

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: P518832

Luminaire Tested: **SQ4-BB-125U-100D-835-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518832
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-100D-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

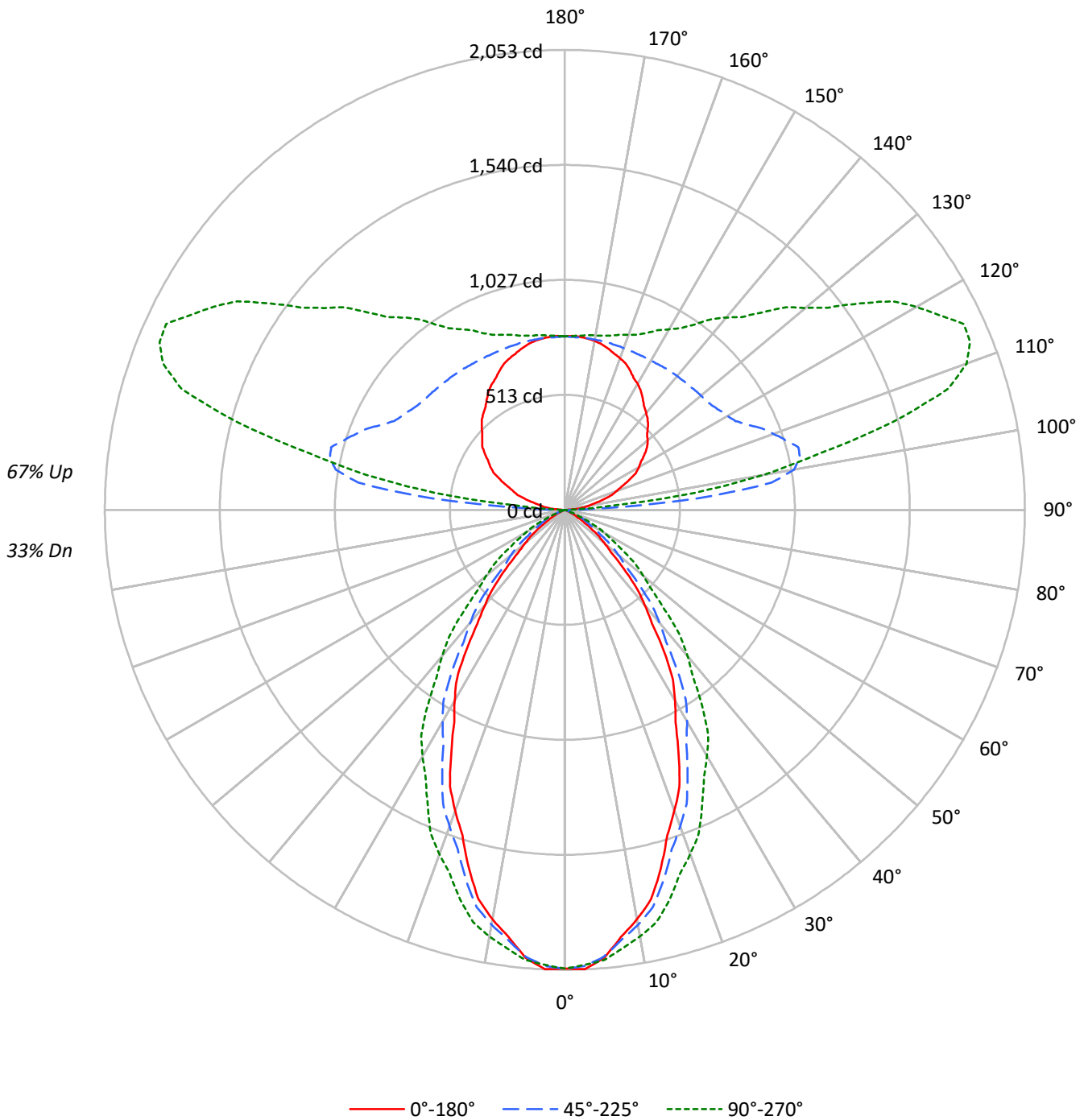
Lumens per Lamp: N/A
Luminaire Lumens: 7444.0 lumens
Efficiency: N/A
Efficacy: 115.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 64.5
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



