

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521078

Luminaire Tested: **SQ4-BB-050U-125D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521078
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-050U-125D-93050-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

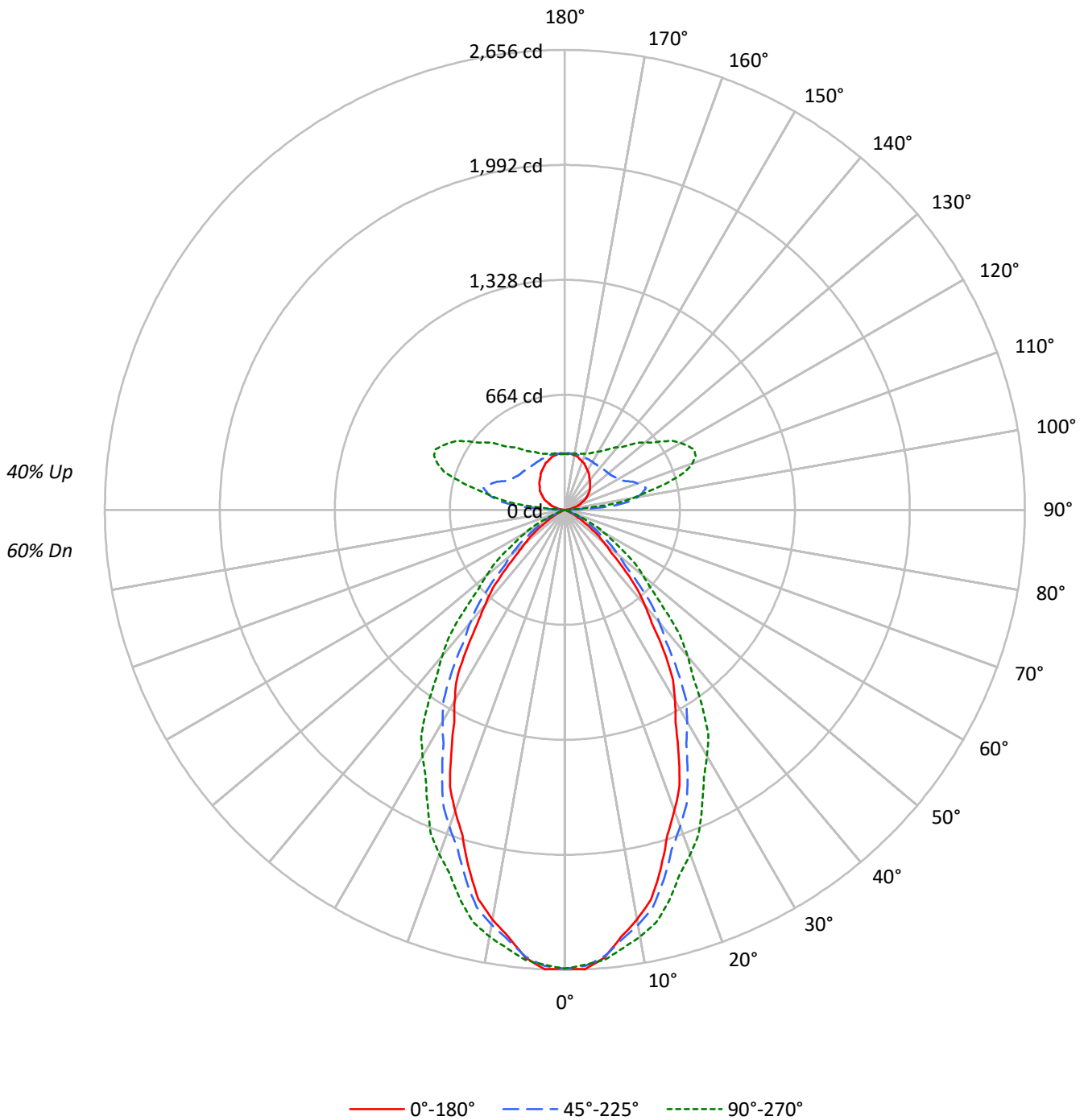
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5258.9 lumens
Efficiency: N/A
Efficacy: 73.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 71.5
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	110	110	110	110	102	102	102	102	89	89	89	77	77	77	65	65	65	60
1	102	99	95	93	96	93	90	87	81	79	77	71	69	68	61	60	59	55
2	95	89	84	79	89	84	79	75	74	71	68	65	62	60	57	55	53	50
3	88	80	74	69	82	76	70	66	67	63	60	59	56	54	52	50	48	45
4	82	72	66	61	77	69	63	58	61	57	53	55	51	48	48	46	44	41
5	76	66	59	54	71	63	56	52	56	51	47	50	46	43	45	42	40	37
6	71	60	53	48	67	57	51	46	52	47	43	46	42	39	41	38	36	34
7	66	55	48	43	62	53	46	42	48	42	39	43	39	36	39	35	33	31
8	62	51	44	39	58	49	42	38	44	39	35	40	36	33	36	33	30	28
9	58	47	40	36	55	45	39	35	41	36	32	37	33	30	34	30	28	26
10	55	44	37	33	52	42	36	32	38	33	30	35	31	28	32	28	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24447	24447	24447
5°	24053	23994	24172
10°	22506	22806	23443
15°	20461	21109	22285
20°	18162	19105	20779
25°	15817	17069	19092
