

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: P521052

Luminaire Tested: **SQ4-BB-050U-075D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521052
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-075D-93050-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

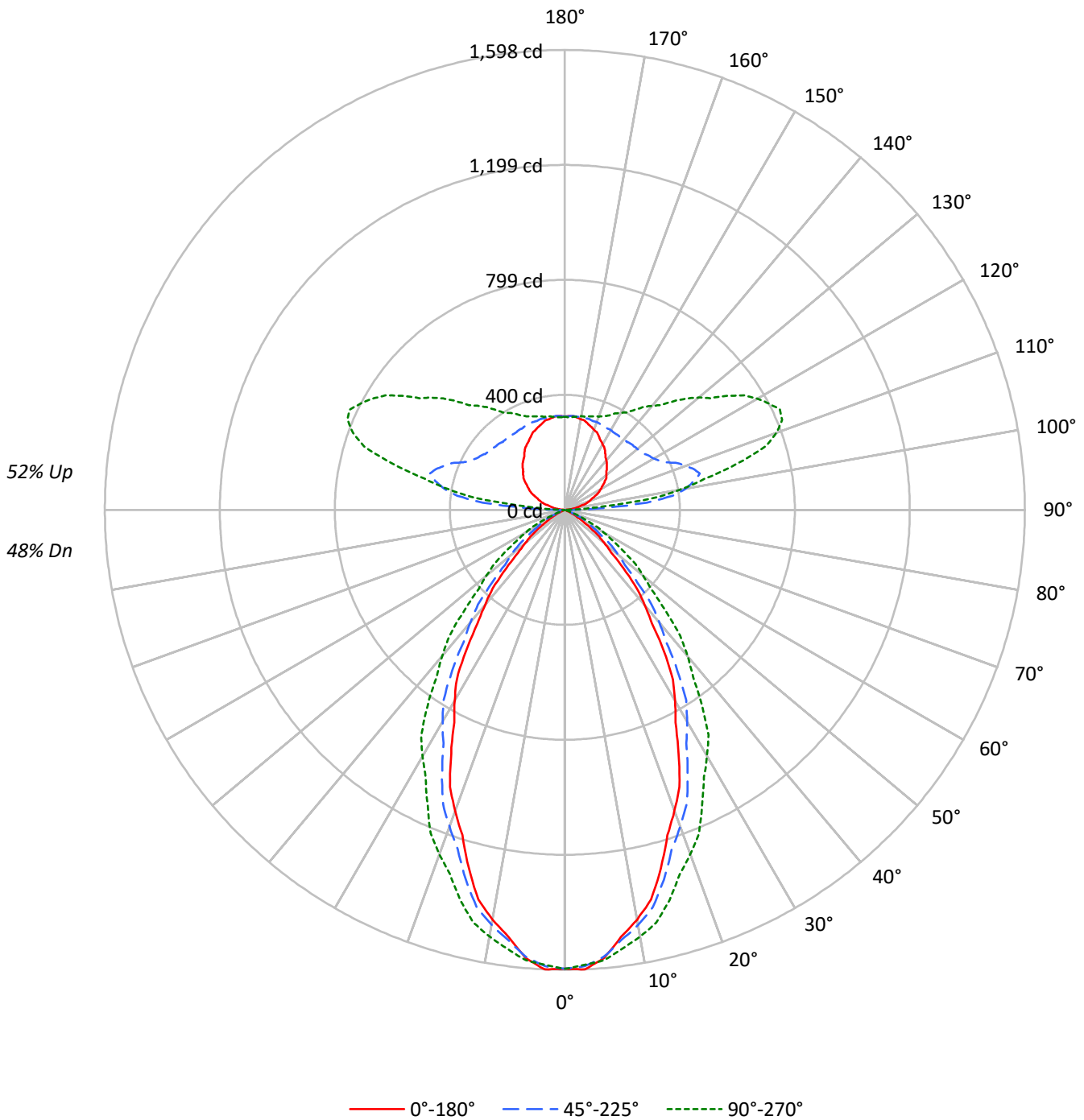
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4000.1 lumens
Efficiency: N/A
Efficacy: 84.0 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: General Diffuse

