

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: P518924

Luminaire Tested: **SQ4-BB-150U-100D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518924
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-830-1D-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

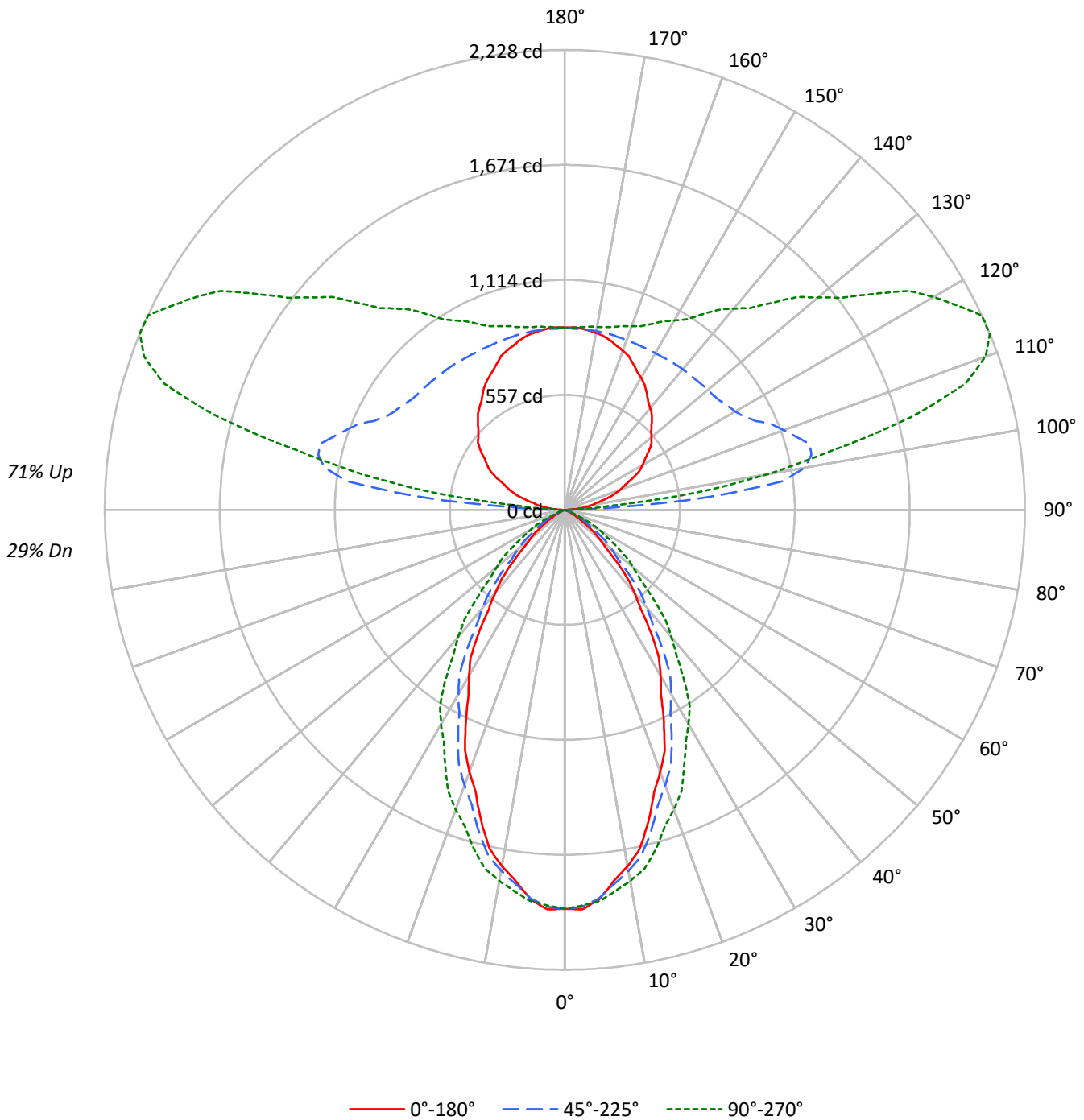
Lumens per Lamp: N/A
Luminaire Lumens: 7993.6 lumens
Efficiency: N/A
Efficacy: 110.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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	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°	17833	17833	17833
5°	17547	17503	17633
10°	16417	16637	17101
15°	14925	15399	16256
20°	13249	13937	15159
25°	11538	12452	13927
30°	9883	10969	12762
35°	8194	9311	11354
40°	6295	7444	9675
45°	4551	5637	7784
50°	3100	4201	6175
55°	2015	3039	4798
60°	1157	2140	3469
65°	306	1305	1755
70°	151	405	504
75°	68	32	0
80°	48	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.4	2.2
10°-20°	451.1	5.6
20°-30°	564.7	7.1
30°-40°	521.6	6.5
40°-50°	350.5	4.4
50°-60°	181.0	2.3
60°-70°	56.7	0.7
70°-80°	3.6	0.0
80°-90°	1.9	0.0
90°-100°	409.8	5.1
100°-110°	1108.2	13.9
110°-120°	1165.1	14.6
120°-130°	946.4	11.8
130°-140°	742.3	9.3
140°-150°	569.7	7.1
150°-160°	409.7	5.1
160°-170°	250.3	3.1
170°-180°	84.4	1.1
0°-30°	1192.3	14.9
0°-40°	1713.9	21.4
0°-60°	2245.4	28.1
0°-90°	2307.6	28.9
90°-120°	2683.1	33.6
90°-150°	4941.5	61.8
90°-180°	5686.0	71.1
0°-180°	7993.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1933	1933	1933	1933	1933	
5°	1895	1875	1890	1897	1904	176
15°	1563	1557	1612	1666	1702	435
25°	1133	1142	1223	1307	1368	520
35°	728	746	827	924	1008	451
45°	349	370	432	516	597	274
55°	125	146	189	242	298	117
65°	14	27	60	72	80	24
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	2	6	12	13	12	4
95°	64	223	682	353	210	67
105°	206	318	1229	1813	1739	217
115°	363	443	1020	1974	2228	358
125°	496	569	919	1551	1822	443
135°	595	666	894	1252	1417	460
145°	692	744	882	1072	1153	433
155°	781	812	874	961	993	360
165°	851	859	878	912	917	240
175°	883	882	879	890	888	84
180°	882	882	882	882	882	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1932.9	1932.9	1932.9	1932.9	1932.9
2.5°	1937.4	1919.1	1923.9	1923.8	1918.7
5°	1894.6	1875.4	1889.9	1896.6	1903.9
7.5°	1814.5	1799.5	1827.4	1848.4	1863.5
10°	1752.4	1739.6	1775.8	1804.3	1825.4
12.5°	1680.6	1670.7	1714.5	1753.6	1780.5
