

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521014

Luminaire Tested: **SQ4-BB-025U-100D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521014
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-025U-100D-93050-1D-UNV-STD-W-4 (5000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

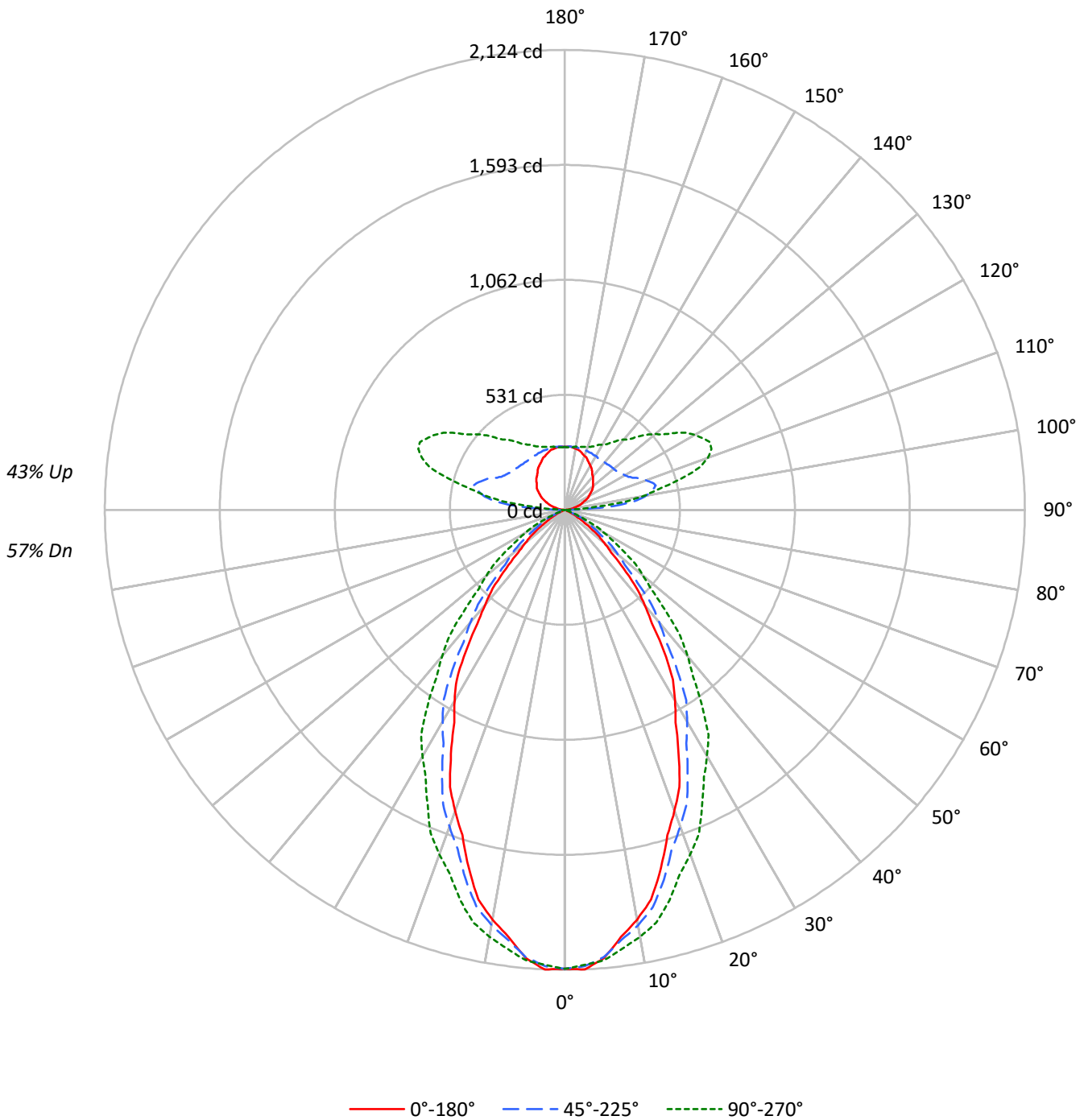
Lumens per Lamp: N/A
Luminaire Lumens: 4409.4 lumens
Efficiency: N/A
Efficacy: 77.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 56.7
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	109	109	109	109	101	101	101	101	87	87	87	75	75	75	63	63	63	57
1	101	98	95	92	95	92	89	86	80	78	76	69	67	66	59	58	57	52
2	94	88	83	79	88	83	78	74	72	69	66	63	61	59	54	53	51	47
3	87	79	73	68	82	75	69	65	66	62	58	58	55	52	50	48	46	43
4	81	72	65	60	76	68	62	57	60	55	52	53	49	47	46	44	42	39
5	75	65	58	53	70	62	55	51	55	50	46	49	45	42	43	40	38	35
6	70	59	52	47	66	56	50	45	50	45	42	45	41	38	40	37	35	32
7	65	55	47	42	61	52	45	41	47	41	38	42	38	35	37	34	32	29
8	61	50	43	38	58	48	41	37	43	38	34	39	35	32	35	31	29	27
9	58	46	40	35	54	44	38	34	40	35	31	36	32	29	32	29	27	25
10	54	43	36	32	51	41	35	31	37	32	29	34	30	27	30	27	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19555	19555	19555
5°	19241	19192	19335
10°	18003	18242	18752
15°	16367	16885	17825
20°	14528	15283	16621
25°	12652	13653	15272
30°	10837	12028	13993
35°	8986	10210	12450
40°	6904	8163	10608
45°	4991	6181	8536
50°	3400	4607	6771
55°	2210	3331	5262
60°	1268	2347	3803
65°	336	1432	1925
70°	167	442	553
75°	75	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.4	4.4
10°-20°	494.7	11.2
20°-30°	619.3	14.0
30°-40°	572.0	13.0
40°-50°	384.4	8.7
50°-60°	198.5	4.5
60°-70°	62.2	1.4
70°-80°	3.9	0.1
80°-90°	0.1	0.0
90°-100°	149.8	3.4
100°-110°	361.9	8.2
110°-120°	386.0	8.8
120°-130°	312.7	7.1
130°-140°	242.1	5.5
140°-150°	184.7	4.2
150°-160°	133.7	3.0
160°-170°	82.3	1.9
170°-180°	27.9	0.6
0°-30°	1307.3	29.6
0°-40°	1879.3	42.6
0°-60°	2462.2	55.8
0°-90°	2528.4	57.3
90°-120°	897.7	20.4
90°-150°	1637.1	37.1
90°-180°	1881.0	42.7
0°-180°	4409.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2120	2120	2120	2120	2120	
5°	2078	2056	2072	2080	2088	193
15°	1714	1707	1768	1827	1866	477
25°	1243	1253	1341	1433	1500	570
35°	798	818	906	1013	1105	494
45°	382	406	474	566	654	300
55°	137	160	207	266	327	128
65°	15	29	66	79	88	26
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	15	75	257	167	117	17
105°	58	100	435	563	556	61
115°	106	135	350	663	739	105
125°	151	174	303	527	619	135
135°	185	207	291	416	478	143
145°	219	235	286	353	381	137
155°	251	262	289	313	324	116
165°	278	282	293	297	302	78
