

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: P564089

Luminaire Tested: **SQ4-PR1-075U-100D-830-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564089  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-PR1-075U-100D-830-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19226.7 lumens  
Efficiency: N/A  
Efficacy: 118.5 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

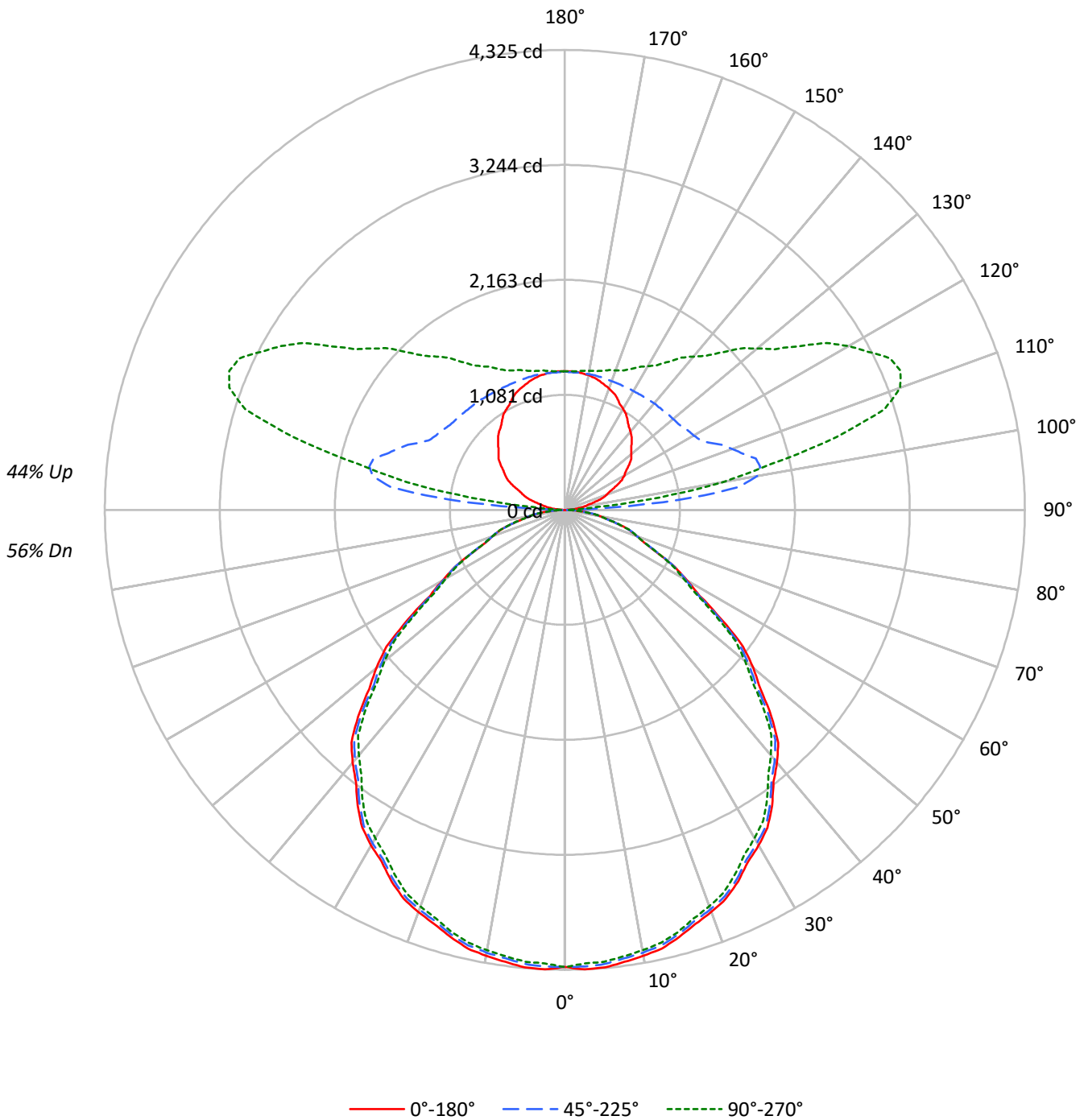
Input Watts (W): 162.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	56
1	99	95	91	88	92	89	85	82	76	74	72	65	64	62	55	54	53	48
2	91	84	77	72	84	78	73	68	67	63	60	58	55	52	49	47	45	41
3	83	74	66	61	77	69	62	57	60	55	51	51	48	45	43	41	38	35
4	76	65	58	52	71	61	54	49	53	48	44	46	42	38	39	36	33	30
5	70	58	50	44	65	55	48	42	48	42	38	41	37	33	35	32	29	26
6	65	53	44	39	60	49	42	37	43	37	33	37	33	29	32	29	26	23
7	60	47	40	34	55	45	37	32	39	33	29	34	30	26	29	26	23	21
8	55	43	35	30	52	41	34	29	36	30	26	31	27	23	27	23	21	18
9	52	39	32	27	48	37	30	26	33	27	23	29	24	21	25	21	19	17
10	48	36	29	24	45	34	28	23	30	25	21	27	22	19	23	20	17	15

