

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: P518919

Luminaire Tested: **SQ4-BB-150U-075D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518919  
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-075D-940-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

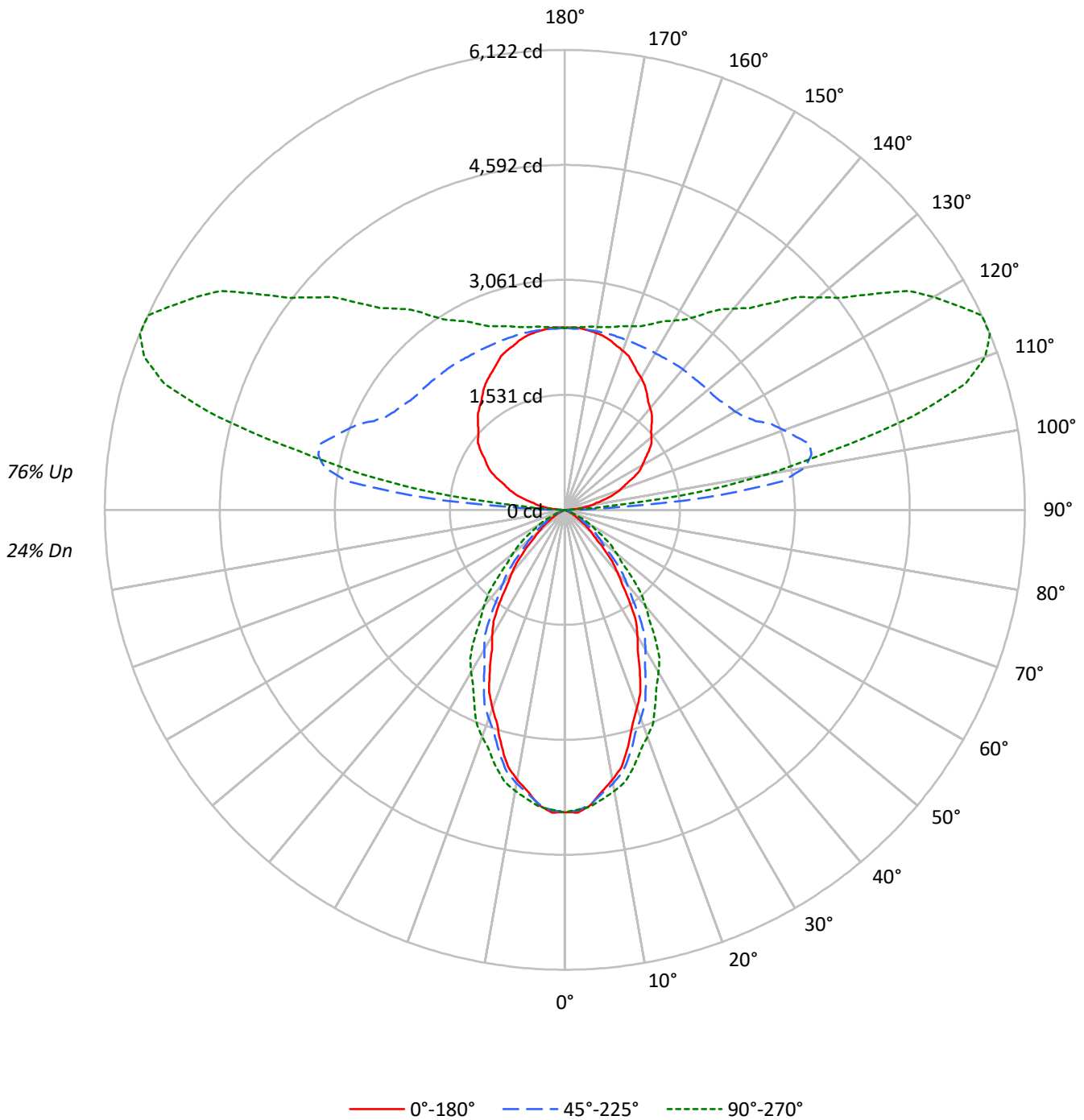
Lumens per Lamp: N/A  
Luminaire Lumens: 20428.7 lumens  
Efficiency: N/A  
Efficacy: 104.8 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 194.9  
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	101	101	101	101	90	90	90	90	69	69	69	49	49	49	32	32	32	24
1	93	89	85	82	82	79	76	74	61	59	58	45	44	43	29	29	28	21
2	85	79	73	69	76	70	66	62	55	52	49	40	38	37	27	26	25	19
3	78	70	63	58	69	63	57	53	49	45	42	36	34	32	25	23	23	17
4	72	62	55	50	64	56	50	45	44	40	37	33	30	28	23	21	20	16
5	66	56	48	43	59	50	44	39	40	35	32	30	27	25	21	19	18	14
6	61	50	43	38	54	45	39	35	36	32	28	27	24	22	19	18	16	13
7	57	45	38	33	50	41	35	31	33	28	25	25	22	20	18	16	15	12
8	53	41	34	30	47	37	31	27	30	26	23	23	20	18	16	15	14	11
9	49	38	31	26	44	34	28	24	28	23	20	21	18	16	15	14	13	10
10	46	35	28	24	41	32	26	22	26	21	18	20	17	15	14	13	12	10

