

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: P518759

Luminaire Tested: **SQ4-BB-100U-125D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518759
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-125D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

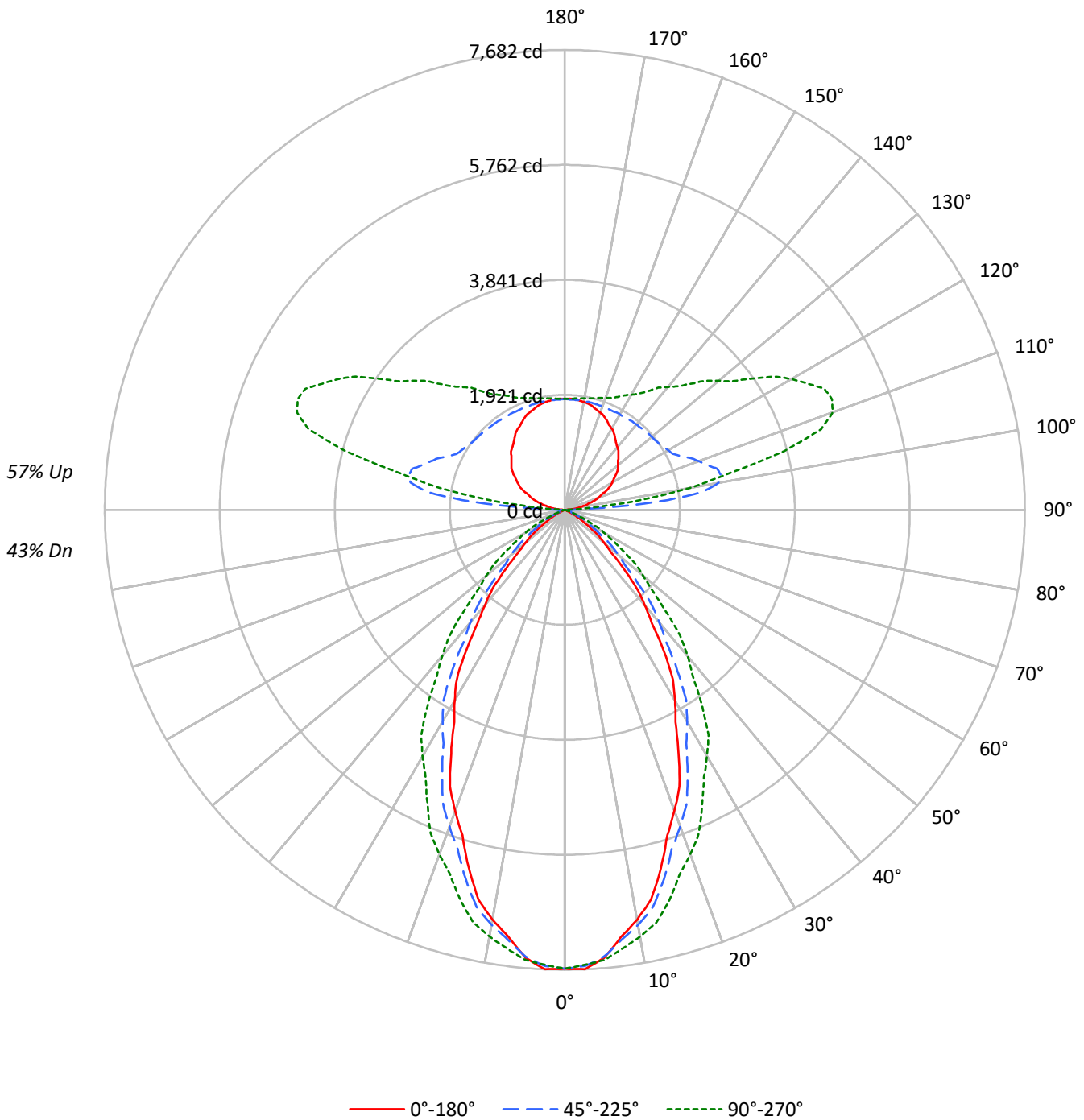
Lumens per Lamp: N/A
Luminaire Lumens: 21195.6 lumens
Efficiency: N/A
Efficacy: 98.7 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 214.8
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				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	106	106	106	106	96	96	96	96	80	80	80	64	64	64	50	50	50	43
1	98	94	91	88	89	86	84	81	72	70	68	59	57	56	46	46	45	39
2	90	84	79	74	83	77	73	69	65	62	59	53	51	50	43	42	40	36
3	83	75	69	64	76	70	64	60	59	55	52	49	46	44	39	38	36	32
4	77	68	61	56	71	63	57	52	53	49	45	44	41	39	36	34	33	29
5	71	61	54	49	66	57	51	46	49	44	40	41	38	35	34	31	30	26
6	66	56	48	43	61	52	45	41	44	40	36	38	34	31	31	29	27	24
7	62	51	44	39	57	47	41	37	41	36	32	35	31	29	29	27	25	22
8	58	46	39	35	53	43	37	33	38	33	29	32	29	26	27	24	23	20
9	54	43	36	31	50	40	34	30	35	30	27	30	26	24	25	23	21	19
10	51	40	33	29	47	37	31	27	32	28	25	28	24	22	24	21	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23571	23571	23571
5°	23192	23134	23306
10°	21700	21989	22603
15°	19727	20353	21486
20°	17511	18421	20035
25°	15250	16458	18408
30°	13062	14497	16868
35°	10831	12306	15007
40°	8321	9840	12787
45°	6015	7451	10289
50°	4098	5553	8161
55°	2664	4016	6342
60°	1528	2828	4584
65°	405	1727	2321
70°	200	533	667
75°	88	44	0
80°	66	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	699.5	3.3
10°-20°	1788.7	8.4
20°-30°	2239.3	10.6
30°-40°	2068.4	9.8
40°-50°	1389.8	6.6
50°-60°	717.9	3.4
60°-70°	224.8	1.1
70°-80°	14.2	0.1
80°-90°	4.1	0.0
90°-100°	868.4	4.1
100°-110°	2397.4	11.3
110°-120°	2472.6	11.7
120°-130°	1986.9	9.4
130°-140°	1561.5	7.4
140°-150°	1197.6	5.7
