

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: P518772

Luminaire Tested: **SQ4-BB-100U-125D-935-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518772
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-935-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

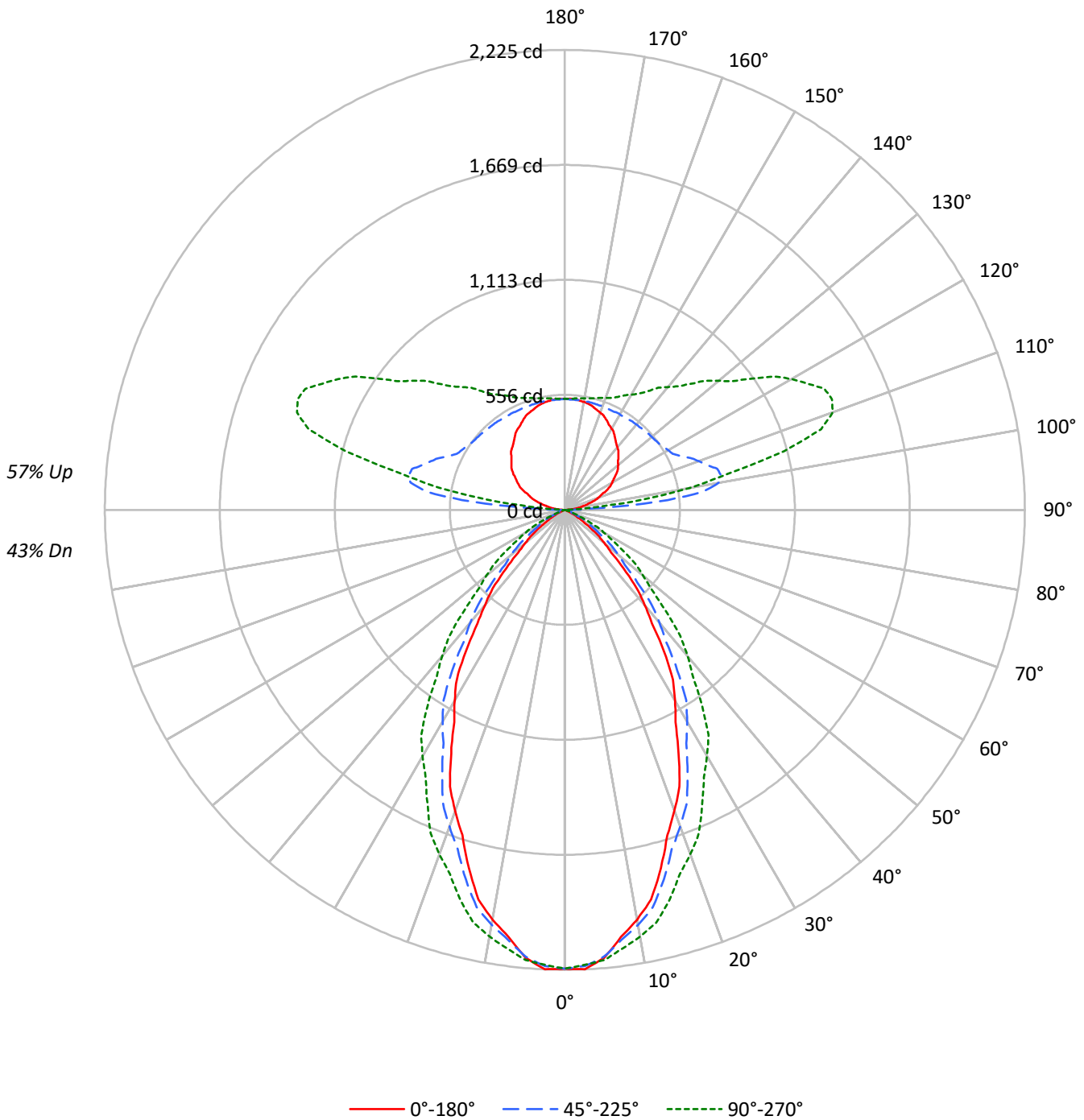
Lumens per Lamp: N/A
Luminaire Lumens: 6138.9 lumens
Efficiency: N/A
Efficacy: 89.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 68.7
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	106	106	106	106	96	96	96	96	80	80	80	64	64	64	50	50	50	43				43
1	98	94	91	88	89	86	84	81	72	70	68	59	57	56	46	46	45	39				39
2	90	84	79	74	83	77	73	69	65	62	59	53	51	50	43	42	40	36				36
3	83	75	69	64	76	70	64	60	59	55	52	49	46	44	39	38	36	32				32
4	77	68	61	56	71	63	57	52	53	49	45	44	41	39	36	34	33	29				29
5	71	61	54	49	66	57	51	46	49	44	40	41	38	35	34	31	30	26				26
6	66	56	48	43	61	52	45	41	44	40	36	38	34	31	31	29	27	24				24
7	62	51	44	39	57	47	41	37	41	36	32	35	31	29	29	27	25	22				22
8	58	46	39	35	53	43	37	33	38	33	29	32	29	26	27	24	23	20				20
9	54	43	36	31	50	40	34	30	35	30	27	30	26	24	25	23	21	19				19
10	51	40	33	29	47	37	31	27	32	28	25	28	24	22	24	21	19	17				17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20480	20480	20480
5°	20151	20101	20250
10°	18855	19106	19639
15°	17140	17685	18670
20°	15215	16006	17409
25°	13250	14300	15995
30°	11349	12597	14656
35°	9410	10693	13039
40°	7230	8550	11111
45°	5227	6474	8940
50°	3561	4824	7091
55°	2315	3489	5511
60°	1329	2458	3984
65°	351	1500	2017
70°	173	464	580
75°	75	39	0
80°	58	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.6	3.3
10°-20°	518.1	8.4
20°-30°	648.6	10.6
30°-40°	599.1	9.8
40°-50°	402.5	6.6
50°-60°	207.9	3.4
60°-70°	65.1	1.1
70°-80°	4.1	0.1
80°-90°	1.2	0.0
90°-100°	251.5	4.1
100°-110°	694.4	11.3
110°-120°	716.1	11.7
120°-130°	575.5	9.4
130°-140°	452.3	7.4
140°-150°	346.9	5.7
150°-160°	249.3	4.1
160°-170°	152.5	2.5
170°-180°	51.4	0.8
0°-30°	1369.2	22.3
0°-40°	1968.3	32.1
0°-60°	2578.7	42.0
0°-90°	2649.2	43.2
90°-120°	1662.0	27.1
90°-150°	3036.6	49.5
90°-180°	3490.0	56.9
0°-180°	6138.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2220	2220	2220	2220	2220	
5°	2176	2154	2170	2178	2186	202
15°	1794	1788	1852	1914	1955	500
25°	1302	1312	1405	1501	1571	597
35°	836	856	949	1061	1158	518
45°	401	425	496	593	685	315
55°	144	168	217	278	343	134
65°	16	31	69	83	92	27
75°	2	2	1	0	0	3
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	