30°	13547	15036	17494
35°	11233	12763	15564
40°	8631	10205	13263
45°	6238	7727	10672
50°	4250	5759	8464
55°	2763	4165	6577
60°	1585	2934	4755
65°	419	1790	2406
70°	208	553	691
75°	93	46	0
80°	69	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.8	4.6
10°-20°	618.4	11.8
20°-30°	774.2	14.7
30°-40°	715.1	13.6
40°-50°	480.5	9.1
50°-60°	248.2	4.7
60°-70°	77.7	1.5
70°-80°	4.9	0.1
80°-90°	0.1	0.0
90°-100°	167.0	3.2
100°-110°	403.7	7.7
110°-120°	430.6	8.2
120°-130°	348.7	6.6
130°-140°	270.0	5.1
140°-150°	206.0	3.9
150°-160°	149.1	2.8
160°-170°	91.8	1.7
170°-180°	31.1	0.6
0°-30°	1634.4	31.1
0°-40°	2349.4	44.7
0°-60°	3078.1	58.5
0°-90°	3160.9	60.1
90°-120°	1001.3	19.0
90°-150°	1826.0	34.7
90°-180°	2098.0	39.9
0°-180°	5258.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2650	2650	2650	2650	2650	
5°	2597	2571	2591	2600	2610	241
15°	2142	2134	2210	2284	2333	597
25°	1554	1566	1677	1791	1875	712
35°	997	1022	1133	1267	1382	618
45°	478	507	592	708	818	376
55°	172	201	259	332	409	160
65°	19	37	82	99	110	32
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	16	84	286	186	130	18
105°	64	112	485	628	620	68
115°	118	151	390	739	824	117
125°	168	194	338	588	690	150
135°	207	231	325	464	533	159
145°	244	262	318	394	425	153
155°	280	292	323	349	362	129
165°	310	314	327	332	336	87
175°	327	326	327	325	324	31
180°	324	324	324	324	324	

