

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: P521100

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

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521100
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_6500K
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 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5575.9 lumens
Efficiency: N/A
Efficacy: 101.0 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

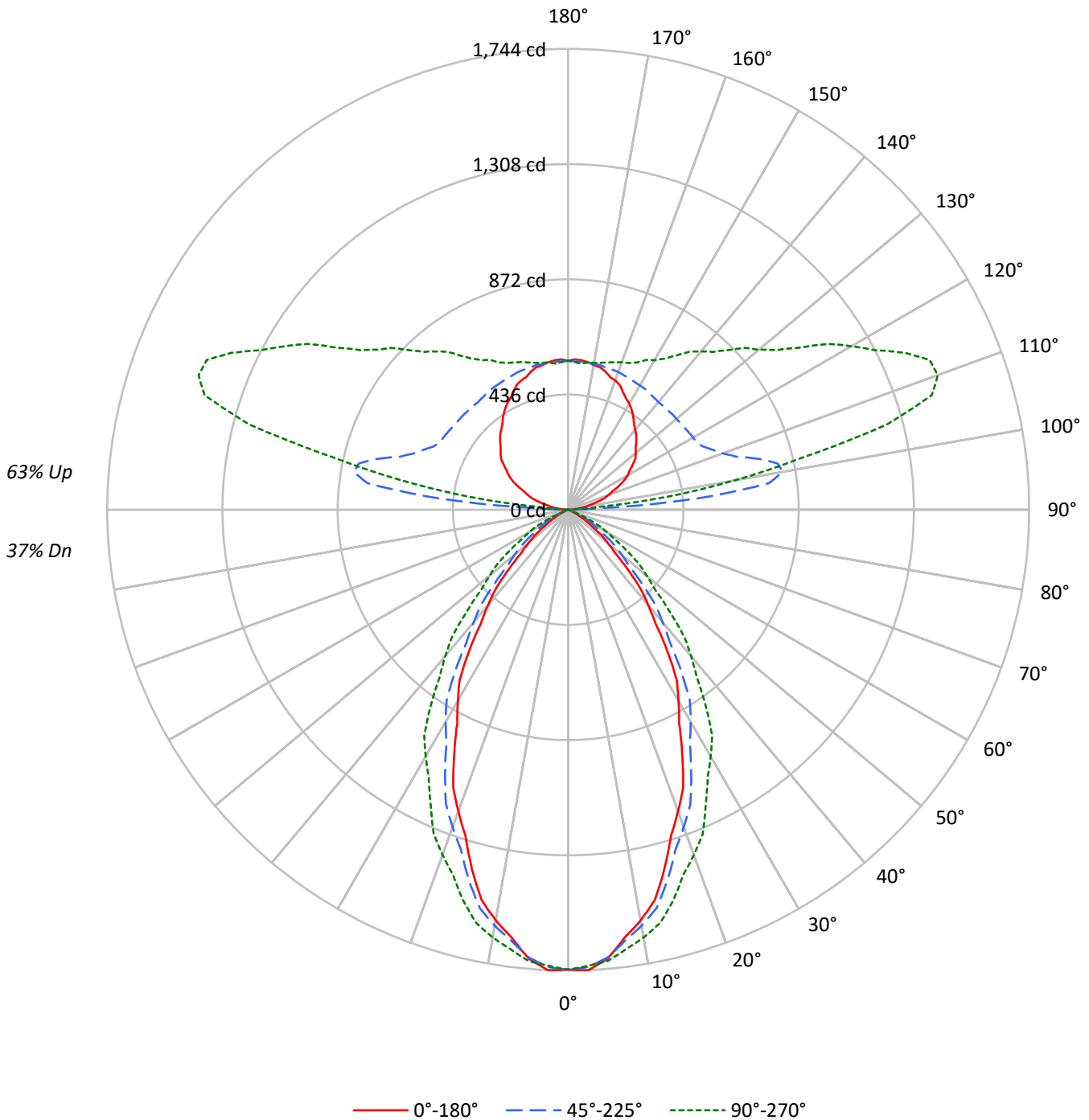
Input Watts (W): 55.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	16057	16057	16057
5°	15799	15759	15877
10°	14783	14979	15398
15°	13439	13865	14637
20°	11929	12549	13648
25°	10389	11211	12540
30°	8898	9876	11491
35°	7378	8383	10224
40°	5669	6704	8711
45°	4098	5076	7009
50°	2792	3782	5559
55°	1814	2736	4321
60°	1041	1926	3122
65°	275	1177	1581
70°	138	364	453
75°	61	29	0
80°	43	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7009 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.8	2.8
10°-20°	406.2	7.3
20°-30°	508.5	9.1
30°-40°	469.7	8.4
40°-50°	315.6	5.7
50°-60°	163.0	2.9
60°-70°	51.1	0.9
70°-80°	3.2	0.1
80°-90°	0.1	0.0
90°-100°	256.7	4.6
100°-110°	730.5	13.1
110°-120°	699.9	12.6
120°-130°	553.9	9.9
130°-140°	444.6	8.0
140°-150°	348.1	6.2
150°-160°	254.7	4.6
160°-170°	157.8	2.8
170°-180°	53.5	1.0
0°-30°	1073.5	19.3
0°-40°	1543.2	27.7
0°-60°	2021.8	36.3
0°-90°	2076.1	37.2
90°-120°	1687.1	30.3
90°-150°	3033.8	54.4
90°-180°	3500.0	62.8
0°-180°	5575.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1740	1740	1740	1740	1740	
