

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: P686283

Luminaire Tested: SQ4R-F-050D-92765-1-UNV-STD-W-4_5700K

Issue Date: 5/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P686283
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-F-050D-92765-1-UNV-STD-W-4_5700K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS, WHITE TUNING 2700K-6500I
500 LUMENS PER FOOT
Light Source: 2700K AND 6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

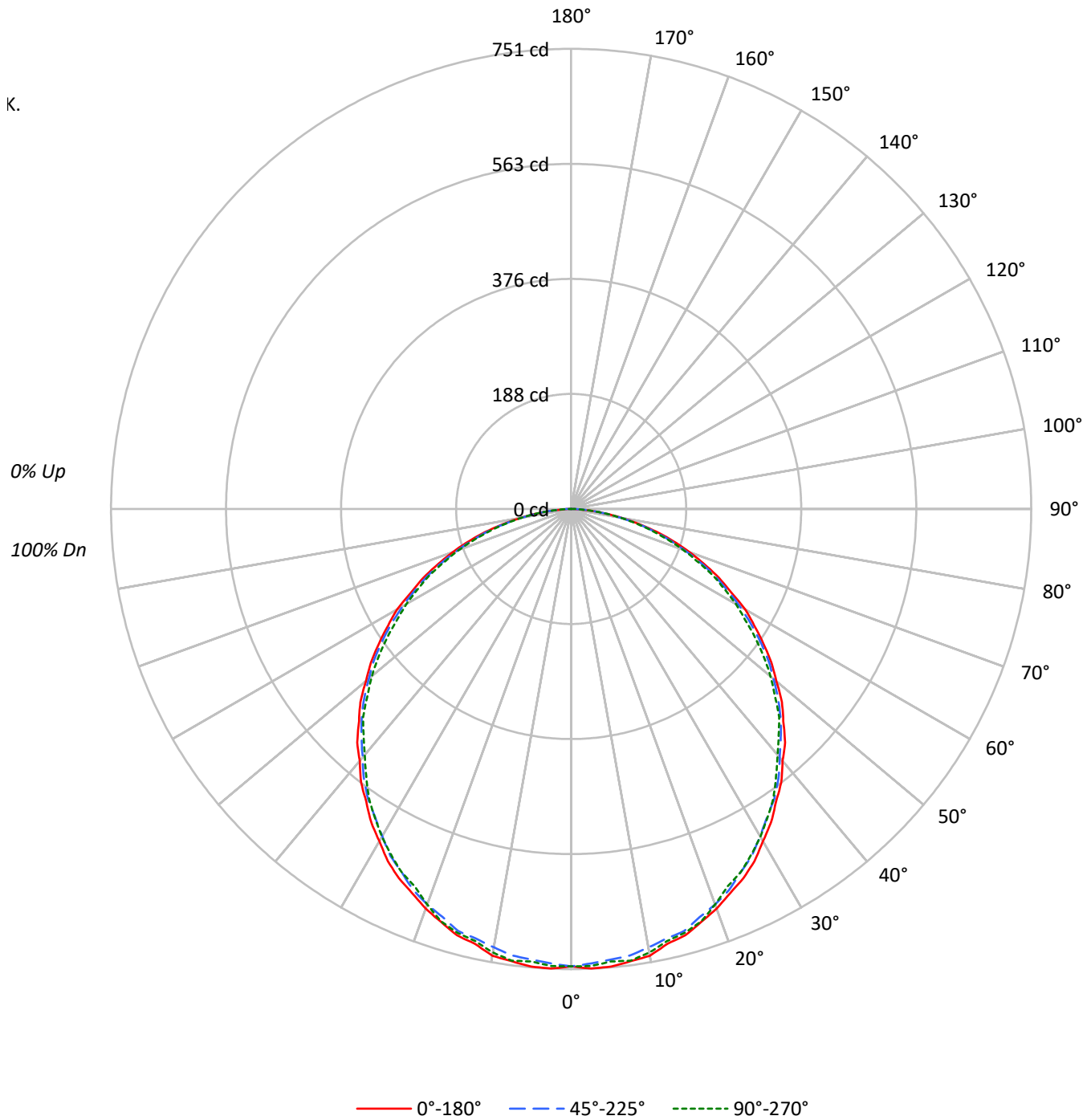
Lumens per Lamp: N/A
Luminaire Lumens: 2087.7 lumens
Efficiency: N/A
Efficacy: 98.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 21.2
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	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	93	91	88	90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	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	34	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7187	7187	7187
5°	7245	7134	7164
10°	7237	7103	7185
15°	7179	7106	7137
20°	7111	7036	7036
25°	7062	6950	6950
30°	6959	6853	6866
35°	6852	6790	6765
40°	6746	6655	6589
45°	6667	6582	6538
50°	6548	6454	6361
55°	6424	6318	6160
60°	6319	6117	5977
65°	6066	5900	5804
70°	5785	5548	5461
75°	5382	5189	5033
80°	4591	4474	4474
85°	3358	3480	3358

