

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: P518748

Luminaire Tested: **SQ4-BB-100U-100D-935-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518748
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-100D-935-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

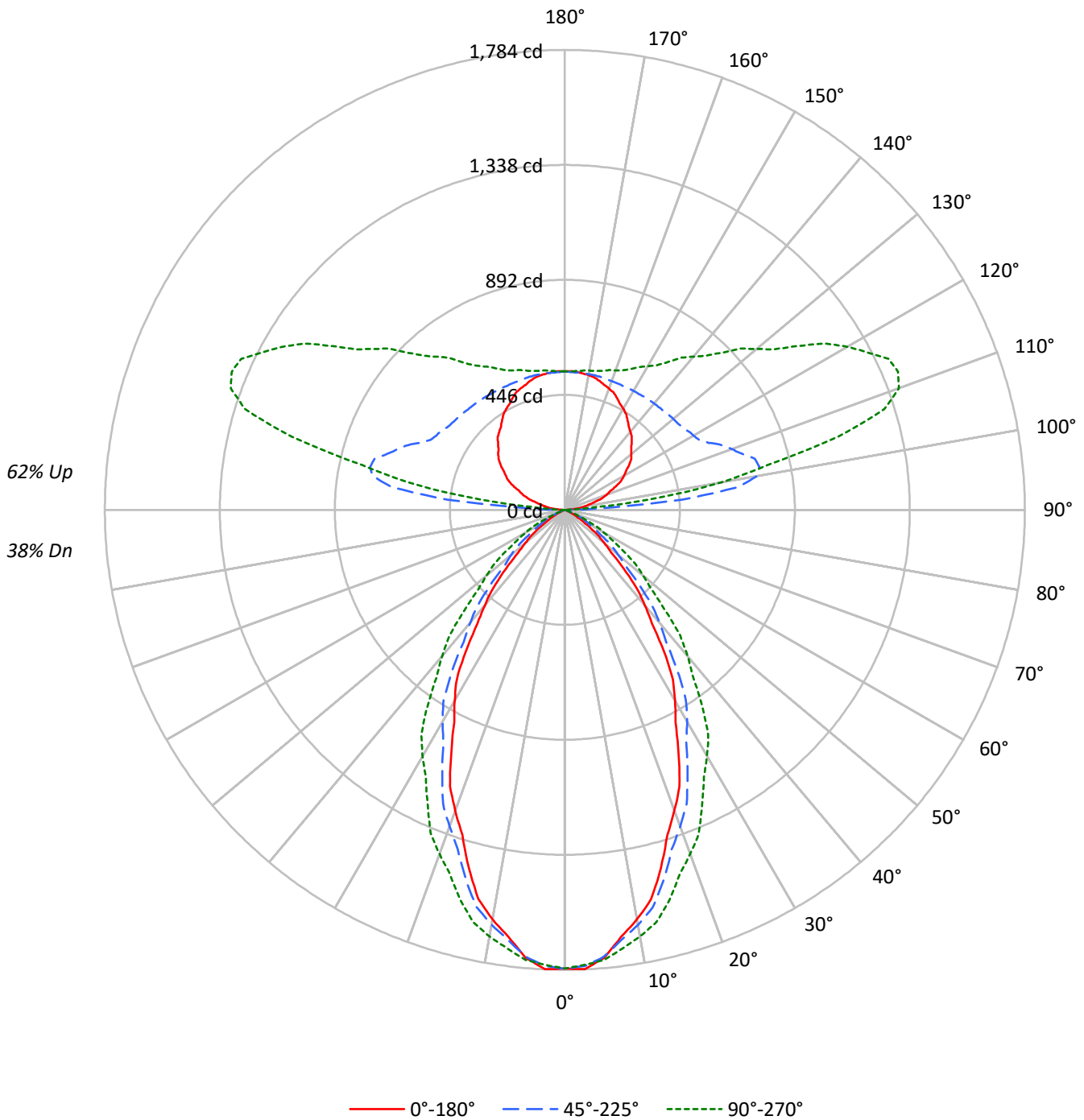
Lumens per Lamp: N/A
Luminaire Lumens: 5613.5 lumens
Efficiency: N/A
Efficacy: 97.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 57.9
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	0
RCR																		
0	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	93	89	86	87	84	82	79	69	67	65	55	54	53	42	41	41	35
2	89	83	77	73	81	75	71	67	62	59	56	50	48	46	38	37	36	31
3	82	74	67	62	75	68	62	58	56	52	49	45	43	41	35	34	33	28
4	76	66	59	54	69	61	55	50	51	46	43	41	38	36	33	31	29	25
5	70	60	53	47	64	55	49	44	46	42	38	38	35	32	30	28	27	23
6	65	54	47	42	59	50	44	39	42	37	34	35	31	29	28	26	24	21
7	60	49	42	37	55	46	39	35	39	34	31	32	29	26	26	24	22	19
8	56	45	38	33	51	42	36	31	36	31	28	30	26	24	24	22	20	18
9	53	41	35	30	48	38	32	28	33	28	25	28	24	22	23	20	19	16
10	49	38	32	27	45	36	30	26	30	26	23	26	22	20	21	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16416	16416	16416
5°	16152	16112	16232
10°	15113	15315	15742
15°	13739	14176	14965
20°	12196	12830	13954
25°	10621	11463	12821
30°	9097	10097	11748
35°	7543	8571	10452
40°	5796	6853	8907
45°	4190	5189	7166
50°	2855	3867	5684
55°	1856	2797	4417
60°	1065	1969	3192
65°	282	1203	1615
70°	140	372	464
75°	61	32	0
80°	48	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.4	2.9
10°-20°	415.3	7.4
20°-30°	519.9	9.3
30°-40°	480.2	8.6
40°-50°	322.6	5.7
50°-60°	166.7	3.0
60°-70°	52.2	0.9
70°-80°	3.3	0.1
80°-90°	1.2	0.0
90°-100°	251.5	4.5
100°-110°	694.4	12.4
110°-120°	716.1	12.8
