

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: P518413

Luminaire Tested: **SQ4-BB-050U-050D-935-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518413
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-935-1D-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

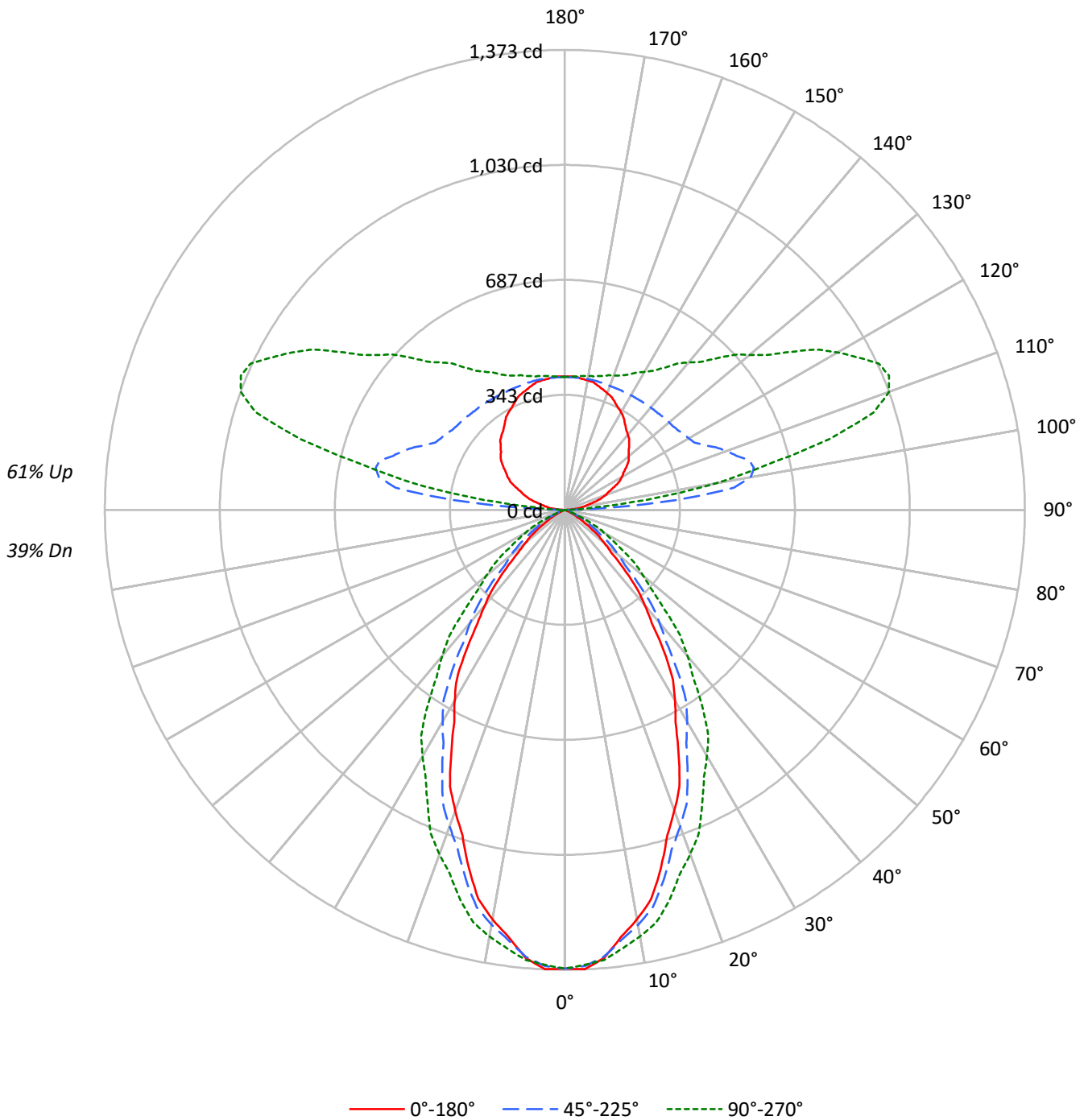
Lumens per Lamp: N/A
Luminaire Lumens: 4231.3 lumens
Efficiency: N/A
Efficacy: 94.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

