

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: P518896

Luminaire Tested: **SQ4-BB-150U-050D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518896
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-050D-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

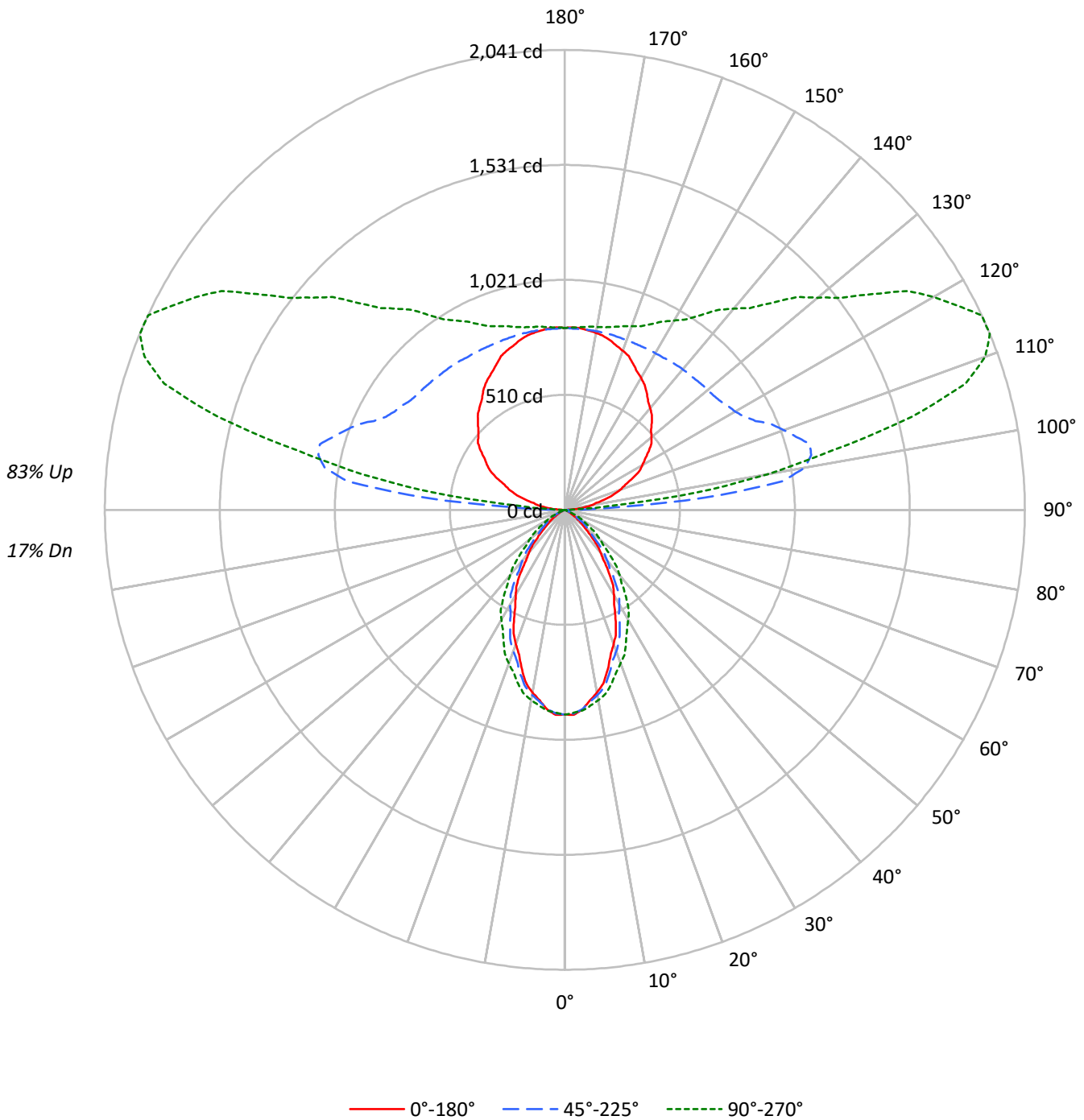
Lumens per Lamp: N/A
Luminaire Lumens: 6292.8 lumens
Efficiency: N/A
Efficacy: 113.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 55.7
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	99	99	99	99	87	87	87	87	65	65	65	45	45	45	26	26	26	17
1	91	87	84	81	80	77	74	72	58	56	54	40	39	38	24	23	23	16
2	83	77	71	67	73	68	63	60	51	48	46	36	34	33	22	21	20	14
3	76	68	61	56	67	60	55	51	46	42	39	32	30	29	20	19	18	13
4	70	60	53	48	62	54	48	43	41	37	34	29	27	25	18	17	16	12
5	64	54	47	41	57	48	42	37	37	33	30	26	24	22	17	15	14	11
6	59	48	41	36	52	43	37	33	33	29	26	24	21	19	15	14	13	10
7	55	44	37	32	48	39	33	29	30	26	23	22	19	17	14	13	12	9
8	51	40	33	28	45	36	30	25	28	23	20	20	18	16	13	12	11	8
9	47	36	29	25	42	32	27	23	25	21	18	19	16	14	12	11	10	8
10	44	33	27	22	39	30	24	20	23	19	16	17	15	13	11	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8380	8380	8380
5°	8245	8225	8286
10°	7715	7818	8036
15°	7014	7236	7639
20°	6226	6550	7123
25°	5422	5851	6545
30°	4644	5154	5997
35°	3851	4376	5335
40°	2959	3499	4547
45°	2139	2649	3659
50°	1457	1974	2901
55°	947	1428	2255
60°	543	1006	1629
65°	144	613	825
70°	70	189	237
75°	32	14	0
80°	21	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.9	1.3
10°-20°	212.0	3.4
20°-30°	265.4	4.2
30°-40°	245.1	3.9
40°-50°	164.7	2.6
50°-60°	85.1	1.4
60°-70°	26.6	0.4
70°-80°	1.7	0.0
80°-90°	1.7	0.0
90°-100°	375.4	6.0
100°-110°	1014.9	16.1
110°-120°	1067.1	17.0
120°-130°	866.7	13.8
130°-140°	679.9	10.8
140°-150°	521.8	8.3
150°-160°	375.3	6.0
160°-170°	229.3	3.6
170°-180°	77.3	1.2
0°-30°	560.3	8.9
0°-40°	805.4	12.8
0°-60°	1055.2	16.8
0°-90°	1085.3	17.2
90°-120°	2457.4	39.1
90°-150°	4525.8	71.9
90°-180°	5208.0	82.8
0°-180°	6292.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	908	908	908	908	908	
5°	890	881	888	891	895	83
15°	734	732	758	783	800	205
25°	533	537	575	614	643	244
35°	342	350	388	434	474	212
45°	164	174	203	243	280	129
55°	59	69	89	114	140	55
65°	7	13	28	34	38	11
75°	1	1	0	0	0	1
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	

