

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: P518954

Luminaire Tested: **SQ4-BB-150U-125D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518954  
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-125D-835-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

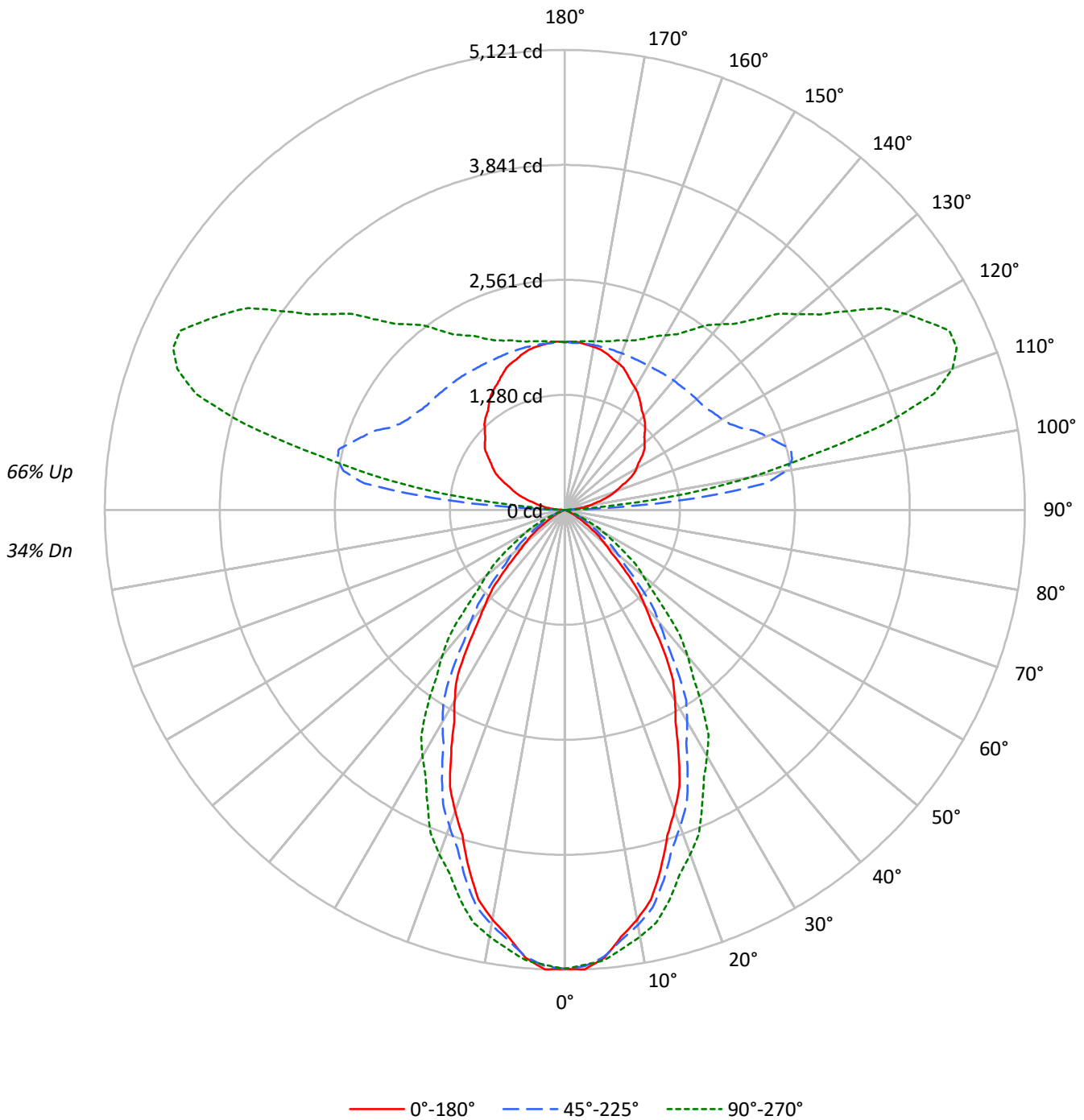
Lumens per Lamp: N/A  
Luminaire Lumens: 18147.0 lumens  
Efficiency: N/A  
Efficacy: 108.1 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 167.8  
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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	34
1	95	92	88	85	86	83	80	78	67	65	63	52	51	50	38	37	37	31
2	88	81	76	72	79	74	69	66	60	57	54	47	45	43	35	34	33	28
3	81	73	66	61	73	66	61	56	54	50	47	43	40	38	32	31	30	25
4	75	65	58	53	67	59	53	49	49	45	41	39	36	34	30	28	27	23
5	69	59	51	46	62	54	47	43	44	40	36	35	32	30	27	26	24	21
6	64	53	46	40	58	49	42	38	40	36	32	33	29	27	25	23	22	19
7	59	48	41	36	54	44	38	34	37	32	29	30	27	24	23	21	20	17
8	55	44	37	32	50	41	34	30	34	29	26	28	25	22	22	20	18	16
9	52	40	34	29	47	37	31	27	31	27	24	26	23	20	20	18	17	15
10	48	37	31	26	44	34	29	25	29	25	22	24	21	19	19	17	16	14