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	12377	12377	12377
5°	12178	12148	12238
10°	11394	11546	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°	3158	3912	5403
50°	2152	2916	4285
55°	1399	2109	3330
60°	803	1485	2407
65°	212	907	1218
70°	105	281	350
75°	46	23	0
80°	34	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	367.3	1.8
10°-20°	939.3	4.6
20°-30°	1175.8	5.8
30°-40°	1086.1	5.3
40°-50°	729.8	3.6
50°-60°	377.0	1.8
60°-70°	118.1	0.6
70°-80°	7.5	0.0
80°-90°	5.2	0.0
90°-100°	1126.1	5.5
100°-110°	3044.8	14.9
110°-120°	3201.2	15.7
120°-130°	2600.2	12.7
130°-140°	2039.6	10.0
140°-150°	1565.4	7.7
150°-160°	1125.8	5.5
160°-170°	687.8	3.4
170°-180°	231.9	1.1
0°-30°	2482.4	12.2
0°-40°	3568.5	17.5
0°-60°	4675.2	22.9
0°-90°	4806.0	23.5
90°-120°	7372.0	36.1
90°-150°	13577.3	66.5
90°-180°	15623.0	76.5
0°-180°	20428.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4024	4024	4024	4024	4024	
5°	3945	3905	3935	3949	3964	366
15°	3254	3242	3357	3469	3544	906
25°	2360	2379	2547	2721	2848	1082
35°	1515	1553	1721	1924	2099	938
45°	726	770	900	1075	1242	570
55°	261	305	393	505	621	243
65°	29	56	125	150	167	49
75°	4	4	2	0	0	6
85°	0	0	0	0	0	1
90°	5	15	34	36	34	12
95°	175	613	1873	969	576	183
105°	566	875	3378	4982	4778	596
115°	996	1218	2801	5423	6122	984
125°	1364	1563	2525	4261	5005	1216
135°	1635	1829	2457	3440	3894	1264
145°	1902	2044	2423	2945	3169	1190
155°	2147	2231	2402	2642	2728	990
165°	2337	2360	2413	2507	2520	658
175°	2426	2423	2415	2446	2441	230
180°	2423	2423	2423	2423	2423	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4024.5	4024.5	4024.5	4024.5	4024.5
2.5°	4033.9	3995.8	4005.8	4005.6	3994.9
5°	3944.7	3904.7	3935.0	3948.9	3964.2
7.5°	3778.0	3746.8	3804.9	3848.4	3880.0
10°	3648.7	3622.1	3697.4	3756.8	3800.6
12.5°	3499.2	3478.6	3569.7	3651.2	3707.1
15°	3253.5	3242.1	3356.7	3469.4	3543.6
17.5°	2990.3	2989.9	3120.7	3260.6	3350.1
20°	2809.6	2815.3	2955.6	3109.8	3214.5
22.5°	2628.9	2642.2	2792.0	2952.9	3072.8
25°	2359.8	2378.8	2546.7	2721.0	2848.5
27.5°	2101.2	2129.0	2305.7	2486.8	2642.1
30°	1931.5	1963.8	2143.7	2334.2	2494.1
32.5°	1764.8	1803.2	1978.6	2180.1	2343.1
35°	1514.8	1552.9	1721.2	1923.8	2098.9
37.5°	1256.6	1293.9	1458.3	1657.7	1847.0
