

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: P521096

Luminaire Tested: SQ4-BB-075U-075D-92765-1D-UNV-STD-W-4_4000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521096
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-075D-92765-1D-UNV-STD-W-4_4000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5300.8 lumens
Efficiency: N/A
Efficacy: 95.3 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

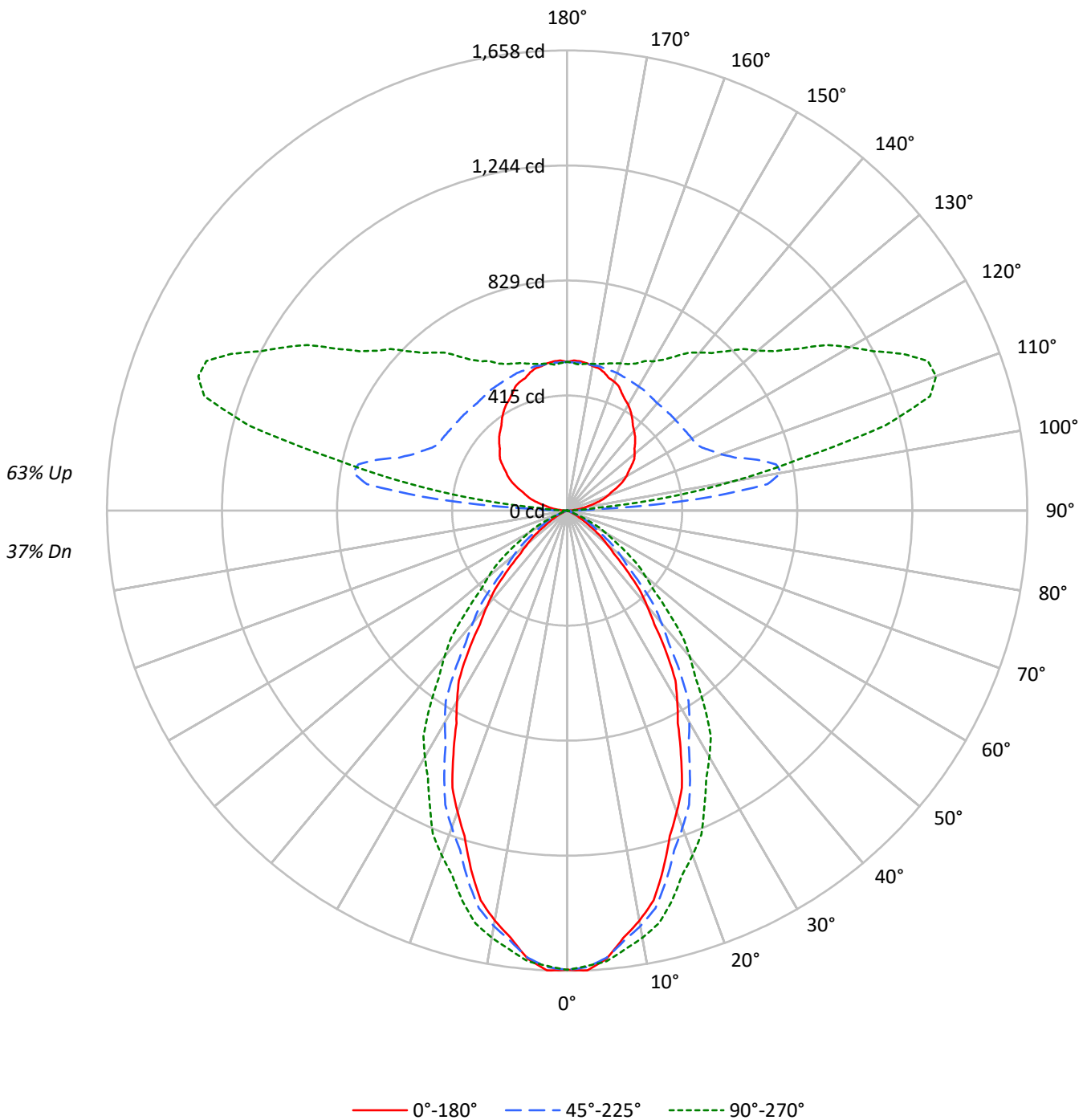
Input Watts (W): 55.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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°	15265	15265	15265
5°	15019	14982	15093
10°	14053	14241	14638
15°	12776	13181	13915
20°	11340	11930	12975
25°	9876	10658	11922
30°	8459	9389	10924
35°	7014	7970	9719
40°	5390	6372	8281
45°	3896	4825	6664
50°	2654	3596	5285
55°	1726	2601	4107
60°	989	1832	2969
65°	262	1118	1502
70°	129	345	432
75°	57	29	0
80°	43	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6664 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.0	2.8
10°-20°	386.1	7.3
20°-30°	483.4	9.1
30°-40°	446.5	8.4
40°-50°	300.0	5.7
50°-60°	155.0	2.9
60°-70°	48.5	0.9
70°-80°	3.1	0.1
80°-90°	0.1	0.0
90°-100°	244.1	4.6
100°-110°	694.5	13.1
110°-120°	665.4	12.6
120°-130°	526.6	9.9
130°-140°	422.7	8.0
140°-150°	330.9	6.2
150°-160°	242.1	4.6
160°-170°	150.0	2.8
170°-180°	50.9	1.0
0°-30°	1020.5	19.3
0°-40°	1467.1	27.7
0°-60°	1922.1	36.3
0°-90°	1973.7	37.2
90°-120°	1603.9	30.3
90°-150°	2884.1	54.4
90°-180°	3327.0	62.8
0°-180°	5300.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1654	1654	1654	1654	1654	
5°	1622	1605	1618	1624	1630	150
15°	1338	1333	1380	1426	1457	373
25°	970	978	1047	1119	1171	445
35°	623	638	708	791	863	386
45°	299	317	370	442	511	235
55°	107	125	162	208	255	100
65°	12	23	51	62	69	20
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	26	105	472	164	101	30
105°	108	164	708	1250	1188	114
115°	201	242	537	1137	1335	198
125°	283	314	512	850	1016	253
135°	346	375	506	718	812	267
145°	408	429	510	621	677	255
155°	466	477	522	562	584	216
165°	515	517	528	540	548	145
175°	540	537	535	532	528	51
180°	536	536	536	536	536	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1654.5	1654.5	1654.5	1654.5	1654.5
2.5°	1658.4	1642.7	1646.8	1646.7	1642.4
5°	1621.7	1605.3	1617.7	1623.5	1629.7
7.5°	1553.2	1540.4	1564.2	1582.1	1595.1
10°	1500.0	1489.1	1520.1	1544.5	1562.5
