

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: P564025

Luminaire Tested: **SQ4-PR1-050U-125D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564025
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-125D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

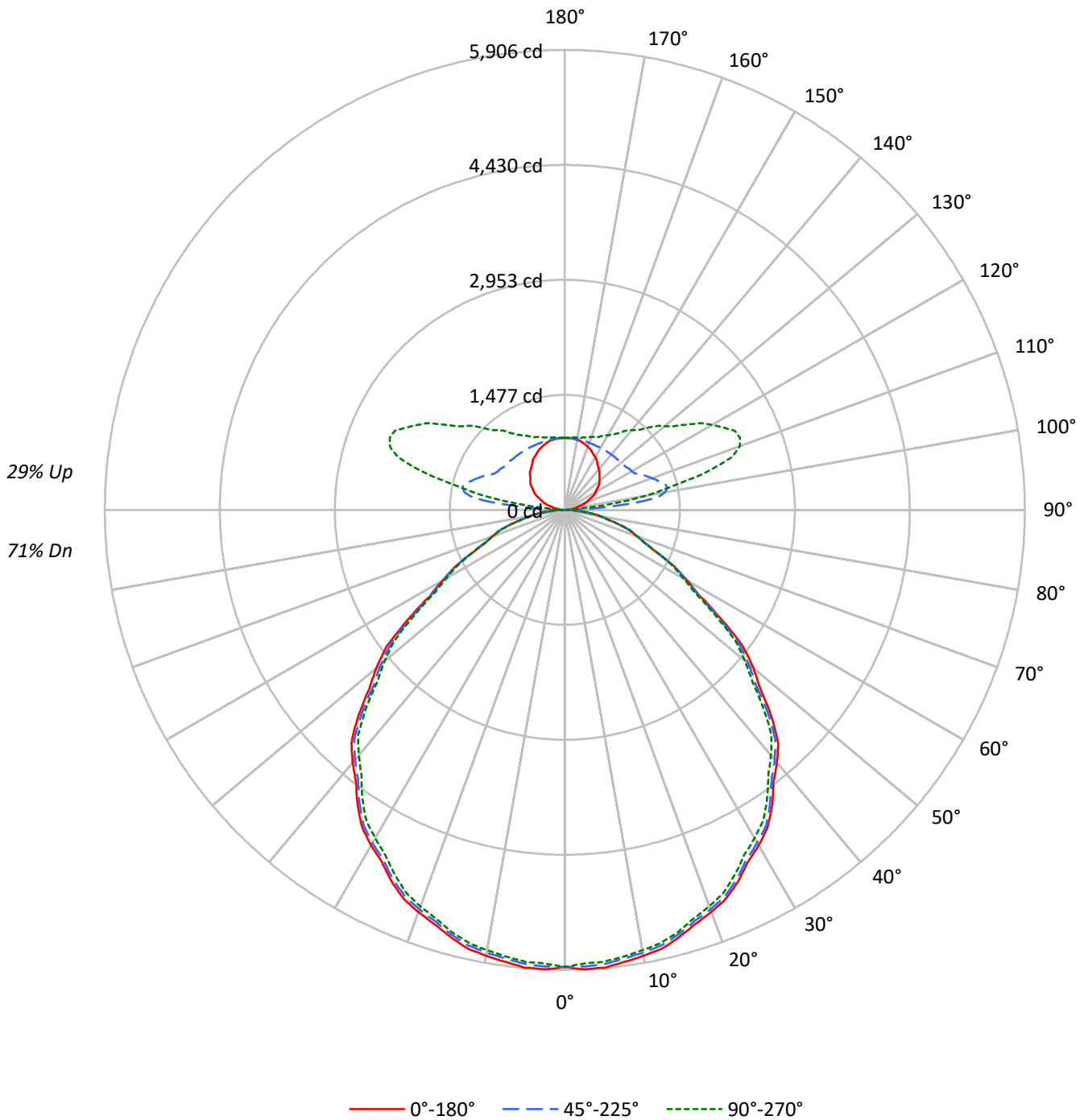
Lumens per Lamp: N/A
Luminaire Lumens: 20714.1 lumens
Efficiency: N/A
Efficacy: 124.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 167
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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	75	75	75	75	75	75	71	
1	103	99	95	91	97	93	90	87	84	81	79	75	73	71	67	66	64	64	64	64	60	
2	94	87	80	75	89	82	77	72	74	70	66	67	63	60	60	57	55	55	55	55	51	
3	86	77	69	63	81	73	66	61	66	60	56	59	55	52	53	50	47	47	47	47	44	
4	79	68	60	54	75	65	58	52	59	53	48	53	48	45	48	44	41	41	41	41	38	
5	73	61	53	47	69	58	51	45	53	47	42	48	43	39	43	39	36	36	36	36	33	
6	67	55	47	41	63	52	45	39	48	41	37	43	38	34	39	35	32	32	32	32	29	
7	62	50	42	36	59	48	40	35	43	37	33	40	34	30	36	32	28	28	28	28	26	
8	58	45	37	32	55	43	36	31	40	34	29	36	31	27	33	29	25	25	25	25	23	
9	54	41	34	29	51	40	33	28	37	30	26	33	28	25	31	26	23	23	23	23	21	
10	51	38	31	26	48	37	30	25	34	28	24	31	26	22	28	24	21	21	21	21	19	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18053	18053	18053
5°	18216	18075	17981
10°	18158	18032	17937
15°	18078	17965	17869
20°	17987	17871	17739
25°	17860	17740	17534
30°	17668	17542	17291
35°	17407	17255	17008
40°	17010	16827	16523
45°	16317	16031	15701
50°	15095	14732	14442
55°	13176	12877	12606
60°	11102	11009	10792
65°	9603	9640	9566
70°	8820	8865	8865
75°	8471	8471	8532
80°	7970	8058	7970
85°	6422	7135	7135



