

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: P518525

Luminaire Tested: **SQ4-BB-075U-075D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518525  
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-075D-840-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

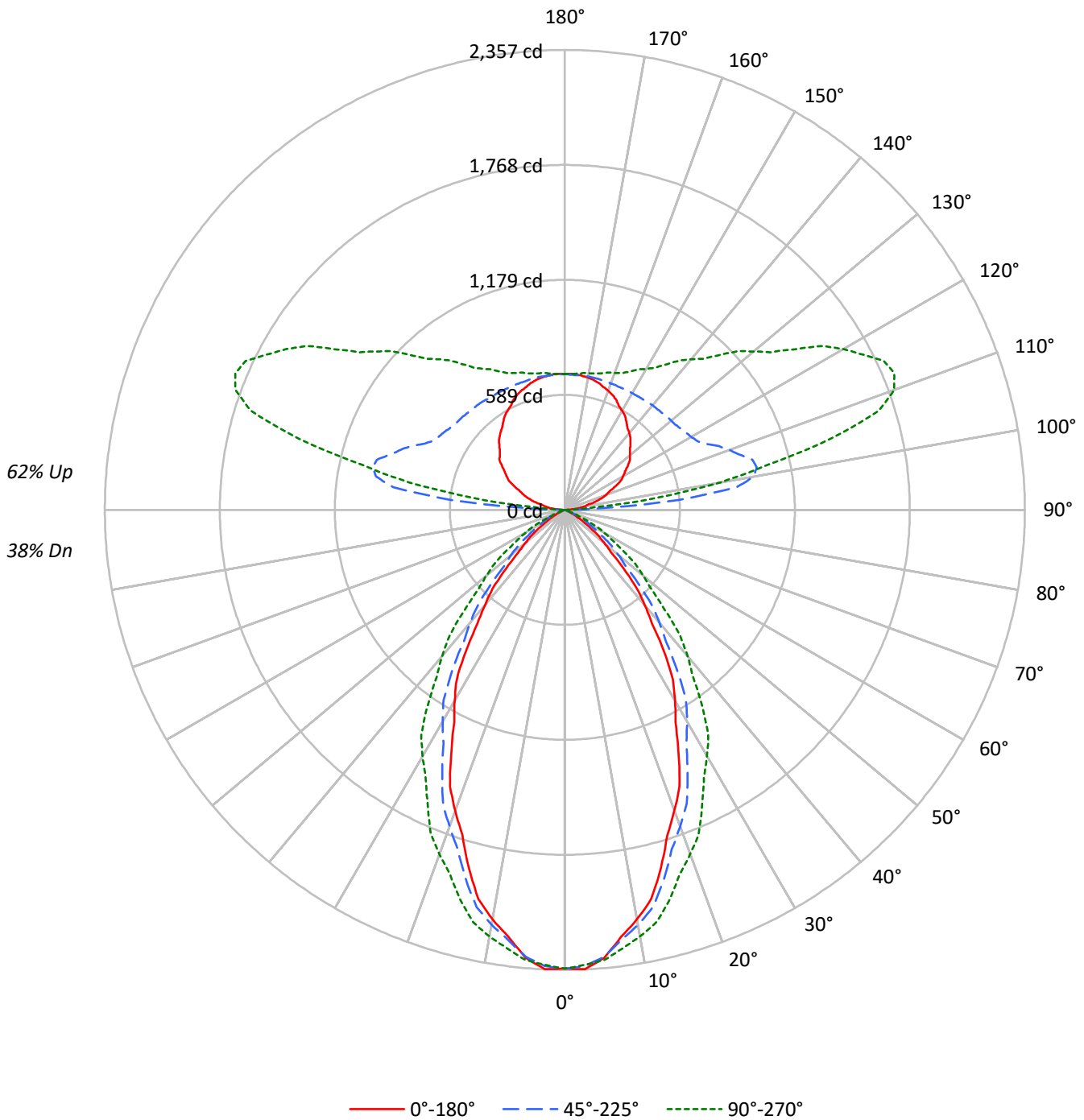
Lumens per Lamp: N/A  
Luminaire Lumens: 7342.3 lumens  
Efficiency: N/A  
Efficacy: 108.0 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 68  
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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38				
1	96	93	89	86	88	85	82	79	69	67	66	55	54	53	42	41	41	35				
2	89	83	77	73	81	76	71	67	62	59	57	50	48	46	39	38	37	32				
3	82	74	68	62	75	68	62	58	56	52	49	46	43	41	36	34	33	28				
4	76	66	59	54	69	61	55	50	51	47	43	42	39	36	33	31	30	26				
5	70	60	53	47	64	55	49	44	46	42	38	38	35	32	30	28	27	23				
6	65	54	47	42	59	50	44	39	42	38	34	35	32	29	28	26	24	21				
7	60	49	42	37	55	46	39	35	39	34	31	32	29	26	26	24	22	20				
8	56	45	38	33	52	42	36	31	36	31	28	30	26	24	24	22	20	18				
9	53	42	35	30	48	39	33	28	33	28	25	28	24	22	23	20	19	17				
10	49	38	32	27	45	36	30	26	31	26	23	26	23	20	21	19	17	15				

