

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

(formerly Eaton)

Brand: CORELITE

Report Number: P518417

Luminaire Tested: **SQ4-BB-050U-050D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518417
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-050U-050D-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

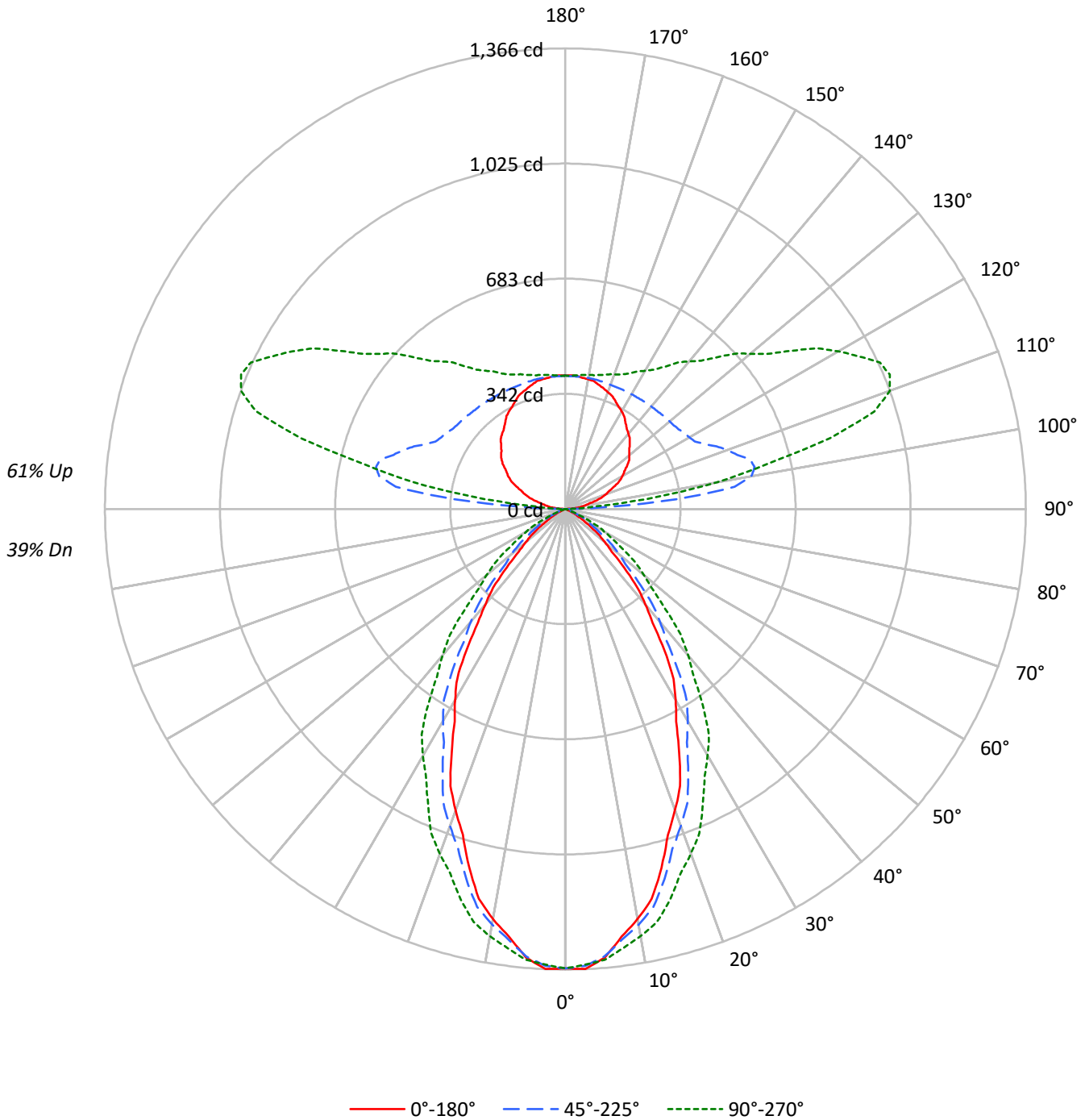
Lumens per Lamp: N/A
Luminaire Lumens: 4209.9 lumens
Efficiency: N/A
Efficacy: 94.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 44.8
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



