

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: P519078

Luminaire Tested: **SQ4-WB-050U-050D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519078
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-050U-050D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

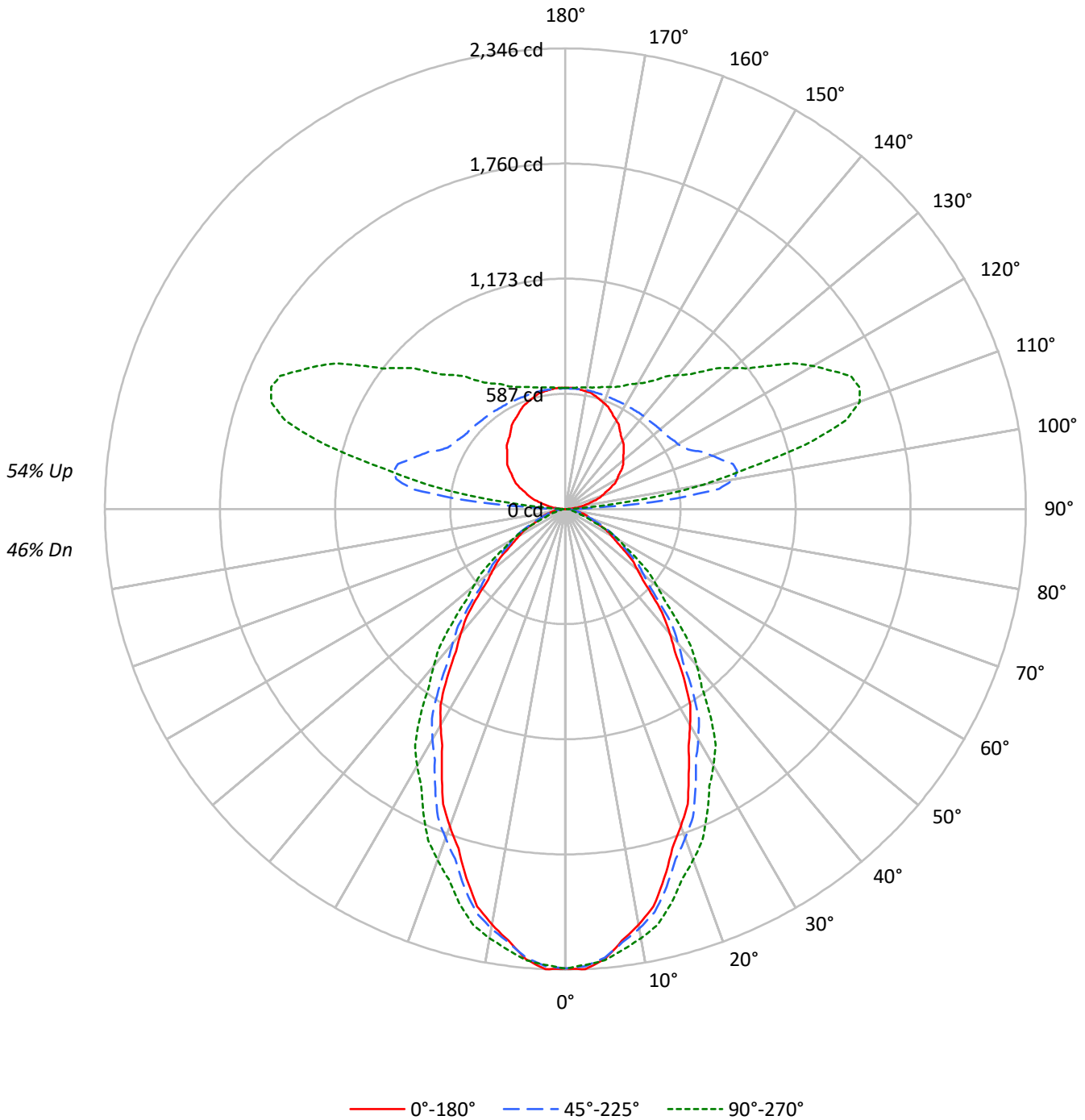
Lumens per Lamp: N/A
Luminaire Lumens: 7436.9 lumens
Efficiency: N/A
Efficacy: 126.3 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 58.9
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	0
RCR																		
0	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46
1	98	94	91	87	90	87	84	81	73	70	69	60	58	57	48	47	46	41
2	90	83	78	73	83	77	72	68	65	61	59	54	51	49	43	42	41	36
3	83	74	68	62	76	69	63	58	58	54	51	49	46	43	40	38	36	32
4	76	66	59	54	70	62	55	50	52	48	44	44	41	38	36	34	32	28
5	71	60	52	47	65	56	49	44	48	43	39	40	36	34	33	31	29	25
6	65	54	47	41	60	50	44	39	43	38	34	37	33	30	30	28	26	23
7	61	49	42	37	56	46	39	35	40	35	31	34	30	27	28	25	23	21
8	57	45	38	33	52	42	36	31	36	31	28	31	27	25	26	23	21	19
9	53	41	34	30	49	39	32	28	34	29	25	29	25	22	24	22	20	17
10	50	38	31	27	46	36	30	26	31	26	23	27	23	21	23	20	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10797	10797	10797
5°	10662	10624	10686
10°	10074	10165	10401
15°	9300	9515	9942
20°	8445	8762	9342
25°	7574	7988	8704
30°	6772	7216	8042
35°	5922	6350	7259
40°	4985	5381	6283
45°	4114	4469	5246
50°	3435	3744	4371
55°	2915	3213	3610
60°	2492	2785	2880
65°	1984	2342	1861
70°	1759	1829	1136
75°	1629	1483	695
80°	1501	1363	600
85°	1360	1249	487



