

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: P973810

Luminaire Tested: FLR2-22-60HE-L835-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973810
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: FLR2-22-60HE-L835-CP080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

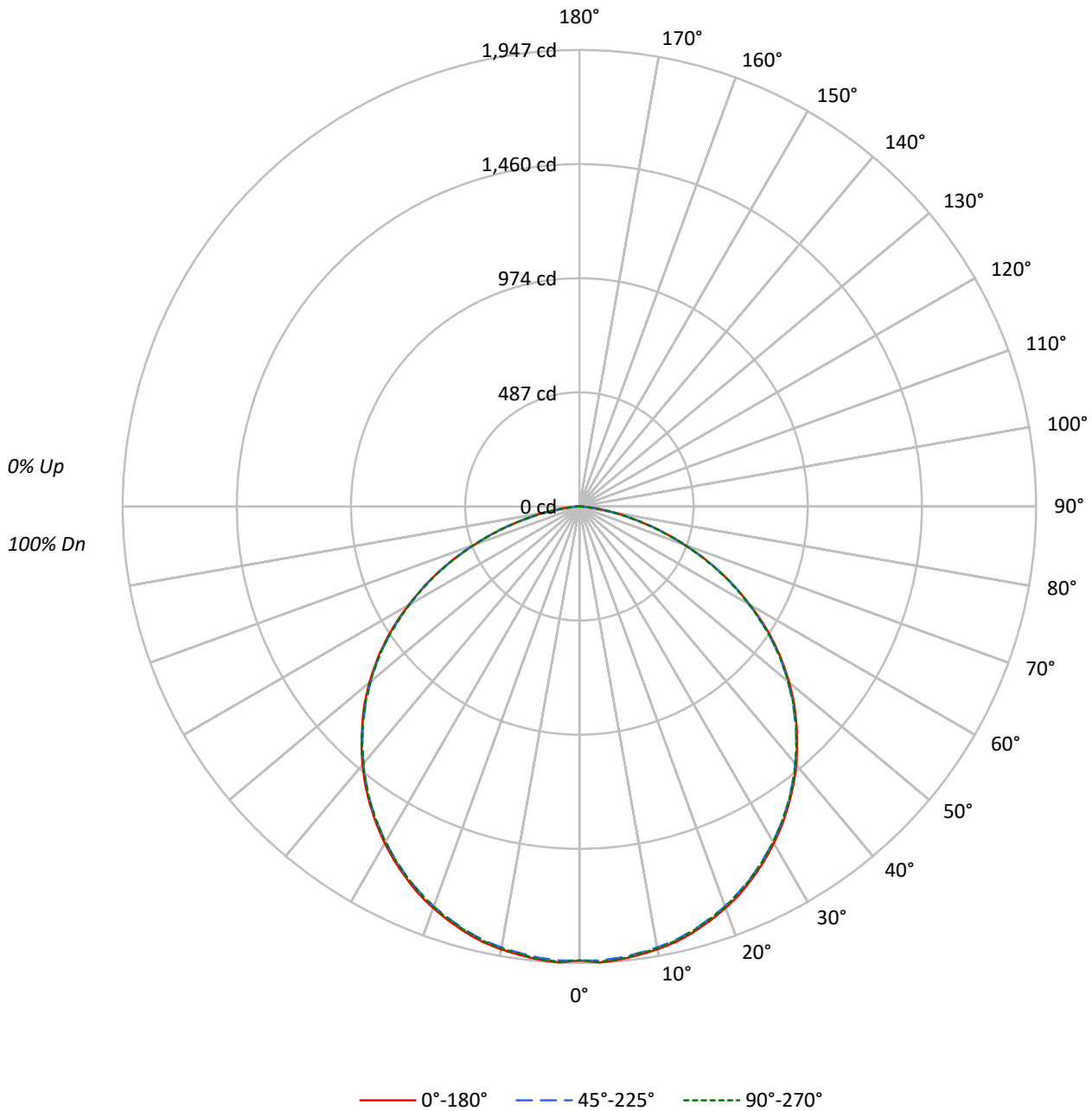
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5415.0 lumens
Efficiency: N/A
Efficacy: 114.2 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): 47.4
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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CATALOG NUMBER: FLR2-22-60HE-L835-CP080

