

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: P521035

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

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521035
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-050U-050D-92765-1D-UNV-STD-W-4_6500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 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: 3724.3 lumens
Efficiency: N/A
Efficacy: 102.9 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

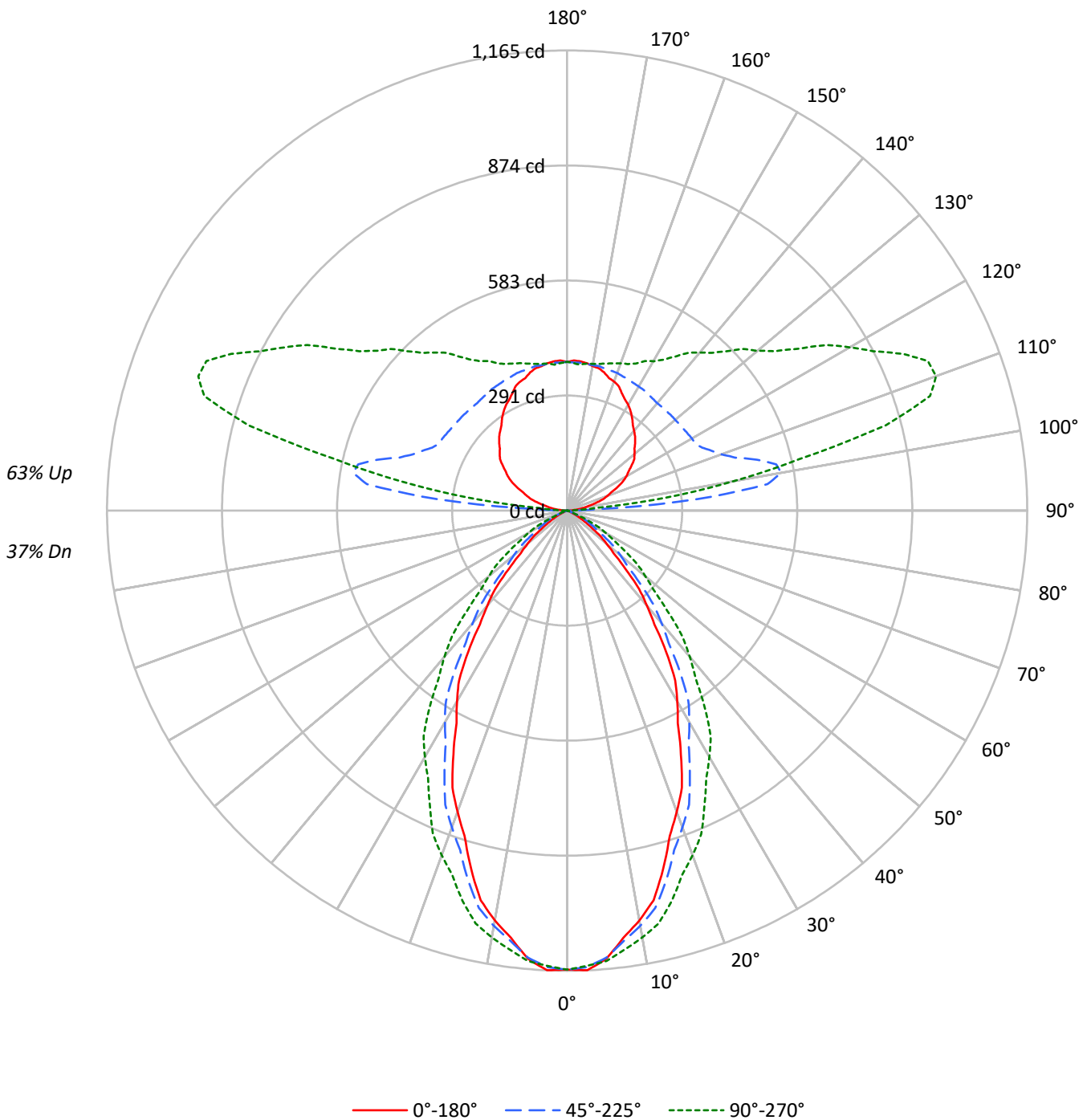
Input Watts (W): 36.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	44	44	44	37				
1	96	93	89	86	87	84	81	79	69	67	65	54	53	52	41	41	40	34				
2	89	82	77	73	81	75	71	67	62	59	56	49	47	46	38	37	36	31				
3	82	74	67	62	74	67	62	58	56	52	49	45	42	40	35	33	32	28				
4	76	66	59	54	69	61	55	50	50	46	43	41	38	36	32	30	29	25				
5	70	60	52	47	64	55	49	44	46	41	38	38	34	32	30	28	26	23				
6	65	54	47	42	59	50	43	39	42	37	34	34	31	29	28	25	24	21				
7	60	49	42	37	55	45	39	35	38	34	30	32	28	26	26	23	22	19				
8	56	45	38	33	51	42	35	31	35	31	27	29	26	24	24	22	20	18				
9	52	41	34	30	48	38	32	28	33	28	25	27	24	22	22	20	18	16				
10	49	38	31	27	45	35	30	26	30	26	23	25	22	20	21	19	17	15				

