

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: P563968

Luminaire Tested: **SQ4-PR1-050U-050D-940-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P563968  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2106-289-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PR1-050U-050D-940-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

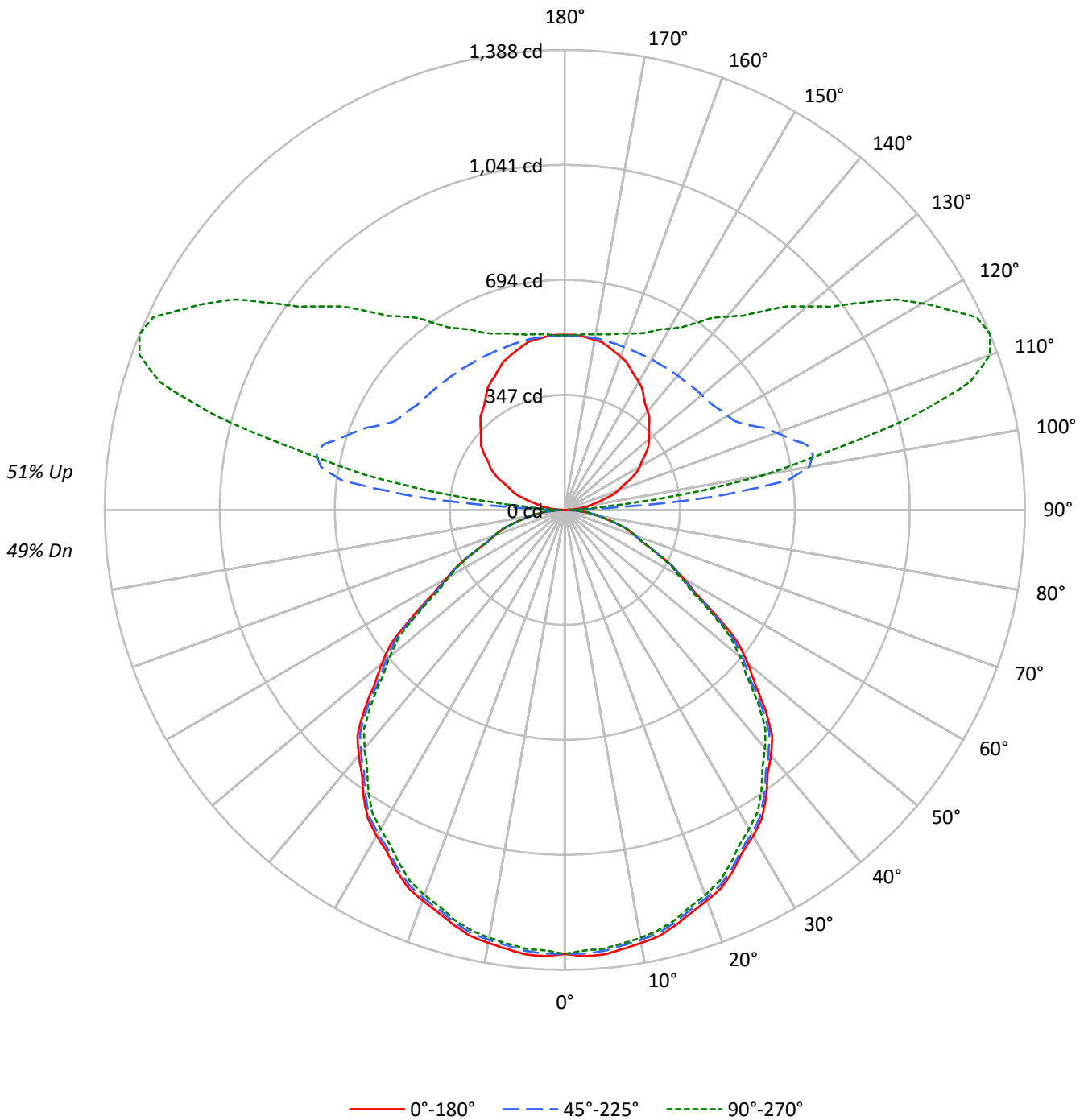
Lumens per Lamp: N/A  
Luminaire Lumens: 6796.4 lumens  
Efficiency: N/A  
Efficacy: 115.4 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 58.9  
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	49
1	98	94	90	86	90	87	83	80	73	71	69	61	59	58	49	48	47	42
2	89	82	76	71	82	76	71	66	64	61	57	54	51	49	44	42	40	36
3	82	72	65	60	75	67	61	56	57	52	48	48	44	41	39	37	35	31
4	75	64	56	51	69	60	53	48	51	46	42	43	39	36	35	32	30	26
5	69	57	49	43	63	53	46	41	46	40	36	38	34	31	32	29	26	23
6	63	51	43	38	58	48	41	36	41	36	31	35	31	27	29	26	23	20
7	59	47	39	33	54	43	36	31	37	32	28	32	27	24	26	23	21	18
8	54	42	35	29	50	39	33	28	34	29	25	29	25	22	24	21	19	16
9	51	39	31	26	47	36	29	25	31	26	22	27	22	19	22	19	17	15
10	47	35	28	23	44	33	27	22	29	24	20	25	20	18	21	18	15	13

