

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: P521312

Luminaire Tested: **SQ4-BB-150U-075D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521312
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-150U-075D-93050-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

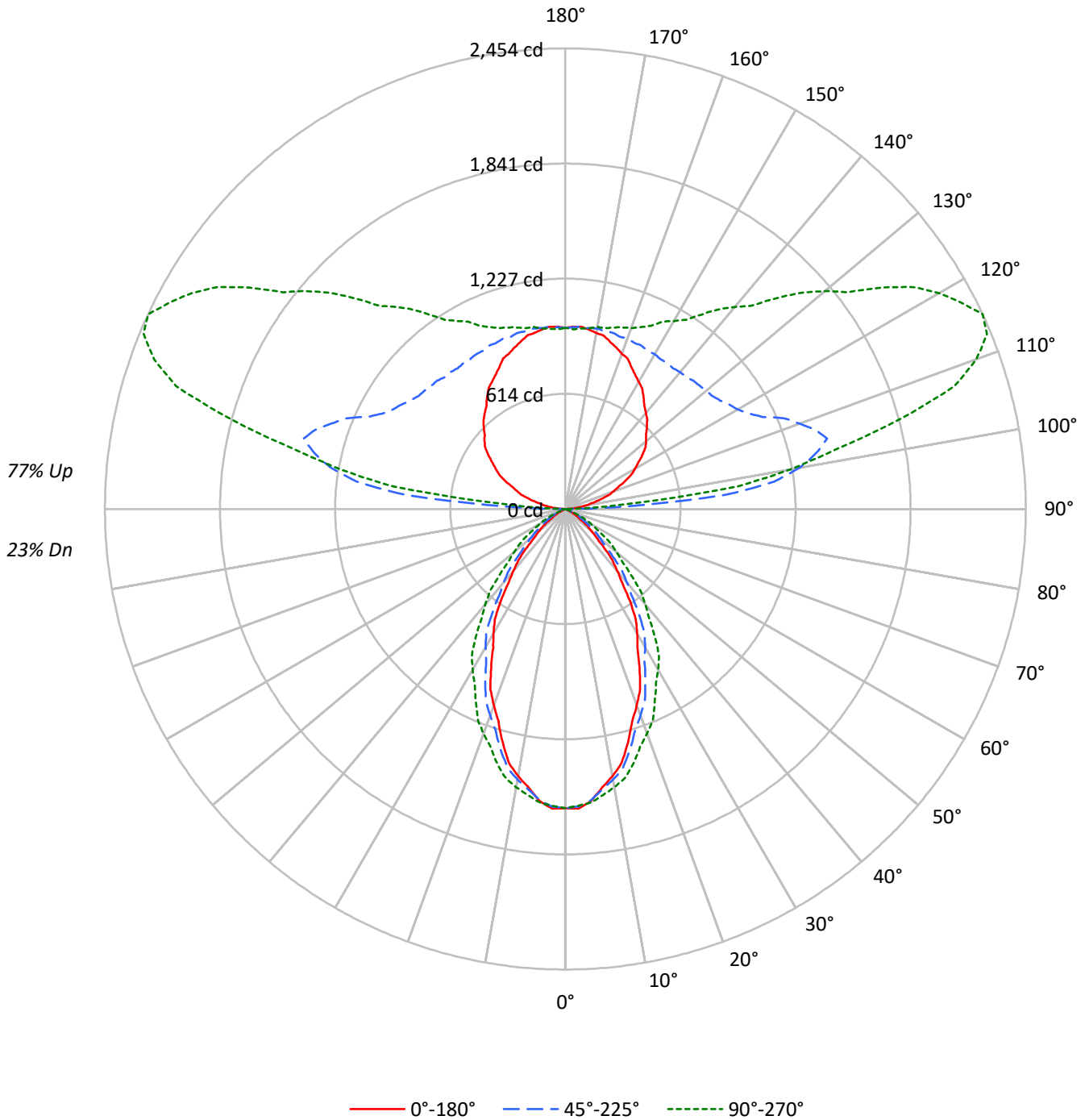
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8147.6 lumens
Efficiency: N/A
Efficacy: 98.8 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: Semi-Indirect

