

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: P973485

Luminaire Tested: FLR2-14-20-L950-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973485
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: FLR2-14-20-L950-CP250
Description: 1*4 FLR-2.0 2000 LUMEN at 5000 CCT & 90 CRI with Clear Polycarbonate (0.250" thickness)

Light Source:
Ballast/Driver: -

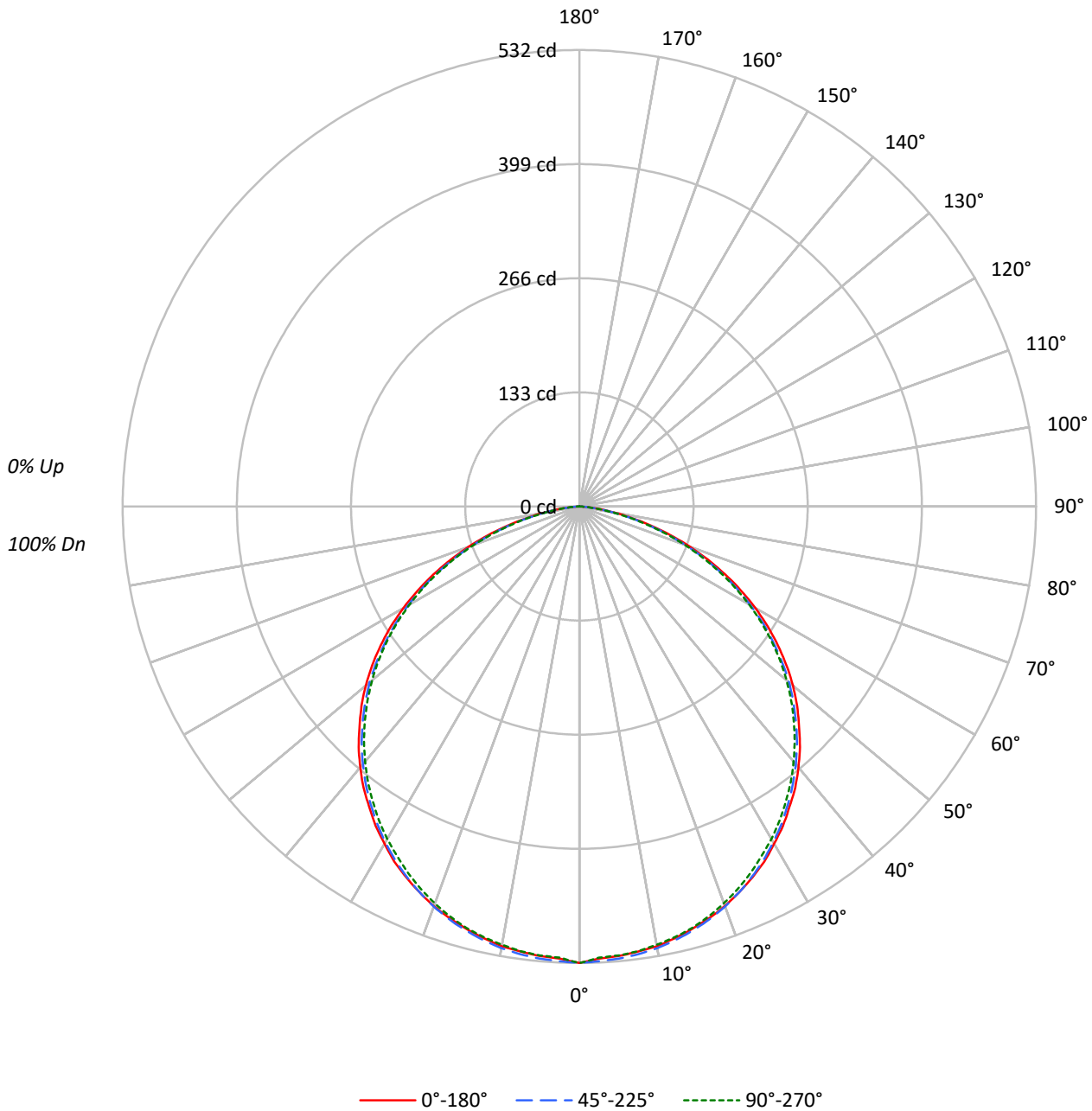
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1489.1 lumens
Efficiency: N/A
Efficacy: 90.8 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): 16.4
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				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	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°	1432	1432	1432
5°	1421	1429	1419
10°	1422	1428	1418
15°	1420	1425	1417
20°	1420	1421	1410
25°	1416	1414	1401
30°	1410	1404	1391
35°	1403	1392	1378
40°	1395	1378	1364
45°	1378	1359	1344
50°	1360	1335	1319
55°	1325	1294	1282
60°	1274	1238	1228
65°	1193	1158	1145
70°	1076	1033	1024
75°	902	857	847
80°	656	611	594
85°	346	306	278

