

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: P521051

Luminaire Tested: **SQ4-BB-050U-075D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/5/2021



Test Information

Test Method: LM-79-08
Report Number: P521051
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 (4000K)
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 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

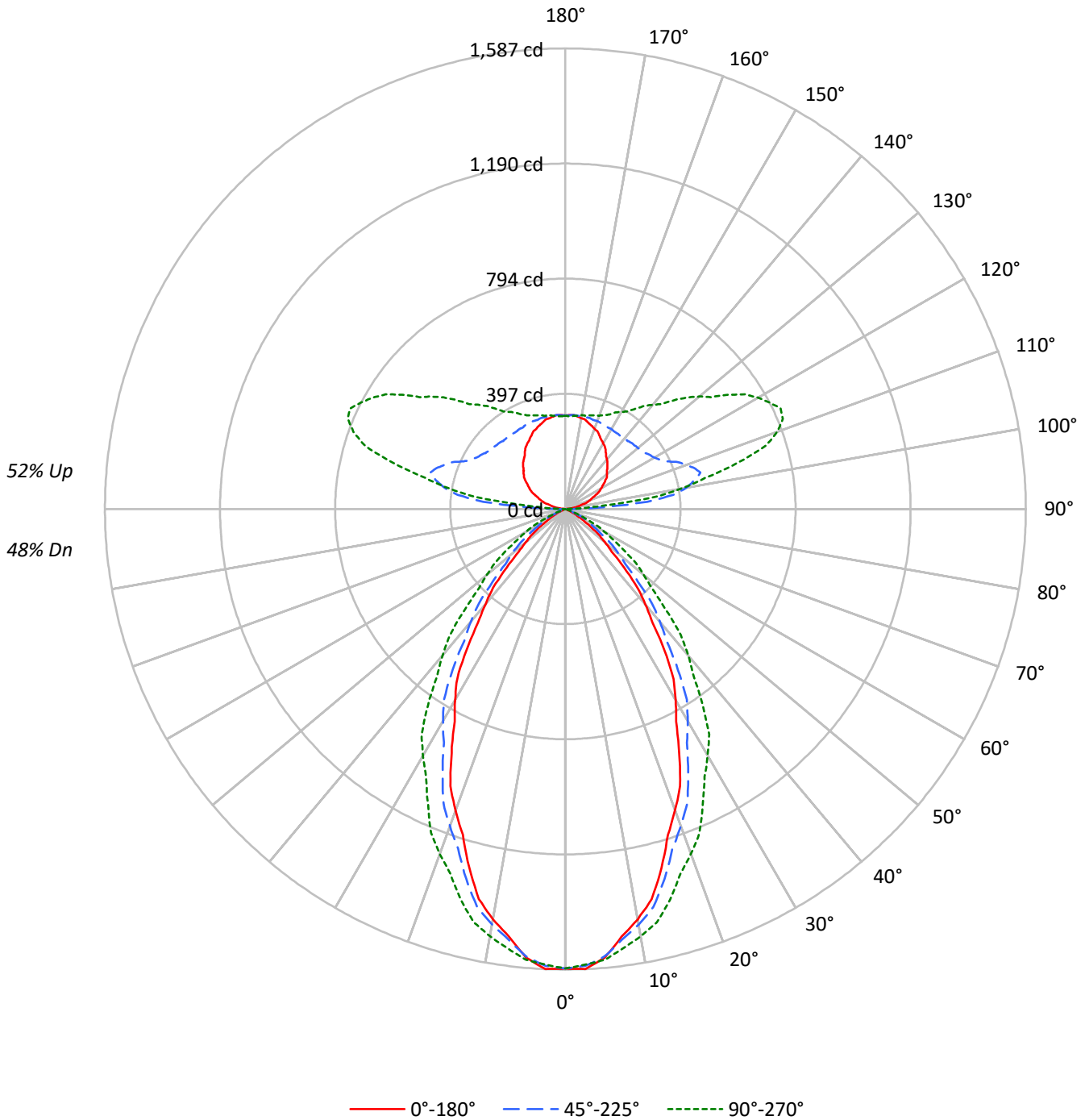
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3972.1 lumens
Efficiency: N/A
Efficacy: 83.4 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°	14608	14608	14608
5°	14373	14338	14444
10°	13449	13627	14008
15°	12226	12614	13316
20°	10852	11417	12417
25°	9451	10199	11409
30°	8096	8985	10453
35°	6712	7626	9300
40°	5157	6098	7925
45°	3728	4618	6376
50°	2539	3442	5058
55°	1650	2488	3931
60°	947	1753	2842
65°	251	1070	1439
70°	124	332	413
75°	53	29	0
80°	43	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.5	3.6
10°-20°	369.5	9.3
20°-30°	462.6	11.6
30°-40°	427.3	10.8
40°-50°	287.1	7.2
50°-60°	148.3	3.7
60°-70°	46.5	1.2
70°-80°	2.9	0.1
80°-90°	0.1	0.0
90°-100°	165.9	4.2
100°-110°	400.9	10.1
110°-120°	427.6	10.8
120°-130°	346.3	8.7
130°-140°	268.1	6.7
140°-150°	204.5	5.1
150°-160°	148.0	3.7
160°-170°	91.2	2.3
170°-180°	30.9	0.8
0°-30°	976.6	24.6
0°-40°	1403.9	35.3
0°-60°	1839.3	46.3
0°-90°	1888.8	47.6
90°-120°	994.3	25.0
90°-150°	1813.2	45.6
90°-180°	2083.0	52.4
0°-180°	3972.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1583	1583	1583	1583	1583	
5°	1552	1536	1548	1554	1560	144
15°	1280	1276	1321	1365	1394	356
25°	928	936	1002	1070	1121	426
35°	596	611	677	757	826	369
45°	286	303	354	423	489	224
55°	103	120	155	199	244	96
65°	12	22	49	59	66	19
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	16	83	284	185	130	18
105°	64	111	482	623	615	68
115°	117	150	387	734	818	116
125°	167	192	336	584	686	149
135°	205	229	322	460	530	158
145°	243	261	316	391	422	152
155°	278	290	320	346	359	128
165°	307	312	324	329	334	87
175°	325	324	325	322	322	31
180°	322	322	322	322	322	



