

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: P521012

Luminaire Tested: **SQ4-BB-025U-100D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521012
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 (4000K)
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 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

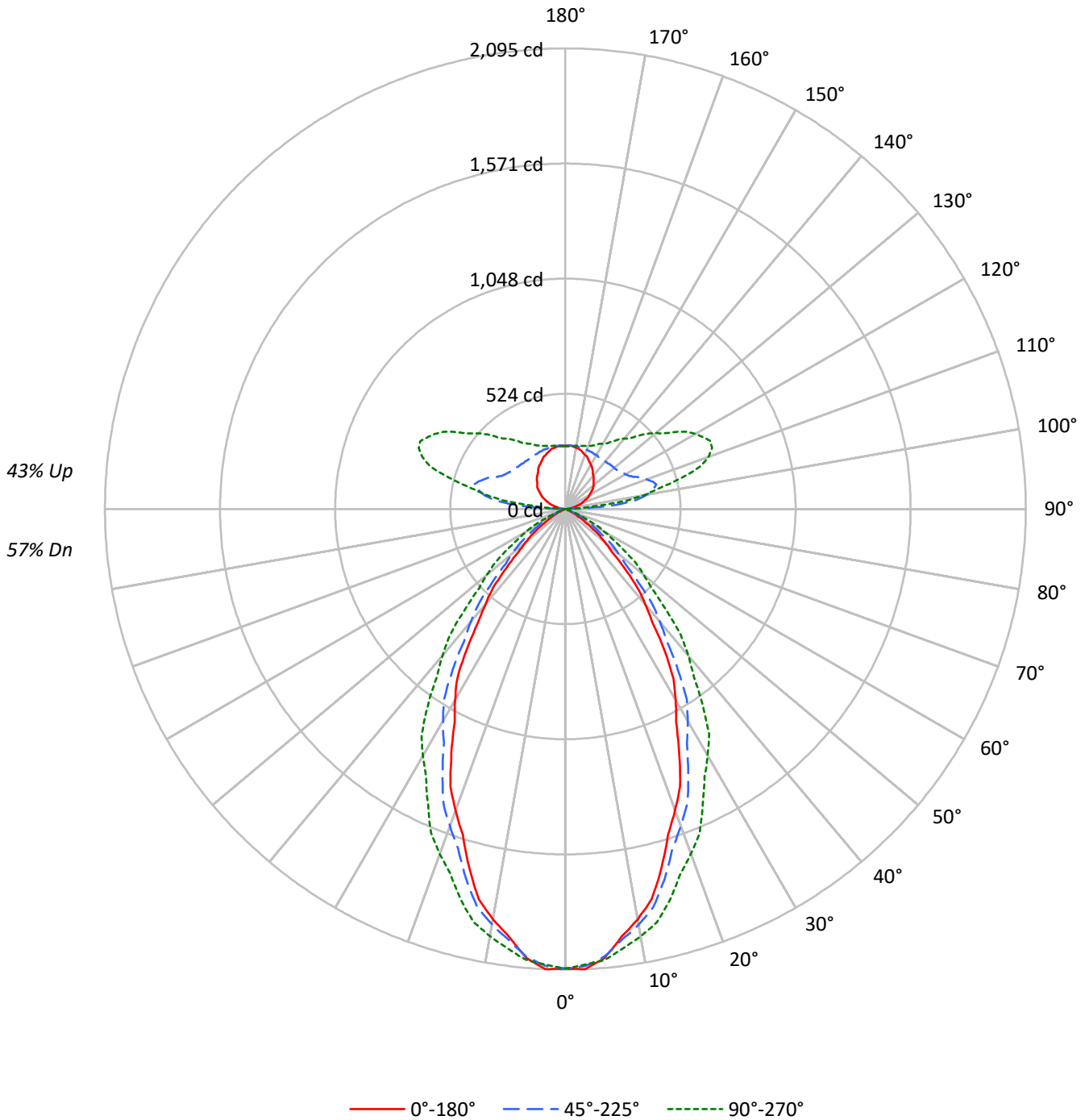
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4348.8 lumens
Efficiency: N/A
Efficacy: 76.6 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: General Diffuse