TEST NUMBER: P518832
CATALOG NUMBER: SQ4-BB-125U-100D-835-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P518832

CATALOG NUMBER: SQ4-BB-125U-100D-835-1D-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	56	56	56	40	40	40	33
1	95	91	88	85	86	83	80	77	66	64	63	51	50	49	37	37	36	30
2	88	81	76	71	79	74	69	65	59	56	54	46	45	43	34	33	32	27
3	81	72	66	61	73	66	60	56	54	50	47	42	40	38	32	30	29	24
4	74	65	58	53	67	59	53	49	48	44	41	38	36	33	29	27	26	22
5	69	58	51	46	62	53	47	42	44	39	36	35	32	30	27	25	24	20
6	64	53	45	40	58	48	42	38	40	35	32	32	29	27	25	23	21	18
7	59	48	41	36	53	44	38	33	37	32	29	30	26	24	23	21	20	17
8	55	44	37	32	50	40	34	30	34	29	26	27	24	22	21	19	18	15
9	51	40	33	29	47	37	31	27	31	27	23	25	22	20	20	18	16	14
10	48	37	30	26	44	34	28	24	29	24	21	24	20	18	19	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18893	18893	18893
5°	18590	18543	18681
10°	17394	17626	18118
15°	15813	16314	17223
20°	14036	14766	16060
25°	12224	13192	14755
30°	10470	11621	13520
35°	8682	9864	12029
40°	6670	7888	10249
45°	4821	5972	8248
50°	3285	4451	6541
55°	2136	3219	5083
60°	1225	2266	3674
65°	325	1384	1860
70°	159	429	534
75°	71	36	0
80°	53	0	0
85°	0	0	0



TEST NUMBER: P518832

CATALOG NUMBER: SQ4-BB-125U-100D-835-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.9	2.5
10°-20°	477.9	6.4
20°-30°	598.3	8.0
30°-40°	552.6	7.4
40°-50°	371.3	5.0
50°-60°	191.8	2.6
60°-70°	60.1	0.8
70°-80°	3.8	0.1
80°-90°	1.9	0.0
90°-100°	362.3	4.9
100°-110°	975.9	13.1
110°-120°	1024.2	13.8
120°-130°	831.1	11.2
130°-140°	651.8	8.8
140°-150°	500.4	6.7
150°-160°	359.8	4.8
160°-170°	219.8	3.0
170°-180°	74.1	1.0
0°-30°	1263.1	17.0
0°-40°	1815.8	24.4
0°-60°	2378.9	32.0
0°-90°	2444.7	32.8
90°-120°	2362.3	31.7
90°-150°	4345.6	58.4
90°-180°	4999.0	67.2
0°-180°	7444.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2048	2048	2048	2048	2048	
5°	2007	1987	2002	2009	2017	186
15°	1656	1650	1708	1765	1803	461
25°	1201	1210	1296	1384	1449	551
35°	771	790	876	979	1068	477
45°	370	392	458	547	632	290
55°	133	155	200	257	316	124
65°	15	28	63	76	85	25
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	2	6	12	13	13	4
95°	55	197	594	304	210	58
105°	180	281	1079	1615	1515	190
115°	319	390	899	1736	1964	314
125°	435	500	807	1364	1605	389
135°	524	585	784	1100	1246	404
145°	606	653	774	941	1010	380
155°	688	713	768	844	871	317
165°	746	754	770	801	805	210
175°	775	774	772	782	780	74
180°	774	774	774	774	774	