Input Watts (W): 47.6
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	50	30	10	0	
RCR																						
0	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	48				
1	99	95	92	89	91	88	85	83	74	72	71	62	61	59	50	49	49	43				
2	92	85	80	76	84	79	75	71	67	64	61	56	54	52	46	45	44	39				
3	85	77	70	65	78	71	66	61	61	57	54	51	49	46	43	41	39	35				
4	78	69	62	57	72	64	58	54	55	51	47	47	44	41	39	37	36	32				
5	73	62	55	50	67	58	52	47	51	46	42	43	40	37	36	34	32	29				
6	68	57	50	44	62	53	47	42	46	41	38	40	36	34	34	31	29	27				
7	63	52	45	40	58	49	42	38	43	38	34	37	33	30	31	29	27	24				
8	59	48	41	36	54	45	39	34	39	34	31	34	30	28	29	27	25	22				
9	55	44	37	32	51	41	35	31	36	32	28	32	28	26	27	25	23	21				
10	52	41	34	30	48	38	32	28	34	29	26	30	26	24	26	23	21	19				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14711	14711	14711
5°	14475	14439	14546
10°	13543	13724	14107
15°	12312	12703	13411
20°	10929	11497	12505
25°	9517	10272	11489
30°	8152	9048	10528
35°	6760	7680	9366
40°	5193	6141	7980
45°	3754	4650	6422
50°	2558	3466	5093
55°	1663	2506	3959
60°	954	1766	2862
65°	253	1078	1447
70°	124	332	415
75°	53	29	0
80°	43	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.5	3.6
10°-20°	372.1	9.3
20°-30°	465.9	11.6
30°-40°	430.3	10.8
40°-50°	289.1	7.2
50°-60°	149.4	3.7
60°-70°	46.8	1.2
70°-80°	3.0	0.1
80°-90°	0.1	0.0
90°-100°	167.0	4.2
100°-110°	403.7	10.1
110°-120°	430.6	10.8
120°-130°	348.7	8.7
130°-140°	270.0	6.7
140°-150°	206.0	5.1
150°-160°	149.1	3.7
160°-170°	91.8	2.3
170°-180°	31.1	0.8
0°-30°	983.5	24.6
0°-40°	1413.8	35.3
0°-60°	1852.3	46.3
0°-90°	1902.1	47.6
90°-120°	1001.3	25.0
90°-150°	1826.0	45.6
90°-180°	2098.0	52.4
0°-180°	4000.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1594	1594	1594	1594	1594	
5°	1563	1547	1559	1565	1571	145
15°	1289	1284	1330	1374	1404	359
25°	935	942	1009	1078	1129	429
35°	600	615	682	762	832	372
45°	288	305	356	426	492	226
55°	103	121	156	200	246	96
65°	12	22	49	60	66	20
75°	2	2	1	0	0	2
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: P521052

CATALOG NUMBER: SQ4-BB-050U-075D-93050-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1594.5	1594.5	1594.5	1594.5	1594.5
2.5°	1598.2	1583.1	1587.1	1587.0	1582.8
5°	1562.9	1547.0	1559.0	1564.6	1570.6
7.5°	1496.8	1484.5	1507.5	1524.7	1537.3
10°	1445.6	1435.1	1464.9	1488.4	1505.8
12.5°	1386.4	1378.2	1414.3	1446.6	1468.8
15°	1289.0	1284.5	1329.9	1374.5	1404.0
17.5°	1184.7	1184.6	1236.4	1291.8	1327.3
20°	1113.1	1115.4	1171.0	1232.1	1273.6
22.5°	1041.6	1046.8	1106.2	1169.9	1217.4
25°	934.9	942.5	1009.0	1078.0	1128.6
27.5°	832.5	843.5	913.5	985.3	1046.8
30°	765.2	778.1	849.3	924.8	988.2
32.5°	699.2	714.4	783.9	863.7	928.3
35°	600.2	615.2	681.9	762.2	831.6
37.5°	497.9	512.7	577.8	656.8	731.8
40°	431.2	447.8	509.9	586.5	662.6
42.5°	370.7	387.3	445.7	520.9	592.9
45°	287.7	305.1	356.4	425.8	492.2
47.5°	218.9	237.8	282.8	345.6	406.1
50°	178.2	197.1	241.5	296.8	354.8
52.5°	145.5	163.7	203.8	255.9	309.2
55°	103.4	120.7	155.8	200.1	246.1
57.5°	71.4	86.4	117.9	154.8	190.8
60°	51.7	66.0	95.7	125.6	155.1
62.5°	34.4	47.5	76.5	99.5	119.3
65°	11.6	22.1	49.4	59.6	66.3
67.5°	5.9	7.1	25.9	27.4	29.6
70°	4.6	4.6	12.3	13.2	15.4
72.5°	3.4	3.4	4.9	6.3	6.8
75°	1.5	1.5	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	0.0	0.0	0.0
82.5°	0.2	0.2	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

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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)