15°	1562.6	1557.1	1612.2	1666.3	1701.9
17.5°	1436.2	1436.0	1498.8	1566.0	1609.0
20°	1349.4	1352.1	1419.5	1493.6	1543.9
22.5°	1262.6	1269.0	1341.0	1418.2	1475.8
25°	1133.4	1142.5	1223.2	1306.8	1368.1
27.5°	1009.2	1022.5	1107.4	1194.4	1269.0
30°	927.7	943.2	1029.6	1121.1	1197.9
32.5°	847.6	866.1	950.3	1047.1	1125.3
35°	727.5	745.8	826.7	924.0	1008.1
37.5°	603.5	621.5	700.4	796.2	887.1
40°	522.7	542.9	618.1	710.9	803.3
42.5°	449.4	469.5	540.3	631.5	718.7
45°	348.8	369.8	432.0	516.2	596.6
47.5°	265.4	288.2	342.8	418.9	492.3
50°	216.0	238.9	292.7	359.8	430.2
52.5°	176.4	198.5	247.1	310.2	374.8
55°	125.3	146.3	188.9	242.5	298.3
57.5°	86.6	104.7	142.9	187.6	231.4
60°	62.7	80.0	116.0	152.3	188.0
62.5°	41.7	57.6	92.8	120.6	144.6
65°	14.0	26.8	59.8	72.2	80.4
67.5°	7.1	8.6	31.4	33.2	35.9
70°	5.6	5.6	15.0	16.0	18.7
72.5°	4.1	4.1	6.0	7.7	8.2
75°	1.9	1.9	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°	0.4	1.1	2.5	2.7	2.5
90°	1.9	5.6	12.3	13.3	12.3
92.5°	27.0	98.2	193.8	84.2	60.9
95°	63.6	223.3	681.6	352.7	209.8
97.5°	102.1	256.0	1062.5	879.3	645.7
100°	131.0	269.3	1180.9	1231.6	995.8
102.5°	157.6	287.7	1222.7	1498.7	1322.4
105°	206.0	318.3	1229.3	1813.4	1739.1
107.5°	250.8	353.3	1175.6	2009.7	2034.4
110°	285.7	378.6	1127.8	2062.4	2167.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	316.9	403.8	1083.7	2051.8	2228.0
115°	362.6	443.4	1019.6	1973.7	2228.0
117.5°	407.4	483.2	977.2	1854.3	2142.6
120°	434.8	509.0	952.2	1768.6	2062.8
122.5°	460.6	533.4	937.0	1676.8	1973.2
125°	496.5	568.9	918.9	1550.7	1821.7
127.5°	529.5	600.6	908.3	1447.8	1686.2
130°	547.7	621.1	903.7	1384.2	1599.6
132.5°	566.7	639.3	899.2	1326.9	1525.2
135°	595.2	665.8	894.2	1252.1	1417.3
137.5°	623.9	690.5	890.1	1191.4	1326.0
140°	643.6	705.8	888.5	1152.3	1272.1
142.5°	662.6	721.1	885.5	1117.1	1221.9
145°	692.0	744.0	881.9	1071.7	1153.4
147.5°	718.8	764.9	877.7	1030.7	1093.4
150°	738.6	779.4	876.2	1008.4	1058.5
152.5°	756.8	792.4	875.4	987.6	1028.9
155°	781.3	811.9	874.3	961.4	993.0
157.5°	806.7	828.1	874.5	943.1	963.9
160°	821.1	838.8	875.3	931.6	946.5
162.5°	832.5	847.2	876.0	922.4	933.5
165°	850.6	858.9	878.1	912.4	917.0
167.5°	862.9	868.7	878.3	903.8	906.0
170°	870.5	873.3	879.1	899.9	899.9
172.5°	876.6	877.1	879.1	895.4	894.6
175°	882.9	881.9	879.1	890.4	888.5
177.5°	884.9	882.7	878.9	886.4	884.2
180°	881.9	881.9	881.9	881.9	881.9

(END OF REPORT)