

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: P518487

Luminaire Tested: **SQ4-BB-050U-125D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518487
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-940-1D-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

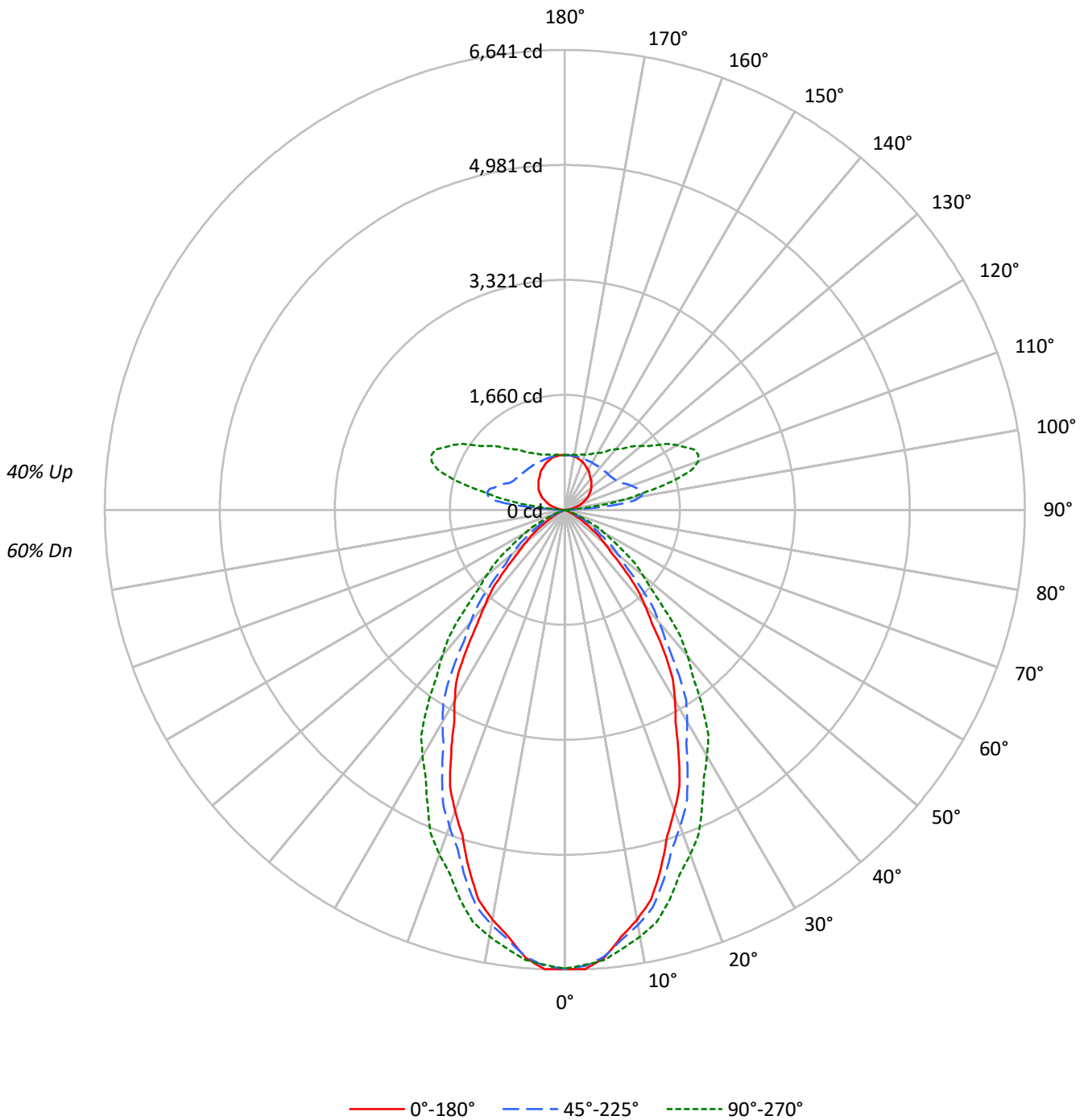
Lumens per Lamp: N/A
Luminaire Lumens: 13072.8 lumens
Efficiency: N/A
Efficacy: 78.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

