

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: P518753

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518753
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-6
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

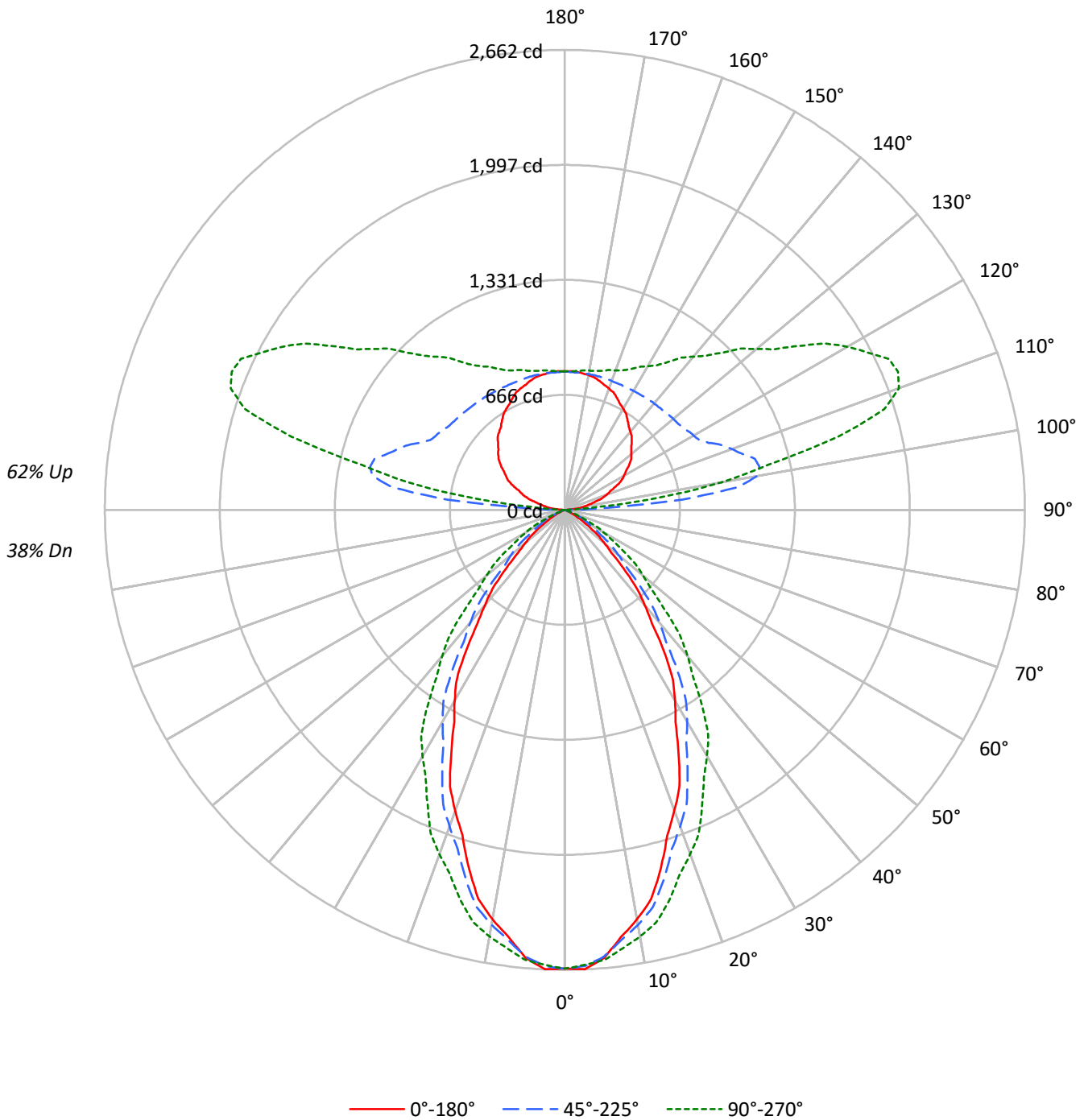
Lumens per Lamp: N/A
Luminaire Lumens: 8377.5 lumens
Efficiency: N/A
Efficacy: 90.2 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 92.9
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°	13670	14103	14889
20°	12134	12765	13883
25°	10567	11404	12756
30°	9051	10046	11688
35°	7505	8528	10399
40°	5766	6818	8860
45°	4168	5163	7129
50°	2840	3848	5655
55°	1846	2783	4395
60°	1059	1960	3176
65°	281	1196	1608
70°	138	370	462
75°	62	31	0
80°	46	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.3	2.9
10°-20°	619.7	7.4
20°-30°	775.8	9.3
30°-40°	716.6	8.6
40°-50°	481.5	5.7
50°-60°	248.7	3.0
60°-70°	77.9	0.9
70°-80°	4.9	0.1
80°-90°	1.8	0.0
90°-100°	375.4	4.5
100°-110°	1036.3	12.4
110°-120°	1068.7	12.8
120°-130°	858.8	10.3
130°-140°	674.9	8.1
140°-150°	517.7	6.2
150°-160°	372.0	4.4
160°-170°	227.5	2.7
170°-180°	76.7	0.9
0°-30°	1637.9	19.6
0°-40°	2354.6	28.1
0°-60°	3084.8	36.8
0°-90°	3169.4	37.8
90°-120°	2480.4	29.6
90°-150°	4531.8	54.1
90°-180°	5208.0	62.2
0°-180°	8377.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2655	2655	2655	2655	2655	
5°	2603	2576	2596	2606	2616	241
15°	2147	2139	2215	2289	2338	598
