

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: P519798

Luminaire Tested: **SQ4-F-025U-050D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519798
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-025U-050D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

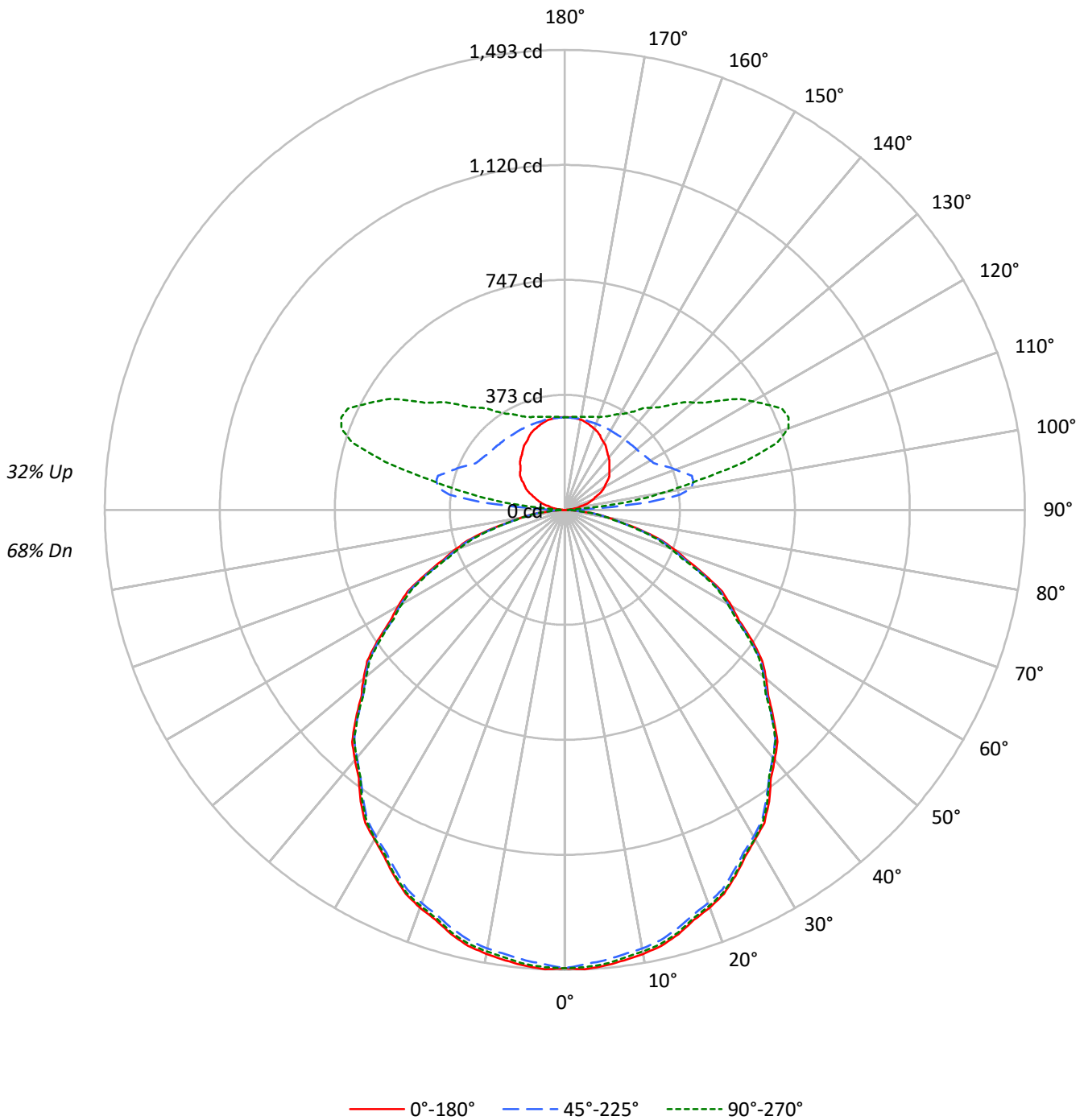
Lumens per Lamp: N/A
Luminaire Lumens: 6014.1 lumens
Efficiency: N/A
Efficacy: 133.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 45.2
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	93	93	93	82	82	82	72	72	72	68
1	102	97	93	90	96	92	88	85	82	79	77	72	70	69	64	62	61	57
2	93	85	78	73	87	80	75	70	72	67	63	63	60	57	56	54	51	47
3	84	75	67	61	79	71	64	58	63	58	53	56	52	48	50	46	43	40
4	77	66	58	51	72	62	55	49	56	50	45	50	45	41	44	40	37	34
5	71	59	50	44	67	56	48	42	50	44	39	45	40	36	40	36	32	30
6	65	53	44	38	61	50	42	37	45	39	34	40	35	31	36	32	29	26
7	60	48	39	34	57	45	38	32	41	35	30	37	32	28	33	29	25	23
8	56	43	35	30	53	41	34	29	37	31	27	34	28	25	30	26	23	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	28	24	20	18
10	49	36	29	24	46	35	28	23	32	26	22	29	24	20	26	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6864	6864	6864
5°	6881	6798	6854
10°	6858	6774	6821
15°	6811	6726	6783
20°	6748	6669	6718
25°	6671	6591	6651
30°	6579	6526	6568
35°	6507	6428	6462
40°	6381	6322	6333
45°	6251	6199	6199
50°	6118	6061	6033
55°	5976	5895	5864
60°	5753	5660	5624
65°	5480	5370	5305
70°	5104	4997	4891
75°	4581	4438	4333
80°	3703	3653	3544
85°	2212	2530	2636