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

	0°	45°	90°
0°	23571	23571	23571
5°	23192	23134	23306
10°	21700	21989	22603
15°	19727	20353	21486
20°	17511	18421	20035
25°	15250	16457	18408
30°	13062	14497	16868
35°	10831	12306	15007
40°	8321	9840	12787
45°	6015	7450	10289
50°	4098	5553	8161
55°	2664	4016	6342
60°	1528	2828	4584
65°	405	1727	2321
70°	200	534	666
75°	87	45	0
80°	66	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	466.3	2.6
10°-20°	1192.5	6.6
20°-30°	1492.9	8.2
30°-40°	1378.9	7.6
40°-50°	926.5	5.1
50°-60°	478.6	2.6
60°-70°	149.9	0.8
70°-80°	9.5	0.1
80°-90°	4.1	0.0
90°-100°	868.4	4.8
100°-110°	2348.1	12.9
110°-120°	2468.6	13.6
120°-130°	2005.2	11.0
130°-140°	1572.9	8.7
140°-150°	1207.2	6.7
150°-160°	868.2	4.8
160°-170°	530.4	2.9
170°-180°	178.8	1.0
0°-30°	3151.6	17.4
0°-40°	4530.6	25.0
0°-60°	5935.7	32.7
0°-90°	6099.1	33.6
90°-120°	5685.1	31.3
90°-150°	10470.5	57.7
90°-180°	12048.0	66.4
0°-180°	18147.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5110	5110	5110	5110	5110	
5°	5008	4957	4996	5014	5033	464
15°	4131	4116	4262	4405	4499	1150
25°	2996	3020	3233	3454	3616	1374
35°	1923	1972	2185	2442	2665	1191
45°	922	978	1142	1364	1577	724
55°	331	387	499	641	789	309
65°	37	71	158	191	213	63
75°	5	5	2	0	0	7
85°	0	0	0	0	0	1
90°	4	12	26	28	26	9
95°	135	473	1444	747	444	141
105°	436	674	2605	3842	3685	460
115°	768	940	2160	4182	4721	759
125°	1052	1205	1947	3286	3860	938
135°	1261	1411	1895	2653	3003	975
145°	1466	1576	1869	2271	2444	917
155°	1655	1720	1853	2037	2104	764
165°	1802	1820	1861	1933	1943	508
175°	1871	1869	1863	1887	1883	178
180°	1869	1869	1869	1869	1869	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5109.5	5109.5	5109.5	5109.5	5109.5
2.5°	5121.4	5073.1	5085.8	5085.5	5072.0
5°	5008.2	4957.4	4995.8	5013.6	5032.9
7.5°	4796.6	4756.9	4830.7	4886.0	4926.1
10°	4632.5	4598.6	4694.2	4769.7	4825.3
12.5°	4442.6	4416.5	4532.1	4635.5	4706.6
15°	4130.6	4116.1	4261.7	4404.7	4499.0
17.5°	3796.4	3796.0	3962.1	4139.7	4253.3
20°	3567.0	3574.3	3752.4	3948.3	4081.2
22.5°	3337.6	3354.6	3544.8	3749.0	3901.2
25°	2996.0	3020.2	3233.3	3454.5	3616.5
27.5°	2667.7	2703.0	2927.3	3157.2	3354.4
30°	2452.2	2493.3	2721.6	2963.5	3166.6
32.5°	2240.6	2289.4	2512.0	2767.9	2974.8
35°	1923.2	1971.5	2185.2	2442.4	2664.8
37.5°	1595.4	1642.8	1851.5	2104.6	2344.9
40°	1381.8	1435.0	1634.0	1879.3	2123.4
42.5°	1188.0	1241.2	1428.3	1669.4	1899.9
45°	922.0	977.6	1142.0	1364.4	1577.1
47.5°	701.5	762.0	906.2	1107.4	1301.2
50°	571.0	631.4	773.7	951.0	1137.1
52.5°	466.2	524.7	653.1	820.1	990.8
55°	331.2	386.8	499.3	641.1	788.6
57.5°	228.9	276.8	377.7	496.0	611.6
60°	165.6	211.5	306.5	402.6	496.9
62.5°	110.2	152.3	245.2	318.8	382.2
65°	37.1	70.9	158.2	190.8	212.6
67.5°	18.8	22.7	83.1	87.7	94.9
70°	14.8	14.8	39.6	42.2	49.4
72.5°	10.9	10.9	15.8	20.3	21.8
75°	4.9	4.9	2.5	0.0	0.0
77.5°	2.5	2.5	2.0	0.0	0.0
80°	2.5	2.5	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°	0.8	2.4	5.2	5.6	5.2
90°	4.0	11.9	26.1	28.1	26.1
92.5°	57.1	208.2	410.7	178.3	129.1
95°	134.8	473.1	1444.2	747.4	444.5
97.5°	216.4	542.5	2251.2	1863.0	1368.2
100°	277.6	570.6	2502.3	2609.6	2110.0
102.5°	333.9	609.6	2590.8	3175.7	2802.0
105°	436.5	674.5	2604.9	3842.4	3685.0
107.5°	531.4	748.6	2491.0	4258.3	4310.6
110°	605.5	802.1	2389.6	4369.9	4592.2