120°-130°	575.5	10.3
130°-140°	452.3	8.1
140°-150°	346.9	6.2
150°-160°	249.3	4.4
160°-170°	152.5	2.7
170°-180°	51.4	0.9
0°-30°	1097.5	19.6
0°-40°	1577.7	28.1
0°-60°	2067.0	36.8
0°-90°	2123.7	37.8
90°-120°	1662.0	29.6
90°-150°	3036.6	54.1
90°-180°	3490.0	62.2
0°-180°	5613.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1779	1779	1779	1779	1779	
5°	1744	1726	1740	1746	1753	162
15°	1438	1433	1484	1534	1567	401
25°	1043	1052	1126	1203	1259	478
35°	670	687	761	850	928	415
45°	321	340	398	475	549	252
55°	115	135	174	223	275	108
65°	13	25	55	66	74	22
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	2	3	7	8	9	3
95°	37	136	456	188	122	40
105°	124	191	764	1166	1098	132
115°	222	268	615	1218	1385	218
125°	304	346	558	944	1108	271
135°	366	406	542	764	862	283
145°	424	454	535	651	700	266
155°	479	495	531	584	602	221
165°	518	525	534	554	559	146
175°	537	538	534	542	540	51
180°	537	537	537	537	537	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1779.3	1779.3	1779.3	1779.3	1779.3
2.5°	1783.5	1766.6	1771.1	1771.0	1766.2
5°	1744.0	1726.4	1739.7	1745.9	1752.6
7.5°	1670.4	1656.5	1682.2	1701.5	1715.5
10°	1613.2	1601.4	1634.7	1661.0	1680.3
12.5°	1547.1	1538.0	1578.2	1614.3	1639.0
15°	1438.4	1433.4	1484.1	1533.9	1566.7
17.5°	1322.1	1321.9	1379.7	1441.6	1481.1
20°	1242.2	1244.7	1306.7	1374.9	1421.2
22.5°	1162.3	1168.2	1234.4	1305.5	1358.6
25°	1043.3	1051.7	1126.0	1203.0	1259.4
27.5°	929.0	941.3	1019.4	1099.5	1168.1
30°	853.9	868.3	947.8	1032.0	1102.7
32.5°	780.3	797.3	874.8	963.9	1035.9
35°	669.7	686.6	761.0	850.5	928.0
37.5°	555.6	572.1	644.8	732.9	816.6
40°	481.2	499.7	569.0	654.4	739.5
42.5°	413.7	432.2	497.4	581.3	661.6
45°	321.1	340.4	397.7	475.1	549.2
47.5°	244.3	265.3	315.6	385.6	453.1
50°	198.9	219.9	269.4	331.2	396.0
52.5°	162.4	182.7	227.4	285.6	345.0
