

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: P518729

Luminaire Tested: **SQ4-BB-100U-075D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518729
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-075D-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

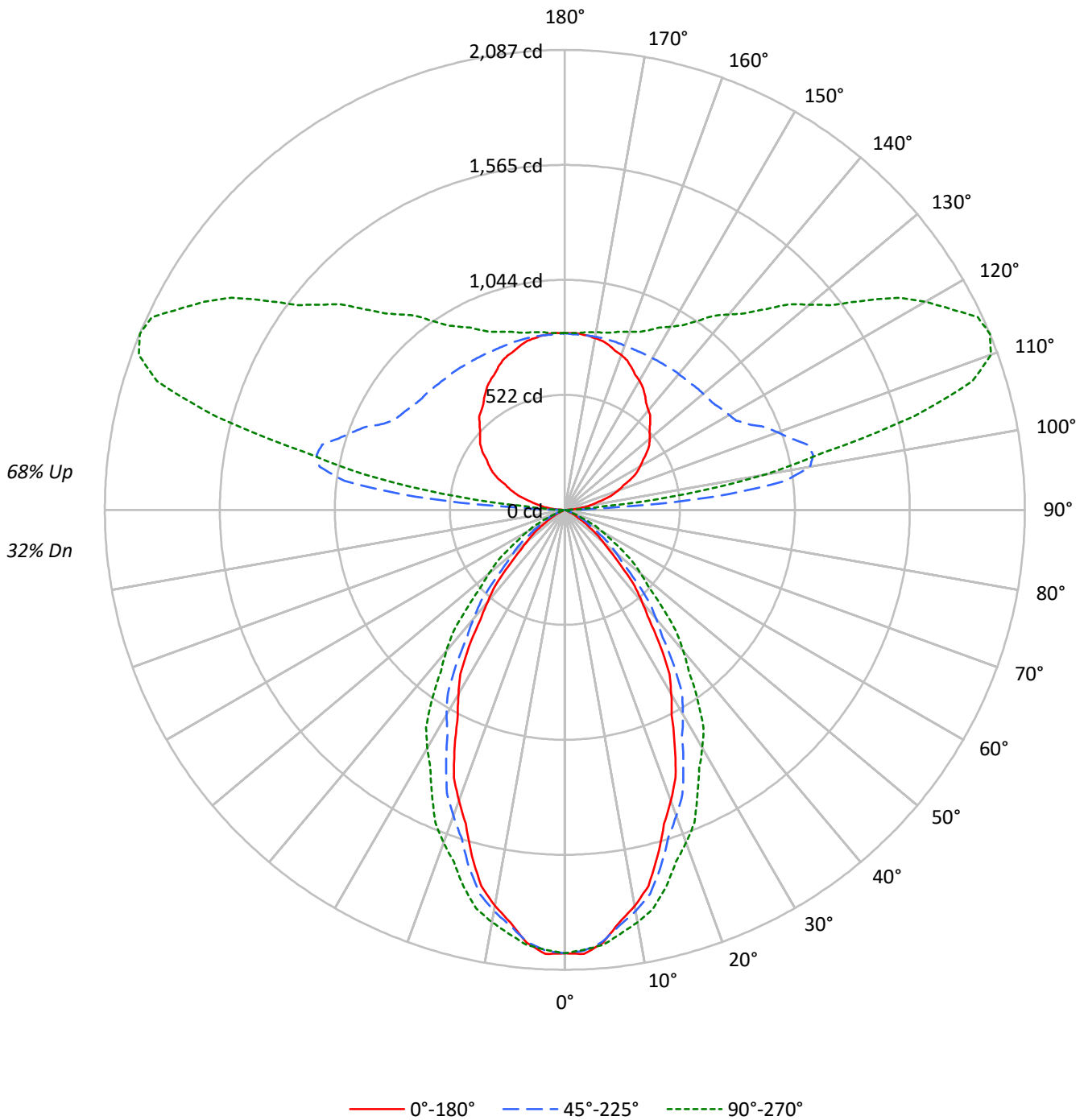
Lumens per Lamp: N/A
Luminaire Lumens: 7610.2 lumens
Efficiency: N/A
Efficacy: 97.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 78
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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	32
1	95	91	88	85	85	82	79	77	66	64	62	50	49	48	36	36	35	29
2	87	81	75	71	78	73	69	65	59	56	53	46	44	42	33	32	31	26
3	80	72	66	60	72	65	60	56	53	49	46	41	39	37	31	29	28	23
4	74	64	57	52	67	59	53	48	48	44	40	38	35	33	28	27	25	21
5	68	58	51	45	62	53	47	42	43	39	36	34	31	29	26	24	23	19
6	63	52	45	40	57	48	42	37	39	35	32	31	28	26	24	22	21	18
7	59	48	40	35	53	44	37	33	36	32	28	29	26	24	22	20	19	16
8	55	43	36	32	49	40	34	30	33	29	25	27	24	21	21	19	17	15
9	51	40	33	28	46	37	31	27	31	26	23	25	22	19	19	17	16	14
10	48	37	30	26	43	34	28	24	28	24	21	23	20	18	18	16	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12377	12377	12377
5°	12178	12148	12238
10°	11395	11546	11869
15°	10358	10687	11282
20°	9195	9673	10521
25°	8008	8642	9666
30°	6859	7612	8857
35°	5687	6462	7880
40°	4370	5167	6715
45°	3158	3913	5403
50°	2152	2916	4285
55°	1399	2109	3331
60°	802	1485	2407
65°	212	907	1218
70°	104	281	351
75°	45	24	0
80°	35	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.6	2.4
10°-20°	469.6	6.2
20°-30°	587.9	7.7
30°-40°	543.1	7.1
40°-50°	364.9	4.8
50°-60°	188.5	2.5
60°-70°	59.0	0.8
70°-80°	3.7	0.0
80°-90°	1.7	0.0
90°-100°	375.4	4.9
100°-110°	1036.3	13.6
110°-120°	1068.7	14.0
120°-130°	858.8	11.3
130°-140°	674.9	8.9
