

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: P519936

Luminaire Tested: **SQ4-F-050U-100D-835-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519936
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-100D-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

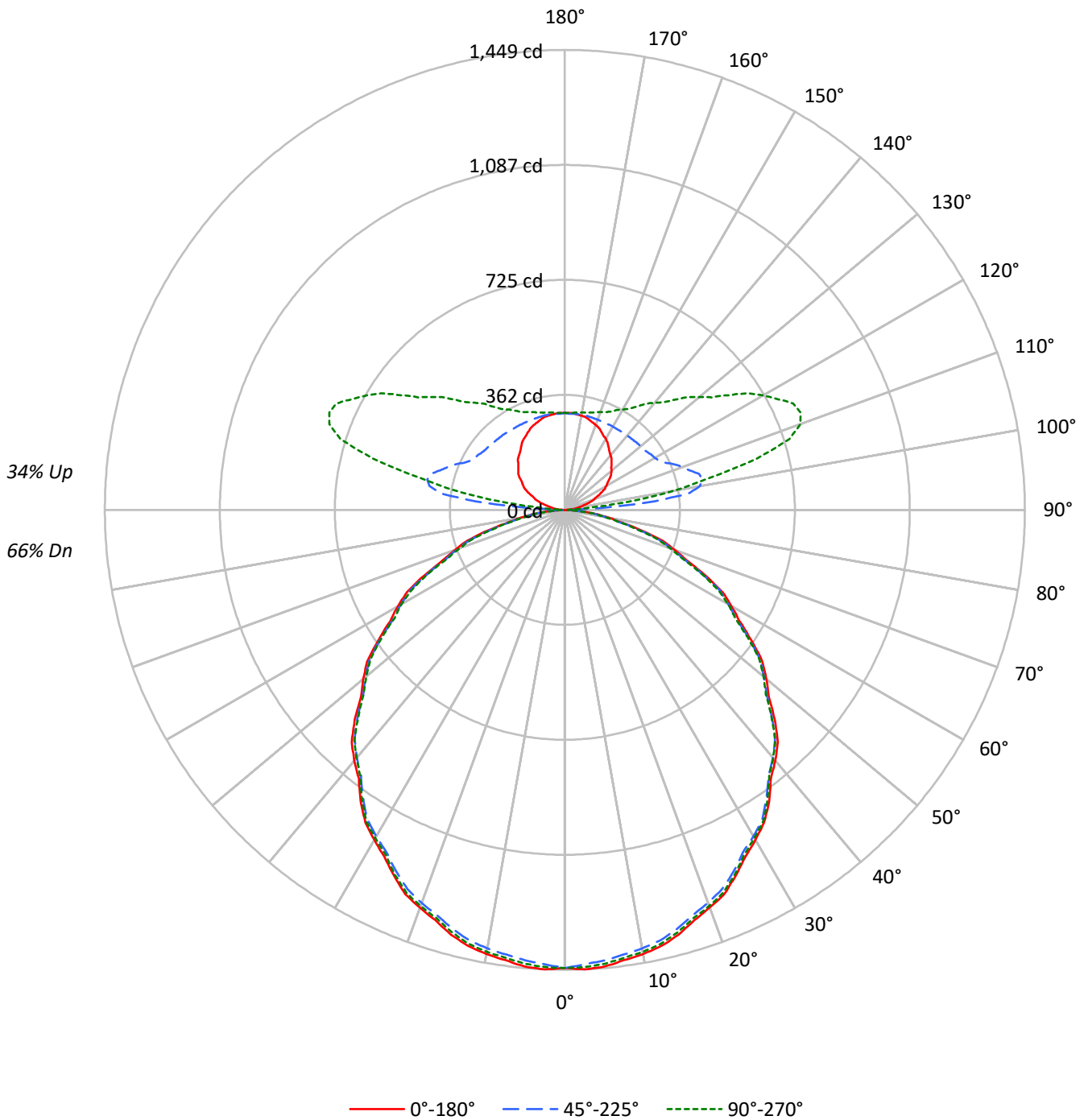
Lumens per Lamp: N/A
Luminaire Lumens: 5930.5 lumens
Efficiency: N/A
Efficacy: 131.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 45.1
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	105	105	105	105	92	92	92	81	81	81	71	71	71	66
1	101	97	93	89	95	91	88	85	81	79	76	72	70	68	63	61	60	56
2	92	85	78	73	87	80	74	69	71	67	63	63	59	57	55	53	51	47
3	84	74	67	61	79	70	63	58	63	57	53	55	51	48	49	46	43	39
4	77	66	58	51	72	62	55	49	56	50	45	49	45	41	44	40	37	34
5	71	59	50	44	66	56	48	42	50	44	39	44	39	35	39	35	32	29
6	65	53	44	38	61	50	42	37	45	39	34	40	35	31	36	31	28	26
7	60	48	39	34	57	45	38	32	41	34	30	36	31	27	32	28	25	23
8	56	43	35	30	53	41	34	29	37	31	27	33	28	24	30	26	22	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	27	23	20	18
10	49	36	29	24	46	35	28	23	31	26	21	28	23	20	25	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13319	13319	13319
5°	13379	13196	13297
10°	13311	13144	13246
15°	13231	13050	13155
20°	13094	12939	13046
25°	12951	12800	12901
30°	12794	12656	12719
35°	12633	12476	12544
40°	12422	12280	12291
45°	12204	12037	11997
50°	11889	11747	11718
55°	11540	11411	11332
60°	11190	10988	10952
65°	10643	10405	10317
70°	9889	9649	9463
75°	8830	8548	8370
80°	7263	7003	6684
85°	4298	4721	4827



