

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: P518761

Luminaire Tested: **SQ4-BB-100U-125D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518761
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-6
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

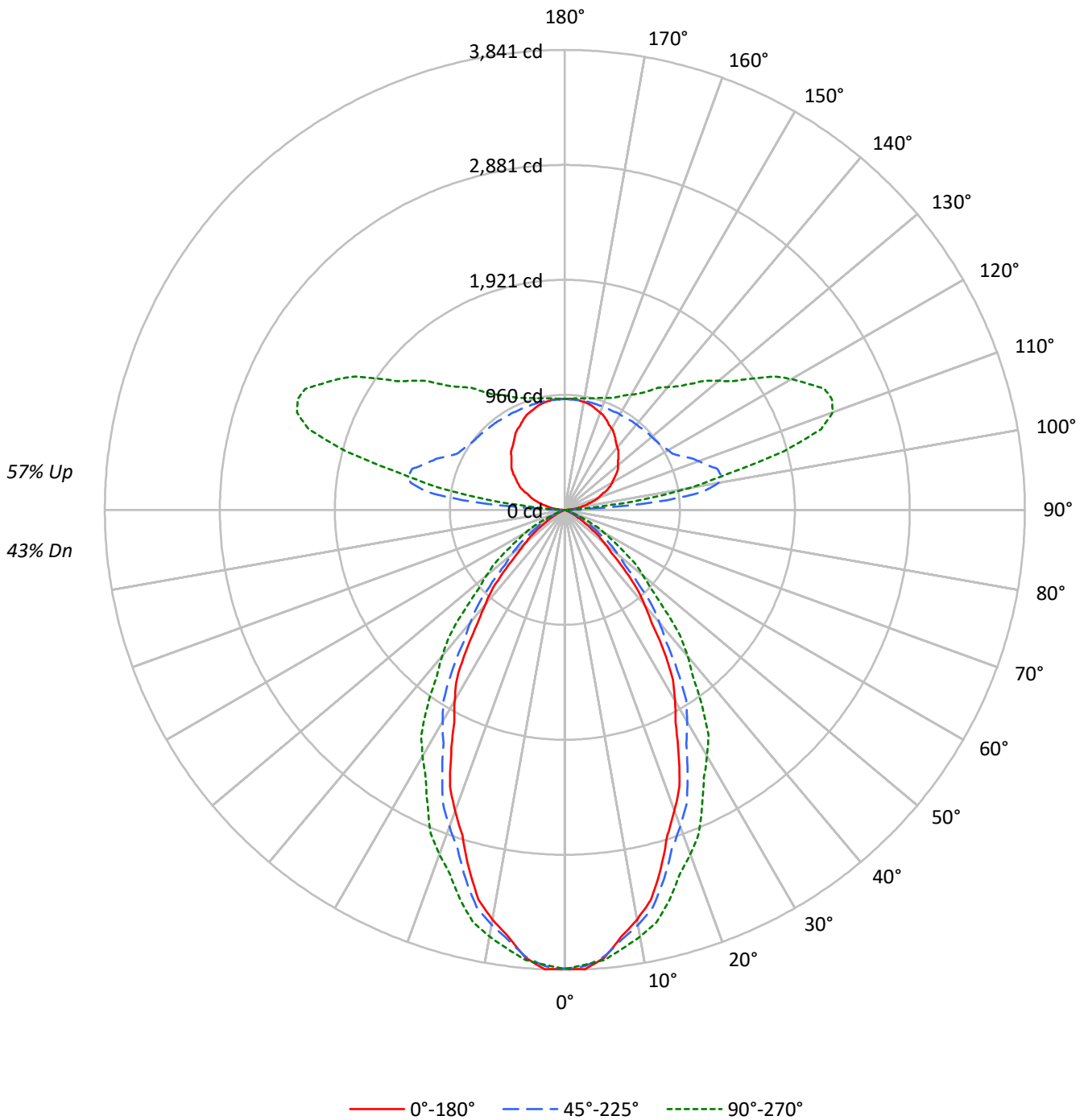
Lumens per Lamp: N/A
Luminaire Lumens: 10597.9 lumens
Efficiency: N/A
Efficacy: 98.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

