

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: P564018

Luminaire Tested: **SQ4-PR1-050U-125D-830-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564018
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-125D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

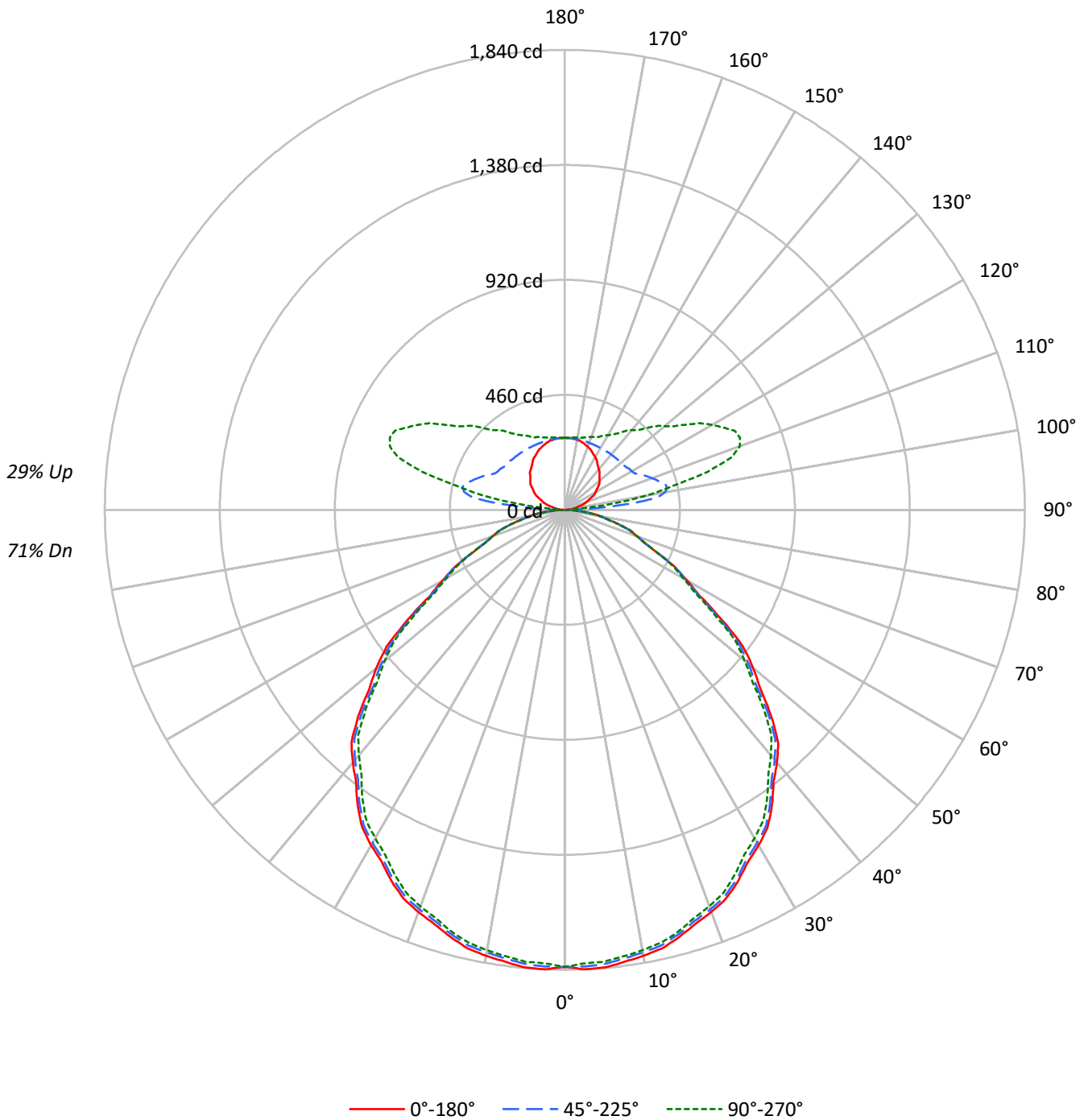
Lumens per Lamp: N/A
Luminaire Lumens: 6452.3 lumens
Efficiency: N/A
Efficacy: 115.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 55.9
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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	75	75	75	75	75	75	71	
1	103	99	95	91	97	93	90	87	84	81	79	75	73	71	67	66	64	64	64	64	60	
2	94	87	80	75	89	82	77	72	74	70	66	67	63	60	60	57	55	55	55	55	51	
3	86	77	69	63	81	73	66	61	66	60	56	59	55	52	53	50	47	47	47	47	44	
4	79	68	60	54	75	65	58	52	59	53	48	53	48	45	48	44	41	41	41	41	38	
5	73	61	53	47	69	58	51	45	53	47	42	48	43	39	43	39	36	36	36	36	33	
6	67	55	47	41	63	52	45	39	48	41	37	43	38	34	39	35	32	32	32	32	29	
7	62	50	42	36	59	48	40	35	43	37	33	40	34	30	36	32	28	28	28	28	26	
8	58	45	37	32	55	43	36	31	40	34	29	36	31	27	33	29	25	25	25	25	23	
9	54	41	34	29	51	40	33	28	37	30	26	33	28	25	31	26	23	23	23	23	21	
10	51	38	31	26	48	37	30	25	34	28	24	31	26	22	28	24	21	21	21	21	19	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16870	16870	16870
5°	17023	16891	16803
10°	16968	16850	16761
15°	16894	16788	16698
20°	16809	16701	16577
25°	16690	16578	16386
30°	16511	16393	16158
35°	16266	16124	15895
40°	15896	15725	15440
45°	15248	14980	14672
50°	14107	13766	13495
55°	12312	12033	11781
60°	10376	10287	10084
65°	8975	9007	8940
70°	8241	8284	8284
75°	7917	7917	7971
80°	7449	7529	7449
85°	6002	6669	6669



