

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: P521793

Luminaire Tested: **SQ4-WB-050U-100D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521793
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-100D-93050-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

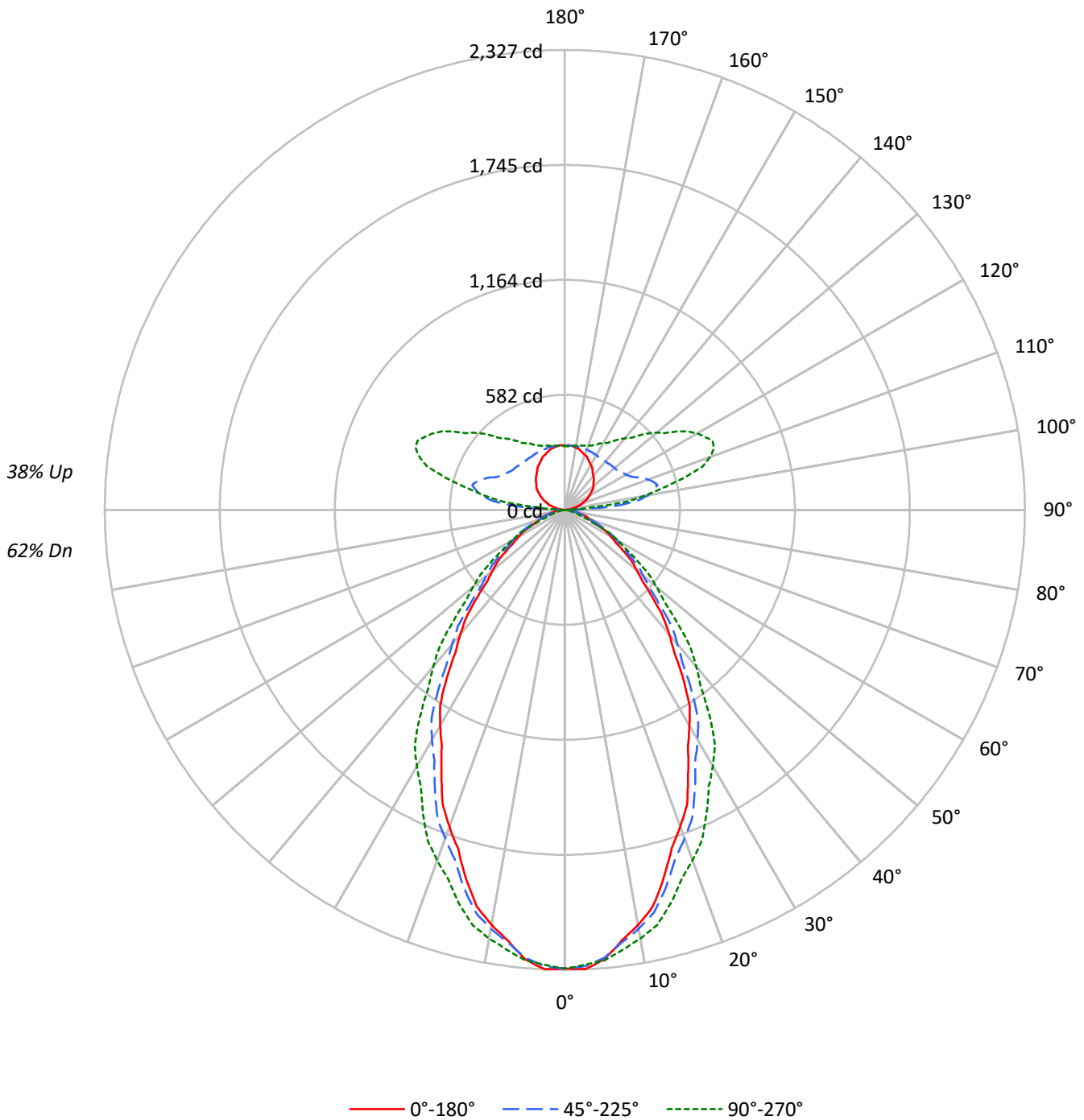
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5480.2 lumens
Efficiency: N/A
Efficacy: 93.8 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: Semi-Direct

