

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: P518405

Luminaire Tested: **SQ4-BB-050U-050D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518405
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-050D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

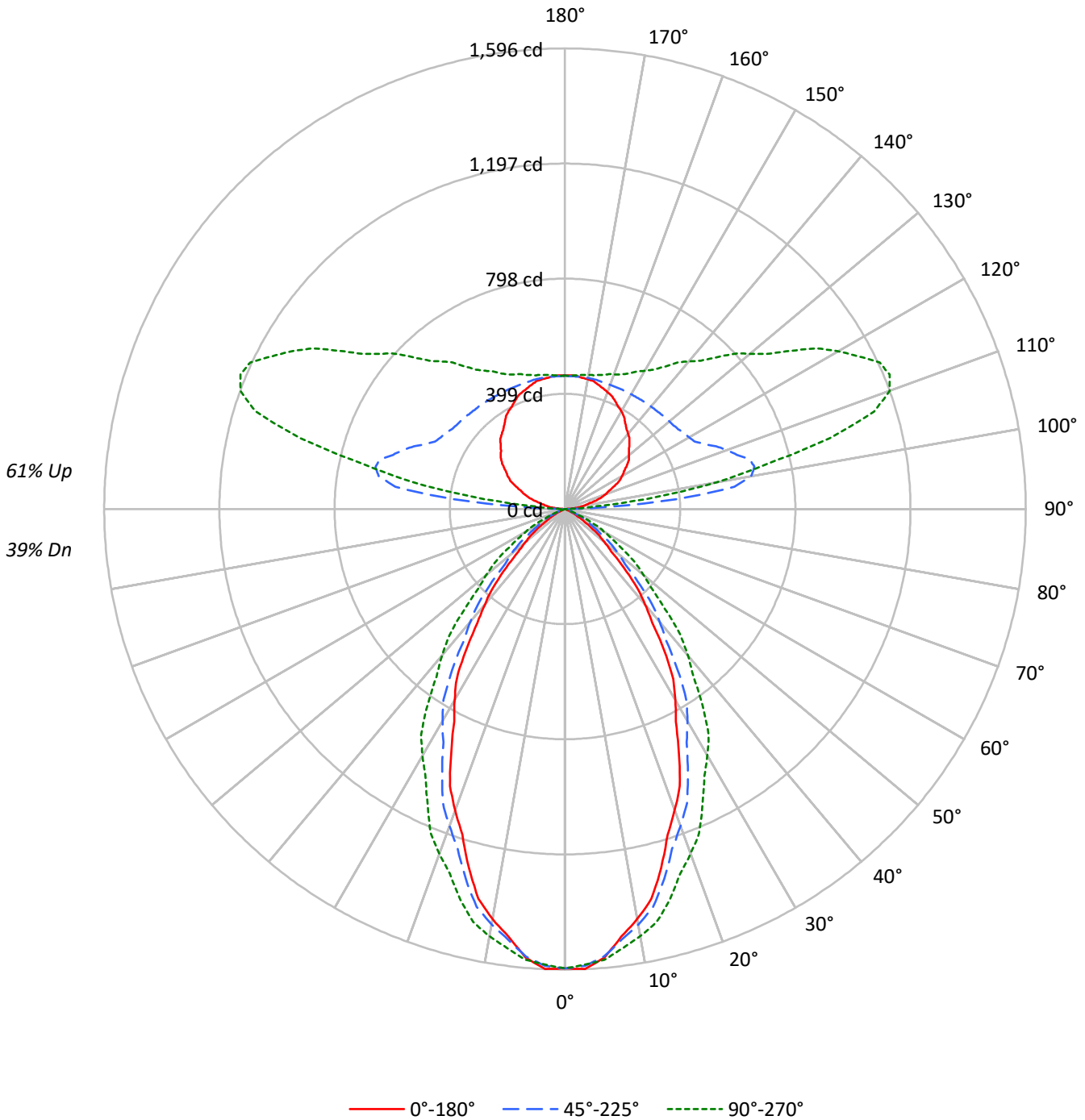
Lumens per Lamp: N/A
Luminaire Lumens: 4918.8 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 44.8
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	50	30	10	0	
RCR																						
0	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39				
1	97	93	90	87	88	85	82	79	69	68	66	55	54	53	42	42	41	35				
2	89	83	77	73	81	76	71	67	63	59	57	50	48	47	39	38	37	32				
3	82	74	68	63	75	68	62	58	56	53	49	46	43	41	36	34	33	29				
4	76	66	60	54	69	61	55	51	51	47	43	42	39	37	33	31	30	26				
5	70	60	53	47	64	55	49	44	46	42	38	38	35	33	31	29	27	24				
6	65	54	47	42	59	50	44	39	42	38	34	35	32	29	28	26	25	22				
7	61	50	42	37	55	46	40	35	39	34	31	32	29	27	26	24	22	20				
8	56	45	38	33	52	42	36	32	36	31	28	30	27	24	25	22	21	18				
9	53	42	35	30	48	39	33	29	33	29	25	28	25	22	23	21	19	17				
10	49	38	32	27	45	36	30	26	31	26	23	26	23	20	22	19	18	16				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9792	9792	9792
5°	9634	9610	9682
10°	9014	9135	9390
15°	8195	8455	8926
20°	7275	7652	8323
25°	6335	6837	7647
30°	5426	6023	7007
35°	4499	5112	6235
40°	3457	4088	5312
45°	2499	3095	4274
50°	1702	2307	3390
55°	1107	1669	2635
60°	635	1175	1904
65°	169	718	963
70°	83	221	277
75°	36	19	0
80°	28	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.3	3.0
10°-20°	371.5	7.6
20°-30°	465.1	9.5
30°-40°	429.6	8.7
40°-50°	288.7	5.9
50°-60°	149.1	3.0
60°-70°	46.7	0.9
70°-80°	2.9	0.1
80°-90°	1.8	0.0
90°-100°	221.9	4.5
100°-110°	602.8	12.3
110°-120°	619.7	12.6
120°-130°	495.5	10.1
130°-140°	389.3	7.9
140°-150°	298.5	6.1
150°-160°	214.7	4.4
160°-170°	131.3	2.7
170°-180°	44.2	0.9
0°-30°	982.0	20.0
0°-40°	1411.6	28.7
0°-60°	1849.4	37.6
0°-90°	1900.9	38.6
90°-120°	1444.4	29.4
90°-150°	2627.7	53.4
90°-180°	3018.0	61.4
0°-180°	4918.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1592	1592	1592	1592	1592	
5°	1560	1545	1556	1562	1568	145
15°	1287	1282	1328	1372	1402	358
25°	934	941	1007	1076	1127	428
35°	599	614	681	761	830	371
45°	287	305	356	425	491	226
55°	103	120	156	200	246	96
65°	12	22	49	60	66	20
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	2	6	10	13	13	2
95°	33	121	386	168	113	35
105°	107	167	663	1009	950	114
115°	190	231	531	1056	1202	188
125°	262	298	480	809	954	233
135°	315	350	467	659	743	244
145°	364	390	461	560	602	229
155°	412	426	458	503	517	190
165°	446	452	459	479	480	126
175°	462	464	461	467	465	44
