

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: P562381

Luminaire Tested: **SQ4-PW1-100U-100D-92765-1D-UNV-STD-W-4 (5700K)**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P562381  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, 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-PW1-100U-100D-92765-1D-UNV-STD-W-4 (5700K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 2700K/65000K CCT, 90 CRI LEDS, TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8789.4 lumens  
Efficiency: N/A  
Efficacy: 117.8 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: General Diffuse

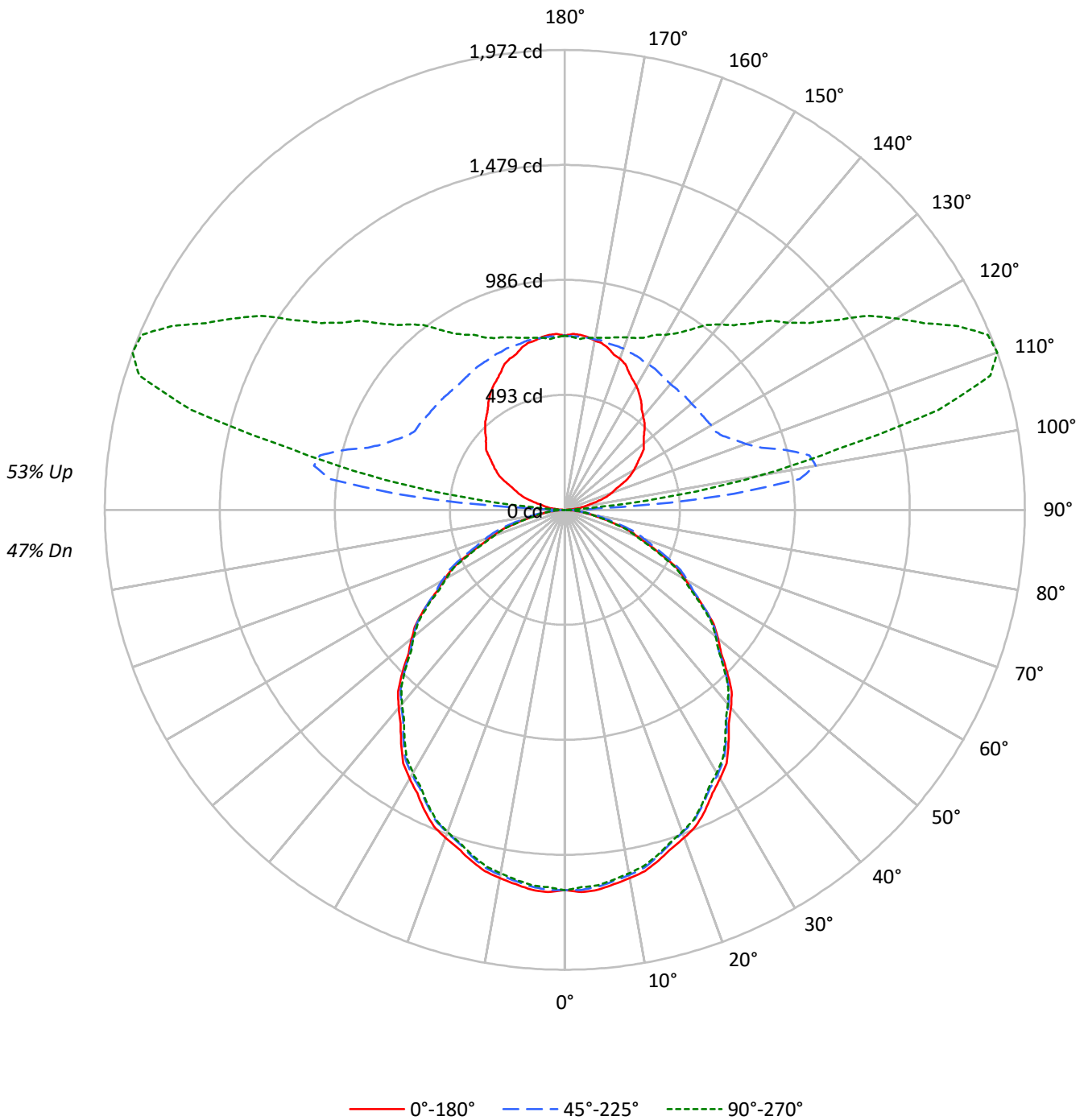
Input Watts (W): 74.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	54	54	54	47				47
1	97	93	89	86	89	86	82	79	72	70	67	59	58	56	48	46	45				40	
2	89	81	75	70	81	75	70	65	63	59	56	52	49	47	42	40	38				34	
3	81	71	64	58	74	66	60	55	56	51	47	46	43	40	37	35	33				29	
4	74	63	55	49	68	58	52	46	49	44	40	41	37	34	33	30	28				25	
5	68	56	48	42	62	52	45	40	44	39	35	37	33	30	30	27	25				21	
6	63	51	42	37	57	47	40	35	40	34	30	33	29	26	27	24	22				19	
7	58	46	38	32	53	42	35	30	36	31	27	30	26	23	25	22	19				17	
8	54	41	34	28	49	38	32	27	33	27	24	28	23	20	23	20	17				15	
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	21	18	16				13	
10	47	35	27	23	43	32	26	21	28	23	19	24	19	17	20	16	14				12	

