

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: P520388

Luminaire Tested: **SQ4-F-150U-075D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520388
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-18)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-150U-075D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

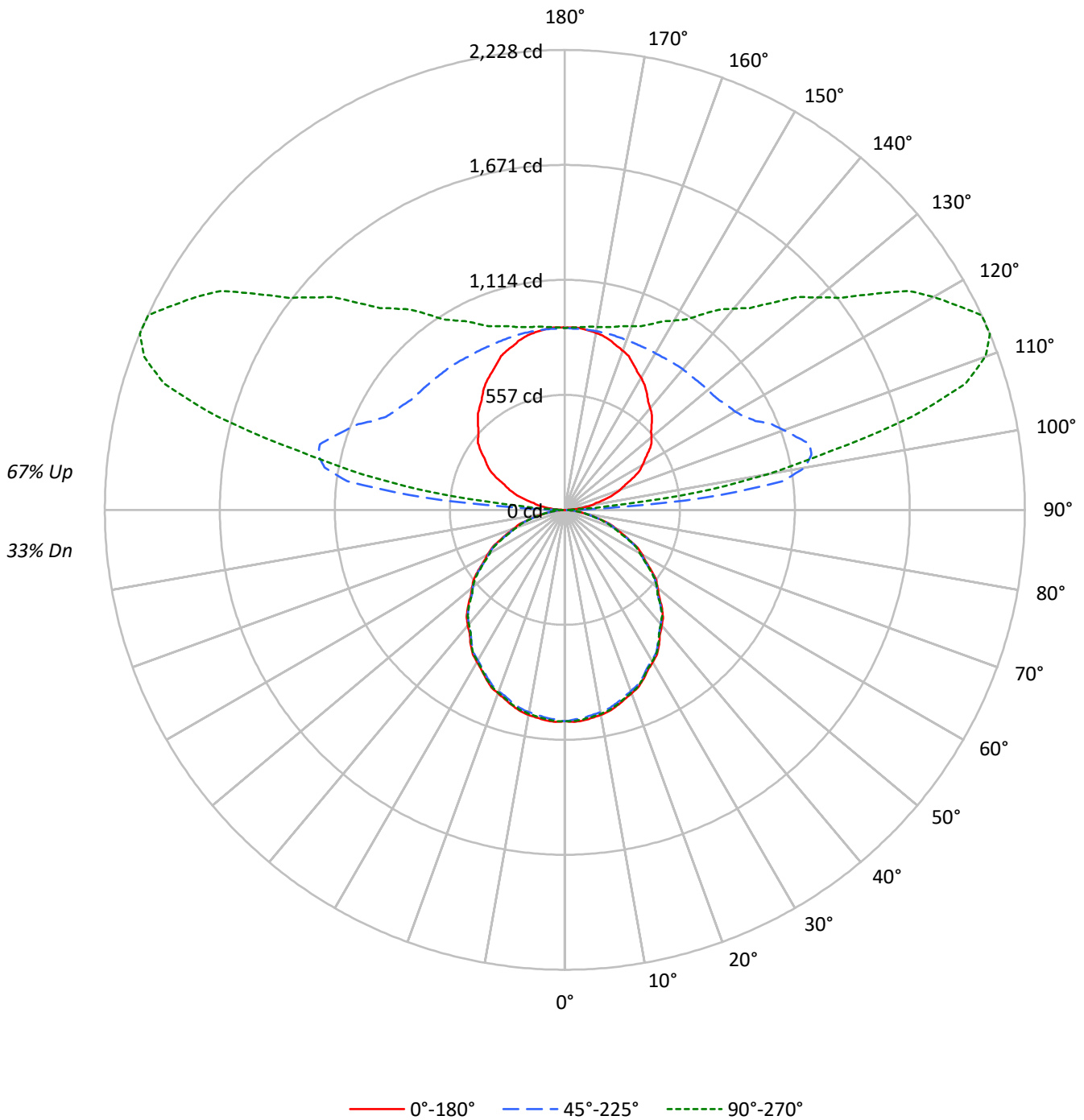
Lumens per Lamp: N/A
Luminaire Lumens: 8484.6 lumens
Efficiency: N/A
Efficacy: 133.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 63.5
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	56	56	56	40	40	40	33
1	94	90	86	83	85	81	78	75	65	62	60	50	48	47	36	35	34	28
2	85	78	72	67	77	71	66	61	57	53	50	43	41	39	31	30	29	23
3	78	69	62	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	36	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	35	54	44	37	32	35	30	26	27	24	21	20	18	16	13
7	55	43	36	30	50	39	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	26	46	36	29	24	29	24	20	23	19	16	17	14	13	10
9	48	36	28	23	43	33	26	22	26	22	18	21	17	15	15	13	11	9
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9452	9452	9452
5°	9488	9368	9437
10°	9451	9329	9399
15°	9378	9262	9342
20°	9293	9184	9257
25°	9192	9096	9162
30°	9075	8976	9025
35°	8955	8862	8903
40°	8804	8715	8703
45°	8653	8544	8569
50°	8413	8347	8347
55°	8216	8112	8038
60°	7953	7815	7746
65°	7523	7381	7281
70°	7068	6892	6717
75°	6356	6124	5992
80°	5085	4984	4936
85°	3049	3440	3546



