

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: P518523

Luminaire Tested: **SQ4-BB-075U-075D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518523
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-075D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

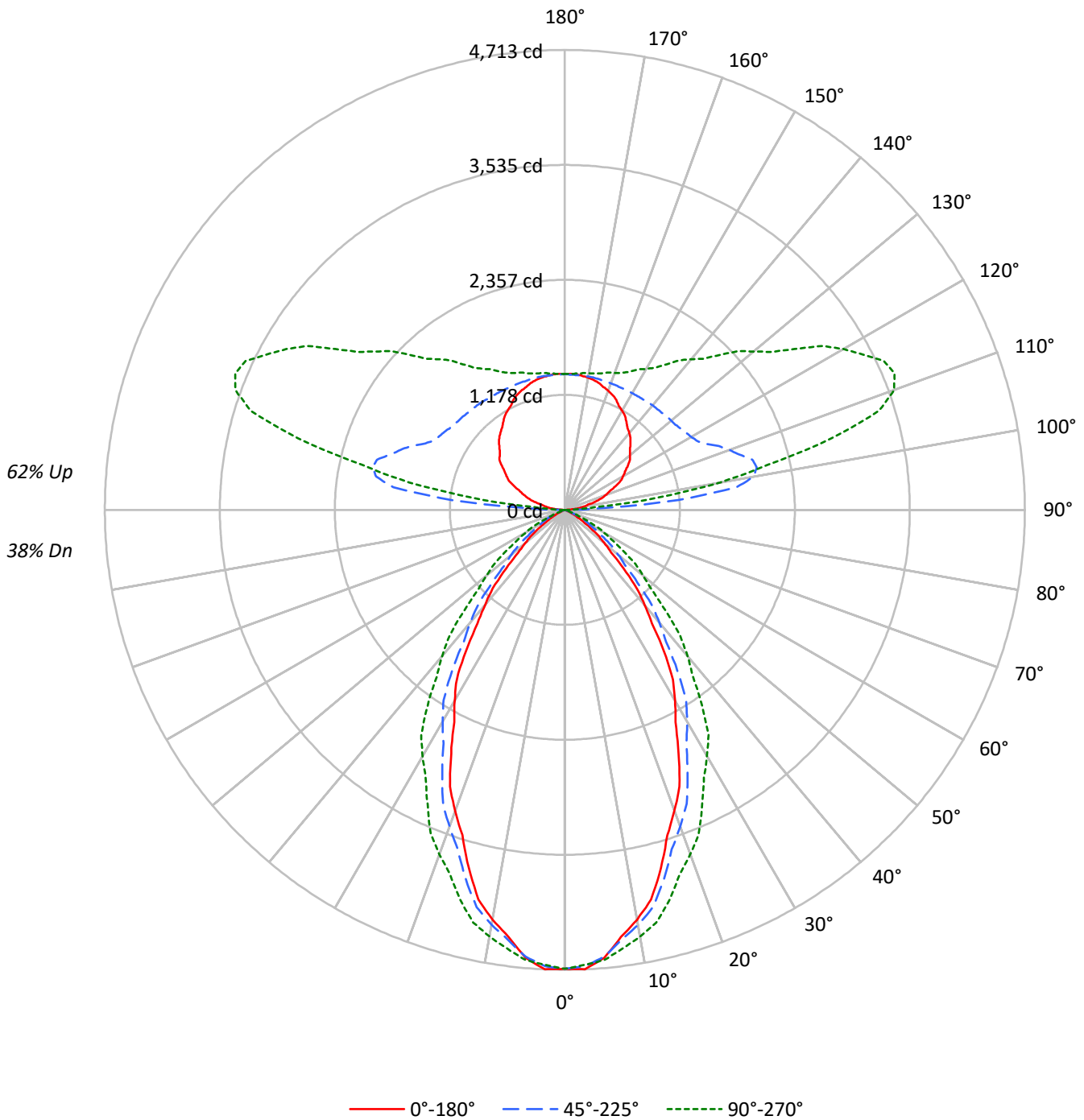
Lumens per Lamp: N/A
Luminaire Lumens: 14684.6 lumens
Efficiency: N/A
Efficacy: 110.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 133.4
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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	93	89	86	88	85	82	79	69	67	66	55	54	53	42	41	41	35
2	89	83	77	73	81	76	71	67	62	59	57	50	48	46	39	38	37	32
3	82	74	68	62	75	68	62	58	56	52	49	46	43	41	36	34	33	28
4	76	66	59	54	69	61	55	50	51	47	43	42	39	36	33	31	30	26
5	70	60	53	47	64	55	49	44	46	42	38	38	35	32	30	28	27	23
6	65	54	47	42	59	50	44	39	42	38	34	35	32	29	28	26	24	21
7	60	49	42	37	55	46	39	35	39	34	31	32	29	26	26	24	22	20
8	56	45	38	33	52	42	36	31	36	31	28	30	26	24	24	22	20	18
9	53	42	35	30	48	39	33	28	33	28	25	28	24	22	23	20	19	17
10	49	38	32	27	45	36	30	26	31	26	23	26	23	20	21	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14461	14461	14461
5°	14229	14193	14299
10°	13313	13491	13867
15°	12103	12487	13183
20°	10744	11302	12292
25°	9356	10097	11294
30°	8014	8895	10349
35°	6645	7550	9207
40°	5105	6037	7845
45°	3690	4571	6313
50°	2514	3407	5007
55°	1634	2464	3891
60°	937	1735	2813
65°	248	1060	1423
70°	122	327	409
75°	53	27	0
80°	41	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	429.1	2.9
10°-20°	1097.4	7.5
20°-30°	1373.9	9.4
30°-40°	1269.0	8.6
40°-50°	852.7	5.8
50°-60°	440.4	3.0
60°-70°	137.9	0.9
70°-80°	8.7	0.1
80°-90°	3.7	0.0
90°-100°	656.8	4.5
100°-110°	1807.0	12.3
110°-120°	1865.1	12.7
120°-130°	1494.3	10.2
130°-140°	1173.7	8.0
140°-150°	899.4	6.1
150°-160°	646.7	4.4
160°-170°	395.4	2.7