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°	20376	20376	20376
5°	20049	19999	20148
10°	18759	19009	19540
15°	17054	17595	18574
20°	15138	15925	17320
25°	13183	14227	15913
30°	11292	12533	14582
35°	9363	10638	12973
40°	7193	8506	11054
45°	5200	6441	8895
50°	3543	4800	7055
55°	2303	3472	5482
60°	1321	2445	3963
65°	350	1493	2006
70°	173	461	576
75°	76	38	0
80°	57	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	604.7	4.6
10°-20°	1546.3	11.8
20°-30°	1935.8	14.8
30°-40°	1788.1	13.7
40°-50°	1201.5	9.2
50°-60°	620.6	4.7
60°-70°	194.4	1.5
70°-80°	12.3	0.1
80°-90°	3.3	0.0
90°-100°	379.8	2.9
100°-110°	1031.8	7.9
110°-120°	1060.8	8.1
120°-130°	848.2	6.5
130°-140°	666.4	5.1
140°-150°	511.0	3.9
150°-160°	367.5	2.8
160°-170°	224.7	1.7
170°-180°	75.7	0.6
0°-30°	4086.8	31.3
0°-40°	5874.9	44.9
0°-60°	7696.9	58.9
0°-90°	7906.9	60.5
90°-120°	2472.4	18.9
90°-150°	4498.0	34.4
90°-180°	5166.0	39.5
0°-180°	13072.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6626	6626	6626	6626	6626	
5°	6494	6428	6478	6501	6526	602
15°	5356	5338	5526	5712	5834	1492
25°	3885	3916	4193	4480	4690	1781
35°	2494	2556	2834	3167	3456	1545
45°	1196	1268	1481	1769	2045	939
55°	430	502	648	831	1022	401
65°	48	92	205	248	276	81
75°	6	6	3	0	0	9
85°	0	0	0	0	0	1
90°	2	10	18	23	23	4
95°	56	208	661	288	193	59
105°	183	285	1135	1728	1626	195
115°	326	395	908	1807	2058	321
125°	448	510	822	1384	1633	399
135°	539	599	799	1128	1272	417
145°	623	668	789	958	1030	391
155°	705	730	784	860	885	325
165°	763	773	786	819	822	215
175°	791	794	789	799	796	75
180°	791	791	791	791	791	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6625.6	6625.6	6625.6	6625.6	6625.6
2.5°	6641.0	6578.3	6594.9	6594.5	6576.9
5°	6494.2	6428.4	6478.2	6501.2	6526.3
7.5°	6219.8	6168.4	6264.1	6335.8	6387.8
10°	6007.0	5963.1	6087.1	6184.9	6257.0
12.5°	5760.8	5727.0	5876.9	6011.0	6103.2
15°	5356.3	5337.5	5526.2	5711.7	5833.9
17.5°	4922.9	4922.3	5137.7	5368.0	5515.3
20°	4625.5	4634.9	4865.9	5119.8	5292.2
22.5°	4328.0	4349.9	4596.6	4861.4	5058.8
25°	3885.0	3916.3	4192.7	4479.6	4689.6
27.5°	3459.3	3505.1	3795.9	4094.0	4349.8
30°	3179.8	3233.1	3529.2	3842.9	4106.2
32.5°	2905.4	2968.7	3257.4	3589.1	3857.4
35°	2493.8	2556.5	2833.6	3167.1	3455.5
37.5°	2068.8	2130.2	2400.9	2729.1	3040.7
40°	1791.8	1860.8	2118.8	2436.9	2753.5
42.5°	1540.5	1609.5	1852.1	2164.7	2463.7
45°	1195.6	1267.7	1480.9	1769.3	2045.1
47.5°	909.7	988.1	1175.1	1436.0	1687.3
50°	740.5	818.8	1003.3	1233.2	1474.5
52.5°	604.5	680.4	846.9	1063.5	1284.7
55°	429.5	501.6	647.5	831.3	1022.5
57.5°	296.8	358.9	489.8	643.2	793.0
60°	214.8	274.3	397.5	522.1	644.3
62.5°	143.0	197.5	318.0	413.4	495.6
65°	48.1	92.0	205.1	247.5	275.7
67.5°	24.4	29.4	107.7	113.7	123.1
70°	19.2	19.2	51.3	54.7	64.1
72.5°	14.1	14.1	20.5	26.3	28.2
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°	2.5	10.0	17.8	22.9	22.9
92.5°	22.9	104.0	180.6	77.6	65.6
95°	56.0	207.7	661.4	287.9	193.3
97.5°	92.6	229.4	1014.0	788.9	554.1
100°	117.0	243.9	1121.9	1137.3	918.4
102.5°	141.4	258.4	1150.4	1406.5	1213.5
105°	183.2	285.2	1134.6	1727.6	1625.6
107.5°	226.4	316.5	1069.0	1893.4	1921.8
110°	256.9	339.0	1020.2	1926.1	2047.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	283.4	361.5	971.3	1899.0	2082.5
115°	325.6	395.3	908.2	1806.9	2058.1
117.5°	365.3	432.0	868.0	1676.3	1959.4
120°	391.8	456.5	849.7	1588.8	1869.9
122.5°	414.2	478.8	837.5	1501.0	1772.2
125°	447.7	509.9	821.7	1384.5	1633.3
127.5°	477.8	539.5	813.1	1296.2	1509.6
130°	496.1	555.8	809.0	1240.8	1432.3
132.5°	514.4	574.1	804.9	1193.4	1363.1
135°	539.3	599.0	798.8	1127.7	1272.0
137.5°	566.3	620.5	795.8	1069.7	1191.1
140°	582.6	634.8	793.7	1032.8	1142.3
142.5°	598.9	647.1	791.7	1003.9	1095.5
145°	623.3	668.1	788.6	958.2	1030.3
147.5°	650.8	689.1	786.1	922.2	978.9
150°	669.1	701.4	786.1	901.6	946.4
152.5°	683.3	711.7	784.1	883.1	919.9
155°	704.7	729.6	783.6	860.4	885.3
157.5°	725.6	745.0	783.6	845.0	864.0
160°	737.8	755.2	783.6	834.8	849.7
162.5°	750.0	763.4	785.6	826.5	837.5
165°	763.2	773.2	786.1	819.2	821.7
167.5°	776.9	781.9	788.6	810.6	812.6
170°	781.0	786.0	788.6	806.5	806.5
172.5°	785.1	788.1	788.6	802.4	802.4
175°	791.2	793.7	788.6	798.8	796.3
177.5°	793.2	793.2	787.1	795.2	791.2
180°	791.2	791.2	791.2	791.2	791.2

(END OF REPORT)