

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: P520999

Luminaire Tested: **SQ4-BB-025U-075D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P520999
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-075D-93050-1D-UNV-STD-W-4 (4000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 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

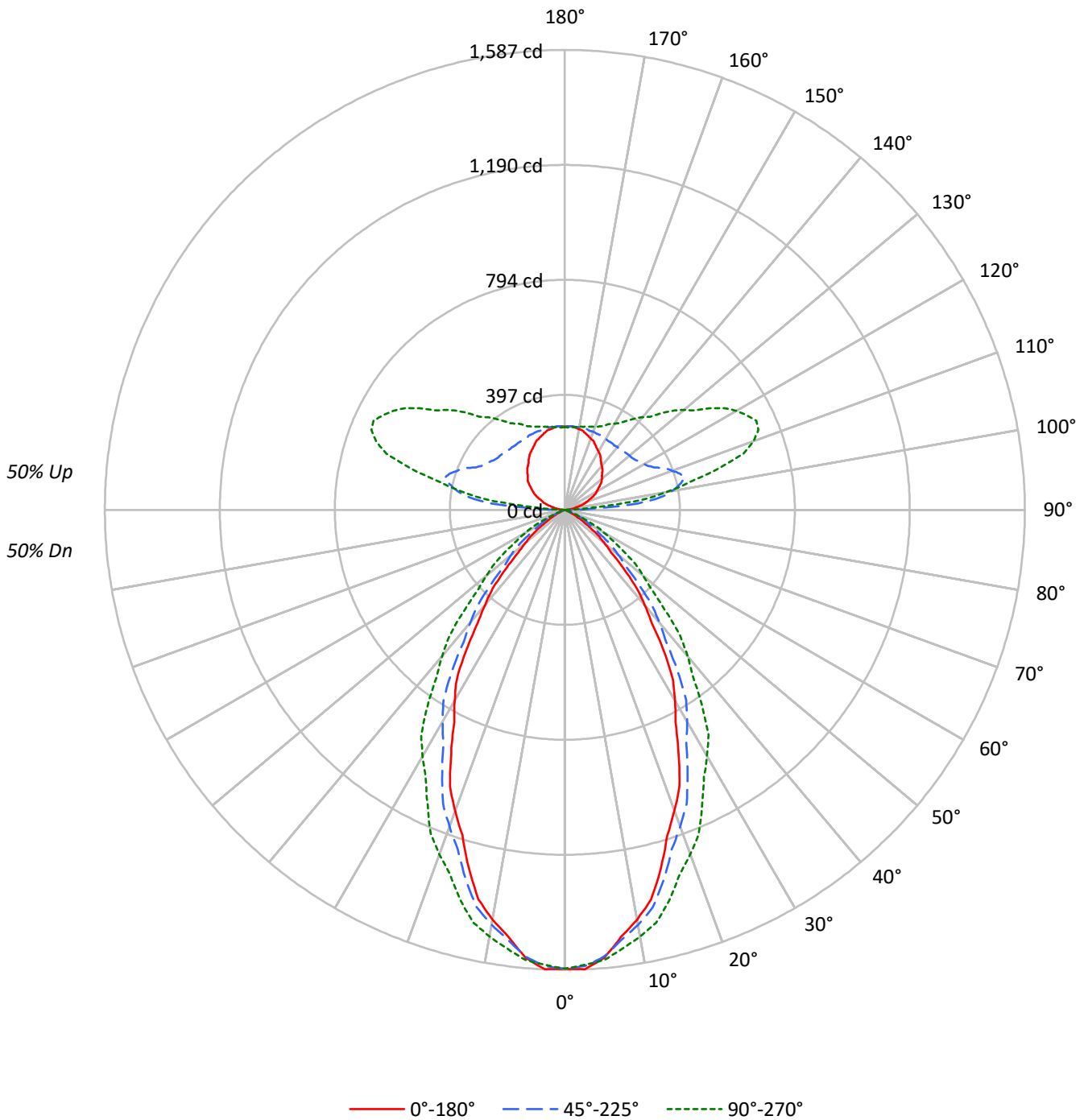
Lumens per Lamp: N/A
Luminaire Lumens: 3743.9 lumens
Efficiency: N/A
Efficacy: 81.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 45.9
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	50	30	10	0	
RCR																						
0	107	107	107	107	99	99	99	99	84	84	84	69	69	69	57	57	57	50				
1	100	96	93	90	92	89	86	84	76	74	72	64	63	61	53	52	51	46				
2	92	86	81	77	85	80	76	72	69	66	63	58	56	54	49	47	46	42				
3	85	77	71	66	79	72	67	62	62	58	55	53	51	48	45	43	41	38				
4	79	70	63	58	73	65	59	55	57	52	49	49	46	43	41	39	37	34				
5	73	63	56	51	68	59	53	48	52	47	43	45	41	39	38	36	34	31				
6	68	58	50	45	63	54	48	43	47	43	39	41	38	35	36	33	31	28				
7	64	53	46	41	59	50	43	39	44	39	35	38	34	32	33	30	28	26				
8	60	48	41	37	55	46	39	35	40	35	32	35	32	29	31	28	26	24				
9	56	45	38	33	52	42	36	32	37	33	29	33	29	27	29	26	24	22				
10	52	41	35	30	49	39	33	29	35	30	27	31	27	25	27	24	22	20				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14608	14608	14608
5°	14373	14338	14444
10°	13449	13627	14008
15°	12226	12614	13316
20°	10852	11417	12417
25°	9451	10199	11409
30°	8096	8985	10453
35°	6712	7626	9300
40°	5157	6098	7925
45°	3728	4618	6376
50°	2539	3442	5058
55°	1650	2488	3931
60°	947	1753	2842
65°	251	1070	1439
70°	124	332	413
75°	53	29	0
80°	43	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.5	3.9
10°-20°	369.5	9.9
20°-30°	462.6	12.4
30°-40°	427.3	11.4
40°-50°	287.1	7.7
50°-60°	148.3	4.0
60°-70°	46.5	1.2
70°-80°	2.9	0.1
80°-90°	0.1	0.0
90°-100°	147.7	3.9
100°-110°	357.0	9.5
110°-120°	380.7	10.2
120°-130°	308.4	8.2
