

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: P521416

Luminaire Tested: **SQ4-F-050U-075D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521416
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 (4500K)
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 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

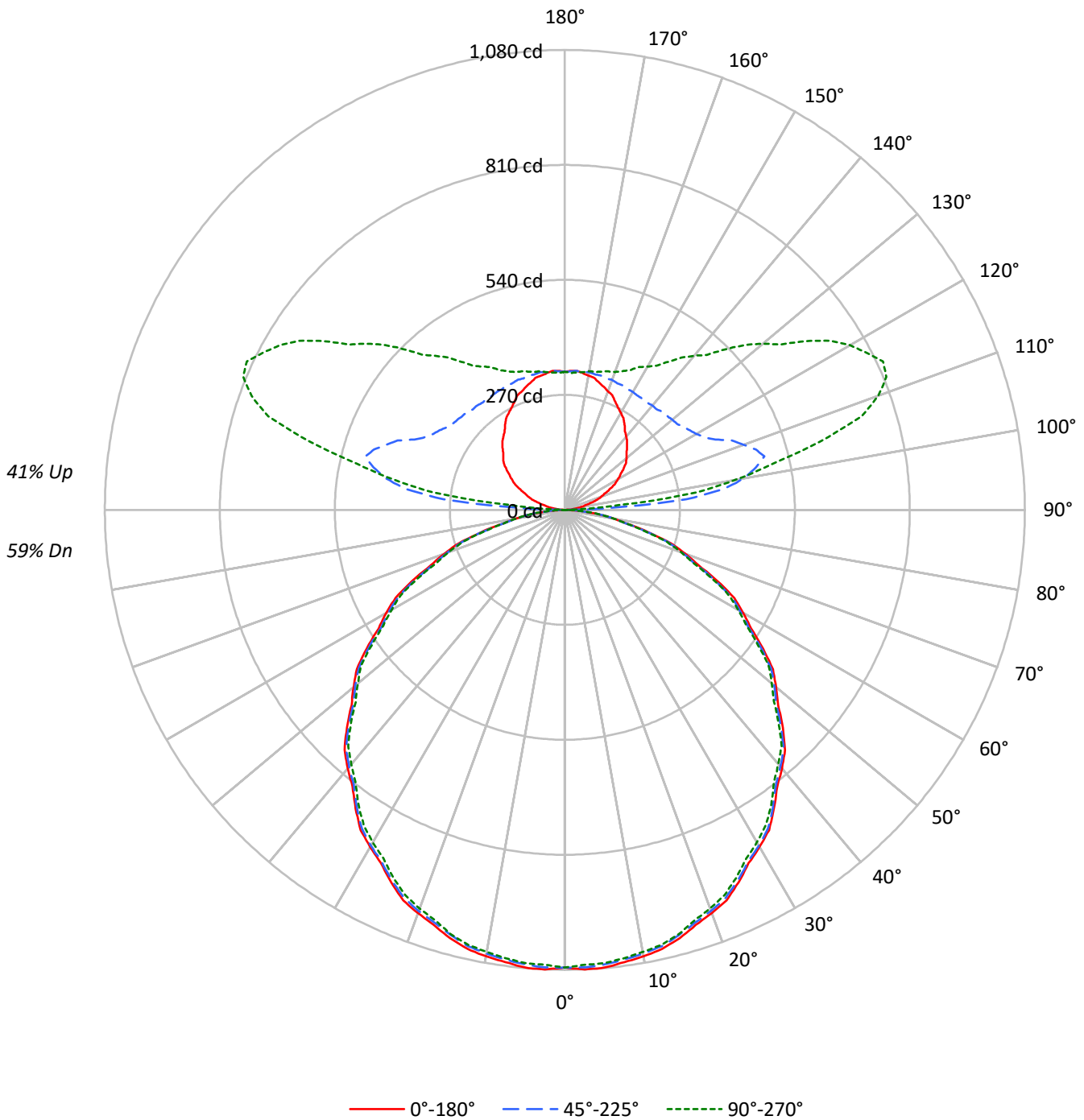
Lumens per Lamp: N/A
Luminaire Lumens: 5162.8 lumens
Efficiency: N/A
Efficacy: 108.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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

