

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: P518331

Luminaire Tested: **SQ4-BB-025U-075D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518331
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, 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-025U-075D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

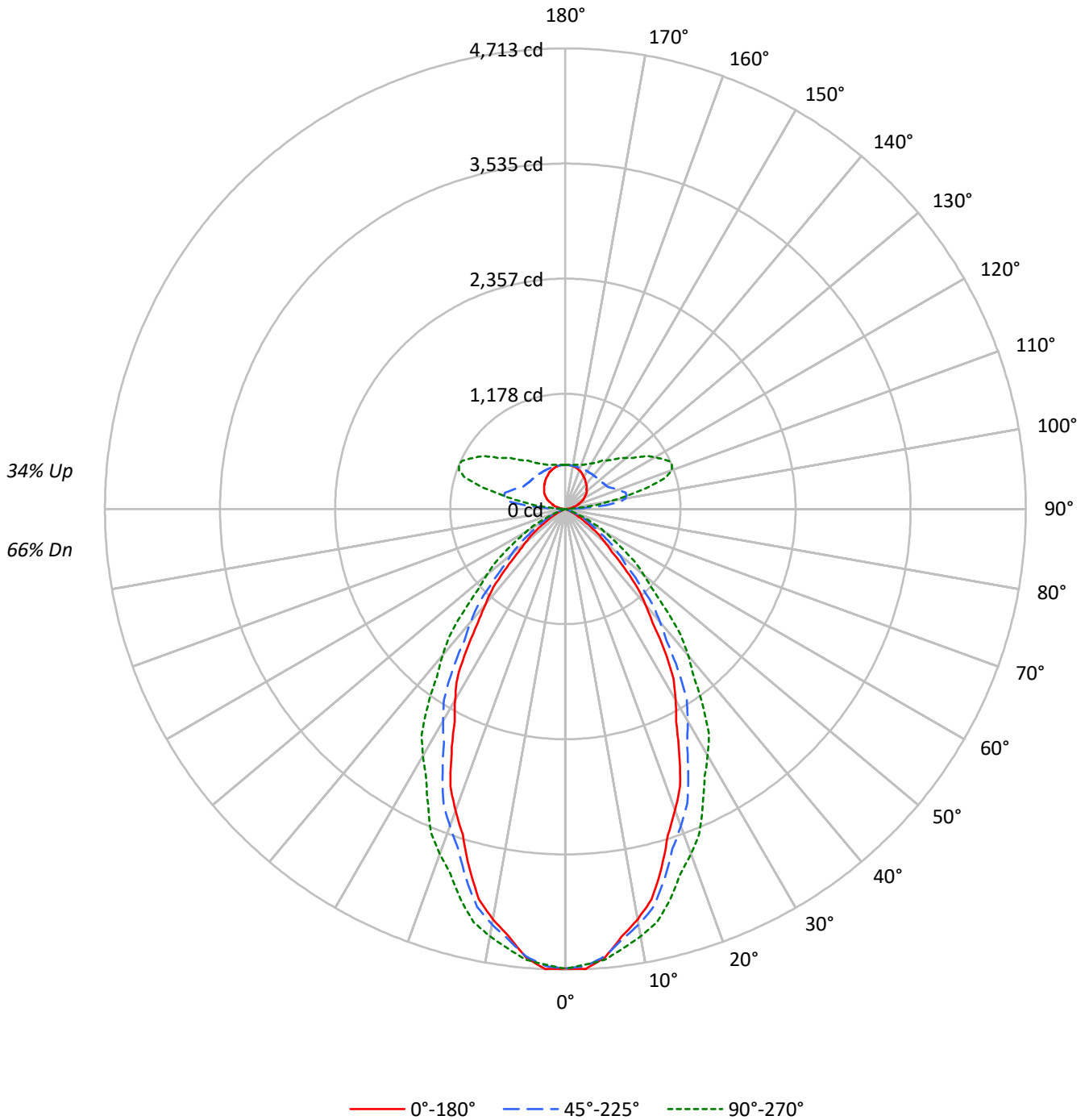
Lumens per Lamp: N/A
Luminaire Lumens: 8538.7 lumens
Efficiency: N/A
Efficacy: 90.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 94.8
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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71	66	66	66	66	
1	104	100	97	94	98	95	92	89	84	82	80	75	73	72	66	65	64	60	60	60	60	
2	96	90	85	81	91	86	81	77	77	73	71	69	66	64	61	59	58	54	54	54	54	
3	90	82	75	71	84	78	72	68	70	66	62	63	60	57	56	54	52	49	49	49	49	
4	83	74	67	62	79	71	65	60	64	59	56	58	54	51	52	49	47	44	44	44	44	
5	78	67	60	55	73	64	58	53	59	54	50	53	49	46	48	45	43	40	40	40	40	
6	72	62	55	49	68	59	53	48	54	49	45	49	45	42	45	42	39	37	37	37	37	
7	68	57	50	45	64	54	48	43	50	45	41	46	41	38	42	38	36	34	34	34	34	
8	63	52	45	41	60	50	44	39	46	41	37	43	38	35	39	36	33	31	31	31	31	
9	60	48	42	37	57	47	40	36	43	38	34	40	35	32	37	33	31	29	29	29	29	
10	56	45	38	34	53	43	37	33	40	35	32	37	33	30	34	31	28	27	27	27	27	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14461	14461	14461
5°	14229	14193	14299
10°	13313	13491	13867
15°	12103	12487	13183
20°	10744	11302	12292
25°	9356	10097	11294
30°	8014	8895	10349
35°	6645	7550	9207
40°	5105	6037	7845
45°	3690	4571	6313
50°	2514	3407	5007
55°	1634	2464	3891
60°	937	1735	2813
65°	248	1060	1423
70°	122	327	409
75°	53	27	0
80°	41	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	429.1	5.0
10°-20°	1097.4	12.9
20°-30°	1373.9	16.1
30°-40°	1269.0	14.9
40°-50°	852.7	10.0
50°-60°	440.4	5.2
60°-70°	137.9	1.6