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6182	6182	6182
5°	6238	6190	6158
10°	6218	6175	6143
15°	6191	6153	6119
20°	6160	6120	6075
25°	6117	6075	6005
30°	6051	6008	5922
35°	5962	5909	5825
40°	5826	5763	5659
45°	5588	5490	5377
50°	5169	5045	4946
55°	4512	4410	4317
60°	3802	3770	3696
65°	3289	3301	3276
70°	3020	3036	3036
75°	2902	2902	2921
80°	2728	2760	2728
85°	2202	2445	2445



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	126.7	1.9
10°-20°	362.6	5.3
20°-30°	546.9	8.0
30°-40°	651.7	9.6
40°-50°	642.5	9.5
50°-60°	491.0	7.2
60°-70°	303.9	4.5
70°-80°	172.6	2.5
80°-90°	54.5	0.8
90°-100°	253.2	3.7
100°-110°	687.8	10.1
110°-120°	707.2	10.4
120°-130°	565.4	8.3
130°-140°	444.3	6.5
140°-150°	340.7	5.0
150°-160°	245.0	3.6
160°-170°	149.8	2.2
170°-180°	50.5	0.7
0°-30°	1036.3	15.2
0°-40°	1687.9	24.8
0°-60°	2821.5	41.5
0°-90°	3352.4	49.3
90°-120°	1648.3	24.3
90°-150°	2998.6	44.1
90°-180°	3444.0	50.7
0°-180°	6796.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1340	1340	1340	1340	1340	
5°	1347	1332	1337	1332	1330	128
15°	1296	1283	1288	1284	1281	366
25°	1202	1187	1194	1181	1180	553
35°	1059	1046	1049	1035	1034	661
45°	856	845	842	826	824	656
55°	561	552	548	539	537	503
65°	301	299	302	300	300	305
75°	163	163	163	164	164	172
85°	42	44	46	46	46	48
90°	2	7	12	15	15	4
95°	37	138	441	192	129	40
105°	122	190	756	1152	1084	130
115°	217	264	606	1205	1372	214
125°	298	340	548	923	1089	266
135°	360	399	532	752	848	278
145°	416	445	526	639	687	261
155°	470	486	522	574	590	217
165°	509	515	524	546	548	144
175°	528	529	526	532	531	50
180°	528	528	528	528	528	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1340.2	1340.2	1340.2	1340.2	1340.2
2.5°	1348.5	1336.8	1340.2	1337.3	1331.0
5°	1347.1	1332.5	1336.8	1332.1	1329.8
7.5°	1336.8	1322.3	1326.6	1321.9	1320.6
10°	1327.5	1314.0	1318.3	1313.6	1311.4
12.5°	1317.4	1302.9	1308.1	1302.5	1300.3
15°	1296.4	1282.8	1288.3	1283.6	1281.3
17.5°	1273.3	1258.8	1264.3	1258.9	1256.0
20°	1254.8	1241.3	1246.7	1238.6	1237.5
22.5°	1234.5	1220.9	1226.4	1215.5	1215.3
25°	1201.7	1187.0	1193.6	1180.9	1179.8
27.5°	1162.7	1149.1	1154.6	1141.6	1140.3
30°	1135.9	1122.4	1127.8	1113.9	1111.7
32.5°	1105.4	1092.8	1097.3	1083.5	1082.1
