

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: P563978

Luminaire Tested: **SQ4-PR1-050U-075D-840-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P563978  
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-075D-840-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

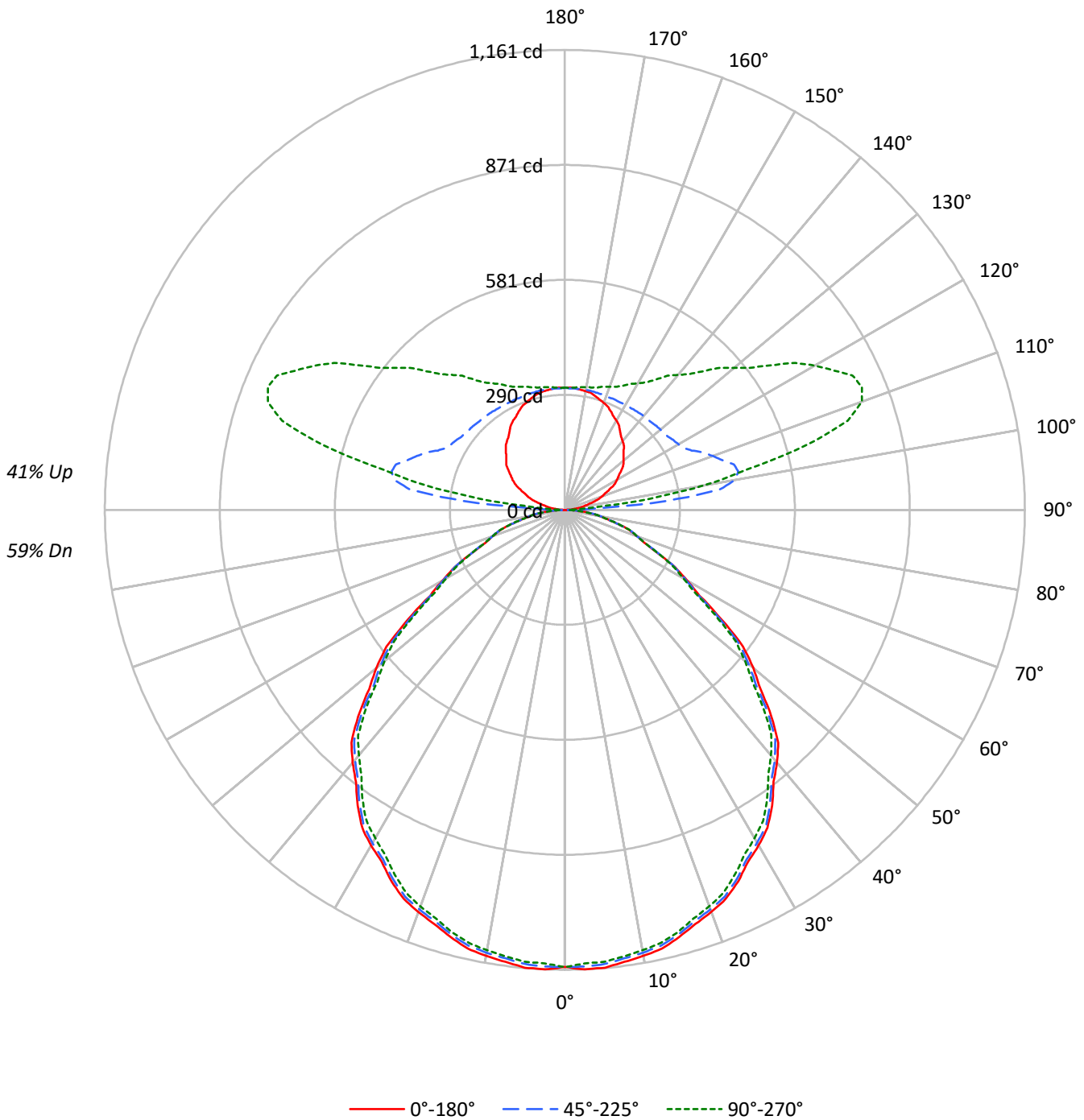
Lumens per Lamp: N/A  
Luminaire Lumens: 4898.0 lumens  
Efficiency: N/A  
Efficacy: 134.9 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 36.3  
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	109	109	109	109	102	102	102	102	88	88	88	76	76	76	64	64	64	59
1	100	96	92	89	93	90	86	83	78	76	73	67	65	64	57	56	55	50
2	91	84	78	73	85	79	73	69	69	65	61	59	56	54	51	49	47	43
3	84	74	67	61	78	70	63	58	61	56	52	53	49	46	45	43	40	37
4	77	66	58	52	71	62	55	49	54	49	44	47	43	40	41	38	35	32
5	71	59	51	45	66	55	48	43	49	43	39	43	38	35	37	33	31	28
6	65	53	45	39	61	50	43	37	44	38	34	39	34	30	33	30	27	24
7	60	48	40	34	56	45	38	33	40	34	30	35	30	27	31	27	24	22
8	56	44	36	30	52	41	34	29	37	31	27	32	28	24	28	24	22	19
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	26	22	20	17
10	49	37	29	25	46	35	28	24	31	25	22	27	23	20	24	20	18	16

