

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: P518538

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

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518538  
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-940-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

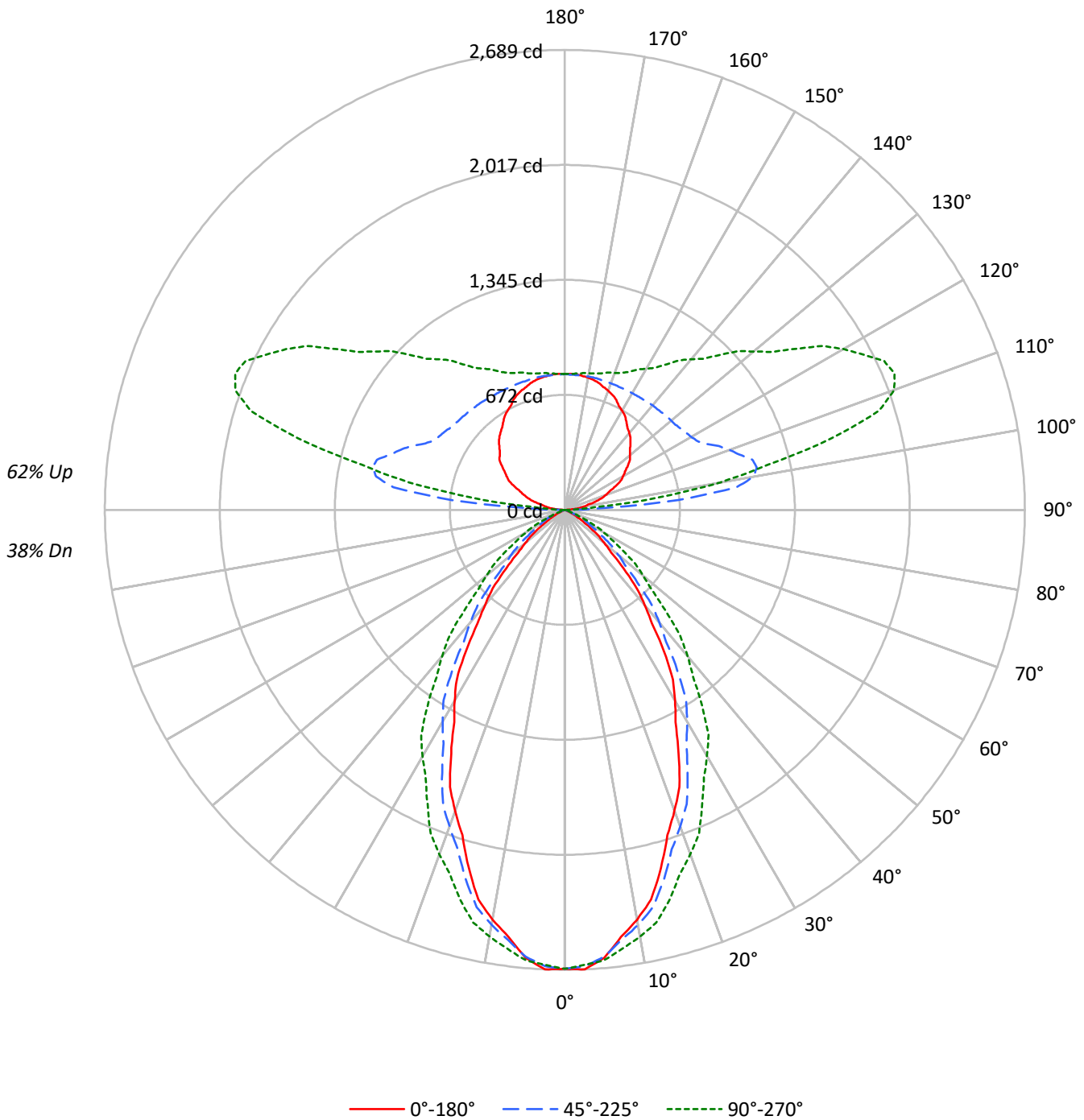
Lumens per Lamp: N/A  
Luminaire Lumens: 8378.8 lumens  
Efficiency: N/A  
Efficacy: 92.1 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 91  
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°	12377	12377	12377
5°	12178	12148	12238
10°	11394	11546	11869
15°	10359	10687	11282
20°	9195	9673	10520
25°	8008	8642	9666
30°	6859	7612	8857
35°	5687	6462	7880
40°	4370	5167	6715
45°	3159	3912	5402
50°	2152	2916	4285
55°	1399	2109	3330
60°	803	1485	2407
65°	213	907	1218
70°	105	281	351
75°	46	23	0
80°	35	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	244.9	2.9
10°-20°	626.2	7.5
20°-30°	783.9	9.4
30°-40°	724.1	8.6
40°-50°	486.5	5.8
50°-60°	251.3	3.0
60°-70°	78.7	0.9
70°-80°	5.0	0.1
80°-90°	2.1	0.0
90°-100°	374.7	4.5
100°-110°	1031.0	12.3
110°-120°	1064.2	12.7
120°-130°	852.6	10.2
130°-140°	669.7	8.0
140°-150°	513.2	6.1
150°-160°	369.0	4.4
160°-170°	225.6	2.7
170°-180°	76.1	0.9
0°-30°	1654.9	19.8
0°-40°	2379.0	28.4
0°-60°	3116.8	37.2
0°-90°	3202.6	38.2
90°-120°	2470.0	29.5
90°-150°	4505.5	53.8
90°-180°	5176.0	61.8
0°-180°	8378.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2683	2683	2683	2683	2683	
5°	2630	2603	2623	2633	2643	244
15°	2169	2161	2238	2313	2362	604
25°	1573	1586	1698	1814	1899	721
