

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521116

Luminaire Tested: **SQ4-BB-075U-100D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521116
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-075U-100D-93050-1D-UNV-STD-W-4 (4000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

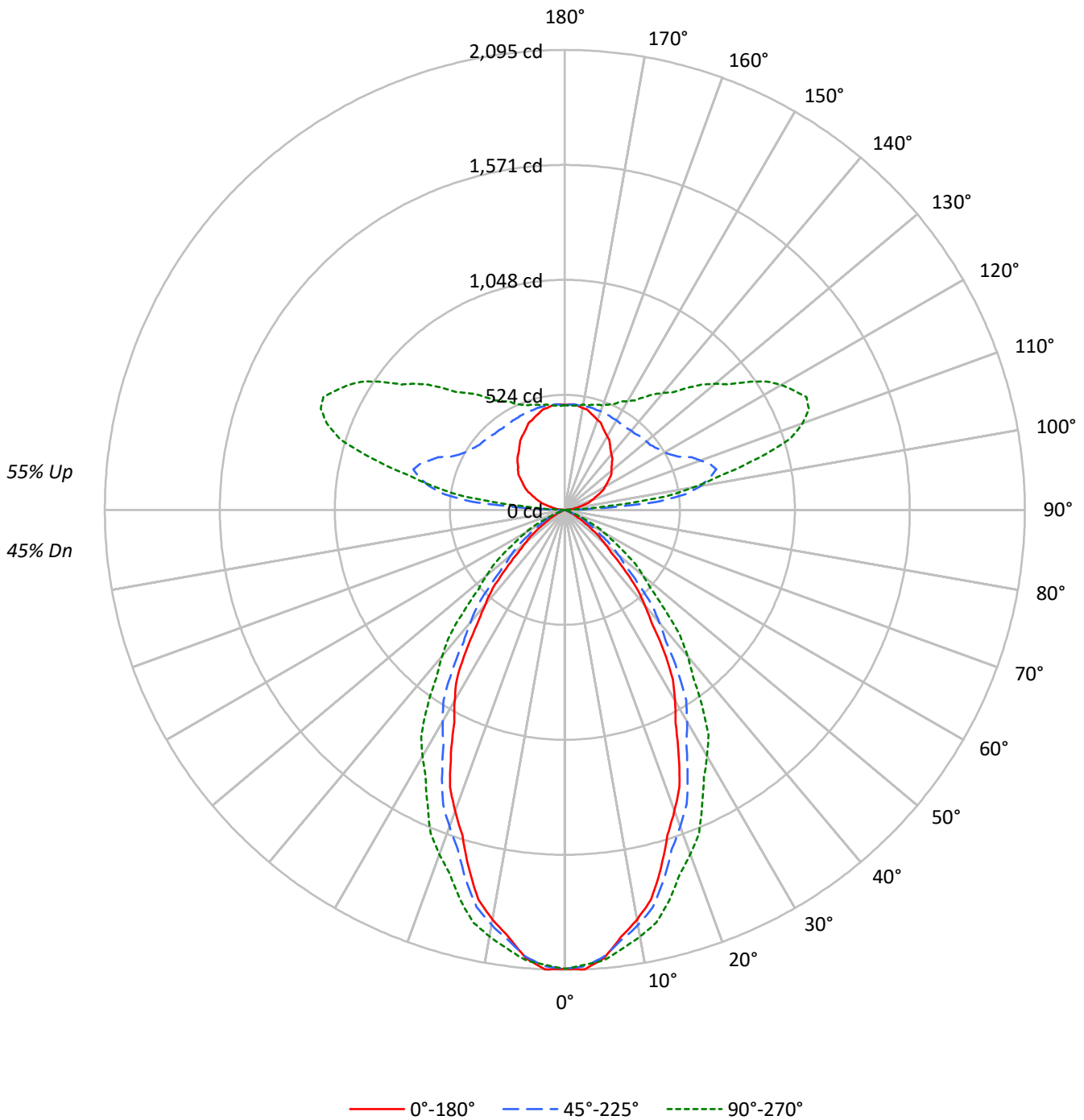
Lumens per Lamp: N/A
Luminaire Lumens: 5583.2 lumens
Efficiency: N/A
Efficacy: 84.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 66.1
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	45
1	98	95	91	88	90	87	84	82	73	71	69	60	59	57	48	47	46	41
2	91	84	79	75	83	78	73	70	66	63	60	54	52	51	44	43	42	37
3	84	76	69	64	77	70	65	60	59	56	52	50	47	45	41	39	37	33
4	78	68	61	56	71	63	57	53	54	50	46	45	42	40	37	35	34	30
5	72	62	54	49	66	57	51	46	49	45	41	42	38	36	35	32	31	27
6	67	56	49	44	61	52	46	41	45	40	37	38	35	32	32	30	28	25
7	62	51	44	39	57	48	41	37	41	37	33	35	32	29	30	27	25	23
8	58	47	40	35	54	44	38	33	38	33	30	33	29	27	28	25	23	21
9	54	43	36	32	50	40	34	30	35	31	27	31	27	24	26	23	22	19
10	51	40	33	29	47	38	32	28	33	28	25	29	25	22	24	22	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19286	19286	19286
5°	18976	18929	19069
10°	17755	17992	18494
15°	16141	16653	17581
20°	14328	15073	16394
25°	12478	13466	15062
30°	10688	11863	13802
35°	8862	10069	12279
40°	6808	8051	10463
45°	4922	6096	8418
50°	3353	4543	6677
55°	2180	3286	5189
60°	1251	2314	3751
65°	332	1412	1899
70°	165	437	545
75°	71	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.8	3.4
10°-20°	487.9	8.7
20°-30°	610.8	10.9
30°-40°	564.1	10.1
40°-50°	379.1	6.8
50°-60°	195.8	3.5
60°-70°	61.3	1.1
70°-80°	3.9	0.1
80°-90°	0.1	0.0
90°-100°	246.0	4.4
100°-110°	594.5	10.6
110°-120°	634.1	11.4
120°-130°	513.5	9.2
130°-140°	397.6	7.1
140°-150°	303.3	5.4
150°-160°	219.6	3.9
160°-170°	135.2	2.4
170°-180°	45.8	0.8
0°-30°	1289.4	23.1
0°-40°	1853.5	33.2
0°-60°	2428.4	43.5
0°-90°	2493.6	44.7
90°-120°	1474.5	26.4
90°-150°	2689.0	48.2
90°-180°	3090.0	55.3
0°-180°	5583.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2090	2090	2090	2090	2090	
5°	2049	2028	2044	2051	2059	190
15°	1690	1684	1744	1802	1841	471
25°	1226	1236	1323	1413	1480	562
35°	787	807	894	999	1090	487
45°	377	400	467	558	645	296
55°	136	158	204	262	323	126
65°	15	29	65	78	87	26
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	24	123	421	274	192	27
105°	95	164	714	924	913	100
115°	174	222	574	1088	1214	172
125°	248	285	498	866	1017	221
135°	304	340	478	682	785	235
145°	360	386	469	580	626	225
155°	412	430	475	514	533	190
165°	456	463	481	488	495	129
175°	482	480	482	478	477	46
