

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521780

Luminaire Tested: **SQ4-WB-050U-075D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521780
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-050U-075D-93050-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

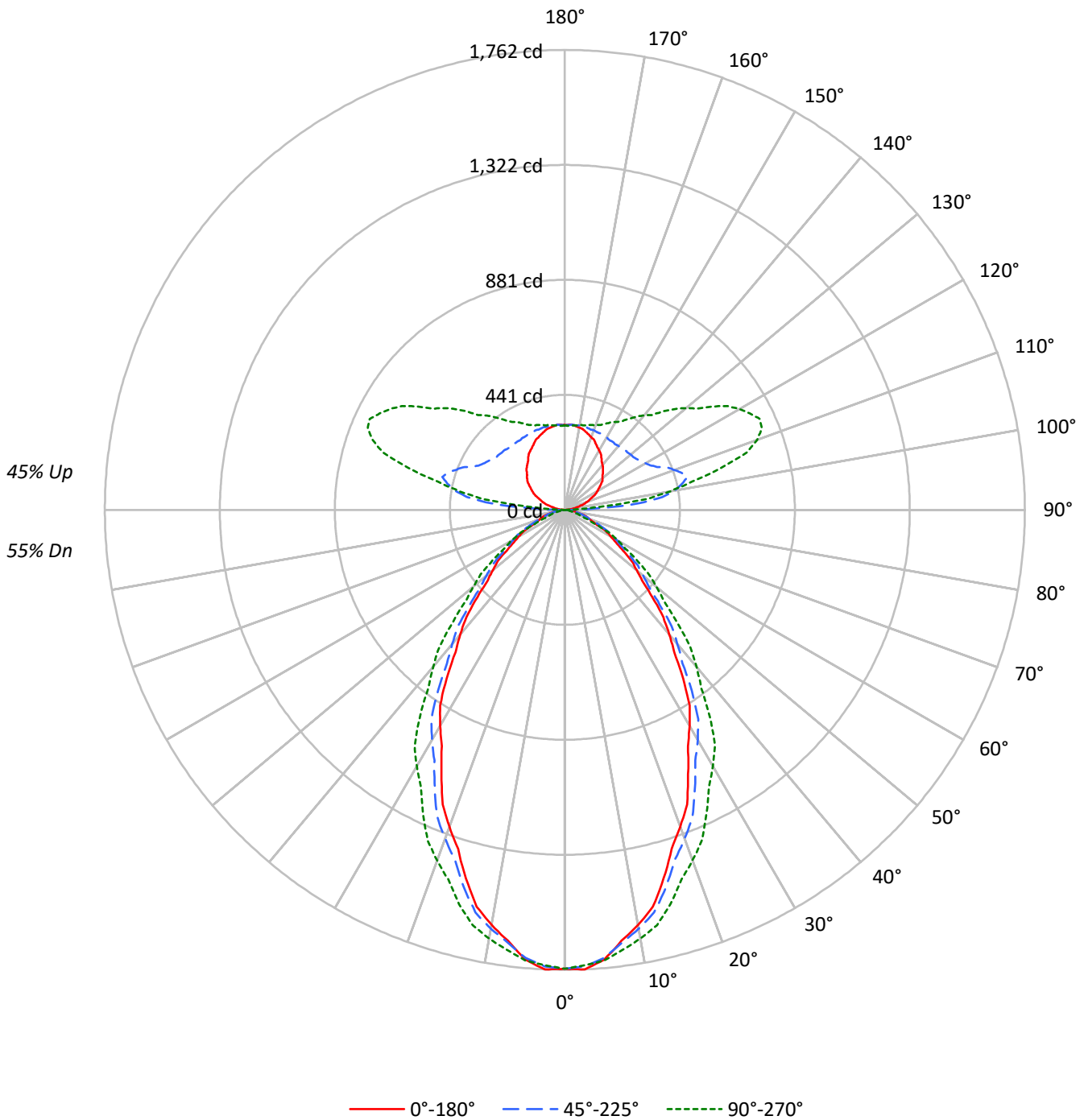
Lumens per Lamp: N/A
Luminaire Lumens: 4659.8 lumens
Efficiency: N/A
Efficacy: 97.9 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 47.6
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				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	55		
1	100	96	93	90	93	90	87	84	77	75	73	66	65	63	56	55	54	49		
2	92	86	80	75	86	80	75	71	69	66	63	60	57	55	51	49	47	43		
3	85	76	70	64	79	72	66	61	62	58	54	54	51	48	46	44	42	38		
4	79	69	61	56	73	64	58	53	56	52	48	49	45	42	42	39	37	34		
5	73	62	54	49	68	58	52	47	51	46	42	45	41	38	39	36	33	30		
6	67	56	49	43	63	53	46	41	47	41	38	41	37	34	36	33	30	27		
7	63	51	44	39	58	48	42	37	43	38	34	38	34	31	33	30	27	25		
8	59	47	40	35	55	44	38	33	40	34	30	35	31	28	31	27	25	23		
9	55	43	36	31	51	41	35	30	37	31	28	32	28	25	29	25	23	21		
10	51	40	33	29	48	38	32	27	34	29	25	30	26	23	27	24	21	19		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16220	16220	16220
5°	16018	15960	16054
10°	15133	15271	15625
15°	13970	14294	14935
20°	12686	13163	14034
25°	11379	11999	13075
30°	10174	10840	12081
35°	8897	9540	10904
40°	7489	8083	9440
45°	6179	6713	7881
50°	5160	5625	6565
55°	4380	4827	5422
60°	3744	4185	4327
65°	2980	3519	2797
70°	2644	2746	1708
75°	2449	2228	1044
80°	2253	2051	903
85°	2043	1874	730



