

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: P973763

Luminaire Tested: FLR2-22-20HE-L930-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973763
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: FLR2-22-20HE-L930-CP080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

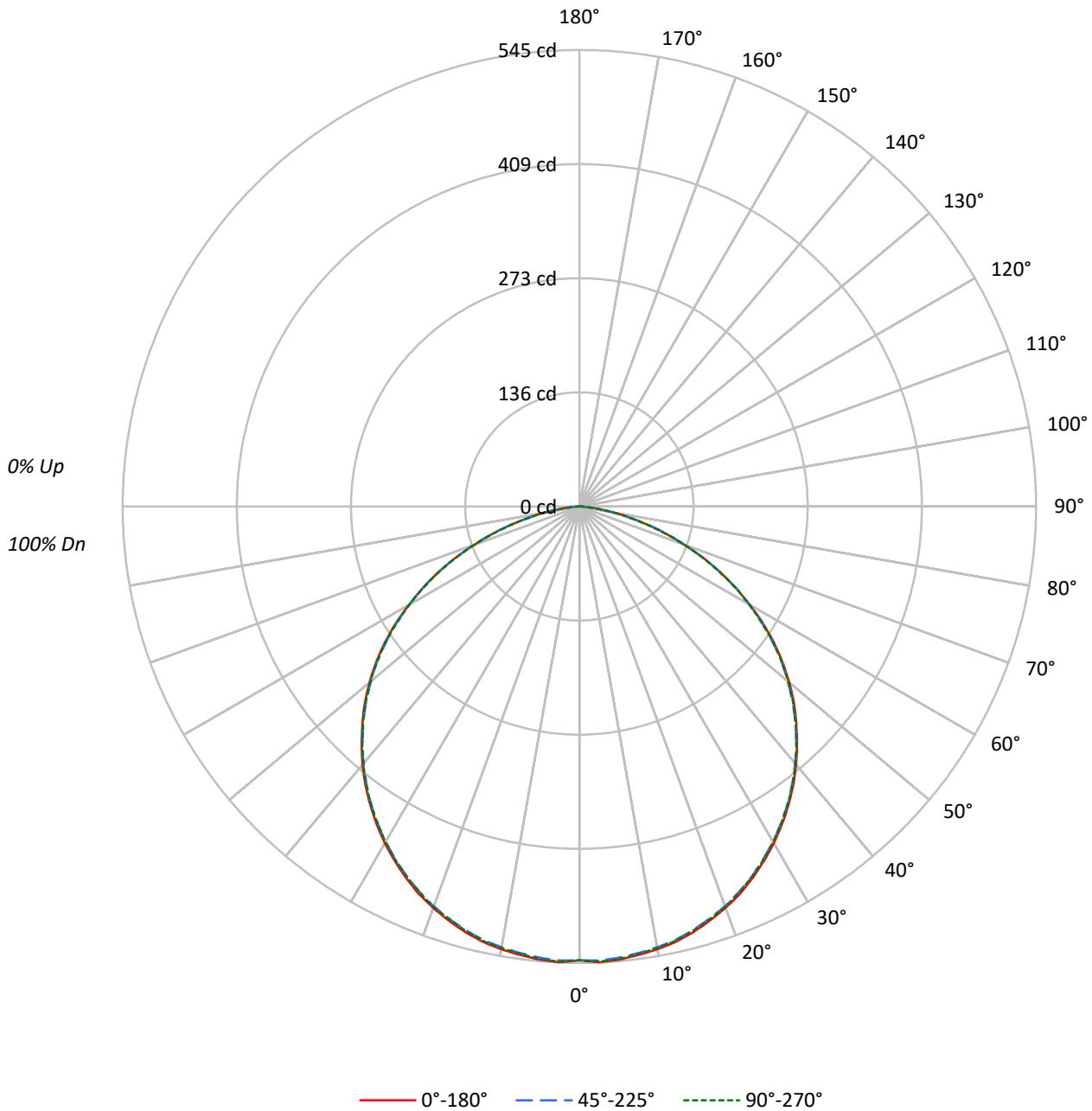
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1515.2 lumens
Efficiency: N/A
Efficacy: 102.4 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): 14.8
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	63	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	71	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	50	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	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	40	32	27	39	32	27	38	31	27	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1458	1458	1458
5°	1467	1461	1465
10°	1467	1461	1463
15°	1466	1459	1461
20°	1460	1455	1457
25°	1453	1447	1448
30°	1442	1436	1437
35°	1429	1424	1425
40°	1414	1407	1408
45°	1393	1387	1389
50°	1369	1359	1362
55°	1330	1319	1323
60°	1264	1259	1259
65°	1181	1179	1174
70°	1046	1050	1048
75°	881	873	866
80°	632	623	617
85°	330	330	321

