

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: P518539

Luminaire Tested: **SQ4-BB-075U-100D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518539
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-100D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

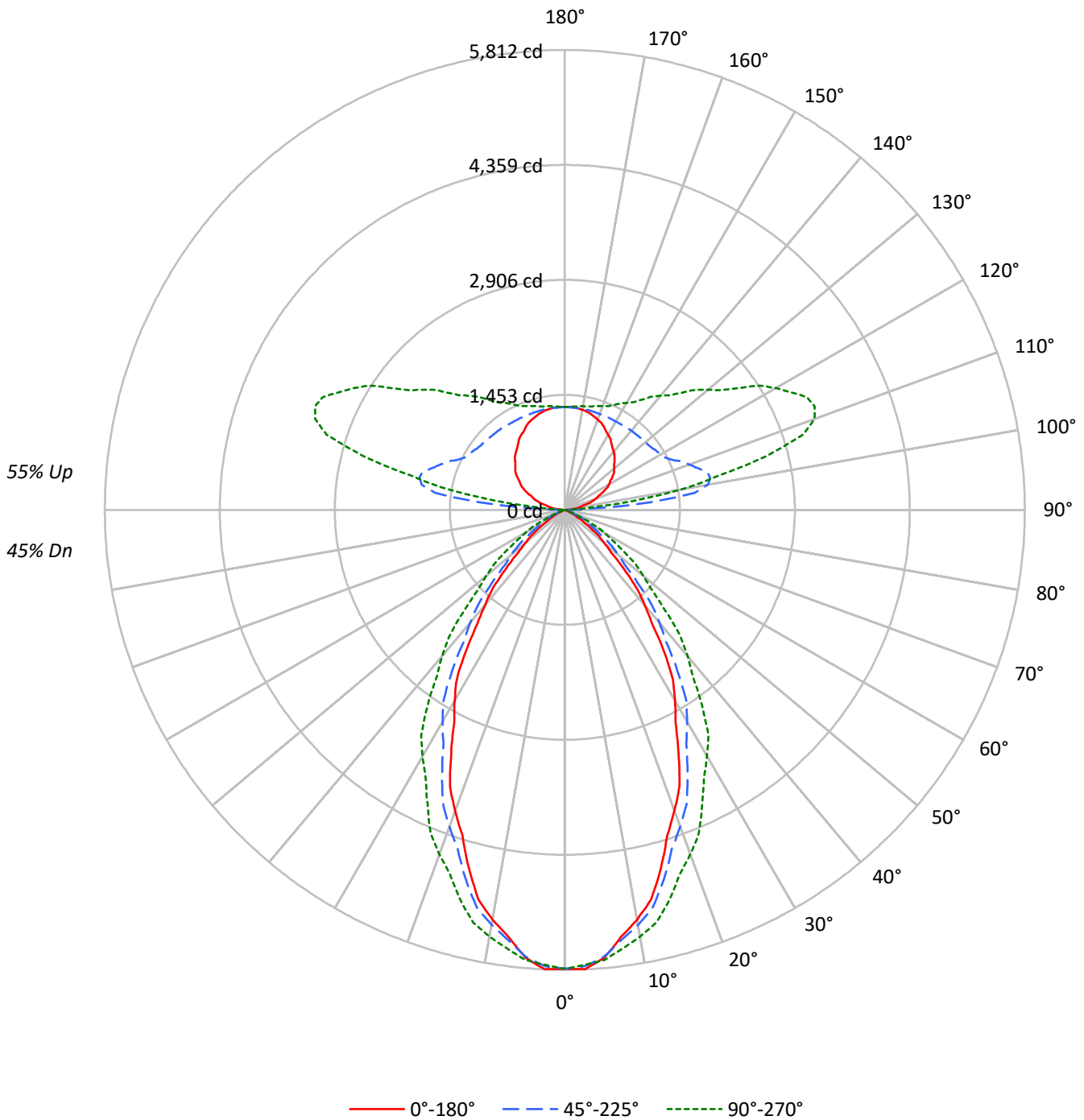
Lumens per Lamp: N/A
Luminaire Lumens: 15398.1 lumens
Efficiency: N/A
Efficacy: 94.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 162.2
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	106	106	106	106	97	97	97	97	81	81	81	65	65	65	51	51	51	45
1	98	95	91	88	90	87	84	82	73	71	69	60	59	58	48	47	47	41
2	91	84	79	75	83	78	74	70	66	63	60	55	53	51	44	43	42	37
3	84	76	69	64	77	70	65	60	60	56	52	50	47	45	41	39	38	33
4	78	68	61	56	71	63	57	53	54	50	46	46	42	40	38	36	34	30
5	72	62	55	49	66	57	51	46	49	45	41	42	38	36	35	32	31	28
6	67	56	49	44	62	52	46	41	45	40	37	38	35	32	32	30	28	25
7	62	51	44	39	57	48	42	37	41	37	33	36	32	29	30	27	26	23
8	58	47	40	35	54	44	38	33	38	33	30	33	29	27	28	25	23	21
9	54	43	36	32	50	41	34	30	35	31	27	31	27	25	26	24	22	20
10	51	40	33	29	47	38	32	28	33	28	25	29	25	23	24	22	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17834	17834	17834
5°	17546	17503	17633
10°	16418	16637	17101
15°	14925	15399	16256
20°	13249	13937	15159
25°	11538	12452	13927
30°	9883	10968	12762
35°	8194	9311	11354
40°	6296	7445	9675
45°	4551	5637	7784
50°	3100	4201	6174
55°	2015	3039	4798
60°	1156	2140	3468
65°	306	1306	1756
70°	151	404	504
75°	67	33	0
80°	50	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	529.2	3.4
10°-20°	1353.3	8.8
20°-30°	1694.2	11.0
30°-40°	1564.9	10.2
40°-50°	1051.5	6.8
50°-60°	543.1	3.5
60°-70°	170.1	1.1
70°-80°	10.7	0.1
80°-90°	3.5	0.0
90°-100°	613.7	4.0
100°-110°	1688.6	11.0
110°-120°	1742.9	11.3
120°-130°	1396.4	9.1
130°-140°	1096.8	7.1
140°-150°	840.5	5.5
150°-160°	604.3	3.9
