

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: P561862

Luminaire Tested: **SQ4-PR1-050U-100D-92765-1D-UNV-STD-W-4 (6500K)**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P561862
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, 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-92765-1D-UNV-STD-W-4 (6500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K/65000K CCT, 90 CRI LEDS, TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

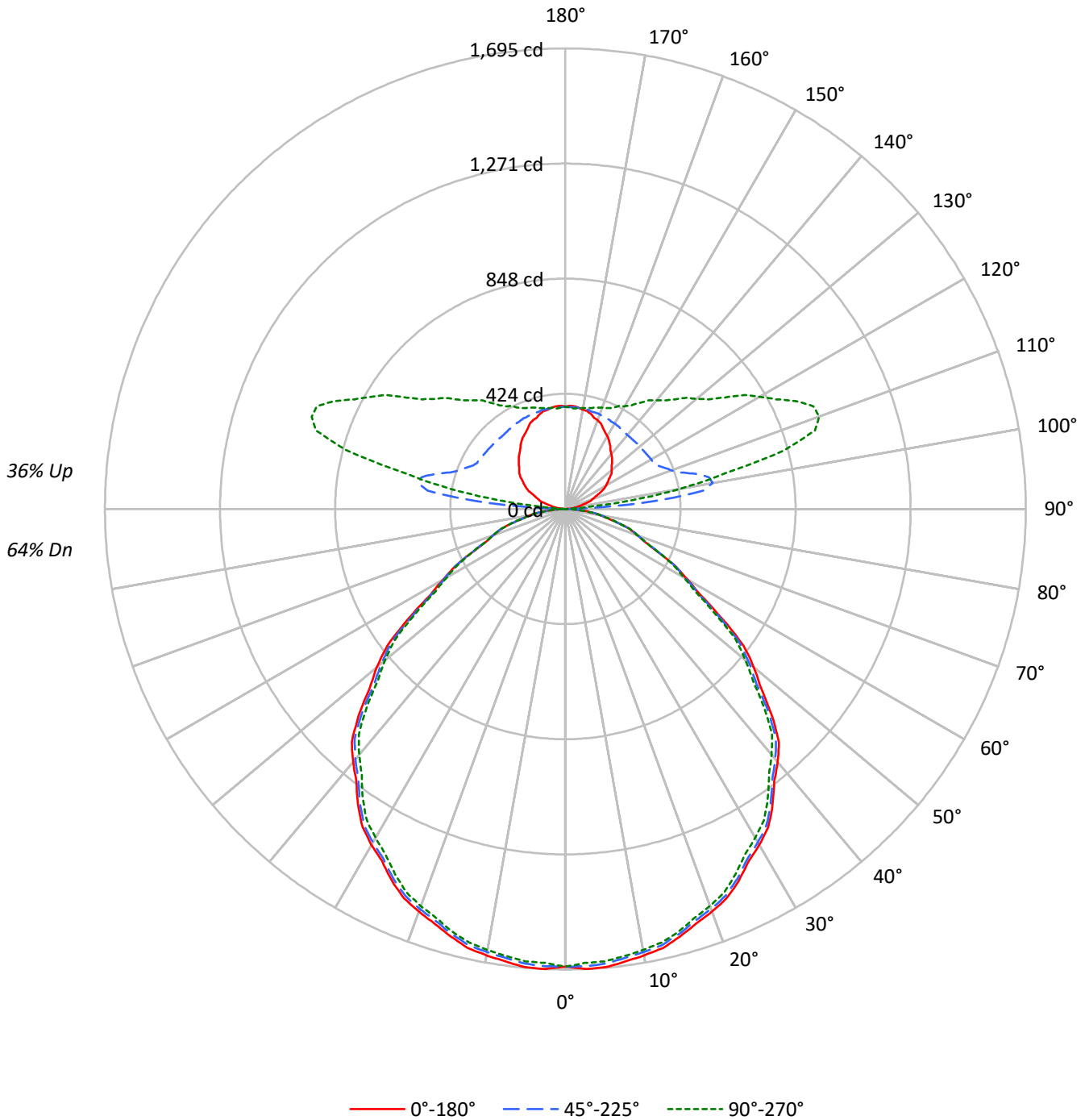
Lumens per Lamp: N/A
Luminaire Lumens: 6548.4 lumens
Efficiency: N/A
Efficacy: 113.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 57.8
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	91	91	91	80	80	80	69	69	69	64
1	101	97	93	90	95	91	88	85	81	78	76	71	69	67	62	60	59	55
2	93	85	79	74	87	80	75	70	71	67	63	63	60	57	55	53	50	47
3	85	75	68	62	79	71	65	59	63	58	54	56	52	48	49	46	43	40
4	78	67	59	53	73	63	56	51	56	51	46	50	45	42	44	40	38	34
5	72	60	52	46	67	57	49	44	51	45	40	45	40	36	40	36	33	30
6	66	54	46	40	62	51	44	38	46	40	35	41	36	32	36	32	29	27
7	61	49	41	35	57	46	39	34	42	36	31	37	32	29	33	29	26	24
8	57	44	37	31	53	42	35	30	38	32	28	34	29	26	30	26	23	21
9	53	41	33	28	50	39	32	27	35	29	25	31	27	23	28	24	21	19
10	50	37	30	25	47	36	29	24	32	27	23	29	24	21	26	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15539	15539	15539
5°	15680	15558	15478
10°	15630	15521	15439
15°	15561	15464	15381
20°	15483	15382	15268
25°	15374	15270	15093
30°	15208	15099	14883
35°	14983	14853	14640
40°	14642	14484	14223
45°	14045	13799	13515
50°	12993	12681	12431
55°	11340	11084	10851
60°	9557	9475	9289
65°	8265	8298	8235
70°	7591	7631	7631
75°	7290	7290	7343
80°	6859	6939	6859
85°	5526	6140	6140