140°-150°	517.7	6.8
150°-160°	372.0	4.9
160°-170°	227.5	3.0
170°-180°	76.7	1.0
0°-30°	1241.2	16.3
0°-40°	1784.2	23.4
0°-60°	2337.6	30.7
0°-90°	2402.1	31.6
90°-120°	2480.4	32.6
90°-150°	4531.8	59.5
90°-180°	5208.0	68.4
0°-180°	7610.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2012	2012	2012	2012	2012	
5°	1972	1952	1968	1974	1982	183
15°	1627	1621	1678	1735	1772	453
25°	1180	1189	1273	1360	1424	541
35°	757	776	861	962	1050	469
45°	363	385	450	537	621	285
55°	130	152	197	252	311	122
65°	15	28	62	75	84	25
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	3	5	10	12	13	4
95°	55	203	681	280	182	59
105°	185	285	1140	1741	1639	196
115°	331	400	918	1818	2067	325
125°	454	517	832	1409	1653	404
135°	546	605	809	1141	1286	423
145°	634	677	799	971	1045	397
155°	714	738	793	871	899	329
165°	773	783	796	827	834	218
175°	802	803	798	809	807	76
180°	802	802	802	802	802	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2012.3	2012.3	2012.3	2012.3	2012.3
2.5°	2016.9	1997.9	2002.9	2002.8	1997.5
5°	1972.3	1952.4	1967.5	1974.5	1982.1
7.5°	1889.0	1873.4	1902.4	1924.2	1940.0
10°	1824.4	1811.0	1848.7	1878.4	1900.3
12.5°	1749.6	1739.3	1784.8	1825.6	1853.6
15°	1626.7	1621.0	1678.3	1734.7	1771.8
17.5°	1495.1	1494.9	1560.4	1630.3	1675.0
20°	1404.8	1407.6	1477.8	1554.9	1607.3
22.5°	1314.4	1321.1	1396.0	1476.4	1536.4
25°	1179.9	1189.4	1273.4	1360.5	1424.3
27.5°	1050.6	1064.5	1152.8	1243.4	1321.1
30°	965.7	981.9	1071.8	1167.1	1247.1
32.5°	882.4	901.6	989.3	1090.0	1171.5
35°	757.4	776.4	860.6	961.9	1049.5
37.5°	628.3	647.0	729.2	828.9	923.5
40°	544.2	565.1	643.5	740.1	836.3
42.5°	467.9	488.8	562.5	657.4	748.2
45°	363.1	385.0	449.8	537.3	621.1
47.5°	276.3	300.1	356.9	436.1	512.5
50°	224.9	248.7	304.7	374.5	447.8
52.5°	183.6	206.6	257.2	323.0	390.2
55°	130.5	152.3	196.7	252.5	310.6