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°	23571	23571	23571
5°	23191	23134	23306
10°	21699	21989	22603
15°	19727	20353	21486
20°	17511	18421	20035
25°	15250	16458	18408
30°	13062	14497	16867
35°	10831	12306	15007
40°	8322	9840	12787
45°	6015	7450	10289
50°	4098	5553	8160
55°	2664	4016	6342
60°	1528	2828	4584
65°	405	1728	2320
70°	200	534	667
75°	88	45	0
80°	67	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	349.7	3.3
10°-20°	894.4	8.4
20°-30°	1119.6	10.6
30°-40°	1034.2	9.8
40°-50°	694.9	6.6
50°-60°	358.9	3.4
60°-70°	112.4	1.1
70°-80°	7.1	0.1
80°-90°	2.1	0.0
90°-100°	434.2	4.1
100°-110°	1198.7	11.3
110°-120°	1236.3	11.7
120°-130°	993.5	9.4
130°-140°	780.8	7.4
140°-150°	598.8	5.7
150°-160°	430.4	4.1
160°-170°	263.2	2.5
170°-180°	88.7	0.8
0°-30°	2363.7	22.3
0°-40°	3397.9	32.1
0°-60°	4451.8	42.0
0°-90°	4573.4	43.2
90°-120°	2869.2	27.1
90°-150°	5242.2	49.5
90°-180°	6024.0	56.8
0°-180°	10597.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3832	3832	3832	3832	3832	
5°	3756	3718	3747	3760	3775	348
15°	3098	3087	3196	3304	3374	863
25°	2247	2265	2425	2591	2712	1030
35°	1442	1479	1639	1832	1999	894
45°	692	733	856	1023	1183	543
55°	248	290	374	481	591	232
65°	28	53	119	143	159	47
75°	4	4	2	0	0	5
85°	0	0	0	0	0	0
90°	3	6	12	13	15	5
95°	64	235	788	324	211	68
105°	214	330	1319	2013	1896	227
115°	383	462	1062	2103	2391	376
125°	525	598	963	1629	1912	467
135°	632	700	936	1320	1488	489
145°	733	784	924	1124	1209	459
155°	826	854	917	1008	1040	381
165°	895	906	921	957	964	252
175°	927	929	923	936	933	88
180°	927	927	927	927	927	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3832.2	3832.2	3832.2	3832.2	3832.2
2.5°	3841.1	3804.8	3814.4	3814.1	3804.0
5°	3756.1	3718.1	3746.9	3760.2	3774.7
7.5°	3597.4	3567.7	3623.0	3664.5	3694.6
10°	3474.3	3449.0	3520.7	3577.3	3618.9
12.5°	3332.0	3312.4	3399.1	3476.7	3530.0
15°	3098.0	3087.1	3196.2	3303.5	3374.2
17.5°	2847.3	2847.0	2971.5	3104.7	3189.9
20°	2675.3	2680.7	2814.3	2961.2	3060.9
22.5°	2503.2	2515.9	2658.6	2811.7	2925.9
25°	2247.0	2265.1	2425.0	2590.9	2712.4
27.5°	2000.8	2027.3	2195.5	2367.9	2515.8
30°	1839.1	1870.0	2041.2	2222.7	2374.9
32.5°	1680.4	1717.1	1884.0	2075.9	2231.1
35°	1442.4	1478.6	1638.9	1831.8	1998.6
37.5°	1196.6	1232.1	1388.6	1578.5	1758.7
40°	1036.4	1076.2	1225.5	1409.5	1592.6
42.5°	891.0	930.9	1071.2	1252.0	1425.0
45°	691.5	733.2	856.5	1023.3	1182.8
47.5°	526.2	571.5	679.7	830.5	975.9
50°	428.3	473.6	580.3	713.2	852.8
52.5°	349.7	393.5	489.8	615.1	743.1
55°	248.4	290.1	374.5	480.8	591.4
57.5°	171.7	207.6	283.3	372.0	458.7
60°	124.2	158.7	229.9	301.9	372.6
62.5°	82.7	114.2	183.9	239.1	286.6
65°	27.8	53.2	118.7	143.1	159.4
67.5°	14.1	17.0	62.3	65.8	71.2
70°	11.1	11.1	29.7	31.6	37.1
72.5°	8.2	8.2	11.9	15.2	16.3
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	11.9	13.4	14.8
92.5°	26.7	110.8	198.2	72.3	56.4
95°	63.8	235.0	787.8	323.8	210.7
97.5°	105.6	263.2	1166.9	898.4	650.7
100°	136.5	280.1	1307.0	1316.2	1069.6
102.5°	166.2	299.3	1334.3	1626.3	1392.4
105°	213.6	329.7	1318.9	2013.4	1895.9
107.5°	264.1	367.3	1245.3	2200.2	2243.1
110°	299.7	392.5	1188.3	2240.3	2379.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	331.7	421.1	1134.9	2208.6	2414.0
115°	382.7	462.5	1062.2	2102.8	2391.4
117.5°	427.3	506.7	1014.4	1953.8	2282.3
120°	456.9	535.3	995.4	1853.0	2183.7
122.5°	485.4	560.3	980.0	1758.9	2072.2
125°	525.2	597.7	962.8	1629.4	1912.3
127.5°	559.0	631.5	952.7	1519.9	1763.9
130°	581.5	654.1	948.0	1453.0	1674.9
132.5°	602.9	672.0	943.2	1396.7	1597.8
135°	632.0	700.2	936.1	1319.7	1488.0
137.5°	664.6	726.7	932.5	1255.1	1398.7
140°	682.4	743.3	930.2	1211.9	1338.1
142.5°	702.6	758.9	927.8	1173.6	1284.7
145°	732.9	783.6	924.2	1123.5	1209.1
147.5°	761.9	806.3	921.0	1081.2	1147.7
150°	783.3	819.6	919.8	1056.0	1109.7
152.5°	799.9	833.9	918.6	1034.4	1078.8
155°	826.3	853.9	916.8	1008.0	1040.0
157.5°	850.7	871.8	917.1	988.8	1010.6
160°	864.9	883.8	918.3	978.0	994.0
162.5°	876.8	893.3	919.5	968.4	980.9
165°	894.6	906.2	921.3	957.0	964.3
167.5°	908.2	915.2	922.8	950.1	952.4
170°	915.3	921.1	922.8	946.5	946.5
172.5°	921.3	924.7	922.8	941.7	940.6
175°	927.2	928.7	922.8	936.0	933.1
177.5°	929.6	928.4	922.5	930.7	928.4
180°	927.2	927.2	927.2	927.2	927.2

(END OF REPORT)