

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: P518920

Luminaire Tested: **SQ4-BB-150U-075D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518920
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-4
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

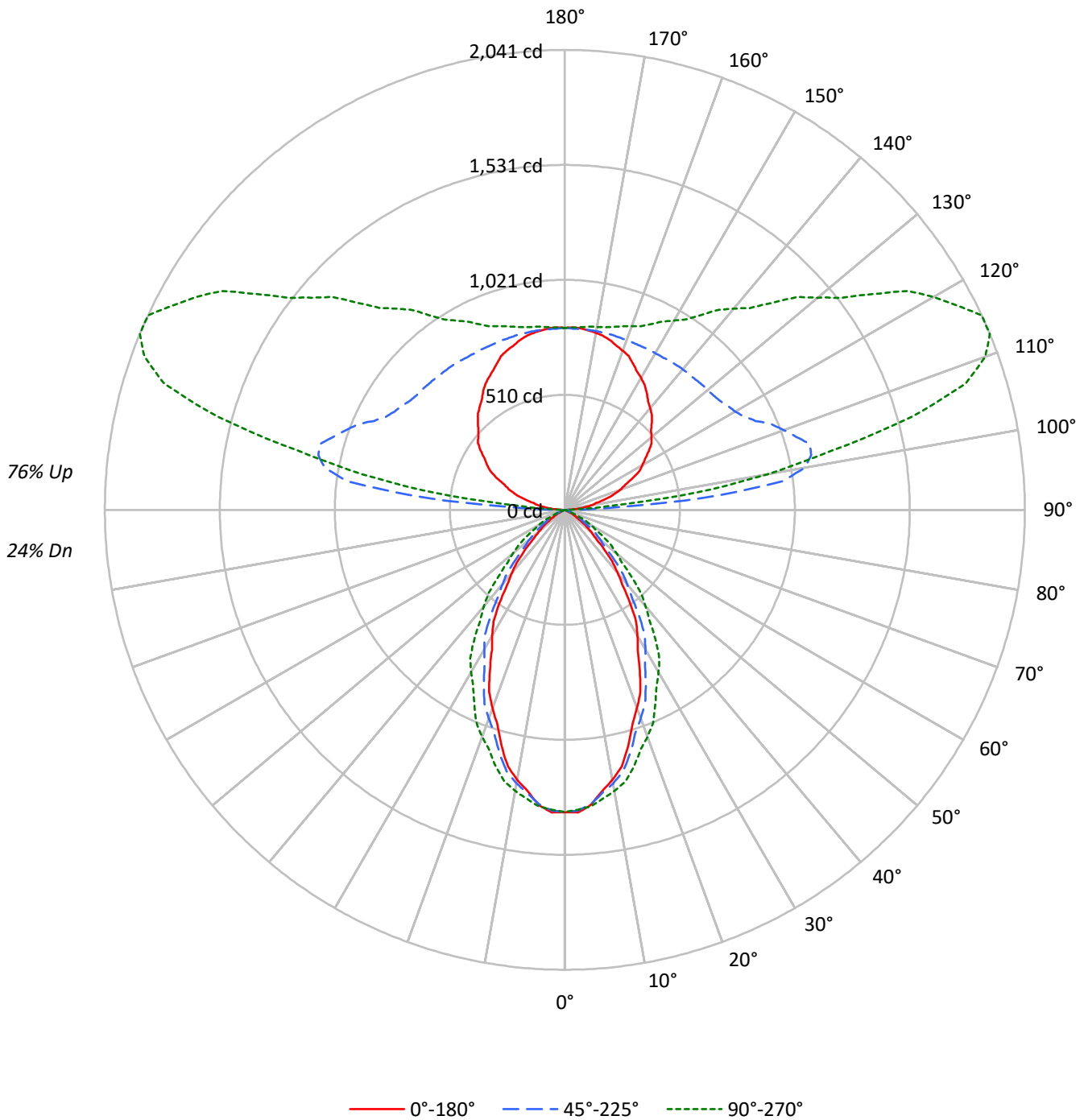
Lumens per Lamp: N/A
Luminaire Lumens: 6809.6 lumens
Efficiency: N/A
Efficacy: 107.2 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 63.5
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°	11394	11547	11869
15°	10359	10687	11282
20°	9195	9673	10520
25°	8008	8642	9666
30°	6859	7613	8857
35°	5687	6462	7880
40°	4370	5167	6715
45°	3159	3912	5403
50°	2152	2915	4284
55°	1399	2109	3330
60°	803	1485	2408
65°	212	906	1218
70°	105	281	351
75°	46	21	0
80°	32	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.4	1.8
10°-20°	313.1	4.6
20°-30°	392.0	5.8
30°-40°	362.0	5.3
40°-50°	243.3	3.6
50°-60°	125.7	1.8
60°-70°	39.3	0.6
70°-80°	2.5	0.0
80°-90°	1.7	0.0
90°-100°	375.4	5.5
100°-110°	1014.9	14.9
110°-120°	1067.1	15.7
120°-130°	866.7	12.7
130°-140°	679.9	10.0
140°-150°	521.8	7.7
150°-160°	375.3	5.5
160°-170°	229.3	3.4
170°-180°	77.3	1.1
0°-30°	827.5	12.2
0°-40°	1189.5	17.5
0°-60°	1558.4	22.9
0°-90°	1602.0	23.5
90°-120°	2457.4	36.1
90°-150°	4525.8	66.5
90°-180°	5208.0	76.5
0°-180°	6809.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1342	1342	1342	1342	1342	
5°	1315	1302	1312	1316	1321	122
15°	1084	1081	1119	1156	1181	302
25°	787	793	849	907	950	361
35°	505	518	574	641	700	313
45°	242	257	300	358	414	190
55°	87	102	131	168	207	81
65°	10	19	42	50	56	16
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	2	5	11	12	11	4
95°	58	204	624	323	192	61
105°	189	292	1126	1661	1593	199
115°	332	406	934	1808	2041	328
125°	455	521	842	1420	1668	405
135°	545	610	819	1147	1298	421
145°	634	681	808	982	1056	397
155°	716	744	801	880	909	330
165°	779	787	804	836	840	219
175°	809	808	805	816	814	77
180°	808	808	808	808	808	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1341.5	1341.5	1341.5	1341.5	1341.5
2.5°	1344.6	1331.9	1335.3	1335.2	1331.6
5°	1314.9	1301.6	1311.7	1316.3	1321.4
7.5°	1259.3	1248.9	1268.3	1282.8	1293.3
10°	1216.2	1207.4	1232.5	1252.3	1266.9
12.5°	1166.4	1159.5	1189.9	1217.1	1235.7
15°	1084.5	1080.7	1118.9	1156.5	1181.2
17.5°	996.8	996.6	1040.2	1086.9	1116.7
