

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: P519412

Luminaire Tested: **SQ4-WB-100U-100D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519412  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-100D-840-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

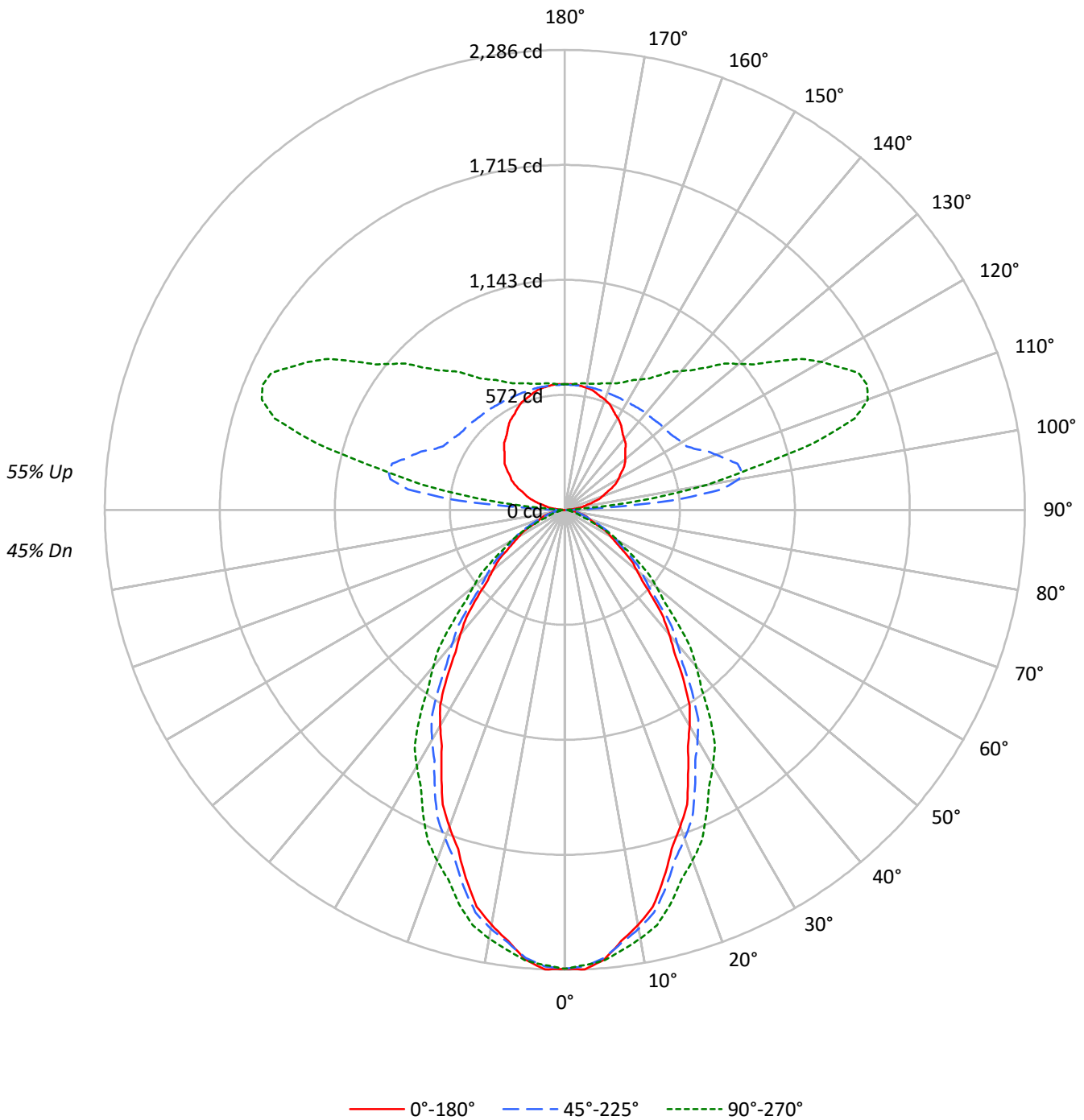
Lumens per Lamp: N/A  
Luminaire Lumens: 7381.6 lumens  
Efficiency: N/A  
Efficacy: 127.5 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 57.9  
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	106	106	106	106	97	97	97	97	81	81	81	65	65	65	52	52	52	45				45
1	98	94	90	87	89	86	83	81	72	70	68	59	58	56	47	46	46	40				40
2	90	83	78	73	82	77	72	68	64	61	58	53	51	49	43	41	40	35				35
3	83	74	67	62	76	68	63	58	58	54	50	48	45	43	39	37	35	31				31
4	76	66	59	54	70	61	55	50	52	47	44	44	40	37	36	33	31	28				28
5	70	60	52	47	65	55	49	44	47	42	39	40	36	33	33	30	28	25				25
6	65	54	46	41	60	50	44	39	43	38	34	36	33	30	30	27	25	22				22
7	61	49	42	36	56	46	39	34	39	34	31	33	30	27	28	25	23	20				20
8	56	45	38	33	52	42	35	31	36	31	28	31	27	24	26	23	21	19				19
9	53	41	34	29	49	39	32	28	33	28	25	29	25	22	24	21	19	17				17
10	49	38	31	27	46	36	29	25	31	26	23	27	23	20	22	20	18	16				16

