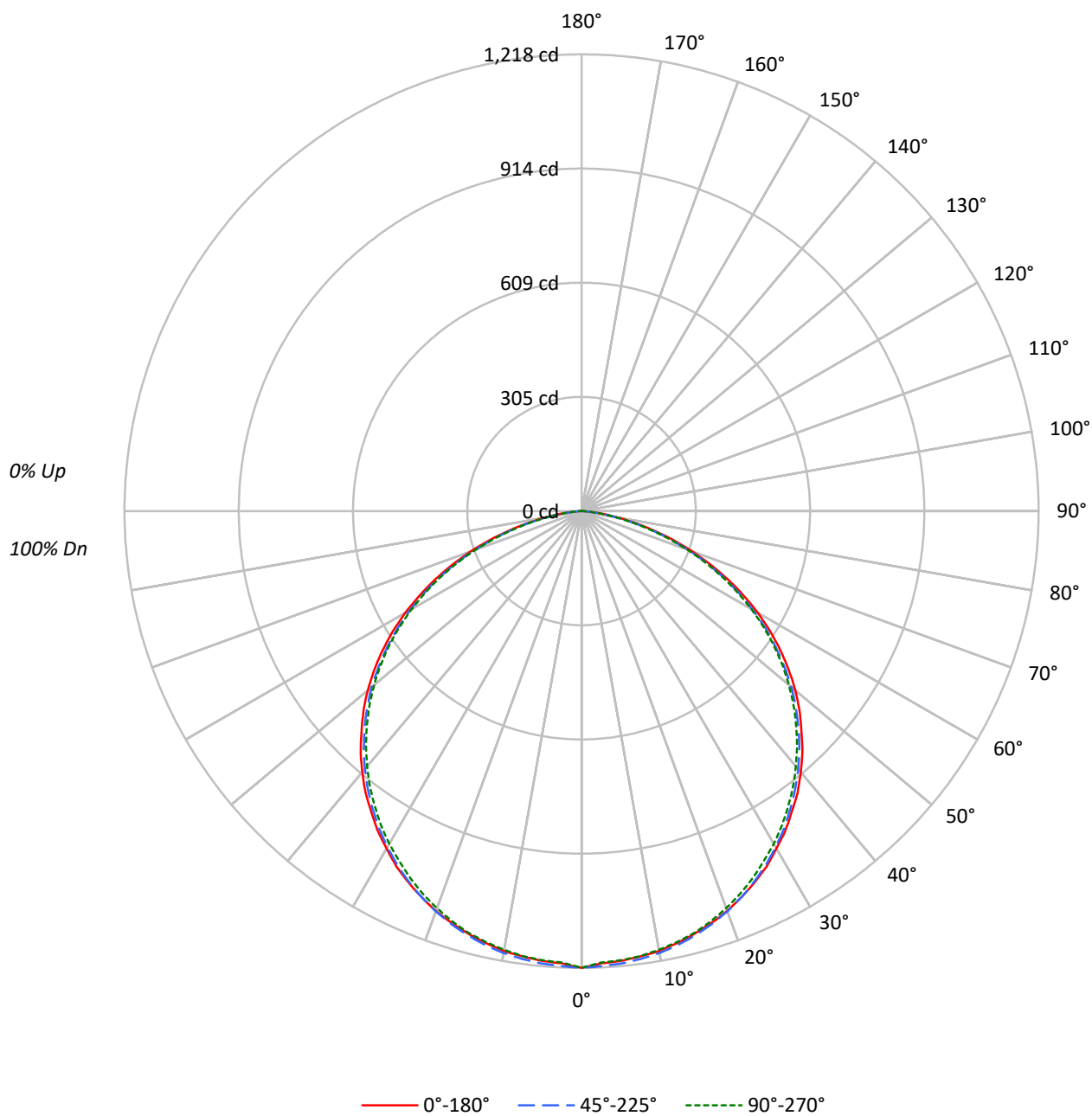
Lumens per Lamp: N/A
Luminaire Lumens: 3409.1 lumens
Efficiency: N/A
Efficacy: 106.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor:
Total Harmonic Distortion (THDi):
Frequency (hertz): 60
Stabilization Time: HR
Operation Time: HR
Ambient Temperature (°C): NR
Test Distance: 24 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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85		
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71		
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60		
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44		
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39		
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34		
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30		
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27		
10	53	40	32	27	52	39	32	27	38	32	27	38	31	27	37	31	26	25		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3278	3278	3278
5°	3252	3271	3248
10°	3255	3269	3246
15°	3250	3263	3243
20°	3250	3253	3227
25°	3242	3236	3206
30°	3229	3214	3183
35°	3211	3187	3155
40°	3193	3154	3122
45°	3154	3110	3078
50°	3113	3056	3020
55°	3035	2964	2936
60°	2917	2835	2811
65°	2732	2651	2623
70°	2463	2364	2345
75°	2065	1961	1939
80°	1500	1398	1359
85°	794	701	639

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3154 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.4	3.4
10°-20°	331.3	9.7
20°-30°	503.4	14.8
30°-40°	608.9	17.9
40°-50°	632.8	18.6
50°-60°	566.6	16.6
60°-70°	413.3	12.1
70°-80°	203.5	6.0
80°-90°	34.0	1.0
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°	950.0	27.9
0°-40°	1558.9	45.7
0°-60°	2758.3	80.9
0°-90°	3409.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3409.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1218	1218	1218	1218	1218	
