

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: P518315

Luminaire Tested: **SQ4-BB-025U-050D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518315
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-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

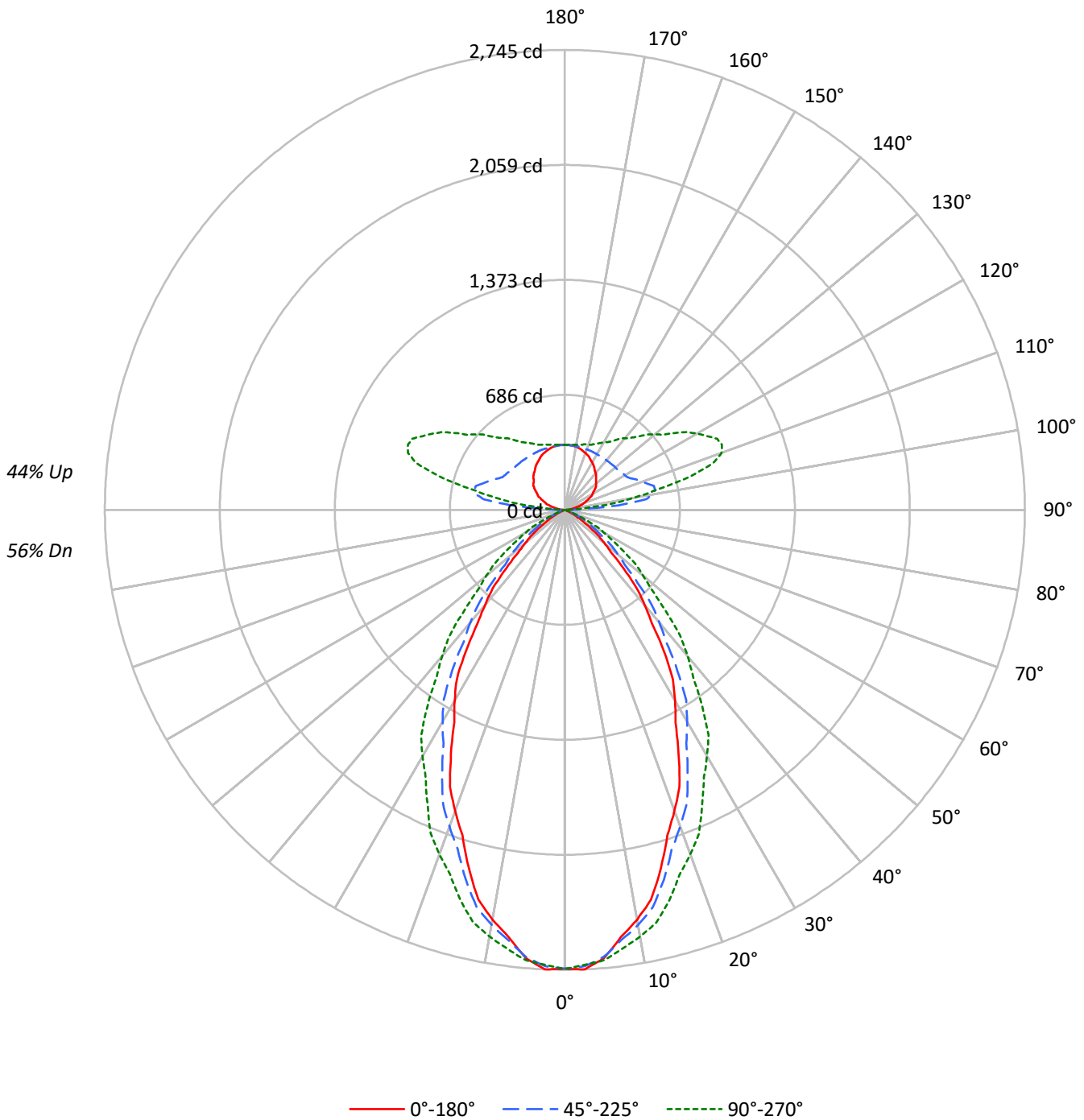
Lumens per Lamp: N/A
Luminaire Lumens: 5787.2 lumens
Efficiency: N/A
Efficacy: 84.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 68.8
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					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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	56				
1	101	98	94	92	94	91	89	86	79	77	76	68	67	66	58	57	56	52				
2	94	88	83	78	87	82	78	74	72	69	66	62	60	58	54	52	51	47				
3	87	79	73	68	81	74	69	64	65	61	58	57	54	52	49	47	46	42				
4	81	71	65	59	75	67	61	57	60	55	51	52	49	46	46	43	41	38				
5	75	65	58	53	70	61	55	50	55	50	46	48	45	42	42	40	37	35				
6	70	59	52	47	65	56	50	45	50	45	41	44	41	38	39	36	34	32				
7	65	54	47	42	61	51	45	41	46	41	37	41	37	34	37	34	31	29				
8	61	50	43	38	57	47	41	37	43	38	34	38	34	31	34	31	29	27				
9	57	46	39	35	54	44	38	34	40	35	31	36	32	29	32	29	27	25				
10	54	43	36	32	51	41	35	31	37	32	29	33	29	27	30	27	25	23				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8423	8423	8423
5°	8288	8267	8329
10°	7755	7858	8077
15°	7050	7273	7678
20°	6258	6583	7160
