

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: P521109

Luminaire Tested: SQ4-BB-075U-100D-92765-1D-UNV-STD-W-4_4000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521109
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-100D-92765-1D-UNV-STD-W-4_4000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 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: 5921.7 lumens
Efficiency: N/A
Efficacy: 89.6 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: General Diffuse

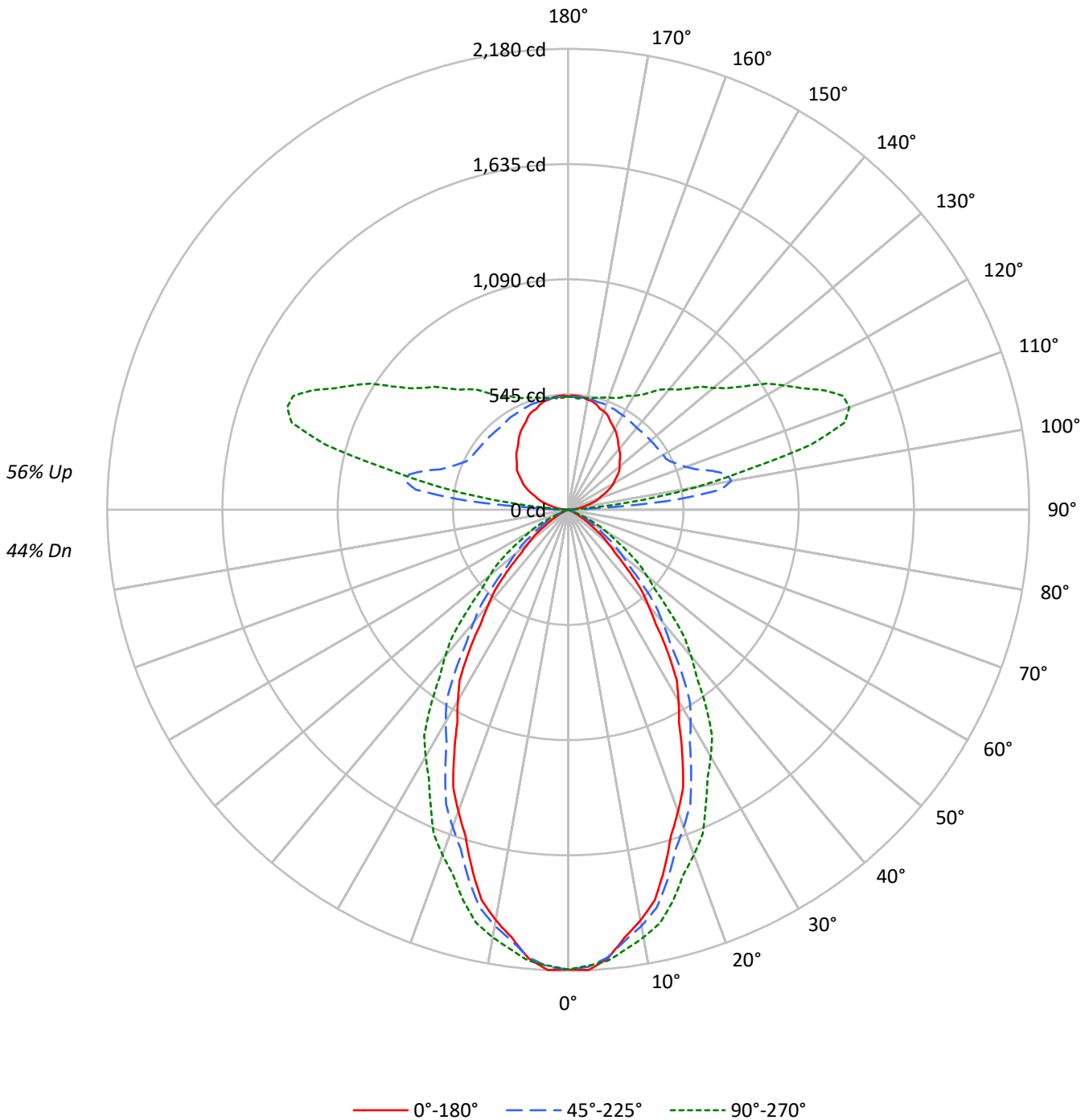
Input Watts (W): 66.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	106	106	106	106	97	97	97	97	80	80	80		65	65	65		50	50	50	44
1	98	94	91	88	90	87	84	81	72	70	69		59	58	57		47	46	46	40
2	91	84	79	75	83	78	73	69	65	62	59		54	52	50		43	42	41	36
3	84	75	69	64	77	70	64	60	59	55	52		49	46	44		40	38	37	33
4	77	68	61	56	71	63	57	52	54	49	46		45	42	39		37	35	33	30
5	72	61	54	49	66	57	51	46	49	44	41		41	38	35		34	32	30	27
6	67	56	49	43	61	52	46	41	45	40	36		38	34	32		32	29	27	24
7	62	51	44	39	57	48	41	37	41	36	33		35	31	29		29	27	25	22
8	58	47	40	35	53	44	37	33	38	33	30		32	29	26		27	25	23	21
9	54	43	36	32	50	40	34	30	35	30	27		30	27	24		26	23	21	19
10	51	40	33	29	47	37	31	27	33	28	25		28	25	22		24	21	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20067	20067	20067
5°	19744	19695	19842
10°	18474	18720	19243
15°	16795	17328	18292
20°	14908	15683	17057
25°	12983	14011	15671
30°	11120	12342	14360
35°	9220	10477	12776
40°	7084	8377	10887
45°	5121	6343	8759
50°	3489	4728	6947
55°	2268	3420	5400
60°	1301	2408	3903
65°	345	1469	1976
70°	170	453	566
75°	75	39	0
80°	58	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8759 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	198.5	3.4
10°-20°	507.6	8.6
20°-30°	635.5	10.7
30°-40°	587.0	9.9
40°-50°	394.4	6.7
50°-60°	203.7	3.4
60°-70°	63.8	1.1
70°-80°	4.0	0.1
80°-90°	0.1	0.0
