

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: P563948

Luminaire Tested: **SQ4-PR1-050U-050D-830-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563948
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-050D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE 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: 7420.7 lumens
Efficiency: N/A
Efficacy: 126.0 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

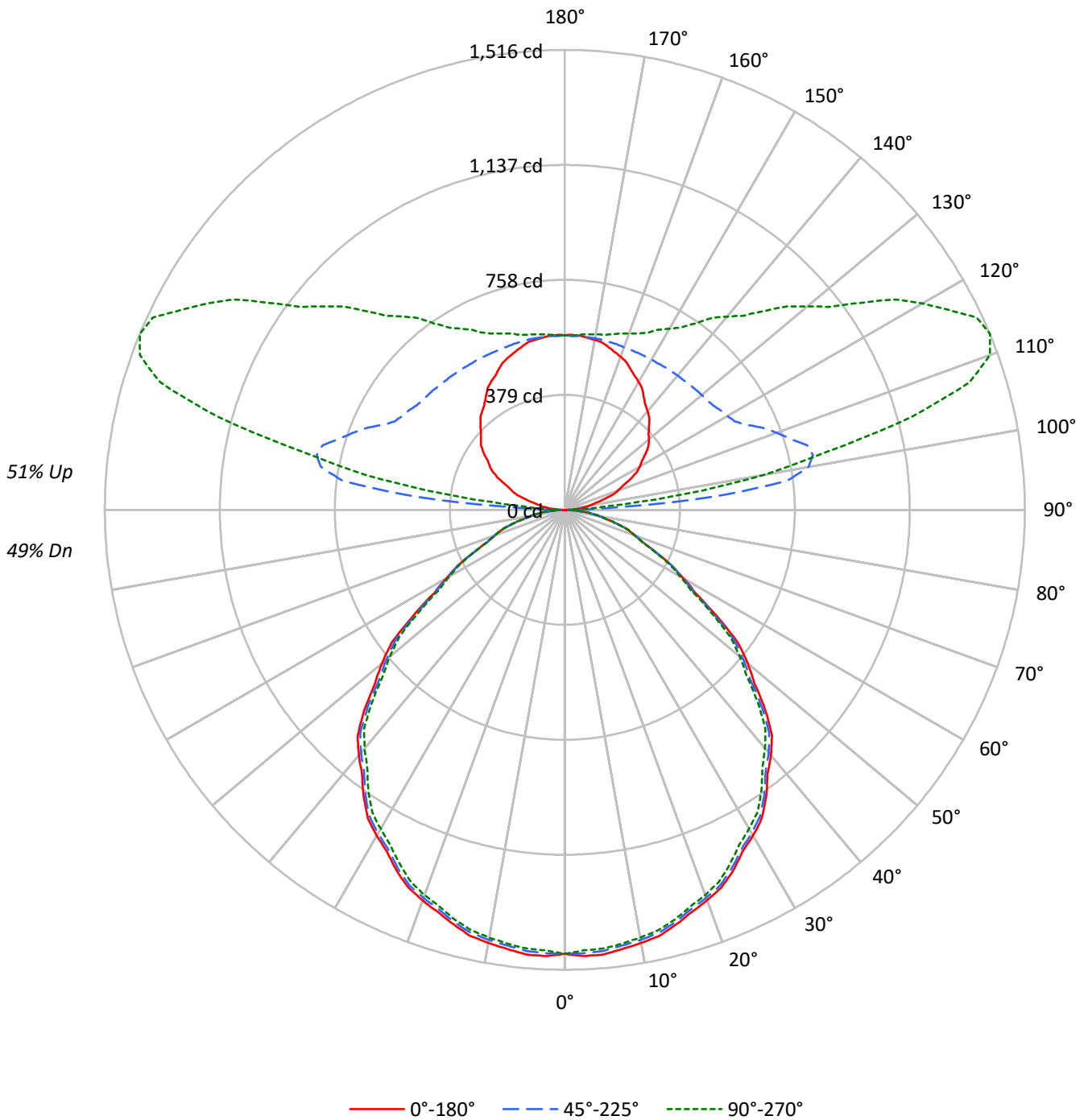
Input Watts (W): 58.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	0
RCR																		
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	49
1	98	94	90	86	90	87	83	80	73	71	69	61	59	58	49	48	47	42
2	89	82	76	71	82	76	71	66	64	61	57	54	51	49	44	42	40	36
3	82	72	65	60	75	67	61	56	57	52	48	48	44	41	39	37	35	31
4	75	64	56	51	69	60	53	48	51	46	42	43	39	36	35	32	30	26
5	69	57	49	43	63	53	46	41	46	40	36	38	34	31	32	29	26	23
6	63	51	43	38	58	48	41	36	41	36	31	35	31	27	29	26	23	20
7	59	47	39	33	54	43	36	31	37	32	28	32	27	24	26	23	21	18
8	54	42	35	29	50	39	33	28	34	29	25	29	25	22	24	21	19	16
9	51	39	31	26	47	36	29	25	31	26	22	27	22	19	22	19	17	15
10	47	35	28	23	44	33	27	22	29	24	20	25	20	18	21	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6750	6750	6750
5°	6811	6759	6724
10°	6790	6743	6707
15°	6760	6718	6682
20°	6726	6682	6633
25°	6679	6634	6556
30°	6606	6559	6466
35°	6509	6452	6360
40°	6360	6292	6179
45°	6101	5994	5871
50°	5644	5509	5400
55°	4927	4815	4714
60°	4152	4117	4036
65°	3591	3604	3577
70°	3298	3315	3315
75°	3167	3167	3190
80°	2981	3013	2981
85°	2403	2668	2668



