

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521246

Luminaire Tested: **SQ4-BB-125U-050D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521246
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-125U-050D-93050-1D-UNV-STD-W-4 (4000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

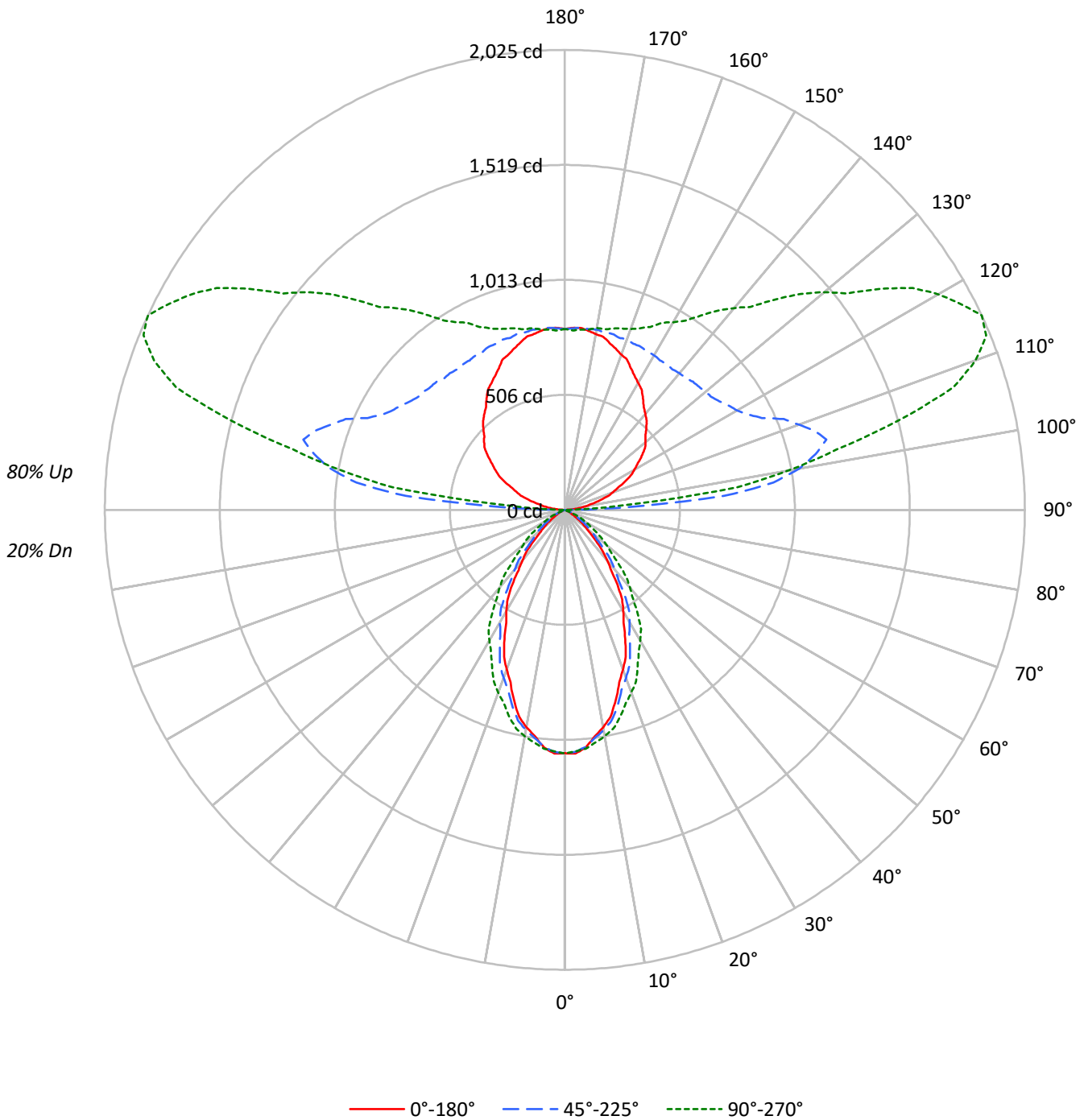
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6433.2 lumens
Efficiency: N/A
Efficacy: 103.4 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: Semi-Indirect

