

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521414

Luminaire Tested: **SQ4-F-050U-075D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521414
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-050U-075D-93050-1D-UNV-STD-W-4 (3500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

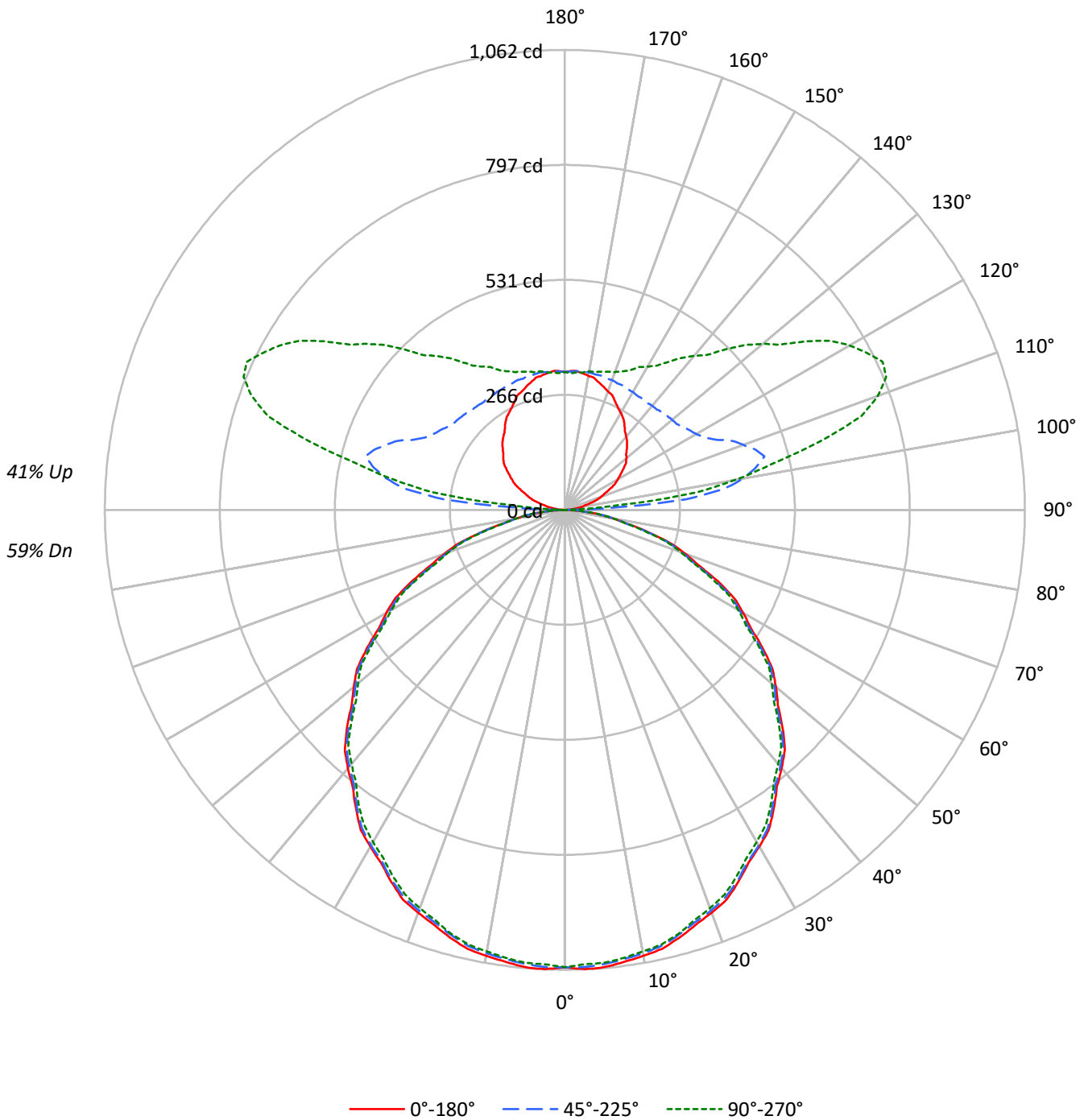
Lumens per Lamp: N/A
Luminaire Lumens: 5072.6 lumens
Efficiency: N/A
Efficacy: 106.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 47.6
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				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65	59		
1	100	95	91	88	93	89	86	82	77	75	72	67	65	63	57	56	54	50		
2	91	83	77	71	84	78	72	67	68	63	60	58	55	52	50	48	45	41		
3	83	73	65	59	77	68	61	56	59	54	50	51	47	44	44	41	38	35		
4	75	64	56	50	70	60	53	47	53	47	42	46	41	38	39	36	33	30		
5	69	57	49	43	64	54	46	41	47	41	36	41	36	32	35	32	29	26		
6	64	51	43	37	59	48	41	35	42	36	32	37	32	28	32	28	25	22		
7	59	46	38	32	55	44	36	31	38	32	28	34	29	25	29	25	22	20		
8	55	42	34	29	51	40	32	27	35	29	25	31	26	22	27	23	20	18		
9	51	38	31	25	47	36	29	24	32	26	22	28	23	20	25	21	18	16		
10	48	35	28	23	44	33	26	22	30	24	20	26	21	18	23	19	16	14		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9743	9743	9743
5°	9817	9752	9725
10°	9799	9743	9706
15°	9771	9704	9685
20°	9720	9671	9612
25°	9651	9610	9528
30°	9567	9535	9439
35°	9472	9427	9348
40°	9382	9322	9226
45°	9277	9199	9107
50°	9129	9057	8942
55°	8976	8863	8750
60°	8765	8617	8525
65°	8492	8274	8165
70°	7985	7769	7688
75°	7129	6987	6880
80°	5898	5951	5898
85°	4234	4764	4975



