

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: P564100

Luminaire Tested: **SQ4-PR1-075U-100D-840-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564100
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-PR1-075U-100D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

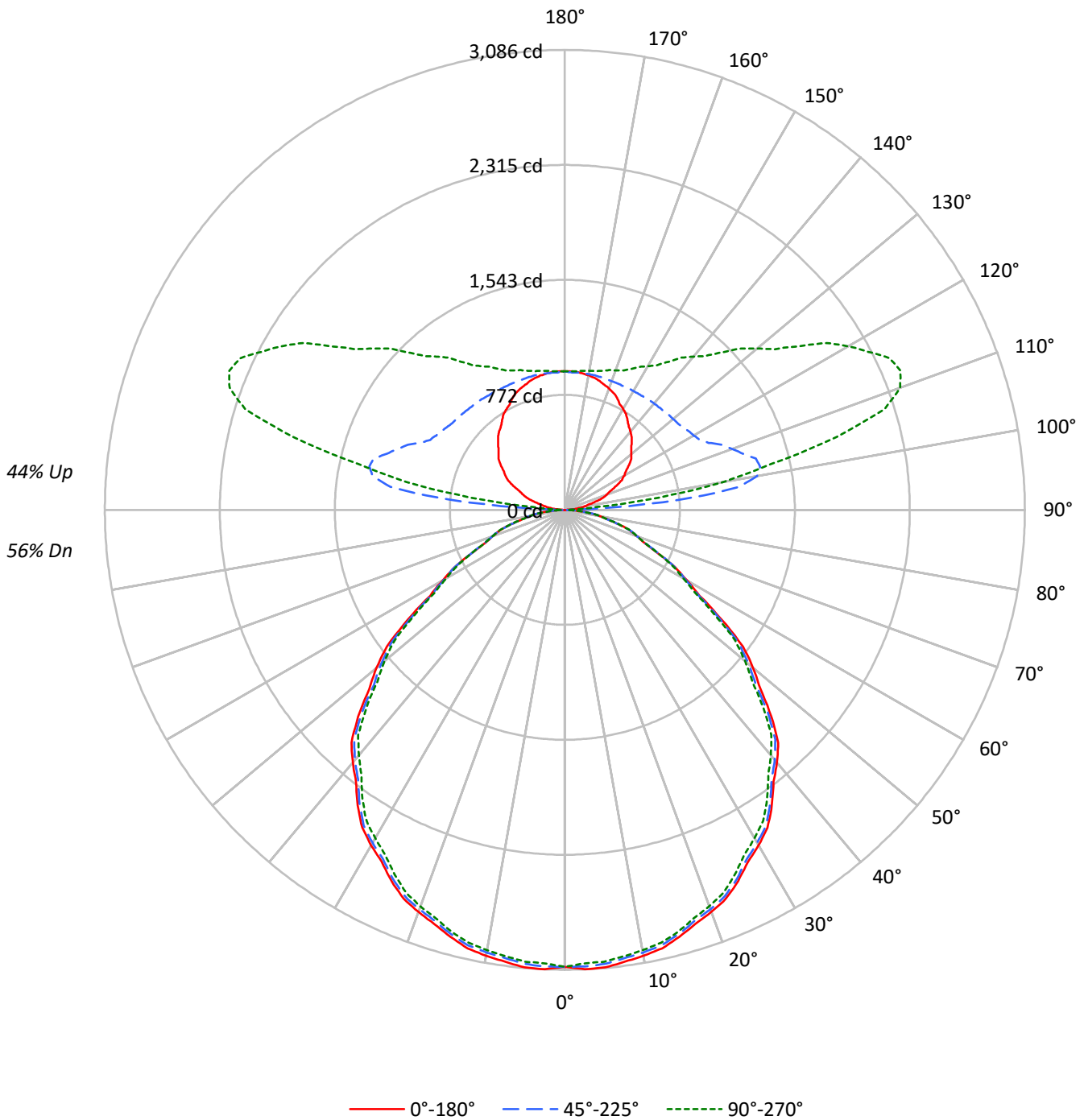
Lumens per Lamp: N/A
Luminaire Lumens: 13716.4 lumens
Efficiency: N/A
Efficacy: 126.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 108.3
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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	56
1	99	95	91	88	92	89	85	82	76	74	72	65	64	62	55	54	53	48
2	91	84	77	72	84	78	73	68	67	63	60	58	55	52	49	47	45	41
3	83	74	66	61	77	69	62	57	60	55	51	51	48	45	43	41	38	35
4	76	65	58	52	71	61	54	49	53	48	44	46	42	38	39	36	33	30
5	70	58	50	44	65	55	48	42	48	42	38	41	37	33	35	32	29	26
6	65	53	44	39	60	49	42	37	43	37	33	37	33	29	32	29	26	23
7	60	47	40	34	55	45	37	32	39	33	29	34	30	26	29	26	23	21
8	55	43	35	30	52	41	34	29	36	30	26	31	27	23	27	23	21	18
9	52	39	32	27	48	37	30	26	33	27	23	29	24	21	25	21	19	17
10	48	36	29	24	45	34	28	23	30	25	21	27	22	19	23	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14147	14147	14147
5°	14274	14164	14090
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°	13330	13186	12948
45°	12786	12562	12303
50°	11829	11544	11317
55°	10324	10090	9878
60°	8700	8626	8457
65°	7525	7554	7497
70°	6911	6948	6948
75°	6638	6638	6686
80°	6246	6315	6246
85°	5034	5595	5595



