

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: P518879

Luminaire Tested: **SQ4-BB-150U-050D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518879
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-050D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

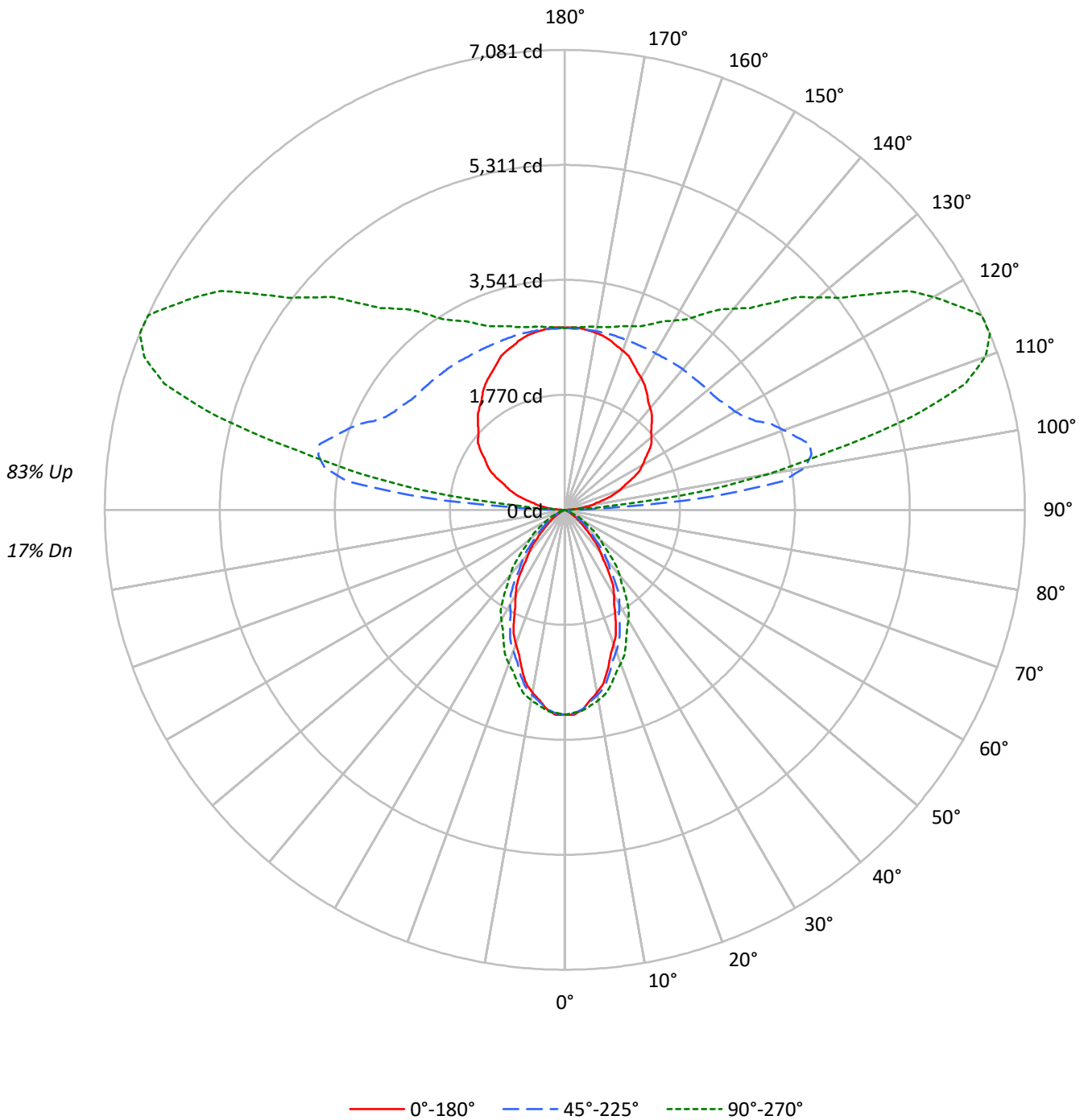
Lumens per Lamp: N/A
Luminaire Lumens: 21838.1 lumens
Efficiency: N/A
Efficacy: 129.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 168.9
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	99	99	99	99	87	87	87	87	65	65	65	45	45	45	26	26	26	17
1	91	87	84	81	80	77	74	72	58	56	54	40	39	38	24	23	23	16
2	83	77	71	67	73	68	63	60	51	48	46	36	34	33	22	21	20	14
3	76	68	61	56	67	60	55	51	46	42	39	32	30	29	20	19	18	13
4	70	60	53	48	62	54	48	43	41	37	34	29	27	25	18	17	16	12
5	64	54	47	41	57	48	42	37	37	33	30	26	24	22	17	15	14	11
6	59	48	41	36	52	43	37	33	33	29	26	24	21	19	15	14	13	10
7	55	44	37	32	48	39	33	29	30	26	23	22	19	17	14	13	12	9
8	51	40	33	28	45	36	30	25	28	23	20	20	18	16	13	12	11	8
9	47	36	29	25	42	32	27	23	25	21	18	19	16	14	12	11	10	8
10	44	33	27	22	39	30	24	20	23	19	16	17	15	13	11	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9694	9694	9694
5°	9538	9515	9585
10°	8925	9044	9296
15°	8114	8371	8837
20°	7202	7576	8240
25°	6272	6769	7571
30°	5372	5962	6937
35°	4455	5061	6172
40°	3422	4047	5259
45°	2474	3064	4232
50°	1686	2284	3356
55°	1096	1652	2609
60°	629	1163	1885
65°	167	710	955
70°	83	219	274
75°	37	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	287.7	1.3
10°-20°	735.7	3.4
20°-30°	921.0	4.2
30°-40°	850.7	3.9
40°-50°	571.6	2.6
50°-60°	295.2	1.4
60°-70°	92.5	0.4
70°-80°	5.8	0.0
80°-90°	5.9	0.0
90°-100°	1302.7	6.0
100°-110°	3522.1	16.1
110°-120°	3703.0	17.0
120°-130°	3007.8	13.8
130°-140°	2359.4	10.8
140°-150°	1810.8	8.3
150°-160°	1302.3	6.0
