

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: P564621

Luminaire Tested: **SQ4-PW1-050U-050D-835-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564621  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2106-289-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PW1-050U-050D-835-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11763.4 lumens  
Efficiency: N/A  
Efficacy: 147.8 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

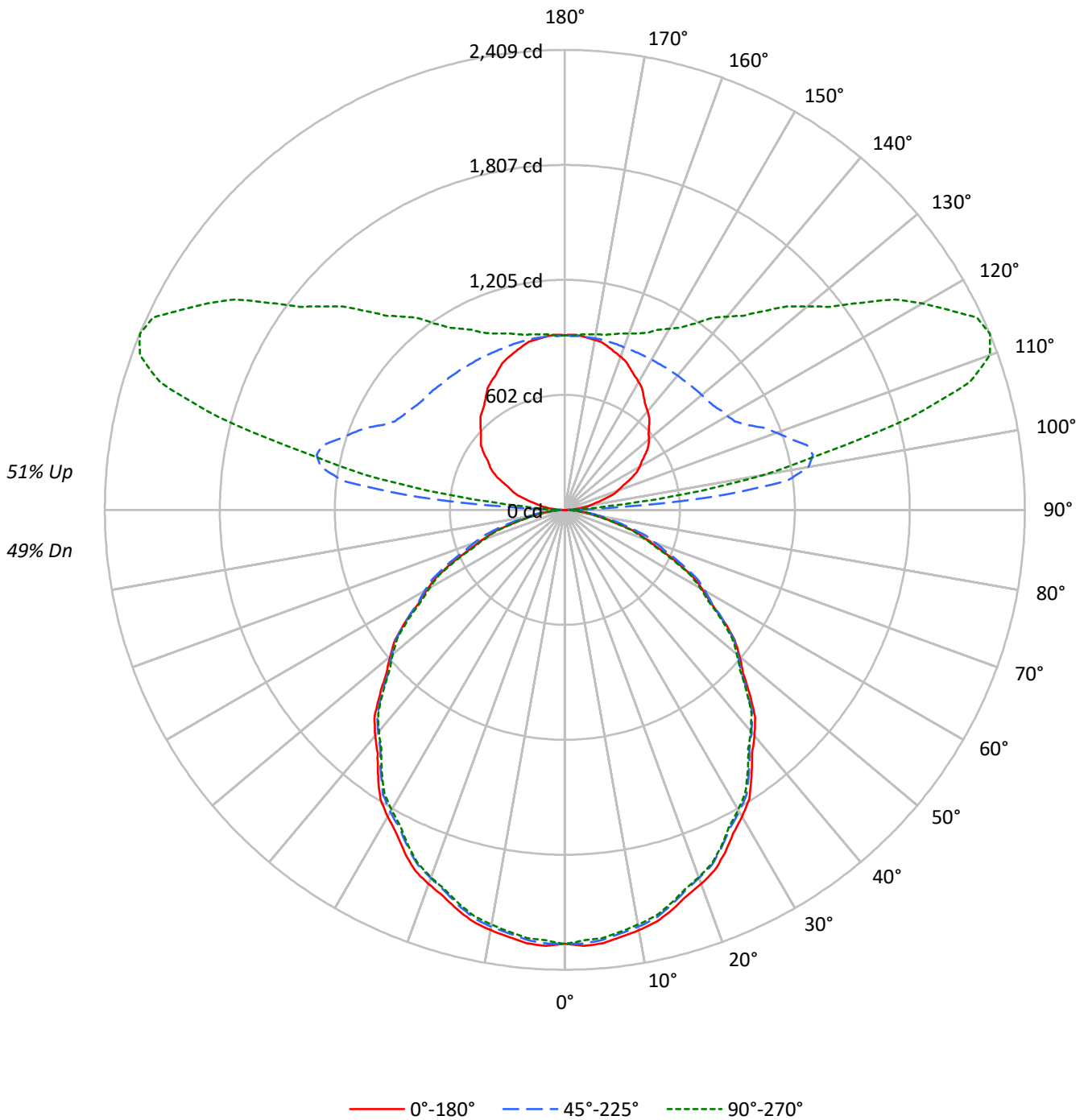
Input Watts (W): 79.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	55	55	55	49
1	98	93	90	86	90	86	83	80	73	70	68	60	59	57	49	48	47	42
2	89	82	76	70	82	75	70	66	64	60	57	53	50	48	43	41	40	35
3	81	72	65	59	75	66	60	55	56	52	48	47	44	41	38	36	34	30
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	34	32	29	26
5	68	57	49	43	63	53	45	40	45	39	35	38	33	30	31	28	25	22
6	63	51	43	37	58	47	40	35	40	35	31	34	30	26	28	25	22	19
7	58	46	38	32	53	43	36	31	37	31	27	31	27	23	26	22	20	17
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	24	20	18	15
9	50	38	31	26	46	35	29	24	31	25	21	26	22	19	22	19	16	14
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	15	13

