

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: P519166

Luminaire Tested: **SQ4-WB-075U-050D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519166
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-075U-050D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

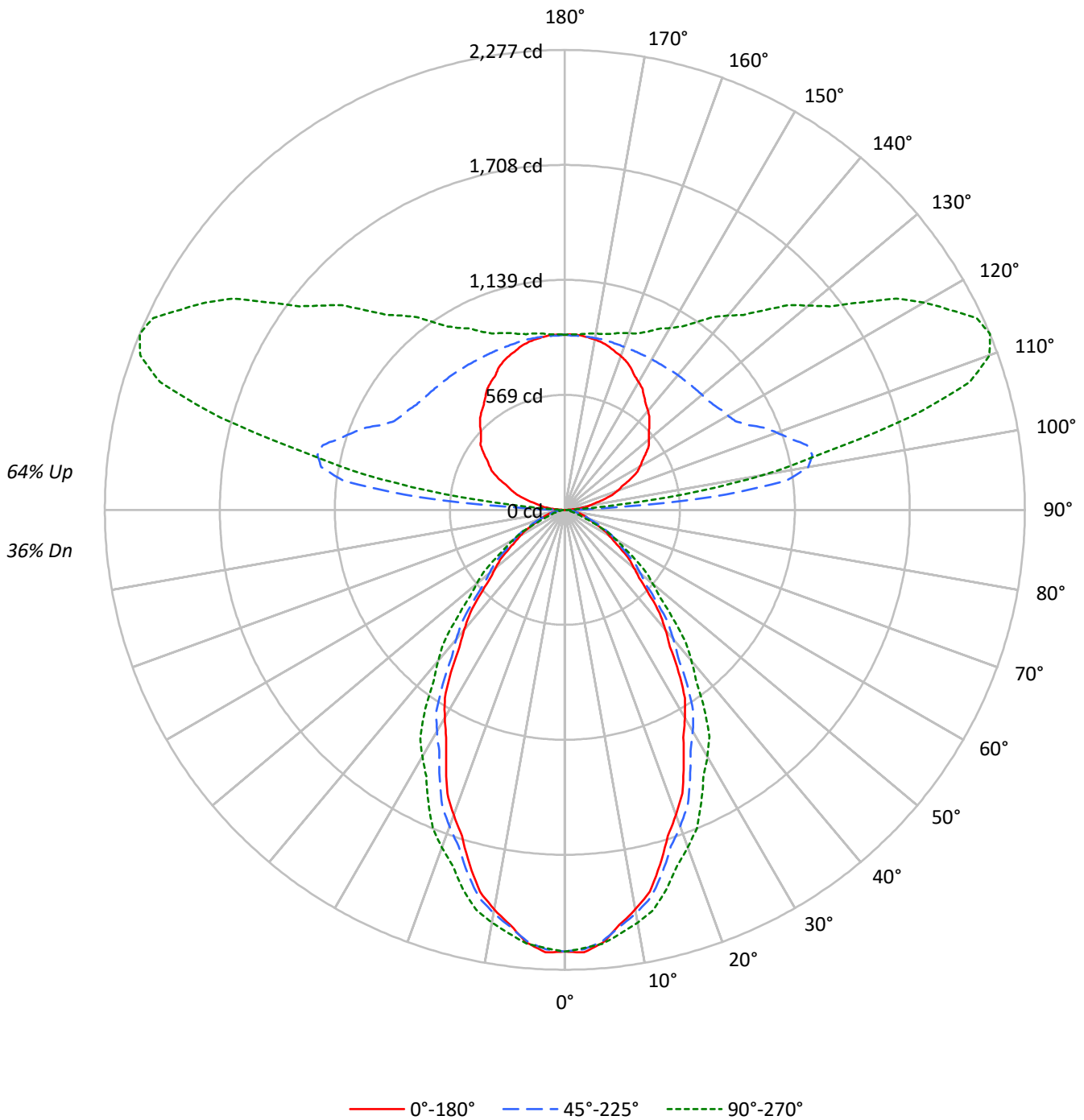
Lumens per Lamp: N/A
Luminaire Lumens: 8841.0 lumens
Efficiency: N/A
Efficacy: 123.1 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 71.8
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	0
RCR																		
0	104	104	104	104	94	94	94	94	76	76	76	59	59	59	43	43	43	36
1	95	92	88	85	86	83	80	78	67	65	64	53	52	50	40	39	38	32
2	88	81	75	71	79	74	69	65	60	57	54	47	45	43	36	35	33	28
3	80	72	65	60	73	66	60	55	54	50	46	43	40	38	33	31	29	25
4	74	64	57	51	67	59	52	48	48	44	40	39	36	33	30	28	26	22
5	68	58	50	45	62	53	46	41	44	39	35	35	32	29	27	25	23	20
6	63	52	44	39	57	48	41	36	40	35	31	32	29	26	25	23	21	18
7	58	47	40	35	53	43	37	32	36	31	28	29	26	23	23	21	19	16
8	54	43	36	31	49	40	33	29	33	28	25	27	24	21	21	19	17	15
9	51	39	32	28	46	36	30	26	31	26	23	25	22	19	20	18	16	14
10	47	36	29	25	43	33	27	23	28	24	20	23	20	18	19	16	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10090	10090	10090
5°	9964	9928	9986
10°	9414	9499	9719
15°	8690	8892	9291
20°	7891	8188	8730
25°	7078	7464	8133
30°	6329	6743	7515
35°	5535	5935	6783
40°	4658	5028	5872
45°	3845	4176	4903
50°	3209	3499	4084
55°	2725	3002	3373
60°	2329	2604	2692
65°	1855	2190	1739
70°	1644	1709	1061
75°	1522	1385	651
80°	1403	1275	561
85°	1270	1170	455



