

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: P518438

Luminaire Tested: **SQ4-BB-050U-075D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518438
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-075D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

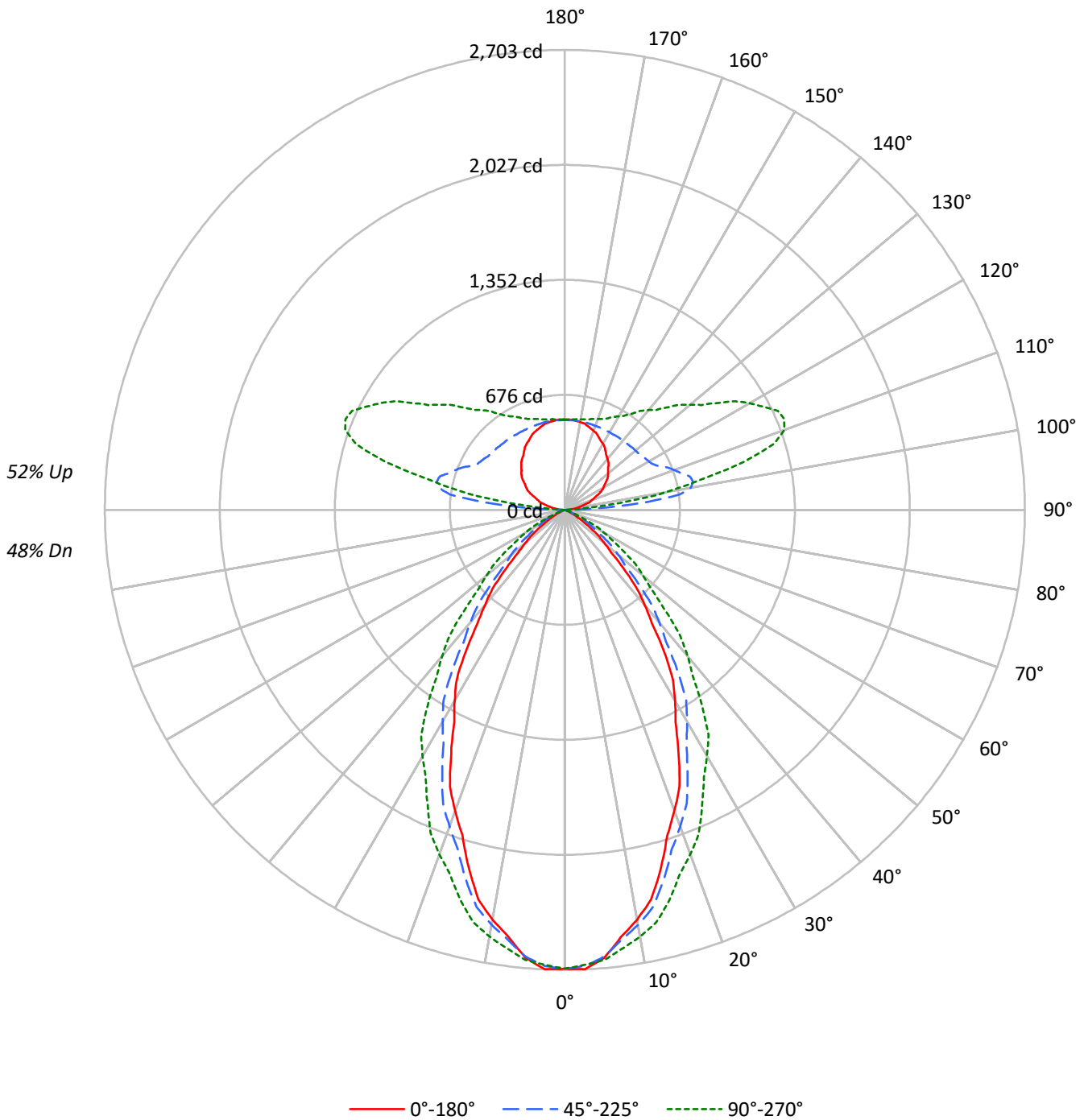
Lumens per Lamp: N/A
Luminaire Lumens: 6680.5 lumens
Efficiency: N/A
Efficacy: 85.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 78.1
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	68	68	68	54	54	54	48				48
1	99	95	92	89	91	88	85	83	75	73	71	62	61	60	51	50	49				44	
2	92	85	80	76	84	79	75	71	68	64	62	57	55	53	47	45	44				40	
3	85	77	70	65	78	71	66	62	61	57	54	52	49	47	43	41	40				36	
4	79	69	62	57	73	64	58	54	56	51	48	47	44	42	40	38	36				32	
5	73	63	55	50	67	59	52	48	51	46	42	44	40	37	37	34	33				29	
6	68	57	50	45	63	53	47	42	47	42	38	40	37	34	34	32	30				27	
7	63	52	45	40	58	49	43	38	43	38	34	37	33	31	32	29	27				25	
8	59	48	41	36	55	45	39	34	40	35	31	34	31	28	30	27	25				23	
9	55	44	37	33	51	42	35	31	37	32	28	32	28	26	28	25	23				21	
10	52	41	34	30	48	38	33	29	34	29	26	30	26	24	26	23	21				20	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12440	12440	12440
5°	12240	12210	12301
10°	11453	11605	11929
15°	10412	10742	11340
20°	9242	9723	10574
25°	8048	8686	9715
30°	6894	7651	8903
35°	5716	6495	7920
40°	4392	5193	6749
45°	3175	3932	5431
50°	2163	2931	4307
55°	1406	2119	3347
60°	806	1493	2419
65°	214	911	1225
70°	105	282	352
75°	46	23	0
80°	35	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	246.1	3.7
10°-20°	629.4	9.4
20°-30°	787.9	11.8
30°-40°	727.8	10.9
40°-50°	489.0	7.3
50°-60°	252.6	3.8
60°-70°	79.1	1.2
70°-80°	5.0	0.1
80°-90°	2.1	0.0
90°-100°	254.5	3.8
100°-110°	691.4	10.3
110°-120°	710.8	10.6
120°-130°	568.3	8.5
130°-140°	446.6	6.7