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

	0°	45°	90°
0°	6992	6992	6992
5°	7037	6981	6950
10°	6980	6924	6887
15°	6906	6830	6805
20°	6824	6719	6706
25°	6729	6606	6586
30°	6587	6487	6444
35°	6400	6309	6272
40°	6200	6103	6079
45°	5959	5880	5854
50°	5712	5664	5626
55°	5445	5445	5359
60°	5113	5212	5026
65°	4679	4912	4562
70°	4125	4521	4017
75°	3522	4046	3427
80°	2731	3406	2766
85°	1768	2615	2332



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	214.1	1.8
10°-20°	604.4	5.1
20°-30°	896.5	7.6
30°-40°	1049.0	8.9
40°-50°	1044.3	8.9
50°-60°	901.8	7.7
60°-70°	649.2	5.5
70°-80°	340.4	2.9
80°-90°	87.9	0.7
90°-100°	439.4	3.7
100°-110°	1193.5	10.1
110°-120°	1227.1	10.4
120°-130°	981.1	8.3
130°-140°	770.9	6.6
140°-150°	591.1	5.0
150°-160°	425.1	3.6
160°-170°	260.0	2.2
170°-180°	87.6	0.7
0°-30°	1715.0	14.6
0°-40°	2764.0	23.5
0°-60°	4710.2	40.0
0°-90°	5787.7	49.2
90°-120°	2860.0	24.3
90°-150°	5203.1	44.2
90°-180°	5976.0	50.8
0°-180°	11763.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2273	2273	2273	2273	2273	
5°	2279	2254	2261	2255	2251	216
15°	2169	2142	2145	2141	2137	611
25°	1983	1950	1947	1935	1941	912
35°	1705	1681	1680	1665	1670	1066
45°	1370	1358	1352	1348	1346	1057
55°	1016	1014	1016	1002	1000	906
65°	643	662	675	648	627	637
75°	296	324	340	318	288	318
85°	50	66	74	70	66	66
90°	3	12	21	26	26	6
95°	65	240	765	333	224	69
105°	212	330	1312	1998	1880	225
115°	377	457	1051	2090	2381	372
125°	518	590	950	1602	1889	462
135°	624	693	924	1304	1471	482
145°	721	773	912	1108	1192	453
155°	815	844	906	995	1024	376
165°	883	894	909	948	950	249
175°	915	918	912	924	921	87
180°	915	915	915	915	915	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2273.4	2273.4	2273.4	2273.4	2273.4
2.5°	2286.2	2267.4	2273.4	2268.3	2257.4
5°	2279.4	2254.0	2261.4	2255.3	2251.4
7.5°	2256.2	2232.7	2238.2	2231.7	2229.3
10°	2235.3	2211.8	2217.3	2209.2	2205.3
12.5°	2211.3	2186.2	2191.7	2183.6	2181.3
15°	2169.2	2141.8	2145.2	2141.1	2137.2
17.5°	2120.4	2092.6	2093.1	2086.7	2085.9
20°	2085.1	2055.7	2053.1	2045.2	2049.1
22.5°	2046.7	2015.7	2013.0	2001.9	2007.4
25°	1983.0	1949.7	1946.9	1935.0	1940.9
27.5°	1909.3	1876.4	1876.4	1859.7	1866.0
30°	1854.8	1823.4	1826.7	1806.9	1814.7
32.5°	1797.1	1768.9	1770.7	1750.8	1758.6
35°	1704.6	1681.1	1680.5	1664.6	1670.5
37.5°	1610.0	1589.3	1586.0	1576.8	1578.4
40°	1544.3	1526.7	1520.3	1514.3	1514.3
42.5°	1475.4	1459.3	1453.0	1448.5	1447.0
45°	1370.1	1358.3	1352.0	1348.0	1346.0
47.5°	1265.9	1254.9	1249.5	1246.6	1244.7
50°	1193.8	1186.0	1183.8	1177.7	1175.8
52.5°	1121.7	1117.0	1114.9	1107.2	1105.3
55°	1015.5	1013.6	1015.5	1001.5	999.5
57.5°	905.0	908.1	914.6	895.6	890.9
60°	831.2	839.1	847.3	825.1	817.2
62.5°	755.9	768.5	780.0	754.5	743.5
65°	643.0	662.5	675.0	648.5	626.9
67.5°	534.0	558.3	573.3	544.7	520.4
70°	458.7	486.1	502.8	474.1	446.7
72.5°	393.0	423.5	437.1	410.0	382.6
75°	296.4	323.9	340.5	317.8	288.4
77.5°	210.3	236.2	250.0	230.2	205.9
80°	154.2	181.6	192.3	175.8	156.2
82.5°	109.4	132.1	139.4	129.5	116.2
85°	50.1	65.7	74.1	70.0	66.1
87.5°	13.4	26.1	34.6	35.8	37.3
90°	2.9	11.6	20.6	26.5	26.5
92.5°	26.5	120.3	208.9	89.7	75.9
95°	64.7	240.3	765.1	333.0	223.7
97.5°	107.1	265.4	1173.0	912.6	641.0
100°	135.4	282.1	1297.8	1315.6	1062.4
102.5°	163.6	298.9	1330.8	1627.0	1403.7
105°	211.9	329.9	1312.5	1998.4	1880.5
107.5°	261.9	366.1	1236.6	2190.2	2223.0
110°	297.2	392.2	1180.1	2228.0	2369.0

