

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: P518752

Luminaire Tested: **SQ4-BB-100U-100D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518752  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-100D-940-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

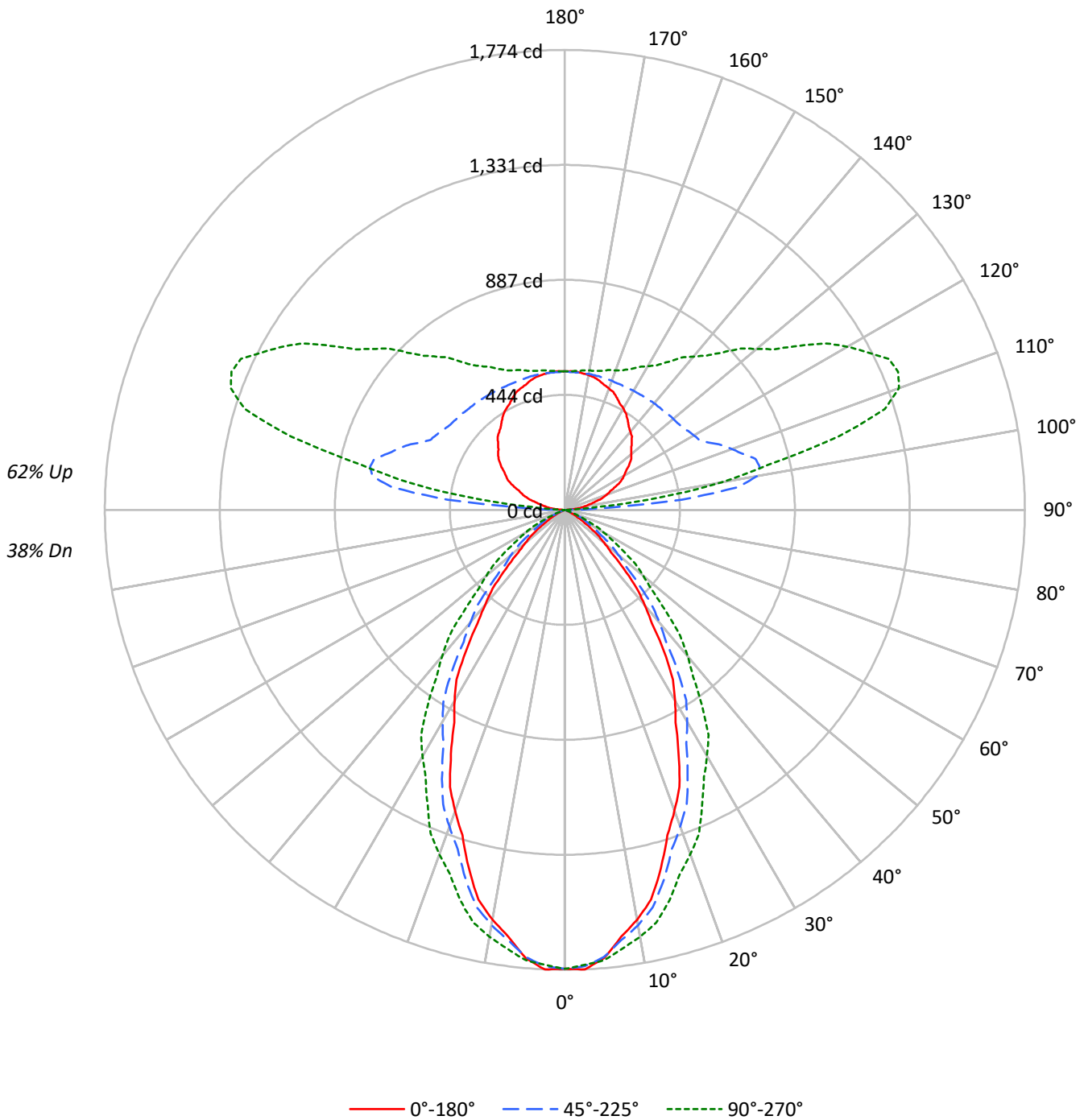
Lumens per Lamp: N/A  
Luminaire Lumens: 5585.0 lumens  
Efficiency: N/A  
Efficacy: 96.5 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 57.9  
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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	93	89	86	87	84	82	79	69	67	65	55	54	53	42	41	41	35
2	89	83	77	73	81	75	71	67	62	59	56	50	48	46	38	37	36	31
3	82	74	67	62	75	68	62	58	56	52	49	45	43	41	35	34	33	28
4	76	66	59	54	69	61	55	50	51	46	43	41	38	36	33	31	29	25
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	37	34	35	31	29	28	26	24	21
7	60	49	42	37	55	46	39	35	39	34	31	32	29	26	26	24	22	19
8	56	45	38	33	51	42	36	31	36	31	28	30	26	24	24	22	20	18
9	53	41	35	30	48	38	32	28	33	28	25	28	24	22	23	20	19	16
10	49	38	32	27	45	36	30	26	30	26	23	26	22	20	21	19	17	15