25°	1557	1570	1680	1795	1880	714
35°	1000	1025	1136	1269	1385	619
45°	479	508	594	709	820	376
55°	172	201	260	333	410	161
65°	19	37	82	99	110	33
75°	3	3	1	0	0	4
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°	2655.4	2655.4	2655.4	2655.4	2655.4
2.5°	2661.6	2636.5	2643.1	2643.0	2635.9
5°	2602.8	2576.4	2596.4	2605.6	2615.6
7.5°	2492.8	2472.2	2510.5	2539.3	2560.1
10°	2407.5	2389.9	2439.6	2478.8	2507.7
12.5°	2308.8	2295.3	2355.3	2409.1	2446.0
15°	2146.7	2139.2	2214.8	2289.1	2338.1
17.5°	1973.0	1972.8	2059.1	2151.4	2210.4
20°	1853.8	1857.6	1950.2	2051.9	2121.0
22.5°	1734.6	1743.4	1842.2	1948.4	2027.5
25°	1557.0	1569.6	1680.4	1795.3	1879.5
27.5°	1386.4	1404.8	1521.3	1640.8	1743.3
30°	1274.4	1295.8	1414.4	1540.2	1645.7
32.5°	1164.4	1189.8	1305.5	1438.5	1546.0
35°	999.5	1024.6	1135.7	1269.3	1384.9
37.5°	829.1	853.8	962.2	1093.8	1218.7
40°	718.1	745.8	849.2	976.7	1103.5
42.5°	617.4	645.1	742.3	867.6	987.4
45°	479.2	508.1	593.5	709.1	819.6
47.5°	364.6	396.0	471.0	575.5	676.3
50°	296.8	328.2	402.1	494.2	591.0
52.5°	242.3	272.7	339.4	426.2	514.9
55°	172.1	201.0	259.5	333.2	409.8
57.5°	119.0	143.8	196.3	257.8	317.8
60°	86.1	109.9	159.3	209.2	258.2
62.5°	57.3	79.2	127.4	165.7	198.6
65°	19.3	36.9	82.2	99.2	110.5
67.5°	9.8	11.8	43.2	45.6	49.3
70°	7.7	7.7	20.6	21.9	25.7
72.5°	5.7	5.7	8.2	10.6	11.3
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°	0.5	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)