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.4	2.3
10°-20°	399.8	6.6
20°-30°	600.5	10.0
30°-40°	716.8	11.9
40°-50°	734.5	12.2
50°-60°	655.1	10.9
60°-70°	487.9	8.1
70°-80°	264.8	4.4
80°-90°	63.0	1.0
90°-100°	146.7	2.4
100°-110°	385.7	6.4
110°-120°	400.0	6.7
120°-130°	320.8	5.3
130°-140°	251.7	4.2
140°-150°	193.2	3.2
150°-160°	139.2	2.3
160°-170°	85.1	1.4
170°-180°	28.8	0.5
0°-30°	1140.7	19.0
0°-40°	1857.5	30.9
0°-60°	3247.1	54.0
0°-90°	4062.8	67.6
90°-120°	932.4	15.5
90°-150°	1698.2	28.2
90°-180°	1951.0	32.4
0°-180°	6014.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1488	1488	1488	1488	1488	
5°	1486	1484	1468	1482	1480	141
15°	1426	1422	1408	1420	1420	402
25°	1311	1307	1295	1303	1307	604
35°	1155	1151	1141	1142	1147	721
45°	958	960	950	948	950	739
55°	743	743	733	727	729	662
65°	502	500	492	486	486	497
75°	257	255	249	245	243	272
85°	42	46	48	50	50	59
90°	2	6	16	8	8	3
95°	19	76	253	130	89	22
105°	70	105	426	647	604	74
115°	124	150	342	681	778	122
125°	172	192	311	525	620	152
135°	205	225	301	424	480	158
145°	237	252	297	362	390	149
155°	268	276	297	326	336	123
165°	289	293	297	309	313	82
175°	301	301	299	303	303	29
180°	301	301	301	301	301	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1488.0	1488.0	1488.0	1488.0	1488.0
2.5°	1492.8	1489.6	1476.8	1488.0	1486.4
5°	1486.0	1484.0	1468.0	1481.9	1480.1
7.5°	1475.2	1471.4	1455.7	1469.2	1467.3
10°	1464.1	1460.2	1446.2	1458.1	1456.1
12.5°	1449.7	1447.4	1431.9	1443.8	1443.4
15°	1426.2	1422.4	1408.3	1420.2	1420.2
17.5°	1395.2	1392.8	1379.2	1390.7	1389.2
20°	1374.5	1370.5	1358.5	1368.4	1368.4
22.5°	1348.9	1346.7	1334.6	1343.0	1344.6
25°	1310.7	1306.8	1294.8	1302.8	1306.7
27.5°	1268.5	1265.4	1255.3	1260.6	1263.3
30°	1235.0	1235.0	1225.1	1227.1	1233.1
32.5°	1204.8	1204.8	1193.2	1195.2	1198.0
35°	1155.4	1151.4	1141.4	1141.6	1147.4
37.5°	1098.0	1096.0	1089.6	1088.4	1090.0
40°	1059.7	1057.7	1049.8	1051.7	1051.7
42.5°	1021.5	1019.5	1011.5	1008.8	1011.9
45°	958.2	960.1	950.2	948.2	950.2