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

	0°	45°	90°
0°	14461	14461	14461
5°	14229	14193	14299
10°	13313	13491	13867
15°	12103	12487	13183
20°	10744	11302	12292
25°	9356	10097	11294
30°	8014	8894	10349
35°	6644	7550	9207
40°	5105	6037	7845
45°	3691	4571	6313
50°	2515	3407	5006
55°	1634	2464	3891
60°	937	1735	2812
65°	249	1060	1423
70°	122	327	408
75°	55	26	0
80°	39	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	214.6	2.9
10°-20°	548.7	7.5
20°-30°	686.9	9.4
30°-40°	634.5	8.6
40°-50°	426.4	5.8
50°-60°	220.2	3.0
60°-70°	69.0	0.9
70°-80°	4.3	0.1
80°-90°	1.9	0.0
90°-100°	328.4	4.5
100°-110°	903.5	12.3
110°-120°	932.6	12.7
120°-130°	747.2	10.2
130°-140°	586.8	8.0
140°-150°	449.7	6.1
150°-160°	323.3	4.4
160°-170°	197.7	2.7
170°-180°	66.6	0.9
0°-30°	1450.2	19.8
0°-40°	2084.7	28.4
0°-60°	2731.3	37.2
0°-90°	2806.4	38.2
90°-120°	2164.4	29.5
90°-150°	3948.2	53.8
90°-180°	4536.0	61.8
0°-180°	7342.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2351	2351	2351	2351	2351	
5°	2304	2281	2299	2307	2316	214
15°	1901	1894	1961	2027	2070	529
25°	1379	1390	1488	1590	1664	632
35°	885	907	1006	1124	1226	548
45°	424	450	526	628	726	333
55°	152	178	230	295	363	142
65°	17	33	73	88	98	29
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	2	6	10	13	13	3
95°	49	179	581	248	158	52
105°	162	248	996	1516	1415	170
115°	286	348	798	1590	1804	282
125°	394	449	724	1226	1436	352
135°	476	528	704	991	1121	367
145°	550	587	693	844	910	345
155°	622	642	689	759	781	286
165°	673	681	692	720	724	190
175°	696	698	693	702	701	66
180°	696	696	696	696	696	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2351.1	2351.1	2351.1	2351.1	2351.1
2.5°	2356.6	2334.3	2340.2	2340.1	2333.8
5°	2304.5	2281.1	2298.8	2307.0	2315.9
7.5°	2207.1	2188.9	2222.8	2248.3	2266.7
10°	2131.6	2116.0	2160.0	2194.7	2220.3
12.5°	2044.2	2032.2	2085.4	2133.0	2165.7
15°	1900.7	1894.0	1961.0	2026.8	2070.2
17.5°	1746.9	1746.7	1823.1	1904.8	1957.1
20°	1641.4	1644.7	1726.7	1816.8	1877.9
22.5°	1535.8	1543.6	1631.1	1725.1	1795.1
25°	1378.6	1389.7	1487.8	1589.6	1664.1
27.5°	1227.5	1243.8	1347.0	1452.8	1543.5
30°	1128.4	1147.3	1252.3	1363.7	1457.1
