

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: P520247

Luminaire Tested: **SQ4-F-100U-125D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520247
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G3-1910-536-20)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-100U-125D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

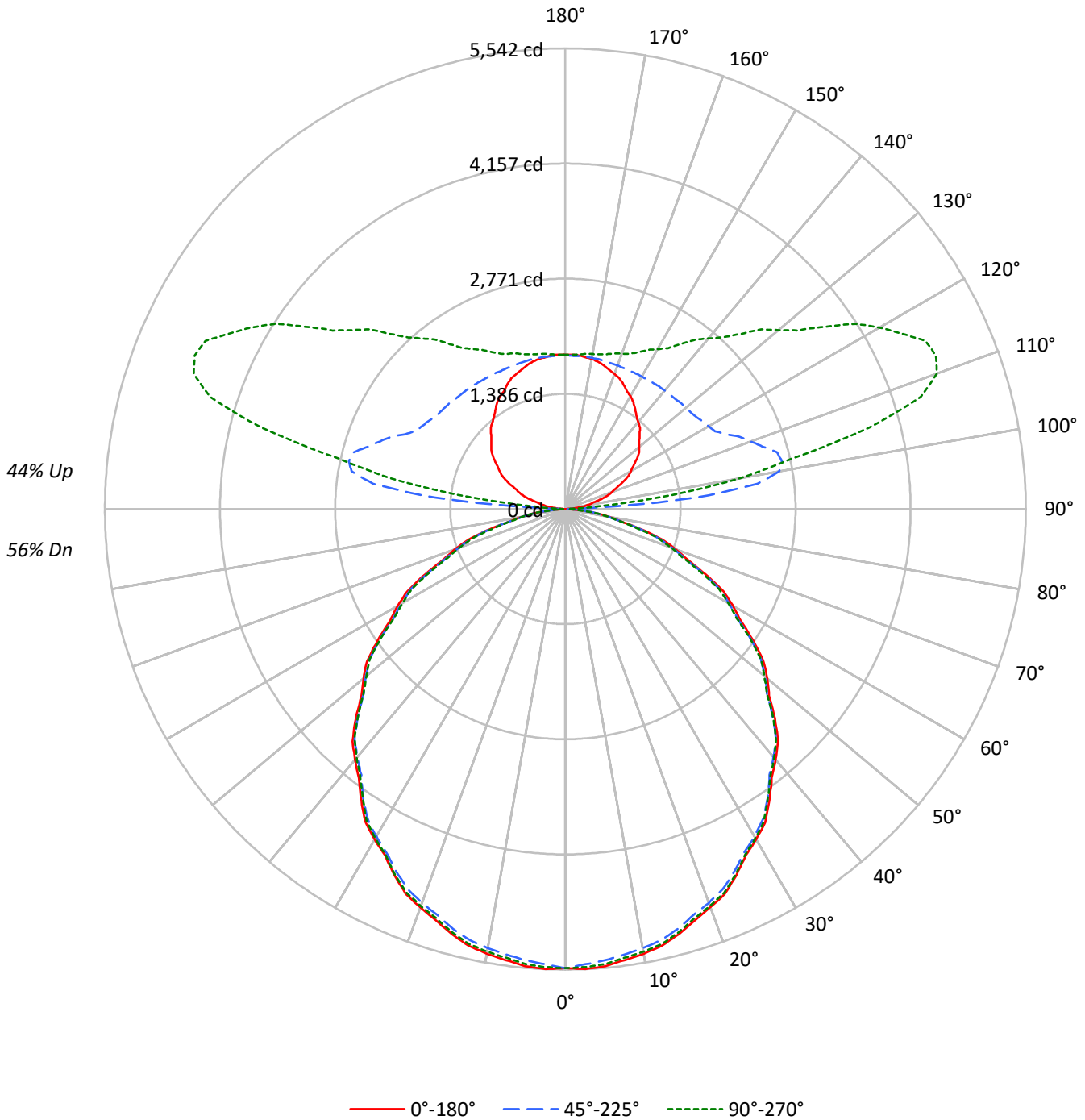
Lumens per Lamp: N/A
Luminaire Lumens: 27125.8 lumens
Efficiency: N/A
Efficacy: 125.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 215.6
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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	56
1	99	95	91	87	92	88	85	82	76	73	71	65	63	61	54	53	52	47
2	90	83	76	71	83	77	71	67	66	62	59	57	54	51	48	45	43	39
3	82	73	65	59	76	68	61	56	58	53	49	50	46	43	42	39	37	33
4	75	64	56	50	69	60	53	47	52	46	42	44	40	37	37	34	32	28
5	69	57	49	43	64	53	46	40	46	41	36	40	35	32	34	30	28	24
6	63	51	43	37	59	48	41	35	42	36	31	36	31	28	31	27	24	21
7	59	46	38	32	54	43	36	31	38	32	28	33	28	25	28	24	21	19
8	54	42	34	29	50	39	32	27	34	29	25	30	25	22	26	22	19	17
9	51	38	31	26	47	36	29	24	32	26	22	27	23	20	24	20	17	15
10	47	35	28	23	44	33	26	22	29	24	20	25	21	18	22	18	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16991	16991	16991
5°	17046	16830	16971
10°	16968	16759	16892
15°	16854	16651	16786
20°	16698	16509	16638
25°	16508	16333	16467
30°	16304	16164	16250
35°	16073	15936	15947
40°	15808	15637	15686
45°	15512	15340	15366
50°	15173	14998	14955
55°	14787	14575	14542
60°	14307	13989	13914
65°	13564	13275	13099
70°	12631	12303	12139
75°	11236	10983	10659
80°	9155	8885	8832
85°	5473	6224	6224



