

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: P686293

Luminaire Tested: SQ4R-F-075D-92765-1-UNV-STD-W-4_4000K

Issue Date: 5/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P686293
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-075D-92765-1-UNV-STD-W-4_4000K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS, WHITE TUNING 2700K-6500K
750 LUMENS PER FOOT
Light Source: 2700K AND 6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

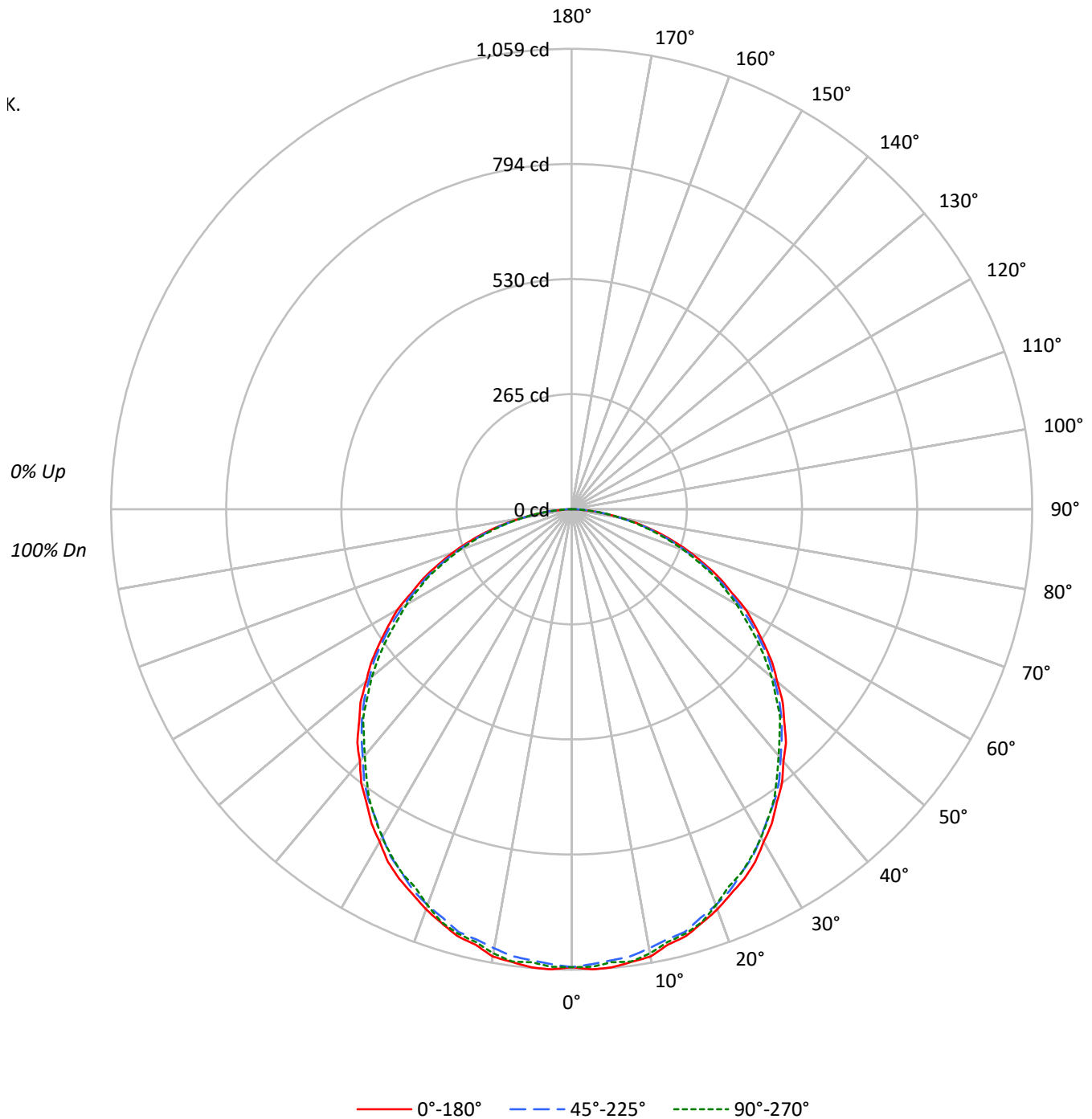
Lumens per Lamp: N/A
Luminaire Lumens: 2945.7 lumens
Efficiency: N/A
Efficacy: 89.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 32.8
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°	10141	10141	10141
5°	10223	10066	10109
10°	10211	10023	10139
15°	10130	10028	10072
20°	10034	9929	9929
25°	9964	9807	9807
30°	9819	9670	9687
35°	9668	9581	9546
40°	9520	9389	9296
45°	9407	9286	9226
50°	9240	9108	8975
55°	9064	8914	8691
60°	8917	8632	8432
65°	8561	8324	8189
70°	8163	7828	7704
75°	7596	7320	7101
80°	6481	6315	6315
85°	4739	4904	4739

