

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: P973916

Luminaire Tested: FLR2-22-45HE-L840-CP375

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973916
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: FLR2-22-45HE-L840-CP375
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

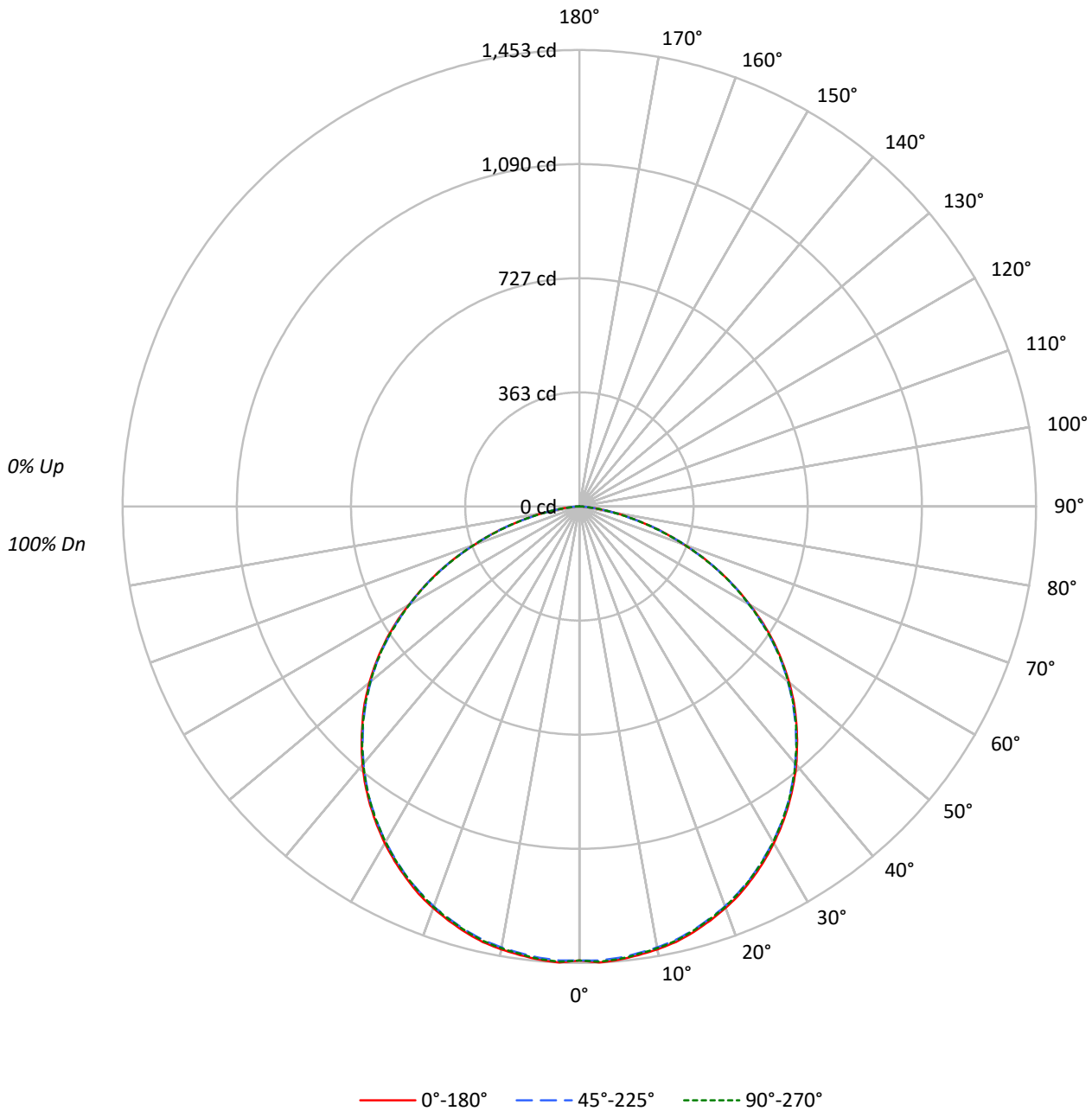
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4040.9 lumens
Efficiency: N/A
Efficacy: 111.6 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): 36.2
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									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°	3888	3888	3888
5°	3913	3896	3908
10°	3912	3895	3902
15°	3909	3891	3896
20°	3895	3880	3885
25°	3874	3858	3861
30°	3846	3830	3833
35°	3812	3797	3800
40°	3772	3753	3756
45°	3716	3699	3706
50°	3651	3624	3632
55°	3547	3517	3530
60°	3372	3358	3358
65°	3148	3143	3131
70°	2788	2802	2795
75°	2348	2329	2310
80°	1688	1660	1646
85°	883	883	855

