

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

Brand: CORELITE

Report Number: P521477

Luminaire Tested: SQ4-F-075U-100D-92765-1D-UNV-STD-W-4_6500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521477
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-38)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-075U-100D-92765-1D-UNV-STD-W-4_6500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7897.1 lumens
Efficiency: N/A
Efficacy: 120.4 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

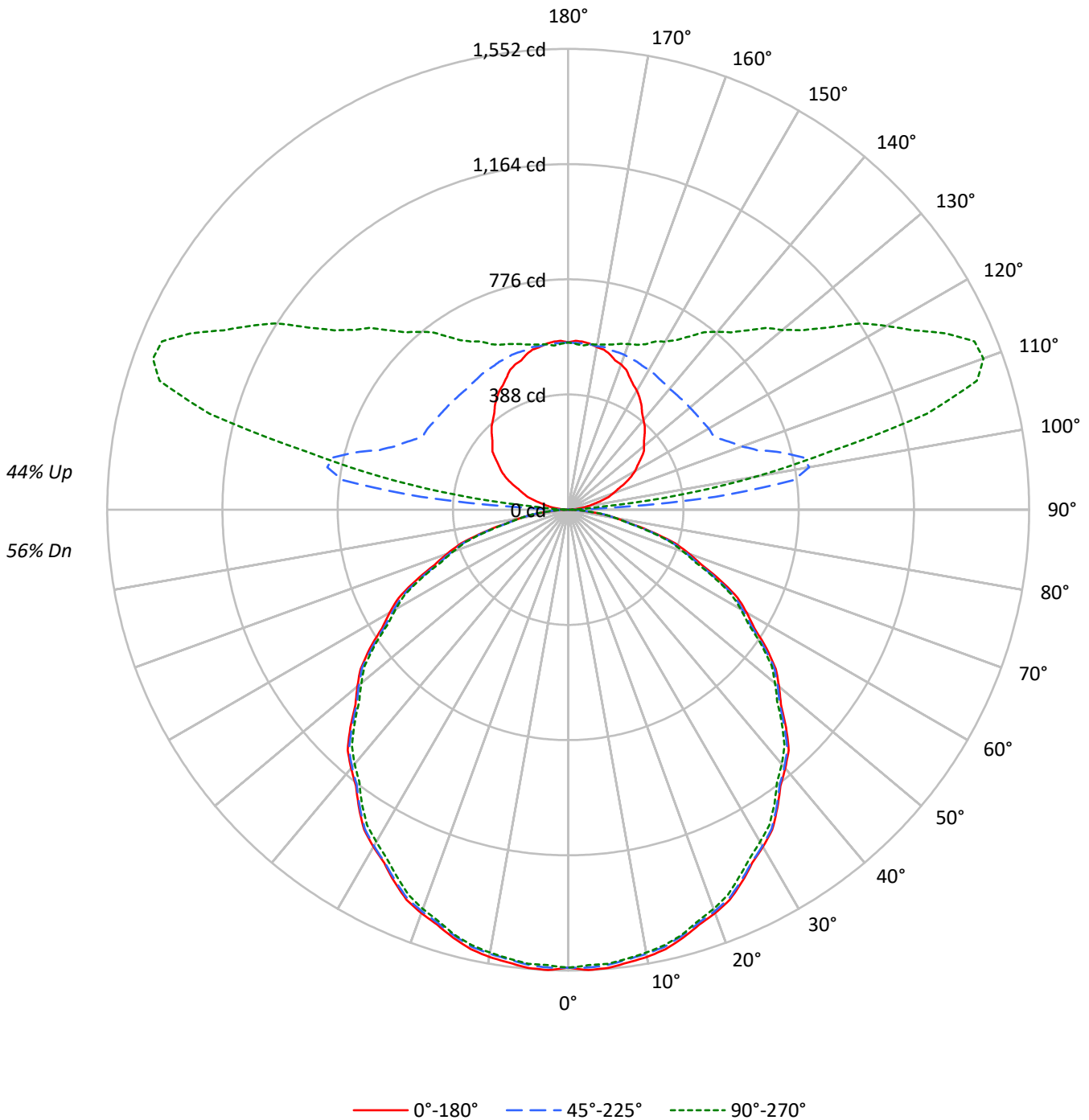
Input Watts (W): 65.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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	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	94	90	87	92	88	84	81	76	73	71	64	63	61	54	53	52	47																				
2	90	82	76	71	83	77	71	66	66	62	58	56	53	51	47	45	43	39																				
3	82	72	65	59	76	67	61	55	58	53	49	50	46	43	42	39	36	33																				
4	75	64	56	49	69	60	52	47	52	46	41	44	40	36	37	34	31	28																				
5	69	57	48	42	63	53	46	40	46	40	36	39	35	31	33	30	27	24																				
6	63	51	43	37	58	48	40	35	41	35	31	36	31	27	30	27	24	21																				
7	58	46	38	32	54	43	36	30	37	32	27	32	28	24	28	24	21	18																				
8	54	42	34	28	50	39	32	27	34	28	24	30	25	21	25	22	19	16																				
9	50	38	30	25	47	36	29	24	31	26	22	27	23	19	23	20	17	15																				
10	47	35	27	23	44	33	26	22	29	23	19	25	21	17	22	18	15	13																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14230	14230	14230
5°	14345	14255	14215
10°	14330	14230	14190
15°	14263	14180	14150
20°	14197	14134	14050
25°	14088	14033	13880
30°	13968	13934	13762
35°	13825	13777	13633
40°	13688	13636	13469
45°	13529	13417	13263
50°	13298	13207	13053
55°	13111	12921	12767
60°	12808	12551	12372
65°	12393	12042	11856
70°	11672	11297	11095
75°	10537	10270	10117
80°	8708	8708	8591
85°	6119	7029	7262

