

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: P520077

Luminaire Tested: **SQ4-F-0U-050D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520077
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-0U-050D-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

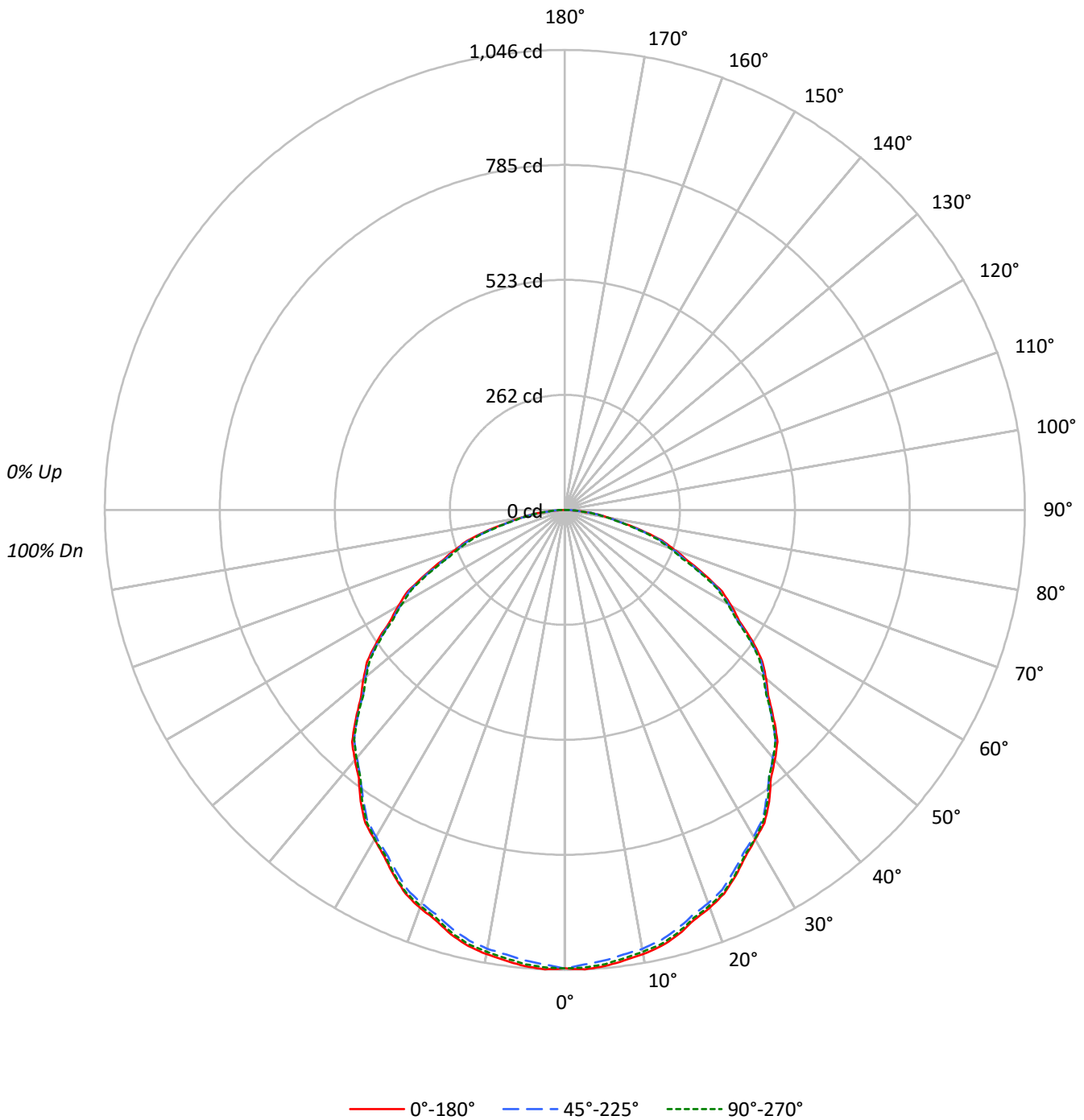
Lumens per Lamp: N/A
Luminaire Lumens: 2846.4 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Direct

