

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: P519404

Luminaire Tested: **SQ4-WB-100U-100D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519404
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-100D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

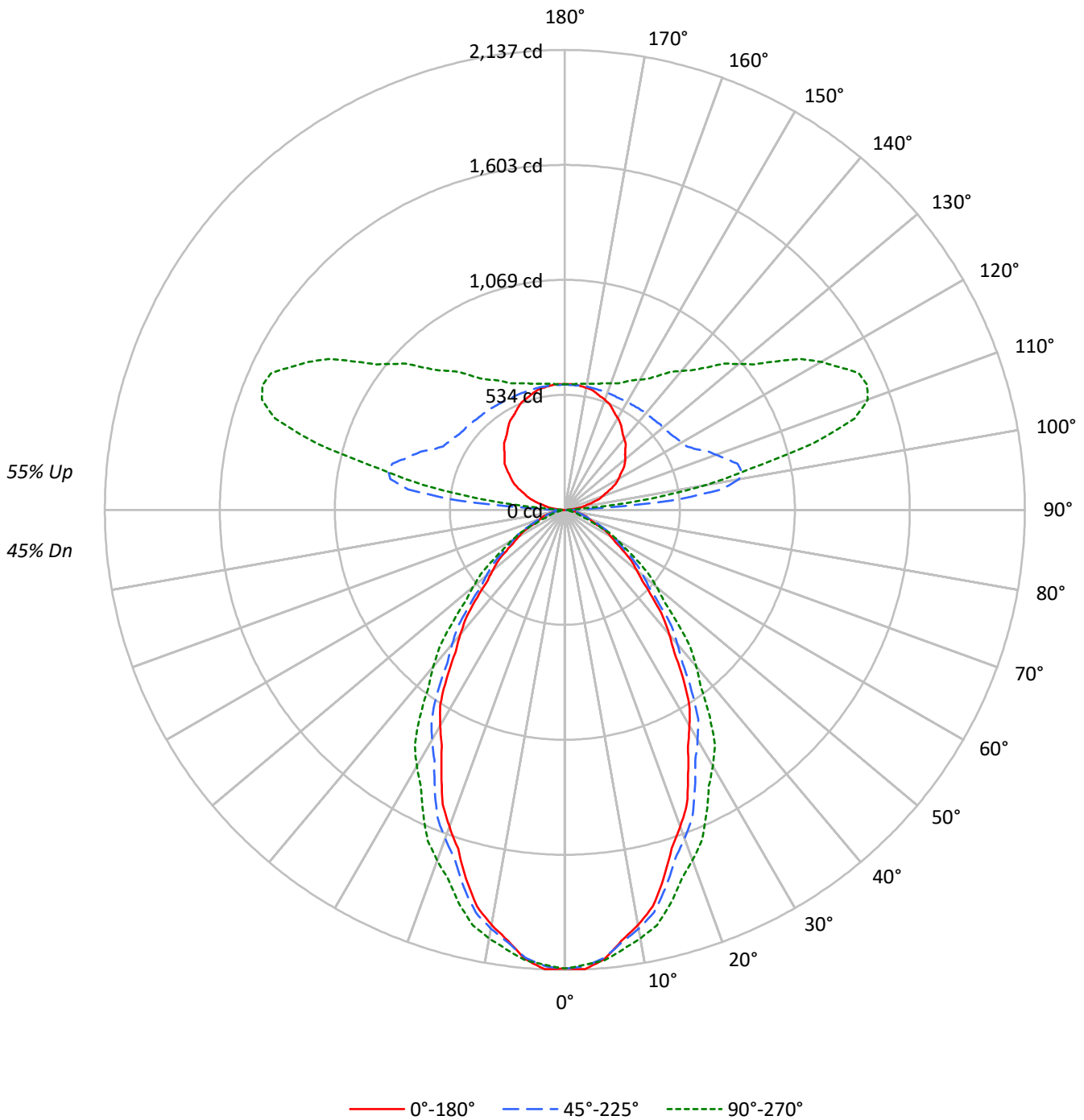
Lumens per Lamp: N/A
Luminaire Lumens: 6897.9 lumens
Efficiency: N/A
Efficacy: 119.1 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 57.9
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	50	30	10	0	
RCR																						
0	106	106	106	106	97	97	97	97	81	81	81	65	65	65	52	52	52	45				
1	98	94	90	87	89	86	83	81	72	70	68	59	58	56	47	46	46	40				
2	90	83	78	73	82	77	72	68	64	61	58	53	51	49	43	41	40	35				
3	83	74	67	62	76	68	63	58	58	54	50	48	45	43	39	37	35	31				
4	76	66	59	54	70	61	55	50	52	47	44	44	40	37	36	33	31	28				
5	70	60	52	47	65	55	49	44	47	42	39	40	36	33	33	30	28	25				
6	65	54	46	41	60	50	44	39	43	38	34	36	33	30	30	27	25	22				
7	61	49	42	36	56	46	39	34	39	34	31	33	30	27	28	25	23	20				
8	56	45	38	33	52	42	35	31	36	31	28	31	27	24	26	23	21	19				
9	53	41	34	29	49	39	32	28	33	28	25	29	25	22	24	21	19	17				
10	49	38	31	27	46	36	29	25	31	26	23	27	23	20	22	20	18	16				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19665	19665	19665
5°	19419	19350	19462
10°	18346	18513	18942
15°	16937	17330	18107
20°	15380	15959	17015
25°	13795	14547	15851
30°	12335	13141	14646
35°	10787	11566	13220
40°	9079	9799	11444
45°	7492	8139	9555
50°	6255	6819	7960
55°	5310	5852	6574
60°	4539	5074	5246
65°	3613	4268	3388
70°	3205	3329	2069
75°	2966	2702	1265
80°	2731	2487	1095
85°	2477	2276	889



