

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: P521013

Luminaire Tested: **SQ4-BB-025U-100D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521013
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 (4500K)
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 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

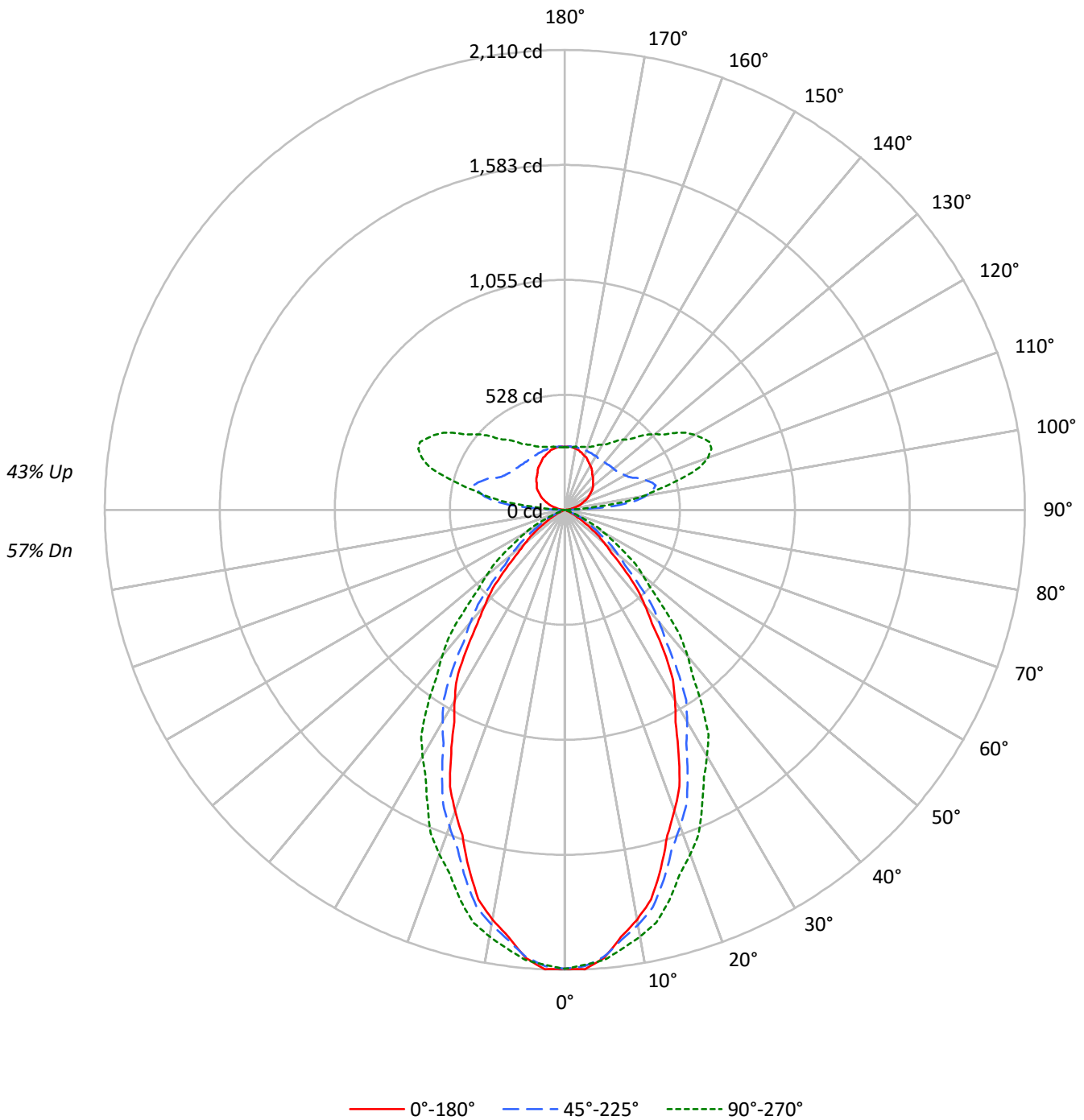
Lumens per Lamp: N/A
Luminaire Lumens: 4379.5 lumens
Efficiency: N/A
Efficacy: 77.2 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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°	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	4.4
10°-20°	491.3	11.2
20°-30°	615.1	14.0
30°-40°	568.1	13.0
40°-50°	381.8	8.7
50°-60°	197.2	4.5
60°-70°	61.8	1.4
70°-80°	3.9	0.1
80°-90°	0.1	0.0
90°-100°	148.7	3.4
100°-110°	359.5	8.2
110°-120°	383.4	8.8
120°-130°	310.5	7.1
130°-140°	240.4	5.5
140°-150°	183.4	4.2
150°-160°	132.8	3.0
160°-170°	81.8	1.9
170°-180°	27.7	0.6
0°-30°	1298.5	29.6
0°-40°	1866.6	42.6
0°-60°	2445.5	55.8
0°-90°	2511.3	57.3
90°-120°	891.6	20.4
90°-150°	1626.0	37.1
90°-180°	1868.0	42.7
0°-180°	4379.5	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°	15	74	255	166	116	16
105°	57	99	432	559	552	61
115°	105	134	347	658	734	104
125°	150	172	301	523	615	134
135°	184	206	289	413	475	142
145°	218	234	284	351	378	136
155°	249	260	287	311	322	115
165°	276	280	291	295	300	78
175°	292	290	292	289	288	28
180°	288	288	288	288	288	



