

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: P521560

Luminaire Tested: **SQ4-F-100U-050D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521560
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-F-100U-050D-93050-1D-UNV-STD-W-4 (5000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

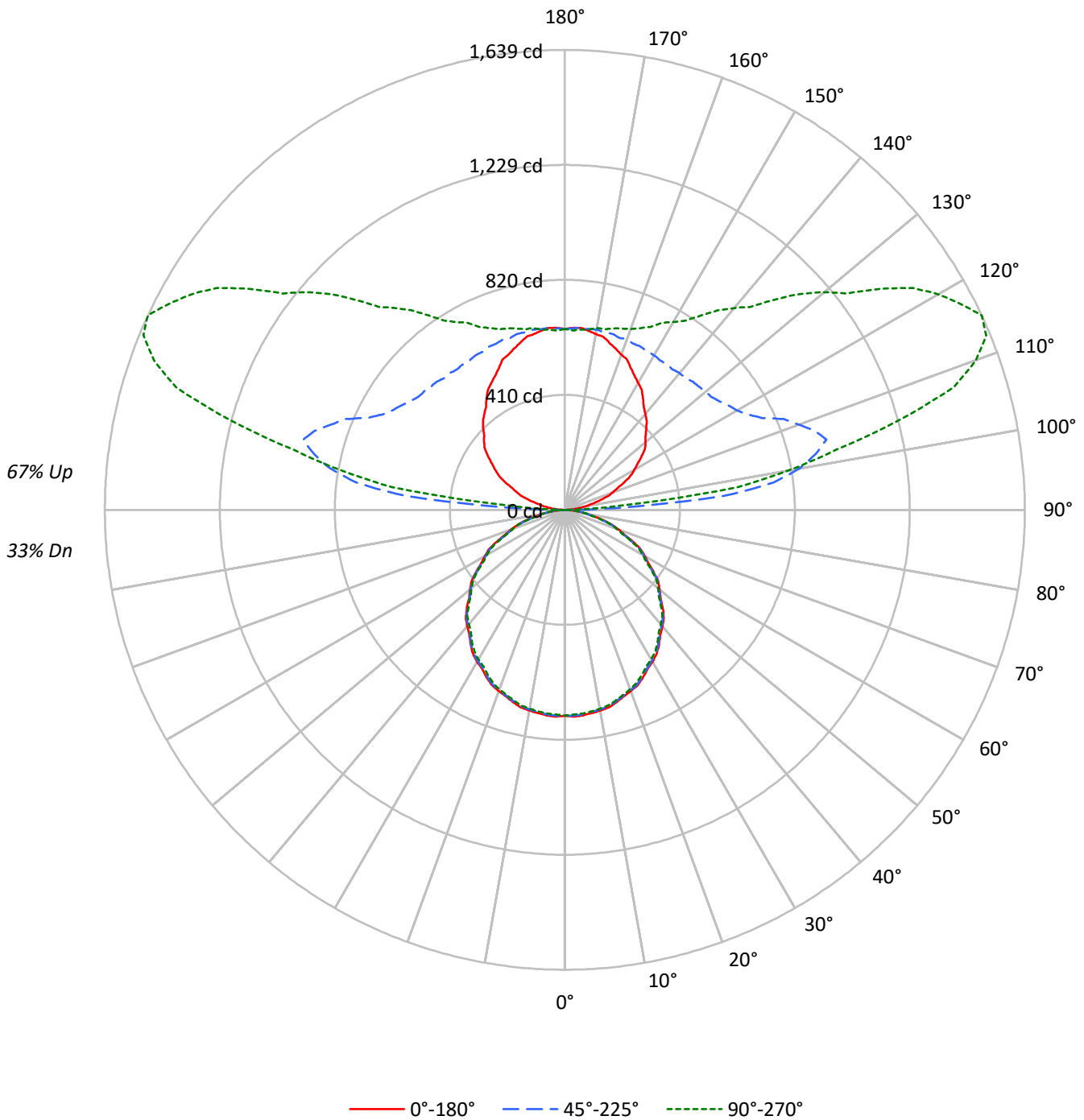
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6261.3 lumens
Efficiency: N/A
Efficacy: 117.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 53.1
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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	33
1	94	90	86	82	85	81	78	75	65	63	60	50	48	47	36	35	34	28
2	85	78	72	67	77	71	66	61	57	53	50	44	41	39	31	30	29	23
3	78	69	61	56	70	62	56	51	50	45	42	38	35	33	28	26	24	20
4	71	61	53	47	64	55	48	43	44	39	35	34	31	28	25	23	21	17
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	20	18	14
6	60	48	40	34	54	44	37	32	35	30	26	27	24	21	20	18	16	13
7	55	43	35	30	50	39	32	28	32	27	23	25	21	18	18	16	14	11
8	51	39	32	26	46	36	29	24	29	24	20	23	19	16	17	14	12	10
9	47	36	28	23	43	32	26	22	26	21	18	21	17	15	15	13	11	9
10	44	32	25	21	40	30	23	19	24	19	16	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6769	6769	6769
5°	6814	6777	6748
10°	6806	6768	6740
15°	6783	6743	6715
20°	6751	6721	6680
25°	6708	6666	6603
30°	6660	6616	6550
35°	6590	6555	6486
40°	6517	6468	6405
45°	6444	6378	6324
50°	6324	6281	6222
55°	6214	6148	6082
60°	6069	5975	5899
65°	5840	5683	5615
70°	5473	5336	5279
75°	4969	4823	4748
80°	4139	4192	4086
85°	2932	3472	3472