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.7	2.9
10°-20°	558.4	7.5
20°-30°	723.3	9.7
30°-40°	708.3	9.5
40°-50°	542.1	7.3
50°-60°	361.3	4.9
60°-70°	197.1	2.7
70°-80°	82.1	1.1
80°-90°	25.6	0.3
90°-100°	295.8	4.0
100°-110°	803.7	10.8
110°-120°	826.3	11.1
120°-130°	660.7	8.9
130°-140°	519.1	7.0
140°-150°	398.0	5.4
150°-160°	286.2	3.8
160°-170°	175.1	2.4
170°-180°	59.0	0.8
0°-30°	1496.4	20.1
0°-40°	2204.6	29.6
0°-60°	3108.0	41.8
0°-90°	3412.9	45.9
90°-120°	1925.8	25.9
90°-150°	3503.7	47.1
90°-180°	4024.0	54.1
0°-180°	7436.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2340	2340	2340	2340	2340	
5°	2302	2279	2294	2300	2308	214
15°	1947	1940	1992	2047	2082	544
25°	1488	1492	1569	1638	1710	684
35°	1052	1057	1128	1204	1289	654
45°	631	643	685	737	804	492
55°	362	378	400	415	449	329
65°	182	197	215	188	170	189
75°	91	91	83	57	39	98
85°	26	26	24	15	9	28
90°	2	8	14	18	18	4
95°	44	162	515	224	151	46
105°	143	222	884	1346	1266	152
115°	254	308	707	1407	1603	250
125°	349	397	640	1078	1272	311
135°	420	467	622	878	991	325
145°	486	520	614	746	803	305
155°	549	568	610	670	690	253
165°	594	602	612	638	640	168
175°	616	618	614	622	620	59
180°	616	616	616	616	616	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2340.5	2340.5	2340.5	2340.5	2340.5
2.5°	2346.3	2325.4	2330.7	2330.5	2324.1
5°	2302.5	2279.4	2294.3	2299.6	2307.7
7.5°	2217.1	2199.6	2226.7	2246.8	2263.1
10°	2150.5	2135.5	2170.0	2199.3	2220.4
12.5°	2073.3	2060.7	2103.5	2142.7	2170.3
15°	1947.2	1940.2	1992.4	2046.6	2081.7
17.5°	1812.2	1808.8	1868.7	1932.0	1977.0
20°	1720.2	1719.2	1784.9	1850.8	1903.0
22.5°	1627.4	1629.6	1698.7	1767.2	1826.6
25°	1488.1	1492.1	1569.3	1637.7	1710.0
27.5°	1359.3	1361.1	1440.9	1513.1	1590.2
30°	1271.4	1276.4	1354.6	1429.4	1509.7
32.5°	1183.5	1189.3	1265.9	1343.1	1425.1
35°	1051.6	1056.7	1127.6	1203.5	1288.9
37.5°	915.7	922.5	985.5	1057.3	1141.2
40°	827.8	837.8	893.5	961.1	1043.4
42.5°	743.1	755.6	807.2	871.4	945.7
45°	630.6	642.6	685.0	736.9	804.1