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.3	2.3
10°-20°	388.0	6.5
20°-30°	582.7	9.8
30°-40°	695.4	11.7
40°-50°	712.8	12.0
50°-60°	634.7	10.7
60°-70°	473.1	8.0
70°-80°	256.2	4.3
80°-90°	59.5	1.0
90°-100°	146.4	2.5
100°-110°	397.8	6.7
110°-120°	409.0	6.9
120°-130°	327.0	5.5
130°-140°	257.0	4.3
140°-150°	197.0	3.3
150°-160°	141.7	2.4
160°-170°	86.7	1.5
170°-180°	29.2	0.5
0°-30°	1106.9	18.7
0°-40°	1802.3	30.4
0°-60°	3149.8	53.1
0°-90°	3938.6	66.4
90°-120°	953.3	16.1
90°-150°	1734.4	29.2
90°-180°	1992.0	33.6
0°-180°	5930.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1444	1444	1444	1444	1444	
5°	1445	1442	1425	1438	1436	137
15°	1385	1380	1366	1377	1377	390
25°	1272	1269	1257	1264	1267	586
35°	1122	1117	1108	1110	1114	700
45°	935	930	922	918	920	720
55°	717	718	709	702	704	642
65°	488	486	477	472	473	482
75°	248	245	240	235	235	264
85°	41	44	45	46	46	57
90°	1	4	7	9	9	2
95°	22	80	255	111	75	23
105°	71	110	438	666	627	75
115°	126	152	350	697	794	124
125°	173	197	317	534	630	154
135°	208	231	308	435	490	161
145°	240	258	304	370	397	151
155°	272	281	302	332	341	125
165°	294	298	303	316	317	83
175°	305	306	304	308	307	29
180°	305	305	305	305	305	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1443.6	1443.6	1443.6	1443.6	1443.6
2.5°	1449.2	1446.1	1433.3	1443.6	1442.0
5°	1444.6	1441.7	1424.8	1437.7	1435.7
7.5°	1431.1	1428.3	1413.3	1425.2	1423.4
10°	1420.8	1418.0	1403.0	1414.9	1413.9
12.5°	1407.4	1404.5	1389.5	1401.4	1400.4
15°	1385.2	1380.3	1366.3	1377.2	1377.2
17.5°	1355.8	1352.2	1339.2	1348.3	1348.5
20°	1333.6	1330.8	1317.8	1327.7	1328.7
22.5°	1311.5	1308.6	1294.0	1303.1	1304.9
25°	1272.2	1269.3	1257.4	1264.4	1267.3
27.5°	1231.8	1227.5	1215.7	1221.9	1224.1
30°	1200.9	1198.9	1188.0	1191.1	1193.9
32.5°	1168.4	1166.4	1157.1	1158.6	1163.8
35°	1121.6	1116.8	1107.7	1109.8	1113.7
37.5°	1066.3	1064.0	1055.2	1054.1	1057.8
40°	1031.4	1027.6	1019.6	1017.7	1020.5
42.5°	993.4	989.5	979.9	978.0	981.7
45°	935.3	930.5	922.5	917.5	919.5
