

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: P563945

Luminaire Tested: **SQ4-PR1-050U-050D-830-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563945
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-050D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

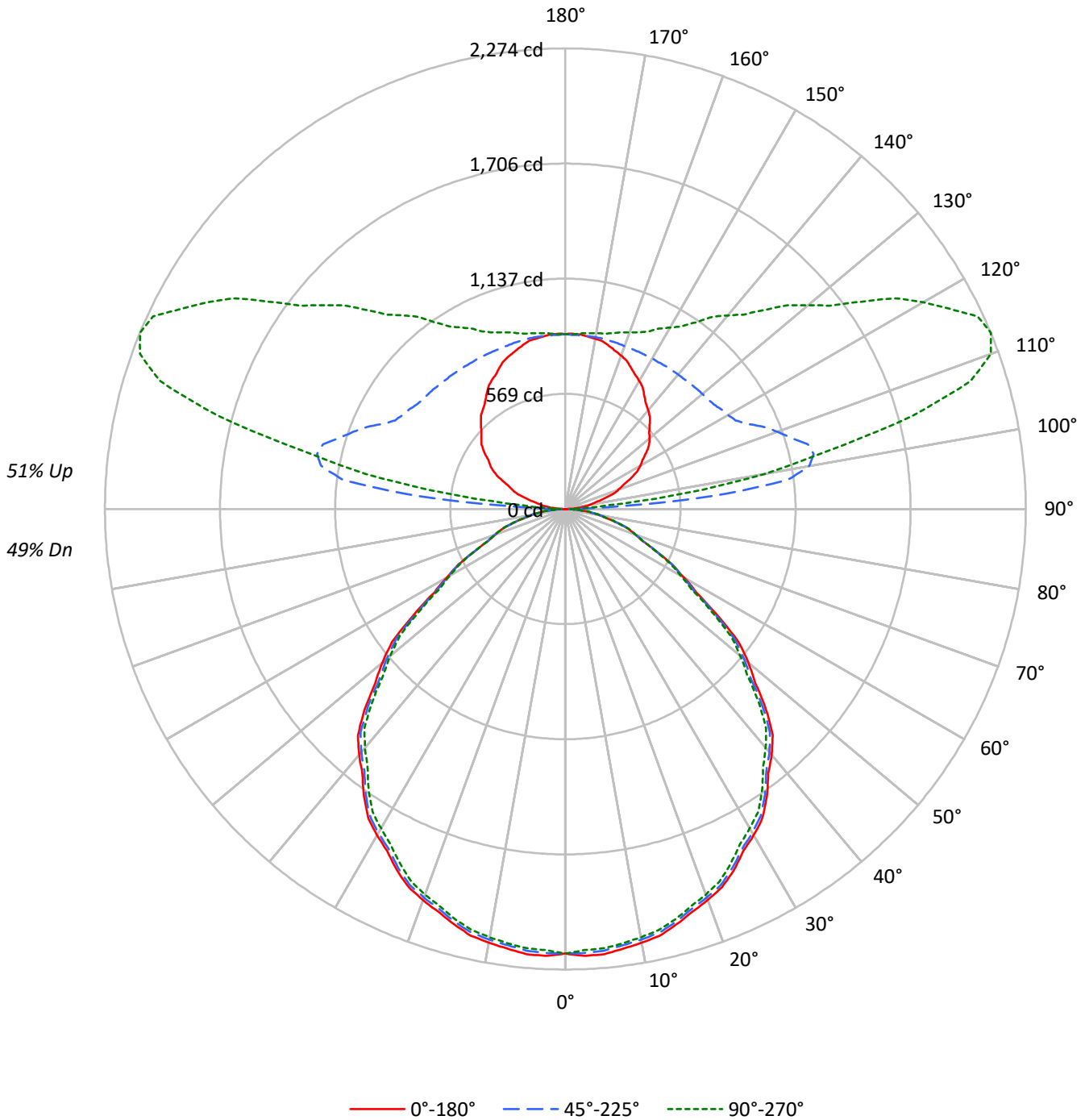
Lumens per Lamp: N/A
Luminaire Lumens: 11131.0 lumens
Efficiency: N/A
Efficacy: 139.8 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 79.6
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	49
1	98	94	90	86	90	87	83	80	73	71	69	61	59	58	49	48	47	42
2	89	82	76	71	82	76	71	66	64	61	57	54	51	49	44	42	40	36
3	82	72	65	60	75	67	61	56	57	52	48	48	44	41	39	37	35	31
4	75	64	56	51	69	60	53	48	51	46	42	43	39	36	35	32	30	26
5	69	57	49	43	63	53	46	41	46	40	36	38	34	31	32	29	26	23
6	63	51	43	38	58	48	41	36	41	36	31	35	31	27	29	26	23	20
7	59	47	39	33	54	43	36	31	37	32	28	32	27	24	26	23	21	18
8	54	42	35	29	50	39	33	28	34	29	25	29	25	22	24	21	19	16
9	51	39	31	26	47	36	29	25	31	26	22	27	22	19	22	19	17	15
10	47	35	28	23	44	33	27	22	29	24	20	25	20	18	21	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6751	6751	6751
5°	6811	6759	6724
10°	6790	6743	6707
15°	6760	6718	6682
20°	6726	6683	6633
25°	6678	6634	6557
30°	6607	6559	6466
35°	6509	6452	6360
40°	6360	6292	6179
45°	6101	5995	5871
50°	5644	5509	5400
55°	4926	4815	4714
60°	4151	4117	4035
65°	3590	3604	3577
70°	3298	3315	3315
75°	3168	3168	3190
80°	2981	3014	2981
85°	2403	2668	2668