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.9	2.7
10°-20°	494.7	7.7
20°-30°	746.2	11.6
30°-40°	889.1	13.8
40°-50°	876.6	13.6
50°-60°	669.9	10.4
60°-70°	414.6	6.4
70°-80°	235.5	3.6
80°-90°	72.7	1.1
90°-100°	138.2	2.1
100°-110°	375.5	5.8
110°-120°	386.1	6.0
120°-130°	308.7	4.8
130°-140°	242.5	3.8
140°-150°	186.0	2.9
150°-160°	133.7	2.1
160°-170°	81.8	1.3
170°-180°	27.6	0.4
0°-30°	1413.8	21.9
0°-40°	2302.9	35.7
0°-60°	3849.4	59.7
0°-90°	4572.2	70.9
90°-120°	899.8	13.9
90°-150°	1637.0	25.4
90°-180°	1880.0	29.1
0°-180°	6452.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1828	1828	1828	1828	1828	
5°	1838	1818	1824	1817	1814	174
15°	1769	1750	1758	1751	1748	499
25°	1640	1620	1628	1611	1610	755
35°	1444	1427	1432	1413	1411	901
45°	1169	1153	1148	1128	1124	895
55°	765	753	748	735	732	686
65°	411	408	413	410	410	416
75°	222	222	222	224	224	235
85°	57	60	63	63	63	66
90°	1	4	6	8	8	4
95°	20	76	241	105	70	22
105°	67	104	413	629	592	71
115°	118	144	330	658	749	117
125°	163	186	299	504	594	145
135°	196	218	291	410	463	152
145°	227	243	287	349	375	142
155°	256	266	285	313	322	118
165°	278	281	286	298	299	78
175°	288	289	287	291	290	27
180°	288	288	288	288	288	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1828.5	1828.5	1828.5	1828.5	1828.5
2.5°	1839.9	1823.8	1828.5	1824.5	1815.9
5°	1838.0	1818.0	1823.8	1817.4	1814.3
7.5°	1823.8	1804.1	1809.9	1803.6	1801.7
10°	1811.2	1792.7	1798.6	1792.2	1789.1
12.5°	1797.3	1777.6	1784.7	1777.1	1774.0
15°	1768.7	1750.2	1757.6	1751.3	1748.2
17.5°	1737.2	1717.5	1724.9	1717.6	1713.6
20°	1712.0	1693.5	1701.0	1689.9	1688.4
22.5°	1684.3	1665.8	1673.2	1658.4	1658.1
25°	1639.5	1619.5	1628.5	1611.1	1609.6
27.5°	1586.3	1567.8	1575.3	1557.6	1555.7
30°	1549.8	1531.3	1538.7	1519.8	1516.7
32.5°	1508.2	1490.9	1497.2	1478.2	1476.4
35°	1444.2	1427.3	1431.6	1412.7	1411.2
37.5°	1371.5	1356.1	1358.6	1337.7	1336.2
40°	1319.8	1304.4	1305.6	1283.6	1282.0
42.5°	1263.1	1247.7	1246.4	1224.3	1222.8
45°	1168.6	1153.2	1148.1	1127.6	1124.5
47.5°	1060.9	1045.5	1036.0	1019.3	1017.1
50°	982.8	967.4	959.1	944.9	940.2
