

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: P521297

Luminaire Tested: **SQ4-BB-150U-050D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521297
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-150U-050D-93050-1D-UNV-STD-W-4 (3500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

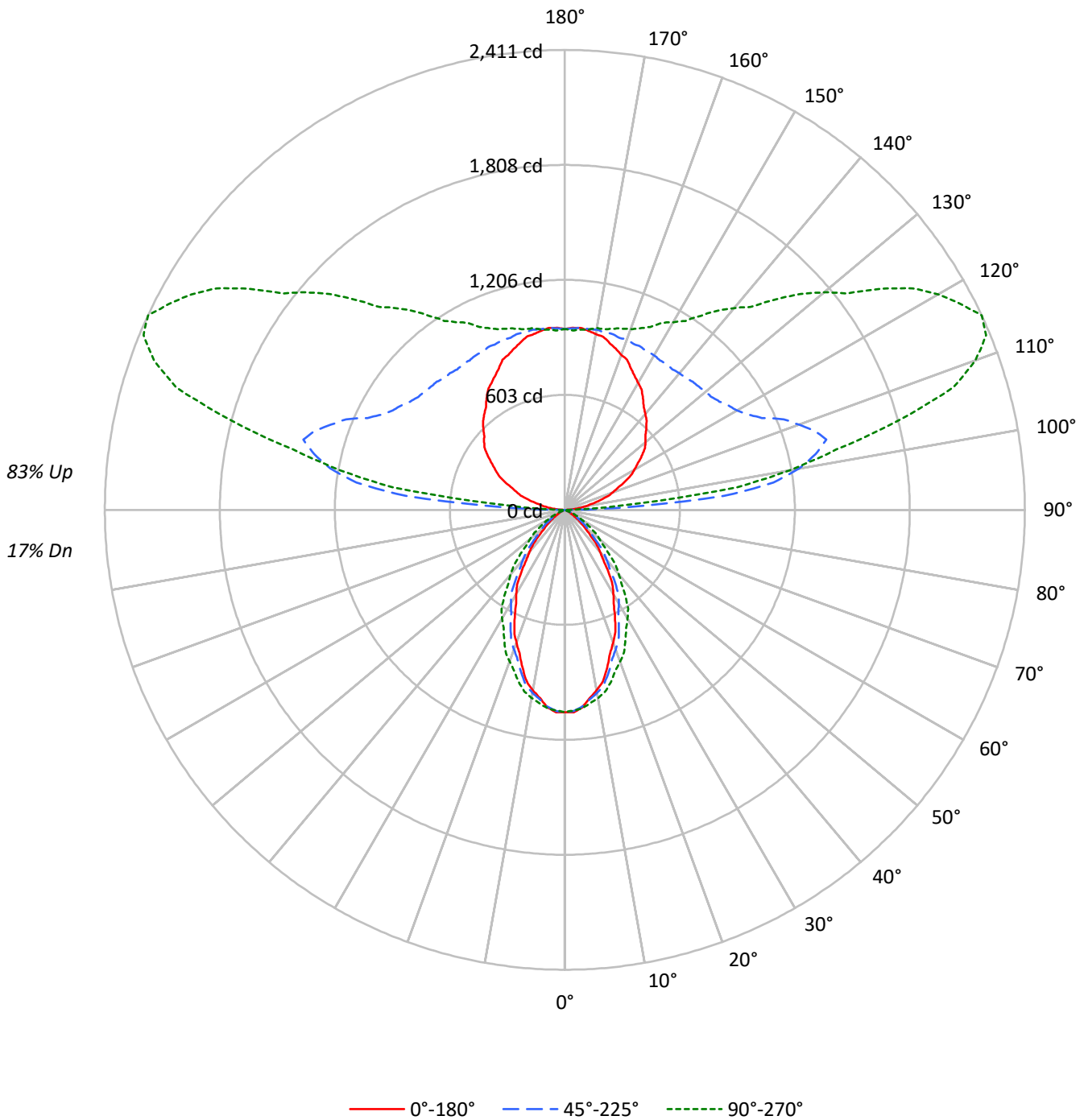
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7401.3 lumens
Efficiency: N/A
Efficacy: 102.9 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): 71.9
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	99	99	99	99	87	87	87	87	65	65	65	45	45	45	26	26	26	17
1	91	87	84	81	80	77	74	72	58	56	54	40	39	38	24	23	23	16
2	83	77	71	67	73	68	63	60	51	48	46	36	34	33	22	21	20	14
3	76	68	61	56	67	60	55	50	46	42	39	32	30	28	20	19	18	13
4	70	60	53	48	62	54	48	43	41	37	34	29	27	25	18	17	16	12
5	64	54	47	41	57	48	42	37	37	33	29	26	24	22	17	15	14	10
6	59	48	41	36	52	43	37	33	33	29	26	24	21	19	15	14	13	10
7	55	44	37	31	48	39	33	29	30	26	23	22	19	17	14	13	12	9
8	51	40	33	28	45	36	30	25	28	23	20	20	17	16	13	12	11	8
9	47	36	29	25	42	32	27	23	25	21	18	19	16	14	12	11	10	7
10	44	33	27	22	39	30	24	20	23	19	16	17	15	13	11	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9783	9783	9783
5°	9626	9602	9674
10°	9007	9127	9382
15°	8189	8447	8918
20°	7269	7647	8316
25°	6330	6831	7640
30°	5422	6017	7001
35°	4495	5108	6229
40°	3454	4084	5308
45°	2497	3092	4271
50°	1701	2305	3387
55°	1105	1666	2633
60°	635	1174	1902
65°	168	716	963
70°	84	221	278
75°	36	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.8	1.3
10°-20°	247.5	3.3
20°-30°	309.8	4.2
30°-40°	286.2	3.9
40°-50°	192.3	2.6
50°-60°	99.3	1.3
60°-70°	31.1	0.4
70°-80°	2.0	0.0
80°-90°	0.0	0.0
90°-100°	488.5	6.6
100°-110°	1180.8	16.0
110°-120°	1259.3	17.0
120°-130°	1020.0	13.8
130°-140°	789.7	10.7
140°-150°	602.4	8.1
150°-160°	436.1	5.9
160°-170°	268.6	3.6
170°-180°	90.9	1.2
0°-30°	654.1	8.8
0°-40°	940.2	12.7
0°-60°	1231.9	16.6
0°-90°	1265.0	17.1
90°-120°	2928.6	39.6
90°-150°	5340.7	72.2
90°-180°	6136.0	82.9
0°-180°	7401.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1060	1060	1060	1060	1060	
5°	1039	1029	1037	1040	1044	96
15°	857	854	884	914	934	239
25°	622	627	671	717	750	285
35°	399	409	454	507	553	247
45°	191	203	237	283	327	150
55°	69	80	104	133	164	64
65°	8	15	33	40	44	13
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	48	244	837	544	381	54
105°	189	326	1419	1836	1813	199
115°	345	441	1140	2162	2411	341
125°	492	566	990	1719	2019	439
135°	604	675	949	1356	1560	466
145°	715	768	931	1152	1242	447
155°	819	854	943	1020	1058	378
165°	905	919	956	970	984	255
175°	958	954	958	949	947	90
