

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: P521429

Luminaire Tested: **SQ4-F-050U-100D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521429
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-100D-93050-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 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

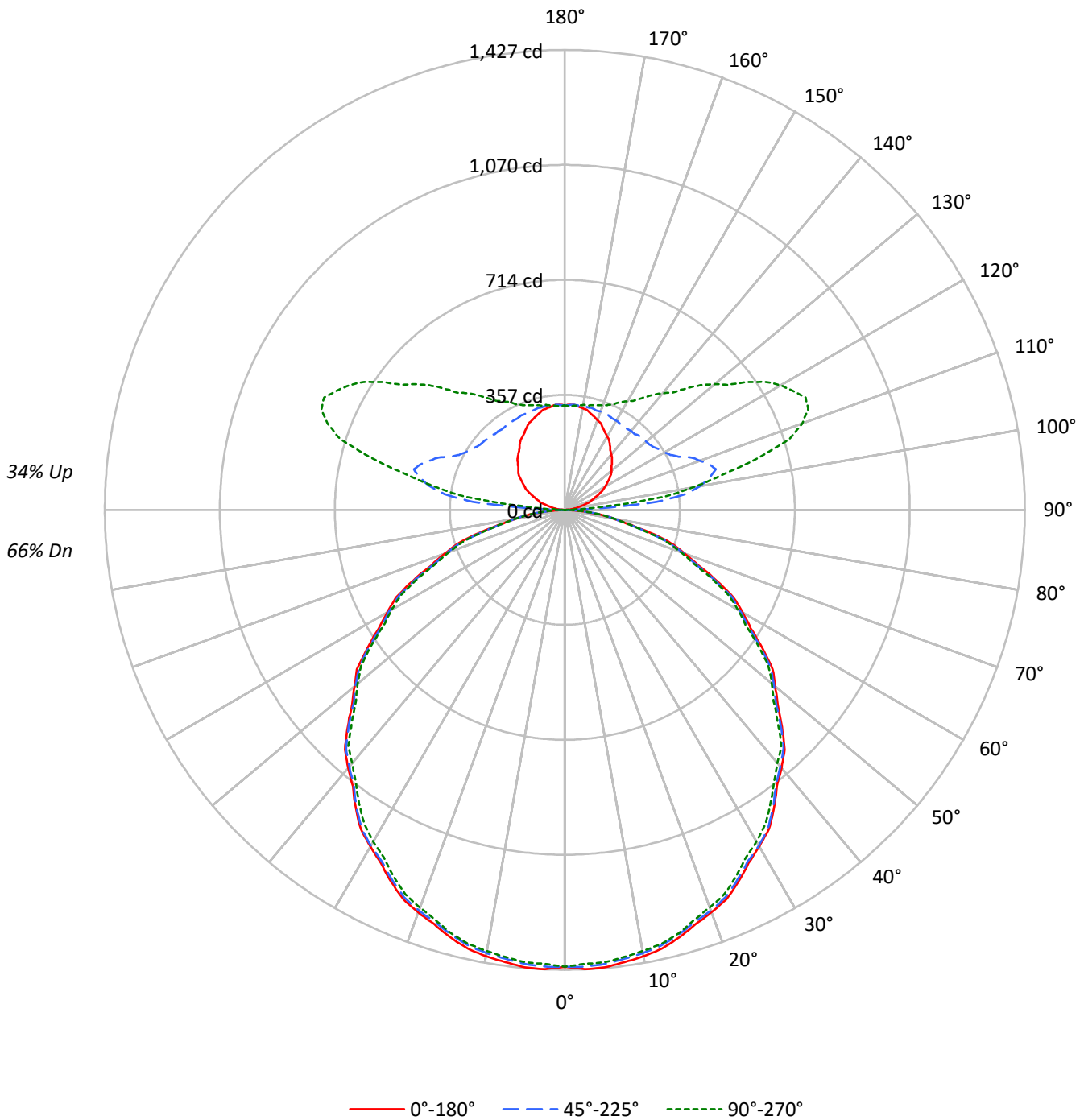
Lumens per Lamp: N/A
Luminaire Lumens: 6144.1 lumens
Efficiency: N/A
Efficacy: 105.2 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 58.4
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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71	66
1	101	97	93	89	95	91	88	84	81	78	75	71	69	67	62	61	59	55
2	92	84	78	72	86	79	74	69	70	66	62	62	59	56	54	52	50	46
3	84	74	66	60	78	70	63	57	62	56	52	55	50	47	48	45	42	38
4	77	65	57	51	72	62	54	48	55	49	44	49	44	40	43	39	36	33
5	70	58	50	43	66	55	47	42	49	43	38	44	39	35	38	34	31	28
6	65	52	44	38	61	49	42	36	44	38	33	39	34	30	35	31	27	25
7	60	47	39	33	56	45	37	32	40	34	29	36	31	27	32	28	24	22
8	56	43	35	29	52	41	33	28	37	30	26	33	28	24	29	25	22	19
9	52	39	31	26	49	37	30	25	34	27	23	30	25	21	27	23	20	17
10	48	36	28	23	46	34	27	23	31	25	21	28	23	19	25	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13081	13081	13081
5°	13197	13102	13055
10°	13178	13082	13025
15°	13114	13036	12998
20°	13051	12991	12890
25°	12972	12899	12785
30°	12849	12816	12665
35°	12736	12690	12529
40°	12590	12528	12356
45°	12429	12364	12191
50°	12228	12154	12038
55°	12017	11902	11771
60°	11738	11607	11437
65°	11354	11132	10931
70°	10707	10461	10270
75°	9760	9432	9250
80°	8002	8002	8002
85°	5706	6468	6786



