

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: CORELITE

Report Number: P688758

Luminaire Tested: SQ4R-PH1-100D-93050-1-UNV-STD-W-4_4000K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688758
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-36)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PH1-100D-93050-1-UNV-STD-W-4_4000K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3944.2 lumens
Efficiency: N/A
Efficacy: 84.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.22 / 1.28
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

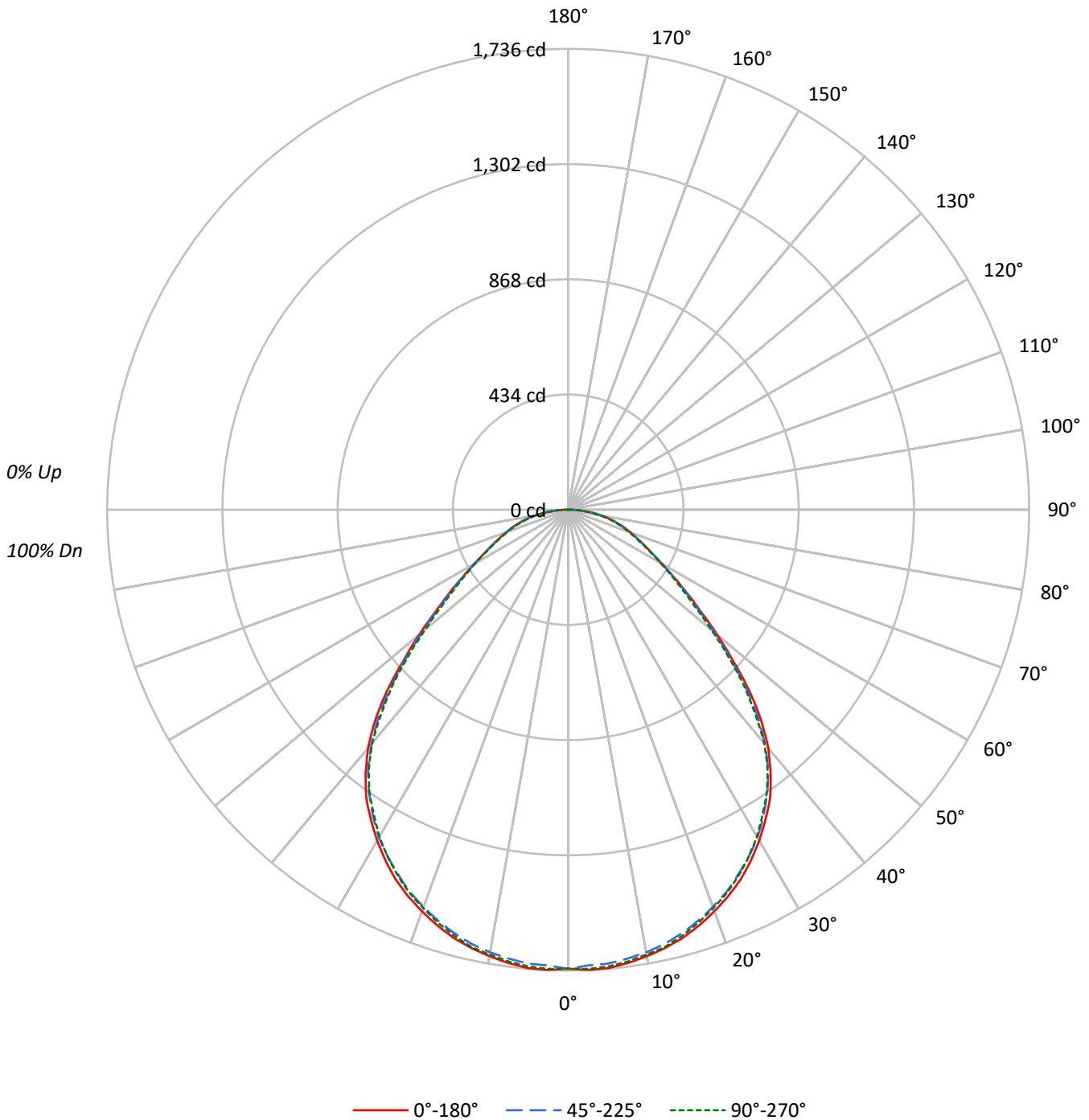
Input Watts (W): 46.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P688758