20°	936.5	938.4	985.2	1036.6	1071.5
22.5°	876.3	880.7	930.7	984.3	1024.3
25°	786.6	792.9	848.9	907.0	949.5
27.5°	700.4	709.7	768.6	828.9	880.7
30°	643.8	654.6	714.6	778.1	831.4
32.5°	588.3	601.1	659.5	726.7	781.0
35°	504.9	517.6	573.7	641.3	699.6
37.5°	418.9	431.3	486.1	552.6	615.7
40°	362.8	376.8	429.0	493.4	557.5
42.5°	311.9	325.9	375.0	438.3	498.8
45°	242.1	256.7	299.8	358.2	414.1
47.5°	184.2	200.1	237.9	290.7	341.6
50°	149.9	165.8	203.1	249.7	298.5
52.5°	122.4	137.8	171.5	215.3	260.1
55°	87.0	101.6	131.1	168.3	207.0
57.5°	60.1	72.7	99.2	130.2	160.6
60°	43.5	55.5	80.5	105.7	130.5
62.5°	28.9	40.0	64.4	83.7	100.3
65°	9.7	18.6	41.5	50.1	55.8
67.5°	4.9	5.9	21.8	23.0	24.9
70°	3.9	3.9	10.4	11.1	13.0
72.5°	2.9	2.9	4.2	5.3	5.7
75°	1.3	1.3	0.6	0.0	0.0
77.5°	0.6	0.6	0.5	0.0	0.0
80°	0.6	0.6	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	2.3	2.4	2.3
90°	1.7	5.1	11.3	12.2	11.3
92.5°	24.7	90.0	177.5	77.1	55.8
95°	58.3	204.5	624.3	323.1	192.1
97.5°	93.6	234.5	973.1	805.3	591.4
100°	120.0	246.6	1081.6	1128.0	912.0
102.5°	144.3	263.5	1119.8	1372.6	1211.1
105°	188.7	291.5	1125.9	1660.8	1592.8
107.5°	229.7	323.6	1076.7	1840.6	1863.2
110°	261.7	346.7	1032.9	1888.9	1984.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	290.2	369.8	992.6	1879.2	2040.6
115°	332.1	406.1	933.8	1807.6	2040.6
117.5°	373.2	442.5	895.0	1698.3	1962.3
120°	398.2	466.2	872.0	1619.8	1889.3
122.5°	421.9	488.5	858.1	1535.7	1807.2
125°	454.7	521.0	841.6	1420.2	1668.5
127.5°	485.0	550.1	831.9	1326.0	1544.3
130°	501.7	568.8	827.7	1267.8	1465.0
132.5°	519.1	585.5	823.5	1215.3	1396.8
135°	545.1	609.7	819.0	1146.7	1298.1
137.5°	571.4	632.4	815.2	1091.2	1214.4
140°	589.5	646.4	813.8	1055.4	1165.0
142.5°	606.9	660.4	811.0	1023.1	1119.1
145°	633.8	681.4	807.7	981.6	1056.4
147.5°	658.3	700.5	803.9	944.0	1001.4
150°	676.4	713.8	802.5	923.5	969.4
152.5°	693.1	725.8	801.8	904.6	942.3
155°	715.5	743.6	800.8	880.5	909.4
157.5°	738.8	758.4	800.9	863.8	882.8
160°	752.1	768.2	801.6	853.2	866.8
162.5°	762.5	775.9	802.3	844.8	855.0
165°	779.0	786.7	804.2	835.6	839.9
167.5°	790.3	795.6	804.4	827.8	829.8
170°	797.3	799.8	805.1	824.2	824.2
172.5°	802.8	803.3	805.1	820.0	819.4
175°	808.6	807.7	805.1	815.5	813.8
177.5°	810.5	808.4	804.9	811.8	809.8
180°	807.7	807.7	807.7	807.7	807.7

(END OF REPORT)