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.3	3.5
10°-20°	419.4	9.0
20°-30°	543.3	11.7
30°-40°	532.0	11.4
40°-50°	407.2	8.7
50°-60°	271.4	5.8
60°-70°	148.1	3.2
70°-80°	61.7	1.3
80°-90°	17.5	0.4
90°-100°	167.0	3.6
100°-110°	403.7	8.7
110°-120°	430.6	9.2
120°-130°	348.7	7.5
130°-140°	270.0	5.8
140°-150°	206.0	4.4
150°-160°	149.1	3.2
160°-170°	91.8	2.0
170°-180°	31.1	0.7
0°-30°	1124.0	24.1
0°-40°	1656.0	35.5
0°-60°	2334.5	50.1
0°-90°	2561.8	55.0
90°-120°	1001.3	21.5
90°-150°	1826.0	39.2
90°-180°	2098.0	45.0
0°-180°	4659.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1758	1758	1758	1758	1758	
5°	1730	1712	1723	1727	1733	161
15°	1463	1457	1496	1537	1564	408
25°	1118	1121	1179	1230	1284	514
35°	790	794	847	904	968	491
45°	474	483	514	554	604	369
55°	272	284	300	312	337	247
65°	136	148	161	141	128	142
75°	69	69	62	43	29	73
85°	19	19	18	12	7	21
90°	0	0	0	0	0	2
95°	16	84	286	186	130	18
105°	64	112	485	628	620	68
115°	118	151	390	739	824	117
125°	168	194	338	588	690	150
135°	207	231	325	464	533	159
145°	244	262	318	394	425	153
155°	280	292	323	349	362	129
165°	310	314	327	332	336	87
175°	327	326	327	325	324	31
180°	324	324	324	324	324	

