

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: P973890

Luminaire Tested: FLR2-22-25HE-L840-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973890
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-2)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-22-25HE-L840-CP080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

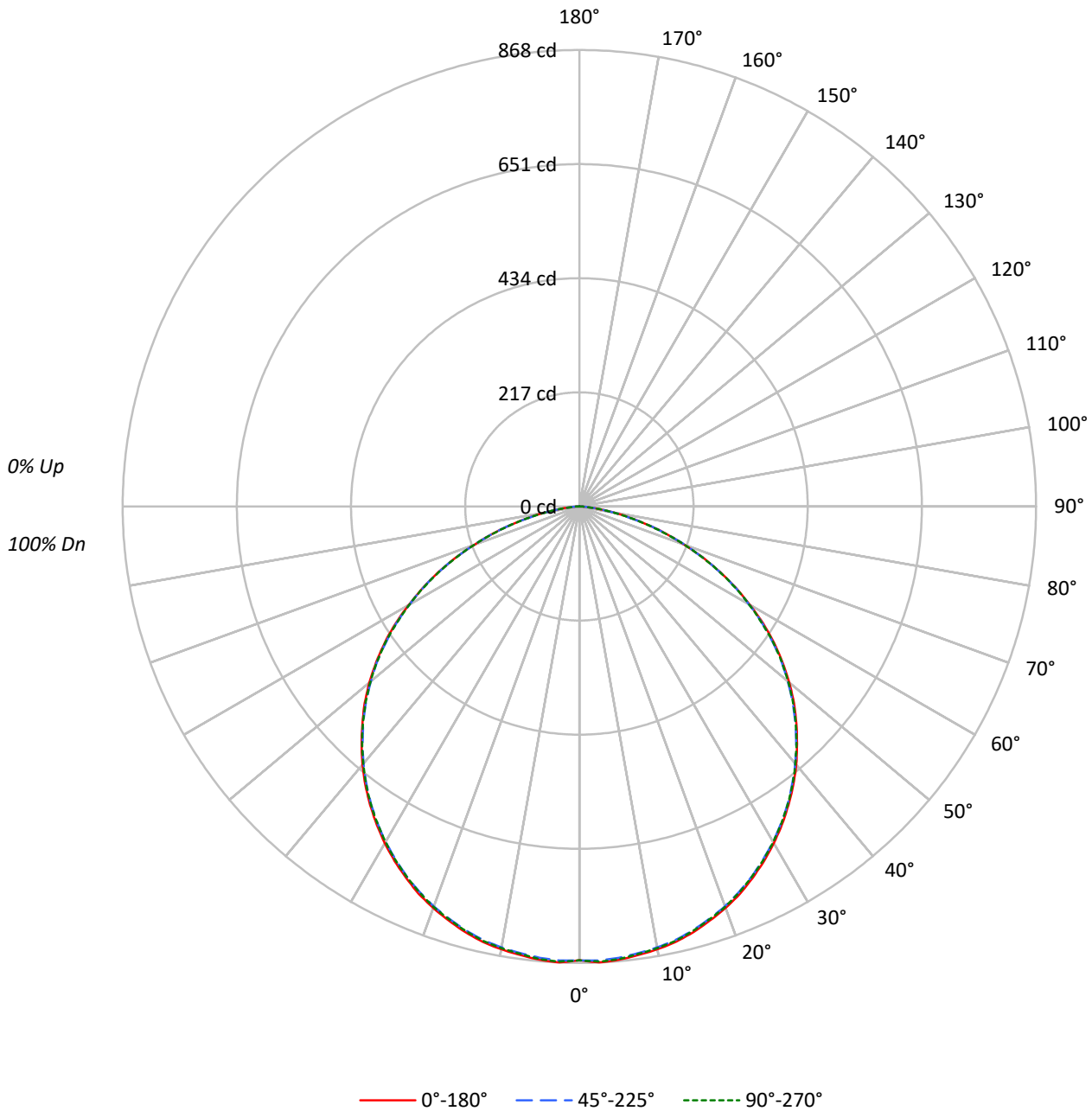
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2413.8 lumens
Efficiency: N/A
Efficacy: 125.7 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 19.2
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

