

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: P686063

Luminaire Tested: SQ4R-F-050D-840-1-UNV-STD-W-4

Issue Date: 11/18/2022

Test Information

Test Method: LM-79-2019
Report Number: P686063
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-050D-840-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS.
500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

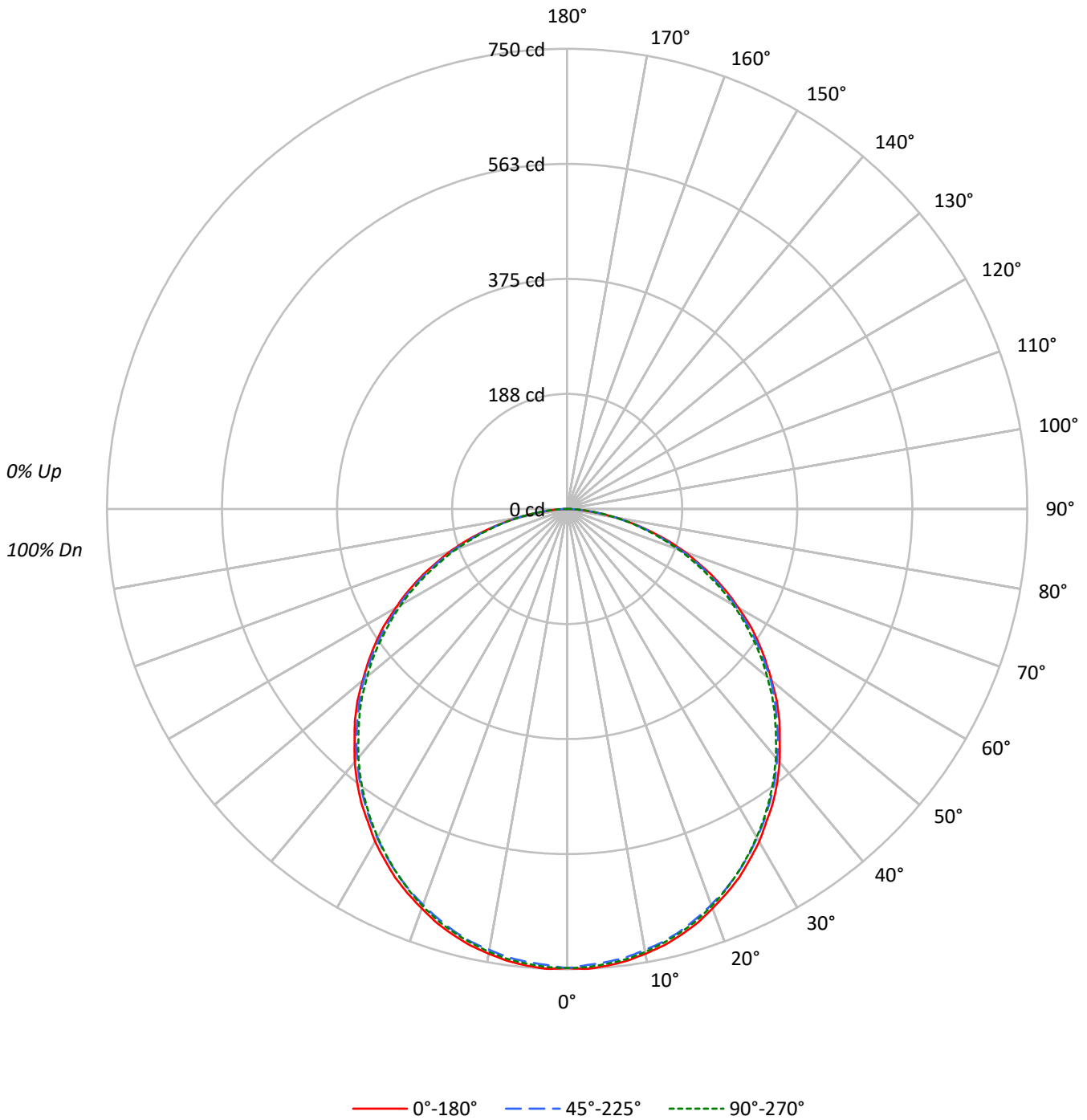
Lumens per Lamp: N/A
Luminaire Lumens: 2085.7 lumens
Efficiency: N/A
Efficacy: 110.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 18.9
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°	7204	7204	7204
5°	7222	7162	7192
10°	7194	7134	7165
15°	7161	7099	7120
20°	7098	7034	7056
25°	7043	6966	6966
30°	6959	6879	6867
35°	6873	6790	6765
40°	6769	6691	6652
45°	6662	6577	6522
50°	6512	6481	6373
55°	6400	6314	6210
60°	6213	6115	6017
65°	6019	5877	5736
70°	5728	5554	5438
75°	5200	5085	4970
80°	4446	4446	4385
85°	3181	3402	3402