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 6681 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.7	3.4
10°-20°	201.7	9.7
20°-30°	303.1	14.5
30°-40°	361.8	17.3
40°-50°	373.3	17.9
50°-60°	336.2	16.1
60°-70°	255.8	12.3
70°-80°	146.9	7.0
80°-90°	38.2	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°	575.5	27.6
0°-40°	937.3	44.9
0°-60°	1646.8	78.9
0°-90°	2087.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2087.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	746	746	746	746	746	
5°	750	746	738	746	741	71
15°	720	717	713	715	716	203
25°	665	660	654	656	654	306
35°	583	582	578	576	576	366
45°	490	491	483	479	480	378
55°	383	384	376	373	367	343
65°	266	263	259	254	255	263
75°	145	140	140	136	135	152
85°	30	32	32	32	30	38
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	746.5	746.5	746.5	746.5	746.5
2.5°	750.7	750.7	742.4	747.6	746.5
5°	749.7	746.5	738.2	746.5	741.3
7.5°	744.5	739.2	735.0	740.3	743.4
10°	740.3	739.2	726.6	732.9	735.0
12.5°	726.6	731.9	718.2	722.4	722.4
15°	720.3	717.2	713.0	715.1	716.1
17.5°	706.7	704.6	698.3	703.6	705.7
20°	694.1	691.0	686.8	687.8	686.8
22.5°	678.4	676.3	673.2	673.2	666.9
25°	664.8	659.5	654.3	656.4	654.3
27.5°	648.0	643.8	638.5	639.6	636.5
30°	626.0	627.0	616.5	616.5	617.6
32.5°	607.1	602.9	595.6	595.6	596.6
35°	583.0	581.9	577.7	575.6	575.6
37.5°	563.1	563.1	555.7	552.6	549.4
40°	536.8	537.9	529.5	528.5	524.3
42.5°	516.9	514.8	506.4	505.4	501.2
45°	489.7	490.7	483.4	479.2	480.2
47.5°	466.6	463.4	458.2	454.0	450.9
50°	437.2	436.2	430.9	427.8	424.7
52.5°	412.1	408.9	405.8	398.4	396.3
55°	382.7	383.8	376.4	373.3	367.0
57.5°	354.4	353.4	347.1	341.8	336.6
60°	328.2	325.0	317.7	312.5	310.4
62.5°	293.6	292.5	287.3	283.1	281.0
65°	266.3	263.2	259.0	253.7	254.8
67.5°	234.9	232.8	228.6	224.4	222.3
70°	205.5	202.4	197.1	195.0	194.0
72.5°	175.1	172.0	167.8	163.6	164.6
75°	144.7	140.5	139.5	136.3	135.3
77.5°	113.2	111.1	109.0	108.0	106.9
80°	82.8	83.9	80.7	79.7	80.7
82.5°	56.6	56.6	55.6	54.5	55.6
85°	30.4	31.5	31.5	31.5	30.4
87.5°	10.5	12.6	13.6	13.6	12.6
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	18.68	20.32	19.04	20.63	20.95	18.44	20.08	18.80	20.39	20.71
	3H	20.52	22.00	20.89	22.32	22.68	20.24	21.73	20.62	22.05	22.41
	4H	21.20	22.60	21.60	22.95	23.32	20.91	22.31	21.31	22.66	23.03
	6H	21.69	22.98	22.10	23.35	23.74	21.40	22.69	21.81	23.06	23.45
	8H	21.83	23.07	22.26	23.46	23.86	21.55	22.78	21.97	23.17	23.57
	12H	21.91	23.10	22.34	23.48	23.91	21.63	22.82	22.06	23.20	23.63
4H	2H	19.29	20.69	19.69	21.04	21.41	19.10	20.50	19.50	20.85	21.22
	3H	21.35	22.52	21.76	22.92	23.32	21.12	22.29	21.53	22.69	23.09
	4H	22.16	23.22	22.59	23.63	24.07	21.92	22.98	22.35	23.39	23.83
	6H	22.77	23.70	23.23	24.14	24.60	22.52	23.45	22.98	23.89	24.34
	8H	22.96	23.83	23.42	24.27	24.74	22.72	23.58	23.17	24.03	24.49
	12H	23.08	23.86	23.56	24.34	24.81	22.84	23.62	23.32	24.10	24.56
8H	4H	22.46	23.33	22.92	23.77	24.23	22.24	23.11	22.70	23.55	24.02
	6H	23.19	23.91	23.68	24.40	24.87	22.96	23.68	23.45	24.17	24.65
	8H	23.45	24.09	23.95	24.60	25.08	23.22	23.87	23.73	24.38	24.86
	12H	23.63	24.20	24.13	24.69	25.25	23.41	23.98	23.92	24.47	25.03
12H	4H	22.49	23.27	22.97	23.74	24.21	22.28	23.06	22.76	23.53	24.00
	6H	23.23	23.88	23.74	24.39	24.87	23.02	23.67	23.53	24.17	24.66
	8H	23.55	24.12	24.05	24.61	25.17	23.33	23.91	23.84	24.40	24.96