

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: P518747

Luminaire Tested: **SQ4-BB-100U-100D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518747
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-100D-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

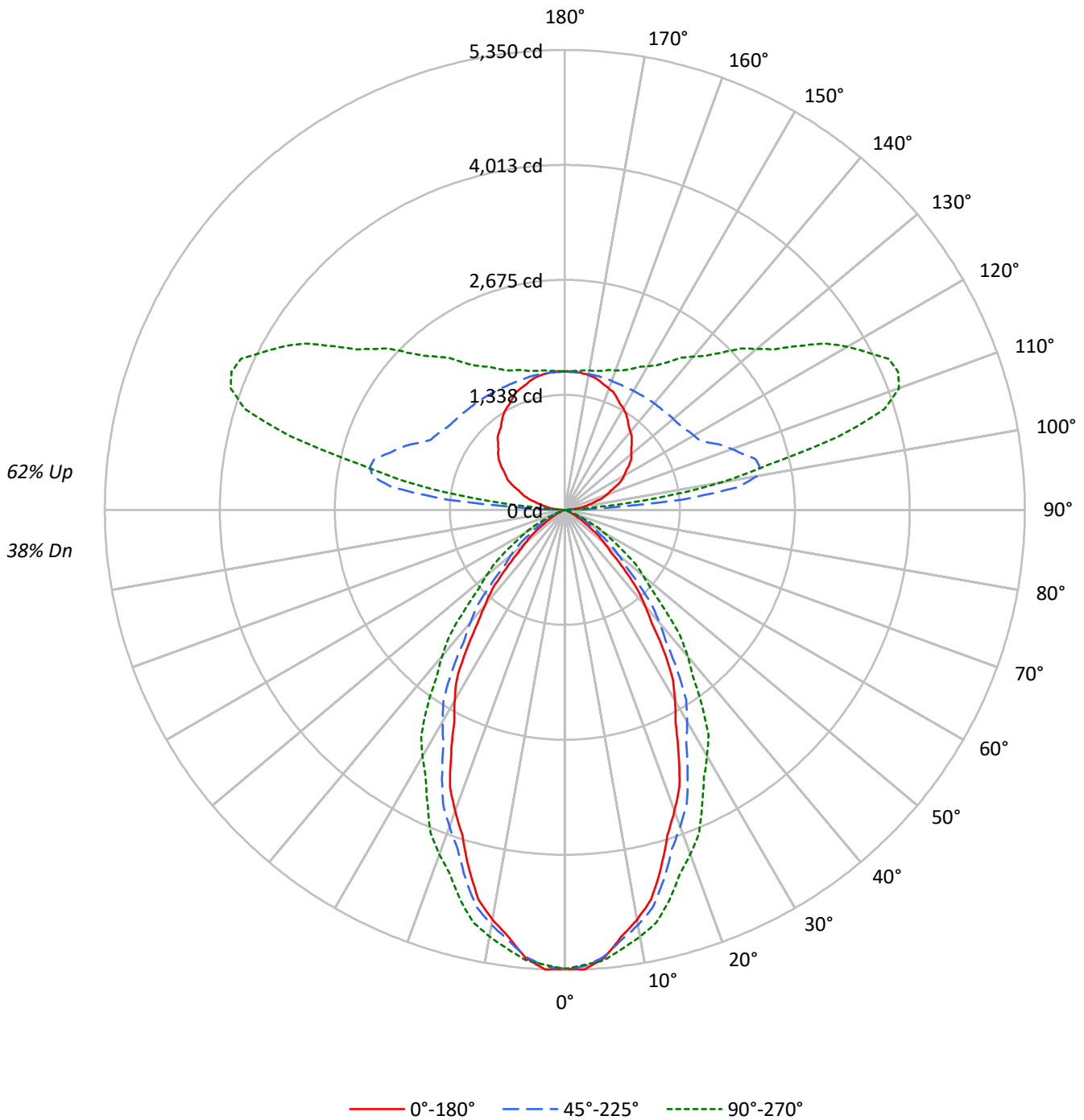
Lumens per Lamp: N/A
Luminaire Lumens: 16840.4 lumens
Efficiency: N/A
Efficacy: 92.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 182.2
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	87	84	82	79	69	67	65	55	54	53	42	41	41	35
2	89	83	77	73	81	75	71	67	62	59	56	50	48	46	38	37	36	31
3	82	74	67	62	75	68	62	58	56	52	49	45	43	41	35	34	33	28
4	76	66	59	54	69	61	55	50	51	46	43	41	38	36	33	31	29	25
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	37	34	35	31	29	28	26	24	21
7	60	49	42	37	55	46	39	35	39	34	31	32	29	26	26	24	22	19
8	56	45	38	33	51	42	36	31	36	31	28	30	26	24	24	22	20	18
9	53	41	35	30	48	38	32	28	33	28	25	28	24	22	23	20	19	16
10	49	38	32	27	45	36	30	26	30	26	23	26	22	20	21	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16416	16416	16416
5°	16152	16112	16232
10°	15113	15315	15742
15°	13739	14175	14965
20°	12196	12830	13954
25°	10621	11462	12821
30°	9097	10097	11748
35°	7543	8571	10452
40°	5796	6853	8906
45°	4190	5189	7166
50°	2854	3867	5683
55°	1856	2797	4417
60°	1064	1969	3193
65°	282	1203	1616
70°	139	371	464
75°	62	31	0
80°	46	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	487.2	2.9
10°-20°	1245.8	7.4
20°-30°	1559.6	9.3
30°-40°	1440.6	8.6
40°-50°	968.0	5.7
50°-60°	500.0	3.0
60°-70°	156.6	0.9
70°-80°	9.9	0.1
80°-90°	3.5	0.0
90°-100°	754.6	4.5
100°-110°	2083.1	12.4
110°-120°	2148.4	12.8
120°-130°	1726.4	10.3
130°-140°	1356.8	8.1
140°-150°	1040.6	6.2
150°-160°	747.9	4.4
160°-170°	457.3	2.7
170°-180°	154.2	0.9
0°-30°	3292.6	19.6
0°-40°	4733.1	28.1