90°-100°	244.1	4.1
100°-110°	694.5	11.7
110°-120°	665.4	11.2
120°-130°	526.6	8.9
130°-140°	422.7	7.1
140°-150°	330.9	5.6
150°-160°	242.1	4.1
160°-170°	150.0	2.5
170°-180°	50.9	0.9
0°-30°	1341.6	22.7
0°-40°	1928.5	32.6
0°-60°	2526.7	42.7
0°-90°	2594.6	43.8
90°-120°	1603.9	27.1
90°-150°	2884.1	48.7
90°-180°	3327.0	56.2
0°-180°	5921.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2175	2175	2175	2175	2175	
5°	2132	2110	2127	2134	2142	198
15°	1758	1752	1814	1875	1915	490
25°	1275	1286	1376	1470	1539	585
35°	819	839	930	1040	1134	507
45°	392	416	486	581	671	308
55°	141	165	213	273	336	132
65°	16	30	67	81	90	27
75°	2	2	1	0	0	3
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°	2175.0	2175.0	2175.0	2175.0	2175.0
2.5°	2180.0	2159.5	2164.9	2164.8	2159.0
5°	2131.9	2110.2	2126.6	2134.1	2142.4
7.5°	2041.8	2024.9	2056.3	2079.8	2096.9
10°	1971.9	1957.5	1998.2	2030.3	2054.0
12.5°	1891.1	1880.0	1929.2	1973.2	2003.5
15°	1758.3	1752.1	1814.1	1875.0	1915.1
17.5°	1616.0	1615.8	1686.5	1762.1	1810.5
20°	1518.4	1521.5	1597.3	1680.7	1737.3
22.5°	1420.7	1427.9	1508.9	1595.8	1660.7
25°	1275.3	1285.6	1376.3	1470.5	1539.4
27.5°	1135.6	1150.6	1246.1	1343.9	1427.9
30°	1043.8	1061.3	1158.5	1261.5	1347.9
32.5°	953.8	974.5	1069.3	1178.2	1266.3
35°	818.6	839.2	930.2	1039.7	1134.3
37.5°	679.1	699.3	788.1	895.9	998.2
40°	588.2	610.8	695.5	800.0	903.9
42.5°	505.7	528.3	608.0	710.6	808.8
45°	392.5	416.2	486.1	580.8	671.3
47.5°	298.6	324.3	385.8	471.4	553.9
50°	243.1	268.8	329.4	404.8	484.0
52.5°	198.5	223.4	278.0	349.1	421.7
55°	141.0	164.7	212.6	272.9	335.7
57.5°	97.4	117.8	160.8	211.1	260.3
60°	70.5	90.0	130.5	171.4	211.5
62.5°	46.9	64.8	104.4	135.7	162.7
65°	15.8	30.2	67.3	81.2	90.5
67.5°	8.0	9.6	35.4	37.3	40.4
70°	6.3	6.3	16.8	18.0	21.0
72.5°	4.6	4.6	6.7	8.6	9.3
75°	2.1	2.1	1.1	0.0	0.0
77.5°	1.1	1.1	0.8	0.0	0.0
80°	1.1	1.1	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)