

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: P563995

Luminaire Tested: **SQ4-PR1-050U-100D-830-1D-UNV-STD-W-6**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563995
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-100D-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

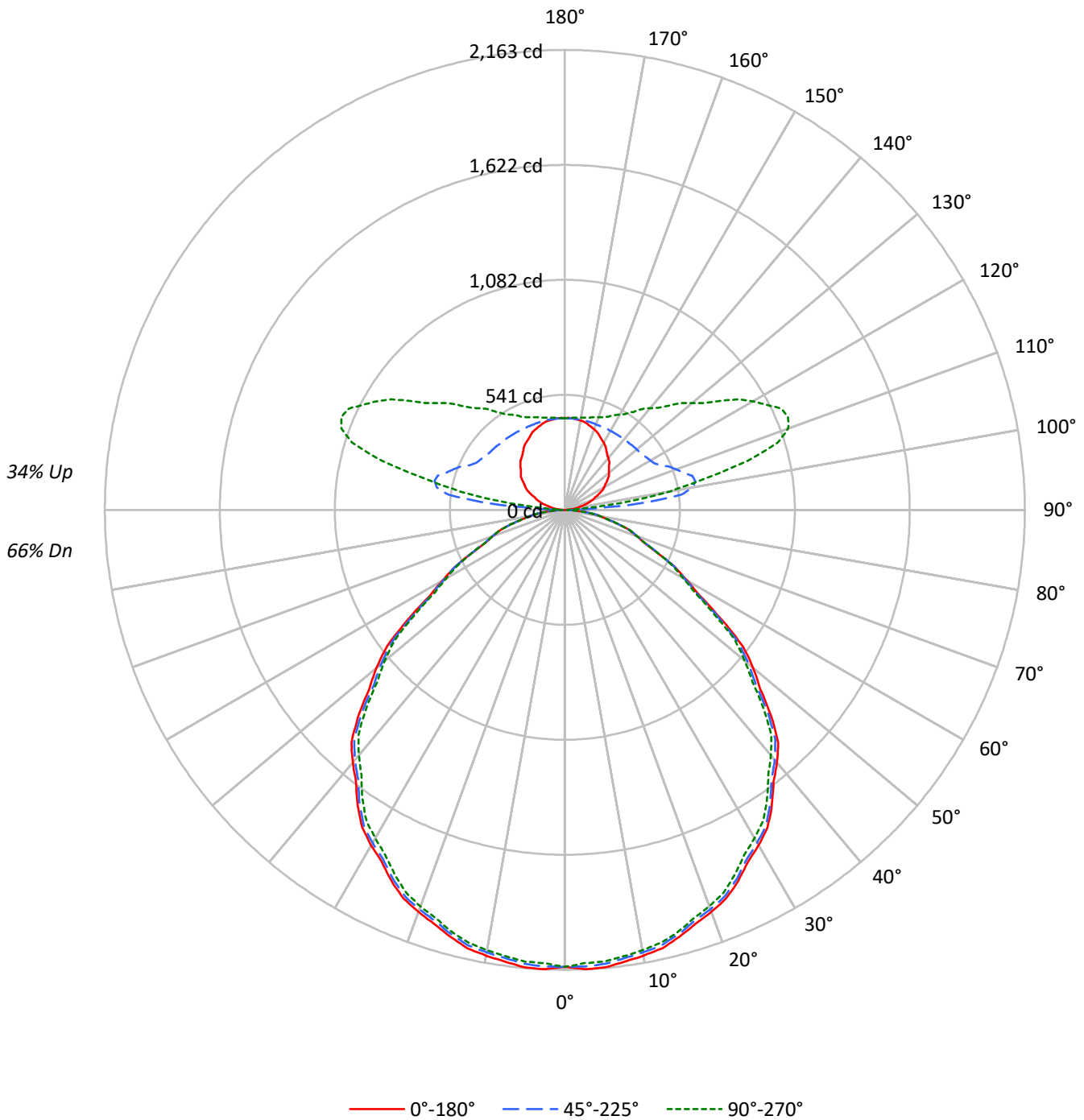
Lumens per Lamp: N/A
Luminaire Lumens: 8194.9 lumens
Efficiency: N/A
Efficacy: 111.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 73.4
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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	66				
1	102	97	94	90	95	92	88	85	81	79	76	72	70	68	63	62	60	56				
2	93	85	79	74	87	81	75	71	72	68	64	63	60	57	56	53	51	48				
3	85	76	68	62	80	71	65	60	64	58	54	56	52	49	50	47	44	41				
4	78	67	59	53	73	64	56	51	57	51	47	51	46	42	45	41	38	35				
5	72	60	52	46	67	57	50	44	51	45	40	46	41	37	40	37	34	31				
6	66	54	46	40	62	51	44	38	46	40	35	41	36	33	37	33	30	27				
7	61	49	41	35	58	47	39	34	42	36	31	38	33	29	34	30	26	24				
8	57	45	37	31	54	42	35	30	38	32	28	34	30	26	31	27	24	22				
9	53	41	33	28	50	39	32	27	35	29	25	32	27	23	29	24	21	19				
10	50	37	30	25	47	36	29	24	33	27	23	29	25	21	26	22	20	18				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13220	13220	13220
5°	13339	13236	13167
10°	13296	13204	13135
15°	13238	13156	13085
20°	13172	13087	12990
25°	13079	12991	12840
30°	12938	12846	12661
35°	12747	12636	12455
40°	12456	12323	12099
45°	11948	11740	11498
50°	11054	10788	10576
55°	9648	9429	9231
60°	8130	8061	7903
65°	7033	7059	7005
70°	6458	6492	6492
75°	6203	6203	6248
80°	5837	5901	5837
85°	4700	5222	5222