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.5	2.8
10°-20°	508.5	7.4
20°-30°	658.6	9.5
30°-40°	645.0	9.4
40°-50°	493.7	7.2
50°-60°	329.0	4.8
60°-70°	179.5	2.6
70°-80°	74.8	1.1
80°-90°	22.4	0.3
90°-100°	273.2	4.0
100°-110°	754.3	10.9
110°-120°	777.9	11.3
120°-130°	625.1	9.1
130°-140°	491.3	7.1
140°-150°	376.8	5.5
150°-160°	270.8	3.9
160°-170°	165.6	2.4
170°-180°	55.8	0.8
0°-30°	1362.6	19.8
0°-40°	2007.6	29.1
0°-60°	2830.3	41.0
0°-90°	3107.0	45.0
90°-120°	1805.5	26.2
90°-150°	3298.7	47.8
90°-180°	3791.0	55.0
0°-180°	6897.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2131	2131	2131	2131	2131	
5°	2097	2076	2089	2094	2101	195
15°	1773	1767	1814	1864	1896	495
25°	1355	1359	1429	1491	1557	623
35°	958	962	1027	1096	1174	595
45°	574	585	624	671	732	448
55°	330	344	364	378	409	299
65°	166	179	196	171	155	172
75°	83	83	76	52	36	89
85°	23	23	22	14	8	25
90°	2	4	8	8	9	4
95°	40	148	496	204	133	43
105°	134	207	830	1267	1193	143
115°	241	291	668	1323	1505	237
125°	330	376	606	1025	1203	294
135°	398	441	589	830	936	308
145°	461	493	582	707	761	289
155°	520	537	577	634	654	240
165°	563	570	580	602	607	159
175°	584	584	581	589	587	55
180°	584	584	584	584	584	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2131.4	2131.4	2131.4	2131.4	2131.4
2.5°	2136.6	2117.6	2122.4	2122.2	2116.4
5°	2096.8	2075.7	2089.3	2094.1	2101.4
7.5°	2018.9	2003.0	2027.7	2046.0	2060.8
10°	1958.3	1944.6	1976.1	2002.7	2021.9
12.5°	1888.0	1876.5	1915.5	1951.2	1976.3
15°	1773.2	1766.8	1814.3	1863.7	1895.7
17.5°	1650.3	1647.2	1701.7	1759.3	1800.3
20°	1566.5	1565.6	1625.4	1685.4	1733.0
22.5°	1481.9	1484.0	1546.8	1609.2	1663.4
25°	1355.1	1358.8	1429.0	1491.3	1557.1
27.5°	1237.9	1239.5	1312.1	1377.9	1448.1
30°	1157.8	1162.4	1233.5	1301.6	1374.8
32.5°	1077.7	1083.0	1152.7	1223.1	1297.7
35°	957.7	962.2	1026.9	1096.0	1173.7
37.5°	833.8	840.1	897.4	962.8	1039.2
40°	753.8	762.9	813.6	875.2	950.2
42.5°	676.7	688.1	735.1	793.5	861.1
45°	574.2	585.2	623.8	671.0	732.3