TEST NUMBER: P518832

CATALOG NUMBER: SQ4-BB-125U-100D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2047.8	2047.8	2047.8	2047.8	2047.8
2.5°	2052.6	2033.2	2038.3	2038.2	2032.8
5°	2007.2	1986.9	2002.2	2009.4	2017.1
7.5°	1922.4	1906.5	1936.1	1958.2	1974.3
10°	1856.6	1843.0	1881.4	1911.6	1933.9
12.5°	1780.5	1770.1	1816.4	1857.8	1886.3
15°	1655.5	1649.7	1708.0	1765.3	1803.1
17.5°	1521.5	1521.4	1587.9	1659.1	1704.6
20°	1429.6	1432.5	1503.9	1582.4	1635.7
22.5°	1337.7	1344.4	1420.7	1502.5	1563.6
25°	1200.8	1210.4	1295.9	1384.5	1449.4
27.5°	1069.2	1083.3	1173.2	1265.4	1344.4
30°	982.8	999.3	1090.8	1187.7	1269.1
32.5°	898.0	917.6	1006.8	1109.3	1192.2
35°	770.8	790.2	875.8	978.9	1068.0
37.5°	639.4	658.4	742.0	843.5	939.8
40°	553.8	575.1	654.9	753.2	851.0
42.5°	476.1	497.5	572.4	669.1	761.5
45°	369.5	391.8	457.7	546.8	632.1
47.5°	281.2	305.4	363.2	443.8	521.5
50°	228.9	253.1	310.1	381.1	455.7
52.5°	186.8	210.3	261.7	328.7	397.1
55°	132.8	155.0	200.1	256.9	316.0
57.5°	91.7	110.9	151.4	198.8	245.1
60°	66.4	84.8	122.8	161.4	199.1
62.5°	44.2	61.0	98.3	127.8	153.2
65°	14.9	28.4	63.4	76.5	85.2
67.5°	7.5	9.1	33.3	35.1	38.0
70°	5.9	5.9	15.9	16.9	19.8
72.5°	4.4	4.4	6.3	8.1	8.7
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°	0.4	1.2	2.4	2.6	2.6
90°	2.0	5.8	11.8	12.8	12.8
92.5°	24.1	85.0	168.1	80.9	56.2
95°	55.2	197.0	593.9	303.7	210.1
97.5°	88.2	225.6	931.5	778.2	586.8
100°	113.4	236.9	1038.8	1086.9	901.7
102.5°	137.9	252.9	1074.3	1318.1	1166.1
105°	180.5	280.9	1079.3	1614.6	1515.3
107.5°	220.8	310.3	1033.3	1767.0	1792.7
110°	247.6	332.5	991.5	1814.4	1907.9



TEST NUMBER: P518832

CATALOG NUMBER: SQ4-BB-125U-100D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	276.0	354.7	951.2	1803.9	1957.7
115°	318.6	390.0	898.7	1736.5	1964.2
117.5°	357.5	424.5	858.1	1629.0	1882.5
120°	382.8	447.4	837.6	1551.8	1812.2
122.5°	404.9	468.7	822.6	1472.9	1732.5
125°	435.1	499.7	807.0	1363.9	1605.1
127.5°	464.1	527.7	797.1	1267.8	1483.1
130°	481.4	545.1	793.2	1212.8	1401.8
132.5°	498.8	561.7	789.2	1164.3	1337.9
135°	523.8	584.6	784.3	1100.3	1246.0
137.5°	547.7	606.0	781.7	1046.1	1165.7
140°	564.3	620.2	779.4	1012.7	1120.7
142.5°	581.7	633.7	777.8	981.5	1072.5
145°	605.7	653.0	774.4	940.7	1010.2
147.5°	631.8	672.9	771.1	906.5	961.1
150°	649.1	684.8	769.5	885.0	930.3
152.5°	664.9	696.0	768.7	867.4	904.2
155°	687.6	712.7	767.5	844.1	871.1
157.5°	707.5	727.0	767.7	827.7	845.8
160°	720.2	736.6	768.5	818.1	831.6
162.5°	731.2	744.5	769.3	810.2	819.8
165°	745.8	754.5	770.5	801.1	805.0
167.5°	757.6	762.7	771.5	794.2	795.7
170°	765.5	767.5	771.5	790.2	790.2
172.5°	770.3	770.7	772.2	786.3	786.3
175°	775.4	774.4	771.5	782.3	780.3
177.5°	777.6	776.0	772.1	778.3	776.8
180°	774.4	774.4	774.4	774.4	774.4

(END OF REPORT)