

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: P521065

Luminaire Tested: **SQ4-BB-050U-100D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521065
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-050U-100D-93050-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

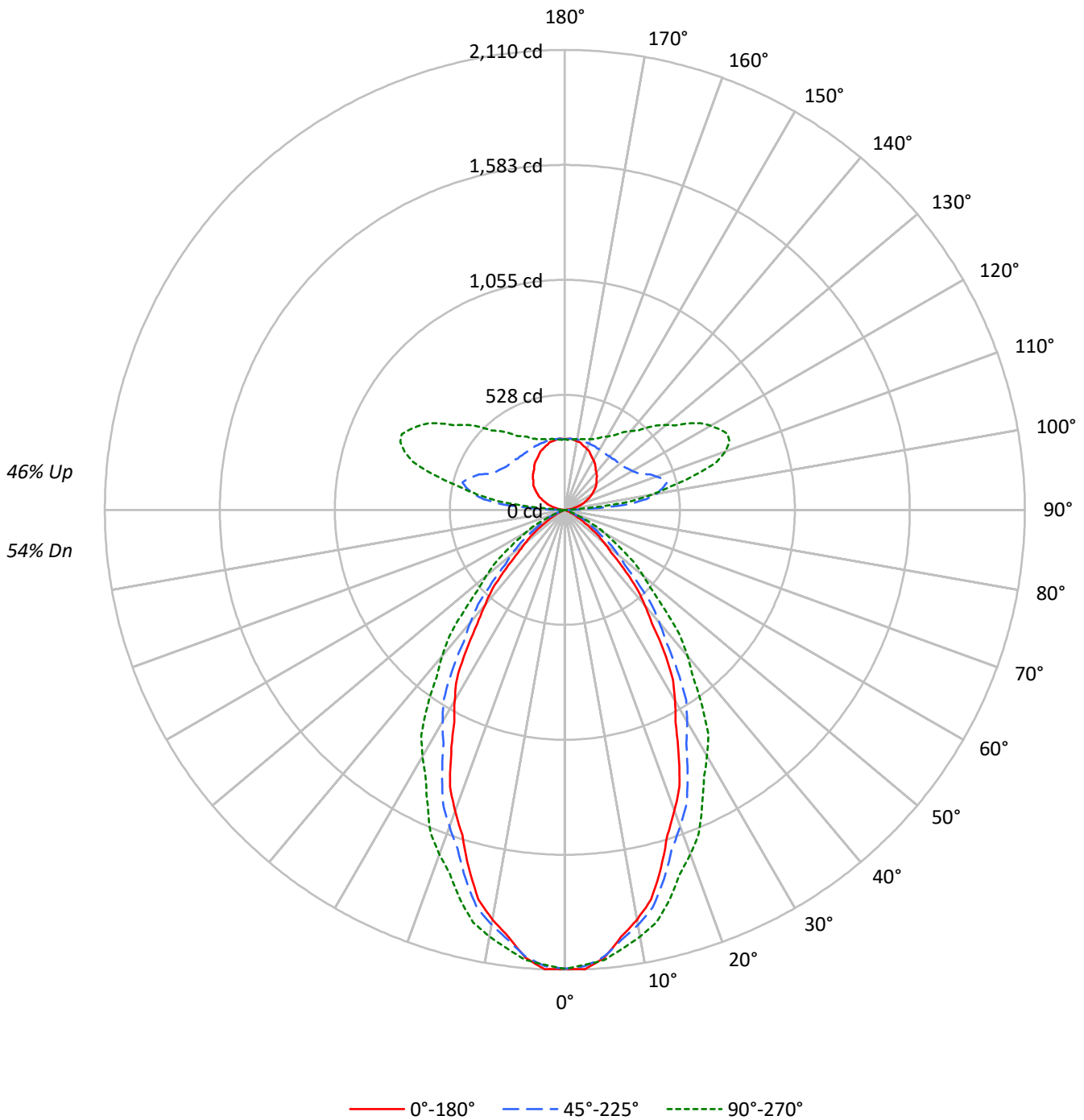
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4609.3 lumens
Efficiency: N/A
Efficacy: 78.9 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): 58.4
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					
RC	80					70					50					30					
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	
RCR																					
0	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60	54			
1	101	97	94	91	94	91	88	85	78	76	74	67	65	64	56	55	55	50			
2	93	87	82	78	87	81	77	73	71	68	65	61	59	57	52	50	49	45			
3	87	78	72	67	80	74	68	64	64	60	57	56	53	51	48	46	44	41			
4	80	71	64	59	75	67	61	56	59	54	51	51	48	45	44	42	40	37			
5	75	64	57	52	69	61	54	50	54	49	45	47	43	41	41	38	36	33			
6	69	59	51	46	65	55	49	44	49	44	41	43	40	37	38	35	33	30			
7	65	54	47	42	60	51	44	40	45	40	37	40	36	33	35	32	30	28			
8	61	49	42	38	57	47	41	36	42	37	33	37	33	31	33	30	28	26			
9	57	46	39	34	53	43	37	33	39	34	31	35	31	28	31	28	26	24			
10	53	42	36	31	50	40	34	30	36	31	28	33	29	26	29	26	24	22			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19423	19423	19423
5°	19110	19063	19205
