

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: P518433

Luminaire Tested: **SQ4-BB-050U-075D-930-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518433  
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-930-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

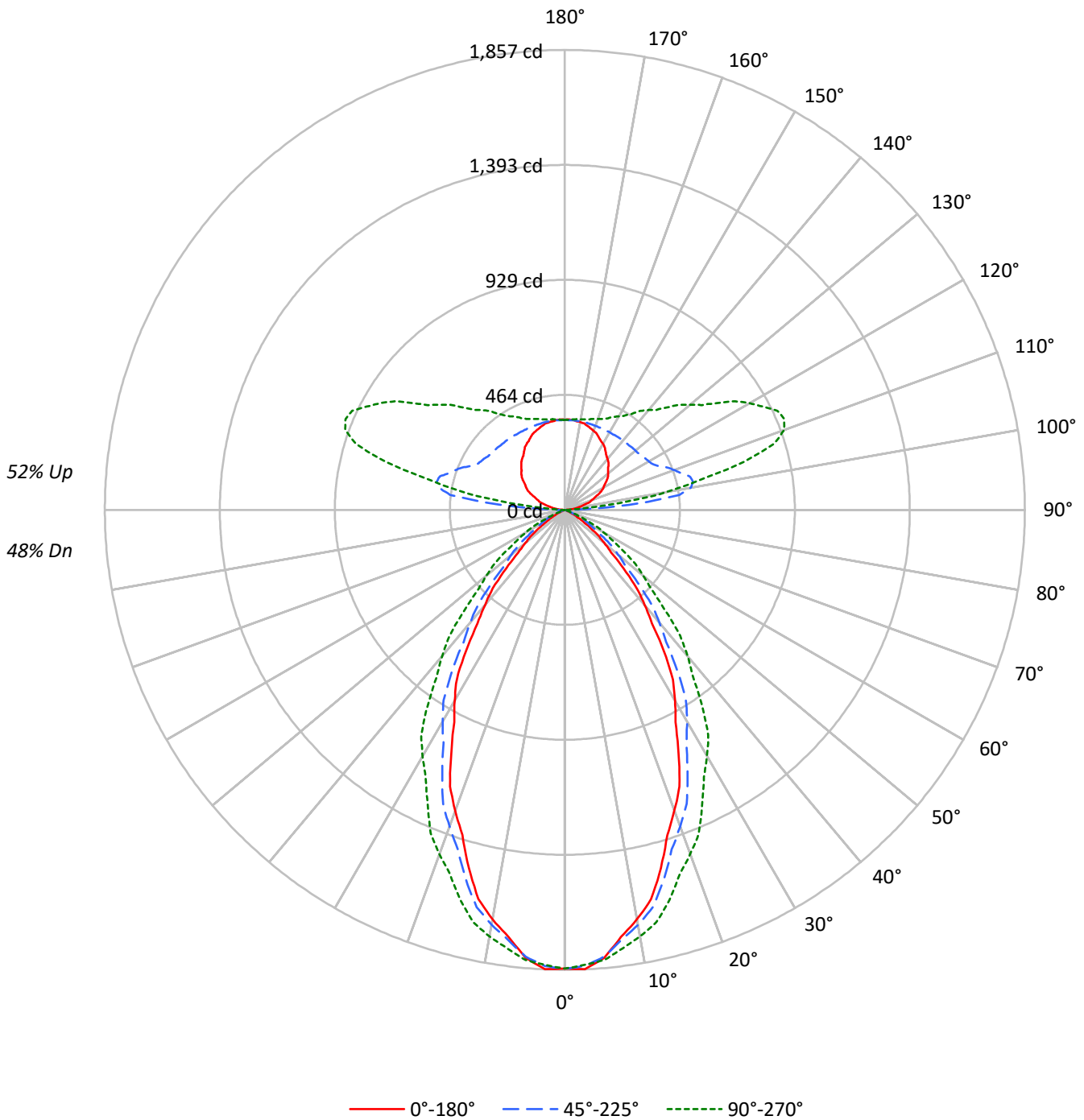
Lumens per Lamp: N/A  
Luminaire Lumens: 4588.6 lumens  
Efficiency: N/A  
Efficacy: 78.4 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 58.5  
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									
RC	80									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°	11393	11393	11393
5°	11209	11182	11265
10°	10488	10628	10925
15°	9535	9838	10385
20°	8464	8904	9684
25°	7371	7955	8897
30°	6314	7007	8153
35°	5235	5948	7253
40°	4022	4756	6181
45°	2908	3601	4973
50°	1981	2684	3944
55°	1288	1941	3066
60°	738	1367	2216
65°	195	835	1122
70°	97	257	322
75°	43	21	0
80°	32	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	169.0	3.7
10°-20°	432.3	9.4
20°-30°	541.2	11.8
30°-40°	499.9	10.9
40°-50°	335.9	7.3
50°-60°	173.5	3.8
60°-70°	54.3	1.2
70°-80°	3.4	0.1
80°-90°	1.5	0.0
90°-100°	174.8	3.8
100°-110°	474.9	10.3
110°-120°	488.2	10.6
120°-130°	390.4	8.5
130°-140°	306.7	6.7
140°-150°	235.2	5.1
150°-160°	169.1	3.7
160°-170°	103.4	2.3
170°-180°	34.8	0.8
0°-30°	1142.5	24.9
0°-40°	1642.4	35.8
0°-60°	2151.8	46.9
0°-90°	2211.0	48.2
90°-120°	1137.9	24.8
90°-150°	2070.2	45.1
90°-180°	2378.0	51.8
0°-180°	4588.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1852	1852	1852	1852	1852	
5°	1816	1797	1811	1818	1824	168
15°	1497	1492	1545	1597	1631	417
25°	1086	1095	1172	1252	1311	498
35°	697	715	792	885	966	432
45°	334	354	414	495	572	263
55°	120	140	181	232	286	112
65°	13	26	57	69	77	23
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	1	5	8	10	10	2
95°	26	96	304	132	89	27
105°	84	131	522	795	748	90
115°	150	182	418	832	947	148
125°	206	235	378	637	752	184
135°	248	276	368	519	585	192
145°	287	308	363	441	474	180
155°	324	336	361	396	408	150
165°	351	356	362	377	378	99
175°	364	365	363	368	366	35
180°	364	364	364	364	364	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1852.3	1852.3	1852.3	1852.3	1852.3
2.5°	1856.6	1839.1	1843.7	1843.6	1838.7
5°	1815.5	1797.1	1811.1	1817.5	1824.5
7.5°	1738.8	1724.5	1751.2	1771.2	1785.8
10°	1679.3	1667.1	1701.7	1729.1	1749.2
12.5°	1610.5	1601.0	1642.9	1680.5	1706.2
