

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: P563980

Luminaire Tested: **SQ4-PR1-050U-075D-840-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563980
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-8
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

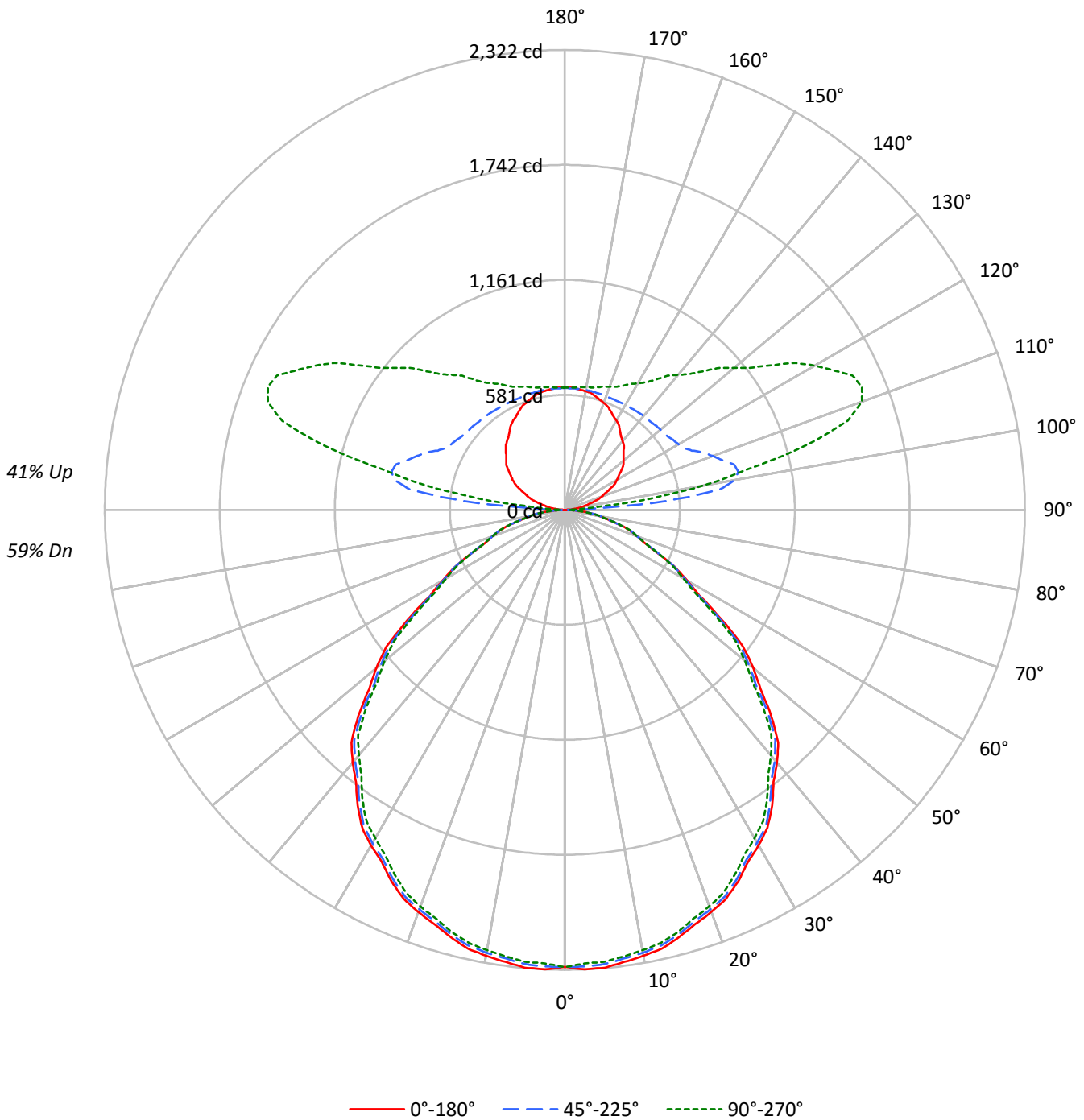
Lumens per Lamp: N/A
Luminaire Lumens: 9796.0 lumens
Efficiency: N/A
Efficacy: 125.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 78.1
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	10605
10°	10709	10634	10578
15°	10662	10595	10538
20°	10608	10540	10462
25°	10533	10462	10341
30°	10420	10346	10198
35°	10266	10176	10031
40°	10032	9924	9745
45°	9623	9454	9260
50°	8903	8688	8517
55°	7770	7595	7435
60°	6548	6492	6364
65°	5663	5685	5642
70°	5202	5228	5228
75°	4996	4996	5032
80°	4699	4753	4699
85°	3790	4208	4208



