

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: P518395

Luminaire Tested: **SQ4-BB-050U-050D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518395
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-050D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

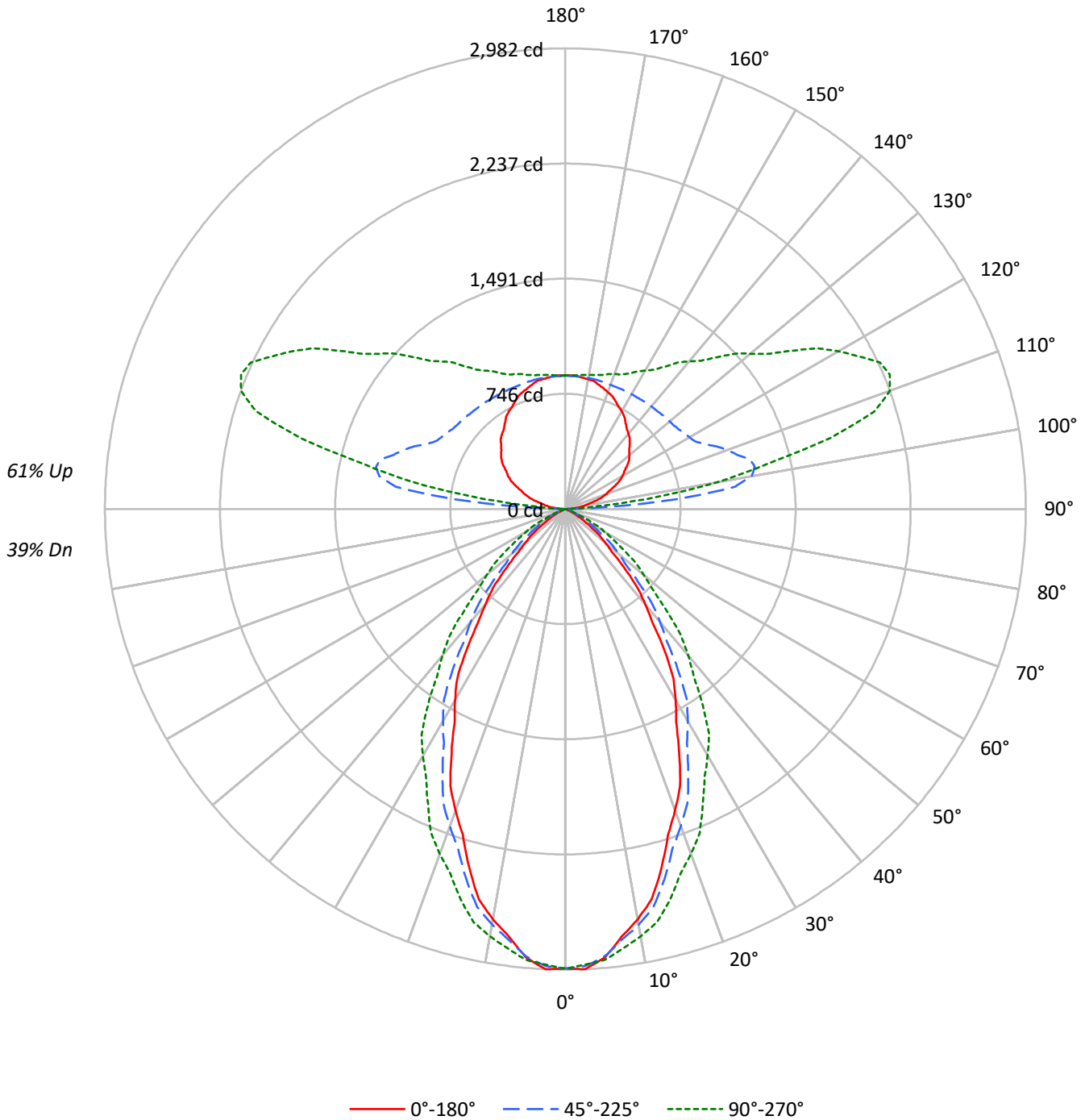
Lumens per Lamp: N/A
Luminaire Lumens: 9193.1 lumens
Efficiency: N/A
Efficacy: 115.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 79.6
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: P518395
CATALOG NUMBER: SQ4-BB-050U-050D-830-1D-UNV-STD-W-12

