

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: P518462

Luminaire Tested: **SQ4-BB-050U-100D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518462
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-100D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

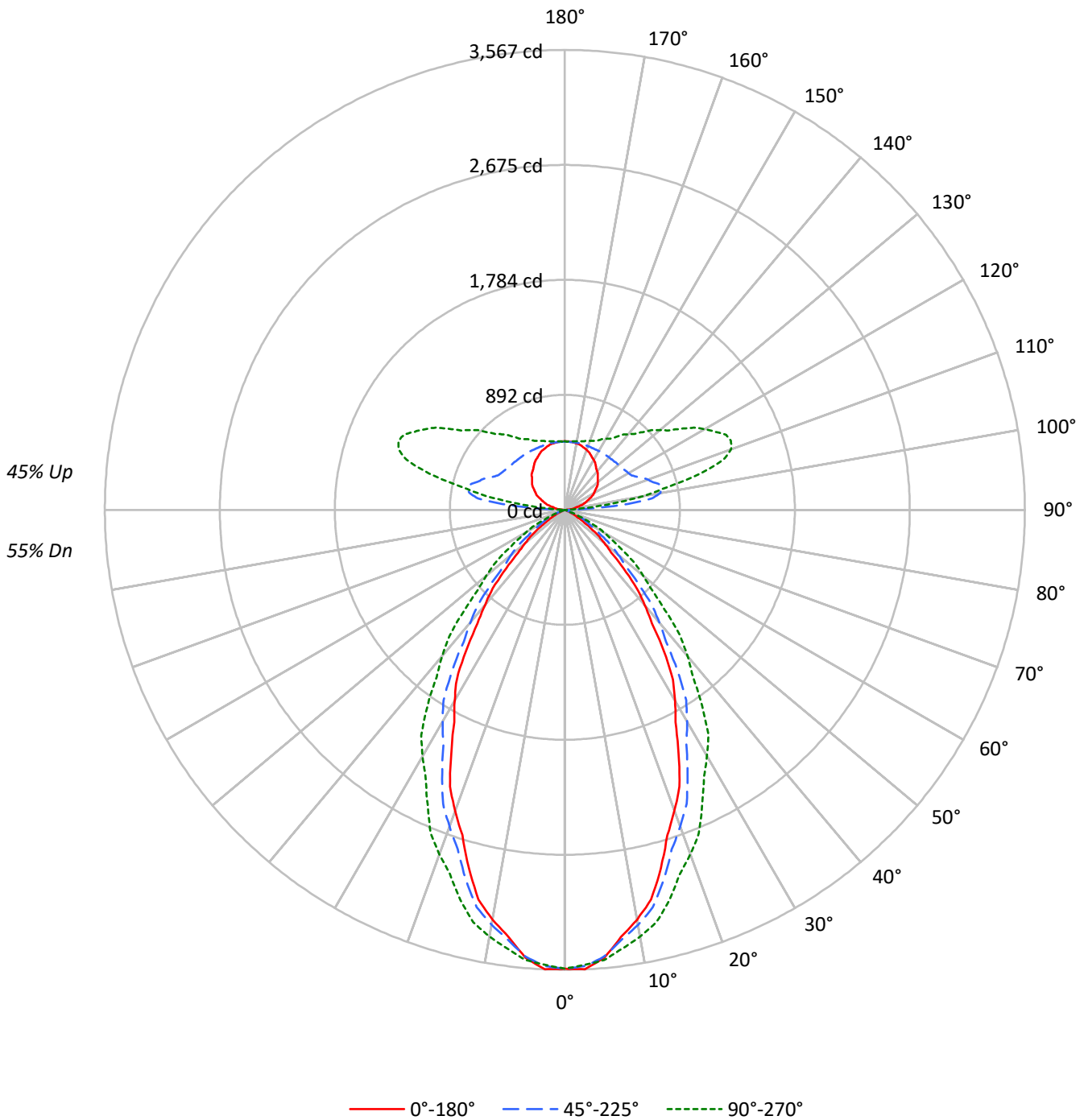
Lumens per Lamp: N/A
Luminaire Lumens: 7708.8 lumens
Efficiency: N/A
Efficacy: 80.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 95.4
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



TEST NUMBER: P518462
CATALOG NUMBER: SQ4-BB-050U-100D-935-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P518462

