

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: P518509

Luminaire Tested: **SQ4-BB-075U-050D-935-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518509
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-050D-935-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

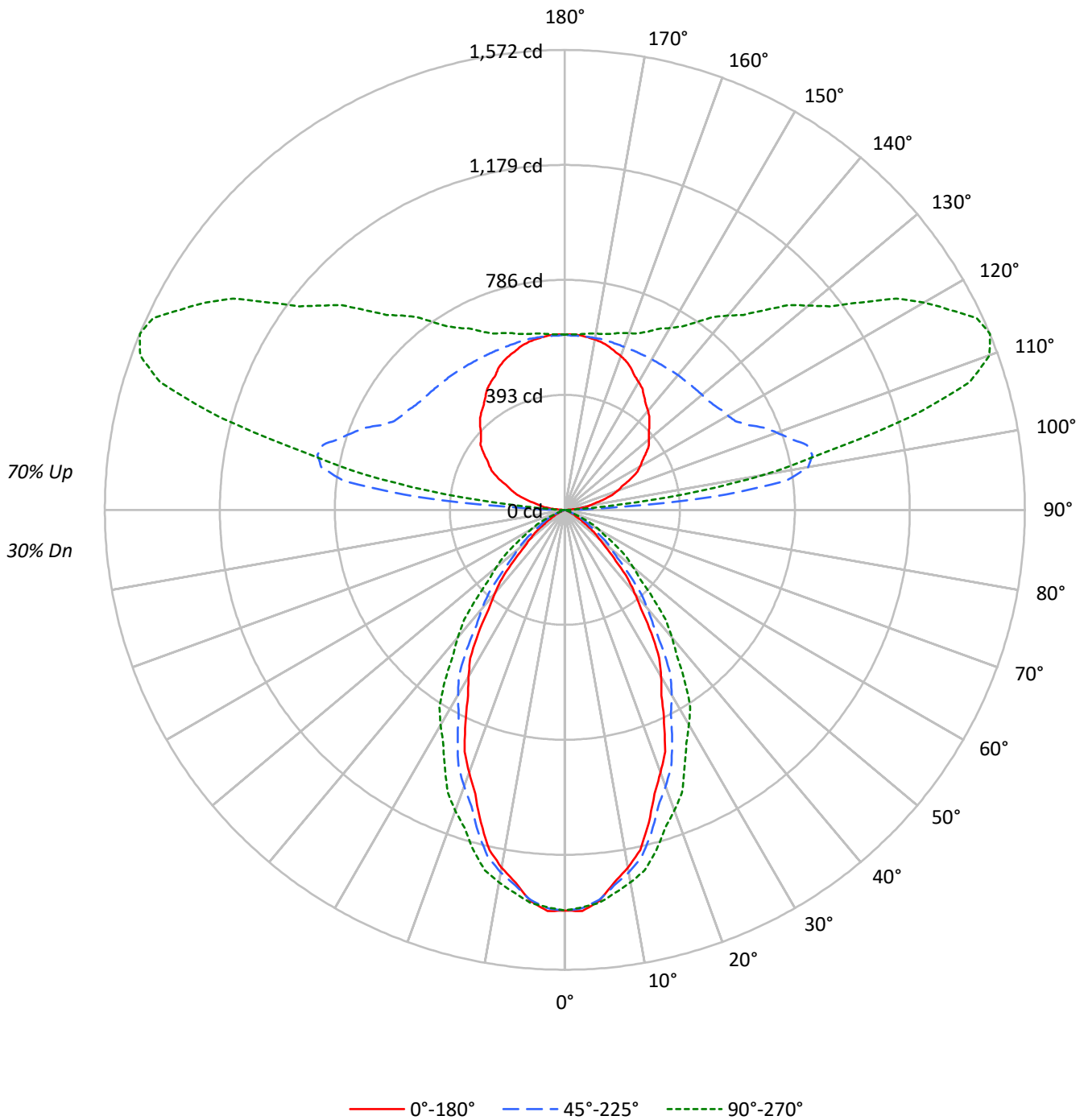
Lumens per Lamp: N/A
Luminaire Lumens: 5537.1 lumens
Efficiency: N/A
Efficacy: 102.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 54.3
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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	30				
1	94	90	87	84	84	81	79	76	64	63	61	49	48	47	35	34	33	27				
2	87	80	75	70	78	72	68	64	58	55	52	44	42	41	32	31	30	24				
3	80	71	65	60	72	65	59	55	52	48	45	40	38	36	29	28	27	22				
4	73	64	57	52	66	58	52	47	47	43	39	36	34	32	27	25	24	20				
5	68	57	50	45	61	52	46	41	42	38	35	33	30	28	25	23	22	18				
6	63	52	45	39	56	47	41	36	39	34	31	30	27	25	23	21	20	16				
7	58	47	40	35	52	43	37	32	35	31	27	28	25	23	21	19	18	15				
8	54	43	36	31	49	39	33	29	32	28	25	26	23	21	20	18	16	14				
9	51	39	33	28	46	36	30	26	30	25	22	24	21	19	18	16	15	13				
10	47	36	30	25	43	33	27	24	28	23	20	22	19	17	17	15	14	12				