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.6	1.9
10°-20°	593.9	5.3
20°-30°	895.8	8.0
30°-40°	1067.3	9.6
40°-50°	1052.3	9.5
50°-60°	804.2	7.2
60°-70°	497.7	4.5
70°-80°	282.7	2.5
80°-90°	89.3	0.8
90°-100°	414.7	3.7
100°-110°	1126.6	10.1
110°-120°	1158.3	10.4
120°-130°	926.1	8.3
130°-140°	727.6	6.5
140°-150°	557.9	5.0
150°-160°	401.2	3.6
160°-170°	245.4	2.2
170°-180°	82.7	0.7
0°-30°	1697.2	15.2
0°-40°	2764.5	24.8
0°-60°	4620.9	41.5
0°-90°	5490.6	49.3
90°-120°	2699.5	24.3
90°-150°	4911.2	44.1
90°-180°	5640.0	50.7
0°-180°	11131.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2195	2195	2195	2195	2195	
5°	2206	2182	2189	2182	2178	209
15°	2123	2101	2110	2102	2099	599
25°	1968	1944	1955	1934	1932	906
35°	1734	1713	1719	1696	1694	1082
45°	1403	1384	1378	1354	1350	1075
55°	919	904	898	883	879	823
65°	493	490	495	492	492	500
75°	267	267	267	268	268	282
85°	68	72	76	76	76	79
90°	3	11	19	25	25	7
95°	61	227	722	314	211	65
105°	200	311	1239	1886	1775	212
115°	356	432	992	1973	2247	351
125°	489	557	897	1512	1783	436
135°	589	654	872	1231	1389	455
145°	680	729	861	1046	1125	427
155°	769	797	856	940	967	355
165°	833	844	858	894	897	235
175°	864	867	861	872	869	82
180°	864	864	864	864	864	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2195.0	2195.0	2195.0	2195.0	2195.0
2.5°	2208.6	2189.4	2195.0	2190.2	2179.9
5°	2206.3	2182.3	2189.3	2181.7	2178.0
7.5°	2189.3	2165.7	2172.7	2165.1	2162.9
10°	2174.2	2152.0	2159.1	2151.4	2147.7
12.5°	2157.6	2133.9	2142.4	2133.3	2129.6
15°	2123.2	2101.0	2109.9	2102.3	2098.6
17.5°	2085.3	2061.7	2070.6	2061.8	2057.0
20°	2055.1	2032.9	2041.9	2028.6	2026.7
22.5°	2021.8	1999.6	2008.6	1990.8	1990.4
25°	1968.1	1944.1	1954.9	1934.1	1932.2
27.5°	1904.2	1882.0	1891.0	1869.8	1867.5
30°	1860.4	1838.2	1847.1	1824.4	1820.7
32.5°	1810.4	1789.7	1797.2	1774.5	1772.3
35°	1733.7	1713.4	1718.6	1695.8	1694.0
37.5°	1646.3	1627.9	1630.8	1605.8	1604.0
40°	1584.3	1565.8	1567.3	1540.8	1539.0
42.5°	1516.3	1497.8	1496.2	1469.7	1467.9
45°	1402.8	1384.3	1378.3	1353.6	1349.9
