

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: P518909

Luminaire Tested: **SQ4-BB-150U-075D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518909
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-075D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

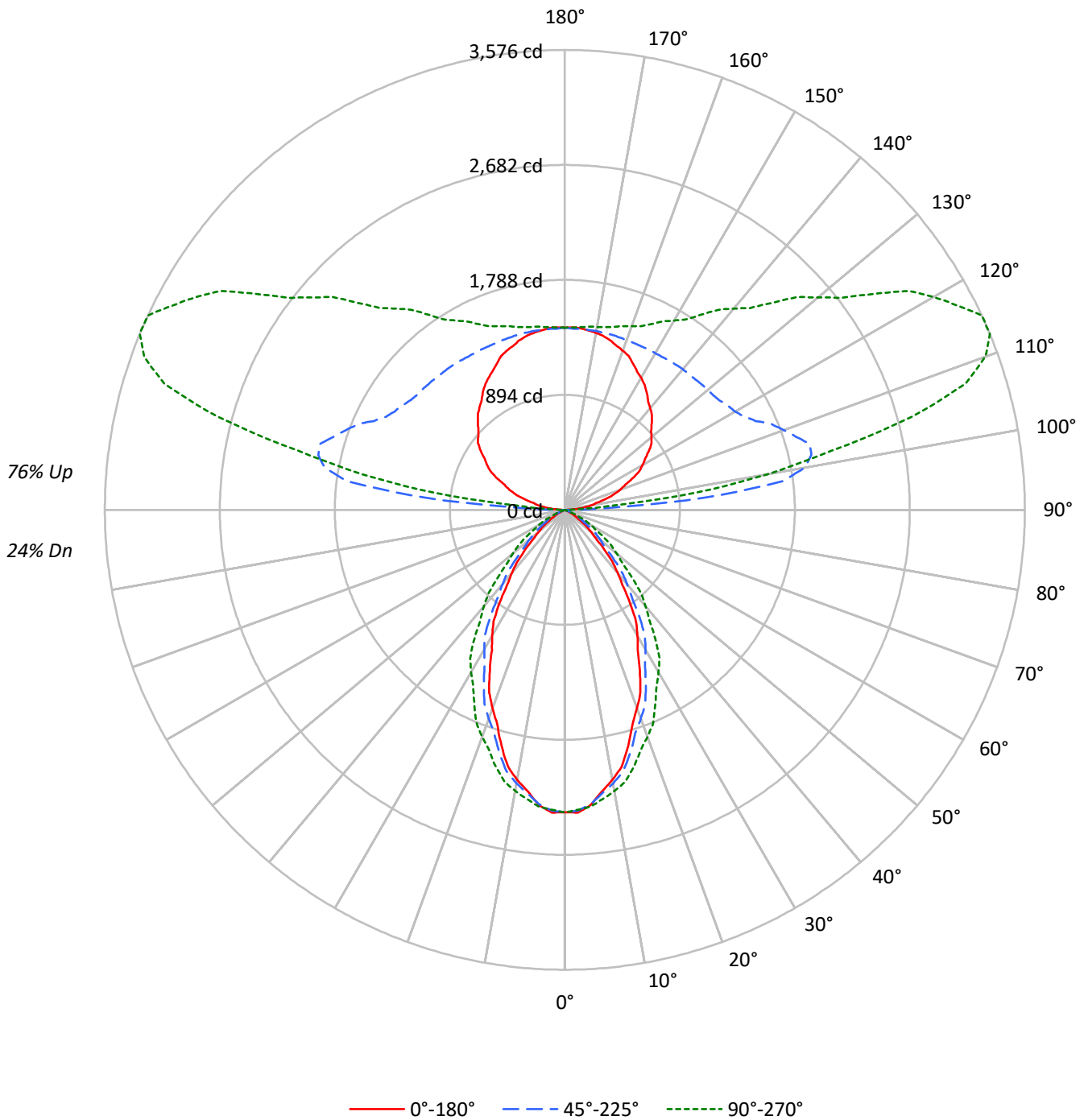
Lumens per Lamp: N/A
Luminaire Lumens: 11934.5 lumens
Efficiency: N/A
Efficacy: 122.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 97.8
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	101	101	101	101	90	90	90	90	69	69	69	49	49	49	32	32	32	24
1	93	89	85	82	82	79	76	74	61	59	58	45	44	43	29	29	28	21
2	85	79	73	69	76	70	66	62	55	52	49	40	38	37	27	26	25	19
3	78	70	63	58	69	63	57	53	49	45	42	36	34	32	25	23	23	17
4	72	62	55	50	64	56	50	45	44	40	37	33	30	28	23	21	20	16
5	66	56	48	43	59	50	44	39	40	35	32	30	27	25	21	19	18	14
6	61	50	43	38	54	45	39	35	36	32	28	27	24	22	19	18	16	13
7	57	45	38	33	50	41	35	31	33	28	25	25	22	20	18	16	15	12
8	53	41	34	30	47	37	31	27	30	26	23	23	20	18	16	15	14	11
9	49	38	31	26	44	34	28	24	28	23	20	21	18	16	15	14	13	10
10	46	35	28	24	41	32	26	22	26	21	18	20	17	15	14	13	12	10

