

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P518407

Luminaire Tested: **SQ4-BB-050U-050D-930-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518407
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-050U-050D-930-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

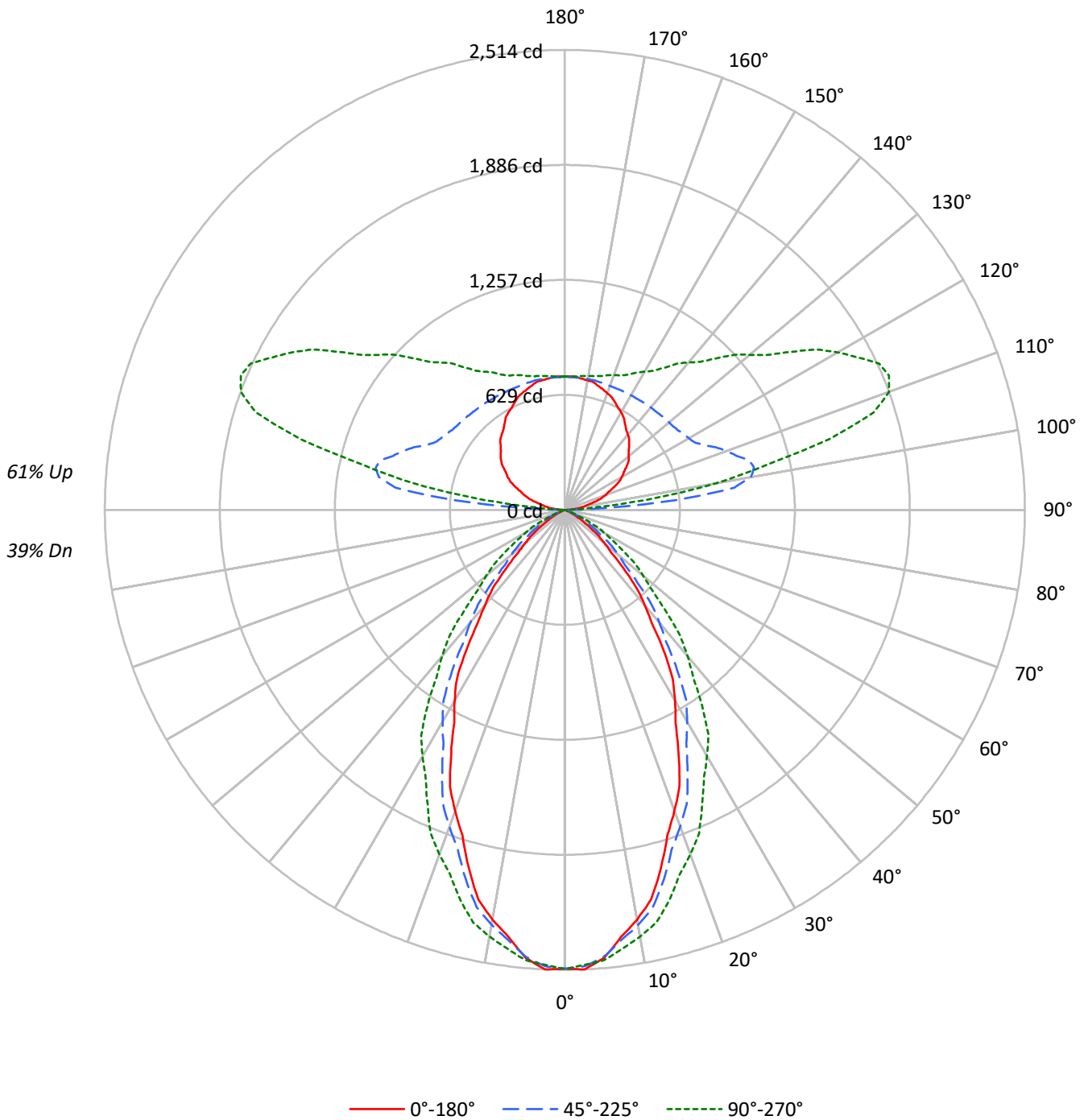
Lumens per Lamp: N/A
Luminaire Lumens: 7750.3 lumens
Efficiency: N/A
Efficacy: 97.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 79.6
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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39				
1	97	93	90	87	88	85	82	79	69	68	66	55	54	53	42	42	41	35				
2	89	83	77	73	81	76	71	67	63	59	57	50	48	47	39	38	37	32				
3	82	74	68	63	75	68	62	58	56	53	49	46	43	41	36	34	33	29				
4	76	66	60	54	69	61	55	51	51	47	43	42	39	37	33	31	30	26				
5	70	60	53	47	64	55	49	44	46	42	38	38	35	33	31	29	27	24				
6	65	54	47	42	59	50	44	39	42	38	34	35	32	29	28	26	25	22				
7	61	50	42	37	55	46	40	35	39	34	31	32	29	27	26	24	22	20				
8	56	45	38	33	52	42	36	32	36	31	28	30	27	24	25	22	21	18				
9	53	42	35	30	48	39	33	29	33	29	25	28	25	22	23	21	19	17				
10	49	38	32	27	45	36	30	26	31	26	23	26	23	20	22	19	18	16				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7714	7714	7714
5°	7590	7572	7628
10°	7102	7197	7397
15°	6456	6661	7032
20°	5731	6029	6557
25°	4991	5386	6025
30°	4275	4745	5520
35°	3545	4028	4911
40°	2724	3220	4185
45°	1969	2439	3367
50°	1341	1817	2671
55°	872	1314	2076
60°	500	926	1500
65°	132	565	760
70°	66	174	219
75°	29	14	0
80°	21	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	228.9	3.0
10°-20°	585.4	7.6
20°-30°	732.9	9.5
30°-40°	676.9	8.7
40°-50°	454.9	5.9
50°-60°	234.9	3.0
60°-70°	73.6	0.9
70°-80°	4.6	0.1
80°-90°	2.9	0.0
90°-100°	349.6	4.5
100°-110°	949.7	12.3
110°-120°	976.5	12.6
120°-130°	780.7	10.1
