

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: P520037

Luminaire Tested: **SQ4-F-075U-100D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520037
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-075U-100D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

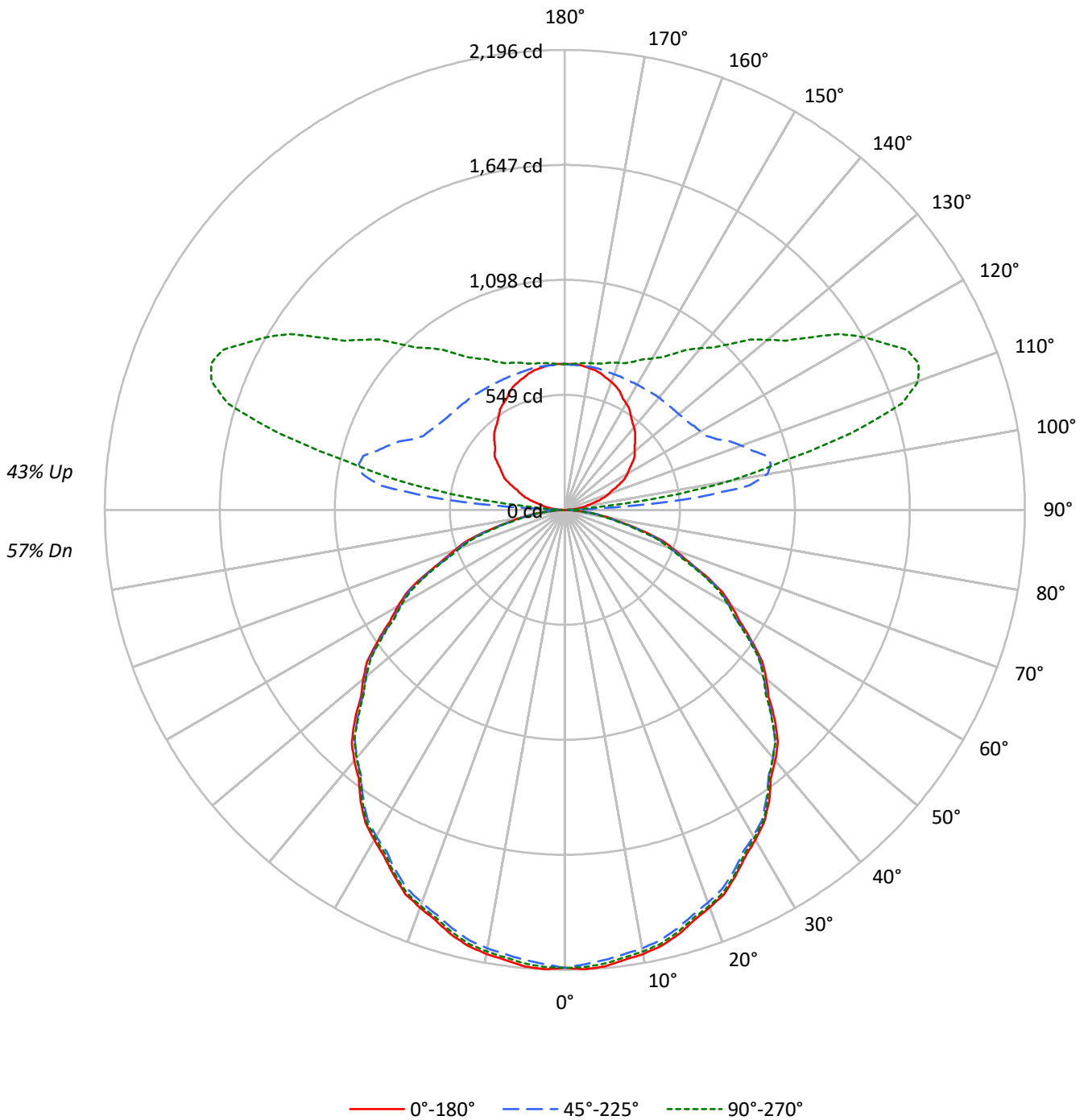
Lumens per Lamp: N/A
Luminaire Lumens: 10503.2 lumens
Efficiency: N/A
Efficacy: 131.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 79.8
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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	57				57
1	99	95	91	87	92	88	85	82	76	74	72	65	64	62	55	54	53	48				48
2	90	83	77	71	84	77	72	67	67	63	59	57	54	52	48	46	44	40				40
3	82	73	65	59	76	68	61	56	59	54	50	51	47	43	43	40	38	34				34
4	75	64	56	50	70	60	53	47	52	47	42	45	41	37	38	35	32	29				29
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	31	28	25				25
6	64	51	43	37	59	48	41	35	42	36	32	36	32	28	31	27	25	22				22
7	59	46	38	33	55	44	36	31	38	32	28	33	28	25	28	25	22	19				19
8	55	42	34	29	51	40	32	27	35	29	25	30	26	22	26	22	20	17				17
9	51	38	31	26	47	36	29	24	32	26	22	28	23	20	24	20	18	15				15
10	48	35	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16	14				14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13453	13453	13453
5°	13514	13328	13431
10°	13445	13276	13380
15°	13364	13182	13288
20°	13226	13069	13177
25°	13081	12929	13030
30°	12922	12783	12847
35°	12760	12603	12670
40°	12547	12403	12415
45°	12327	12158	12118
50°	12009	11865	11836
55°	11654	11526	11445
60°	11301	11099	11062
65°	10750	10509	10422
70°	9990	9745	9557
75°	8919	8634	8456
80°	7339	7074	6751
85°	4340	4771	4877



