

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: P521661

Luminaire Tested: **SQ4-F-150U-050D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521661
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-150U-050D-93050-1D-UNV-STD-W-4 (3500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

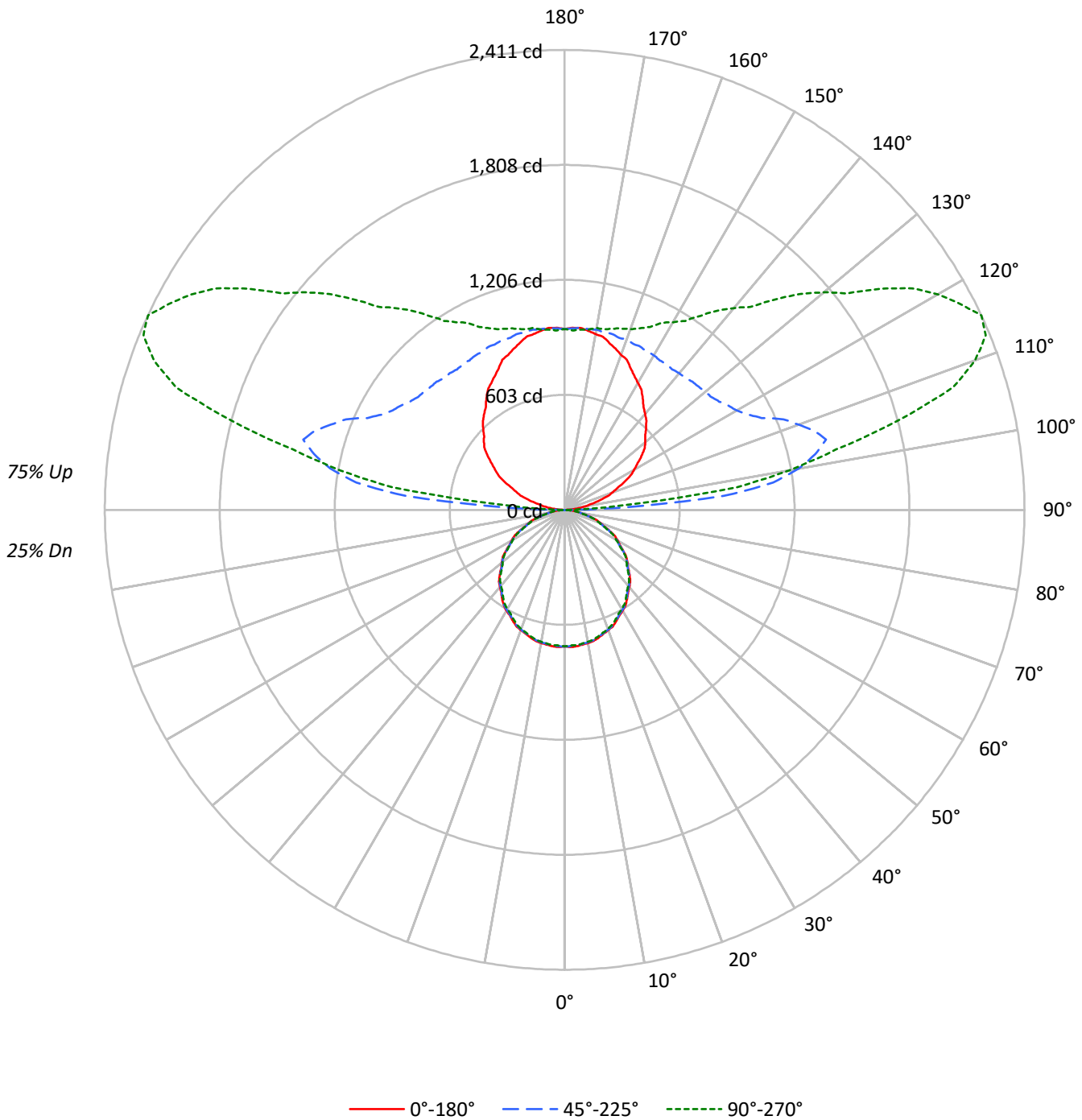
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8174.5 lumens
Efficiency: N/A
Efficacy: 113.7 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): 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					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	25		
1	92	88	84	81	82	78	75	72	61	58	57	44	43	42	29	28	28	21		
2	84	77	71	66	74	68	63	59	53	50	47	39	37	35	25	24	23	17		
3	76	67	60	55	68	60	54	49	47	42	39	34	31	29	22	21	20	15		
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	12		
5	64	53	45	39	56	47	40	35	37	32	28	27	24	21	18	16	15	11		
6	59	47	39	34	52	42	35	31	33	28	24	24	21	19	16	14	13	9		
7	54	42	35	29	48	38	31	27	30	25	21	22	19	16	15	13	11	8		
8	50	38	31	26	44	34	28	23	27	22	19	20	17	14	13	11	10	7		
9	46	35	27	23	41	31	25	21	25	20	17	18	15	13	12	10	9	7		
10	43	32	25	20	38	28	22	18	22	18	15	17	14	11	11	10	8	6		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6606	6606	6606
5°	6650	6613	6585
10°	6642	6605	6577
15°	6619	6581	6552
20°	6588	6559	6519
25°	6546	6505	6444
30°	6499	6456	6392
35°	6431	6397	6330
40°	6359	6311	6251
45°	6289	6224	6172
50°	6172	6129	6071
55°	6064	6000	5936
60°	5923	5831	5757
65°	5698	5545	5480
70°	5341	5206	5152
75°	4848	4705	4634
80°	4038	4091	3985
85°	2858	3387	3387