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.3	2.4
10°-20°	455.7	7.0
20°-30°	687.3	10.5
30°-40°	819.0	12.5
40°-50°	807.4	12.3
50°-60°	617.1	9.4
60°-70°	381.9	5.8
70°-80°	216.9	3.3
80°-90°	66.0	1.0
90°-100°	171.5	2.6
100°-110°	488.0	7.5
110°-120°	467.6	7.1
120°-130°	370.1	5.7
130°-140°	297.0	4.5
140°-150°	232.5	3.6
150°-160°	170.1	2.6
160°-170°	105.4	1.6
170°-180°	35.8	0.5
0°-30°	1302.3	19.9
0°-40°	2121.2	32.4
0°-60°	3545.7	54.1
0°-90°	4210.4	64.3
90°-120°	1127.1	17.2
90°-150°	2026.7	30.9
90°-180°	2338.0	35.7
0°-180°	6548.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1684	1684	1684	1684	1684	
5°	1693	1674	1680	1674	1671	161
15°	1629	1612	1619	1613	1610	460
25°	1510	1492	1500	1484	1483	695
35°	1330	1315	1319	1301	1300	830
45°	1076	1062	1058	1039	1036	825
55°	705	694	689	677	675	632
65°	379	376	380	377	377	384
75°	204	204	204	206	206	216
85°	52	55	58	58	58	61
90°	0	0	0	0	0	3
95°	19	74	332	115	71	21
105°	76	115	497	878	835	80
115°	141	170	377	799	938	139
125°	199	221	360	597	714	178
135°	243	264	356	504	570	188
145°	287	302	358	437	476	179
155°	328	335	367	395	411	151
165°	362	364	371	379	385	102
175°	379	377	376	374	371	36
180°	376	376	376	376	376	

