

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: P521464

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

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521464
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-37)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-075U-075D-92765-1D-UNV-STD-W-4_6500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 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: 6844.9 lumens
Efficiency: N/A
Efficacy: 124.0 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

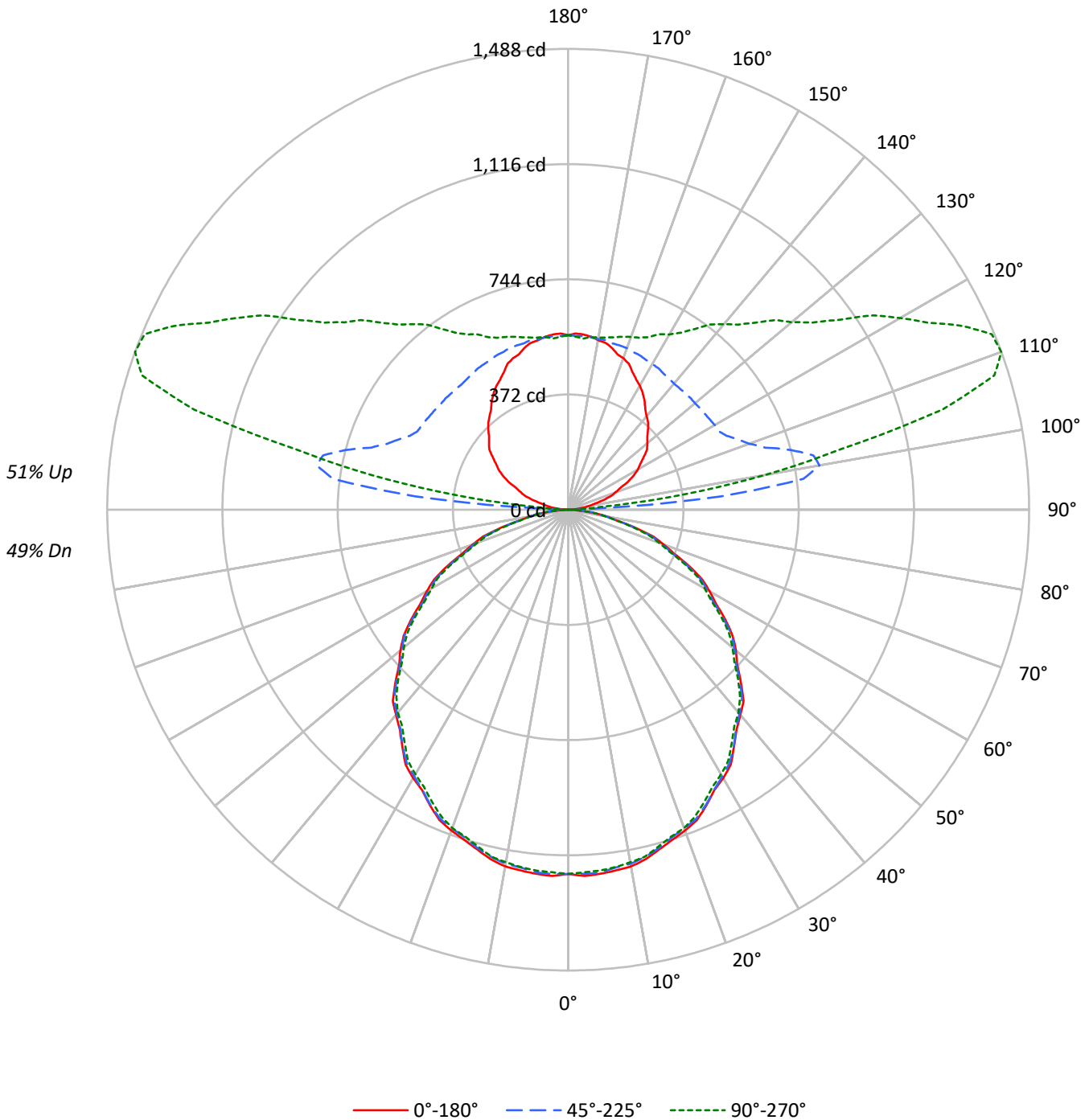
Input Watts (W): 55.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	50	30	10	0	
RCR																						
0	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49				
1	97	93	89	86	90	86	82	79	72	70	68	60	58	57	48	47	46	41				
2	89	81	75	70	81	75	69	65	63	59	56	52	50	47	42	40	39	34				
3	81	71	64	58	74	66	59	54	56	51	47	46	43	40	37	35	33	29				
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	30	28	24				
5	68	56	48	42	62	52	44	39	44	38	34	37	32	29	30	27	24	21				
6	62	50	42	36	57	46	39	34	40	34	30	33	29	25	27	24	21	18				
7	57	45	37	31	53	42	35	30	36	30	26	30	26	22	25	21	19	16				
8	53	41	33	28	49	38	31	26	33	27	23	27	23	20	23	19	17	14				
9	50	37	30	25	46	35	28	23	30	24	21	25	21	18	21	18	15	13				
10	46	34	27	22	43	32	25	21	27	22	18	23	19	16	19	16	14	12				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10851	10851	10851
5°	10932	10892	10833
10°	10958	10878	10828
15°	10845	10804	10753
20°	10822	10748	10737
25°	10730	10708	10588
30°	10658	10590	10510
35°	10508	10496	10363
40°	10411	10359	10295
45°	10287	10231	10119
50°	10146	10070	9933
55°	9958	9838	9699
60°	9724	9566	9389
65°	9400	9191	9027
70°	8813	8611	8408
75°	7942	7714	7600
80°	6487	6546	6429
85°	4647	5325	5325