35°	1058.6	1046.1	1049.3	1035.4	1034.3
37.5°	1005.2	993.9	995.8	980.5	979.4
40°	967.4	956.1	957.0	940.8	939.7
42.5°	925.8	914.5	913.6	897.4	896.2
45°	856.5	845.3	841.5	826.5	824.2
47.5°	777.6	766.3	759.3	747.1	745.5
50°	720.3	709.0	703.0	692.5	689.2
52.5°	658.5	647.2	642.1	632.5	629.1
55°	561.0	552.0	548.3	539.0	536.8
57.5°	468.4	462.3	461.3	452.3	451.4
60°	412.1	408.7	408.6	400.6	400.6
62.5°	364.1	361.6	363.4	358.1	357.2
65°	301.3	299.0	302.4	300.1	300.1
67.5°	251.7	251.7	253.7	252.8	252.8
70°	223.9	223.9	225.1	225.1	225.1
72.5°	199.0	198.1	201.1	201.1	200.2
75°	162.8	162.8	162.8	163.9	163.9
77.5°	126.7	127.0	127.9	127.7	126.7
80°	102.7	103.9	103.9	102.7	102.7
82.5°	78.7	79.9	79.9	79.6	78.7
85°	41.6	43.8	46.2	46.2	46.2
87.5°	12.3	17.0	20.8	21.5	20.6
90°	1.7	6.7	11.9	15.3	15.3
92.5°	15.3	69.3	120.4	51.7	43.8
95°	37.3	138.5	441.0	191.9	128.9
97.5°	61.7	152.9	676.0	525.9	369.4
100°	78.0	162.6	747.9	758.2	612.3
102.5°	94.3	172.2	766.9	937.7	809.0
105°	122.1	190.1	756.4	1151.7	1083.8
107.5°	150.9	211.0	712.7	1262.3	1281.2
110°	171.3	226.0	680.1	1284.0	1365.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	188.9	241.0	647.5	1266.0	1388.4
115°	217.1	263.5	605.5	1204.6	1372.1
117.5°	243.5	288.0	578.7	1117.6	1306.3
120°	261.2	304.3	566.5	1059.2	1246.6
122.5°	276.1	319.2	558.3	1000.7	1181.4
125°	298.5	340.0	547.8	923.0	1088.8
127.5°	318.5	359.6	542.0	864.1	1006.4
130°	330.7	370.5	539.3	827.2	954.9
132.5°	342.9	382.7	536.6	795.6	908.7
135°	359.6	399.4	532.5	751.8	848.0
137.5°	377.5	413.7	530.5	713.1	794.1
140°	388.4	423.2	529.2	688.5	761.5
142.5°	399.2	431.4	527.8	669.3	730.3
145°	415.5	445.4	525.8	638.8	686.9
147.5°	433.8	459.4	524.1	614.8	652.6
150°	446.1	467.6	524.1	601.1	630.9
152.5°	455.6	474.5	522.7	588.7	613.3
155°	469.8	486.4	522.4	573.6	590.2
157.5°	483.7	496.6	522.4	563.4	576.0
160°	491.8	503.5	522.4	556.5	566.5
162.5°	500.0	508.9	523.7	551.0	558.3
165°	508.8	515.4	524.1	546.2	547.8
167.5°	518.0	521.3	525.8	540.4	541.7
170°	520.7	524.0	525.8	537.6	537.6
172.5°	523.4	525.4	525.8	534.9	534.9
175°	527.5	529.1	525.8	532.5	530.9
177.5°	528.8	528.8	524.7	530.1	527.5
180°	527.5	527.5	527.5	527.5	527.5

(END OF REPORT)