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6662 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.8	3.4
10°-20°	201.8	9.7
20°-30°	303.4	14.5
30°-40°	362.5	17.4
40°-50°	373.6	17.9
50°-60°	336.1	16.1
60°-70°	255.5	12.3
70°-80°	145.3	7.0
80°-90°	36.7	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°	576.0	27.6
0°-40°	938.5	45.0
0°-60°	1648.2	79.0
0°-90°	2085.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2085.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	748	748	748	748	748	
5°	747	746	741	747	744	71
15°	718	717	712	716	714	203
25°	663	661	656	658	656	305
35°	585	583	578	578	576	365
45°	489	489	483	480	479	377
55°	381	380	376	373	370	340
65°	264	263	258	255	252	261
75°	140	139	137	136	134	149
85°	29	30	31	31	31	36
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	748.3	748.3	748.3	748.3	748.3
2.5°	750.3	748.3	744.2	749.3	747.3
5°	747.3	746.2	741.1	747.3	744.2
7.5°	743.1	742.1	737.0	742.1	740.1
10°	735.9	734.9	729.8	734.9	732.9
12.5°	728.7	727.7	722.6	726.7	724.6
15°	718.5	717.4	712.3	716.4	714.4
17.5°	707.2	706.1	700.0	704.1	703.1
20°	692.8	691.7	686.6	689.7	688.7
22.5°	678.4	677.4	672.2	675.3	673.2
25°	663.0	660.9	655.8	657.8	655.8
27.5°	644.5	643.4	638.3	639.3	637.3
30°	626.0	624.9	618.8	619.8	617.7
32.5°	604.4	604.4	599.2	599.2	597.2
35°	584.8	582.8	577.7	577.7	575.6
37.5°	562.2	560.2	556.1	555.0	553.0
40°	538.6	537.6	532.4	531.4	529.3
42.5°	512.9	513.9	508.8	505.7	503.6
45°	489.3	489.3	483.1	480.0	479.0
47.5°	463.6	463.6	458.4	455.3	453.3
50°	434.8	436.8	432.7	427.6	425.5
52.5°	408.1	409.1	403.9	400.9	398.8
55°	381.3	380.3	376.2	373.1	370.0
57.5°	353.6	352.6	346.4	343.3	341.2
60°	322.7	322.7	317.6	314.5	312.5
62.5°	294.0	292.9	288.8	284.7	283.7
65°	264.2	263.1	258.0	254.9	251.8
67.5°	232.3	231.3	228.2	224.1	222.0
70°	203.5	200.4	197.3	194.3	193.2
72.5°	172.7	169.6	166.5	164.5	162.4
75°	139.8	138.8	136.7	135.7	133.6
77.5°	110.0	110.0	107.9	106.9	106.9
80°	80.2	80.2	80.2	79.1	79.1
82.5°	52.4	53.4	53.4	52.4	53.4
85°	28.8	29.8	30.8	30.8	30.8
87.5°	9.3	12.3	11.3	12.3	12.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)