

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: P518480

Luminaire Tested: **SQ4-BB-050U-125D-930-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518480
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-125D-930-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

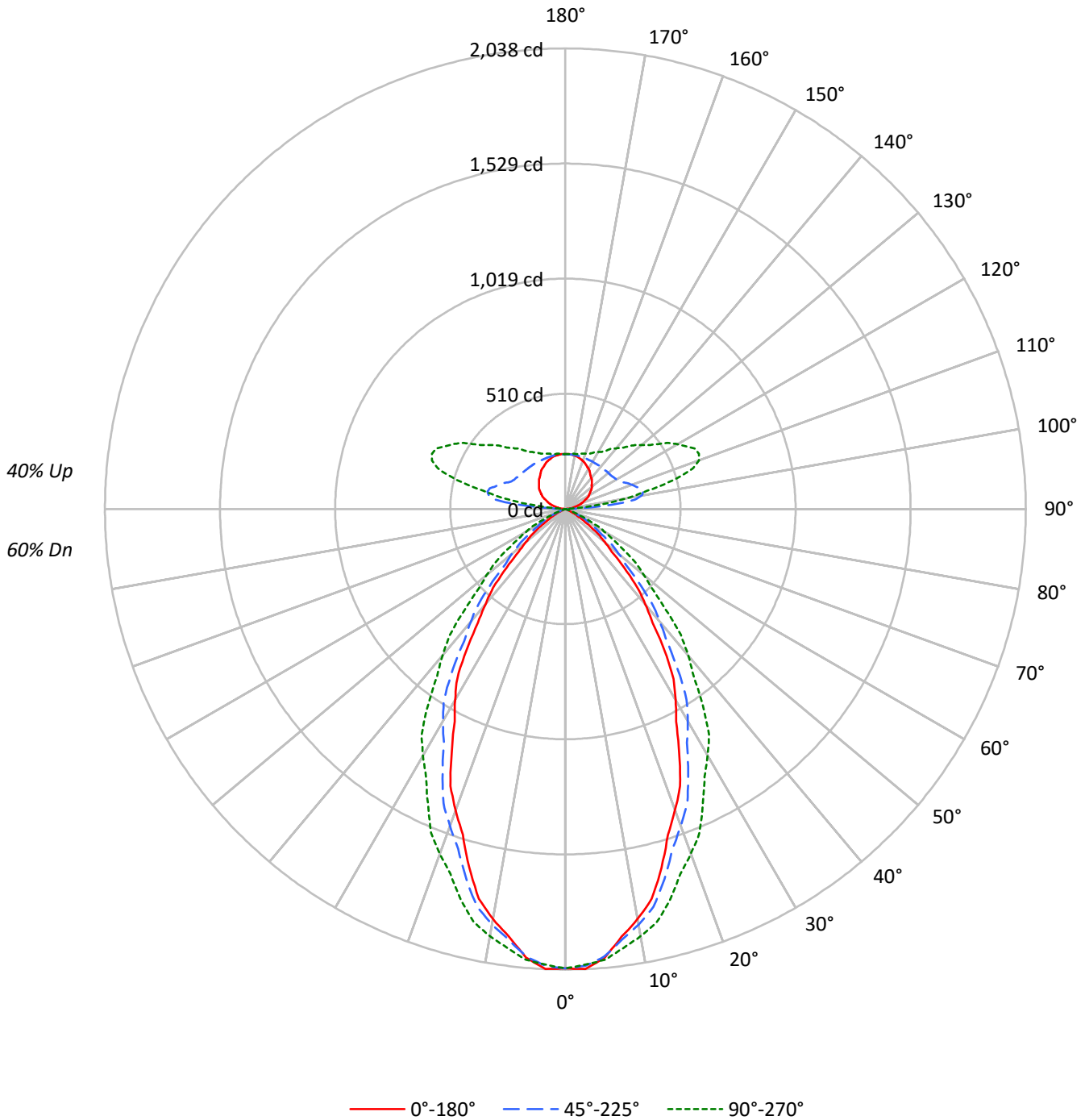
Lumens per Lamp: N/A
Luminaire Lumens: 4011.2 lumens
Efficiency: N/A
Efficacy: 71.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 55.9
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	110	110	110	110	102	102	102	102	89	89	89	77	77	77	66	66	66	66	66	66	60	
1	102	99	96	93	96	93	90	88	81	79	78	71	70	68	61	61	60	60	60	60	55	
2	95	89	84	79	89	84	79	76	74	71	68	65	63	61	57	55	54	54	54	54	50	
3	88	80	74	69	83	76	70	66	67	63	60	60	57	54	52	50	48	48	48	48	45	
4	82	73	66	61	77	69	63	58	61	57	53	55	51	48	48	46	44	44	44	44	41	
5	76	66	59	54	72	63	56	52	56	51	48	50	47	44	45	42	40	40	40	40	37	
6	71	60	53	48	67	57	51	46	52	47	43	47	43	40	42	39	36	36	36	36	34	
7	66	55	48	43	62	53	46	42	48	43	39	43	39	36	39	36	33	33	33	33	31	
8	62	51	44	39	59	49	42	38	44	39	35	40	36	33	36	33	31	31	31	31	29	
9	58	47	40	36	55	45	39	35	41	36	33	37	33	30	34	31	28	28	28	28	26	
10	55	44	37	33	52	42	36	32	38	33	30	35	31	28	32	29	26	26	26	26	24	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18757	18757	18757
5°	18454	18409	18546
10°	17267	17498	17987
15°	15698	16196	17097
20°	13934	14659	15943
25°	12135	13097	14648
30°	10395	11537	13422
35°	8619	9792	11942
40°	6622	7830	10176
45°	4787	5929	8188
50°	3261	4418	6493
55°	2120	3196	5046
60°	1216	2251	3648
65°	323	1373	1847
70°	159	424	531
75°	71	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.5	4.6
10°-20°	474.5	11.8
20°-30°	594.0	14.8
30°-40°	548.6	13.7
40°-50°	368.7	9.2
50°-60°	190.4	4.7
60°-70°	59.6	1.5
