

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

(formerly Eaton)

Brand: CORELITE

Report Number: P519219

Luminaire Tested: **SQ4-WB-075U-100D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519219
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-075U-100D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19045.7 lumens
Efficiency: N/A
Efficacy: 117.4 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

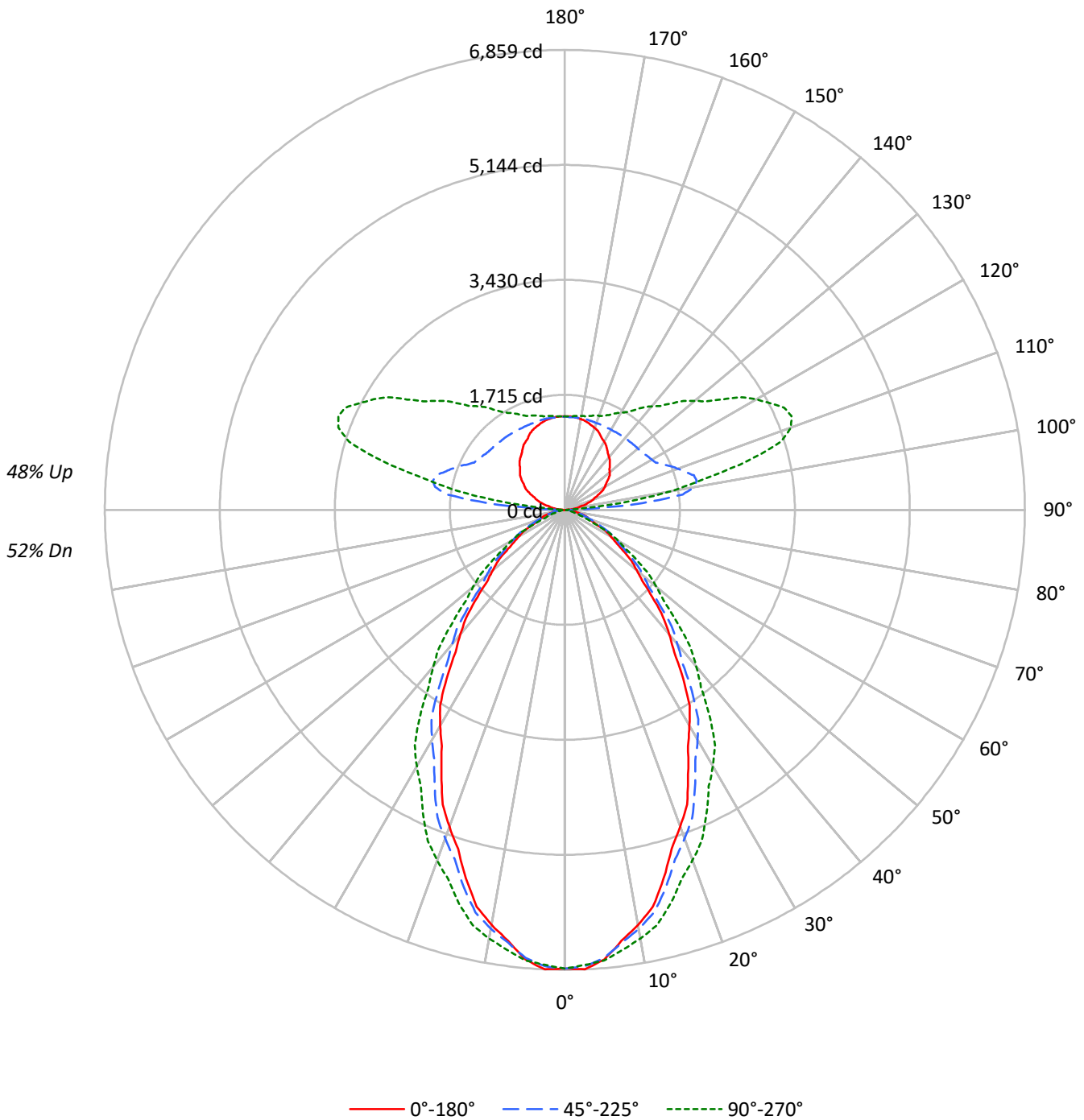
Input Watts (W): 162.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	58	58	58	52				
1	99	96	92	89	92	89	86	83	76	74	72	64	63	61	53	52	52	46				
2	92	85	79	75	85	79	74	70	68	65	62	58	55	53	48	47	45	41				
3	84	76	69	64	78	71	65	60	61	57	53	52	49	47	44	42	40	36				
4	78	68	61	55	72	64	57	52	55	50	47	48	44	41	40	38	36	32				
5	72	61	54	48	67	57	51	46	50	45	41	43	40	37	37	34	32	29				
6	67	56	48	43	62	52	45	41	46	41	37	40	36	33	34	31	29	26				
7	62	51	43	38	58	48	41	36	42	37	33	37	33	30	32	29	26	24				
8	58	46	39	34	54	44	37	33	39	33	30	34	30	27	29	26	24	22				
9	54	43	36	31	51	40	34	30	36	31	27	31	27	24	27	24	22	20				
10	51	39	33	28	47	37	31	27	33	28	25	29	25	22	26	23	20	18				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21043	21043	21043
5°	20780	20706	20827
10°	19633	19811	20270
15°	18124	18545	19376
20°	16458	17078	18207
25°	14762	15567	16963
30°	13199	14063	15673
35°	11542	12377	14146
40°	9715	10486	12246
45°	8017	8710	10224
50°	6694	7297	8518
55°	5682	6262	7035
60°	4857	5429	5614
65°	3867	4566	3627
70°	3429	3563	2214
75°	3175	2890	1356
80°	2924	2658	1171
85°	2650	2438	953



