

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: P518966

Luminaire Tested: **SQ4-BB-150U-125D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518966
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-935-1D-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, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

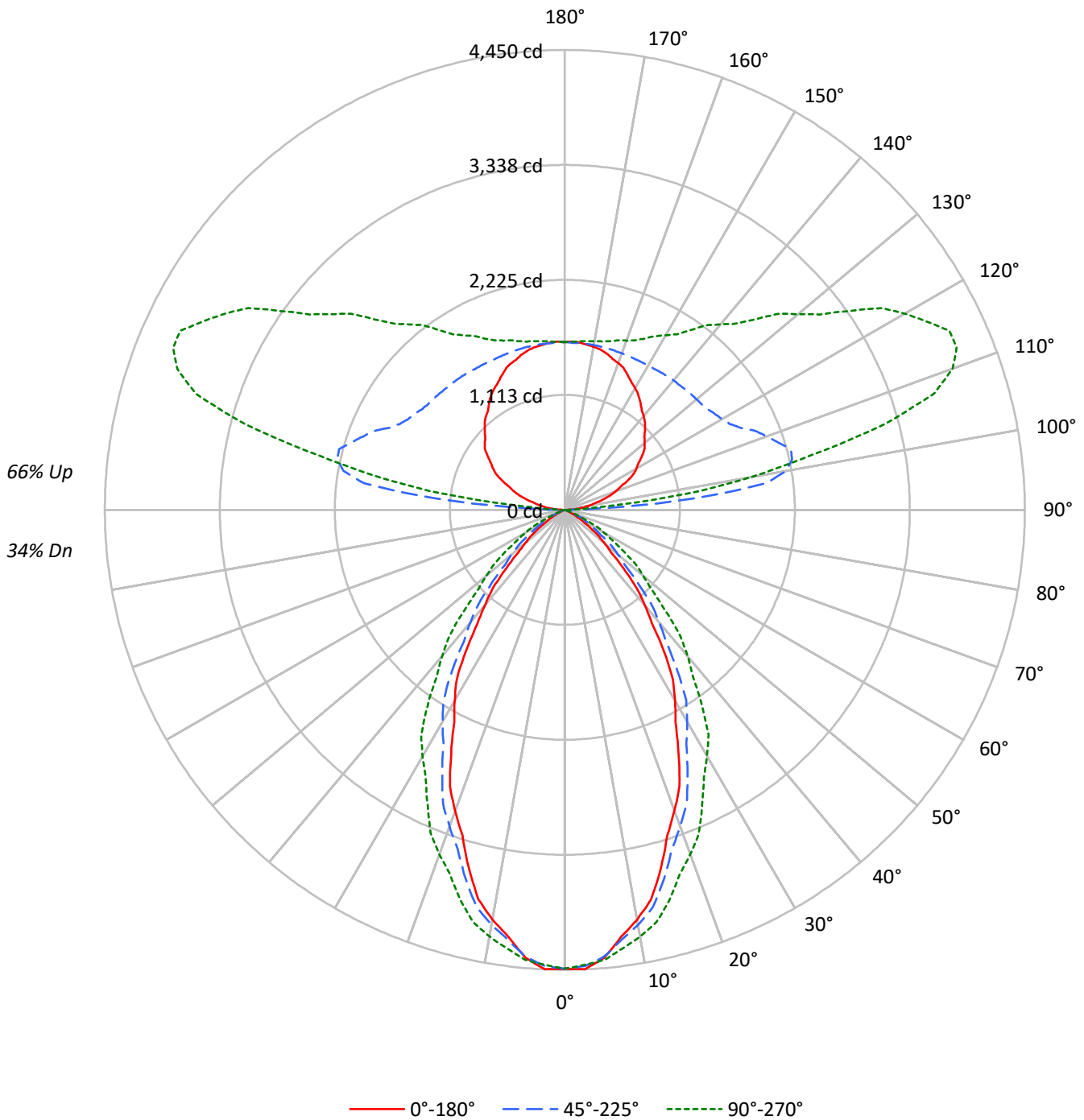
Lumens per Lamp: N/A
Luminaire Lumens: 15767.8 lumens
Efficiency: N/A
Efficacy: 94.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

