

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: P519376

Luminaire Tested: **SQ4-WB-100U-050D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519376
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-100U-050D-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

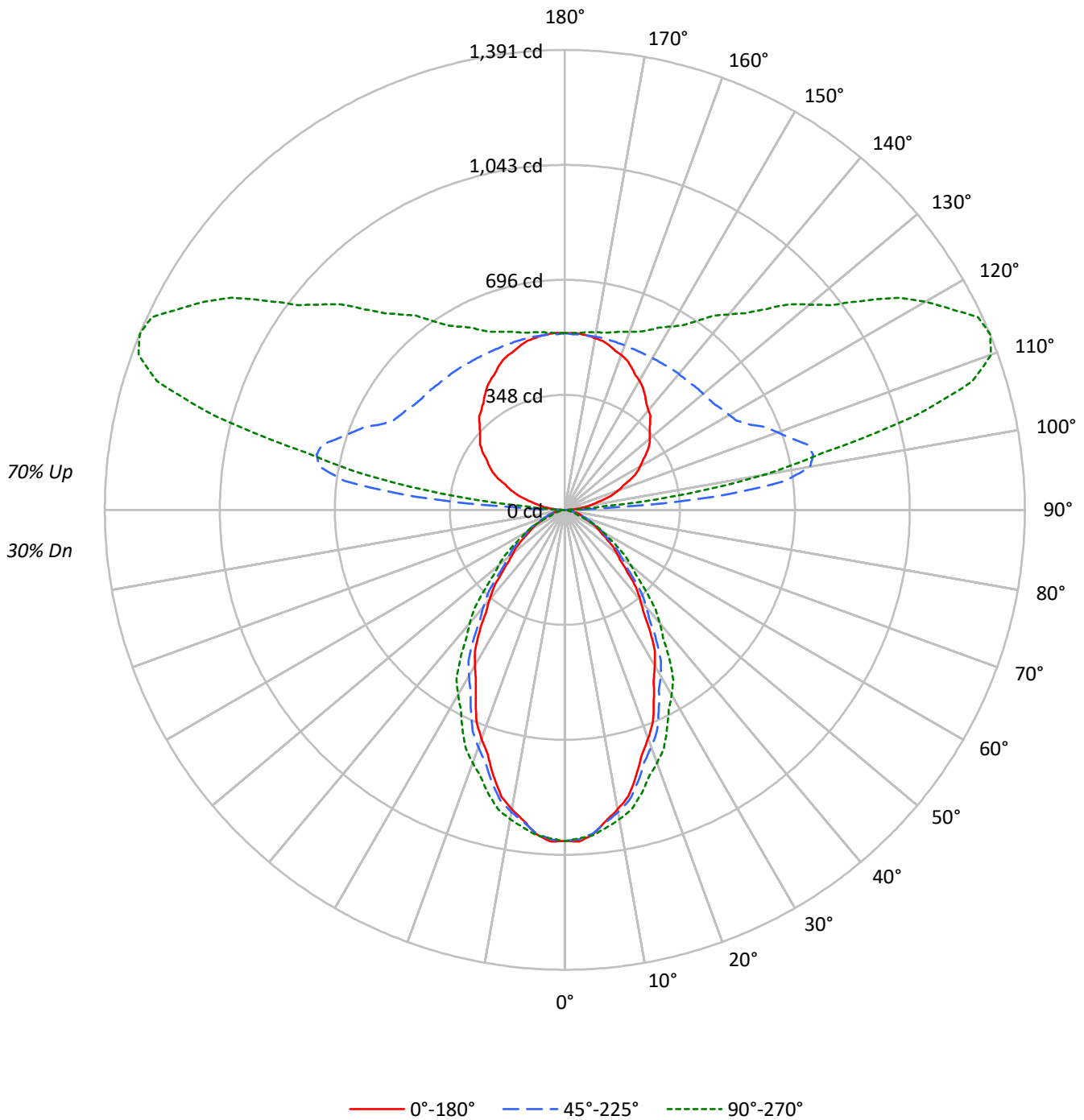
Lumens per Lamp: N/A
Luminaire Lumens: 4932.6 lumens
Efficiency: N/A
Efficacy: 119.4 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 41.3
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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	30
1	94	90	86	83	84	81	78	75	64	62	60	48	47	46	34	33	33	26
2	86	79	74	69	77	72	67	63	57	54	51	43	41	40	31	30	29	23
3	79	70	64	58	71	64	58	53	51	47	44	39	36	34	28	27	25	20
4	72	63	55	50	65	57	51	46	46	41	38	35	32	30	25	24	22	18
5	67	56	49	43	60	51	44	40	41	36	33	32	29	26	23	21	20	16
6	62	50	43	38	55	46	39	35	37	33	29	29	26	23	21	19	18	15
7	57	46	38	33	51	42	35	31	34	29	26	27	23	21	20	18	16	13
8	53	42	34	29	48	38	32	27	31	26	23	24	21	19	18	16	15	12
9	49	38	31	26	44	35	29	24	28	24	21	23	19	17	17	15	14	11
10	46	35	28	24	42	32	26	22	26	22	19	21	18	16	16	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9241	9241	9241
5°	9125	9093	9146
10°	8622	8700	8902
15°	7959	8144	8509
20°	7227	7499	7996
25°	6483	6836	7449
30°	5797	6176	6882
35°	5068	5436	6213
40°	4266	4606	5378
45°	3520	3824	4490
50°	2940	3205	3741
55°	2495	2751	3090
60°	2133	2384	2465
65°	1698	2006	1594
70°	1505	1565	971
75°	1394	1269	595
80°	1286	1169	515
85°	1164	1069	423