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	21043	21043	21043
5°	20780	20706	20826
10°	19633	19811	20271
15°	18124	18545	19377
20°	16458	17078	18207
25°	14762	15567	16963
30°	13200	14063	15672
35°	11542	12377	14146
40°	9715	10487	12246
45°	8018	8709	10224
50°	6694	7297	8519
55°	5683	6262	7034
60°	4857	5429	5613
65°	3866	4567	3626
70°	3429	3563	2215
75°	3176	2891	1355
80°	2922	2657	1169
85°	2646	2435	953



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	209.2	2.8
10°-20°	544.1	7.4
20°-30°	704.8	9.5
30°-40°	690.2	9.4
40°-50°	528.3	7.2
50°-60°	352.0	4.8
60°-70°	192.1	2.6
70°-80°	80.0	1.1
80°-90°	23.9	0.3
90°-100°	292.4	4.0
100°-110°	807.2	10.9
110°-120°	832.5	11.3
120°-130°	669.0	9.1
130°-140°	525.7	7.1
140°-150°	403.2	5.5
150°-160°	289.8	3.9
160°-170°	177.2	2.4
170°-180°	59.8	0.8
0°-30°	1458.2	19.8
0°-40°	2148.4	29.1
0°-60°	3028.7	41.0
0°-90°	3324.8	45.0
90°-120°	1932.1	26.2
90°-150°	3530.0	47.8
90°-180°	4057.0	55.0
0°-180°	7381.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2281	2281	2281	2281	2281	
5°	2244	2221	2236	2241	2249	209
15°	1898	1891	1942	1994	2029	530
25°	1450	1454	1529	1596	1666	667
35°	1025	1030	1099	1173	1256	637
45°	614	626	668	718	784	479
55°	353	368	389	404	437	320
65°	177	192	209	183	166	184
75°	89	89	81	56	38	95
85°	25	25	23	15	9	27
90°	2	4	8	9	10	4
95°	43	158	530	218	142	46
105°	144	222	888	1356	1277	153
115°	258	312	715	1416	1610	253
125°	354	402	648	1097	1288	315
135°	426	472	630	889	1002	329
145°	494	528	622	756	814	309
155°	556	575	617	679	700	256
165°	602	610	620	644	649	170
175°	624	625	621	630	628	59
180°	624	624	624	624	624	

