

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: P518880

Luminaire Tested: **SQ4-BB-150U-050D-835-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518880
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-050D-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

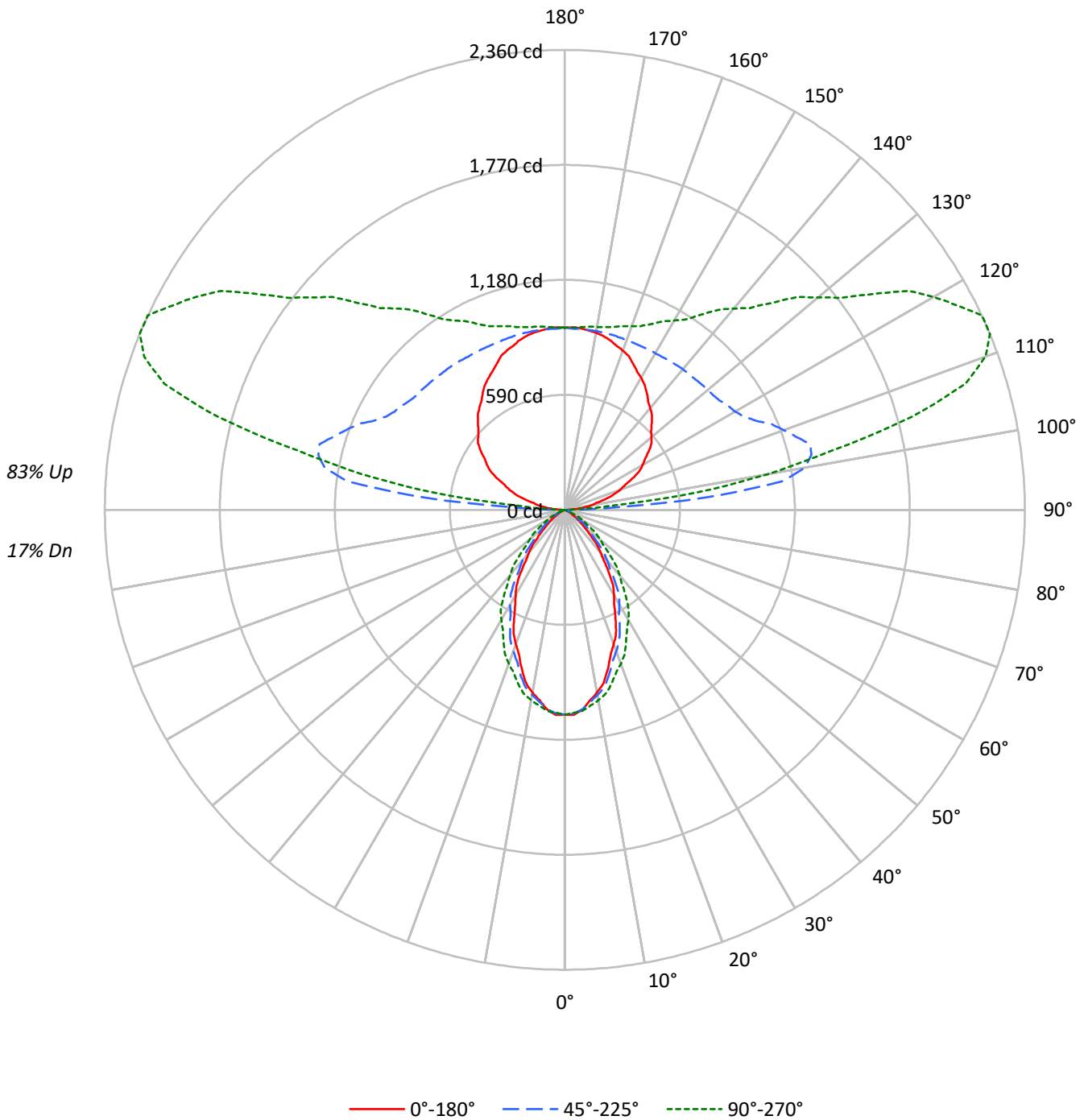
Lumens per Lamp: N/A
Luminaire Lumens: 7279.4 lumens
Efficiency: N/A
Efficacy: 130.7 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 55.7
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	99	99	99	99	87	87	87	87	65	65	65	45	45	45	26	26	26	17
1	91	87	84	81	80	77	74	72	58	56	54	40	39	38	24	23	23	16
2	83	77	71	67	73	68	63	60	51	48	46	36	34	33	22	21	20	14
3	76	68	61	56	67	60	55	51	46	42	39	32	30	29	20	19	18	13
4	70	60	53	48	62	54	48	43	41	37	34	29	27	25	18	17	16	12
5	64	54	47	41	57	48	42	37	37	33	30	26	24	22	17	15	14	11
6	59	48	41	36	52	43	37	33	33	29	26	24	21	19	15	14	13	10
7	55	44	37	32	48	39	33	29	30	26	23	22	19	17	14	13	12	9
8	51	40	33	28	45	36	30	25	28	23	20	20	18	16	13	12	11	8
9	47	36	29	25	42	32	27	23	25	21	18	19	16	14	12	11	10	8
10	44	33	27	22	39	30	24	20	23	19	16	17	15	13	11	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9694	9694	9694
5°	9538	9515	9586
10°	8924	9043	9296
15°	8113	8371	8837
20°	7202	7577	8241
25°	6272	6769	7571
30°	5373	5963	6938
35°	4455	5062	6172
40°	3423	4047	5260
45°	2474	3065	4231
50°	1685	2284	3356
55°	1095	1652	2609
60°	629	1163	1886
65°	166	710	954
70°	84	219	275
75°	36	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.9	1.3
10°-20°	245.2	3.4
20°-30°	307.0	4.2
30°-40°	283.6	3.9
40°-50°	190.5	2.6
50°-60°	98.4	1.4
60°-70°	30.8	0.4
70°-80°	1.9	0.0
80°-90°	2.0	0.0
90°-100°	434.2	6.0
100°-110°	1174.0	16.1
110°-120°	1234.3	17.0
120°-130°	1002.6	13.8
130°-140°	786.5	10.8
140°-150°	603.6	8.3
150°-160°	434.1	6.0
160°-170°	265.2	3.6
170°-180°	89.4	1.2
0°-30°	648.1	8.9
0°-40°	931.7	12.8
