

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: P521767

Luminaire Tested: **SQ4-WB-050U-050D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521767
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-WB-050U-050D-93050-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

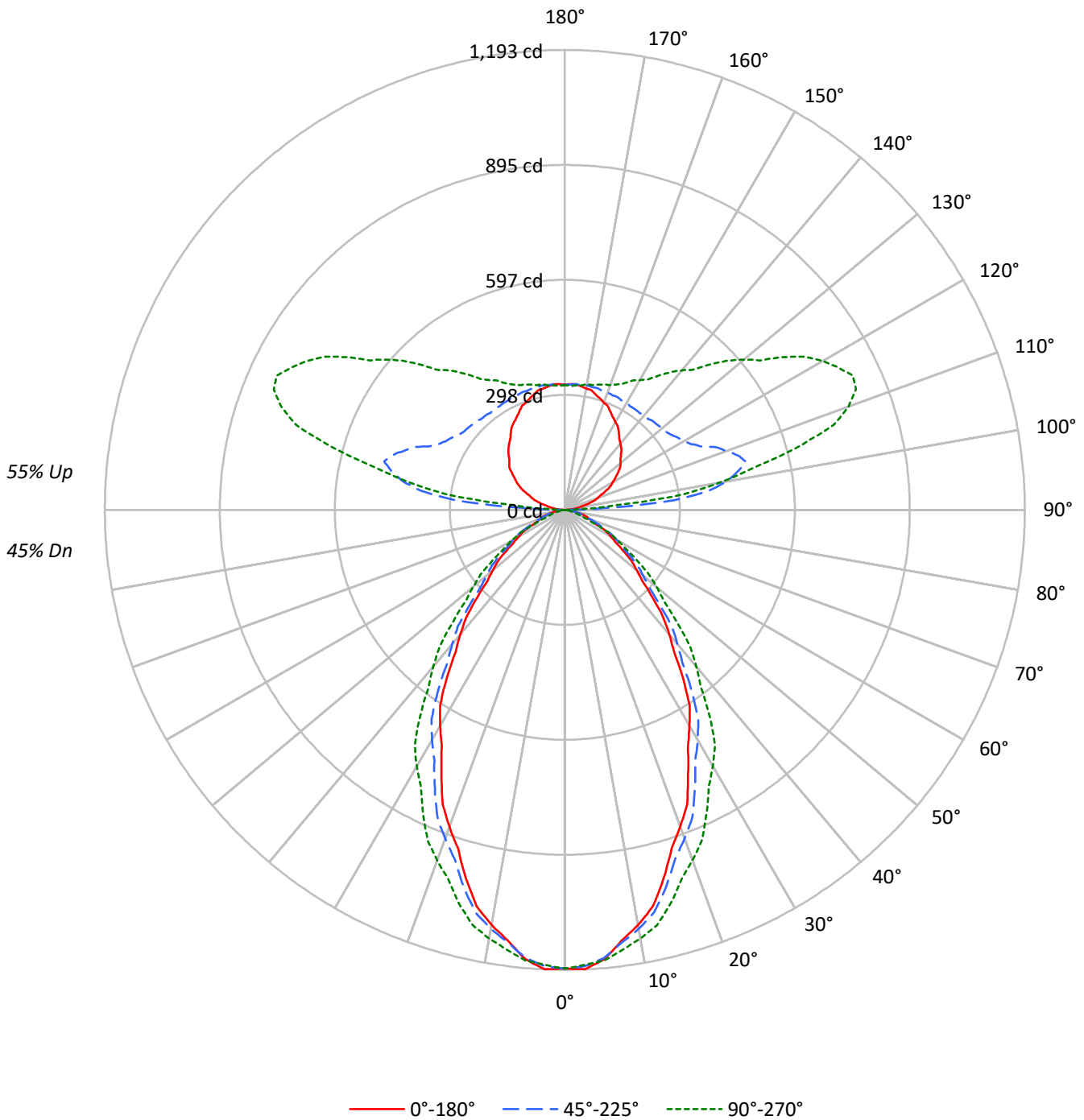
Lumens per Lamp: N/A
Luminaire Lumens: 3832.0 lumens
Efficiency: N/A
Efficacy: 103.8 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	45
1	98	94	90	87	90	86	83	81	72	70	68	59	58	57	47	46	46	40
2	90	83	78	73	82	77	72	68	65	61	58	53	51	49	43	41	40	35
3	83	74	67	62	76	68	63	58	58	54	50	48	45	43	39	37	35	31
4	76	66	59	54	70	61	55	50	52	48	44	44	40	38	36	33	32	28
5	70	60	52	47	65	55	49	44	47	42	39	40	36	33	33	30	28	25
6	65	54	46	41	60	50	44	39	43	38	34	36	33	30	30	28	25	23
7	61	49	42	37	56	46	39	35	39	34	31	33	30	27	28	25	23	21
8	56	45	38	33	52	42	35	31	36	31	28	31	27	24	26	23	21	19
9	53	41	34	29	49	39	32	28	33	29	25	29	25	22	24	21	19	17
10	49	38	31	27	46	36	30	25	31	26	23	27	23	20	23	20	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10979	10979	10979
5°	10841	10803	10866
10°	10244	10336	10576
15°	9456	9676	10109
20°	8587	8910	9499
25°	7702	8122	8850
30°	6886	7337	8178
35°	6022	6457	7381
40°	5068	5472	6389
45°	4183	4545	5334
50°	3492	3807	4444
55°	2965	3267	3671
60°	2534	2832	2928
65°	2017	2382	1893
70°	1788	1859	1155
75°	1658	1508	706
80°	1525	1387	611
85°	1387	1270	498



