

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: P518963

Luminaire Tested: **SQ4-BB-150U-125D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518963
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-12
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

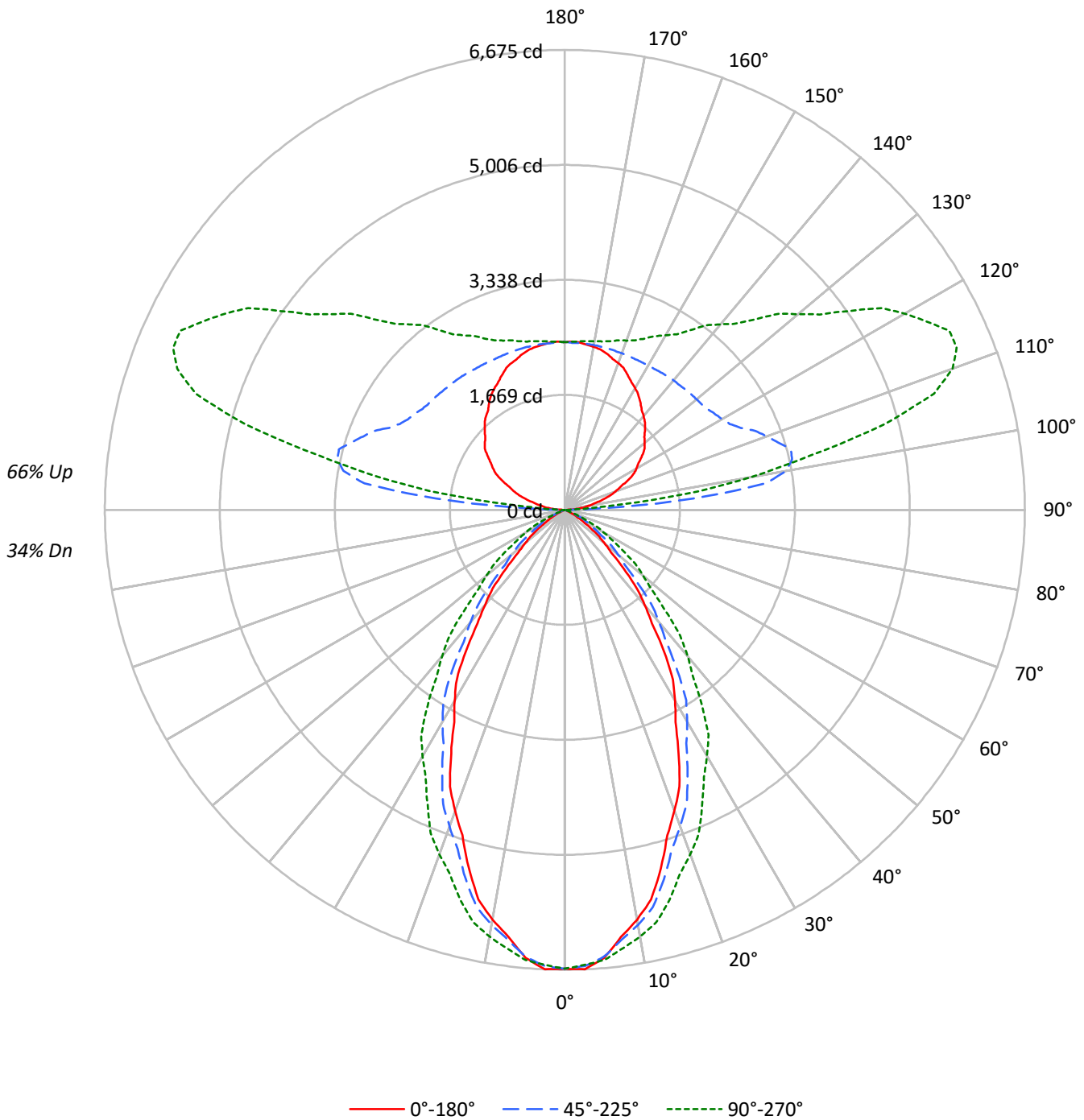
Lumens per Lamp: N/A
Luminaire Lumens: 23651.7 lumens
Efficiency: N/A
Efficacy: 92.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 256.3
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°	20481	20481	20481
5°	20151	20101	20250
10°	18855	19106	19640
15°	17141	17685	18669
20°	15215	16006	17409
25°	13250	14300	15994
30°	11350	12597	14656
35°	9411	10693	13039
40°	7230	8550	11111
45°	5227	6474	8940
50°	3561	4825	7091
55°	2315	3489	5511
60°	1328	2457	3983
65°	351	1501	2016
70°	174	463	579
75°	76	38	0
80°	57	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	607.8	2.6
10°-20°	1554.2	6.6
20°-30°	1945.7	8.2
30°-40°	1797.2	7.6
40°-50°	1207.6	5.1
50°-60°	623.8	2.6
60°-70°	195.4	0.8
70°-80°	12.3	0.1
80°-90°	5.3	0.0
90°-100°	1131.9	4.8
100°-110°	3060.3	12.9
110°-120°	3217.5	13.6
120°-130°	2613.5	11.0
130°-140°	2050.0	8.7
140°-150°	1573.4	6.7
150°-160°	1131.6	4.8
160°-170°	691.3	2.9
170°-180°	233.1	1.0
0°-30°	4107.7	17.4
0°-40°	5904.9	25.0
0°-60°	7736.2	32.7
0°-90°	7949.2	33.6
90°-120°	7409.7	31.3
90°-150°	13646.6	57.7
90°-180°	15703.0	66.4
0°-180°	23651.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6660	6660	6660	6660	6660	
5°	6527	6461	6511	6534	6560	605
15°	5384	5365	5554	5741	5864	1499
25°	3905	3936	4214	4502	4714	1790
35°	2507	2570	2848	3183	3473	1553
45°	1202	1274	1488	1778	2056	944
55°	432	504	651	836	1028	403
65°	48	92	206	249	277	82
75°	6	6	3	0	0	9
85°	0	0	0	0	0	1
90°	5	16	34	37	34	12
95°	176	616	1882	974	579	184
105°	569	879	3395	5008	4803	599
115°	1002	1224	2816	5451	6153	989
125°	1371	1571	2538	4282	5031	1222
135°	1644	1839	2470	3458	3914	1270
145°	1911	2055	2436	2960	3185	1196
155°	2158	2242	2414	2655	2742	995
165°	2349	2372	2425	2520	2532	662
175°	2438	2436	2428	2459	2454	231
180°	2436	2436	2436	2436	2436	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6659.5	6659.5	6659.5	6659.5	6659.5
2.5°	6674.9	6611.9	6628.5	6628.1	6610.5
5°	6527.4	6461.2	6511.3	6534.4	6559.6
7.5°	6251.6	6199.9	6296.0	6368.1	6420.4
10°	6037.7	5993.6	6118.2	6216.5	6289.0
12.5°	5790.2	5756.2	5906.8	6041.7	6134.3
15°	5383.6	5364.7	5554.4	5740.8	5863.7
17.5°	4948.0	4947.4	5163.9	5395.4	5543.4
20°	4649.1	4658.5	4890.7	5145.9	5319.2
