

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: P518355

Luminaire Tested: **SQ4-BB-025U-100D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518355
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-100D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

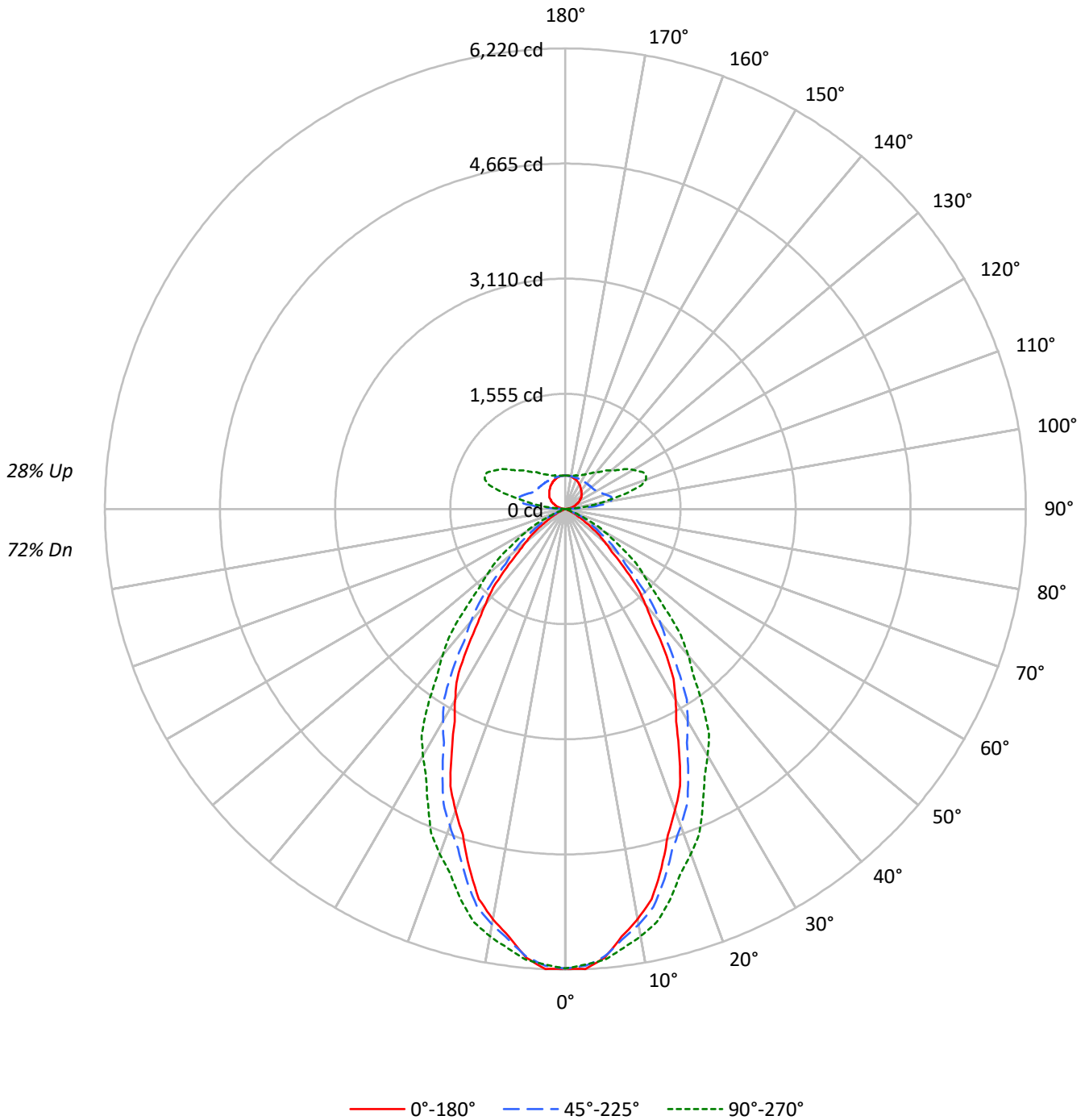
Lumens per Lamp: N/A
Luminaire Lumens: 10331.7 lumens
Efficiency: N/A
Efficacy: 83.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 123.6
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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	76	76	76	72	
1	105	102	99	96	100	97	94	92	87	86	84	79	78	76	71	70	69	69	69	69	65	
2	98	92	87	83	93	88	83	80	80	77	74	73	70	68	66	64	62	62	62	62	59	
3	91	83	77	72	87	80	74	70	73	69	65	67	63	61	61	58	56	56	56	56	53	
4	85	76	69	64	81	73	67	62	67	62	58	61	58	55	56	53	51	51	51	51	48	
5	79	69	62	57	75	66	60	55	61	56	52	57	52	49	52	49	46	46	46	46	44	
6	74	63	56	51	70	61	55	50	57	51	47	52	48	45	48	45	42	42	42	42	40	
7	69	58	51	46	66	56	50	45	52	47	43	49	44	41	45	42	39	39	39	39	37	
8	65	54	47	42	62	52	46	41	49	43	39	45	41	38	42	38	36	36	36	36	34	
9	61	50	43	39	58	48	42	38	45	40	36	42	38	35	40	36	33	33	33	33	31	
10	58	47	40	36	55	45	39	35	42	37	33	40	35	32	37	33	31	31	31	31	29	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19084	19084	19084
5°	18777	18730	18869
10°	17569	17803	18300
15°	15972	16479	17396
20°	14178	14914	16221
25°	12347	13325	14904
30°	10575	11738	13656
35°	8769	9963	12150
40°	6737	7967	10353
45°	4870	6032	8330
50°	3318	4495	6607
55°	2157	3251	5135
60°	1237	2290	3711
65°	327	1398	1879
70°	162	432	540
75°	71	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	566.3	5.5
10°-20°	1448.2	14.0
20°-30°	1813.0	17.5
30°-40°	1674.6	16.2
40°-50°	1125.3	10.9
50°-60°	581.2	5.6
60°-70°	182.0	1.8
70°-80°	11.5	0.1
80°-90°	2.6	0.0
90°-100°	220.1	2.1
100°-110°	578.6	5.6
110°-120°	600.0	5.8
120°-130°	481.3	4.7