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CATALOG NUMBER: SQ4-BB-050U-075D-93050-1D-UNV-STD-W-4 (4000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1583.3	1583.3	1583.3	1583.3	1583.3
2.5°	1587.0	1572.0	1576.0	1575.9	1571.7
5°	1551.9	1536.2	1548.1	1553.6	1559.6
7.5°	1486.3	1474.1	1496.9	1514.0	1526.5
10°	1435.5	1425.0	1454.6	1478.0	1495.2
12.5°	1376.6	1368.6	1404.4	1436.4	1458.5
15°	1280.0	1275.5	1320.6	1364.9	1394.1
17.5°	1176.4	1176.3	1227.7	1282.8	1318.0
20°	1105.3	1107.6	1162.8	1223.5	1264.7
22.5°	1034.2	1039.5	1098.4	1161.7	1208.9
25°	928.4	935.9	1001.9	1070.5	1120.7
27.5°	826.7	837.6	907.1	978.3	1039.5
30°	759.9	772.6	843.4	918.3	981.2
32.5°	694.3	709.4	778.4	857.7	921.8
35°	595.9	610.9	677.1	756.8	825.7
37.5°	494.4	509.1	573.7	652.2	726.6
40°	428.2	444.7	506.3	582.3	658.0
42.5°	368.1	384.6	442.6	517.3	588.7
45°	285.7	302.9	353.9	422.8	488.7
47.5°	217.4	236.1	280.8	343.2	403.2
50°	176.9	195.7	239.8	294.7	352.4
52.5°	144.5	162.6	202.4	254.1	307.0
55°	102.6	119.9	154.7	198.7	244.4
57.5°	70.9	85.8	117.0	153.7	189.5
60°	51.3	65.6	95.0	124.8	154.0
62.5°	34.2	47.2	76.0	98.8	118.4
65°	11.5	22.0	49.0	59.1	65.9
67.5°	5.8	7.0	25.7	27.2	29.4
70°	4.6	4.6	12.3	13.1	15.3
72.5°	3.4	3.4	4.9	6.3	6.7
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	44.9	105.8	51.4	34.9
95°	16.4	83.0	284.2	184.8	129.5
97.5°	29.0	91.9	374.3	360.6	309.5
100°	38.8	97.5	423.9	447.5	405.5
102.5°	48.1	102.5	456.6	519.8	494.9
105°	64.1	110.7	481.8	623.4	615.4
107.5°	79.7	120.4	466.9	706.4	725.2
110°	90.6	128.6	443.0	742.3	777.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	101.5	136.9	421.7	751.0	811.4
115°	117.2	149.9	387.1	733.8	818.5
117.5°	132.8	163.5	366.8	694.4	793.5
120°	143.1	171.8	353.7	663.4	767.3
122.5°	154.0	180.5	345.5	631.7	734.1
125°	167.0	192.3	336.0	583.6	685.6
127.5°	179.8	203.6	329.3	542.9	632.4
130°	187.4	210.7	327.1	514.5	602.4
132.5°	194.5	218.9	323.8	494.0	568.6
135°	205.1	229.1	322.3	460.2	529.5
137.5°	215.2	239.3	317.6	437.3	489.6
140°	222.8	244.8	317.6	420.9	468.9
142.5°	230.5	252.5	314.8	406.5	447.0
145°	242.6	260.6	316.2	391.2	421.8
147.5°	253.9	271.4	315.4	373.5	398.8
150°	261.0	276.3	317.6	365.7	385.7
152.5°	268.6	283.4	317.0	357.5	375.4
155°	278.0	290.0	320.3	346.5	359.1
157.5°	289.4	299.6	319.6	342.3	349.7
160°	293.7	302.4	322.3	336.8	342.1
162.5°	300.8	308.4	321.2	335.1	338.3
165°	307.3	312.0	324.4	329.3	333.9
167.5°	315.4	318.5	323.6	328.9	329.0
170°	317.6	319.6	325.7	325.1	328.5
172.5°	321.4	322.9	324.1	325.6	323.6
175°	325.1	323.7	325.1	322.3	321.7
177.5°	324.4	324.4	323.3	322.1	319.5
180°	321.7	321.7	321.7	321.7	321.7

(END OF REPORT)