

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: P518304

Luminaire Tested: **SQ4-BB-025U-050D-835-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518304
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-835-1D-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

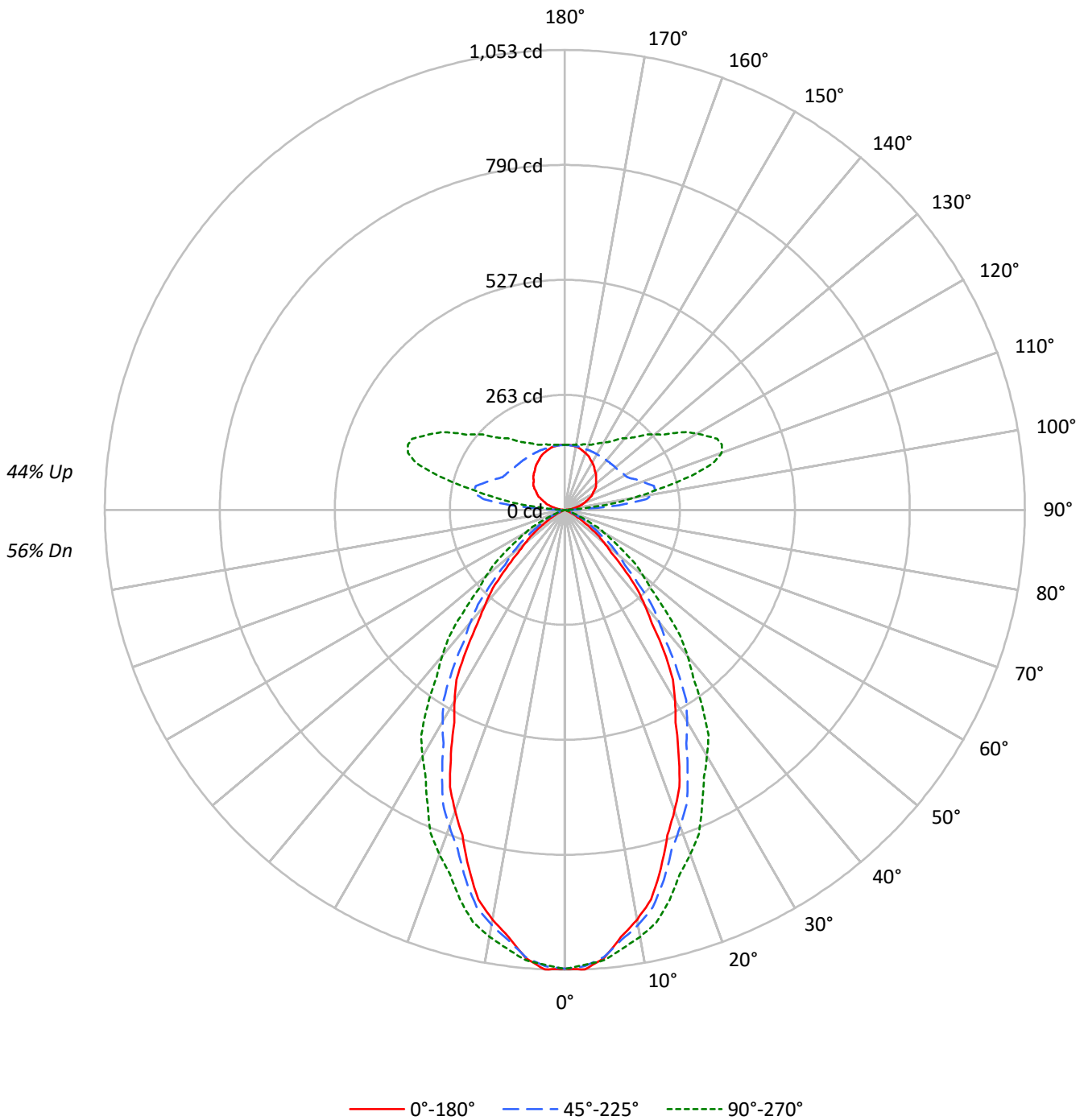
Lumens per Lamp: N/A
Luminaire Lumens: 2220.2 lumens
Efficiency: N/A
Efficacy: 100.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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									20									20
RC	80									50									30									10									0									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									56																			
1	101	98	94	92	94	91	89	86	79	77	76	68	67	66	58	57	56	52									52																			
2	94	88	83	78	87	82	78	74	72	69	66	62	60	58	54	52	51	47									47																			
3	87	79	73	68	81	74	69	64	65	61	58	57	54	52	49	47	46	42									42																			
4	81	71	65	59	75	67	61	57	60	55	51	52	49	46	46	43	41	38									38																			
5	75	65	58	53	70	61	55	50	55	50	46	48	45	42	42	40	37	35									35																			
6	70	59	52	47	65	56	50	45	50	45	41	44	41	38	39	36	34	32									32																			
7	65	54	47	42	61	51	45	41	46	41	37	41	37	34	37	34	31	29									29																			
8	61	50	43	38	57	47	41	37	43	38	34	38	34	31	34	31	29	27									27																			
9	57	46	39	35	54	44	38	34	40	35	31	36	32	29	32	29	27	25									25																			
10	54	43	36	32	51	41	35	31	37	32	29	33	29	27	30	27	25	23									23																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9694	9694	9694
5°	9538	9515	9586
10°	8924	9043	9296
15°	8113	8371	8837
20°	7202	7577	8241
25°	6272	6769	7571
30°	5373	5963	6938
35°	4455	5062	6172
40°	3423	4047	5260
45°	2474	3065	4231
50°	1685	2284	3356
55°	1095	1652	2609
60°	629	1163	1886
65°	166	710	954
70°	84	219	275
75°	36	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.9	4.3
10°-20°	245.2	11.0
20°-30°	307.0	13.8
30°-40°	283.6	12.8
40°-50°	190.5	8.6
50°-60°	98.4	4.4
60°-70°	30.8	1.4
70°-80°	1.9	0.1
80°-90°	0.8	0.0
90°-100°	72.6	3.3
100°-110°	190.9	8.6
110°-120°	198.0	8.9
120°-130°	158.8	7.2
130°-140°	124.6	5.6
140°-150°	95.6	4.3
150°-160°	68.9	3.1
160°-170°	42.1	1.9
170°-180°	14.2	0.6
0°-30°	648.1	29.2
0°-40°	931.7	42.0
0°-60°	1220.6	55.0
0°-90°	1254.3	56.5
90°-120°	461.6	20.8
90°-150°	840.6	37.9
90°-180°	966.0	43.5
0°-180°	2220.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1051	1051	1051	1051	1051	
5°	1030	1020	1027	1031	1035	95
15°	849	846	876	906	925	237
25°	616	621	665	710	744	282
35°	396	405	449	502	548	245
45°	190	201	235	281	324	149
55°	68	80	103	132	162	64
65°	8	15	32	39	44	13
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	1	3	8	4	4	1