32.5°	1031.0	1053.5	1155.9	1273.6	1368.8
35°	884.9	907.2	1005.5	1123.9	1226.2
37.5°	734.1	755.9	852.0	968.4	1079.0
40°	635.8	660.3	751.9	864.7	977.1
42.5°	546.7	571.1	657.2	768.1	874.3
45°	424.3	449.9	525.5	627.8	725.7
47.5°	322.8	350.6	417.0	509.6	598.8
50°	262.8	290.6	356.0	437.6	523.2
52.5°	214.5	241.4	300.5	377.4	455.9
55°	152.4	178.0	229.8	295.0	362.8
57.5°	105.3	127.3	173.8	228.2	281.4
60°	76.2	97.3	141.0	185.3	228.6
62.5°	50.7	70.1	112.8	146.7	175.9
65°	17.1	32.6	72.8	87.8	97.8
67.5°	8.6	10.4	38.2	40.3	43.7
70°	6.8	6.8	18.2	19.4	22.7
72.5°	5.0	5.0	7.3	9.3	10.0
75°	2.3	2.3	1.1	0.0	0.0
77.5°	1.1	1.1	0.9	0.0	0.0
80°	1.1	1.1	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	1.2	2.1	2.7	2.7
90°	1.5	5.8	10.4	13.3	13.3
92.5°	20.4	87.4	151.4	58.1	47.7
95°	48.9	179.3	580.7	248.3	158.5
97.5°	79.7	198.8	886.2	682.8	481.8
100°	102.2	210.9	982.2	991.4	808.8
102.5°	123.5	225.2	1007.1	1229.9	1062.5
105°	161.5	248.4	995.5	1516.1	1414.7
107.5°	197.6	277.0	938.9	1656.3	1686.4
110°	223.7	296.1	896.3	1691.2	1795.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	247.4	317.5	853.6	1668.7	1827.5
115°	285.9	348.2	798.5	1590.0	1804.4
117.5°	322.7	380.0	763.5	1479.5	1722.0
120°	345.2	400.2	748.1	1396.7	1647.3
122.5°	365.3	420.4	737.4	1324.2	1562.0
125°	394.1	449.1	724.4	1225.5	1435.5
127.5°	421.3	473.7	715.8	1143.1	1327.3
130°	435.5	489.1	711.1	1094.1	1262.2
132.5°	452.1	505.7	707.5	1051.1	1202.9
135°	475.5	527.7	703.7	991.1	1121.4
137.5°	497.5	545.8	700.4	942.5	1050.0
140°	514.0	559.0	699.2	910.3	1007.4
142.5°	528.3	569.7	696.9	881.5	964.7
145°	549.6	587.3	693.3	844.4	909.6
147.5°	572.4	604.9	691.5	811.5	863.7
150°	586.6	615.6	690.3	793.5	834.0
152.5°	599.7	626.3	689.2	777.9	811.5
155°	622.2	642.5	688.9	759.0	780.7
157.5°	638.5	655.0	688.9	743.4	758.5
160°	650.3	663.4	688.9	735.0	746.6
162.5°	659.8	670.5	690.0	727.9	737.1
165°	672.6	681.2	691.8	720.1	724.4
167.5°	681.4	688.1	693.3	713.5	714.6
170°	687.4	691.7	693.3	711.1	711.1
172.5°	692.1	694.1	693.3	707.5	706.3
175°	696.3	697.7	693.3	702.2	700.7
177.5°	697.4	697.4	692.7	699.8	697.4
180°	696.3	696.3	696.3	696.3	696.3

(END OF REPORT)