180°	477	477	477	477	477	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2090.4	2090.4	2090.4	2090.4	2090.4
2.5°	2095.2	2075.5	2080.7	2080.6	2075.0
5°	2048.9	2028.2	2043.9	2051.1	2059.0
7.5°	1962.4	1946.1	1976.3	1998.9	2015.3
10°	1895.2	1881.4	1920.5	1951.3	1974.1
12.5°	1817.5	1806.9	1854.1	1896.5	1925.5
15°	1689.9	1684.0	1743.5	1802.0	1840.6
17.5°	1553.2	1553.0	1620.9	1693.6	1740.1
20°	1459.3	1462.3	1535.2	1615.3	1669.7
22.5°	1365.5	1372.4	1450.2	1533.8	1596.1
25°	1225.7	1235.6	1322.8	1413.3	1479.6
27.5°	1091.4	1105.8	1197.6	1291.7	1372.4
30°	1003.2	1020.0	1113.5	1212.4	1295.5
32.5°	916.7	936.6	1027.7	1132.4	1217.0
35°	786.8	806.6	894.0	999.2	1090.2
37.5°	652.7	672.1	757.5	861.0	959.3
40°	565.3	587.1	668.5	768.8	868.7
42.5°	486.0	507.8	584.3	683.0	777.3
45°	377.2	400.0	467.2	558.2	645.2
47.5°	287.0	311.7	370.7	453.1	532.4
50°	233.6	258.3	316.5	389.1	465.2
52.5°	190.7	214.7	267.2	335.5	405.3
55°	135.5	158.3	204.3	262.3	322.6
57.5°	93.6	113.2	154.5	202.9	250.2
60°	67.8	86.5	125.4	164.7	203.3
62.5°	45.1	62.3	100.3	130.4	156.3
65°	15.2	29.0	64.7	78.1	87.0
67.5°	7.7	9.3	34.0	35.9	38.8
70°	6.1	6.1	16.2	17.3	20.2
72.5°	4.4	4.4	6.5	8.3	8.9
75°	2.0	2.0	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.1	66.6	156.9	76.3	51.7
95°	24.3	123.1	421.4	274.0	192.0
97.5°	43.1	136.3	555.0	534.7	459.0
100°	57.6	144.6	628.6	663.6	601.3
102.5°	71.4	152.0	677.1	770.9	733.9
105°	95.0	164.2	714.5	924.5	912.6
107.5°	118.2	178.5	692.5	1047.7	1075.5
110°	134.4	190.7	656.9	1100.8	1153.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	150.6	203.0	625.4	1113.7	1203.3
115°	173.8	222.3	574.0	1088.3	1213.8
117.5°	196.9	242.5	543.9	1029.8	1176.8
120°	212.2	254.7	524.5	983.8	1138.0
122.5°	228.4	267.7	512.4	936.9	1088.7
125°	247.6	285.2	498.2	865.5	1016.7
127.5°	266.6	302.0	488.3	805.1	937.9
130°	277.9	312.5	485.1	763.0	893.4
132.5°	288.4	324.6	480.3	732.6	843.3
135°	304.2	339.8	478.0	682.5	785.3
137.5°	319.2	354.9	471.0	648.6	726.0
140°	330.5	363.1	471.0	624.2	695.3
142.5°	341.8	374.4	466.9	602.9	663.0
145°	359.8	386.5	468.9	580.1	625.6
147.5°	376.6	402.5	467.7	553.9	591.4
150°	387.1	409.8	471.0	542.4	572.0
152.5°	398.4	420.3	470.2	530.2	556.7
155°	412.3	430.1	475.0	513.8	532.6
157.5°	429.1	444.3	474.0	507.6	518.7
160°	435.6	448.4	478.0	499.4	507.3
162.5°	446.1	457.4	476.4	496.9	501.7
165°	455.8	462.7	481.1	488.3	495.2
167.5°	467.7	472.3	479.9	487.7	487.9
170°	471.0	473.9	483.1	482.2	487.1
172.5°	476.6	478.8	480.7	482.8	479.9
175°	482.1	480.1	482.1	478.0	477.0
177.5°	481.1	481.1	479.4	477.7	473.8
180°	477.0	477.0	477.0	477.0	477.0

(END OF REPORT)