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	2.8
10°-20°	271.2	7.3
20°-30°	339.5	9.1
30°-40°	313.6	8.4
40°-50°	210.7	5.7
50°-60°	108.8	2.9
60°-70°	34.1	0.9
70°-80°	2.2	0.1
80°-90°	0.0	0.0
90°-100°	171.5	4.6
100°-110°	488.0	13.1
110°-120°	467.6	12.6
120°-130°	370.1	9.9
130°-140°	297.0	8.0
140°-150°	232.5	6.2
150°-160°	170.1	4.6
160°-170°	105.4	2.8
170°-180°	35.8	1.0
0°-30°	716.8	19.2
0°-40°	1030.4	27.7
0°-60°	1350.0	36.2
0°-90°	1386.3	37.2
90°-120°	1127.1	30.3
90°-150°	2026.7	54.4
90°-180°	2338.0	62.8
0°-180°	3724.3	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°	19	74	332	115	71	21
105°	76	115	497	878	835	80
115°	141	170	377	799	938	139
125°	199	221	360	597	714	178
135°	243	264	356	504	570	188
145°	287	302	358	437	476	179
155°	328	335	367	395	411	151
165°	362	364	371	379	385	102
175°	379	377	376	374	371	36
180°	376	376	376	376	376	

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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°	5.7	30.4	70.4	20.5	15.5
95°	18.6	73.9	332.0	114.9	70.8
97.5°	34.2	86.5	511.3	365.9	250.7
100°	45.1	94.1	550.3	557.4	429.3
102.5°	57.1	102.2	541.7	713.5	601.6
105°	75.8	115.0	497.3	878.4	835.1
107.5°	94.9	130.0	445.5	925.0	963.6
110°	108.1	140.9	415.7	907.2	993.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	120.6	151.8	395.7	865.1	988.8
115°	141.0	170.4	377.1	798.9	938.1
117.5°	158.9	186.4	366.1	726.5	874.0
120°	173.2	196.3	364.9	685.1	826.5
122.5°	184.6	207.7	362.1	648.9	780.1
125°	198.9	220.6	359.9	597.3	714.1
127.5°	214.5	234.8	358.8	566.5	662.8
130°	222.5	242.8	357.1	545.0	629.0
132.5°	231.1	250.9	357.1	528.3	605.5
135°	243.3	263.6	355.6	504.5	570.3
137.5°	254.7	274.5	355.5	484.4	541.3
140°	263.3	283.6	354.9	467.8	522.4
142.5°	273.1	290.0	356.6	454.5	503.5
145°	286.9	301.6	358.5	436.7	475.8
147.5°	298.8	313.1	361.6	418.7	452.5
150°	309.1	318.9	362.8	412.7	436.5
152.5°	317.1	327.5	363.9	404.7	426.8
155°	327.7	335.4	367.1	394.6	410.7
157.5°	340.9	345.5	367.8	390.1	401.6
160°	347.8	351.3	370.7	386.6	396.4
162.5°	351.8	355.8	371.2	383.7	391.3
165°	362.1	363.5	371.4	379.4	385.0
167.5°	369.1	367.8	374.7	378.3	380.5
170°	371.4	370.7	373.5	374.3	377.1
172.5°	376.5	374.2	375.2	373.1	375.4
175°	379.2	377.1	375.7	373.5	370.7
177.5°	380.4	377.0	375.2	373.0	373.5
180°	376.4	376.4	376.4	376.4	376.4

(END OF REPORT)