

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: P520024

Luminaire Tested: **SQ4-F-075U-075D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520024
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-075D-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

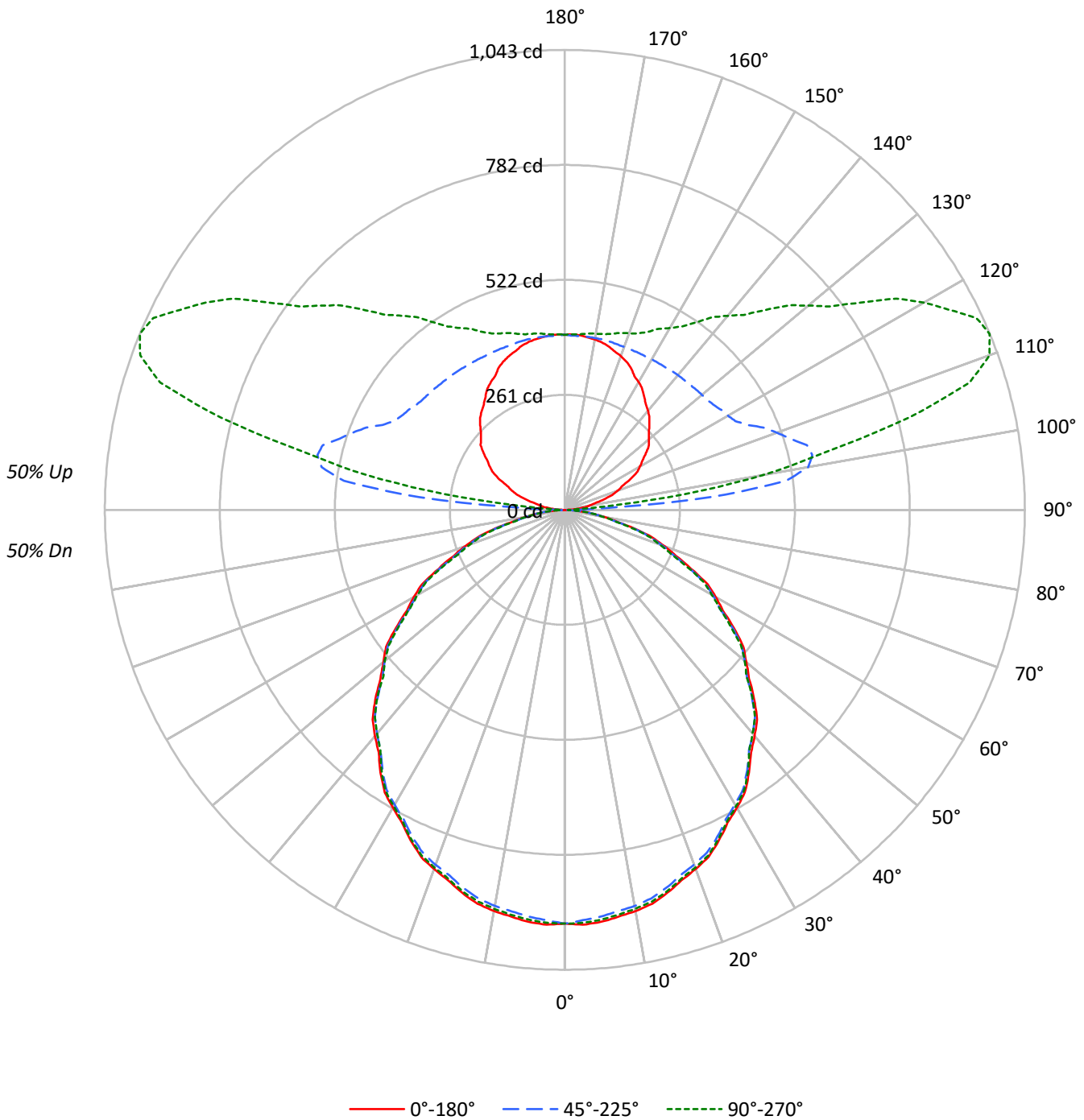
Lumens per Lamp: N/A
Luminaire Lumens: 5150.7 lumens
Efficiency: N/A
Efficacy: 121.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 42.5
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	93	89	86	90	86	83	80	73	71	68	61	59	57	49	48	47	42
2	89	81	75	70	82	75	70	65	64	60	56	53	50	48	43	41	40	35
3	81	72	64	58	74	66	60	55	56	51	47	47	43	40	38	36	34	29
4	74	63	55	49	68	59	52	46	50	44	40	42	38	34	34	31	29	25
5	68	56	48	42	62	52	45	40	45	39	35	37	33	30	31	28	25	22
6	63	50	42	36	57	47	40	34	40	34	30	34	29	26	28	25	22	19
7	58	45	37	32	53	42	35	30	36	31	26	31	26	23	25	22	20	17
8	54	41	33	28	49	38	31	27	33	27	23	28	24	20	23	20	17	15
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	14
10	47	34	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8657	8657	8657
5°	8690	8580	8643
10°	8655	8543	8607
15°	8589	8483	8556
20°	8512	8410	8477
25°	8418	8330	8391
30°	8311	8220	8265
35°	8202	8115	8154
40°	8063	7982	7972
45°	7925	7826	7848
50°	7705	7645	7645
55°	7526	7430	7362
60°	7283	7158	7095
65°	6890	6761	6667
70°	6471	6310	6150
75°	5825	5611	5490
80°	4654	4564	4516
85°	2795	3155	3239



