

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: P562226

Luminaire Tested: **SQ4-PW1-050U-100D-92765-1D-UNV-STD-W-4 (6500K)**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P562226
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-PW1-050U-100D-92765-1D-UNV-STD-W-4 (6500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES 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

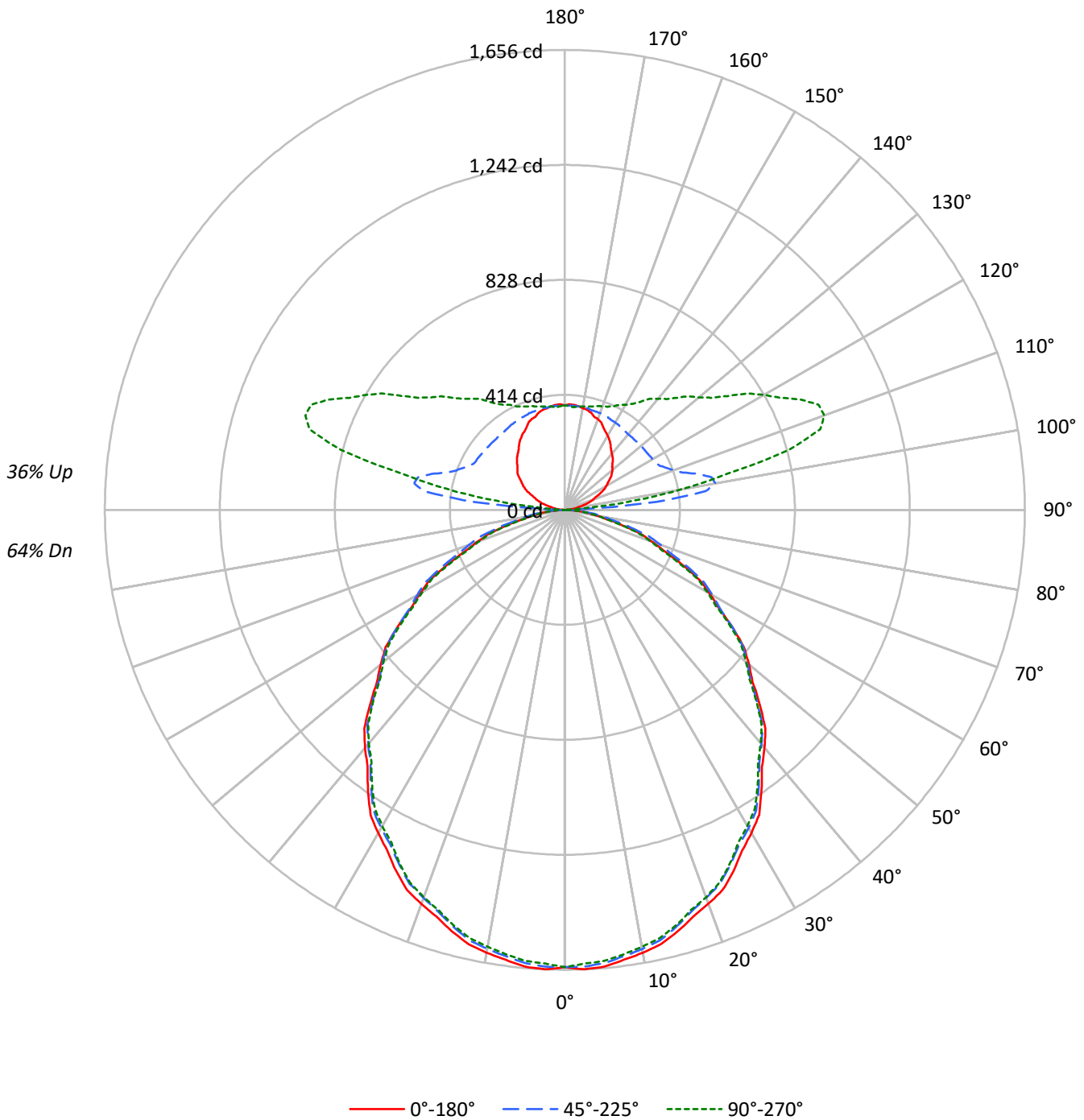
Lumens per Lamp: N/A
Luminaire Lumens: 6527.2 lumens
Efficiency: N/A
Efficacy: 112.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 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	89	95	91	88	85	80	78	75	70	69	67	61	60	59	54
2	92	85	78	73	86	80	74	70	71	66	63	62	59	56	54	52	50	46
3	84	74	67	61	79	70	64	58	62	57	53	55	51	47	48	45	42	39
4	77	66	58	52	72	62	55	50	55	50	45	49	44	41	43	39	37	33
5	71	59	51	45	66	56	48	43	50	44	39	44	39	35	39	35	32	29
6	65	53	45	39	61	50	43	37	45	39	34	40	35	31	35	31	28	25
7	60	48	40	34	57	45	38	33	41	35	30	36	31	28	32	28	25	23
8	56	44	36	30	53	41	34	29	37	31	27	33	28	25	30	25	22	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	27	23	20	18
10	49	37	29	24	46	35	28	24	32	26	22	28	24	20	25	21	18	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15191	15191	15191
5°	15290	15168	15102
10°	15168	15045	14963
15°	15007	14840	14785
20°	14828	14600	14571
25°	14620	14355	14310
30°	14311	14095	14002
35°	13904	13708	13627
40°	13471	13262	13209
45°	12947	12776	12720
50°	12410	12307	12223
55°	11831	11831	11644
60°	11108	11322	10922
65°	10167	10673	9913
70°	8961	9822	8727
75°	7653	8791	7447
80°	5935	7401	6014
85°	3843	5685	5071