CATALOG NUMBER: SQ4R-PH1-100D-93050-1-UNV-STD-W-4_4000K

Luminous Intensity Polar Plot



TEST NUMBER: P688758

CATALOG NUMBER: SQ4R-PH1-100D-93050-1-UNV-STD-W-4_4000K

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	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	110	105	102	98	107	103	100	96	99	96	93	95	93	91	92	90	88	86				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	79	76	74				74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	73	69	66	64				64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57	55				55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49				49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43				43
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39				39
8	64	51	43	37	62	50	43	37	49	42	37	48	42	37	47	41	37	35				35
9	60	47	39	34	58	47	39	34	45	39	34	44	38	34	43	38	33	32				32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	31	29				29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16647	16647	16647
5°	16752	16587	16690
10°	16695	16549	16632
15°	16638	16467	16553
20°	16491	16315	16359
25°	16327	16100	16145
30°	15995	15852	15805
35°	15580	15354	15329
40°	14728	14487	14434
45°	13137	12876	12730
50°	10967	10743	10519
55°	9136	9029	8814
60°	7850	7892	7727
65°	7196	7148	7050
70°	6970	6910	6789
75°	7067	6908	6748
80°	7102	6980	6747
85°	6838	6838	6363

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13137 cd/sqm

TEST NUMBER: P688758

CATALOG NUMBER: SQ4R-PH1-100D-93050-1-UNV-STD-W-4_4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.0	4.2
10°-20°	468.5	11.9
20°-30°	701.9	17.8
30°-40°	816.7	20.7
40°-50°	726.4	18.4
50°-60°	487.7	12.4
60°-70°	315.2	8.0
70°-80°	196.5	5.0
80°-90°	67.3	1.7
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°	1334.4	33.8
0°-40°	2151.0	54.5
0°-60°	3365.1	85.3
0°-90°	3944.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3944.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1729	1729	1729	1729	1729	
5°	1733	1729	1716	1729	1727	165
15°	1669	1665	1652	1663	1661	471
25°	1537	1531	1516	1524	1520	707
35°	1326	1319	1306	1306	1304	824
45°	965	961	946	933	935	738
55°	544	544	538	529	525	493
65°	316	318	314	312	310	317
75°	190	188	186	186	181	200
85°	62	64	62	60	58	69
90°	0	0	0	0	0	

TEST NUMBER: P688758

CATALOG NUMBER: SQ4R-PH1-100D-93050-1-UNV-STD-W-4_4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1729.1	1729.1	1729.1	1729.1	1729.1
2.5°	1735.5	1731.2	1718.4	1733.4	1731.2
5°	1733.4	1729.1	1716.3	1729.1	1727.0
7.5°	1722.7	1720.6	1705.6	1720.6	1716.3
10°	1707.8	1707.8	1692.8	1705.6	1701.3
12.5°	1690.7	1688.5	1675.7	1688.5	1686.4
15°	1669.3	1665.1	1652.2	1662.9	1660.8
17.5°	1641.6	1639.4	1624.5	1635.2	1630.9
20°	1609.6	1605.3	1592.5	1601.0	1596.7
22.5°	1575.4	1571.1	1558.3	1564.7	1562.6
25°	1537.0	1530.6	1515.6	1524.2	1519.9
27.5°	1490.0	1487.9	1472.9	1477.2	1472.9
30°	1438.8	1436.6	1426.0	1426.0	1421.7
32.5°	1383.3	1385.4	1368.3	1370.5	1361.9
35°	1325.6	1319.2	1306.4	1306.4	1304.3
37.5°	1253.1	1248.8	1238.1	1236.0	1233.9
40°	1171.9	1167.7	1152.7	1148.5	1148.5
42.5°	1075.9	1071.6	1056.7	1050.3	1041.7
45°	964.9	960.6	945.7	932.9	935.0
47.5°	841.1	845.3	830.4	819.7	817.6
50°	732.2	730.1	717.3	710.9	702.3
52.5°	627.6	629.7	619.1	614.8	604.1
55°	544.3	544.3	537.9	529.4	525.1
57.5°	469.6	473.9	467.5	463.2	459.0
60°	407.7	409.9	409.9	401.3	401.3
62.5°	356.5	358.6	356.5	352.2	352.2
65°	315.9	318.1	313.8	311.7	309.5
67.5°	279.6	281.8	279.6	277.5	273.2
70°	247.6	247.6	245.5	245.5	241.2
72.5°	219.9	217.7	215.6	215.6	213.5
75°	190.0	187.9	185.7	185.7	181.4
77.5°	160.1	158.0	158.0	153.7	151.6
80°	128.1	128.1	125.9	123.8	121.7
82.5°	98.2	96.1	93.9	91.8	89.7
85°	61.9	64.0	61.9	59.8	57.6
87.5°	27.8	29.9	29.9	29.9	27.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)