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.6	1.7
10°-20°	252.1	4.9
20°-30°	378.8	7.4
30°-40°	452.0	8.8
40°-50°	463.6	9.0
50°-60°	413.1	8.0
60°-70°	308.0	6.0
70°-80°	167.0	3.2
80°-90°	39.4	0.8
90°-100°	187.4	3.6
100°-110°	515.5	10.0
110°-120°	532.1	10.3
120°-130°	426.3	8.3
130°-140°	334.8	6.5
140°-150°	256.6	5.0
150°-160°	184.5	3.6
160°-170°	112.8	2.2
170°-180°	38.0	0.7
0°-30°	719.5	14.0
0°-40°	1171.5	22.7
0°-60°	2048.2	39.8
0°-90°	2562.6	49.8
90°-120°	1235.0	24.0
90°-150°	2252.8	43.7
90°-180°	2588.0	50.2
0°-180°	5150.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	938	938	938	938	938	
5°	938	937	926	934	933	89
15°	899	898	888	895	896	254
25°	827	826	818	823	824	381
35°	728	726	720	721	724	455
45°	607	605	600	600	602	467
55°	468	467	462	458	458	418
65°	316	316	310	306	305	314
75°	163	160	157	155	154	172
85°	26	28	30	30	31	37
90°	1	3	6	8	8	3
95°	28	102	331	142	90	29
105°	92	142	568	865	807	97
115°	163	199	456	907	1030	161
125°	225	256	413	699	819	201
135°	271	301	402	566	640	209
145°	314	335	396	482	519	197
155°	355	367	393	433	445	163
165°	384	389	395	411	413	108
175°	397	398	396	401	400	38
180°	397	397	397	397	397	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	938.3	938.3	938.3	938.3	938.3
2.5°	941.7	939.8	931.5	938.3	937.6
5°	938.3	936.6	926.4	934.1	933.2
7.5°	930.6	928.9	918.7	926.4	926.2
10°	923.8	921.4	911.9	919.6	918.7
12.5°	915.0	912.5	903.1	910.7	909.9
15°	899.2	897.6	888.1	895.0	895.8
17.5°	881.1	878.0	869.6	876.2	877.1
20°	866.9	864.4	856.6	862.6	863.4
22.5°	851.9	849.4	841.7	847.7	848.5
25°	826.9	826.0	818.3	822.7	824.3
27.5°	799.8	797.5	791.3	794.6	796.3
30°	780.1	778.4	771.6	774.2	775.8
32.5°	759.7	758.7	752.5	753.8	756.2
35°	728.2	726.5	720.5	720.6	724.0
37.5°	693.4	691.5	686.5	685.7	687.1
40°	669.5	667.0	662.7	661.9	661.9
42.5°	645.1	643.2	637.5	636.0	638.1
45°	607.4	604.9	599.8	599.8	601.5
47.5°	566.7	565.7	559.7	557.1	557.8
