

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: P973954

Luminaire Tested: FLR2-22-60HE-L940-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973954
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-L940-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

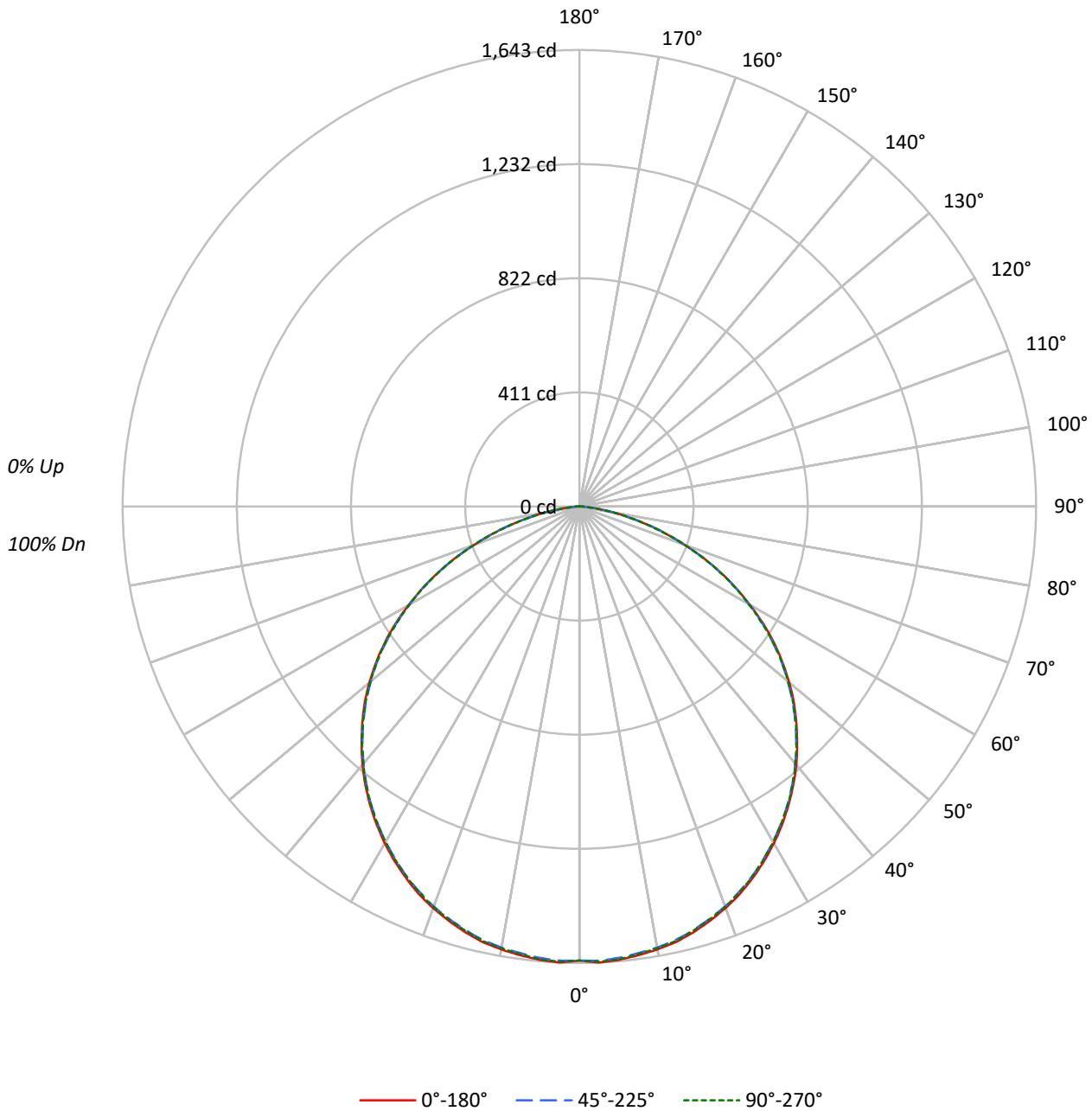
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4570.0 lumens
Efficiency: N/A
Efficacy: 96.4 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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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	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°	4398	4398	4398
5°	4425	4406	4420
10°	4424	4405	4413
15°	4420	4401	4406
20°	4405	4388	4393
25°	4382	4363	4367
30°	4350	4331	4334
35°	4311	4294	4297
40°	4266	4244	4248
45°	4202	4183	4191
50°	4129	4099	4107
55°	4011	3978	3992
60°	3814	3797	3797
65°	3561	3554	3542
70°	3153	3168	3161
75°	2655	2635	2613
80°	1908	1877	1861
85°	997	997	966