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 9427 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.8	3.4
10°-20°	284.6	9.7
20°-30°	427.6	14.5
30°-40°	510.5	17.3
40°-50°	526.7	17.9
50°-60°	474.4	16.1
60°-70°	360.9	12.3
70°-80°	207.2	7.0
80°-90°	53.9	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°	812.0	27.6
0°-40°	1322.5	44.9
0°-60°	2323.7	78.9
0°-90°	2945.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2945.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1053	1053	1053	1053	1053	
5°	1058	1053	1042	1053	1046	100
15°	1016	1012	1006	1009	1010	286
25°	938	931	923	926	923	432
35°	823	821	815	812	812	516
45°	691	692	682	676	678	534
55°	540	542	531	527	518	483
65°	376	371	365	358	360	371
75°	204	198	197	192	191	215
85°	43	44	44	44	43	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1053.4	1053.4	1053.4	1053.4	1053.4
2.5°	1059.3	1059.3	1047.5	1054.9	1053.4
5°	1057.8	1053.4	1041.6	1053.4	1046.0
7.5°	1050.4	1043.0	1037.1	1044.5	1049.0
10°	1044.5	1043.0	1025.3	1034.2	1037.1
12.5°	1025.3	1032.7	1013.5	1019.4	1019.4
15°	1016.4	1012.0	1006.1	1009.0	1010.5
17.5°	997.2	994.2	985.3	992.7	995.7
20°	979.4	975.0	969.1	970.5	969.1
22.5°	957.2	954.3	949.8	949.8	941.0
25°	938.0	930.6	923.2	926.2	923.2
27.5°	914.3	908.4	901.0	902.5	898.1
30°	883.3	884.7	869.9	869.9	871.4
32.5°	856.6	850.7	840.4	840.4	841.8
35°	822.6	821.1	815.2	812.2	812.2
37.5°	794.5	794.5	784.1	779.7	775.3
40°	757.5	759.0	747.1	745.7	739.7
42.5°	729.4	726.4	714.6	713.1	707.2
45°	690.9	692.4	682.0	676.1	677.6
47.5°	658.4	653.9	646.5	640.6	636.2
50°	616.9	615.5	608.1	603.6	599.2
52.5°	581.4	577.0	572.6	562.2	559.2
55°	540.0	541.5	531.1	526.7	517.8
57.5°	500.1	498.6	489.7	482.3	474.9
60°	463.1	458.6	448.3	440.9	437.9
62.5°	414.3	412.8	405.4	399.5	396.5
65°	375.8	371.4	365.4	358.0	359.5
67.5°	331.4	328.4	322.5	316.6	313.7
70°	290.0	285.5	278.1	275.2	273.7
72.5°	247.1	242.6	236.7	230.8	232.3
75°	204.2	198.3	196.8	192.3	190.9
77.5°	159.8	156.8	153.9	152.4	150.9
80°	116.9	118.4	113.9	112.4	113.9
82.5°	79.9	79.9	78.4	76.9	78.4
85°	42.9	44.4	44.4	44.4	42.9
87.5°	14.8	17.8	19.2	19.2	17.8
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	19.88	21.52	20.24	21.83	22.14	19.63	21.27	20.00	21.59	21.90
	3H	21.71	23.19	22.09	23.52	23.88	21.44	22.92	21.82	23.25	23.61
	4H	22.40	23.80	22.80	24.14	24.52	22.11	23.50	22.51	23.85	24.23
	6H	22.89	24.18	23.30	24.55	24.94	22.59	23.89	23.00	24.25	24.64
	8H	23.03	24.27	23.45	24.66	25.05	22.74	23.98	23.17	24.37	24.77
	12H	23.11	24.30	23.54	24.68	25.11	22.83	24.02	23.26	24.40	24.83
4H	2H	20.49	21.89	20.89	22.23	22.61	20.30	21.70	20.70	22.04	22.42
	3H	22.54	23.71	22.95	24.11	24.51	22.32	23.49	22.73	23.89	24.29
	4H	23.36	24.42	23.79	24.83	25.27	23.11	24.17	23.54	24.59	25.02
	6H	23.97	24.90	24.42	25.34	25.79	23.72	24.65	24.17	25.09	25.54
	8H	24.16	25.03	24.62	25.47	25.94	23.91	24.78	24.37	25.22	25.69
	12H	24.28	25.06	24.76	25.53	26.00	24.04	24.82	24.52	25.29	25.76
8H	4H	23.65	24.52	24.11	24.96	25.43	23.44	24.31	23.90	24.75	25.21
	6H	24.38	25.11	24.88	25.59	26.07	24.16	24.88	24.65	25.37	25.84
	8H	24.64	25.29	25.15	25.80	26.28	24.42	25.07	24.93	25.57	26.06
	12H	24.82	25.40	25.33	25.89	26.45	24.61	25.18	25.11	25.67	26.23
12H	4H	23.68	24.46	24.16	24.94	25.41	23.47	24.25	23.95	24.73	25.20
	6H	24.43	25.08	24.94	25.59	26.07	24.21	24.86	24.72	25.37	25.85
	8H	24.74	25.32	25.25	25.81	26.37	24.53	25.10	25.04	25.59	26.15