47.5°	895.5	895.5	887.6	882.1	885.2
50°	852.5	852.5	844.6	840.6	840.6
52.5°	808.0	809.5	800.0	794.5	795.9
55°	743.0	743.0	733.0	727.1	729.1
57.5°	671.3	671.3	661.3	655.4	659.0
60°	623.5	623.5	613.5	607.6	609.6
62.5°	575.7	575.7	565.7	559.8	560.2
65°	502.0	500.0	492.0	486.0	486.0
67.5°	431.1	426.0	419.9	412.0	412.0
70°	378.4	376.5	370.5	362.6	362.6
72.5°	330.6	327.2	321.1	314.7	314.7
75°	257.0	255.0	249.0	244.9	243.1
77.5°	184.1	182.5	182.0	176.5	178.1
80°	139.4	139.4	137.5	133.4	133.4
82.5°	99.6	101.2	97.6	96.7	95.3
85°	41.8	45.8	47.8	49.8	49.8
87.5°	8.4	13.8	14.3	14.3	14.3
90°	1.9	5.7	15.5	7.7	7.7
92.5°	8.1	39.1	86.4	38.3	24.7
95°	19.3	75.9	252.8	130.3	88.8
97.5°	33.6	83.4	378.2	300.8	221.6
100°	44.4	89.7	416.9	422.4	328.1
102.5°	53.6	95.9	427.7	526.2	445.4
105°	69.5	105.3	426.5	647.4	604.0
107.5°	85.6	118.9	402.1	710.4	721.0
110°	96.4	126.7	382.1	726.6	772.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	107.3	136.0	363.6	716.4	785.8
115°	123.5	149.9	341.5	681.4	777.7
117.5°	139.4	163.5	326.5	633.1	739.9
120°	148.6	171.2	320.3	600.6	704.4
122.5°	157.8	180.5	315.7	568.2	670.4
125°	171.8	192.5	310.7	525.1	619.5
127.5°	183.0	204.1	306.4	490.5	570.1
130°	189.2	211.7	304.9	468.7	542.3
132.5°	195.3	217.9	303.4	450.0	516.1
135°	204.6	225.3	301.1	423.9	480.5
137.5°	214.2	234.6	300.6	404.4	450.8
140°	222.0	240.8	299.1	388.8	432.2
142.5°	228.1	245.5	299.1	377.9	415.3
145°	237.3	252.4	297.2	361.5	389.8
147.5°	246.6	261.3	297.2	347.9	371.3
150°	252.8	266.0	297.2	340.1	358.9
152.5°	258.9	269.2	297.2	333.8	348.1
155°	268.2	275.8	297.2	326.3	335.8
157.5°	275.2	282.4	297.2	319.7	326.5
160°	279.8	285.5	297.2	316.6	320.3
162.5°	284.5	288.6	297.2	313.5	317.2
165°	289.4	293.3	297.2	308.8	312.7
167.5°	294.1	296.0	299.1	306.8	308.4
170°	297.2	299.1	299.1	306.8	306.8
172.5°	298.7	299.1	299.1	305.3	303.8
175°	301.1	301.1	299.1	303.0	303.0
177.5°	301.1	301.1	299.5	302.5	301.1
180°	301.1	301.1	301.1	301.1	301.1

(END OF REPORT)