

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: P565107

Luminaire Tested: **SQ4-PW1-150U-050D-840-1D-UNV-STD-W-6**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565107
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-150U-050D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

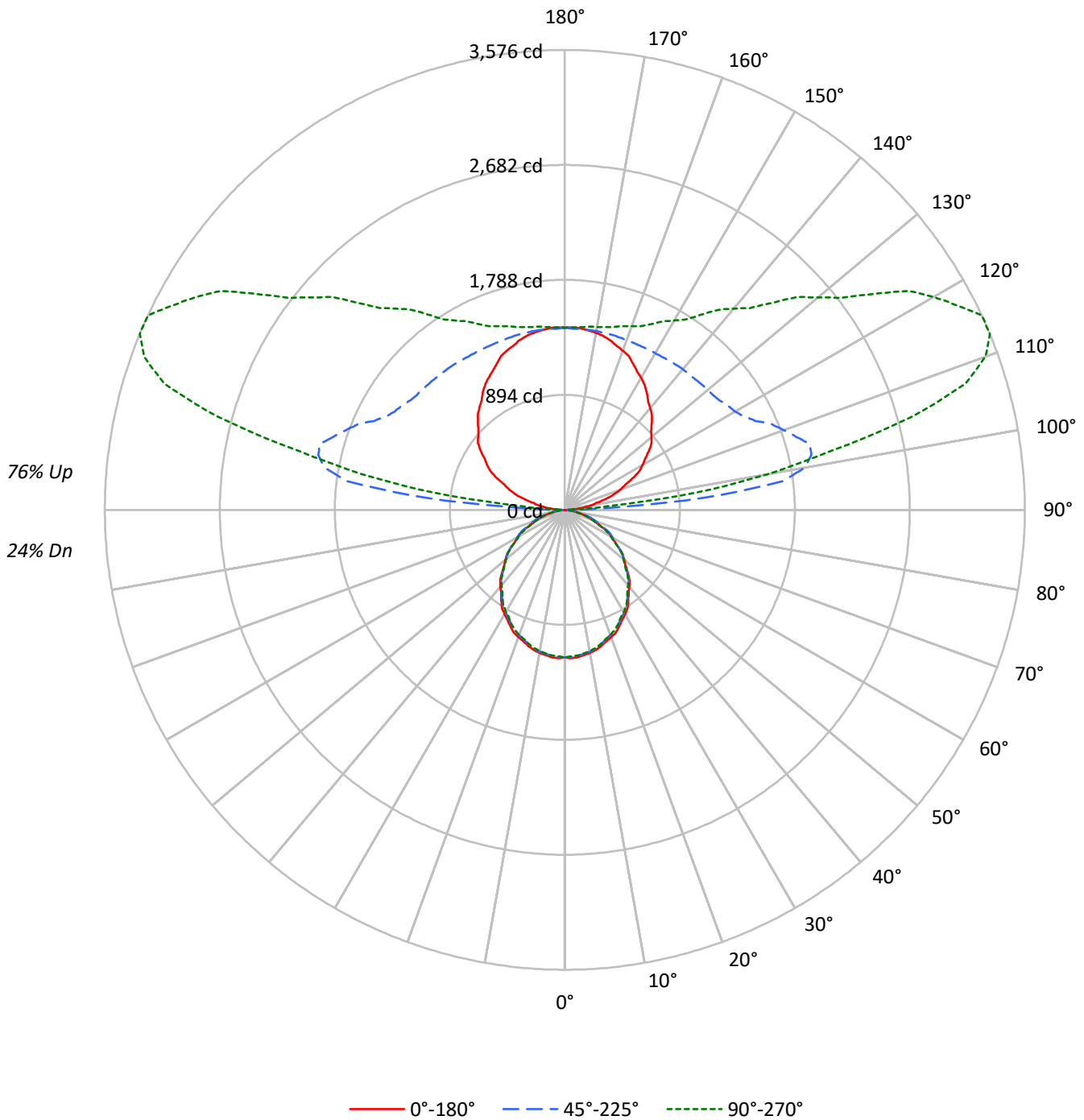
Lumens per Lamp: N/A
Luminaire Lumens: 12051.0 lumens
Efficiency: N/A
Efficacy: 143.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 84.1
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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24
1	92	88	84	81	82	78	75	72	60	58	57	44	43	42	29	28	27	21
2	84	77	71	66	74	68	64	59	53	50	47	39	37	35	25	24	23	17
3	76	67	60	55	68	60	54	50	47	43	39	34	32	29	22	21	20	15
4	70	60	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	13
5	64	53	45	39	57	47	41	36	37	32	29	27	24	22	18	16	15	11
6	59	47	40	34	52	42	36	31	33	28	25	24	21	19	16	14	13	10
7	54	43	35	30	48	38	32	27	30	25	22	22	19	17	15	13	11	9
8	50	38	31	26	45	35	28	24	27	22	19	20	17	15	14	12	10	8
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	13	11	9	7
10	43	32	25	20	39	29	23	19	23	18	15	17	14	12	12	10	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7062	7062	7062
5°	7108	7052	7020
10°	7051	6994	6956
15°	6976	6899	6873
20°	6893	6787	6773
25°	6797	6673	6652
30°	6653	6553	6509
35°	6464	6373	6335
40°	6262	6165	6141
45°	6019	5939	5913
50°	5769	5720	5682
55°	5500	5500	5413
60°	5164	5264	5077
65°	4726	4961	4608
70°	4167	4566	4057
75°	3558	4088	3463
80°	2759	3439	2795
85°	1785	2639	2357