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.6	2.3
10°-20°	521.8	5.9
20°-30°	675.9	7.6
30°-40°	661.9	7.5
40°-50°	506.6	5.7
50°-60°	337.6	3.8
60°-70°	184.2	2.1
70°-80°	76.8	0.9
80°-90°	24.0	0.3
90°-100°	409.2	4.6
100°-110°	1125.7	12.7
110°-120°	1161.9	13.1
120°-130°	931.0	10.5
130°-140°	731.2	8.3
140°-150°	560.3	6.3
150°-160°	402.9	4.6
160°-170°	246.4	2.8
170°-180°	83.0	0.9
0°-30°	1398.3	15.8
0°-40°	2060.2	23.3
0°-60°	2904.4	32.9
0°-90°	3189.4	36.1
90°-120°	2696.8	30.5
90°-150°	4919.3	55.6
90°-180°	5652.0	63.9
0°-180°	8841.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2187	2187	2187	2187	2187	
5°	2152	2130	2144	2149	2156	200
15°	1820	1813	1862	1912	1945	508
25°	1391	1394	1466	1530	1598	640
35°	983	987	1054	1125	1204	611
45°	589	600	640	689	752	460
55°	339	353	373	388	419	307
65°	170	184	201	175	159	177
75°	85	85	78	53	36	91
85°	24	24	22	14	9	26
90°	2	7	13	17	17	5
95°	61	223	724	309	198	64
105°	201	310	1240	1889	1763	212
115°	356	434	995	1981	2248	352
125°	491	560	903	1527	1789	438
135°	592	658	877	1235	1397	457
145°	685	732	864	1052	1133	429
155°	775	800	858	946	973	356
165°	838	849	862	897	903	236
175°	868	869	864	875	873	82
180°	868	868	868	868	868	

