

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: P518765

Luminaire Tested: **SQ4-BB-100U-125D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518765
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-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

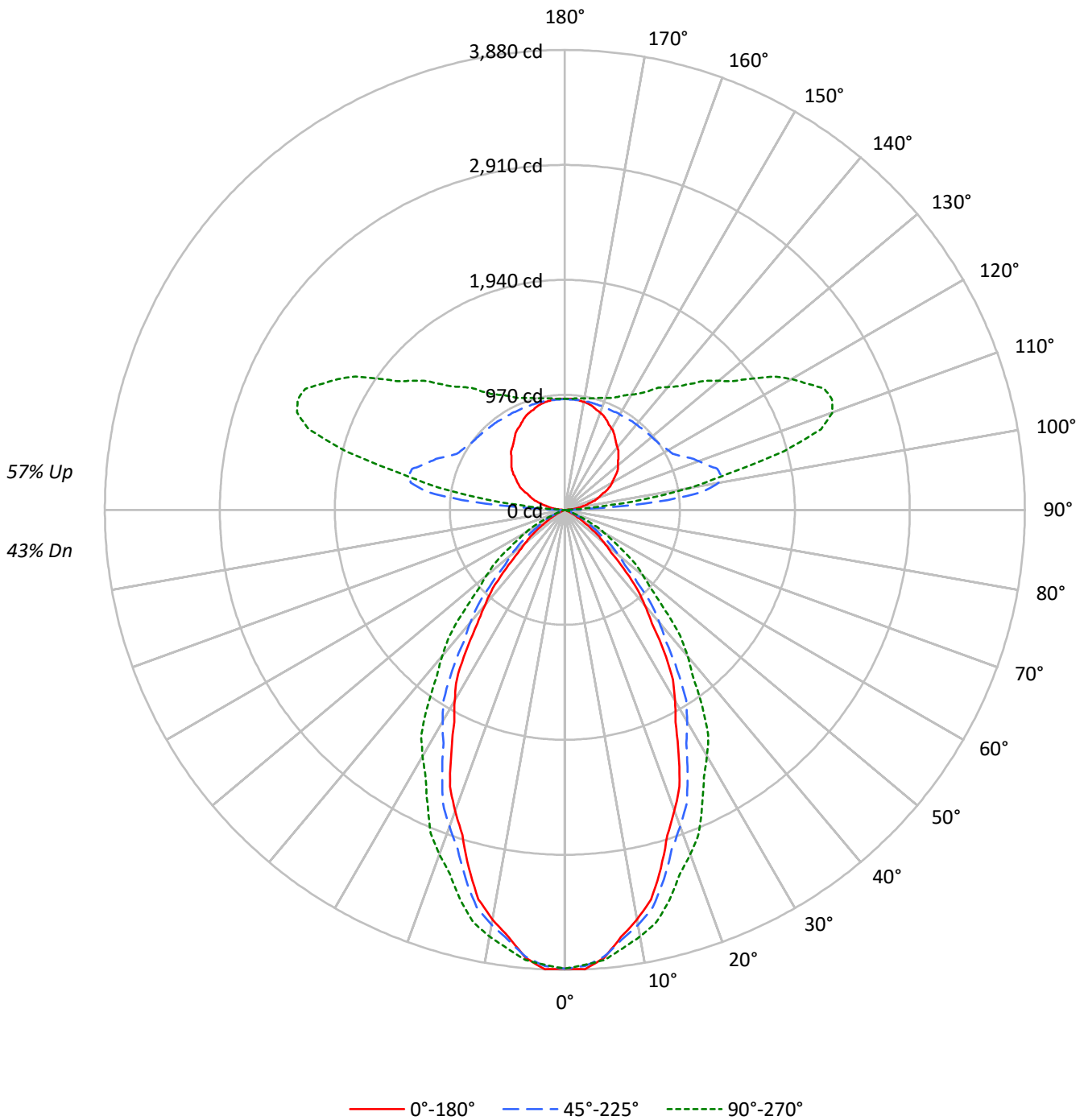
Lumens per Lamp: N/A
Luminaire Lumens: 10704.5 lumens
Efficiency: N/A
Efficacy: 99.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 107.3
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°	23808	23808	23808
5°	23425	23367	23541
10°	21918	22210	22830
15°	19926	20558	21703
20°	17687	18606	20237
25°	15403	16623	18593
30°	13193	14644	17037
35°	10939	12430	15158
40°	8405	9939	12916
45°	6076	7526	10392
50°	4140	5608	8243
55°	2691	4057	6406
60°	1544	2856	4630
65°	409	1744	2343
70°	201	540	674
75°	88	45	0
80°	67	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	353.2	3.3
10°-20°	903.4	8.4
20°-30°	1130.9	10.6
30°-40°	1044.6	9.8
40°-50°	701.9	6.6
50°-60°	362.6	3.4
60°-70°	113.6	1.1
70°-80°	7.2	0.1
80°-90°	2.1	0.0
90°-100°	438.6	4.1
100°-110°	1210.8	11.3
110°-120°	1248.7	11.7
120°-130°	1003.5	9.4
130°-140°	788.6	7.4
140°-150°	604.8	5.7
150°-160°	434.7	4.1
160°-170°	265.8	2.5
170°-180°	89.6	0.8
0°-30°	2387.5	22.3
0°-40°	3432.1	32.1
0°-60°	4496.6	42.0
0°-90°	4619.4	43.2
90°-120°	2898.1	27.1
90°-150°	5295.0	49.5
90°-180°	6085.0	56.8
0°-180°	10704.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3871	3871	3871	3871	3871	
5°	3794	3756	3785	3798	3813	352
15°	3129	3118	3228	3337	3408	872
25°	2270	2288	2449	2617	2740	1041
35°	1457	1494	1655	1850	2019	903
45°	698	741	865	1034	1195	549
55°	251	293	378	486	597	234
65°	28	54	120	145	161	47
75°	4	4	2	0	0	5
85°	0	0	0	0	0	0
90°	3	6	12	14	15	5
95°	64	237	796	327	213	69
105°	216	333	1332	2034	1915	230
115°	387	467	1073	2124	2416	380
125°	530	604	972	1646	1932	472
135°	638	707	946	1333	1503	494
145°	740	792	934	1135	1221	463
155°	835	862	926	1018	1050	385
165°	904	915	930	967	974	255
175°	936	938	932	946	942	89
180°	936	936	936	936	936	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3870.7	3870.7	3870.7	3870.7	3870.7
2.5°	3879.7	3843.1	3852.7	3852.5	3842.3
5°	3793.9	3755.5	3784.6	3798.0	3812.7
7.5°	3633.6	3603.6	3659.5	3701.4	3731.8
10°	3509.3	3483.7	3556.1	3613.3	3655.4
12.5°	3365.5	3345.7	3433.3	3511.6	3565.5
15°	3129.2	3118.2	3228.4	3336.8	3408.2
17.5°	2876.0	2875.6	3001.4	3136.0	3222.0
