

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: P518514

Luminaire Tested: **SQ4-BB-075U-050D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518514  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-050D-940-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

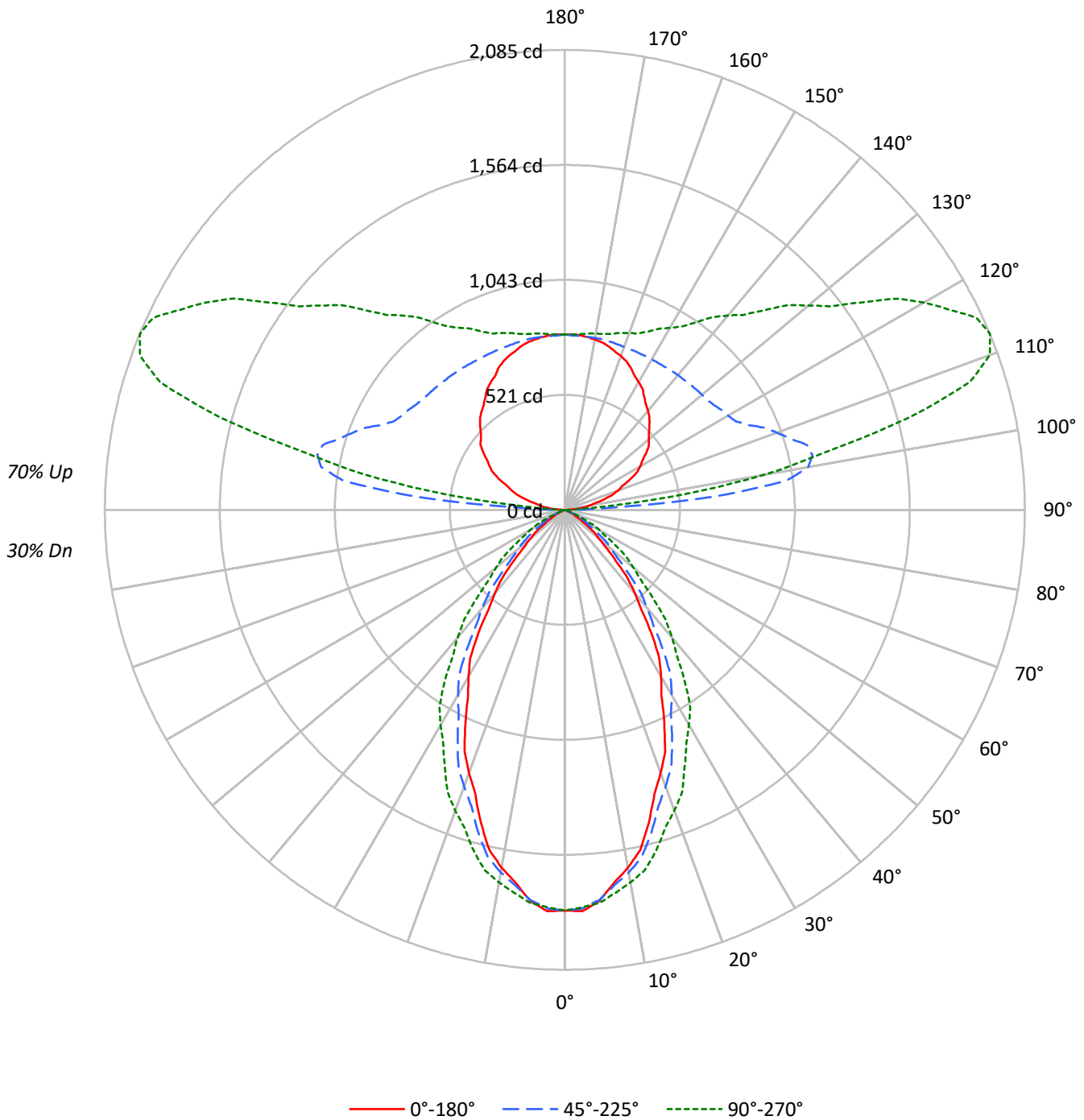
Lumens per Lamp: N/A  
Luminaire Lumens: 7345.3 lumens  
Efficiency: N/A  
Efficacy: 102.3 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 71.8  
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					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	50	30	10	0	
RCR																						
0	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	30				
1	94	90	87	84	84	81	79	76	64	63	61	49	48	47	35	34	33	27				
2	87	80	75	70	78	72	68	64	58	55	52	44	42	41	32	31	30	24				
3	80	71	65	60	72	65	59	55	52	48	45	40	38	36	29	28	27	22				
4	73	64	57	52	66	58	52	47	47	43	39	36	34	32	27	25	24	20				
5	68	57	50	45	61	52	46	41	42	38	35	33	30	28	25	23	22	18				
6	63	52	45	39	56	47	41	36	39	34	31	30	27	25	23	21	20	16				
7	58	47	40	35	52	43	37	32	35	31	27	28	25	23	21	19	18	15				
8	54	43	36	31	49	39	33	29	32	28	25	26	23	21	20	18	16	14				
9	51	39	33	28	46	36	30	26	30	25	22	24	21	19	18	16	15	13				
10	47	36	30	25	43	33	27	24	28	23	20	22	19	17	17	15	14	12				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	8381	8381	8381
5°	8245	8226	8286
10°	7715	7818	8036
15°	7014	7236	7639
