

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: P518306

Luminaire Tested: **SQ4-BB-025U-050D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518306
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, 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-025U-050D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

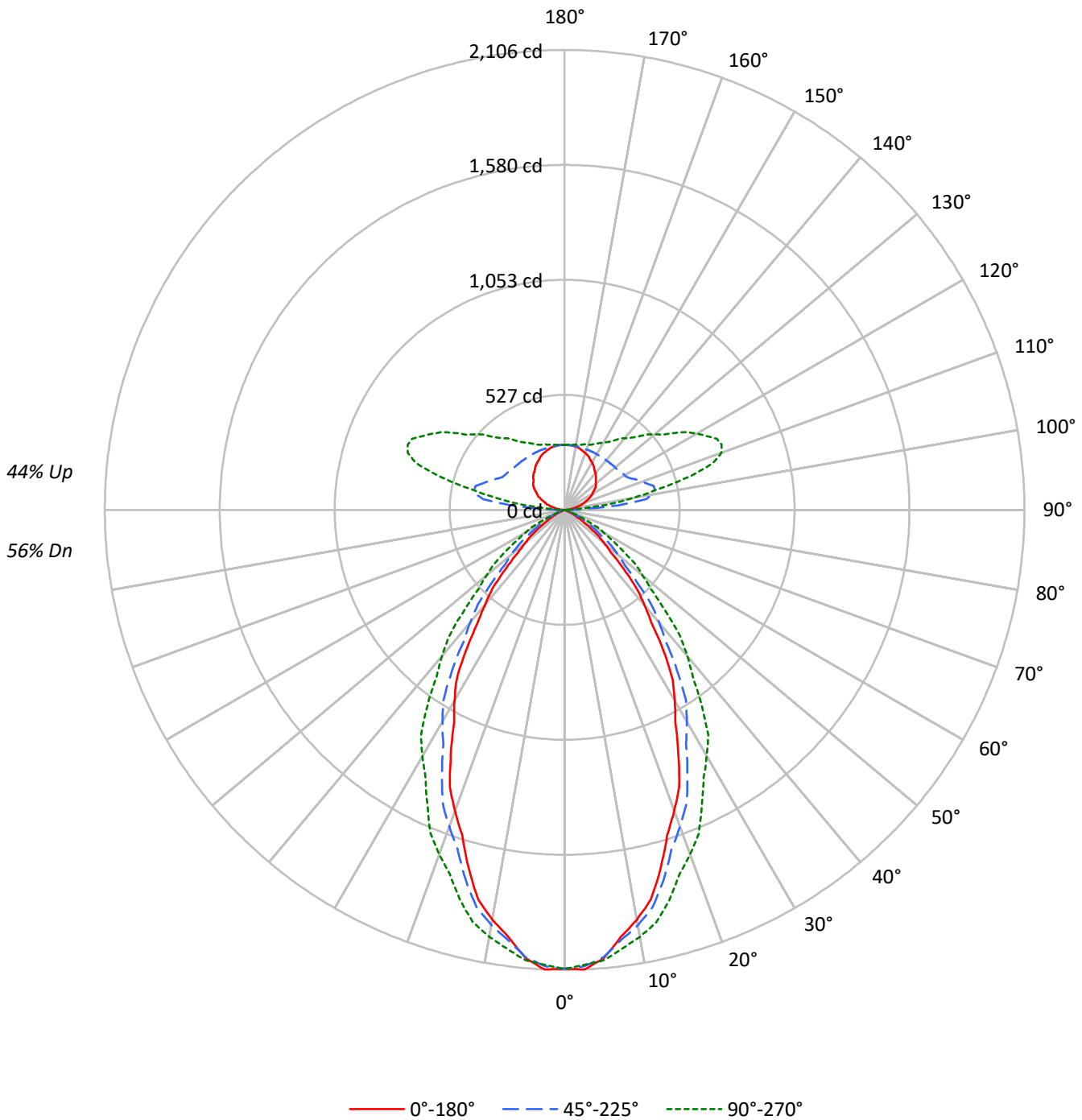
Lumens per Lamp: N/A
Luminaire Lumens: 4440.3 lumens
Efficiency: N/A
Efficacy: 97.2 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 45.7
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									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0							
RCR																																					
0	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	56																			
1	101	98	94	92	94	91	89	86	79	77	76	68	67	66	58	57	56	52																			
2	94	88	83	78	87	82	78	74	72	69	66	62	60	58	54	52	51	47																			
3	87	79	73	68	81	74	69	64	65	61	58	57	54	52	49	47	46	42																			
4	81	71	65	59	75	67	61	57	60	55	51	52	49	46	46	43	41	38																			
5	75	65	58	53	70	61	55	50	55	50	46	48	45	42	42	40	37	35																			
6	70	59	52	47	65	56	50	45	50	45	41	44	41	38	39	36	34	32																			
7	65	54	47	42	61	51	45	41	46	41	37	41	37	34	37	34	31	29																			
8	61	50	43	38	57	47	41	37	43	38	34	38	34	31	34	31	29	27																			
9	57	46	39	35	54	44	38	34	40	35	31	36	32	29	32	29	27	25																			
10	54	43	36	32	51	41	35	31	37	32	29	33	29	27	30	27	25	23																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9694	9694	9694
5°	9538	9515	9586
10°	8925	9044	9296
15°	8114	8371	8837
20°	7202	7576	8240
25°	6272	6769	7571
30°	5372	5963	6938
35°	4455	5061	6172
40°	3422	4047	5259
45°	2474	3064	4231
50°	1686	2284	3357
55°	1095	1652	2608
60°	628	1163	1886
65°	167	711	954
70°	82	220	274
