

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: P563956

Luminaire Tested: **SQ4-PR1-050U-050D-840-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P563956  
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-840-1D-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, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

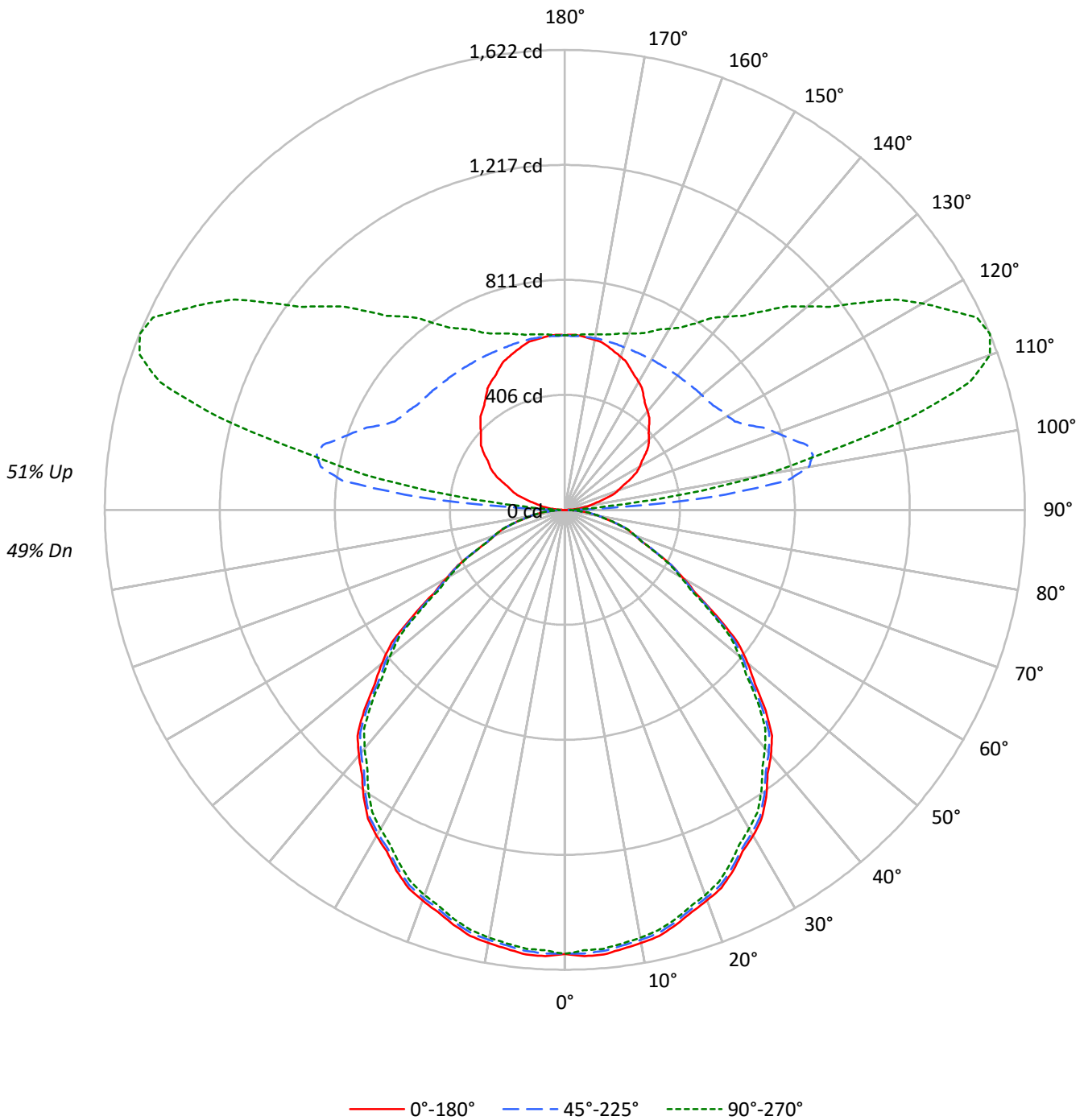
Lumens per Lamp: N/A  
Luminaire Lumens: 7940.9 lumens  
Efficiency: N/A  
Efficacy: 134.8 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

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				
RC	80					70					50					30				
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°	7224	7224	7224
5°	7289	7233	7195
10°	7266	7215	7177
15°	7234	7189	7150
20°	7197	7151	7098
25°	7147	7099	7016
30°	7070	7019	6919
35°	6965	6904	6806
40°	6807	6733	6612
45°	6529	6415	6283
50°	6040	5895	5779
55°	5272	5153	5044
60°	4442	4406	4318
65°	3842	3858	3828
70°	3530	3547	3547
75°	3390	3390	3413
80°	3188	3225	3188
85°	2572	2858	2858