50°	536.8	538.5	532.6	529.2	532.6
52.5°	510.9	509.9	504.6	501.3	502.6
55°	467.9	467.0	461.9	457.7	457.7
57.5°	424.6	422.6	417.1	414.0	416.6
60°	394.7	393.9	387.9	382.0	384.5
62.5°	364.8	363.3	357.3	353.4	355.2
65°	315.6	315.6	309.7	306.2	305.4
67.5°	272.6	268.6	265.2	261.2	260.0
70°	239.9	236.6	233.9	230.5	228.0
72.5°	207.9	206.0	201.9	198.6	198.1
75°	163.4	160.0	157.4	154.8	154.0
77.5°	116.2	115.5	113.2	111.8	112.3
80°	87.6	87.6	85.9	85.9	85.0
82.5°	61.8	62.4	62.1	60.7	60.6
85°	26.4	28.0	29.8	29.8	30.6
87.5°	4.9	8.8	8.7	9.1	9.1
90°	0.9	3.3	5.9	7.6	7.6
92.5°	11.6	49.9	86.4	33.2	27.2
95°	27.9	102.3	331.4	141.7	90.5
97.5°	45.5	113.4	505.6	389.6	274.9
100°	58.3	120.3	560.4	565.6	461.5
102.5°	70.5	128.5	574.6	701.8	606.2
105°	92.1	141.7	568.0	865.0	807.2
107.5°	112.8	158.1	535.7	945.1	962.3
110°	127.6	168.9	511.4	964.9	1024.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	141.1	181.1	487.0	952.1	1042.7
115°	163.2	198.7	455.6	907.2	1029.6
117.5°	184.1	216.8	435.7	844.2	982.5
120°	197.0	228.4	426.9	797.0	940.0
122.5°	208.4	239.8	420.8	755.5	891.3
125°	224.9	256.3	413.4	699.3	819.1
127.5°	240.4	270.4	408.5	652.2	757.4
130°	248.5	279.1	405.7	624.3	720.2
132.5°	257.9	288.5	403.7	599.8	686.3
135°	271.3	301.1	401.5	565.5	639.9
137.5°	283.9	311.4	399.7	537.8	599.1
140°	293.3	319.0	399.0	519.4	574.7
142.5°	301.5	325.0	397.6	502.9	550.4
145°	313.6	335.1	395.6	481.8	519.0
147.5°	326.6	345.1	394.6	463.0	492.8
150°	334.7	351.2	393.9	452.8	475.9
152.5°	342.1	357.4	393.2	443.9	463.0
155°	355.1	366.6	393.0	433.0	445.4
157.5°	364.3	373.7	393.0	424.2	432.8
160°	371.1	378.5	393.0	419.4	426.0
162.5°	376.5	382.6	393.7	415.3	420.6
165°	383.7	388.7	394.8	410.8	413.4
167.5°	388.8	392.6	395.6	407.1	407.8
170°	392.2	394.7	395.6	405.7	405.7
172.5°	394.9	396.0	395.6	403.7	403.0
175°	397.3	398.1	395.6	400.6	399.9
177.5°	398.0	398.0	395.3	399.3	398.0
180°	397.3	397.3	397.3	397.3	397.3

(END OF REPORT)