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	521.3	1.9
10°-20°	1484.6	5.5
20°-30°	2230.4	8.2
30°-40°	2661.4	9.8
40°-50°	2728.0	10.1
50°-60°	2431.5	9.0
60°-70°	1810.1	6.7
70°-80°	980.6	3.6
80°-90°	229.0	0.8
90°-100°	868.4	3.2
100°-110°	2397.5	8.8
110°-120°	2472.6	9.1
120°-130°	1986.9	7.3
130°-140°	1561.5	5.8
140°-150°	1197.6	4.4
150°-160°	860.7	3.2
160°-170°	526.4	1.9
170°-180°	177.5	0.7
0°-30°	4236.3	15.6
0°-40°	6897.7	25.4
0°-60°	12057.2	44.4
0°-90°	15076.8	55.6
90°-120°	5738.4	21.2
90°-150°	10484.4	38.7
90°-180°	12049.0	44.4
0°-180°	27125.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5525	5525	5525	5525	5525	
5°	5522	5513	5452	5500	5497	524
15°	5294	5282	5230	5275	5272	1492
25°	4865	4856	4813	4841	4853	2240
35°	4281	4278	4245	4245	4248	2677
45°	3567	3558	3527	3521	3533	2748
55°	2758	2749	2718	2697	2712	2463
65°	1864	1852	1824	1812	1800	1846
75°	946	946	924	906	897	1004
85°	155	176	176	179	176	214
90°	6	12	24	27	30	13
95°	128	470	1576	648	421	137
105°	427	659	2638	4027	3792	455
115°	766	925	2124	4206	4783	752
125°	1050	1195	1926	3259	3824	935
135°	1264	1400	1872	2639	2976	978
145°	1466	1567	1848	2247	2418	918
155°	1653	1708	1834	2016	2080	762
165°	1789	1812	1842	1914	1929	504
175°	1854	1857	1846	1872	1866	176
180°	1854	1854	1854	1854	1854	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5524.7	5524.7	5524.7	5524.7	5524.7
2.5°	5541.7	5532.2	5483.3	5524.5	5517.4
5°	5521.6	5512.7	5451.7	5500.3	5497.3
7.5°	5474.8	5463.5	5407.9	5453.4	5448.1
10°	5433.5	5424.5	5366.6	5412.1	5409.1
12.5°	5382.4	5373.5	5315.5	5361.1	5360.5
15°	5293.6	5281.7	5229.8	5275.3	5272.3
17.5°	5187.2	5173.5	5122.1	5158.1	5164.1
20°	5102.0	5093.1	5044.3	5077.8	5083.8
22.5°	5014.5	5003.1	4951.8	4990.3	4996.2
25°	4864.9	4856.0	4813.2	4840.9	4852.7
27.5°	4700.7	4700.7	4661.2	4680.8	4687.9
30°	4591.2	4591.2	4551.7	4564.2	4576.0
32.5°	4474.5	4465.0	4427.7	4437.7	4449.5
35°	4281.1	4278.2	4244.6	4244.7	4247.7
37.5°	4081.0	4072.7	4036.0	4038.8	4053.1
40°	3937.5	3931.5	3894.9	3895.3	3907.1
42.5°	3791.6	3785.6	3753.9	3749.1	3753.9
45°	3566.6	3557.6	3527.0	3521.3	3533.1
47.5°	3327.0	3329.3	3292.9	3284.5	3291.1