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

	0°	45°	90°
0°	10647	10647	10647
5°	10743	10660	10604
10°	10709	10634	10578
15°	10662	10596	10538
20°	10608	10540	10461
25°	10533	10463	10341
30°	10420	10346	10198
35°	10266	10176	10031
40°	10031	9924	9745
45°	9623	9454	9260
50°	8902	8688	8517
55°	7771	7594	7435
60°	6547	6493	6364
65°	5663	5685	5641
70°	5201	5228	5228
75°	4994	4994	5030
80°	4702	4755	4702
85°	3790	4213	4213



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.1	2.2
10°-20°	312.2	6.4
20°-30°	470.9	9.6
30°-40°	561.1	11.5
40°-50°	553.2	11.3
50°-60°	422.8	8.6
60°-70°	261.6	5.3
70°-80°	148.6	3.0
80°-90°	46.4	0.9
90°-100°	147.9	3.0
100°-110°	401.8	8.2
110°-120°	413.2	8.4
120°-130°	330.3	6.7
130°-140°	259.5	5.3
140°-150°	199.0	4.1
150°-160°	143.1	2.9
160°-170°	87.5	1.8
170°-180°	29.5	0.6
0°-30°	892.3	18.2
0°-40°	1453.4	29.7
0°-60°	2429.4	49.6
0°-90°	2886.0	58.9
90°-120°	962.9	19.7
90°-150°	1751.8	35.8
90°-180°	2012.0	41.1
0°-180°	4898.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1154	1154	1154	1154	1154	
5°	1160	1147	1151	1147	1145	110
15°	1116	1105	1109	1105	1103	315
25°	1035	1022	1028	1017	1016	476
35°	912	901	904	892	891	569
45°	738	728	725	712	710	565
55°	483	475	472	464	462	433
65°	259	258	260	258	258	263
75°	140	140	140	141	141	148
85°	36	38	40	40	40	42
90°	1	4	7	9	9	3
95°	22	81	258	112	75	23
105°	71	111	442	673	633	76
115°	127	154	354	704	802	125
125°	174	199	320	539	636	155
135°	210	233	311	439	495	162
145°	243	260	307	373	401	152
155°	274	284	305	335	345	127
165°	297	301	306	319	320	84
175°	308	309	307	311	310	29
180°	308	308	308	308	308	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1154.0	1154.0	1154.0	1154.0	1154.0
2.5°	1161.1	1151.0	1154.0	1151.5	1146.0
5°	1160.0	1147.3	1151.0	1147.0	1145.0
7.5°	1151.0	1138.6	1142.3	1138.3	1137.1
10°	1143.1	1131.4	1135.1	1131.1	1129.1
12.5°	1134.3	1121.9	1126.4	1121.5	1119.6
15°	1116.2	1104.6	1109.3	1105.2	1103.3
17.5°	1096.3	1083.9	1088.6	1084.0	1081.4
20°	1080.4	1068.8	1073.5	1066.5	1065.5
22.5°	1062.9	1051.3	1056.0	1046.6	1046.4
25°	1034.7	1022.1	1027.8	1016.8	1015.8
27.5°	1001.1	989.5	994.2	983.0	981.8
30°	978.1	966.4	971.1	959.1	957.2