55°	115.4	134.7	173.9	223.3	274.6
57.5°	79.7	96.4	131.5	172.7	213.0
60°	57.7	73.7	106.7	140.2	173.0
62.5°	38.4	53.0	85.4	111.0	133.1
65°	12.9	24.7	55.1	66.5	74.0
67.5°	6.5	7.9	28.9	30.5	33.1
70°	5.2	5.2	13.8	14.7	17.2
72.5°	3.8	3.8	5.5	7.1	7.6
75°	1.7	1.7	0.9	0.0	0.0
77.5°	0.9	0.9	0.7	0.0	0.0
80°	0.9	0.9	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°	0.3	0.7	1.4	1.6	1.7
90°	1.7	3.4	6.9	7.8	8.6
92.5°	15.5	64.2	114.8	41.9	32.7
95°	37.0	136.1	456.3	187.6	122.0
97.5°	61.2	152.4	676.0	520.4	376.9
100°	79.1	162.2	757.1	762.4	619.6
102.5°	96.2	173.4	772.9	942.0	806.6
105°	123.7	191.0	764.0	1166.3	1098.2
107.5°	153.0	212.8	721.3	1274.5	1299.3
110°	173.6	227.4	688.3	1297.7	1378.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	192.2	243.9	657.4	1279.4	1398.3
115°	221.7	267.9	615.3	1218.1	1385.3
117.5°	247.5	293.5	587.6	1131.8	1322.0
120°	264.7	310.1	576.6	1073.4	1265.0
122.5°	281.2	324.5	567.7	1018.8	1200.3
125°	304.2	346.2	557.7	943.9	1107.7
127.5°	323.8	365.8	551.9	880.4	1021.8
130°	336.9	378.9	549.1	841.6	970.2
132.5°	349.2	389.2	546.4	809.1	925.5
135°	366.1	405.6	542.2	764.5	861.9
137.5°	385.0	421.0	540.2	727.0	810.2
140°	395.3	430.6	538.8	702.0	775.1
142.5°	407.0	439.6	537.4	679.8	744.2
145°	424.5	453.9	535.4	650.8	700.4
147.5°	441.4	467.1	533.5	626.3	664.8
150°	453.7	474.7	532.8	611.7	642.8
152.5°	463.4	483.0	532.1	599.2	624.9
155°	478.7	494.6	531.1	583.9	602.4
157.5°	492.8	505.0	531.2	572.8	585.4
160°	501.0	511.9	531.9	566.5	575.8
162.5°	507.9	517.5	532.6	561.0	568.2
165°	518.2	524.9	533.7	554.4	558.6
167.5°	526.1	530.1	534.5	550.4	551.7
170°	530.2	533.6	534.5	548.3	548.3
172.5°	533.7	535.7	534.5	545.5	544.8
175°	537.1	537.9	534.5	542.2	540.5
177.5°	538.5	537.8	534.3	539.1	537.8
180°	537.1	537.1	537.1	537.1	537.1

(END OF REPORT)