

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: P518513

Luminaire Tested: **SQ4-BB-075U-050D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518513
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-050D-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

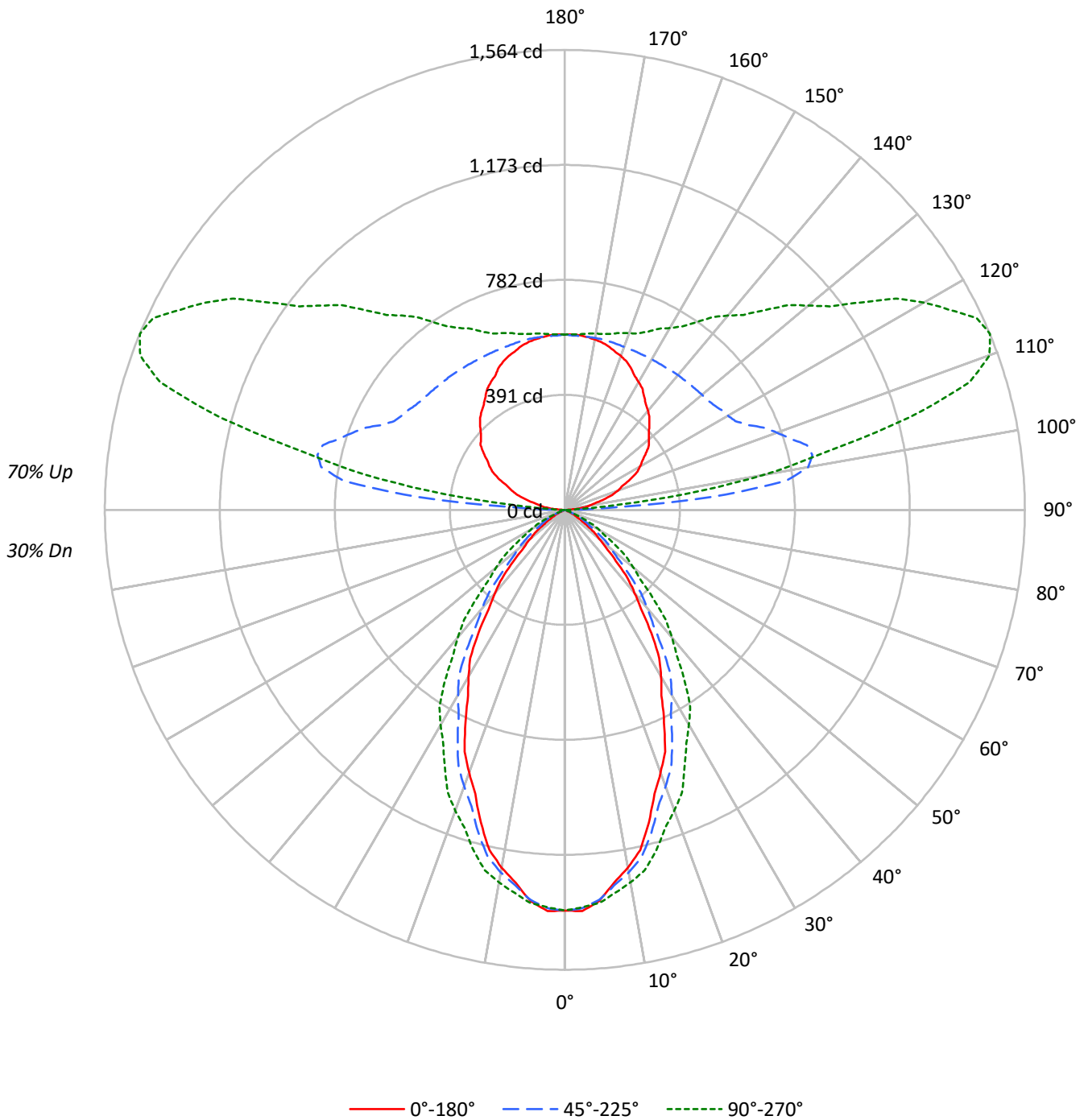
Lumens per Lamp: N/A
Luminaire Lumens: 5509.0 lumens
Efficiency: N/A
Efficacy: 101.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 54.3
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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	30
1	94	90	87	84	84	81	79	76	64	63	61	49	48	47	35	34	33	27
2	87	80	75	70	78	72	68	64	58	55	52	44	42	41	32	31	30	24
3	80	71	65	60	72	65	59	55	52	48	45	40	38	36	29	28	27	22
4	73	64	57	52	66	58	52	47	47	43	39	36	34	32	27	25	24	20
5	68	57	50	45	61	52	46	41	42	38	35	33	30	28	25	23	22	18
6	63	52	45	39	56	47	41	36	39	34	31	30	27	25	23	21	20	16
7	58	47	40	35	52	43	37	32	35	31	27	28	25	23	21	19	18	15
8	54	43	36	31	49	39	33	29	32	28	25	26	23	21	20	18	16	14
9	51	39	33	28	46	36	30	26	30	25	22	24	21	19	18	16	15	13
10	47	36	30	25	43	33	27	24	28	23	20	22	19	17	17	15	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8380	8380	8380
5°	8246	8225	8287
10°	7715	7818	8036
15°	7014	7236	7639
20°	6226	6549	7124
25°	5422	5851	6545
30°	4644	5155	5997
35°	3850	4375	5336
40°	2959	3498	4546
45°	2139	2649	3659
50°	1457	1974	2901
55°	947	1428	2255
60°	544	1005	1630
65°	144	614	825
70°	72	189	237
75°	31	17	0
80°	25	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.3	2.3
10°-20°	318.0	5.8
20°-30°	398.1	7.2
30°-40°	367.7	6.7
40°-50°	247.1	4.5
50°-60°	127.6	2.3
60°-70°	40.0	0.7
70°-80°	2.5	0.0
80°-90°	1.6	0.0
90°-100°	281.1	5.1
100°-110°	773.3	14.0
110°-120°	798.1	14.5
120°-130°	639.5	11.6