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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°	4.9	40.3	94.8	46.1	31.3
95°	14.7	74.4	254.8	165.7	116.1
97.5°	26.0	82.4	335.6	323.3	277.6
100°	34.8	87.4	380.1	401.3	363.6
102.5°	43.1	91.9	409.5	466.1	443.8
105°	57.4	99.3	432.1	559.0	551.8
107.5°	71.5	108.0	418.7	633.5	650.4
110°	81.3	115.3	397.2	665.6	697.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	<i>91.1</i>	122.7	378.2	673.5	727.6
115°	<i>105.1</i>	134.4	347.1	658.1	734.0
117.5°	<i>119.0</i>	146.7	328.9	622.7	711.6
120°	<i>128.3</i>	154.0	317.2	594.9	688.1
122.5°	<i>138.1</i>	161.9	309.8	566.5	658.3
125°	<i>149.7</i>	172.4	301.3	523.4	614.8
127.5°	<i>161.2</i>	182.6	295.3	486.8	567.1
130°	<i>168.1</i>	189.0	293.3	461.4	540.2
132.5°	<i>174.4</i>	196.3	290.4	443.0	509.9
135°	<i>183.9</i>	205.5	289.1	412.7	474.8
137.5°	<i>193.0</i>	214.6	284.8	392.2	439.0
140°	<i>199.8</i>	219.6	284.8	377.4	420.5
142.5°	<i>206.7</i>	226.4	282.3	364.6	400.9
145°	<i>217.6</i>	233.7	283.6	350.8	378.3
147.5°	<i>227.7</i>	243.4	282.8	334.9	357.6
150°	<i>234.1</i>	247.8	284.8	328.0	345.9
152.5°	<i>240.9</i>	254.2	284.3	320.6	336.6
155°	<i>249.3</i>	260.1	287.2	310.7	322.1
157.5°	<i>259.5</i>	268.7	286.6	306.9	313.6
160°	<i>263.4</i>	271.2	289.1	302.0	306.8
162.5°	<i>269.8</i>	276.6	288.1	300.5	303.4
165°	<i>275.6</i>	279.8	290.9	295.3	299.5
167.5°	<i>282.8</i>	285.6	290.2	294.9	295.1
170°	<i>284.8</i>	286.6	292.1	291.6	294.6
172.5°	<i>288.2</i>	289.5	290.7	292.0	290.2
175°	<i>291.5</i>	290.3	291.5	289.0	288.5
177.5°	<i>290.9</i>	290.9	289.9	288.9	286.5
180°	<i>288.5</i>	288.5	288.5	288.5	288.5

(END OF REPORT)