

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: P519114

Luminaire Tested: **SQ4-WB-050U-075D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519114
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-940-1D-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, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

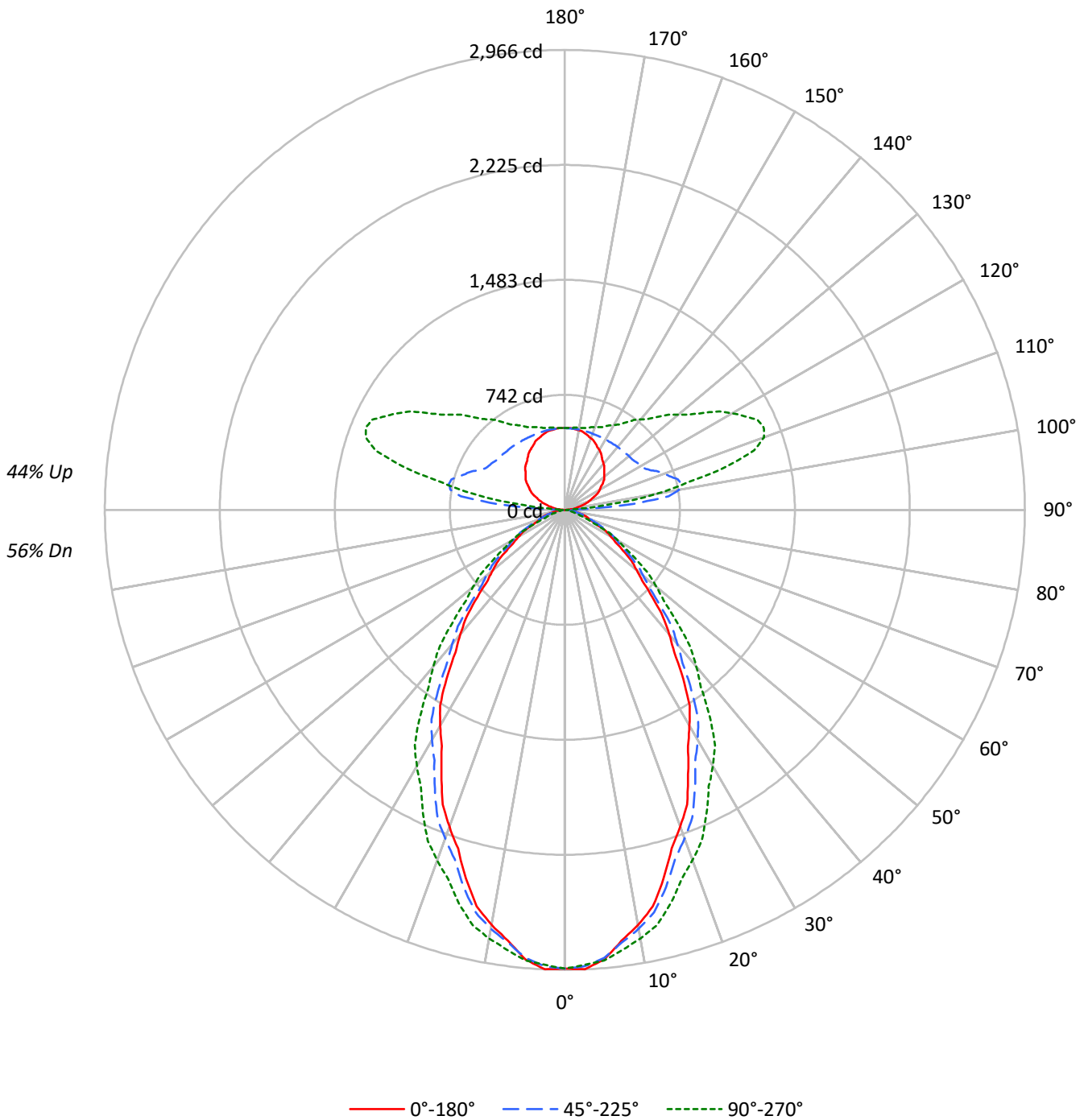
Lumens per Lamp: N/A
Luminaire Lumens: 7757.0 lumens
Efficiency: N/A
Efficacy: 99.3 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13648	13648	13648
5°	13477	13429	13507
10°	12733	12849	13147
15°	11755	12027	12567
20°	10674	11076	11808
25°	9574	10097	11002
30°	8561	9120	10165
35°	7486	8027	9175
40°	6301	6801	7942
45°	5200	5649	6631
50°	4341	4733	5525
55°	3685	4062	4563
60°	3150	3522	3641
65°	2508	2961	2352
70°	2224	2312	1435
75°	2059	1873	879
80°	1897	1724	760
85°	1720	1583	619