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				
RC	80					70					50					30				
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°	20480	20480	20480
5°	20151	20101	20251
10°	18855	19106	19639
15°	17141	17684	18669
20°	15215	16006	17408
25°	13250	14300	15994
30°	11350	12597	14656
35°	9410	10693	13039
40°	7231	8549	11111
45°	5227	6474	8940
50°	3561	4825	7091
55°	2315	3490	5511
60°	1328	2457	3983
65°	351	1501	2016
70°	174	464	580
75°	77	37	0
80°	56	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	405.2	2.6
10°-20°	1036.1	6.6
20°-30°	1297.1	8.2
30°-40°	1198.1	7.6
40°-50°	805.1	5.1
50°-60°	415.8	2.6
60°-70°	130.2	0.8
70°-80°	8.2	0.1
80°-90°	3.5	0.0
90°-100°	754.6	4.8
100°-110°	2040.2	12.9
110°-120°	2145.0	13.6
120°-130°	1742.3	11.0
130°-140°	1366.7	8.7
140°-150°	1049.0	6.7
150°-160°	754.4	4.8
160°-170°	460.8	2.9
170°-180°	155.4	1.0
0°-30°	2738.4	17.4
0°-40°	3936.6	25.0
0°-60°	5157.5	32.7
0°-90°	5299.5	33.6
90°-120°	4939.8	31.3
90°-150°	9097.7	57.7
90°-180°	10468.0	66.4
0°-180°	15767.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4440	4440	4440	4440	4440	
5°	4352	4308	4341	4356	4373	403
15°	3589	3576	3703	3827	3909	1000
25°	2603	2624	2809	3002	3142	1193
35°	1671	1713	1899	2122	2315	1035
45°	801	850	992	1186	1370	629
55°	288	336	434	557	685	269
65°	32	62	138	166	185	54
75°	4	4	2	0	0	6
85°	0	0	0	0	0	0
90°	4	10	23	24	23	8
95°	117	411	1255	649	386	123
105°	379	586	2263	3339	3202	399
115°	668	816	1877	3634	4102	659
125°	914	1047	1692	2855	3354	815
135°	1096	1226	1646	2305	2609	847
145°	1274	1370	1624	1973	2124	797
155°	1438	1495	1610	1770	1828	663
165°	1566	1581	1617	1680	1688	441
175°	1625	1624	1618	1639	1636	154
180°	1624	1624	1624	1624	1624	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4439.6	4439.6	4439.6	4439.6	4439.6
2.5°	4450.0	4407.9	4419.0	4418.8	4407.0
5°	4351.6	4307.5	4340.8	4356.3	4373.1
7.5°	4167.7	4133.3	4197.4	4245.4	4280.3
10°	4025.1	3995.7	4078.8	4144.3	4192.6
12.5°	3860.1	3837.5	3937.9	4027.8	4089.5
15°	3589.1	3576.5	3702.9	3827.2	3909.1
17.5°	3298.7	3298.3	3442.6	3596.9	3695.6
20°	3099.4	3105.7	3260.5	3430.6	3546.1
22.5°	2900.1	2914.8	3080.0	3257.5	3389.8
25°	2603.2	2624.2	2809.4	3001.6	3142.3
27.5°	2318.0	2348.6	2543.5	2743.3	2914.7
30°	2130.7	2166.4	2364.8	2575.0	2751.4
32.5°	1946.8	1989.2	2182.7	2405.0	2584.7
35°	1671.0	1713.0	1898.7	2122.2	2315.4
37.5°	1386.2	1427.4	1608.8	1828.7	2037.5
40°	1200.7	1246.9	1419.7	1632.9	1845.0
42.5°	1032.3	1078.5	1241.0	1450.5	1650.9
45°	801.2	849.5	992.3	1185.5	1370.3
47.5°	609.6	662.1	787.4	962.2	1130.6
50°	496.2	548.7	672.3	826.3	988.0
52.5°	405.1	455.9	567.5	712.6	860.9
55°	287.8	336.1	433.9	557.1	685.2
57.5°	198.9	240.5	328.2	431.0	531.4
60°	143.9	183.8	266.3	349.8	431.7
62.5°	95.8	132.3	213.1	277.0	332.1
65°	32.2	61.6	137.5	165.8	184.7
67.5°	16.3	19.7	72.2	76.2	82.5
70°	12.9	12.9	34.4	36.7	43.0
72.5°	9.5	9.5	13.7	17.6	18.9
75°	4.3	4.3	2.1	0.0	0.0
77.5°	2.1	2.1	1.7	0.0	0.0
80°	2.1	2.1	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°	0.7	2.1	4.5	4.9	4.5
90°	3.5	10.3	22.7	24.4	22.7
92.5°	49.6	180.9	356.9	154.9	112.2
95°	117.1	411.0	1254.9	649.4	386.3
97.5°	188.1	471.4	1956.1	1618.8	1188.8
100°	241.2	495.8	2174.2	2267.5	1833.4
102.5°	290.1	529.7	2251.1	2759.3	2434.6
105°	379.3	586.0	2263.3	3338.6	3201.9
107.5°	461.8	650.4	2164.4	3700.0	3745.4
110°	526.1	697.0	2076.3	3797.0	3990.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	583.4	743.4	1995.2	3777.6	4102.0
115°	667.6	816.3	1877.1	3633.7	4102.0
117.5°	750.1	889.6	1799.1	3413.9	3944.7
120°	800.5	937.2	1753.0	3256.1	3797.9
122.5°	848.0	982.0	1725.0	3087.0	3632.9
125°	914.1	1047.4	1691.8	2854.9	3353.9
127.5°	974.9	1105.8	1672.2	2665.5	3104.4
130°	1008.5	1143.5	1663.9	2548.5	2945.0
132.5°	1043.4	1177.0	1655.5	2442.9	2807.9
135°	1095.8	1225.7	1646.4	2305.2	2609.4
137.5°	1148.6	1271.3	1638.7	2193.5	2441.3
140°	1185.0	1299.5	1635.9	2121.5	2342.0
142.5°	1219.9	1327.6	1630.3	2056.6	2249.7
145°	1274.1	1369.8	1623.7	1973.1	2123.5
147.5°	1323.4	1408.2	1616.0	1897.5	2013.1
150°	1359.7	1434.9	1613.2	1856.5	1948.7
152.5°	1393.3	1458.9	1611.8	1818.3	1894.2
155°	1438.4	1494.8	1609.7	1770.0	1828.1
157.5°	1485.2	1524.5	1610.0	1736.4	1774.7
160°	1511.8	1544.3	1611.4	1715.2	1742.5
162.5°	1532.8	1559.8	1612.8	1698.2	1718.7
165°	1566.0	1581.4	1616.7	1679.8	1688.3
167.5°	1588.7	1599.3	1617.0	1664.0	1668.1
170°	1602.7	1607.8	1618.4	1656.9	1656.9
172.5°	1613.9	1614.9	1618.4	1648.4	1647.1
175°	1625.4	1623.7	1618.4	1639.3	1635.9
177.5°	1629.3	1625.2	1618.1	1632.0	1627.9
180°	1623.7	1623.7	1623.7	1623.7	1623.7

(END OF REPORT)