150°-160°	860.7	4.1
160°-170°	526.4	2.5
170°-180°	177.5	0.8
0°-30°	4727.5	22.3
0°-40°	6795.8	32.1
0°-60°	8903.5	42.0
0°-90°	9146.7	43.2
90°-120°	5738.4	27.1
90°-150°	10484.4	49.5
90°-180°	12049.0	56.8
0°-180°	21195.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7664	7664	7664	7664	7664	
5°	7512	7436	7494	7520	7549	696
15°	6196	6174	6392	6607	6748	1726
25°	4494	4530	4850	5182	5425	2060
35°	2885	2957	3278	3664	3997	1787
45°	1383	1466	1713	2047	2366	1086
55°	497	580	749	962	1183	464
65°	56	106	237	286	319	94
75°	7	7	4	0	0	11
85°	0	0	0	0	0	1
90°	6	12	24	27	30	9
95°	128	470	1576	648	421	137
105°	427	659	2638	4027	3792	455
115°	766	925	2124	4206	4783	752
125°	1050	1195	1926	3259	3824	935
135°	1264	1400	1872	2639	2976	978
145°	1466	1567	1848	2247	2418	918
155°	1653	1708	1834	2016	2080	762
165°	1789	1812	1842	1914	1929	504
175°	1854	1857	1846	1872	1866	176
180°	1854	1854	1854	1854	1854	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7664.3	7664.3	7664.3	7664.3	7664.3
2.5°	7682.1	7609.6	7628.7	7628.3	7607.9
5°	7512.3	7436.1	7493.7	7520.4	7549.4
7.5°	7194.9	7135.4	7246.1	7329.0	7389.2
10°	6948.7	6897.9	7041.4	7154.5	7237.9
12.5°	6663.9	6624.8	6798.1	6953.3	7059.9
15°	6196.0	6174.2	6392.5	6607.1	6748.4
17.5°	5694.7	5693.9	5943.1	6209.5	6379.9
20°	5350.6	5361.4	5628.7	5922.4	6121.8
22.5°	5006.5	5031.8	5317.2	5623.5	5851.9
25°	4494.0	4530.3	4850.0	5181.8	5424.7
27.5°	4001.6	4054.5	4390.9	4735.8	5031.7
30°	3678.3	3739.9	4082.4	4445.3	4749.9
32.5°	3360.9	3434.1	3768.0	4151.8	4462.1
35°	2884.8	2957.3	3277.8	3663.6	3997.2
37.5°	2393.1	2464.2	2777.2	3157.0	3517.4
40°	2072.7	2152.5	2450.9	2818.9	3185.1
42.5°	1782.0	1861.8	2142.4	2504.0	2849.9
45°	1383.1	1466.4	1713.1	2046.6	2365.7
47.5°	1052.3	1143.0	1359.3	1661.1	1951.9
50°	856.5	947.2	1160.6	1426.5	1705.7
52.5°	699.3	787.1	979.6	1230.2	1486.1
55°	496.9	580.3	749.0	961.7	1182.8
57.5°	343.4	415.1	566.6	744.0	917.3
