

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: P518300

Luminaire Tested: **SQ4-BB-025U-050D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518300
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-050D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

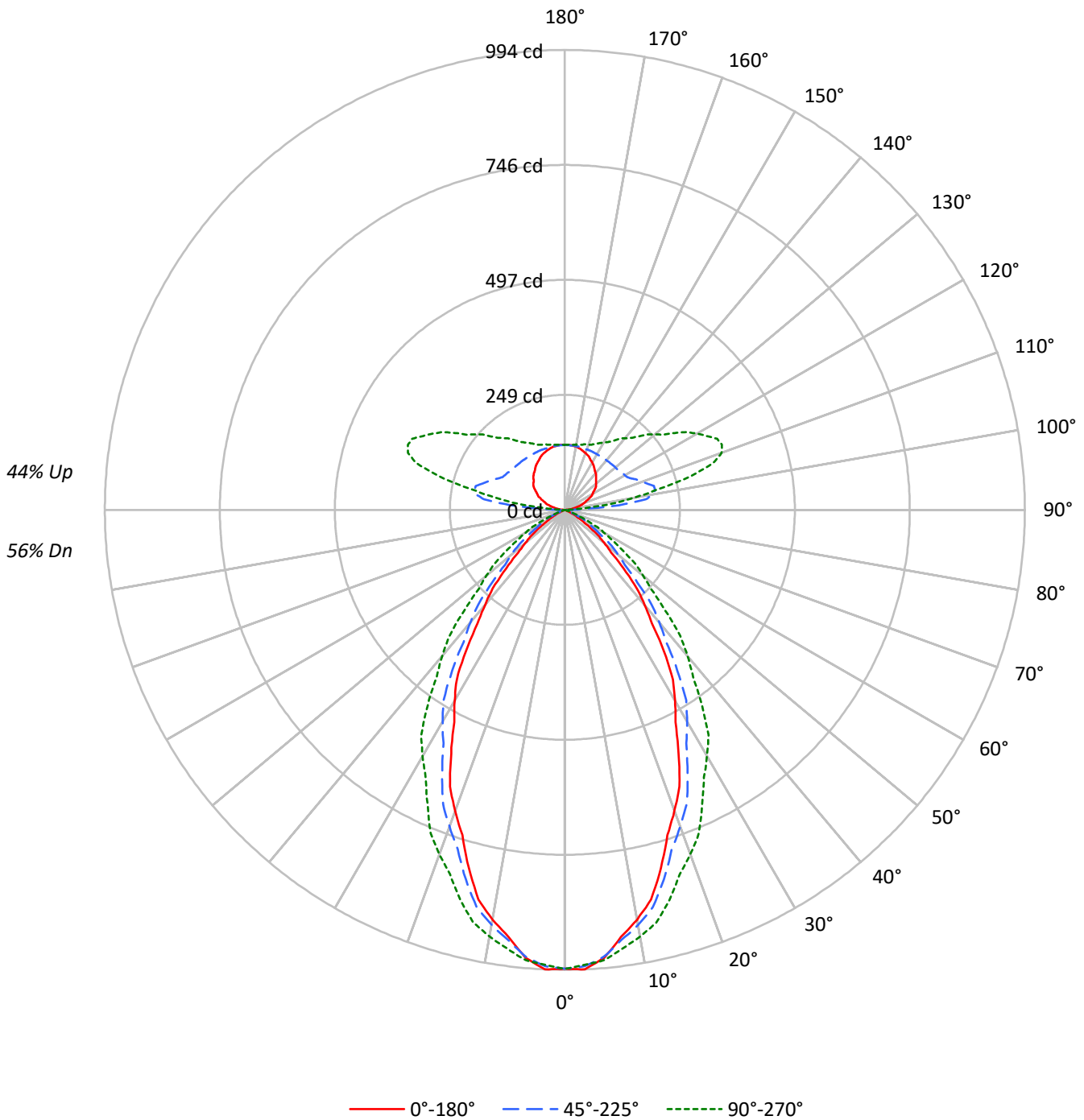
Lumens per Lamp: N/A
Luminaire Lumens: 2095.6 lumens
Efficiency: N/A
Efficacy: 94.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 22.1
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																	
RC	80									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	50	30	10	50	30	10	50	30	10	0															
RCR																																													
0	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	56																											
1	101	98	94	92	94	91	89	86	79	77	76	68	67	66	58	57	56	52																											
2	94	88	83	78	87	82	78	74	72	69	66	62	60	58	54	52	51	47																											
3	87	79	73	68	81	74	69	64	65	61	58	57	54	52	49	47	46	42																											
4	81	71	65	59	75	67	61	57	60	55	51	52	49	46	46	43	41	38																											
5	75	65	58	53	70	61	55	50	55	50	46	48	45	42	42	40	37	35																											
6	70	59	52	47	65	56	50	45	50	45	41	44	41	38	39	36	34	32																											
7	65	54	47	42	61	51	45	41	46	41	37	41	37	34	37	34	31	29																											
8	61	50	43	38	57	47	41	37	43	38	34	38	34	31	34	31	29	27																											
9	57	46	39	35	54	44	38	34	40	35	31	36	32	29	32	29	27	25																											
10	54	43	36	32	51	41	35	31	37	32	29	33	29	27	30	27	25	23																											

