

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: P519807

Luminaire Tested: **SQ4-F-025U-050D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519807
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-025U-050D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

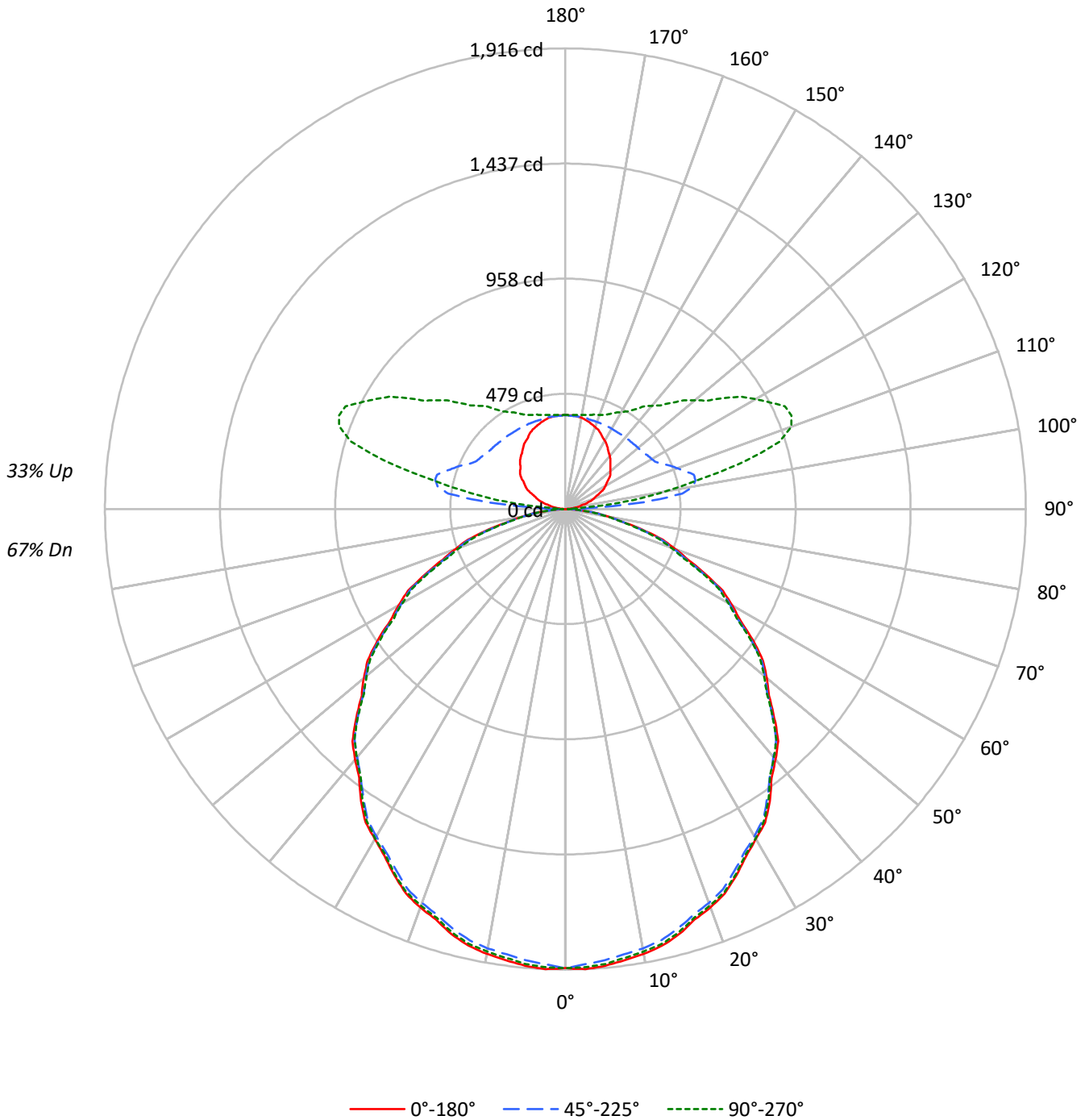
Lumens per Lamp: N/A
Luminaire Lumens: 7746.1 lumens
Efficiency: N/A
Efficacy: 111.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 69.6
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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67
1	102	97	93	90	96	92	88	85	82	79	76	72	70	68	64	62	61	57
2	92	85	78	73	87	80	74	70	71	67	63	63	60	57	56	53	51	47
3	84	74	67	61	79	70	64	58	63	57	53	56	52	48	49	46	43	40
4	77	66	58	51	72	62	55	49	56	50	45	50	45	41	44	40	37	34
5	71	59	50	44	66	56	48	42	50	44	39	45	40	36	40	36	32	30
6	65	53	44	38	61	50	42	37	45	39	34	40	35	31	36	32	28	26
7	60	48	39	34	57	45	38	32	41	35	30	37	31	28	33	29	25	23
8	56	43	35	30	53	41	34	29	37	31	27	34	28	25	30	26	23	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	28	24	20	18
10	49	36	29	24	46	35	28	23	32	26	22	29	24	20	26	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5875	5875	5875
5°	5889	5818	5866
10°	5870	5798	5838
15°	5830	5756	5805
20°	5775	5708	5750
25°	5710	5640	5693
30°	5630	5585	5621
35°	5568	5501	5530
40°	5462	5410	5421
45°	5350	5306	5306
50°	5237	5188	5163
55°	5115	5046	5019
60°	4923	4845	4813
65°	4689	4597	4541
70°	4369	4277	4185
75°	3920	3799	3707
80°	3170	3124	3036
85°	1895	2163	2255