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13529 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.0	1.8
10°-20°	418.3	5.3
20°-30°	632.6	8.0
30°-40°	761.7	9.6
40°-50°	791.1	10.0
50°-60°	717.1	9.1
60°-70°	546.1	6.9
70°-80°	305.1	3.9
80°-90°	79.2	1.0
90°-100°	256.7	3.3
100°-110°	730.5	9.3
110°-120°	699.9	8.9
120°-130°	553.9	7.0
130°-140°	444.6	5.6
140°-150°	348.1	4.4
150°-160°	254.7	3.2
160°-170°	157.8	2.0
170°-180°	53.5	0.7
0°-30°	1196.9	15.2
0°-40°	1958.6	24.8
0°-60°	3466.9	43.9
0°-90°	4397.3	55.7
90°-120°	1687.1	21.4
90°-150°	3033.8	38.4
90°-180°	3500.0	44.3
0°-180°	7897.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1542	1542	1542	1542	1542	
5°	1549	1534	1539	1535	1535	147
15°	1493	1480	1485	1481	1481	421
25°	1384	1372	1378	1368	1364	637
35°	1228	1220	1223	1211	1210	768
45°	1037	1031	1028	1018	1016	799
55°	815	812	803	794	794	727
65°	568	561	552	544	543	560
75°	296	291	288	284	284	313
85°	58	62	66	68	69	72
90°	0	0	0	0	0	3
95°	28	111	497	172	106	32
105°	114	172	744	1315	1250	120
115°	211	255	564	1196	1404	208
125°	298	330	539	894	1069	267
135°	364	395	532	755	854	281
145°	430	452	537	654	712	268
155°	491	502	550	591	615	227
165°	542	544	556	568	576	152
175°	568	565	562	559	555	54
180°	563	563	563	563	563	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1542.4	1542.4	1542.4	1542.4	1542.4
2.5°	1551.9	1539.3	1543.3	1540.6	1535.6
5°	1548.9	1534.2	1539.2	1534.9	1534.9
7.5°	1538.1	1524.1	1527.4	1524.9	1524.9
10°	1529.6	1513.9	1518.9	1514.6	1514.6
12.5°	1515.9	1501.8	1506.9	1502.6	1501.7
15°	1493.2	1479.5	1484.6	1481.4	1481.4
17.5°	1465.7	1452.7	1459.3	1454.1	1452.5
20°	1446.0	1431.4	1439.6	1431.0	1431.0
22.5°	1422.0	1409.0	1416.5	1406.1	1404.5
25°	1383.9	1372.4	1378.5	1367.7	1363.5
27.5°	1341.1	1328.7	1337.8	1325.8	1323.5
30°	1311.1	1299.5	1307.9	1294.9	1291.8
32.5°	1278.5	1268.7	1274.4	1262.4	1260.1
35°	1227.5	1220.2	1223.2	1211.4	1210.4
37.5°	1173.3	1166.2	1169.0	1155.9	1155.1
40°	1136.5	1130.2	1132.2	1118.3	1118.3
42.5°	1098.8	1091.6	1091.9	1078.8	1078.0
