

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: P520036

Luminaire Tested: **SQ4-F-075U-100D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520036
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-075U-100D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

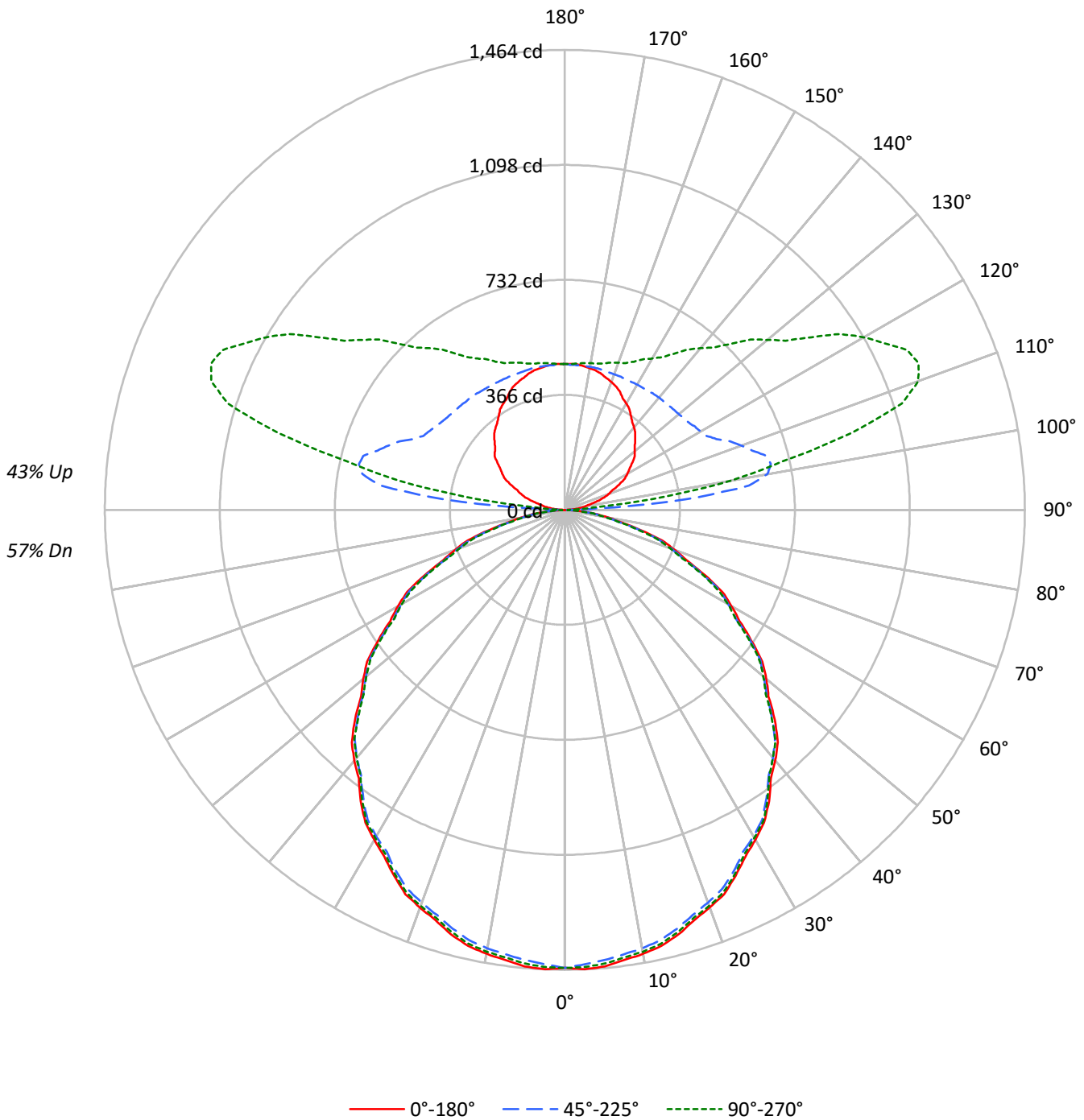
Lumens per Lamp: N/A
Luminaire Lumens: 7002.2 lumens
Efficiency: N/A
Efficacy: 136.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 51.3
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	50	30	10	0	
RCR																						
0	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	57				57
1	99	95	91	87	92	88	85	82	76	74	72	65	64	62	55	54	53	48				48
2	90	83	77	71	84	77	72	67	67	63	59	57	54	52	48	46	44	40				40
3	82	73	65	59	76	68	61	56	59	54	50	51	47	43	43	40	38	34				34
4	75	64	56	50	70	60	53	47	52	47	42	45	41	37	38	35	32	29				29
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	31	28	25				25
6	64	51	43	37	59	48	41	35	42	36	32	36	32	28	31	27	25	22				22
7	59	46	38	33	55	44	36	31	38	32	28	33	28	25	28	25	22	19				19
8	55	42	34	29	51	40	32	27	35	29	25	30	26	22	26	22	20	17				17
9	51	38	31	26	47	36	29	24	32	26	22	28	23	20	24	20	18	15				15
10	48	35	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16	14				14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13454	13454	13454
5°	13514	13329	13431
10°	13445	13276	13380
15°	13364	13182	13287
20°	13225	13069	13177
25°	13081	12929	13030
30°	12923	12784	12847
35°	12760	12602	12670
40°	12547	12404	12416
45°	12326	12158	12118
50°	12010	11865	11837
55°	11655	11527	11446
60°	11302	11097	11060
65°	10750	10507	10422
70°	9989	9746	9557
75°	8919	8634	8456
80°	7337	7072	6753
85°	4340	4774	4880