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	148.1	1.9
10°-20°	423.7	5.3
20°-30°	639.0	8.0
30°-40°	761.4	9.6
40°-50°	750.7	9.5
50°-60°	573.7	7.2
60°-70°	355.0	4.5
70°-80°	201.7	2.5
80°-90°	63.7	0.8
90°-100°	295.8	3.7
100°-110°	803.7	10.1
110°-120°	826.3	10.4
120°-130°	660.7	8.3
130°-140°	519.1	6.5
140°-150°	398.0	5.0
150°-160°	286.2	3.6
160°-170°	175.1	2.2
170°-180°	59.0	0.7
0°-30°	1210.8	15.2
0°-40°	1972.2	24.8
0°-60°	3296.6	41.5
0°-90°	3917.0	49.3
90°-120°	1925.8	24.3
90°-150°	3503.7	44.1
90°-180°	4024.0	50.7
0°-180°	7940.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1566	1566	1566	1566	1566	
5°	1574	1557	1562	1556	1554	149
15°	1515	1499	1505	1500	1497	427
25°	1404	1387	1395	1380	1378	646
35°	1237	1222	1226	1210	1208	772
45°	1001	988	983	966	963	767
55°	656	645	641	630	627	587
65°	352	349	353	351	351	357
75°	190	190	190	192	192	201
85°	49	51	54	54	54	56
90°	2	8	14	18	18	5
95°	44	162	515	224	151	46
105°	143	222	884	1346	1266	152
115°	254	308	707	1407	1603	250
125°	349	397	640	1078	1272	311
135°	420	467	622	878	991	325
145°	486	520	614	746	803	305
155°	549	568	610	670	690	253
165°	594	602	612	638	640	168
175°	616	618	614	622	620	59
180°	616	616	616	616	616	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1565.9	1565.9	1565.9	1565.9	1565.9
2.5°	1575.6	1561.9	1565.9	1562.5	1555.1
5°	1574.0	1556.9	1561.9	1556.4	1553.8
7.5°	1561.9	1545.0	1550.0	1544.6	1543.0
10°	1551.1	1535.3	1540.3	1534.8	1532.2
12.5°	1539.2	1522.3	1528.4	1521.9	1519.2
15°	1514.7	1498.8	1505.2	1499.8	1497.1
17.5°	1487.7	1470.8	1477.2	1470.9	1467.5
20°	1466.1	1450.3	1456.7	1447.2	1445.9
22.5°	1442.4	1426.5	1432.9	1420.2	1420.0
25°	1404.1	1386.9	1394.6	1379.8	1378.4
27.5°	1358.5	1342.7	1349.0	1333.9	1332.3
30°	1327.2	1311.4	1317.7	1301.5	1298.9
32.5°	1291.6	1276.8	1282.1	1265.9	1264.3
35°	1236.8	1222.3	1226.0	1209.8	1208.5
37.5°	1174.5	1161.3	1163.4	1145.6	1144.3
40°	1130.3	1117.1	1118.1	1099.2	1097.9
42.5°	1081.7	1068.5	1067.4	1048.5	1047.2
45°	1000.8	987.6	983.3	965.7	963.0
47.5°	908.5	895.3	887.2	872.9	871.0
50°	841.6	828.4	821.4	809.2	805.2
52.5°	769.3	756.1	750.2	739.0	735.1
55°	655.5	644.9	640.7	629.8	627.2
57.5°	547.3	540.2	539.0	528.4	527.4
60°	481.5	477.6	477.5	468.0	468.0
62.5°	425.4	422.5	424.6	418.4	417.3
65°	352.0	349.4	353.4	350.7	350.7
67.5°	294.0	294.0	296.5	295.4	295.4
70°	261.7	261.7	263.0	263.0	263.0
72.5°	232.5	231.5	235.0	234.9	233.9
75°	190.2	190.2	190.2	191.5	191.5
77.5°	148.1	148.4	149.4	149.1	148.1
80°	120.0	121.4	121.4	120.0	120.0
82.5°	92.0	93.3	93.3	93.0	92.0
85°	48.6	51.2	54.0	54.0	54.0
87.5°	14.4	19.8	24.4	25.1	24.1
90°	2.0	7.8	13.9	17.8	17.8
92.5°	17.8	81.0	140.7	60.4	51.1
95°	43.6	161.8	515.2	224.2	150.6
97.5°	72.1	178.7	789.9	614.5	431.6
100°	91.2	190.0	873.9	885.9	715.4
102.5°	110.2	201.2	896.1	1095.6	945.2
105°	142.7	222.1	883.8	1345.7	1266.3
107.5°	176.4	246.5	832.7	1474.8	1496.9
110°	200.1	264.1	794.6	1500.3	1595.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	220.8	281.6	756.6	1479.2	1622.2
115°	253.6	307.9	707.4	1407.4	1603.1
117.5°	284.6	336.5	676.1	1305.8	1526.3
120°	305.2	355.5	661.9	1237.6	1456.5
122.5°	322.6	373.0	652.4	1169.2	1380.4
125°	348.8	397.2	640.1	1078.4	1272.2
127.5°	372.2	420.2	633.3	1009.7	1175.9
130°	386.4	432.9	630.2	966.5	1115.7
132.5°	400.7	447.2	627.0	929.6	1061.8
135°	420.1	466.6	622.2	878.4	990.8
137.5°	441.1	483.4	619.9	833.2	927.8
140°	453.8	494.5	618.3	804.5	889.8
142.5°	466.5	504.1	616.7	782.0	853.3
145°	485.5	520.4	614.3	746.4	802.6
147.5°	506.9	536.7	612.3	718.4	762.5
150°	521.2	546.4	612.3	702.3	737.2
152.5°	532.3	554.4	610.7	687.9	716.6
155°	548.9	568.3	610.3	670.2	689.6
157.5°	565.2	580.3	610.3	658.2	673.0
160°	574.7	588.2	610.3	650.2	661.9
162.5°	584.2	594.6	611.9	643.8	652.4
165°	594.5	602.2	612.3	638.1	640.1
167.5°	605.2	609.1	614.3	631.4	632.9
170°	608.4	612.2	614.3	628.2	628.2
172.5°	611.5	613.9	614.3	625.0	625.0
175°	616.3	618.2	614.3	622.2	620.3
177.5°	617.9	617.9	613.1	619.4	616.3
180°	616.3	616.3	616.3	616.3	616.3

(END OF REPORT)