

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: P519408

Luminaire Tested: **SQ4-WB-100U-100D-835-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519408
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-835-1D-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

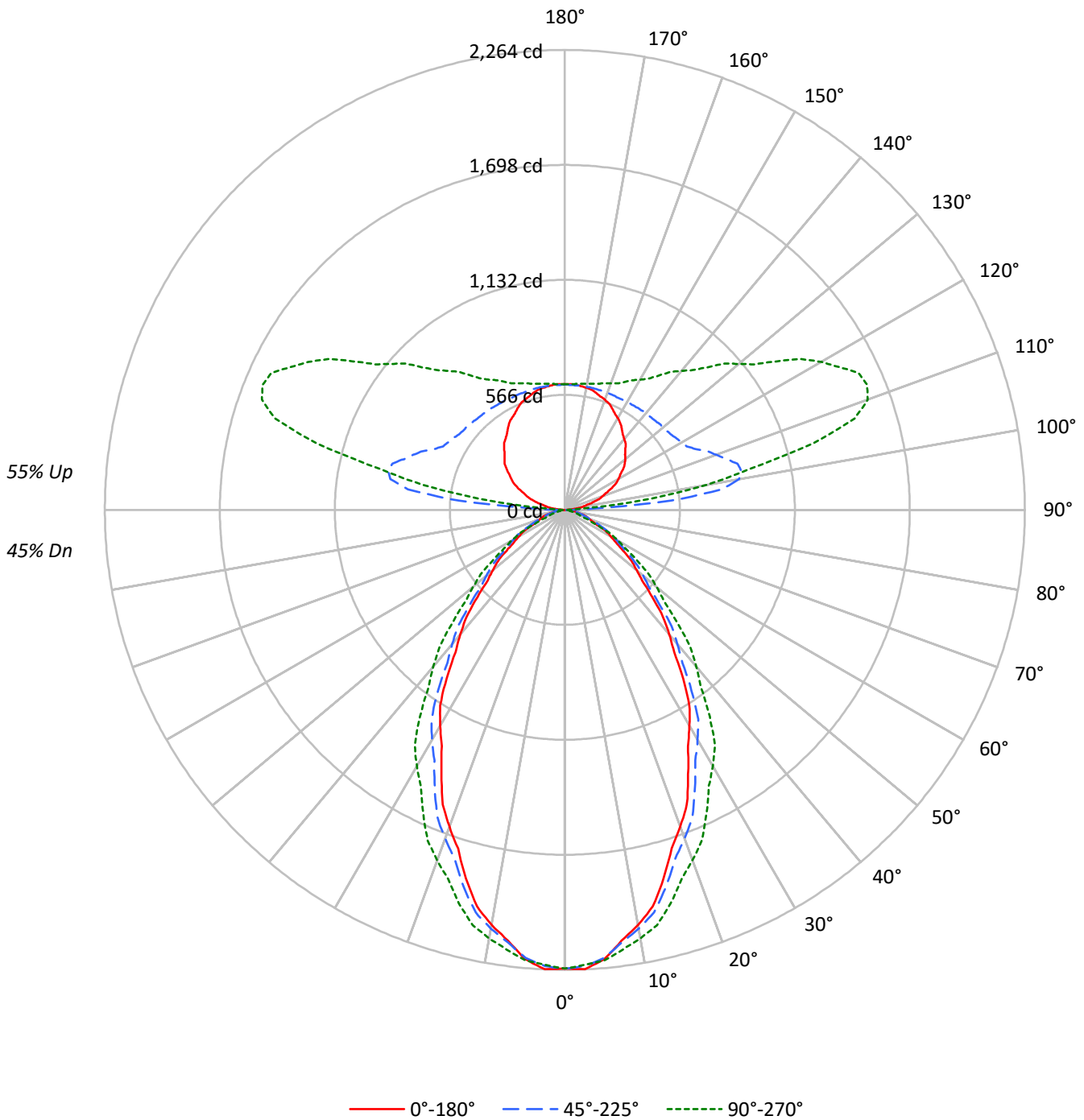
Lumens per Lamp: N/A
Luminaire Lumens: 7308.0 lumens
Efficiency: N/A
Efficacy: 126.2 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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	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°	20833	20833	20833
5°	20573	20500	20619
10°	19437	19614	20068
15°	17944	18360	19184
20°	16294	16907	18026
25°	14615	15413	16794
30°	13068	13923	15517
35°	11428	12253	14006
40°	9618	10382	12125
45°	7938	8623	10122
50°	6627	7224	8433
55°	5627	6199	6965
60°	4809	5375	5558
65°	3829	4521	3591
70°	3394	3528	2190
75°	3144	2862	1344
80°	2896	2630	1158
85°	2625	2414	942