22.5°	4350.1	4372.1	4620.1	4886.2	5084.6
25°	3904.8	3936.3	4214.1	4502.4	4713.5
27.5°	3477.0	3523.0	3815.3	4114.9	4372.0
30°	3196.0	3249.6	3547.2	3862.5	4127.1
32.5°	2920.2	2983.9	3274.0	3607.5	3877.1
35°	2506.6	2569.6	2848.1	3183.3	3473.1
37.5°	2079.4	2141.1	2413.1	2743.1	3056.2
40°	1801.0	1870.3	2129.6	2449.4	2767.5
42.5°	1548.4	1617.7	1861.6	2175.7	2476.3
45°	1201.7	1274.2	1488.5	1778.3	2055.5
47.5°	914.3	993.1	1181.1	1443.3	1696.0
50°	744.2	823.0	1008.4	1239.5	1482.0
52.5°	607.6	683.9	851.2	1068.9	1291.3
55°	431.7	504.2	650.8	835.6	1027.8
57.5°	298.3	360.7	492.3	646.5	797.1
60°	215.9	275.7	399.5	524.7	647.6
62.5°	143.7	198.5	319.6	415.6	498.1
65°	48.3	92.4	206.2	248.7	277.1
67.5°	24.5	29.5	108.3	114.3	123.7
70°	19.3	19.3	51.5	55.0	64.4
72.5°	14.2	14.2	20.6	26.5	28.4
75°	6.4	6.4	3.2	0.0	0.0
77.5°	3.2	3.2	2.6	0.0	0.0
80°	3.2	3.2	0.0	0.0	0.0
82.5°	0.6	0.6	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	15.5	34.1	36.6	34.1
92.5°	74.5	271.3	535.3	232.4	168.3
95°	175.6	616.5	1882.3	974.1	579.4
97.5°	282.1	707.1	2934.1	2428.2	1783.2
100°	361.8	743.7	3261.3	3401.2	2750.1
102.5°	435.2	794.6	3376.7	4139.0	3651.9
105°	568.9	879.1	3395.0	5007.9	4802.8
107.5°	692.6	975.6	3246.6	5550.0	5618.1
110°	789.1	1045.4	3114.5	5695.5	5985.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	875.1	1115.0	2992.8	5666.4	6153.0
115°	1001.5	1224.5	2815.6	5450.6	6153.0
117.5°	1125.2	1334.4	2698.7	5120.8	5917.0
120°	1200.7	1405.8	2629.5	4884.2	5696.8
122.5°	1272.0	1473.0	2587.5	4630.6	5449.3
125°	1371.1	1571.1	2537.7	4282.4	5030.9
127.5°	1462.3	1658.7	2508.4	3998.3	4656.5
130°	1512.7	1715.2	2495.8	3822.7	4417.4
132.5°	1565.1	1765.6	2483.2	3664.4	4211.9
135°	1643.8	1838.6	2469.6	3457.8	3914.1
137.5°	1722.9	1907.0	2458.0	3290.2	3661.9
140°	1777.5	1949.2	2453.8	3182.3	3513.0
142.5°	1829.9	1991.4	2445.5	3084.9	3374.6
145°	1911.2	2054.7	2435.5	2959.7	3185.3
147.5°	1985.1	2112.2	2424.0	2846.3	3019.6
150°	2039.6	2152.4	2419.8	2784.7	2923.1
152.5°	2090.0	2188.4	2417.7	2727.5	2841.3
155°	2157.6	2242.2	2414.5	2655.1	2742.2
157.5°	2227.9	2286.8	2415.0	2604.6	2662.0
160°	2267.7	2316.4	2417.1	2572.7	2613.8
162.5°	2299.2	2339.7	2419.2	2547.3	2578.1
165°	2349.0	2372.0	2425.0	2519.7	2532.5
167.5°	2383.1	2399.0	2425.5	2495.9	2502.1
170°	2404.0	2411.7	2427.6	2485.3	2485.3
172.5°	2420.8	2422.3	2427.6	2472.7	2470.6
175°	2438.1	2435.5	2427.6	2459.0	2453.8
177.5°	2443.9	2437.7	2427.1	2447.9	2441.8
180°	2435.5	2435.5	2435.5	2435.5	2435.5

(END OF REPORT)