

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: P563994

Luminaire Tested: **SQ4-PR1-050U-100D-830-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563994
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-100D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

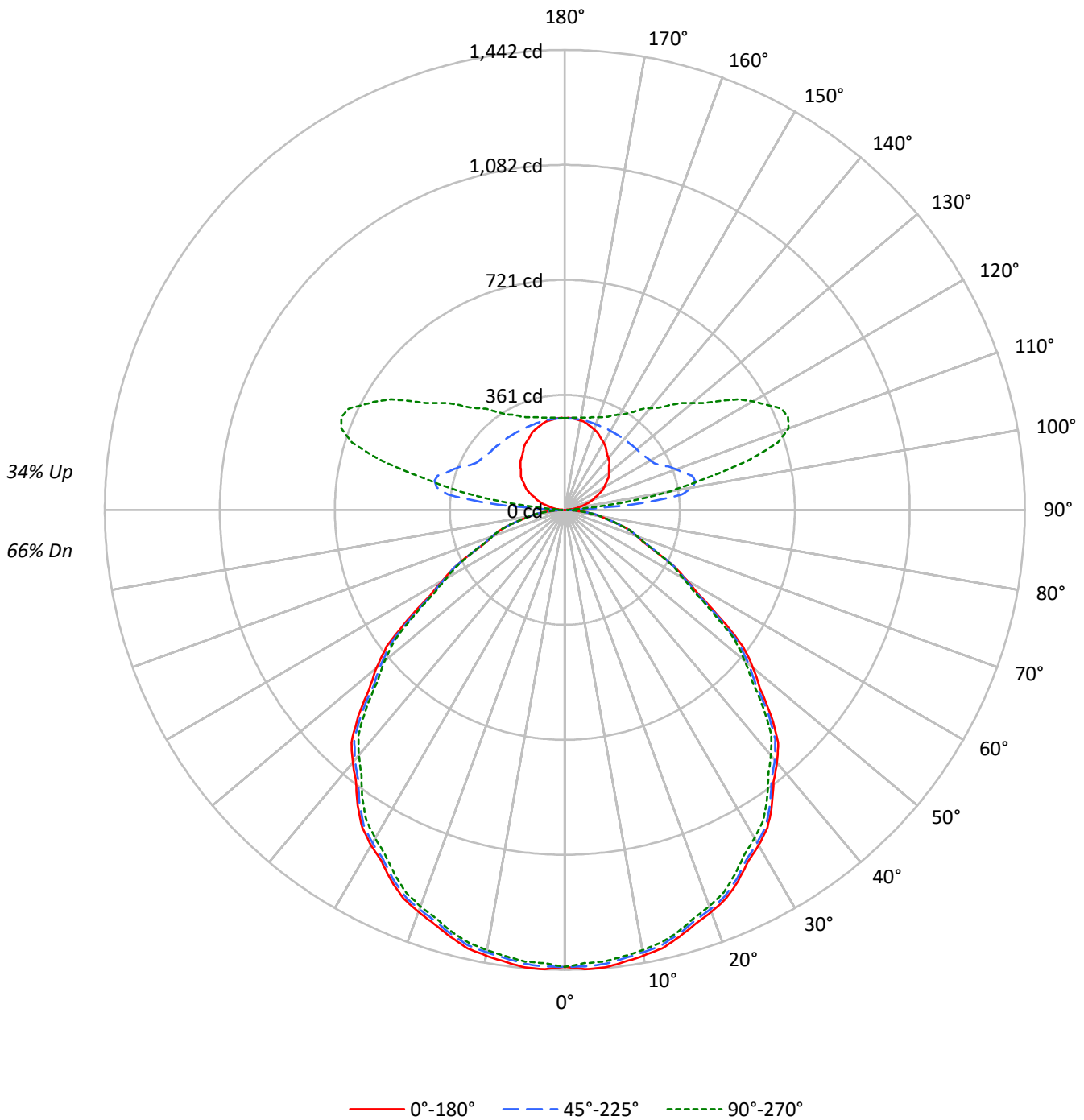
Lumens per Lamp: N/A
Luminaire Lumens: 5463.2 lumens
Efficiency: N/A
Efficacy: 121.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 45.1
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	50	30	10	0	
RCR																						
0	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	66				
1	102	97	94	90	95	92	88	85	81	79	76	72	70	68	63	62	60	56				
2	93	85	79	74	87	81	75	71	72	68	64	63	60	57	56	53	51	48				
3	85	76	68	62	80	71	65	60	64	58	54	56	52	49	50	47	44	41				
4	78	67	59	53	73	64	56	51	57	51	47	51	46	42	45	41	38	35				
5	72	60	52	46	67	57	50	44	51	45	40	46	41	37	40	37	34	31				
6	66	54	46	40	62	51	44	38	46	40	35	41	36	33	37	33	30	27				
7	61	49	41	35	58	47	39	34	42	36	31	38	33	29	34	30	26	24				
8	57	45	37	31	54	42	35	30	38	32	28	34	30	26	31	27	24	22				
9	53	41	33	28	50	39	32	27	35	29	25	32	27	23	29	24	21	19				
10	50	37	30	25	47	36	29	24	33	27	23	29	25	21	26	22	20	18				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13220	13220	13220
5°	13339	13236	13168
10°	13297	13204	13135
15°	13239	13156	13085
20°	13171	13087	12990
25°	13079	12991	12840
30°	12938	12846	12662
35°	12746	12636	12455
40°	12456	12322	12099
45°	11948	11739	11498
50°	11054	10788	10576
55°	9648	9429	9231
60°	8130	8062	7903
65°	7032	7060	7006
70°	6458	6493	6493
75°	6203	6203	6249
80°	5834	5903	5834
85°	4700	5229	5229