50°	3171.3	3171.3	3134.8	3116.8	3125.7
52.5°	3008.3	3003.6	2967.0	2946.8	2967.6
55°	2757.8	2748.9	2718.3	2697.3	2712.2
57.5°	2501.2	2487.5	2456.8	2433.9	2442.2
60°	2326.0	2305.2	2274.3	2256.2	2262.2
62.5°	2143.6	2132.3	2099.2	2071.5	2084.6
65°	1863.9	1852.0	1824.3	1811.9	1800.0
67.5°	1589.6	1581.9	1550.7	1537.7	1530.0
70°	1404.7	1389.8	1368.2	1352.9	1350.0
72.5°	1224.7	1207.5	1185.8	1172.8	1165.1
75°	945.6	945.6	924.3	905.9	897.0
77.5°	679.9	682.2	664.7	658.5	654.3
80°	516.9	516.9	501.7	495.7	498.7
82.5°	361.2	368.3	363.0	354.4	350.3
85°	155.1	175.8	176.4	179.3	176.4
87.5°	28.0	45.8	51.1	46.7	42.6
90°	5.9	11.8	23.7	26.8	29.7
92.5°	53.4	221.7	396.4	144.6	112.8
95°	127.6	469.9	1575.5	647.6	421.3
97.5°	211.3	526.4	2333.9	1796.8	1301.3
100°	272.9	560.2	2614.0	2632.4	2139.3
102.5°	332.3	598.7	2668.5	3252.6	2784.8
105°	427.2	659.3	2637.8	4026.9	3791.9
107.5°	528.1	734.7	2490.6	4400.3	4486.2
110°	599.4	785.0	2376.6	4480.7	4759.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	663.5	842.1	2269.8	4417.2	4828.0
115°	765.5	925.0	2124.4	4205.6	4782.9
117.5°	854.5	1013.5	2028.9	3907.7	4564.6
120°	913.8	1070.5	1990.9	3706.0	4367.5
122.5°	970.8	1120.5	1960.0	3517.8	4144.3
125°	1050.4	1195.4	1925.6	3258.8	3824.5
127.5°	1118.0	1263.0	1905.4	3039.9	3527.8
130°	1163.1	1308.1	1895.9	2905.9	3349.8
132.5°	1205.9	1343.9	1886.4	2793.5	3195.5
135°	1263.9	1400.3	1872.2	2639.4	2976.0
137.5°	1329.2	1453.4	1865.1	2510.1	2797.3
140°	1364.8	1486.7	1860.3	2423.9	2676.2
142.5°	1405.2	1517.8	1855.6	2347.2	2569.5
145°	1465.7	1567.2	1848.5	2247.0	2418.1
147.5°	1523.9	1612.6	1841.9	2162.4	2295.3
150°	1566.6	1639.1	1839.6	2112.0	2219.3
152.5°	1599.9	1667.7	1837.2	2068.9	2157.7
155°	1652.7	1707.8	1833.6	2016.0	2079.9
157.5°	1701.3	1743.7	1834.2	1977.6	2021.2
160°	1729.7	1767.5	1836.6	1956.0	1987.9
162.5°	1753.5	1786.6	1839.0	1936.9	1961.8
165°	1789.1	1812.3	1842.5	1914.0	1928.6
167.5°	1816.4	1830.4	1845.5	1900.2	1904.8
170°	1830.6	1842.3	1845.5	1893.0	1893.0
172.5°	1842.5	1849.5	1845.5	1883.5	1881.1
175°	1854.4	1857.3	1845.5	1872.1	1866.3
177.5°	1859.1	1856.9	1844.9	1861.4	1856.8
180°	1854.4	1854.4	1854.4	1854.4	1854.4

(END OF REPORT)