

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: P518555

Luminaire Tested: **SQ4-BB-075U-100D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518555
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-075U-100D-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

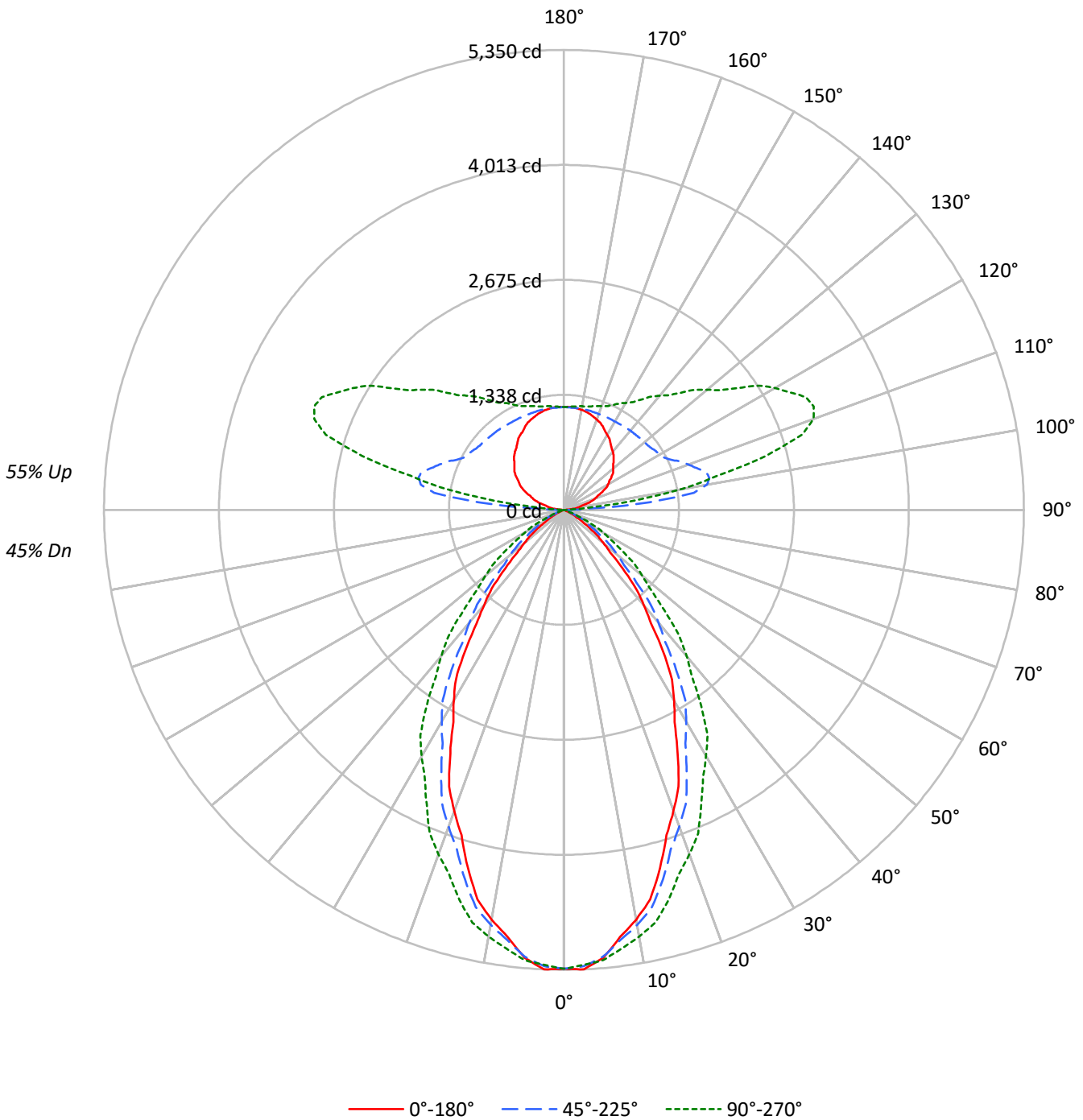
Lumens per Lamp: N/A
Luminaire Lumens: 14174.7 lumens
Efficiency: N/A
Efficacy: 87.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 162.2
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	51	51	51	45
1	98	95	91	88	90	87	84	82	73	71	69	60	59	58	48	47	47	41
2	91	84	79	75	83	78	74	70	66	63	60	55	53	51	44	43	42	37
3	84	76	69	64	77	70	65	60	60	56	52	50	47	45	41	39	38	33
4	78	68	61	56	71	63	57	53	54	50	46	46	42	40	38	36	34	30
5	72	62	55	49	66	57	51	46	49	45	41	42	38	36	35	32	31	28
6	67	56	49	44	62	52	46	41	45	40	37	38	35	32	32	30	28	25
7	62	51	44	39	57	48	42	37	41	37	33	36	32	29	30	27	26	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	41	34	30	35	31	27	31	27	25	26	24	22	20
10	51	40	33	29	47	38	32	28	33	28	25	29	25	23	24	22	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16416	16416	16416
5°	16152	16112	16232
10°	15113	15315	15742
15°	13739	14175	14965
20°	12196	12830	13954
25°	10621	11462	12821
30°	9097	10097	11748
35°	7543	8571	10452
40°	5796	6853	8906
45°	4190	5189	7166