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.5	2.5
10°-20°	387.7	7.1
20°-30°	584.7	10.7
30°-40°	696.7	12.8
40°-50°	686.9	12.6
50°-60°	525.0	9.6
60°-70°	324.9	5.9
70°-80°	184.5	3.4
80°-90°	57.2	1.0
90°-100°	138.2	2.5
100°-110°	375.5	6.9
110°-120°	386.1	7.1
120°-130°	308.7	5.7
130°-140°	242.5	4.4
140°-150°	186.0	3.4
150°-160°	133.7	2.4
160°-170°	81.8	1.5
170°-180°	27.6	0.5
0°-30°	1107.9	20.3
0°-40°	1804.6	33.0
0°-60°	3016.5	55.2
0°-90°	3583.1	65.6
90°-120°	899.8	16.5
90°-150°	1637.0	30.0
90°-180°	1880.0	34.4
0°-180°	5463.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1433	1433	1433	1433	1433	
5°	1440	1425	1429	1424	1422	137
15°	1386	1372	1377	1372	1370	391
25°	1285	1269	1276	1262	1261	591
35°	1132	1118	1122	1107	1106	706
45°	916	904	900	884	881	702
55°	600	590	586	576	574	537
65°	322	320	323	321	321	326
75°	174	174	174	175	175	184
85°	44	47	49	49	49	52
90°	1	4	6	8	8	3
95°	20	76	241	105	70	22
105°	67	104	413	629	592	71
115°	118	144	330	658	749	117
125°	163	186	299	504	594	145
135°	196	218	291	410	463	152
145°	227	243	287	349	375	142
155°	256	266	285	313	322	118
165°	278	281	286	298	299	78
175°	288	289	287	291	290	27
180°	288	288	288	288	288	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1432.9	1432.9	1432.9	1432.9	1432.9
2.5°	1441.7	1429.2	1432.9	1429.7	1423.0
5°	1440.3	1424.6	1429.2	1424.2	1421.8
7.5°	1429.2	1413.7	1418.3	1413.3	1411.9
10°	1419.3	1404.8	1409.4	1404.4	1402.0
12.5°	1408.4	1393.0	1398.6	1392.6	1390.2
15°	1386.0	1371.5	1377.3	1372.3	1369.9
17.5°	1361.3	1345.8	1351.7	1345.9	1342.8
20°	1341.5	1327.1	1332.9	1324.2	1323.0
22.5°	1319.8	1305.3	1311.2	1299.6	1299.3
25°	1284.8	1269.1	1276.1	1262.5	1261.3
27.5°	1243.0	1228.6	1234.4	1220.6	1219.1
30°	1214.4	1199.9	1205.8	1190.9	1188.5
32.5°	1181.8	1168.3	1173.2	1158.4	1156.9
35°	1131.7	1118.5	1121.9	1107.0	1105.8
37.5°	1074.7	1062.6	1064.6	1048.3	1047.1
40°	1034.2	1022.2	1023.1	1005.8	1004.6
42.5°	989.8	977.7	976.7	959.4	958.2
45°	915.7	903.7	899.7	883.6	881.2