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	271.4	3.5
10°-20°	705.8	9.1
20°-30°	914.2	11.8
30°-40°	895.3	11.5
40°-50°	685.3	8.8
50°-60°	456.6	5.9
60°-70°	249.2	3.2
70°-80°	103.8	1.3
80°-90°	31.4	0.4
90°-100°	253.2	3.3
100°-110°	687.8	8.9
110°-120°	707.2	9.1
120°-130°	565.4	7.3
130°-140°	444.3	5.7
140°-150°	340.7	4.4
150°-160°	245.0	3.2
160°-170°	149.8	1.9
170°-180°	50.5	0.7
0°-30°	1891.4	24.4
0°-40°	2786.7	35.9
0°-60°	3928.6	50.6
0°-90°	4313.1	55.6
90°-120°	1648.3	21.2
90°-150°	2998.6	38.7
90°-180°	3444.0	44.4
0°-180°	7757.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2958	2958	2958	2958	2958	
5°	2910	2881	2900	2907	2917	271
15°	2461	2452	2518	2587	2631	687
25°	1881	1886	1984	2070	2161	865
35°	1329	1336	1425	1521	1629	826
45°	797	812	866	931	1016	622
55°	458	477	505	524	567	415
65°	230	249	271	237	216	239
75°	116	116	105	72	49	123
85°	32	32	30	19	12	35
90°	2	7	12	15	15	4
95°	37	138	441	192	129	40
105°	122	190	756	1152	1084	130
115°	217	264	606	1205	1372	214
125°	298	340	548	923	1089	266
135°	360	399	532	752	848	278
145°	416	445	526	639	687	261
155°	470	486	522	574	590	217
165°	509	515	524	546	548	144
175°	528	529	526	532	531	50
180°	528	528	528	528	528	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2958.5	2958.5	2958.5	2958.5	2958.5
2.5°	2965.7	2939.3	2946.0	2945.8	2937.7
5°	2910.4	2881.2	2900.0	2906.8	2916.9
7.5°	2802.4	2780.3	2814.6	2840.0	2860.6
10°	2718.3	2699.3	2743.0	2779.9	2806.6
12.5°	2620.7	2604.7	2658.8	2708.4	2743.2
15°	2461.3	2452.4	2518.4	2586.9	2631.3
17.5°	2290.7	2286.4	2362.1	2442.0	2498.9
20°	2174.4	2173.1	2256.2	2339.4	2405.4
22.5°	2057.0	2059.8	2147.1	2233.7	2308.9
25°	1881.0	1886.1	1983.6	2070.0	2161.4
27.5°	1718.2	1720.5	1821.3	1912.6	2010.0
30°	1607.1	1613.4	1712.2	1806.7	1908.3
32.5°	1496.0	1503.3	1600.1	1697.7	1801.3
35°	1329.3	1335.6	1425.4	1521.3	1629.2
37.5°	1157.4	1166.0	1245.7	1336.4	1442.5
40°	1046.3	1059.0	1129.4	1214.8	1318.9
42.5°	939.3	955.1	1020.3	1101.4	1195.3
45°	797.1	812.3	865.9	931.4	1016.4
47.5°	674.5	692.0	733.2	789.6	862.2
50°	604.9	621.4	659.5	701.3	769.8
52.5°	543.7	560.2	594.0	626.2	684.6
55°	458.2	477.3	505.0	524.1	567.3
57.5°	388.1	406.4	428.4	437.0	463.2
60°	341.4	361.7	381.7	380.7	394.6
62.5°	298.8	316.1	336.0	322.2	323.0
65°	229.8	248.8	271.3	237.1	215.5
67.5°	185.6	189.7	212.9	165.3	139.7
70°	164.9	164.9	171.4	128.0	106.4
72.5°	145.1	145.1	139.2	104.1	81.5
75°	115.5	115.5	105.1	72.2	49.3
77.5°	89.1	88.0	80.5	53.9	35.8
80°	71.4	71.4	64.9	42.5	28.6
82.5°	55.8	55.8	50.4	33.2	21.3
85°	32.5	32.5	29.9	19.3	11.7
87.5°	11.8	12.8	12.8	9.3	8.2
90°	1.7	6.7	11.9	15.3	15.3
92.5°	15.3	69.3	120.4	51.7	43.8
95°	37.3	138.5	441.0	191.9	128.9
97.5°	61.7	152.9	676.0	525.9	369.4
100°	78.0	162.6	747.9	758.2	612.3
102.5°	94.3	172.2	766.9	937.7	809.0
105°	122.1	190.1	756.4	1151.7	1083.8
107.5°	150.9	211.0	712.7	1262.3	1281.2
110°	171.3	226.0	680.1	1284.0	1365.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	188.9	241.0	647.5	1266.0	1388.4
115°	217.1	263.5	605.5	1204.6	1372.1
117.5°	243.5	288.0	578.7	1117.6	1306.3
120°	261.2	304.3	566.5	1059.2	1246.6
122.5°	276.1	319.2	558.3	1000.7	1181.4
125°	298.5	340.0	547.8	923.0	1088.8
127.5°	318.5	359.6	542.0	864.1	1006.4
130°	330.7	370.5	539.3	827.2	954.9
132.5°	342.9	382.7	536.6	795.6	908.7
135°	359.6	399.4	532.5	751.8	848.0
137.5°	377.5	413.7	530.5	713.1	794.1
140°	388.4	423.2	529.2	688.5	761.5
142.5°	399.2	431.4	527.8	669.3	730.3
145°	415.5	445.4	525.8	638.8	686.9
147.5°	433.8	459.4	524.1	614.8	652.6
150°	446.1	467.6	524.1	601.1	630.9
152.5°	455.6	474.5	522.7	588.7	613.3
155°	469.8	486.4	522.4	573.6	590.2
157.5°	483.7	496.6	522.4	563.4	576.0
160°	491.8	503.5	522.4	556.5	566.5
162.5°	500.0	508.9	523.7	551.0	558.3
165°	508.8	515.4	524.1	546.2	547.8
167.5°	518.0	521.3	525.8	540.4	541.7
170°	520.7	524.0	525.8	537.6	537.6
172.5°	523.4	525.4	525.8	534.9	534.9
175°	527.5	529.1	525.8	532.5	530.9
177.5°	528.8	528.8	524.7	530.1	527.5
180°	527.5	527.5	527.5	527.5	527.5

(END OF REPORT)