130°-140°	502.3	9.1
140°-150°	384.9	7.0
150°-160°	276.7	5.0
160°-170°	169.2	3.1
170°-180°	57.0	1.0
0°-30°	840.4	15.3
0°-40°	1208.1	21.9
0°-60°	1582.8	28.7
0°-90°	1626.9	29.5
90°-120°	1852.5	33.6
90°-150°	3379.1	61.3
90°-180°	3882.0	70.5
0°-180°	5509.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1362	1362	1362	1362	1362	
5°	1336	1322	1332	1337	1342	124
15°	1102	1098	1136	1175	1200	307
25°	799	805	862	921	964	366
35°	513	526	583	651	711	318
45°	246	261	304	364	421	193
55°	88	103	133	171	210	82
65°	10	19	42	51	57	17
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	1	5	9	11	11	3
95°	42	153	497	212	136	44
105°	138	213	852	1298	1211	146
115°	245	298	683	1361	1544	241
125°	337	384	620	1049	1229	301
135°	407	452	602	848	960	314
145°	470	503	593	723	778	295
155°	532	550	590	650	668	245
165°	576	583	592	616	620	162
175°	596	597	593	601	600	57
180°	596	596	596	596	596	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1362.5	1362.5	1362.5	1362.5	1362.5
2.5°	1365.7	1352.8	1356.2	1356.1	1352.5
5°	1335.5	1322.0	1332.2	1336.9	1342.1
7.5°	1279.1	1268.5	1288.2	1302.9	1313.6
10°	1235.3	1226.3	1251.8	1271.9	1286.7
12.5°	1184.7	1177.7	1208.5	1236.1	1255.1
15°	1101.5	1097.6	1136.4	1174.6	1199.7
17.5°	1012.4	1012.2	1056.5	1103.9	1134.2
20°	951.2	953.1	1000.6	1052.8	1088.3
22.5°	890.0	894.5	945.3	999.7	1040.3
25°	798.9	805.4	862.2	921.2	964.4
27.5°	711.4	720.8	780.6	841.9	894.5
30°	653.9	664.9	725.8	790.3	844.4
32.5°	597.5	610.5	669.9	738.1	793.2
35°	512.8	525.7	582.7	651.3	710.6
37.5°	425.4	438.1	493.7	561.2	625.3
40°	368.5	382.7	435.7	501.1	566.2
42.5°	316.8	331.0	380.9	445.2	506.6
45°	245.9	260.7	304.5	363.8	420.6
47.5°	187.1	203.2	241.7	295.3	347.0
50°	152.3	168.4	206.3	253.6	303.2
52.5°	124.3	139.9	174.2	218.7	264.2
