

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: P518483

Luminaire Tested: **SQ4-BB-050U-125D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518483
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-125D-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

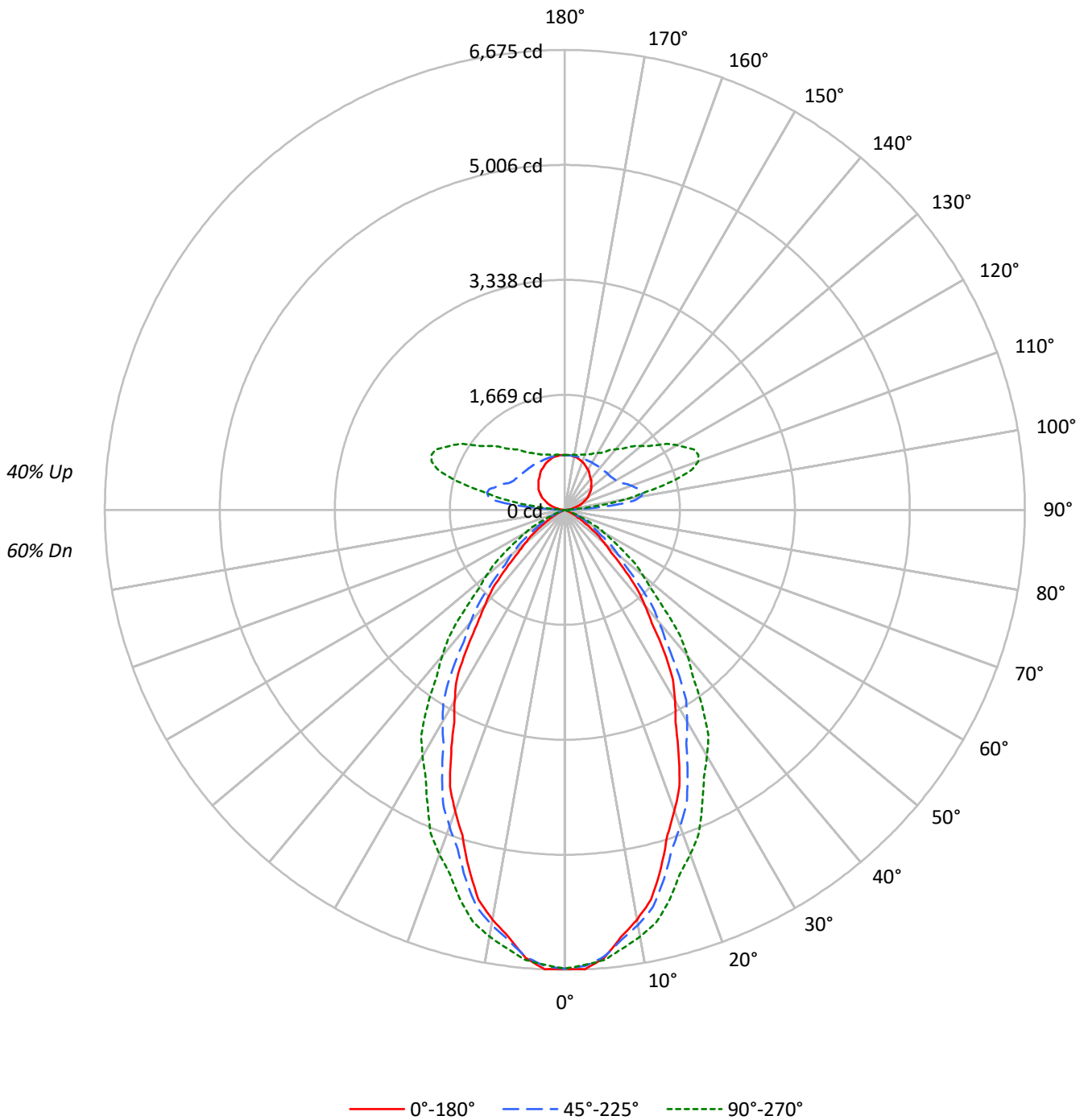
Lumens per Lamp: N/A
Luminaire Lumens: 13139.5 lumens
Efficiency: N/A
Efficacy: 78.7 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 167
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	110	110	110	110	102	102	102	102	89	89	89	77	77	77	66	66	66	60
1	102	99	96	93	96	93	90	88	81	79	78	71	70	68	61	61	60	55
2	95	89	84	79	89	84	79	76	74	71	68	65	63	61	57	55	54	50
3	88	80	74	69	83	76	70	66	67	63	60	60	57	54	52	50	48	45
4	82	73	66	61	77	69	63	58	61	57	53	55	51	48	48	46	44	41
5	76	66	59	54	72	63	56	52	56	51	48	50	47	44	45	42	40	37
6	71	60	53	48	67	57	51	46	52	47	43	47	43	40	42	39	36	34
7	66	55	48	43	62	53	46	42	48	43	39	43	39	36	39	36	33	31
8	62	51	44	39	59	49	42	38	44	39	35	40	36	33	36	33	31	29
9	58	47	40	36	55	45	39	35	41	36	33	37	33	30	34	31	28	26
10	55	44	37	33	52	42	36	32	38	33	30	35	31	28	32	29	26	24