57.5°	90.1	109.0	148.8	195.3	240.8
60°	65.2	83.3	120.7	158.6	195.7
62.5°	43.4	60.0	96.6	125.6	150.5
65°	14.6	27.9	62.3	75.2	83.7
67.5°	7.4	8.9	32.7	34.5	37.4
70°	5.8	5.8	15.6	16.6	19.5
72.5°	4.3	4.3	6.2	8.0	8.6
75°	1.9	1.9	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	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°	0.5	1.0	2.1	2.3	2.6
90°	2.6	5.1	10.3	11.6	12.8
92.5°	23.1	95.8	171.3	62.5	48.7
95°	55.1	203.1	681.0	279.9	182.1
97.5°	91.3	227.5	1008.8	776.7	562.5
100°	118.0	242.1	1129.9	1137.8	924.7
102.5°	143.6	258.8	1153.5	1405.9	1203.7
105°	184.7	285.0	1140.1	1740.6	1639.0
107.5°	228.3	317.6	1076.5	1902.0	1939.1
110°	259.1	339.3	1027.3	1936.7	2057.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	286.8	364.0	981.1	1909.3	2086.8
115°	330.9	399.8	918.3	1817.8	2067.4
117.5°	369.4	438.1	877.0	1689.1	1973.0
120°	395.0	462.7	860.5	1601.9	1887.8
122.5°	419.6	484.3	847.2	1520.5	1791.4
125°	454.0	516.7	832.3	1408.6	1653.1
127.5°	483.2	545.9	823.6	1313.9	1524.9
130°	502.7	565.4	819.5	1256.1	1447.9
132.5°	521.2	580.9	815.4	1207.4	1381.2
135°	546.3	605.3	809.2	1140.9	1286.3
137.5°	574.6	628.2	806.2	1085.0	1209.1
140°	589.9	642.6	804.1	1047.7	1156.8
142.5°	607.4	656.0	802.1	1014.6	1110.6
145°	633.5	677.4	799.0	971.2	1045.2
147.5°	658.7	697.1	796.2	934.7	992.1
150°	677.1	708.5	795.1	912.9	959.3
152.5°	691.5	720.9	794.1	894.2	932.6
155°	714.3	738.2	792.6	871.4	899.0
157.5°	735.4	753.7	792.8	854.8	873.6
160°	747.7	764.0	793.9	845.5	859.3
162.5°	757.9	772.2	794.9	837.2	848.0
165°	773.3	783.4	796.4	827.3	833.6
167.5°	785.1	791.2	797.7	821.3	823.4
170°	791.3	796.3	797.7	818.2	818.2
172.5°	796.4	799.4	797.7	814.1	813.1
175°	801.5	802.8	797.7	809.2	806.7
177.5°	803.6	802.6	797.4	804.6	802.6
180°	801.5	801.5	801.5	801.5	801.5

(END OF REPORT)