

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: P519102

Luminaire Tested: **SQ4-WB-050U-075D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519102
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-075D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

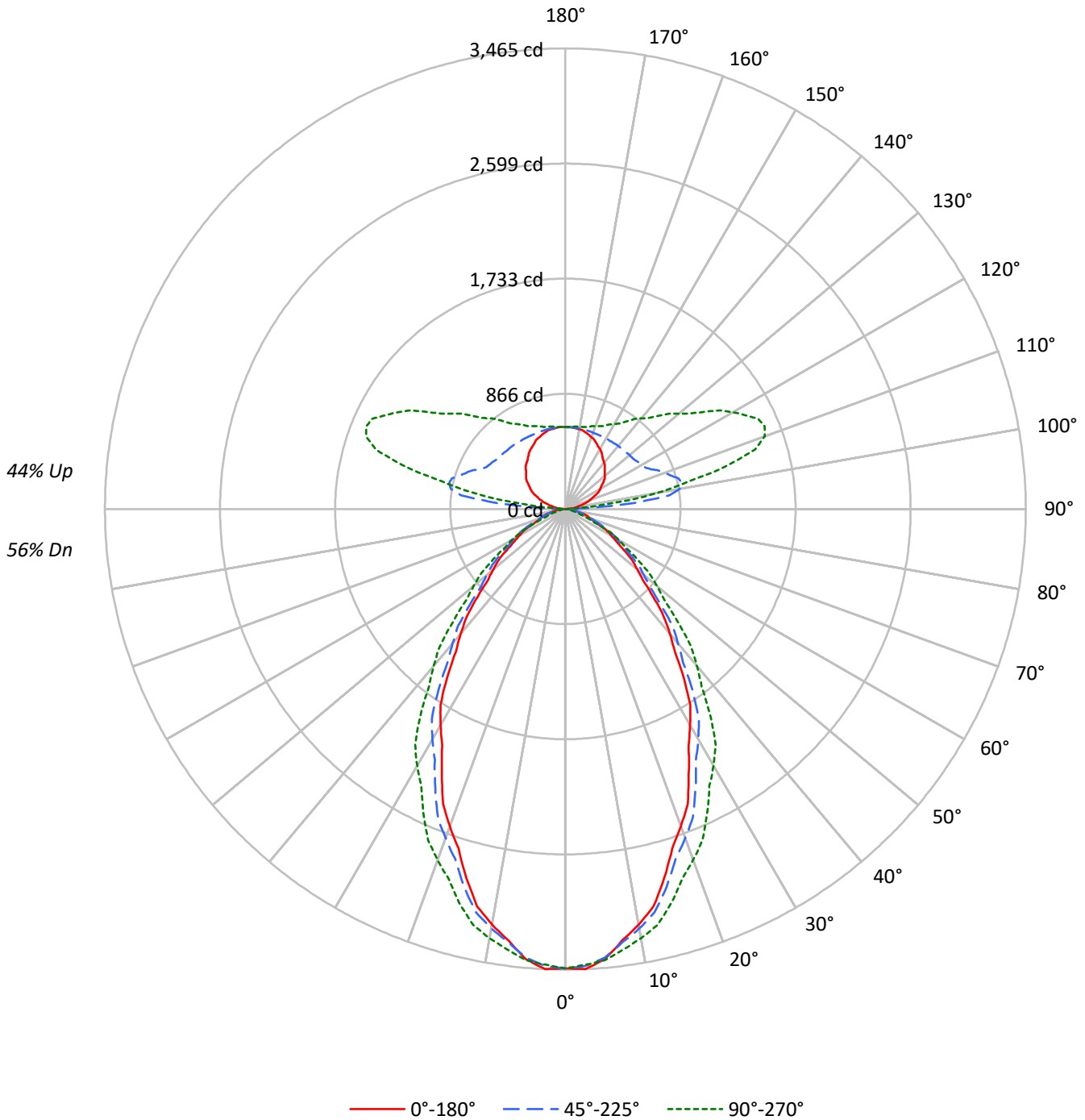
Lumens per Lamp: N/A
Luminaire Lumens: 9063.3 lumens
Efficiency: N/A
Efficacy: 116.0 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 78.1
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									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	50	30	10	50	30	10	50	30	10	0																
RCR																																														
0	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	56									56																			
1	100	96	93	90	93	90	87	84	78	76	74	66	65	64	56	55	54	49									49																			
2	92	86	80	76	86	80	75	71	70	66	63	60	57	55	51	49	48	43									43																			
3	85	77	70	65	79	72	66	61	63	58	55	54	51	48	46	44	42	38									38																			
4	79	69	62	56	73	65	58	53	57	52	48	49	46	43	42	40	38	34									34																			
5	73	62	55	49	68	58	52	47	51	46	42	45	41	38	39	36	34	31									31																			
6	68	56	49	43	63	53	46	41	47	42	38	41	37	34	36	33	30	28									28																			
7	63	51	44	39	59	49	42	37	43	38	34	38	34	31	33	30	28	25									25																			
8	59	47	40	35	55	45	38	33	40	34	31	35	31	28	31	28	25	23									23																			
9	55	43	36	31	51	41	35	30	37	32	28	33	29	26	29	26	23	21									21																			
10	52	40	33	29	48	38	32	28	34	29	26	30	26	23	27	24	21	20									20																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15946	15946	15946
5°	15747	15691	15782
10°	14878	15013	15361
15°	13734	14053	14683
20°	12472	12941	13797
25°	11187	11797	12854
30°	10002	10657	11877
35°	8746	9379	10720
40°	7362	7947	9280
45°	6076	6600	7748
50°	5072	5530	6455
55°	4306	4745	5331
60°	3680	4114	4254
65°	2931	3460	2749
70°	2598	2700	1678
75°	2406	2191	1027
80°	2216	2014	887
85°	2006	1847	725