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.2	2.3
10°-20°	513.3	6.6
20°-30°	770.9	10.0
30°-40°	920.2	11.9
40°-50°	943.0	12.2
50°-60°	841.0	10.9
60°-70°	626.3	8.1
70°-80°	340.0	4.4
80°-90°	80.8	1.0
90°-100°	190.3	2.5
100°-110°	500.2	6.5
110°-120°	518.7	6.7
120°-130°	416.0	5.4
130°-140°	326.4	4.2
140°-150°	250.5	3.2
150°-160°	180.5	2.3
160°-170°	110.4	1.4
170°-180°	37.3	0.5
0°-30°	1464.4	18.9
0°-40°	2384.7	30.8
0°-60°	4168.7	53.8
0°-90°	5215.8	67.3
90°-120°	1209.1	15.6
90°-150°	2202.1	28.4
90°-180°	2530.0	32.7
0°-180°	7746.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1910	1910	1910	1910	1910	
5°	1908	1905	1885	1903	1900	181
15°	1831	1826	1808	1823	1823	516
25°	1683	1678	1662	1672	1678	775
35°	1483	1478	1465	1466	1473	926
45°	1230	1233	1220	1217	1220	949
55°	954	954	941	934	936	850
65°	644	642	632	624	624	638
75°	330	327	320	314	312	349
85°	54	59	61	64	64	75
90°	2	7	20	10	10	4
95°	25	98	328	169	115	28
105°	90	137	553	840	783	95
115°	160	194	443	884	1008	158
125°	223	250	403	681	803	198
135°	265	292	390	550	623	205
145°	308	327	385	469	506	193
155°	348	358	385	423	435	160
165°	375	380	385	400	405	106
175°	390	390	388	393	393	37
180°	390	390	390	390	390	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1910.3	1910.3	1910.3	1910.3	1910.3
2.5°	1916.4	1912.5	1896.0	1910.3	1908.2
5°	1907.7	1905.3	1884.7	1902.6	1900.0
7.5°	1893.9	1888.9	1868.9	1886.2	1883.7
10°	1879.6	1874.6	1856.5	1871.8	1869.4
12.5°	1861.2	1858.2	1838.2	1853.5	1853.0
15°	1831.0	1826.0	1808.0	1823.3	1823.3
17.5°	1791.1	1788.1	1770.7	1785.5	1783.5
20°	1764.5	1759.5	1744.0	1756.9	1756.9
22.5°	1731.8	1728.8	1713.4	1724.1	1726.2
25°	1682.7	1677.7	1662.2	1672.5	1677.6
27.5°	1628.5	1624.4	1611.6	1618.3	1621.9
30°	1585.5	1585.5	1572.8	1575.4	1582.9
32.5°	1546.6	1546.6	1531.8	1534.4	1538.0
35°	1483.2	1478.2	1465.3	1465.5	1473.0
37.5°	1409.6	1407.1	1398.8	1397.3	1399.3
40°	1360.5	1358.0	1347.6	1350.2	1350.2
42.5°	1311.4	1308.9	1298.5	1295.1	1299.1
45°	1230.0	1232.6	1219.9	1217.3	1219.9