47.5°	533.6	547.5	580.0	624.7	682.1
50°	478.6	491.6	521.7	554.8	609.0
52.5°	430.1	443.2	470.0	495.4	541.6
55°	362.5	377.6	399.5	414.7	448.8
57.5°	307.1	321.5	338.9	345.7	366.4
60°	270.1	286.2	301.9	301.2	312.2
62.5°	236.4	250.1	265.8	254.9	255.5
65°	181.8	196.8	214.6	187.6	170.5
67.5°	146.9	150.1	168.4	130.8	110.5
70°	130.4	130.4	135.6	101.3	84.2
72.5°	114.8	114.8	110.1	82.4	64.5
75°	91.4	91.4	83.2	57.1	39.0
77.5°	70.5	69.6	63.7	42.6	28.3
80°	56.5	56.5	51.3	33.6	22.6
82.5°	44.2	44.2	39.8	26.3	16.8
85°	25.7	25.7	23.6	15.3	9.2
87.5°	9.4	10.6	11.0	8.5	7.7
90°	2.0	7.8	13.9	17.8	17.8
92.5°	17.8	81.0	140.7	60.4	51.1
95°	43.6	161.8	515.2	224.2	150.6
97.5°	72.1	178.7	789.9	614.5	431.6
100°	91.2	190.0	873.9	885.9	715.4
102.5°	110.2	201.2	896.1	1095.6	945.2
105°	142.7	222.1	883.8	1345.7	1266.3
107.5°	176.4	246.5	832.7	1474.8	1496.9
110°	200.1	264.1	794.6	1500.3	1595.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	220.8	281.6	756.6	1479.2	1622.2
115°	253.6	307.9	707.4	1407.4	1603.1
117.5°	284.6	336.5	676.1	1305.8	1526.3
120°	305.2	355.5	661.9	1237.6	1456.5
122.5°	322.6	373.0	652.4	1169.2	1380.4
125°	348.8	397.2	640.1	1078.4	1272.2
127.5°	372.2	420.2	633.3	1009.7	1175.9
130°	386.4	432.9	630.2	966.5	1115.7
132.5°	400.7	447.2	627.0	929.6	1061.8
135°	420.1	466.6	622.2	878.4	990.8
137.5°	441.1	483.4	619.9	833.2	927.8
140°	453.8	494.5	618.3	804.5	889.8
142.5°	466.5	504.1	616.7	782.0	853.3
145°	485.5	520.4	614.3	746.4	802.6
147.5°	506.9	536.7	612.3	718.4	762.5
150°	521.2	546.4	612.3	702.3	737.2
152.5°	532.3	554.4	610.7	687.9	716.6
155°	548.9	568.3	610.3	670.2	689.6
157.5°	565.2	580.3	610.3	658.2	673.0
160°	574.7	588.2	610.3	650.2	661.9
162.5°	584.2	594.6	611.9	643.8	652.4
165°	594.5	602.2	612.3	638.1	640.1
167.5°	605.2	609.1	614.3	631.4	632.9
170°	608.4	612.2	614.3	628.2	628.2
172.5°	611.5	613.9	614.3	625.0	625.0
175°	616.3	618.2	614.3	622.2	620.3
177.5°	617.9	617.9	613.1	619.4	616.3
180°	616.3	616.3	616.3	616.3	616.3

(END OF REPORT)