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	317.1	3.5
10°-20°	824.7	9.1
20°-30°	1068.2	11.8
30°-40°	1046.0	11.5
40°-50°	800.7	8.8
50°-60°	533.5	5.9
60°-70°	291.1	3.2
70°-80°	121.3	1.3
80°-90°	36.7	0.4
90°-100°	295.8	3.3
100°-110°	803.7	8.9
110°-120°	826.3	9.1
120°-130°	660.7	7.3
130°-140°	519.1	5.7
140°-150°	398.0	4.4
150°-160°	286.2	3.2
160°-170°	175.1	1.9
170°-180°	59.0	0.7
0°-30°	2209.9	24.4
0°-40°	3256.0	35.9
0°-60°	4590.2	50.6
0°-90°	5039.3	55.6
90°-120°	1925.8	21.2
90°-150°	3503.7	38.7
90°-180°	4024.0	44.4
0°-180°	9063.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3457	3457	3457	3457	3457	
5°	3400	3366	3388	3396	3408	316
15°	2876	2865	2942	3022	3074	803
25°	2198	2204	2318	2419	2525	1011
35°	1553	1561	1665	1778	1904	966
45°	931	949	1012	1088	1188	726
55°	535	558	590	612	663	485
65°	268	291	317	277	252	279
75°	135	135	123	84	58	144
85°	38	38	35	22	14	41
90°	2	8	14	18	18	5
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°	3456.7	3456.7	3456.7	3456.7	3456.7
2.5°	3465.2	3434.3	3442.1	3441.9	3432.4
5°	3400.5	3366.4	3388.4	3396.3	3408.1
7.5°	3274.4	3248.5	3288.6	3318.3	3342.3
10°	3176.1	3153.8	3204.9	3248.1	3279.2
12.5°	3062.0	3043.3	3106.6	3164.6	3205.2
15°	2875.8	2865.4	2942.5	3022.5	3074.4
17.5°	2676.5	2671.4	2759.9	2853.3	2919.7
20°	2540.6	2539.1	2636.1	2733.4	2810.5
22.5°	2403.4	2406.7	2508.7	2609.9	2697.7
25°	2197.8	2203.7	2317.6	2418.6	2525.4
27.5°	2007.6	2010.2	2128.0	2234.6	2348.5
30°	1877.7	1885.1	2000.6	2111.0	2229.6
32.5°	1747.9	1756.5	1869.5	1983.6	2104.6
35°	1553.1	1560.6	1665.4	1777.5	1903.5
37.5°	1352.3	1362.4	1455.5	1561.4	1685.4
40°	1222.5	1237.3	1319.6	1419.4	1541.0
42.5°	1097.5	1115.9	1192.2	1286.9	1396.6
45°	931.3	949.1	1011.7	1088.2	1187.6
47.5°	788.1	808.6	856.7	922.6	1007.4
50°	706.8	726.1	770.5	819.3	899.4
52.5°	635.2	654.5	694.1	731.7	799.9
55°	535.4	557.7	590.0	612.4	662.8
57.5°	453.5	474.9	500.5	510.6	541.2
60°	398.9	422.6	445.9	444.8	461.1
62.5°	349.2	369.3	392.5	376.5	377.4
65°	268.5	290.7	317.0	277.0	251.8
67.5°	216.9	221.6	248.7	193.2	163.2
70°	192.6	192.6	200.2	149.6	124.4
72.5°	169.6	169.6	162.6	121.6	95.3
75°	135.0	135.0	122.9	84.3	57.6
77.5°	104.0	102.9	94.0	62.9	41.9
80°	83.4	83.4	75.8	49.7	33.4
82.5°	65.2	65.2	58.8	38.8	24.9
85°	37.9	37.9	34.9	22.5	13.7
87.5°	13.7	14.9	14.9	10.8	9.6
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)