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.4	1.1
10°-20°	198.9	3.2
20°-30°	300.5	4.8
30°-40°	362.0	5.8
40°-50°	375.9	6.0
50°-60°	341.0	5.4
60°-70°	258.6	4.1
70°-80°	144.2	2.3
80°-90°	38.1	0.6
90°-100°	332.2	5.3
100°-110°	802.9	12.8
110°-120°	856.3	13.7
120°-130°	693.6	11.1
130°-140°	537.0	8.6
140°-150°	409.7	6.5
150°-160°	296.5	4.7
160°-170°	182.6	2.9
170°-180°	61.8	1.0
0°-30°	568.8	9.1
0°-40°	930.8	14.9
0°-60°	1647.7	26.3
0°-90°	2088.6	33.4
90°-120°	1991.5	31.8
90°-150°	3631.7	58.0
90°-180°	4173.0	66.6
0°-180°	6261.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	734	734	734	734	734	
5°	736	730	732	730	729	70
15°	710	702	706	704	703	200
25°	659	652	655	649	649	303
35°	585	579	582	575	576	366
45°	494	489	489	484	485	380
55°	386	385	382	378	378	345
65°	268	264	260	257	257	264
75°	139	137	135	133	133	147
85°	28	31	33	33	33	34
90°	0	0	0	0	0	3
95°	33	166	569	370	259	37
105°	128	222	965	1249	1233	136
115°	235	300	775	1470	1639	232
125°	334	385	673	1169	1373	298
135°	411	459	646	922	1061	317
145°	486	522	633	784	845	304
155°	557	581	642	694	719	257
165°	616	625	650	660	669	174
175°	651	648	651	646	644	62
180°	644	644	644	644	644	