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	15049	15049	15049
5°	15146	15026	14960
10°	15025	14903	14823
15°	14865	14701	14646
20°	14688	14462	14434
25°	14483	14219	14176
30°	14177	13962	13871
35°	13774	13580	13499
40°	13345	13136	13085
45°	12826	12656	12600
50°	12294	12190	12109
55°	11720	11720	11535
60°	11005	11217	10819
65°	10071	10573	9820
70°	8878	9730	8646
75°	7582	8709	7375
80°	5882	7332	5956
85°	3800	5632	5018



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	153.6	1.7
10°-20°	433.6	4.9
20°-30°	643.2	7.3
30°-40°	752.6	8.6
40°-50°	749.3	8.5
50°-60°	647.0	7.4
60°-70°	465.7	5.3
70°-80°	244.2	2.8
80°-90°	60.6	0.7
90°-100°	340.3	3.9
100°-110°	968.4	11.0
110°-120°	927.8	10.6
120°-130°	734.4	8.4
130°-140°	589.4	6.7
140°-150°	461.5	5.3
150°-160°	337.6	3.8
160°-170°	209.1	2.4
170°-180°	71.0	0.8
0°-30°	1230.4	14.0
0°-40°	1983.1	22.6
0°-60°	3379.3	38.4
0°-90°	4149.9	47.2
90°-120°	2236.6	25.4
90°-150°	4021.8	45.8
90°-180°	4640.0	52.8
0°-180°	8789.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1631	1631	1631	1631	1631	
5°	1635	1617	1622	1618	1615	155
15°	1556	1537	1539	1536	1533	439
25°	1423	1399	1397	1388	1392	654
35°	1223	1206	1206	1194	1198	764
45°	983	974	970	967	966	758
55°	729	727	729	718	717	650
65°	461	475	484	465	450	457
75°	213	232	244	228	207	228
85°	36	47	53	50	47	47
90°	0	0	0	0	0	3
95°	37	147	659	228	141	42
105°	150	228	987	1743	1657	159
115°	280	338	748	1585	1862	275
125°	395	438	714	1185	1417	353
135°	483	523	706	1001	1132	373
145°	569	599	711	866	944	356
155°	650	666	728	783	815	301
165°	718	721	737	753	764	202
175°	753	748	746	741	736	71
180°	747	747	747	747	747	



