

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: P518921

Luminaire Tested: **SQ4-BB-150U-075D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518921
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-940-1D-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, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

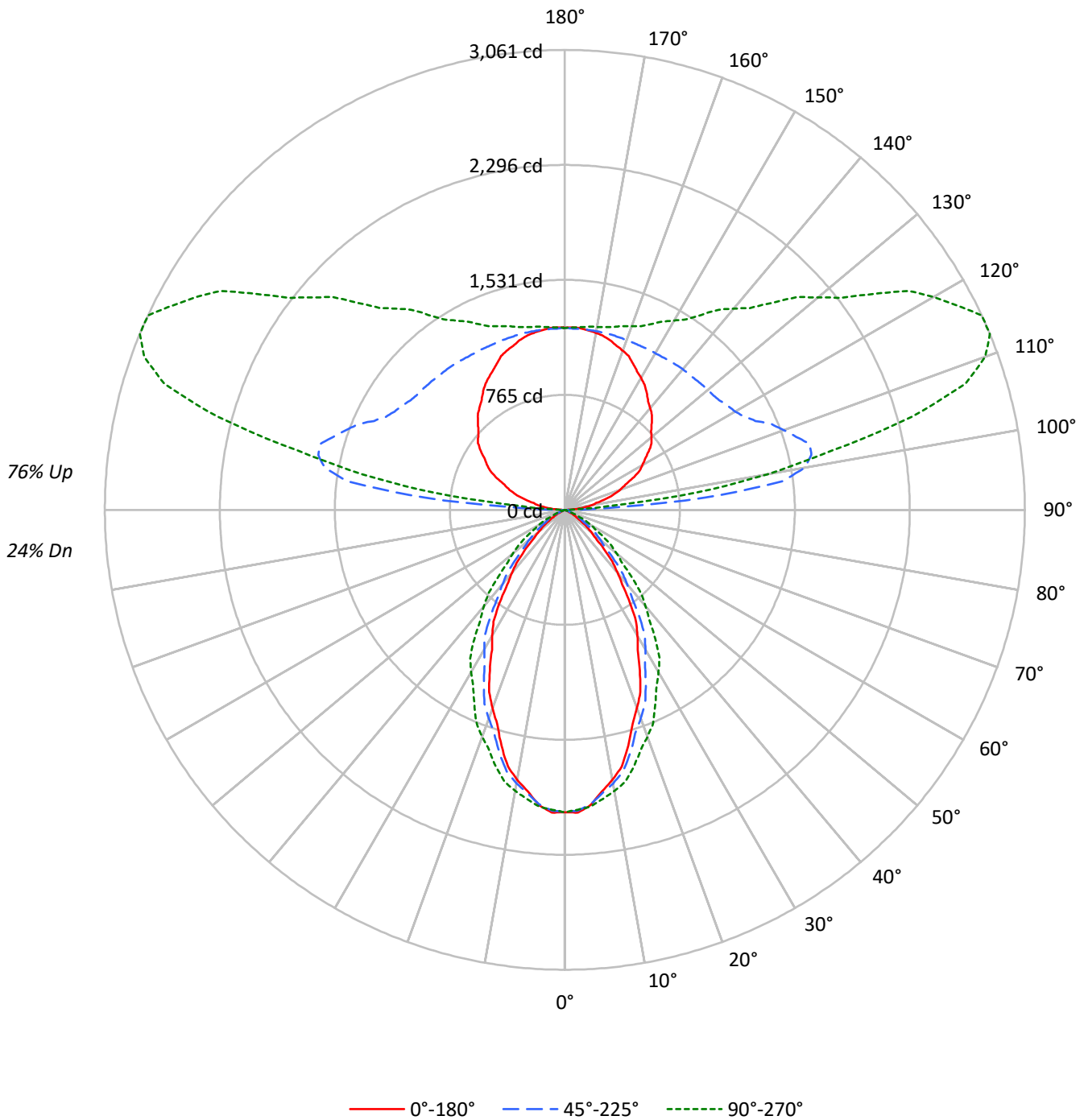
Lumens per Lamp: N/A
Luminaire Lumens: 10214.4 lumens
Efficiency: N/A
Efficacy: 104.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

