

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: P518801

Luminaire Tested: **SQ4-BB-125U-050D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518801
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-050D-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

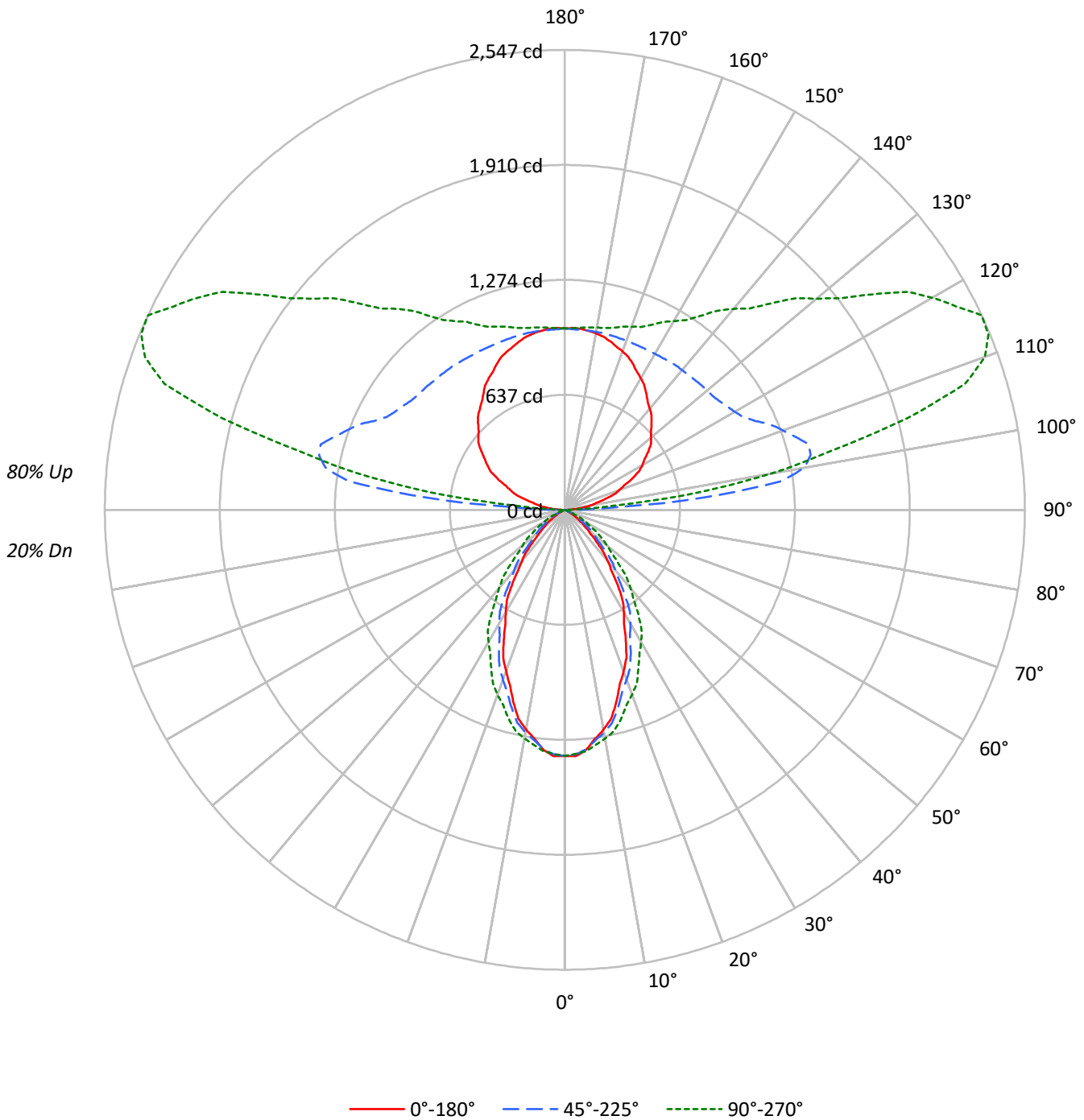
Lumens per Lamp: N/A
Luminaire Lumens: 8110.5 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 74.2
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



