

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: P564620

Luminaire Tested: **SQ4-PW1-050U-050D-830-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564620
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-050D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

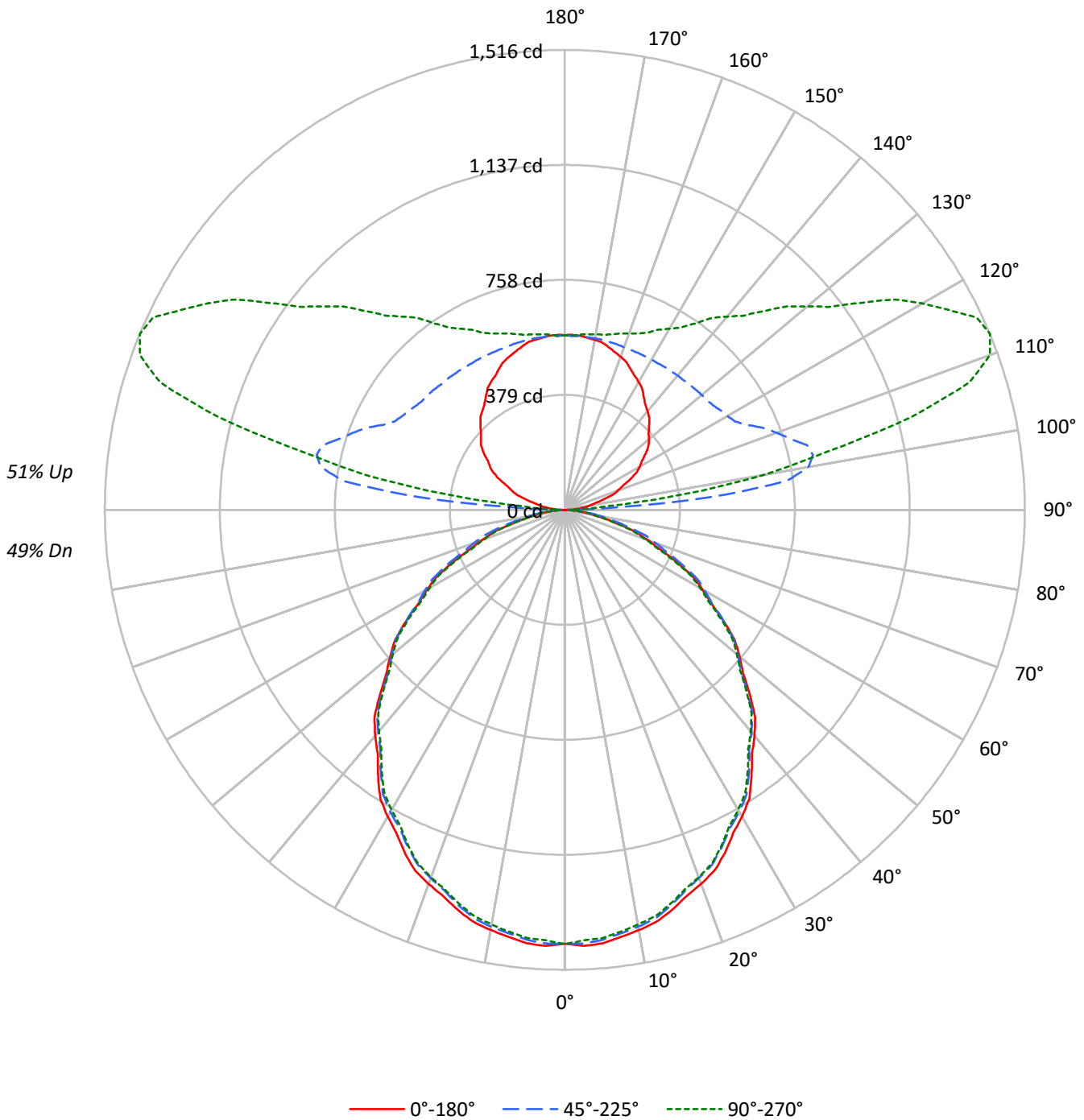
Lumens per Lamp: N/A
Luminaire Lumens: 7402.3 lumens
Efficiency: N/A
Efficacy: 125.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

