

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: P519110

Luminaire Tested: **SQ4-WB-050U-075D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519110
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-935-1D-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

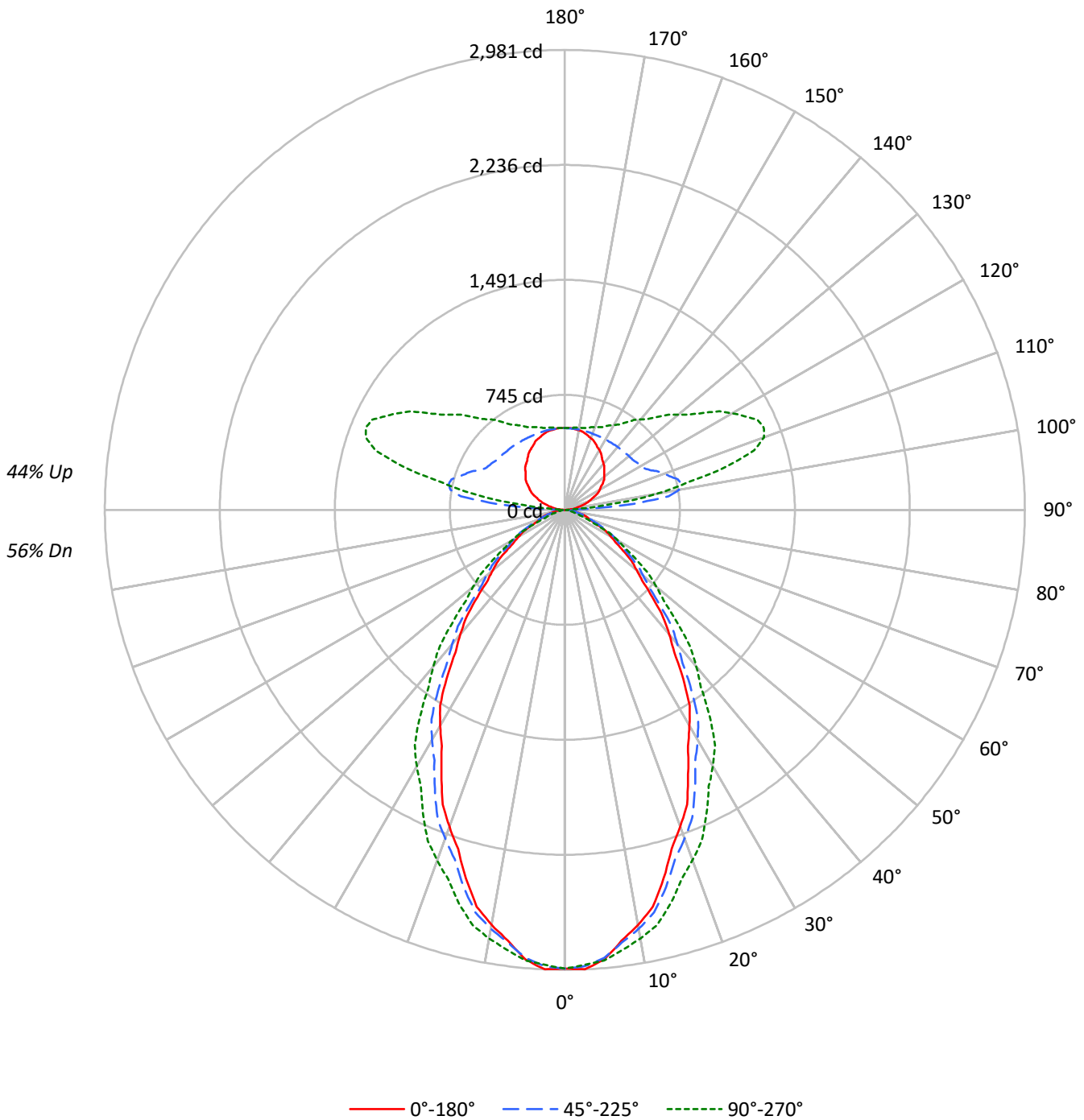
Lumens per Lamp: N/A
Luminaire Lumens: 7796.6 lumens
Efficiency: N/A
Efficacy: 99.8 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

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°	13718	13718	13718
5°	13546	13498	13576
10°	12798	12915	13214
15°	11814	12089	12631
20°	10729	11133	11869
25°	9623	10148	11058
30°	8604	9167	10217
35°	7524	8068	9222
40°	6333	6836	7983
45°	5226	5678	6665
50°	4363	4757	5553
55°	3704	4082	4586
60°	3166	3539	3659
65°	2520	2977	2364
70°	2235	2323	1443
75°	2069	1884	884
80°	1907	1732	762
85°	1725	1588	619



