

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: P518784

Luminaire Tested: **SQ4-BB-125U-050D-835-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518784
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-050D-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

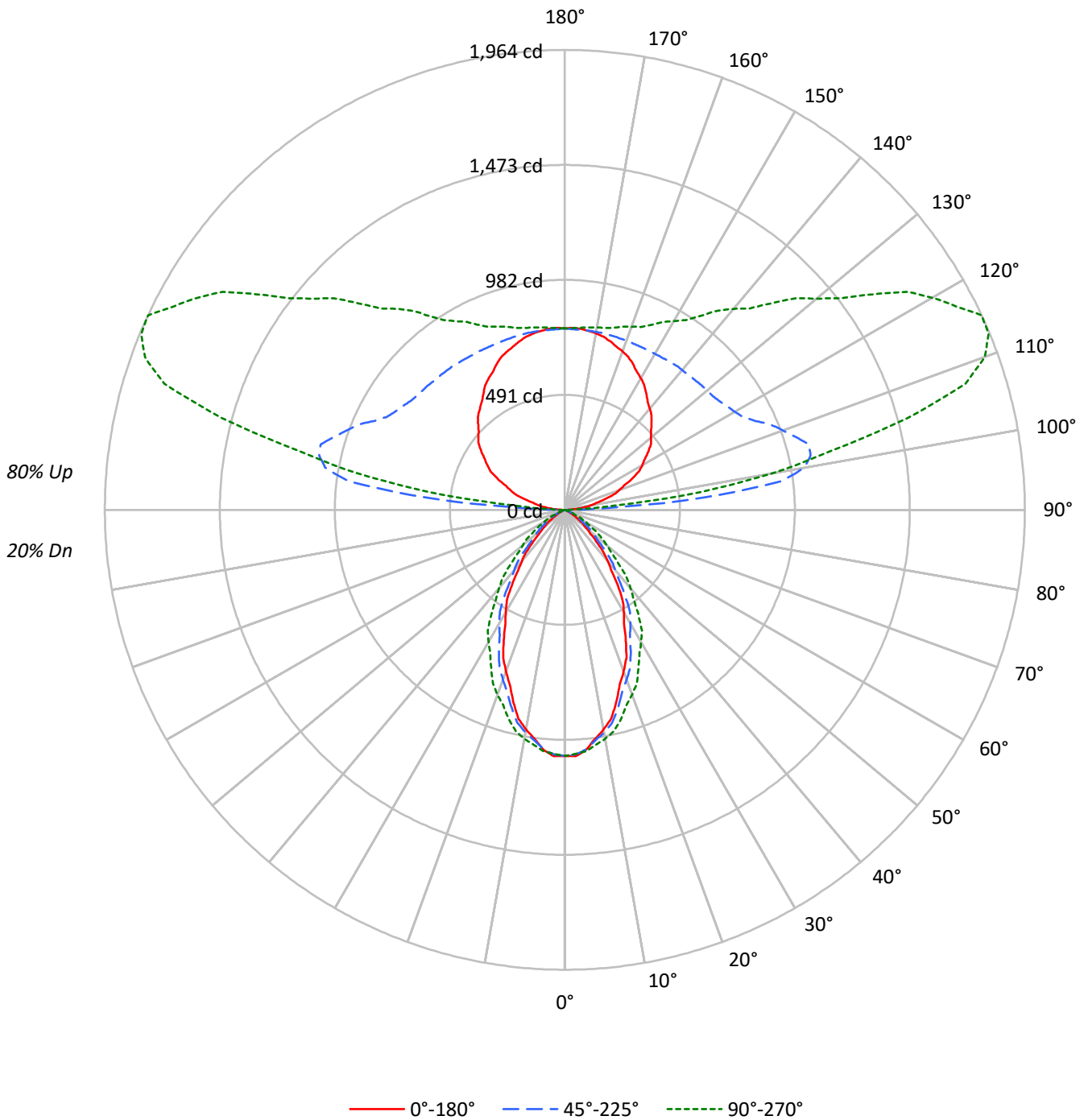
Lumens per Lamp: N/A
Luminaire Lumens: 6254.6 lumens
Efficiency: N/A
Efficacy: 130.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 47.9
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	100	100	100	100	88	88	88	88	67	67	67	47	47	47	29	29	29	20
1	92	88	84	81	81	78	75	73	59	58	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	23	17
3	77	69	62	57	68	61	56	52	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	14
5	65	55	47	42	58	49	43	38	38	34	31	28	25	23	19	17	16	12
6	60	49	42	37	53	44	38	33	35	30	27	26	23	21	17	16	15	11
7	56	45	37	32	49	40	34	29	31	27	24	23	21	19	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	26	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°	9694	9694	9694
5°	9538	9515	9586
10°	8924	9043	9296
15°	8113	8371	8837
20°	7202	7577	8241
25°	6272	6769	7571
30°	5373	5963	6938
35°	4455	5062	6172
40°	3423	4047	5260
45°	2474	3065	4231
50°	1685	2284	3356
55°	1095	1652	2609
60°	629	1163	1886
65°	166	710	954
70°	84	219	275
75°	36	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.9	1.5
10°-20°	245.2	3.9
20°-30°	307.0	4.9
30°-40°	283.6	4.5
40°-50°	190.5	3.0
50°-60°	98.4	1.6
60°-70°	30.8	0.5
70°-80°	1.9	0.0
80°-90°	1.9	0.0
90°-100°	362.3	5.8
100°-110°	975.9	15.6
110°-120°	1024.2	16.4
120°-130°	831.1	13.3
130°-140°	651.8	10.4
140°-150°	500.4	8.0
150°-160°	359.8	5.8
160°-170°	219.8	3.5
170°-180°	74.1	1.2
0°-30°	648.1	10.4
0°-40°	931.7	14.9
0°-60°	1220.6	19.5
0°-90°	1255.3	20.1
90°-120°	2362.3	37.8
90°-150°	4345.6	69.5
90°-180°	4999.0	79.9
0°-180°	6254.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1051	1051	1051	1051	1051	
5°	1030	1020	1027	1031	1035	95
15°	849	846	876	906	925	237
25°	616	621	665	710	744	282
35°	396	405	449	502	548	245
45°	190	201	235	281	324	149
55°	68	80	103	132	162	64
65°	8	15	32	39	44	13
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	2	6	12	13	13	4
95°	55	197	594	304	210	58
105°	180	281	1079	1615	1515	190
115°	319	390	899	1736	1964	314
125°	435	500	807	1364	1605	389
135°	524	585	784	1100	1246	404
145°	606	653	774	941	1010	380
155°	688	713	768	844	871	317
165°	746	754	770	801	805	210
175°	775	774	772	782	780	74
180°	774	774	774	774	774	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1050.7	1050.7	1050.7	1050.7	1050.7