70°-80°	8.7	0.1
80°-90°	2.6	0.0
90°-100°	220.1	2.6
100°-110°	578.6	6.8
110°-120°	600.0	7.0
120°-130°	481.3	5.6
130°-140°	377.6	4.4
140°-150°	289.8	3.4
150°-160°	208.7	2.4
160°-170°	127.7	1.5
170°-180°	43.1	0.5
0°-30°	2900.4	34.0
0°-40°	4169.4	48.8
0°-60°	5462.6	64.0
0°-90°	5611.8	65.7
90°-120°	1398.7	16.4
90°-150°	2547.3	29.8
90°-180°	2927.0	34.3
0°-180°	8538.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4702	4702	4702	4702	4702	
5°	4609	4562	4598	4614	4632	427
15°	3801	3788	3922	4054	4140	1059
25°	2757	2779	2976	3179	3328	1264
35°	1770	1814	2011	2248	2452	1096
45°	848	900	1051	1256	1451	666
55°	305	356	460	590	726	284
65°	34	65	146	176	196	58
75°	4	4	2	0	0	6
85°	0	0	0	0	0	1
90°	3	9	23	12	12	3
95°	29	114	379	195	133	32
105°	104	158	640	971	906	110
115°	185	225	512	1022	1167	183
125°	258	289	466	788	929	229
135°	307	338	452	636	721	237
145°	356	379	446	542	585	223
155°	402	414	446	490	504	185
165°	434	440	446	463	469	123
175°	452	452	449	454	454	43
180°	452	452	452	452	452	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4702.3	4702.3	4702.3	4702.3	4702.3
2.5°	4713.2	4668.7	4680.4	4680.1	4667.7
5°	4609.0	4562.3	4597.6	4613.9	4631.7
7.5°	4414.3	4377.8	4445.6	4496.5	4533.5
10°	4263.2	4232.1	4320.1	4389.5	4440.6
12.5°	4088.5	4064.5	4170.8	4266.0	4331.4
15°	3801.4	3788.0	3922.0	4053.6	4140.4
17.5°	3493.8	3493.4	3646.2	3809.7	3914.2
20°	3282.7	3289.4	3453.3	3633.6	3755.9
22.5°	3071.6	3087.2	3262.2	3450.1	3590.3
25°	2757.2	2779.4	2975.6	3179.2	3328.2
27.5°	2455.1	2487.6	2694.0	2905.6	3087.1
30°	2256.7	2294.5	2504.7	2727.3	2914.2
32.5°	2062.0	2106.9	2311.8	2547.2	2737.6
35°	1769.9	1814.4	2011.0	2247.7	2452.4
37.5°	1468.2	1511.8	1703.9	1936.9	2158.0
40°	1271.7	1320.6	1503.7	1729.5	1954.2
42.5°	1093.3	1142.3	1314.4	1536.3	1748.5
45°	848.5	899.7	1051.0	1255.7	1451.4
47.5°	645.6	701.2	834.0	1019.1	1197.5
50°	525.5	581.1	712.0	875.2	1046.5
