

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: P564666

Luminaire Tested: **SQ4-PW1-050U-100D-830-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564666
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-100D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

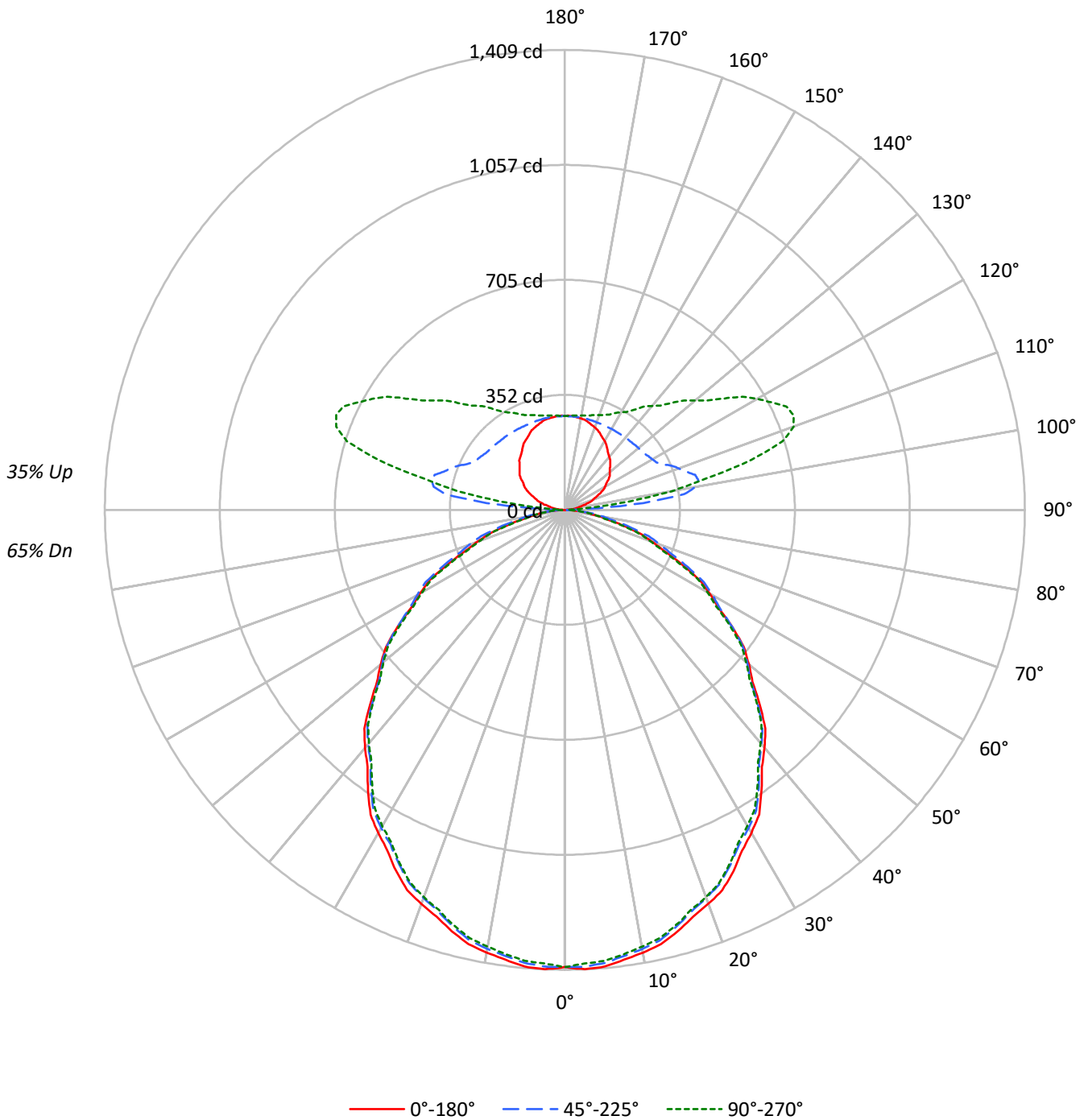
Lumens per Lamp: N/A
Luminaire Lumens: 5445.2 lumens
Efficiency: N/A
Efficacy: 120.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

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	0
RCR																		
0	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	65
1	101	97	93	90	95	91	88	85	81	78	76	71	69	68	62	61	60	55
2	92	85	79	73	87	80	75	70	71	67	63	63	59	57	55	53	50	47
3	84	75	67	61	79	71	64	59	63	58	53	56	51	48	49	46	43	40
4	77	66	58	52	72	63	55	50	56	50	45	50	45	41	44	40	37	34
5	71	59	51	45	67	56	48	43	50	44	39	45	40	36	39	36	32	30
6	66	53	45	39	61	50	43	37	45	39	34	40	35	31	36	32	29	26
7	61	48	40	34	57	46	38	33	41	35	30	37	32	28	33	29	25	23
8	56	44	36	30	53	42	34	29	38	31	27	34	29	25	30	26	23	21
9	53	40	32	27	49	38	31	26	34	29	24	31	26	22	28	24	21	19
10	49	37	29	24	46	35	28	24	32	26	22	29	24	20	26	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12924	12924	12924
5°	13008	12905	12847
10°	12903	12799	12730
15°	12767	12625	12579
20°	12615	12420	12397
25°	12438	12212	12174
30°	12175	11992	11913
35°	11830	11663	11593
40°	11460	11282	11237
45°	11015	10870	10822
50°	10558	10469	10399
55°	10065	10065	9905
60°	9451	9634	9291
65°	8649	9080	8433
70°	7623	8357	7424
75°	6513	7479	6335
80°	5048	6296	5117
85°	3271	4838	4308