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	627.6	3.3
10°-20°	1632.4	8.6
20°-30°	2114.5	11.1
30°-40°	2070.6	10.9
40°-50°	1584.9	8.3
50°-60°	1056.1	5.5
60°-70°	576.3	3.0
70°-80°	240.1	1.3
80°-90°	71.5	0.4
90°-100°	656.8	3.4
100°-110°	1807.0	9.5
110°-120°	1865.1	9.8
120°-130°	1494.3	7.8
130°-140°	1173.7	6.2
140°-150°	899.4	4.7
150°-160°	646.7	3.4
160°-170°	395.4	2.1
170°-180°	133.3	0.7
0°-30°	4374.5	23.0
0°-40°	6445.1	33.8
0°-60°	9086.1	47.7
0°-90°	9974.1	52.4
90°-120°	4328.8	22.7
90°-150°	7896.3	41.5
90°-180°	9072.0	47.6
0°-180°	19045.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6842	6842	6842	6842	6842	
5°	6731	6664	6707	6723	6746	626
15°	5692	5672	5824	5983	6086	1590
25°	4350	4362	4588	4788	4999	2001
35°	3074	3089	3297	3518	3768	1911
45°	1843	1879	2003	2154	2351	1438
55°	1060	1104	1168	1212	1312	961
65°	531	575	628	548	498	552
75°	267	267	243	167	114	285
85°	75	75	69	45	27	82
90°	3	12	21	27	27	10
95°	98	358	1161	497	317	103
105°	323	497	1991	3032	2830	340
115°	572	696	1597	3180	3609	564
125°	788	898	1449	2451	2871	703
135°	951	1055	1407	1982	2243	734
145°	1099	1174	1387	1689	1819	689
155°	1244	1285	1378	1518	1561	572
165°	1345	1362	1384	1440	1449	379
175°	1392	1395	1387	1404	1401	132
180°	1392	1392	1392	1392	1392	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6842.3	6842.3	6842.3	6842.3	6842.3
2.5°	6859.1	6798.1	6813.5	6813.1	6794.3
5°	6731.2	6663.7	6707.2	6722.8	6746.2
7.5°	6481.4	6430.4	6509.7	6568.4	6615.9
10°	6286.9	6242.8	6343.9	6429.4	6491.0
12.5°	6061.1	6024.1	6149.4	6264.1	6344.5
15°	5692.4	5671.9	5824.5	5983.0	6085.7
17.5°	5297.9	5287.9	5463.0	5648.0	5779.5
20°	5028.9	5026.0	5218.1	5410.7	5563.3
22.5°	4757.5	4764.0	4965.9	5166.2	5339.9
25°	4350.4	4362.1	4587.6	4787.5	4998.9
27.5°	3973.9	3979.2	4212.3	4423.4	4648.8
30°	3716.9	3731.6	3960.1	4178.6	4413.4
32.5°	3459.9	3476.9	3700.7	3926.5	4166.0
35°	3074.4	3089.1	3296.6	3518.4	3767.9
37.5°	2676.9	2696.8	2881.0	3090.8	3336.2
40°	2419.9	2449.2	2612.0	2809.6	3050.4
42.5°	2172.5	2208.9	2359.8	2547.3	2764.5
45°	1843.4	1878.7	2002.6	2154.1	2350.8
47.5°	1560.0	1600.5	1695.7	1826.2	1994.1