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.9	2.0
10°-20°	286.2	5.6
20°-30°	432.9	8.5
30°-40°	521.2	10.3
40°-50°	541.4	10.7
50°-60°	491.3	9.7
60°-70°	374.7	7.4
70°-80°	208.8	4.1
80°-90°	54.8	1.1
90°-100°	164.1	3.2
100°-110°	396.6	7.8
110°-120°	423.1	8.3
120°-130°	342.6	6.8
130°-140°	265.3	5.2
140°-150°	202.4	4.0
150°-160°	146.5	2.9
160°-170°	90.2	1.8
170°-180°	30.6	0.6
0°-30°	819.1	16.1
0°-40°	1340.3	26.4
0°-60°	2373.0	46.8
0°-90°	3011.3	59.4
90°-120°	983.8	19.4
90°-150°	1794.1	35.4
90°-180°	2061.0	40.6
0°-180°	5072.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1056	1056	1056	1056	1056	
5°	1060	1050	1053	1051	1050	101
15°	1023	1011	1016	1014	1014	289
25°	948	938	944	935	936	437
35°	841	835	837	828	830	526
45°	711	704	705	696	698	548
55°	558	555	551	544	544	498
65°	389	385	379	373	374	383
75°	200	199	196	194	193	213
85°	40	45	45	47	47	49
90°	0	0	0	0	0	2
95°	16	82	281	183	128	18
105°	63	110	477	617	609	67
115°	116	148	383	726	810	115
125°	165	190	332	578	678	147
135°	203	227	319	455	524	157
145°	240	258	313	387	417	150
155°	275	287	317	343	355	127
165°	304	309	321	326	330	86
175°	322	320	322	319	318	30
180°	318	318	318	318	318	