TEST NUMBER: P521416

CATALOG NUMBER: SQ4-F-050U-075D-93050-1D-UNV-STD-W-4 (4500K)

Luminous Intensity Polar Plot





TEST NUMBER: P521416

CATALOG NUMBER: SQ4-F-050U-075D-93050-1D-UNV-STD-W-4 (4500K)

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	50	30	10	
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°	9916	9916	9916
5°	9992	9925	9898
10°	9974	9917	9878
15°	9945	9877	9857
20°	9893	9843	9783
25°	9823	9781	9697
30°	9737	9704	9607
35°	9641	9595	9515
40°	9550	9488	9389
45°	9441	9362	9269
50°	9291	9218	9102
55°	9135	9021	8906
60°	8920	8770	8676
65°	8643	8420	8311
70°	8128	7907	7826
75°	7258	7112	7001
80°	6004	6057	6004
85°	4308	4848	5060



TEST NUMBER: P521416

CATALOG NUMBER: SQ4-F-050U-075D-93050-1D-UNV-STD-W-4 (4500K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.7	2.0
10°-20°	291.3	5.6
20°-30°	440.6	8.5
30°-40°	530.5	10.3
40°-50°	551.0	10.7
50°-60°	500.0	9.7
60°-70°	381.4	7.4
70°-80°	212.5	4.1
80°-90°	55.8	1.1
90°-100°	167.0	3.2
100°-110°	403.7	7.8
110°-120°	430.6	8.3
120°-130°	348.7	6.8
130°-140°	270.0	5.2
140°-150°	206.0	4.0
150°-160°	149.1	2.9
160°-170°	91.8	1.8
170°-180°	31.1	0.6
0°-30°	833.7	16.1
0°-40°	1364.2	26.4
0°-60°	2415.2	46.8
0°-90°	3064.8	59.4
90°-120°	1001.3	19.4
90°-150°	1826.0	35.4
90°-180°	2098.0	40.6
0°-180°	5162.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1075	1075	1075	1075	1075	
5°	1079	1069	1072	1070	1069	102
15°	1041	1029	1034	1032	1032	294
25°	965	955	961	952	953	444
35°	856	850	852	843	845	536
45°	724	717	718	708	710	557
55°	568	565	561	554	554	507
65°	396	392	386	380	381	390
75°	204	203	200	197	196	216
85°	41	46	46	48	48	50
90°	0	0	0	0	0	2
95°	16	84	286	186	130	18
105°	64	112	485	628	620	68
115°	118	151	390	739	824	117
125°	168	194	338	588	690	150
135°	207	231	325	464	533	159
145°	244	262	318	394	425	153
155°	280	292	323	349	362	129
165°	310	314	327	332	336	87
175°	327	326	327	325	324	31
180°	324	324	324	324	324	

