

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P686326

Luminaire Tested: SQ4R-F-125D-93050-1-UNV-STD-W-4_4000K

Issue Date: 5/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P686326
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-21)
Test Lab: INNOVATION CENTER
Issue Date: 5/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-F-125D-93050-1-UNV-STD-W-4_4000K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS, WHITE TUNING 3000K-5000K
1250 LUMENS PER FOOT
Light Source: 3000K AND 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

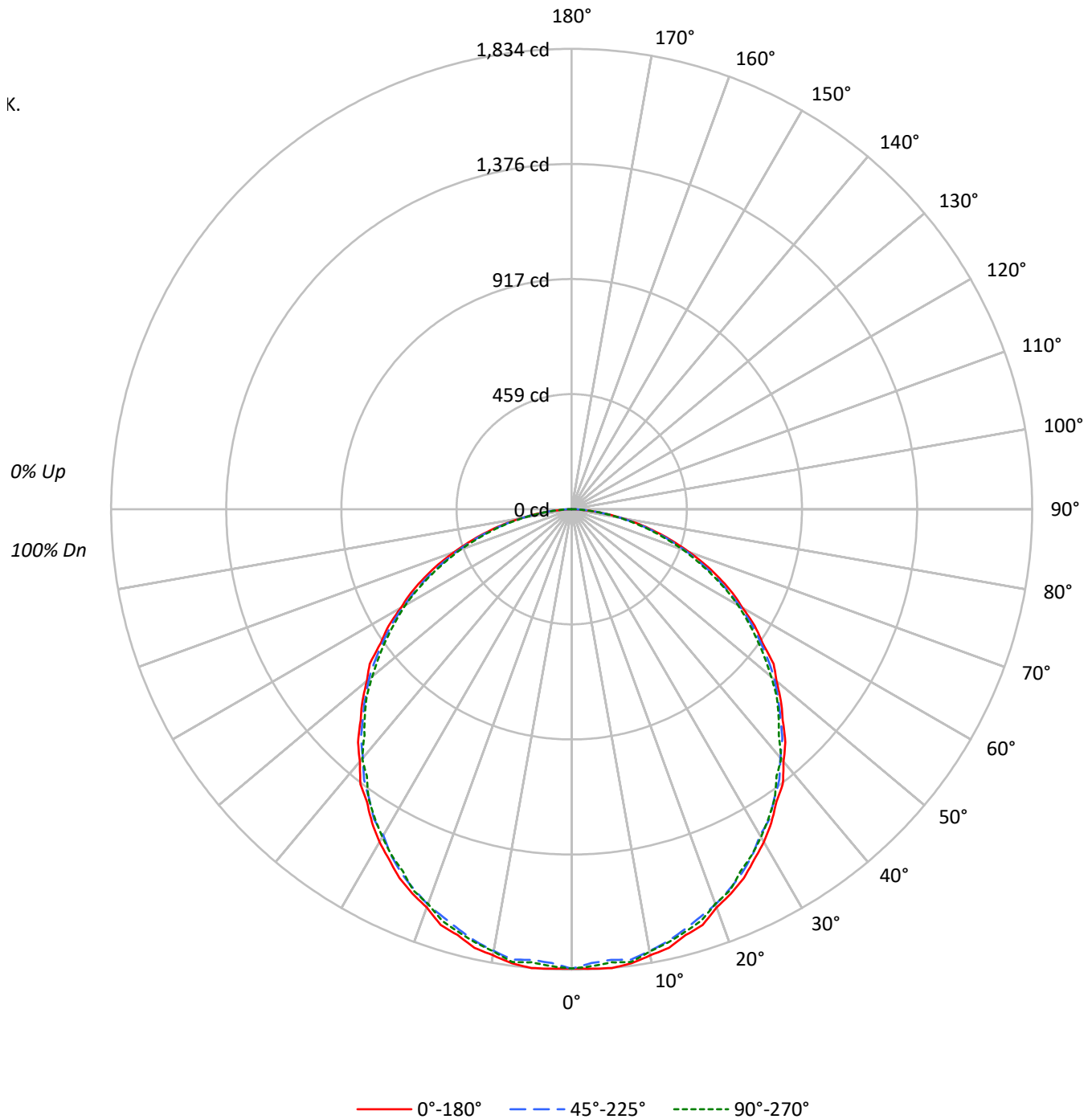
Lumens per Lamp: N/A
Luminaire Lumens: 5089.9 lumens
Efficiency: N/A
Efficacy: 82.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 61.5
Input Voltage (V): 120
Input Current (A_{in}): 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



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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	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	104	100	96	106	102	98	94	97	94	91	94	91	88	90	88	86	84																												
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	70																												
3	90	80	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59																												
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50																												
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43																												
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40	38																												
7	65	51	43	36	63	51	42	36	49	41	36	48	41	36	46	40	35	33																												
8	60	47	38	32	59	46	38	32	45	37	32	44	37	32	42	36	32	30																												
9	56	43	35	29	55	42	35	29	41	34	29	40	34	29	39	33	29	27																												
10	53	40	32	27	52	39	32	26	38	31	26	37	31	26	36	30	26	24																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17613	17613	17613
5°	17729	17411	17508
10°	17637	17464	17488
15°	17502	17275	17375
20°	17290	17160	17134
25°	17227	17011	16904
30°	17014	16676	16761
35°	16707	16528	16557
40°	16495	16241	16304
45°	16180	16007	15870
50°	15939	15788	15523
55°	15566	15353	15098
60°	15125	14880	14734
65°	14778	14258	14026
70°	13979	13551	13266
75°	12911	12535	12160
80°	11099	10955	10678
85°	8119	8395	8119

