

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: P973960

Luminaire Tested: FLR2-22-60HE-L940-CP375

Issue Date: 3/13/2025

**Test Information**

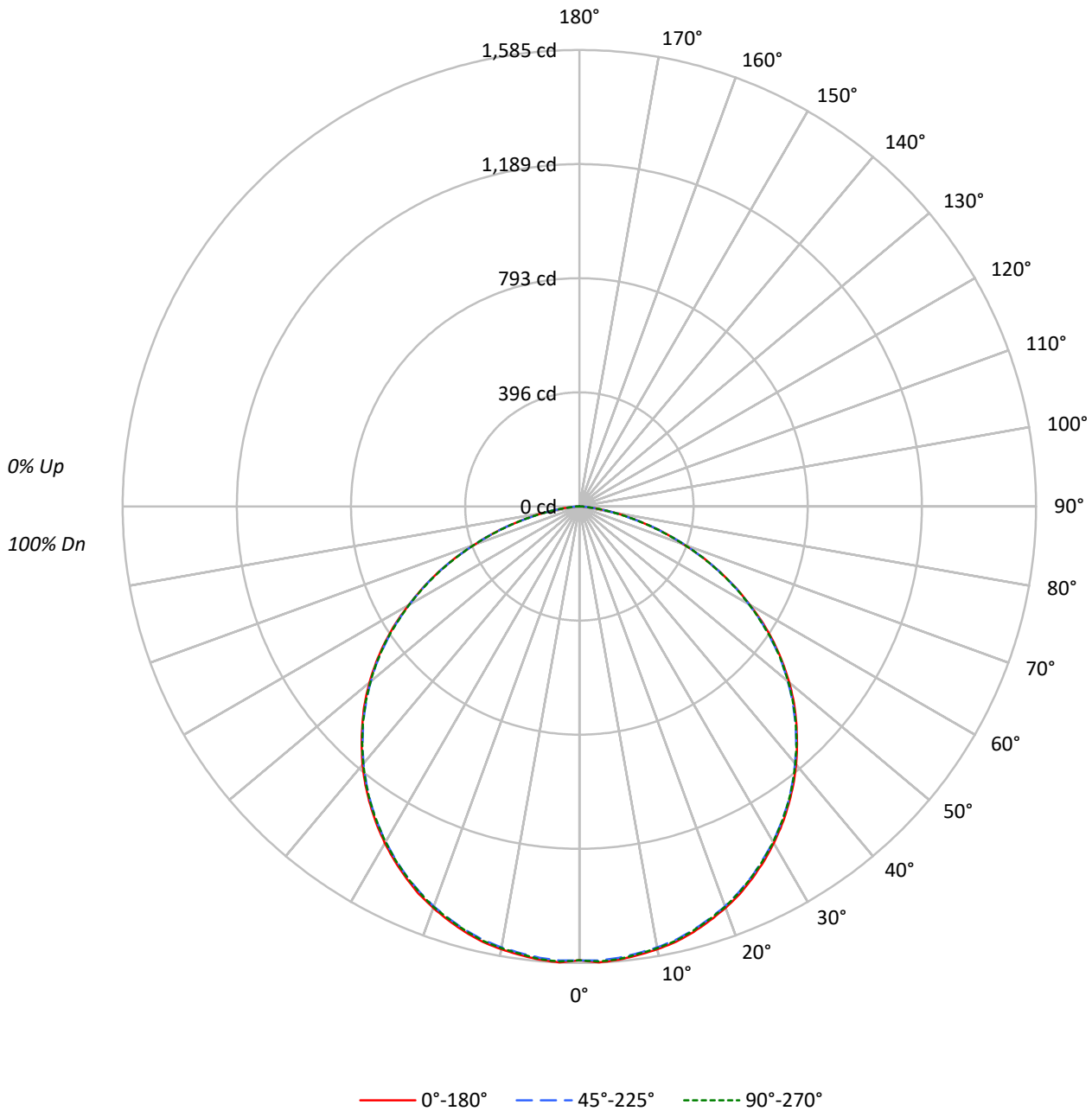
Test Method: LM-79-2019  
Report Number: P973960  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-22-60HE-L940-CP375  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4407.0 lumens  
Efficiency: N/A  
Efficacy: 93.0 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				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°	4241	4241	4241
5°	4267	4249	4262
10°	4266	4248	4256
15°	4263	4244	4249
20°	4248	4231	4237
25°	4225	4208	4211
30°	4195	4177	4180
35°	4157	4141	4144
40°	4114	4093	4096
45°	4053	4034	4042
50°	3981	3953	3961
55°	3868	3836	3850
60°	3677	3662	3662
65°	3433	3428	3415
70°	3040	3056	3048
75°	2561	2540	2520
80°	1841	1810	1795
85°	960	960	932

