

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: P521037

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

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521037
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-050U-050D-93050-1D-UNV-STD-W-4 (3500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

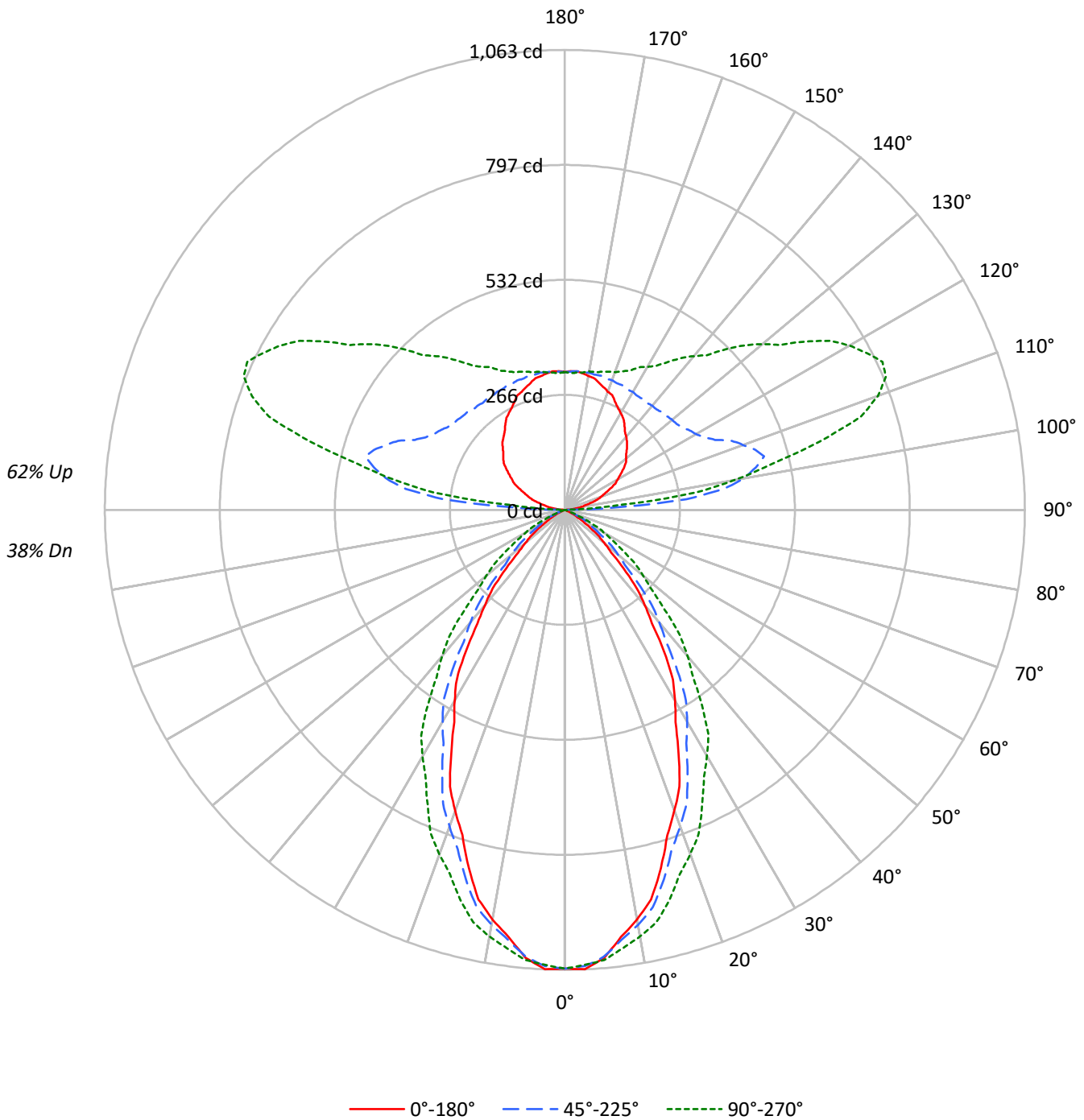
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3326.4 lumens
Efficiency: N/A
Efficacy: 90.1 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): 36.9
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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	93	89	86	88	85	82	79	69	67	66	55	54	53	42	41	41	35
2	89	83	77	73	81	76	71	67	62	59	57	50	48	46	39	37	36	31
3	82	74	67	62	75	68	62	58	56	52	49	45	43	41	36	34	33	28
4	76	66	59	54	69	61	55	50	51	47	43	41	39	36	33	31	29	26
5	70	60	53	47	64	55	49	44	46	42	38	38	35	32	30	28	27	23
6	65	54	47	42	59	50	44	39	42	38	34	35	32	29	28	26	24	21
7	60	49	42	37	55	46	39	35	39	34	31	32	29	26	26	24	22	19
8	56	45	38	33	52	42	36	31	36	31	28	30	26	24	24	22	20	18
9	53	42	35	30	48	39	33	28	33	28	25	28	24	22	23	20	19	17
10	49	38	32	27	45	36	30	26	31	26	23	26	22	20	21	19	17	15

