

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: P974893

Luminaire Tested: FLR2-24-40HE-L940-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974893
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-3)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-24-40HE-L940-CP080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

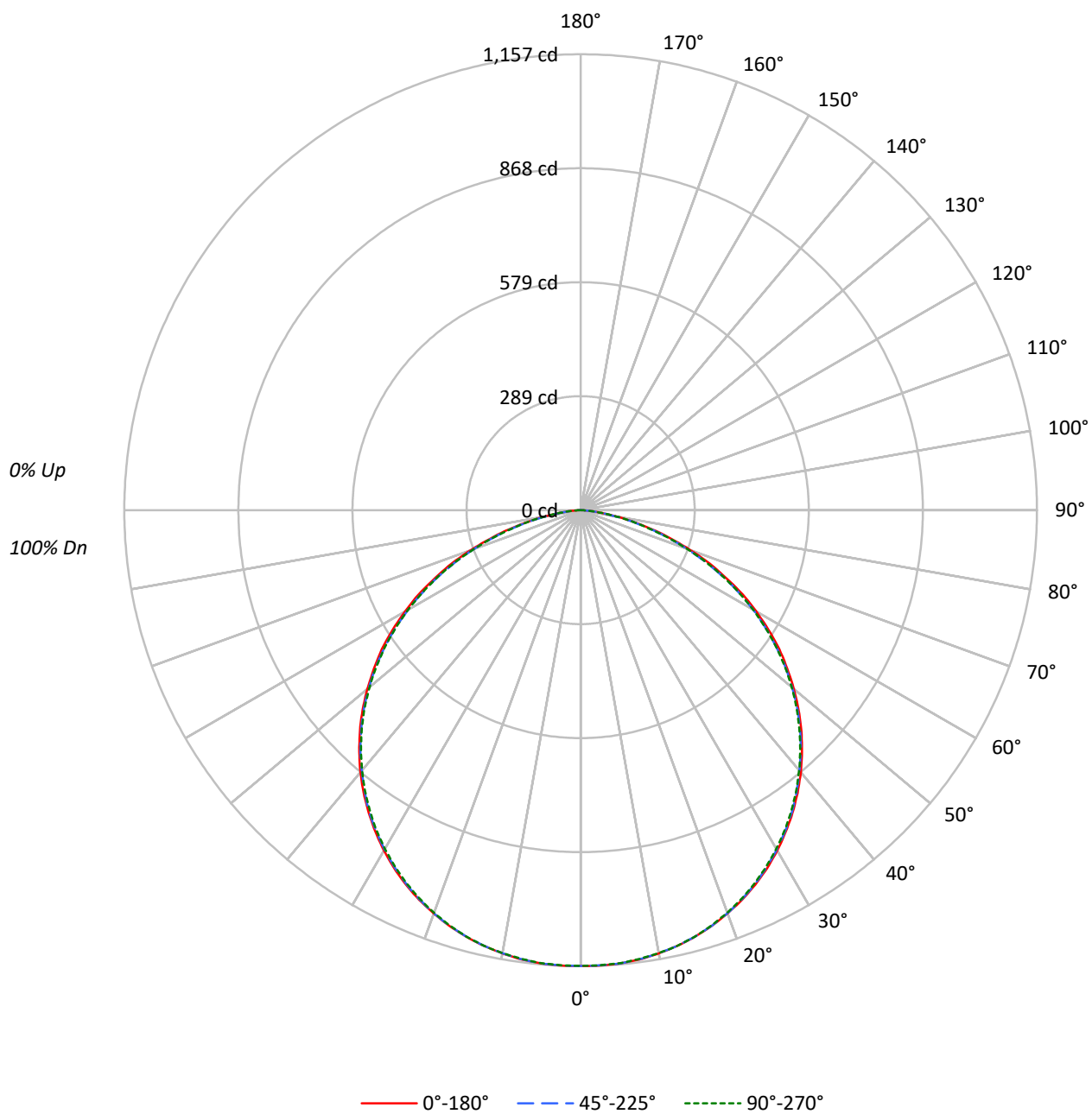
Lumens per Lamp: N/A
Luminaire Lumens: 3269.1 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 29.9
Input Voltage (V):
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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	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	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85		85
2	99	91	85	79	97	89	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	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51		51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44		44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38		38
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34		34
8	61	47	39	33	59	47	38	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	39	33	29	27		27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25		25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1556	1556	1556
5°	1559	1559	1558
10°	1560	1560	1559
15°	1561	1560	1560
20°	1559	1559	1556
25°	1556	1553	1551
30°	1549	1545	1542
35°	1539	1535	1530
40°	1526	1516	1514
45°	1506	1497	1493
50°	1478	1467	1462
55°	1443	1422	1420
60°	1383	1358	1358
65°	1294	1263	1267
70°	1164	1128	1125
75°	977	938	934
80°	714	679	707
85°	403	372	378