10°	17881	18120	18625
15°	16255	16771	17705
20°	14429	15179	16510
25°	12566	13561	15168
30°	10763	11946	13899
35°	8925	10140	12366
40°	6857	8108	10537
45°	4957	6139	8478
50°	3377	4576	6725
55°	2196	3309	5226
60°	1258	2331	3777
65°	334	1423	1912
70°	165	440	550
75°	71	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.1	4.2
10°-20°	491.3	10.7
20°-30°	615.1	13.3
30°-40°	568.1	12.3
40°-50°	381.8	8.3
50°-60°	197.2	4.3
60°-70°	61.8	1.3
70°-80°	3.9	0.1
80°-90°	0.1	0.0
90°-100°	167.0	3.6
100°-110°	403.7	8.8
110°-120°	430.6	9.3
120°-130°	348.7	7.6
130°-140°	270.0	5.9
140°-150°	206.0	4.5
150°-160°	149.1	3.2
160°-170°	91.8	2.0
170°-180°	31.1	0.7
0°-30°	1298.5	28.2
0°-40°	1866.6	40.5
0°-60°	2445.5	53.1
0°-90°	2511.3	54.5
90°-120°	1001.3	21.7
90°-150°	1826.0	39.6
90°-180°	2098.0	45.5
0°-180°	4609.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2105	2105	2105	2105	2105	
5°	2063	2042	2058	2066	2074	191
15°	1702	1696	1756	1815	1854	474
25°	1234	1244	1332	1423	1490	566
35°	792	812	900	1006	1098	491
45°	380	403	470	562	650	298
55°	136	159	206	264	325	127
65°	15	29	65	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°	16	84	286	186	130	18
105°	64	112	485	628	620	68
115°	118	151	390	739	824	117
125°	168	194	338	588	690	150
135°	207	231	325	464	533	159
145°	244	262	318	394	425	153
155°	280	292	323	349	362	129
165°	310	314	327	332	336	87
175°	327	326	327	325	324	31
180°	324	324	324	324	324	