170°-180°	133.3	0.9
0°-30°	2900.4	19.8
0°-40°	4169.4	28.4
0°-60°	5462.6	37.2
0°-90°	5612.9	38.2
90°-120°	4328.8	29.5
90°-150°	7896.3	53.8
90°-180°	9072.0	61.8
0°-180°	14684.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4702	4702	4702	4702	4702	
5°	4609	4562	4598	4614	4632	427
15°	3801	3788	3922	4054	4140	1059
25°	2757	2779	2976	3179	3328	1264
35°	1770	1814	2011	2248	2452	1096
45°	848	900	1051	1256	1451	666
55°	305	356	460	590	726	284
65°	34	65	146	176	196	58
75°	4	4	2	0	0	6
85°	0	0	0	0	0	1
90°	3	12	21	27	27	7
95°	98	358	1161	497	317	103
105°	323	497	1991	3032	2830	340
115°	572	696	1597	3180	3609	564
125°	788	898	1449	2451	2871	703
135°	951	1055	1407	1982	2243	734
145°	1099	1174	1387	1689	1819	689
155°	1244	1285	1378	1518	1561	572
165°	1345	1362	1384	1440	1449	379
175°	1392	1395	1387	1404	1401	132
180°	1392	1392	1392	1392	1392	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4702.3	4702.3	4702.3	4702.3	4702.3
2.5°	4713.2	4668.7	4680.4	4680.1	4667.7
5°	4609.0	4562.3	4597.6	4613.9	4631.7
7.5°	4414.3	4377.8	4445.6	4496.5	4533.5
10°	4263.2	4232.1	4320.1	4389.5	4440.6
12.5°	4088.5	4064.5	4170.8	4266.0	4331.4
15°	3801.4	3788.0	3922.0	4053.6	4140.4
17.5°	3493.8	3493.4	3646.2	3809.7	3914.2
20°	3282.7	3289.4	3453.3	3633.6	3755.9
22.5°	3071.6	3087.2	3262.2	3450.1	3590.3
25°	2757.2	2779.4	2975.6	3179.2	3328.2
27.5°	2455.1	2487.6	2694.0	2905.6	3087.1
30°	2256.7	2294.5	2504.7	2727.3	2914.2
32.5°	2062.0	2106.9	2311.8	2547.2	2737.6
35°	1769.9	1814.4	2011.0	2247.7	2452.4
37.5°	1468.2	1511.8	1703.9	1936.9	2158.0
40°	1271.7	1320.6	1503.7	1729.5	1954.2
42.5°	1093.3	1142.3	1314.4	1536.3	1748.5
45°	848.5	899.7	1051.0	1255.7	1451.4
47.5°	645.6	701.2	834.0	1019.1	1197.5
50°	525.5	581.1	712.0	875.2	1046.5
52.5°	429.0	482.9	601.0	754.7	911.8
55°	304.8	356.0	459.5	590.0	725.7
57.5°	210.7	254.7	347.6	456.5	562.8
60°	152.4	194.7	282.1	370.5	457.3