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.7	1.1
10°-20°	275.3	3.2
20°-30°	413.6	4.9
30°-40°	493.5	5.8
40°-50°	506.1	6.0
50°-60°	451.0	5.3
60°-70°	336.3	4.0
70°-80°	182.4	2.1
80°-90°	43.7	0.5
90°-100°	409.8	4.8
100°-110°	1108.2	13.1
110°-120°	1165.1	13.7
120°-130°	946.4	11.2
130°-140°	742.3	8.7
140°-150°	569.7	6.7
150°-160°	409.7	4.8
160°-170°	250.3	3.0
170°-180°	84.4	1.0
0°-30°	785.6	9.3
0°-40°	1279.2	15.1
0°-60°	2236.3	26.4
0°-90°	2798.7	33.0
90°-120°	2683.1	31.6
90°-150°	4941.5	58.2
90°-180°	5686.0	67.0
0°-180°	8484.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1024	1024	1024	1024	1024	
5°	1024	1023	1012	1020	1019	97
15°	982	980	970	977	978	277
25°	903	902	894	898	900	416
35°	795	793	787	787	790	497
45°	663	660	655	655	657	510
55°	511	510	504	500	500	456
65°	345	345	338	334	334	343
75°	178	175	172	169	168	187
85°	29	31	32	33	34	40
90°	2	6	12	13	12	5
95°	64	223	682	353	210	67
105°	206	318	1229	1813	1739	217
115°	363	443	1020	1974	2228	358
125°	496	569	919	1551	1822	443
135°	595	666	894	1252	1417	460
145°	692	744	882	1072	1153	433
155°	781	812	874	961	993	360
165°	851	859	878	912	917	240
175°	883	882	879	890	889	84
180°	882	882	882	882	882	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1024.5	1024.5	1024.5	1024.5	1024.5
2.5°	1028.2	1026.1	1017.1	1024.5	1023.8
5°	1024.5	1022.7	1011.5	1019.9	1019.0
7.5°	1016.1	1014.2	1003.2	1011.5	1011.3
10°	1008.8	1006.0	995.8	1004.0	1003.2
12.5°	999.1	996.4	986.0	994.4	993.5
15°	981.8	979.9	969.7	977.2	978.1
17.5°	962.1	958.7	949.4	956.7	957.7
20°	946.5	943.8	935.4	941.8	942.8
22.5°	930.1	927.4	919.0	925.5	926.4
25°	902.9	901.9	893.5	898.3	900.0
27.5°	873.3	870.8	864.0	867.5	869.4
30°	851.8	849.9	842.5	845.3	847.1
32.5°	829.5	828.4	821.7	823.0	825.5
35°	795.1	793.3	786.8	786.9	790.5
37.5°	757.0	755.0	749.6	748.7	750.1
40°	731.0	728.3	723.6	722.6	722.6
42.5°	704.3	702.2	696.1	694.5	696.6
45°	663.2	660.5	654.8	654.9	656.7
47.5°	618.8	617.7	611.2	608.2	608.9