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.7	0.8
10°-20°	194.1	2.4
20°-30°	293.3	3.6
30°-40°	353.2	4.3
40°-50°	366.8	4.5
50°-60°	332.8	4.1
60°-70°	252.4	3.1
70°-80°	140.7	1.7
80°-90°	37.2	0.5
90°-100°	488.5	6.0
100°-110°	1180.8	14.4
110°-120°	1259.3	15.4
120°-130°	1020.0	12.5
130°-140°	789.7	9.7
140°-150°	602.4	7.4
150°-160°	436.1	5.3
160°-170°	268.6	3.3
170°-180°	90.9	1.1
0°-30°	555.1	6.8
0°-40°	908.3	11.1
0°-60°	1607.9	19.7
0°-90°	2038.2	24.9
90°-120°	2928.6	35.8
90°-150°	5340.7	65.3
90°-180°	6136.0	75.1
0°-180°	8174.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	716	716	716	716	716	
5°	718	712	714	712	711	68
15°	693	685	689	687	686	196
25°	643	636	639	633	633	296
35°	571	565	568	561	562	357
45°	482	477	477	472	473	371
55°	377	376	373	369	369	337
65°	261	258	254	251	251	258
75°	136	134	132	130	130	144
85°	27	30	32	32	32	34
90°	0	0	0	0	0	3
95°	48	244	837	544	381	54
105°	189	326	1419	1836	1813	199
115°	345	441	1140	2162	2411	341
125°	492	566	990	1719	2019	439
135°	604	675	949	1356	1560	466
145°	715	768	931	1152	1242	447
155°	819	854	943	1020	1058	378
165°	905	919	956	970	984	255
175°	958	954	958	949	947	90
180°	947	947	947	947	947	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	716.0	716.0	716.0	716.0	716.0
2.5°	720.0	714.5	716.0	715.1	712.0
5°	718.0	712.1	714.0	712.0	711.0
7.5°	713.0	706.9	709.0	707.0	707.6
10°	709.0	702.2	705.0	703.0	702.0
12.5°	704.2	696.6	699.4	696.6	697.2
15°	693.0	685.2	689.0	687.0	686.0
17.5°	680.6	673.8	677.6	674.4	674.4
20°	671.0	664.2	668.0	664.0	664.0
22.5°	660.6	653.0	656.8	652.0	652.0
25°	643.0	636.2	639.0	633.0	633.0
27.5°	622.8	615.8	619.6	613.6	613.6
30°	610.0	602.2	606.0	600.0	600.0
32.5°	594.0	588.5	590.8	584.8	584.8
35°	571.0	565.1	568.0	561.0	562.0
37.5°	545.6	541.5	541.6	535.4	536.6
40°	528.0	523.1	524.0	517.0	519.0
42.5°	509.6	505.5	505.6	500.2	501.4
45°	482.0	477.1	477.0	472.0	473.0
47.5°	450.8	448.3	447.8	442.0	443.0
50°	430.0	429.0	427.0	422.0	423.0