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.1	2.8
10°-20°	283.9	7.4
20°-30°	367.7	9.6
30°-40°	360.1	9.4
40°-50°	275.6	7.2
50°-60°	183.7	4.8
60°-70°	100.2	2.6
70°-80°	41.8	1.1
80°-90°	11.8	0.3
90°-100°	167.0	4.4
100°-110°	403.7	10.5
110°-120°	430.6	11.2
120°-130°	348.7	9.1
130°-140°	270.0	7.0
140°-150°	206.0	5.4
150°-160°	149.1	3.9
160°-170°	91.8	2.4
170°-180°	31.1	0.8
0°-30°	760.8	19.9
0°-40°	1120.9	29.3
0°-60°	1580.2	41.2
0°-90°	1734.0	45.3
90°-120°	1001.3	26.1
90°-150°	1826.0	47.7
90°-180°	2098.0	54.7
0°-180°	3832.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1190	1190	1190	1190	1190	
5°	1171	1159	1166	1169	1173	109
15°	990	986	1013	1040	1058	276
25°	757	759	798	833	869	348
35°	535	537	573	612	655	332
45°	321	327	348	375	409	250
55°	184	192	203	211	228	167
65°	92	100	109	95	87	96
75°	46	46	42	29	20	50
85°	13	13	12	8	5	14
90°	0	0	0	0	0	1
95°	16	84	286	186	130	18
105°	64	112	485	628	620	68
115°	118	151	390	739	824	117
125°	168	194	338	588	690	150
135°	207	231	325	464	533	159
145°	244	262	318	394	425	153
155°	280	292	323	349	362	129
165°	310	314	327	332	336	87
175°	327	326	327	325	324	31
180°	324	324	324	324	324	