Luminous Intensity Polar Plot





TEST NUMBER: P518395

CATALOG NUMBER: SQ4-BB-050U-050D-830-1D-UNV-STD-W-12

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	0
RCR																		
0	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	97	93	90	87	88	85	82	79	69	68	66	55	54	53	42	42	41	35
2	89	83	77	73	81	76	71	67	63	59	57	50	48	47	39	38	37	32
3	82	74	68	63	75	68	62	58	56	53	49	46	43	41	36	34	33	29
4	76	66	60	54	69	61	55	51	51	47	43	42	39	37	33	31	30	26
5	70	60	53	47	64	55	49	44	46	42	38	38	35	33	31	29	27	24
6	65	54	47	42	59	50	44	39	42	38	34	35	32	29	28	26	25	22
7	61	50	42	37	55	46	40	35	39	34	31	32	29	27	26	24	22	20
8	56	45	38	33	52	42	36	32	36	31	28	30	27	24	25	22	21	18
9	53	42	35	30	48	39	33	29	33	29	25	28	25	22	23	21	19	17
10	49	38	32	27	45	36	30	26	31	26	23	26	23	20	22	19	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9150	9150	9150
5°	9003	8981	9048
10°	8424	8536	8775
15°	7658	7901	8341
20°	6798	7151	7778
25°	5920	6389	7146
30°	5071	5628	6548
35°	4205	4777	5826
40°	3231	3820	4964
45°	2335	2892	3994
50°	1591	2155	3168
55°	1034	1559	2462
60°	593	1098	1779
65°	157	670	901
70°	77	207	259
75°	34	17	0
80°	25	0	0
85°	0	0	0



TEST NUMBER: P518395

CATALOG NUMBER: SQ4-BB-050U-050D-830-1D-UNV-STD-W-12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	271.5	3.0
10°-20°	694.4	7.6
20°-30°	869.3	9.5
30°-40°	803.0	8.7
40°-50°	539.5	5.9
50°-60°	278.7	3.0
60°-70°	87.3	0.9
70°-80°	5.5	0.1
80°-90°	3.4	0.0
90°-100°	414.7	4.5
100°-110°	1126.6	12.3
110°-120°	1158.3	12.6
120°-130°	926.1	10.1
130°-140°	727.6	7.9
140°-150°	557.9	6.1
150°-160°	401.2	4.4
160°-170°	245.4	2.7
170°-180°	82.7	0.9
0°-30°	1835.2	20.0
0°-40°	2638.2	28.7
0°-60°	3456.4	37.6
0°-90°	3552.6	38.6
90°-120°	2699.5	29.4
90°-150°	4911.2	53.4
90°-180°	5640.0	61.4
0°-180°	9193.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2975	2975	2975	2975	2975	
5°	2916	2887	2909	2920	2931	270
15°	2405	2397	2482	2565	2620	670
25°	1745	1759	1883	2012	2106	800
35°	1120	1148	1272	1422	1552	694
45°	537	569	665	794	918	422
55°	193	225	291	373	459	180
65°	22	41	92	111	124	36
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	3	11	19	25	25	4
95°	61	227	722	314	211	65
105°	200	311	1239	1886	1775	212
115°	356	432	992	1973	2247	351
125°	489	557	897	1512	1783	436
135°	589	654	872	1231	1389	455
145°	680	729	861	1046	1125	427
155°	769	797	856	940	967	355
165°	833	844	858	894	897	235
175°	864	867	861	872	869	82
180°	864	864	864	864	864	

