

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: P518486

Luminaire Tested: **SQ4-BB-050U-125D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518486
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-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8759.7 lumens
Efficiency: N/A
Efficacy: 76.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

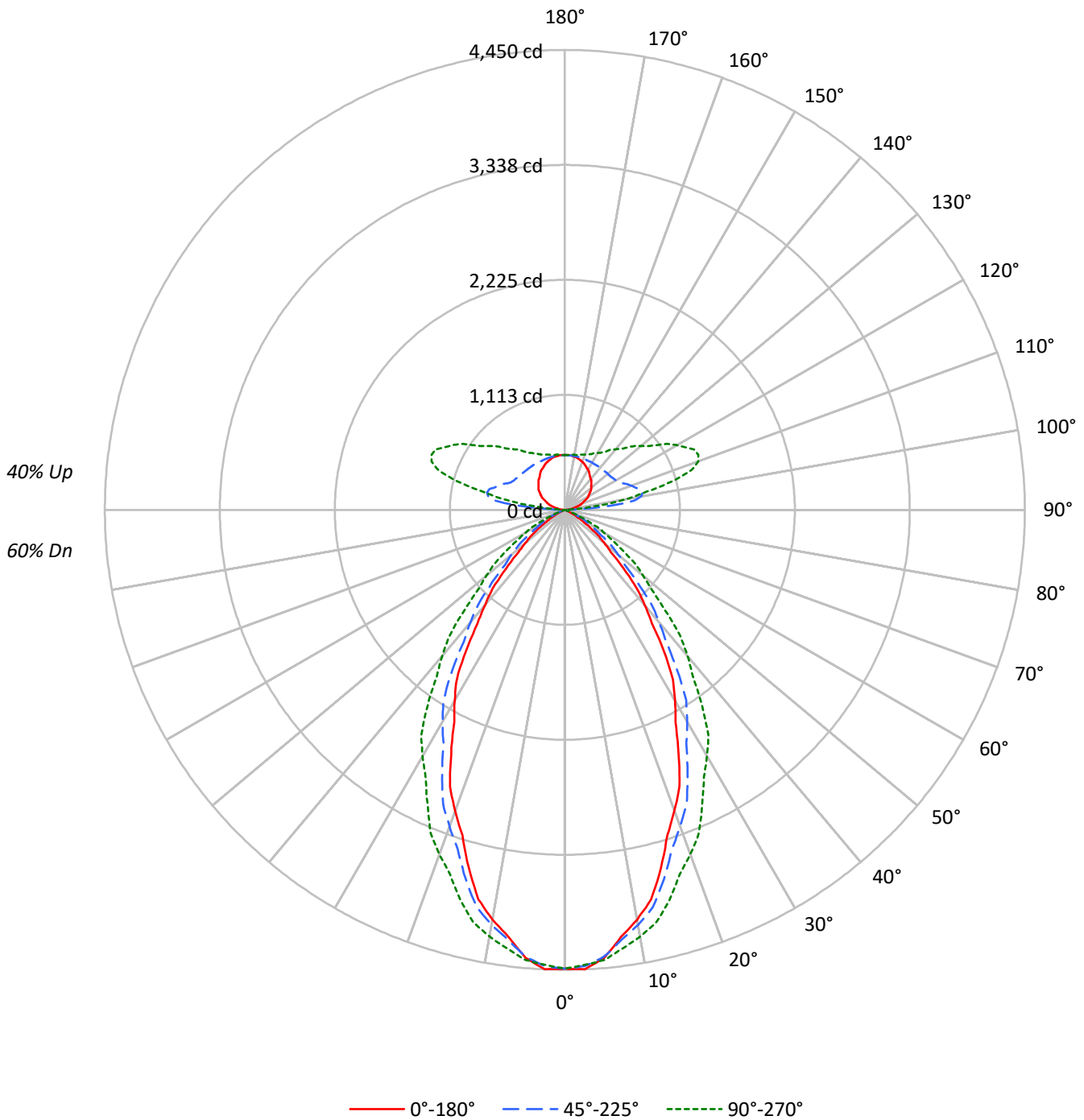
Input Watts (W): 114.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20				
RC	80					70					50					30				
RW	70	50	30	10	70	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	60		
1	102	99	96	93	96	93	90	88	81	79	78	71	70	68	61	61	60	55		
2	95	89	84	79	89	84	79	76	74	71	68	65	63	61	57	55	54	50		
3	88	80	74	69	83	76	70	66	67	63	60	60	57	54	52	50	48	45		
4	82	73	66	61	77	69	63	58	61	57	53	55	51	48	48	46	44	41		
5	76	66	59	54	72	63	56	52	56	51	48	50	47	44	45	42	40	37		
6	71	60	53	48	67	57	51	46	52	47	43	47	43	40	42	39	36	34		
7	66	55	48	43	62	53	46	42	48	43	39	43	39	36	39	36	33	31		
8	62	51	44	39	59	49	42	38	44	39	35	40	36	33	36	33	31	29		
9	58	47	40	36	55	45	39	35	41	36	33	37	33	30	34	31	28	26		
10	55	44	37	33	52	42	36	32	38	33	30	35	31	28	32	29	26	24		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20480	20480	20480
5°	20151	20101	20251
10°	18855	19106	19639
15°	17141	17684	18669
20°	15215	16006	17408
25°	13250	14300	15994
30°	11350	12597	14656
35°	9410	10693	13039
40°	7231	8549	11111
45°	5227	6474	8940
50°	3561	4825	7091
55°	2315	3490	5511
60°	1328	2457	3983
65°	351	1501	2016
70°	174	464	580
75°	77	37	0
80°	56	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	405.2	4.6
10°-20°	1036.1	11.8
20°-30°	1297.1	14.8
30°-40°	1198.1	13.7
40°-50°	805.1	9.2
50°-60°	415.8	4.7
60°-70°	130.2	1.5
70°-80°	8.2	0.1
80°-90°	2.2	0.0
90°-100°	254.5	2.9
100°-110°	691.4	7.9
110°-120°	710.8	8.1