TEST NUMBER: P521065

CATALOG NUMBER: SQ4-BB-050U-100D-93050-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2105.2	2105.2	2105.2	2105.2	2105.2
2.5°	2110.0	2090.1	2095.4	2095.3	2089.7
5°	2063.4	2042.5	2058.3	2065.6	2073.6
7.5°	1976.2	1959.9	1990.3	2013.1	2029.6
10°	1908.6	1894.7	1934.1	1965.1	1988.0
12.5°	1830.4	1819.6	1867.2	1909.9	1939.1
15°	1701.8	1695.9	1755.8	1814.8	1853.6
17.5°	1564.2	1564.0	1632.4	1705.6	1752.4
20°	1469.6	1472.6	1546.0	1626.7	1681.5
22.5°	1375.1	1382.1	1460.5	1544.6	1607.3
25°	1234.4	1244.3	1332.1	1423.3	1490.0
27.5°	1099.1	1113.7	1206.1	1300.8	1382.1
30°	1010.3	1027.2	1121.3	1221.0	1304.6
32.5°	923.1	943.2	1035.0	1140.4	1225.6
35°	792.4	812.3	900.3	1006.3	1097.9
37.5°	657.3	676.8	762.8	867.1	966.1
40°	569.3	591.2	673.2	774.3	874.9
42.5°	489.5	511.4	588.5	687.8	782.8
45°	379.9	402.8	470.5	562.1	649.8
47.5°	289.0	313.9	373.4	456.3	536.1
50°	235.3	260.2	318.8	391.8	468.5
52.5°	192.1	216.2	269.1	337.9	408.2
55°	136.5	159.4	205.7	264.1	324.9
57.5°	94.3	114.0	155.6	204.4	252.0
60°	68.2	87.2	126.3	165.9	204.7
62.5°	45.4	62.8	101.0	131.4	157.5
65°	15.3	29.2	65.2	78.6	87.6
67.5°	7.7	9.3	34.2	36.1	39.1
70°	6.1	6.1	16.3	17.4	20.4
72.5°	4.5	4.5	6.5	8.4	9.0
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°	5.5	45.2	106.5	51.8	35.1
95°	16.5	83.6	286.2	186.1	130.4
97.5°	29.2	92.6	376.9	363.1	311.7
100°	39.1	98.2	426.9	450.6	408.3
102.5°	48.5	103.2	459.8	523.5	498.4
105°	64.5	111.5	485.2	627.8	619.7
107.5°	80.3	121.2	470.2	711.4	730.4
110°	91.3	129.5	446.1	747.5	783.1

TEST NUMBER: P521065

CATALOG NUMBER: SQ4-BB-050U-100D-93050-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	102.3	137.8	424.7	756.3	817.1
115°	118.0	150.9	389.8	739.0	824.2
117.5°	133.7	164.7	369.4	699.3	799.1
120°	144.1	173.0	356.2	668.1	772.8
122.5°	155.1	181.8	348.0	636.2	739.3
125°	168.1	193.6	338.3	587.7	690.4
127.5°	181.0	205.1	331.6	546.7	636.9
130°	188.7	212.2	329.4	518.1	606.7
132.5°	195.9	220.4	326.1	497.5	572.6
135°	206.6	230.7	324.6	463.5	533.2
137.5°	216.7	241.0	319.8	440.4	493.0
140°	224.4	246.6	319.8	423.9	472.2
142.5°	232.1	254.2	317.1	409.4	450.2
145°	244.3	262.4	318.4	393.9	424.8
147.5°	255.7	273.3	317.6	376.1	401.6
150°	262.9	278.3	319.8	368.3	388.4
152.5°	270.5	285.4	319.3	360.0	378.0
155°	280.0	292.1	322.6	348.9	361.7
157.5°	291.4	301.7	321.9	344.7	352.2
160°	295.8	304.5	324.6	339.2	344.5
162.5°	302.9	310.6	323.5	337.5	340.7
165°	309.5	314.2	326.7	331.6	336.3
167.5°	317.6	320.7	325.9	331.2	331.3
170°	319.8	321.8	328.0	327.4	330.8
172.5°	323.7	325.1	326.4	327.9	325.9
175°	327.4	326.0	327.4	324.6	323.9
177.5°	326.7	326.7	325.6	324.4	321.7
180°	323.9	323.9	323.9	323.9	323.9

(END OF REPORT)