

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: P686325

Luminaire Tested: SQ4R-F-125D-93050-1-UNV-STD-W-4_3500K

Issue Date: 5/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P686325
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_3500K
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

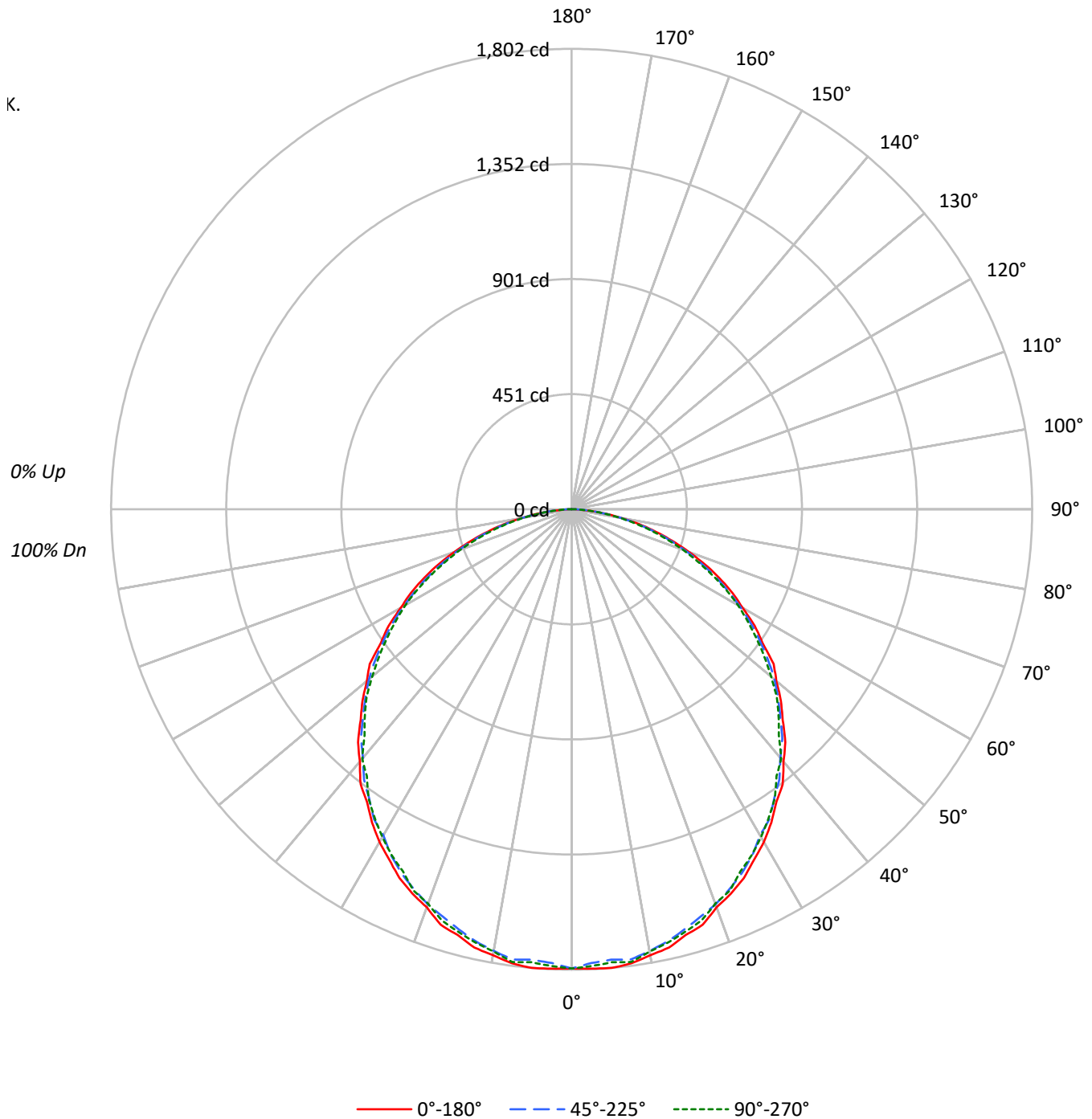
Lumens per Lamp: N/A
Luminaire Lumens: 5000.6 lumens
Efficiency: N/A
Efficacy: 81.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

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	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	109	104	100	96	106	102	98	94	97	94	91	94	91	88	90	88	86	84					84			
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	70					70			
3	90	80	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59					59			
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50					50			
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43					43			
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40	38					38			
7	65	51	43	36	63	51	42	36	49	41	36	48	41	36	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	44	37	32	42	36	32	30					30			
9	56	43	35	29	55	42	35	29	41	34	29	40	34	29	39	33	29	27					27			
10	53	40	32	27	52	39	32	26	38	31	26	37	31	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17303	17303	17303
5°	17418	17105	17201
10°	17327	17157	17181
15°	17194	16971	17070
20°	16986	16858	16833
25°	16924	16713	16606
30°	16715	16383	16466
35°	16413	16238	16267
40°	16206	15956	16017
45°	15896	15727	15591
50°	15659	15511	15249
55°	15293	15084	14833
60°	14859	14620	14476
65°	14518	14008	13780
70°	13734	13314	13033
75°	12684	12316	11944
80°	10905	10767	10490
85°	7975	8251	7975