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

	0°	45°	90°
0°	13220	13220	13220
5°	13339	13236	13168
10°	13297	13204	13135
15°	13238	13156	13085
20°	13172	13087	12990
25°	13079	12991	12840
30°	12938	12846	12662
35°	12747	12636	12455
40°	12456	12323	12099
45°	11948	11739	11498
50°	11054	10788	10576
55°	9648	9430	9231
60°	8130	8062	7903
65°	7032	7059	7005
70°	6459	6492	6492
75°	6204	6204	6248
80°	5836	5901	5836
85°	4704	5226	5226



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	406.5	2.1
10°-20°	1163.0	6.0
20°-30°	1754.2	9.1
30°-40°	2090.1	10.9
40°-50°	2060.7	10.7
50°-60°	1574.9	8.2
60°-70°	974.6	5.1
70°-80°	553.6	2.9
80°-90°	171.7	0.9
90°-100°	613.7	3.2
100°-110°	1688.6	8.8
110°-120°	1742.9	9.1
120°-130°	1396.4	7.3
130°-140°	1096.8	5.7
140°-150°	840.5	4.4
150°-160°	604.3	3.1
160°-170°	369.5	1.9
170°-180°	124.6	0.6
0°-30°	3323.7	17.3
0°-40°	5413.9	28.2
0°-60°	9049.4	47.1
0°-90°	10749.3	55.9
90°-120°	4045.3	21.0
90°-150°	7379.0	38.4
90°-180°	8477.0	44.1
0°-180°	19226.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4299	4299	4299	4299	4299	
5°	4321	4274	4288	4272	4265	410
15°	4158	4114	4132	4117	4110	1173
25°	3854	3807	3828	3788	3784	1774
35°	3395	3355	3366	3321	3317	2119
45°	2747	2711	2699	2651	2644	2105
55°	1799	1770	1759	1729	1722	1612
65°	966	959	970	963	963	979
75°	522	522	522	526	526	551
85°	133	140	148	148	148	155
90°	3	11	19	25	25	11
95°	91	335	1085	464	296	97
105°	302	464	1861	2834	2644	318
115°	534	651	1492	2972	3372	527
125°	736	839	1354	2290	2683	657
135°	889	986	1315	1852	2096	686
145°	1027	1098	1296	1578	1700	644
155°	1163	1201	1288	1418	1459	534
165°	1257	1273	1293	1346	1354	354
175°	1301	1304	1296	1312	1310	124
180°	1301	1301	1301	1301	1301	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4298.6	4298.6	4298.6	4298.6	4298.6
2.5°	4325.2	4287.6	4298.6	4289.2	4269.0
5°	4320.8	4273.7	4287.5	4272.5	4265.3
7.5°	4287.5	4241.1	4254.9	4240.0	4235.6
10°	4257.9	4214.4	4228.2	4213.3	4206.0
12.5°	4225.3	4178.9	4195.7	4177.7	4170.5
15°	4157.9	4114.4	4132.0	4117.0	4109.8
17.5°	4083.8	4037.5	4055.0	4037.7	4028.3
20°	4024.6	3981.2	3998.7	3972.7	3969.1
22.5°	3959.4	3916.0	3933.5	3898.7	3898.0
25°	3854.3	3807.2	3828.4	3787.6	3783.9
27.5°	3729.1	3685.7	3703.2	3661.7	3657.3
30°	3643.2	3599.8	3617.3	3572.7	3565.5
32.5°	3545.5	3505.0	3519.6	3475.1	3470.7
35°	3395.2	3355.4	3365.6	3321.0	3317.4
37.5°	3224.1	3187.9	3193.8	3144.8	3141.2
40°	3102.7	3066.5	3069.4	3017.4	3013.8
42.5°	2969.4	2933.2	2930.1	2878.2	2874.6
45°	2747.2	2711.0	2699.1	2650.8	2643.6
47.5°	2494.0	2457.8	2435.5	2396.1	2391.1
50°	2310.3	2274.1	2254.8	2221.2	2210.4
52.5°	2111.9	2075.7	2059.3	2028.7	2017.9
55°	1799.4	1770.4	1758.7	1728.9	1721.7
57.5°	1502.5	1482.9	1479.5	1450.6	1447.7
60°	1321.8	1310.9	1310.7	1284.8	1284.8
62.5°	1167.8	1159.8	1165.5	1148.4	1145.5
65°	966.3	959.1	970.1	962.6	962.6
67.5°	807.1	807.1	813.8	810.8	810.8
70°	718.3	718.3	722.0	722.0	722.0
72.5°	638.3	635.4	645.0	644.9	642.0
75°	522.1	522.1	522.1	525.8	525.8
77.5°	406.5	407.3	410.2	409.4	406.5
80°	329.5	333.1	333.2	329.5	329.5
82.5°	252.5	256.1	256.2	255.4	252.5
85°	133.3	140.5	148.1	148.1	148.1
87.5°	39.1	52.3	63.1	64.2	61.3
90°	2.8	10.9	19.4	24.9	24.9
92.5°	38.2	163.3	283.0	108.6	89.2
95°	91.4	335.0	1085.3	464.1	296.3
97.5°	149.0	371.5	1656.2	1276.1	900.4
100°	191.0	394.1	1835.7	1852.8	1511.7
102.5°	230.9	421.0	1882.2	2298.7	1985.7
105°	301.8	464.2	1860.6	2833.6	2644.1
107.5°	369.3	517.7	1754.8	3095.6	3151.9
110°	418.1	553.4	1675.1	3160.8	3355.7

