

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: P521026

Luminaire Tested: **SQ4-BB-025U-125D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521026
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-125D-93050-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 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

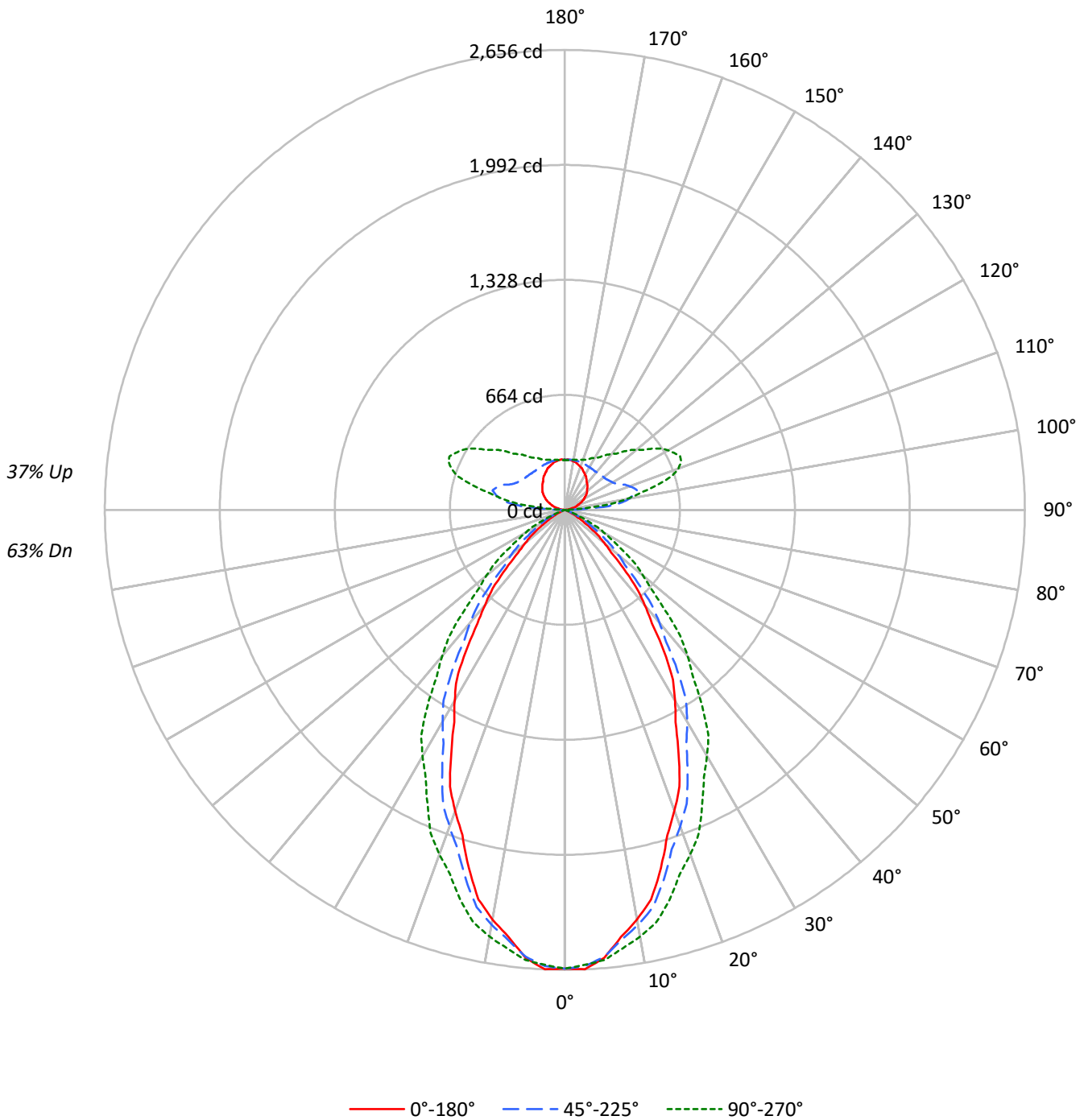
Lumens per Lamp: N/A
Luminaire Lumens: 5029.1 lumens
Efficiency: N/A
Efficacy: 72.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 69.8
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				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	110	110	110	110	103	103	103	103	90	90	90	79	79	79	68	68	68	63		
1	103	99	96	93	97	94	91	88	83	81	79	73	71	70	63	63	62	57		
2	96	89	84	80	90	85	80	76	75	72	69	67	64	62	59	57	56	52		
3	89	81	75	70	83	77	71	67	69	64	61	61	58	55	54	52	50	47		
4	83	73	66	61	78	70	64	59	63	58	54	56	53	50	50	48	45	42		
5	77	67	60	54	72	63	57	52	57	52	49	52	48	45	46	44	41	38		
6	72	61	54	49	68	58	52	47	53	48	44	48	44	41	43	40	38	35		
7	67	56	49	44	63	53	47	43	49	44	40	44	40	37	40	37	34	32		
8	63	52	45	40	59	49	43	39	45	40	36	41	37	34	37	34	32	30		
9	59	48	41	36	56	46	40	35	42	37	33	38	34	31	35	32	29	27		
10	55	44	38	33	53	43	37	32	39	34	31	36	32	29	33	30	27	25		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24447	24447	24447
5°	24053	23994	24172
10°	22506	22806	23443
15°	20461	21109	22285
20°	18162	19105	20779
25°	15817	17069	19092
30°	13547	15036	17494
35°	11233	12763	15564
40°	8631	10205	13263
45°	6238	7727	10672
50°	4250	5759	8464
55°	2763	4165	6577
60°	1585	2934	4755
65°	419	1790	2406
70°	208	553	691
75°	93	46	0
80°	69	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.8	4.8
10°-20°	618.4	12.3
20°-30°	774.2	15.4
30°-40°	715.1	14.2
40°-50°	480.5	9.6
50°-60°	248.2	4.9
60°-70°	77.7	1.5
70°-80°	4.9	0.1
80°-90°	0.1	0.0
90°-100°	148.7	3.0
100°-110°	359.5	7.1