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10287 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.4	1.6
10°-20°	318.7	4.7
20°-30°	482.2	7.0
30°-40°	580.0	8.5
40°-50°	602.2	8.8
50°-60°	545.5	8.0
60°-70°	415.0	6.1
70°-80°	230.6	3.4
80°-90°	59.4	0.9
90°-100°	256.7	3.8
100°-110°	730.5	10.7
110°-120°	699.9	10.2
120°-130°	553.9	8.1
130°-140°	444.6	6.5
140°-150°	348.1	5.1
150°-160°	254.7	3.7
160°-170°	157.8	2.3
170°-180°	53.5	0.8
0°-30°	912.4	13.3
0°-40°	1492.4	21.8
0°-60°	2640.1	38.6
0°-90°	3345.1	48.9
90°-120°	1687.1	24.6
90°-150°	3033.8	44.3
90°-180°	3500.0	51.1
0°-180°	6844.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1176	1176	1176	1176	1176	
5°	1180	1170	1176	1171	1170	112
15°	1135	1126	1131	1130	1126	321
25°	1054	1045	1052	1041	1040	486
35°	933	929	932	921	920	585
45°	788	783	784	776	776	608
55°	619	618	612	606	603	553
65°	431	424	421	414	414	424
75°	223	220	216	214	213	236
85°	44	47	50	50	50	54
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°	1176.1	1176.1	1176.1	1176.1	1176.1
2.5°	1183.8	1173.8	1177.0	1174.3	1171.8
5°	1180.4	1169.9	1176.1	1170.7	1169.7
7.5°	1174.8	1162.5	1165.4	1164.3	1164.3
10°	1169.7	1154.0	1161.1	1155.8	1155.8
12.5°	1156.0	1142.8	1148.3	1145.5	1147.2
15°	1135.4	1126.0	1131.1	1130.0	1125.8
17.5°	1117.6	1106.3	1110.1	1108.2	1106.5
20°	1102.2	1091.7	1094.7	1089.4	1093.6
22.5°	1085.1	1074.6	1080.1	1071.3	1071.3
25°	1054.0	1044.6	1051.9	1041.1	1040.1
27.5°	1021.0	1014.9	1019.7	1011.7	1008.8
30°	1000.4	991.0	994.0	988.6	986.5
32.5°	976.4	967.0	970.0	960.4	961.7
35°	933.0	928.8	931.9	921.2	920.1
37.5°	893.5	885.2	890.1	881.3	880.5
40°	864.4	856.0	860.1	854.8	854.8
42.5°	837.8	828.6	831.0	823.9	821.3
45°	788.4	783.1	784.1	775.5	775.5
47.5°	739.5	735.7	734.2	725.4	727.1
50°	706.9	700.7	701.6	692.0	692.0
52.5°	669.2	669.7	665.6	659.3	654.2
55°	619.1	618.1	611.6	606.2	603.0
57.5°	565.6	560.7	556.1	548.8	548.2
60°	527.0	523.9	518.4	511.9	508.8
62.5°	487.6	484.4	479.0	473.4	472.8
65°	430.6	424.3	421.0	414.5	413.5
67.5°	368.7	363.7	359.5	354.3	353.7
70°	326.7	322.5	319.2	314.8	311.7
72.5°	288.1	281.4	278.1	274.6	272.3
75°	222.8	219.7	216.4	214.2	213.2
77.5°	159.8	160.0	160.0	157.2	156.2
80°	122.1	123.2	123.2	122.1	121.0
82.5°	88.7	90.6	91.5	90.4	90.2
85°	43.9	47.1	50.3	50.3	50.3
87.5°	12.0	16.2	19.7	20.5	19.7
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)