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°	8424	8424	8424
5°	8288	8267	8329
10°	7755	7858	8078
15°	7050	7273	7678
20°	6258	6583	7160
25°	5450	5881	6578
30°	4668	5181	6028
35°	3871	4398	5363
40°	2974	3516	4569
45°	2149	2663	3677
50°	1464	1985	2917
55°	952	1435	2266
60°	546	1011	1639
65°	144	617	830
70°	72	191	239
75°	31	17	0
80°	25	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.0	3.0
10°-20°	319.6	7.6
20°-30°	400.1	9.5
30°-40°	369.6	8.7
40°-50°	248.3	5.9
50°-60°	128.3	3.0
60°-70°	40.2	0.9
70°-80°	2.5	0.1
80°-90°	1.6	0.0
90°-100°	190.9	4.5
100°-110°	518.5	12.3
110°-120°	533.1	12.6
120°-130°	426.2	10.1
130°-140°	334.9	7.9
140°-150°	256.8	6.1
150°-160°	184.7	4.4
160°-170°	112.9	2.7
170°-180°	38.1	0.9
0°-30°	844.7	20.0
0°-40°	1214.3	28.7
0°-60°	1590.9	37.6
0°-90°	1635.2	38.6
90°-120°	1242.5	29.4
90°-150°	2260.4	53.4
90°-180°	2596.0	61.4
0°-180°	4231.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1370	1370	1370	1370	1370	
5°	1342	1329	1339	1344	1349	124
15°	1107	1103	1142	1181	1206	308
25°	803	810	867	926	969	368
35°	516	528	586	655	714	319
45°	247	262	306	366	423	194
55°	89	104	134	172	211	83
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	12	12	2
95°	28	104	332	145	97	30
105°	92	143	570	868	817	98
115°	164	199	456	908	1034	161
125°	225	256	413	696	821	201
135°	271	301	402	567	639	210
145°	313	336	396	482	518	197
155°	354	367	394	432	445	163
165°	384	389	395	412	413	108
175°	398	399	396	401	400	38
180°	398	398	398	398	398	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1369.5	1369.5	1369.5	1369.5	1369.5
2.5°	1372.6	1359.7	1363.1	1363.0	1359.4
5°	1342.3	1328.7	1339.0	1343.7	1348.9
7.5°	1285.6	1275.0	1294.7	1309.6	1320.3
10°	1241.6	1232.5	1258.2	1278.4	1293.3
12.5°	1190.7	1183.7	1214.7	1242.4	1261.5
15°	1107.1	1103.2	1142.2	1180.6	1205.8
17.5°	1017.5	1017.4	1061.9	1109.5	1140.0
20°	956.0	958.0	1005.7	1058.2	1093.9
22.5°	894.6	899.1	950.1	1004.8	1045.6
25°	803.0	809.5	866.6	925.9	969.3
27.5°	715.0	724.5	784.6	846.2	899.1
30°	657.2	668.3	729.5	794.3	848.7
32.5°	600.5	613.6	673.3	741.8	797.3
35°	515.5	528.4	585.7	654.6	714.2
37.5°	427.6	440.3	496.2	564.1	628.5
40°	370.4	384.6	437.9	503.7	569.1
42.5°	318.4	332.7	382.8	447.4	509.2
45°	247.1	262.0	306.1	365.7	422.7
47.5°	188.0	204.2	242.9	296.8	348.8
50°	153.0	169.2	207.4	254.9	304.8
52.5°	125.0	140.6	175.0	219.8	265.5
55°	88.8	103.7	133.8	171.8	211.3
57.5°	61.4	74.2	101.2	132.9	163.9
60°	44.4	56.7	82.2	107.9	133.2
62.5°	29.5	40.8	65.7	85.5	102.4
65°	9.9	19.0	42.4	51.1	57.0
67.5°	5.0	6.1	22.3	23.5	25.4
70°	4.0	4.0	10.6	11.3	13.3
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	11.5	11.5
92.5°	11.5	52.3	90.8	39.0	33.0
95°	28.1	104.4	332.4	144.7	97.2
97.5°	46.5	115.3	509.6	396.5	278.5
100°	58.8	122.6	563.8	571.5	461.5
102.5°	71.1	129.8	578.1	706.9	609.8
105°	92.1	143.3	570.2	868.2	817.0
107.5°	113.8	159.0	537.2	951.5	965.8
110°	129.1	170.4	512.7	967.9	1029.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	142.4	181.7	488.1	954.3	1046.6
115°	163.6	198.7	456.4	908.1	1034.3
117.5°	183.6	217.1	436.2	842.4	984.7
120°	196.9	229.4	427.0	798.4	939.7
122.5°	208.1	240.6	420.9	754.3	890.6
125°	225.0	256.3	413.0	695.8	820.8
127.5°	240.1	271.1	408.6	651.4	758.7
130°	249.3	279.3	406.6	623.5	719.8
132.5°	258.5	288.5	404.5	599.8	685.0
135°	271.0	301.0	401.5	566.7	639.3
137.5°	284.6	311.8	399.9	537.6	598.6
140°	292.8	319.0	398.9	519.0	574.0
142.5°	301.0	325.2	397.9	504.5	550.5
145°	313.2	335.7	396.3	481.5	517.8
147.5°	327.0	346.3	395.1	463.5	492.0
150°	336.2	352.5	395.1	453.1	475.6
152.5°	343.4	357.7	394.0	443.8	462.3
155°	354.1	366.6	393.8	432.4	444.9
157.5°	364.6	374.4	393.8	424.7	434.2
160°	370.8	379.5	393.8	419.5	427.0
162.5°	376.9	383.7	394.8	415.4	420.9
165°	383.6	388.6	395.1	411.7	413.0
167.5°	390.5	393.0	396.3	407.4	408.4
170°	392.5	395.0	396.3	405.3	405.3
172.5°	394.5	396.0	396.3	403.2	403.2
175°	397.6	398.9	396.3	401.4	400.2
177.5°	398.6	398.6	395.6	399.6	397.6
180°	397.6	397.6	397.6	397.6	397.6

(END OF REPORT)