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.6	2.0
10°-20°	391.9	5.6
20°-30°	588.6	8.4
30°-40°	702.4	10.0
40°-50°	719.9	10.3
50°-60°	641.1	9.2
60°-70°	477.9	6.8
70°-80°	258.8	3.7
80°-90°	60.1	0.9
90°-100°	218.9	3.1
100°-110°	602.3	8.6
110°-120°	621.7	8.9
120°-130°	498.1	7.1
130°-140°	391.2	5.6
140°-150°	299.8	4.3
150°-160°	215.6	3.1
160°-170°	131.8	1.9
170°-180°	44.4	0.6
0°-30°	1118.1	16.0
0°-40°	1820.5	26.0
0°-60°	3181.5	45.4
0°-90°	3978.3	56.8
90°-120°	1443.0	20.6
90°-150°	2632.1	37.6
90°-180°	3024.0	43.2
0°-180°	7002.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1458	1458	1458	1458	1458	
5°	1459	1456	1439	1452	1450	138
15°	1399	1394	1380	1391	1391	394
25°	1285	1282	1270	1277	1280	592
35°	1133	1128	1119	1121	1125	707
45°	945	940	932	927	929	727
55°	725	726	717	710	712	649
65°	492	490	481	476	477	487
75°	250	247	242	237	237	266
85°	41	45	45	46	46	57
90°	1	4	7	9	9	3
95°	33	120	387	166	106	34
105°	108	166	664	1011	943	114
115°	191	232	532	1060	1203	188
125°	263	299	483	817	957	234
135°	317	352	469	661	748	245
145°	366	392	462	563	606	230
155°	415	428	459	506	520	191
165°	448	454	461	480	483	126
175°	464	465	462	468	467	44
180°	464	464	464	464	464	

