

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: P521289

Luminaire Tested: SQ4-BB-150U-050D-92765-1D-UNV-STD-W-4_3000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521289
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-150U-050D-92765-1D-UNV-STD-W-4_3000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7727.3 lumens
Efficiency: N/A
Efficacy: 107.5 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

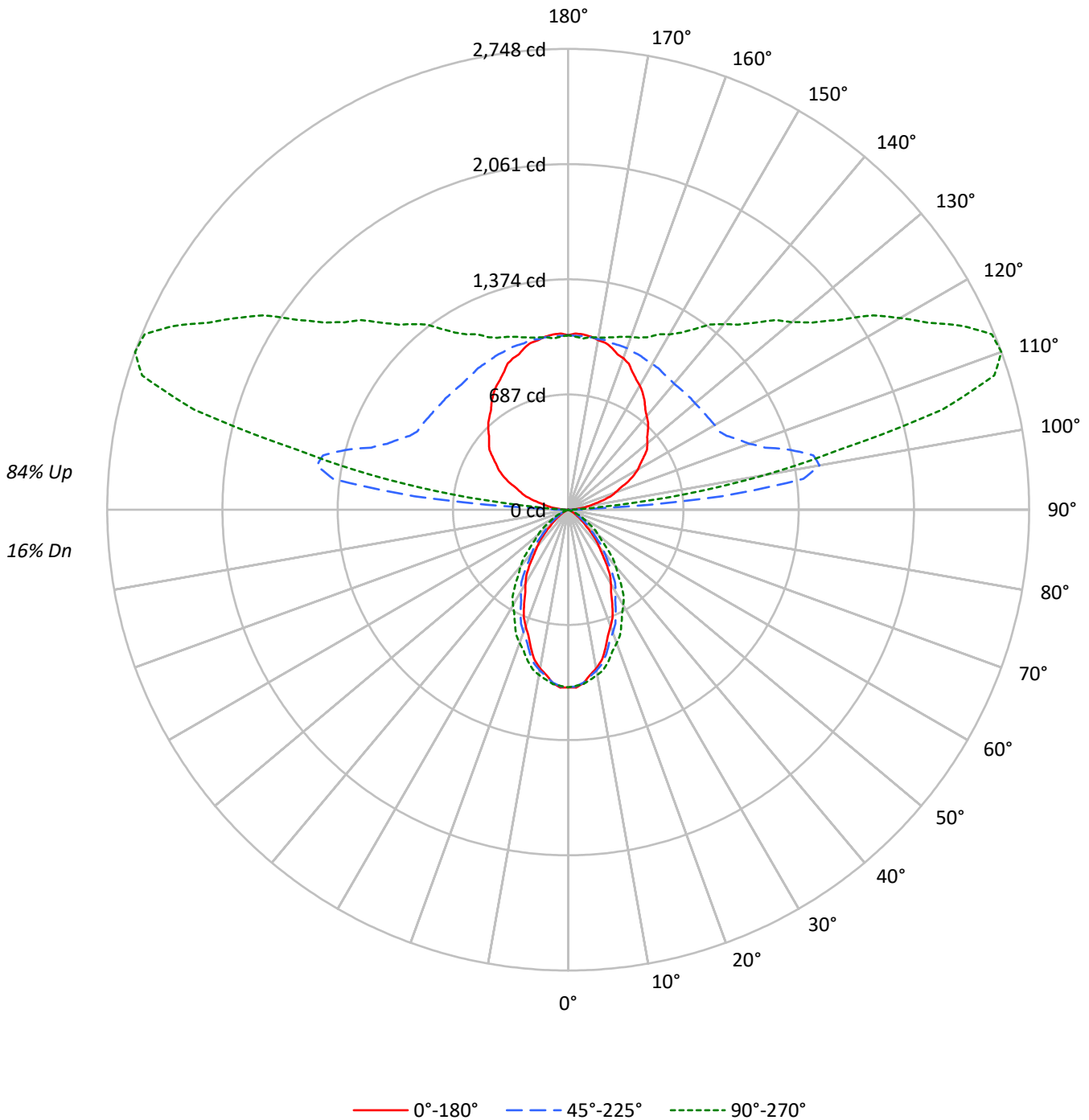
Input Watts (W): 71.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	50	30	10	0													
RCR																																					
0	99	99	99	99	87	87	87	87	65	65	65	44	44	44	25	25	25	16																			
1	91	87	83	80	80	77	74	71	57	56	54	40	39	38	23	23	22	15																			
2	83	77	71	67	73	68	63	59	51	48	46	35	34	32	21	20	20	13																			
3	76	68	61	56	67	60	55	50	45	42	39	32	30	28	19	18	17	12																			
4	70	60	53	48	61	53	48	43	41	37	34	29	26	24	18	16	16	11																			
5	64	54	46	41	56	48	42	37	36	32	29	26	23	21	16	15	14	10																			
6	59	48	41	36	52	43	37	32	33	29	26	24	21	19	15	14	13	9																			
7	55	44	36	31	48	39	33	28	30	26	23	22	19	17	14	12	11	8																			
8	51	40	32	28	45	35	29	25	27	23	20	20	17	15	13	11	10	8																			
9	47	36	29	25	42	32	26	22	25	21	18	18	16	14	12	10	9	7																			
10	44	33	26	22	39	30	24	20	23	19	16	17	14	12	11	10	9	7																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9775	9775	9775
5°	9618	9594	9665
10°	8999	9119	9373
15°	8181	8441	8911
20°	7262	7640	8309
25°	6324	6825	7634
30°	5417	6012	6995
35°	4492	5103	6224
40°	3451	4080	5303
45°	2495	3090	4267
50°	1699	2302	3385
55°	1105	1665	2630
60°	633	1174	1901
65°	168	716	963
70°	84	221	278
75°	36	18	0
80°	27	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4267 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.7	1.3