52.5°	898.4	883.0	876.0	863.0	858.4
55°	765.4	753.1	748.1	735.4	732.4
57.5°	639.1	630.8	629.4	617.0	615.8
60°	562.3	557.6	557.5	546.5	546.5
62.5°	496.7	493.4	495.8	488.5	487.3
65°	411.1	408.0	412.6	409.5	409.5
67.5°	343.3	343.3	346.2	344.9	344.9
70°	305.5	305.5	307.1	307.1	307.1
72.5°	271.5	270.3	274.4	274.3	273.1
75°	222.1	222.1	222.1	223.6	223.6
77.5°	172.9	173.2	174.5	174.2	172.9
80°	140.2	141.7	141.7	140.2	140.2
82.5°	107.4	109.0	109.0	108.6	107.4
85°	56.7	59.8	63.0	63.0	63.0
87.5°	16.6	22.0	26.5	26.8	25.6
90°	0.9	3.6	6.5	8.3	8.3
92.5°	8.3	37.8	65.7	28.2	23.9
95°	20.4	75.6	240.7	104.8	70.4
97.5°	33.7	83.5	369.1	287.1	201.7
100°	42.6	88.8	408.3	413.9	334.3
102.5°	51.5	94.0	418.7	511.9	441.7
105°	66.7	103.8	413.0	628.8	591.7
107.5°	82.4	115.2	389.1	689.1	699.4
110°	93.5	123.4	371.3	701.0	745.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	<i>103.1</i>	131.6	353.5	691.1	757.9
115°	<i>118.5</i>	143.9	330.5	657.6	749.1
117.5°	<i>133.0</i>	157.2	315.9	610.1	713.1
120°	<i>142.6</i>	166.1	309.3	578.2	680.5
122.5°	<i>150.7</i>	174.3	304.8	546.3	645.0
125°	<i>163.0</i>	185.6	299.1	503.9	594.4
127.5°	<i>173.9</i>	196.3	295.9	471.8	549.4
130°	<i>180.6</i>	202.3	294.4	451.6	521.3
132.5°	<i>187.2</i>	208.9	293.0	434.4	496.1
135°	<i>196.3</i>	218.0	290.7	410.4	463.0
137.5°	<i>206.1</i>	225.8	289.6	389.3	433.5
140°	<i>212.0</i>	231.0	288.9	375.9	415.7
142.5°	<i>218.0</i>	235.5	288.1	365.4	398.7
145°	<i>226.8</i>	243.1	287.0	348.7	375.0
147.5°	<i>236.8</i>	250.8	286.1	335.6	356.3
150°	<i>243.5</i>	255.3	286.1	328.1	344.4
152.5°	<i>248.7</i>	259.0	285.4	321.4	334.8
155°	<i>256.5</i>	265.5	285.2	313.2	322.2
157.5°	<i>264.1</i>	271.1	285.2	307.6	314.4
160°	<i>268.5</i>	274.9	285.2	303.8	309.3
162.5°	<i>273.0</i>	277.8	285.9	300.8	304.8
165°	<i>277.8</i>	281.4	286.1	298.2	299.1
167.5°	<i>282.8</i>	284.6	287.0	295.0	295.7
170°	<i>284.3</i>	286.1	287.0	293.5	293.5
172.5°	<i>285.7</i>	286.8	287.0	292.0	292.0
175°	<i>288.0</i>	288.9	287.0	290.7	289.8
177.5°	<i>288.7</i>	288.7	286.5	289.4	288.0
180°	<i>288.0</i>	288.0	288.0	288.0	288.0

(END OF REPORT)