

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: P686327

Luminaire Tested: SQ4R-F-125D-93050-1-UNV-STD-W-4_4500K

Issue Date: 5/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P686327
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_4500K
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

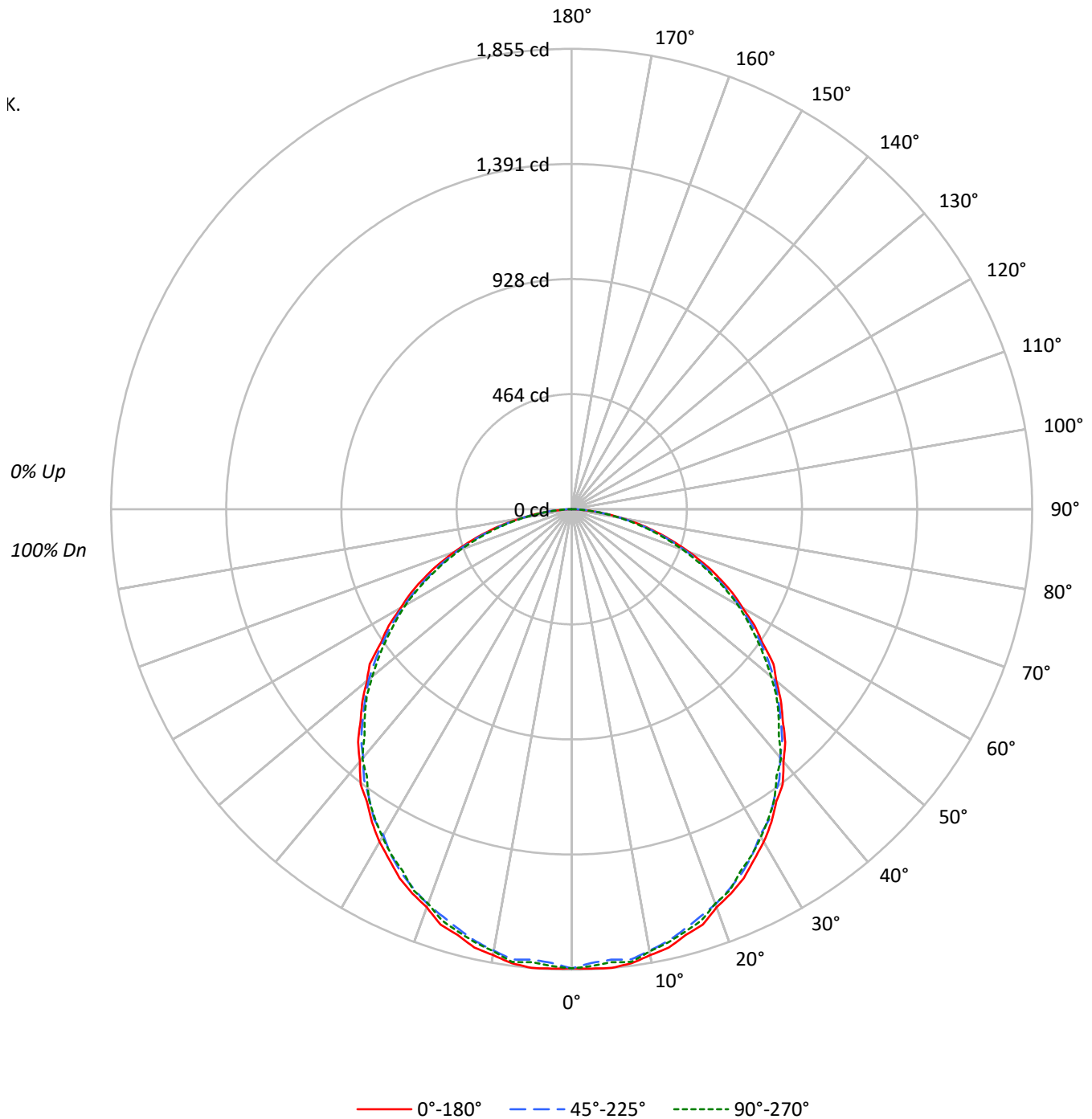
Lumens per Lamp: N/A
Luminaire Lumens: 5146.4 lumens
Efficiency: N/A
Efficacy: 83.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 61.4
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



TEST NUMBER: P686327
CATALOG NUMBER: SQ4R-F-125D-93050-1-UNV-STD-W-4_4500K

Luminous Intensity Polar Plot





TEST NUMBER: P686327

CATALOG NUMBER: SQ4R-F-125D-93050-1-UNV-STD-W-4_4500K

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	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°	17809	17809	17809
5°	17926	17604	17703
10°	17832	17657	17683
15°	17696	17466	17569
20°	17481	17350	17324
25°	17418	17200	17091
30°	17202	16861	16946
35°	16892	16711	16742
40°	16678	16421	16485
45°	16360	16186	16045
50°	16116	15963	15695
55°	15739	15524	15266
60°	15292	15046	14897
65°	14942	14415	14183
70°	14136	13703	13413
75°	13056	12673	12294
80°	11221	11077	10794
85°	8207	8494	8207