Input Watts (W): 82.5
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	101	101	101	101	90	90	90	90	69	69	69	49	49	49	32	32	32	23
1	93	89	85	82	82	79	76	74	61	59	58	44	43	43	29	29	28	21
2	85	78	73	69	75	70	66	62	55	52	49	40	38	37	27	26	25	19
3	78	70	63	58	69	62	57	53	49	45	42	36	34	32	24	23	22	17
4	72	62	55	50	64	56	50	45	44	40	37	33	30	28	22	21	20	16
5	66	56	48	43	59	50	44	39	40	35	32	30	27	25	21	19	18	14
6	61	50	43	38	54	45	39	35	36	32	28	27	24	22	19	18	16	13
7	57	45	38	33	50	41	35	31	33	28	25	25	22	20	18	16	15	12
8	53	41	34	29	47	37	31	27	30	26	23	23	20	18	16	15	14	11
9	49	38	31	26	44	34	28	24	28	23	20	21	18	16	15	14	12	10
10	46	35	28	24	41	32	26	22	25	21	18	20	17	15	14	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14711	14711	14711
5°	14475	14439	14546
10°	13543	13724	14107
15°	12312	12703	13411
20°	10929	11497	12505
25°	9517	10272	11489
30°	8152	9048	10528
35°	6760	7680	9366
40°	5193	6141	7980
45°	3754	4650	6422
50°	2558	3466	5093
55°	1663	2506	3959
60°	954	1766	2862
65°	253	1078	1447
70°	124	332	415
75°	53	29	0
80°	43	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.5	1.8
10°-20°	372.1	4.6
20°-30°	465.9	5.7
30°-40°	430.3	5.3
40°-50°	289.1	3.5
50°-60°	149.4	1.8
60°-70°	46.8	0.6
70°-80°	3.0	0.0
80°-90°	0.1	0.0
90°-100°	497.2	6.1
100°-110°	1201.7	14.7
110°-120°	1281.7	15.7
120°-130°	1038.1	12.7
130°-140°	803.7	9.9
140°-150°	613.1	7.5
150°-160°	443.8	5.4
160°-170°	273.4	3.4
170°-180°	92.6	1.1
0°-30°	983.5	12.1
0°-40°	1413.8	17.4
0°-60°	1852.3	22.7
0°-90°	1902.1	23.3
90°-120°	2980.7	36.6
90°-150°	5435.7	66.7
90°-180°	6245.0	76.6
0°-180°	8147.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1594	1594	1594	1594	1594	
5°	1563	1547	1559	1565	1571	145
15°	1289	1284	1330	1374	1404	359
25°	935	942	1009	1078	1129	429
35°	600	615	682	762	832	372
45°	288	305	356	426	492	226
55°	103	121	156	200	246	96
65°	12	22	49	60	66	20
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	49	249	852	554	388	55
105°	192	332	1444	1869	1845	203
115°	351	449	1160	2200	2454	347
125°	500	576	1007	1750	2055	447
135°	615	687	966	1380	1587	475
145°	727	781	948	1173	1265	455
155°	834	870	960	1039	1077	385
165°	921	935	972	987	1001	260
175°	974	970	974	966	964	92
180°	964	964	964	964	964	



