

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: P686069

Luminaire Tested: SQ4R-F-075D-840-1-UNV-STD-W-4

Issue Date: 11/18/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P686069  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/18/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4R-F-075D-840-1-UNV-STD-W-4  
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS.  
750 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3066.3 lumens  
Efficiency: N/A  
Efficacy: 114.4 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

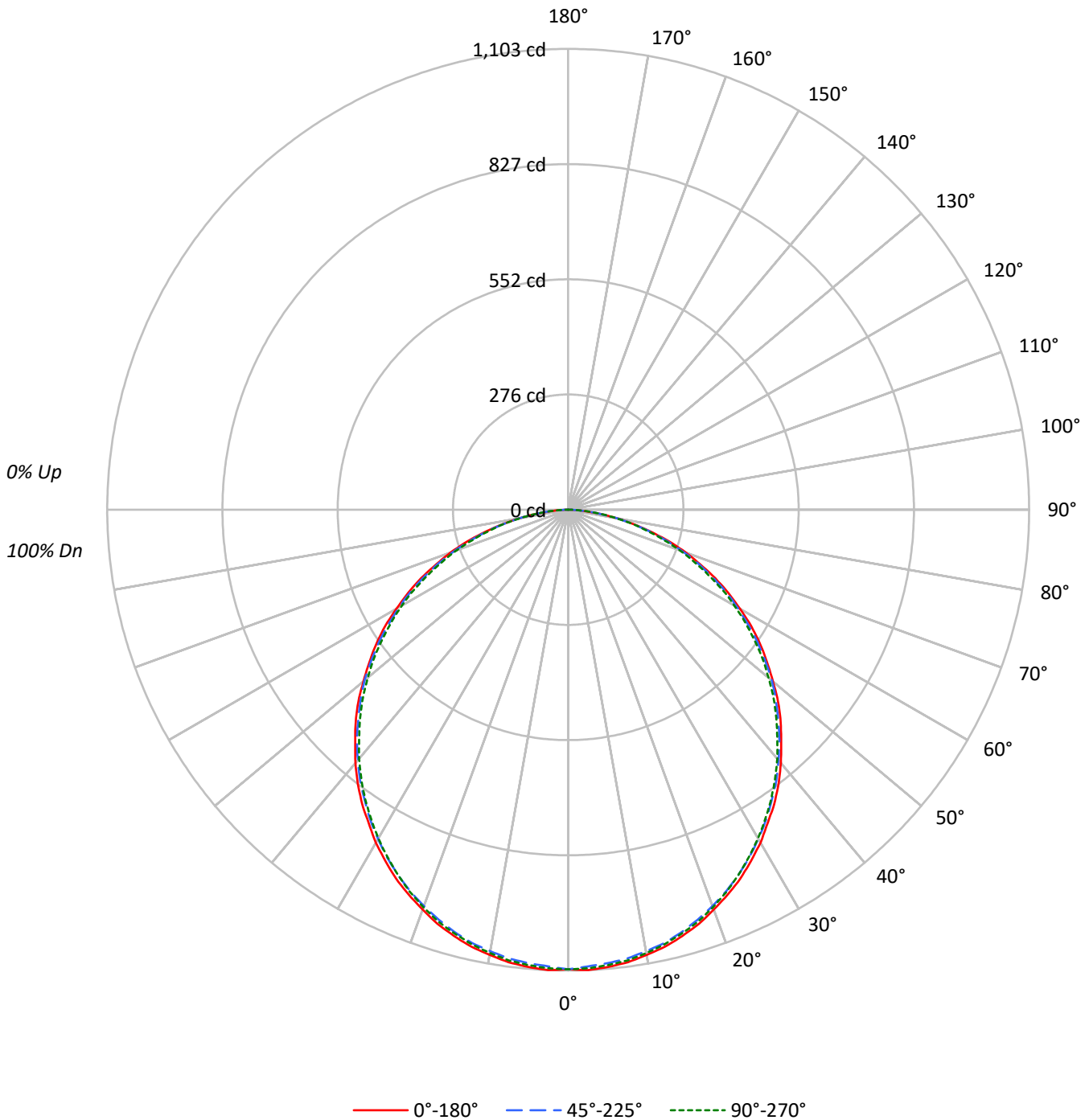
Input Watts (W): 26.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P686069