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.1	2.8
10°-20°	538.7	7.4
20°-30°	697.8	9.5
30°-40°	683.3	9.4
40°-50°	523.0	7.2
50°-60°	348.5	4.8
60°-70°	190.2	2.6
70°-80°	79.3	1.1
80°-90°	23.7	0.3
90°-100°	289.5	4.0
100°-110°	799.1	10.9
110°-120°	824.2	11.3
120°-130°	662.3	9.1
130°-140°	520.5	7.1
140°-150°	399.2	5.5
150°-160°	286.9	3.9
160°-170°	175.5	2.4
170°-180°	59.2	0.8
0°-30°	1443.6	19.8
0°-40°	2127.0	29.1
0°-60°	2998.5	41.0
0°-90°	3291.7	45.0
90°-120°	1912.8	26.2
90°-150°	3494.8	47.8
90°-180°	4016.0	55.0
0°-180°	7308.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2258	2258	2258	2258	2258	
5°	2221	2199	2214	2219	2226	207
15°	1879	1872	1922	1974	2008	525
25°	1436	1440	1514	1580	1650	660
35°	1015	1019	1088	1161	1244	631
45°	608	620	661	711	776	474
55°	350	364	385	400	433	317
65°	175	190	207	181	164	182
75°	88	88	80	55	38	94
85°	25	25	23	15	9	27
90°	2	4	8	9	10	4
95°	42	157	525	216	140	45
105°	142	220	879	1342	1264	152
115°	255	308	708	1402	1594	251
125°	350	398	642	1086	1275	312
135°	421	467	624	880	992	326
145°	489	522	616	749	806	306
155°	551	569	611	672	693	254
165°	596	604	614	638	643	168
175°	618	619	615	624	622	59
180°	618	618	618	618	618	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2258.0	2258.0	2258.0	2258.0	2258.0
2.5°	2263.6	2243.4	2248.5	2248.4	2242.2
5°	2221.4	2199.1	2213.5	2218.6	2226.3
7.5°	2139.0	2122.1	2148.3	2167.6	2183.3
10°	2074.7	2060.2	2093.6	2121.8	2142.1
12.5°	2000.2	1988.0	2029.4	2067.2	2093.8
15°	1878.6	1871.8	1922.2	1974.5	2008.4
17.5°	1748.4	1745.1	1802.9	1863.9	1907.3
20°	1659.6	1658.6	1722.0	1785.6	1836.0
22.5°	1570.0	1572.2	1638.8	1704.9	1762.2
25°	1435.7	1439.6	1514.0	1579.9	1649.7
27.5°	1311.4	1313.2	1390.1	1459.8	1534.2
30°	1226.6	1231.5	1306.9	1379.0	1456.5
32.5°	1141.8	1147.4	1221.3	1295.8	1374.8
35°	1014.6	1019.4	1087.9	1161.1	1243.5
37.5°	883.4	890.0	950.8	1020.0	1101.0
40°	798.6	808.3	862.0	927.2	1006.7
42.5°	716.9	729.0	778.8	840.6	912.3
45°	608.4	620.0	660.9	710.9	775.8
47.5°	514.8	528.2	559.6	602.7	658.1
50°	461.7	474.3	503.3	535.2	587.5
52.5°	414.9	427.5	453.4	478.0	522.6
55°	349.8	364.3	385.4	400.0	433.0
57.5°	296.3	310.2	327.0	333.6	353.5
60°	260.6	276.1	291.3	290.5	301.2
62.5°	228.1	241.3	256.4	245.9	246.5
65°	175.4	189.9	207.1	180.9	164.5
67.5°	141.7	144.8	162.5	126.2	106.6
70°	125.8	125.8	130.8	97.7	81.2
72.5°	110.8	110.8	106.2	79.5	62.2
75°	88.2	88.2	80.3	55.1	37.7
77.5°	68.0	67.2	61.4	41.1	27.3
80°	54.5	54.5	49.5	32.5	21.8
82.5°	42.6	42.6	38.4	25.4	16.2
85°	24.8	24.8	22.8	14.7	8.9
87.5°	9.1	9.5	9.5	6.5	5.9
90°	2.0	3.9	7.9	8.9	9.9
92.5°	17.8	73.9	132.1	48.2	37.6
95°	42.5	156.6	525.2	215.9	140.4
97.5°	70.4	175.4	778.0	599.0	433.8
100°	91.0	186.7	871.3	877.5	713.1
102.5°	110.8	199.5	889.5	1084.2	928.3
105°	142.4	219.8	879.2	1342.3	1264.0
107.5°	176.0	244.9	830.2	1466.8	1495.4
110°	199.8	261.7	792.2	1493.5	1586.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	221.1	280.7	756.6	1472.4	1609.3
115°	255.2	308.4	708.1	1401.9	1594.3
117.5°	284.8	337.8	676.3	1302.6	1521.5
120°	304.6	356.8	663.6	1235.3	1455.8
122.5°	323.6	373.5	653.3	1172.6	1381.5
125°	350.1	398.5	641.9	1086.3	1274.8
127.5°	372.7	421.0	635.1	1013.3	1175.9
130°	387.7	436.0	632.0	968.6	1116.6
132.5°	401.9	448.0	628.8	931.1	1065.2
135°	421.3	466.8	624.1	879.8	992.0
137.5°	443.1	484.5	621.7	836.7	932.4
140°	454.9	495.6	620.1	808.0	892.1
142.5°	468.4	505.9	618.5	782.4	856.5
145°	488.6	522.4	616.2	749.0	806.0
147.5°	508.0	537.5	614.0	720.8	765.1
150°	522.2	546.4	613.2	704.0	739.8
152.5°	533.3	555.9	612.4	689.6	719.2
155°	550.9	569.3	611.2	672.0	693.3
157.5°	567.1	581.2	611.4	659.2	673.7
160°	576.6	589.2	612.2	652.0	662.6
162.5°	584.5	595.5	613.0	645.6	653.9
165°	596.4	604.1	614.2	638.0	642.9
167.5°	605.5	610.1	615.2	633.4	634.9
170°	610.2	614.1	615.2	631.0	631.0
172.5°	614.2	616.5	615.2	627.8	627.0
175°	618.1	619.1	615.2	624.0	622.1
177.5°	619.7	618.9	615.0	620.5	618.9
180°	618.1	618.1	618.1	618.1	618.1

(END OF REPORT)