TEST NUMBER: P521312

CATALOG NUMBER: SQ4-BB-150U-075D-93050-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1594.5	1594.5	1594.5	1594.5	1594.5
2.5°	1598.2	1583.1	1587.1	1587.0	1582.8
5°	1562.9	1547.0	1559.0	1564.6	1570.6
7.5°	1496.8	1484.5	1507.5	1524.7	1537.3
10°	1445.6	1435.1	1464.9	1488.4	1505.8
12.5°	1386.4	1378.2	1414.3	1446.6	1468.8
15°	1289.0	1284.5	1329.9	1374.5	1404.0
17.5°	1184.7	1184.6	1236.4	1291.8	1327.3
20°	1113.1	1115.4	1171.0	1232.1	1273.6
22.5°	1041.6	1046.8	1106.2	1169.9	1217.4
25°	934.9	942.5	1009.0	1078.0	1128.6
27.5°	832.5	843.5	913.5	985.3	1046.8
30°	765.2	778.1	849.3	924.8	988.2
32.5°	699.2	714.4	783.9	863.7	928.3
35°	600.2	615.2	681.9	762.2	831.6
37.5°	497.9	512.7	577.8	656.8	731.8
40°	431.2	447.8	509.9	586.5	662.6
42.5°	370.7	387.3	445.7	520.9	592.9
45°	287.7	305.1	356.4	425.8	492.2
47.5°	218.9	237.8	282.8	345.6	406.1
50°	178.2	197.1	241.5	296.8	354.8
52.5°	145.5	163.7	203.8	255.9	309.2
55°	103.4	120.7	155.8	200.1	246.1
57.5°	71.4	86.4	117.9	154.8	190.8
60°	51.7	66.0	95.7	125.6	155.1
62.5°	34.4	47.5	76.5	99.5	119.3
65°	11.6	22.1	49.4	59.6	66.3
67.5°	5.9	7.1	25.9	27.4	29.6
70°	4.6	4.6	12.3	13.2	15.4
72.5°	3.4	3.4	4.9	6.3	6.8
75°	1.5	1.5	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	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°	16.3	134.6	317.1	154.1	104.6
95°	49.0	248.8	851.9	554.0	388.2
97.5°	87.0	275.6	1122.0	1080.9	927.9
100°	116.4	292.2	1270.7	1341.4	1215.6
102.5°	144.2	307.2	1368.8	1558.3	1483.6
105°	192.0	331.9	1444.4	1868.8	1844.8
107.5°	239.0	360.9	1399.8	2117.8	2174.1
110°	271.7	385.6	1327.9	2225.2	2331.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	304.4	410.3	1264.2	2251.4	2432.4
115°	351.4	449.3	1160.4	2199.9	2453.6
117.5°	398.0	490.3	1099.5	2081.6	2378.8
120°	429.0	514.9	1060.3	1988.8	2300.4
122.5°	461.7	541.2	1035.8	1893.9	2200.7
125°	500.5	576.4	1007.2	1749.6	2055.2
127.5°	538.9	610.4	987.2	1627.4	1895.9
130°	561.8	631.7	980.6	1542.3	1806.0
132.5°	583.1	656.2	970.8	1480.9	1704.7
135°	614.9	686.8	966.3	1379.6	1587.4
137.5°	645.2	717.5	952.0	1311.1	1467.7
140°	668.1	734.0	952.0	1261.7	1405.6
142.5°	690.9	756.9	943.9	1218.7	1340.2
145°	727.3	781.2	947.9	1172.7	1264.6
147.5°	761.2	813.5	945.5	1119.6	1195.5
150°	782.5	828.4	952.0	1096.4	1156.3
152.5°	805.3	849.7	950.4	1071.7	1125.3
155°	833.5	869.5	960.2	1038.7	1076.6
157.5°	867.4	898.2	958.2	1026.1	1048.5
160°	880.5	906.5	966.3	1009.6	1025.6
162.5°	901.8	924.5	963.1	1004.5	1014.1
165°	921.4	935.4	972.5	987.1	1001.1
167.5°	945.5	954.7	970.0	985.9	986.3
170°	952.0	958.0	976.5	974.7	984.7
172.5°	963.5	967.9	971.6	976.0	970.0
175°	974.5	970.5	974.5	966.3	964.3
177.5°	972.5	972.5	969.2	965.7	957.7
180°	964.3	964.3	964.3	964.3	964.3

(END OF REPORT)