

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: P518421

Luminaire Tested: **SQ4-BB-050U-075D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518421
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-075D-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

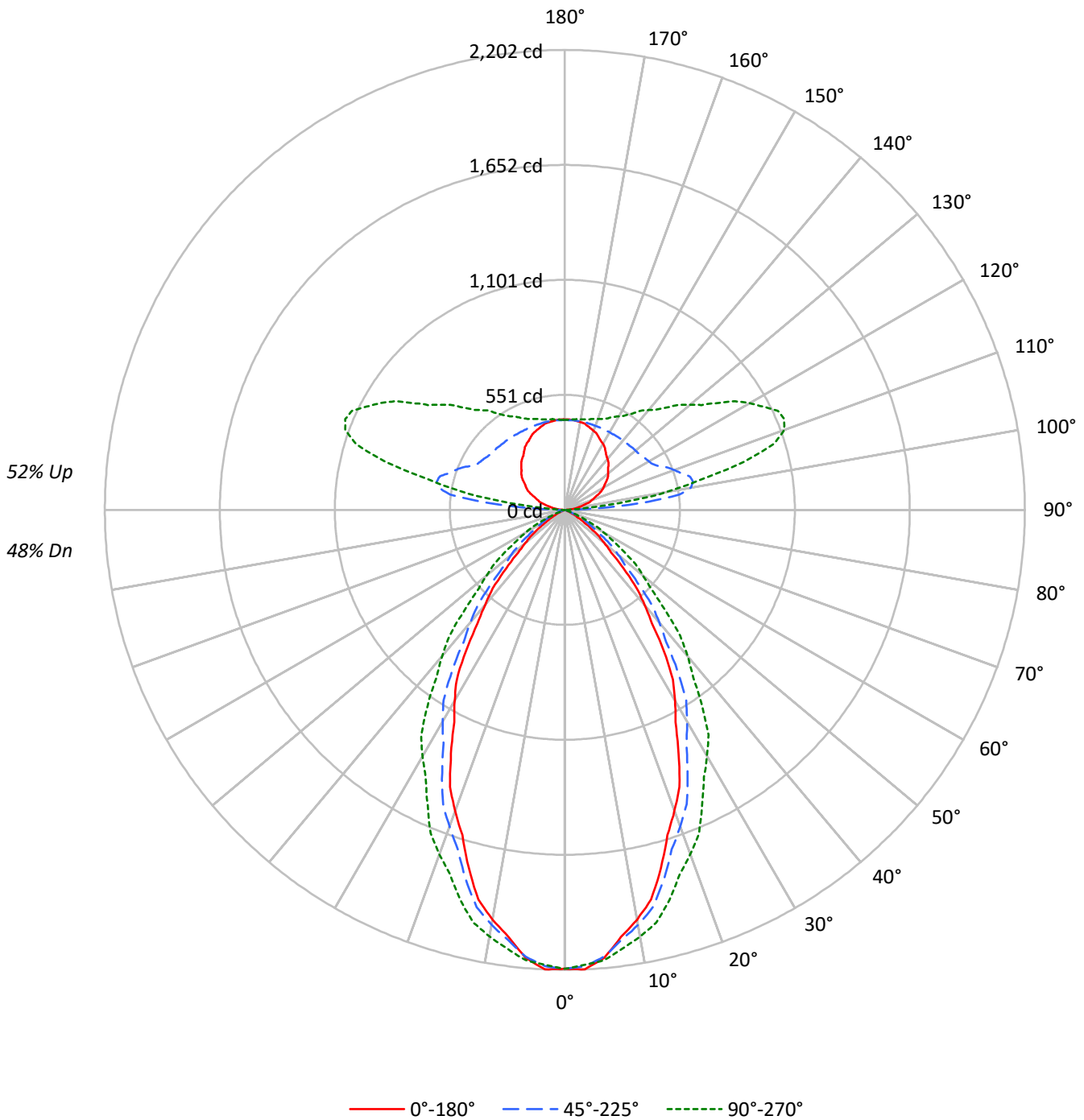
Lumens per Lamp: N/A
Luminaire Lumens: 5442.9 lumens
Efficiency: N/A
Efficacy: 93.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 58.5
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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54	48		
1	99	95	92	89	91	88	85	83	75	73	71	62	61	60	51	50	49	44		
2	92	85	80	76	84	79	75	71	68	64	62	57	55	53	47	45	44	40		
3	85	77	70	65	78	71	66	62	61	57	54	52	49	47	43	41	40	36		
4	79	69	62	57	73	64	58	54	56	51	48	47	44	42	40	38	36	32		
5	73	63	55	50	67	59	52	48	51	46	42	44	40	37	37	34	33	29		
6	68	57	50	45	63	53	47	42	47	42	38	40	37	34	34	32	30	27		
7	63	52	45	40	58	49	43	38	43	38	34	37	33	31	32	29	27	25		
8	59	48	41	36	55	45	39	34	40	35	31	34	31	28	30	27	25	23		
9	55	44	37	33	51	42	35	31	37	32	28	32	28	26	28	25	23	21		
10	52	41	34	30	48	38	33	29	34	29	26	30	26	24	26	23	21	20		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13514	13514	13514
5°	13296	13264	13362
10°	12441	12607	12959
15°	11310	11669	12319
20°	10040	10561	11487
25°	8743	9435	10554
30°	7489	8312	9671
35°	6210	7055	8604
40°	4771	5641	7332
45°	3449	4272	5899
50°	2349	3184	4679
55°	1527	2302	3636
60°	876	1621	2629
65°	231	990	1330
70°	115	306	383
75°	50	26	0
80°	39	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.5	3.7
10°-20°	512.8	9.4
20°-30°	641.9	11.8
30°-40°	592.9	10.9
40°-50°	398.4	7.3
50°-60°	205.8	3.8
60°-70°	64.4	1.2
70°-80°	4.1	0.1
80°-90°	1.7	0.0
90°-100°	207.4	3.8
100°-110°	563.3	10.3
110°-120°	579.1	10.6
