

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: P518928

Luminaire Tested: **SQ4-BB-150U-100D-835-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518928
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-100D-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

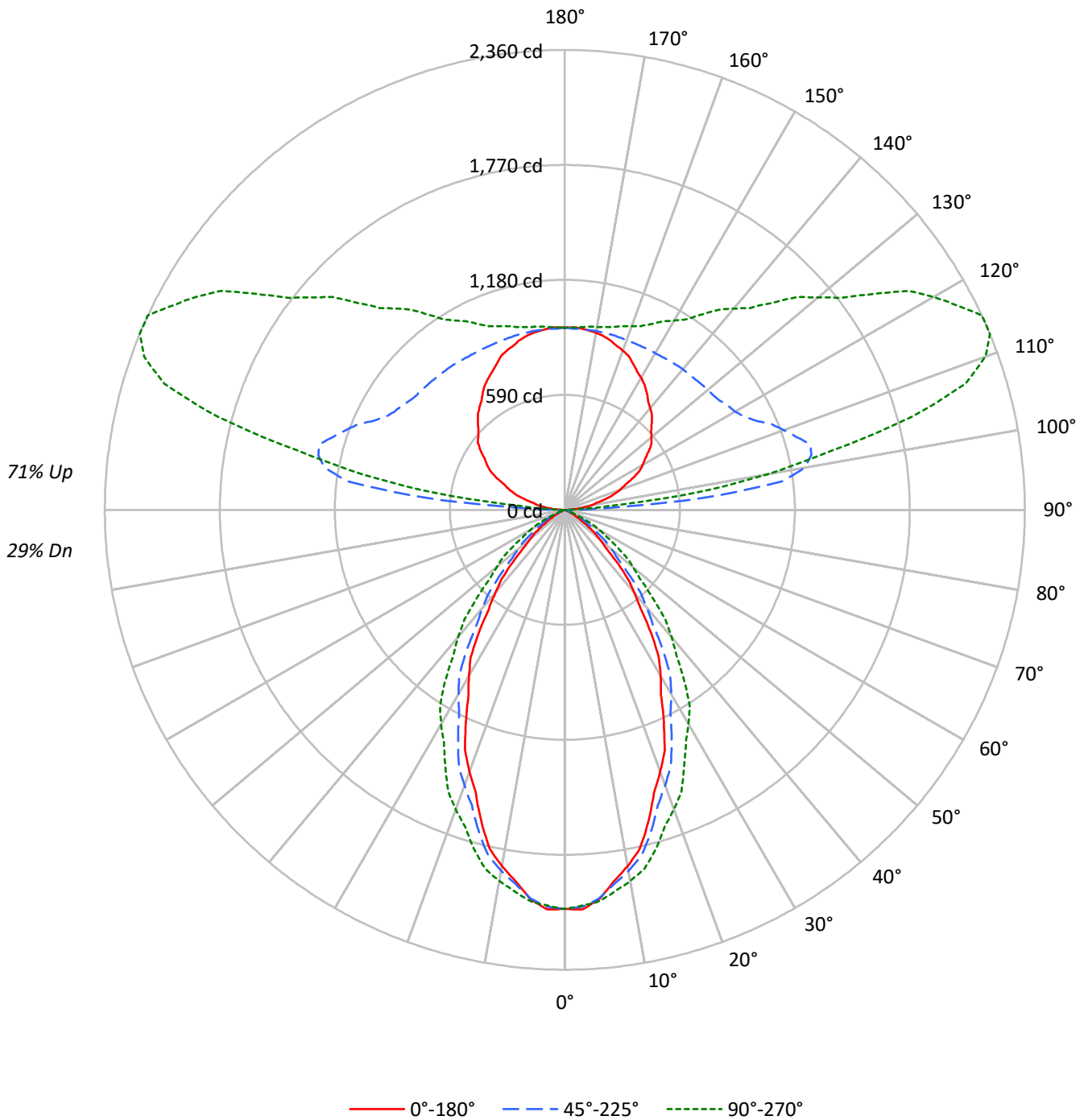
Lumens per Lamp: N/A
Luminaire Lumens: 8468.8 lumens
Efficiency: N/A
Efficacy: 117.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 72.3
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	102	102	102	102	91	91	91	91	72	72	72	53	53	53	37	37	37	29				
1	94	90	87	84	84	81	78	76	64	62	61	48	47	46	34	33	33	26				
2	86	80	75	70	77	72	68	64	57	54	52	44	42	40	31	30	29	24				
3	80	71	65	60	71	64	59	55	52	48	45	40	37	35	29	27	26	21				
4	73	64	57	51	66	58	52	47	46	42	39	36	33	31	26	25	24	19				
5	68	57	50	45	61	52	46	41	42	38	34	33	30	28	24	23	21	18				
6	63	52	44	39	56	47	41	36	38	34	30	30	27	25	22	21	19	16				
7	58	47	40	35	52	43	37	32	35	30	27	28	25	22	21	19	18	15				
8	54	43	36	31	49	39	33	29	32	28	24	26	22	20	19	17	16	14				
9	50	39	32	28	45	36	30	26	30	25	22	24	21	18	18	16	15	13				
10	47	36	29	25	43	33	27	23	27	23	20	22	19	17	17	15	14	12				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18893	18893	18893
5°	18590	18543	18681
10°	17394	17626	18118
15°	15813	16314	17223
20°	14036	14766	16060
25°	12224	13192	14755
30°	10470	11621	13520
35°	8682	9864	12029
40°	6670	7888	10249
45°	4821	5972	8248
50°	3285	4451	6541
55°	2136	3219	5083
60°	1225	2266	3674
65°	325	1384	1860
70°	159	429	534
75°	71	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.9	2.2
10°-20°	477.9	5.6
20°-30°	598.3	7.1
30°-40°	552.6	6.5
40°-50°	371.3	4.4
50°-60°	191.8	2.3
60°-70°	60.1	0.7
70°-80°	3.8	0.0
80°-90°	2.0	0.0
90°-100°	434.2	5.1
100°-110°	1174.0	13.9
110°-120°	1234.3	14.6