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4053 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	149.2	3.4
10°-20°	429.1	9.7
20°-30°	652.1	14.8
30°-40°	788.2	17.9
40°-50°	818.2	18.6
50°-60°	731.4	16.6
60°-70°	531.8	12.1
70°-80°	261.5	5.9
80°-90°	45.3	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°	1230.5	27.9
0°-40°	2018.7	45.8
0°-60°	3568.3	81.0
0°-90°	4407.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4407.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1576	1576	1576	1576	1576	
5°	1580	1561	1573	1567	1578	150
15°	1530	1513	1523	1519	1525	432
25°	1423	1408	1417	1414	1418	656
35°	1265	1257	1260	1262	1262	792
45°	1065	1060	1060	1062	1062	821
55°	824	820	818	820	821	735
65°	539	541	538	538	536	532
75°	246	248	244	245	242	261
85°	31	32	31	31	30	45
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1575.9	1575.9	1575.9	1575.9	1575.9
2.5°	1584.7	1566.2	1577.8	1571.0	1581.7
5°	1579.8	1561.3	1573.0	1567.1	1577.8
7.5°	1571.0	1552.5	1564.2	1558.4	1567.1
10°	1561.3	1541.8	1554.5	1548.6	1557.4
12.5°	1548.6	1530.1	1541.8	1537.0	1544.7
15°	1530.1	1512.6	1523.3	1519.4	1525.3
17.5°	1507.8	1490.2	1500.9	1498.0	1502.9
20°	1483.4	1466.9	1477.6	1474.7	1479.5
22.5°	1456.2	1438.6	1448.4	1446.4	1450.3
25°	1423.1	1407.5	1417.2	1414.3	1418.2
27.5°	1388.0	1373.4	1381.2	1381.2	1383.2
30°	1350.1	1336.4	1344.2	1344.2	1345.2
32.5°	1309.2	1298.5	1303.3	1304.3	1304.3
35°	1265.4	1256.6	1260.5	1261.5	1261.5
37.5°	1219.6	1210.9	1213.8	1215.7	1215.7
40°	1171.0	1163.2	1165.1	1167.1	1166.1
42.5°	1118.4	1112.6	1113.5	1115.5	1115.5
45°	1064.9	1060.0	1060.0	1062.0	1062.0
47.5°	1010.4	1005.5	1003.6	1005.5	1005.5
50°	951.0	946.1	944.2	946.1	946.1
52.5°	888.7	883.8	883.8	883.8	884.8
55°	824.4	819.6	817.6	819.6	820.6
57.5°	756.3	754.4	751.4	752.4	749.5
60°	683.3	683.3	680.4	682.3	680.4
62.5°	612.3	614.2	611.3	611.3	609.3
65°	539.2	541.2	538.3	538.3	536.3
67.5°	464.3	467.2	463.3	463.3	461.4
70°	386.4	392.3	388.4	389.4	387.4
72.5°	316.3	319.3	315.4	315.4	313.4
75°	246.3	248.2	244.3	245.3	242.4
77.5°	177.2	180.1	176.2	177.2	176.2
80°	118.8	119.7	116.8	117.8	115.8
82.5°	69.1	70.1	69.1	68.1	67.2
85°	31.1	32.1	31.1	31.1	30.2
87.5°	7.8	7.8	7.8	7.8	7.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)