

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: P518778

Luminaire Tested: **SQ4-BB-100U-125D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518778
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-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

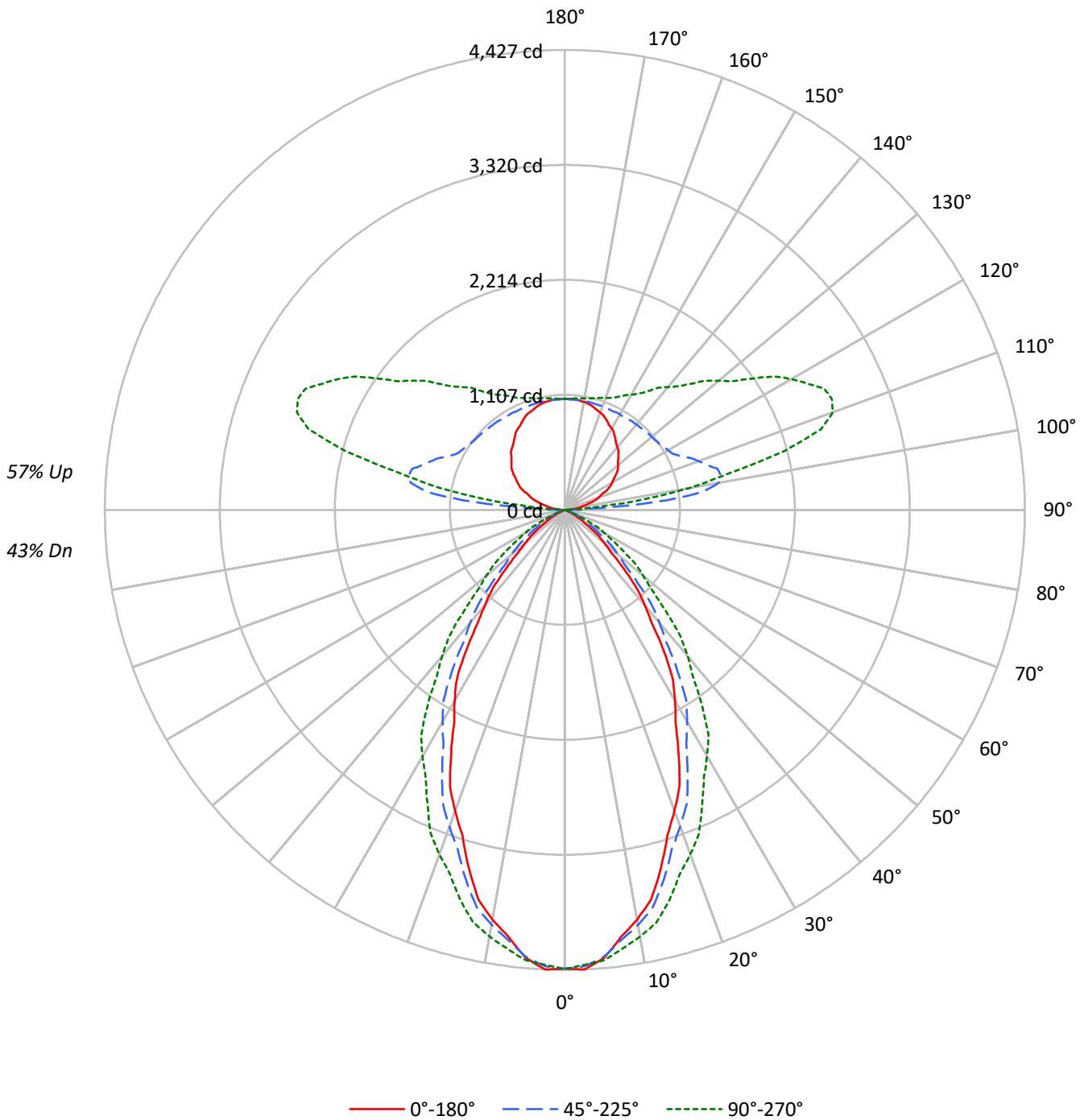
Lumens per Lamp: N/A
Luminaire Lumens: 12215.5 lumens
Efficiency: N/A
Efficacy: 86.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 140.6
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°	20377	20377	20377
5°	20049	19999	20148
10°	18759	19009	19539
15°	17054	17595	18575
20°	15138	15925	17320
25°	13183	14227	15913
30°	11292	12533	14581
35°	9363	10639	12973
40°	7194	8506	11054
45°	5200	6441	8895
50°	3542	4801	7055
55°	2303	3472	5483
60°	1321	2445	3963
65°	350	1493	2006
70°	173	461	576
75°	77	37	0
80°	56	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	403.1	3.3
10°-20°	1030.9	8.4
20°-30°	1290.6	10.6
30°-40°	1192.0	9.8
40°-50°	801.0	6.6
50°-60°	413.7	3.4
60°-70°	129.6	1.1
70°-80°	8.2	0.1
80°-90°	2.4	0.0
90°-100°	500.5	4.1
100°-110°	1381.7	11.3
110°-120°	1425.0	11.7
120°-130°	1145.1	9.4
130°-140°	899.9	7.4
140°-150°	690.2	5.7
150°-160°	496.0	4.1
160°-170°	303.4	2.5
170°-180°	102.3	0.8
0°-30°	2724.5	22.3
0°-40°	3916.6	32.1
0°-60°	5131.3	42.0
0°-90°	5271.4	43.2
90°-120°	3307.2	27.1
90°-150°	6042.4	49.5
90°-180°	6944.0	56.8
0°-180°	12215.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4417	4417	4417	4417	4417	
5°	4330	4286	4319	4334	4351	401
15°	3571	3558	3684	3808	3889	995
25°	2590	2611	2795	2986	3126	1187
35°	1663	1704	1889	2111	2304	1030
45°	797	845	987	1180	1363	626
55°	286	334	432	554	682	267
65°	32	61	137	165	184	54
75°	4	4	2	0	0	6
85°	0	0	0	0	0	0
90°	3	7	14	15	17	5
95°	74	271	908	373	243	79
105°	246	380	1520	2321	2185	262
115°	441	533	1224	2424	2756	434
125°	605	689	1110	1878	2204	539
135°	728	807	1079	1521	1715	564
145°	845	903	1065	1295	1394	529
155°	952	984	1057	1162	1199	439
165°	1031	1044	1062	1103	1112	291
175°	1069	1070	1064	1079	1076	102
180°	1069	1069	1069	1069	1069	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4417.1	4417.1	4417.1	4417.1	4417.1
2.5°	4427.4	4385.6	4396.6	4396.3	4384.6
5°	4329.5	4285.6	4318.8	4334.1	4350.9
7.5°	4146.6	4112.3	4176.0	4223.9	4258.5
10°	4004.7	3975.4	4058.1	4123.3	4171.3
12.5°	3840.5	3818.0	3917.9	4007.3	4068.8
15°	3570.9	3558.3	3684.1	3807.8	3889.3
17.5°	3281.9	3281.5	3425.1	3578.6	3676.9
