

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: P518903

Luminaire Tested: **SQ4-BB-150U-075D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518903
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-835-1D-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

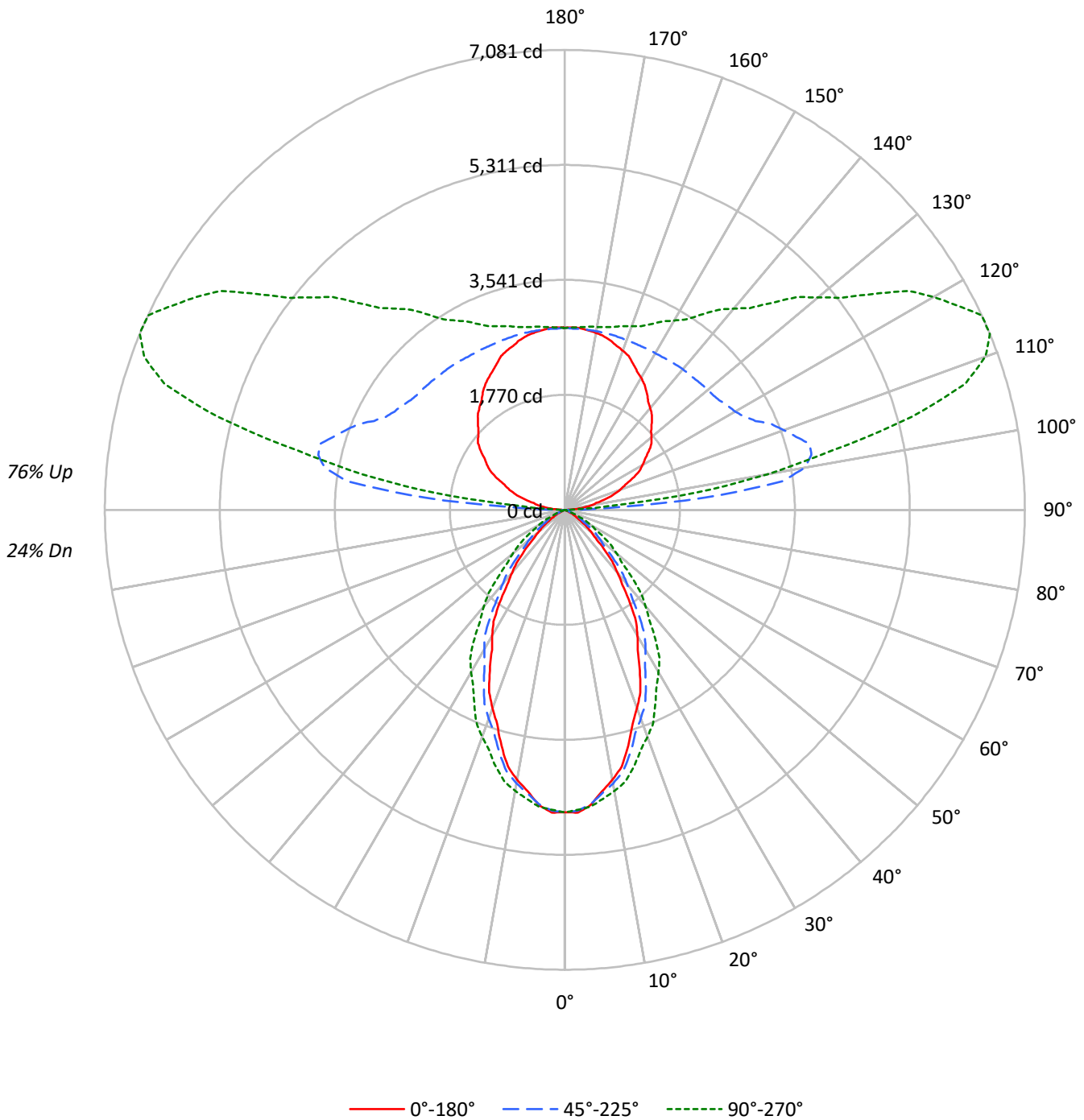
Lumens per Lamp: N/A
Luminaire Lumens: 23631.2 lumens
Efficiency: N/A
Efficacy: 121.2 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