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

	0°	45°	90°
0°	16333	16333	16333
5°	16070	16031	16149
10°	15036	15237	15662
15°	13669	14103	14889
20°	12134	12765	13883
25°	10567	11404	12756
30°	9051	10046	11688
35°	7505	8527	10399
40°	5767	6818	8861
45°	4169	5163	7129
50°	2839	3848	5655
55°	1847	2783	4395
60°	1059	1960	3176
65°	279	1196	1609
70°	138	370	461
75°	61	32	0
80°	48	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	161.6	2.9
10°-20°	413.2	7.4
20°-30°	517.2	9.3
30°-40°	477.8	8.6
40°-50°	321.0	5.7
50°-60°	165.8	3.0
60°-70°	51.9	0.9
70°-80°	3.3	0.1
80°-90°	1.2	0.0
90°-100°	250.2	4.5
100°-110°	690.9	12.4
110°-120°	712.5	12.8
120°-130°	572.6	10.3
130°-140°	450.0	8.1
140°-150°	345.1	6.2
150°-160°	248.0	4.4
160°-170°	151.7	2.7
170°-180°	51.1	0.9
0°-30°	1091.9	19.6
0°-40°	1569.7	28.1
0°-60°	2056.5	36.8
0°-90°	2112.9	37.8
90°-120°	1653.6	29.6
90°-150°	3021.2	54.1
90°-180°	3472.0	62.2
0°-180°	5585.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1770	1770	1770	1770	1770	
5°	1735	1718	1731	1737	1744	161
15°	1431	1426	1476	1526	1559	399
25°	1038	1046	1120	1197	1253	476
35°	666	683	757	846	923	413
45°	320	339	396	473	546	251
55°	115	134	173	222	273	107
65°	13	25	55	66	74	22
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	2	3	7	8	8	3
95°	37	135	454	187	121	39
105°	123	190	760	1160	1093	131
115°	221	267	612	1212	1378	217
125°	303	344	555	939	1102	269
135°	364	404	540	761	858	282
145°	422	452	533	648	697	264
155°	476	492	528	581	599	219
165°	516	522	531	552	556	145
175°	534	535	532	540	538	51
180°	534	534	534	534	534	