75°	36	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	191.8	4.3
10°-20°	490.4	11.0
20°-30°	614.0	13.8
30°-40°	567.1	12.8
40°-50°	381.1	8.6
50°-60°	196.8	4.4
60°-70°	61.7	1.4
70°-80°	3.9	0.1
80°-90°	1.7	0.0
90°-100°	145.3	3.3
100°-110°	381.9	8.6
110°-120°	396.0	8.9
120°-130°	317.6	7.2
130°-140°	249.2	5.6
140°-150°	191.3	4.3
150°-160°	137.8	3.1
160°-170°	84.3	1.9
170°-180°	28.5	0.6
0°-30°	1296.2	29.2
0°-40°	1863.3	42.0
0°-60°	2441.3	55.0
0°-90°	2508.5	56.5
90°-120°	923.2	20.8
90°-150°	1681.3	37.9
90°-180°	1932.0	43.5
0°-180°	4440.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2102	2102	2102	2102	2102	
5°	2060	2039	2055	2062	2070	191
15°	1699	1693	1753	1812	1850	473
25°	1232	1242	1330	1421	1487	565
35°	791	811	899	1004	1096	490
45°	379	402	470	561	649	298
55°	136	159	205	264	324	127
65°	15	29	65	78	87	26
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	2	6	15	8	8	2
95°	19	75	250	129	88	21
105°	69	104	422	641	598	73
115°	122	148	338	675	770	121
125°	170	191	308	520	613	151
135°	202	223	298	420	476	157
145°	235	250	294	358	386	147
155°	266	273	294	323	332	122
165°	287	290	294	306	310	81
175°	298	298	296	300	300	28
180°	298	298	298	298	298	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2101.5	2101.5	2101.5	2101.5	2101.5
2.5°	2106.4	2086.5	2091.7	2091.6	2086.0
5°	2059.8	2038.9	2054.7	2062.0	2070.0
7.5°	1972.8	1956.5	1986.8	2009.5	2026.0
10°	1905.3	1891.3	1930.7	1961.7	1984.6
12.5°	1827.2	1816.4	1864.0	1906.5	1935.8
15°	1698.9	1692.9	1752.8	1811.6	1850.4
17.5°	1561.4	1561.2	1629.5	1702.6	1749.3
20°	1467.1	1470.0	1543.3	1623.9	1678.5
22.5°	1372.7	1379.7	1457.9	1541.9	1604.5
25°	1232.2	1242.2	1329.8	1420.8	1487.4
27.5°	1097.2	1111.7	1203.9	1298.5	1379.6
30°	1008.5	1025.4	1119.4	1218.9	1302.4
32.5°	921.5	941.6	1033.1	1138.4	1223.5
35°	791.0	810.9	898.7	1004.5	1096.0
37.5°	656.2	675.6	761.5	865.6	964.4
40°	568.3	590.2	672.0	772.9	873.3