175°	294	292	294	291	290	28
180°	290	290	290	290	290	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2119.5	2119.5	2119.5	2119.5	2119.5
2.5°	2124.4	2104.4	2109.7	2109.5	2103.9
5°	2077.5	2056.4	2072.3	2079.7	2087.7
7.5°	1989.7	1973.3	2003.8	2026.8	2043.4
10°	1921.6	1907.6	1947.2	1978.5	2001.6
12.5°	1842.9	1832.0	1880.0	1922.9	1952.4
15°	1713.5	1707.4	1767.8	1827.1	1866.2
17.5°	1574.8	1574.6	1643.5	1717.2	1764.3
20°	1479.7	1482.7	1556.6	1637.8	1692.9
22.5°	1384.5	1391.5	1470.4	1555.1	1618.3
25°	1242.8	1252.8	1341.2	1433.0	1500.2
27.5°	1106.6	1121.3	1214.3	1309.7	1391.5
30°	1017.2	1034.2	1129.0	1229.3	1313.5
32.5°	929.4	949.7	1042.0	1148.1	1234.0
35°	797.8	817.8	906.5	1013.1	1105.4
37.5°	661.8	681.4	768.0	873.0	972.7
40°	573.2	595.3	677.8	779.6	880.8
42.5°	492.8	514.9	592.5	692.5	788.1
45°	382.5	405.5	473.7	566.0	654.2
47.5°	291.0	316.1	375.9	459.4	539.8
50°	236.9	261.9	321.0	394.5	471.7
52.5°	193.4	217.7	270.9	340.2	411.0
55°	137.4	160.5	207.1	265.9	327.1
57.5°	95.0	114.8	156.7	205.8	253.7
60°	68.7	87.8	127.2	167.0	206.1
62.5°	45.7	63.2	101.7	132.3	158.5
65°	15.4	29.4	65.6	79.2	88.2
67.5°	7.8	9.4	34.5	36.4	39.4
70°	6.2	6.2	16.4	17.5	20.5
72.5°	4.5	4.5	6.6	8.4	9.0
75°	2.1	2.1	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°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	4.9	40.5	95.5	46.4	31.5
95°	14.8	74.9	256.6	166.8	116.9
97.5°	26.2	83.0	337.9	325.6	279.5
100°	35.1	88.0	382.7	404.0	366.1
102.5°	43.4	92.5	412.2	469.3	446.8
105°	57.8	100.0	435.0	562.8	555.6
107.5°	72.0	108.7	421.6	637.8	654.8
110°	81.8	116.1	399.9	670.2	702.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	91.7	123.6	380.7	678.1	732.6
115°	105.8	135.3	349.5	662.6	739.0
117.5°	119.9	147.7	331.2	626.9	716.4
120°	129.2	155.1	319.3	599.0	692.8
122.5°	139.1	163.0	312.0	570.4	662.8
125°	150.7	173.6	303.3	526.9	619.0
127.5°	162.3	183.9	297.3	490.1	571.0
130°	169.2	190.3	295.3	464.5	543.9
132.5°	175.6	197.6	292.4	446.0	513.4
135°	185.2	206.9	291.0	415.5	478.1
137.5°	194.3	216.1	286.7	394.9	442.0
140°	201.2	221.1	286.7	380.0	423.3
142.5°	208.1	227.9	284.3	367.1	403.6
145°	219.0	235.3	285.5	353.2	380.9
147.5°	229.3	245.0	284.8	337.2	360.1
150°	235.7	249.5	286.7	330.2	348.3
152.5°	242.5	255.9	286.2	322.8	338.9
155°	251.0	261.9	289.2	312.8	324.3
157.5°	261.3	270.5	288.6	309.0	315.8
160°	265.2	273.0	291.0	304.1	308.9
162.5°	271.6	278.4	290.0	302.5	305.4
165°	277.5	281.7	292.9	297.3	301.5
167.5°	284.8	287.5	292.1	296.9	297.1
170°	286.7	288.5	294.1	293.6	296.6
172.5°	290.2	291.5	292.6	293.9	292.1
175°	293.5	292.3	293.5	291.0	290.4
177.5°	292.9	292.9	291.9	290.9	288.5
180°	290.4	290.4	290.4	290.4	290.4

(END OF REPORT)