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	462.4	593.4	1595.3	3118.8	3415.5
115°	534.4	650.8	1492.3	2971.6	3372.3
117.5°	603.0	710.2	1427.0	2765.2	3218.4
120°	645.1	748.0	1398.2	2610.5	3078.8
122.5°	682.8	785.6	1378.3	2474.8	2919.3
125°	736.5	839.4	1353.9	2290.3	2682.9
127.5°	787.4	885.4	1337.8	2136.4	2480.8
130°	814.0	914.2	1329.0	2044.9	2358.9
132.5°	845.0	945.2	1322.3	1964.5	2248.2
135°	888.8	986.2	1315.1	1852.3	2095.9
137.5°	929.7	1020.2	1309.0	1761.6	1962.5
140°	960.7	1044.7	1306.8	1701.3	1882.7
142.5°	987.3	1064.7	1302.4	1647.6	1803.0
145°	1027.2	1097.6	1295.8	1578.2	1700.0
147.5°	1069.8	1130.5	1292.4	1516.7	1614.2
150°	1096.4	1150.6	1290.2	1483.0	1558.8
152.5°	1120.8	1170.6	1288.0	1453.9	1516.7
155°	1162.9	1200.8	1287.5	1418.5	1459.1
157.5°	1193.3	1224.2	1287.5	1389.4	1417.6
160°	1215.5	1239.8	1287.5	1373.8	1395.4
162.5°	1233.2	1253.2	1289.7	1360.4	1377.7
165°	1257.0	1273.2	1293.0	1345.8	1353.9
167.5°	1273.6	1286.1	1295.8	1333.5	1335.6
170°	1284.7	1292.8	1295.8	1329.0	1329.0
172.5°	1293.5	1297.3	1295.8	1322.3	1320.1
175°	1301.3	1304.0	1295.8	1312.3	1309.6
177.5°	1303.5	1303.5	1294.7	1307.8	1303.5
180°	1301.3	1301.3	1301.3	1301.3	1301.3

(END OF REPORT)