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.9	1.9
10°-20°	239.0	4.8
20°-30°	309.5	6.3
30°-40°	303.1	6.1
40°-50°	232.0	4.7
50°-60°	154.6	3.1
60°-70°	84.4	1.7
70°-80°	35.1	0.7
80°-90°	11.1	0.2
90°-100°	250.2	5.1
100°-110°	690.9	14.0
110°-120°	712.5	14.4
120°-130°	572.6	11.6
130°-140°	450.0	9.1
140°-150°	345.1	7.0
150°-160°	248.0	5.0
160°-170°	151.7	3.1
170°-180°	51.1	1.0
0°-30°	640.3	13.0
0°-40°	943.4	19.1
0°-60°	1330.0	27.0
0°-90°	1460.6	29.6
90°-120°	1653.6	33.5
90°-150°	3021.2	61.2
90°-180°	3472.0	70.4
0°-180°	4932.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1002	1002	1002	1002	1002	
5°	985	975	982	984	988	92
15°	833	830	853	876	891	233
25°	637	638	672	701	732	293
35°	450	452	483	515	552	280
45°	270	275	293	315	344	210
55°	155	162	171	177	192	141
65°	78	84	92	80	73	81
75°	39	39	36	24	17	42
85°	11	11	10	6	4	12
90°	2	3	7	8	8	3
95°	37	135	454	187	121	39
105°	123	190	760	1160	1093	131
115°	221	267	612	1212	1378	217
125°	303	344	555	939	1102	269
135°	364	404	540	761	858	282
145°	422	452	533	648	697	264
155°	476	492	528	581	599	219
165°	516	522	531	552	556	145
175°	534	535	532	540	538	51
180°	534	534	534	534	534	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1001.6	1001.6	1001.6	1001.6	1001.6
2.5°	1004.1	995.1	997.4	997.3	994.6
5°	985.3	975.4	981.8	984.1	987.5
7.5°	948.8	941.3	952.9	961.5	968.5
10°	920.3	913.8	928.6	941.1	950.2
12.5°	887.2	881.8	900.2	917.0	928.7
15°	833.3	830.3	852.6	875.8	890.8
17.5°	775.5	774.1	799.7	826.8	846.0
20°	736.1	735.7	763.8	792.0	814.4
22.5°	696.4	697.4	726.9	756.2	781.7
25°	636.8	638.5	671.5	700.8	731.7
27.5°	581.7	582.5	616.6	647.5	680.5
30°	544.1	546.2	579.7	611.7	646.0
32.5°	506.5	509.0	541.7	574.8	609.8
35°	450.0	452.2	482.6	515.0	551.6
37.5°	391.8	394.8	421.7	452.4	488.4
40°	354.2	358.5	382.4	411.3	446.5
42.5°	318.0	323.3	345.4	372.9	404.7
45°	269.8	275.0	293.1	315.3	344.1
47.5°	228.4	234.3	248.2	267.3	291.9
