

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: P520264

Luminaire Tested: **SQ4-F-100U-125D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520264
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G3-1910-536-20)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-100U-125D-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

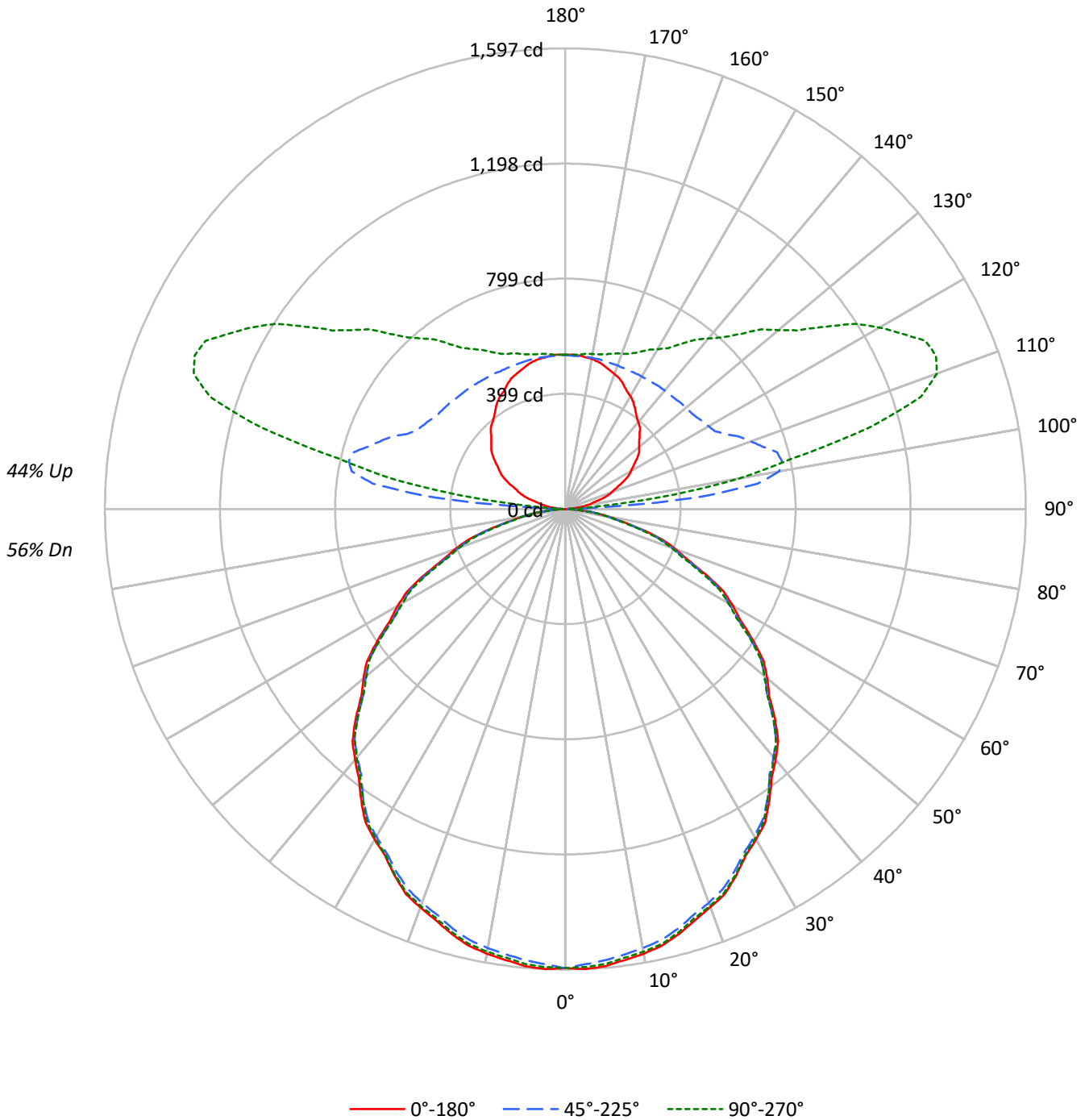
Lumens per Lamp: N/A
Luminaire Lumens: 7816.6 lumens
Efficiency: N/A
Efficacy: 113.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 68.7
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	50	30	10	0	
RCR																						
0	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	56				
1	99	95	91	87	92	88	85	82	76	73	71	65	63	61	54	53	52	47				
2	90	83	76	71	83	77	71	67	66	62	59	57	54	51	48	45	43	39				
3	82	73	65	59	76	68	61	56	58	53	49	50	46	43	42	39	37	33				
4	75	64	56	50	69	60	53	47	52	46	42	44	40	37	37	34	32	28				
5	69	57	49	43	64	53	46	40	46	41	36	40	35	32	34	30	28	24				
6	63	51	43	37	59	48	41	35	42	36	31	36	31	28	31	27	24	21				
7	59	46	38	32	54	43	36	31	38	32	28	33	28	25	28	24	21	19				
8	54	42	34	29	50	39	32	27	34	29	25	30	25	22	26	22	19	17				
9	51	38	31	26	47	36	29	24	32	26	22	27	23	20	24	20	17	15				
10	47	35	28	23	44	33	26	22	29	24	20	25	21	18	22	18	16	14				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14688	14688	14688
5°	14736	14550	14671
10°	14668	14487	14603
15°	14570	14394	14512
20°	14435	14272	14383
25°	14271	14120	14236
30°	14095	13973	14048
35°	13895	13776	13786
40°	13665	13518	13560
45°	13409	13262	13284
50°	13118	12965	12928
55°	12783	12598	12571
60°	12367	12092	12029
65°	11725	11477	11324
70°	10920	10636	10494
75°	9714	9496	9211
80°	7917	7678	7635
85°	4732	5378	5378