TEST NUMBER: P521780

CATALOG NUMBER: SQ4-WB-050U-075D-93050-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1758.0	1758.0	1758.0	1758.0	1758.0
2.5°	1762.4	1746.7	1750.6	1750.5	1745.7
5°	1729.5	1712.1	1723.3	1727.3	1733.4
7.5°	1665.3	1652.2	1672.6	1687.7	1699.9
10°	1615.3	1604.0	1630.0	1651.9	1667.8
12.5°	1557.3	1547.8	1580.0	1609.5	1630.1
15°	1462.6	1457.3	1496.5	1537.2	1563.6
17.5°	1361.2	1358.7	1403.7	1451.2	1485.0
20°	1292.1	1291.4	1340.7	1390.2	1429.4
22.5°	1222.4	1224.0	1275.9	1327.4	1372.0
25°	1117.8	1120.8	1178.7	1230.1	1284.4
27.5°	1021.0	1022.4	1082.3	1136.5	1194.4
30°	955.0	958.8	1017.5	1073.6	1134.0
32.5°	889.0	893.3	950.8	1008.9	1070.4
35°	789.9	793.7	847.0	904.0	968.1
37.5°	687.8	692.9	740.2	794.1	857.2
40°	621.8	629.3	671.1	721.9	783.8
42.5°	558.2	567.5	606.3	654.5	710.3
45°	473.6	482.7	514.5	553.5	604.0
47.5°	400.8	411.2	435.7	469.2	512.4
50°	359.5	369.3	391.9	416.7	457.4
52.5°	323.1	332.9	353.0	372.1	406.8
55°	272.3	283.6	300.1	311.5	337.1
57.5°	230.7	241.5	254.6	259.7	275.2
60°	202.9	214.9	226.8	226.2	234.5
62.5°	177.6	187.8	199.6	191.5	191.9
65°	136.5	147.9	161.2	140.9	128.1
67.5°	110.3	112.7	126.5	98.2	83.0
70°	98.0	98.0	101.8	76.1	63.3
72.5°	86.2	86.2	82.7	61.9	48.4
75°	68.7	68.7	62.5	42.9	29.3
77.5°	52.9	52.3	47.8	32.0	21.3
80°	42.4	42.4	38.6	25.3	17.0
82.5°	33.2	33.2	29.9	19.7	12.7
85°	19.3	19.3	17.7	11.5	6.9
87.5°	6.8	6.8	6.2	3.7	3.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.5	45.2	106.5	51.8	35.1
95°	16.5	83.6	286.2	186.1	130.4
97.5°	29.2	92.6	376.9	363.1	311.7
100°	39.1	98.2	426.9	450.6	408.3
102.5°	48.5	103.2	459.8	523.5	498.4
105°	64.5	111.5	485.2	627.8	619.7
107.5°	80.3	121.2	470.2	711.4	730.4
110°	91.3	129.5	446.1	747.5	783.1

TEST NUMBER: P521780

CATALOG NUMBER: SQ4-WB-050U-075D-93050-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	102.3	137.8	424.7	756.3	817.1
115°	118.0	150.9	389.8	739.0	824.2
117.5°	133.7	164.7	369.4	699.3	799.1
120°	144.1	173.0	356.2	668.1	772.8
122.5°	155.1	181.8	348.0	636.2	739.3
125°	168.1	193.6	338.3	587.7	690.4
127.5°	181.0	205.1	331.6	546.7	636.9
130°	188.7	212.2	329.4	518.1	606.7
132.5°	195.9	220.4	326.1	497.5	572.6
135°	206.6	230.7	324.6	463.5	533.2
137.5°	216.7	241.0	319.8	440.4	493.0
140°	224.4	246.6	319.8	423.9	472.2
142.5°	232.1	254.2	317.1	409.4	450.2
145°	244.3	262.4	318.4	393.9	424.8
147.5°	255.7	273.3	317.6	376.1	401.6
150°	262.9	278.3	319.8	368.3	388.4
152.5°	270.5	285.4	319.3	360.0	378.0
155°	280.0	292.1	322.6	348.9	361.7
157.5°	291.4	301.7	321.9	344.7	352.2
160°	295.8	304.5	324.6	339.2	344.5
162.5°	302.9	310.6	323.5	337.5	340.7
165°	309.5	314.2	326.7	331.6	336.3
167.5°	317.6	320.7	325.9	331.2	331.3
170°	319.8	321.8	328.0	327.4	330.8
172.5°	323.7	325.1	326.4	327.9	325.9
175°	327.4	326.0	327.4	324.6	323.9
177.5°	326.7	326.7	325.6	324.4	321.7
180°	323.9	323.9	323.9	323.9	323.9

(END OF REPORT)