180°	462	462	462	462	462	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1592.0	1592.0	1592.0	1592.0	1592.0
2.5°	1595.7	1580.6	1584.6	1584.5	1580.3
5°	1560.4	1544.6	1556.5	1562.1	1568.1
7.5°	1494.5	1482.1	1505.1	1522.3	1534.8
10°	1443.3	1432.8	1462.6	1486.1	1503.4
12.5°	1384.2	1376.0	1412.0	1444.3	1466.4
15°	1287.0	1282.5	1327.8	1372.4	1401.7
17.5°	1182.8	1182.7	1234.4	1289.8	1325.2
20°	1111.4	1113.6	1169.1	1230.2	1271.6
22.5°	1039.9	1045.2	1104.4	1168.1	1215.5
25°	933.5	941.0	1007.4	1076.3	1126.8
27.5°	831.2	842.2	912.0	983.7	1045.1
30°	764.0	776.8	848.0	923.3	986.6
32.5°	698.1	713.3	782.7	862.4	926.8
35°	599.2	614.3	680.8	761.0	830.3
37.5°	497.1	511.8	576.9	655.7	730.6
40°	430.5	447.1	509.1	585.5	661.6
42.5°	370.1	386.7	445.0	520.1	592.0
45°	287.3	304.6	355.8	425.1	491.4
47.5°	218.6	237.4	282.3	345.0	405.4
50°	177.9	196.7	241.1	296.3	354.3
52.5°	145.3	163.5	203.5	255.5	308.7
55°	103.2	120.5	155.6	199.8	245.7
57.5°	71.3	86.2	117.7	154.5	190.5
60°	51.6	65.9	95.5	125.4	154.8
62.5°	34.4	47.5	76.4	99.3	119.1
65°	11.6	22.1	49.3	59.5	66.2
67.5°	5.9	7.1	25.9	27.3	29.6
70°	4.6	4.6	12.3	13.1	15.4
72.5°	3.4	3.4	4.9	6.3	6.8
75°	1.5	1.5	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	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°	0.3	1.2	2.1	2.7	2.7
90°	1.5	5.8	10.4	13.4	13.4
92.5°	13.4	60.8	105.5	45.3	38.3
95°	32.7	121.3	386.4	168.2	113.0
97.5°	54.1	134.0	592.4	460.9	323.7
100°	68.4	142.5	655.4	664.4	536.5
102.5°	82.6	150.9	672.1	821.7	708.9
105°	107.0	166.6	662.9	1009.3	949.7
107.5°	132.3	184.9	624.5	1106.1	1122.7
110°	150.1	198.1	596.0	1125.2	1196.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	165.6	211.2	567.4	1109.4	1216.6
115°	190.2	230.9	530.6	1055.6	1202.4
117.5°	213.4	252.4	507.1	979.3	1144.7
120°	228.9	266.7	496.4	928.2	1092.4
122.5°	242.0	279.7	489.3	876.9	1035.3
125°	261.6	297.9	480.1	808.8	954.2
127.5°	279.1	315.2	475.0	757.2	881.9
130°	289.8	324.7	472.6	724.8	836.7
132.5°	300.5	335.4	470.2	697.2	796.3
135°	315.1	350.0	466.7	658.8	743.1
137.5°	330.8	362.5	464.9	624.9	695.9
140°	340.3	370.9	463.7	603.4	667.3
142.5°	349.9	378.0	462.5	586.5	640.0
145°	364.1	390.3	460.7	559.8	601.9
147.5°	380.2	402.6	459.2	538.8	571.9
150°	390.9	409.8	459.2	526.7	552.9
152.5°	399.2	415.8	458.1	515.9	537.4
155°	411.7	426.2	457.8	502.7	517.2
157.5°	423.9	435.2	457.8	493.7	504.7
160°	431.0	441.2	457.8	487.7	496.4
162.5°	438.1	446.0	458.9	482.9	489.3
165°	445.9	451.7	459.2	478.6	480.1
167.5°	453.9	456.8	460.7	473.5	474.7
170°	456.3	459.2	460.7	471.1	471.1
172.5°	458.6	460.4	460.7	468.8	468.8
175°	462.2	463.7	460.7	466.6	465.2
177.5°	463.4	463.4	459.8	464.5	462.2
180°	462.2	462.2	462.2	462.2	462.2

(END OF REPORT)