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.2	2.2
10°-20°	384.4	6.3
20°-30°	581.5	9.5
30°-40°	700.3	11.4
40°-50°	727.3	11.8
50°-60°	660.1	10.7
60°-70°	503.6	8.2
70°-80°	281.5	4.6
80°-90°	73.3	1.2
90°-100°	167.0	2.7
100°-110°	403.7	6.6
110°-120°	430.6	7.0
120°-130°	348.7	5.7
130°-140°	270.0	4.4
140°-150°	206.0	3.4
150°-160°	149.1	2.4
160°-170°	91.8	1.5
170°-180°	31.1	0.5
0°-30°	1100.1	17.9
0°-40°	1800.4	29.3
0°-60°	3187.7	51.9
0°-90°	4046.1	65.9
90°-120°	1001.3	16.3
90°-150°	1826.0	29.7
90°-180°	2098.0	34.1
0°-180°	6144.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1418	1418	1418	1418	1418	
5°	1425	1410	1415	1412	1410	135
15°	1373	1359	1365	1361	1361	387
25°	1274	1261	1267	1256	1256	587
35°	1131	1121	1127	1112	1112	707
45°	953	946	948	934	934	735
55°	747	745	740	732	732	668
65°	520	516	510	503	501	513
75°	274	270	265	260	260	288
85°	54	59	61	62	64	67
90°	0	0	0	0	0	3
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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1417.8	1417.8	1417.8	1417.8	1417.8
2.5°	1426.7	1414.8	1418.6	1416.8	1409.6
5°	1424.9	1410.0	1414.7	1411.6	1409.6
7.5°	1415.5	1400.6	1405.4	1401.3	1400.1
10°	1406.6	1391.6	1396.4	1392.3	1390.3
12.5°	1394.4	1380.2	1385.0	1380.1	1379.7
15°	1373.0	1359.1	1364.8	1360.8	1360.8
17.5°	1348.0	1335.0	1341.0	1335.1	1334.1
20°	1329.2	1316.3	1323.1	1313.9	1312.9
22.5°	1308.1	1295.9	1301.9	1291.2	1291.8
25°	1274.3	1261.3	1267.1	1255.9	1255.9
27.5°	1235.4	1222.6	1229.9	1216.4	1215.6
30°	1206.1	1194.1	1203.0	1188.8	1188.8
32.5°	1176.8	1166.4	1172.9	1159.4	1157.0
35°	1130.8	1120.8	1126.7	1112.4	1112.4
37.5°	1080.3	1072.1	1075.2	1062.0	1065.0
40°	1045.3	1036.3	1040.2	1026.9	1025.9
42.5°	1009.4	1001.3	1004.3	991.2	994.2
45°	952.6	945.7	947.6	934.3	934.3
47.5°	895.0	889.9	888.3	876.6	878.6
50°	851.9	849.9	846.8	836.7	838.7
52.5°	812.8	808.4	804.5	795.1	796.3
55°	747.1	745.1	739.9	731.8	731.8
57.5°	684.2	679.8	673.8	665.4	665.4
60°	636.1	634.1	629.0	619.8	619.8
62.5°	590.5	587.7	581.8	573.4	572.6
65°	520.1	516.1	509.9	502.7	500.7
67.5°	446.6	442.4	437.4	430.7	429.5
70°	396.9	392.0	387.8	382.6	380.7
72.5°	346.5	343.9	338.9	333.8	332.6
75°	273.8	269.8	264.6	260.5	259.5
77.5°	197.0	196.4	194.6	192.0	193.0
80°	150.6	151.6	150.6	149.6	150.6
82.5°	109.1	111.7	111.5	111.4	112.4
85°	53.9	58.9	61.1	62.1	64.1
87.5°	15.5	20.2	24.4	25.3	26.1
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

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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)