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.2	1.9
10°-20°	427.8	5.5
20°-30°	642.7	8.2
30°-40°	766.9	9.8
40°-50°	786.1	10.1
50°-60°	700.7	9.0
60°-70°	521.6	6.7
70°-80°	282.6	3.6
80°-90°	66.0	0.8
90°-100°	250.2	3.2
100°-110°	690.9	8.8
110°-120°	712.5	9.1
120°-130°	572.6	7.3
130°-140°	450.0	5.8
140°-150°	345.1	4.4
150°-160°	248.0	3.2
160°-170°	151.7	1.9
170°-180°	51.1	0.7
0°-30°	1220.7	15.6
0°-40°	1987.6	25.4
0°-60°	3474.4	44.4
0°-90°	4344.6	55.6
90°-120°	1653.6	21.2
90°-150°	3021.2	38.7
90°-180°	3472.0	44.4
0°-180°	7816.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1592	1592	1592	1592	1592	
5°	1591	1589	1571	1585	1584	151
15°	1525	1522	1507	1520	1519	430
25°	1402	1399	1387	1395	1398	646
35°	1234	1233	1223	1223	1224	771
45°	1028	1025	1016	1015	1018	792
55°	795	792	783	777	782	710
65°	537	534	526	522	519	532
75°	272	272	266	261	258	289
85°	45	51	51	52	51	62
90°	2	3	7	8	8	4
95°	37	135	454	187	121	39
105°	123	190	760	1160	1093	131
115°	221	267	612	1212	1378	217
125°	303	344	555	939	1102	269
135°	364	404	540	761	858	282
145°	422	452	533	647	697	264
155°	476	492	528	581	599	219
165°	516	522	531	552	556	145
175°	534	535	532	539	538	51
180°	534	534	534	534	534	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1592.0	1592.0	1592.0	1592.0	1592.0
2.5°	1596.9	1594.2	1580.1	1591.9	1589.9
5°	1591.1	1588.6	1571.0	1584.9	1584.1
7.5°	1577.6	1574.4	1558.4	1571.5	1569.9
10°	1565.7	1563.1	1546.4	1559.6	1558.7
12.5°	1551.0	1548.5	1531.7	1544.8	1544.7
15°	1525.4	1522.0	1507.0	1520.2	1519.3
17.5°	1494.7	1490.8	1476.0	1486.3	1488.0
20°	1470.2	1467.7	1453.6	1463.2	1464.9
22.5°	1445.0	1441.7	1426.9	1438.0	1439.7
25°	1401.9	1399.3	1387.0	1394.9	1398.4
27.5°	1354.6	1354.6	1343.1	1348.8	1350.9
30°	1323.0	1323.0	1311.6	1315.2	1318.6
32.5°	1289.4	1286.7	1275.9	1278.8	1282.2
35°	1233.7	1232.7	1223.1	1223.1	1224.0
37.5°	1176.0	1173.6	1163.0	1163.8	1168.0
40°	1134.6	1132.9	1122.4	1122.5	1125.9
42.5°	1092.6	1090.8	1081.7	1080.3	1081.7
45°	1027.7	1025.2	1016.4	1014.6	1018.1