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CATALOG NUMBER: SQ4-PR1-050U-100D-92765-1D-UNV-STD-W-4 (6500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1684.2	1684.2	1684.2	1684.2	1684.2
2.5°	1694.7	1679.9	1684.2	1680.6	1672.6
5°	1693.0	1674.5	1679.9	1674.0	1671.2
7.5°	1679.9	1661.7	1667.1	1661.3	1659.6
10°	1668.3	1651.3	1656.7	1650.8	1648.0
12.5°	1655.5	1637.4	1643.9	1636.9	1634.1
15°	1629.1	1612.1	1619.0	1613.1	1610.3
17.5°	1600.1	1582.0	1588.8	1582.0	1578.3
20°	1576.9	1559.9	1566.7	1556.6	1555.1
22.5°	1551.4	1534.3	1541.2	1527.6	1527.3
25°	1510.2	1491.7	1500.0	1484.0	1482.6
27.5°	1461.1	1444.1	1451.0	1434.7	1433.0
30°	1427.5	1410.5	1417.3	1399.8	1397.0
32.5°	1389.2	1373.3	1379.0	1361.6	1359.9
35°	1330.3	1314.7	1318.7	1301.2	1299.8
37.5°	1263.3	1249.1	1251.4	1232.2	1230.8
40°	1215.7	1201.5	1202.6	1182.3	1180.9
42.5°	1163.5	1149.3	1148.1	1127.7	1126.3
45°	1076.4	1062.2	1057.6	1038.6	1035.8
47.5°	977.2	963.0	954.3	938.8	936.9
50°	905.2	891.0	883.5	870.3	866.1
52.5°	827.5	813.3	806.9	794.9	790.6
55°	705.0	693.7	689.1	677.4	674.6
57.5°	588.7	581.0	579.7	568.4	567.2
60°	517.9	513.6	513.5	503.4	503.4
62.5°	457.5	454.4	456.7	450.0	448.8
65°	378.6	375.8	380.1	377.2	377.2
67.5°	316.3	316.3	318.9	317.7	317.7
70°	281.4	281.4	282.9	282.9	282.9
72.5°	250.1	249.0	252.7	252.7	251.5
75°	204.5	204.5	204.5	206.0	206.0
77.5°	159.3	159.6	160.7	160.4	159.3
80°	129.1	130.5	130.6	129.1	129.1
82.5°	98.9	100.4	100.4	100.1	98.9
85°	52.2	55.1	58.0	58.0	58.0
87.5°	15.1	19.6	23.2	23.2	22.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.7	30.4	70.4	20.5	15.5
95°	18.6	73.9	332.0	114.9	70.8
97.5°	34.2	86.5	511.3	365.9	250.7
100°	45.1	94.1	550.3	557.4	429.3
102.5°	57.1	102.2	541.7	713.5	601.6
105°	75.8	115.0	497.3	878.4	835.1
107.5°	94.9	130.0	445.5	925.0	963.6
110°	108.1	140.9	415.7	907.2	993.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	120.6	151.8	395.7	865.1	988.8
115°	141.0	170.4	377.1	798.9	938.1
117.5°	158.9	186.4	366.1	726.5	874.0
120°	173.2	196.3	364.9	685.1	826.5
122.5°	184.6	207.7	362.1	648.9	780.1
125°	198.9	220.6	359.9	597.3	714.1
127.5°	214.5	234.8	358.8	566.5	662.8
130°	222.5	242.8	357.1	545.0	629.0
132.5°	231.1	250.9	357.1	528.3	605.5
135°	243.3	263.6	355.6	504.5	570.3
137.5°	254.7	274.5	355.5	484.4	541.3
140°	263.3	283.6	354.9	467.8	522.4
142.5°	273.1	290.0	356.6	454.5	503.5
145°	286.9	301.6	358.5	436.7	475.8
147.5°	298.8	313.1	361.6	418.7	452.5
150°	309.1	318.9	362.8	412.7	436.5
152.5°	317.1	327.5	363.9	404.7	426.8
155°	327.7	335.4	367.1	394.6	410.7
157.5°	340.9	345.5	367.8	390.1	401.6
160°	347.8	351.3	370.7	386.6	396.4
162.5°	351.8	355.8	371.2	383.7	391.3
165°	362.1	363.5	371.4	379.4	385.0
167.5°	369.1	367.8	374.7	378.3	380.5
170°	371.4	370.7	373.5	374.3	377.1
172.5°	376.5	374.2	375.2	373.1	375.4
175°	379.2	377.1	375.7	373.5	370.7
177.5°	380.4	377.0	375.2	373.0	373.5
180°	376.4	376.4	376.4	376.4	376.4

(END OF REPORT)