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.3	2.2
10°-20°	624.4	6.4
20°-30°	941.9	9.6
30°-40°	1122.2	11.5
40°-50°	1106.4	11.3
50°-60°	845.6	8.6
60°-70°	523.3	5.3
70°-80°	297.2	3.0
80°-90°	92.8	0.9
90°-100°	295.8	3.0
100°-110°	803.7	8.2
110°-120°	826.3	8.4
120°-130°	660.7	6.7
130°-140°	519.1	5.3
140°-150°	398.0	4.1
150°-160°	286.2	2.9
160°-170°	175.1	1.8
170°-180°	59.0	0.6
0°-30°	1784.6	18.2
0°-40°	2906.8	29.7
0°-60°	4858.8	49.6
0°-90°	5772.1	58.9
90°-120°	1925.8	19.7
90°-150°	3503.7	35.8
90°-180°	4024.0	41.1
0°-180°	9796.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2308	2308	2308	2308	2308	
5°	2320	2295	2302	2294	2290	220
15°	2232	2209	2218	2210	2207	630
25°	2069	2044	2056	2034	2032	952
35°	1823	1802	1807	1783	1781	1138
45°	1475	1456	1449	1423	1419	1130
55°	966	951	944	928	924	866
65°	519	515	521	517	517	526
75°	280	280	280	282	282	296
85°	72	76	80	80	80	83
90°	2	8	14	18	18	6
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°	2308.0	2308.0	2308.0	2308.0	2308.0
2.5°	2322.3	2302.1	2308.0	2303.0	2292.1
5°	2319.9	2294.6	2302.0	2294.0	2290.1
7.5°	2302.0	2277.1	2284.5	2276.5	2274.2
10°	2286.1	2262.8	2270.2	2262.2	2258.3
12.5°	2268.6	2243.7	2252.7	2243.1	2239.2
15°	2232.4	2209.1	2218.5	2210.5	2206.6
17.5°	2192.7	2167.8	2177.2	2167.9	2162.9
20°	2160.9	2137.5	2147.0	2133.0	2131.1
22.5°	2125.9	2102.6	2112.0	2093.3	2092.9
25°	2069.4	2044.2	2055.5	2033.6	2031.7
27.5°	2002.2	1978.9	1988.3	1966.0	1963.7
30°	1956.1	1932.8	1942.2	1918.3	1914.4
32.5°	1903.6	1881.9	1889.7	1865.8	1863.5
35°	1822.9	1801.5	1807.0	1783.1	1781.2
37.5°	1731.1	1711.6	1714.8	1688.5	1686.6
40°	1665.9	1646.4	1648.0	1620.1	1618.2
42.5°	1594.3	1574.9	1573.2	1545.4	1543.4
45°	1475.0	1455.6	1449.2	1423.3	1419.4
47.5°	1339.1	1319.6	1307.7	1286.5	1283.8
50°	1240.5	1221.0	1210.6	1192.6	1186.8
52.5°	1133.9	1114.5	1105.7	1089.3	1083.4
55°	966.1	950.6	944.3	928.3	924.4
57.5°	806.7	796.2	794.4	778.8	777.3
60°	709.7	703.9	703.7	689.8	689.8
62.5°	627.0	622.7	625.8	616.6	615.1
65°	518.8	515.0	520.8	516.9	516.9
67.5°	433.4	433.4	436.9	435.4	435.4
70°	385.7	385.7	387.6	387.6	387.6
72.5°	342.7	341.2	346.3	346.3	344.7
75°	280.3	280.3	280.3	282.3	282.3
77.5°	218.3	218.7	220.3	219.8	218.3
80°	176.9	178.9	178.9	176.9	176.9
82.5°	135.6	137.5	137.6	137.1	135.6
85°	71.6	75.5	79.5	79.5	79.5
87.5°	21.1	28.5	34.6	35.3	33.8
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)