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.1	0.9
10°-20°	305.2	2.5
20°-30°	452.8	3.8
30°-40°	529.8	4.4
40°-50°	527.4	4.4
50°-60°	455.5	3.8
60°-70°	327.8	2.7
70°-80°	171.9	1.4
80°-90°	45.6	0.4
90°-100°	657.9	5.5
100°-110°	1778.8	14.8
110°-120°	1870.1	15.5
120°-130°	1519.0	12.6
130°-140°	1191.6	9.9
140°-150°	914.5	7.6
150°-160°	657.7	5.5
160°-170°	401.8	3.3
170°-180°	135.5	1.1
0°-30°	866.1	7.2
0°-40°	1395.9	11.6
0°-60°	2378.8	19.7
0°-90°	2924.1	24.3
90°-120°	4306.8	35.7
90°-150°	7931.9	65.8
90°-180°	9127.0	75.7
0°-180°	12051.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1148	1148	1148	1148	1148	
5°	1151	1138	1142	1139	1137	109
15°	1096	1082	1083	1081	1079	309
25°	1002	985	983	977	980	460
35°	861	849	849	841	844	538
45°	692	686	683	681	680	534
55°	513	512	513	506	505	458
65°	325	335	341	328	317	322
75°	150	164	172	160	146	160
85°	25	33	37	35	33	33
90°	3	9	20	21	20	8
95°	102	358	1094	566	337	107
105°	331	511	1973	2911	2792	348
115°	582	712	1636	3168	3576	575
125°	797	913	1475	2489	2924	710
135°	955	1069	1435	2010	2275	738
145°	1111	1194	1416	1720	1851	695
155°	1254	1303	1403	1543	1594	578
165°	1365	1379	1410	1464	1472	385
175°	1417	1416	1411	1429	1426	135
180°	1416	1416	1416	1416	1416	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1148.1	1148.1	1148.1	1148.1	1148.1
2.5°	1154.6	1145.1	1148.1	1145.6	1140.0
5°	1151.2	1138.3	1142.1	1139.0	1137.0
7.5°	1139.4	1127.6	1130.3	1127.1	1125.9
10°	1128.9	1117.1	1119.8	1115.7	1113.7
12.5°	1116.8	1104.1	1106.9	1102.8	1101.6
15°	1095.5	1081.7	1083.4	1081.3	1079.4
17.5°	1070.9	1056.8	1057.1	1053.9	1053.5
20°	1053.1	1038.2	1036.9	1032.9	1034.8
22.5°	1033.6	1018.0	1016.6	1011.0	1013.8
25°	1001.5	984.6	983.3	977.3	980.2
27.5°	964.2	947.6	947.6	939.2	942.4
30°	936.7	920.9	922.6	912.5	916.5
32.5°	907.6	893.3	894.2	884.2	888.2
35°	860.9	849.0	848.7	840.7	843.7
37.5°	813.1	802.6	801.0	796.3	797.1
40°	779.9	771.0	767.8	764.8	764.8
42.5°	745.1	737.0	733.8	731.6	730.8
45°	691.9	686.0	682.8	680.8	679.8
47.5°	639.3	633.8	631.0	629.6	628.6
50°	602.9	598.9	597.8	594.8	593.8