35°	1010	1035	1148	1282	1399	626
45°	484	513	600	716	828	380
55°	174	203	262	337	414	162
65°	20	37	83	100	112	33
75°	3	3	1	0	0	4
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	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2683.0	2683.0	2683.0	2683.0	2683.0
2.5°	2689.2	2663.9	2670.5	2670.4	2663.3
5°	2629.8	2603.1	2623.3	2632.6	2642.8
7.5°	2518.7	2497.9	2536.6	2565.6	2586.7
10°	2432.5	2414.7	2464.9	2504.5	2533.7
12.5°	2332.8	2319.1	2379.8	2434.1	2471.4
15°	2169.0	2161.4	2237.8	2312.9	2362.4
17.5°	1993.5	1993.2	2080.5	2173.7	2233.4
20°	1873.0	1876.9	1970.4	2073.2	2143.0
22.5°	1752.6	1761.5	1861.4	1968.6	2048.5
25°	1573.2	1585.9	1697.8	1814.0	1899.0
27.5°	1400.8	1419.4	1537.1	1657.8	1761.4
30°	1287.6	1309.2	1429.1	1556.2	1662.8
32.5°	1176.5	1202.2	1319.0	1453.4	1562.0
35°	1009.9	1035.2	1147.5	1282.5	1399.3
37.5°	837.7	862.6	972.2	1105.1	1231.3
40°	725.6	753.5	858.0	986.8	1115.0
42.5°	623.8	651.8	750.0	876.6	997.7
45°	484.2	513.4	599.7	716.4	828.1
47.5°	368.4	400.1	475.9	581.5	683.3
50°	299.8	331.6	406.3	499.4	597.1
52.5°	244.8	275.5	342.9	430.6	520.2
55°	173.9	203.1	262.2	336.6	414.1
57.5°	120.2	145.3	198.3	260.5	321.1
60°	87.0	111.1	161.0	211.4	260.9
62.5°	57.9	80.0	128.8	167.4	200.7
65°	19.5	37.2	83.1	100.2	111.6
67.5°	9.9	11.9	43.6	46.0	49.8
70°	7.8	7.8	20.8	22.2	26.0
72.5°	5.7	5.7	8.3	10.7	11.4
75°	2.6	2.6	1.3	0.0	0.0
77.5°	1.3	1.3	1.0	0.0	0.0
80°	1.3	1.3	0.0	0.0	0.0
82.5°	0.3	0.3	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



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**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)