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CATALOG NUMBER: SQ4-WB-050U-050D-93050-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1190.0	1190.0	1190.0	1190.0	1190.0
2.5°	1192.9	1182.3	1185.0	1184.9	1181.6
5°	1170.6	1158.9	1166.5	1169.2	1173.3
7.5°	1127.2	1118.3	1132.1	1142.3	1150.6
10°	1093.4	1085.7	1103.3	1118.2	1128.9
12.5°	1054.1	1047.7	1069.5	1089.4	1103.4
15°	990.0	986.4	1013.0	1040.5	1058.4
17.5°	921.4	919.6	950.1	982.3	1005.1
20°	874.6	874.1	907.5	941.0	967.5
22.5°	827.4	828.5	863.6	898.5	928.7
25°	756.6	758.6	797.8	832.6	869.4
27.5°	691.1	692.0	732.6	769.3	808.5
30°	646.4	649.0	688.7	726.7	767.6
32.5°	601.7	604.7	643.6	682.9	724.5
35°	534.7	537.2	573.3	611.9	655.3
37.5°	465.5	469.0	501.0	537.5	580.2
40°	420.8	426.0	454.3	488.6	530.5
42.5°	377.8	384.2	410.4	443.0	480.8
45°	320.6	326.7	348.3	374.6	408.8
47.5°	271.3	278.4	294.9	317.6	346.8
50°	243.3	250.0	265.2	282.1	309.6
52.5°	218.7	225.3	238.9	251.9	275.4
55°	184.3	192.0	203.1	210.8	228.2
57.5°	156.1	163.5	172.3	175.8	186.3
60°	137.3	145.5	153.5	153.1	158.7
62.5°	120.2	127.1	135.1	129.6	129.9
65°	92.4	100.1	109.1	95.4	86.7
67.5°	74.7	76.3	85.6	66.5	56.2
70°	66.3	66.3	68.9	51.5	42.8
72.5°	58.4	58.4	56.0	41.9	32.8
75°	46.5	46.5	42.3	29.0	19.8
77.5°	35.8	35.4	32.4	21.7	14.4
80°	28.7	28.7	26.1	17.1	11.5
82.5°	22.5	22.5	20.3	13.4	8.6
85°	13.1	13.1	12.0	7.8	4.7
87.5°	4.6	4.6	4.2	2.5	2.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.5	45.2	106.5	51.8	35.1
95°	16.5	83.6	286.2	186.1	130.4
97.5°	29.2	92.6	376.9	363.1	311.7
100°	39.1	98.2	426.9	450.6	408.3
102.5°	48.5	103.2	459.8	523.5	498.4
105°	64.5	111.5	485.2	627.8	619.7
107.5°	80.3	121.2	470.2	711.4	730.4
110°	91.3	129.5	446.1	747.5	783.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	102.3	137.8	424.7	756.3	817.1
115°	118.0	150.9	389.8	739.0	824.2
117.5°	133.7	164.7	369.4	699.3	799.1
120°	144.1	173.0	356.2	668.1	772.8
122.5°	155.1	181.8	348.0	636.2	739.3
125°	168.1	193.6	338.3	587.7	690.4
127.5°	181.0	205.1	331.6	546.7	636.9
130°	188.7	212.2	329.4	518.1	606.7
132.5°	195.9	220.4	326.1	497.5	572.6
135°	206.6	230.7	324.6	463.5	533.2
137.5°	216.7	241.0	319.8	440.4	493.0
140°	224.4	246.6	319.8	423.9	472.2
142.5°	232.1	254.2	317.1	409.4	450.2
145°	244.3	262.4	318.4	393.9	424.8
147.5°	255.7	273.3	317.6	376.1	401.6
150°	262.9	278.3	319.8	368.3	388.4
152.5°	270.5	285.4	319.3	360.0	378.0
155°	280.0	292.1	322.6	348.9	361.7
157.5°	291.4	301.7	321.9	344.7	352.2
160°	295.8	304.5	324.6	339.2	344.5
162.5°	302.9	310.6	323.5	337.5	340.7
165°	309.5	314.2	326.7	331.6	336.3
167.5°	317.6	320.7	325.9	331.2	331.3
170°	319.8	321.8	328.0	327.4	330.8
172.5°	323.7	325.1	326.4	327.9	325.9
175°	327.4	326.0	327.4	324.6	323.9
177.5°	326.7	326.7	325.6	324.4	321.7
180°	323.9	323.9	323.9	323.9	323.9

(END OF REPORT)