

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: P973253

Luminaire Tested: FLR2-14-80HE-L940-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973253
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: FLR2-14-80HE-L940-CA080
Description: 1*4 FLR-2.0 8000 Lumen High Efficacy at 4000CCT & 90cri with Clear Aryalic (0.080" thickness)

Light Source:
Ballast/Driver: -

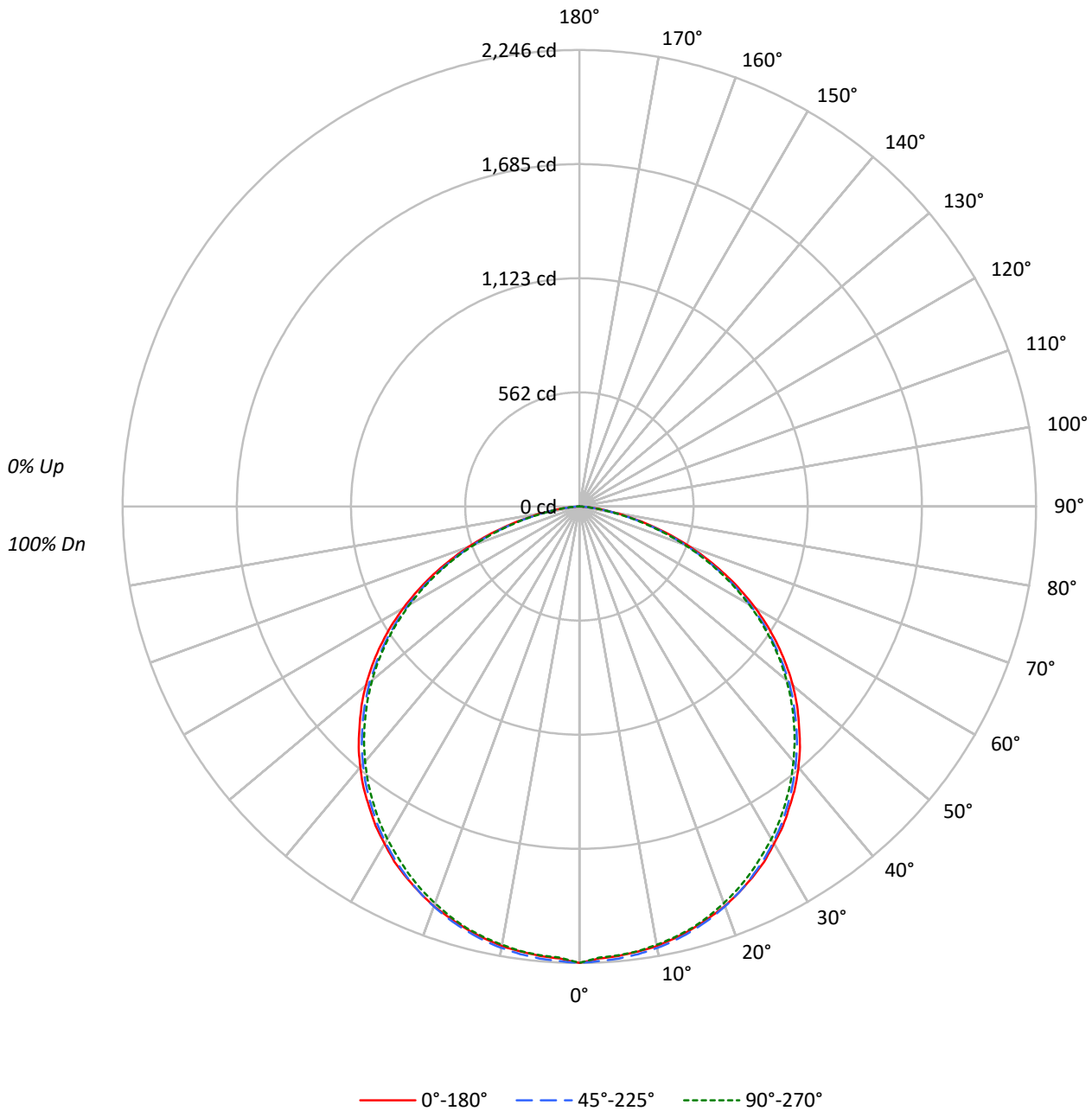
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6286.0 lumens
Efficiency: N/A
Efficacy: 101.6 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): 61.9
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									
RC	80									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	100	100	100	100													
	1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85	85	85	85	85	85													
	2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71	71	71	71	71	71													
	3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60	60	60	60	60	60													
	4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51	51	51	51	51	51													
	5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44	44	44	44	44	44													
	6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39	39	39	39	39	39													
	7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34	34	34	34	34	34													
	8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30	30	30	30	30	30													
	9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27	27	27	27	27	27													
	10	53	40	32	27	52	39	32	27	38	32	27	38	31	27	37	31	26	25	25	25	25	25	25													