5°	1204	1217	1211	1223	1202	115
15°	1167	1177	1171	1181	1164	329
25°	1092	1098	1090	1095	1080	503
35°	978	980	970	974	960	612
45°	829	828	817	819	809	640
55°	647	641	632	630	626	577
65°	429	424	416	413	412	424
75°	199	195	189	186	186	212
85°	26	25	23	20	21	37
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1218.0	1218.0	1218.0	1218.0	1218.0
2.5°	1207.4	1221.1	1214.5	1226.6	1204.9
5°	1203.9	1217.0	1211.0	1222.6	1202.4
7.5°	1197.9	1211.5	1204.9	1216.0	1196.9
10°	1191.3	1203.4	1196.4	1207.4	1187.8
12.5°	1179.7	1191.8	1185.3	1195.3	1177.2
15°	1166.6	1177.2	1171.1	1181.2	1164.1
17.5°	1151.5	1161.6	1155.0	1164.1	1146.9
20°	1134.8	1142.9	1135.9	1143.4	1126.8
22.5°	1114.2	1121.7	1114.2	1119.2	1104.6
25°	1092.0	1097.5	1090.0	1095.0	1079.9
27.5°	1068.3	1071.3	1063.8	1067.8	1052.2
30°	1039.1	1042.6	1034.5	1039.6	1024.4
32.5°	1010.8	1012.8	1003.8	1007.8	994.2
35°	977.6	979.6	970.0	974.0	960.4
37.5°	945.8	945.3	935.2	937.7	926.1
40°	909.0	908.5	897.9	899.9	888.8
42.5°	871.2	869.2	859.1	860.1	850.0
45°	828.8	827.8	817.2	818.7	808.7
47.5°	788.0	785.0	774.4	774.9	766.3
50°	743.6	739.1	730.0	729.0	721.4
52.5°	696.2	691.2	681.1	680.1	674.6
55°	646.8	641.3	631.7	630.2	625.7
57.5°	595.9	588.9	581.3	578.3	574.7
60°	542.0	535.4	526.8	523.8	522.3
62.5°	486.0	479.5	472.9	469.9	467.9
65°	429.0	424.0	416.4	413.4	411.9
67.5°	371.1	366.5	359.5	355.9	355.4
70°	313.1	308.5	300.5	298.5	298.0
72.5°	255.1	251.1	243.5	241.5	241.5
75°	198.6	195.1	188.6	186.5	186.5
77.5°	145.2	142.2	137.1	134.6	134.6
80°	96.8	94.8	90.2	88.2	87.7
82.5°	56.0	55.0	50.9	48.9	49.9
85°	25.7	24.7	22.7	20.2	20.7
87.5°	6.6	6.0	4.5	3.5	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)