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.4	2.0
10°-20°	587.9	5.6
20°-30°	882.8	8.4
30°-40°	1053.6	10.0
40°-50°	1079.9	10.3
50°-60°	961.6	9.2
60°-70°	716.9	6.8
70°-80°	388.1	3.7
80°-90°	90.1	0.9
90°-100°	328.4	3.1
100°-110°	903.5	8.6
110°-120°	932.5	8.9
120°-130°	747.2	7.1
130°-140°	586.8	5.6
140°-150°	449.7	4.3
150°-160°	323.3	3.1
160°-170°	197.7	1.9
170°-180°	66.6	0.6
0°-30°	1677.1	16.0
0°-40°	2730.7	26.0
0°-60°	4772.2	45.4
0°-90°	5967.3	56.8
90°-120°	2164.4	20.6
90°-150°	3948.2	37.6
90°-180°	4536.0	43.2
0°-180°	10503.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2187	2187	2187	2187	2187	
5°	2189	2184	2159	2178	2175	208
15°	2099	2091	2070	2087	2087	591
25°	1928	1923	1905	1916	1920	888
35°	1699	1692	1678	1681	1687	1061
45°	1417	1410	1398	1390	1393	1090
55°	1087	1088	1075	1064	1067	973
65°	739	736	722	715	716	730
75°	375	371	363	356	356	400
85°	62	67	68	69	69	86
90°	2	6	10	13	13	5
95°	49	179	581	248	159	52
105°	162	248	996	1516	1415	170
115°	286	348	798	1590	1804	282
125°	394	449	724	1226	1436	352
135°	476	528	704	991	1121	367
145°	550	587	693	844	910	345
155°	622	642	689	759	781	286
165°	673	681	692	720	724	190
175°	696	698	693	702	701	66
180°	696	696	696	696	696	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2187.2	2187.2	2187.2	2187.2	2187.2
2.5°	2195.7	2190.9	2171.6	2187.1	2184.9
5°	2188.7	2184.4	2158.7	2178.1	2175.3
7.5°	2168.3	2164.0	2141.3	2159.3	2156.6
10°	2152.7	2148.3	2125.7	2143.6	2142.2
12.5°	2132.3	2127.9	2105.3	2123.2	2121.7
15°	2098.7	2091.3	2070.1	2086.7	2086.7
17.5°	2054.3	2048.6	2029.0	2042.8	2043.1
20°	2020.6	2016.2	1996.6	2011.7	2013.1
22.5°	1987.0	1982.5	1960.5	1974.4	1977.1
25°	1927.5	1923.1	1905.1	1915.7	1920.0
27.5°	1866.3	1859.8	1841.9	1851.4	1854.5
30°	1819.4	1816.5	1799.9	1804.5	1808.9
32.5°	1770.2	1767.2	1753.1	1755.3	1763.3
35°	1699.4	1692.0	1678.4	1681.4	1687.4
37.5°	1615.5	1612.1	1598.8	1597.1	1602.7
40°	1562.7	1556.9	1544.7	1541.8	1546.2
42.5°	1505.1	1499.2	1484.6	1481.8	1487.4
45°	1417.1	1409.7	1397.7	1390.1	1393.1