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					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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	55	55	55	49				49
1	98	93	90	86	90	86	83	80	73	70	68	60	59	57	49	48	47				42	
2	89	82	76	70	82	75	70	66	64	60	57	53	50	48	43	41	40				35	
3	81	72	65	59	75	66	60	55	56	52	48	47	44	41	38	36	34				30	
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	34	32	29				26	
5	68	57	49	43	63	53	45	40	45	39	35	38	33	30	31	28	25				22	
6	63	51	43	37	58	47	40	35	40	35	31	34	30	26	28	25	22				19	
7	58	46	38	32	53	43	36	31	37	31	27	31	27	23	26	22	20				17	
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	24	20	18				15	
9	50	38	31	26	46	35	29	24	31	25	21	26	22	19	22	19	16				14	
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	15				13	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6600	6600	6600
5°	6642	6590	6560
10°	6589	6536	6500
15°	6519	6447	6423
20°	6441	6342	6330
25°	6351	6236	6216
30°	6217	6123	6083
35°	6040	5955	5920
40°	5852	5761	5738
45°	5624	5551	5526
50°	5391	5346	5310
55°	5139	5139	5058
60°	4826	4919	4744
65°	4416	4637	4306
70°	3893	4268	3791
75°	3324	3820	3235
80°	2580	3214	2611
85°	1667	2467	2202