160°-170°	369.5	2.4
170°-180°	124.6	0.8
0°-30°	3576.8	23.2
0°-40°	5141.7	33.4
0°-60°	6736.4	43.7
0°-90°	6920.7	44.9
90°-120°	4045.3	26.3
90°-150°	7379.0	47.9
90°-180°	8477.0	55.1
0°-180°	15398.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5799	5799	5799	5799	5799	
5°	5684	5626	5670	5690	5712	527
15°	4688	4671	4836	4999	5106	1306
25°	3400	3428	3670	3920	4104	1559
35°	2183	2238	2480	2772	3024	1352
45°	1046	1110	1296	1548	1790	822
55°	376	439	567	728	895	351
65°	42	80	180	217	241	71
75°	6	6	3	0	0	8
85°	0	0	0	0	0	1
90°	3	11	19	25	25	6
95°	91	335	1085	464	296	97
105°	302	464	1861	2834	2644	318
115°	534	651	1492	2972	3372	527
125°	736	839	1354	2290	2683	657
135°	889	986	1315	1852	2096	686
145°	1027	1098	1296	1578	1700	644
155°	1163	1201	1288	1418	1459	534
165°	1257	1273	1293	1346	1354	354
175°	1301	1304	1296	1312	1310	124
180°	1301	1301	1301	1301	1301	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5798.8	5798.8	5798.8	5798.8	5798.8
2.5°	5812.2	5757.4	5771.8	5771.5	5756.1
5°	5683.7	5626.1	5669.7	5689.8	5711.8
7.5°	5443.6	5398.6	5482.3	5545.1	5590.6
10°	5257.3	5218.9	5327.4	5413.0	5476.1
12.5°	5041.9	5012.2	5143.4	5260.8	5341.5
15°	4687.8	4671.4	4836.5	4998.8	5105.8
17.5°	4308.5	4308.0	4496.5	4698.0	4827.0
20°	4048.2	4056.4	4258.6	4480.8	4631.7
22.5°	3787.8	3807.0	4022.9	4254.7	4427.5
25°	3400.1	3427.6	3669.5	3920.5	4104.3
27.5°	3027.6	3067.6	3322.1	3583.1	3806.9
30°	2783.0	2829.6	3088.7	3363.3	3593.7
32.5°	2542.8	2598.2	2850.8	3141.2	3376.0
35°	2182.6	2237.5	2480.0	2771.9	3024.2
37.5°	1810.6	1864.4	2101.2	2388.5	2661.2
40°	1568.2	1628.6	1854.4	2132.8	2409.8
42.5°	1348.3	1408.6	1621.0	1894.5	2156.2
45°	1046.4	1109.5	1296.1	1548.5	1789.8
47.5°	796.2	864.7	1028.5	1256.8	1476.8
50°	648.0	716.6	878.1	1079.3	1290.5
52.5°	529.1	595.5	741.2	930.7	1124.4
55°	375.9	439.0	566.7	727.6	894.9
57.5°	259.8	314.1	428.7	562.9	694.1
