

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: P519844

Luminaire Tested: **SQ4-F-025U-100D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519844
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, 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-025U-100D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

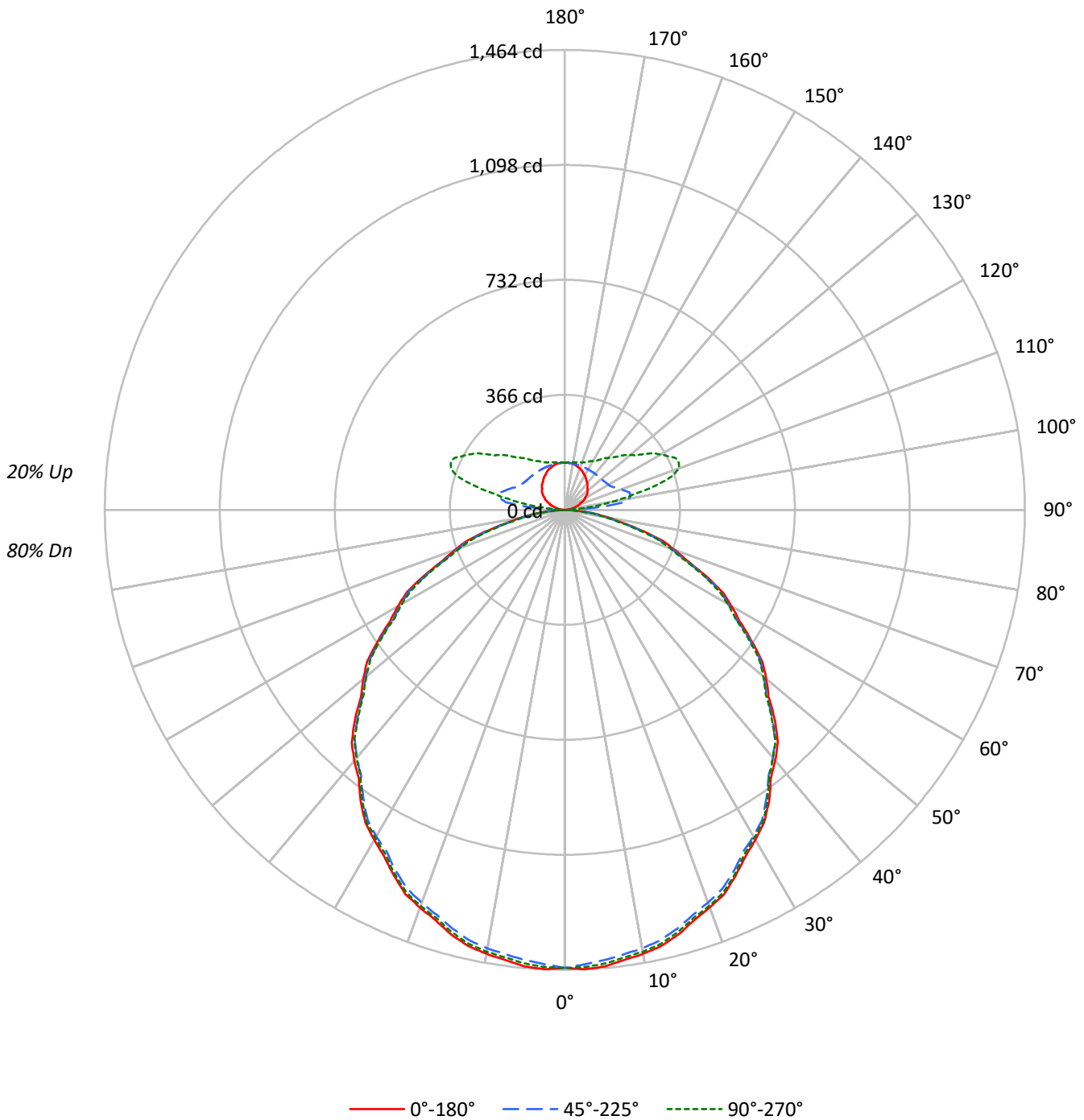
Lumens per Lamp: N/A
Luminaire Lumens: 4953.6 lumens
Efficiency: N/A
Efficacy: 128.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 38.7
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	114	114	114	114	109	109	109	109	100	100	100	92	92	92	84	84	84	80
1	105	100	96	92	100	96	92	89	88	85	83	81	79	77	74	73	71	68
2	95	87	81	75	91	84	78	73	77	72	68	71	67	64	65	62	60	56
3	87	77	69	63	83	74	67	61	68	62	57	63	58	54	58	54	51	48
4	79	68	59	53	76	65	58	52	60	54	49	56	50	46	51	47	43	41
5	73	61	52	46	70	58	50	44	54	47	42	50	44	40	46	42	38	35
6	67	54	46	40	64	52	45	39	49	42	37	45	39	35	42	37	33	31
7	62	49	41	35	59	48	40	34	44	38	33	41	35	31	38	33	30	27
8	58	45	37	31	55	43	36	30	40	34	29	38	32	28	35	30	26	24
9	54	41	33	28	52	40	32	27	37	31	26	35	29	25	32	28	24	22
10	51	38	30	25	48	37	29	25	34	28	24	32	27	23	30	25	22	20