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1506 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.8	3.4
10°-20°	316.3	9.7
20°-30°	482.2	14.8
30°-40°	584.3	17.9
40°-50°	606.9	18.6
50°-60°	542.9	16.6
60°-70°	395.7	12.1
70°-80°	196.0	6.0
80°-90°	35.0	1.1
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°	908.3	27.8
0°-40°	1492.6	45.7
0°-60°	2642.4	80.8
0°-90°	3269.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3269.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1157	1157	1157	1157	1157	
5°	1155	1155	1155	1155	1154	110
15°	1121	1120	1120	1121	1120	316
25°	1048	1047	1046	1046	1045	483
35°	937	936	935	933	931	586
45°	791	790	787	785	784	610
55°	615	610	606	606	606	548
65°	406	403	397	398	398	403
75°	188	185	180	184	180	200
85°	26	24	24	24	24	36
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1156.7	1156.7	1156.7	1156.7	1156.7
2.5°	1156.7	1156.2	1156.2	1156.7	1155.8
5°	1154.6	1155.0	1154.6	1154.6	1153.8
7.5°	1150.0	1149.6	1149.2	1149.6	1148.4
10°	1142.1	1142.1	1141.7	1142.1	1141.3
12.5°	1132.6	1132.6	1132.6	1133.0	1132.6
15°	1120.6	1120.1	1120.1	1121.0	1120.1
17.5°	1106.4	1106.0	1106.0	1105.6	1104.8
20°	1089.0	1089.0	1088.6	1088.2	1086.9
22.5°	1070.3	1069.9	1068.7	1068.7	1067.0
25°	1048.3	1047.1	1046.3	1045.9	1044.6
27.5°	1024.3	1022.6	1021.4	1020.5	1019.3
30°	997.3	995.6	994.4	993.1	992.3
32.5°	968.2	967.4	965.3	964.9	963.3
35°	937.1	935.9	934.6	933.0	931.3
37.5°	903.9	902.7	899.8	898.9	897.7
40°	868.6	867.0	863.2	863.2	862.0
42.5°	830.9	829.2	826.7	825.1	824.2
45°	791.4	789.8	786.9	785.2	784.4
47.5°	749.5	748.3	745.0	743.7	742.5
50°	705.9	704.3	700.6	699.7	698.5
52.5°	660.3	659.5	654.5	654.1	652.8
55°	615.1	610.5	606.3	606.3	605.5
57.5°	565.3	561.9	556.5	556.5	555.7
60°	513.8	510.9	504.7	505.5	504.7
62.5°	463.6	457.4	451.5	454.0	452.0
65°	406.3	403.0	396.8	398.4	398.0
67.5°	354.0	347.8	342.0	345.3	343.6
70°	295.9	292.6	286.8	290.1	285.9
72.5°	241.1	238.2	232.4	236.1	232.0
75°	188.0	185.1	180.5	183.9	179.7
77.5°	137.8	135.7	131.6	134.9	135.7
80°	92.1	89.6	87.6	90.5	91.3
82.5°	54.0	52.3	51.5	51.9	54.0
85°	26.1	24.1	24.1	24.5	24.5
87.5°	7.1	6.2	7.1	7.5	7.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)