120°-130°	463.0	8.5
130°-140°	363.8	6.7
140°-150°	279.0	5.1
150°-160°	200.6	3.7
160°-170°	122.7	2.3
170°-180°	41.3	0.8
0°-30°	1355.2	24.9
0°-40°	1948.1	35.8
0°-60°	2552.4	46.9
0°-90°	2622.6	48.2
90°-120°	1349.8	24.8
90°-150°	2455.6	45.1
90°-180°	2820.0	51.8
0°-180°	5442.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2197	2197	2197	2197	2197	
5°	2154	2132	2148	2156	2164	200
15°	1776	1770	1832	1894	1935	495
25°	1288	1299	1390	1486	1555	591
35°	827	848	940	1050	1146	512
45°	396	420	491	587	678	311
55°	142	166	215	276	339	133
65°	16	30	68	82	91	27
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	1	6	10	12	12	2
95°	31	113	361	157	106	32
105°	100	156	619	943	888	106
115°	178	216	496	986	1124	175
125°	244	278	449	756	892	218
135°	294	327	436	616	694	228
145°	340	365	430	523	562	214
155°	385	398	428	470	483	177
165°	417	422	429	447	449	118
175°	432	433	430	436	435	41
180°	432	432	432	432	432	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2197.1	2197.1	2197.1	2197.1	2197.1
2.5°	2202.2	2181.4	2186.9	2186.8	2180.9
5°	2153.5	2131.7	2148.2	2155.8	2164.2
7.5°	2062.5	2045.5	2077.2	2101.0	2118.2
10°	1992.0	1977.4	2018.5	2051.0	2074.9
12.5°	1910.3	1899.1	1948.8	1993.3	2023.8
15°	1776.2	1769.9	1832.5	1894.0	1934.6
17.5°	1632.5	1632.3	1703.7	1780.1	1828.9
20°	1533.8	1536.9	1613.5	1697.8	1754.9
22.5°	1435.2	1442.5	1524.3	1612.1	1677.5
25°	1288.3	1298.7	1390.3	1485.5	1555.1
27.5°	1147.1	1162.3	1258.7	1357.6	1442.4
30°	1054.4	1072.1	1170.3	1274.3	1361.6
32.5°	963.5	984.4	1080.2	1190.2	1279.1
35°	827.0	847.8	939.6	1050.2	1145.9
37.5°	686.0	706.4	796.1	905.0	1008.3
40°	594.2	617.1	702.6	808.1	913.1
42.5°	510.9	533.7	614.2	717.8	817.0
45°	396.5	420.4	491.1	586.7	678.2
47.5°	301.7	327.6	389.7	476.2	559.5
50°	245.5	271.5	332.7	408.9	489.0