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6044	6044	6044
5°	5997	6032	5989
10°	6002	6028	5984
15°	5993	6016	5980
20°	5992	5998	5950
25°	5978	5967	5912
30°	5953	5927	5869
35°	5921	5875	5818
40°	5888	5816	5757
45°	5816	5735	5675
50°	5740	5635	5569
55°	5596	5465	5412
60°	5378	5228	5183
65°	5037	4889	4836
70°	4542	4359	4323
75°	3808	3615	3577
80°	2766	2579	2506
85°	1463	1291	1176

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5816 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	212.7	3.4
10°-20°	610.9	9.7
20°-30°	928.1	14.8
30°-40°	1122.7	17.9
40°-50°	1166.8	18.6
50°-60°	1044.7	16.6
60°-70°	762.0	12.1
70°-80°	375.2	6.0
80°-90°	62.8	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°	1751.8	27.9
0°-40°	2874.5	45.7
0°-60°	5086.0	80.9
0°-90°	6286.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6286.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2246	2246	2246	2246	2246	
5°	2220	2244	2233	2254	2217	211
15°	2151	2171	2160	2178	2146	608
25°	2014	2024	2010	2019	1991	928
35°	1802	1806	1788	1796	1771	1129
45°	1528	1526	1507	1510	1491	1180
55°	1193	1182	1165	1162	1154	1065
65°	791	782	768	762	760	781
75°	366	360	348	344	344	390
85°	47	46	42	37	38	68
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2245.9	2245.9	2245.9	2245.9	2245.9
2.5°	2226.4	2251.5	2239.4	2261.7	2221.7
5°	2219.9	2244.0	2232.9	2254.3	2217.1
7.5°	2208.7	2233.8	2221.7	2242.2	2206.9
10°	2196.6	2218.9	2205.9	2226.4	2190.1
12.5°	2175.3	2197.6	2185.5	2204.1	2170.6
15°	2151.1	2170.6	2159.5	2178.0	2146.4
17.5°	2123.2	2141.8	2129.7	2146.4	2114.8
20°	2092.5	2107.4	2094.4	2108.3	2077.6
22.5°	2054.4	2068.4	2054.4	2063.7	2036.7
25°	2013.5	2023.7	2009.8	2019.1	1991.2
27.5°	1969.8	1975.4	1961.4	1968.9	1940.1
30°	1915.9	1922.4	1907.5	1916.8	1888.9
32.5°	1863.8	1867.6	1850.8	1858.3	1833.2
35°	1802.5	1806.2	1788.5	1796.0	1770.9
37.5°	1743.9	1743.0	1724.4	1729.0	1707.7
40°	1676.1	1675.1	1655.6	1659.3	1638.9
42.5°	1606.3	1602.6	1584.0	1585.9	1567.3
45°	1528.3	1526.4	1506.9	1509.7	1491.1
47.5°	1453.0	1447.4	1427.9	1428.8	1413.0
50°	1371.2	1362.8	1346.1	1344.2	1330.3
52.5°	1283.8	1274.5	1255.9	1254.0	1243.8
55°	1192.7	1182.4	1164.8	1162.0	1153.6
57.5°	1098.8	1085.8	1071.8	1066.2	1059.7
60°	999.3	987.2	971.4	965.9	963.1
62.5°	896.1	884.0	872.0	866.4	862.7
65°	791.1	781.8	767.8	762.3	759.5
67.5°	684.2	675.8	662.8	656.3	655.4
70°	577.3	568.9	554.0	550.3	549.4
72.5°	470.4	462.9	449.0	445.3	445.3
75°	366.3	359.8	347.7	344.0	344.0
77.5°	267.7	262.1	252.9	248.2	248.2
80°	178.5	174.8	166.4	162.7	161.7
82.5°	103.2	101.3	93.9	90.2	92.0
85°	47.4	45.6	41.8	37.2	38.1
87.5°	12.1	11.2	8.4	6.5	8.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)