

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: P521715

Luminaire Tested: **SQ4-WB-025U-050D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521715
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-025U-050D-93050-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

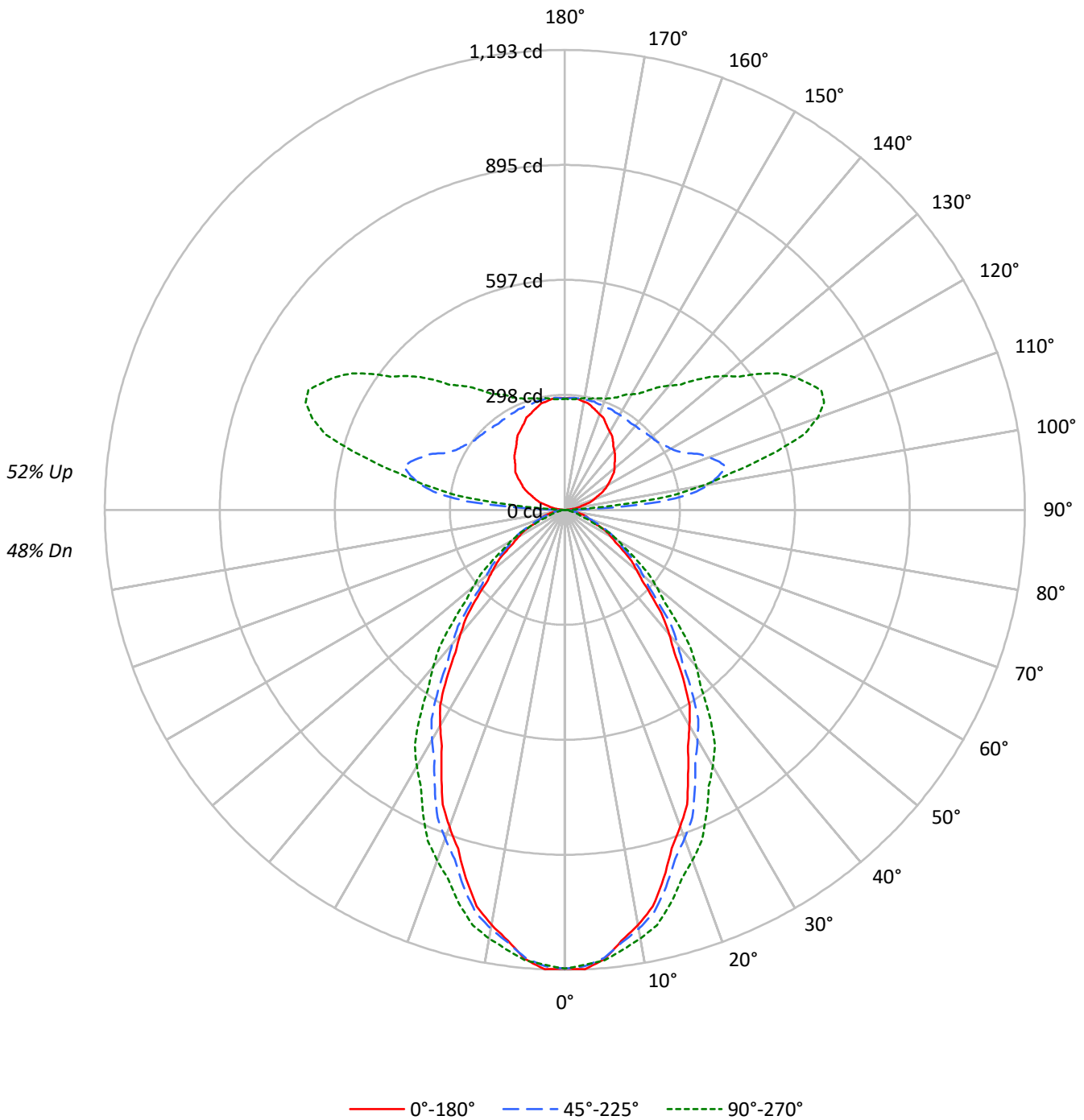
Lumens per Lamp: N/A
Luminaire Lumens: 3602.3 lumens
Efficiency: N/A
Efficacy: 102.3 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 35.2
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

TEST NUMBER: P521715

CATALOG NUMBER: SQ4-WB-025U-050D-93050-1D-UNV-STD-W-4 (4500K)

Luminous Intensity Polar Plot





TEST NUMBER: P521715

CATALOG NUMBER: SQ4-WB-025U-050D-93050-1D-UNV-STD-W-4 (4500K)

