

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: P564667

Luminaire Tested: **SQ4-PW1-050U-100D-830-1D-UNV-STD-W-6**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564667
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

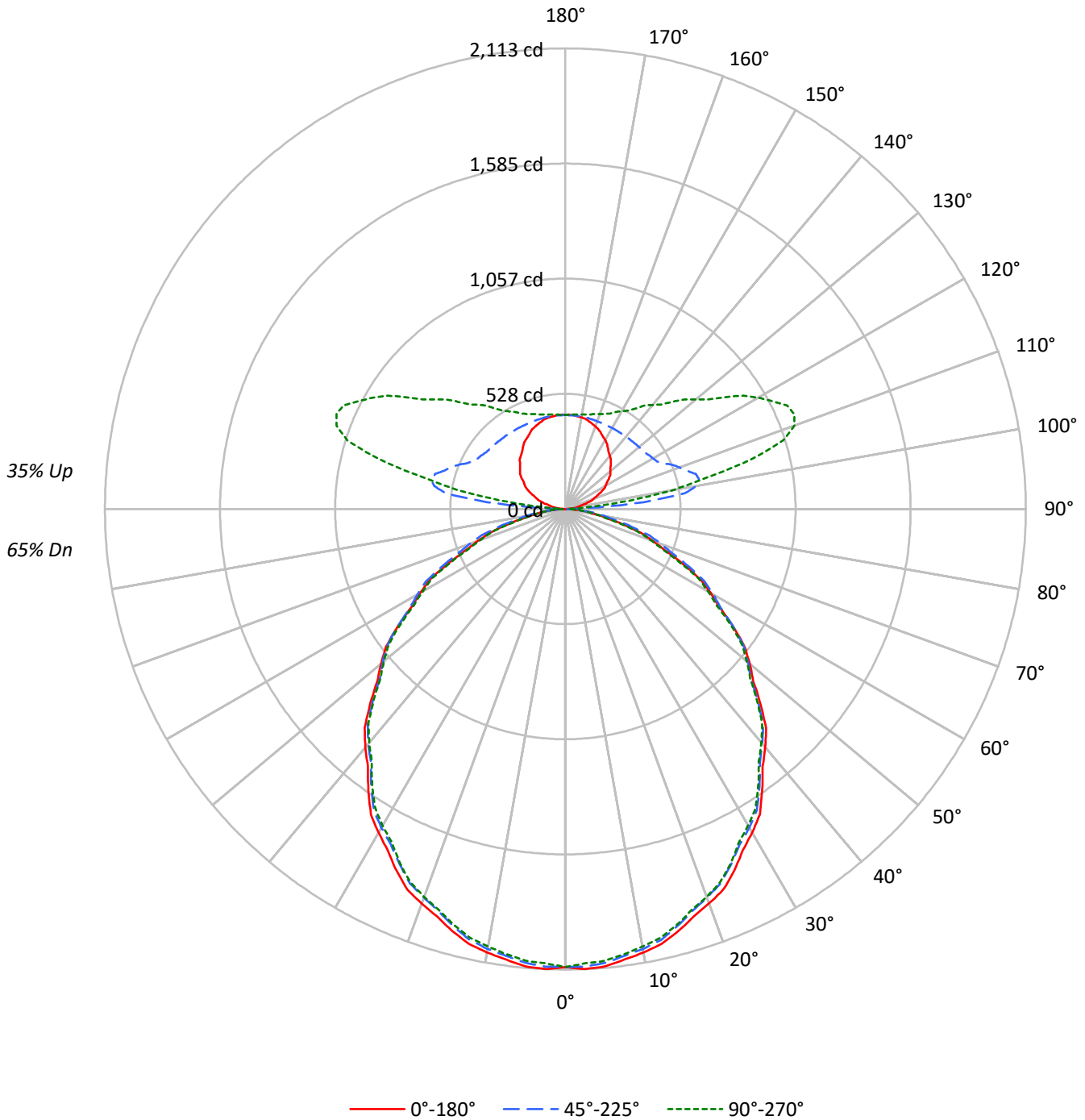
Lumens per Lamp: N/A
Luminaire Lumens: 8167.8 lumens
Efficiency: N/A
Efficacy: 111.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Direct

