

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: P518467

Luminaire Tested: **SQ4-BB-050U-125D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518467
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-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

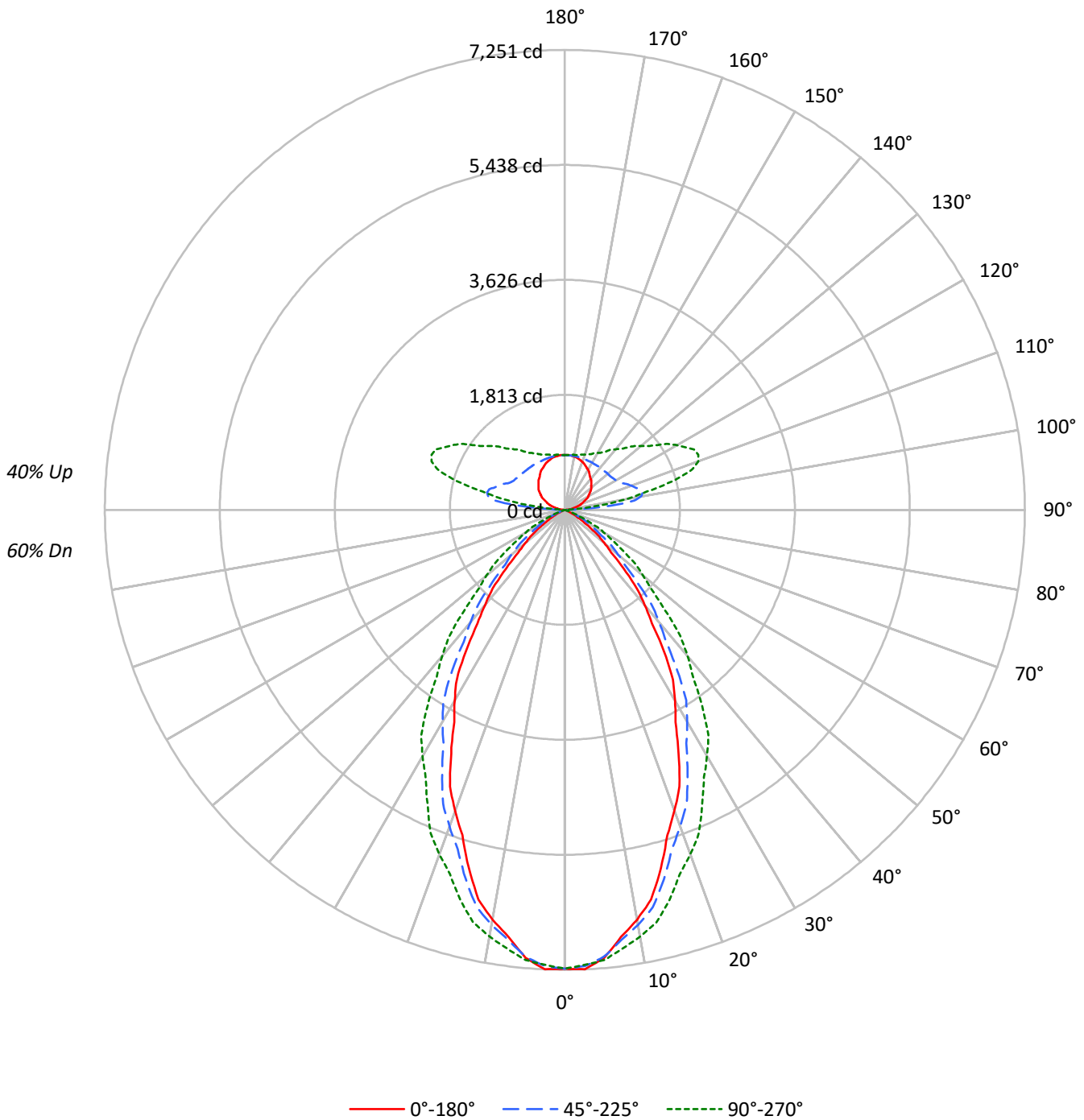
Lumens per Lamp: N/A
Luminaire Lumens: 14273.7 lumens
Efficiency: N/A
Efficacy: 85.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 167
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	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°	22248	22248	22248
5°	21890	21836	21998
10°	20482	20755	21335
15°	18620	19211	20281
20°	16528	17388	18911
25°	14394	15534	17375
30°	12329	13684	15921
35°	10223	11616	14165
40°	7854	9287	12070
45°	5678	7033	9711
50°	3868	5241	7703
55°	2515	3791	5986
60°	1442	2669	4327
65°	382	1630	2190
70°	189	504	629
75°	83	42	0
80°	62	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	660.2	4.6
10°-20°	1688.4	11.8
20°-30°	2113.7	14.8
30°-40°	1952.3	13.7
40°-50°	1311.9	9.2
50°-60°	677.6	4.7
60°-70°	212.2	1.5
70°-80°	13.4	0.1
80°-90°	3.6	0.0
90°-100°	414.7	2.9
100°-110°	1126.6	7.9
110°-120°	1158.3	8.1
120°-130°	926.1	6.5
130°-140°	727.6	5.1
140°-150°	557.9	3.9
150°-160°	401.2	2.8
160°-170°	245.4	1.7
170°-180°	82.7	0.6
0°-30°	4462.2	31.3
0°-40°	6414.5	44.9
0°-60°	8404.0	58.9
0°-90°	8633.2	60.5
90°-120°	2699.5	18.9
90°-150°	4911.2	34.4
90°-180°	5640.0	39.5
0°-180°	14273.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7234	7234	7234	7234	7234	
5°	7091	7019	7073	7098	7126	657
15°	5848	5828	6034	6236	6370	1629
25°	4242	4276	4578	4891	5120	1945