10°-20°	247.3	3.2
20°-30°	309.6	4.0
30°-40°	285.9	3.7
40°-50°	192.1	2.5
50°-60°	99.2	1.3
60°-70°	31.1	0.4
70°-80°	2.0	0.0
80°-90°	0.0	0.0
90°-100°	474.1	6.1
100°-110°	1349.1	17.5
110°-120°	1292.6	16.7
120°-130°	1023.0	13.2
130°-140°	821.1	10.6
140°-150°	642.8	8.3
150°-160°	470.4	6.1
160°-170°	291.4	3.8
170°-180°	98.9	1.3
0°-30°	653.5	8.5
0°-40°	939.4	12.2
0°-60°	1230.8	15.9
0°-90°	1263.9	16.4
90°-120°	3115.8	40.3
90°-150°	5602.8	72.5
90°-180°	6463.0	83.6
0°-180°	7727.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1060	1060	1060	1060	1060	
5°	1038	1028	1036	1040	1044	96
15°	856	854	884	913	933	239
25°	621	626	670	716	750	285
35°	399	409	453	506	553	247
45°	191	203	237	283	327	150
55°	69	80	104	133	164	64
65°	8	15	33	40	44	13
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	51	204	918	318	196	59
105°	210	318	1375	2428	2308	222
115°	390	471	1042	2208	2593	384
125°	550	610	995	1651	1974	492
135°	673	729	983	1395	1577	519
145°	793	834	991	1207	1316	496
155°	906	927	1015	1091	1136	419
165°	1001	1005	1027	1049	1064	281
175°	1048	1043	1038	1032	1025	99
180°	1040	1040	1040	1040	1040	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1059.5	1059.5	1059.5	1059.5	1059.5
2.5°	1062.0	1051.9	1054.6	1054.5	1051.7
5°	1038.5	1028.0	1035.9	1039.6	1043.6
7.5°	994.6	986.4	1001.7	1013.1	1021.5
10°	960.6	953.5	973.4	989.0	1000.5
12.5°	921.2	915.8	939.8	961.2	975.9
15°	856.5	853.5	883.7	913.3	932.9
17.5°	787.2	787.1	821.6	858.4	881.9
20°	739.6	741.1	778.1	818.7	846.3
22.5°	692.1	695.6	735.0	777.4	808.9
25°	621.2	626.3	670.4	716.3	749.9
27.5°	553.2	560.5	607.0	654.7	695.6
30°	508.5	517.0	564.3	614.5	656.6
32.5°	464.6	474.7	520.9	573.9	616.8
35°	398.8	408.8	453.1	506.4	552.6
37.5°	330.8	340.6	383.9	436.4	486.2
40°	286.5	297.6	338.8	389.7	440.3
42.5°	246.3	257.4	296.2	346.2	394.0
45°	191.2	202.7	236.8	282.9	327.0
47.5°	145.5	158.0	187.9	229.6	269.8