12.5°	1438.6	1430.1	1467.5	1501.0	1524.1
15°	1337.6	1332.9	1380.0	1426.3	1456.8
17.5°	1229.3	1229.2	1283.0	1340.5	1377.3
20°	1155.0	1157.4	1215.1	1278.5	1321.5
22.5°	1080.8	1086.2	1147.8	1214.0	1263.3
25°	970.1	978.0	1047.0	1118.6	1171.1
27.5°	863.8	875.3	947.9	1022.3	1086.2
30°	794.0	807.4	881.3	959.6	1025.4
32.5°	725.5	741.3	813.4	896.3	963.3
35°	622.7	638.4	707.6	790.9	862.9
37.5°	516.6	532.0	599.5	681.5	759.3
40°	447.5	464.7	529.1	608.5	687.6
42.5°	384.7	401.9	462.5	540.6	615.2
45°	298.6	316.6	369.8	441.8	510.7
47.5°	227.2	246.7	293.4	358.6	421.4
50°	184.9	204.5	250.5	307.9	368.2
52.5°	151.0	169.9	211.5	265.6	320.8
55°	107.3	125.3	161.7	207.6	255.3
57.5°	74.1	89.6	122.3	160.6	198.0
60°	53.6	68.5	99.3	130.4	160.9
62.5°	35.7	49.3	79.4	103.2	123.7
65°	12.0	23.0	51.2	61.8	68.8
67.5°	6.1	7.3	26.9	28.4	30.7
70°	4.8	4.8	12.8	13.7	16.0
72.5°	3.5	3.5	5.1	6.6	7.0
75°	1.6	1.6	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	0.0	0.0	0.0
82.5°	0.2	0.2	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°	8.1	43.2	100.2	29.2	22.0
95°	26.5	105.1	472.5	163.5	100.8
97.5°	48.7	123.2	727.7	520.7	356.8
100°	64.2	133.8	783.1	793.2	611.0
102.5°	81.3	145.4	770.8	1015.3	856.2
105°	107.9	163.7	707.7	1250.1	1188.4
107.5°	135.0	185.0	634.0	1316.3	1371.2
110°	153.8	200.6	591.6	1290.9	1414.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	171.7	216.1	563.1	1231.0	1407.1
115°	200.6	242.4	536.6	1136.8	1335.0
117.5°	226.1	265.3	521.0	1033.9	1243.7
120°	246.4	279.3	519.3	975.0	1176.1
122.5°	262.7	295.6	515.3	923.4	1110.1
125°	283.1	314.0	512.2	850.0	1016.3
127.5°	305.3	334.2	510.6	806.1	943.1
130°	316.7	345.6	508.1	775.6	895.1
132.5°	328.9	357.0	508.1	751.8	861.7
135°	346.2	375.1	506.1	718.0	811.6
137.5°	362.5	390.6	505.9	689.4	770.2
140°	374.7	403.6	505.1	665.7	743.4
142.5°	388.6	412.7	507.5	646.8	716.5
145°	408.3	429.2	510.2	621.4	677.2
147.5°	425.2	445.6	514.6	595.8	644.0
150°	439.9	453.8	516.3	587.3	621.2
152.5°	451.3	466.0	517.9	575.8	607.3
155°	466.4	477.3	522.4	561.6	584.5
157.5°	485.1	491.7	523.4	555.1	571.5
160°	494.9	499.9	527.5	550.2	564.1
162.5°	500.6	506.4	528.3	546.1	556.8
165°	515.3	517.2	528.5	539.9	547.8
167.5°	525.2	523.4	533.2	538.3	541.5
170°	528.5	527.5	531.5	532.7	536.6
172.5°	535.8	532.4	534.0	531.0	534.2
175°	539.7	536.7	534.6	531.5	527.5
177.5°	541.3	536.5	534.0	530.8	531.5
180°	535.6	535.6	535.6	535.6	535.6

(END OF REPORT)