50°	204.8	210.4	223.3	237.4	260.6
52.5°	184.1	189.6	201.1	212.0	231.8
55°	155.1	161.6	171.0	177.4	192.1
57.5°	131.4	137.6	145.0	148.0	156.8
60°	115.6	122.5	129.2	128.9	133.6
62.5°	101.2	107.0	113.7	109.1	109.3
65°	77.8	84.2	91.9	80.3	73.0
67.5°	62.8	64.2	72.1	56.0	47.3
70°	55.8	55.8	58.0	43.3	36.0
72.5°	49.1	49.1	47.1	35.2	27.6
75°	39.1	39.1	35.6	24.4	16.7
77.5°	30.1	29.8	27.2	18.2	12.1
80°	24.2	24.2	22.0	14.4	9.7
82.5°	18.9	18.9	17.1	11.2	7.2
85°	11.0	11.0	10.1	6.5	4.0
87.5°	4.2	4.5	4.9	3.6	3.5
90°	1.7	3.4	6.8	7.7	8.5
92.5°	15.4	63.9	114.2	41.7	32.5
95°	36.8	135.4	454.0	186.6	121.4
97.5°	60.9	151.7	672.5	517.8	375.0
100°	78.7	161.4	753.2	758.6	616.4
102.5°	95.8	172.5	769.0	937.3	802.5
105°	123.1	190.0	760.1	1160.4	1092.7
107.5°	152.2	211.7	717.7	1268.0	1292.7
110°	172.7	226.2	684.8	1291.1	1371.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	191.2	242.7	654.1	1272.9	1391.2
115°	220.6	266.6	612.2	1211.9	1378.2
117.5°	246.2	292.0	584.6	1126.0	1315.3
120°	263.3	308.5	573.7	1067.9	1258.5
122.5°	279.8	322.9	564.8	1013.7	1194.2
125°	302.7	344.5	554.9	939.1	1102.1
127.5°	322.2	364.0	549.1	876.0	1016.6
130°	335.2	377.0	546.3	837.4	965.3
132.5°	347.5	387.3	543.6	805.0	920.8
135°	364.2	403.5	539.5	760.6	857.6
137.5°	383.0	418.8	537.4	723.3	806.1
140°	393.3	428.4	536.1	698.5	771.2
142.5°	404.9	437.4	534.7	676.4	740.4
145°	422.4	451.6	532.7	647.5	696.8
147.5°	439.1	464.7	530.8	623.1	661.4
150°	451.4	472.3	530.1	608.6	639.5
152.5°	461.0	480.6	529.4	596.2	621.7
155°	476.2	492.1	528.4	581.0	599.3
157.5°	490.2	502.5	528.6	569.9	582.4
160°	498.5	509.3	529.2	563.6	572.8
162.5°	505.3	514.8	529.9	558.1	565.3
165°	515.6	522.2	530.9	551.6	555.7
167.5°	523.4	527.4	531.8	547.6	548.9
170°	527.5	530.9	531.8	545.5	545.5
172.5°	530.9	533.0	531.8	542.7	542.1
175°	534.4	535.2	531.8	539.5	537.8
177.5°	535.7	535.1	531.6	536.4	535.0
180°	534.4	534.4	534.4	534.4	534.4

(END OF REPORT)