

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: P518414

Luminaire Tested: **SQ4-BB-050U-050D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518414
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-8
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

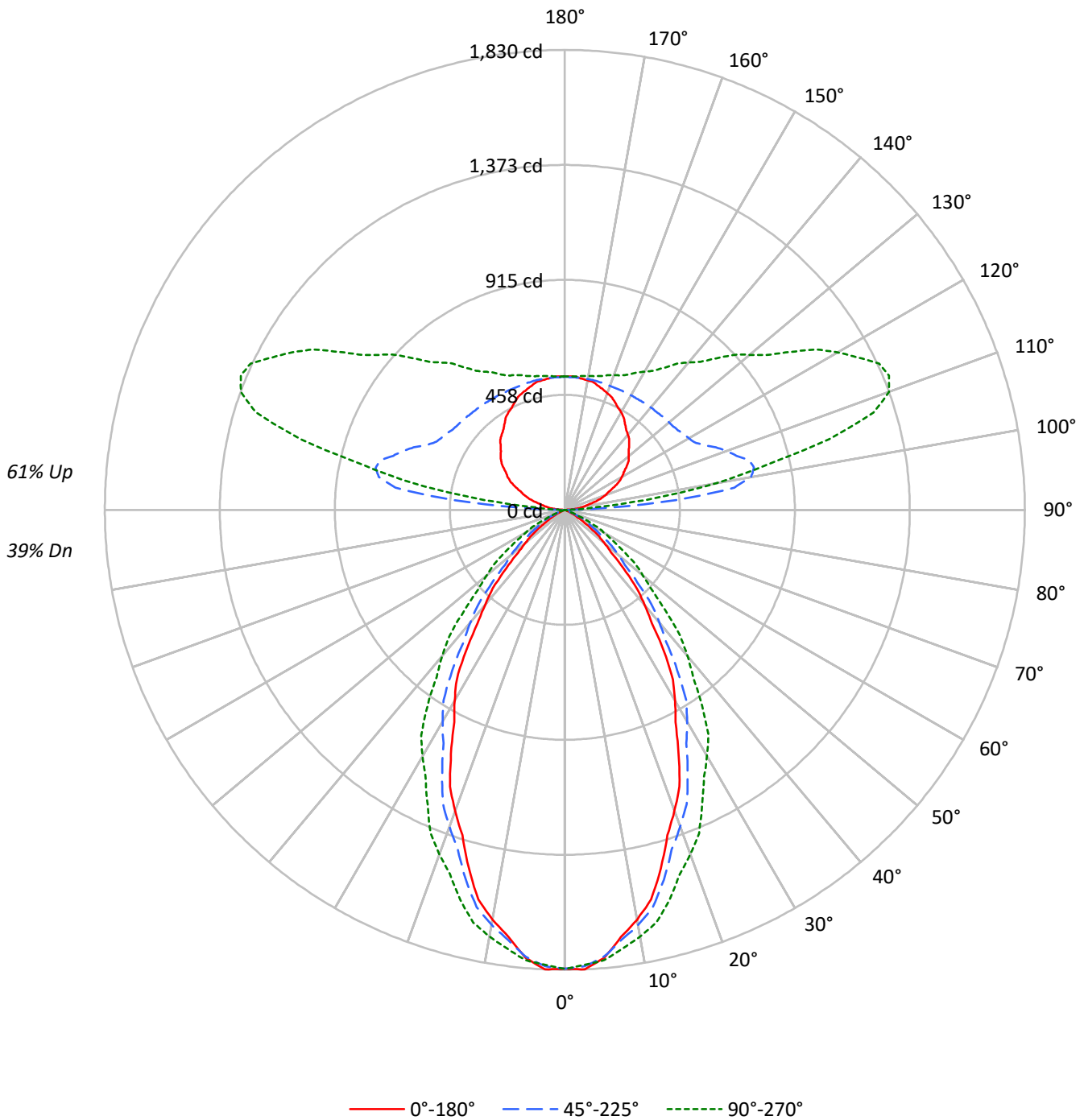
Lumens per Lamp: N/A
Luminaire Lumens: 5641.8 lumens
Efficiency: N/A
Efficacy: 95.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 58.9
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	7274	7679
20°	6258	6583	7160
25°	5450	5881	6578
30°	4668	5181	6028
35°	3871	4398	5363
40°	2974	3516	4569
45°	2150	2662	3677
50°	1465	1984	2917
55°	952	1435	2266
60°	546	1010	1639
65°	145	617	830
70°	71	190	239
75°	32	16	0
80°	24	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.6	3.0
10°-20°	426.2	7.6
20°-30°	533.5	9.5
30°-40°	492.8	8.7
40°-50°	331.1	5.9
50°-60°	171.0	3.0
60°-70°	53.6	0.9
70°-80°	3.4	0.1
80°-90°	2.1	0.0
90°-100°	254.5	4.5
100°-110°	691.4	12.3
110°-120°	710.8	12.6
120°-130°	568.3	10.1
130°-140°	446.6	7.9
140°-150°	342.4	6.1
150°-160°	246.2	4.4
160°-170°	150.6	2.7
170°-180°	50.7	0.9
0°-30°	1126.3	20.0
0°-40°	1619.1	28.7
0°-60°	2121.2	37.6
0°-90°	2180.3	38.6
90°-120°	1656.7	29.4
90°-150°	3014.0	53.4
90°-180°	3462.0	61.4
0°-180°	5641.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1826	1826	1826	1826	1826	
5°	1790	1772	1785	1792	1799	166
15°	1476	1471	1523	1574	1608	411
25°	1071	1079	1156	1234	1292	491
35°	687	704	781	873	952	426
45°	330	349	408	488	564	259
55°	118	138	178	229	282	110
65°	13	25	56	68	76	22
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	2	7	12	15	15	3
95°	38	139	443	193	130	40
105°	123	191	760	1158	1089	130
115°	218	265	609	1211	1379	215
125°	300	342	551	928	1094	267
135°	361	401	535	756	852	279
145°	418	448	528	642	690	262
155°	472	489	525	577	593	218
165°	511	518	527	549	551	144
175°	530	532	528	535	534	50
180°	530	530	530	530	530	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1826.0	1826.0	1826.0	1826.0	1826.0
2.5°	1830.2	1812.9	1817.5	1817.4	1812.5
5°	1789.7	1771.6	1785.3	1791.7	1798.6
7.5°	1714.1	1700.0	1726.3	1746.1	1760.4
10°	1655.5	1643.4	1677.5	1704.5	1724.4
12.5°	1587.6	1578.3	1619.6	1656.6	1682.0
15°	1476.1	1471.0	1523.0	1574.1	1607.8
17.5°	1356.7	1356.5	1415.9	1479.4	1520.0