Input Watts (W): 62.2
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	100	100	100	100	88	88	88	88	67	67	67	47	47	47	28	28	28	20
1	92	88	84	81	81	78	75	73	59	57	56	42	41	40	26	26	25	18
2	84	78	72	68	74	69	64	61	53	50	47	38	36	35	24	23	22	16
3	77	69	62	57	68	61	56	51	47	44	41	34	32	30	22	21	20	15
4	71	61	54	49	63	55	49	44	42	38	35	31	28	26	20	19	18	13
5	65	55	47	42	58	49	43	38	38	34	31	28	25	23	18	17	16	12
6	60	49	42	37	53	44	38	33	34	30	27	25	23	21	17	16	14	11
7	56	45	37	32	49	40	34	29	31	27	24	23	21	18	16	14	13	10
8	52	40	33	29	46	36	30	26	29	24	21	21	19	17	15	13	12	9
9	48	37	30	25	43	33	27	23	26	22	19	20	17	15	14	12	11	9
10	45	34	27	23	40	31	25	21	24	20	17	18	16	14	13	11	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9888	9888	9888
5°	9728	9704	9776
10°	9102	9224	9482
15°	8276	8538	9013
20°	7346	7728	8404
25°	6397	6904	7722
30°	5479	6081	7076
35°	4544	5162	6295
40°	3490	4127	5364
45°	2523	3125	4316
50°	1720	2330	3423
55°	1118	1684	2661
60°	640	1186	1923
65°	170	725	974
70°	84	224	281
75°	36	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.8	1.5
10°-20°	250.1	3.9
20°-30°	313.1	4.9
30°-40°	289.2	4.5
40°-50°	194.3	3.0
50°-60°	100.4	1.6
60°-70°	31.4	0.5
70°-80°	2.0	0.0
80°-90°	0.0	0.0
90°-100°	410.4	6.4
100°-110°	991.9	15.4
110°-120°	1057.9	16.4
120°-130°	856.8	13.3
130°-140°	663.4	10.3
140°-150°	506.1	7.9
150°-160°	366.3	5.7
160°-170°	225.6	3.5
170°-180°	76.4	1.2
0°-30°	661.0	10.3
0°-40°	950.3	14.8
0°-60°	1245.0	19.4
0°-90°	1278.4	19.9
90°-120°	2460.2	38.2
90°-150°	4486.5	69.7
90°-180°	5155.0	80.1
0°-180°	6433.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1072	1072	1072	1072	1072	
5°	1050	1040	1048	1052	1056	97
15°	866	863	894	924	944	241
25°	628	634	678	725	758	288
35°	403	414	458	512	559	250
45°	193	205	240	286	331	152
55°	70	81	105	134	165	65
65°	8	15	33	40	45	13
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	40	205	703	457	320	45
105°	158	274	1192	1542	1523	167
115°	290	371	958	1816	2025	287
125°	413	476	831	1444	1696	369
135°	508	567	798	1139	1310	392
145°	600	645	782	968	1044	375
155°	688	718	792	857	889	318
165°	760	772	803	815	826	215
175°	804	801	804	798	796	76
180°	796	796	796	796	796	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1071.7	1071.7	1071.7	1071.7	1071.7
2.5°	1074.2	1064.0	1066.7	1066.7	1063.8
5°	1050.4	1039.8	1047.8	1051.6	1055.6
7.5°	1006.1	997.7	1013.2	1024.8	1033.2
10°	971.6	964.5	984.6	1000.4	1012.1
12.5°	931.8	926.3	950.6	972.3	987.2
15°	866.4	863.3	893.9	923.9	943.6
17.5°	796.3	796.2	831.0	868.3	892.1
20°	748.2	749.7	787.1	828.1	856.0
22.5°	700.1	703.6	743.5	786.3	818.3
25°	628.4	633.5	678.2	724.6	758.5
27.5°	559.5	566.9	614.0	662.2	703.6
30°	514.3	523.0	570.8	621.6	664.2
32.5°	470.0	480.2	526.9	580.5	623.9
35°	403.4	413.5	458.3	512.3	558.9
37.5°	334.6	344.6	388.3	441.4	491.8
40°	289.8	301.0	342.7	394.2	445.4
42.5°	249.2	260.3	299.6	350.1	398.5
45°	193.4	205.1	239.5	286.2	330.8
47.5°	147.1	159.8	190.1	232.3	272.9
50°	119.8	132.4	162.3	199.5	238.5
52.5°	97.8	110.1	137.0	172.0	207.8
55°	69.5	81.1	104.7	134.5	165.4
57.5°	48.0	58.0	79.2	104.0	128.3
60°	34.7	44.4	64.3	84.4	104.2
62.5°	23.1	31.9	51.4	66.9	80.2
65°	7.8	14.9	33.2	40.0	44.6
67.5°	3.9	4.8	17.4	18.4	19.9
70°	3.1	3.1	8.3	8.8	10.4
72.5°	2.3	2.3	3.3	4.3	4.6
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	0.0	0.0
80°	0.5	0.5	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	13.5	111.1	261.7	127.2	86.3
95°	40.5	205.3	703.1	457.2	320.4
97.5°	71.8	227.5	926.1	892.2	765.9
100°	96.1	241.2	1048.8	1107.2	1003.3
102.5°	119.0	253.6	1129.8	1286.2	1224.5
105°	158.5	273.9	1192.1	1542.4	1522.6
107.5°	197.3	297.9	1155.4	1748.0	1794.5
110°	224.3	318.2	1096.0	1836.6	1924.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	251.2	338.6	1043.4	1858.2	2007.6
115°	290.0	370.8	957.8	1815.7	2025.1
117.5°	328.5	404.6	907.5	1718.1	1963.4
120°	354.1	425.0	875.1	1641.5	1898.7
122.5°	381.1	446.7	854.9	1563.1	1816.4
125°	413.1	475.8	831.3	1444.1	1696.3
127.5°	444.8	503.8	814.8	1343.2	1564.8
130°	463.7	521.4	809.4	1273.0	1490.6
132.5°	481.2	541.6	801.3	1222.3	1407.0
135°	507.5	566.9	797.6	1138.7	1310.2
137.5°	532.5	592.2	785.8	1082.1	1211.4
140°	551.4	605.8	785.8	1041.4	1160.1
142.5°	570.3	624.7	779.0	1005.9	1106.1
145°	600.3	644.8	782.4	967.9	1043.8
147.5°	628.3	671.5	780.4	924.1	986.8
150°	645.8	683.7	785.8	904.9	954.4
152.5°	664.7	701.3	784.4	884.6	928.8
155°	688.0	717.6	792.5	857.3	888.6
157.5°	716.0	741.4	790.8	846.9	865.4
160°	726.8	748.2	797.6	833.3	846.5
162.5°	744.3	763.1	794.9	829.1	837.0
165°	760.5	772.0	802.6	814.7	826.2
167.5°	780.4	788.0	800.6	813.8	814.1
170°	785.8	790.7	806.0	804.5	812.7
172.5°	795.2	798.8	802.0	805.6	800.6
175°	804.3	801.0	804.3	797.5	795.9
177.5°	802.6	802.6	799.9	797.1	790.5
180°	795.9	795.9	795.9	795.9	795.9

(END OF REPORT)