TEST NUMBER: P521416

CATALOG NUMBER: SQ4-F-050U-075D-93050-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1074.8	1074.8	1074.8	1074.8	1074.8
2.5°	1080.5	1072.5	1075.6	1073.1	1069.1
5°	1078.9	1068.9	1071.7	1069.7	1068.7
7.5°	1071.1	1061.2	1065.0	1062.0	1061.8
10°	1064.6	1054.7	1058.5	1055.4	1054.4
12.5°	1056.5	1045.7	1049.5	1046.5	1046.3
15°	1041.2	1029.3	1034.1	1032.0	1032.0
17.5°	1022.3	1010.5	1016.4	1012.7	1011.1
20°	1007.6	996.7	1002.5	996.4	996.4
22.5°	992.1	981.2	986.2	979.3	979.3
25°	964.9	954.9	960.8	951.7	952.6
27.5°	935.1	926.2	931.3	922.5	922.9
30°	914.0	905.0	910.9	899.8	901.8
32.5°	892.0	883.8	887.3	877.7	878.1
35°	856.0	850.0	851.9	842.8	844.8
37.5°	818.9	811.9	813.8	804.5	806.5
40°	792.9	785.9	787.8	777.6	779.6
42.5°	765.2	759.0	760.1	750.0	752.8
45°	723.6	716.7	717.5	708.4	710.4
47.5°	679.1	673.5	672.3	664.0	665.8
50°	647.3	643.3	642.2	633.1	634.1
52.5°	615.6	612.4	609.7	601.4	604.0
55°	567.9	564.9	560.8	553.7	553.7
57.5°	518.5	515.5	510.3	503.2	505.2
60°	483.4	480.5	475.3	468.2	470.2
62.5°	448.4	445.5	439.5	433.2	434.4
65°	395.9	391.9	385.7	379.7	380.7
67.5°	339.5	335.8	330.6	324.7	325.9
70°	301.3	298.3	293.1	288.1	290.1
72.5°	261.4	258.4	254.0	251.4	251.0
75°	203.6	202.6	199.5	197.4	196.4
77.5°	148.8	150.2	146.6	145.7	145.5
80°	113.0	116.0	114.0	114.0	113.0
82.5°	81.2	85.8	84.7	84.7	84.5
85°	40.7	45.7	45.8	47.8	47.8
87.5°	11.4	16.2	18.7	19.5	19.5
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.5	45.2	106.5	51.8	35.1
95°	16.5	83.6	286.2	186.1	130.4
97.5°	29.2	92.6	376.9	363.1	311.7
100°	39.1	98.2	426.9	450.6	408.3
102.5°	48.5	103.2	459.8	523.5	498.4
105°	64.5	111.5	485.2	627.8	619.7
107.5°	80.3	121.2	470.2	711.4	730.4
110°	91.3	129.5	446.1	747.5	783.1

TEST NUMBER: P521416

CATALOG NUMBER: SQ4-F-050U-075D-93050-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	102.3	137.8	424.7	756.3	817.1
115°	118.0	150.9	389.8	739.0	824.2
117.5°	133.7	164.7	369.4	699.3	799.1
120°	144.1	173.0	356.2	668.1	772.8
122.5°	155.1	181.8	348.0	636.2	739.3
125°	168.1	193.6	338.3	587.7	690.4
127.5°	181.0	205.1	331.6	546.7	636.9
130°	188.7	212.2	329.4	518.1	606.7
132.5°	195.9	220.4	326.1	497.5	572.6
135°	206.6	230.7	324.6	463.5	533.2
137.5°	216.7	241.0	319.8	440.4	493.0
140°	224.4	246.6	319.8	423.9	472.2
142.5°	232.1	254.2	317.1	409.4	450.2
145°	244.3	262.4	318.4	393.9	424.8
147.5°	255.7	273.3	317.6	376.1	401.6
150°	262.9	278.3	319.8	368.3	388.4
152.5°	270.5	285.4	319.3	360.0	378.0
155°	280.0	292.1	322.6	348.9	361.7
157.5°	291.4	301.7	321.9	344.7	352.2
160°	295.8	304.5	324.6	339.2	344.5
162.5°	302.9	310.6	323.5	337.5	340.7
165°	309.5	314.2	326.7	331.6	336.3
167.5°	317.6	320.7	325.9	331.2	331.3
170°	319.8	321.8	328.0	327.4	330.8
172.5°	323.7	325.1	326.4	327.9	325.9
175°	327.4	326.0	327.4	324.6	323.9
177.5°	326.7	326.7	325.6	324.4	321.7
180°	323.9	323.9	323.9	323.9	323.9

(END OF REPORT)