

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: P518440

Luminaire Tested: **SQ4-BB-050U-075D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518440  
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-075D-940-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

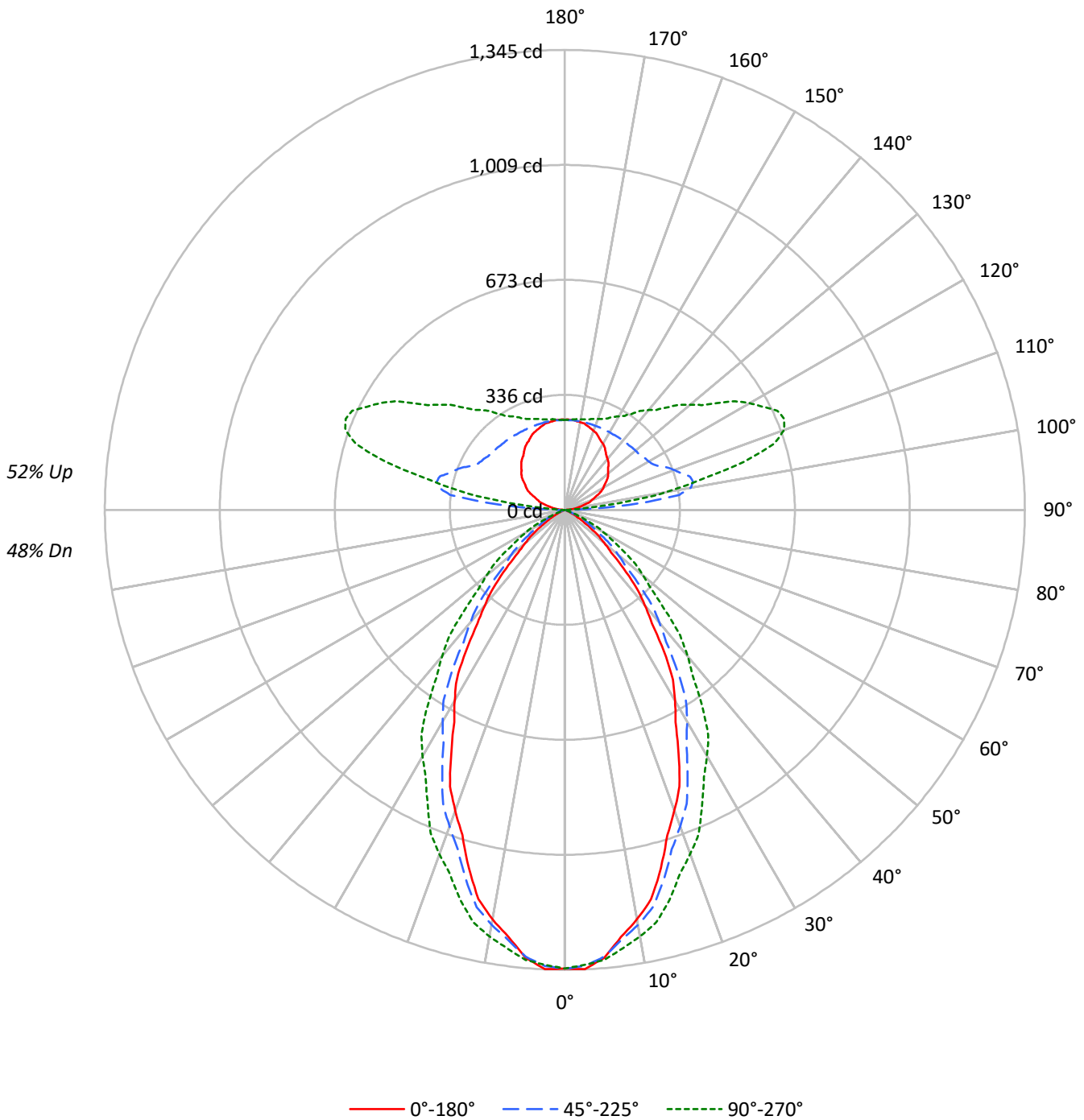
Lumens per Lamp: N/A  
Luminaire Lumens: 3323.3 lumens  
Efficiency: N/A  
Efficacy: 91.6 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 36.3  
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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54	48				48
1	99	95	92	89	91	88	85	83	75	73	71	62	61	60	51	50	49				44	
2	92	85	80	76	84	79	75	71	68	64	62	57	55	53	47	45	44				40	
3	85	77	70	65	78	71	66	62	61	57	54	52	49	47	43	41	40				36	
4	79	69	62	57	73	64	58	54	56	51	48	47	44	42	40	38	36				32	
5	73	63	55	50	67	59	52	48	51	46	42	44	40	37	37	34	33				29	
6	68	57	50	45	63	53	47	42	47	42	38	40	37	34	34	32	30				27	
7	63	52	45	40	58	49	43	38	43	38	34	37	33	31	32	29	27				25	
8	59	48	41	36	55	45	39	34	40	35	31	34	31	28	30	27	25				23	
9	55	44	37	33	51	42	35	31	37	32	28	32	28	26	28	25	23				21	
10	52	41	34	30	48	38	33	29	34	29	26	30	26	24	26	23	21				20	