50°	118.4	130.9	160.4	197.2	235.8
52.5°	96.7	108.8	135.4	170.1	205.4
55°	68.7	80.2	103.5	132.9	163.5
57.5°	47.5	57.4	78.3	102.9	126.8
60°	34.3	43.9	63.6	83.5	103.0
62.5°	22.9	31.6	50.8	66.1	79.2
65°	7.7	14.7	32.8	39.6	44.1
67.5°	3.9	4.7	17.2	18.2	19.7
70°	3.1	3.1	8.2	8.7	10.3
72.5°	2.3	2.3	3.3	4.2	4.5
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	0.0	0.0
80°	0.5	0.5	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°	15.8	83.9	194.7	56.7	42.7
95°	51.4	204.2	917.9	317.7	195.8
97.5°	94.6	239.2	1413.6	1011.5	693.2
100°	124.6	260.0	1521.2	1540.9	1186.9
102.5°	157.9	282.4	1497.5	1972.3	1663.2
105°	209.7	318.0	1374.8	2428.4	2308.5
107.5°	262.3	359.4	1231.6	2557.0	2663.8
110°	298.7	389.6	1149.3	2507.8	2747.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	333.5	419.8	1093.9	2391.5	2733.4
115°	389.7	470.9	1042.5	2208.5	2593.4
117.5°	439.2	515.4	1012.0	2008.4	2416.1
120°	478.7	542.5	1008.9	1894.1	2284.8
122.5°	510.4	574.2	1001.0	1793.7	2156.6
125°	549.9	609.9	995.0	1651.2	1974.2
127.5°	593.1	649.1	991.9	1566.0	1832.2
130°	615.2	671.3	987.1	1506.7	1738.8
132.5°	638.9	693.5	987.1	1460.4	1673.9
135°	672.6	728.7	983.2	1394.8	1576.6
137.5°	704.2	758.8	982.8	1339.2	1496.3
140°	728.0	784.1	981.2	1293.2	1444.1
142.5°	754.9	801.7	985.9	1256.4	1391.8
145°	793.2	833.9	991.1	1207.2	1315.5
147.5°	826.1	865.5	999.8	1157.4	1251.0
150°	854.6	881.6	1002.9	1140.9	1206.7
152.5°	876.7	905.4	1006.1	1118.7	1179.8
155°	906.0	927.3	1014.8	1091.0	1135.5
157.5°	942.4	955.2	1016.8	1078.4	1110.1
160°	961.4	971.1	1024.7	1068.8	1095.9
162.5°	972.5	983.7	1026.3	1060.8	1081.7
165°	1001.0	1004.8	1026.7	1048.8	1064.3
167.5°	1020.3	1016.9	1035.8	1045.8	1052.0
170°	1026.7	1024.7	1032.6	1034.8	1042.5
172.5°	1040.9	1034.3	1037.4	1031.6	1037.7
175°	1048.4	1042.6	1038.5	1032.4	1024.7
177.5°	1051.6	1042.3	1037.4	1031.1	1032.6
180°	1040.5	1040.5	1040.5	1040.5	1040.5

(END OF REPORT)