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.7	1.8
10°-20°	380.3	5.1
20°-30°	564.1	7.6
30°-40°	660.1	8.9
40°-50°	657.2	8.9
50°-60°	567.5	7.7
60°-70°	408.5	5.5
70°-80°	214.2	2.9
80°-90°	55.3	0.7
90°-100°	276.5	3.7
100°-110°	751.0	10.1
110°-120°	772.2	10.4
120°-130°	617.4	8.3
130°-140°	485.1	6.6
140°-150°	372.0	5.0
150°-160°	267.5	3.6
160°-170°	163.6	2.2
170°-180°	55.1	0.7
0°-30°	1079.2	14.6
0°-40°	1739.3	23.5
0°-60°	2963.9	40.0
0°-90°	3642.0	49.2
90°-120°	1799.7	24.3
90°-150°	3274.1	44.2
90°-180°	3760.0	50.8
0°-180°	7402.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1431	1431	1431	1431	1431	
5°	1434	1418	1423	1419	1417	136
15°	1365	1348	1350	1347	1345	385
25°	1248	1227	1225	1218	1221	574
35°	1073	1058	1058	1048	1051	671
45°	862	855	851	848	847	665
55°	639	638	639	630	629	570
65°	405	417	425	408	394	401
75°	186	204	214	200	182	200
85°	32	41	47	44	42	42
90°	2	7	13	17	17	4
95°	41	151	482	210	141	43
105°	133	208	826	1258	1183	142
115°	237	288	661	1315	1498	234
125°	326	371	598	1008	1189	291
135°	393	436	582	821	926	304
145°	454	486	574	698	750	285
155°	513	531	570	626	644	237
165°	556	563	572	596	598	157
175°	576	578	574	581	580	55
180°	576	576	576	576	576	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1430.6	1430.6	1430.6	1430.6	1430.6
2.5°	1438.6	1426.8	1430.6	1427.4	1420.5
5°	1434.3	1418.3	1423.0	1419.2	1416.7
7.5°	1419.7	1404.9	1408.4	1404.3	1402.8
10°	1406.6	1391.8	1395.3	1390.2	1387.7
12.5°	1391.5	1375.7	1379.1	1374.1	1372.6
15°	1365.0	1347.8	1349.9	1347.3	1344.9
17.5°	1334.3	1316.8	1317.1	1313.1	1312.6
20°	1312.1	1293.6	1291.9	1286.9	1289.4
22.5°	1287.9	1268.4	1266.7	1259.7	1263.2
25°	1247.8	1226.9	1225.1	1217.6	1221.3
27.5°	1201.4	1180.7	1180.8	1170.3	1174.2
30°	1167.1	1147.4	1149.5	1137.0	1141.9
32.5°	1130.8	1113.1	1114.2	1101.7	1106.6
35°	1072.6	1057.8	1057.5	1047.5	1051.2
37.5°	1013.1	1000.1	998.0	992.2	993.2
40°	971.8	960.7	956.7	952.9	952.9
42.5°	928.4	918.3	914.3	911.5	910.5
45°	862.1	854.7	850.8	848.2	847.0
47.5°	796.6	789.7	786.2	784.5	783.2
50°	751.2	746.3	744.9	741.1	739.9
52.5°	705.8	702.9	701.5	696.7	695.5
55°	639.0	637.8	639.0	630.2	628.9
57.5°	569.5	571.4	575.5	563.6	560.6
60°	523.1	528.0	533.2	519.2	514.2
62.5°	475.7	483.6	490.8	474.8	467.9
65°	404.6	416.9	424.8	408.1	394.5
67.5°	336.0	351.3	360.7	342.7	327.5
70°	288.6	305.9	316.4	298.3	281.1
72.5°	247.3	266.5	275.0	258.0	240.7
75°	186.5	203.8	214.3	200.0	181.5
77.5°	132.3	148.6	157.3	144.9	129.6
80°	97.1	114.3	121.0	110.6	98.3
82.5°	68.8	83.1	87.7	81.5	73.1
85°	31.5	41.4	46.6	44.1	41.6
87.5°	8.4	16.4	21.8	22.5	23.5
90°	1.9	7.3	13.0	16.7	16.7
92.5°	16.7	75.7	131.5	56.5	47.8
95°	40.7	151.2	481.5	209.5	140.7
97.5°	67.4	167.0	738.1	574.3	403.3
100°	85.2	177.5	816.7	827.8	668.5
102.5°	103.0	188.1	837.4	1023.8	883.3
105°	133.3	207.6	825.9	1257.5	1183.3
107.5°	164.8	230.4	778.1	1378.2	1398.9
110°	187.0	246.8	742.6	1402.0	1490.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	206.3	263.1	707.0	1382.3	1515.9
115°	237.0	287.7	661.1	1315.2	1498.1
117.5°	265.9	314.4	631.8	1220.2	1426.3
120°	285.2	332.3	618.5	1156.5	1361.1
122.5°	301.5	348.6	609.6	1092.6	1290.0
125°	325.9	371.2	598.1	1007.8	1188.9
127.5°	347.8	392.7	591.8	943.5	1098.9
130°	361.1	404.6	588.9	903.2	1042.6
132.5°	374.4	417.9	585.9	868.7	992.2
135°	392.6	436.0	581.5	820.9	925.9
137.5°	412.2	451.7	579.2	778.7	867.0
140°	424.1	462.1	577.8	751.8	831.5
142.5°	435.9	471.0	576.3	730.8	797.4
145°	453.7	486.3	574.1	697.5	750.0
147.5°	473.7	501.6	572.2	671.3	712.6
150°	487.0	510.6	572.2	656.3	688.9
152.5°	497.4	518.0	570.7	642.8	669.6
155°	513.0	531.1	570.4	626.3	644.4
157.5°	528.1	542.3	570.4	615.1	628.9
160°	537.0	549.7	570.4	607.6	618.5
162.5°	545.9	555.7	571.8	601.7	609.6
165°	555.5	562.8	572.2	596.3	598.1
167.5°	565.5	569.2	574.1	590.0	591.5
170°	568.5	572.1	574.1	587.0	587.0
172.5°	571.5	573.6	574.1	584.1	584.1
175°	575.9	577.7	574.1	581.4	579.6
177.5°	577.4	577.4	573.0	578.8	575.9
180°	575.9	575.9	575.9	575.9	575.9

(END OF REPORT)