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°	12377	12377	12377
5°	12178	12148	12238
10°	11395	11546	11869
15°	10358	10687	11282
20°	9195	9673	10521
25°	8008	8642	9666
30°	6859	7612	8857
35°	5687	6462	7880
40°	4370	5167	6715
45°	3158	3913	5403
50°	2152	2916	4285
55°	1399	2109	3331
60°	802	1485	2407
65°	212	907	1218
70°	104	281	351
75°	45	24	0
80°	35	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.6	1.8
10°-20°	469.6	4.6
20°-30°	587.9	5.8
30°-40°	543.1	5.3
40°-50°	364.9	3.6
50°-60°	188.5	1.8
60°-70°	59.0	0.6
70°-80°	3.7	0.0
80°-90°	2.6	0.0
90°-100°	563.1	5.5
100°-110°	1522.4	14.9
110°-120°	1600.6	15.7
120°-130°	1300.1	12.7
130°-140°	1019.8	10.0
140°-150°	782.7	7.7
150°-160°	562.9	5.5
160°-170°	343.9	3.4
170°-180°	115.9	1.1
0°-30°	1241.2	12.2
0°-40°	1784.2	17.5
0°-60°	2337.6	22.9
0°-90°	2403.0	23.5
90°-120°	3686.0	36.1
90°-150°	6788.7	66.5
90°-180°	7811.0	76.5
0°-180°	10214.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2012	2012	2012	2012	2012	
5°	1972	1952	1968	1974	1982	183
15°	1627	1621	1678	1735	1772	453
25°	1180	1189	1273	1360	1424	541
35°	757	776	861	962	1050	469
45°	363	385	450	537	621	285
55°	130	152	197	252	311	122
65°	15	28	62	75	84	25
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	3	8	17	18	17	6
95°	87	307	936	485	288	91
105°	283	437	1689	2491	2389	298
115°	498	609	1401	2712	3061	492
125°	682	782	1262	2130	2503	608
135°	818	915	1228	1720	1947	632
145°	951	1022	1212	1472	1585	595
155°	1073	1115	1201	1321	1364	495
165°	1168	1180	1206	1253	1260	329
175°	1213	1212	1208	1223	1221	115
180°	1212	1212	1212	1212	1212	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2012.3	2012.3	2012.3	2012.3	2012.3
2.5°	2016.9	1997.9	2002.9	2002.8	1997.5
5°	1972.3	1952.4	1967.5	1974.5	1982.1
7.5°	1889.0	1873.4	1902.4	1924.2	1940.0
10°	1824.4	1811.0	1848.7	1878.4	1900.3
12.5°	1749.6	1739.3	1784.8	1825.6	1853.6
15°	1626.7	1621.0	1678.3	1734.7	1771.8
17.5°	1495.1	1494.9	1560.4	1630.3	1675.0
20°	1404.8	1407.6	1477.8	1554.9	1607.3
22.5°	1314.4	1321.1	1396.0	1476.4	1536.4
25°	1179.9	1189.4	1273.4	1360.5	1424.3
27.5°	1050.6	1064.5	1152.8	1243.4	1321.1
30°	965.7	981.9	1071.8	1167.1	1247.1
32.5°	882.4	901.6	989.3	1090.0	1171.5
35°	757.4	776.4	860.6	961.9	1049.5
37.5°	628.3	647.0	729.2	828.9	923.5
40°	544.2	565.1	643.5	740.1	836.3
42.5°	467.9	488.8	562.5	657.4	748.2
45°	363.1	385.0	449.8	537.3	621.1
47.5°	276.3	300.1	356.9	436.1	512.5
50°	224.9	248.7	304.7	374.5	447.8
52.5°	183.6	206.6	257.2	323.0	390.2
55°	130.5	152.3	196.7	252.5	310.6
57.5°	90.1	109.0	148.8	195.3	240.8
60°	65.2	83.3	120.7	158.6	195.7
62.5°	43.4	60.0	96.6	125.6	150.5
65°	14.6	27.9	62.3	75.2	83.7
67.5°	7.4	8.9	32.7	34.5	37.4
70°	5.8	5.8	15.6	16.6	19.5
72.5°	4.3	4.3	6.2	8.0	8.6
75°	1.9	1.9	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	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°	0.5	1.5	3.4	3.6	3.4
90°	2.6	7.7	17.0	18.2	17.0
92.5°	37.0	135.0	266.3	115.6	83.7
95°	87.4	306.7	936.4	484.6	288.2
97.5°	140.3	351.8	1459.6	1207.9	887.1
100°	180.0	370.0	1622.4	1692.0	1368.1
102.5°	216.5	395.3	1679.8	2059.0	1816.7
105°	283.0	437.3	1688.9	2491.2	2389.2
107.5°	344.6	485.3	1615.1	2760.9	2794.8
110°	392.6	520.1	1549.3	2833.3	2977.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	435.3	554.7	1488.8	2818.8	3060.9
115°	498.2	609.1	1400.7	2711.5	3060.9
117.5°	559.7	663.8	1342.5	2547.4	2943.5
120°	597.3	699.3	1308.1	2429.7	2833.9
122.5°	632.8	732.8	1287.2	2303.5	2710.8
125°	682.1	781.5	1262.4	2130.3	2502.7
127.5°	727.5	825.1	1247.8	1989.0	2316.4
130°	752.5	853.2	1241.6	1901.7	2197.5
132.5°	778.6	878.3	1235.3	1822.9	2095.3
135°	817.7	914.6	1228.5	1720.1	1947.1
137.5°	857.1	948.6	1222.8	1636.7	1821.6
140°	884.2	969.7	1220.7	1583.1	1747.6
142.5°	910.3	990.6	1216.5	1534.6	1678.7
145°	950.7	1022.1	1211.6	1472.3	1584.6
147.5°	987.5	1050.8	1205.8	1415.9	1502.1
150°	1014.6	1070.7	1203.7	1385.3	1454.1
152.5°	1039.7	1088.6	1202.7	1356.8	1413.4
155°	1073.3	1115.4	1201.1	1320.8	1364.1
157.5°	1108.3	1137.6	1201.4	1295.7	1324.2
160°	1128.1	1152.3	1202.4	1279.8	1300.2
162.5°	1143.7	1163.9	1203.5	1267.2	1282.5
165°	1168.5	1180.0	1206.3	1253.4	1259.8
167.5°	1185.5	1193.4	1206.6	1241.6	1244.7
170°	1195.9	1199.7	1207.6	1236.3	1236.3
172.5°	1204.3	1205.0	1207.6	1230.1	1229.0
175°	1212.9	1211.6	1207.6	1223.2	1220.7
177.5°	1215.7	1212.7	1207.4	1217.8	1214.7
180°	1211.6	1211.6	1211.6	1211.6	1211.6

(END OF REPORT)