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	8894	10349
35°	6644	7550	9207
40°	5105	6037	7845
45°	3691	4571	6313
50°	2515	3407	5006
55°	1634	2464	3891
60°	937	1735	2812
65°	249	1060	1423
70°	122	327	408
75°	55	26	0
80°	39	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.6	1.8
10°-20°	548.7	4.6
20°-30°	686.9	5.8
30°-40°	634.5	5.3
40°-50°	426.4	3.6
50°-60°	220.2	1.8
60°-70°	69.0	0.6
70°-80°	4.3	0.0
80°-90°	3.0	0.0
90°-100°	657.9	5.5
100°-110°	1778.8	14.9
110°-120°	1870.1	15.7
120°-130°	1519.0	12.7
130°-140°	1191.6	10.0
140°-150°	914.5	7.7
150°-160°	657.7	5.5
160°-170°	401.8	3.4
170°-180°	135.5	1.1
0°-30°	1450.2	12.2
0°-40°	2084.7	17.5
0°-60°	2731.3	22.9
0°-90°	2807.6	23.5
90°-120°	4306.8	36.1
90°-150°	7931.9	66.5
90°-180°	9127.0	76.5
0°-180°	11934.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2351	2351	2351	2351	2351	
5°	2304	2281	2299	2307	2316	214
15°	1901	1894	1961	2027	2070	529
25°	1379	1390	1488	1590	1664	632
35°	885	907	1006	1124	1226	548
45°	424	450	526	628	726	333
55°	152	178	230	295	363	142
65°	17	33	73	88	98	29
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	3	9	20	21	20	7
95°	102	358	1094	566	337	107
105°	331	511	1973	2911	2792	348
115°	582	712	1636	3168	3576	575
125°	797	913	1475	2489	2924	710
135°	955	1069	1435	2010	2275	738
145°	1111	1194	1416	1720	1851	695
155°	1254	1303	1403	1543	1594	578
165°	1365	1379	1410	1464	1472	385
175°	1417	1416	1411	1429	1426	135
180°	1416	1416	1416	1416	1416	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2351.1	2351.1	2351.1	2351.1	2351.1
2.5°	2356.6	2334.3	2340.2	2340.1	2333.8
5°	2304.5	2281.1	2298.8	2307.0	2315.9
7.5°	2207.1	2188.9	2222.8	2248.3	2266.7
10°	2131.6	2116.0	2160.0	2194.7	2220.3
12.5°	2044.2	2032.2	2085.4	2133.0	2165.7
15°	1900.7	1894.0	1961.0	2026.8	2070.2
17.5°	1746.9	1746.7	1823.1	1904.8	1957.1
20°	1641.4	1644.7	1726.7	1816.8	1877.9
22.5°	1535.8	1543.6	1631.1	1725.1	1795.1
25°	1378.6	1389.7	1487.8	1589.6	1664.1
27.5°	1227.5	1243.8	1347.0	1452.8	1543.5
30°	1128.4	1147.3	1252.3	1363.7	1457.1
32.5°	1031.0	1053.5	1155.9	1273.6	1368.8
35°	884.9	907.2	1005.5	1123.9	1226.2