50°	1399.1	1437.2	1525.2	1621.9	1780.4
52.5°	1257.4	1295.5	1373.9	1448.4	1583.4
55°	1059.8	1103.9	1167.9	1212.2	1312.0
57.5°	897.7	940.0	990.8	1010.8	1071.2
60°	789.6	836.6	882.7	880.4	912.7
62.5°	691.1	731.1	777.0	745.2	747.0
65°	531.4	575.4	627.5	548.3	498.4
67.5°	429.3	438.7	492.4	382.4	323.1
70°	381.3	381.3	396.3	296.1	246.2
72.5°	335.7	335.7	321.8	240.8	188.5
75°	267.2	267.2	243.2	166.9	114.1
77.5°	206.0	203.6	186.1	124.6	82.9
80°	165.1	165.1	150.1	98.3	66.1
82.5°	129.1	129.1	116.5	76.8	49.2
85°	75.1	75.1	69.1	44.6	27.0
87.5°	27.0	28.8	28.2	19.7	17.3
90°	3.0	11.7	20.7	26.7	26.7
92.5°	40.9	174.7	302.8	116.3	95.4
95°	97.8	358.5	1161.4	496.6	317.0
97.5°	159.4	397.5	1772.4	1365.6	963.5
100°	204.4	421.7	1964.3	1982.7	1617.7
102.5°	247.1	450.5	2014.1	2459.8	2124.9
105°	322.9	496.8	1991.0	3032.3	2829.5
107.5°	395.2	554.0	1877.8	3312.6	3372.9
110°	447.4	592.2	1792.5	3382.3	3590.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	494.8	635.0	1707.2	3337.4	3654.9
115°	571.8	696.4	1597.0	3180.0	3608.7
117.5°	645.3	760.0	1527.0	2959.0	3444.0
120°	690.3	800.4	1496.2	2793.5	3294.6
122.5°	730.6	840.7	1474.9	2648.3	3124.0
125°	788.1	898.2	1448.8	2450.9	2871.0
127.5°	842.6	947.5	1431.6	2286.2	2654.7
130°	871.1	978.3	1422.2	2188.3	2524.3
132.5°	904.3	1011.4	1415.0	2102.2	2405.8
135°	951.1	1055.4	1407.3	1982.1	2242.8
137.5°	994.9	1091.7	1400.8	1885.1	2100.0
140°	1028.1	1117.9	1398.4	1820.6	2014.7
142.5°	1056.5	1139.4	1393.7	1763.1	1929.4
145°	1099.2	1174.5	1386.6	1688.8	1819.2
147.5°	1144.8	1209.7	1383.0	1623.0	1727.3
150°	1173.3	1231.2	1380.7	1586.9	1668.1
152.5°	1199.3	1252.7	1378.3	1555.8	1623.0
155°	1244.4	1284.9	1377.7	1517.9	1561.4
157.5°	1277.0	1310.0	1377.7	1486.8	1517.0
160°	1300.7	1326.7	1377.7	1470.1	1493.3
162.5°	1319.6	1341.1	1380.1	1455.8	1474.3
165°	1345.1	1362.5	1383.6	1440.1	1448.8
167.5°	1362.9	1376.2	1386.6	1426.9	1429.3
170°	1374.7	1383.4	1386.6	1422.2	1422.2
172.5°	1384.2	1388.3	1386.6	1415.0	1412.7
175°	1392.5	1395.4	1386.6	1404.3	1401.4
177.5°	1394.9	1394.9	1385.4	1399.5	1394.9
180°	1392.5	1392.5	1392.5	1392.5	1392.5

(END OF REPORT)