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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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	97	93	90	87	88	85	82	79	69	68	66	55	54	53	42	42	41	35
2	89	83	77	73	81	76	71	67	63	59	57	50	48	47	39	38	37	32
3	82	74	68	63	75	68	62	58	56	53	49	46	43	41	36	34	33	29
4	76	66	60	54	69	61	55	51	51	47	43	42	39	37	33	31	30	26
5	70	60	53	47	64	55	49	44	46	42	38	38	35	33	31	29	27	24
6	65	54	47	42	59	50	44	39	42	38	34	35	32	29	28	26	25	22
7	61	50	42	37	55	46	40	35	39	34	31	32	29	27	26	24	22	20
8	56	45	38	33	52	42	36	32	36	31	28	30	27	24	25	22	21	18
9	53	42	35	30	48	39	33	29	33	29	25	28	25	22	23	21	19	17
10	49	38	32	27	45	36	30	26	31	26	23	26	23	20	22	19	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8380	8380	8380
5°	8246	8225	8287
10°	7715	7818	8036
15°	7014	7236	7639
20°	6226	6549	7124
25°	5422	5851	6545
30°	4644	5155	5997
35°	3850	4375	5336
40°	2959	3498	4546
45°	2139	2649	3659
50°	1457	1974	2901
55°	947	1428	2255
60°	544	1005	1630
65°	144	614	825
70°	72	189	237
75°	31	17	0
80°	25	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.3	3.0
10°-20°	318.0	7.6
20°-30°	398.1	9.5
30°-40°	367.7	8.7
40°-50°	247.1	5.9
50°-60°	127.6	3.0
60°-70°	40.0	0.9
70°-80°	2.5	0.1
80°-90°	1.6	0.0
90°-100°	189.9	4.5
100°-110°	515.9	12.3
110°-120°	530.4	12.6
120°-130°	424.1	10.1
130°-140°	333.2	7.9
140°-150°	255.5	6.1
150°-160°	183.7	4.4
160°-170°	112.4	2.7
170°-180°	37.9	0.9
0°-30°	840.4	20.0
0°-40°	1208.1	28.7
0°-60°	1582.8	37.6
0°-90°	1626.9	38.6
90°-120°	1236.2	29.4
90°-150°	2249.0	53.4
90°-180°	2583.0	61.4
0°-180°	4209.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1362	1362	1362	1362	1362	
5°	1336	1322	1332	1337	1342	124
15°	1102	1098	1136	1175	1200	307
25°	799	805	862	921	964	366
35°	513	526	583	651	711	318
45°	246	261	304	364	421	193
55°	88	103	133	171	210	82
65°	10	19	42	51	57	17
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	1	5	9	11	11	2
95°	28	104	331	144	97	30
105°	92	143	567	864	813	97
115°	163	198	454	903	1029	161
125°	224	255	411	692	817	200
135°	270	300	399	564	636	209
145°	312	334	394	479	515	196
155°	352	365	392	430	443	162
165°	382	387	393	410	411	108
175°	396	397	394	399	398	38
180°	396	396	396	396	396	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1362.5	1362.5	1362.5	1362.5	1362.5
2.5°	1365.7	1352.8	1356.2	1356.1	1352.5
5°	1335.5	1322.0	1332.2	1336.9	1342.1
7.5°	1279.1	1268.5	1288.2	1302.9	1313.6