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3716 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.8	3.4
10°-20°	393.5	9.7
20°-30°	598.0	14.8
30°-40°	722.7	17.9
40°-50°	750.2	18.6
50°-60°	670.7	16.6
60°-70°	487.6	12.1
70°-80°	239.8	5.9
80°-90°	41.6	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°	1128.3	27.9
0°-40°	1851.0	45.8
0°-60°	3271.9	81.0
0°-90°	4040.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4040.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1445	1445	1445	1445	1445	
5°	1448	1432	1442	1437	1447	138
15°	1403	1387	1397	1393	1399	396
25°	1305	1291	1300	1297	1300	601
35°	1160	1152	1156	1157	1157	726
45°	976	972	972	974	974	753
55°	756	752	750	752	752	674
65°	494	496	494	494	492	488
75°	226	228	224	225	222	240
85°	29	30	29	29	28	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1445.0	1445.0	1445.0	1445.0	1445.0
2.5°	1453.0	1436.0	1446.7	1440.5	1450.3
5°	1448.5	1431.6	1442.3	1436.9	1446.7
7.5°	1440.5	1423.5	1434.3	1428.9	1436.9
10°	1431.6	1413.7	1425.3	1420.0	1428.0
12.5°	1420.0	1403.0	1413.7	1409.3	1416.4
15°	1403.0	1387.0	1396.8	1393.2	1398.6
17.5°	1382.5	1366.4	1376.2	1373.6	1378.0
20°	1360.2	1345.0	1354.8	1352.1	1356.6
22.5°	1335.2	1319.1	1328.0	1326.3	1329.8
25°	1304.8	1290.6	1299.5	1296.8	1300.4
27.5°	1272.7	1259.3	1266.5	1266.5	1268.2
30°	1237.9	1225.4	1232.5	1232.5	1233.4
32.5°	1200.4	1190.6	1195.1	1196.0	1196.0
35°	1160.3	1152.2	1155.8	1156.7	1156.7
37.5°	1118.3	1110.3	1113.0	1114.7	1114.7
40°	1073.7	1066.5	1068.3	1070.1	1069.2
42.5°	1025.5	1020.1	1021.0	1022.8	1022.8
45°	976.4	971.9	971.9	973.7	973.7
47.5°	926.4	922.0	920.2	922.0	922.0
50°	872.0	867.5	865.7	867.5	867.5
52.5°	814.9	810.4	810.4	810.4	811.3
55°	756.0	751.5	749.7	751.5	752.4
57.5°	693.5	691.7	689.0	689.9	687.2
60°	626.5	626.5	623.9	625.6	623.9
62.5°	561.4	563.2	560.5	560.5	558.7
65°	494.4	496.2	493.6	493.6	491.8
67.5°	425.7	428.4	424.8	424.8	423.0
70°	354.3	359.7	356.1	357.0	355.2
72.5°	290.1	292.7	289.2	289.2	287.4
75°	225.8	227.6	224.0	224.9	222.2
77.5°	162.4	165.1	161.5	162.4	161.5
80°	108.9	109.8	107.1	108.0	106.2
82.5°	63.4	64.3	63.4	62.5	61.6
85°	28.6	29.5	28.6	28.6	27.7
87.5°	7.1	7.1	7.1	7.1	7.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)