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9151	9151	9151
5°	9003	8981	9048
10°	8424	8537	8775
15°	7659	7901	8341
20°	6798	7152	7778
25°	5920	6389	7146
30°	5071	5628	6548
35°	4205	4778	5825
40°	3230	3820	4965
45°	2336	2893	3994
50°	1590	2156	3168
55°	1034	1559	2463
60°	592	1098	1779
65°	157	670	902
70°	78	208	259
75°	36	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.5	4.3
10°-20°	231.5	11.0
20°-30°	289.8	13.8
30°-40°	267.7	12.8
40°-50°	179.8	8.6
50°-60°	92.9	4.4
60°-70°	29.1	1.4
70°-80°	1.8	0.1
80°-90°	0.8	0.0
90°-100°	68.6	3.3
100°-110°	180.2	8.6
110°-120°	186.9	8.9
120°-130°	149.9	7.2
130°-140°	117.6	5.6
140°-150°	90.3	4.3
150°-160°	65.0	3.1
160°-170°	39.8	1.9
170°-180°	13.4	0.6
0°-30°	611.8	29.2
0°-40°	879.4	42.0
0°-60°	1152.1	55.0
0°-90°	1183.9	56.5
90°-120°	435.7	20.8
90°-150°	793.5	37.9
90°-180°	912.0	43.5
0°-180°	2095.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	992	992	992	992	992	
5°	972	962	970	973	977	90
15°	802	799	827	855	873	223
25°	582	586	628	670	702	267
35°	373	383	424	474	517	231
45°	179	190	222	265	306	141
55°	64	75	97	124	153	60
65°	7	14	31	37	41	12
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	1	3	7	4	4	1
95°	9	36	118	61	42	10
105°	32	49	199	302	282	34
115°	58	70	160	318	363	57
125°	80	90	145	245	289	71
135°	96	105	141	198	224	74
145°	111	118	139	169	182	69
155°	125	129	139	152	157	58
165°	135	137	139	144	146	38
175°	141	141	140	142	142	13
180°	141	141	141	141	141	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	991.8	991.8	991.8	991.8	991.8
2.5°	994.1	984.7	987.2	987.1	984.5
5°	972.1	962.3	969.7	973.2	976.9
7.5°	931.0	923.3	937.7	948.4	956.2
10°	899.2	892.6	911.2	925.8	936.6
12.5°	862.3	857.3	879.7	899.8	913.6
15°	801.8	799.0	827.2	855.0	873.3
17.5°	736.9	736.8	769.1	803.5	825.6
20°	692.4	693.8	728.4	766.4	792.2
22.5°	647.8	651.1	688.1	727.7	757.2
25°	581.5	586.2	627.6	670.5	702.0
27.5°	517.8	524.7	568.2	612.8	651.1
30°	476.0	484.0	528.3	575.2	614.6
32.5°	434.9	444.4	487.6	537.3	577.4
35°	373.3	382.7	424.2	474.1	517.2
37.5°	309.7	318.9	359.4	408.5	455.2
40°	268.2	278.5	317.2	364.8	412.2
42.5°	230.6	240.9	277.2	324.0	368.8
45°	179.0	189.8	221.7	264.8	306.1
47.5°	136.2	147.9	175.9	214.9	252.6
50°	110.8	122.6	150.2	184.6	220.7
52.5°	90.5	101.8	126.8	159.2	192.3
55°	64.3	75.1	96.9	124.4	153.1
57.5°	44.4	53.7	73.3	96.3	118.7
60°	32.1	41.1	59.5	78.1	96.4
62.5°	21.4	29.6	47.6	61.9	74.2
65°	7.2	13.8	30.7	37.0	41.3
67.5°	3.6	4.4	16.1	17.0	18.4
70°	2.9	2.9	7.7	8.2	9.6
72.5°	2.1	2.1	3.1	3.9	4.2
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	0.0	0.0
80°	0.5	0.5	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°	0.2	0.5	1.4	0.7	0.7
90°	0.9	2.7	7.2	3.6	3.6
92.5°	3.8	18.2	40.4	17.9	11.5
95°	9.0	35.5	118.1	60.9	41.5
97.5°	15.7	39.0	176.7	140.5	103.5
100°	20.7	41.9	194.8	197.4	153.3
102.5°	25.1	44.8	199.8	245.8	208.1
105°	32.5	49.2	199.3	302.5	282.2
107.5°	40.0	55.6	187.9	331.9	336.9
110°	45.1	59.2	178.5	339.5	360.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	50.1	63.5	169.9	334.7	367.2
115°	57.7	70.1	159.6	318.4	363.4
117.5°	65.1	76.4	152.6	295.8	345.7
120°	69.4	80.0	149.7	280.6	329.1
122.5°	73.8	84.3	147.5	265.5	313.2
125°	80.3	89.9	145.2	245.4	289.4
127.5°	85.5	95.4	143.2	229.2	266.4
130°	88.4	98.9	142.5	219.0	253.4
132.5°	91.3	101.8	141.7	210.3	241.1
135°	95.6	105.3	140.7	198.1	224.5
137.5°	100.1	109.6	140.5	188.9	210.6
140°	103.7	112.5	139.8	181.7	202.0
142.5°	106.6	114.7	139.8	176.6	194.0
145°	110.9	118.0	138.9	168.9	182.1
147.5°	115.2	122.1	138.9	162.6	173.5
150°	118.1	124.3	138.9	158.9	167.7
152.5°	121.0	125.8	138.9	156.0	162.7
155°	125.3	128.9	138.9	152.5	156.9
157.5°	128.6	131.9	138.9	149.4	152.6
160°	130.7	133.4	138.9	147.9	149.7
162.5°	132.9	134.8	138.9	146.5	148.2
165°	135.3	137.0	138.9	144.3	146.1
167.5°	137.4	138.3	139.8	143.4	144.1
170°	138.9	139.7	139.8	143.4	143.4
172.5°	139.6	139.8	139.8	142.6	141.9
175°	140.7	140.7	139.8	141.6	141.6
177.5°	140.7	140.7	139.9	141.4	140.7
180°	140.7	140.7	140.7	140.7	140.7

(END OF REPORT)