47.5°	958.7	959.4	948.9	946.5	948.3
50°	913.9	913.9	903.3	898.1	900.7
52.5°	866.9	865.5	855.0	849.1	855.1
55°	794.7	792.1	783.2	777.3	781.5
57.5°	720.7	716.8	707.9	701.4	703.8
60°	670.2	664.3	655.3	650.2	651.9
62.5°	617.7	614.4	604.9	597.0	600.7
65°	537.1	533.6	525.7	522.2	518.7
67.5°	458.1	455.9	446.9	443.1	440.9
70°	404.8	400.5	394.3	389.9	389.0
72.5°	352.9	347.9	341.7	338.0	335.8
75°	272.5	272.5	266.4	261.1	258.4
77.5°	195.9	196.6	191.6	189.7	188.5
80°	149.0	149.0	144.5	142.8	143.7
82.5°	104.1	106.1	104.6	102.2	100.9
85°	44.7	50.7	50.8	51.7	50.8
87.5°	8.1	13.2	14.7	13.5	12.3
90°	1.7	3.4	6.8	7.7	8.5
92.5°	15.4	63.9	114.3	41.6	32.4
95°	36.8	135.4	454.0	186.6	121.4
97.5°	60.8	151.6	672.6	517.8	375.0
100°	78.6	161.4	753.3	758.5	616.5
102.5°	95.8	172.5	769.0	937.3	802.5
105°	123.2	190.0	760.1	1160.4	1092.7
107.5°	152.1	211.7	717.7	1268.0	1292.7
110°	172.7	226.2	684.8	1291.1	1371.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	191.2	242.7	654.1	1272.8	1391.2
115°	220.6	266.6	612.1	1211.9	1378.3
117.5°	246.2	292.0	584.6	1126.0	1315.3
120°	263.3	308.4	573.6	1068.0	1258.6
122.5°	279.8	322.9	564.8	1013.7	1194.3
125°	302.7	344.4	554.9	939.1	1102.1
127.5°	322.2	363.9	549.1	876.0	1016.6
130°	335.1	377.0	546.3	837.4	965.3
132.5°	347.5	387.3	543.6	804.9	920.9
135°	364.2	403.5	539.5	760.6	857.6
137.5°	383.0	418.8	537.4	723.3	806.1
140°	393.3	428.4	536.1	698.5	771.2
142.5°	404.9	437.3	534.7	676.4	740.4
145°	422.4	451.6	532.7	647.4	696.8
147.5°	439.1	464.7	530.8	623.1	661.4
150°	451.5	472.4	530.1	608.6	639.5
152.5°	461.0	480.6	529.4	596.2	621.7
155°	476.2	492.1	528.3	581.0	599.4
157.5°	490.3	502.4	528.5	569.9	582.5
160°	498.5	509.3	529.2	563.7	572.9
162.5°	505.3	514.8	529.9	558.1	565.3
165°	515.6	522.2	530.9	551.6	555.7
167.5°	523.4	527.5	531.8	547.5	548.9
170°	527.6	530.9	531.8	545.5	545.5
172.5°	530.9	533.0	531.8	542.7	542.1
175°	534.4	535.2	531.8	539.4	537.7
177.5°	535.8	535.1	531.6	536.4	535.1
180°	534.4	534.4	534.4	534.4	534.4

(END OF REPORT)