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	203.2	2.5
10°-20°	581.5	7.1
20°-30°	877.1	10.7
30°-40°	1045.1	12.8
40°-50°	1030.3	12.6
50°-60°	787.4	9.6
60°-70°	487.3	5.9
70°-80°	276.8	3.4
80°-90°	85.9	1.0
90°-100°	207.4	2.5
100°-110°	563.3	6.9
110°-120°	579.1	7.1
120°-130°	463.0	5.7
130°-140°	363.8	4.4
140°-150°	279.0	3.4
150°-160°	200.6	2.4
160°-170°	122.7	1.5
170°-180°	41.3	0.5
0°-30°	1661.9	20.3
0°-40°	2706.9	33.0
0°-60°	4524.7	55.2
0°-90°	5374.7	65.6
90°-120°	1349.8	16.5
90°-150°	2455.6	30.0
90°-180°	2820.0	34.4
0°-180°	8194.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2149	2149	2149	2149	2149	
5°	2160	2137	2144	2136	2133	205
15°	2079	2057	2066	2058	2055	587
25°	1927	1904	1914	1894	1892	887
35°	1698	1678	1683	1660	1659	1059
45°	1374	1356	1350	1325	1322	1052
55°	900	885	879	864	861	806
65°	483	480	485	481	481	489
75°	261	261	261	263	263	276
85°	67	70	74	74	74	77
90°	1	6	10	12	12	5
95°	31	113	361	157	106	32
105°	100	156	619	943	888	106
115°	178	216	496	986	1124	175
125°	244	278	449	756	892	218
135°	294	327	436	616	694	228
145°	340	365	430	523	562	214
155°	385	398	428	470	483	177
165°	417	422	429	447	449	118
175°	432	433	430	436	435	41
180°	432	432	432	432	432	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2149.3	2149.3	2149.3	2149.3	2149.3
2.5°	2162.6	2143.8	2149.3	2144.6	2134.5
5°	2160.4	2136.9	2143.7	2136.3	2132.6
7.5°	2143.7	2120.6	2127.4	2120.0	2117.8
10°	2128.9	2107.2	2114.1	2106.6	2103.0
12.5°	2112.6	2089.5	2097.8	2088.9	2085.2
15°	2078.9	2057.2	2066.0	2058.5	2054.9
17.5°	2041.9	2018.7	2027.5	2018.9	2014.2
20°	2012.3	1990.6	1999.3	1986.3	1984.5
22.5°	1979.7	1958.0	1966.8	1949.3	1949.0
25°	1927.1	1903.6	1914.2	1893.8	1892.0
27.5°	1864.6	1842.8	1851.6	1830.8	1828.7
30°	1821.6	1799.9	1808.7	1786.4	1782.7
32.5°	1772.7	1752.5	1759.8	1737.5	1735.4
35°	1697.6	1677.7	1682.8	1660.5	1658.7
37.5°	1612.1	1594.0	1596.9	1572.4	1570.6
40°	1551.3	1533.2	1534.7	1508.7	1506.9
42.5°	1484.7	1466.6	1465.1	1439.1	1437.3
45°	1373.6	1355.5	1349.6	1325.4	1321.8