TEST NUMBER: P518752

CATALOG NUMBER: SQ4-BB-100U-100D-940-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1770.3	1770.3	1770.3	1770.3	1770.3
2.5°	1774.4	1757.7	1762.1	1762.0	1757.3
5°	1735.2	1717.6	1730.9	1737.0	1743.7
7.5°	1661.9	1648.1	1673.7	1692.8	1706.7
10°	1605.0	1593.3	1626.4	1652.5	1671.8
12.5°	1539.2	1530.2	1570.2	1606.1	1630.7
15°	1431.1	1426.1	1476.5	1526.1	1558.8
17.5°	1315.3	1315.2	1372.7	1434.3	1473.6
20°	1235.9	1238.4	1300.1	1368.0	1414.0
22.5°	1156.4	1162.3	1228.2	1298.9	1351.7
25°	1038.0	1046.4	1120.2	1196.9	1253.0
27.5°	924.3	936.5	1014.2	1093.9	1162.2
30°	849.6	863.8	943.0	1026.8	1097.1
32.5°	776.3	793.2	870.3	959.0	1030.7
35°	666.3	683.1	757.1	846.2	923.3
37.5°	552.8	569.2	641.5	729.2	812.4
40°	478.8	497.2	566.1	651.1	735.7
42.5°	411.6	430.0	494.9	578.4	658.3
45°	319.5	338.7	395.7	472.7	546.4
47.5°	243.1	264.0	314.0	383.7	450.8
50°	197.8	218.8	268.1	329.5	394.0
52.5°	161.5	181.8	226.3	284.1	343.3
55°	114.8	134.0	173.0	222.1	273.2
57.5°	79.3	95.9	130.9	171.9	211.9
60°	57.4	73.3	106.2	139.5	172.1
62.5°	38.2	52.8	85.0	110.5	132.4
65°	12.8	24.6	54.8	66.1	73.7
67.5°	6.5	7.8	28.8	30.4	32.9
70°	5.1	5.1	13.7	14.6	17.1
72.5°	3.8	3.8	5.5	7.0	7.5
75°	1.7	1.7	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	0.7	1.4	1.5	1.7
90°	1.7	3.4	6.8	7.7	8.5
92.5°	15.4	63.9	114.2	41.7	32.5
95°	36.8	135.4	454.0	186.6	121.4
97.5°	60.9	151.7	672.5	517.8	375.0
100°	78.7	161.4	753.2	758.6	616.4
102.5°	95.8	172.5	769.0	937.3	802.5
105°	123.1	190.0	760.1	1160.4	1092.7
107.5°	152.2	211.7	717.7	1268.0	1292.7
110°	172.7	226.2	684.8	1291.1	1371.4

TEST NUMBER: P518752

CATALOG NUMBER: SQ4-BB-100U-100D-940-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	191.2	242.7	654.1	1272.9	1391.2
115°	220.6	266.6	612.2	1211.9	1378.2
117.5°	246.2	292.0	584.6	1126.0	1315.3
120°	263.3	308.5	573.7	1067.9	1258.5
122.5°	279.8	322.9	564.8	1013.7	1194.2
125°	302.7	344.5	554.9	939.1	1102.1
127.5°	322.2	364.0	549.1	876.0	1016.6
130°	335.2	377.0	546.3	837.4	965.3
132.5°	347.5	387.3	543.6	805.0	920.8
135°	364.2	403.5	539.5	760.6	857.6
137.5°	383.0	418.8	537.4	723.3	806.1
140°	393.3	428.4	536.1	698.5	771.2
142.5°	404.9	437.4	534.7	676.4	740.4
145°	422.4	451.6	532.7	647.5	696.8
147.5°	439.1	464.7	530.8	623.1	661.4
150°	451.4	472.3	530.1	608.6	639.5
152.5°	461.0	480.6	529.4	596.2	621.7
155°	476.2	492.1	528.4	581.0	599.3
157.5°	490.2	502.5	528.6	569.9	582.4
160°	498.5	509.3	529.2	563.6	572.8
162.5°	505.3	514.8	529.9	558.1	565.3
165°	515.6	522.2	530.9	551.6	555.7
167.5°	523.4	527.4	531.8	547.6	548.9
170°	527.5	530.9	531.8	545.5	545.5
172.5°	530.9	533.0	531.8	542.7	542.1
175°	534.4	535.2	531.8	539.5	537.8
177.5°	535.7	535.1	531.6	536.4	535.0
180°	534.4	534.4	534.4	534.4	534.4

(END OF REPORT)