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	2.3
10°-20°	319.6	5.8
20°-30°	400.1	7.2
30°-40°	369.6	6.7
40°-50°	248.3	4.5
50°-60°	128.3	2.3
60°-70°	40.2	0.7
70°-80°	2.5	0.0
80°-90°	1.6	0.0
90°-100°	282.5	5.1
100°-110°	777.2	14.0
110°-120°	802.2	14.5
120°-130°	642.7	11.6
130°-140°	504.8	9.1
140°-150°	386.9	7.0
150°-160°	278.2	5.0
160°-170°	170.1	3.1
170°-180°	57.3	1.0
0°-30°	844.7	15.3
0°-40°	1214.3	21.9
0°-60°	1590.9	28.7
0°-90°	1635.2	29.5
90°-120°	1861.9	33.6
90°-150°	3396.4	61.3
90°-180°	3902.0	70.5
0°-180°	5537.1	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	3
95°	42	154	500	214	136	44
105°	139	214	856	1304	1217	146
115°	246	300	687	1368	1552	243
125°	339	386	623	1054	1235	302
135°	409	454	605	852	965	316
145°	473	505	596	726	782	296
155°	535	553	593	653	672	246
165°	579	586	595	619	623	163
175°	599	600	596	604	603	57
180°	599	599	599	599	599	



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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°	17.6	75.2	130.2	50.0	41.0
95°	42.1	154.2	499.5	213.6	136.4
97.5°	68.6	171.0	762.3	587.4	414.4
100°	87.9	181.4	844.9	852.8	695.8
102.5°	106.3	193.8	866.3	1058.0	914.0
105°	138.9	213.7	856.4	1304.2	1217.0
107.5°	170.0	238.3	807.7	1424.8	1450.7
110°	192.4	254.7	771.0	1454.8	1544.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	212.8	273.1	734.3	1435.5	1572.1
115°	246.0	299.5	686.9	1367.8	1552.2
117.5°	277.6	326.9	656.8	1272.7	1481.3
120°	296.9	344.3	643.6	1201.5	1417.1
122.5°	314.3	361.6	634.4	1139.1	1343.7
125°	339.0	386.3	623.2	1054.2	1234.9
127.5°	362.4	407.5	615.8	983.3	1141.8
130°	374.7	420.8	611.7	941.2	1085.8
132.5°	388.9	435.0	608.6	904.2	1034.8
135°	409.1	453.9	605.3	852.5	964.7
137.5°	427.9	469.5	602.5	810.8	903.3
140°	442.2	480.8	601.5	783.1	866.6
142.5°	454.4	490.1	599.5	758.3	829.9
145°	472.8	505.2	596.4	726.4	782.5
147.5°	492.4	520.3	594.9	698.1	743.0
150°	504.6	529.6	593.9	682.6	717.5
152.5°	515.9	538.8	592.8	669.2	698.1
155°	535.2	552.7	592.6	652.9	671.6
157.5°	549.2	563.5	592.6	639.5	652.5
160°	559.4	570.7	592.6	632.3	642.3
162.5°	567.6	576.8	593.6	626.1	634.1
165°	578.6	586.0	595.1	619.4	623.2
167.5°	586.2	591.9	596.4	613.8	614.8
170°	591.3	595.0	596.4	611.7	611.7
172.5°	595.4	597.1	596.4	608.6	607.6
175°	598.9	600.2	596.4	604.0	602.8
177.5°	600.0	600.0	595.9	602.0	600.0
180°	598.9	598.9	598.9	598.9	598.9

(END OF REPORT)