

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: P686294

Luminaire Tested: SQ4R-F-075D-92765-1-UNV-STD-W-4_4500K

Issue Date: 5/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P686294
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_4500K
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

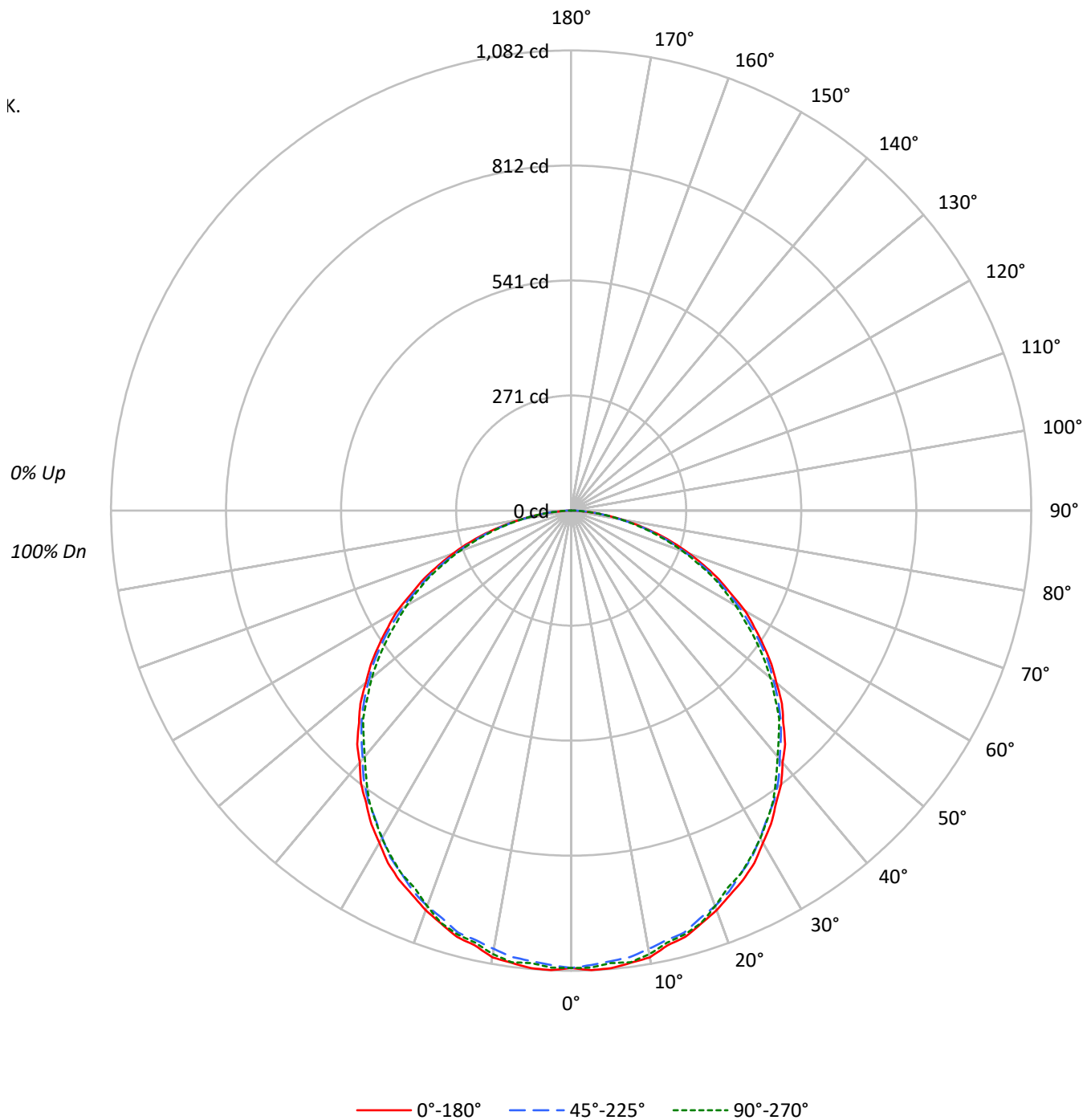
Lumens per Lamp: N/A
Luminaire Lumens: 3007.6 lumens
Efficiency: N/A
Efficacy: 91.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 32.9
Input Voltage (V): 120
Input Current (Ain): 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	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	93	91	88	90	88	86	84				84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70				70
3	90	79	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	34	29	41	34	29	40	34	29	39	33	29	27				27
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24				24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10354	10354	10354
5°	10438	10277	10321
10°	10426	10233	10352
15°	10344	10238	10283
20°	10245	10137	10137
25°	10173	10013	10013
30°	10025	9874	9891
35°	9871	9782	9747
40°	9720	9587	9492
45°	9604	9482	9419
50°	9434	9298	9163
55°	9255	9102	8874
60°	9104	8813	8609
65°	8741	8499	8363
70°	8335	7994	7867
75°	7756	7473	7250
80°	6614	6448	6448
85°	4838	5004	4838