47.5°	1273.5	1255.0	1243.6	1223.5	1221.0
50°	1179.7	1161.3	1151.4	1134.2	1128.7
52.5°	1078.4	1059.9	1051.6	1035.9	1030.4
55°	918.8	904.0	898.0	882.8	879.1
57.5°	767.2	757.2	755.5	740.7	739.2
60°	674.9	669.4	669.3	656.0	656.0
62.5°	596.3	592.2	595.2	586.4	585.0
65°	493.4	489.8	495.3	491.6	491.6
67.5°	412.2	412.2	415.6	414.0	414.0
70°	366.8	366.8	368.7	368.7	368.7
72.5°	325.9	324.5	329.3	329.3	327.8
75°	266.6	266.6	266.6	268.5	268.5
77.5°	207.6	208.0	209.5	209.1	207.6
80°	168.3	170.1	170.2	168.3	168.3
82.5°	128.9	130.8	130.8	130.4	128.9
85°	68.1	71.8	75.6	75.6	75.6
87.5°	20.2	27.8	34.1	35.2	33.7
90°	2.8	10.9	19.4	25.0	25.0
92.5°	25.0	113.5	197.2	84.7	71.7
95°	61.1	226.8	722.2	314.3	211.1
97.5°	101.1	250.5	1107.2	861.4	605.0
100°	127.8	266.3	1225.0	1241.8	1002.8
102.5°	154.4	282.1	1256.1	1535.7	1325.0
105°	200.0	311.4	1238.9	1886.3	1775.0
107.5°	247.2	345.5	1167.2	2067.3	2098.3
110°	280.6	370.2	1113.9	2103.0	2236.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	309.4	394.7	1060.5	2073.4	2273.8
115°	355.5	431.6	991.6	1972.9	2247.2
117.5°	398.9	471.7	947.8	1830.3	2139.4
120°	427.8	498.4	927.8	1734.7	2041.6
122.5°	452.2	522.8	914.4	1638.9	1935.0
125°	488.9	556.8	897.2	1511.7	1783.3
127.5°	521.7	589.0	887.8	1415.3	1648.3
130°	541.7	606.8	883.3	1354.7	1563.9
132.5°	561.7	626.8	878.9	1303.1	1488.3
135°	588.9	654.1	872.2	1231.3	1388.9
137.5°	618.3	677.5	868.9	1168.0	1300.5
140°	636.1	693.1	866.6	1127.7	1247.2
142.5°	653.9	706.6	864.4	1096.1	1196.1
145°	680.5	729.4	861.1	1046.2	1125.0
147.5°	710.5	752.4	858.3	1006.9	1068.9
150°	730.5	765.8	858.3	984.4	1033.3
152.5°	746.1	777.1	856.1	964.2	1004.4
155°	769.4	796.6	855.5	939.5	966.6
157.5°	792.2	813.4	855.5	922.7	943.3
160°	805.5	824.6	855.5	911.5	927.8
162.5°	818.9	833.5	857.8	902.5	914.4
165°	833.3	844.2	858.3	894.5	897.2
167.5°	848.3	853.7	861.1	885.0	887.2
170°	852.8	858.2	861.1	880.5	880.5
172.5°	857.2	860.5	861.1	876.1	876.1
175°	863.9	866.6	861.1	872.1	869.4
177.5°	866.1	866.1	859.4	868.2	863.9
180°	863.9	863.9	863.9	863.9	863.9

(END OF REPORT)