70°-80°	3.8	0.1
80°-90°	1.0	0.0
90°-100°	116.5	2.9
100°-110°	316.6	7.9
110°-120°	325.5	8.1
120°-130°	260.2	6.5
130°-140°	204.5	5.1
140°-150°	156.8	3.9
150°-160°	112.8	2.8
160°-170°	69.0	1.7
170°-180°	23.2	0.6
0°-30°	1254.0	31.3
0°-40°	1802.6	44.9
0°-60°	2361.7	58.9
0°-90°	2426.1	60.5
90°-120°	758.6	18.9
90°-150°	1380.1	34.4
90°-180°	1585.0	39.5
0°-180°	4011.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2033	2033	2033	2033	2033	
5°	1993	1972	1988	1995	2002	185
15°	1644	1638	1696	1752	1790	458
25°	1192	1202	1286	1374	1439	546
35°	765	784	869	972	1060	474
45°	367	389	454	543	628	288
55°	132	154	199	255	314	123
65°	15	28	63	76	85	25
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	1	3	6	7	7	1
95°	17	64	203	88	59	18
105°	56	88	348	530	499	60
115°	100	121	279	554	632	99
125°	137	156	252	425	501	122
135°	166	184	245	346	390	128
145°	191	205	242	294	316	120
155°	216	224	240	264	272	100
165°	234	237	241	251	252	66
175°	243	244	242	245	244	23
180°	243	243	243	243	243	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2033.0	2033.0	2033.0	2033.0	2033.0
2.5°	2037.7	2018.5	2023.5	2023.4	2018.0
5°	1992.6	1972.5	1987.7	1994.8	2002.5
7.5°	1908.5	1892.7	1922.0	1944.0	1960.0
10°	1843.1	1829.7	1867.7	1897.7	1919.9
12.5°	1767.6	1757.2	1803.2	1844.4	1872.7
15°	1643.5	1637.7	1695.6	1752.5	1790.0
17.5°	1510.5	1510.3	1576.4	1647.1	1692.3
20°	1419.2	1422.1	1493.0	1570.9	1623.8
22.5°	1328.0	1334.7	1410.4	1491.6	1552.2
25°	1192.0	1201.7	1286.5	1374.5	1438.9
27.5°	1061.4	1075.5	1164.7	1256.2	1334.7
30°	975.7	992.0	1082.9	1179.1	1259.9
32.5°	891.5	910.9	999.5	1101.3	1183.6
35°	765.2	784.4	869.4	971.8	1060.3
37.5°	634.8	653.6	736.7	837.4	933.0
40°	549.8	571.0	650.1	747.7	844.9
42.5°	472.7	493.8	568.3	664.2	755.9
45°	366.9	389.0	454.4	542.9	627.5