52.5°	200.5	225.6	280.8	352.7	426.0
55°	142.4	166.3	214.7	275.7	339.1
57.5°	98.4	119.0	162.4	213.3	263.0
60°	71.2	91.0	131.8	173.1	213.7
62.5°	47.4	65.5	105.4	137.1	164.3
65°	15.9	30.5	68.0	82.1	91.4
67.5°	8.1	9.7	35.7	37.7	40.8
70°	6.4	6.4	17.0	18.1	21.3
72.5°	4.7	4.7	6.8	8.7	9.4
75°	2.1	2.1	1.1	0.0	0.0
77.5°	1.1	1.1	0.9	0.0	0.0
80°	1.1	1.1	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	1.1	1.9	2.5	2.5
90°	1.4	5.5	9.7	12.5	12.5
92.5°	12.5	56.8	98.6	42.4	35.8
95°	30.6	113.4	361.1	157.2	105.6
97.5°	50.6	125.2	553.6	430.7	302.5
100°	63.9	133.1	612.5	620.9	501.4
102.5°	77.2	141.0	628.0	767.9	662.5
105°	100.0	155.7	619.4	943.2	887.5
107.5°	123.6	172.8	583.6	1033.7	1049.1
110°	140.3	185.1	556.9	1051.5	1118.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	154.7	197.4	530.3	1036.7	1136.9
115°	177.8	215.8	495.8	986.4	1123.6
117.5°	199.4	235.8	473.9	915.2	1069.7
120°	213.9	249.2	463.9	867.4	1020.8
122.5°	226.1	261.4	457.2	819.5	967.5
125°	244.4	278.4	448.6	755.8	891.6
127.5°	260.8	294.5	443.9	707.6	824.2
130°	270.8	303.4	441.7	677.4	781.9
132.5°	280.8	313.4	439.4	651.5	744.2
135°	294.4	327.0	436.1	615.7	694.4
137.5°	309.2	338.8	434.4	584.0	650.3
140°	318.0	346.6	433.3	563.8	623.6
142.5°	326.9	353.3	432.2	548.1	598.0
145°	340.3	364.7	430.5	523.1	562.5
147.5°	355.3	376.2	429.2	503.5	534.4
150°	365.3	382.9	429.2	492.2	516.7
152.5°	373.0	388.5	428.0	482.1	502.2
155°	384.7	398.3	427.8	469.7	483.3
157.5°	396.1	406.7	427.8	461.3	471.7
160°	402.8	412.3	427.8	455.7	463.9
162.5°	409.4	416.8	428.9	451.2	457.2
165°	416.7	422.1	429.2	447.2	448.6
167.5°	424.2	426.9	430.5	442.5	443.6
170°	426.4	429.1	430.5	440.3	440.3
172.5°	428.6	430.2	430.5	438.0	438.0
175°	431.9	433.3	430.5	436.1	434.7
177.5°	433.0	433.0	429.7	434.1	431.9
180°	431.9	431.9	431.9	431.9	431.9

(END OF REPORT)