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 15964 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.9	3.4
10°-20°	484.2	9.7
20°-30°	727.0	14.5
30°-40°	868.7	17.4
40°-50°	893.8	17.9
50°-60°	805.5	16.1
60°-70°	612.0	12.2
70°-80°	349.5	7.0
80°-90°	89.9	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°	1381.2	27.6
0°-40°	2249.8	45.0
0°-60°	3949.1	79.0
0°-90°	5000.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5000.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1797	1797	1797	1797	1797	
5°	1802	1790	1770	1790	1780	171
15°	1725	1723	1703	1720	1713	488
25°	1593	1576	1573	1576	1563	732
35°	1396	1404	1382	1377	1384	878
45°	1168	1172	1155	1148	1145	904
55°	911	921	899	891	884	819
65°	637	632	615	605	605	629
75°	341	336	331	324	321	361
85°	72	75	75	72	72	90
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1797.3	1797.3	1797.3	1797.3	1797.3
2.5°	1799.8	1799.8	1777.4	1802.3	1789.8
5°	1802.3	1789.8	1769.9	1789.8	1779.9
7.5°	1792.3	1774.9	1777.4	1779.9	1787.4
10°	1772.4	1764.9	1755.0	1764.9	1757.5
12.5°	1757.5	1757.5	1732.6	1742.5	1737.6
15°	1725.1	1722.6	1702.7	1720.1	1712.7
17.5°	1705.2	1692.8	1672.8	1685.3	1687.8
20°	1657.9	1660.4	1645.5	1657.9	1643.0
22.5°	1628.0	1638.0	1610.6	1625.5	1615.6
25°	1593.2	1575.8	1573.3	1575.8	1563.3
27.5°	1545.9	1543.4	1528.5	1523.5	1526.0
30°	1503.6	1508.5	1473.7	1473.7	1481.2
32.5°	1453.8	1451.3	1438.8	1426.4	1433.9
35°	1396.5	1404.0	1381.6	1376.6	1384.1
37.5°	1356.7	1346.7	1334.3	1326.8	1316.9
40°	1289.5	1294.5	1269.6	1269.6	1274.5
42.5°	1237.2	1234.7	1219.8	1209.8	1199.9
45°	1167.5	1172.5	1155.1	1147.6	1145.1
47.5°	1110.2	1107.8	1095.3	1080.4	1087.8
50°	1045.5	1043.0	1035.6	1020.6	1018.1
52.5°	995.7	985.8	968.4	955.9	950.9
55°	911.1	921.1	898.7	891.2	883.7
57.5°	848.9	843.9	831.4	819.0	816.5
60°	771.7	771.7	759.3	751.8	751.8
62.5°	709.5	702.0	687.1	682.1	679.6
65°	637.3	632.3	614.9	604.9	604.9
67.5°	565.1	560.1	542.7	532.7	532.7
70°	487.9	482.9	473.0	465.5	463.0
72.5°	413.2	410.7	400.8	393.3	388.3
75°	341.0	336.1	331.1	323.6	321.1
77.5°	271.3	266.4	261.4	253.9	251.4
80°	196.7	194.2	194.2	186.7	189.2
82.5°	134.4	134.4	131.9	127.0	129.4
85°	72.2	74.7	74.7	72.2	72.2
87.5°	24.9	29.9	32.4	29.9	29.9
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	21.68	23.32	22.04	23.63	23.94	21.49	23.13	21.85	23.44	23.76
	3H	23.52	25.00	23.89	25.33	25.69	23.27	24.76	23.65	25.08	25.44
	4H	24.20	25.59	24.60	25.94	26.32	23.93	25.33	24.33	25.68	26.05
	6H	24.68	25.97	25.09	26.34	26.73	24.40	25.70	24.82	26.06	26.45
	8H	24.82	26.06	25.24	26.44	26.84	24.55	25.79	24.97	26.17	26.57
	12H	24.90	26.08	25.33	26.46	26.89	24.63	25.82	25.06	26.20	26.63
4H	2H	22.29	23.68	22.68	24.03	24.41	22.14	23.53	22.54	23.88	24.26
	3H	24.35	25.52	24.76	25.92	26.32	24.14	25.32	24.55	25.71	26.11
	4H	25.16	26.22	25.59	26.63	27.06	24.93	25.99	25.36	26.40	26.84
	6H	25.76	26.68	26.21	27.13	27.58	25.52	26.45	25.97	26.89	27.34
	8H	25.94	26.81	26.40	27.25	27.72	25.71	26.57	26.17	27.01	27.48
	12H	26.06	26.84	26.54	27.32	27.78	25.83	26.61	26.31	27.08	27.55
8H	4H	25.45	26.32	25.91	26.76	27.23	25.25	26.12	25.71	26.56	27.03
	6H	26.17	26.89	26.66	27.38	27.85	25.96	26.68	26.45	27.16	27.64
	8H	26.42	27.07	26.93	27.57	28.06	26.21	26.85	26.72	27.36	27.85
	12H	26.60	27.17	27.11	27.66	28.22	26.39	26.96	26.90	27.45	28.01
12H	4H	25.48	26.26	25.96	26.74	27.21	25.29	26.07	25.77	26.54	27.01
	6H	26.22	26.86	26.73	27.37	27.86	26.01	26.66	26.52	27.17	27.65
	8H	26.52	27.10	27.03	27.59	28.15	26.32	26.89	26.82	27.38	27.94