

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: P518956

Luminaire Tested: **SQ4-BB-150U-125D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518956
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-125D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

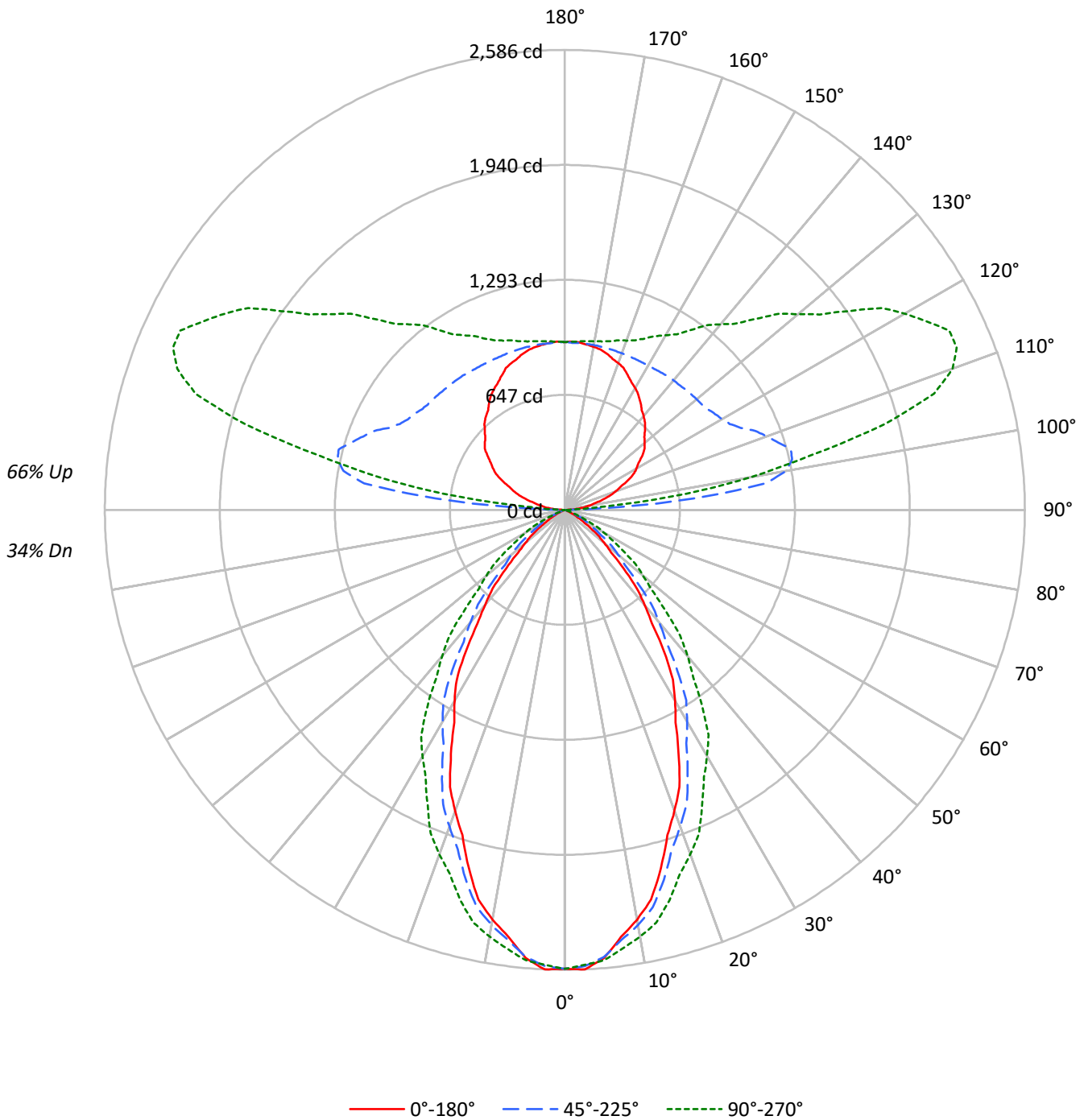
Lumens per Lamp: N/A
Luminaire Lumens: 9164.8 lumens
Efficiency: N/A
Efficacy: 110.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 83.1
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