32.5°	951.8	940.9	944.9	932.9	931.7
35°	911.5	900.8	903.5	891.6	890.6
37.5°	865.5	855.8	857.4	844.2	843.3
40°	832.9	823.2	824.0	810.1	809.1
42.5°	797.2	787.4	786.6	772.7	771.7
45°	737.5	727.8	724.6	711.6	709.7
47.5°	669.5	659.8	653.8	643.3	641.9
50°	620.2	610.5	605.3	596.3	593.4
52.5°	567.0	557.2	552.8	544.6	541.7
55°	483.1	475.3	472.1	464.1	462.2
57.5°	403.3	398.1	397.2	389.4	388.6
60°	354.8	351.9	351.9	344.9	344.9
62.5°	313.5	311.4	312.9	308.3	307.5
65°	259.4	257.5	260.4	258.4	258.4
67.5°	216.7	216.7	218.5	217.7	217.7
70°	192.8	192.8	193.8	193.8	193.8
72.5°	171.4	170.6	173.1	173.1	172.4
75°	140.1	140.1	140.1	141.1	141.1
77.5°	109.1	109.3	110.1	109.9	109.1
80°	88.5	89.4	89.5	88.5	88.5
82.5°	67.8	68.8	68.8	68.6	67.8
85°	35.8	37.7	39.8	39.8	39.8
87.5°	10.5	14.2	17.3	17.7	16.9
90°	1.0	3.9	6.9	8.9	8.9
92.5°	8.9	40.5	70.3	30.2	25.6
95°	21.8	80.9	257.6	112.1	75.3
97.5°	36.1	89.3	394.9	307.3	215.8
100°	45.6	95.0	437.0	442.9	357.7
102.5°	55.1	100.6	448.0	547.8	472.6
105°	71.3	111.1	441.9	672.9	633.1
107.5°	88.2	123.3	416.3	737.4	748.5
110°	100.1	132.0	397.3	750.1	797.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	110.4	140.8	378.3	739.6	811.1
115°	126.8	154.0	353.7	703.7	801.6
117.5°	142.3	168.2	338.1	652.9	763.1
120°	152.6	177.8	330.9	618.8	728.3
122.5°	161.3	186.5	326.2	584.6	690.2
125°	174.4	198.6	320.0	539.2	636.1
127.5°	186.1	210.1	316.7	504.8	588.0
130°	193.2	216.5	315.1	483.2	557.8
132.5°	200.3	223.6	313.5	464.8	530.9
135°	210.1	233.3	311.1	439.2	495.4
137.5°	220.6	241.7	309.9	416.6	463.9
140°	226.9	247.2	309.1	402.2	444.9
142.5°	233.2	252.0	308.3	391.0	426.6
145°	242.8	260.2	307.2	373.2	401.3
147.5°	253.5	268.4	306.2	359.2	381.3
150°	260.6	273.2	306.2	351.1	368.6
152.5°	266.1	277.2	305.4	343.9	358.3
155°	274.5	284.1	305.2	335.1	344.8
157.5°	282.6	290.1	305.2	329.1	336.5
160°	287.3	294.1	305.2	325.1	330.9
162.5°	292.1	297.3	306.0	321.9	326.2
165°	297.2	301.1	306.2	319.1	320.0
167.5°	302.6	304.5	307.2	315.7	316.5
170°	304.2	306.1	307.2	314.1	314.1
172.5°	305.8	306.9	307.2	312.5	312.5
175°	308.1	309.1	307.2	311.1	310.1
177.5°	308.9	308.9	306.6	309.7	308.1
180°	308.1	308.1	308.1	308.1	308.1

(END OF REPORT)