TEST NUMBER: P518395

CATALOG NUMBER: SQ4-BB-050U-050D-830-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2975.3	2975.3	2975.3	2975.3	2975.3
2.5°	2982.3	2954.1	2961.5	2961.3	2953.5
5°	2916.3	2886.8	2909.1	2919.5	2930.7
7.5°	2793.1	2770.0	2813.0	2845.2	2868.5
10°	2697.5	2677.8	2733.5	2777.4	2809.8
12.5°	2587.0	2571.8	2639.1	2699.3	2740.7
15°	2405.3	2396.9	2481.6	2564.9	2619.8
17.5°	2210.7	2210.4	2307.2	2410.6	2476.7
20°	2077.1	2081.4	2185.1	2299.1	2376.5
22.5°	1943.5	1953.4	2064.2	2183.1	2271.7
25°	1744.6	1758.7	1882.8	2011.6	2105.9
27.5°	1553.5	1574.0	1704.6	1838.5	1953.3
30°	1427.9	1451.9	1584.8	1725.7	1843.9
32.5°	1304.7	1333.1	1462.8	1611.8	1732.2
35°	1119.9	1148.0	1272.5	1422.2	1551.7
37.5°	929.0	956.6	1078.1	1225.6	1365.5
40°	804.7	835.6	951.5	1094.3	1236.5
42.5°	691.8	722.8	831.7	972.1	1106.4
45°	536.9	569.3	665.0	794.5	918.4
47.5°	408.5	443.7	527.7	644.8	757.7
50°	332.5	367.7	450.5	553.8	662.1
52.5°	271.5	305.5	380.3	477.6	576.9
55°	192.9	225.3	290.8	373.3	459.2
57.5°	133.3	161.2	219.9	288.8	356.1
60°	96.4	123.2	178.5	234.4	289.3
62.5°	64.2	88.7	142.8	185.7	222.5
65°	21.6	41.3	92.1	111.1	123.8
67.5°	10.9	13.2	48.4	51.1	55.3
70°	8.6	8.6	23.0	24.6	28.8
72.5°	6.3	6.3	9.2	11.8	12.7
75°	2.9	2.9	1.4	0.0	0.0
77.5°	1.4	1.4	1.2	0.0	0.0
80°	1.4	1.4	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°	0.6	2.2	3.9	5.0	5.0
90°	2.8	10.9	19.4	25.0	25.0
92.5°	25.0	113.5	197.2	84.7	71.7
95°	61.1	226.8	722.2	314.3	211.1
97.5°	101.1	250.5	1107.2	861.4	605.0
100°	127.8	266.3	1225.0	1241.8	1002.8
102.5°	154.4	282.1	1256.1	1535.7	1325.0
105°	200.0	311.4	1238.9	1886.3	1775.0
107.5°	247.2	345.5	1167.2	2067.3	2098.3
110°	280.6	370.2	1113.9	2103.0	2236.1

TEST NUMBER: P518395

CATALOG NUMBER: SQ4-BB-050U-050D-830-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	309.4	394.7	1060.5	2073.4	2273.8
115°	355.5	431.6	991.6	1972.9	2247.2
117.5°	398.9	471.7	947.8	1830.3	2139.4
120°	427.8	498.4	927.8	1734.7	2041.6
122.5°	452.2	522.8	914.4	1638.9	1935.0
125°	488.9	556.8	897.2	1511.7	1783.3
127.5°	521.7	589.0	887.8	1415.3	1648.3
130°	541.7	606.8	883.3	1354.7	1563.9
132.5°	561.7	626.8	878.9	1303.1	1488.3
135°	588.9	654.1	872.2	1231.3	1388.9
137.5°	618.3	677.5	868.9	1168.0	1300.5
140°	636.1	693.1	866.6	1127.7	1247.2
142.5°	653.9	706.6	864.4	1096.1	1196.1
145°	680.5	729.4	861.1	1046.2	1125.0
147.5°	710.5	752.4	858.3	1006.9	1068.9
150°	730.5	765.8	858.3	984.4	1033.3
152.5°	746.1	777.1	856.1	964.2	1004.4
155°	769.4	796.6	855.5	939.5	966.6
157.5°	792.2	813.4	855.5	922.7	943.3
160°	805.5	824.6	855.5	911.5	927.8
162.5°	818.9	833.5	857.8	902.5	914.4
165°	833.3	844.2	858.3	894.5	897.2
167.5°	848.3	853.7	861.1	885.0	887.2
170°	852.8	858.2	861.1	880.5	880.5
172.5°	857.2	860.5	861.1	876.1	876.1
175°	863.9	866.6	861.1	872.1	869.4
177.5°	866.1	866.1	859.4	868.2	863.9
180°	863.9	863.9	863.9	863.9	863.9

(END OF REPORT)