20°	2702.2	2707.7	2842.6	2991.0	3091.7
22.5°	2528.4	2541.2	2685.3	2840.0	2955.4
25°	2269.6	2287.9	2449.4	2617.0	2739.7
27.5°	2020.9	2047.7	2217.6	2391.7	2541.2
30°	1857.6	1888.8	2061.8	2245.0	2398.8
32.5°	1697.3	1734.3	1903.0	2096.8	2253.5
35°	1456.9	1493.5	1655.4	1850.2	2018.7
37.5°	1208.6	1244.5	1402.6	1594.4	1776.4
40°	1046.8	1087.1	1237.8	1423.7	1608.6
42.5°	900.0	940.3	1082.0	1264.6	1439.3
45°	698.5	740.6	865.2	1033.6	1194.7
47.5°	531.5	577.2	686.5	838.9	985.7
50°	432.6	478.4	586.1	720.4	861.4
52.5°	353.2	397.5	494.7	621.3	750.5
55°	250.9	293.0	378.3	485.7	597.4
57.5°	173.4	209.7	286.1	375.8	463.3
60°	125.5	160.3	232.2	305.0	376.4
62.5°	83.5	115.4	185.8	241.5	289.5
65°	28.1	53.7	119.8	144.6	161.0
67.5°	14.2	17.2	62.9	66.4	71.9
70°	11.2	11.2	30.0	32.0	37.5
72.5°	8.2	8.2	12.0	15.4	16.5
75°	3.7	3.7	1.9	0.0	0.0
77.5°	1.9	1.9	1.5	0.0	0.0
80°	1.9	1.9	0.0	0.0	0.0
82.5°	0.4	0.4	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.6	1.2	2.4	2.7	3.0
90°	3.0	5.9	12.0	13.5	15.0
92.5°	27.0	112.0	200.2	73.1	56.9
95°	64.4	237.3	795.7	327.1	212.8
97.5°	106.7	265.8	1178.7	907.5	657.2
100°	137.9	282.9	1320.1	1329.5	1080.4
102.5°	167.8	302.3	1347.7	1642.6	1406.4
105°	215.8	333.0	1332.1	2033.7	1915.0
107.5°	266.7	371.0	1257.8	2222.3	2265.7
110°	302.7	396.5	1200.3	2262.9	2403.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	335.1	425.3	1146.3	2230.8	2438.3
115°	386.6	467.2	1072.9	2123.9	2415.5
117.5°	431.6	511.8	1024.6	1973.5	2305.2
120°	461.5	540.6	1005.5	1871.7	2205.7
122.5°	490.3	565.9	989.9	1776.6	2093.0
125°	530.5	603.7	972.5	1645.8	1931.5
127.5°	564.6	637.9	962.3	1535.2	1781.7
130°	587.4	660.7	957.5	1467.6	1691.8
132.5°	609.0	678.7	952.7	1410.8	1613.8
135°	638.3	707.2	945.5	1333.0	1502.9
137.5°	671.3	734.0	941.9	1267.7	1412.7
140°	689.3	750.8	939.5	1224.1	1351.6
142.5°	709.7	766.5	937.1	1185.4	1297.7
145°	740.2	791.5	933.5	1134.8	1221.2
147.5°	769.6	814.4	930.2	1092.1	1159.2
150°	791.2	827.8	929.0	1066.6	1120.8
152.5°	808.0	842.2	927.8	1044.8	1089.7
155°	834.6	862.5	926.0	1018.2	1050.4
157.5°	859.2	880.6	926.3	998.8	1020.7
160°	873.6	892.6	927.5	987.8	1004.0
162.5°	885.6	902.3	928.7	978.2	990.8
165°	903.6	915.3	930.5	966.7	974.0
167.5°	917.4	924.4	932.0	959.7	962.0
170°	924.5	930.4	932.0	956.0	956.0
172.5°	930.5	934.1	932.0	951.2	950.0
175°	936.5	938.0	932.0	945.5	942.5
177.5°	938.9	937.8	931.7	940.1	937.7
180°	936.5	936.5	936.5	936.5	936.5

(END OF REPORT)