Input Watts (W): 56.8
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°	19286	19286	19286
5°	18976	18929	19069
10°	17755	17992	18494
15°	16141	16653	17581
20°	14328	15073	16394
25°	12478	13466	15062
30°	10688	11863	13802
35°	8862	10069	12279
40°	6808	8051	10463
45°	4922	6096	8418
50°	3353	4543	6677
55°	2180	3286	5189
60°	1251	2314	3751
65°	332	1412	1899
70°	165	437	545
75°	71	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.8	4.4
10°-20°	487.9	11.2
20°-30°	610.8	14.0
30°-40°	564.1	13.0
40°-50°	379.1	8.7
50°-60°	195.8	4.5
60°-70°	61.3	1.4
70°-80°	3.9	0.1
80°-90°	0.1	0.0
90°-100°	147.7	3.4
100°-110°	357.0	8.2
110°-120°	380.7	8.8
120°-130°	308.4	7.1
130°-140°	238.7	5.5
140°-150°	182.1	4.2
150°-160°	131.8	3.0
160°-170°	81.2	1.9
170°-180°	27.5	0.6
0°-30°	1289.4	29.6
0°-40°	1853.5	42.6
0°-60°	2428.4	55.8
0°-90°	2493.6	57.3
90°-120°	885.4	20.4
90°-150°	1614.6	37.1
90°-180°	1855.0	42.7
0°-180°	4348.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2090	2090	2090	2090	2090	
5°	2049	2028	2044	2051	2059	190
15°	1690	1684	1744	1802	1841	471
25°	1226	1236	1323	1413	1480	562
35°	787	807	894	999	1090	487
45°	377	400	467	558	645	296
55°	136	158	204	262	323	126
65°	15	29	65	78	87	26
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	15	74	253	164	115	16
105°	57	99	429	555	548	60
115°	104	134	345	654	729	103
125°	149	171	299	520	610	133
135°	183	204	287	410	472	141
145°	216	232	282	348	376	135
155°	248	258	285	308	320	114
165°	274	278	289	293	297	77
175°	290	288	290	287	286	27
180°	286	286	286	286	286	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2090.4	2090.4	2090.4	2090.4	2090.4
2.5°	2095.2	2075.5	2080.7	2080.6	2075.0
5°	2048.9	2028.2	2043.9	2051.1	2059.0
7.5°	1962.4	1946.1	1976.3	1998.9	2015.3
10°	1895.2	1881.4	1920.5	1951.3	1974.1
12.5°	1817.5	1806.9	1854.1	1896.5	1925.5
15°	1689.9	1684.0	1743.5	1802.0	1840.6
17.5°	1553.2	1553.0	1620.9	1693.6	1740.1
20°	1459.3	1462.3	1535.2	1615.3	1669.7
22.5°	1365.5	1372.4	1450.2	1533.8	1596.1
25°	1225.7	1235.6	1322.8	1413.3	1479.6
27.5°	1091.4	1105.8	1197.6	1291.7	1372.4
30°	1003.2	1020.0	1113.5	1212.4	1295.5
32.5°	916.7	936.6	1027.7	1132.4	1217.0
35°	786.8	806.6	894.0	999.2	1090.2
37.5°	652.7	672.1	757.5	861.0	959.3
40°	565.3	587.1	668.5	768.8	868.7
42.5°	486.0	507.8	584.3	683.0	777.3
45°	377.2	400.0	467.2	558.2	645.2
47.5°	287.0	311.7	370.7	453.1	532.4
50°	233.6	258.3	316.5	389.1	465.2
52.5°	190.7	214.7	267.2	335.5	405.3
55°	135.5	158.3	204.3	262.3	322.6
57.5°	93.6	113.2	154.5	202.9	250.2
60°	67.8	86.5	125.4	164.7	203.3
62.5°	45.1	62.3	100.3	130.4	156.3
65°	15.2	29.0	64.7	78.1	87.0
67.5°	7.7	9.3	34.0	35.9	38.8
70°	6.1	6.1	16.2	17.3	20.2
72.5°	4.4	4.4	6.5	8.3	8.9
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°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	4.9	40.0	94.2	45.8	31.1
95°	14.6	73.9	253.1	164.5	115.3
97.5°	25.9	81.9	333.3	321.1	275.6
100°	34.6	86.8	377.5	398.5	361.1
102.5°	42.8	91.3	406.6	462.9	440.7
105°	57.0	98.6	429.0	555.1	548.0
107.5°	71.0	107.2	415.8	629.1	645.8
110°	80.7	114.5	394.4	661.0	692.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	90.4	121.9	375.5	668.7	722.5
115°	104.4	133.5	344.7	653.5	728.8
117.5°	118.2	145.6	326.6	618.3	706.6
120°	127.4	153.0	314.9	590.7	683.3
122.5°	137.1	160.8	307.7	562.5	653.7
125°	148.7	171.2	299.2	519.7	610.5
127.5°	160.1	181.3	293.2	483.4	563.1
130°	166.9	187.6	291.3	458.1	536.4
132.5°	173.2	194.9	288.4	439.9	506.3
135°	182.7	204.0	287.0	409.8	471.5
137.5°	191.6	213.1	282.8	389.4	436.0
140°	198.4	218.0	282.8	374.8	417.5
142.5°	205.2	224.8	280.4	362.0	398.1
145°	216.0	232.1	281.6	348.3	375.6
147.5°	226.1	241.7	280.8	332.6	355.1
150°	232.4	246.1	282.8	325.7	343.5
152.5°	239.2	252.4	282.3	318.3	334.2
155°	247.6	258.3	285.2	308.5	319.8
157.5°	257.7	266.8	284.6	304.8	311.4
160°	261.5	269.3	287.0	299.9	304.6
162.5°	267.9	274.6	286.1	298.4	301.2
165°	273.7	277.8	288.9	293.2	297.4
167.5°	280.8	283.6	288.1	292.9	293.0
170°	282.8	284.6	290.1	289.5	292.5
172.5°	286.2	287.5	288.6	289.9	288.1
175°	289.5	288.3	289.5	287.0	286.4
177.5°	288.9	288.9	287.9	286.9	284.5
180°	286.4	286.4	286.4	286.4	286.4

(END OF REPORT)