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1393 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.3	3.4
10°-20°	147.5	9.7
20°-30°	224.2	14.8
30°-40°	271.0	17.9
40°-50°	281.3	18.6
50°-60°	251.5	16.6
60°-70°	182.9	12.1
70°-80°	89.9	5.9
80°-90°	15.6	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°	423.1	27.9
0°-40°	694.1	45.8
0°-60°	1226.9	81.0
0°-90°	1515.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1515.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	542	542	542	542	542	
5°	543	537	541	539	542	52
15°	526	520	524	522	524	148
25°	489	484	487	486	488	226
35°	435	432	433	434	434	272
45°	366	364	364	365	365	282
55°	284	282	281	282	282	253
65°	185	186	185	185	184	183
75°	85	85	84	84	83	90
85°	11	11	11	11	10	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	541.8	541.8	541.8	541.8	541.8
2.5°	544.8	538.5	542.5	540.1	543.8
5°	543.2	536.8	540.8	538.8	542.5
7.5°	540.1	533.8	537.8	535.8	538.8
10°	536.8	530.1	534.5	532.4	535.5
12.5°	532.4	526.1	530.1	528.4	531.1
15°	526.1	520.1	523.7	522.4	524.4
17.5°	518.4	512.4	516.1	515.0	516.7
20°	510.0	504.3	508.0	507.0	508.7
22.5°	500.7	494.6	498.0	497.3	498.6
25°	489.3	483.9	487.3	486.3	487.6
27.5°	477.2	472.2	474.9	474.9	475.6
30°	464.2	459.5	462.2	462.2	462.5
32.5°	450.1	446.4	448.1	448.4	448.4
35°	435.1	432.1	433.4	433.7	433.7
37.5°	419.3	416.3	417.3	418.0	418.0
40°	402.6	399.9	400.6	401.3	400.9
42.5°	384.5	382.5	382.9	383.5	383.5
45°	366.1	364.4	364.4	365.1	365.1
47.5°	347.4	345.7	345.0	345.7	345.7
50°	327.0	325.3	324.6	325.3	325.3
52.5°	305.5	303.9	303.9	303.9	304.2
55°	283.5	281.8	281.1	281.8	282.1
57.5°	260.0	259.4	258.4	258.7	257.7
60°	234.9	234.9	233.9	234.6	233.9
62.5°	210.5	211.2	210.2	210.2	209.5
65°	185.4	186.1	185.1	185.1	184.4
67.5°	159.6	160.6	159.3	159.3	158.6
70°	132.9	134.9	133.5	133.9	133.2
72.5°	108.8	109.8	108.4	108.4	107.8
75°	84.7	85.3	84.0	84.3	83.3
77.5°	60.9	61.9	60.6	60.9	60.6
80°	40.8	41.2	40.2	40.5	39.8
82.5°	23.8	24.1	23.8	23.4	23.1
85°	10.7	11.0	10.7	10.7	10.4
87.5°	2.7	2.7	2.7	2.7	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)