47.5°	831.3	819.3	811.8	798.7	797.0
50°	770.1	758.0	751.6	740.4	736.8
52.5°	704.0	691.9	686.4	676.2	672.6
55°	599.8	590.1	586.2	576.3	573.9
57.5°	500.8	494.3	493.2	483.5	482.6
60°	440.6	437.0	436.9	428.3	428.3
62.5°	389.3	386.6	388.5	382.8	381.8
65°	322.1	319.7	323.4	320.9	320.9
67.5°	269.0	269.0	271.3	270.3	270.3
70°	239.4	239.4	240.7	240.7	240.7
72.5°	212.8	211.8	215.0	215.0	214.0
75°	174.0	174.0	174.0	175.3	175.3
77.5°	135.5	135.8	136.7	136.5	135.5
80°	109.8	111.0	111.1	109.8	109.8
82.5°	84.2	85.4	85.4	85.1	84.2
85°	44.4	46.8	49.4	49.4	49.4
87.5°	13.0	17.4	21.0	21.4	20.4
90°	0.9	3.6	6.5	8.3	8.3
92.5°	8.3	37.8	65.7	28.2	23.9
95°	20.4	75.6	240.7	104.8	70.4
97.5°	33.7	83.5	369.1	287.1	201.7
100°	42.6	88.8	408.3	413.9	334.3
102.5°	51.5	94.0	418.7	511.9	441.7
105°	66.7	103.8	413.0	628.8	591.7
107.5°	82.4	115.2	389.1	689.1	699.4
110°	93.5	123.4	371.3	701.0	745.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	103.1	131.6	353.5	691.1	757.9
115°	118.5	143.9	330.5	657.6	749.1
117.5°	133.0	157.2	315.9	610.1	713.1
120°	142.6	166.1	309.3	578.2	680.5
122.5°	150.7	174.3	304.8	546.3	645.0
125°	163.0	185.6	299.1	503.9	594.4
127.5°	173.9	196.3	295.9	471.8	549.4
130°	180.6	202.3	294.4	451.6	521.3
132.5°	187.2	208.9	293.0	434.4	496.1
135°	196.3	218.0	290.7	410.4	463.0
137.5°	206.1	225.8	289.6	389.3	433.5
140°	212.0	231.0	288.9	375.9	415.7
142.5°	218.0	235.5	288.1	365.4	398.7
145°	226.8	243.1	287.0	348.7	375.0
147.5°	236.8	250.8	286.1	335.6	356.3
150°	243.5	255.3	286.1	328.1	344.4
152.5°	248.7	259.0	285.4	321.4	334.8
155°	256.5	265.5	285.2	313.2	322.2
157.5°	264.1	271.1	285.2	307.6	314.4
160°	268.5	274.9	285.2	303.8	309.3
162.5°	273.0	277.8	285.9	300.8	304.8
165°	277.8	281.4	286.1	298.2	299.1
167.5°	282.8	284.6	287.0	295.0	295.7
170°	284.3	286.1	287.0	293.5	293.5
172.5°	285.7	286.8	287.0	292.0	292.0
175°	288.0	288.9	287.0	290.7	289.8
177.5°	288.7	288.7	286.5	289.4	288.0
180°	288.0	288.0	288.0	288.0	288.0

(END OF REPORT)