5°	1706	1689	1702	1708	1714	158
15°	1407	1402	1452	1500	1532	392
25°	1020	1029	1101	1177	1232	468
35°	655	672	744	832	908	406
45°	314	333	389	465	537	247
55°	113	132	170	218	269	105
65°	13	24	54	65	72	21
75°	2	2	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°	1740.4	1740.4	1740.4	1740.4	1740.4
2.5°	1744.4	1728.0	1732.3	1732.2	1727.6
5°	1705.9	1688.6	1701.6	1707.7	1714.3
7.5°	1633.8	1620.3	1645.4	1664.2	1677.9
10°	1577.9	1566.4	1598.9	1624.6	1643.6
12.5°	1513.2	1504.3	1543.7	1578.9	1603.1
15°	1407.0	1402.0	1451.6	1500.3	1532.4
17.5°	1293.1	1293.0	1349.5	1410.0	1448.7
20°	1215.0	1217.5	1278.1	1344.8	1390.1
22.5°	1136.8	1142.6	1207.4	1277.0	1328.8
25°	1020.5	1028.7	1101.3	1176.7	1231.8
27.5°	908.7	920.7	997.1	1075.4	1142.6
30°	835.2	849.2	927.0	1009.4	1078.6
32.5°	763.2	779.8	855.6	942.8	1013.2
35°	655.1	671.5	744.3	831.9	907.7
37.5°	543.4	559.6	630.6	716.9	798.7
40°	470.7	488.8	556.6	640.1	723.3
42.5°	404.7	422.8	486.5	568.6	647.1
45°	314.1	333.0	389.0	464.7	537.2
47.5°	239.0	259.5	308.7	377.2	443.2
50°	194.5	215.1	263.5	323.9	387.3
52.5°	158.8	178.7	222.5	279.3	337.5
55°	112.8	131.8	170.1	218.4	268.6
57.5°	78.0	94.3	128.7	169.0	208.3
60°	56.4	72.1	104.4	137.1	169.2
62.5°	37.6	51.9	83.5	108.6	130.2
65°	12.6	24.2	53.9	65.0	72.4
67.5°	6.4	7.7	28.3	29.9	32.3
70°	5.1	5.1	13.5	14.4	16.8
72.5°	3.7	3.7	5.4	6.9	7.4
75°	1.7	1.7	0.8	0.0	0.0
77.5°	0.8	0.8	0.7	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°	8.6	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)