120°-130°	1002.6	11.8
130°-140°	786.5	9.3
140°-150°	603.6	7.1
150°-160°	434.1	5.1
160°-170°	265.2	3.1
170°-180°	89.4	1.1
0°-30°	1263.1	14.9
0°-40°	1815.8	21.4
0°-60°	2378.9	28.1
0°-90°	2444.8	28.9
90°-120°	2842.6	33.6
90°-150°	5235.3	61.8
90°-180°	6024.0	71.1
0°-180°	8468.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2048	2048	2048	2048	2048	
5°	2007	1987	2002	2009	2017	186
15°	1656	1650	1708	1765	1803	461
25°	1201	1210	1296	1384	1449	551
35°	771	790	876	979	1068	477
45°	370	392	458	547	632	290
55°	133	155	200	257	316	124
65°	15	28	63	76	85	25
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	2	6	13	14	13	5
95°	67	236	722	374	222	71
105°	218	337	1302	1921	1842	230
115°	384	470	1080	2091	2360	379
125°	526	603	974	1643	1930	469
135°	631	705	947	1326	1502	487
145°	733	788	934	1135	1222	459
155°	828	860	926	1019	1052	382
165°	901	910	930	967	972	254
175°	935	934	931	943	941	89
180°	934	934	934	934	934	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2047.8	2047.8	2047.8	2047.8	2047.8
2.5°	2052.6	2033.2	2038.3	2038.2	2032.8
5°	2007.2	1986.9	2002.2	2009.4	2017.1
7.5°	1922.4	1906.5	1936.1	1958.2	1974.3
10°	1856.6	1843.0	1881.4	1911.6	1933.9
12.5°	1780.5	1770.1	1816.4	1857.8	1886.3
15°	1655.5	1649.7	1708.0	1765.3	1803.1
17.5°	1521.5	1521.4	1587.9	1659.1	1704.6
20°	1429.6	1432.5	1503.9	1582.4	1635.7
22.5°	1337.7	1344.4	1420.7	1502.5	1563.6
25°	1200.8	1210.4	1295.9	1384.5	1449.4
27.5°	1069.2	1083.3	1173.2	1265.4	1344.4
30°	982.8	999.3	1090.8	1187.7	1269.1
32.5°	898.0	917.6	1006.8	1109.3	1192.2
35°	770.8	790.2	875.8	978.9	1068.0
37.5°	639.4	658.4	742.0	843.5	939.8
40°	553.8	575.1	654.9	753.2	851.0
42.5°	476.1	497.5	572.4	669.1	761.5
45°	369.5	391.8	457.7	546.8	632.1
47.5°	281.2	305.4	363.2	443.8	521.5
50°	228.9	253.1	310.1	381.1	455.7