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	555.1	2.7
10°-20°	1588.2	7.7
20°-30°	2395.5	11.6
30°-40°	2854.3	13.8
40°-50°	2814.1	13.6
50°-60°	2150.7	10.4
60°-70°	1330.9	6.4
70°-80°	755.9	3.6
80°-90°	233.5	1.1
90°-100°	443.8	2.1
100°-110°	1205.5	5.8
110°-120°	1239.5	6.0
120°-130°	991.0	4.8
130°-140°	778.7	3.8
140°-150°	597.1	2.9
150°-160°	429.4	2.1
160°-170°	262.6	1.3
170°-180°	88.5	0.4
0°-30°	4538.9	21.9
0°-40°	7393.2	35.7
0°-60°	12357.9	59.7
0°-90°	14678.2	70.9
90°-120°	2888.8	13.9
90°-150°	5255.5	25.4
90°-180°	6036.0	29.1
0°-180°	20714.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5870	5870	5870	5870	5870	
5°	5900	5836	5855	5834	5825	560
15°	5678	5619	5643	5622	5612	1602
25°	5263	5199	5228	5172	5167	2422
35°	4636	4582	4596	4535	4530	2894
45°	3752	3702	3686	3620	3610	2874
55°	2457	2418	2402	2361	2351	2202
65°	1320	1310	1325	1315	1315	1337
75°	713	713	713	718	718	753
85°	182	192	202	202	202	212
90°	3	12	21	27	27	12
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°	5870.1	5870.1	5870.1	5870.1	5870.1
2.5°	5906.5	5855.1	5870.1	5857.4	5829.7
5°	5900.5	5836.2	5855.0	5834.5	5824.6
7.5°	5855.0	5791.7	5810.5	5790.1	5784.2
10°	5814.5	5755.2	5774.1	5753.6	5743.7
12.5°	5770.0	5706.7	5729.6	5705.1	5695.2
15°	5678.0	5618.7	5642.6	5622.2	5612.3
17.5°	5576.9	5513.6	5537.4	5513.9	5501.0
20°	5496.0	5436.6	5460.6	5425.1	5420.1
22.5°	5407.0	5347.7	5371.6	5324.0	5323.1
25°	5263.4	5199.1	5228.0	5172.3	5167.3
27.5°	5092.5	5033.2	5057.1	5000.3	4994.4
30°	4975.2	4915.9	4939.8	4878.9	4869.0
32.5°	4841.7	4786.3	4806.3	4745.5	4739.6
35°	4636.4	4582.1	4596.0	4535.2	4530.3
37.5°	4402.8	4353.4	4361.4	4294.5	4289.6
40°	4237.0	4187.6	4191.5	4120.6	4115.7
42.5°	4055.0	4005.6	4001.4	3930.5	3925.6
45°	3751.6	3702.2	3685.9	3619.9	3610.1
47.5°	3405.8	3356.3	3325.9	3272.1	3265.2
50°	3155.0	3105.6	3079.2	3033.3	3018.5
52.5°	2884.0	2834.6	2812.2	2770.4	2755.6
55°	2457.3	2417.7	2401.6	2361.0	2351.1
57.5°	2051.8	2025.1	2020.4	1980.9	1976.9
60°	1805.0	1790.2	1789.9	1754.5	1754.5
62.5°	1594.7	1583.8	1591.7	1568.3	1564.4
65°	1319.6	1309.8	1324.7	1314.6	1314.6
67.5°	1102.2	1102.2	1111.3	1107.3	1107.3
70°	980.9	980.9	985.9	985.9	985.9
72.5°	871.7	867.7	880.8	880.7	876.7
75°	712.9	712.9	712.9	718.0	718.0
77.5°	555.2	556.1	560.2	559.1	555.2
80°	450.0	454.9	455.0	450.0	450.0
82.5°	344.8	349.8	349.9	348.8	344.8
85°	182.0	191.9	202.2	202.2	202.2
87.5°	53.2	70.7	85.1	86.2	82.2
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)