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.9	2.4
10°-20°	372.4	6.8
20°-30°	552.4	10.1
30°-40°	646.4	11.9
40°-50°	643.5	11.8
50°-60°	555.7	10.2
60°-70°	400.0	7.3
70°-80°	209.7	3.9
80°-90°	53.1	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	4.5
140°-150°	186.0	3.4
150°-160°	133.7	2.5
160°-170°	81.8	1.5
170°-180°	27.6	0.5
0°-30°	1056.7	19.4
0°-40°	1703.1	31.3
0°-60°	2902.2	53.3
0°-90°	3565.1	65.5
90°-120°	899.8	16.5
90°-150°	1637.0	30.1
90°-180°	1880.0	34.5
0°-180°	5445.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1401	1401	1401	1401	1401	
5°	1404	1389	1393	1390	1387	133
15°	1337	1320	1322	1319	1317	377
25°	1222	1201	1200	1192	1196	562
35°	1050	1036	1036	1026	1029	657
45°	844	837	833	831	829	651
55°	626	624	626	617	616	558
65°	396	408	416	400	386	393
75°	183	200	210	196	178	196
85°	31	40	46	43	41	41
90°	1	4	6	8	8	2
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°	1400.8	1400.8	1400.8	1400.8	1400.8
2.5°	1408.7	1397.1	1400.8	1397.7	1390.9
5°	1404.5	1388.8	1393.4	1389.6	1387.2
7.5°	1390.2	1375.7	1379.1	1375.1	1373.6
10°	1377.3	1362.8	1366.2	1361.2	1358.8
12.5°	1362.5	1347.1	1350.4	1345.5	1344.0
15°	1336.6	1319.7	1321.8	1319.3	1316.9
17.5°	1306.5	1289.4	1289.7	1285.7	1285.3
20°	1284.8	1266.7	1265.0	1260.1	1262.6
22.5°	1261.1	1242.0	1240.3	1233.5	1236.9
25°	1221.8	1201.3	1199.6	1192.3	1195.9
27.5°	1176.4	1156.1	1156.2	1145.9	1149.7
30°	1142.8	1123.5	1125.6	1113.3	1118.2
32.5°	1107.3	1089.9	1091.0	1078.8	1083.6
35°	1050.3	1035.8	1035.5	1025.7	1029.3
37.5°	992.0	979.2	977.2	971.6	972.5
40°	951.5	940.7	936.7	933.0	933.0
42.5°	909.1	899.2	895.3	892.5	891.6
45°	844.2	836.9	833.1	830.6	829.4
47.5°	780.0	773.2	769.9	768.1	766.9
50°	735.6	730.7	729.4	725.7	724.5
52.5°	691.1	688.2	686.9	682.2	681.0
55°	625.7	624.5	625.7	617.1	615.8
57.5°	557.6	559.5	563.5	551.9	549.0
60°	512.2	517.0	522.1	508.4	503.5
62.5°	465.8	473.5	480.6	464.9	458.1
65°	396.2	408.2	415.9	399.6	386.3
67.5°	329.0	344.0	353.2	335.6	320.6
70°	282.6	299.5	309.8	292.1	275.2
72.5°	242.1	261.0	269.3	252.6	235.7
75°	182.7	199.6	209.8	195.8	177.7
77.5°	129.6	145.5	154.0	141.8	126.9
80°	95.0	111.9	118.5	108.3	96.3
82.5°	67.4	81.4	85.9	79.8	71.6
85°	30.9	40.5	45.7	43.1	40.7
87.5°	8.1	15.4	20.1	20.4	21.4
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°	<i>103.1</i>	131.6	353.5	691.1	757.9
115°	<i>118.5</i>	143.9	330.5	657.6	749.1
117.5°	<i>133.0</i>	157.2	315.9	610.1	713.1
120°	<i>142.6</i>	166.1	309.3	578.2	680.5
122.5°	<i>150.7</i>	174.3	304.8	546.3	645.0
125°	<i>163.0</i>	185.6	299.1	503.9	594.4
127.5°	<i>173.9</i>	196.3	295.9	471.8	549.4
130°	<i>180.6</i>	202.3	294.4	451.6	521.3
132.5°	<i>187.2</i>	208.9	293.0	434.4	496.1
135°	<i>196.3</i>	218.0	290.7	410.4	463.0
137.5°	<i>206.1</i>	225.8	289.6	389.3	433.5
140°	<i>212.0</i>	231.0	288.9	375.9	415.7
142.5°	<i>218.0</i>	235.5	288.1	365.4	398.7
145°	<i>226.8</i>	243.1	287.0	348.7	375.0
147.5°	<i>236.8</i>	250.8	286.1	335.6	356.3
150°	<i>243.5</i>	255.3	286.1	328.1	344.4
152.5°	<i>248.7</i>	259.0	285.4	321.4	334.8
155°	<i>256.5</i>	265.5	285.2	313.2	322.2
157.5°	<i>264.1</i>	271.1	285.2	307.6	314.4
160°	<i>268.5</i>	274.9	285.2	303.8	309.3
162.5°	<i>273.0</i>	277.8	285.9	300.8	304.8
165°	<i>277.8</i>	281.4	286.1	298.2	299.1
167.5°	<i>282.8</i>	284.6	287.0	295.0	295.7
170°	<i>284.3</i>	286.1	287.0	293.5	293.5
172.5°	<i>285.7</i>	286.8	287.0	292.0	292.0
175°	<i>288.0</i>	288.9	287.0	290.7	289.8
177.5°	<i>288.7</i>	288.7	286.5	289.4	288.0
180°	<i>288.0</i>	288.0	288.0	288.0	288.0

(END OF REPORT)