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CATALOG NUMBER: SQ4-F-100U-050D-93050-1D-UNV-STD-W-4 (5000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	733.7	733.7	733.7	733.7	733.7
2.5°	737.8	732.2	733.7	732.8	729.6
5°	735.7	729.7	731.7	729.6	728.6
7.5°	730.6	724.4	726.5	724.5	725.1
10°	726.5	719.5	722.4	720.4	719.4
12.5°	721.6	713.8	716.7	713.8	714.4
15°	710.1	702.1	706.0	704.0	703.0
17.5°	697.4	690.4	694.4	691.1	691.1
20°	687.6	680.6	684.5	680.4	680.4
22.5°	676.9	669.1	673.0	668.1	668.1
25°	658.9	651.9	654.8	648.6	648.6
27.5°	638.2	631.0	634.9	628.8	628.8
30°	625.1	617.1	621.0	614.8	614.8
32.5°	608.7	603.1	605.4	599.3	599.3
35°	585.1	579.1	582.0	574.9	575.9
37.5°	559.1	554.9	555.0	548.7	549.9
40°	541.1	536.0	537.0	529.8	531.8
42.5°	522.2	518.0	518.1	512.6	513.8
45°	493.9	488.9	488.8	483.7	484.7
47.5°	461.9	459.3	458.9	452.9	454.0
50°	440.6	439.6	437.6	432.5	433.5
52.5°	419.3	418.3	416.2	411.1	412.1
55°	386.3	385.3	382.2	378.1	378.1
57.5°	351.9	350.9	347.6	343.5	343.5
60°	328.9	327.9	323.8	319.7	319.7
62.5°	305.2	303.4	299.2	295.9	295.9
65°	267.5	264.4	260.3	257.2	257.2
67.5°	228.3	226.3	223.2	220.3	220.3
70°	202.9	200.9	197.8	195.7	195.7
72.5°	177.5	175.5	172.4	170.3	170.3
75°	139.4	137.4	135.3	133.2	133.2
77.5°	101.7	101.1	101.0	99.0	99.0
80°	77.9	78.9	78.9	76.9	76.9
82.5°	55.7	57.5	58.4	58.0	58.0
85°	27.7	30.7	32.8	32.8	32.8
87.5°	8.2	10.6	13.1	13.1	13.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.9	89.9	211.8	103.0	69.9
95°	32.8	166.2	569.2	370.1	259.3
97.5°	58.1	184.1	749.6	722.2	620.0
100°	77.8	195.2	849.0	896.2	812.1
102.5°	96.4	205.3	914.5	1041.1	991.2
105°	128.3	221.7	965.0	1248.6	1232.6
107.5°	159.7	241.1	935.3	1414.9	1452.6
110°	181.5	257.6	887.2	1486.7	1557.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	203.4	274.1	844.6	1504.2	1625.1
115°	234.8	300.2	775.3	1469.8	1639.3
117.5°	265.9	327.6	734.6	1390.8	1589.3
120°	286.6	344.0	708.4	1328.7	1536.9
122.5°	308.5	361.6	692.0	1265.3	1470.3
125°	334.4	385.1	672.9	1168.9	1373.1
127.5°	360.1	407.9	659.5	1087.3	1266.7
130°	375.4	422.1	655.2	1030.4	1206.6
132.5°	389.6	438.4	648.6	989.4	1138.9
135°	410.9	458.9	645.6	921.8	1060.6
137.5°	431.1	479.4	636.1	875.9	980.6
140°	446.3	490.4	636.1	843.0	939.1
142.5°	461.6	505.7	630.6	814.3	895.4
145°	485.9	522.0	633.3	783.5	844.9
147.5°	508.6	543.5	631.7	748.1	798.8
150°	522.8	553.5	636.1	732.5	772.6
152.5°	538.1	567.7	635.0	716.0	751.8
155°	556.9	580.9	641.5	694.0	719.3
157.5°	579.6	600.1	640.2	685.5	700.5
160°	588.3	605.6	645.6	674.5	685.2
162.5°	602.5	617.7	643.4	671.2	677.6
165°	615.6	624.9	649.7	659.5	668.8
167.5°	631.7	637.8	648.1	658.7	659.0
170°	636.1	640.1	652.4	651.2	657.9
172.5°	643.7	646.6	649.2	652.1	648.1
175°	651.1	648.4	651.1	645.6	644.3
177.5°	649.7	649.7	647.5	645.2	639.9
180°	644.3	644.3	644.3	644.3	644.3

(END OF REPORT)