37.5°	734.1	755.9	852.0	968.4	1079.0
40°	635.8	660.3	751.9	864.7	977.1
42.5°	546.7	571.1	657.2	768.1	874.3
45°	424.3	449.9	525.5	627.8	725.7
47.5°	322.8	350.6	417.0	509.6	598.8
50°	262.8	290.6	356.0	437.6	523.2
52.5°	214.5	241.4	300.5	377.4	455.9
55°	152.4	178.0	229.8	295.0	362.8
57.5°	105.3	127.3	173.8	228.2	281.4
60°	76.2	97.3	141.0	185.3	228.6
62.5°	50.7	70.1	112.8	146.7	175.9
65°	17.1	32.6	72.8	87.8	97.8
67.5°	8.6	10.4	38.2	40.3	43.7
70°	6.8	6.8	18.2	19.4	22.7
72.5°	5.0	5.0	7.3	9.3	10.0
75°	2.3	2.3	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°	0.6	1.8	4.0	4.3	4.0
90°	3.0	9.0	19.8	21.3	19.8
92.5°	43.3	157.7	311.2	135.1	97.8
95°	102.1	358.4	1094.1	566.2	336.8
97.5°	164.0	411.0	1705.4	1411.3	1036.5
100°	210.3	432.3	1895.6	1976.9	1598.4
102.5°	252.9	461.8	1962.6	2405.7	2122.6
105°	330.7	510.9	1973.3	2910.8	2791.6
107.5°	402.6	567.1	1887.1	3225.8	3265.5
110°	458.7	607.7	1810.3	3310.4	3478.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	508.6	648.1	1739.5	3293.5	3576.3
115°	582.1	711.7	1636.5	3168.1	3576.3
117.5°	654.0	775.6	1568.6	2976.4	3439.2
120°	697.9	817.1	1528.4	2838.9	3311.2
122.5°	739.3	856.1	1504.0	2691.5	3167.3
125°	796.9	913.2	1475.0	2489.1	2924.1
127.5°	850.0	964.1	1458.0	2323.9	2706.5
130°	879.2	996.9	1450.6	2221.9	2567.6
132.5°	909.7	1026.2	1443.3	2129.9	2448.1
135°	955.4	1068.6	1435.4	2009.8	2275.0
137.5°	1001.4	1108.4	1428.7	1912.4	2128.4
140°	1033.1	1132.9	1426.3	1849.7	2041.9
142.5°	1063.6	1157.5	1421.4	1793.1	1961.4
145°	1110.8	1194.3	1415.6	1720.3	1851.4
147.5°	1153.8	1227.7	1408.9	1654.4	1755.1
150°	1185.5	1251.1	1406.5	1618.6	1699.0
152.5°	1214.8	1272.0	1405.2	1585.3	1651.5
155°	1254.1	1303.2	1403.4	1543.2	1593.9
157.5°	1294.9	1329.2	1403.7	1513.9	1547.2
160°	1318.1	1346.4	1404.9	1495.4	1519.2
162.5°	1336.4	1359.9	1406.1	1480.6	1498.5
165°	1365.3	1378.7	1409.5	1464.5	1472.0
167.5°	1385.1	1394.4	1409.8	1450.7	1454.3
170°	1397.3	1401.8	1411.0	1444.5	1444.5
172.5°	1407.1	1408.0	1411.0	1437.2	1436.0
175°	1417.1	1415.6	1411.0	1429.2	1426.3
177.5°	1420.5	1416.9	1410.7	1422.8	1419.3
180°	1415.6	1415.6	1415.6	1415.6	1415.6

(END OF REPORT)