52.5°	566.5	564.1	563.0	559.2	558.2
55°	512.9	511.9	512.9	505.8	504.8
57.5°	457.0	458.6	461.9	452.3	449.9
60°	419.8	423.8	427.9	416.7	412.7
62.5°	381.8	388.1	393.9	381.0	375.5
65°	324.7	334.6	340.9	327.5	316.6
67.5°	269.7	282.0	289.5	275.1	262.8
70°	231.7	245.5	253.9	239.4	225.6
72.5°	198.5	213.9	220.7	207.1	193.2
75°	149.7	163.6	172.0	160.5	145.7
77.5°	106.2	119.3	126.2	116.3	104.0
80°	77.9	91.7	97.1	88.8	78.9
82.5°	55.2	66.7	70.4	65.4	58.7
85°	25.3	33.2	37.4	35.4	33.4
87.5°	7.1	13.8	19.3	19.7	20.1
90°	3.0	9.0	19.8	21.3	19.8
92.5°	43.3	157.7	311.2	135.1	97.8
95°	102.1	358.4	1094.1	566.2	336.8
97.5°	164.0	411.0	1705.4	1411.3	1036.5
100°	210.3	432.3	1895.6	1976.9	1598.4
102.5°	252.9	461.8	1962.6	2405.7	2122.6
105°	330.7	510.9	1973.3	2910.8	2791.6
107.5°	402.6	567.1	1887.1	3225.8	3265.5
110°	458.7	607.7	1810.3	3310.4	3478.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	508.6	648.1	1739.5	3293.5	3576.3
115°	582.1	711.7	1636.5	3168.1	3576.3
117.5°	654.0	775.6	1568.6	2976.4	3439.2
120°	697.9	817.1	1528.4	2838.9	3311.2
122.5°	739.3	856.1	1504.0	2691.5	3167.3
125°	796.9	913.2	1475.0	2489.1	2924.1
127.5°	850.0	964.1	1458.0	2323.9	2706.5
130°	879.2	996.9	1450.6	2221.9	2567.6
132.5°	909.7	1026.2	1443.3	2129.9	2448.1
135°	955.4	1068.6	1435.4	2009.8	2275.0
137.5°	1001.4	1108.4	1428.7	1912.4	2128.4
140°	1033.1	1132.9	1426.3	1849.7	2041.9
142.5°	1063.6	1157.5	1421.4	1793.1	1961.4
145°	1110.8	1194.3	1415.6	1720.3	1851.4
147.5°	1153.8	1227.7	1408.9	1654.4	1755.1
150°	1185.5	1251.1	1406.5	1618.6	1699.0
152.5°	1214.8	1272.0	1405.2	1585.3	1651.5
155°	1254.1	1303.2	1403.4	1543.2	1593.9
157.5°	1294.9	1329.2	1403.7	1513.9	1547.2
160°	1318.1	1346.4	1404.9	1495.4	1519.2
162.5°	1336.4	1359.9	1406.1	1480.6	1498.5
165°	1365.3	1378.7	1409.5	1464.5	1472.0
167.5°	1385.1	1394.4	1409.8	1450.7	1454.3
170°	1397.3	1401.8	1411.0	1444.5	1444.5
172.5°	1407.1	1408.0	1411.0	1437.2	1436.0
175°	1417.1	1415.6	1411.0	1429.2	1426.3
177.5°	1420.5	1416.9	1410.7	1422.8	1419.3
180°	1415.6	1415.6	1415.6	1415.6	1415.6

(END OF REPORT)