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	2.9
10°-20°	247.5	7.4
20°-30°	309.8	9.3
30°-40°	286.2	8.6
40°-50°	192.3	5.8
50°-60°	99.3	3.0
60°-70°	31.1	0.9
70°-80°	2.0	0.1
80°-90°	0.0	0.0
90°-100°	164.1	4.9
100°-110°	396.6	11.9
110°-120°	423.1	12.7
120°-130°	342.6	10.3
130°-140°	265.3	8.0
140°-150°	202.4	6.1
150°-160°	146.5	4.4
160°-170°	90.2	2.7
170°-180°	30.6	0.9
0°-30°	654.1	19.7
0°-40°	940.2	28.3
0°-60°	1231.9	37.0
0°-90°	1265.0	38.0
90°-120°	983.8	29.6
90°-150°	1794.1	53.9
90°-180°	2061.0	62.0
0°-180°	3326.4	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	1
95°	16	82	281	183	128	18
105°	63	110	477	617	609	67
115°	116	148	383	726	810	115
125°	165	190	332	578	678	147
135°	203	227	319	455	524	157
145°	240	258	313	387	417	150
155°	275	287	317	343	355	127
165°	304	309	321	326	330	86
175°	322	320	322	319	318	30
180°	318	318	318	318	318	

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CATALOG NUMBER: SQ4-BB-050U-050D-93050-1D-UNV-STD-W-4 (3500K)

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°	5.4	44.4	104.7	50.9	34.5
95°	16.2	82.1	281.2	182.8	128.1
97.5°	28.7	91.0	370.3	356.8	306.3
100°	38.4	96.5	419.4	442.7	401.2
102.5°	47.6	101.4	451.8	514.3	489.7
105°	63.4	109.5	476.7	616.8	608.9
107.5°	78.9	119.1	462.0	699.0	717.6
110°	89.7	127.3	438.3	734.4	769.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	100.5	135.4	417.3	743.1	802.8
115°	116.0	148.3	383.0	726.1	809.8
117.5°	131.4	161.8	362.9	687.1	785.2
120°	141.6	170.0	350.0	656.4	759.3
122.5°	152.4	178.6	341.9	625.1	726.4
125°	165.2	190.3	332.4	577.5	678.3
127.5°	177.9	201.5	325.8	537.1	625.8
130°	185.4	208.5	323.7	509.1	596.1
132.5°	192.4	216.6	320.4	488.8	562.6
135°	203.0	226.7	318.9	455.4	523.9
137.5°	212.9	236.8	314.2	432.7	484.4
140°	220.5	242.3	314.2	416.4	463.9
142.5°	228.0	249.8	311.5	402.3	442.3
145°	240.1	257.9	312.9	387.1	417.4
147.5°	251.2	268.5	312.1	369.5	394.6
150°	258.3	273.4	314.2	361.9	381.7
152.5°	265.8	280.4	313.7	353.7	371.4
155°	275.1	287.0	316.9	342.8	355.4
157.5°	286.3	296.5	316.2	338.7	346.1
160°	290.6	299.2	318.9	333.2	338.5
162.5°	297.6	305.2	317.9	331.6	334.7
165°	304.1	308.7	321.0	325.8	330.4
167.5°	312.1	315.1	320.2	325.4	325.6
170°	314.2	316.2	322.3	321.7	325.0
172.5°	318.0	319.5	320.7	322.1	320.2
175°	321.6	320.3	321.6	318.9	318.3
177.5°	321.0	321.0	319.9	318.7	316.1
180°	318.3	318.3	318.3	318.3	318.3

(END OF REPORT)