15°	1497.4	1492.2	1544.9	1596.8	1630.9
17.5°	1376.3	1376.1	1436.3	1500.7	1541.9
20°	1293.1	1295.7	1360.3	1431.3	1479.5
22.5°	1209.9	1216.1	1285.0	1359.1	1414.3
25°	1086.1	1094.9	1172.1	1252.3	1311.0
27.5°	967.1	979.9	1061.2	1144.5	1216.0
30°	889.0	903.8	986.6	1074.3	1147.9
32.5°	812.2	829.9	910.6	1003.4	1078.4
35°	697.2	714.7	792.2	885.4	966.0
37.5°	578.4	595.5	671.2	763.0	850.1
40°	500.9	520.2	592.3	681.3	769.8
42.5°	430.7	450.0	517.8	605.2	688.8
45°	334.3	354.4	414.0	494.6	571.7
47.5°	254.3	276.2	328.5	401.4	471.7
50°	207.0	228.9	280.5	344.7	412.2
52.5°	169.0	190.2	236.8	297.3	359.2
55°	120.1	140.2	181.0	232.4	285.9
57.5°	83.0	100.3	136.9	179.8	221.7
60°	60.0	76.7	111.1	145.9	180.1
62.5°	40.0	55.2	88.9	115.6	138.5
65°	13.4	25.7	57.4	69.2	77.1
67.5°	6.8	8.2	30.1	31.8	34.4
70°	5.4	5.4	14.3	15.3	17.9
72.5°	3.9	3.9	5.7	7.4	7.9
75°	1.8	1.8	0.9	0.0	0.0
77.5°	0.9	0.9	0.7	0.0	0.0
80°	0.9	0.9	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°	0.2	0.9	1.6	2.1	2.1
90°	1.2	4.6	8.2	10.5	10.5
92.5°	10.5	47.9	83.1	35.7	30.2
95°	25.8	95.6	304.4	132.5	89.0
97.5°	42.6	105.6	466.7	363.1	255.0
100°	53.9	112.2	516.4	523.4	422.7
102.5°	65.1	118.9	529.5	647.4	558.5
105°	84.3	131.2	522.2	795.1	748.2
107.5°	104.2	145.7	492.0	871.4	884.5
110°	118.3	156.0	469.5	886.5	942.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	130.4	166.4	447.0	874.0	958.5
115°	149.9	181.9	418.0	831.6	947.2
117.5°	168.1	198.8	399.5	771.5	901.8
120°	180.3	210.1	391.1	731.2	860.6
122.5°	190.6	220.4	385.5	690.9	815.6
125°	206.1	234.7	378.2	637.2	751.7
127.5°	219.9	248.3	374.2	596.6	694.8
130°	228.3	255.8	372.3	571.1	659.2
132.5°	236.8	264.2	370.5	549.3	627.4
135°	248.2	275.7	367.7	519.0	585.4
137.5°	260.6	285.6	366.3	492.3	548.2
140°	268.1	292.2	365.3	475.4	525.7
142.5°	275.6	297.8	364.4	462.1	504.2
145°	286.9	307.5	363.0	441.0	474.2
147.5°	299.5	317.1	361.8	424.5	450.6
150°	307.9	322.8	361.8	415.0	435.6
152.5°	314.5	327.6	360.9	406.4	423.4
155°	324.3	335.8	360.6	396.0	407.5
157.5°	333.9	342.9	360.6	388.9	397.6
160°	339.6	347.6	360.6	384.2	391.1
162.5°	345.2	351.4	361.6	380.4	385.5
165°	351.3	355.8	361.8	377.1	378.2
167.5°	357.6	359.9	363.0	373.1	374.0
170°	359.5	361.8	363.0	371.2	371.2
172.5°	361.3	362.7	363.0	369.3	369.3
175°	364.1	365.3	363.0	367.6	366.5
177.5°	365.1	365.1	362.3	366.0	364.1
180°	364.1	364.1	364.1	364.1	364.1

(END OF REPORT)