140°-150°	342.4	5.1
150°-160°	246.2	3.7
160°-170°	150.6	2.3
170°-180°	50.7	0.8
0°-30°	1663.4	24.9
0°-40°	2391.1	35.8
0°-60°	3132.7	46.9
0°-90°	3219.0	48.2
90°-120°	1656.7	24.8
90°-150°	3014.0	45.1
90°-180°	3462.0	51.8
0°-180°	6680.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2697	2697	2697	2697	2697	
5°	2643	2616	2637	2646	2656	245
15°	2180	2172	2249	2325	2374	607
25°	1581	1594	1706	1823	1909	725
35°	1015	1040	1153	1289	1406	629
45°	487	516	603	720	832	382
55°	175	204	264	338	416	163
65°	20	37	84	101	112	33
75°	3	3	1	0	0	4
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°	2696.7	2696.7	2696.7	2696.7	2696.7
2.5°	2703.0	2677.5	2684.2	2684.0	2676.9
5°	2643.2	2616.4	2636.7	2646.1	2656.3
7.5°	2531.5	2510.6	2549.5	2578.7	2599.9
10°	2444.9	2427.0	2477.5	2517.3	2546.7
12.5°	2344.7	2330.9	2391.9	2446.5	2484.0
15°	2180.1	2172.4	2249.2	2324.7	2374.5
17.5°	2003.7	2003.4	2091.1	2184.8	2244.8
20°	1882.6	1886.4	1980.5	2083.8	2154.0
22.5°	1761.5	1770.5	1870.9	1978.6	2059.0
25°	1581.2	1594.0	1706.5	1823.2	1908.7
27.5°	1408.0	1426.6	1545.0	1666.3	1770.4
30°	1294.2	1315.9	1436.4	1564.1	1671.3
32.5°	1182.5	1208.3	1325.8	1460.8	1570.0
35°	1015.0	1040.5	1153.3	1289.0	1406.4
37.5°	842.0	867.0	977.2	1110.8	1237.6
40°	729.3	757.4	862.4	991.8	1120.7
42.5°	627.0	655.1	753.8	881.1	1002.8
45°	486.6	516.0	602.7	720.1	832.4
47.5°	370.3	402.1	478.3	584.5	686.8
50°	301.4	333.3	408.4	501.9	600.1
52.5°	246.1	276.9	344.7	432.8	522.9
55°	174.8	204.2	263.5	338.4	416.2
57.5°	120.8	146.1	199.3	261.8	322.8
60°	87.4	111.6	161.8	212.5	262.2
62.5°	58.2	80.4	129.4	168.3	201.7
65°	19.6	37.4	83.5	100.7	112.2
67.5°	9.9	12.0	43.8	46.3	50.1
70°	7.8	7.8	20.9	22.3	26.1
72.5°	5.7	5.7	8.3	10.7	11.5
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°	0.3	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)