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	327.8	418.2	1123.6	2196.7	2409.0
115°	376.7	457.3	1050.6	2090.1	2380.8
117.5°	422.6	499.7	1004.1	1939.1	2266.6
120°	453.2	528.0	982.9	1837.8	2163.0
122.5°	479.1	553.9	968.8	1736.3	2050.0
125°	517.9	589.9	950.5	1601.6	1889.3
127.5°	552.7	624.0	940.5	1499.4	1746.3
130°	573.9	642.9	935.8	1435.3	1656.8
132.5°	595.0	664.1	931.1	1380.5	1576.8
135°	623.9	692.9	924.1	1304.5	1471.4
137.5°	655.1	717.8	920.5	1237.4	1377.8
140°	673.9	734.3	918.2	1194.7	1321.3
142.5°	692.7	748.6	915.8	1161.3	1267.2
145°	721.0	772.8	912.3	1108.4	1191.8
147.5°	752.8	797.1	909.3	1066.8	1132.4
150°	774.0	811.4	909.3	1042.9	1094.7
152.5°	790.4	823.2	907.0	1021.5	1064.1
155°	815.2	843.9	906.4	995.3	1024.1
157.5°	839.3	861.7	906.4	977.5	999.4
160°	853.4	873.6	906.4	965.6	982.9
162.5°	867.5	883.1	908.7	956.1	968.8
165°	882.9	894.4	909.3	947.7	950.5
167.5°	898.7	904.5	912.3	937.6	939.9
170°	903.5	909.2	912.3	932.9	932.9
172.5°	908.2	911.6	912.3	928.2	928.2
175°	915.2	918.1	912.3	924.0	921.1
177.5°	917.6	917.6	910.5	919.8	915.2
180°	915.2	915.2	915.2	915.2	915.2

(END OF REPORT)