20°	1274.7	1277.3	1341.0	1411.0	1458.5
22.5°	1192.7	1198.8	1266.8	1339.7	1394.2
25°	1070.7	1079.3	1155.5	1234.5	1292.4
27.5°	953.3	966.0	1046.1	1128.3	1198.8
30°	876.3	891.0	972.6	1059.1	1131.6
32.5°	800.7	818.1	897.7	989.1	1063.1
35°	687.3	704.5	780.9	872.8	952.3
37.5°	570.1	587.1	661.7	752.1	838.0
40°	493.8	512.8	583.9	671.6	758.8
42.5°	424.6	443.6	510.4	596.6	679.0
45°	329.5	349.4	408.1	487.6	563.6
47.5°	250.7	272.3	323.8	395.7	465.0
50°	204.1	225.7	276.5	339.8	406.4
52.5°	166.6	187.5	233.4	293.1	354.1
55°	118.4	138.2	178.4	229.1	281.8
57.5°	81.8	98.9	135.0	177.3	218.5
60°	59.2	75.6	109.5	143.9	177.6
62.5°	39.4	54.4	87.6	113.9	136.6
65°	13.3	25.3	56.5	68.2	76.0
67.5°	6.7	8.1	29.7	31.3	33.9
70°	5.3	5.3	14.1	15.1	17.7
72.5°	3.9	3.9	5.7	7.3	7.8
75°	1.8	1.8	0.9	0.0	0.0
77.5°	0.9	0.9	0.7	0.0	0.0
80°	0.9	0.9	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°	0.3	1.3	2.4	3.1	3.1
90°	1.7	6.7	11.9	15.3	15.3
92.5°	15.3	69.7	121.0	52.0	44.0
95°	37.5	139.2	443.2	192.9	129.6
97.5°	62.1	153.7	679.5	528.6	371.3
100°	78.4	163.4	751.8	762.1	615.4
102.5°	94.8	173.1	770.9	942.5	813.1
105°	122.7	191.1	760.3	1157.6	1089.3
107.5°	151.7	212.1	716.3	1268.7	1287.7
110°	172.2	227.2	683.6	1290.6	1372.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	189.9	242.2	650.8	1272.4	1395.4
115°	218.2	264.9	608.6	1210.7	1379.1
117.5°	244.8	289.5	581.6	1123.3	1312.9
120°	262.5	305.9	569.4	1064.6	1252.9
122.5°	277.5	320.9	561.2	1005.8	1187.5
125°	300.0	341.7	550.6	927.7	1094.4
127.5°	320.1	361.5	544.8	868.5	1011.6
130°	332.4	372.4	542.1	831.4	959.7
132.5°	344.7	384.7	539.4	799.7	913.4
135°	361.4	401.4	535.3	755.7	852.3
137.5°	379.5	415.8	533.2	716.8	798.1
140°	390.4	425.4	531.9	692.1	765.4
142.5°	401.3	433.6	530.5	672.7	734.0
145°	417.6	447.6	528.4	642.1	690.4
147.5°	436.1	461.7	526.7	618.0	656.0
150°	448.3	470.0	526.7	604.1	634.1
152.5°	457.9	476.9	525.4	591.7	616.4
155°	472.2	488.9	525.0	576.6	593.2
157.5°	486.2	499.2	525.0	566.2	578.9
160°	494.4	506.0	525.0	559.4	569.4
162.5°	502.5	511.5	526.4	553.8	561.2
165°	511.4	518.1	526.7	548.9	550.6
167.5°	520.6	523.9	528.4	543.1	544.5
170°	523.3	526.7	528.4	540.4	540.4
172.5°	526.1	528.1	528.4	537.7	537.7
175°	530.2	531.8	528.4	535.2	533.6
177.5°	531.5	531.5	527.4	532.8	530.2
180°	530.2	530.2	530.2	530.2	530.2

(END OF REPORT)