2.5°	1053.2	1043.2	1045.9	1045.8	1043.0
5°	1029.9	1019.5	1027.4	1031.0	1035.0
7.5°	986.4	978.2	993.4	1004.8	1013.0
10°	952.6	945.7	965.3	980.8	992.3
12.5°	913.6	908.2	932.0	953.3	967.9
15°	849.4	846.5	876.4	905.8	925.2
17.5°	780.7	780.6	814.8	851.3	874.6
20°	733.5	735.0	771.7	811.9	839.3
22.5°	686.4	689.8	729.0	770.9	802.3
25°	616.1	621.1	664.9	710.4	743.7
27.5°	548.6	555.9	602.0	649.3	689.8
30°	504.3	512.7	559.7	609.4	651.2
32.5°	460.8	470.8	516.6	569.2	611.7
35°	395.5	405.4	449.4	502.3	548.0
37.5°	328.1	337.8	380.7	432.8	482.2
40°	284.2	295.1	336.0	386.5	436.7
42.5°	244.3	255.2	293.7	343.3	390.7
45°	189.6	201.0	234.9	280.6	324.3
47.5°	144.3	156.7	186.4	227.7	267.6
50°	117.4	129.9	159.1	195.6	233.8
52.5°	95.9	107.9	134.3	168.7	203.7
55°	68.1	79.5	102.7	131.8	162.2
57.5°	47.1	56.9	77.7	102.0	125.8
60°	34.1	43.5	63.0	82.8	102.2
62.5°	22.7	31.3	50.4	65.6	78.6
65°	7.6	14.6	32.5	39.2	43.7
67.5°	3.9	4.7	17.1	18.0	19.5
70°	3.1	3.1	8.1	8.7	10.2
72.5°	2.2	2.2	3.3	4.2	4.5
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°	0.4	1.2	2.4	2.6	2.6
90°	2.0	5.8	11.8	12.8	12.8
92.5°	24.1	85.0	168.1	80.9	56.2
95°	55.2	197.0	593.9	303.7	210.1
97.5°	88.2	225.6	931.5	778.2	586.8
100°	113.4	236.9	1038.8	1086.9	901.7
102.5°	137.9	252.9	1074.3	1318.1	1166.1
105°	180.5	280.9	1079.3	1614.6	1515.3
107.5°	220.8	310.3	1033.3	1767.0	1792.7
110°	247.6	332.5	991.5	1814.4	1907.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	276.0	354.7	951.2	1803.9	1957.7
115°	318.6	390.0	898.7	1736.5	1964.2
117.5°	357.5	424.5	858.1	1629.0	1882.5
120°	382.8	447.4	837.6	1551.8	1812.2
122.5°	404.9	468.7	822.6	1472.9	1732.5
125°	435.1	499.7	807.0	1363.9	1605.1
127.5°	464.1	527.7	797.1	1267.8	1483.1
130°	481.4	545.1	793.2	1212.8	1401.8
132.5°	498.8	561.7	789.2	1164.3	1337.9
135°	523.8	584.6	784.3	1100.3	1246.0
137.5°	547.7	606.0	781.7	1046.1	1165.7
140°	564.3	620.2	779.4	1012.7	1120.7
142.5°	581.7	633.7	777.8	981.5	1072.5
145°	605.7	653.0	774.4	940.7	1010.2
147.5°	631.8	672.9	771.1	906.5	961.1
150°	649.1	684.8	769.5	885.0	930.3
152.5°	664.9	696.0	768.7	867.4	904.2
155°	687.6	712.7	767.5	844.1	871.1
157.5°	707.5	727.0	767.7	827.7	845.8
160°	720.2	736.6	768.5	818.1	831.6
162.5°	731.2	744.5	769.3	810.2	819.8
165°	745.8	754.5	770.5	801.1	805.0
167.5°	757.6	762.7	771.5	794.2	795.7
170°	765.5	767.5	771.5	790.2	790.2
172.5°	770.3	770.7	772.2	786.3	786.3
175°	775.4	774.4	771.5	782.3	780.3
177.5°	777.6	776.0	772.1	778.3	776.8
180°	774.4	774.4	774.4	774.4	774.4

(END OF REPORT)