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4202 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.7	3.4
10°-20°	445.0	9.7
20°-30°	676.2	14.8
30°-40°	817.4	17.9
40°-50°	848.4	18.6
50°-60°	758.5	16.6
60°-70°	551.5	12.1
70°-80°	271.2	5.9
80°-90°	47.0	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°	1276.0	27.9
0°-40°	2093.4	45.8
0°-60°	3700.3	81.0
0°-90°	4570.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4570.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1634	1634	1634	1634	1634	
5°	1638	1619	1631	1625	1636	156
15°	1587	1569	1580	1576	1582	448
25°	1476	1460	1470	1467	1471	680
35°	1312	1303	1307	1308	1308	821
45°	1104	1099	1099	1101	1101	852
55°	855	850	848	850	851	762
65°	559	561	558	558	556	552
75°	255	257	253	254	251	271
85°	32	33	32	32	31	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1634.2	1634.2	1634.2	1634.2	1634.2
2.5°	1643.3	1624.1	1636.2	1629.1	1640.2
5°	1638.2	1619.0	1631.1	1625.1	1636.2
7.5°	1629.1	1609.9	1622.1	1616.0	1625.1
10°	1619.0	1598.8	1612.0	1605.9	1615.0
12.5°	1605.9	1586.7	1598.8	1593.8	1601.9
15°	1586.7	1568.6	1579.7	1575.6	1581.7
17.5°	1563.5	1545.3	1556.4	1553.4	1558.5
20°	1538.3	1521.1	1532.2	1529.2	1534.2
22.5°	1510.0	1491.8	1501.9	1499.9	1504.0
25°	1475.7	1459.5	1469.6	1466.6	1470.7
27.5°	1439.4	1424.2	1432.3	1432.3	1434.3
30°	1400.0	1385.9	1393.9	1393.9	1394.9
32.5°	1357.6	1346.5	1351.5	1352.6	1352.6
35°	1312.2	1303.1	1307.1	1308.1	1308.1
37.5°	1264.7	1255.7	1258.7	1260.7	1260.7
40°	1214.3	1206.2	1208.2	1210.2	1209.2
42.5°	1159.8	1153.7	1154.7	1156.7	1156.7
45°	1104.2	1099.2	1099.2	1101.2	1101.2
47.5°	1047.7	1042.7	1040.7	1042.7	1042.7
50°	986.2	981.1	979.1	981.1	981.1
52.5°	921.6	916.5	916.5	916.5	917.5
55°	854.9	849.9	847.9	849.9	850.9
57.5°	784.3	782.3	779.2	780.2	777.2
60°	708.6	708.6	705.5	707.6	705.5
62.5°	634.9	636.9	633.9	633.9	631.9
65°	559.2	561.2	558.2	558.2	556.2
67.5°	481.5	484.5	480.5	480.5	478.4
70°	400.7	406.8	402.7	403.7	401.7
72.5°	328.0	331.1	327.0	327.0	325.0
75°	255.4	257.4	253.4	254.4	251.3
77.5°	183.7	186.7	182.7	183.7	182.7
80°	123.1	124.2	121.1	122.1	120.1
82.5°	71.7	72.7	71.7	70.7	69.6
85°	32.3	33.3	32.3	32.3	31.3
87.5°	8.1	8.1	8.1	8.1	8.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)