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 16429 cd/sqm



TEST NUMBER: P686327

CATALOG NUMBER: SQ4R-F-125D-93050-1-UNV-STD-W-4_4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.9	3.4
10°-20°	498.4	9.7
20°-30°	748.2	14.5
30°-40°	894.0	17.4
40°-50°	919.9	17.9
50°-60°	829.0	16.1
60°-70°	629.8	12.2
70°-80°	359.7	7.0
80°-90°	92.5	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°	1421.5	27.6
0°-40°	2315.5	45.0
0°-60°	4064.3	79.0
0°-90°	5146.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5146.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1850	1850	1850	1850	1850	
5°	1855	1842	1822	1842	1832	176
15°	1776	1773	1752	1770	1763	502
25°	1640	1622	1619	1622	1609	754
35°	1437	1445	1422	1417	1424	903
45°	1202	1207	1189	1181	1178	930
55°	938	948	925	917	910	843
65°	656	651	633	623	623	647
75°	351	346	341	333	330	371
85°	74	77	77	74	74	92
90°	0	0	0	0	0	



TEST NUMBER: P686327

CATALOG NUMBER: SQ4R-F-125D-93050-1-UNV-STD-W-4_4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1849.8	1849.8	1849.8	1849.8	1849.8
2.5°	1852.3	1852.3	1829.3	1854.9	1842.1
5°	1854.9	1842.1	1821.6	1842.1	1831.8
7.5°	1844.6	1826.7	1829.3	1831.8	1839.5
10°	1824.1	1816.5	1806.2	1816.5	1808.8
12.5°	1808.8	1808.8	1783.2	1793.4	1788.3
15°	1775.5	1772.9	1752.4	1770.3	1762.7
17.5°	1755.0	1742.2	1721.7	1734.5	1737.0
20°	1706.3	1708.9	1693.5	1706.3	1690.9
22.5°	1675.5	1685.8	1657.6	1673.0	1662.7
25°	1639.7	1621.7	1619.2	1621.7	1608.9
27.5°	1591.0	1588.4	1573.1	1567.9	1570.5
30°	1547.4	1552.6	1516.7	1516.7	1524.4
32.5°	1496.2	1493.6	1480.8	1468.0	1475.7
35°	1437.3	1445.0	1421.9	1416.8	1424.5
37.5°	1396.3	1386.0	1373.2	1365.5	1355.3
40°	1327.1	1332.2	1306.6	1306.6	1311.7
42.5°	1273.3	1270.8	1255.4	1245.1	1234.9
45°	1201.6	1206.7	1188.8	1181.1	1178.5
47.5°	1142.7	1140.1	1127.3	1111.9	1119.6
50°	1076.0	1073.5	1065.8	1050.4	1047.9
52.5°	1024.8	1014.6	996.6	983.8	978.7
55°	937.7	947.9	924.9	917.2	909.5
57.5°	873.6	868.5	855.7	842.9	840.3
60°	794.2	794.2	781.4	773.7	773.7
62.5°	730.2	722.5	707.1	702.0	699.4
65°	655.9	650.7	632.8	622.6	622.6
67.5°	581.6	576.4	558.5	548.3	548.3
70°	502.2	497.0	486.8	479.1	476.5
72.5°	425.3	422.7	412.5	404.8	399.7
75°	351.0	345.9	340.7	333.1	330.5
77.5°	279.3	274.1	269.0	261.3	258.8
80°	202.4	199.8	199.8	192.1	194.7
82.5°	138.3	138.3	135.8	130.7	133.2
85°	74.3	76.9	76.9	74.3	74.3
87.5°	25.6	30.7	33.3	30.7	30.7
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P686327

CATALOG NUMBER: SQ4R-F-125D-93050-1-UNV-STD-W-4_4500K

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	21.78	23.42	22.14	23.73	24.04	21.59	23.23	21.95	23.54	23.86
	3H	23.62	25.10	23.99	25.43	25.79	23.37	24.86	23.75	25.18	25.54
	4H	24.30	25.69	24.70	26.04	26.42	24.03	25.43	24.43	25.78	26.15
	6H	24.78	26.07	25.19	26.44	26.83	24.50	25.80	24.92	26.16	26.55
	8H	24.92	26.15	25.34	26.54	26.94	24.65	25.89	25.07	26.27	26.67
	12H	25.00	26.18	25.43	26.56	26.99	24.73	25.92	25.16	26.30	26.73
4H	2H	22.39	23.78	22.78	24.13	24.51	22.24	23.63	22.64	23.98	24.36
	3H	24.45	25.62	24.86	26.02	26.42	24.24	25.42	24.65	25.81	26.21
	4H	25.26	26.32	25.69	26.73	27.16	25.03	26.09	25.46	26.50	26.94
	6H	25.86	26.78	26.31	27.22	27.68	25.62	26.55	26.07	26.99	27.44
	8H	26.04	26.91	26.50	27.35	27.82	25.81	26.67	26.27	27.11	27.58
	12H	26.16	26.94	26.64	27.42	27.88	25.93	26.71	26.41	27.18	27.65
8H	4H	25.55	26.42	26.01	26.86	27.33	25.35	26.22	25.81	26.66	27.13
	6H	26.27	26.99	26.76	27.48	27.95	26.06	26.78	26.55	27.26	27.74
	8H	26.52	27.17	27.03	27.67	28.16	26.31	26.95	26.82	27.46	27.95
	12H	26.70	27.27	27.21	27.76	28.32	26.49	27.06	27.00	27.55	28.11
12H	4H	25.58	26.36	26.06	26.84	27.31	25.39	26.17	25.87	26.64	27.11
	6H	26.32	26.96	26.83	27.47	27.96	26.11	26.76	26.62	27.27	27.75
	8H	26.62	27.20	27.13	27.69	28.25	26.42	26.99	26.92	27.48	28.04