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	290.0	2.1
10°-20°	829.7	6.0
20°-30°	1251.5	9.1
30°-40°	1491.1	10.9
40°-50°	1470.1	10.7
50°-60°	1123.5	8.2
60°-70°	695.3	5.1
70°-80°	394.9	2.9
80°-90°	122.5	0.9
90°-100°	437.9	3.2
100°-110°	1204.6	8.8
110°-120°	1243.4	9.1
120°-130°	996.2	7.3
130°-140°	782.5	5.7
140°-150°	599.6	4.4
150°-160°	431.1	3.1
160°-170°	263.6	1.9
170°-180°	88.9	0.6
0°-30°	2371.2	17.3
0°-40°	3862.3	28.2
0°-60°	6455.9	47.1
0°-90°	7668.6	55.9
90°-120°	2885.9	21.0
90°-150°	5264.2	38.4
90°-180°	6048.0	44.1
0°-180°	13716.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3067	3067	3067	3067	3067	
5°	3082	3049	3059	3048	3043	292
15°	2966	2935	2948	2937	2932	837
25°	2750	2716	2731	2702	2700	1265
35°	2422	2394	2401	2369	2367	1512
45°	1960	1934	1926	1891	1886	1501
55°	1284	1263	1255	1233	1228	1150
65°	689	684	692	687	687	698
75°	372	372	372	375	375	393
85°	95	100	106	106	106	111
90°	2	8	14	18	18	8
95°	65	239	774	331	211	69
105°	215	331	1327	2022	1886	227
115°	381	464	1065	2120	2406	376
125°	525	599	966	1634	1914	469
135°	634	704	938	1321	1495	489
145°	733	783	924	1126	1213	460
155°	830	857	918	1012	1041	381
165°	897	908	922	960	966	253
175°	928	930	924	936	934	88
180°	928	928	928	928	928	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3066.6	3066.6	3066.6	3066.6	3066.6
2.5°	3085.6	3058.8	3066.6	3060.0	3045.5
5°	3082.5	3048.9	3058.7	3048.0	3042.8
7.5°	3058.7	3025.6	3035.5	3024.8	3021.7
10°	3037.6	3006.6	3016.4	3005.8	3000.6
12.5°	3014.3	2981.3	2993.2	2980.4	2975.2
15°	2966.2	2935.3	2947.8	2937.1	2931.9
17.5°	2913.4	2880.4	2892.8	2880.5	2873.8
20°	2871.2	2840.2	2852.7	2834.1	2831.5
22.5°	2824.7	2793.7	2806.2	2781.3	2780.8
25°	2749.7	2716.1	2731.2	2702.1	2699.5
27.5°	2660.4	2629.4	2641.9	2612.2	2609.1
30°	2599.1	2568.1	2580.6	2548.8	2543.6
32.5°	2529.4	2500.4	2510.9	2479.1	2476.0
35°	2422.1	2393.7	2401.0	2369.2	2366.7
37.5°	2300.1	2274.3	2278.4	2243.5	2240.9
40°	2213.5	2187.6	2189.7	2152.7	2150.1
42.5°	2118.4	2092.5	2090.4	2053.3	2050.8
45°	1959.9	1934.1	1925.6	1891.1	1885.9
