

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: P518936

Luminaire Tested: **SQ4-BB-150U-100D-930-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518936
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-930-1D-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, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

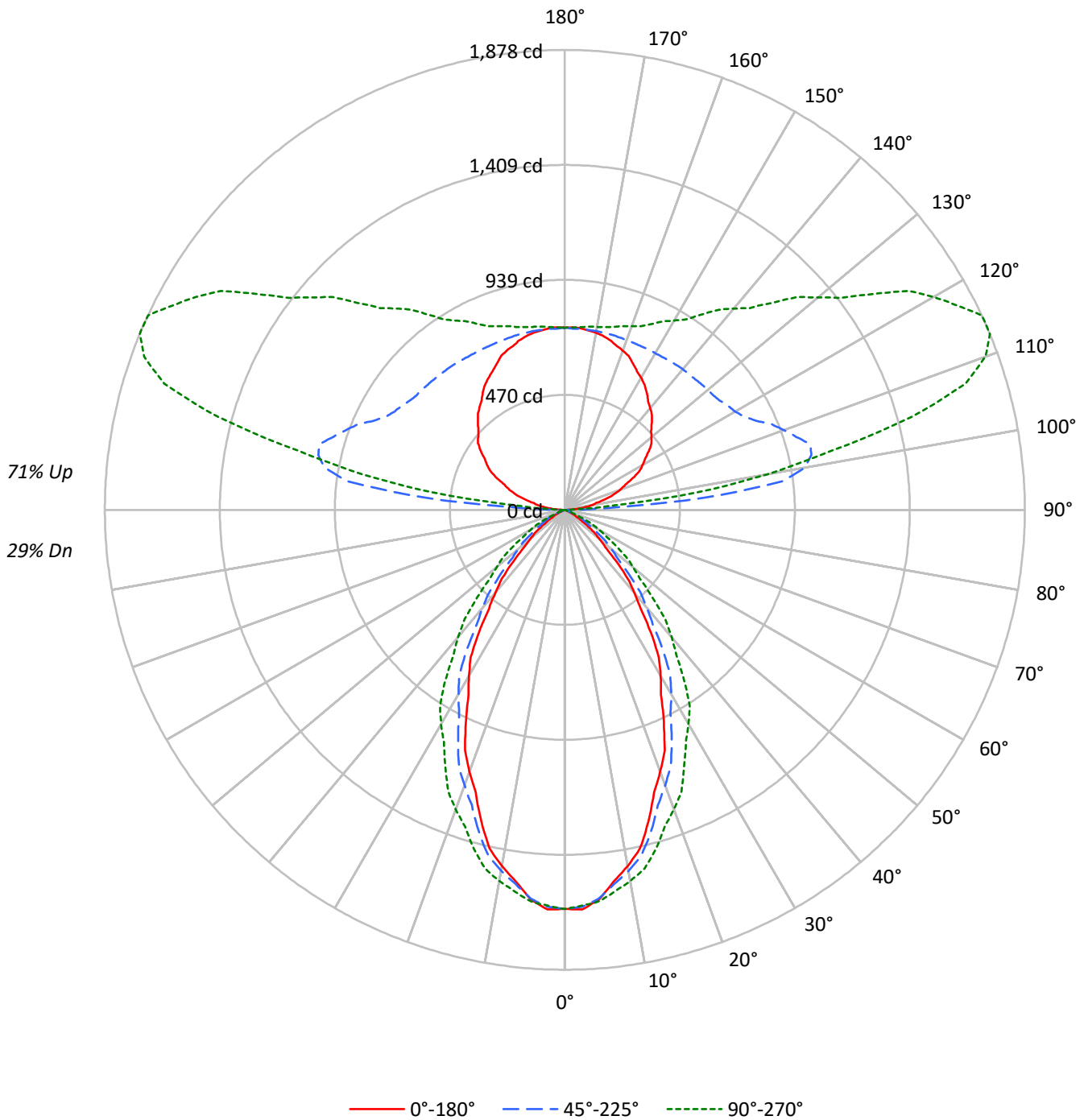
Lumens per Lamp: N/A
Luminaire Lumens: 6739.1 lumens
Efficiency: N/A
Efficacy: 93.2 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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°	15035	15035	15035
5°	14792	14756	14866
10°	13841	14026	14417
15°	12583	12982	13705
20°	11169	11750	12780
25°	9727	10498	11742
30°	8332	9247	10759
35°	6909	7849	9573
40°	5308	6276	8156
45°	3837	4752	6563
50°	2614	3542	5205
55°	1699	2562	4045
60°	974	1805	2925
65°	258	1102	1480
70°	127	340	426
75°	57	29	0
80°	43	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.7	2.2
10°-20°	380.3	5.6
20°-30°	476.1	7.1
30°-40°	439.8	6.5
40°-50°	295.5	4.4
50°-60°	152.6	2.3
60°-70°	47.8	0.7
70°-80°	3.0	0.0
80°-90°	1.6	0.0
90°-100°	345.5	5.1
100°-110°	934.2	13.9
110°-120°	982.2	14.6
120°-130°	797.8	11.8
130°-140°	625.8	9.3
140°-150°	480.3	7.1
150°-160°	345.4	5.1
160°-170°	211.0	3.1
170°-180°	71.1	1.1
0°-30°	1005.1	14.9
0°-40°	1444.9	21.4
0°-60°	1893.0	28.1
0°-90°	1945.5	28.9
90°-120°	2262.0	33.6
90°-150°	4166.0	61.8
90°-180°	4794.0	71.1
0°-180°	6739.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1630	1630	1630	1630	1630	
5°	1597	1581	1593	1599	1605	148
15°	1317	1313	1359	1405	1435	367
25°	956	963	1031	1102	1153	438
35°	613	629	697	779	850	380
45°	294	312	364	435	503	231
55°	106	123	159	204	252	99
65°	12	23	50	61	68	20
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	2	5	10	11	10	4
95°	54	188	575	297	177	56
105°	174	268	1036	1529	1466	183
115°	306	374	860	1664	1878	302
125°	419	480	775	1307	1536	373
135°	502	561	754	1056	1195	388
145°	583	627	744	904	972	365
155°	659	684	737	810	837	304
165°	717	724	740	769	773	202
175°	744	744	741	751	749	71
180°	744	744	744	744	744	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1629.6	1629.6	1629.6	1629.6	1629.6
2.5°	1633.3	1617.9	1622.0	1621.9	1617.6
5°	1597.2	1581.0	1593.3	1599.0	1605.1
7.5°	1529.8	1517.1	1540.6	1558.3	1571.1
10°	1477.4	1466.6	1497.1	1521.2	1538.9
12.5°	1416.9	1408.5	1445.4	1478.4	1501.1
15°	1317.4	1312.7	1359.1	1404.8	1434.8