**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	3.7
10°-20°	313.1	9.4
20°-30°	392.0	11.8
30°-40°	362.0	10.9
40°-50°	243.3	7.3
50°-60°	125.7	3.8
60°-70°	39.3	1.2
70°-80°	2.5	0.1
80°-90°	1.1	0.0
90°-100°	126.6	3.8
100°-110°	343.9	10.3
110°-120°	353.6	10.6
120°-130°	282.7	8.5
130°-140°	222.2	6.7
140°-150°	170.3	5.1
150°-160°	122.5	3.7
160°-170°	74.9	2.3
170°-180°	25.2	0.8
0°-30°	827.5	24.9
0°-40°	1189.5	35.8
0°-60°	1558.4	46.9
0°-90°	1601.3	48.2
90°-120°	824.1	24.8
90°-150°	1499.3	45.1
90°-180°	1722.0	51.8
0°-180°	3323.3	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°	1	3	6	8	8	1
95°	19	69	220	96	64	20
105°	61	95	378	576	542	65
115°	108	132	303	602	686	107
125°	149	170	274	462	544	133
135°	180	200	266	376	424	139
145°	208	223	263	319	343	130
155°	235	243	261	287	295	108
165°	254	258	262	273	274	72
175°	264	265	263	266	265	25
180°	264	264	264	264	264	

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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°	0.2	0.7	1.2	1.5	1.5
90°	0.8	3.3	5.9	7.6	7.6
92.5°	7.6	34.7	60.2	25.9	21.9
95°	18.7	69.2	220.5	96.0	64.4
97.5°	30.9	76.5	338.0	263.0	184.7
100°	39.0	81.3	374.0	379.1	306.1
102.5°	47.1	86.1	383.5	468.8	404.5
105°	61.1	95.1	378.2	575.9	541.9
107.5°	75.5	105.5	356.3	631.1	640.6
110°	85.6	113.0	340.1	642.0	682.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	94.5	120.5	323.8	633.0	694.2
115°	108.5	131.8	302.7	602.3	686.0
117.5°	121.8	144.0	289.3	558.8	653.1
120°	130.6	152.2	283.2	529.6	623.3
122.5°	138.1	159.6	279.2	500.3	590.7
125°	149.2	170.0	273.9	461.5	544.4
127.5°	159.3	179.8	271.0	432.1	503.2
130°	165.4	185.3	269.7	413.6	477.4
132.5°	171.5	191.4	268.3	397.8	454.4
135°	179.8	199.7	266.3	375.9	424.0
137.5°	188.8	206.8	265.3	356.6	397.0
140°	194.2	211.6	264.6	344.3	380.8
142.5°	199.6	215.7	263.9	334.6	365.2
145°	207.8	222.7	262.9	319.4	343.4
147.5°	216.9	229.7	262.0	307.4	326.3
150°	223.0	233.8	262.0	300.5	315.5
152.5°	227.8	237.2	261.4	294.4	306.6
155°	234.9	243.2	261.2	286.8	295.1
157.5°	241.9	248.3	261.2	281.7	288.0
160°	245.9	251.7	261.2	278.3	283.2
162.5°	250.0	254.5	261.9	275.5	279.2
165°	254.4	257.7	262.0	273.1	273.9
167.5°	259.0	260.6	262.9	270.2	270.9
170°	260.3	262.0	262.9	268.8	268.8
172.5°	261.7	262.7	262.9	267.5	267.5
175°	263.7	264.6	262.9	266.3	265.4
177.5°	264.4	264.4	262.4	265.1	263.7
180°	263.7	263.7	263.7	263.7	263.7

(END OF REPORT)