TEST NUMBER: P973890
CATALOG NUMBER: FLR2-22-25HE-L840-CP080

Luminous Intensity Polar Plot





TEST NUMBER: P973890
 CATALOG NUMBER: FLR2-22-25HE-L840-CP080

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85					85															
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71					71															
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60					60															
4	83	71	63	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51					51															
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44					44															
6	71	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39					39															
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34					34															
8	61	47	39	33	59	47	39	33	45	38	33	44	37	32	43	37	32	30					30															
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27					27															
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25					25															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2323	2323	2323
5°	2337	2327	2334
10°	2337	2326	2331
15°	2335	2324	2327
20°	2327	2318	2321
25°	2314	2305	2306
30°	2298	2288	2289
35°	2277	2268	2270
40°	2253	2242	2244
45°	2219	2210	2213
50°	2181	2165	2169
55°	2119	2101	2108
60°	2014	2006	2006
65°	1881	1877	1871
70°	1666	1674	1670
75°	1403	1391	1380
80°	1007	992	982
85°	528	528	509

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2219 cd/sqm



TEST NUMBER: P973890
 CATALOG NUMBER: FLR2-22-25HE-L840-CP080

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.7	3.4
10°-20°	235.0	9.7
20°-30°	357.2	14.8
30°-40°	431.7	17.9
40°-50°	448.1	18.6
50°-60°	400.6	16.6
60°-70°	291.3	12.1
70°-80°	143.2	5.9
80°-90°	24.9	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°	674.0	27.9
0°-40°	1105.7	45.8
0°-60°	1954.4	81.0
0°-90°	2413.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2413.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	863	863	863	863	863	
5°	865	855	862	858	864	82
15°	838	828	834	832	835	236
25°	779	771	776	775	777	359
35°	693	688	690	691	691	434
45°	583	581	581	582	582	450
55°	452	449	448	449	449	402
65°	295	296	295	295	294	291
75°	135	136	134	134	133	143
85°	17	18	17	17	16	25
90°	0	0	0	0	0	



TEST NUMBER: P973890
 CATALOG NUMBER: FLR2-22-25HE-L840-CP080

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	863.1	863.1	863.1	863.1	863.1
2.5°	867.9	857.8	864.2	860.5	866.3
5°	865.3	855.1	861.5	858.3	864.2
7.5°	860.5	850.3	856.7	853.5	858.3
10°	855.1	844.5	851.4	848.2	853.0
12.5°	848.2	838.1	844.5	841.8	846.1
15°	838.1	828.5	834.3	832.2	835.4
17.5°	825.8	816.2	822.1	820.5	823.2
20°	812.5	803.4	809.3	807.7	810.4
22.5°	797.6	788.0	793.3	792.2	794.4
25°	779.4	770.9	776.2	774.6	776.8
27.5°	760.2	752.2	756.5	756.5	757.6
30°	739.5	732.0	736.3	736.3	736.8
32.5°	717.1	711.2	713.9	714.4	714.4
35°	693.1	688.3	690.4	690.9	690.9
37.5°	668.0	663.2	664.8	665.9	665.9
40°	641.4	637.1	638.2	639.2	638.7
42.5°	612.6	609.4	609.9	611.0	611.0
45°	583.2	580.6	580.6	581.6	581.6
47.5°	553.4	550.7	549.7	550.7	550.7
50°	520.9	518.2	517.1	518.2	518.2
52.5°	486.7	484.1	484.1	484.1	484.6
55°	451.6	448.9	447.8	448.9	449.4
57.5°	414.2	413.2	411.6	412.1	410.5
60°	374.3	374.3	372.7	373.7	372.7
62.5°	335.3	336.4	334.8	334.8	333.7
65°	295.4	296.4	294.8	294.8	293.8
67.5°	254.3	255.9	253.8	253.8	252.7
70°	211.7	214.9	212.7	213.3	212.2
72.5°	173.3	174.9	172.7	172.7	171.7
75°	134.9	135.9	133.8	134.3	132.7
77.5°	97.0	98.6	96.5	97.0	96.5
80°	65.0	65.6	64.0	64.5	63.4
82.5°	37.9	38.4	37.9	37.3	36.8
85°	17.1	17.6	17.1	17.1	16.5
87.5°	4.3	4.3	4.3	4.3	4.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)