CATALOG NUMBER: SQ4-BB-050U-100D-935-1D-UNV-STD-W-8

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	0																
RCR																																					
0	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	55																			
1	101	97	94	91	94	91	88	86	78	77	75	67	66	65	57	56	55	50																			
2	94	87	82	78	87	82	77	74	71	68	65	61	59	57	52	51	50	45																			
3	87	79	72	67	81	74	68	64	65	61	57	56	53	51	48	46	45	41																			
4	80	71	64	59	75	67	61	56	59	54	51	52	48	46	45	42	40	37																			
5	75	65	57	52	70	61	55	50	54	49	45	47	44	41	41	39	37	34																			
6	70	59	52	46	65	56	49	45	49	44	41	44	40	37	38	36	33	31																			
7	65	54	47	42	61	51	45	40	46	41	37	41	37	34	36	33	31	28																			
8	61	50	43	38	57	47	41	36	42	37	34	38	34	31	33	30	28	26																			
9	57	46	39	34	53	44	37	33	39	34	31	35	31	28	31	28	26	24																			
10	54	42	36	31	50	40	34	30	36	32	28	33	29	26	29	26	24	22																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16417	16417	16417
5°	16152	16113	16232
10°	15113	15315	15742
15°	13740	14175	14965
20°	12196	12830	13954
25°	10621	11462	12821
30°	9098	10097	11748
35°	7543	8571	10452
40°	5796	6853	8906
45°	4190	5189	7166
50°	2854	3868	5684
55°	1855	2797	4417
60°	1065	1970	3193
65°	282	1203	1617
70°	139	371	464
75°	61	30	0
80°	45	0	0
85°	0	0	0



TEST NUMBER: P518462

CATALOG NUMBER: SQ4-BB-050U-100D-935-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	324.8	4.2
10°-20°	830.5	10.8
20°-30°	1039.7	13.5
30°-40°	960.4	12.5
40°-50°	645.3	8.4
50°-60°	333.3	4.3
60°-70°	104.4	1.4
70°-80°	6.6	0.1
80°-90°	2.2	0.0
90°-100°	254.5	3.3
100°-110°	691.4	9.0
110°-120°	710.8	9.2
120°-130°	568.3	7.4
130°-140°	446.6	5.8
140°-150°	342.4	4.4
150°-160°	246.2	3.2
160°-170°	150.6	2.0
170°-180°	50.7	0.7
0°-30°	2195.0	28.5
0°-40°	3155.4	40.9
0°-60°	4134.1	53.6
0°-90°	4247.2	55.1
90°-120°	1656.7	21.5
90°-150°	3014.0	39.1
90°-180°	3462.0	44.9
0°-180°	7708.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3559	3559	3559	3559	3559	
5°	3488	3453	3480	3492	3505	323
15°	2877	2867	2968	3068	3133	801
25°	2087	2104	2252	2406	2519	957
35°	1339	1373	1522	1701	1856	830
45°	642	681	795	950	1098	504
55°	231	269	348	446	549	215
65°	26	49	110	133	148	44
75°	3	3	2	0	0	5
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	

TEST NUMBER: P518462

CATALOG NUMBER: SQ4-BB-050U-100D-935-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3558.7	3558.7	3558.7	3558.7	3558.7
2.5°	3566.9	3533.3	3542.1	3541.9	3532.5
5°	3488.1	3452.7	3479.5	3491.8	3505.3
7.5°	3340.7	3313.1	3364.5	3403.0	3430.9
10°	3226.4	3202.8	3269.4	3322.0	3360.7
12.5°	3094.2	3076.0	3156.5	3228.5	3278.0
15°	2876.9	2866.8	2968.1	3067.8	3133.4
17.5°	2644.1	2643.8	2759.5	2883.2	2962.3
20°	2484.4	2489.4	2613.5	2749.9	2842.5
22.5°	2324.6	2336.4	2468.9	2611.1	2717.1
25°	2086.6	2103.5	2251.9	2406.0	2518.8
27.5°	1858.0	1882.6	2038.8	2198.9	2336.3
30°	1707.9	1736.5	1895.5	2064.0	2205.4
32.5°	1560.5	1594.5	1749.5	1927.7	2071.8
35°	1339.4	1373.1	1521.9	1701.1	1855.9
37.5°	1111.2	1144.2	1289.5	1465.8	1633.2
40°	962.4	999.4	1138.0	1308.9	1478.9
42.5°	827.4	864.5	994.8	1162.7	1323.3
45°	642.2	680.9	795.4	950.3	1098.4
47.5°	488.6	530.7	631.2	771.3	906.3
50°	397.7	439.8	538.9	662.3	792.0
52.5°	324.7	365.4	454.9	571.2	690.0
55°	230.7	269.4	347.8	446.5	549.2
57.5°	159.4	192.8	263.1	345.5	425.9
60°	115.4	147.3	213.5	280.4	346.1
62.5°	76.8	106.1	170.8	222.1	266.2
65°	25.8	49.4	110.2	132.9	148.1
67.5°	13.1	15.8	57.8	61.1	66.1
70°	10.3	10.3	27.5	29.4	34.4
72.5°	7.6	7.6	11.0	14.1	15.2
75°	3.4	3.4	1.7	0.0	0.0
77.5°	1.7	1.7	1.4	0.0	0.0
80°	1.7	1.7	0.0	0.0	0.0
82.5°	0.3	0.3	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



TEST NUMBER: P518462

CATALOG NUMBER: SQ4-BB-050U-100D-935-1D-UNV-STD-W-8

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)