47.5°	1149.7	1149.7	1139.5	1132.5	1136.4
50°	1094.5	1094.5	1084.3	1079.1	1079.1
52.5°	1037.2	1039.2	1027.0	1019.9	1021.9
55°	953.9	953.9	941.1	933.5	936.0
57.5°	861.8	861.8	849.0	841.4	845.9
60°	800.4	800.4	787.7	780.1	782.5
62.5°	739.0	739.0	726.2	718.6	719.1
65°	644.4	641.9	631.7	624.0	624.0
67.5°	553.4	546.9	539.1	528.8	528.8
70°	485.9	483.4	475.7	465.4	465.4
72.5°	424.5	420.0	412.3	404.1	404.1
75°	329.9	327.4	319.7	314.5	312.0
77.5°	236.3	234.3	233.7	226.6	228.7
80°	179.0	179.0	176.4	171.4	171.4
82.5°	127.9	129.9	125.3	124.2	122.3
85°	53.7	58.7	61.3	63.9	63.9
87.5°	10.7	17.7	18.4	18.4	18.4
90°	2.5	7.4	20.0	10.0	10.0
92.5°	10.5	50.7	112.1	49.6	32.0
95°	25.0	98.5	327.9	168.9	115.1
97.5°	43.6	108.1	490.5	390.1	287.2
100°	57.5	116.2	540.5	547.7	425.5
102.5°	69.6	124.4	554.5	682.3	577.5
105°	90.0	136.6	553.1	839.5	783.2
107.5°	111.1	154.2	521.5	921.2	934.9
110°	125.1	164.3	495.5	942.3	1001.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	139.2	176.4	471.4	928.9	1018.9
115°	160.2	194.4	442.9	883.7	1008.4
117.5°	180.7	212.0	423.4	820.9	959.4
120°	192.7	222.0	415.4	778.8	913.4
122.5°	204.6	234.1	409.4	736.7	869.4
125°	222.7	249.7	402.9	681.0	803.3
127.5°	237.2	264.7	397.4	635.9	739.2
130°	245.3	274.6	395.3	607.7	703.1
132.5°	253.2	282.6	393.3	583.6	669.1
135°	265.3	292.2	390.4	549.7	623.1
137.5°	277.8	304.2	389.9	524.4	584.6
140°	287.8	312.3	387.9	504.3	560.5
142.5°	295.7	318.3	387.9	490.1	538.5
145°	307.8	327.4	385.4	468.8	505.5
147.5°	319.8	338.9	385.4	451.2	481.5
150°	327.9	345.0	385.4	440.9	465.4
152.5°	335.8	349.1	385.4	432.8	451.5
155°	347.8	357.6	385.4	423.2	435.4
157.5°	356.8	366.1	385.4	414.6	423.4
160°	362.8	370.2	385.4	410.5	415.4
162.5°	368.9	374.2	385.4	406.5	411.4
165°	375.4	380.2	385.4	400.5	405.4
167.5°	381.4	383.8	387.9	397.9	399.9
170°	385.4	387.8	387.9	397.9	397.9
172.5°	387.4	387.9	387.9	395.8	393.9
175°	390.4	390.4	387.9	392.9	392.9
177.5°	390.4	390.4	388.4	392.4	390.4
180°	390.4	390.4	390.4	390.4	390.4

(END OF REPORT)