

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: P565170

Luminaire Tested: **SQ4-PW1-150U-125D-830-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565170
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-125D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

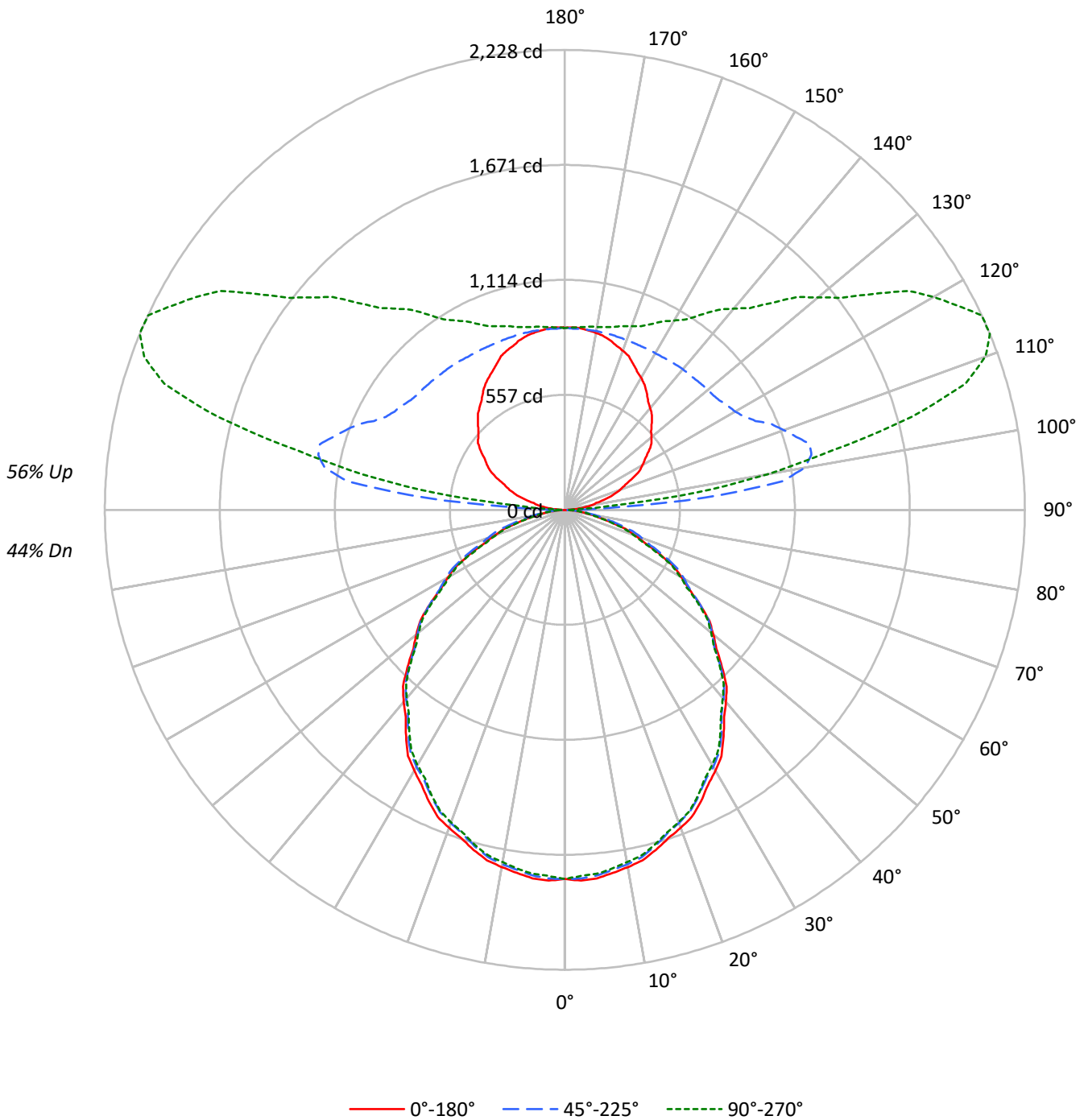
Lumens per Lamp: N/A
Luminaire Lumens: 10235.9 lumens
Efficiency: N/A
Efficacy: 123.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 83.1
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44
1	97	92	89	85	88	85	82	79	70	68	66	57	56	54	45	44	43	38
2	88	81	75	70	80	74	69	65	62	58	55	50	48	45	40	38	37	32
3	80	71	64	58	73	65	59	54	55	50	46	45	41	38	35	33	31	27
4	73	63	55	49	67	58	51	46	48	43	39	40	36	33	32	29	27	23
5	67	56	48	42	62	52	45	39	43	38	34	36	32	29	29	26	23	20
6	62	50	42	36	57	46	39	34	39	34	30	32	28	25	26	23	21	18
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	24	21	18	16
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	16	14
9	50	37	30	25	45	35	28	24	30	24	21	25	21	18	20	17	15	13
10	46	34	27	22	42	32	25	21	27	22	19	23	19	16	19	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16493	16493	16493
5°	16599	16468	16396
10°	16467	16334	16245
15°	16292	16112	16052
20°	16097	15850	15819
25°	15873	15585	15536
30°	15537	15303	15201
35°	15096	14883	14794
40°	14625	14397	14341
45°	14056	13871	13810
50°	13474	13360	13270
55°	12844	12844	12642
60°	12060	12293	11858
65°	11038	11588	10763
70°	9730	10663	9474
75°	8309	9543	8085
80°	6445	8033	6525
85°	4171	6172	5505