47.5°	485.9	498.6	528.2	568.9	621.2
50°	435.8	447.7	475.1	505.2	554.6
52.5°	391.7	403.6	428.0	451.2	493.2
55°	330.1	343.8	363.8	377.6	408.7
57.5°	279.6	292.8	308.6	314.8	333.7
60°	246.0	260.6	275.0	274.2	284.3
62.5°	215.3	227.7	242.0	232.1	232.7
65°	165.5	179.2	195.5	170.8	155.2
67.5°	133.7	136.7	153.4	119.1	100.6
70°	118.8	118.8	123.4	92.2	76.7
72.5°	104.6	104.6	100.3	75.0	58.7
75°	83.2	83.2	75.8	52.0	35.5
77.5°	64.2	63.4	58.0	38.8	25.8
80°	51.4	51.4	46.8	30.6	20.6
82.5°	40.2	40.2	36.3	23.9	15.3
85°	23.4	23.4	21.5	13.9	8.4
87.5°	8.6	9.0	9.0	6.2	5.6
90°	1.9	3.7	7.5	8.4	9.3
92.5°	16.8	69.7	124.7	45.5	35.5
95°	40.1	147.8	495.7	203.8	132.6
97.5°	66.5	165.6	734.3	565.3	409.4
100°	85.9	176.2	822.4	828.2	673.1
102.5°	104.6	188.3	839.6	1023.3	876.2
105°	134.4	207.4	829.9	1267.0	1193.0
107.5°	166.2	231.2	783.6	1384.5	1411.5
110°	188.6	247.0	747.8	1409.7	1497.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	208.7	265.0	714.1	1389.8	1519.0
115°	240.8	291.1	668.4	1323.2	1504.8
117.5°	268.9	318.9	638.3	1229.5	1436.1
120°	287.5	336.8	626.4	1166.0	1374.1
122.5°	305.4	352.5	616.7	1106.8	1303.9
125°	330.5	376.1	605.9	1025.3	1203.3
127.5°	351.8	397.4	599.5	956.4	1110.0
130°	365.9	411.6	596.5	914.3	1053.9
132.5°	379.4	422.8	593.5	878.9	1005.4
135°	397.7	440.6	589.1	830.4	936.3
137.5°	418.2	457.3	586.8	789.8	880.1
140°	429.4	467.8	585.3	762.6	842.0
142.5°	442.1	477.5	583.8	738.5	808.4
145°	461.2	493.1	581.6	707.0	760.8
147.5°	479.5	507.4	579.5	680.4	722.2
150°	492.9	515.7	578.8	664.5	698.3
152.5°	503.4	524.7	578.0	650.9	678.9
155°	520.0	537.3	576.9	634.3	654.4
157.5°	535.3	548.6	577.1	622.2	635.9
160°	544.2	556.1	577.9	615.4	625.5
162.5°	551.7	562.1	578.6	609.4	617.2
165°	562.9	570.2	579.7	602.2	606.8
167.5°	571.5	575.9	580.7	597.9	599.3
170°	576.0	579.6	580.7	595.6	595.6
172.5°	579.7	581.9	580.7	592.6	591.9
175°	583.5	584.4	580.7	589.0	587.2
177.5°	584.9	584.2	580.5	585.7	584.2
180°	583.5	583.5	583.5	583.5	583.5

(END OF REPORT)