

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: P519424

Luminaire Tested: **SQ4-WB-100U-100D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519424
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-940-1D-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

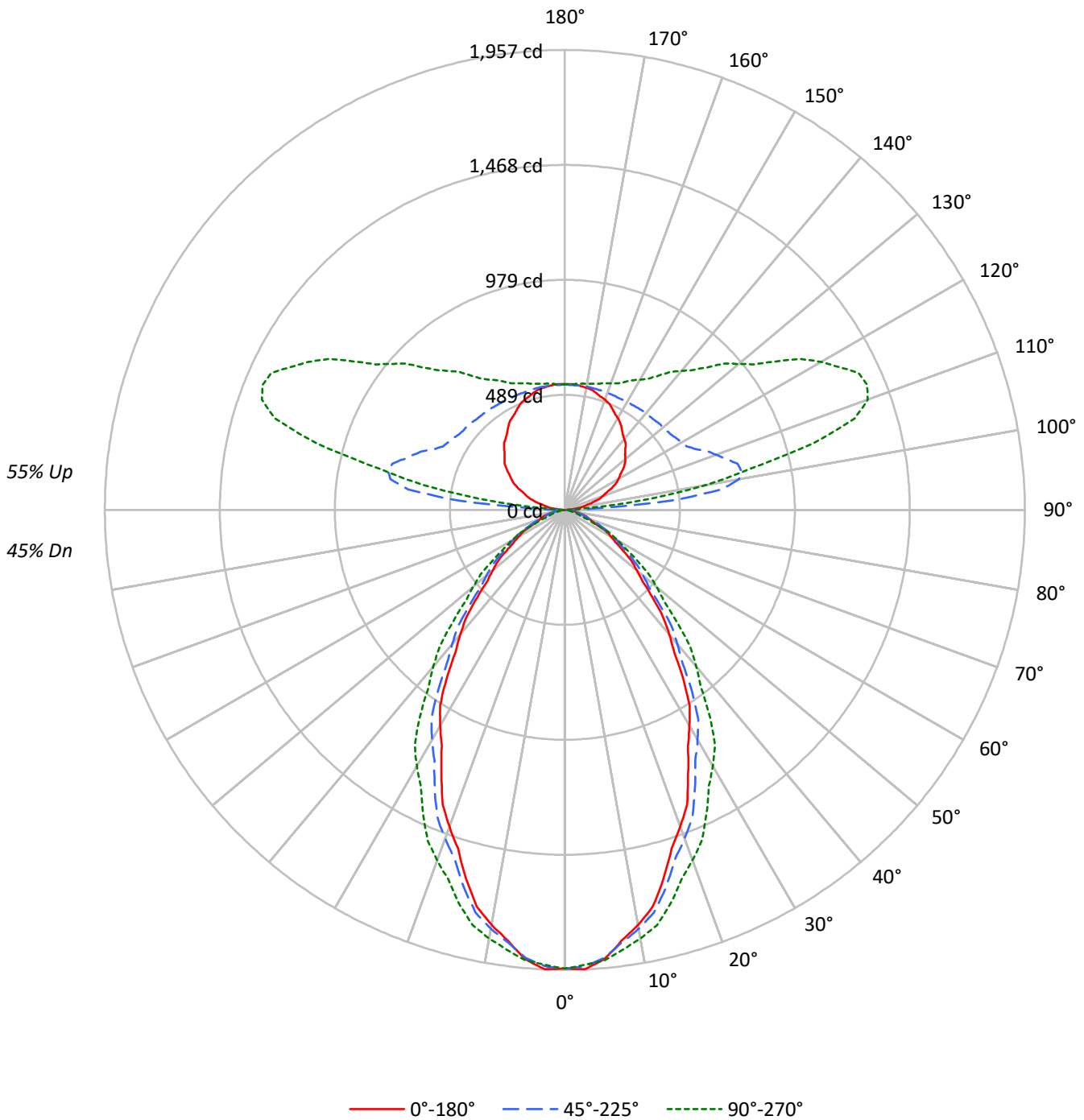
Lumens per Lamp: N/A
Luminaire Lumens: 6317.6 lumens
Efficiency: N/A
Efficacy: 109.1 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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	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°	18010	18010	18010
5°	17785	17722	17825
10°	16803	16956	17349
15°	15512	15872	16584
20°	14086	14617	15584
25°	12634	13324	14518
30°	11297	12036	13414
35°	9879	10593	12107
40°	8315	8975	10481
45°	6862	7454	8751
50°	5728	6245	7290
55°	4864	5360	6021
60°	4157	4646	4805
65°	3310	3908	3104
70°	2935	3051	1894
75°	2716	2474	1159
80°	2502	2274	999
85°	2265	2085	815