95°	10	38	125	64	44	11
105°	34	52	211	320	299	36
115°	61	74	169	337	385	60
125°	85	95	154	260	307	75
135°	101	112	149	210	238	78
145°	118	125	147	179	193	74
155°	133	136	147	162	166	61
165°	143	145	147	153	155	40
175°	149	149	148	150	150	14
180°	149	149	149	149	149	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1050.7	1050.7	1050.7	1050.7	1050.7
2.5°	1053.2	1043.2	1045.9	1045.8	1043.0
5°	1029.9	1019.5	1027.4	1031.0	1035.0
7.5°	986.4	978.2	993.4	1004.8	1013.0
10°	952.6	945.7	965.3	980.8	992.3
12.5°	913.6	908.2	932.0	953.3	967.9
15°	849.4	846.5	876.4	905.8	925.2
17.5°	780.7	780.6	814.8	851.3	874.6
20°	733.5	735.0	771.7	811.9	839.3
22.5°	686.4	689.8	729.0	770.9	802.3
25°	616.1	621.1	664.9	710.4	743.7
27.5°	548.6	555.9	602.0	649.3	689.8
30°	504.3	512.7	559.7	609.4	651.2
32.5°	460.8	470.8	516.6	569.2	611.7
35°	395.5	405.4	449.4	502.3	548.0
37.5°	328.1	337.8	380.7	432.8	482.2
40°	284.2	295.1	336.0	386.5	436.7
42.5°	244.3	255.2	293.7	343.3	390.7
45°	189.6	201.0	234.9	280.6	324.3
47.5°	144.3	156.7	186.4	227.7	267.6
50°	117.4	129.9	159.1	195.6	233.8
52.5°	95.9	107.9	134.3	168.7	203.7
55°	68.1	79.5	102.7	131.8	162.2
57.5°	47.1	56.9	77.7	102.0	125.8
60°	34.1	43.5	63.0	82.8	102.2
62.5°	22.7	31.3	50.4	65.6	78.6
65°	7.6	14.6	32.5	39.2	43.7
67.5°	3.9	4.7	17.1	18.0	19.5
70°	3.1	3.1	8.1	8.7	10.2
72.5°	2.2	2.2	3.3	4.2	4.5
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	0.6	1.5	0.8	0.8
90°	1.0	2.8	7.6	3.8	3.8
92.5°	4.0	19.3	42.8	19.0	12.2
95°	9.6	37.6	125.1	64.5	43.9
97.5°	16.6	41.3	187.2	148.9	109.7
100°	22.0	44.4	206.3	209.1	162.4
102.5°	26.6	47.5	211.7	260.5	220.5
105°	34.4	52.1	211.1	320.5	299.0
107.5°	42.4	58.9	199.1	351.7	356.9
110°	47.8	62.7	189.1	359.7	382.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	53.1	67.3	180.0	354.6	389.0
115°	61.1	74.2	169.1	337.3	385.0
117.5°	69.0	80.9	161.6	313.4	366.3
120°	73.6	84.8	158.6	297.3	348.7
122.5°	78.1	89.4	156.3	281.2	331.9
125°	85.0	95.3	153.8	259.9	306.6
127.5°	90.6	101.0	151.7	242.8	282.2
130°	93.6	104.8	150.9	232.0	268.4
132.5°	96.7	107.9	150.2	222.8	255.4
135°	101.3	111.5	149.0	209.8	237.9
137.5°	106.0	116.1	148.8	200.2	223.2
140°	109.9	119.2	148.1	192.5	214.0
142.5°	112.9	121.5	148.1	187.1	205.6
145°	117.5	125.0	147.1	179.0	193.0
147.5°	122.1	129.4	147.1	172.2	183.8
150°	125.1	131.7	147.1	168.3	177.7
152.5°	128.2	133.2	147.1	165.2	172.3
155°	132.8	136.5	147.1	161.5	166.2
157.5°	136.2	139.8	147.1	158.3	161.6
160°	138.5	141.3	147.1	156.7	158.6
162.5°	140.8	142.9	147.1	155.2	157.0
165°	143.3	145.2	147.1	152.9	154.8
167.5°	145.6	146.5	148.1	151.9	152.7
170°	147.1	148.0	148.1	151.9	151.9
172.5°	147.9	148.1	148.1	151.1	150.4
175°	149.0	149.0	148.1	150.0	150.0
177.5°	149.0	149.0	148.3	149.8	149.0
180°	149.0	149.0	149.0	149.0	149.0

(END OF REPORT)