55°	88.3	103.2	133.2	171.0	210.3
57.5°	61.0	73.8	100.7	132.3	163.1
60°	44.2	56.4	81.7	107.4	132.5
62.5°	29.4	40.6	65.4	85.0	101.9
65°	9.9	18.9	42.2	50.9	56.7
67.5°	5.0	6.0	22.1	23.4	25.3
70°	4.0	4.0	10.5	11.2	13.2
72.5°	2.9	2.9	4.2	5.4	5.8
75°	1.3	1.3	0.7	0.0	0.0
77.5°	0.7	0.7	0.5	0.0	0.0
80°	0.7	0.7	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	1.0	1.8	2.3	2.3
90°	1.3	5.0	8.9	11.4	11.4
92.5°	17.5	74.8	129.6	49.8	40.8
95°	41.8	153.4	497.0	212.5	135.7
97.5°	68.2	170.1	758.5	584.4	412.3
100°	87.5	180.5	840.6	848.5	692.3
102.5°	105.7	192.8	861.9	1052.6	909.3
105°	138.2	212.6	852.0	1297.6	1210.8
107.5°	169.1	237.1	803.6	1417.6	1443.4
110°	191.5	253.4	767.1	1447.4	1536.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	211.7	271.7	730.6	1428.2	1564.1
115°	244.7	298.0	683.4	1360.8	1544.3
117.5°	276.1	325.2	653.5	1266.3	1473.8
120°	295.4	342.5	640.3	1195.4	1409.9
122.5°	312.7	359.8	631.2	1133.3	1336.9
125°	337.3	384.4	620.0	1048.8	1228.6
127.5°	360.6	405.5	612.6	978.3	1136.0
130°	372.8	418.6	608.6	936.4	1080.2
132.5°	387.0	432.8	605.5	899.6	1029.5
135°	407.0	451.6	602.2	848.2	959.8
137.5°	425.8	467.2	599.5	806.7	898.7
140°	440.0	478.4	598.4	779.1	862.2
142.5°	452.1	487.6	596.4	754.5	825.6
145°	470.4	502.6	593.4	722.7	778.5
147.5°	489.9	517.7	591.9	694.5	739.2
150°	502.1	526.9	590.8	679.1	713.8
152.5°	513.2	536.1	589.8	665.8	694.5
155°	532.5	549.9	589.6	649.6	668.2
157.5°	546.5	560.6	589.6	636.3	649.2
160°	556.6	567.8	589.6	629.1	639.0
162.5°	564.7	573.9	590.6	623.0	630.9
165°	575.6	583.1	592.1	616.3	620.0
167.5°	583.2	588.9	593.4	610.6	611.6
170°	588.3	592.0	593.4	608.6	608.6
172.5°	592.4	594.1	593.4	605.5	604.5
175°	595.9	597.1	593.4	601.0	599.7
177.5°	596.9	596.9	592.9	598.9	596.9
180°	595.9	595.9	595.9	595.9	595.9

(END OF REPORT)