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.0	2.8
10°-20°	465.7	7.4
20°-30°	603.2	9.5
30°-40°	590.7	9.4
40°-50°	452.2	7.2
50°-60°	301.3	4.8
60°-70°	164.4	2.6
70°-80°	68.5	1.1
80°-90°	20.5	0.3
90°-100°	250.2	4.0
100°-110°	690.9	10.9
110°-120°	712.5	11.3
120°-130°	572.6	9.1
130°-140°	450.0	7.1
140°-150°	345.1	5.5
150°-160°	248.0	3.9
160°-170°	151.7	2.4
170°-180°	51.1	0.8
0°-30°	1248.0	19.8
0°-40°	1838.7	29.1
0°-60°	2592.2	41.0
0°-90°	2845.6	45.0
90°-120°	1653.6	26.2
90°-150°	3021.2	47.8
90°-180°	3472.0	55.0
0°-180°	6317.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1952	1952	1952	1952	1952	
5°	1920	1901	1914	1918	1925	179
15°	1624	1618	1662	1707	1736	454
25°	1241	1244	1309	1366	1426	571
35°	877	881	940	1004	1075	545
45°	526	536	571	615	671	410
55°	302	315	333	346	374	274
65°	152	164	179	156	142	158
75°	76	76	69	48	32	81
85°	21	21	20	13	8	23
90°	2	3	7	8	8	4
95°	37	135	454	187	121	39
105°	123	190	760	1160	1093	131
115°	221	267	612	1212	1378	217
125°	303	344	555	939	1102	269
135°	364	404	540	761	858	282
145°	422	452	533	648	697	264
155°	476	492	528	581	599	219
165°	516	522	531	552	556	145
175°	534	535	532	540	538	51
180°	534	534	534	534	534	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1952.0	1952.0	1952.0	1952.0	1952.0
2.5°	1956.8	1939.4	1943.8	1943.7	1938.3
5°	1920.3	1901.1	1913.5	1917.9	1924.6
7.5°	1849.1	1834.5	1857.1	1873.9	1887.5
10°	1793.6	1781.0	1809.9	1834.2	1851.8
12.5°	1729.2	1718.6	1754.4	1787.1	1810.0
15°	1624.0	1618.1	1661.7	1706.9	1736.2
17.5°	1511.4	1508.6	1558.5	1611.3	1648.8
20°	1434.7	1433.9	1488.7	1543.6	1587.2
22.5°	1357.3	1359.1	1416.7	1473.9	1523.4
25°	1241.1	1244.5	1308.8	1365.8	1426.1
27.5°	1133.7	1135.2	1201.7	1261.9	1326.3
30°	1060.4	1064.6	1129.8	1192.1	1259.1
32.5°	987.1	991.9	1055.8	1120.2	1188.5
35°	877.1	881.3	940.5	1003.8	1074.9
37.5°	763.7	769.4	821.9	881.8	951.8
40°	690.4	698.7	745.2	801.6	870.2
42.5°	619.8	630.2	673.2	726.7	788.7
45°	525.9	536.0	571.3	614.6	670.7
47.5°	445.1	456.6	483.8	521.0	568.9
50°	399.1	410.0	435.1	462.7	507.9
52.5°	358.7	369.6	391.9	413.2	451.7
55°	302.4	314.9	333.2	345.8	374.3
57.5°	256.1	268.2	282.7	288.4	305.6
60°	225.3	238.7	251.8	251.2	260.4
62.5°	197.2	208.6	221.7	212.6	213.1
65°	151.6	164.2	179.0	156.4	142.2
67.5°	122.5	125.2	140.5	109.1	92.2
70°	108.8	108.8	113.1	84.5	70.2
72.5°	95.8	95.8	91.8	68.7	53.8
75°	76.2	76.2	69.4	47.6	32.5
77.5°	58.8	58.1	53.1	35.5	23.6
80°	47.1	47.1	42.8	28.1	18.8
82.5°	36.8	36.8	33.2	21.9	14.0
85°	21.4	21.4	19.7	12.7	7.7
87.5°	7.9	8.2	8.2	5.6	5.1
90°	1.7	3.4	6.8	7.7	8.5
92.5°	15.4	63.9	114.2	41.7	32.5
95°	36.8	135.4	454.0	186.6	121.4
97.5°	60.9	151.7	672.5	517.8	375.0
100°	78.7	161.4	753.2	758.6	616.4
102.5°	95.8	172.5	769.0	937.3	802.5
105°	123.1	190.0	760.1	1160.4	1092.7
107.5°	152.2	211.7	717.7	1268.0	1292.7
110°	172.7	226.2	684.8	1291.1	1371.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	191.2	242.7	654.1	1272.9	1391.2
115°	220.6	266.6	612.2	1211.9	1378.2
117.5°	246.2	292.0	584.6	1126.0	1315.3
120°	263.3	308.5	573.7	1067.9	1258.5
122.5°	279.8	322.9	564.8	1013.7	1194.2
125°	302.7	344.5	554.9	939.1	1102.1
127.5°	322.2	364.0	549.1	876.0	1016.6
130°	335.2	377.0	546.3	837.4	965.3
132.5°	347.5	387.3	543.6	805.0	920.8
135°	364.2	403.5	539.5	760.6	857.6
137.5°	383.0	418.8	537.4	723.3	806.1
140°	393.3	428.4	536.1	698.5	771.2
142.5°	404.9	437.4	534.7	676.4	740.4
145°	422.4	451.6	532.7	647.5	696.8
147.5°	439.1	464.7	530.8	623.1	661.4
150°	451.4	472.3	530.1	608.6	639.5
152.5°	461.0	480.6	529.4	596.2	621.7
155°	476.2	492.1	528.4	581.0	599.3
157.5°	490.2	502.5	528.6	569.9	582.4
160°	498.5	509.3	529.2	563.6	572.8
162.5°	505.3	514.8	529.9	558.1	565.3
165°	515.6	522.2	530.9	551.6	555.7
167.5°	523.4	527.4	531.8	547.6	548.9
170°	527.5	530.9	531.8	545.5	545.5
172.5°	530.9	533.0	531.8	542.7	542.1
175°	534.4	535.2	531.8	539.5	537.8
177.5°	535.7	535.1	531.6	536.4	535.0
180°	534.4	534.4	534.4	534.4	534.4

(END OF REPORT)