TEST NUMBER: P562381

CATALOG NUMBER: SQ4-PW1-100U-100D-92765-1D-UNV-STD-W-4 (5700K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1631.1	1631.1	1631.1	1631.1	1631.1
2.5°	1640.3	1626.8	1631.1	1627.4	1619.6
5°	1635.4	1617.1	1622.4	1618.1	1615.3
7.5°	1618.7	1601.8	1605.8	1601.1	1599.5
10°	1603.8	1586.9	1590.8	1585.0	1582.2
12.5°	1586.5	1568.5	1572.4	1566.7	1565.0
15°	1556.3	1536.7	1539.1	1536.2	1533.3
17.5°	1521.3	1501.3	1501.7	1497.1	1496.6
20°	1496.0	1474.9	1473.0	1467.3	1470.1
22.5°	1468.4	1446.2	1444.3	1436.3	1440.2
25°	1422.7	1398.8	1396.8	1388.3	1392.5
27.5°	1369.8	1346.2	1346.2	1334.3	1338.8
30°	1330.7	1308.2	1310.6	1296.4	1302.0
32.5°	1289.3	1269.1	1270.4	1256.1	1261.7
35°	1222.9	1206.1	1205.7	1194.3	1198.5
37.5°	1155.1	1140.2	1137.9	1131.3	1132.4
40°	1108.0	1095.3	1090.7	1086.4	1086.4
42.5°	1058.5	1047.0	1042.4	1039.3	1038.1
45°	983.0	974.5	970.0	967.1	965.7
47.5°	908.2	900.4	896.4	894.4	893.0
50°	856.5	850.9	849.3	845.0	843.6
52.5°	804.8	801.4	799.9	794.4	793.0
55°	728.6	727.2	728.6	718.5	717.1
57.5°	649.3	651.5	656.2	642.6	639.2
60°	596.4	602.0	607.9	591.9	586.3
62.5°	542.3	551.3	559.6	541.3	533.4
65°	461.3	475.3	484.3	465.3	449.8
67.5°	383.1	400.5	411.3	390.8	373.3
70°	329.1	348.8	360.7	340.1	320.5
72.5°	282.0	303.9	313.6	294.2	274.5
75°	212.7	232.4	244.3	228.0	206.9
77.5°	150.9	169.4	179.3	165.2	147.7
80°	110.7	130.3	138.0	126.1	112.1
82.5°	78.5	94.8	100.0	92.9	83.3
85°	35.9	47.2	53.2	50.2	47.4
87.5°	9.2	17.1	21.8	21.9	23.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	11.4	60.2	139.7	40.7	30.7
95°	36.9	146.6	658.9	228.0	140.6
97.5°	67.9	171.7	1014.7	726.1	497.6
100°	89.5	186.6	1092.0	1106.1	852.0
102.5°	113.3	202.7	1074.9	1415.8	1193.9
105°	150.5	228.3	986.9	1743.2	1657.1
107.5°	188.3	258.0	884.1	1835.5	1912.1
110°	214.4	279.7	825.0	1800.2	1972.3

TEST NUMBER: P562381

CATALOG NUMBER: SQ4-PW1-100U-100D-92765-1D-UNV-STD-W-4 (5700K)

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	239.4	301.3	785.2	1716.7	1962.1
115°	279.7	338.0	748.3	1585.3	1861.6
117.5°	315.2	369.9	726.5	1441.7	1734.4
120°	343.6	389.5	724.2	1359.6	1640.1
122.5°	366.4	412.2	718.5	1287.6	1548.1
125°	394.8	437.8	714.2	1185.3	1417.1
127.5°	425.7	466.0	712.0	1124.1	1315.2
130°	441.6	481.9	708.6	1081.5	1248.2
132.5°	458.7	497.8	708.6	1048.3	1201.6
135°	482.8	523.1	705.7	1001.2	1131.7
137.5°	505.5	544.7	705.4	961.3	1074.1
140°	522.6	562.8	704.3	928.3	1036.6
142.5°	541.9	575.5	707.7	901.9	999.1
145°	569.4	598.6	711.4	866.5	944.3
147.5°	593.0	621.3	717.7	830.8	898.0
150°	613.4	632.9	719.9	819.0	866.2
152.5°	629.3	649.9	722.2	803.0	846.9
155°	650.3	665.6	728.4	783.1	815.1
157.5°	676.5	685.6	729.9	774.1	796.9
160°	690.1	697.1	735.5	767.2	786.7
162.5°	698.1	706.1	736.7	761.4	776.4
165°	718.5	721.3	737.0	752.8	763.9
167.5°	732.4	729.9	743.5	750.7	755.1
170°	737.0	735.6	741.2	742.8	748.3
172.5°	747.2	742.5	744.6	740.5	744.9
175°	752.6	748.4	745.5	741.1	735.5
177.5°	754.9	748.2	744.6	740.1	741.2
180°	746.9	746.9	746.9	746.9	746.9

(END OF REPORT)