42.5°	488.6	510.5	587.4	686.6	781.4
45°	379.2	402.1	469.7	561.2	648.6
47.5°	288.5	313.4	372.7	455.5	535.2
50°	234.9	259.7	318.2	391.1	467.7
52.5°	191.7	215.8	268.6	337.3	407.5
55°	136.2	159.1	205.4	263.7	324.3
57.5°	94.1	113.8	155.3	204.0	251.5
60°	68.1	87.0	126.1	165.6	204.4
62.5°	45.3	62.6	100.9	131.1	157.2
65°	15.3	29.2	65.1	78.5	87.4
67.5°	7.7	9.3	34.2	36.1	39.0
70°	6.1	6.1	16.3	17.4	20.3
72.5°	4.5	4.5	6.5	8.4	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°	0.4	1.1	3.1	1.5	1.5
90°	1.9	5.6	15.3	7.6	7.6
92.5°	8.0	38.7	85.6	37.9	24.5
95°	19.1	75.1	250.3	129.0	87.9
97.5°	33.2	82.6	374.5	297.8	219.3
100°	43.9	88.8	412.7	418.2	324.8
102.5°	53.1	95.0	423.4	520.9	441.0
105°	68.8	104.3	422.2	641.0	598.0
107.5°	84.8	117.7	398.2	703.3	713.8
110°	95.5	125.4	378.3	719.4	764.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	106.2	134.6	360.0	709.2	778.0
115°	122.3	148.4	338.2	674.7	770.0
117.5°	137.9	161.9	323.3	626.8	732.5
120°	147.1	169.5	317.2	594.6	697.4
122.5°	156.3	178.7	312.6	562.5	663.7
125°	170.0	190.6	307.6	519.9	613.3
127.5°	181.1	202.0	303.4	485.5	564.4
130°	187.2	209.7	301.9	464.0	536.9
132.5°	193.4	215.8	300.3	445.5	510.9
135°	202.5	223.1	298.0	419.7	475.7
137.5°	212.1	232.2	297.7	400.4	446.3
140°	219.7	238.4	296.1	385.0	428.0
142.5°	225.8	243.0	296.1	374.2	411.2
145°	235.0	249.9	294.2	357.9	385.9
147.5°	244.2	258.7	294.2	344.4	367.6
150°	250.3	263.4	294.2	336.7	355.4
152.5°	256.4	266.5	294.2	330.5	344.7
155°	265.6	273.0	294.2	323.1	332.4
157.5°	272.4	279.5	294.2	316.5	323.3
160°	277.0	282.6	294.2	313.4	317.2
162.5°	281.6	285.7	294.2	310.4	314.1
165°	286.6	290.3	294.2	305.8	309.5
167.5°	291.2	293.0	296.1	303.8	305.3
170°	294.2	296.1	296.1	303.8	303.8
172.5°	295.8	296.1	296.1	302.2	300.7
175°	298.0	298.0	296.1	300.0	300.0
177.5°	298.0	298.0	296.5	299.5	298.0
180°	298.0	298.0	298.0	298.0	298.0

(END OF REPORT)