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 9625 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.9	3.4
10°-20°	290.6	9.7
20°-30°	436.6	14.5
30°-40°	521.2	17.3
40°-50°	537.8	17.9
50°-60°	484.4	16.1
60°-70°	368.5	12.3
70°-80°	211.6	7.0
80°-90°	55.0	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°	829.0	27.6
0°-40°	1350.3	44.9
0°-60°	2372.5	78.9
0°-90°	3007.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3007.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1076	1076	1076	1076	1076	
5°	1080	1076	1063	1076	1068	103
15°	1038	1033	1027	1030	1032	292
25°	958	950	943	946	943	441
35°	840	838	832	829	829	527
45°	705	707	696	690	692	545
55°	551	553	542	538	529	494
65°	384	379	373	366	367	378
75°	208	202	201	196	195	219
85°	44	45	45	45	44	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1075.5	1075.5	1075.5	1075.5	1075.5
2.5°	1081.6	1081.6	1069.5	1077.0	1075.5
5°	1080.1	1075.5	1063.4	1075.5	1068.0
7.5°	1072.5	1064.9	1058.9	1066.5	1071.0
10°	1066.5	1064.9	1046.8	1055.9	1058.9
12.5°	1046.8	1054.4	1034.7	1040.8	1040.8
15°	1037.8	1033.2	1027.2	1030.2	1031.7
17.5°	1018.1	1015.1	1006.0	1013.6	1016.6
20°	1000.0	995.5	989.4	990.9	989.4
22.5°	977.3	974.3	969.8	969.8	960.7
25°	957.7	950.1	942.6	945.6	942.6
27.5°	933.5	927.5	919.9	921.4	916.9
30°	901.8	903.3	888.2	888.2	889.7
32.5°	874.6	868.6	858.0	858.0	859.5
35°	839.9	838.4	832.3	829.3	829.3
37.5°	811.2	811.2	800.6	796.1	791.5
40°	773.4	774.9	762.8	761.3	755.3
42.5°	744.7	741.7	729.6	728.1	722.0
45°	705.4	706.9	696.4	690.3	691.8
47.5°	672.2	667.7	660.1	654.1	649.5
50°	629.9	628.4	620.8	616.3	611.8
52.5°	593.7	589.1	584.6	574.0	571.0
55°	551.4	552.9	542.3	537.8	528.7
57.5°	510.6	509.1	500.0	492.4	484.9
60°	472.8	468.3	457.7	450.1	447.1
62.5°	423.0	421.4	413.9	407.9	404.8
65°	383.7	379.2	373.1	365.6	367.1
67.5°	338.4	335.3	329.3	323.3	320.2
70°	296.1	291.5	284.0	281.0	279.5
72.5°	252.3	247.7	241.7	235.6	237.2
75°	208.5	202.4	200.9	196.4	194.9
77.5°	163.1	160.1	157.1	155.6	154.1
80°	119.3	120.8	116.3	114.8	116.3
82.5°	81.6	81.6	80.1	78.5	80.1
85°	43.8	45.3	45.3	45.3	43.8
87.5°	15.1	18.1	19.6	19.6	18.1
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	19.95	21.59	20.31	21.90	22.22	19.71	21.35	20.07	21.66	21.97
	3H	21.78	23.27	22.16	23.59	23.95	21.51	22.99	21.89	23.32	23.68
	4H	22.47	23.87	22.87	24.22	24.59	22.18	23.58	22.58	23.93	24.30
	6H	22.96	24.25	23.37	24.62	25.01	22.67	23.96	23.08	24.33	24.72
	8H	23.10	24.34	23.53	24.73	25.13	22.82	24.05	23.24	24.44	24.84
	12H	23.18	24.37	23.61	24.75	25.18	22.90	24.09	23.33	24.47	24.90
4H	2H	20.56	21.96	20.96	22.31	22.68	20.37	21.77	20.77	22.12	22.49
	3H	22.61	23.79	23.02	24.18	24.58	22.39	23.56	22.80	23.96	24.36
	4H	23.43	24.49	23.86	24.90	25.34	23.18	24.25	23.62	24.66	25.09
	6H	24.04	24.97	24.50	25.41	25.86	23.79	24.72	24.24	25.16	25.61
	8H	24.23	25.10	24.69	25.54	26.01	23.98	24.85	24.44	25.29	25.76
	12H	24.35	25.13	24.83	25.61	26.07	24.11	24.89	24.59	25.36	25.83
8H	4H	23.73	24.59	24.19	25.04	25.50	23.51	24.38	23.97	24.82	25.29
	6H	24.46	25.18	24.95	25.66	26.14	24.23	24.95	24.72	25.44	25.91
	8H	24.71	25.36	25.22	25.87	26.35	24.49	25.14	25.00	25.64	26.13
	12H	24.89	25.47	25.40	25.96	26.52	24.68	25.25	25.18	25.74	26.30
12H	4H	23.76	24.54	24.24	25.01	25.48	23.55	24.33	24.03	24.80	25.27
	6H	24.50	25.15	25.01	25.66	26.14	24.29	24.93	24.79	25.44	25.93
	8H	24.82	25.39	25.32	25.88	26.44	24.60	25.17	25.11	25.66	26.22