

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: P686067

Luminaire Tested: SQ4R-F-075D-830-1-UNV-STD-W-4

Issue Date: 11/18/2022

Test Information

Test Method: LM-79-2019
Report Number: P686067
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-830-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS.
750 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2916.0 lumens
Efficiency: N/A
Efficacy: 108.8 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

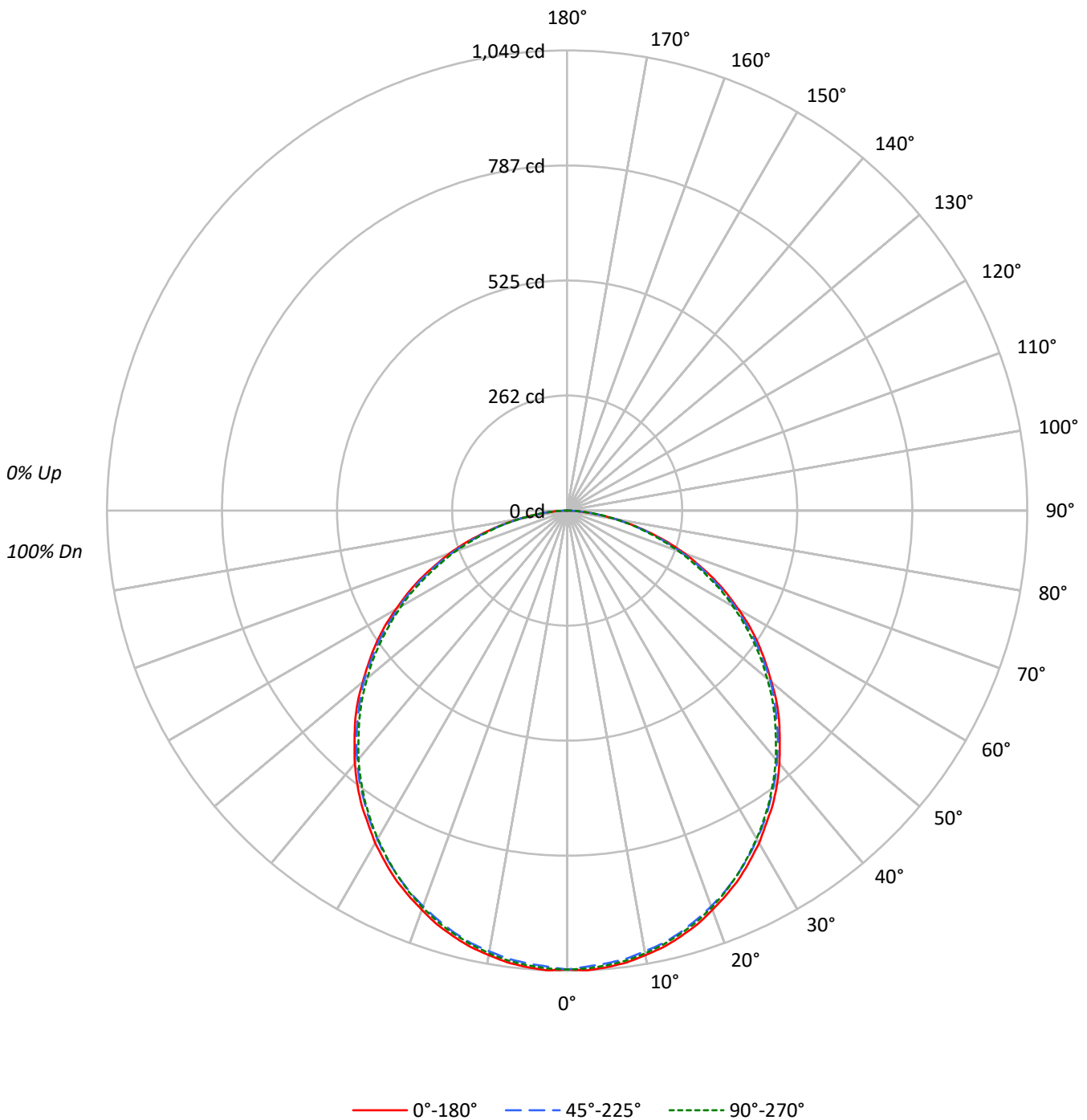
Input Watts (W): 26.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P686067