20°	6226	6550	7124
25°	5422	5851	6545
30°	4644	5155	5997
35°	3851	4375	5336
40°	2959	3499	4547
45°	2139	2649	3658
50°	1457	1974	2902
55°	947	1428	2255
60°	543	1006	1630
65°	144	613	825
70°	71	190	237
75°	32	16	0
80°	24	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	165.8	2.3
10°-20°	424.0	5.8
20°-30°	530.8	7.2
30°-40°	490.3	6.7
40°-50°	329.4	4.5
50°-60°	170.2	2.3
60°-70°	53.3	0.7
70°-80°	3.4	0.0
80°-90°	2.1	0.0
90°-100°	374.7	5.1
100°-110°	1031.0	14.0
110°-120°	1064.2	14.5
120°-130°	852.6	11.6
130°-140°	669.7	9.1
140°-150°	513.2	7.0
150°-160°	369.0	5.0
160°-170°	225.6	3.1
170°-180°	76.1	1.0
0°-30°	1120.6	15.3
0°-40°	1610.8	21.9
0°-60°	2110.4	28.7
0°-90°	2169.2	29.5
90°-120°	2470.0	33.6
90°-150°	4505.5	61.3
90°-180°	5176.0	70.5
0°-180°	7345.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1817	1817	1817	1817	1817	
5°	1781	1763	1776	1783	1789	165
15°	1469	1464	1515	1566	1600	409
25°	1065	1074	1150	1228	1286	488
35°	684	701	777	868	948	424
45°	328	348	406	485	561	257
55°	118	138	178	228	280	110
65°	13	25	56	68	76	22
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	2	7	12	15	15	4
95°	56	205	663	283	181	59
105°	184	283	1136	1730	1614	194
115°	326	397	911	1814	2059	322
125°	450	512	827	1398	1638	401
135°	543	602	803	1131	1280	419
145°	627	670	791	964	1038	393
155°	710	733	786	866	891	326
165°	768	777	790	822	827	216
175°	794	796	791	801	800	75
180°	794	794	794	794	794	