180°	947	947	947	947	947	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1060.4	1060.4	1060.4	1060.4	1060.4
2.5°	1062.9	1052.8	1055.5	1055.4	1052.6
5°	1039.4	1028.8	1036.8	1040.5	1044.5
7.5°	995.5	987.2	1002.5	1014.0	1022.3
10°	961.4	954.4	974.2	989.9	1001.4
12.5°	922.0	916.6	940.6	962.0	976.8
15°	857.3	854.2	884.4	914.1	933.7
17.5°	787.9	787.8	822.3	859.1	882.7
20°	740.3	741.8	778.8	819.4	847.0
22.5°	692.7	696.2	735.7	778.0	809.6
25°	621.8	626.8	671.0	716.9	750.5
27.5°	553.7	561.0	607.5	655.2	696.2
30°	508.9	517.4	564.8	615.0	657.2
32.5°	465.0	475.1	521.3	574.4	617.4
35°	399.1	409.2	453.5	506.9	553.0
37.5°	331.1	340.9	384.3	436.8	486.7
40°	286.8	297.8	339.1	390.0	440.7
42.5°	246.6	257.6	296.4	346.5	394.3
45°	191.4	202.9	237.0	283.2	327.3
47.5°	145.6	158.1	188.1	229.8	270.1
50°	118.5	131.0	160.6	197.4	236.0
52.5°	96.8	108.9	135.5	170.2	205.6
55°	68.7	80.3	103.6	133.1	163.7
57.5°	47.5	57.4	78.4	102.9	126.9
60°	34.4	43.9	63.6	83.6	103.1
62.5°	22.9	31.6	50.9	66.2	79.3
65°	7.7	14.7	32.8	39.6	44.1
67.5°	3.9	4.7	17.2	18.2	19.7
70°	3.1	3.1	8.2	8.8	10.3
72.5°	2.3	2.3	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°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.1	132.2	311.5	151.4	102.8
95°	48.2	244.4	837.0	544.3	381.4
97.5°	85.5	270.8	1102.4	1062.0	911.7
100°	114.4	287.1	1248.5	1318.0	1194.3
102.5°	141.7	301.9	1344.9	1531.1	1457.7
105°	188.7	326.1	1419.1	1836.1	1812.6
107.5°	234.9	354.6	1375.4	2080.8	2136.1
110°	267.0	378.8	1304.7	2186.3	2290.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	299.1	403.1	1242.1	2212.0	2389.9
115°	345.3	441.4	1140.1	2161.5	2410.7
117.5°	391.0	481.7	1080.3	2045.2	2337.3
120°	421.5	505.9	1041.8	1954.0	2260.2
122.5°	453.6	531.8	1017.7	1860.8	2162.2
125°	491.8	566.4	989.6	1719.0	2019.3
127.5°	529.5	599.8	969.9	1599.0	1862.7
130°	552.0	620.7	963.5	1515.4	1774.4
132.5°	572.9	644.7	953.9	1455.0	1674.9
135°	604.2	674.8	949.4	1355.5	1559.6
137.5°	633.9	704.9	935.4	1288.2	1442.0
140°	656.4	721.1	935.4	1239.7	1381.0
142.5°	678.9	743.6	927.4	1197.4	1316.8
145°	714.6	767.6	931.4	1152.2	1242.5
147.5°	747.9	799.3	929.0	1100.1	1174.7
150°	768.8	813.9	935.4	1077.2	1136.1
152.5°	791.3	834.8	933.8	1053.0	1105.6
155°	819.0	854.3	943.4	1020.5	1057.8
157.5°	852.3	882.5	941.4	1008.1	1030.1
160°	865.1	890.6	949.4	991.9	1007.7
162.5°	886.0	908.4	946.2	987.0	996.4
165°	905.3	919.0	955.5	969.8	983.6
167.5°	929.0	938.0	953.1	968.7	969.1
170°	935.4	941.3	959.5	957.7	967.5
172.5°	946.6	950.9	954.7	958.9	953.1
175°	957.5	953.5	957.5	949.4	947.4
177.5°	955.5	955.5	952.2	948.9	941.0
180°	947.4	947.4	947.4	947.4	947.4

(END OF REPORT)