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 16250 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.9	3.4
10°-20°	492.9	9.7
20°-30°	740.0	14.5
30°-40°	884.2	17.4
40°-50°	909.8	17.9
50°-60°	819.9	16.1
60°-70°	622.9	12.2
70°-80°	355.8	7.0
80°-90°	91.5	1.8
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°	1405.9	27.6
0°-40°	2290.1	45.0
0°-60°	4019.7	79.0
0°-90°	5089.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5089.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1830	1830	1830	1830	1830	
5°	1834	1822	1802	1822	1812	174
15°	1756	1753	1733	1751	1743	496
25°	1622	1604	1601	1604	1591	746
35°	1422	1429	1406	1401	1409	893
45°	1188	1194	1176	1168	1166	920
55°	927	938	915	907	900	834
65°	649	644	626	616	616	640
75°	347	342	337	329	327	367
85°	74	76	76	74	74	91
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1829.5	1829.5	1829.5	1829.5	1829.5
2.5°	1832.0	1832.0	1809.2	1834.5	1821.9
5°	1834.5	1821.9	1801.6	1821.9	1811.7
7.5°	1824.4	1806.6	1809.2	1811.7	1819.3
10°	1804.1	1796.5	1786.4	1796.5	1788.9
12.5°	1788.9	1788.9	1763.6	1773.7	1768.6
15°	1756.0	1753.4	1733.2	1750.9	1743.3
17.5°	1735.7	1723.0	1702.8	1715.4	1718.0
20°	1687.6	1690.1	1674.9	1687.6	1672.4
22.5°	1657.2	1667.3	1639.4	1654.6	1644.5
25°	1621.7	1603.9	1601.4	1603.9	1591.3
27.5°	1573.5	1571.0	1555.8	1550.7	1553.3
30°	1530.5	1535.5	1500.1	1500.1	1507.7
32.5°	1479.8	1477.2	1464.6	1451.9	1459.5
35°	1421.5	1429.1	1406.3	1401.2	1408.8
37.5°	1381.0	1370.8	1358.2	1350.6	1340.4
40°	1312.5	1317.6	1292.3	1292.3	1297.3
42.5°	1259.3	1256.8	1241.6	1231.5	1221.3
45°	1188.4	1193.5	1175.7	1168.1	1165.6
47.5°	1130.1	1127.6	1114.9	1099.7	1107.3
50°	1064.2	1061.7	1054.1	1038.9	1036.4
52.5°	1013.5	1003.4	985.7	973.0	967.9
55°	927.4	937.5	914.7	907.1	899.5
57.5°	864.0	859.0	846.3	833.6	831.1
60°	785.5	785.5	772.8	765.2	765.2
62.5°	722.2	714.6	699.3	694.3	691.7
65°	648.7	643.6	625.9	615.7	615.7
67.5°	575.2	570.1	552.4	542.2	542.2
70°	496.6	491.6	481.4	473.8	471.3
72.5°	420.6	418.1	408.0	400.4	395.3
75°	347.1	342.1	337.0	329.4	326.9
77.5°	276.2	271.1	266.1	258.5	255.9
80°	200.2	197.6	197.6	190.0	192.6
82.5°	136.8	136.8	134.3	129.2	131.8
85°	73.5	76.0	76.0	73.5	73.5
87.5°	25.3	30.4	32.9	30.4	30.4
90°	0.0	0.0	0.0	0.0	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	21.74	23.38	22.10	23.69	24.01	21.55	23.19	21.92	23.50	23.82
	3H	23.58	25.06	23.96	25.39	25.75	23.34	24.82	23.71	25.14	25.50
	4H	24.26	25.66	24.66	26.00	26.38	24.00	25.39	24.39	25.74	26.11
	6H	24.74	26.03	25.15	26.40	26.79	24.47	25.76	24.88	26.13	26.52
	8H	24.88	26.12	25.30	26.51	26.90	24.61	25.85	25.03	26.24	26.63
	12H	24.96	26.14	25.39	26.53	26.95	24.69	25.88	25.12	26.26	26.69
4H	2H	22.35	23.74	22.75	24.09	24.47	22.20	23.60	22.60	23.94	24.32
	3H	24.41	25.58	24.82	25.98	26.38	24.21	25.38	24.62	25.77	26.17
	4H	25.22	26.28	25.65	26.69	27.13	24.99	26.05	25.42	26.46	26.90
	6H	25.82	26.75	26.27	27.19	27.64	25.58	26.51	26.03	26.95	27.40
	8H	26.01	26.87	26.47	27.31	27.78	25.77	26.63	26.23	27.08	27.54
	12H	26.12	26.90	26.60	27.38	27.85	25.89	26.67	26.37	27.14	27.61
8H	4H	25.52	26.38	25.98	26.83	27.29	25.32	26.18	25.78	26.62	27.09
	6H	26.23	26.95	26.72	27.44	27.91	26.02	26.74	26.51	27.23	27.70
	8H	26.48	27.13	26.99	27.64	28.12	26.27	26.92	26.78	27.42	27.91
	12H	26.66	27.23	27.17	27.72	28.28	26.45	27.02	26.96	27.51	28.07
12H	4H	25.54	26.32	26.02	26.80	27.27	25.35	26.13	25.83	26.60	27.07
	6H	26.28	26.93	26.79	27.43	27.92	26.07	26.72	26.58	27.23	27.71
	8H	26.59	27.16	27.09	27.65	28.21	26.38	26.95	26.89	27.44	28.00