45°	1036.9	1030.6	1028.3	1017.6	1016.5
47.5°	971.1	968.2	964.7	953.9	953.9
50°	926.5	924.4	920.1	909.4	909.4
52.5°	881.1	879.9	873.8	864.8	863.1
55°	815.1	812.0	803.3	793.7	793.7
57.5°	742.9	740.4	730.7	723.0	721.1
60°	694.1	689.9	680.2	671.6	670.5
62.5°	643.5	640.2	629.6	621.9	620.0
65°	567.7	561.4	551.6	544.1	543.1
67.5°	487.6	480.5	471.9	465.7	463.6
70°	432.7	426.5	418.8	413.4	411.3
72.5°	378.8	372.5	365.7	362.0	361.6
75°	295.6	291.4	288.1	283.8	283.8
77.5°	214.4	211.9	210.2	208.0	208.0
80°	163.9	163.9	163.9	161.7	161.7
82.5°	117.6	120.1	121.9	120.6	120.6
85°	57.8	62.0	66.4	67.5	68.6
87.5°	16.3	21.3	26.6	27.4	28.3
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.6	45.4	105.4	30.7	23.1
95°	27.8	110.6	497.0	172.0	106.0
97.5°	51.2	129.5	765.4	547.7	375.3
100°	67.5	140.8	823.7	834.3	642.7
102.5°	85.5	152.9	810.8	1068.0	900.6
105°	113.5	172.2	744.4	1314.9	1250.0
107.5°	142.0	194.6	666.9	1384.6	1442.4
110°	161.7	211.0	622.3	1357.9	1487.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	180.6	227.3	592.3	1294.9	1480.1
115°	211.0	255.0	564.5	1195.8	1404.3
117.5°	237.8	279.1	548.0	1087.5	1308.3
120°	259.2	293.8	546.3	1025.6	1237.2
122.5°	276.4	310.9	542.0	971.3	1167.7
125°	297.8	330.2	538.8	894.1	1069.0
127.5°	321.1	351.5	537.1	848.0	992.1
130°	333.1	363.5	534.5	815.8	941.5
132.5°	346.0	375.5	534.5	790.8	906.4
135°	364.2	394.6	532.4	755.2	853.7
137.5°	381.3	410.9	532.1	725.2	810.2
140°	394.2	424.5	531.3	700.2	781.9
142.5°	408.7	434.1	533.9	680.3	753.6
145°	429.5	451.5	536.6	653.7	712.3
147.5°	447.3	468.7	541.4	626.7	677.4
150°	462.7	477.4	543.1	617.8	653.4
152.5°	474.7	490.2	544.8	605.7	638.8
155°	490.6	502.1	549.5	590.7	614.8
157.5°	510.3	517.2	550.6	583.9	601.1
160°	520.6	525.8	554.8	578.7	593.4
162.5°	526.6	532.6	555.7	574.4	585.7
165°	542.0	544.1	555.9	567.9	576.3
167.5°	552.5	550.6	560.8	566.3	569.6
170°	555.9	554.9	559.1	560.3	564.5
172.5°	563.6	560.1	561.7	558.6	561.9
175°	567.7	564.6	562.3	559.0	554.8
177.5°	569.4	564.4	561.7	558.3	559.1
180°	563.4	563.4	563.4	563.4	563.4

(END OF REPORT)