160°-170°	795.6	3.6
170°-180°	268.2	1.2
0°-30°	1944.3	8.9
0°-40°	2795.0	12.8
0°-60°	3661.9	16.8
0°-90°	3766.2	17.2
90°-120°	8527.7	39.0
90°-150°	15705.8	71.9
90°-180°	18072.0	82.8
0°-180°	21838.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3152	3152	3152	3152	3152	
5°	3090	3058	3082	3093	3105	286
15°	2548	2539	2629	2717	2776	710
25°	1848	1863	1995	2131	2231	847
35°	1186	1216	1348	1507	1644	735
45°	569	603	705	842	973	447
55°	204	239	308	396	486	191
65°	23	44	98	118	131	39
75°	3	3	2	0	0	4
85°	0	0	0	0	0	0
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°	3152.2	3152.2	3152.2	3152.2	3152.2
2.5°	3159.5	3129.7	3137.6	3137.4	3129.0
5°	3089.7	3058.4	3082.1	3093.0	3104.9
7.5°	2959.1	2934.7	2980.2	3014.3	3039.1
10°	2857.9	2837.0	2896.0	2942.5	2976.8
12.5°	2740.8	2724.7	2796.0	2859.8	2903.6
15°	2548.3	2539.4	2629.1	2717.4	2775.5
17.5°	2342.1	2341.8	2444.3	2553.9	2623.9
20°	2200.6	2205.1	2315.0	2435.8	2517.8
22.5°	2059.1	2069.5	2186.9	2312.8	2406.8
25°	1848.3	1863.2	1994.7	2131.2	2231.1
27.5°	1645.8	1667.6	1805.9	1947.8	2069.4
30°	1512.8	1538.2	1679.0	1828.3	1953.5
32.5°	1382.3	1412.4	1549.7	1707.6	1835.2
35°	1186.5	1216.3	1348.1	1506.8	1644.0
37.5°	984.2	1013.5	1142.2	1298.4	1446.6
40°	852.5	885.3	1008.0	1159.4	1310.0
42.5°	732.9	765.7	881.2	1029.9	1172.1
45°	568.8	603.1	704.6	841.7	973.0
47.5°	432.8	470.1	559.1	683.2	802.8
50°	352.3	389.6	477.3	586.7	701.5
52.5°	287.6	323.7	402.9	506.0	611.2
55°	204.4	238.6	308.1	395.5	486.5
57.5°	141.2	170.7	233.0	306.0	377.3
60°	102.2	130.5	189.1	248.4	306.5
62.5°	68.0	94.0	151.3	196.7	235.8
65°	22.9	43.8	97.6	117.7	131.2
67.5°	11.6	14.0	51.2	54.1	58.6
70°	9.2	9.2	24.4	26.0	30.5
72.5°	6.7	6.7	9.8	12.5	13.4
75°	3.1	3.1	1.5	0.0	0.0
77.5°	1.5	1.5	1.2	0.0	0.0
80°	1.5	1.5	0.0	0.0	0.0
82.5°	0.3	0.3	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)