0°-60°	6201.1	36.8
0°-90°	6371.1	37.8
90°-120°	4986.1	29.6
90°-150°	9109.9	54.1
90°-180°	10469.0	62.2
0°-180°	16840.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5338	5338	5338	5338	5338	
5°	5232	5179	5219	5238	5258	485
15°	4315	4300	4452	4602	4700	1202
25°	3130	3155	3378	3609	3778	1435
35°	2009	2060	2283	2552	2784	1245
45°	963	1021	1193	1425	1648	757
55°	346	404	522	670	824	323
65°	39	74	165	199	222	65
75°	5	5	3	0	0	7
85°	0	0	0	0	0	1
90°	5	10	21	23	26	8
95°	111	408	1369	563	366	119
105°	371	573	2292	3499	3295	395
115°	665	804	1846	3654	4156	654
125°	913	1039	1673	2832	3323	812
135°	1098	1217	1627	2293	2586	850
145°	1274	1362	1606	1952	2101	797
155°	1436	1484	1593	1752	1807	662
165°	1555	1575	1601	1663	1676	438
175°	1611	1614	1604	1627	1622	153
180°	1611	1611	1611	1611	1611	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5338.0	5338.0	5338.0	5338.0	5338.0
2.5°	5350.4	5299.9	5313.2	5312.9	5298.7
5°	5232.1	5179.1	5219.2	5237.7	5257.9
7.5°	5011.1	4969.6	5046.7	5104.5	5146.4
10°	4839.6	4804.2	4904.1	4982.9	5041.0
12.5°	4641.2	4614.0	4734.7	4842.8	4917.1
15°	4315.3	4300.2	4452.2	4601.6	4700.1
17.5°	3966.2	3965.7	4139.2	4324.7	4443.4
20°	3726.5	3734.1	3920.2	4124.8	4263.7
22.5°	3486.9	3504.5	3703.3	3916.6	4075.7
25°	3130.0	3155.2	3377.9	3609.0	3778.2
27.5°	2787.0	2823.9	3058.2	3298.4	3504.4
30°	2561.8	2604.8	2843.3	3096.1	3308.2
32.5°	2340.8	2391.8	2624.3	2891.6	3107.8
35°	2009.2	2059.7	2282.9	2551.6	2783.9
37.5°	1666.7	1716.2	1934.3	2198.8	2449.7
40°	1443.6	1499.2	1707.0	1963.3	2218.4
42.5°	1241.1	1296.7	1492.2	1744.0	1984.9
45°	963.3	1021.3	1193.1	1425.4	1647.6
47.5°	732.9	796.0	946.7	1156.9	1359.4
50°	596.6	659.7	808.3	993.5	1187.9
52.5°	487.1	548.2	682.3	856.8	1035.1
55°	346.1	404.1	521.7	669.8	823.8
57.5°	239.1	289.1	394.6	518.2	638.9
60°	173.0	221.0	320.2	420.6	519.1