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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54	48
1	98	95	91	88	91	87	84	82	74	72	70	61	60	59	50	49	48	43
2	91	84	78	74	83	78	73	69	66	63	60	55	53	51	45	44	42	38
3	83	75	68	63	77	69	64	59	59	55	52	50	47	44	41	39	37	33
4	77	67	60	54	71	62	56	51	53	49	45	45	42	39	38	35	33	30
5	71	60	53	47	65	56	50	45	48	43	40	41	38	35	34	32	30	27
6	66	55	47	42	61	51	44	40	44	39	35	38	34	31	32	29	27	24
7	61	50	42	37	57	47	40	35	40	35	32	35	31	28	29	27	24	22
8	57	46	38	33	53	43	36	32	37	32	28	32	28	25	27	24	22	20
9	53	42	35	30	49	39	33	29	34	29	26	30	26	23	25	23	20	18
10	50	39	32	27	46	36	30	26	32	27	24	28	24	21	24	21	19	17

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



TEST NUMBER: P521715

CATALOG NUMBER: SQ4-WB-025U-050D-93050-1D-UNV-STD-W-4 (4500K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.1	3.0
10°-20°	283.9	7.9
20°-30°	367.7	10.2
30°-40°	360.1	10.0
40°-50°	275.6	7.7
50°-60°	183.7	5.1
60°-70°	100.2	2.8
70°-80°	41.8	1.2
80°-90°	11.8	0.3
90°-100°	148.7	4.1
100°-110°	359.5	10.0
110°-120°	383.4	10.6
120°-130°	310.5	8.6
130°-140°	240.4	6.7
140°-150°	183.4	5.1
150°-160°	132.8	3.7
160°-170°	81.8	2.3
170°-180°	27.7	0.8
0°-30°	760.8	21.1
0°-40°	1120.9	31.1
0°-60°	1580.2	43.9
0°-90°	1734.0	48.1
90°-120°	891.6	24.8
90°-150°	1626.0	45.1
90°-180°	1868.0	51.9
0°-180°	3602.3	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°	15	74	255	166	116	16
105°	57	99	432	559	552	61
115°	105	134	347	658	734	104
125°	150	172	301	523	615	134
135°	184	206	289	413	475	142
145°	218	234	284	351	378	136
155°	249	260	287	311	322	115
165°	276	280	291	295	300	78
175°	292	290	292	289	288	28
180°	288	288	288	288	288	



TEST NUMBER: P521715

CATALOG NUMBER: SQ4-WB-025U-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°	4.9	40.3	94.8	46.1	31.3
95°	14.7	74.4	254.8	165.7	116.1
97.5°	26.0	82.4	335.6	323.3	277.6
100°	34.8	87.4	380.1	401.3	363.6
102.5°	43.1	91.9	409.5	466.1	443.8
105°	57.4	99.3	432.1	559.0	551.8
107.5°	71.5	108.0	418.7	633.5	650.4
110°	81.3	115.3	397.2	665.6	697.3

TEST NUMBER: P521715

CATALOG NUMBER: SQ4-WB-025U-050D-93050-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	<i>91.1</i>	122.7	378.2	673.5	727.6
115°	<i>105.1</i>	134.4	347.1	658.1	734.0
117.5°	<i>119.0</i>	146.7	328.9	622.7	711.6
120°	<i>128.3</i>	154.0	317.2	594.9	688.1
122.5°	<i>138.1</i>	161.9	309.8	566.5	658.3
125°	<i>149.7</i>	172.4	301.3	523.4	614.8
127.5°	<i>161.2</i>	182.6	295.3	486.8	567.1
130°	<i>168.1</i>	189.0	293.3	461.4	540.2
132.5°	<i>174.4</i>	196.3	290.4	443.0	509.9
135°	<i>183.9</i>	205.5	289.1	412.7	474.8
137.5°	<i>193.0</i>	214.6	284.8	392.2	439.0
140°	<i>199.8</i>	219.6	284.8	377.4	420.5
142.5°	<i>206.7</i>	226.4	282.3	364.6	400.9
145°	<i>217.6</i>	233.7	283.6	350.8	378.3
147.5°	<i>227.7</i>	243.4	282.8	334.9	357.6
150°	<i>234.1</i>	247.8	284.8	328.0	345.9
152.5°	<i>240.9</i>	254.2	284.3	320.6	336.6
155°	<i>249.3</i>	260.1	287.2	310.7	322.1
157.5°	<i>259.5</i>	268.7	286.6	306.9	313.6
160°	<i>263.4</i>	271.2	289.1	302.0	306.8
162.5°	<i>269.8</i>	276.6	288.1	300.5	303.4
165°	<i>275.6</i>	279.8	290.9	295.3	299.5
167.5°	<i>282.8</i>	285.6	290.2	294.9	295.1
170°	<i>284.8</i>	286.6	292.1	291.6	294.6
172.5°	<i>288.2</i>	289.5	290.7	292.0	290.2
175°	<i>291.5</i>	290.3	291.5	289.0	288.5
177.5°	<i>290.9</i>	290.9	289.9	288.9	286.5
180°	<i>288.5</i>	288.5	288.5	288.5	288.5

(END OF REPORT)