10°	1235.3	1226.3	1251.8	1271.9	1286.7
12.5°	1184.7	1177.7	1208.5	1236.1	1255.1
15°	1101.5	1097.6	1136.4	1174.6	1199.7
17.5°	1012.4	1012.2	1056.5	1103.9	1134.2
20°	951.2	953.1	1000.6	1052.8	1088.3
22.5°	890.0	894.5	945.3	999.7	1040.3
25°	798.9	805.4	862.2	921.2	964.4
27.5°	711.4	720.8	780.6	841.9	894.5
30°	653.9	664.9	725.8	790.3	844.4
32.5°	597.5	610.5	669.9	738.1	793.2
35°	512.8	525.7	582.7	651.3	710.6
37.5°	425.4	438.1	493.7	561.2	625.3
40°	368.5	382.7	435.7	501.1	566.2
42.5°	316.8	331.0	380.9	445.2	506.6
45°	245.9	260.7	304.5	363.8	420.6
47.5°	187.1	203.2	241.7	295.3	347.0
50°	152.3	168.4	206.3	253.6	303.2
52.5°	124.3	139.9	174.2	218.7	264.2
55°	88.3	103.2	133.2	171.0	210.3
57.5°	61.0	73.8	100.7	132.3	163.1
60°	44.2	56.4	81.7	107.4	132.5
62.5°	29.4	40.6	65.4	85.0	101.9
65°	9.9	18.9	42.2	50.9	56.7
67.5°	5.0	6.0	22.1	23.4	25.3
70°	4.0	4.0	10.5	11.2	13.2
72.5°	2.9	2.9	4.2	5.4	5.8
75°	1.3	1.3	0.7	0.0	0.0
77.5°	0.7	0.7	0.5	0.0	0.0
80°	0.7	0.7	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	1.0	1.8	2.3	2.3
90°	1.3	5.0	8.9	11.4	11.4
92.5°	11.4	52.0	90.3	38.8	32.8
95°	28.0	103.9	330.7	143.9	96.7
97.5°	46.3	114.7	507.0	394.5	277.0
100°	58.5	121.9	561.0	568.6	459.2
102.5°	70.7	129.2	575.2	703.3	606.8
105°	91.6	142.6	567.3	863.8	812.8
107.5°	113.2	158.2	534.5	946.7	960.9
110°	128.5	169.5	510.1	963.0	1024.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	141.7	180.8	485.7	949.5	1041.3
115°	162.8	197.6	454.1	903.4	1029.1
117.5°	182.7	216.0	434.0	838.2	979.7
120°	195.9	228.2	424.9	794.4	934.9
122.5°	207.1	239.4	418.7	750.5	886.1
125°	223.9	255.0	410.9	692.3	816.6
127.5°	238.9	269.7	406.5	648.1	754.8
130°	248.0	277.9	404.5	620.4	716.1
132.5°	257.2	287.1	402.5	596.7	681.5
135°	269.7	299.5	399.4	563.9	636.0
137.5°	283.2	310.3	397.9	534.9	595.6
140°	291.3	317.4	396.9	516.4	571.1
142.5°	299.4	323.6	395.9	502.0	547.7
145°	311.6	334.0	394.3	479.1	515.2
147.5°	325.4	344.5	393.1	461.1	489.5
150°	334.5	350.7	393.1	450.8	473.2
152.5°	341.7	355.8	392.0	441.6	460.0
155°	352.3	364.8	391.8	430.2	442.7
157.5°	362.8	372.5	391.8	422.5	432.0
160°	368.9	377.6	391.8	417.4	424.9
162.5°	375.0	381.7	392.8	413.3	418.7
165°	381.6	386.6	393.1	409.6	410.9
167.5°	388.5	391.0	394.3	405.3	406.3
170°	390.5	393.0	394.3	403.2	403.2
172.5°	392.5	394.0	394.3	401.2	401.2
175°	395.6	396.8	394.3	399.4	398.1
177.5°	396.6	396.6	393.6	397.6	395.6
180°	395.6	395.6	395.6	395.6	395.6

(END OF REPORT)