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.0	2.4
10°-20°	437.7	6.7
20°-30°	649.3	9.9
30°-40°	759.8	11.6
40°-50°	756.4	11.6
50°-60°	653.2	10.0
60°-70°	470.2	7.2
70°-80°	246.5	3.8
80°-90°	61.1	0.9
90°-100°	171.5	2.6
100°-110°	488.0	7.5
110°-120°	467.6	7.2
120°-130°	370.1	5.7
130°-140°	297.0	4.6
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°	1242.1	19.0
0°-40°	2001.9	30.7
0°-60°	3411.4	52.3
0°-90°	4189.2	64.2
90°-120°	1127.1	17.3
90°-150°	2026.7	31.0
90°-180°	2338.0	35.8
0°-180°	6527.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1646	1646	1646	1646	1646	
5°	1651	1632	1638	1633	1631	156
15°	1571	1551	1554	1551	1548	443
25°	1436	1412	1410	1402	1406	660
35°	1234	1218	1217	1206	1210	772
45°	992	984	979	976	975	766
55°	736	734	736	725	724	656
65°	466	480	489	470	454	461
75°	215	235	247	230	209	230
85°	36	48	54	51	48	48
90°	0	0	0	0	0	2
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-PW1-050U-100D-92765-1D-UNV-STD-W-4 (6500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1646.5	1646.5	1646.5	1646.5	1646.5
2.5°	1655.8	1642.2	1646.5	1642.9	1634.9
5°	1650.9	1632.4	1637.8	1633.4	1630.6
7.5°	1634.1	1617.0	1621.0	1616.3	1614.6
10°	1619.0	1602.0	1605.9	1600.0	1597.2
12.5°	1601.6	1583.4	1587.3	1581.5	1579.8
15°	1571.1	1551.2	1553.7	1550.7	1547.9
17.5°	1535.7	1515.6	1516.0	1511.3	1510.8
20°	1510.2	1488.9	1487.0	1481.2	1484.1
22.5°	1482.3	1459.9	1457.9	1449.9	1453.9
25°	1436.2	1412.1	1410.1	1401.5	1405.7
27.5°	1382.8	1359.0	1359.0	1346.9	1351.5
30°	1343.3	1320.6	1323.0	1308.7	1314.3
32.5°	1301.6	1281.1	1282.4	1268.0	1273.7
35°	1234.5	1217.5	1217.1	1205.6	1209.9
37.5°	1166.1	1151.0	1148.7	1142.0	1143.1
40°	1118.5	1105.7	1101.1	1096.7	1096.7
42.5°	1068.6	1056.9	1052.3	1049.1	1048.0
45°	992.3	983.8	979.2	976.3	974.9
47.5°	916.8	908.9	904.9	902.9	901.5
50°	864.6	858.9	857.4	853.0	851.6
52.5°	812.4	809.0	807.5	801.9	800.5
55°	735.5	734.1	735.5	725.3	723.9
57.5°	655.4	657.7	662.4	648.7	645.3
60°	602.0	607.7	613.6	597.6	591.9
62.5°	547.5	556.6	564.9	546.4	538.5
65°	465.7	479.9	488.9	469.7	454.1
67.5°	386.8	404.3	415.2	394.5	376.9
70°	332.2	352.1	364.1	343.4	323.5
72.5°	284.6	306.8	316.5	296.9	277.1
75°	214.7	234.6	246.6	230.2	208.9
77.5°	152.3	171.0	181.0	166.7	149.1
80°	111.7	131.6	139.3	127.3	113.2
82.5°	79.2	95.7	101.0	93.8	84.1
85°	36.3	47.6	53.7	50.7	47.9
87.5°	9.3	17.2	22.1	22.1	23.2
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)