TEST NUMBER: P519412

CATALOG NUMBER: SQ4-WB-100U-100D-840-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2280.8	2280.8	2280.8	2280.8	2280.8
2.5°	2286.4	2266.0	2271.2	2271.0	2264.8
5°	2243.7	2221.2	2235.7	2240.9	2248.7
7.5°	2160.5	2143.5	2169.9	2189.5	2205.3
10°	2095.6	2080.9	2114.6	2143.1	2163.7
12.5°	2020.4	2008.0	2049.8	2088.0	2114.8
15°	1897.5	1890.6	1941.5	1994.3	2028.6
17.5°	1766.0	1762.6	1821.0	1882.7	1926.5
20°	1676.3	1675.3	1739.4	1803.6	1854.4
22.5°	1585.8	1588.0	1655.3	1722.1	1780.0
25°	1450.1	1454.0	1529.2	1595.8	1666.3
27.5°	1324.6	1326.4	1404.1	1474.5	1549.6
30°	1239.0	1243.9	1320.0	1392.9	1471.1
32.5°	1153.3	1159.0	1233.6	1308.8	1388.7
35°	1024.8	1029.7	1098.9	1172.8	1256.0
37.5°	892.3	898.9	960.3	1030.3	1112.1
40°	806.6	816.4	870.7	936.5	1016.8
42.5°	724.2	736.3	786.6	849.1	921.5
45°	614.5	626.2	667.5	718.0	783.6
47.5°	520.0	533.5	565.2	608.7	664.7
50°	466.4	479.1	508.4	540.6	593.5
52.5°	419.1	431.8	458.0	482.8	527.8
55°	353.3	368.0	389.3	404.1	437.3
57.5°	299.2	313.3	330.3	336.9	357.1
60°	263.2	278.9	294.2	293.5	304.2
62.5°	230.4	243.7	259.0	248.4	249.0
65°	177.1	191.8	209.2	182.8	166.1
67.5°	143.1	146.2	164.1	127.5	107.7
70°	127.1	127.1	132.1	98.7	82.1
72.5°	111.9	111.9	107.3	80.3	62.8
75°	89.1	89.1	81.1	55.6	38.0
77.5°	68.7	67.9	62.0	41.5	27.6
80°	55.0	55.0	50.0	32.8	22.0
82.5°	43.0	43.0	38.8	25.6	16.4
85°	25.0	25.0	23.0	14.9	9.0
87.5°	9.2	9.6	9.6	6.6	6.0
90°	2.0	4.0	8.0	9.0	10.0
92.5°	18.0	74.6	133.5	48.7	38.0
95°	43.0	158.2	530.5	218.0	141.9
97.5°	71.1	177.2	785.8	605.0	438.1
100°	91.9	188.6	880.1	886.3	720.3
102.5°	111.9	201.6	898.5	1095.1	937.6
105°	143.9	222.0	888.1	1355.8	1276.7
107.5°	177.8	247.4	838.5	1481.5	1510.4
110°	201.8	264.3	800.2	1508.6	1602.3

TEST NUMBER: P519412

CATALOG NUMBER: SQ4-WB-100U-100D-840-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	223.4	283.5	764.2	1487.2	1625.5
115°	257.7	311.5	715.3	1416.0	1610.3
117.5°	287.7	341.2	683.1	1315.7	1536.8
120°	307.7	360.4	670.3	1247.8	1470.5
122.5°	326.9	377.3	659.9	1184.4	1395.4
125°	353.6	402.5	648.3	1097.2	1287.7
127.5°	376.4	425.2	641.5	1023.5	1187.8
130°	391.6	440.4	638.3	978.4	1127.8
132.5°	406.0	452.5	635.1	940.5	1075.9
135°	425.6	471.5	630.3	888.7	1002.0
137.5°	447.5	489.3	628.0	845.1	941.8
140°	459.5	500.5	626.4	816.1	901.1
142.5°	473.1	511.0	624.8	790.3	865.1
145°	493.5	527.7	622.4	756.5	814.2
147.5°	513.1	543.0	620.2	728.1	772.8
150°	527.5	551.9	619.4	711.1	747.2
152.5°	538.6	561.5	618.6	696.6	726.4
155°	556.4	575.0	617.4	678.8	700.3
157.5°	572.8	587.1	617.6	665.8	680.5
160°	582.4	595.1	618.4	658.6	669.3
162.5°	590.4	601.5	619.2	652.1	660.5
165°	602.4	610.2	620.4	644.4	649.3
167.5°	611.6	616.3	621.4	639.8	641.3
170°	616.4	620.3	621.4	637.3	637.3
172.5°	620.4	622.7	621.4	634.1	633.3
175°	624.4	625.3	621.4	630.3	628.4
177.5°	626.0	625.2	621.2	626.7	625.2
180°	624.4	624.4	624.4	624.4	624.4

(END OF REPORT)