CATALOG NUMBER: SQ4R-F-075D-840-1-UNV-STD-W-4

### Luminous Intensity Polar Plot



TEST NUMBER: P686069

CATALOG NUMBER: SQ4R-F-075D-840-1-UNV-STD-W-4

**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°	10591	10591	10591
5°	10617	10529	10573
10°	10577	10489	10533
15°	10527	10437	10467
20°	10435	10342	10372
25°	10353	10241	10241
30°	10230	10113	10096
35°	10105	9980	9945
40°	9951	9837	9780
45°	9793	9669	9588
50°	9574	9529	9370
55°	9410	9284	9131
60°	9136	8990	8846
65°	8846	8641	8433
70°	8422	8166	7997
75°	7644	7477	7306
80°	6537	6537	6453
85°	4673	5004	5004

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 9793 cd/sqm

TEST NUMBER: P686069

CATALOG NUMBER: SQ4R-F-075D-840-1-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.0	3.4
10°-20°	296.7	9.7
20°-30°	446.0	14.5
30°-40°	533.0	17.4
40°-50°	549.2	17.9
50°-60°	494.2	16.1
60°-70°	375.7	12.3
70°-80°	213.6	7.0
80°-90°	54.0	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°	846.7	27.6
0°-40°	1379.7	45.0
0°-60°	2423.1	79.0
0°-90°	3066.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3066.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1100	1100	1100	1100	1100	
5°	1099	1097	1090	1099	1094	104
15°	1056	1055	1047	1053	1050	298
25°	975	972	964	967	964	449
35°	860	857	849	849	846	537
45°	719	719	710	706	704	554
55°	561	559	553	548	544	500
65°	388	387	379	375	370	383
75°	206	204	201	200	196	219
85°	42	44	45	45	45	52
90°	0	0	0	0	0	

TEST NUMBER: P686069

CATALOG NUMBER: SQ4R-F-075D-840-1-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1100.1	1100.1	1100.1	1100.1	1100.1
2.5°	1103.1	1100.1	1094.0	1101.6	1098.6
5°	1098.6	1097.0	1089.5	1098.6	1094.0
7.5°	1092.5	1091.0	1083.4	1091.0	1088.0
10°	1081.9	1080.4	1072.9	1080.4	1077.4
12.5°	1071.4	1069.8	1062.3	1068.3	1065.3
15°	1056.2	1054.7	1047.2	1053.2	1050.2
17.5°	1039.6	1038.1	1029.0	1035.1	1033.6
20°	1018.5	1017.0	1009.4	1013.9	1012.4
22.5°	997.3	995.8	988.2	992.8	989.8
25°	974.6	971.6	964.1	967.1	964.1
27.5°	947.4	945.9	938.4	939.9	936.9
30°	920.2	918.7	909.7	911.2	908.2
32.5°	888.5	888.5	881.0	881.0	877.9
35°	859.8	856.8	849.2	849.2	846.2
37.5°	826.6	823.5	817.5	816.0	813.0
40°	791.8	790.3	782.7	781.2	778.2
42.5°	754.0	755.5	748.0	743.4	740.4
45°	719.3	719.3	710.2	705.7	704.2
47.5°	681.5	681.5	673.9	669.4	666.4
50°	639.2	642.2	636.2	628.6	625.6
52.5°	599.9	601.4	593.9	589.3	586.3
55°	560.6	559.1	553.1	548.5	544.0
57.5°	519.8	518.3	509.2	504.7	501.7
60°	474.5	474.5	466.9	462.4	459.4
62.5°	432.2	430.7	424.6	418.6	417.1
65°	388.3	386.8	379.3	374.7	370.2
67.5°	341.5	340.0	335.5	329.4	326.4
70°	299.2	294.7	290.1	285.6	284.1
72.5°	253.9	249.3	244.8	241.8	238.7
75°	205.5	204.0	201.0	199.5	196.4
77.5°	161.7	161.7	158.7	157.2	157.2
80°	117.9	117.9	117.9	116.4	116.4
82.5°	77.1	78.6	78.6	77.1	78.6
85°	42.3	43.8	45.3	45.3	45.3
87.5°	13.6	18.1	16.6	18.1	18.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)