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1378 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.4	3.4
10°-20°	144.7	9.7
20°-30°	219.9	14.8
30°-40°	266.0	17.9
40°-50°	276.4	18.6
50°-60°	247.5	16.6
60°-70°	180.5	12.1
70°-80°	88.9	6.0
80°-90°	14.9	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°	415.0	27.9
0°-40°	681.0	45.7
0°-60°	1204.9	80.9
0°-90°	1489.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1489.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	532	532	532	532	532	
5°	526	532	529	534	525	50
15°	510	514	512	516	508	144
25°	477	479	476	478	472	220
35°	427	428	424	426	420	267
45°	362	362	357	358	353	280
55°	282	280	276	275	273	252
65°	187	185	182	181	180	185
75°	87	85	82	82	82	93
85°	11	11	10	9	9	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	532.1	532.1	532.1	532.1	532.1
2.5°	527.4	533.4	530.5	535.8	526.3
5°	525.9	531.6	529.0	534.0	525.2
7.5°	523.3	529.2	526.3	531.2	522.8
10°	520.4	525.7	522.6	527.4	518.8
12.5°	515.3	520.6	517.7	522.1	514.2
15°	509.6	514.2	511.6	516.0	508.5
17.5°	503.0	507.4	504.5	508.5	501.0
20°	495.7	499.2	496.2	499.5	492.2
22.5°	486.7	490.0	486.7	488.9	482.5
25°	477.0	479.4	476.1	478.3	471.7
27.5°	466.7	468.0	464.7	466.4	459.6
30°	453.9	455.4	451.9	454.1	447.5
32.5°	441.5	442.4	438.5	440.2	434.3
35°	427.0	427.9	423.7	425.5	419.5
37.5°	413.1	412.9	408.5	409.6	404.6
40°	397.1	396.8	392.2	393.1	388.3
42.5°	380.5	379.7	375.3	375.7	371.3
45°	362.0	361.6	357.0	357.6	353.2
47.5°	344.2	342.9	338.3	338.5	334.7
50°	324.8	322.8	318.9	318.4	315.1
52.5°	304.1	301.9	297.5	297.1	294.7
55°	282.5	280.1	275.9	275.3	273.3
57.5°	260.3	257.2	253.9	252.6	251.1
60°	236.7	233.9	230.1	228.8	228.2
62.5°	212.3	209.4	206.6	205.2	204.4
65°	187.4	185.2	181.9	180.6	179.9
67.5°	162.1	160.1	157.0	155.5	155.3
70°	136.8	134.8	131.3	130.4	130.2
72.5°	111.4	109.7	106.4	105.5	105.5
75°	86.8	85.2	82.4	81.5	81.5
77.5°	63.4	62.1	59.9	58.8	58.8
80°	42.3	41.4	39.4	38.5	38.3
82.5°	24.4	24.0	22.2	21.4	21.8
85°	11.2	10.8	9.9	8.8	9.0
87.5°	2.9	2.6	2.0	1.5	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)