47.5°	1318.7	1318.7	1306.0	1297.4	1301.8
50°	1255.0	1255.0	1240.0	1232.6	1236.9
52.5°	1189.0	1190.1	1173.9	1170.0	1168.5
55°	1086.8	1088.3	1074.8	1064.4	1067.3
57.5°	988.3	985.2	969.4	962.6	964.1
60°	918.7	914.3	902.2	891.8	899.2
62.5°	847.8	845.9	833.8	822.0	821.2
65°	738.6	735.7	722.1	714.6	716.1
67.5°	629.9	626.4	614.0	603.3	607.1
70°	555.5	555.5	541.9	535.8	531.4
72.5°	487.0	481.1	471.0	462.6	459.3
75°	375.3	370.9	363.3	355.8	355.8
77.5°	273.2	269.4	264.5	259.4	257.9
80°	207.2	205.7	199.7	198.0	190.6
82.5°	145.9	145.7	142.0	138.1	137.8
85°	61.5	67.4	67.6	69.1	69.1
87.5°	11.1	19.0	18.9	17.1	17.1
90°	1.5	5.9	10.4	13.3	13.3
92.5°	20.4	87.3	151.4	58.1	47.7
95°	48.9	179.3	580.7	248.3	158.6
97.5°	79.7	198.8	886.2	682.8	481.7
100°	102.2	210.9	982.1	991.3	808.8
102.5°	123.5	225.3	1007.1	1229.9	1062.4
105°	161.5	248.3	995.5	1516.2	1414.8
107.5°	197.6	277.0	938.9	1656.3	1686.5
110°	223.7	296.1	896.3	1691.2	1795.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	247.4	317.5	853.6	1668.7	1827.4
115°	285.9	348.2	798.4	1589.9	1804.3
117.5°	322.7	380.0	763.5	1479.5	1722.0
120°	345.2	400.2	748.1	1396.8	1647.3
122.5°	365.3	420.4	737.4	1324.2	1562.0
125°	394.1	449.1	724.4	1225.5	1435.5
127.5°	421.3	473.7	715.8	1143.1	1327.3
130°	435.6	489.2	711.1	1094.1	1262.2
132.5°	452.1	505.7	707.5	1051.1	1202.9
135°	475.6	527.7	703.7	991.0	1121.4
137.5°	497.5	545.8	700.4	942.5	1050.0
140°	514.0	559.0	699.3	910.3	1007.4
142.5°	528.3	569.7	696.8	881.6	964.7
145°	549.6	587.3	693.3	844.4	909.6
147.5°	572.4	604.9	691.5	811.5	863.7
150°	586.7	615.6	690.4	793.4	834.0
152.5°	599.7	626.3	689.2	777.9	811.5
155°	622.2	642.4	688.9	759.0	780.7
157.5°	638.5	655.0	688.9	743.4	758.4
160°	650.4	663.4	688.9	735.1	746.6
162.5°	659.8	670.5	690.1	727.9	737.1
165°	672.6	681.3	691.8	720.1	724.4
167.5°	681.5	688.1	693.3	713.4	714.6
170°	687.3	691.7	693.3	711.1	711.1
172.5°	692.1	694.2	693.3	707.5	706.3
175°	696.2	697.7	693.3	702.2	700.7
177.5°	697.4	697.4	692.7	699.7	697.4
180°	696.2	696.2	696.2	696.2	696.2

(END OF REPORT)