

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: P686298

Luminaire Tested: SQ4R-F-075D-93050-1-UNV-STD-W-4_3000K

Issue Date: 5/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P686298
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-075D-93050-1-UNV-STD-W-4_3000K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS, WHITE TUNING 3000K-5000K
750 LUMENS PER FOOT
Light Source: 3000K AND 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

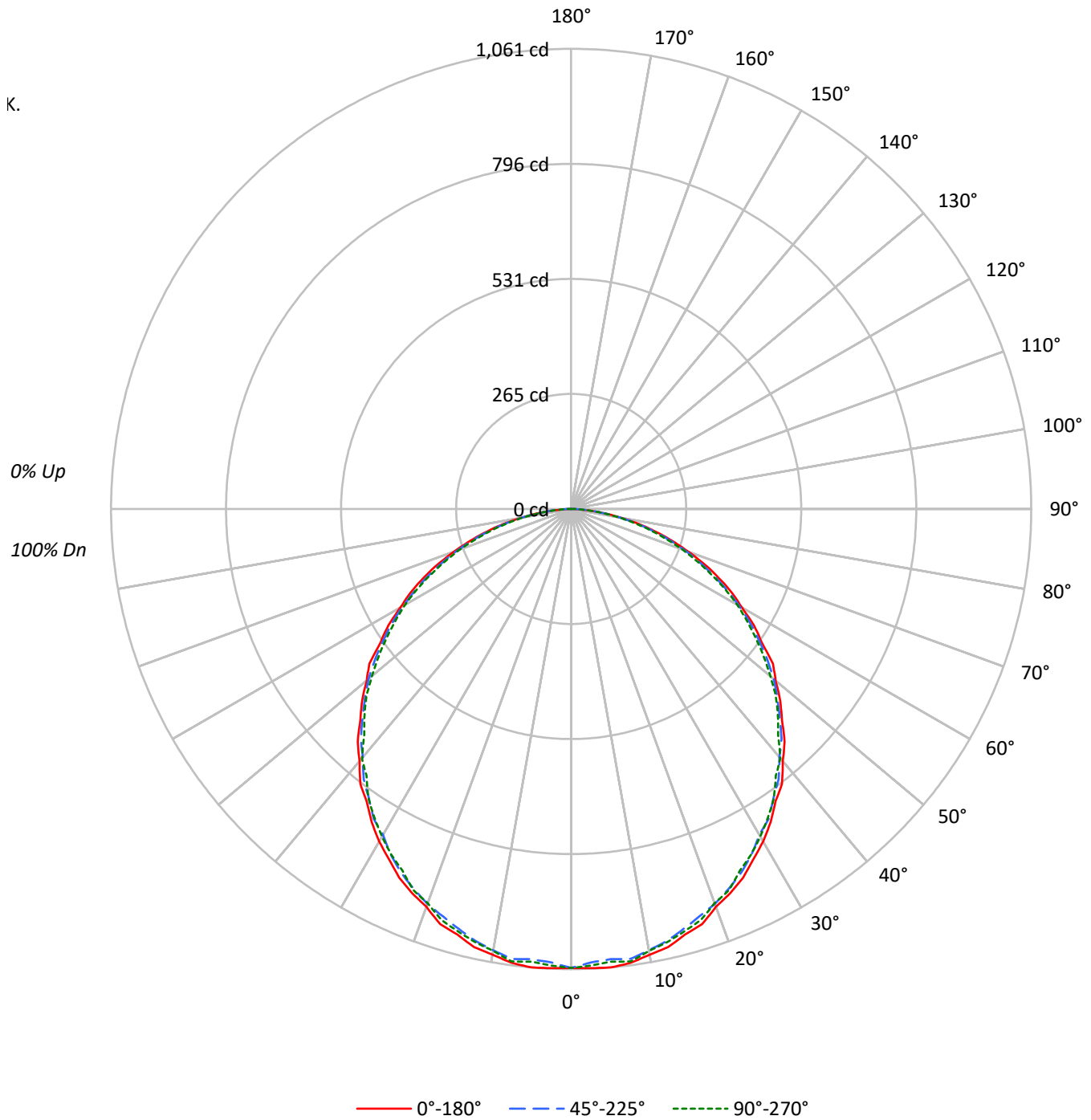
Lumens per Lamp: N/A
Luminaire Lumens: 2943.8 lumens
Efficiency: N/A
Efficacy: 89.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 32.9
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	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°	10187	10187	10187
5°	10254	10070	10126
10°	10200	10100	10114
15°	10122	9991	10050
20°	9999	9925	9909
25°	9963	9839	9776
30°	9841	9645	9694
35°	9662	9560	9576
40°	9540	9393	9429
45°	9358	9258	9178
50°	9219	9130	8978
55°	9003	8879	8733
60°	8747	8607	8522
65°	8547	8246	8112
70°	8084	7837	7673
75°	7469	7250	7030
80°	6420	6337	6176
85°	4695	4860	4695