35°	2723	2791	3094	3458	3773	1687
45°	1306	1384	1617	1932	2233	1025
55°	469	548	707	908	1116	438
65°	52	100	224	270	301	89
75°	7	7	4	0	0	10
85°	0	0	0	0	0	1
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7234.3	7234.3	7234.3	7234.3	7234.3
2.5°	7251.1	7182.6	7200.7	7200.2	7181.1
5°	7090.8	7018.9	7073.3	7098.4	7125.8
7.5°	6791.2	6735.1	6839.5	6917.8	6974.6
10°	6558.8	6510.9	6646.3	6753.1	6831.8
12.5°	6290.0	6253.1	6416.7	6563.2	6663.8
15°	5848.3	5827.8	6033.8	6236.3	6369.8
17.5°	5375.1	5374.5	5609.6	5861.1	6021.9
20°	5050.3	5060.6	5312.8	5590.1	5778.3
22.5°	4725.6	4749.5	5018.8	5307.9	5523.5
25°	4241.9	4276.1	4577.9	4891.1	5120.3
27.5°	3777.1	3827.0	4144.6	4470.1	4749.4
30°	3471.9	3530.1	3853.4	4195.9	4483.4
32.5°	3172.3	3241.4	3556.6	3918.8	4211.8
35°	2722.9	2791.4	3093.9	3458.1	3772.9
37.5°	2258.8	2325.9	2621.4	2979.8	3320.0
40°	1956.4	2031.7	2313.4	2660.8	3006.4
42.5°	1682.0	1757.3	2022.2	2363.5	2690.0
45°	1305.5	1384.2	1617.0	1931.8	2232.9
47.5°	993.3	1078.8	1283.1	1567.9	1842.3
50°	808.5	894.0	1095.5	1346.4	1610.0
52.5°	660.1	742.9	924.7	1161.2	1402.8
55°	469.0	547.7	707.0	907.7	1116.5
57.5°	324.1	391.8	534.8	702.3	865.9
60°	234.5	299.5	434.0	570.0	703.5
62.5°	156.1	215.6	347.2	451.4	541.1
65°	52.5	100.4	224.0	270.2	301.0
67.5°	26.6	32.1	117.6	124.1	134.4
70°	21.0	21.0	56.0	59.7	70.0
72.5°	15.4	15.4	22.4	28.7	30.8
75°	7.0	7.0	3.5	0.0	0.0
77.5°	3.5	3.5	2.8	0.0	0.0
80°	3.5	3.5	0.0	0.0	0.0
82.5°	0.7	0.7	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

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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)