TEST NUMBER: P518896

CATALOG NUMBER: SQ4-BB-150U-050D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	908.3	908.3	908.3	908.3	908.3
2.5°	910.5	901.9	904.1	904.1	901.7
5°	890.3	881.3	888.1	891.3	894.7
7.5°	852.7	845.7	858.8	868.6	875.7
10°	823.5	817.5	834.5	847.9	857.8
12.5°	789.8	785.1	805.7	824.1	836.7
15°	734.3	731.7	757.6	783.0	799.8
17.5°	674.9	674.8	704.3	735.9	756.1
20°	634.1	635.4	667.1	701.9	725.5
22.5°	593.3	596.4	630.2	666.5	693.5
25°	532.6	536.9	574.8	614.1	642.9
27.5°	474.3	480.5	520.4	561.3	596.3
30°	435.9	443.2	483.8	526.8	562.9
32.5°	398.3	407.0	446.6	492.1	528.8
35°	341.9	350.5	388.5	434.2	473.7
37.5°	283.6	292.0	329.1	374.2	416.9
40°	245.7	255.1	290.5	334.1	377.5
42.5°	211.2	220.7	253.9	296.8	337.8
45°	163.9	173.8	203.0	242.6	280.4
47.5°	124.7	135.5	161.1	196.9	231.3
50°	101.5	112.3	137.5	169.1	202.1
52.5°	82.9	93.3	116.1	145.8	176.1
55°	58.9	68.8	88.8	114.0	140.2
57.5°	40.7	49.2	67.1	88.2	108.7
60°	29.4	37.6	54.5	71.6	88.3
62.5°	19.6	27.1	43.6	56.7	67.9
65°	6.6	12.6	28.1	33.9	37.8
67.5°	3.3	4.0	14.8	15.6	16.9
70°	2.6	2.6	7.0	7.5	8.8
72.5°	1.9	1.9	2.8	3.6	3.9
75°	0.9	0.9	0.4	0.0	0.0
77.5°	0.4	0.4	0.4	0.0	0.0
80°	0.4	0.4	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



TEST NUMBER: P518896

CATALOG NUMBER: SQ4-BB-150U-050D-940-1D-UNV-STD-W-4

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)