120°-130°	568.3	6.5
130°-140°	446.6	5.1
140°-150°	342.4	3.9
150°-160°	246.2	2.8
160°-170°	150.6	1.7
170°-180°	50.7	0.6
0°-30°	2738.4	31.3
0°-40°	3936.6	44.9
0°-60°	5157.5	58.9
0°-90°	5298.1	60.5
90°-120°	1656.7	18.9
90°-150°	3014.0	34.4
90°-180°	3462.0	39.5
0°-180°	8759.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4440	4440	4440	4440	4440	
5°	4352	4308	4341	4356	4373	403
15°	3589	3576	3703	3827	3909	1000
25°	2603	2624	2809	3002	3142	1193
35°	1671	1713	1899	2122	2315	1035
45°	801	850	992	1186	1370	629
55°	288	336	434	557	685	269
65°	32	62	138	166	185	54
75°	4	4	2	0	0	6
85°	0	0	0	0	0	0
90°	2	7	12	15	15	3
95°	38	139	443	193	130	40
105°	123	191	760	1158	1089	130
115°	218	265	609	1211	1379	215
125°	300	342	551	928	1094	267
135°	361	401	535	756	852	279
145°	418	448	528	642	690	262
155°	472	489	525	577	593	218
165°	511	518	527	549	551	144
175°	530	532	528	535	534	50
180°	530	530	530	530	530	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4439.6	4439.6	4439.6	4439.6	4439.6
2.5°	4450.0	4407.9	4419.0	4418.8	4407.0
5°	4351.6	4307.5	4340.8	4356.3	4373.1
7.5°	4167.7	4133.3	4197.4	4245.4	4280.3
10°	4025.1	3995.7	4078.8	4144.3	4192.6
12.5°	3860.1	3837.5	3937.9	4027.8	4089.5
15°	3589.1	3576.5	3702.9	3827.2	3909.1
17.5°	3298.7	3298.3	3442.6	3596.9	3695.6
20°	3099.4	3105.7	3260.5	3430.6	3546.1
22.5°	2900.1	2914.8	3080.0	3257.5	3389.8
25°	2603.2	2624.2	2809.4	3001.6	3142.3
27.5°	2318.0	2348.6	2543.5	2743.3	2914.7
30°	2130.7	2166.4	2364.8	2575.0	2751.4
32.5°	1946.8	1989.2	2182.7	2405.0	2584.7
35°	1671.0	1713.0	1898.7	2122.2	2315.4
37.5°	1386.2	1427.4	1608.8	1828.7	2037.5
40°	1200.7	1246.9	1419.7	1632.9	1845.0
42.5°	1032.3	1078.5	1241.0	1450.5	1650.9
45°	801.2	849.5	992.3	1185.5	1370.3
47.5°	609.6	662.1	787.4	962.2	1130.6
50°	496.2	548.7	672.3	826.3	988.0
52.5°	405.1	455.9	567.5	712.6	860.9