60°	248.4	317.3	459.8	603.9	745.3
62.5°	165.4	228.5	367.8	478.3	573.2
65°	55.6	106.4	237.3	286.3	318.9
67.5°	28.2	34.0	124.6	131.5	142.4
70°	22.2	22.2	59.3	63.3	74.2
72.5°	16.3	16.3	23.7	30.5	32.6
75°	7.4	7.4	3.7	0.0	0.0
77.5°	3.7	3.7	3.0	0.0	0.0
80°	3.7	3.7	0.0	0.0	0.0
82.5°	0.7	0.7	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	1.2	2.3	4.7	5.4	5.9
90°	5.9	11.7	23.7	26.8	29.7
92.5°	53.4	221.7	396.4	144.7	112.7
95°	127.6	469.9	1575.5	647.6	421.3
97.5°	211.3	526.3	2333.9	1796.9	1301.3
100°	273.0	560.2	2614.0	2632.4	2139.2
102.5°	332.3	598.6	2668.6	3252.5	2784.9
105°	427.3	659.3	2637.7	4026.9	3791.9
107.5°	528.1	734.7	2490.5	4400.3	4486.2
110°	599.3	785.0	2376.6	4480.6	4759.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	663.4	842.1	2269.8	4417.2	4828.0
115°	765.5	925.1	2124.4	4205.6	4782.9
117.5°	854.5	1013.5	2028.9	3907.7	4564.5
120°	913.9	1070.5	1990.9	3706.0	4367.5
122.5°	970.8	1120.5	1960.0	3517.7	4144.4
125°	1050.3	1195.4	1925.6	3258.8	3824.5
127.5°	1118.0	1263.0	1905.4	3039.9	3527.8
130°	1163.1	1308.1	1895.9	2905.9	3349.8
132.5°	1205.8	1343.9	1886.4	2793.4	3195.5
135°	1264.0	1400.3	1872.2	2639.4	2975.9
137.5°	1329.2	1453.4	1865.1	2510.1	2797.3
140°	1364.8	1486.7	1860.3	2423.9	2676.3
142.5°	1405.2	1517.8	1855.6	2347.2	2569.5
145°	1465.7	1567.3	1848.5	2247.0	2418.1
147.5°	1523.9	1612.6	1841.9	2162.4	2295.3
150°	1566.6	1639.1	1839.6	2112.0	2219.4
152.5°	1599.8	1667.7	1837.2	2068.9	2157.6
155°	1652.6	1707.8	1833.6	2016.1	2079.9
157.5°	1701.3	1743.7	1834.2	1977.6	2021.2
160°	1729.8	1767.5	1836.6	1956.0	1987.9
162.5°	1753.5	1786.6	1839.0	1936.9	1961.8
165°	1789.1	1812.3	1842.5	1914.1	1928.6
167.5°	1816.4	1830.4	1845.5	1900.2	1904.8
170°	1830.7	1842.3	1845.5	1893.0	1893.0
172.5°	1842.5	1849.5	1845.5	1883.4	1881.1
175°	1854.4	1857.3	1845.5	1872.1	1866.3
177.5°	1859.2	1856.8	1844.9	1861.4	1856.8
180°	1854.4	1854.4	1854.4	1854.4	1854.4

(END OF REPORT)