47.5°	870.3	870.3	862.0	856.4	859.2
50°	828.3	828.3	818.4	813.6	816.4
52.5°	784.7	785.5	774.8	772.2	771.3
55°	717.4	718.3	709.4	702.5	704.5
57.5°	652.4	650.2	639.9	635.3	636.3
60°	606.4	603.5	595.5	588.6	593.5
62.5°	559.6	558.2	550.3	542.6	542.0
65°	487.5	485.5	476.6	471.6	472.6
67.5°	415.7	413.5	405.2	398.2	400.7
70°	366.6	366.6	357.7	353.6	350.8
72.5°	321.4	317.6	310.9	305.4	303.2
75°	247.7	244.8	239.8	234.8	234.8
77.5°	180.3	177.9	174.6	171.2	170.2
80°	136.7	135.7	131.8	130.7	125.8
82.5°	96.3	96.1	93.7	91.2	91.0
85°	40.6	44.5	44.6	45.6	45.6
87.5°	7.3	12.6	12.5	11.3	11.3
90°	1.0	3.8	6.9	8.8	8.8
92.5°	8.8	40.1	69.7	29.9	25.3
95°	21.6	80.1	255.0	111.0	74.6
97.5°	35.7	88.4	391.0	304.2	213.6
100°	45.1	94.0	432.6	438.5	354.1
102.5°	54.6	99.6	443.5	542.4	467.9
105°	70.7	110.0	437.5	666.2	626.8
107.5°	87.3	122.1	412.2	730.1	741.0
110°	99.1	130.7	393.4	742.6	789.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	109.3	139.4	374.6	732.2	803.0
115°	125.6	152.4	350.2	696.7	793.6
117.5°	140.9	166.5	334.7	646.4	755.5
120°	151.0	176.0	327.7	612.6	721.0
122.5°	159.7	184.7	322.9	578.8	683.4
125°	172.6	196.6	316.9	533.8	629.8
127.5°	184.2	208.0	313.5	499.8	582.1
130°	191.3	214.3	312.0	478.4	552.3
132.5°	198.3	221.4	310.4	460.2	525.6
135°	207.9	231.0	308.0	434.8	490.4
137.5°	218.3	239.2	306.8	412.4	459.2
140°	224.6	244.7	306.1	398.2	440.4
142.5°	230.9	249.5	305.3	387.1	422.4
145°	240.3	257.6	304.1	369.5	397.3
147.5°	250.9	265.7	303.1	355.6	377.5
150°	258.0	270.4	303.1	347.7	364.9
152.5°	263.5	274.4	302.3	340.5	354.7
155°	271.7	281.3	302.1	331.8	341.4
157.5°	279.8	287.2	302.1	325.9	333.1
160°	284.5	291.1	302.1	321.9	327.7
162.5°	289.2	294.4	302.9	318.7	322.9
165°	294.3	298.1	303.1	315.9	316.9
167.5°	299.6	301.5	304.1	312.5	313.3
170°	301.2	303.0	304.1	311.0	311.0
172.5°	302.7	303.9	304.1	309.4	309.4
175°	305.1	306.1	304.1	308.0	307.0
177.5°	305.9	305.9	303.5	306.7	305.1
180°	305.1	305.1	305.1	305.1	305.1

(END OF REPORT)