130°-140°	613.5	7.9
140°-150°	470.4	6.1
150°-160°	338.3	4.4
160°-170°	206.9	2.7
170°-180°	69.7	0.9
0°-30°	1547.2	20.0
0°-40°	2224.2	28.7
0°-60°	2914.0	37.6
0°-90°	2995.1	38.6
90°-120°	2275.9	29.4
90°-150°	4140.4	53.4
90°-180°	4755.0	61.4
0°-180°	7750.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2508	2508	2508	2508	2508	
5°	2459	2434	2453	2461	2471	228
15°	2028	2021	2092	2162	2209	565
25°	1471	1483	1587	1696	1775	674
35°	944	968	1073	1199	1308	585
45°	453	480	561	670	774	356
55°	163	190	245	315	387	152
65°	18	35	78	94	104	31
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	2	9	16	21	21	4
95°	52	191	609	265	178	55
105°	169	262	1044	1590	1496	179
115°	300	364	836	1663	1894	296
125°	412	469	756	1274	1503	367
135°	496	551	735	1038	1171	384
145°	574	615	726	882	948	360
155°	649	672	721	792	815	299
165°	702	712	724	754	756	198
175°	728	731	726	735	733	69
180°	728	728	728	728	728	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2508.4	2508.4	2508.4	2508.4	2508.4
2.5°	2514.2	2490.5	2496.7	2496.6	2489.9
5°	2458.6	2433.7	2452.6	2461.3	2470.8
7.5°	2354.8	2335.3	2371.5	2398.6	2418.3
10°	2274.2	2257.6	2304.5	2341.5	2368.8
12.5°	2181.0	2168.2	2224.9	2275.7	2310.6
15°	2027.8	2020.7	2092.1	2162.4	2208.6
17.5°	1863.8	1863.5	1945.1	2032.2	2088.0
20°	1751.1	1754.7	1842.2	1938.3	2003.6
22.5°	1638.5	1646.8	1740.2	1840.5	1915.2
25°	1470.8	1482.7	1587.3	1695.9	1775.4
27.5°	1309.7	1327.0	1437.1	1549.9	1646.8
30°	1203.8	1224.0	1336.1	1454.9	1554.5
32.5°	1100.0	1123.9	1233.2	1358.8	1460.4
35°	944.1	967.9	1072.8	1199.0	1308.2
37.5°	783.2	806.5	908.9	1033.2	1151.2
40°	678.4	704.5	802.1	922.6	1042.4
42.5°	583.2	609.3	701.2	819.5	932.7
45°	452.7	479.9	560.7	669.8	774.2
47.5°	344.4	374.1	444.9	543.6	638.8
50°	280.3	310.0	379.8	466.9	558.2
52.5°	228.9	257.6	320.6	402.6	486.4