62.5°	115.2	159.1	256.2	333.1	399.3
65°	38.7	74.1	165.3	199.4	222.1
67.5°	19.6	23.7	86.8	91.6	99.2
70°	15.5	15.5	41.3	44.1	51.6
72.5°	11.4	11.4	16.5	21.2	22.7
75°	5.2	5.2	2.6	0.0	0.0
77.5°	2.6	2.6	2.1	0.0	0.0
80°	2.6	2.6	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°	1.0	2.0	4.1	4.7	5.2
90°	5.2	10.2	20.6	23.3	25.8
92.5°	46.4	192.6	344.4	125.7	98.0
95°	110.9	408.3	1368.9	562.7	366.1
97.5°	183.6	457.3	2027.9	1561.3	1130.7
100°	237.2	486.7	2271.3	2287.3	1858.8
102.5°	288.7	520.1	2318.7	2826.1	2419.8
105°	371.2	572.9	2291.9	3498.9	3294.7
107.5°	458.9	638.4	2164.0	3823.4	3898.0
110°	520.8	682.1	2065.0	3893.2	4135.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	576.5	731.7	1972.2	3838.1	4195.0
115°	665.1	803.8	1845.9	3654.2	4155.8
117.5°	742.5	880.6	1762.9	3395.4	3966.1
120°	794.0	930.2	1729.9	3220.2	3794.9
122.5°	843.5	973.6	1703.1	3056.5	3601.0
125°	912.6	1038.7	1673.2	2831.6	3323.1
127.5°	971.4	1097.4	1655.6	2641.3	3065.3
130°	1010.6	1136.6	1647.4	2524.9	2910.6
132.5°	1047.7	1167.7	1639.1	2427.2	2776.6
135°	1098.2	1216.7	1626.7	2293.4	2585.8
137.5°	1155.0	1262.9	1620.6	2181.0	2430.6
140°	1185.9	1291.8	1616.4	2106.1	2325.4
142.5°	1221.0	1318.8	1612.3	2039.5	2232.6
145°	1273.6	1361.8	1606.1	1952.4	2101.1
147.5°	1324.1	1401.2	1600.5	1878.9	1994.4
150°	1361.2	1424.2	1598.4	1835.1	1928.4
152.5°	1390.1	1449.1	1596.3	1797.6	1874.8
155°	1436.0	1483.9	1593.2	1751.8	1807.2
157.5°	1478.3	1515.1	1593.7	1718.4	1756.2
160°	1503.0	1535.8	1595.8	1699.6	1727.3
162.5°	1523.6	1552.4	1597.9	1682.9	1704.6
165°	1554.6	1574.7	1601.0	1663.1	1675.7
167.5°	1578.3	1590.4	1603.5	1651.1	1655.1
170°	1590.7	1600.7	1603.5	1644.8	1644.8
172.5°	1601.0	1607.0	1603.5	1636.5	1634.5
175°	1611.3	1613.8	1603.5	1626.6	1621.6
177.5°	1615.4	1613.4	1603.0	1617.4	1613.3
180°	1611.3	1611.3	1611.3	1611.3	1611.3

(END OF REPORT)