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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°	2192.6	2173.1	2178.0	2177.9	2171.8
5°	2151.7	2130.1	2144.0	2149.0	2156.5
7.5°	2071.8	2055.5	2080.9	2099.6	2114.8
10°	2009.7	1995.6	2027.9	2055.2	2074.9
12.5°	1937.5	1925.7	1965.7	2002.4	2028.1
15°	1819.6	1813.1	1861.9	1912.5	1945.4
17.5°	1693.5	1690.3	1746.3	1805.4	1847.5
20°	1607.5	1606.6	1668.0	1729.6	1778.4
22.5°	1520.8	1522.8	1587.4	1651.4	1707.0
25°	1390.6	1394.4	1466.5	1530.4	1597.9
27.5°	1270.3	1272.0	1346.5	1414.0	1486.0
30°	1188.1	1192.8	1265.9	1335.7	1410.8
32.5°	1106.0	1111.4	1182.9	1255.1	1331.7
35°	982.8	987.4	1053.8	1124.7	1204.4
37.5°	855.7	862.1	920.9	988.0	1066.4
40°	773.5	782.9	835.0	898.1	975.1
42.5°	694.5	706.1	754.3	814.3	883.7
45°	589.3	600.5	640.1	688.6	751.5
47.5°	498.7	511.6	542.0	583.8	637.4
50°	447.2	459.4	487.5	518.4	569.1
52.5°	401.9	414.1	439.2	463.0	506.2
55°	338.8	352.9	373.3	387.5	419.4
57.5°	287.0	300.5	316.7	323.1	342.4
60°	252.4	267.4	282.2	281.4	291.8
62.5°	220.9	233.7	248.4	238.2	238.8
65°	169.9	183.9	200.6	175.3	159.3
67.5°	137.2	140.2	157.4	122.2	103.3
70°	121.9	121.9	126.7	94.6	78.7
72.5°	107.3	107.3	102.9	77.0	60.3
75°	85.4	85.4	77.7	53.4	36.5
77.5°	65.8	65.1	59.5	39.8	26.5
80°	52.8	52.8	48.0	31.4	21.1
82.5°	41.3	41.3	37.2	24.6	15.7
85°	24.0	24.0	22.1	14.3	8.6
87.5°	8.8	9.9	10.3	7.9	7.2
90°	1.8	7.3	12.9	16.6	16.6
92.5°	25.5	108.9	188.6	72.4	59.4
95°	60.9	223.3	723.6	309.4	197.5
97.5°	99.3	247.7	1104.2	850.8	600.3
100°	127.4	262.7	1223.8	1235.2	1007.8
102.5°	153.9	280.6	1254.8	1532.4	1323.8
105°	201.2	309.5	1240.4	1889.1	1762.7
107.5°	246.2	345.1	1169.9	2063.7	2101.3
110°	278.7	369.0	1116.7	2107.2	2237.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	308.3	395.6	1063.6	2079.2	2277.0
115°	356.2	433.8	994.9	1981.1	2248.2
117.5°	402.0	473.5	951.3	1843.4	2145.6
120°	430.1	498.7	932.1	1740.3	2052.5
122.5°	455.2	523.8	918.8	1649.9	1946.2
125°	491.0	559.6	902.6	1526.9	1788.6
127.5°	524.9	590.3	891.9	1424.3	1653.8
130°	542.7	609.4	886.0	1363.3	1572.6
132.5°	563.3	630.1	881.6	1309.7	1498.8
135°	592.5	657.5	876.8	1234.8	1397.3
137.5°	619.8	680.1	872.7	1174.4	1308.3
140°	640.5	696.4	871.2	1134.2	1255.2
142.5°	658.2	709.8	868.3	1098.4	1202.0
145°	684.8	731.7	863.8	1052.1	1133.3
147.5°	713.2	753.6	861.6	1011.1	1076.1
150°	730.9	767.0	860.1	988.7	1039.2
152.5°	747.2	780.4	858.7	969.3	1011.1
155°	775.2	800.5	858.3	945.7	972.7
157.5°	795.5	816.1	858.3	926.3	945.1
160°	810.3	826.6	858.3	915.9	930.3
162.5°	822.1	835.5	859.8	906.9	918.5
165°	838.0	848.8	862.0	897.2	902.6
167.5°	849.1	857.4	863.8	889.0	890.4
170°	856.5	861.9	863.8	886.0	886.0
172.5°	862.4	864.9	863.8	881.5	880.1
175°	867.5	869.3	863.8	874.9	873.1
177.5°	869.0	869.0	863.1	871.9	869.0
180°	867.5	867.5	867.5	867.5	867.5

(END OF REPORT)