25°	5450	5881	6578
30°	4668	5181	6028
35°	3870	4398	5363
40°	2974	3516	4569
45°	2150	2663	3677
50°	1465	1984	2916
55°	952	1435	2266
60°	546	1011	1638
65°	145	617	830
70°	72	191	238
75°	32	15	0
80°	23	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.0	4.3
10°-20°	639.2	11.0
20°-30°	800.2	13.8
30°-40°	739.2	12.8
40°-50°	496.7	8.6
50°-60°	256.6	4.4
60°-70°	80.3	1.4
70°-80°	5.1	0.1
80°-90°	2.2	0.0
90°-100°	189.3	3.3
100°-110°	497.7	8.6
110°-120°	516.1	8.9
120°-130°	414.0	7.2
130°-140°	324.8	5.6
140°-150°	249.3	4.3
150°-160°	179.6	3.1
160°-170°	109.9	1.9
170°-180°	37.1	0.6
0°-30°	1689.4	29.2
0°-40°	2428.6	42.0
0°-60°	3181.8	55.0
0°-90°	3269.4	56.5
90°-120°	1203.2	20.8
90°-150°	2191.3	37.9
90°-180°	2518.0	43.5
0°-180°	5787.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2739	2739	2739	2739	2739	
5°	2685	2657	2678	2688	2698	249
15°	2214	2206	2284	2361	2412	617
25°	1606	1619	1733	1852	1939	736
35°	1031	1057	1171	1309	1428	639
45°	494	524	612	731	845	388
55°	178	207	268	344	423	166
65°	20	38	85	102	114	34
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	2	7	20	10	10	2
95°	25	98	326	168	114	28
105°	90	136	550	835	779	95
115°	159	194	441	879	1004	157
125°	222	248	401	678	799	197
135°	264	291	388	547	620	204
145°	306	326	384	466	503	192
155°	346	356	384	421	433	159
165°	374	378	384	398	403	105
175°	388	388	386	391	391	37
180°	388	388	388	388	388	