60°	188.0	240.1	347.9	456.9	563.9
62.5°	125.1	172.8	278.3	361.8	433.7
65°	42.1	80.5	179.5	216.6	241.3
67.5°	21.3	25.7	94.3	99.5	107.7
70°	16.8	16.8	44.9	47.9	56.1
72.5°	12.3	12.3	18.0	23.0	24.7
75°	5.6	5.6	2.8	0.0	0.0
77.5°	2.8	2.8	2.2	0.0	0.0
80°	2.8	2.8	0.0	0.0	0.0
82.5°	0.6	0.6	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	24.9	24.9
92.5°	38.2	163.3	283.0	108.6	89.2
95°	91.4	335.0	1085.3	464.1	296.3
97.5°	149.0	371.5	1656.2	1276.1	900.4
100°	191.0	394.1	1835.7	1852.8	1511.7
102.5°	230.9	421.0	1882.2	2298.7	1985.7
105°	301.8	464.2	1860.6	2833.6	2644.1
107.5°	369.3	517.7	1754.8	3095.6	3151.9
110°	418.1	553.4	1675.1	3160.8	3355.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	462.4	593.4	1595.3	3118.8	3415.5
115°	534.4	650.8	1492.3	2971.6	3372.3
117.5°	603.0	710.2	1427.0	2765.2	3218.4
120°	645.1	748.0	1398.2	2610.5	3078.8
122.5°	682.8	785.6	1378.3	2474.8	2919.3
125°	736.5	839.4	1353.9	2290.3	2682.9
127.5°	787.4	885.4	1337.8	2136.4	2480.8
130°	814.0	914.2	1329.0	2044.9	2358.9
132.5°	845.0	945.2	1322.3	1964.5	2248.2
135°	888.8	986.2	1315.1	1852.3	2095.9
137.5°	929.7	1020.2	1309.0	1761.6	1962.5
140°	960.7	1044.7	1306.8	1701.3	1882.7
142.5°	987.3	1064.7	1302.4	1647.6	1803.0
145°	1027.2	1097.6	1295.8	1578.2	1700.0
147.5°	1069.8	1130.5	1292.4	1516.7	1614.2
150°	1096.4	1150.6	1290.2	1483.0	1558.8
152.5°	1120.8	1170.6	1288.0	1453.9	1516.7
155°	1162.9	1200.8	1287.5	1418.5	1459.1
157.5°	1193.3	1224.2	1287.5	1389.4	1417.6
160°	1215.5	1239.8	1287.5	1373.8	1395.4
162.5°	1233.2	1253.2	1289.7	1360.4	1377.7
165°	1257.0	1273.2	1293.0	1345.8	1353.9
167.5°	1273.6	1286.1	1295.8	1333.5	1335.6
170°	1284.7	1292.8	1295.8	1329.0	1329.0
172.5°	1293.5	1297.3	1295.8	1322.3	1320.1
175°	1301.3	1304.0	1295.8	1312.3	1309.6
177.5°	1303.5	1303.5	1294.7	1307.8	1303.5
180°	1301.3	1301.3	1301.3	1301.3	1301.3

(END OF REPORT)