55°	162.6	189.9	245.1	314.7	387.1
57.5°	112.4	135.9	185.4	243.5	300.2
60°	81.3	103.9	150.5	197.6	243.9
62.5°	54.1	74.8	120.4	156.5	187.6
65°	18.2	34.8	77.7	93.7	104.4
67.5°	9.2	11.1	40.8	43.0	46.6
70°	7.3	7.3	19.4	20.7	24.3
72.5°	5.3	5.3	7.8	10.0	10.7
75°	2.4	2.4	1.2	0.0	0.0
77.5°	1.2	1.2	1.0	0.0	0.0
80°	1.2	1.2	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°	0.5	1.8	3.3	4.2	4.2
90°	2.3	9.2	16.4	21.1	21.1
92.5°	21.1	95.7	166.3	71.4	60.4
95°	51.5	191.2	608.9	265.0	178.0
97.5°	85.2	211.2	933.4	726.2	510.0
100°	107.7	224.5	1032.7	1046.9	845.4
102.5°	130.2	237.8	1059.0	1294.7	1117.0
105°	168.6	262.5	1044.4	1590.3	1496.4
107.5°	208.4	291.3	984.0	1742.9	1769.0
110°	236.5	312.1	939.1	1772.9	1885.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	260.9	332.8	894.1	1748.0	1917.0
115°	299.7	363.9	836.0	1663.2	1894.5
117.5°	336.3	397.6	799.0	1543.1	1803.6
120°	360.6	420.2	782.2	1462.5	1721.2
122.5°	381.2	440.8	770.9	1381.7	1631.3
125°	412.2	469.4	756.4	1274.4	1503.4
127.5°	439.8	496.6	748.4	1193.2	1389.6
130°	456.6	511.6	744.7	1142.1	1318.4
132.5°	473.5	528.5	740.9	1098.6	1254.7
135°	496.5	551.4	735.3	1038.1	1170.9
137.5°	521.3	571.2	732.5	984.7	1096.4
140°	536.3	584.4	730.6	950.7	1051.5
142.5°	551.3	595.7	728.8	924.1	1008.4
145°	573.7	615.0	726.0	882.0	948.4
147.5°	599.0	634.3	723.6	848.9	901.1
150°	615.9	645.7	723.6	829.9	871.1
152.5°	629.0	655.1	721.7	812.9	846.8
155°	648.7	671.6	721.3	792.0	814.9
157.5°	667.9	685.7	721.3	777.9	795.3
160°	679.1	695.1	721.3	768.4	782.2
162.5°	690.4	702.7	723.1	760.8	770.9
165°	702.5	711.7	723.6	754.1	756.4
167.5°	715.2	719.8	726.0	746.1	748.0
170°	718.9	723.5	726.0	742.3	742.3
172.5°	722.7	725.4	726.0	738.6	738.6
175°	728.3	730.6	726.0	735.3	733.0
177.5°	730.2	730.2	724.5	732.0	728.3
180°	728.3	728.3	728.3	728.3	728.3

(END OF REPORT)