52.5°	409.2	408.2	406.2	401.2	402.2
55°	377.0	376.0	373.0	369.0	369.0
57.5°	343.4	342.4	339.2	335.2	335.2
60°	321.0	320.0	316.0	312.0	312.0
62.5°	297.8	296.0	292.0	288.8	288.8
65°	261.0	258.1	254.0	251.0	251.0
67.5°	222.8	220.8	217.8	215.0	215.0
70°	198.0	196.0	193.0	191.0	191.0
72.5°	173.2	171.2	168.2	166.2	166.2
75°	136.0	134.0	132.0	130.0	130.0
77.5°	99.2	98.6	98.6	96.6	96.6
80°	76.0	77.0	77.0	75.0	75.0
82.5°	54.4	56.2	57.0	56.6	56.6
85°	27.0	29.9	32.0	32.0	32.0
87.5°	8.0	10.3	12.8	12.8	12.8
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.1	132.2	311.5	151.4	102.8
95°	48.2	244.4	837.0	544.3	381.4
97.5°	85.5	270.8	1102.4	1062.0	911.7
100°	114.4	287.1	1248.5	1318.0	1194.3
102.5°	141.7	301.9	1344.9	1531.1	1457.7
105°	188.7	326.1	1419.1	1836.1	1812.6
107.5°	234.9	354.6	1375.4	2080.8	2136.1
110°	267.0	378.8	1304.7	2186.3	2290.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	299.1	403.1	1242.1	2212.0	2389.9
115°	345.3	441.4	1140.1	2161.5	2410.7
117.5°	391.0	481.7	1080.3	2045.2	2337.3
120°	421.5	505.9	1041.8	1954.0	2260.2
122.5°	453.6	531.8	1017.7	1860.8	2162.2
125°	491.8	566.4	989.6	1719.0	2019.3
127.5°	529.5	599.8	969.9	1599.0	1862.7
130°	552.0	620.7	963.5	1515.4	1774.4
132.5°	572.9	644.7	953.9	1455.0	1674.9
135°	604.2	674.8	949.4	1355.5	1559.6
137.5°	633.9	704.9	935.4	1288.2	1442.0
140°	656.4	721.1	935.4	1239.7	1381.0
142.5°	678.9	743.6	927.4	1197.4	1316.8
145°	714.6	767.6	931.4	1152.2	1242.5
147.5°	747.9	799.3	929.0	1100.1	1174.7
150°	768.8	813.9	935.4	1077.2	1136.1
152.5°	791.3	834.8	933.8	1053.0	1105.6
155°	819.0	854.3	943.4	1020.5	1057.8
157.5°	852.3	882.5	941.4	1008.1	1030.1
160°	865.1	890.6	949.4	991.9	1007.7
162.5°	886.0	908.4	946.2	987.0	996.4
165°	905.3	919.0	955.5	969.8	983.6
167.5°	929.0	938.0	953.1	968.7	969.1
170°	935.4	941.3	959.5	957.7	967.5
172.5°	946.6	950.9	954.7	958.9	953.1
175°	957.5	953.5	957.5	949.4	947.4
177.5°	955.5	955.5	952.2	948.9	941.0
180°	947.4	947.4	947.4	947.4	947.4

(END OF REPORT)