CATALOG NUMBER: SQ4R-F-075D-830-1-UNV-STD-W-4

Luminous Intensity Polar Plot



TEST NUMBER: P686067

CATALOG NUMBER: SQ4R-F-075D-830-1-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	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	94	91	88	90	88	86	84				84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	70				70
3	90	80	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	35	29	41	34	29	40	34	29	39	33	29	27				27
10	53	40	32	27	52	39	32	26	38	31	26	37	31	26	36	30	26	24				24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10071	10071	10071
5°	10096	10013	10055
10°	10058	9974	10016
15°	10012	9925	9954
20°	9922	9834	9864
25°	9846	9739	9739
30°	9728	9617	9600
35°	9610	9492	9457
40°	9463	9355	9301
45°	9313	9196	9117
50°	9105	9061	8910
55°	8948	8827	8683
60°	8688	8549	8412
65°	8413	8217	8021
70°	8008	7766	7606
75°	7268	7108	6948
80°	6215	6215	6132
85°	4441	4761	4761

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9313 cd/sqm

TEST NUMBER: P686067

CATALOG NUMBER: SQ4R-F-075D-830-1-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.9	3.4
10°-20°	282.2	9.7
20°-30°	424.1	14.5
30°-40°	506.9	17.4
40°-50°	522.3	17.9
50°-60°	469.9	16.1
60°-70°	357.3	12.3
70°-80°	203.1	7.0
80°-90°	51.3	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°	805.2	27.6
0°-40°	1312.1	45.0
0°-60°	2304.3	79.0
0°-90°	2916.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2916.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1046	1046	1046	1046	1046	
5°	1045	1043	1036	1045	1040	99
15°	1004	1003	996	1002	999	283
25°	927	924	917	920	917	427
35°	818	815	808	808	805	511
45°	684	684	675	671	670	527
55°	533	532	526	522	517	476
65°	369	368	361	356	352	364
75°	195	194	191	190	187	208
85°	40	42	43	43	43	50
90°	0	0	0	0	0	

TEST NUMBER: P686067

CATALOG NUMBER: SQ4R-F-075D-830-1-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1046.1	1046.1	1046.1	1046.1	1046.1
2.5°	1049.0	1046.1	1040.4	1047.6	1044.7
5°	1044.7	1043.3	1036.1	1044.7	1040.4
7.5°	1039.0	1037.5	1030.3	1037.5	1034.6
10°	1028.9	1027.5	1020.3	1027.5	1024.6
12.5°	1018.8	1017.4	1010.2	1016.0	1013.1
15°	1004.5	1003.0	995.8	1001.6	998.7
17.5°	988.7	987.2	978.6	984.4	982.9
20°	968.5	967.1	959.9	964.2	962.8
22.5°	948.4	947.0	939.8	944.1	941.2
25°	926.9	924.0	916.8	919.7	916.8
27.5°	901.0	899.6	892.4	893.8	890.9
30°	875.1	873.7	865.1	866.5	863.6
32.5°	845.0	845.0	837.8	837.8	834.9
35°	817.7	814.8	807.6	807.6	804.7
37.5°	786.0	783.2	777.4	776.0	773.1
40°	753.0	751.6	744.4	742.9	740.1
42.5°	717.1	718.5	711.3	707.0	704.1
45°	684.0	684.0	675.4	671.1	669.6
47.5°	648.1	648.1	640.9	636.6	633.7
50°	607.9	610.7	605.0	597.8	594.9
52.5°	570.5	571.9	564.7	560.4	557.6
55°	533.1	531.7	525.9	521.6	517.3
57.5°	494.3	492.9	484.3	480.0	477.1
60°	451.2	451.2	444.0	439.7	436.9
62.5°	411.0	409.5	403.8	398.1	396.6
65°	369.3	367.9	360.7	356.4	352.1
67.5°	324.8	323.3	319.0	313.3	310.4
70°	284.5	280.2	275.9	271.6	270.2
72.5°	241.4	237.1	232.8	229.9	227.0
75°	195.4	194.0	191.1	189.7	186.8
77.5°	153.8	153.8	150.9	149.4	149.4
80°	112.1	112.1	112.1	110.6	110.6
82.5°	73.3	74.7	74.7	73.3	74.7
85°	40.2	41.7	43.1	43.1	43.1
87.5°	12.9	17.2	15.8	17.2	17.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)