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	4.6
10°-20°	1554.2	11.8
20°-30°	1945.7	14.8
30°-40°	1797.2	13.7
40°-50°	1207.6	9.2
50°-60°	623.8	4.7
60°-70°	195.4	1.5
70°-80°	12.3	0.1
80°-90°	3.3	0.0
90°-100°	381.7	2.9
100°-110°	1037.0	7.9
110°-120°	1066.3	8.1
120°-130°	852.5	6.5
130°-140°	669.8	5.1
140°-150°	513.6	3.9
150°-160°	369.4	2.8
160°-170°	225.9	1.7
170°-180°	76.1	0.6
0°-30°	4107.7	31.3
0°-40°	5904.9	44.9
0°-60°	7736.2	58.9
0°-90°	7947.2	60.5
90°-120°	2485.0	18.9
90°-150°	4521.0	34.4
90°-180°	5192.0	39.5
0°-180°	13139.5	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°	3	10	18	23	23	4
95°	56	209	665	289	194	60
105°	184	287	1140	1736	1634	196
115°	327	397	913	1816	2069	323
125°	450	512	826	1392	1642	401
135°	542	602	803	1134	1278	419
145°	626	672	793	963	1036	393
155°	708	733	788	865	890	327
165°	767	777	790	823	826	217
175°	795	798	793	803	800	76
180°	795	795	795	795	795	

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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°	0.5	2.0	3.6	4.6	4.6
90°	2.6	10.1	17.9	23.0	23.0
92.5°	23.0	104.5	181.5	78.0	66.0
95°	56.3	208.8	664.8	289.3	194.3
97.5°	93.1	230.6	1019.2	792.9	556.9
100°	117.6	245.1	1127.6	1143.1	923.1
102.5°	142.2	259.7	1156.3	1413.7	1219.7
105°	184.1	286.6	1140.4	1736.4	1633.9
107.5°	227.6	318.1	1074.5	1903.1	1931.6
110°	258.3	340.8	1025.4	1935.9	2058.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	284.9	363.4	976.3	1908.7	2093.2
115°	327.3	397.3	912.9	1816.1	2068.6
117.5°	367.2	434.2	872.5	1684.9	1969.4
120°	393.8	458.8	854.0	1596.9	1879.4
122.5°	416.3	481.3	841.8	1508.7	1781.2
125°	450.0	512.5	825.9	1391.6	1641.6
127.5°	480.2	542.2	817.2	1302.8	1517.3
130°	498.6	558.6	813.1	1247.1	1439.6
132.5°	517.0	577.0	809.0	1199.5	1370.0
135°	542.1	602.1	802.9	1133.5	1278.5
137.5°	569.2	623.7	799.8	1075.2	1197.2
140°	585.6	638.1	797.8	1038.1	1148.1
142.5°	601.9	650.4	795.7	1009.0	1101.0
145°	626.5	671.5	792.7	963.1	1035.6
147.5°	654.1	692.6	790.1	926.9	983.9
150°	672.5	705.0	790.1	906.2	951.2
152.5°	686.8	715.3	788.1	887.6	924.6
155°	708.3	733.3	787.6	864.8	889.8
157.5°	729.3	748.8	787.6	849.4	868.4
160°	741.5	759.0	787.6	839.0	854.0
162.5°	753.8	767.3	789.6	830.8	841.8
165°	767.1	777.1	790.1	823.4	825.9
167.5°	780.9	785.9	792.7	814.7	816.7
170°	785.0	790.0	792.7	810.6	810.6
172.5°	789.1	792.1	792.7	806.5	806.5
175°	795.2	797.7	792.7	802.8	800.3
177.5°	797.3	797.3	791.1	799.2	795.2
180°	795.2	795.2	795.2	795.2	795.2

(END OF REPORT)