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	2.8
10°-20°	391.9	7.9
20°-30°	588.6	11.9
30°-40°	702.4	14.2
40°-50°	719.9	14.5
50°-60°	641.1	12.9
60°-70°	477.9	9.6
70°-80°	258.8	5.2
80°-90°	59.7	1.2
90°-100°	73.4	1.5
100°-110°	192.9	3.9
110°-120°	200.0	4.0
120°-130°	160.4	3.2
130°-140°	125.9	2.5
140°-150°	96.6	2.0
150°-160°	69.6	1.4
160°-170°	42.6	0.9
170°-180°	14.4	0.3
0°-30°	1118.1	22.6
0°-40°	1820.5	36.8
0°-60°	3181.5	64.2
0°-90°	3977.9	80.3
90°-120°	466.2	9.4
90°-150°	849.1	17.1
90°-180°	976.0	19.7
0°-180°	4953.6	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	3	8	4	4	2
95°	10	38	126	65	44	11
105°	35	53	213	324	302	37
115°	62	75	171	341	389	61
125°	86	96	155	263	310	76
135°	102	113	150	212	240	79
145°	119	126	149	181	195	74
155°	134	138	149	163	168	62
165°	145	147	149	154	156	41
175°	150	150	150	152	152	14
180°	150	150	150	150	150	

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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	12.5	12.8	10.4	10.4
90°	1.0	2.9	7.7	3.8	3.8
92.5°	4.0	19.5	43.2	19.1	12.3
95°	9.7	37.9	126.4	65.1	44.4
97.5°	16.8	41.7	189.2	150.4	110.8
100°	22.2	44.8	208.4	211.2	164.0
102.5°	26.9	48.0	213.8	263.1	222.7
105°	34.7	52.7	213.3	323.7	302.1
107.5°	42.8	59.5	201.1	355.2	360.5
110°	48.3	63.4	191.1	363.3	386.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	53.6	68.0	181.8	358.2	393.0
115°	61.7	74.9	170.8	340.8	388.8
117.5°	69.7	81.7	163.3	316.6	369.9
120°	74.3	85.6	160.2	300.3	352.2
122.5°	79.0	90.2	157.8	284.1	335.2
125°	85.8	96.3	155.3	262.6	309.7
127.5°	91.5	102.1	153.2	245.2	285.0
130°	94.5	105.9	152.5	234.4	271.2
132.5°	97.7	109.0	151.7	225.0	258.0
135°	102.3	112.7	150.5	211.9	240.3
137.5°	107.1	117.3	150.4	202.2	225.4
140°	111.0	120.4	149.6	194.4	216.1
142.5°	114.0	122.7	149.6	189.0	207.6
145°	118.7	126.3	148.6	180.8	194.9
147.5°	123.3	130.7	148.6	174.0	185.6
150°	126.4	133.0	148.6	170.0	179.5
152.5°	129.5	134.6	148.6	166.9	174.1
155°	134.1	137.9	148.6	163.2	167.8
157.5°	137.5	141.2	148.6	159.8	163.3
160°	139.9	142.7	148.6	158.3	160.2
162.5°	142.2	144.3	148.6	156.8	158.7
165°	144.7	146.6	148.6	154.5	156.3
167.5°	147.0	148.0	149.6	153.4	154.2
170°	148.6	149.5	149.6	153.4	153.4
172.5°	149.4	149.6	149.6	152.7	151.9
175°	150.5	150.5	149.6	151.5	151.5
177.5°	150.5	150.5	149.8	151.3	150.5
180°	150.5	150.5	150.5	150.5	150.5

(END OF REPORT)