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.3	1.6
10°-20°	475.2	4.6
20°-30°	704.9	6.9
30°-40°	824.9	8.1
40°-50°	821.2	8.0
50°-60°	709.1	6.9
60°-70°	510.4	5.0
70°-80°	267.7	2.6
80°-90°	68.2	0.7
90°-100°	409.8	4.0
100°-110°	1108.2	10.8
110°-120°	1165.1	11.4
120°-130°	946.4	9.2
130°-140°	742.3	7.3
140°-150°	569.7	5.6
150°-160°	409.7	4.0
160°-170°	250.3	2.4
170°-180°	84.4	0.8
0°-30°	1348.5	13.2
0°-40°	2173.4	21.2
0°-60°	3703.6	36.2
0°-90°	4549.9	44.5
90°-120°	2683.1	26.2
90°-150°	4941.5	48.3
90°-180°	5686.0	55.5
0°-180°	10235.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1788	1788	1788	1788	1788	
5°	1792	1772	1778	1773	1770	170
15°	1706	1684	1687	1684	1680	481
25°	1559	1533	1531	1522	1526	717
35°	1340	1322	1321	1309	1314	838
45°	1077	1068	1063	1060	1058	831
55°	798	797	798	787	786	712
65°	506	521	531	510	493	501
75°	233	255	268	250	227	250
85°	39	52	58	55	52	52
90°	2	6	12	13	12	6
95°	64	223	682	353	210	67
105°	206	318	1229	1813	1739	217
115°	363	443	1020	1974	2228	358
125°	496	569	919	1551	1822	443
135°	595	666	894	1252	1417	460
145°	692	744	882	1072	1153	433
155°	781	812	874	961	993	360
165°	851	859	878	912	917	240
175°	883	882	879	890	888	84
180°	882	882	882	882	882	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1787.6	1787.6	1787.6	1787.6	1787.6
2.5°	1797.7	1782.9	1787.6	1783.6	1775.0
5°	1792.3	1772.3	1778.1	1773.3	1770.3
7.5°	1774.0	1755.6	1759.9	1754.8	1752.9
10°	1757.7	1739.2	1743.5	1737.1	1734.0
12.5°	1738.8	1719.0	1723.3	1717.0	1715.1
15°	1705.7	1684.1	1686.8	1683.6	1680.5
17.5°	1667.3	1645.4	1645.8	1640.8	1640.2
20°	1639.5	1616.4	1614.3	1608.1	1611.2
22.5°	1609.3	1585.0	1582.8	1574.1	1578.4
25°	1559.2	1533.0	1530.9	1521.5	1526.1
27.5°	1501.3	1475.4	1475.4	1462.3	1467.2
30°	1458.4	1433.8	1436.4	1420.8	1426.9
32.5°	1413.1	1390.9	1392.3	1376.7	1382.8
35°	1340.3	1321.8	1321.4	1308.9	1313.5
37.5°	1266.0	1249.6	1247.1	1239.8	1241.1
40°	1214.3	1200.4	1195.4	1190.7	1190.7
42.5°	1160.1	1147.5	1142.5	1139.0	1137.8
45°	1077.3	1068.0	1063.1	1059.9	1058.4