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	671.4	855.5	2296.3	4347.6	4720.9
115°	768.4	939.5	2160.3	4182.0	4720.9
117.5°	863.3	1023.8	2070.6	3929.0	4539.9
120°	921.3	1078.6	2017.5	3747.5	4370.9
122.5°	976.0	1130.2	1985.3	3552.9	4181.0
125°	1052.0	1205.4	1947.1	3285.7	3860.0
127.5°	1122.0	1272.7	1924.6	3067.7	3572.8
130°	1160.6	1316.0	1914.9	2933.0	3389.3
132.5°	1200.8	1354.6	1905.3	2811.5	3231.6
135°	1261.2	1410.7	1894.8	2653.0	3003.1
137.5°	1321.9	1463.2	1886.0	2524.4	2809.6
140°	1363.8	1495.5	1882.7	2441.7	2695.4
142.5°	1404.0	1527.9	1876.3	2366.9	2589.2
145°	1466.4	1576.5	1868.7	2270.9	2443.9
147.5°	1523.1	1620.6	1859.8	2183.9	2316.8
150°	1564.9	1651.5	1856.6	2136.6	2242.8
152.5°	1603.5	1679.1	1855.0	2092.7	2180.0
155°	1655.4	1720.3	1852.6	2037.1	2104.0
157.5°	1709.3	1754.6	1853.0	1998.4	2042.4
160°	1739.9	1777.3	1854.6	1974.0	2005.4
162.5°	1764.1	1795.1	1856.2	1954.5	1978.1
165°	1802.3	1820.0	1860.6	1933.2	1943.1
167.5°	1828.4	1840.6	1861.0	1915.0	1919.7
170°	1844.5	1850.4	1862.6	1906.9	1906.9
172.5°	1857.4	1858.6	1862.6	1897.2	1895.6
175°	1870.7	1868.7	1862.6	1886.7	1882.7
177.5°	1875.1	1870.4	1862.2	1878.2	1873.5
180°	1868.7	1868.7	1868.7	1868.7	1868.7

(END OF REPORT)