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.4	1.9
10°-20°	395.9	5.3
20°-30°	597.2	8.0
30°-40°	711.5	9.6
40°-50°	701.5	9.5
50°-60°	536.1	7.2
60°-70°	331.8	4.5
70°-80°	188.4	2.5
80°-90°	59.5	0.8
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	6.5
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°	1131.5	15.2
0°-40°	1843.0	24.8
0°-60°	3080.6	41.5
0°-90°	3660.4	49.3
90°-120°	1799.7	24.3
90°-150°	3274.1	44.1
90°-180°	3760.0	50.7
0°-180°	7420.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1463	1463	1463	1463	1463	
5°	1471	1455	1460	1454	1452	140
15°	1415	1401	1407	1402	1399	399
25°	1312	1296	1303	1289	1288	604
35°	1156	1142	1146	1131	1129	721
45°	935	923	919	902	900	716
55°	613	603	599	589	586	549
65°	329	326	330	328	328	333
75°	178	178	178	179	179	188
85°	45	48	50	50	50	53
90°	2	7	13	17	17	5
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°	1463.3	1463.3	1463.3	1463.3	1463.3
2.5°	1472.4	1459.6	1463.3	1460.2	1453.2
5°	1470.9	1454.9	1459.6	1454.5	1452.0
7.5°	1459.6	1443.8	1448.5	1443.4	1441.9
10°	1449.5	1434.7	1439.4	1434.3	1431.8
12.5°	1438.4	1422.6	1428.3	1422.2	1419.7
15°	1415.4	1400.6	1406.6	1401.5	1399.1
17.5°	1390.2	1374.5	1380.4	1374.5	1371.3
20°	1370.1	1355.3	1361.2	1352.4	1351.2
22.5°	1347.9	1333.1	1339.1	1327.2	1327.0
25°	1312.1	1296.1	1303.3	1289.4	1288.1
27.5°	1269.5	1254.7	1260.7	1246.5	1245.0
30°	1240.2	1225.5	1231.4	1216.2	1213.8
32.5°	1207.0	1193.2	1198.1	1183.0	1181.5
35°	1155.8	1142.2	1145.7	1130.6	1129.3
37.5°	1097.6	1085.2	1087.2	1070.6	1069.3
40°	1056.2	1043.9	1044.9	1027.2	1026.0
42.5°	1010.8	998.5	997.5	979.8	978.6
45°	935.2	922.9	918.8	902.4	899.9
47.5°	849.0	836.7	829.1	815.7	814.0
50°	786.5	774.2	767.6	756.2	752.5
52.5°	718.9	706.6	701.0	690.6	686.9
55°	612.6	602.7	598.7	588.6	586.1
57.5°	511.5	504.8	503.7	493.8	492.8
60°	450.0	446.3	446.2	437.4	437.4
62.5°	397.5	394.8	396.8	391.0	390.0
65°	329.0	326.5	330.2	327.7	327.7
67.5°	274.8	274.8	277.0	276.0	276.0
70°	244.5	244.5	245.8	245.8	245.8
72.5°	217.3	216.3	219.6	219.5	218.6
75°	177.7	177.7	177.7	179.0	179.0
77.5°	138.4	138.6	139.7	139.4	138.4
80°	112.2	113.4	113.4	112.2	112.2
82.5°	86.0	87.2	87.2	86.9	86.0
85°	45.4	47.8	50.4	50.4	50.4
87.5°	13.5	18.5	22.8	23.5	22.5
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)