17.5°	1210.8	1210.6	1263.6	1320.2	1356.5
20°	1137.6	1139.9	1196.7	1259.2	1301.6
22.5°	1064.5	1069.9	1130.5	1195.6	1244.2
25°	955.5	963.2	1031.2	1101.7	1153.4
27.5°	850.8	862.1	933.6	1006.9	1069.8
30°	782.1	795.2	868.0	945.1	1009.9
32.5°	714.6	730.1	801.1	882.7	948.7
35°	613.4	628.8	696.9	778.9	849.9
37.5°	508.8	523.9	590.5	671.2	747.8
40°	440.7	457.7	521.1	599.4	677.2
42.5°	378.9	395.8	455.5	532.4	605.9
45°	294.1	311.8	364.2	435.1	503.0
47.5°	223.7	243.0	289.0	353.2	415.0
50°	182.1	201.4	246.8	303.3	362.6
52.5°	148.7	167.3	208.3	261.6	316.0
55°	105.6	123.4	159.3	204.5	251.5
57.5°	73.0	88.3	120.5	158.2	195.0
60°	52.8	67.5	97.8	128.4	158.5
62.5°	35.2	48.6	78.2	101.7	121.9
65°	11.8	22.6	50.5	60.9	67.8
67.5°	6.0	7.2	26.5	28.0	30.3
70°	4.7	4.7	12.6	13.5	15.8
72.5°	3.5	3.5	5.0	6.5	6.9
75°	1.6	1.6	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	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°	0.3	0.9	2.1	2.2	2.1
90°	1.6	4.7	10.4	11.2	10.4
92.5°	22.7	82.8	163.4	70.9	51.4
95°	53.6	188.2	574.6	297.4	176.9
97.5°	86.1	215.9	895.7	741.3	544.4
100°	110.4	227.0	995.6	1038.3	839.5
102.5°	132.9	242.6	1030.8	1263.5	1114.8
105°	173.7	268.4	1036.4	1528.8	1466.2
107.5°	211.4	297.8	991.1	1694.3	1715.1
110°	240.9	319.1	950.8	1738.7	1827.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	267.1	340.4	913.6	1729.8	1878.3
115°	305.7	373.8	859.5	1663.9	1878.3
117.5°	343.5	407.4	823.8	1563.3	1806.3
120°	366.5	429.1	802.7	1491.0	1739.1
122.5°	388.3	449.7	789.9	1413.6	1663.5
125°	418.6	479.6	774.7	1307.3	1535.8
127.5°	446.4	506.4	765.7	1220.6	1421.5
130°	461.8	523.6	761.9	1167.0	1348.5
132.5°	477.8	539.0	758.1	1118.6	1285.8
135°	501.8	561.3	753.9	1055.6	1194.9
137.5°	526.0	582.2	750.4	1004.4	1117.9
140°	542.6	595.0	749.1	971.5	1072.4
142.5°	558.6	607.9	746.5	941.7	1030.2
145°	583.4	627.3	743.5	903.5	972.4
147.5°	606.0	644.8	740.0	868.9	921.8
150°	622.6	657.1	738.7	850.1	892.4
152.5°	638.0	668.1	738.1	832.6	867.4
155°	658.7	684.5	737.1	810.5	837.1
157.5°	680.1	698.1	737.3	795.1	812.6
160°	692.3	707.1	737.9	785.4	797.9
162.5°	701.9	714.2	738.5	777.6	787.0
165°	717.1	724.1	740.3	769.2	773.1
167.5°	727.5	732.3	740.5	761.9	763.8
170°	733.9	736.2	741.1	758.7	758.7
172.5°	739.0	739.5	741.1	754.8	754.2
175°	744.3	743.5	741.1	750.7	749.1
177.5°	746.1	744.2	740.9	747.3	745.4
180°	743.5	743.5	743.5	743.5	743.5

(END OF REPORT)