TEST NUMBER: P518801
CATALOG NUMBER: SQ4-BB-125U-050D-940-1D-UNV-STD-W-6

Luminous Intensity Polar Plot





TEST NUMBER: P518801

CATALOG NUMBER: SQ4-BB-125U-050D-940-1D-UNV-STD-W-6

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	100	100	100	100	88	88	88	88	67	67	67	47	47	47	29	29	29	20
1	92	88	84	81	81	78	75	73	59	58	56	42	41	40	26	26	25	18
2	84	78	72	68	74	69	64	61	53	50	47	38	36	35	24	23	23	17
3	77	69	62	57	68	61	56	52	47	44	41	34	32	30	22	21	20	15
4	71	61	54	49	63	55	49	44	42	38	35	31	28	26	20	19	18	14
5	65	55	47	42	58	49	43	38	38	34	31	28	25	23	19	17	16	12
6	60	49	42	37	53	44	38	33	35	30	27	26	23	21	17	16	15	11
7	56	45	37	32	49	40	34	29	31	27	24	23	21	19	16	14	13	10
8	52	40	33	29	46	36	30	26	29	24	21	21	19	17	15	13	12	9
9	48	37	30	26	43	33	27	23	26	22	19	20	17	15	14	12	11	9
10	45	34	27	23	40	31	25	21	24	20	17	18	16	14	13	11	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8380	8380	8380
5°	8246	8225	8287
10°	7715	7818	8036
15°	7014	7236	7639
20°	6226	6549	7124
25°	5422	5851	6545
30°	4644	5155	5997
35°	3850	4375	5336
40°	2959	3498	4546
45°	2139	2649	3659
50°	1457	1974	2901
55°	947	1428	2255
60°	544	1005	1630
65°	144	614	825
70°	72	189	237
75°	31	17	0
80°	25	0	0
85°	0	0	0



TEST NUMBER: P518801

CATALOG NUMBER: SQ4-BB-125U-050D-940-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.3	1.5
10°-20°	318.0	3.9
20°-30°	398.1	4.9
30°-40°	367.7	4.5
40°-50°	247.1	3.0
50°-60°	127.6	1.6
60°-70°	40.0	0.5
70°-80°	2.5	0.0
80°-90°	2.4	0.0
90°-100°	469.8	5.8
100°-110°	1265.4	15.6
110°-120°	1328.0	16.4
120°-130°	1077.7	13.3
130°-140°	845.2	10.4
140°-150°	648.9	8.0
150°-160°	466.6	5.8
160°-170°	285.0	3.5
170°-180°	96.1	1.2
0°-30°	840.4	10.4
0°-40°	1208.1	14.9
0°-60°	1582.8	19.5
0°-90°	1627.7	20.1
90°-120°	3063.3	37.8
90°-150°	5635.0	69.5
90°-180°	6483.0	79.9
0°-180°	8110.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1362	1362	1362	1362	1362	
5°	1336	1322	1332	1337	1342	124
15°	1102	1098	1136	1175	1200	307
25°	799	805	862	921	964	366
35°	513	526	583	651	711	318
45°	246	261	304	364	421	193
55°	88	103	133	171	210	82
65°	10	19	42	51	57	17
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	3	8	15	17	17	5
95°	72	256	770	394	272	75
105°	234	364	1400	2094	1965	246
115°	413	506	1165	2252	2547	407
125°	564	648	1046	1769	2081	504
135°	679	758	1017	1427	1616	524
145°	786	847	1004	1220	1310	493
155°	892	924	995	1094	1130	410
165°	967	978	999	1039	1044	273
175°	1006	1004	1000	1014	1012	96
180°	1004	1004	1004	1004	1004	