52.5°	186.8	210.3	261.7	328.7	397.1
55°	132.8	155.0	200.1	256.9	316.0
57.5°	91.7	110.9	151.4	198.8	245.1
60°	66.4	84.8	122.8	161.4	199.1
62.5°	44.2	61.0	98.3	127.8	153.2
65°	14.9	28.4	63.4	76.5	85.2
67.5°	7.5	9.1	33.3	35.1	38.0
70°	5.9	5.9	15.9	16.9	19.8
72.5°	4.4	4.4	6.3	8.1	8.7
75°	2.0	2.0	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°	0.4	1.2	2.6	2.8	2.6
90°	2.0	5.9	13.1	14.1	13.1
92.5°	28.6	104.1	205.4	89.2	64.6
95°	67.4	236.5	722.1	373.7	222.3
97.5°	108.2	271.3	1125.6	931.5	684.1
100°	138.8	285.3	1251.1	1304.8	1055.0
102.5°	167.0	304.8	1295.4	1587.8	1401.0
105°	218.2	337.2	1302.4	1921.2	1842.5
107.5°	265.7	374.3	1245.5	2129.1	2155.3
110°	302.7	401.1	1194.8	2185.0	2296.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	335.7	427.8	1148.1	2173.8	2360.5
115°	384.2	469.7	1080.2	2091.0	2360.5
117.5°	431.7	511.9	1035.3	1964.5	2269.9
120°	460.6	539.3	1008.8	1873.7	2185.5
122.5°	488.0	565.1	992.7	1776.4	2090.5
125°	526.0	602.7	973.6	1642.9	1930.0
127.5°	561.0	636.3	962.3	1533.9	1786.4
130°	580.3	658.0	957.5	1466.5	1694.7
132.5°	600.4	677.3	952.6	1405.8	1615.8
135°	630.6	705.3	947.4	1326.5	1501.6
137.5°	661.0	731.6	943.0	1262.2	1404.8
140°	681.9	747.8	941.4	1220.8	1347.7
142.5°	702.0	764.0	938.1	1183.5	1294.6
145°	733.2	788.2	934.3	1135.4	1222.0
147.5°	761.5	810.3	929.9	1091.9	1158.4
150°	782.5	825.7	928.3	1068.3	1121.4
152.5°	801.8	839.5	927.5	1046.4	1090.0
155°	827.7	860.2	926.3	1018.6	1052.0
157.5°	854.7	877.3	926.5	999.2	1021.2
160°	870.0	888.6	927.3	987.0	1002.7
162.5°	882.0	897.6	928.1	977.2	989.0
165°	901.1	910.0	930.3	966.6	971.5
167.5°	914.2	920.3	930.5	957.5	959.9
170°	922.3	925.2	931.3	953.4	953.4
172.5°	928.7	929.3	931.3	948.6	947.8
175°	935.3	934.3	931.3	943.3	941.4
177.5°	937.5	935.2	931.1	939.1	936.7
180°	934.3	934.3	934.3	934.3	934.3

(END OF REPORT)