TEST NUMBER: P518956
CATALOG NUMBER: SQ4-BB-150U-125D-840-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P518956

CATALOG NUMBER: SQ4-BB-150U-125D-840-1D-UNV-STD-W-4

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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	34
1	95	92	88	85	86	83	80	78	67	65	63	52	51	50	38	37	37	31
2	88	81	76	72	79	74	69	66	60	57	54	47	45	43	35	34	33	28
3	81	73	66	61	73	66	61	56	54	50	47	43	40	38	32	31	30	25
4	75	65	58	53	67	59	53	49	49	45	41	39	36	34	30	28	27	23
5	69	59	51	46	62	54	47	43	44	40	36	35	32	30	27	26	24	21
6	64	53	46	40	58	49	42	38	40	36	32	33	29	27	25	23	22	19
7	59	48	41	36	54	44	38	34	37	32	29	30	27	24	23	21	20	17
8	55	44	37	32	50	41	34	30	34	29	26	28	25	22	22	20	18	16
9	52	40	34	29	47	37	31	27	31	27	24	26	23	20	20	18	17	15
10	48	37	31	26	44	34	29	25	29	25	22	24	21	19	19	17	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23808	23808	23808
5°	23425	23367	23541
10°	21918	22210	22830
15°	19926	20558	21702
20°	17688	18607	20237
25°	15403	16623	18593
30°	13193	14643	17037
35°	10940	12430	15158
40°	8405	9939	12916
45°	6076	7526	10393
50°	4140	5609	8243
55°	2691	4057	6405
60°	1543	2856	4630
65°	408	1744	2345
70°	202	540	674
75°	89	43	0
80°	64	0	0
85°	0	0	0



TEST NUMBER: P518956

CATALOG NUMBER: SQ4-BB-150U-125D-840-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	235.5	2.6
10°-20°	602.2	6.6
20°-30°	753.9	8.2
30°-40°	696.4	7.6
40°-50°	467.9	5.1
50°-60°	241.7	2.6
60°-70°	75.7	0.8
70°-80°	4.8	0.1
80°-90°	2.0	0.0
90°-100°	438.6	4.8
100°-110°	1185.8	12.9
110°-120°	1246.8	13.6
120°-130°	1012.7	11.0
130°-140°	794.4	8.7
140°-150°	609.7	6.7
150°-160°	438.5	4.8
160°-170°	267.9	2.9
170°-180°	90.3	1.0
0°-30°	1591.7	17.4
0°-40°	2288.1	25.0
0°-60°	2997.7	32.7
0°-90°	3080.2	33.6
90°-120°	2871.2	31.3
90°-150°	5287.9	57.7
90°-180°	6085.0	66.4
0°-180°	9164.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2580	2580	2580	2580	2580	
5°	2529	2504	2523	2532	2542	234
15°	2086	2079	2152	2224	2272	581
25°	1513	1525	1633	1745	1826	694
35°	971	996	1104	1234	1346	602
45°	466	494	577	689	796	366
55°	167	195	252	324	398	156
65°	19	36	80	96	107	32
75°	2	2	1	0	0	4
85°	0	0	0	0	0	0
90°	2	6	13	14	13	5
95°	68	239	729	378	224	71
105°	220	341	1316	1940	1861	232
115°	388	474	1091	2112	2384	383
125°	531	609	983	1659	1949	474
135°	637	712	957	1340	1517	492
145°	741	796	944	1147	1234	463
155°	836	869	936	1029	1063	386
165°	910	919	940	976	981	256
175°	945	944	941	953	951	90
180°	944	944	944	944	944	