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°	14317	14317	14317
5°	14087	14052	14156
10°	13181	13356	13729
15°	11983	12363	13051
20°	10637	11189	12170
25°	9263	9997	11181
30°	7934	8806	10245
35°	6579	7475	9115
40°	5054	5977	7767
45°	3654	4525	6249
50°	2489	3373	4957
55°	1618	2440	3852
60°	928	1718	2784
65°	246	1049	1410
70°	121	324	405
75°	53	27	0
80°	41	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	424.9	1.8
10°-20°	1086.5	4.6
20°-30°	1360.2	5.8
30°-40°	1256.4	5.3
40°-50°	844.2	3.6
50°-60°	436.0	1.8
60°-70°	136.6	0.6
70°-80°	8.6	0.0
80°-90°	6.0	0.0
90°-100°	1302.7	5.5
100°-110°	3522.1	14.9
110°-120°	3703.0	15.7
120°-130°	3007.8	12.7
130°-140°	2359.4	10.0
140°-150°	1810.8	7.7
150°-160°	1302.3	5.5
160°-170°	795.6	3.4
170°-180°	268.2	1.1
0°-30°	2871.5	12.2
0°-40°	4127.9	17.5
0°-60°	5408.1	22.9
0°-90°	5559.3	23.5
90°-120°	8527.7	36.1
90°-150°	15705.8	66.5
90°-180°	18072.0	76.5
0°-180°	23631.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4655	4655	4655	4655	4655	
5°	4563	4517	4552	4568	4586	423
15°	3764	3750	3883	4013	4099	1048
25°	2730	2752	2946	3148	3295	1251
35°	1752	1796	1991	2225	2428	1085
45°	840	891	1040	1243	1437	660
55°	302	352	455	584	718	282
65°	34	65	144	174	194	57
75°	4	4	2	0	0	6
85°	0	0	0	0	0	1
90°	6	18	39	42	39	14
95°	202	710	2166	1121	667	212
105°	655	1012	3907	5764	5528	690
115°	1153	1409	3240	6273	7081	1138
125°	1578	1808	2921	4929	5790	1407
135°	1892	2116	2842	3980	4505	1462
145°	2200	2365	2803	3406	3666	1376
155°	2483	2580	2779	3056	3156	1145
165°	2703	2730	2791	2900	2915	762
175°	2806	2803	2794	2830	2824	266
180°	2803	2803	2803	2803	2803	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4655.4	4655.4	4655.4	4655.4	4655.4
2.5°	4666.2	4622.2	4633.8	4633.5	4621.2
5°	4563.1	4516.8	4551.8	4568.0	4585.6
7.5°	4370.3	4334.2	4401.4	4451.7	4488.3
10°	4220.7	4189.9	4277.0	4345.8	4396.4
12.5°	4047.8	4024.0	4129.3	4223.5	4288.3
15°	3763.5	3750.3	3882.9	4013.2	4099.1
17.5°	3459.0	3458.6	3609.9	3771.7	3875.2
20°	3250.0	3256.6	3418.9	3597.4	3718.5
22.5°	3041.0	3056.4	3229.7	3415.8	3554.5
25°	2729.7	2751.8	2946.0	3147.5	3295.0
27.5°	2430.6	2462.8	2667.1	2876.6	3056.3
30°	2234.2	2271.7	2479.7	2700.2	2885.1
32.5°	2041.4	2085.9	2288.7	2521.9	2710.4
35°	1752.3	1796.3	1991.0	2225.3	2427.9
37.5°	1453.6	1496.8	1686.9	1917.6	2136.5
40°	1259.0	1307.5	1488.7	1712.3	1934.7
42.5°	1082.4	1130.9	1301.4	1521.0	1731.1
45°	840.1	890.7	1040.5	1243.1	1436.9
47.5°	639.2	694.2	825.7	1009.0	1185.6
50°	520.3	575.3	705.0	866.5	1036.0
52.5°	424.8	478.1	595.0	747.2	902.7
55°	301.8	352.5	455.0	584.1	718.5
57.5°	208.6	252.2	344.1	451.9	557.2
60°	150.9	192.7	279.3	366.8	452.7
62.5°	100.5	138.8	223.4	290.5	348.2
65°	33.8	64.6	144.1	173.9	193.7
67.5°	17.1	20.6	75.7	79.9	86.5
70°	13.5	13.5	36.0	38.4	45.0
72.5°	9.9	9.9	14.4	18.5	19.8
75°	4.5	4.5	2.3	0.0	0.0
77.5°	2.3	2.3	1.8	0.0	0.0
80°	2.3	2.3	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°	1.2	3.6	7.8	8.4	7.8
90°	6.0	17.8	39.2	42.2	39.2
92.5°	85.7	312.3	616.1	267.5	193.7
95°	202.2	709.6	2166.4	1121.1	666.8
97.5°	324.7	813.8	3376.9	2794.6	2052.3
100°	416.4	855.9	3753.4	3914.4	3165.0
102.5°	500.9	914.5	3886.2	4763.5	4203.0
105°	654.7	1011.7	3907.3	5763.5	5527.5
107.5°	797.1	1122.8	3736.5	6387.4	6465.9
110°	908.2	1203.2	3584.4	6554.9	6888.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1007.1	1283.3	3444.4	6521.4	7081.4
115°	1152.6	1409.2	3240.5	6273.0	7081.4
117.5°	1295.0	1535.7	3105.9	5893.5	6809.8
120°	1381.9	1617.9	3026.3	5621.2	6556.4
122.5°	1463.9	1695.2	2978.0	5329.3	6271.6
125°	1578.0	1808.1	2920.7	4928.6	5790.0
127.5°	1683.0	1909.0	2886.9	4601.6	5359.2
130°	1740.9	1974.0	2872.4	4399.5	5084.0
132.5°	1801.3	2032.0	2857.9	4217.3	4847.4
135°	1891.8	2116.0	2842.2	3979.6	4504.7
137.5°	1982.9	2194.7	2828.9	3786.7	4214.4
140°	2045.7	2243.3	2824.1	3662.5	4043.1
142.5°	2106.0	2291.9	2814.4	3550.4	3883.7
145°	2199.5	2364.7	2803.0	3406.3	3665.9
147.5°	2284.6	2431.0	2789.7	3275.8	3475.2
150°	2347.4	2477.2	2784.9	3204.9	3364.2
152.5°	2405.3	2518.6	2782.5	3139.1	3270.0
155°	2483.2	2580.5	2778.8	3055.7	3156.0
157.5°	2564.0	2631.9	2779.4	2997.6	3063.7
160°	2609.9	2665.9	2781.9	2960.9	3008.2
162.5°	2646.1	2692.7	2784.3	2931.7	2967.1
165°	2703.4	2730.0	2790.9	2899.9	2914.6
167.5°	2742.6	2760.9	2791.5	2872.5	2879.6
170°	2766.8	2775.6	2793.9	2860.3	2860.3
172.5°	2786.1	2787.9	2793.9	2845.8	2843.4
175°	2806.0	2803.0	2793.9	2830.0	2824.1
177.5°	2812.6	2805.6	2793.3	2817.3	2810.2
180°	2803.0	2803.0	2803.0	2803.0	2803.0

(END OF REPORT)