0°-60°	1220.6	16.8
0°-90°	1255.4	17.2
90°-120°	2842.6	39.0
90°-150°	5235.3	71.9
90°-180°	6024.0	82.8
0°-180°	7279.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1051	1051	1051	1051	1051	
5°	1030	1020	1027	1031	1035	95
15°	849	846	876	906	925	237
25°	616	621	665	710	744	282
35°	396	405	449	502	548	245
45°	190	201	235	281	324	149
55°	68	80	103	132	162	64
65°	8	15	32	39	44	13
75°	1	1	0	0	0	1
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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CATALOG NUMBER: SQ4-BB-150U-050D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1050.7	1050.7	1050.7	1050.7	1050.7
2.5°	1053.2	1043.2	1045.9	1045.8	1043.0
5°	1029.9	1019.5	1027.4	1031.0	1035.0
7.5°	986.4	978.2	993.4	1004.8	1013.0
10°	952.6	945.7	965.3	980.8	992.3
12.5°	913.6	908.2	932.0	953.3	967.9
15°	849.4	846.5	876.4	905.8	925.2
17.5°	780.7	780.6	814.8	851.3	874.6
20°	733.5	735.0	771.7	811.9	839.3
22.5°	686.4	689.8	729.0	770.9	802.3
25°	616.1	621.1	664.9	710.4	743.7
27.5°	548.6	555.9	602.0	649.3	689.8
30°	504.3	512.7	559.7	609.4	651.2
32.5°	460.8	470.8	516.6	569.2	611.7
35°	395.5	405.4	449.4	502.3	548.0
37.5°	328.1	337.8	380.7	432.8	482.2
40°	284.2	295.1	336.0	386.5	436.7
42.5°	244.3	255.2	293.7	343.3	390.7
45°	189.6	201.0	234.9	280.6	324.3
47.5°	144.3	156.7	186.4	227.7	267.6
50°	117.4	129.9	159.1	195.6	233.8
52.5°	95.9	107.9	134.3	168.7	203.7
55°	68.1	79.5	102.7	131.8	162.2
57.5°	47.1	56.9	77.7	102.0	125.8
60°	34.1	43.5	63.0	82.8	102.2
62.5°	22.7	31.3	50.4	65.6	78.6
65°	7.6	14.6	32.5	39.2	43.7
67.5°	3.9	4.7	17.1	18.0	19.5
70°	3.1	3.1	8.1	8.7	10.2
72.5°	2.2	2.2	3.3	4.2	4.5
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	0.0	0.0
80°	0.5	0.5	0.0	0.0	0.0
82.5°	0.1	0.1	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



TEST NUMBER: P518880

CATALOG NUMBER: SQ4-BB-150U-050D-835-1D-UNV-STD-W-4

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)