TEST NUMBER: P518956

CATALOG NUMBER: SQ4-BB-150U-125D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2580.5	2580.5	2580.5	2580.5	2580.5
2.5°	2586.5	2562.1	2568.5	2568.3	2561.5
5°	2529.3	2503.7	2523.0	2532.0	2541.8
7.5°	2422.4	2402.4	2439.7	2467.6	2487.8
10°	2339.5	2322.4	2370.7	2408.8	2436.9
12.5°	2243.7	2230.5	2288.8	2341.1	2377.0
15°	2086.1	2078.8	2152.3	2224.5	2272.1
17.5°	1917.3	1917.1	2001.0	2090.7	2148.0
20°	1801.5	1805.1	1895.1	1994.0	2061.1
22.5°	1685.6	1694.2	1790.2	1893.3	1970.3
25°	1513.1	1525.3	1632.9	1744.6	1826.4
27.5°	1347.3	1365.1	1478.4	1594.5	1694.1
30°	1238.4	1259.2	1374.5	1496.7	1599.2
32.5°	1131.6	1156.2	1268.6	1397.9	1502.3
35°	971.3	995.7	1103.6	1233.5	1345.8
37.5°	805.7	829.7	935.1	1062.9	1184.2
40°	697.9	724.7	825.2	949.1	1072.4
42.5°	600.0	626.8	721.3	843.1	959.5
45°	465.7	493.7	576.8	689.1	796.5
47.5°	354.3	384.8	457.7	559.3	657.2
50°	288.4	318.9	390.8	480.3	574.3
52.5°	235.5	265.0	329.8	414.2	500.4
55°	167.3	195.4	252.2	323.8	398.2
57.5°	115.6	139.8	190.8	250.5	308.9
60°	83.6	106.8	154.8	203.3	250.9
62.5°	55.7	76.9	123.8	161.0	193.0
65°	18.7	35.8	79.9	96.4	107.4
67.5°	9.5	11.4	41.9	44.3	47.9
70°	7.5	7.5	20.0	21.3	25.0
72.5°	5.5	5.5	8.0	10.3	11.0
75°	2.5	2.5	1.2	0.0	0.0
77.5°	1.2	1.2	1.0	0.0	0.0
80°	1.2	1.2	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°	0.4	1.2	2.6	2.8	2.6
90°	2.0	6.0	13.2	14.2	13.2
92.5°	28.9	105.1	207.4	90.0	65.2
95°	68.1	238.9	729.4	377.5	224.5
97.5°	109.3	274.0	1136.9	940.9	691.0
100°	140.2	288.2	1263.7	1317.9	1065.6
102.5°	168.6	307.9	1308.4	1603.8	1415.1
105°	220.4	340.6	1315.5	1940.5	1861.0
107.5°	268.4	378.0	1258.0	2150.6	2177.0
110°	305.8	405.1	1206.8	2207.0	2319.2

TEST NUMBER: P518956

CATALOG NUMBER: SQ4-BB-150U-125D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	339.1	432.1	1159.7	2195.7	2384.2
115°	388.1	474.5	1091.0	2112.1	2384.2
117.5°	436.0	517.1	1045.7	1984.3	2292.8
120°	465.3	544.7	1018.9	1892.6	2207.5
122.5°	492.9	570.8	1002.6	1794.3	2111.6
125°	531.3	608.8	983.3	1659.4	1949.4
127.5°	566.6	642.7	972.0	1549.3	1804.4
130°	586.1	664.6	967.1	1481.3	1711.7
132.5°	606.5	684.1	962.2	1419.9	1632.1
135°	636.9	712.4	956.9	1339.9	1516.7
137.5°	667.6	738.9	952.5	1274.9	1418.9
140°	688.7	755.3	950.8	1233.1	1361.2
142.5°	709.1	771.6	947.6	1195.4	1307.6
145°	740.6	796.2	943.7	1146.9	1234.3
147.5°	769.2	818.5	939.3	1102.9	1170.1
150°	790.3	834.0	937.6	1079.0	1132.7
152.5°	809.8	848.0	936.8	1056.9	1101.0
155°	836.0	868.8	935.6	1028.8	1062.6
157.5°	863.3	886.1	935.8	1009.2	1031.5
160°	878.7	897.6	936.6	996.9	1012.8
162.5°	890.9	906.6	937.4	987.1	999.0
165°	910.2	919.1	939.7	976.3	981.3
167.5°	923.4	929.6	939.9	967.1	969.5
170°	931.5	934.5	940.7	963.0	963.0
172.5°	938.0	938.6	940.7	958.1	957.3
175°	944.7	943.8	940.7	952.8	950.8
177.5°	947.0	944.6	940.5	948.6	946.2
180°	943.7	943.7	943.7	943.7	943.7

(END OF REPORT)