Input Watts (W): 58.4
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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	62		
1	102	98	95	91	95	92	89	86	81	79	77	71	69	68	61	60	59	55		
2	94	87	82	77	88	82	77	73	73	69	66	64	61	59	56	54	52	48		
3	87	78	71	66	81	74	68	63	65	61	57	58	54	52	51	48	46	43		
4	80	70	63	57	75	66	60	55	59	54	50	53	49	46	46	44	41	38		
5	74	63	56	50	70	60	53	48	54	49	45	48	44	41	43	39	37	34		
6	69	58	50	45	65	55	48	43	49	44	40	44	40	37	39	36	33	31		
7	64	53	45	40	60	50	43	39	45	40	36	41	36	33	36	33	30	28		
8	60	48	41	36	56	46	39	35	42	36	32	38	33	30	34	30	28	26		
9	56	45	38	33	53	43	36	32	39	33	30	35	31	28	32	28	25	24		
10	53	41	34	30	50	39	33	29	36	31	27	33	28	25	30	26	24	22		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21415	21415	21415
5°	21148	21072	21195
10°	19980	20161	20629
15°	18444	18872	19718
20°	16749	17379	18529
25°	15023	15842	17262
30°	13433	14311	15949
35°	11746	12596	14397
40°	9887	10672	12463
45°	8159	8863	10406
50°	6812	7426	8668
55°	5783	6373	7160
60°	4943	5525	5713
65°	3936	4648	3692
70°	3488	3626	2252
75°	3230	2941	1380
80°	2975	2704	1190
85°	2699	2477	974



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	212.9	3.9
10°-20°	553.8	10.1
20°-30°	717.3	13.1
30°-40°	702.4	12.8
40°-50°	537.6	9.8
50°-60°	358.3	6.5
60°-70°	195.5	3.6
70°-80°	81.5	1.5
80°-90°	23.1	0.4
90°-100°	167.0	3.0
100°-110°	403.7	7.4
110°-120°	430.6	7.9
120°-130°	348.7	6.4
130°-140°	270.0	4.9
140°-150°	206.0	3.8
150°-160°	149.1	2.7
160°-170°	91.8	1.7
170°-180°	31.1	0.6
0°-30°	1483.9	27.1
0°-40°	2186.3	39.9
0°-60°	3082.2	56.2
0°-90°	3382.2	61.7
90°-120°	1001.3	18.3
90°-150°	1826.0	33.3
90°-180°	2098.0	38.3
0°-180°	5480.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2321	2321	2321	2321	2321	
5°	2283	2260	2275	2280	2288	212
15°	1931	1924	1976	2030	2064	539
25°	1476	1480	1556	1624	1696	679
35°	1043	1048	1118	1194	1278	648
45°	625	637	679	731	798	488
55°	360	374	396	411	445	326
65°	180	195	213	186	169	187
75°	91	91	82	57	39	97
85°	26	26	23	15	9	28
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: P521793

CATALOG NUMBER: SQ4-WB-050U-100D-93050-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2321.1	2321.1	2321.1	2321.1	2321.1
2.5°	2326.8	2306.1	2311.3	2311.1	2304.8
5°	2283.4	2260.5	2275.2	2280.5	2288.5
7.5°	2198.7	2181.3	2208.2	2228.1	2244.3
10°	2132.7	2117.7	2152.0	2181.0	2201.9
12.5°	2056.1	2043.5	2086.0	2124.9	2152.2
15°	1931.0	1924.0	1975.8	2029.6	2064.4
17.5°	1797.2	1793.8	1853.2	1915.9	1960.5
20°	1705.9	1704.9	1770.1	1835.4	1887.2
22.5°	1613.9	1616.0	1684.5	1752.5	1811.4
25°	1475.7	1479.7	1556.2	1624.0	1695.7
27.5°	1348.0	1349.8	1428.9	1500.5	1577.0
30°	1260.9	1265.8	1343.3	1417.5	1497.1
32.5°	1173.7	1179.4	1255.4	1332.0	1413.2
35°	1042.9	1047.9	1118.3	1193.5	1278.2
37.5°	908.1	914.8	977.3	1048.5	1131.7
40°	820.9	830.8	886.1	953.1	1034.8
42.5°	737.0	749.3	800.5	864.1	937.8
45°	625.3	637.3	679.3	730.7	797.5
47.5°	529.2	542.9	575.2	619.5	676.5
50°	474.6	487.5	517.4	550.2	603.9
52.5°	426.5	439.5	466.0	491.3	537.1
55°	359.5	374.5	396.2	411.2	445.1
57.5°	304.5	318.9	336.1	342.9	363.4
60°	267.9	283.8	299.4	298.7	309.6
62.5°	234.4	248.0	263.6	252.8	253.4
65°	180.3	195.2	212.9	186.0	169.1
67.5°	145.6	148.8	167.0	129.7	109.6
70°	129.3	129.3	134.4	100.4	83.5
72.5°	113.9	113.9	109.2	81.7	64.0
75°	90.6	90.6	82.5	56.6	38.7
77.5°	69.9	69.1	63.1	42.3	28.1
80°	56.0	56.0	50.9	33.4	22.4
82.5°	43.8	43.8	39.5	26.1	16.7
85°	25.5	25.5	23.4	15.1	9.2
87.5°	9.0	9.0	8.1	4.9	4.1
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

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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)