Luminous Intensity Polar Plot





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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°	5211	5211	5211
5°	5243	5221	5237
10°	5242	5219	5229
15°	5238	5214	5221
20°	5220	5199	5206
25°	5192	5171	5174
30°	5154	5132	5136
35°	5108	5088	5092
40°	5054	5029	5033
45°	4979	4956	4966
50°	4892	4857	4867
55°	4753	4713	4730
60°	4519	4499	4499
65°	4219	4211	4196
70°	3736	3755	3745
75°	3146	3121	3096
80°	2261	2224	2205
85°	1183	1183	1145

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4979 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.4	3.4
10°-20°	527.3	9.7
20°-30°	801.3	14.8
30°-40°	968.5	17.9
40°-50°	1005.3	18.6
50°-60°	898.7	16.6
60°-70°	653.5	12.1
70°-80°	321.3	5.9
80°-90°	55.7	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°	1511.9	27.9
0°-40°	2480.4	45.8
0°-60°	4384.4	81.0
0°-90°	5415.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5415.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1936	1936	1936	1936	1936	
5°	1941	1918	1933	1926	1939	184
15°	1880	1859	1872	1867	1874	531
25°	1748	1729	1741	1738	1742	806
35°	1555	1544	1549	1550	1550	973
45°	1308	1302	1302	1305	1305	1009
55°	1013	1007	1005	1007	1008	903
65°	663	665	661	661	659	653
75°	303	305	300	301	298	321
85°	38	40	38	38	37	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1936.3	1936.3	1936.3	1936.3	1936.3
2.5°	1947.1	1924.3	1938.7	1930.3	1943.5
5°	1941.1	1918.4	1932.7	1925.5	1938.7
7.5°	1930.3	1907.6	1921.9	1914.8	1925.5
10°	1918.4	1894.4	1910.0	1902.8	1913.6
12.5°	1902.8	1880.1	1894.4	1888.5	1898.0
15°	1880.1	1858.6	1871.7	1866.9	1874.1
17.5°	1852.6	1831.1	1844.2	1840.6	1846.6
20°	1822.7	1802.3	1815.5	1811.9	1817.9
22.5°	1789.2	1767.7	1779.6	1777.2	1782.0
25°	1748.5	1729.4	1741.4	1737.8	1742.5
27.5°	1705.5	1687.5	1697.1	1697.1	1699.5
30°	1658.8	1642.1	1651.7	1651.7	1652.8
32.5°	1608.6	1595.4	1601.4	1602.6	1602.6
35°	1554.8	1544.0	1548.8	1550.0	1550.0
37.5°	1498.6	1487.8	1491.4	1493.8	1493.8
40°	1438.8	1429.2	1431.6	1434.0	1432.8
42.5°	1374.2	1367.0	1368.2	1370.6	1370.6
45°	1308.4	1302.4	1302.4	1304.8	1304.8
47.5°	1241.4	1235.5	1233.1	1235.5	1235.5
50°	1168.5	1162.5	1160.1	1162.5	1162.5
52.5°	1091.9	1086.0	1086.0	1086.0	1087.1
55°	1013.0	1007.0	1004.6	1007.0	1008.2
57.5°	929.3	926.9	923.3	924.5	920.9
60°	839.6	839.6	836.0	838.4	836.0
62.5°	752.3	754.7	751.1	751.1	748.7
65°	662.6	665.0	661.4	661.4	659.0
67.5°	570.5	574.1	569.3	569.3	566.9
70°	474.8	482.0	477.2	478.4	476.0
72.5°	388.7	392.3	387.5	387.5	385.1
75°	302.6	305.0	300.2	301.4	297.8
77.5°	217.7	221.3	216.5	217.7	216.5
80°	145.9	147.1	143.5	144.7	142.3
82.5°	84.9	86.1	84.9	83.7	82.5
85°	38.3	39.5	38.3	38.3	37.1
87.5°	9.6	9.6	9.6	9.6	9.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)