47.5°	1779.2	1753.4	1737.5	1709.4	1705.8
50°	1648.2	1622.4	1608.6	1584.6	1576.9
52.5°	1506.6	1480.8	1469.1	1447.3	1439.5
55°	1283.7	1263.0	1254.6	1233.4	1228.2
57.5°	1071.9	1057.9	1055.5	1034.8	1032.8
60°	943.0	935.2	935.0	916.6	916.6
62.5°	833.1	827.4	831.5	819.3	817.2
65°	689.4	684.2	692.0	686.8	686.8
67.5°	575.8	575.8	580.6	578.5	578.5
70°	512.4	512.4	515.1	515.1	515.1
72.5°	455.4	453.3	460.1	460.1	458.0
75°	372.4	372.4	372.4	375.1	375.1
77.5°	290.0	290.5	292.7	292.1	290.0
80°	235.1	237.7	237.7	235.1	235.1
82.5°	180.1	182.7	182.8	182.2	180.1
85°	95.1	100.3	105.7	105.7	105.7
87.5°	27.9	37.3	45.0	45.8	43.7
90°	2.0	7.8	13.8	17.8	17.8
92.5°	27.3	116.5	201.9	77.5	63.6
95°	65.2	239.0	774.3	331.1	211.3
97.5°	106.3	265.0	1181.6	910.4	642.3
100°	136.3	281.1	1309.6	1321.8	1078.5
102.5°	164.7	300.3	1342.7	1639.9	1416.6
105°	215.3	331.2	1327.3	2021.5	1886.3
107.5°	263.5	369.3	1251.9	2208.4	2248.6
110°	298.3	394.8	1195.0	2254.9	2394.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	329.9	423.3	1138.1	2224.9	2436.6
115°	381.2	464.3	1064.6	2120.0	2405.8
117.5°	430.2	506.7	1018.0	1972.7	2296.0
120°	460.2	533.6	997.5	1862.3	2196.4
122.5°	487.1	560.5	983.3	1765.5	2082.7
125°	525.4	598.8	965.9	1633.9	1914.0
127.5°	561.7	631.7	954.4	1524.1	1769.8
130°	580.7	652.2	948.1	1458.8	1682.9
132.5°	602.8	674.3	943.4	1401.5	1603.9
135°	634.0	703.6	938.2	1321.4	1495.2
137.5°	663.3	727.8	933.9	1256.7	1400.0
140°	685.4	745.3	932.3	1213.7	1343.1
142.5°	704.4	759.6	929.1	1175.4	1286.3
145°	732.8	783.0	924.4	1125.9	1212.8
147.5°	763.2	806.5	922.0	1082.0	1151.5
150°	782.2	820.8	920.4	1058.0	1112.0
152.5°	799.6	835.1	918.9	1037.2	1082.0
155°	829.6	856.6	918.5	1012.0	1040.9
157.5°	851.3	873.3	918.5	991.2	1011.3
160°	867.1	884.5	918.5	980.1	995.5
162.5°	879.8	894.0	920.1	970.5	982.9
165°	896.7	908.3	922.4	960.1	965.9
167.5°	908.6	917.5	924.4	951.3	952.8
170°	916.5	922.3	924.4	948.1	948.1
172.5°	922.8	925.5	924.4	943.3	941.8
175°	928.3	930.3	924.4	936.2	934.3
177.5°	929.9	929.9	923.6	933.0	929.9
180°	928.3	928.3	928.3	928.3	928.3

(END OF REPORT)