130°-140°	238.7	6.4
140°-150°	182.1	4.9
150°-160°	131.8	3.5
160°-170°	81.2	2.2
170°-180°	27.5	0.7
0°-30°	976.6	26.1
0°-40°	1403.9	37.5
0°-60°	1839.3	49.1
0°-90°	1888.8	50.4
90°-120°	885.4	23.6
90°-150°	1614.6	43.1
90°-180°	1855.0	49.5
0°-180°	3743.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1583	1583	1583	1583	1583	
5°	1552	1536	1548	1554	1560	144
15°	1280	1276	1321	1365	1394	356
25°	928	936	1002	1070	1121	426
35°	596	611	677	757	826	369
45°	286	303	354	423	489	224
55°	103	120	155	199	244	96
65°	12	22	49	59	66	19
75°	2	2	1	0	0	2
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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CATALOG NUMBER: SQ4-BB-025U-075D-93050-1D-UNV-STD-W-4 (4000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1583.3	1583.3	1583.3	1583.3	1583.3
2.5°	1587.0	1572.0	1576.0	1575.9	1571.7
5°	1551.9	1536.2	1548.1	1553.6	1559.6
7.5°	1486.3	1474.1	1496.9	1514.0	1526.5
10°	1435.5	1425.0	1454.6	1478.0	1495.2
12.5°	1376.6	1368.6	1404.4	1436.4	1458.5
15°	1280.0	1275.5	1320.6	1364.9	1394.1
17.5°	1176.4	1176.3	1227.7	1282.8	1318.0
20°	1105.3	1107.6	1162.8	1223.5	1264.7
22.5°	1034.2	1039.5	1098.4	1161.7	1208.9
25°	928.4	935.9	1001.9	1070.5	1120.7
27.5°	826.7	837.6	907.1	978.3	1039.5
30°	759.9	772.6	843.4	918.3	981.2
32.5°	694.3	709.4	778.4	857.7	921.8
35°	595.9	610.9	677.1	756.8	825.7
37.5°	494.4	509.1	573.7	652.2	726.6
40°	428.2	444.7	506.3	582.3	658.0
42.5°	368.1	384.6	442.6	517.3	588.7
45°	285.7	302.9	353.9	422.8	488.7
47.5°	217.4	236.1	280.8	343.2	403.2
50°	176.9	195.7	239.8	294.7	352.4
52.5°	144.5	162.6	202.4	254.1	307.0
55°	102.6	119.9	154.7	198.7	244.4
57.5°	70.9	85.8	117.0	153.7	189.5
60°	51.3	65.6	95.0	124.8	154.0
62.5°	34.2	47.2	76.0	98.8	118.4
65°	11.5	22.0	49.0	59.1	65.9
67.5°	5.8	7.0	25.7	27.2	29.4
70°	4.6	4.6	12.3	13.1	15.3
72.5°	3.4	3.4	4.9	6.3	6.7
75°	1.5	1.5	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	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)