47.5°	1247.0	1228.9	1217.7	1198.1	1195.5
50°	1155.2	1137.1	1127.4	1110.6	1105.2
52.5°	1055.9	1037.8	1029.7	1014.4	1008.9
55°	899.7	885.2	879.3	864.4	860.8
57.5°	751.2	741.5	739.8	725.3	723.8
60°	660.9	655.5	655.3	642.4	642.4
62.5°	583.9	579.9	582.8	574.2	572.8
65°	483.2	479.6	485.0	481.3	481.3
67.5°	403.6	403.6	406.9	405.4	405.4
70°	359.1	359.1	361.0	361.0	361.0
72.5°	319.2	317.7	322.5	322.5	321.0
75°	261.0	261.0	261.0	262.9	262.9
77.5°	203.3	203.6	205.1	204.7	203.3
80°	164.8	166.6	166.6	164.8	164.8
82.5°	126.3	128.1	128.1	127.7	126.3
85°	66.6	70.3	74.0	74.0	74.0
87.5°	19.5	26.1	31.6	32.1	30.6
90°	1.4	5.5	9.7	12.5	12.5
92.5°	12.5	56.8	98.6	42.4	35.8
95°	30.6	113.4	361.1	157.2	105.6
97.5°	50.6	125.2	553.6	430.7	302.5
100°	63.9	133.1	612.5	620.9	501.4
102.5°	77.2	141.0	628.0	767.9	662.5
105°	100.0	155.7	619.4	943.2	887.5
107.5°	123.6	172.8	583.6	1033.7	1049.1
110°	140.3	185.1	556.9	1051.5	1118.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	154.7	197.4	530.3	1036.7	1136.9
115°	177.8	215.8	495.8	986.4	1123.6
117.5°	199.4	235.8	473.9	915.2	1069.7
120°	213.9	249.2	463.9	867.4	1020.8
122.5°	226.1	261.4	457.2	819.5	967.5
125°	244.4	278.4	448.6	755.8	891.6
127.5°	260.8	294.5	443.9	707.6	824.2
130°	270.8	303.4	441.7	677.4	781.9
132.5°	280.8	313.4	439.4	651.5	744.2
135°	294.4	327.0	436.1	615.7	694.4
137.5°	309.2	338.8	434.4	584.0	650.3
140°	318.0	346.6	433.3	563.8	623.6
142.5°	326.9	353.3	432.2	548.1	598.0
145°	340.3	364.7	430.5	523.1	562.5
147.5°	355.3	376.2	429.2	503.5	534.4
150°	365.3	382.9	429.2	492.2	516.7
152.5°	373.0	388.5	428.0	482.1	502.2
155°	384.7	398.3	427.8	469.7	483.3
157.5°	396.1	406.7	427.8	461.3	471.7
160°	402.8	412.3	427.8	455.7	463.9
162.5°	409.4	416.8	428.9	451.2	457.2
165°	416.7	422.1	429.2	447.2	448.6
167.5°	424.2	426.9	430.5	442.5	443.6
170°	426.4	429.1	430.5	440.3	440.3
172.5°	428.6	430.2	430.5	438.0	438.0
175°	431.9	433.3	430.5	436.1	434.7
177.5°	433.0	433.0	429.7	434.1	431.9
180°	431.9	431.9	431.9	431.9	431.9

(END OF REPORT)