50°	2854	3867	5683
55°	1856	2797	4417
60°	1064	1969	3193
65°	282	1203	1616
70°	139	371	464
75°	62	31	0
80°	46	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	487.2	3.4
10°-20°	1245.8	8.8
20°-30°	1559.6	11.0
30°-40°	1440.6	10.2
40°-50°	968.0	6.8
50°-60°	500.0	3.5
60°-70°	156.6	1.1
70°-80°	9.9	0.1
80°-90°	3.2	0.0
90°-100°	565.0	4.0
100°-110°	1554.4	11.0
110°-120°	1604.4	11.3
120°-130°	1285.5	9.1
130°-140°	1009.6	7.1
140°-150°	773.7	5.5
150°-160°	556.3	3.9
160°-170°	340.2	2.4
170°-180°	114.7	0.8
0°-30°	3292.6	23.2
0°-40°	4733.1	33.4
0°-60°	6201.1	43.7
0°-90°	6370.8	44.9
90°-120°	3723.8	26.3
90°-150°	6792.7	47.9
90°-180°	7804.0	55.1
0°-180°	14174.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5338	5338	5338	5338	5338	
5°	5232	5179	5219	5238	5258	485
15°	4315	4300	4452	4602	4700	1202
25°	3130	3155	3378	3609	3778	1435
35°	2009	2060	2283	2552	2784	1245
45°	963	1021	1193	1425	1648	757
55°	346	404	522	670	824	323
65°	39	74	165	199	222	65
75°	5	5	3	0	0	7
85°	0	0	0	0	0	1
90°	2	10	18	23	23	6
95°	84	308	999	427	273	89
105°	278	427	1713	2608	2434	293
115°	492	599	1374	2736	3104	485
125°	678	773	1246	2108	2470	605
135°	818	908	1211	1705	1929	631
145°	946	1010	1193	1453	1565	593
155°	1070	1105	1185	1306	1343	492
165°	1157	1172	1190	1239	1246	326
175°	1198	1200	1193	1208	1206	114
180°	1198	1198	1198	1198	1198	