62.5°	101.5	140.2	225.7	293.4	351.7
65°	34.1	65.3	145.6	175.6	195.6
67.5°	17.3	20.8	76.4	80.7	87.4
70°	13.6	13.6	36.4	38.8	45.5
72.5°	10.0	10.0	14.6	18.7	20.0
75°	4.5	4.5	2.3	0.0	0.0
77.5°	2.3	2.3	1.8	0.0	0.0
80°	2.3	2.3	0.0	0.0	0.0
82.5°	0.5	0.5	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.6	2.3	4.1	5.3	5.3
90°	3.0	11.7	20.7	26.7	26.7
92.5°	40.9	174.7	302.8	116.3	95.4
95°	97.8	358.5	1161.4	496.6	317.0
97.5°	159.4	397.5	1772.4	1365.6	963.5
100°	204.4	421.7	1964.3	1982.7	1617.7
102.5°	247.1	450.5	2014.1	2459.8	2124.9
105°	322.9	496.8	1991.0	3032.3	2829.5
107.5°	395.2	554.0	1877.8	3312.6	3372.9
110°	447.4	592.2	1792.5	3382.3	3590.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	494.8	635.0	1707.2	3337.4	3654.9
115°	571.8	696.4	1597.0	3180.0	3608.7
117.5°	645.3	760.0	1527.0	2959.0	3444.0
120°	690.3	800.4	1496.2	2793.5	3294.6
122.5°	730.6	840.7	1474.9	2648.3	3124.0
125°	788.1	898.2	1448.8	2450.9	2871.0
127.5°	842.6	947.5	1431.6	2286.2	2654.7
130°	871.1	978.3	1422.2	2188.3	2524.3
132.5°	904.3	1011.4	1415.0	2102.2	2405.8
135°	951.1	1055.4	1407.3	1982.1	2242.8
137.5°	994.9	1091.7	1400.8	1885.1	2100.0
140°	1028.1	1117.9	1398.4	1820.6	2014.7
142.5°	1056.5	1139.4	1393.7	1763.1	1929.4
145°	1099.2	1174.5	1386.6	1688.8	1819.2
147.5°	1144.8	1209.7	1383.0	1623.0	1727.3
150°	1173.3	1231.2	1380.7	1586.9	1668.1
152.5°	1199.3	1252.7	1378.3	1555.8	1623.0
155°	1244.4	1284.9	1377.7	1517.9	1561.4
157.5°	1277.0	1310.0	1377.7	1486.8	1517.0
160°	1300.7	1326.7	1377.7	1470.1	1493.3
162.5°	1319.6	1341.1	1380.1	1455.8	1474.3
165°	1345.1	1362.5	1383.6	1440.1	1448.8
167.5°	1362.9	1376.2	1386.6	1426.9	1429.3
170°	1374.7	1383.4	1386.6	1422.2	1422.2
172.5°	1384.2	1388.3	1386.6	1415.0	1412.7
175°	1392.5	1395.4	1386.6	1404.3	1401.4
177.5°	1394.9	1394.9	1385.4	1399.5	1394.9
180°	1392.5	1392.5	1392.5	1392.5	1392.5

(END OF REPORT)