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 9399 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.0	3.4
10°-20°	285.1	9.7
20°-30°	428.0	14.5
30°-40°	511.4	17.4
40°-50°	526.2	17.9
50°-60°	474.2	16.1
60°-70°	360.3	12.2
70°-80°	205.8	7.0
80°-90°	52.9	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°	813.1	27.6
0°-40°	1324.5	45.0
0°-60°	2324.9	79.0
0°-90°	2943.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2943.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1058	1058	1058	1058	1058	
5°	1061	1054	1042	1054	1048	101
15°	1016	1014	1002	1013	1008	287
25°	938	928	926	928	920	431
35°	822	826	813	810	815	517
45°	687	690	680	676	674	532
55°	536	542	529	525	520	482
65°	375	372	362	356	356	370
75°	201	198	195	190	189	212
85°	42	44	44	42	42	53
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1058.1	1058.1	1058.1	1058.1	1058.1
2.5°	1059.6	1059.6	1046.4	1061.0	1053.7
5°	1061.0	1053.7	1042.0	1053.7	1047.8
7.5°	1055.2	1044.9	1046.4	1047.8	1052.2
10°	1043.4	1039.0	1033.2	1039.0	1034.6
12.5°	1034.6	1034.6	1020.0	1025.9	1022.9
15°	1015.6	1014.1	1002.4	1012.7	1008.3
17.5°	1003.9	996.5	984.8	992.1	993.6
20°	976.0	977.5	968.7	976.0	967.2
22.5°	958.4	964.3	948.2	957.0	951.1
25°	937.9	927.7	926.2	927.7	920.3
27.5°	910.1	908.6	899.8	896.9	898.4
30°	885.2	888.1	867.6	867.6	872.0
32.5°	855.9	854.4	847.1	839.7	844.1
35°	822.1	826.5	813.4	810.4	814.8
37.5°	798.7	792.8	785.5	781.1	775.3
40°	759.1	762.1	747.4	747.4	750.3
42.5°	728.4	726.9	718.1	712.2	706.4
45°	687.3	690.3	680.0	675.6	674.1
47.5°	653.6	652.1	644.8	636.0	640.4
50°	615.5	614.0	609.6	600.9	599.4
52.5°	586.2	580.3	570.1	562.8	559.8
55°	536.4	542.2	529.0	524.6	520.3
57.5°	499.7	496.8	489.5	482.2	480.7
60°	454.3	454.3	447.0	442.6	442.6
62.5°	417.7	413.3	404.5	401.5	400.1
65°	375.2	372.2	362.0	356.1	356.1
67.5°	332.7	329.7	319.5	313.6	313.6
70°	287.2	284.3	278.4	274.0	272.6
72.5°	243.3	241.8	235.9	231.5	228.6
75°	200.8	197.8	194.9	190.5	189.0
77.5°	159.7	156.8	153.9	149.5	148.0
80°	115.8	114.3	114.3	109.9	111.4
82.5°	79.1	79.1	77.7	74.7	76.2
85°	42.5	44.0	44.0	42.5	42.5
87.5°	14.7	17.6	19.1	17.6	17.6
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	19.84	21.47	20.20	21.79	22.10	19.65	21.29	20.01	21.60	21.92
	3H	21.68	23.16	22.05	23.49	23.85	21.43	22.92	21.81	23.24	23.60
	4H	22.36	23.75	22.76	24.10	24.48	22.09	23.49	22.49	23.84	24.21
	6H	22.84	24.13	23.25	24.49	24.89	22.56	23.86	22.97	24.22	24.61
	8H	22.98	24.21	23.40	24.60	25.00	22.71	23.94	23.13	24.33	24.73
	12H	23.06	24.24	23.49	24.62	25.05	22.79	23.98	23.22	24.36	24.79
4H	2H	20.45	21.84	20.84	22.19	22.56	20.30	21.69	20.70	22.04	22.42
	3H	22.51	23.68	22.92	24.08	24.48	22.30	23.48	22.71	23.87	24.27
	4H	23.32	24.38	23.75	24.79	25.22	23.09	24.15	23.52	24.56	25.00
	6H	23.92	24.84	24.37	25.28	25.74	23.68	24.60	24.13	25.05	25.50
	8H	24.10	24.97	24.56	25.41	25.88	23.86	24.73	24.32	25.17	25.64
	12H	24.22	25.00	24.70	25.47	25.94	23.99	24.76	24.47	25.24	25.71
8H	4H	23.61	24.48	24.07	24.92	25.39	23.41	24.28	23.87	24.72	25.19
	6H	24.33	25.05	24.82	25.54	26.01	24.12	24.84	24.61	25.32	25.80
	8H	24.58	25.23	25.09	25.73	26.22	24.37	25.01	24.88	25.52	26.01
	12H	24.76	25.33	25.27	25.82	26.38	24.55	25.12	25.06	25.61	26.17
12H	4H	23.64	24.42	24.12	24.90	25.37	23.45	24.23	23.93	24.70	25.17
	6H	24.38	25.02	24.88	25.53	26.01	24.17	24.82	24.68	25.32	25.81
	8H	24.68	25.25	25.19	25.75	26.31	24.48	25.05	24.98	25.54	26.10