110°-120°	383.4	7.6
120°-130°	310.5	6.2
130°-140°	240.4	4.8
140°-150°	183.4	3.6
150°-160°	132.8	2.6
160°-170°	81.8	1.6
170°-180°	27.7	0.6
0°-30°	1634.4	32.5
0°-40°	2349.4	46.7
0°-60°	3078.1	61.2
0°-90°	3160.9	62.9
90°-120°	891.6	17.7
90°-150°	1626.0	32.3
90°-180°	1868.0	37.1
0°-180°	5029.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2650	2650	2650	2650	2650	
5°	2597	2571	2591	2600	2610	241
15°	2142	2134	2210	2284	2333	597
25°	1554	1566	1677	1791	1875	712
35°	997	1022	1133	1267	1382	618
45°	478	507	592	708	818	376
55°	172	201	259	332	409	160
65°	19	37	82	99	110	32
75°	3	3	1	0	0	4
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°	2649.7	2649.7	2649.7	2649.7	2649.7
2.5°	2655.8	2630.8	2637.4	2637.2	2630.2
5°	2597.1	2570.8	2590.7	2599.9	2610.0
7.5°	2487.4	2466.8	2505.1	2533.8	2554.6
10°	2402.3	2384.7	2434.3	2473.4	2502.3
12.5°	2303.8	2290.3	2350.2	2403.9	2440.7
15°	2142.1	2134.5	2210.0	2284.2	2333.1
17.5°	1968.7	1968.5	2054.6	2146.7	2205.6
20°	1849.8	1853.5	1945.9	2047.5	2116.4
22.5°	1730.8	1739.6	1838.2	1944.1	2023.1
25°	1553.7	1566.2	1676.7	1791.4	1875.4
27.5°	1383.4	1401.7	1518.0	1637.3	1739.5
30°	1271.6	1293.0	1411.4	1536.8	1642.1
32.5°	1161.9	1187.2	1302.7	1435.3	1542.6
35°	997.3	1022.4	1133.2	1266.6	1381.9
37.5°	827.3	851.9	960.1	1091.4	1216.0
40°	716.6	744.2	847.3	974.6	1101.2
42.5°	616.1	643.7	740.7	865.7	985.3
45°	478.1	507.0	592.2	707.6	817.9
47.5°	363.8	395.1	469.9	574.3	674.8
50°	296.1	327.5	401.2	493.2	589.7
52.5°	241.8	272.1	338.7	425.3	513.8
55°	171.8	200.6	258.9	332.5	408.9
57.5°	118.7	143.5	195.9	257.2	317.1
60°	85.9	109.7	159.0	208.8	257.7
62.5°	57.2	79.0	127.2	165.3	198.2
65°	19.2	36.8	82.0	99.0	110.2
67.5°	9.7	11.7	43.1	45.5	49.2
70°	7.7	7.7	20.5	21.9	25.6
72.5°	5.6	5.6	8.2	10.5	11.3
75°	2.6	2.6	1.3	0.0	0.0
77.5°	1.3	1.3	1.0	0.0	0.0
80°	1.3	1.3	0.0	0.0	0.0
82.5°	0.3	0.3	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)