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CATALOG NUMBER: SQ4-F-050U-075D-93050-1D-UNV-STD-W-4 (3500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1056.0	1056.0	1056.0	1056.0	1056.0
2.5°	1061.6	1053.8	1056.8	1054.3	1050.4
5°	1060.0	1050.2	1053.0	1051.0	1050.0
7.5°	1052.4	1042.6	1046.4	1043.4	1043.2
10°	1046.0	1036.2	1040.0	1037.0	1036.0
12.5°	1038.0	1027.4	1031.2	1028.2	1028.0
15°	1023.0	1011.3	1016.0	1014.0	1014.0
17.5°	1004.4	992.9	998.6	995.0	993.4
20°	990.0	979.2	985.0	979.0	979.0
22.5°	974.8	964.0	969.0	962.2	962.2
25°	948.0	938.2	944.0	935.0	936.0
27.5°	918.8	910.0	915.0	906.4	906.8
30°	898.0	889.2	895.0	884.0	886.0
32.5°	876.4	868.4	871.8	862.4	862.8
35°	841.0	835.1	837.0	828.0	830.0
37.5°	804.6	797.8	799.6	790.4	792.4
40°	779.0	772.2	774.0	764.0	766.0
42.5°	751.8	745.7	746.8	736.9	739.6
45°	711.0	704.2	705.0	696.0	698.0
47.5°	667.2	661.7	660.6	652.4	654.2
50°	636.0	632.1	631.0	622.0	623.0
52.5°	604.8	601.7	599.0	590.9	593.4
55°	558.0	555.1	551.0	544.0	544.0
57.5°	509.4	506.5	501.4	494.4	496.4
60°	475.0	472.1	467.0	460.0	462.0
62.5°	440.6	437.7	431.8	425.6	426.8
65°	389.0	385.1	379.0	373.0	374.0
67.5°	333.6	329.9	324.8	319.0	320.2
70°	296.0	293.1	288.0	283.0	285.0
72.5°	256.8	253.9	249.6	247.0	246.6
75°	200.0	199.0	196.0	194.0	193.0
77.5°	146.2	147.6	144.0	143.2	143.0
80°	111.0	113.9	112.0	112.0	111.0
82.5°	79.8	84.3	83.2	83.2	83.0
85°	40.0	44.9	45.0	47.0	47.0
87.5°	11.2	15.9	18.4	19.2	19.2
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.4	44.4	104.7	50.9	34.5
95°	16.2	82.1	281.2	182.8	128.1
97.5°	28.7	91.0	370.3	356.8	306.3
100°	38.4	96.5	419.4	442.7	401.2
102.5°	47.6	101.4	451.8	514.3	489.7
105°	63.4	109.5	476.7	616.8	608.9
107.5°	78.9	119.1	462.0	699.0	717.6
110°	89.7	127.3	438.3	734.4	769.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	100.5	135.4	417.3	743.1	802.8
115°	116.0	148.3	383.0	726.1	809.8
117.5°	131.4	161.8	362.9	687.1	785.2
120°	141.6	170.0	350.0	656.4	759.3
122.5°	152.4	178.6	341.9	625.1	726.4
125°	165.2	190.3	332.4	577.5	678.3
127.5°	177.9	201.5	325.8	537.1	625.8
130°	185.4	208.5	323.7	509.1	596.1
132.5°	192.4	216.6	320.4	488.8	562.6
135°	203.0	226.7	318.9	455.4	523.9
137.5°	212.9	236.8	314.2	432.7	484.4
140°	220.5	242.3	314.2	416.4	463.9
142.5°	228.0	249.8	311.5	402.3	442.3
145°	240.1	257.9	312.9	387.1	417.4
147.5°	251.2	268.5	312.1	369.5	394.6
150°	258.3	273.4	314.2	361.9	381.7
152.5°	265.8	280.4	313.7	353.7	371.4
155°	275.1	287.0	316.9	342.8	355.4
157.5°	286.3	296.5	316.2	338.7	346.1
160°	290.6	299.2	318.9	333.2	338.5
162.5°	297.6	305.2	317.9	331.6	334.7
165°	304.1	308.7	321.0	325.8	330.4
167.5°	312.1	315.1	320.2	325.4	325.6
170°	314.2	316.2	322.3	321.7	325.0
172.5°	318.0	319.5	320.7	322.1	320.2
175°	321.6	320.3	321.6	318.9	318.3
177.5°	321.0	321.0	319.9	318.7	316.1
180°	318.3	318.3	318.3	318.3	318.3

(END OF REPORT)