TEST NUMBER: P518514

CATALOG NUMBER: SQ4-BB-075U-050D-940-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1816.7	1816.7	1816.7	1816.7	1816.7
2.5°	1820.9	1803.7	1808.2	1808.1	1803.3
5°	1780.6	1762.6	1776.3	1782.6	1789.4
7.5°	1705.4	1691.3	1717.5	1737.2	1751.5
10°	1647.1	1635.0	1669.0	1695.8	1715.6
12.5°	1579.6	1570.3	1611.4	1648.2	1673.4
15°	1468.6	1463.5	1515.2	1566.1	1599.6
17.5°	1349.8	1349.6	1408.7	1471.8	1512.2
20°	1268.3	1270.8	1334.2	1403.8	1451.1
22.5°	1186.7	1192.7	1260.3	1332.9	1387.1
25°	1065.2	1073.8	1149.6	1228.3	1285.8
27.5°	948.5	961.1	1040.8	1122.5	1192.7
30°	871.9	886.5	967.7	1053.7	1125.9
32.5°	796.6	814.0	893.1	984.1	1057.7
35°	683.8	701.0	776.9	868.4	947.5
37.5°	567.2	584.1	658.3	748.3	833.7
40°	491.3	510.2	581.0	668.2	755.0
42.5°	422.4	441.3	507.8	593.5	675.5
45°	327.8	347.6	406.1	485.1	560.7
47.5°	249.4	270.9	322.2	393.7	462.7
50°	203.0	224.5	275.1	338.1	404.3
52.5°	165.8	186.6	232.2	291.6	352.3
55°	117.8	137.5	177.5	227.9	280.4
57.5°	81.4	98.4	134.3	176.4	217.4
60°	58.9	75.2	109.0	143.1	176.7
62.5°	39.2	54.2	87.2	113.4	135.9
65°	13.2	25.2	56.2	67.9	75.6
67.5°	6.7	8.1	29.5	31.2	33.7
70°	5.3	5.3	14.1	15.0	17.6
72.5°	3.9	3.9	5.6	7.2	7.7
75°	1.8	1.8	0.9	0.0	0.0
77.5°	0.9	0.9	0.7	0.0	0.0
80°	0.9	0.9	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	1.3	2.4	3.0	3.0
90°	1.7	6.6	11.8	15.2	15.2
92.5°	23.3	99.7	172.8	66.3	54.4
95°	55.8	204.6	662.7	283.4	180.9
97.5°	90.9	226.8	1011.3	779.2	549.8
100°	116.6	240.6	1120.8	1131.3	923.0
102.5°	141.0	257.0	1149.2	1403.5	1212.4
105°	184.3	283.4	1136.0	1730.2	1614.4
107.5°	225.5	316.1	1071.5	1890.1	1924.5
110°	255.3	337.9	1022.8	1929.9	2048.9



TEST NUMBER: P518514

CATALOG NUMBER: SQ4-BB-075U-050D-940-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	282.3	362.3	974.1	1904.3	2085.4
115°	326.3	397.3	911.2	1814.4	2059.1
117.5°	368.2	433.7	871.3	1688.4	1965.1
120°	393.9	456.7	853.7	1593.9	1879.9
122.5°	416.9	479.7	841.5	1511.1	1782.5
125°	449.7	512.5	826.7	1398.4	1638.1
127.5°	480.8	540.6	816.9	1304.4	1514.7
130°	497.0	558.2	811.4	1248.6	1440.3
132.5°	515.9	577.1	807.4	1199.5	1372.7
135°	542.7	602.2	803.0	1131.0	1279.7
137.5°	567.7	622.9	799.3	1075.6	1198.2
140°	586.6	637.9	797.9	1038.8	1149.6
142.5°	602.8	650.1	795.2	1006.0	1100.9
145°	627.2	670.2	791.2	963.6	1038.0
147.5°	653.2	690.2	789.1	926.1	985.6
150°	669.4	702.5	787.8	905.5	951.8
152.5°	684.3	714.7	786.4	887.7	926.1
155°	710.0	733.2	786.1	866.1	890.9
157.5°	728.6	747.5	786.1	848.4	865.5
160°	742.1	757.0	786.1	838.8	852.0
162.5°	753.0	765.2	787.4	830.6	841.2
165°	767.5	777.4	789.5	821.7	826.7
167.5°	777.6	785.2	791.2	814.2	815.5
170°	784.4	789.4	791.2	811.4	811.4
172.5°	789.8	792.1	791.2	807.4	806.0
175°	794.5	796.2	791.2	801.3	799.6
177.5°	795.9	795.9	790.5	798.5	795.9
180°	794.5	794.5	794.5	794.5	794.5

(END OF REPORT)