47.5°	995.4	986.8	982.5	980.2	978.7
50°	938.7	932.5	930.8	926.0	924.5
52.5°	882.0	878.3	876.6	870.6	869.1
55°	798.5	797.0	798.5	787.4	785.9
57.5°	711.6	714.0	719.1	704.2	700.5
60°	653.6	659.8	666.2	648.7	642.6
62.5°	594.4	604.2	613.3	593.2	584.6
65°	505.6	521.0	530.8	509.9	493.0
67.5°	419.9	439.0	450.8	428.3	409.2
70°	360.7	382.2	395.3	372.8	351.2
72.5°	309.0	333.0	343.7	322.4	300.8
75°	233.1	254.7	267.7	249.9	226.8
77.5°	165.4	185.7	196.6	181.0	161.9
80°	121.3	142.8	151.2	138.2	122.8
82.5°	86.0	103.9	109.6	101.8	91.3
85°	39.4	51.7	58.3	55.1	52.0
87.5°	10.5	19.8	26.4	26.6	27.7
90°	1.9	5.6	12.3	13.3	12.3
92.5°	27.0	98.2	193.8	84.2	60.9
95°	63.6	223.3	681.6	352.7	209.8
97.5°	102.1	256.0	1062.5	879.3	645.7
100°	131.0	269.3	1180.9	1231.6	995.8
102.5°	157.6	287.7	1222.7	1498.7	1322.4
105°	206.0	318.3	1229.3	1813.4	1739.1
107.5°	250.8	353.3	1175.6	2009.7	2034.4
110°	285.7	378.6	1127.8	2062.4	2167.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	316.9	403.8	1083.7	2051.8	2228.0
115°	362.6	443.4	1019.6	1973.7	2228.0
117.5°	407.4	483.2	977.2	1854.3	2142.6
120°	434.8	509.0	952.2	1768.6	2062.8
122.5°	460.6	533.4	937.0	1676.8	1973.2
125°	496.5	568.9	918.9	1550.7	1821.7
127.5°	529.5	600.6	908.3	1447.8	1686.2
130°	547.7	621.1	903.7	1384.2	1599.6
132.5°	566.7	639.3	899.2	1326.9	1525.2
135°	595.2	665.8	894.2	1252.1	1417.3
137.5°	623.9	690.5	890.1	1191.4	1326.0
140°	643.6	705.8	888.5	1152.3	1272.1
142.5°	662.6	721.1	885.5	1117.1	1221.9
145°	692.0	744.0	881.9	1071.7	1153.4
147.5°	718.8	764.9	877.7	1030.7	1093.4
150°	738.6	779.4	876.2	1008.4	1058.5
152.5°	756.8	792.4	875.4	987.6	1028.9
155°	781.3	811.9	874.3	961.4	993.0
157.5°	806.7	828.1	874.5	943.1	963.9
160°	821.1	838.8	875.3	931.6	946.5
162.5°	832.5	847.2	876.0	922.4	933.5
165°	850.6	858.9	878.1	912.4	917.0
167.5°	862.9	868.7	878.3	903.8	906.0
170°	870.5	873.3	879.1	899.9	899.9
172.5°	876.6	877.1	879.1	895.4	894.6
175°	882.9	881.9	879.1	890.4	888.5
177.5°	884.9	882.7	878.9	886.4	884.2
180°	881.9	881.9	881.9	881.9	881.9

(END OF REPORT)