

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: P564001

Luminaire Tested: **SQ4-PR1-050U-100D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564001
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PR1-050U-100D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17538.8 lumens
Efficiency: N/A
Efficacy: 130.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

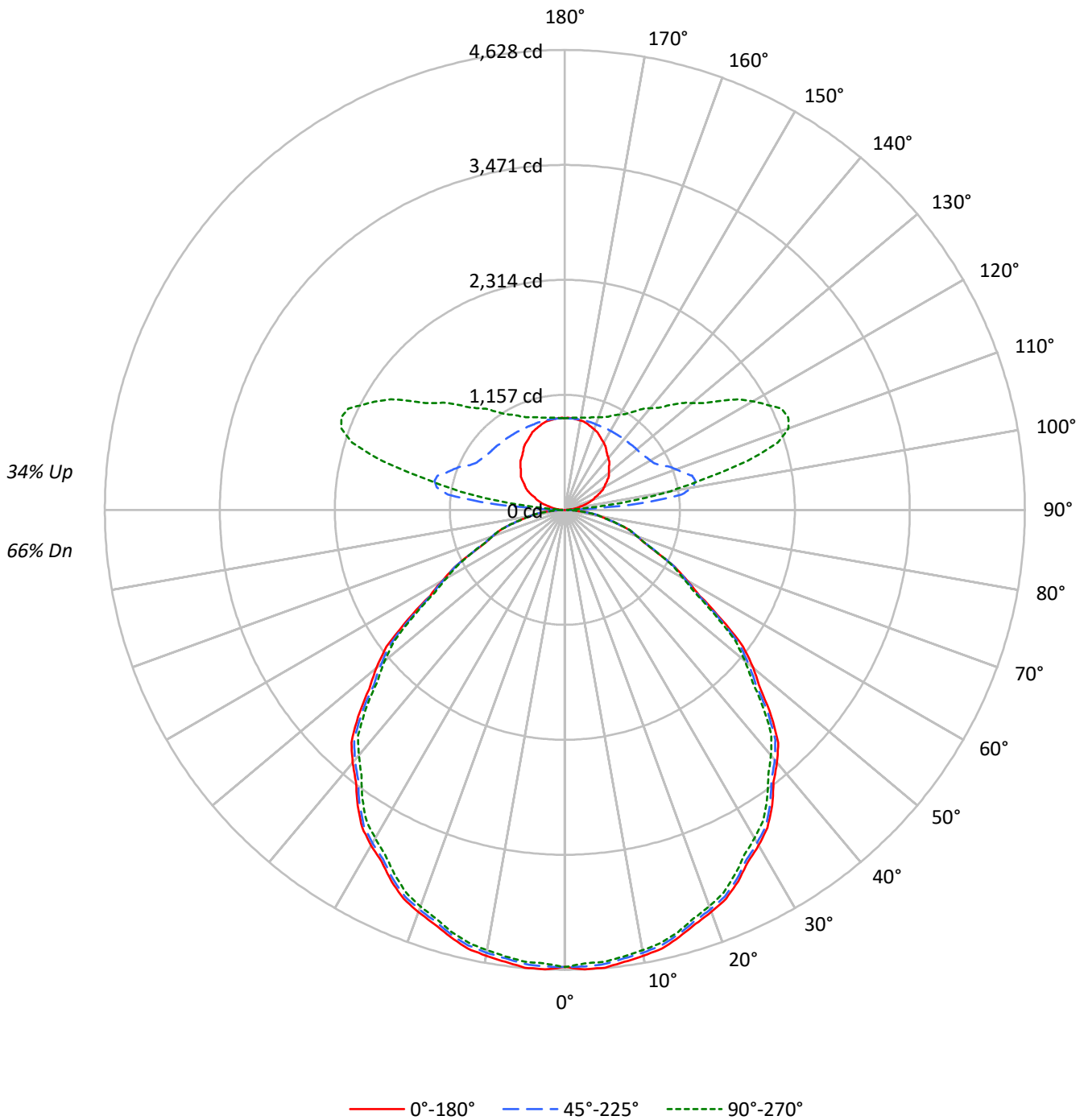
Input Watts (W): 134.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	50	30	10	0	
RCR																						
0	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	66				
1	102	97	94	90	95	92	88	85	81	79	76	72	70	68	63	62	60	56				
2	93	85	79	74	87	81	75	71	72	68	64	63	60	57	56	53	51	48				
3	85	76	68	62	80	71	65	60	64	58	54	56	52	49	50	47	44	41				
4	78	67	59	53	73	64	56	51	57	51	47	51	46	42	45	41	38	35				
5	72	60	52	46	67	57	50	44	51	45	40	46	41	37	40	37	34	31				
6	66	54	46	40	62	51	44	38	46	40	35	41	36	33	37	33	30	27				
7	61	49	41	35	58	47	39	34	42	36	31	38	33	29	34	30	26	24				
8	57	45	37	31	54	42	35	30	38	32	28	34	30	26	31	27	24	22				
9	53	41	33	28	50	39	32	27	35	29	25	32	27	23	29	24	21	19				
10	50	37	30	25	47	36	29	24	33	27	23	29	25	21	26	22	20	18				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14147	14147	14147
5°	14274	14164	14091
10°	14229	14130	14056
15°	14166	14078	14002
20°	14095	14004	13900
25°	13996	13902	13740
30°	13845	13746	13549
35°	13640	13521	13328
40°	13329	13186	12948
45°	12786	12562	12304
50°	11829	11544	11317
55°	10325	10091	9878
60°	8700	8627	8456
65°	7525	7554	7496
70°	6911	6947	6947
75°	6638	6638	6685
80°	6245	6316	6245
85°	5032	5593	5593