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	272.7	3.5
10°-20°	709.4	9.1
20°-30°	918.9	11.8
30°-40°	899.8	11.5
40°-50°	688.8	8.8
50°-60°	459.0	5.9
60°-70°	250.5	3.2
70°-80°	104.4	1.3
80°-90°	31.6	0.4
90°-100°	254.5	3.3
100°-110°	691.4	8.9
110°-120°	710.8	9.1
120°-130°	568.3	7.3
130°-140°	446.6	5.7
140°-150°	342.4	4.4
150°-160°	246.2	3.2
160°-170°	150.6	1.9
170°-180°	50.7	0.7
0°-30°	1901.1	24.4
0°-40°	2800.9	35.9
0°-60°	3948.6	50.6
0°-90°	4335.0	55.6
90°-120°	1656.7	21.2
90°-150°	3014.0	38.7
90°-180°	3462.0	44.4
0°-180°	7796.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2974	2974	2974	2974	2974	
5°	2925	2896	2915	2922	2932	272
15°	2474	2465	2531	2600	2645	691
25°	1891	1896	1994	2081	2172	869
35°	1336	1342	1433	1529	1638	831
45°	801	816	870	936	1022	625
55°	461	480	508	527	570	418
65°	231	250	273	238	217	240
75°	116	116	106	72	50	124
85°	33	33	30	19	12	35
90°	2	7	12	15	15	4
95°	38	139	443	193	130	40
105°	123	191	760	1158	1089	130
115°	218	265	609	1211	1379	215
125°	300	342	551	928	1094	267
135°	361	401	535	756	852	279
145°	418	448	528	642	690	262
155°	472	489	525	577	593	218
165°	511	518	527	549	551	144
175°	530	532	528	535	534	50
180°	530	530	530	530	530	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2973.6	2973.6	2973.6	2973.6	2973.6
2.5°	2980.9	2954.3	2961.0	2960.8	2952.7
5°	2925.3	2895.9	2914.8	2921.6	2931.8
7.5°	2816.7	2794.5	2829.0	2854.5	2875.2
10°	2732.2	2713.0	2757.0	2794.1	2820.9
12.5°	2634.1	2618.0	2672.4	2722.3	2757.2
15°	2473.8	2464.9	2531.2	2600.1	2644.8
17.5°	2302.4	2298.0	2374.1	2454.5	2511.7
20°	2185.5	2184.2	2267.7	2351.4	2417.7
22.5°	2067.5	2070.3	2158.1	2245.1	2320.6
25°	1890.6	1895.7	1993.7	2080.6	2172.4
27.5°	1727.0	1729.3	1830.6	1922.3	2020.3
30°	1615.3	1621.7	1721.0	1815.9	1918.0
32.5°	1503.6	1511.0	1608.2	1706.4	1810.5
35°	1336.1	1342.5	1432.6	1529.0	1637.5
37.5°	1163.3	1172.0	1252.0	1343.2	1449.9
40°	1051.6	1064.4	1135.1	1221.0	1325.6
42.5°	944.1	959.9	1025.5	1107.0	1201.4
45°	801.1	816.4	870.3	936.2	1021.6
47.5°	678.0	695.6	736.9	793.6	866.6
50°	608.0	624.6	662.8	704.8	773.7
52.5°	546.4	563.0	597.1	629.4	688.1
55°	460.6	479.7	507.6	526.8	570.2
57.5°	390.1	408.5	430.6	439.3	465.5
60°	343.2	363.6	383.6	382.6	396.6
62.5°	300.4	317.7	337.7	323.9	324.6
65°	230.9	250.1	272.7	238.3	216.6
67.5°	186.6	190.7	214.0	166.2	140.4
70°	165.7	165.7	172.2	128.7	107.0
72.5°	145.9	145.9	139.9	104.6	81.9
75°	116.1	116.1	105.7	72.5	49.6
77.5°	89.5	88.5	80.9	54.1	36.0
80°	71.8	71.8	65.2	42.7	28.7
82.5°	56.1	56.1	50.6	33.4	21.4
85°	32.6	32.6	30.0	19.4	11.7
87.5°	11.8	12.8	12.8	9.3	8.3
90°	1.7	6.7	11.9	15.3	15.3
92.5°	15.3	69.7	121.0	52.0	44.0
95°	37.5	139.2	443.2	192.9	129.6
97.5°	62.1	153.7	679.5	528.6	371.3
100°	78.4	163.4	751.8	762.1	615.4
102.5°	94.8	173.1	770.9	942.5	813.1
105°	122.7	191.1	760.3	1157.6	1089.3
107.5°	151.7	212.1	716.3	1268.7	1287.7
110°	172.2	227.2	683.6	1290.6	1372.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	189.9	242.2	650.8	1272.4	1395.4
115°	218.2	264.9	608.6	1210.7	1379.1
117.5°	244.8	289.5	581.6	1123.3	1312.9
120°	262.5	305.9	569.4	1064.6	1252.9
122.5°	277.5	320.9	561.2	1005.8	1187.5
125°	300.0	341.7	550.6	927.7	1094.4
127.5°	320.1	361.5	544.8	868.5	1011.6
130°	332.4	372.4	542.1	831.4	959.7
132.5°	344.7	384.7	539.4	799.7	913.4
135°	361.4	401.4	535.3	755.7	852.3
137.5°	379.5	415.8	533.2	716.8	798.1
140°	390.4	425.4	531.9	692.1	765.4
142.5°	401.3	433.6	530.5	672.7	734.0
145°	417.6	447.6	528.4	642.1	690.4
147.5°	436.1	461.7	526.7	618.0	656.0
150°	448.3	470.0	526.7	604.1	634.1
152.5°	457.9	476.9	525.4	591.7	616.4
155°	472.2	488.9	525.0	576.6	593.2
157.5°	486.2	499.2	525.0	566.2	578.9
160°	494.4	506.0	525.0	559.4	569.4
162.5°	502.5	511.5	526.4	553.8	561.2
165°	511.4	518.1	526.7	548.9	550.6
167.5°	520.6	523.9	528.4	543.1	544.5
170°	523.3	526.7	528.4	540.4	540.4
172.5°	526.1	528.1	528.4	537.7	537.7
175°	530.2	531.8	528.4	535.2	533.6
177.5°	531.5	531.5	527.4	532.8	530.2
180°	530.2	530.2	530.2	530.2	530.2

(END OF REPORT)