55°	287.8	336.1	433.9	557.1	685.2
57.5°	198.9	240.5	328.2	431.0	531.4
60°	143.9	183.8	266.3	349.8	431.7
62.5°	95.8	132.3	213.1	277.0	332.1
65°	32.2	61.6	137.5	165.8	184.7
67.5°	16.3	19.7	72.2	76.2	82.5
70°	12.9	12.9	34.4	36.7	43.0
72.5°	9.5	9.5	13.7	17.6	18.9
75°	4.3	4.3	2.1	0.0	0.0
77.5°	2.1	2.1	1.7	0.0	0.0
80°	2.1	2.1	0.0	0.0	0.0
82.5°	0.4	0.4	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	1.3	2.4	3.1	3.1
90°	1.7	6.7	11.9	15.3	15.3
92.5°	15.3	69.7	121.0	52.0	44.0
95°	37.5	139.2	443.2	192.9	129.6
97.5°	62.1	153.7	679.5	528.6	371.3
100°	78.4	163.4	751.8	762.1	615.4
102.5°	94.8	173.1	770.9	942.5	813.1
105°	122.7	191.1	760.3	1157.6	1089.3
107.5°	151.7	212.1	716.3	1268.7	1287.7
110°	172.2	227.2	683.6	1290.6	1372.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	189.9	242.2	650.8	1272.4	1395.4
115°	218.2	264.9	608.6	1210.7	1379.1
117.5°	244.8	289.5	581.6	1123.3	1312.9
120°	262.5	305.9	569.4	1064.6	1252.9
122.5°	277.5	320.9	561.2	1005.8	1187.5
125°	300.0	341.7	550.6	927.7	1094.4
127.5°	320.1	361.5	544.8	868.5	1011.6
130°	332.4	372.4	542.1	831.4	959.7
132.5°	344.7	384.7	539.4	799.7	913.4
135°	361.4	401.4	535.3	755.7	852.3
137.5°	379.5	415.8	533.2	716.8	798.1
140°	390.4	425.4	531.9	692.1	765.4
142.5°	401.3	433.6	530.5	672.7	734.0
145°	417.6	447.6	528.4	642.1	690.4
147.5°	436.1	461.7	526.7	618.0	656.0
150°	448.3	470.0	526.7	604.1	634.1
152.5°	457.9	476.9	525.4	591.7	616.4
155°	472.2	488.9	525.0	576.6	593.2
157.5°	486.2	499.2	525.0	566.2	578.9
160°	494.4	506.0	525.0	559.4	569.4
162.5°	502.5	511.5	526.4	553.8	561.2
165°	511.4	518.1	526.7	548.9	550.6
167.5°	520.6	523.9	528.4	543.1	544.5
170°	523.3	526.7	528.4	540.4	540.4
172.5°	526.1	528.1	528.4	537.7	537.7
175°	530.2	531.8	528.4	535.2	533.6
177.5°	531.5	531.5	527.4	532.8	530.2
180°	530.2	530.2	530.2	530.2	530.2

(END OF REPORT)