47.5°	279.1	303.2	360.6	440.6	517.7
50°	227.2	251.2	307.8	378.4	452.4
52.5°	185.5	208.8	259.9	326.3	394.2
55°	131.8	153.9	198.7	255.1	313.7
57.5°	91.1	110.1	150.3	197.4	243.3
60°	65.9	84.2	122.0	160.2	197.7
62.5°	43.9	60.6	97.6	126.9	152.1
65°	14.8	28.2	62.9	75.9	84.6
67.5°	7.5	9.0	33.0	34.9	37.8
70°	5.9	5.9	15.7	16.8	19.7
72.5°	4.3	4.3	6.3	8.1	8.7
75°	2.0	2.0	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.2	0.6	1.1	1.4	1.4
90°	0.8	3.1	5.5	7.0	7.0
92.5°	7.0	31.9	55.4	23.8	20.1
95°	17.2	63.7	203.0	88.3	59.3
97.5°	28.4	70.4	311.1	242.1	170.0
100°	35.9	74.8	344.2	349.0	281.8
102.5°	43.4	79.3	353.0	431.6	372.3
105°	56.2	87.5	348.1	530.1	498.8
107.5°	69.5	97.1	328.0	581.0	589.7
110°	78.8	104.0	313.0	591.0	628.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	87.0	110.9	298.0	582.7	639.0
115°	99.9	121.3	278.7	554.4	631.5
117.5°	112.1	132.5	266.3	514.4	601.2
120°	120.2	140.1	260.7	487.5	573.7
122.5°	127.1	146.9	257.0	460.6	543.8
125°	137.4	156.5	252.1	424.8	501.1
127.5°	146.6	165.5	249.5	397.7	463.2
130°	152.2	170.5	248.2	380.7	439.5
132.5°	157.8	176.2	247.0	366.2	418.2
135°	165.5	183.8	245.1	346.0	390.3
137.5°	173.8	190.4	244.2	328.2	365.5
140°	178.8	194.8	243.5	316.9	350.5
142.5°	183.8	198.6	242.9	308.0	336.1
145°	191.2	205.0	242.0	294.0	316.1
147.5°	199.7	211.4	241.2	283.0	300.4
150°	205.3	215.2	241.2	276.6	290.4
152.5°	209.7	218.4	240.6	271.0	282.3
155°	216.2	223.9	240.4	264.0	271.6
157.5°	222.6	228.6	240.4	259.3	265.1
160°	226.4	231.7	240.4	256.1	260.7
162.5°	230.1	234.2	241.0	253.6	257.0
165°	234.2	237.2	241.2	251.4	252.1
167.5°	238.4	239.9	242.0	248.7	249.3
170°	239.6	241.2	242.0	247.4	247.4
172.5°	240.9	241.8	242.0	246.2	246.2
175°	242.8	243.5	242.0	245.1	244.3
177.5°	243.4	243.4	241.5	244.0	242.8
180°	242.8	242.8	242.8	242.8	242.8

(END OF REPORT)