20°	3083.6	3089.9	3243.9	3413.2	3528.1
22.5°	2885.3	2900.0	3064.4	3240.9	3372.6
25°	2590.0	2610.9	2795.1	2986.4	3126.4
27.5°	2306.2	2336.7	2530.6	2729.4	2899.9
30°	2119.9	2155.4	2352.8	2561.9	2737.4
32.5°	1936.9	1979.1	2171.6	2392.8	2571.6
35°	1662.6	1704.3	1889.1	2111.4	2303.6
37.5°	1379.2	1420.1	1600.6	1819.4	2027.1
40°	1194.6	1240.5	1412.5	1624.6	1835.6
42.5°	1027.0	1073.0	1234.7	1443.1	1642.5
45°	797.1	845.1	987.3	1179.5	1363.4
47.5°	606.5	658.7	783.4	957.3	1124.9
50°	493.6	545.9	668.9	822.1	983.0
52.5°	403.0	453.6	564.6	709.0	856.5
55°	286.4	334.4	431.7	554.2	681.7
57.5°	197.9	239.3	326.5	428.8	528.7
60°	143.2	182.9	265.0	348.0	429.5
62.5°	95.3	131.7	212.0	275.6	330.4
65°	32.1	61.3	136.8	165.0	183.8
67.5°	16.2	19.6	71.8	75.8	82.1
70°	12.8	12.8	34.2	36.5	42.7
72.5°	9.4	9.4	13.7	17.6	18.8
75°	4.3	4.3	2.1	0.0	0.0
77.5°	2.1	2.1	1.7	0.0	0.0
80°	2.1	2.1	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°	0.7	1.4	2.7	3.1	3.4
90°	3.4	6.8	13.7	15.4	17.1
92.5°	30.8	127.8	228.5	83.4	65.0
95°	73.5	270.8	908.0	373.2	242.8
97.5°	121.7	303.3	1345.1	1035.6	750.0
100°	157.3	322.8	1506.5	1517.1	1232.9
102.5°	191.5	345.0	1537.9	1874.5	1605.0
105°	246.2	380.0	1520.2	2320.8	2185.3
107.5°	304.4	423.4	1435.3	2536.0	2585.5
110°	345.4	452.4	1369.7	2582.3	2742.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	382.3	485.3	1308.1	2545.7	2782.5
115°	441.2	533.1	1224.3	2423.8	2756.5
117.5°	492.5	584.1	1169.3	2252.1	2630.6
120°	526.7	617.0	1147.4	2135.9	2517.1
122.5°	559.5	645.8	1129.6	2027.3	2388.5
125°	605.3	688.9	1109.8	1878.1	2204.2
127.5°	644.3	727.9	1098.1	1751.9	2033.2
130°	670.3	753.9	1092.7	1674.7	1930.6
132.5°	694.9	774.5	1087.2	1609.9	1841.6
135°	728.4	807.0	1079.0	1521.2	1715.1
137.5°	766.1	837.6	1074.9	1446.6	1612.2
140°	786.6	856.8	1072.2	1396.9	1542.4
142.5°	809.8	874.7	1069.4	1352.8	1480.8
145°	844.7	903.2	1065.3	1295.0	1393.6
147.5°	878.2	929.4	1061.5	1246.3	1322.8
150°	902.9	944.7	1060.2	1217.2	1279.1
152.5°	922.0	961.1	1058.8	1192.3	1243.5
155°	952.5	984.2	1056.8	1161.9	1198.7
157.5°	980.5	1004.9	1057.1	1139.8	1164.8
160°	996.9	1018.6	1058.5	1127.3	1145.7
162.5°	1010.6	1029.7	1059.8	1116.3	1130.6
165°	1031.1	1044.5	1061.9	1103.1	1111.5
167.5°	1046.8	1054.9	1063.6	1095.1	1097.8
170°	1055.1	1061.7	1063.6	1091.0	1091.0
172.5°	1061.9	1065.9	1063.6	1085.5	1084.1
175°	1068.7	1070.4	1063.6	1078.9	1075.6
177.5°	1071.5	1070.1	1063.3	1072.8	1070.1
180°	1068.7	1068.7	1068.7	1068.7	1068.7

(END OF REPORT)