

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: P521087

Luminaire Tested: SQ4-BB-075U-050D-92765-1D-UNV-STD-W-4_6500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521087
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-075U-050D-92765-1D-UNV-STD-W-4_6500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 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: 4886.0 lumens
Efficiency: N/A
Efficacy: 111.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

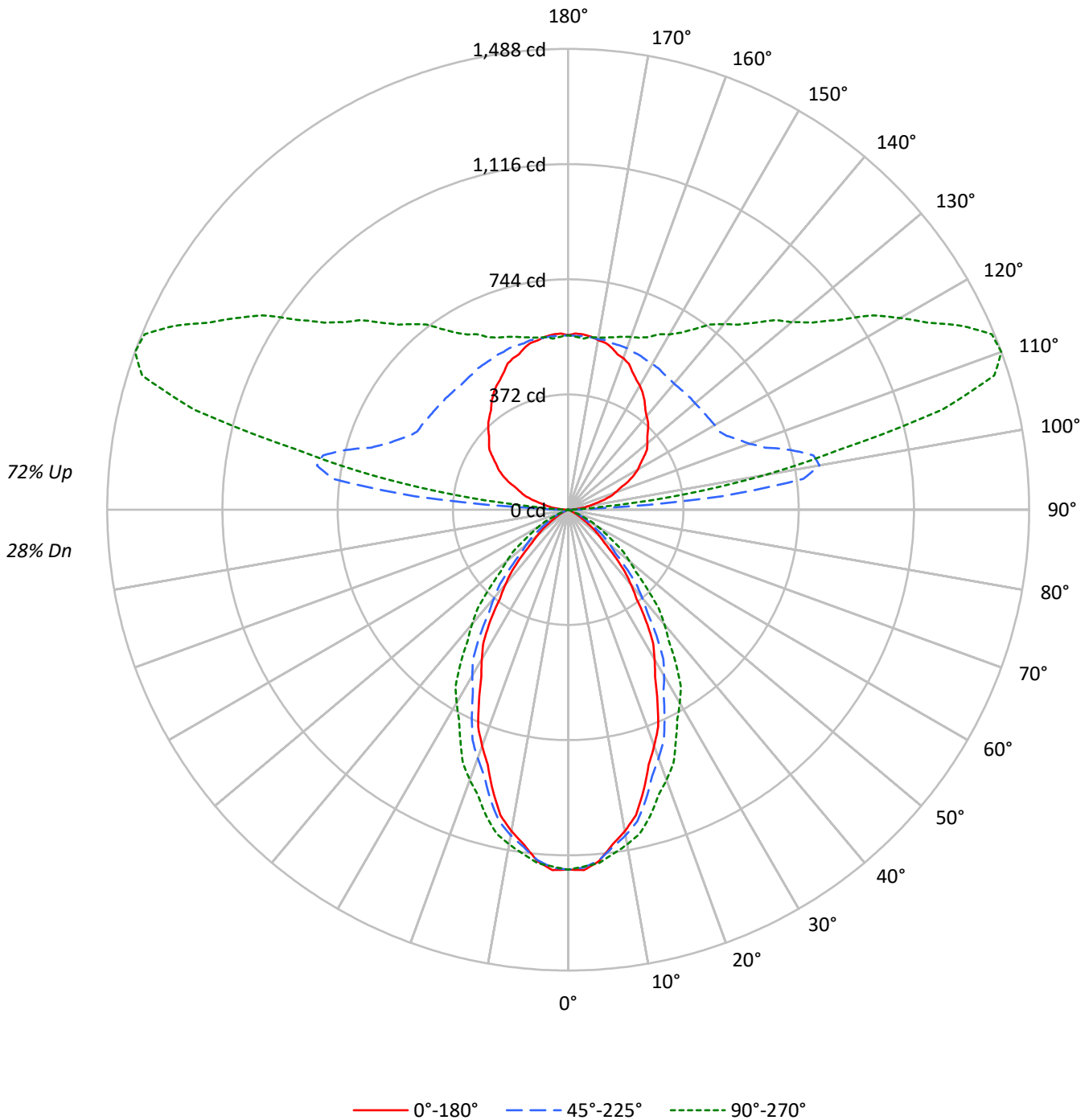
Input Watts (W): 44
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	102	102	102	102	91	91	91	91	71	71	71		53	53	53		36	36	36	28
1	94	90	87	84	84	81	78	76	64	62	60		48	47	46		34	33	33	26
2	86	80	75	70	77	72	68	64	57	54	52		43	42	40		31	30	29	23
3	79	71	65	60	71	64	59	55	51	48	45		39	37	35		28	27	26	21
4	73	64	57	51	66	58	52	47	46	42	39		36	33	31		26	24	23	19
5	67	57	50	44	61	52	46	41	42	38	34		33	30	28		24	22	21	17
6	62	52	44	39	56	47	41	36	38	34	30		30	27	25		22	20	19	16
7	58	47	40	35	52	43	36	32	35	30	27		27	24	22		21	19	17	15
8	54	43	36	31	48	39	33	29	32	27	24		25	22	20		19	17	16	13
9	50	39	32	28	45	36	30	26	29	25	22		23	20	18		18	16	15	12
10	47	36	29	25	42	33	27	23	27	23	20		22	19	17		17	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10722	10722	10722
5°	10549	10523	10602
10°	9871	10002	10281
15°	8974	9258	9773
20°	7966	8379	9113
25°	6937	7486	8373
30°	5941	6595	7673
35°	4926	5598	6827
40°	3785	4476	5816
45°	2736	3389	4680
50°	1865	2526	3712
55°	1211	1827	2884
60°	696	1286	2085
65°	183	786	1057
70°	92	243	302
75°	39	21	0
80°	32	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4680 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.1	2.2
10°-20°	271.2	5.6
20°-30°	339.5	6.9
30°-40°	313.6	6.4
40°-50°	210.7	4.3
50°-60°	108.8	2.2
60°-70°	34.1	0.7
70°-80°	2.2	0.0
80°-90°	0.0	0.0
90°-100°	256.7	5.3
100°-110°	730.5	15.0