40°	1088.4	1130.3	1287.0	1480.2	1672.5
42.5°	935.7	977.6	1125.0	1314.9	1496.5
45°	726.2	770.0	899.5	1074.7	1242.2
47.5°	552.6	600.2	713.8	872.2	1024.9
50°	449.8	497.4	609.4	749.0	895.6
52.5°	367.2	413.3	514.4	646.0	780.4
55°	260.9	304.7	393.3	505.0	621.1
57.5°	180.3	218.0	297.5	390.7	481.7
60°	130.5	166.6	241.4	317.1	391.4
62.5°	86.8	120.0	193.1	251.1	301.0
65°	29.2	55.9	124.6	150.3	167.4
67.5°	14.8	17.8	65.4	69.1	74.8
70°	11.7	11.7	31.2	33.2	38.9
72.5°	8.6	8.6	12.5	16.0	17.1
75°	3.9	3.9	1.9	0.0	0.0
77.5°	1.9	1.9	1.6	0.0	0.0
80°	1.9	1.9	0.0	0.0	0.0
82.5°	0.4	0.4	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	1.0	3.1	6.8	7.3	6.8
90°	5.2	15.4	33.9	36.5	33.9
92.5°	74.1	269.9	532.6	231.2	167.5
95°	174.8	613.4	1872.8	969.2	576.4
97.5°	280.7	703.5	2919.2	2415.8	1774.2
100°	359.9	739.9	3244.7	3383.9	2736.1
102.5°	433.0	790.5	3359.5	4117.9	3633.4
105°	566.0	874.6	3377.8	4982.5	4778.4
107.5°	689.1	970.7	3230.1	5521.8	5589.6
110°	785.1	1040.1	3098.7	5666.6	5954.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	870.7	1109.4	2977.7	5637.7	6121.7
115°	996.4	1218.3	2801.3	5422.9	6121.7
117.5°	1119.5	1327.6	2685.0	5094.8	5887.0
120°	1194.6	1398.6	2616.1	4859.4	5667.9
122.5°	1265.6	1465.5	2574.4	4607.1	5421.6
125°	1364.1	1563.1	2524.8	4260.7	5005.4
127.5°	1454.9	1650.3	2495.6	3978.0	4632.9
130°	1505.0	1706.5	2483.1	3803.3	4395.0
132.5°	1557.2	1756.6	2470.6	3645.8	4190.5
135°	1635.4	1829.2	2457.0	3440.2	3894.2
137.5°	1714.2	1897.3	2445.6	3273.5	3643.3
140°	1768.4	1939.3	2441.4	3166.1	3495.1
142.5°	1820.6	1981.3	2433.0	3069.2	3357.4
145°	1901.5	2044.3	2423.1	2944.7	3169.1
147.5°	1975.0	2101.5	2411.6	2831.9	3004.3
150°	2029.3	2141.5	2407.5	2770.6	2908.3
152.5°	2079.3	2177.3	2405.4	2713.7	2826.9
155°	2146.6	2230.8	2402.3	2641.6	2728.3
157.5°	2216.5	2275.2	2402.8	2591.4	2648.5
160°	2256.2	2304.6	2404.9	2559.7	2600.5
162.5°	2287.5	2327.8	2407.0	2534.4	2565.0
165°	2337.0	2360.0	2412.7	2506.9	2519.6
167.5°	2371.0	2386.8	2413.2	2483.3	2489.4
170°	2391.8	2399.5	2415.3	2472.7	2472.7
172.5°	2408.5	2410.0	2415.3	2460.1	2458.1
175°	2425.7	2423.2	2415.3	2446.5	2441.4
177.5°	2431.5	2425.3	2414.8	2435.5	2429.4
180°	2423.1	2423.1	2423.1	2423.1	2423.1

(END OF REPORT)