Input Watts (W): 25
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	65	61	59
4	83	71	62	55	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	46	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6415	6415	6415
5°	6431	6353	6405
10°	6409	6331	6374
15°	6365	6285	6338
20°	6305	6232	6278
25°	6234	6159	6215
30°	6148	6098	6138
35°	6080	6007	6038
40°	5963	5907	5919
45°	5841	5793	5793
50°	5718	5664	5638
55°	5584	5509	5480
60°	5376	5290	5255
65°	5120	5018	4959
70°	4769	4669	4570
75°	4280	4147	4047
80°	3461	3411	3315
85°	2068	2364	2463



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.4	3.5
10°-20°	280.2	9.8
20°-30°	420.9	14.8
30°-40°	502.4	17.6
40°-50°	514.8	18.1
50°-60°	459.1	16.1
60°-70°	341.9	12.0
70°-80°	185.6	6.5
80°-90°	43.0	1.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	799.5	28.1
0°-40°	1301.9	45.7
0°-60°	2275.8	80.0
0°-90°	2846.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2846.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1043	1043	1043	1043	1043	
5°	1042	1040	1029	1039	1037	99
15°	1000	997	987	995	995	282
25°	919	916	908	913	916	423
35°	810	807	800	800	804	505
45°	672	673	666	665	666	518
55°	521	521	514	510	511	464
65°	352	350	345	341	341	348
75°	180	179	174	172	170	190
85°	29	32	34	35	35	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1042.9	1042.9	1042.9	1042.9	1042.9
2.5°	1046.2	1044.0	1035.1	1042.9	1041.8
5°	1041.5	1040.1	1029.0	1038.7	1037.3
7.5°	1034.0	1031.2	1020.3	1029.7	1028.4
10°	1026.1	1023.4	1013.6	1021.9	1020.6
12.5°	1016.0	1014.5	1003.5	1011.9	1011.6
15°	999.6	996.9	987.0	995.4	995.4
17.5°	977.9	976.2	966.6	974.7	973.6
20°	963.3	960.6	952.1	959.1	959.1
22.5°	945.4	943.8	935.4	941.3	942.4
25°	918.6	915.9	907.5	913.1	915.8
27.5°	889.0	886.9	879.9	883.5	885.4
30°	865.6	865.6	858.6	860.0	864.2
32.5°	844.4	844.4	836.3	837.7	839.6
35°	809.7	807.0	800.0	800.1	804.1
37.5°	769.5	768.1	763.7	762.8	763.9
40°	742.7	741.3	735.7	737.2	737.2
42.5°	715.9	714.6	709.0	707.0	709.2
45°	671.5	672.9	666.0	664.6	666.0
47.5°	627.7	627.7	622.1	618.3	620.4
50°	597.6	597.6	591.9	589.2	589.2
52.5°	566.3	567.4	560.7	556.8	557.9
55°	520.7	520.7	513.7	509.6	511.0
57.5°	470.4	470.4	463.5	459.4	461.9
60°	437.0	437.0	430.0	425.9	427.2
62.5°	403.5	403.5	396.5	392.4	392.5
65°	351.8	350.4	344.8	340.7	340.7
67.5°	302.1	298.6	294.3	288.7	288.7
70°	265.2	263.9	259.6	254.1	254.1
72.5°	231.7	229.3	225.0	220.6	220.6
75°	180.1	178.8	174.5	171.7	170.3
77.5°	129.0	127.9	127.6	123.8	124.8
80°	97.7	97.7	96.3	93.6	93.6
82.5°	69.8	70.9	68.4	67.8	66.8
85°	29.3	32.0	33.5	34.9	34.9
87.5°	5.6	8.9	7.8	9.0	9.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)