52.5°	429.0	482.9	601.0	754.7	911.8
55°	304.8	356.0	459.5	590.0	725.7
57.5°	210.7	254.7	347.6	456.5	562.8
60°	152.4	194.7	282.1	370.5	457.3
62.5°	101.5	140.2	225.7	293.4	351.7
65°	34.1	65.3	145.6	175.6	195.6
67.5°	17.3	20.8	76.4	80.7	87.4
70°	13.6	13.6	36.4	38.8	45.5
72.5°	10.0	10.0	14.6	18.7	20.0
75°	4.5	4.5	2.3	0.0	0.0
77.5°	2.3	2.3	1.8	0.0	0.0
80°	2.3	2.3	0.0	0.0	0.0
82.5°	0.5	0.5	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.6	1.7	4.6	2.3	2.3
90°	2.9	8.6	23.2	11.6	11.6
92.5°	12.2	58.6	129.7	57.4	37.1
95°	28.9	113.9	379.2	195.4	133.2
97.5°	50.4	125.1	567.4	451.2	332.3
100°	66.6	134.5	625.3	633.6	492.1
102.5°	80.5	143.9	641.5	789.2	668.1
105°	104.2	158.0	639.7	971.1	906.0
107.5°	128.5	178.3	603.3	1065.6	1081.5
110°	144.7	190.0	573.2	1090.0	1157.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	160.9	204.0	545.4	1074.6	1178.7
115°	185.3	224.9	512.4	1022.2	1166.6
117.5°	209.0	245.2	489.8	949.6	1109.8
120°	222.9	256.9	480.5	900.9	1056.6
122.5°	236.8	270.8	473.6	852.2	1005.6
125°	257.6	288.8	466.0	787.7	929.2
127.5°	274.4	306.1	459.7	735.7	855.1
130°	283.7	317.6	457.4	703.0	813.4
132.5°	292.9	326.9	455.0	675.0	774.0
135°	306.8	338.0	451.6	635.9	720.8
137.5°	321.3	351.9	451.0	606.6	676.2
140°	332.9	361.2	448.7	583.3	648.4
142.5°	342.2	368.2	448.7	566.9	622.9
145°	356.0	378.7	445.8	542.3	584.7
147.5°	369.9	392.0	445.8	521.8	556.9
150°	379.2	399.0	445.8	510.1	538.4
152.5°	388.5	403.8	445.8	500.7	522.2
155°	402.4	413.7	445.8	489.5	503.7
157.5°	412.8	423.5	445.8	479.6	489.8
160°	419.7	428.2	445.8	474.9	480.5
162.5°	426.7	432.9	445.8	470.2	475.9
165°	434.2	439.9	445.8	463.3	468.9
167.5°	441.2	444.0	448.7	460.3	462.6
170°	445.8	448.6	448.7	460.3	460.3
172.5°	448.1	448.7	448.7	457.9	455.6
175°	451.6	451.6	448.7	454.5	454.5
177.5°	451.6	451.6	449.3	453.8	451.6
180°	451.6	451.6	451.6	451.6	451.6

(END OF REPORT)