TEST NUMBER: P518315

CATALOG NUMBER: SQ4-BB-025U-050D-935-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2738.9	2738.9	2738.9	2738.9	2738.9
2.5°	2745.3	2719.4	2726.2	2726.0	2718.8
5°	2684.6	2657.4	2678.0	2687.5	2697.9
7.5°	2571.2	2549.9	2589.5	2619.1	2640.6
10°	2483.2	2465.1	2516.3	2556.7	2586.5
12.5°	2381.4	2367.4	2429.4	2484.9	2522.9
15°	2214.2	2206.4	2284.4	2361.1	2411.6
17.5°	2035.1	2034.8	2123.8	2219.0	2279.9
20°	1912.1	1916.0	2011.5	2116.4	2187.7
22.5°	1789.1	1798.2	1900.2	2009.6	2091.2
25°	1606.0	1618.9	1733.2	1851.8	1938.6
27.5°	1430.0	1448.9	1569.2	1692.4	1798.1
30°	1314.5	1336.5	1458.9	1588.6	1697.4
32.5°	1201.0	1227.2	1346.5	1483.7	1594.6
35°	1030.9	1056.8	1171.4	1309.2	1428.4
37.5°	855.2	880.6	992.5	1128.2	1257.0
40°	740.7	769.2	875.9	1007.4	1138.2
42.5°	636.8	665.3	765.6	894.9	1018.5
45°	494.3	524.1	612.2	731.4	845.4
47.5°	376.1	408.4	485.8	593.6	697.5
50°	306.1	338.5	414.7	509.8	609.5
52.5°	249.9	281.3	350.1	439.6	531.1
55°	177.6	207.4	267.7	343.7	422.7
57.5°	122.7	148.4	202.5	265.9	327.8
60°	88.8	113.4	164.3	215.8	266.3
62.5°	59.1	81.6	131.4	170.9	204.9
65°	19.9	38.0	84.8	102.3	114.0
67.5°	10.1	12.1	44.5	47.0	50.9
70°	8.0	8.0	21.2	22.6	26.5
72.5°	5.8	5.8	8.5	10.9	11.7
75°	2.7	2.7	1.3	0.0	0.0
77.5°	1.3	1.3	1.1	0.0	0.0
80°	1.3	1.3	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°	0.5	1.5	4.0	2.0	2.0
90°	2.5	7.4	19.9	10.0	10.0
92.5°	10.5	50.4	111.6	49.4	31.9
95°	24.9	97.9	326.2	168.1	114.5
97.5°	43.3	107.6	488.1	388.1	285.9
100°	57.3	115.7	537.9	545.1	423.3
102.5°	69.2	123.8	551.8	678.9	574.7
105°	89.6	135.9	550.3	835.4	779.4
107.5°	110.6	153.4	518.9	916.7	930.3
110°	124.5	163.5	493.0	937.6	996.1



TEST NUMBER: P518315

CATALOG NUMBER: SQ4-BB-025U-050D-935-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	138.5	175.5	469.1	924.4	1014.0
115°	159.4	193.5	440.8	879.3	1003.5
117.5°	179.8	211.0	421.3	816.9	954.7
120°	191.7	221.0	413.4	775.0	908.9
122.5°	203.7	232.9	407.4	733.1	865.1
125°	221.6	248.4	400.9	677.6	799.3
127.5°	236.1	263.3	395.4	632.8	735.6
130°	244.0	273.2	393.4	604.8	699.7
132.5°	252.0	281.2	391.4	580.6	665.9
135°	264.0	290.7	388.5	547.0	620.0
137.5°	276.4	302.7	388.0	521.8	581.7
140°	286.4	310.7	386.0	501.8	557.8
142.5°	294.3	316.7	386.0	487.7	535.9
145°	306.3	325.8	383.5	466.5	503.0
147.5°	318.2	337.2	383.5	448.9	479.1
150°	326.2	343.3	383.5	438.8	463.2
152.5°	334.2	347.3	383.5	430.7	449.2
155°	346.1	355.9	383.5	421.1	433.3
157.5°	355.1	364.3	383.5	412.6	421.3
160°	361.1	368.4	383.5	408.5	413.4
162.5°	367.0	372.4	383.5	404.5	409.4
165°	373.5	378.4	383.5	398.5	403.4
167.5°	379.5	381.9	386.0	396.0	397.9
170°	383.5	385.9	386.0	395.9	395.9
172.5°	385.5	386.0	386.0	393.9	391.9
175°	388.5	388.5	386.0	390.9	390.9
177.5°	388.5	388.5	386.5	390.4	388.5
180°	388.5	388.5	388.5	388.5	388.5

(END OF REPORT)