TEST NUMBER: P518555

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5338.0	5338.0	5338.0	5338.0	5338.0
2.5°	5350.4	5299.9	5313.2	5312.9	5298.7
5°	5232.1	5179.1	5219.2	5237.7	5257.9
7.5°	5011.1	4969.6	5046.7	5104.5	5146.4
10°	4839.6	4804.2	4904.1	4982.9	5041.0
12.5°	4641.2	4614.0	4734.7	4842.8	4917.1
15°	4315.3	4300.2	4452.2	4601.6	4700.1
17.5°	3966.2	3965.7	4139.2	4324.7	4443.4
20°	3726.5	3734.1	3920.2	4124.8	4263.7
22.5°	3486.9	3504.5	3703.3	3916.6	4075.7
25°	3130.0	3155.2	3377.9	3609.0	3778.2
27.5°	2787.0	2823.9	3058.2	3298.4	3504.4
30°	2561.8	2604.8	2843.3	3096.1	3308.2
32.5°	2340.8	2391.8	2624.3	2891.6	3107.8
35°	2009.2	2059.7	2282.9	2551.6	2783.9
37.5°	1666.7	1716.2	1934.3	2198.8	2449.7
40°	1443.6	1499.2	1707.0	1963.3	2218.4
42.5°	1241.1	1296.7	1492.2	1744.0	1984.9
45°	963.3	1021.3	1193.1	1425.4	1647.6
47.5°	732.9	796.0	946.7	1156.9	1359.4
50°	596.6	659.7	808.3	993.5	1187.9
52.5°	487.1	548.2	682.3	856.8	1035.1
55°	346.1	404.1	521.7	669.8	823.8
57.5°	239.1	289.1	394.6	518.2	638.9
60°	173.0	221.0	320.2	420.6	519.1
62.5°	115.2	159.1	256.2	333.1	399.3
65°	38.7	74.1	165.3	199.4	222.1
67.5°	19.6	23.7	86.8	91.6	99.2
70°	15.5	15.5	41.3	44.1	51.6
72.5°	11.4	11.4	16.5	21.2	22.7
75°	5.2	5.2	2.6	0.0	0.0
77.5°	2.6	2.6	2.1	0.0	0.0
80°	2.6	2.6	0.0	0.0	0.0
82.5°	0.5	0.5	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.5	2.0	3.6	4.6	4.6
90°	2.5	10.0	17.8	22.9	22.9
92.5°	35.2	150.3	260.5	100.0	82.1
95°	84.1	308.4	999.1	427.2	272.7
97.5°	137.1	342.0	1524.6	1174.7	828.8
100°	175.9	362.8	1689.8	1705.6	1391.6
102.5°	212.6	387.5	1732.6	2116.0	1827.9
105°	277.8	427.3	1712.7	2608.5	2434.0
107.5°	340.0	476.6	1615.4	2849.6	2901.5
110°	384.9	509.5	1542.0	2909.6	3089.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	425.6	546.3	1468.6	2871.0	3144.1
115°	491.9	599.1	1373.8	2735.5	3104.3
117.5°	555.1	653.8	1313.6	2545.5	2962.6
120°	593.9	688.6	1287.1	2403.0	2834.2
122.5°	628.5	723.2	1268.8	2278.2	2687.4
125°	678.0	772.7	1246.3	2108.4	2469.7
127.5°	724.9	815.1	1231.5	1966.7	2283.7
130°	749.3	841.5	1223.4	1882.4	2171.5
132.5°	777.9	870.1	1217.3	1808.4	2069.6
135°	818.1	907.9	1210.6	1705.1	1929.4
137.5°	855.9	939.1	1205.0	1621.6	1806.5
140°	884.4	961.7	1203.0	1566.2	1733.1
142.5°	908.9	980.1	1198.9	1516.7	1659.7
145°	945.6	1010.4	1192.8	1452.8	1564.9
147.5°	984.8	1040.6	1189.7	1396.2	1485.9
150°	1009.3	1059.1	1187.7	1365.2	1434.9
152.5°	1031.7	1077.6	1185.7	1338.4	1396.2
155°	1070.5	1105.4	1185.2	1305.8	1343.2
157.5°	1098.5	1126.9	1185.2	1279.0	1304.9
160°	1118.9	1141.3	1185.2	1264.6	1284.6
162.5°	1135.2	1153.6	1187.2	1252.3	1268.2
165°	1157.1	1172.1	1190.3	1238.8	1246.3
167.5°	1172.4	1183.9	1192.8	1227.5	1229.5
170°	1182.6	1190.1	1192.8	1223.4	1223.4
172.5°	1190.8	1194.3	1192.8	1217.2	1215.2
175°	1197.9	1200.4	1192.8	1208.0	1205.5
177.5°	1199.9	1199.9	1191.8	1203.9	1199.9
180°	1197.9	1197.9	1197.9	1197.9	1197.9

(END OF REPORT)