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	435.0	2.5
10°-20°	1244.6	7.1
20°-30°	1877.2	10.7
30°-40°	2236.7	12.8
40°-50°	2205.2	12.6
50°-60°	1685.3	9.6
60°-70°	1042.9	5.9
70°-80°	592.3	3.4
80°-90°	183.8	1.0
90°-100°	443.8	2.5
100°-110°	1205.5	6.9
110°-120°	1239.5	7.1
120°-130°	991.0	5.7
130°-140°	778.7	4.4
140°-150°	597.1	3.4
150°-160°	429.4	2.4
160°-170°	262.6	1.5
170°-180°	88.5	0.5
0°-30°	3556.7	20.3
0°-40°	5793.4	33.0
0°-60°	9683.9	55.2
0°-90°	11502.9	65.6
90°-120°	2888.8	16.5
90°-150°	5255.5	30.0
90°-180°	6036.0	34.4
0°-180°	17538.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4600	4600	4600	4600	4600	
5°	4624	4573	4588	4572	4564	439
15°	4449	4403	4422	4406	4398	1256
25°	4124	4074	4097	4053	4049	1898
35°	3633	3591	3602	3554	3550	2268
45°	2940	2901	2888	2837	2829	2252
55°	1926	1895	1882	1850	1842	1725
65°	1034	1026	1038	1030	1030	1047
75°	559	559	559	563	563	590
85°	143	150	158	158	158	166
90°	3	12	21	27	27	10
95°	65	243	773	336	226	69
105°	214	333	1326	2019	1899	227
115°	380	462	1061	2111	2405	375
125°	523	596	960	1618	1908	466
135°	630	700	933	1318	1486	487
145°	728	781	922	1120	1204	457
155°	823	852	916	1005	1034	380
165°	892	903	918	957	960	252
175°	924	927	922	933	930	88
180°	924	924	924	924	924	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4599.9	4599.9	4599.9	4599.9	4599.9
2.5°	4628.5	4588.2	4599.9	4589.9	4568.2
5°	4623.7	4573.3	4588.0	4572.0	4564.3
7.5°	4588.0	4538.5	4553.2	4537.2	4532.6
10°	4556.3	4509.9	4524.7	4508.6	4500.9
12.5°	4521.5	4471.9	4489.8	4470.6	4462.8
15°	4449.4	4402.9	4421.6	4405.6	4397.9
17.5°	4370.1	4320.5	4339.2	4320.8	4310.7
20°	4306.7	4260.3	4279.0	4251.2	4247.3
22.5°	4237.0	4190.5	4209.3	4172.0	4171.2
25°	4124.5	4074.1	4096.8	4053.1	4049.2
27.5°	3990.6	3944.1	3962.8	3918.4	3913.7
30°	3898.6	3852.2	3870.9	3823.2	3815.4
32.5°	3794.1	3750.7	3766.3	3718.7	3714.0
35°	3633.2	3590.6	3601.5	3553.9	3550.0
37.5°	3450.1	3411.4	3417.7	3365.3	3361.4
40°	3320.2	3281.5	3284.5	3229.0	3225.1
42.5°	3177.6	3138.8	3135.6	3080.0	3076.1
45°	2939.8	2901.1	2888.3	2836.6	2828.9