50°	586.1	587.9	581.5	577.8	581.5
52.5°	557.9	556.8	551.0	547.3	548.8
55°	510.8	509.9	504.3	499.7	499.7
57.5°	463.7	461.3	455.5	452.1	454.7
60°	431.0	430.0	423.5	417.1	419.8
62.5°	398.2	396.7	390.1	385.9	387.9
65°	344.6	344.6	338.1	334.4	333.5
67.5°	297.6	293.3	289.6	285.1	283.9
70°	262.0	258.3	255.5	251.6	249.0
72.5°	227.0	224.9	220.5	216.8	216.2
75°	178.3	174.7	171.8	169.1	168.1
77.5°	126.8	126.2	123.5	122.0	122.6
80°	95.7	95.7	93.8	93.8	92.9
82.5°	67.4	68.2	67.8	66.3	66.1
85°	28.8	30.6	32.5	32.6	33.5
87.5°	5.6	9.9	10.6	10.7	10.6
90°	1.9	5.6	12.4	13.3	12.4
92.5°	27.0	98.3	193.9	84.1	61.0
95°	63.6	223.2	681.6	352.7	209.7
97.5°	102.1	256.0	1062.4	879.2	645.7
100°	131.0	269.3	1180.9	1231.6	995.8
102.5°	157.5	287.7	1222.7	1498.7	1322.4
105°	206.0	318.3	1229.3	1813.4	1739.1
107.5°	250.8	353.3	1175.6	2009.7	2034.4
110°	285.7	378.6	1127.8	2062.4	2167.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	316.9	403.8	1083.7	2051.8	2228.1
115°	362.7	443.4	1019.6	1973.6	2228.1
117.5°	407.4	483.2	977.2	1854.2	2142.5
120°	434.8	509.0	952.2	1768.6	2062.9
122.5°	460.6	533.4	937.0	1676.8	1973.2
125°	496.5	568.9	919.0	1550.7	1821.7
127.5°	529.6	600.6	908.3	1447.8	1686.1
130°	547.8	621.1	903.8	1384.2	1599.6
132.5°	566.8	639.3	899.2	1326.9	1525.2
135°	595.2	665.8	894.2	1252.1	1417.3
137.5°	623.9	690.5	890.1	1191.4	1326.0
140°	643.6	705.8	888.6	1152.4	1272.1
142.5°	662.6	721.1	885.5	1117.0	1222.0
145°	692.0	744.0	881.9	1071.7	1153.4
147.5°	718.8	764.9	877.7	1030.6	1093.4
150°	738.6	779.4	876.2	1008.4	1058.5
152.5°	756.8	792.4	875.4	987.7	1028.8
155°	781.2	811.9	874.3	961.4	993.0
157.5°	806.7	828.0	874.5	943.1	963.9
160°	821.2	838.8	875.3	931.6	946.4
162.5°	832.6	847.2	876.0	922.4	933.6
165°	850.6	858.9	878.1	912.4	917.1
167.5°	862.9	868.7	878.3	903.8	906.0
170°	870.5	873.3	879.0	900.0	900.0
172.5°	876.6	877.1	879.0	895.3	894.6
175°	882.9	881.9	879.0	890.4	888.6
177.5°	885.0	882.8	878.8	886.4	884.2
180°	881.9	881.9	881.9	881.9	881.9

(END OF REPORT)