130°-140°	377.6	3.7
140°-150°	289.8	2.8
150°-160°	208.7	2.0
160°-170°	127.7	1.2
170°-180°	43.1	0.4
0°-30°	3827.5	37.0
0°-40°	5502.1	53.3
0°-60°	7208.6	69.8
0°-90°	7404.8	71.7
90°-120°	1398.7	13.5
90°-150°	2547.3	24.7
90°-180°	2927.0	28.3
0°-180°	10331.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6205	6205	6205	6205	6205	
5°	6082	6020	6067	6089	6112	564
15°	5016	4999	5176	5349	5464	1397
25°	3638	3668	3927	4195	4392	1668
35°	2336	2394	2654	2966	3236	1447
45°	1120	1187	1387	1657	1915	879
55°	402	470	606	779	958	375
65°	45	86	192	232	258	76
75°	6	6	3	0	0	9
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°	6205.3	6205.3	6205.3	6205.3	6205.3
2.5°	6219.7	6161.0	6176.4	6176.1	6159.6
5°	6082.2	6020.5	6067.2	6088.7	6112.2
7.5°	5825.2	5777.1	5866.6	5933.8	5982.5
10°	5625.9	5584.8	5700.9	5792.5	5860.0
12.5°	5395.3	5363.6	5504.0	5629.6	5715.9
15°	5016.4	4998.8	5175.6	5349.3	5463.8
17.5°	4610.6	4610.0	4811.7	5027.4	5165.4
20°	4332.0	4340.8	4557.1	4795.0	4956.4
22.5°	4053.4	4073.9	4305.0	4552.9	4737.9
25°	3638.5	3667.9	3926.7	4195.4	4392.0
27.5°	3239.8	3282.7	3555.0	3834.3	4073.8
30°	2978.0	3027.9	3305.3	3599.1	3845.6
32.5°	2721.1	2780.4	3050.7	3361.4	3612.7
35°	2335.6	2394.3	2653.8	2966.2	3236.2
37.5°	1937.5	1995.1	2248.5	2556.0	2847.8
40°	1678.2	1742.7	1984.4	2282.3	2578.8
42.5°	1442.8	1507.4	1734.6	2027.4	2307.4
45°	1119.8	1187.3	1387.0	1657.0	1915.3
47.5°	852.0	925.4	1100.6	1344.9	1580.3
50°	693.5	766.9	939.6	1154.9	1380.9
52.5°	566.2	637.2	793.1	996.0	1203.2
55°	402.3	469.8	606.4	778.6	957.7
57.5°	278.0	336.1	458.7	602.4	742.7
60°	201.1	256.9	372.3	488.9	603.4
62.5°	133.9	185.0	297.8	387.2	464.1
65°	45.0	86.1	192.1	231.8	258.2
67.5°	22.8	27.5	100.9	106.5	115.3
70°	18.0	18.0	48.0	51.2	60.0
72.5°	13.2	13.2	19.2	24.7	26.4
75°	6.0	6.0	3.0	0.0	0.0
77.5°	3.0	3.0	2.4	0.0	0.0
80°	3.0	3.0	0.0	0.0	0.0
82.5°	0.6	0.6	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)