47.5°	2668.8	2630.1	2606.2	2564.1	2558.7
50°	2472.3	2433.6	2412.9	2377.0	2365.3
52.5°	2259.9	2221.2	2203.7	2170.9	2159.3
55°	1925.6	1894.6	1882.0	1850.1	1842.3
57.5°	1607.8	1586.9	1583.2	1552.3	1549.2
60°	1414.4	1402.8	1402.6	1374.8	1374.8
62.5°	1249.6	1241.1	1247.3	1229.0	1225.9
65°	1034.1	1026.3	1038.1	1030.1	1030.1
67.5°	863.7	863.7	870.9	867.7	867.7
70°	768.6	768.6	772.6	772.6	772.6
72.5°	683.1	680.0	690.2	690.1	687.0
75°	558.6	558.6	558.6	562.6	562.6
77.5°	435.0	435.8	439.0	438.1	435.0
80°	352.6	356.5	356.6	352.6	352.6
82.5°	270.2	274.1	274.2	273.3	270.2
85°	142.6	150.4	158.5	158.5	158.5
87.5°	41.8	55.9	67.6	68.7	65.6
90°	3.0	11.7	20.8	26.8	26.8
92.5°	26.8	121.5	211.0	90.6	76.7
95°	65.4	242.7	772.8	336.3	225.9
97.5°	108.2	268.0	1184.8	921.8	647.4
100°	136.7	285.0	1310.9	1328.8	1073.1
102.5°	165.3	301.9	1344.1	1643.4	1417.9
105°	214.0	333.2	1325.7	2018.6	1899.4
107.5°	264.5	369.8	1249.0	2212.3	2245.4
110°	300.2	396.1	1192.0	2250.4	2392.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	331.1	422.4	1134.9	2218.8	2433.2
115°	380.5	461.9	1061.2	2111.2	2404.7
117.5°	426.8	504.7	1014.2	1958.6	2289.4
120°	457.8	533.3	992.8	1856.3	2184.8
122.5°	483.9	559.5	978.5	1753.8	2070.6
125°	523.2	595.8	960.1	1617.7	1908.3
127.5°	558.2	630.3	950.0	1514.5	1763.9
130°	579.6	649.4	945.2	1449.7	1673.5
132.5°	601.0	670.8	940.5	1394.4	1592.6
135°	630.2	699.9	933.4	1317.7	1486.2
137.5°	661.7	725.0	929.8	1249.9	1391.7
140°	680.7	741.7	927.4	1206.7	1334.6
142.5°	699.7	756.1	925.0	1173.0	1279.9
145°	728.3	780.6	921.5	1119.6	1203.8
147.5°	760.4	805.1	918.5	1077.5	1143.8
150°	781.8	819.5	918.5	1053.4	1105.8
152.5°	798.4	831.5	916.1	1031.8	1074.8
155°	823.4	852.4	915.5	1005.3	1034.4
157.5°	847.7	870.4	915.5	987.4	1009.4
160°	862.0	882.4	915.5	975.4	992.8
162.5°	876.3	892.0	917.9	965.7	978.5
165°	891.7	903.4	918.5	957.2	960.1
167.5°	907.8	913.6	921.5	947.1	949.4
170°	912.5	918.4	921.5	942.3	942.3
172.5°	917.3	920.8	921.5	937.5	937.5
175°	924.4	927.3	921.5	933.3	930.4
177.5°	926.8	926.8	919.7	929.1	924.4
180°	924.4	924.4	924.4	924.4	924.4

(END OF REPORT)