TEST NUMBER: P521078

CATALOG NUMBER: SQ4-BB-050U-125D-93050-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2649.7	2649.7	2649.7	2649.7	2649.7
2.5°	2655.8	2630.8	2637.4	2637.2	2630.2
5°	2597.1	2570.8	2590.7	2599.9	2610.0
7.5°	2487.4	2466.8	2505.1	2533.8	2554.6
10°	2402.3	2384.7	2434.3	2473.4	2502.3
12.5°	2303.8	2290.3	2350.2	2403.9	2440.7
15°	2142.1	2134.5	2210.0	2284.2	2333.1
17.5°	1968.7	1968.5	2054.6	2146.7	2205.6
20°	1849.8	1853.5	1945.9	2047.5	2116.4
22.5°	1730.8	1739.6	1838.2	1944.1	2023.1
25°	1553.7	1566.2	1676.7	1791.4	1875.4
27.5°	1383.4	1401.7	1518.0	1637.3	1739.5
30°	1271.6	1293.0	1411.4	1536.8	1642.1
32.5°	1161.9	1187.2	1302.7	1435.3	1542.6
35°	997.3	1022.4	1133.2	1266.6	1381.9
37.5°	827.3	851.9	960.1	1091.4	1216.0
40°	716.6	744.2	847.3	974.6	1101.2
42.5°	616.1	643.7	740.7	865.7	985.3
45°	478.1	507.0	592.2	707.6	817.9
47.5°	363.8	395.1	469.9	574.3	674.8
50°	296.1	327.5	401.2	493.2	589.7
52.5°	241.8	272.1	338.7	425.3	513.8
55°	171.8	200.6	258.9	332.5	408.9
57.5°	118.7	143.5	195.9	257.2	317.1
60°	85.9	109.7	159.0	208.8	257.7
62.5°	57.2	79.0	127.2	165.3	198.2
65°	19.2	36.8	82.0	99.0	110.2
67.5°	9.7	11.7	43.1	45.5	49.2
70°	7.7	7.7	20.5	21.9	25.6
72.5°	5.6	5.6	8.2	10.5	11.3
75°	2.6	2.6	1.3	0.0	0.0
77.5°	1.3	1.3	1.0	0.0	0.0
80°	1.3	1.3	0.0	0.0	0.0
82.5°	0.3	0.3	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.5	45.2	106.5	51.8	35.1
95°	16.5	83.6	286.2	186.1	130.4
97.5°	29.2	92.6	376.9	363.1	311.7
100°	39.1	98.2	426.9	450.6	408.3
102.5°	48.5	103.2	459.8	523.5	498.4
105°	64.5	111.5	485.2	627.8	619.7
107.5°	80.3	121.2	470.2	711.4	730.4
110°	91.3	129.5	446.1	747.5	783.1

TEST NUMBER: P521078

CATALOG NUMBER: SQ4-BB-050U-125D-93050-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	102.3	137.8	424.7	756.3	817.1
115°	118.0	150.9	389.8	739.0	824.2
117.5°	133.7	164.7	369.4	699.3	799.1
120°	144.1	173.0	356.2	668.1	772.8
122.5°	155.1	181.8	348.0	636.2	739.3
125°	168.1	193.6	338.3	587.7	690.4
127.5°	181.0	205.1	331.6	546.7	636.9
130°	188.7	212.2	329.4	518.1	606.7
132.5°	195.9	220.4	326.1	497.5	572.6
135°	206.6	230.7	324.6	463.5	533.2
137.5°	216.7	241.0	319.8	440.4	493.0
140°	224.4	246.6	319.8	423.9	472.2
142.5°	232.1	254.2	317.1	409.4	450.2
145°	244.3	262.4	318.4	393.9	424.8
147.5°	255.7	273.3	317.6	376.1	401.6
150°	262.9	278.3	319.8	368.3	388.4
152.5°	270.5	285.4	319.3	360.0	378.0
155°	280.0	292.1	322.6	348.9	361.7
157.5°	291.4	301.7	321.9	344.7	352.2
160°	295.8	304.5	324.6	339.2	344.5
162.5°	302.9	310.6	323.5	337.5	340.7
165°	309.5	314.2	326.7	331.6	336.3
167.5°	317.6	320.7	325.9	331.2	331.3
170°	319.8	321.8	328.0	327.4	330.8
172.5°	323.7	325.1	326.4	327.9	325.9
175°	327.4	326.0	327.4	324.6	323.9
177.5°	326.7	326.7	325.6	324.4	321.7
180°	323.9	323.9	323.9	323.9	323.9

(END OF REPORT)