TEST NUMBER: P520036

CATALOG NUMBER: SQ4-F-075U-100D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1458.2	1458.2	1458.2	1458.2	1458.2
2.5°	1463.7	1460.7	1447.8	1458.1	1456.5
5°	1459.2	1456.2	1439.2	1452.1	1450.2
7.5°	1445.5	1442.6	1427.6	1439.5	1437.8
10°	1435.1	1432.2	1417.1	1429.1	1428.2
12.5°	1421.5	1418.6	1403.5	1415.5	1414.5
15°	1399.1	1394.2	1380.1	1391.1	1391.1
17.5°	1369.5	1365.7	1352.7	1361.9	1362.1
20°	1347.0	1344.1	1331.1	1341.1	1342.1
22.5°	1324.6	1321.8	1307.0	1316.3	1318.1
25°	1285.0	1282.1	1270.0	1277.1	1280.0
27.5°	1244.2	1239.9	1227.9	1234.3	1236.3
30°	1213.0	1211.0	1200.0	1203.1	1205.9
32.5°	1180.2	1178.2	1168.8	1170.3	1175.5
35°	1132.9	1128.1	1118.9	1121.0	1124.9
37.5°	1077.0	1074.7	1065.8	1064.7	1068.4
40°	1041.8	1037.9	1029.9	1027.9	1030.9
42.5°	1003.4	999.4	989.8	987.9	991.6
45°	944.7	939.9	931.8	926.8	928.7
47.5°	879.1	879.1	870.7	865.0	867.9
50°	836.7	836.7	826.6	821.7	824.7
52.5°	792.7	793.5	782.7	780.0	779.0
55°	724.6	725.6	716.6	709.6	711.6
57.5°	658.9	656.8	646.3	641.8	642.7
60°	612.5	609.6	601.4	594.6	599.4
62.5°	565.3	563.9	555.9	548.0	547.4
65°	492.4	490.5	481.3	476.4	477.4
67.5°	419.9	417.6	409.3	402.2	404.8
70°	370.3	370.3	361.3	357.2	354.3
72.5°	324.7	320.7	314.1	308.4	306.3
75°	250.2	247.3	242.2	237.2	237.2
77.5°	182.1	179.6	176.4	172.9	171.9
80°	138.1	137.1	133.1	132.0	127.1
82.5°	97.3	97.1	94.7	92.0	91.8
85°	41.0	45.0	45.1	46.1	46.1
87.5°	7.4	12.7	12.6	11.4	11.4
90°	1.0	3.9	6.9	8.9	8.9
92.5°	13.6	58.2	100.9	38.7	31.8
95°	32.6	119.5	387.1	165.5	105.6
97.5°	53.1	132.5	590.8	455.2	321.2
100°	68.2	140.6	654.8	660.9	539.2
102.5°	82.4	150.1	671.4	820.0	708.4
105°	107.7	165.6	663.7	1010.8	943.2
107.5°	131.8	184.7	625.9	1104.2	1124.2
110°	149.2	197.4	597.5	1127.5	1197.0



TEST NUMBER: P520036

CATALOG NUMBER: SQ4-F-075U-100D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	164.9	211.7	569.1	1112.5	1218.3
115°	190.6	232.1	532.3	1060.0	1202.9
117.5°	215.1	253.3	509.0	986.3	1148.0
120°	230.2	266.8	498.7	931.2	1098.2
122.5°	243.6	280.2	491.6	882.8	1041.3
125°	262.7	299.4	482.9	816.9	957.0
127.5°	280.9	315.8	477.2	762.1	884.9
130°	290.4	326.1	474.1	729.4	841.5
132.5°	301.5	337.2	471.6	700.7	802.0
135°	317.0	351.8	469.1	660.7	747.6
137.5°	331.7	363.9	467.0	628.3	700.0
140°	342.7	372.7	466.2	606.8	671.6
142.5°	352.2	379.8	464.6	587.7	643.1
145°	366.4	391.5	462.2	562.9	606.4
147.5°	381.6	403.3	461.0	541.0	575.8
150°	391.1	410.4	460.2	529.0	556.1
152.5°	399.8	417.6	459.4	518.6	541.0
155°	414.8	428.3	459.2	506.0	520.5
157.5°	425.7	436.6	459.2	495.6	505.7
160°	433.6	442.2	459.2	490.0	497.8
162.5°	439.9	447.0	460.0	485.2	491.4
165°	448.4	454.1	461.2	480.1	482.9
167.5°	454.3	458.7	462.2	475.7	476.4
170°	458.2	461.2	462.2	474.1	474.1
172.5°	461.4	462.7	462.2	471.6	470.9
175°	464.2	465.1	462.2	468.1	467.1
177.5°	465.0	465.0	461.8	466.5	465.0
180°	464.2	464.2	464.2	464.2	464.2

(END OF REPORT)