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	0
RCR																		
0	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	65
1	101	97	93	90	95	91	88	85	81	78	76	71	69	68	62	61	60	55
2	92	85	79	73	87	80	75	70	71	67	63	63	59	57	55	53	50	47
3	84	75	67	61	79	71	64	59	63	58	53	56	51	48	49	46	43	40
4	77	66	58	52	72	63	55	50	56	50	45	50	45	41	44	40	37	34
5	71	59	51	45	67	56	48	43	50	44	39	45	40	36	39	36	32	30
6	66	53	45	39	61	50	43	37	45	39	34	40	35	31	36	32	29	26
7	61	48	40	34	57	46	38	33	41	35	30	37	32	28	33	29	25	23
8	56	44	36	30	53	42	34	29	38	31	27	34	29	25	30	26	23	21
9	53	40	32	27	49	38	31	26	34	29	24	31	26	22	28	24	21	19
10	49	37	29	24	46	35	28	24	32	26	22	29	24	20	26	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12924	12924	12924
5°	13007	12905	12847
10°	12904	12799	12730
15°	12767	12625	12578
20°	12614	12420	12396
25°	12438	12212	12175
30°	12176	11991	11912
35°	11829	11663	11593
40°	11460	11282	11237
45°	11015	10870	10821
50°	10557	10469	10399
55°	10065	10065	9906
60°	9451	9633	9291
65°	8649	9080	8433
70°	7623	8357	7424
75°	6512	7479	6336
80°	5048	6294	5115
85°	3268	4834	4312



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	197.9	2.4
10°-20°	558.6	6.8
20°-30°	828.6	10.1
30°-40°	969.5	11.9
40°-50°	965.2	11.8
50°-60°	833.5	10.2
60°-70°	600.0	7.3
70°-80°	314.6	3.9
80°-90°	79.7	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	4.5
140°-150°	279.0	3.4
150°-160°	200.6	2.5
160°-170°	122.7	1.5
170°-180°	41.3	0.5
0°-30°	1585.1	19.4
0°-40°	2554.6	31.3
0°-60°	4353.3	53.3
0°-90°	5347.6	65.5
90°-120°	1349.8	16.5
90°-150°	2455.6	30.1
90°-180°	2820.0	34.5
0°-180°	8167.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2101	2101	2101	2101	2101	
5°	2107	2083	2090	2084	2081	200
15°	2005	1980	1983	1979	1975	565
25°	1833	1802	1799	1788	1794	843
35°	1575	1554	1553	1538	1544	985
45°	1266	1255	1250	1246	1244	977
55°	939	937	939	926	924	837
65°	594	612	624	599	579	589
75°	274	299	315	294	267	294
85°	46	61	68	65	61	61
90°	1	6	10	12	12	4
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°	2101.2	2101.2	2101.2	2101.2	2101.2
2.5°	2113.0	2095.6	2101.2	2096.5	2086.4
5°	2106.7	2083.2	2090.1	2084.4	2080.8
7.5°	2085.2	2063.5	2068.6	2062.6	2060.4
10°	2066.0	2044.3	2049.3	2041.8	2038.2
12.5°	2043.8	2020.6	2025.6	2018.2	2016.0
15°	2004.9	1979.6	1982.7	1978.9	1975.3
17.5°	1959.7	1934.0	1934.6	1928.6	1927.9
20°	1927.1	1900.0	1897.5	1890.2	1893.8
22.5°	1891.6	1863.0	1860.5	1850.3	1855.3
25°	1832.7	1802.0	1799.4	1788.4	1793.9
27.5°	1764.6	1734.2	1734.2	1718.8	1724.6
30°	1714.3	1685.3	1688.3	1670.0	1677.2
32.5°	1660.9	1634.9	1636.5	1618.2	1625.4
35°	1575.4	1553.7	1553.2	1538.5	1543.9
37.5°	1488.0	1468.8	1465.8	1457.3	1458.8
40°	1427.3	1411.0	1405.1	1399.5	1399.5
42.5°	1363.6	1348.8	1342.9	1338.8	1337.3
45°	1266.3	1255.4	1249.6	1245.8	1244.0
47.5°	1170.0	1159.9	1154.8	1152.2	1150.4
50°	1103.3	1096.1	1094.1	1088.5	1086.7
52.5°	1036.7	1032.4	1030.4	1023.3	1021.5
55°	938.6	936.8	938.6	925.6	923.8
57.5°	836.4	839.3	845.3	827.8	823.4
60°	768.3	775.5	783.1	762.5	755.3
62.5°	698.7	710.2	720.9	697.3	687.2
65°	594.3	612.4	623.9	599.4	579.4
67.5°	493.5	516.0	529.8	503.4	481.0
70°	423.9	449.3	464.7	438.2	412.8
72.5°	363.2	391.5	403.9	378.9	353.6
75°	274.0	299.3	314.7	293.7	266.6
77.5°	194.4	218.3	231.0	212.8	190.3
80°	142.5	167.9	177.7	162.5	144.4
82.5°	101.1	122.1	128.8	119.7	107.4
85°	46.3	60.8	68.5	64.7	61.1
87.5°	12.1	23.1	30.1	30.7	32.1
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)