TEST NUMBER: P518801

CATALOG NUMBER: SQ4-BB-125U-050D-940-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1362.5	1362.5	1362.5	1362.5	1362.5
2.5°	1365.7	1352.8	1356.2	1356.1	1352.5
5°	1335.5	1322.0	1332.2	1336.9	1342.1
7.5°	1279.1	1268.5	1288.2	1302.9	1313.6
10°	1235.3	1226.3	1251.8	1271.9	1286.7
12.5°	1184.7	1177.7	1208.5	1236.1	1255.1
15°	1101.5	1097.6	1136.4	1174.6	1199.7
17.5°	1012.4	1012.2	1056.5	1103.9	1134.2
20°	951.2	953.1	1000.6	1052.8	1088.3
22.5°	890.0	894.5	945.3	999.7	1040.3
25°	798.9	805.4	862.2	921.2	964.4
27.5°	711.4	720.8	780.6	841.9	894.5
30°	653.9	664.9	725.8	790.3	844.4
32.5°	597.5	610.5	669.9	738.1	793.2
35°	512.8	525.7	582.7	651.3	710.6
37.5°	425.4	438.1	493.7	561.2	625.3
40°	368.5	382.7	435.7	501.1	566.2
42.5°	316.8	331.0	380.9	445.2	506.6
45°	245.9	260.7	304.5	363.8	420.6
47.5°	187.1	203.2	241.7	295.3	347.0
50°	152.3	168.4	206.3	253.6	303.2
52.5°	124.3	139.9	174.2	218.7	264.2
55°	88.3	103.2	133.2	171.0	210.3
57.5°	61.0	73.8	100.7	132.3	163.1
60°	44.2	56.4	81.7	107.4	132.5
62.5°	29.4	40.6	65.4	85.0	101.9
65°	9.9	18.9	42.2	50.9	56.7
67.5°	5.0	6.0	22.1	23.4	25.3
70°	4.0	4.0	10.5	11.2	13.2
72.5°	2.9	2.9	4.2	5.4	5.8
75°	1.3	1.3	0.7	0.0	0.0
77.5°	0.7	0.7	0.5	0.0	0.0
80°	0.7	0.7	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.5	1.5	3.1	3.3	3.3
90°	2.6	7.6	15.4	16.6	16.6
92.5°	31.2	110.3	218.0	104.9	72.9
95°	71.6	255.5	770.1	393.8	272.5
97.5°	114.4	292.5	1207.9	1009.1	760.9
100°	147.1	307.2	1347.0	1409.4	1169.2
102.5°	178.8	327.9	1393.1	1709.2	1512.1
105°	234.1	364.2	1399.5	2093.7	1964.9
107.5°	286.3	402.4	1339.9	2291.4	2324.6
110°	321.1	431.2	1285.6	2352.7	2474.1



TEST NUMBER: P518801

CATALOG NUMBER: SQ4-BB-125U-050D-940-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	357.9	460.0	1233.4	2339.1	2538.5
115°	413.2	505.8	1165.4	2251.8	2547.0
117.5°	463.6	550.4	1112.7	2112.3	2441.0
120°	496.3	580.2	1086.1	2012.2	2350.0
122.5°	525.0	607.8	1066.6	1909.9	2246.6
125°	564.1	648.0	1046.4	1768.6	2081.3
127.5°	601.8	684.3	1033.6	1644.0	1923.2
130°	624.3	706.8	1028.5	1572.6	1817.8
132.5°	646.8	728.3	1023.4	1509.8	1734.9
135°	679.3	758.1	1017.0	1426.8	1615.7
137.5°	710.2	785.8	1013.7	1356.5	1511.6
140°	731.7	804.3	1010.6	1313.1	1453.2
142.5°	754.2	821.8	1008.6	1272.7	1390.8
145°	785.5	846.7	1004.2	1219.9	1309.9
147.5°	819.2	872.5	999.9	1175.4	1246.2
150°	841.7	888.0	997.8	1147.5	1206.3
152.5°	862.2	902.5	996.8	1124.8	1172.6
155°	891.6	924.2	995.2	1094.5	1129.6
157.5°	917.5	942.7	995.5	1073.3	1096.8
160°	933.8	955.1	996.5	1060.9	1078.4
162.5°	948.2	965.4	997.6	1050.5	1063.0
165°	967.1	978.4	999.1	1038.9	1043.9
167.5°	982.5	989.0	1000.4	1029.8	1031.8
170°	992.7	995.2	1000.4	1024.7	1024.7
172.5°	998.8	999.3	1001.4	1019.6	1019.6
175°	1005.5	1004.2	1000.4	1014.4	1011.9
177.5°	1008.3	1006.3	1001.1	1009.3	1007.3
180°	1004.2	1004.2	1004.2	1004.2	1004.2

(END OF REPORT)