110°-120°	699.9	14.3
120°-130°	553.9	11.3
130°-140°	444.6	9.1
140°-150°	348.1	7.1
150°-160°	254.7	5.2
160°-170°	157.8	3.2
170°-180°	53.5	1.1
0°-30°	716.8	14.7
0°-40°	1030.4	21.1
0°-60°	1350.0	27.6
0°-90°	1386.3	28.4
90°-120°	1687.1	34.5
90°-150°	3033.8	62.1
90°-180°	3500.0	71.6
0°-180°	4886.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1162	1162	1162	1162	1162	
5°	1139	1128	1136	1140	1145	106
15°	940	936	969	1002	1023	262
25°	681	687	735	786	822	312
35°	437	448	497	556	606	271
45°	210	222	260	310	359	165
55°	75	88	114	146	179	70
65°	8	16	36	43	48	14
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
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°	1162.1	1162.1	1162.1	1162.1	1162.1
2.5°	1164.8	1153.8	1156.7	1156.6	1153.5
5°	1139.0	1127.5	1136.2	1140.3	1144.7
7.5°	1090.9	1081.9	1098.7	1111.2	1120.4
10°	1053.6	1045.9	1067.6	1084.8	1097.4
12.5°	1010.4	1004.5	1030.8	1054.3	1070.4
15°	939.5	936.2	969.3	1001.8	1023.2
17.5°	863.4	863.3	901.1	941.5	967.3
20°	811.3	812.9	853.4	898.0	928.2
22.5°	759.1	762.9	806.2	852.6	887.3
25°	681.4	686.9	735.4	785.7	822.5
27.5°	606.7	614.8	665.8	718.1	762.9
30°	557.7	567.1	619.0	674.0	720.2
32.5°	509.6	520.7	571.3	629.5	676.6
35°	437.4	448.4	497.0	555.5	606.1
37.5°	362.9	373.6	421.1	478.7	533.3
40°	314.3	326.4	371.6	427.4	482.9
42.5°	270.2	282.3	324.8	379.7	432.1
45°	209.7	222.3	259.7	310.3	358.7
47.5°	159.6	173.3	206.1	251.9	295.9
50°	129.9	143.6	176.0	216.3	258.6
52.5°	106.0	119.3	148.5	186.5	225.3
55°	75.3	88.0	113.6	145.8	179.3
57.5°	52.1	62.9	85.9	112.8	139.1
60°	37.7	48.1	69.7	91.6	113.0
62.5°	25.1	34.6	55.8	72.5	86.9
65°	8.4	16.1	36.0	43.4	48.4
67.5°	4.3	5.2	18.9	19.9	21.6
70°	3.4	3.4	9.0	9.6	11.2
72.5°	2.5	2.5	3.6	4.6	4.9
75°	1.1	1.1	0.6	0.0	0.0
77.5°	0.6	0.6	0.4	0.0	0.0
80°	0.6	0.6	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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)