TEST NUMBER: P518772

CATALOG NUMBER: SQ4-BB-100U-125D-935-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2219.8	2219.8	2219.8	2219.8	2219.8
2.5°	2225.0	2204.0	2209.5	2209.4	2203.5
5°	2175.8	2153.7	2170.4	2178.1	2186.5
7.5°	2083.9	2066.6	2098.7	2122.7	2140.1
10°	2012.6	1997.9	2039.4	2072.2	2096.3
12.5°	1930.1	1918.7	1968.9	2013.9	2044.8
15°	1794.5	1788.2	1851.5	1913.6	1954.6
17.5°	1649.3	1649.1	1721.3	1798.5	1847.8
20°	1549.7	1552.8	1630.2	1715.3	1773.1
22.5°	1450.0	1457.4	1540.0	1628.7	1694.9
25°	1301.6	1312.1	1404.7	1500.8	1571.2
27.5°	1159.0	1174.3	1271.8	1371.6	1457.3
30°	1065.3	1083.2	1182.4	1287.5	1375.7
32.5°	973.4	994.6	1091.3	1202.5	1292.4
35°	835.5	856.5	949.4	1061.1	1157.7
37.5°	693.1	713.7	804.4	914.4	1018.7
40°	600.3	623.4	709.9	816.5	922.5
42.5°	516.1	539.2	620.5	725.2	825.4
45°	400.6	424.7	496.2	592.8	685.2
47.5°	304.8	331.0	393.7	481.1	565.3
50°	248.1	274.3	336.1	413.2	494.0
52.5°	202.5	228.0	283.7	356.3	430.4
55°	143.9	168.1	216.9	278.5	342.6
57.5°	99.4	120.2	164.1	215.5	265.7
60°	72.0	91.9	133.2	174.9	215.9
62.5°	47.9	66.2	106.5	138.5	166.0
65°	16.1	30.8	68.7	82.9	92.4
67.5°	8.2	9.8	36.1	38.1	41.2
70°	6.4	6.4	17.2	18.3	21.5
72.5°	4.7	4.7	6.9	8.8	9.5
75°	2.1	2.1	1.1	0.0	0.0
77.5°	1.1	1.1	0.9	0.0	0.0
80°	1.1	1.1	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

TEST NUMBER: P518772

CATALOG NUMBER: SQ4-BB-100U-125D-935-1D-UNV-STD-W-4

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)