

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: P518558

Luminaire Tested: **SQ4-BB-075U-100D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518558
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-8
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

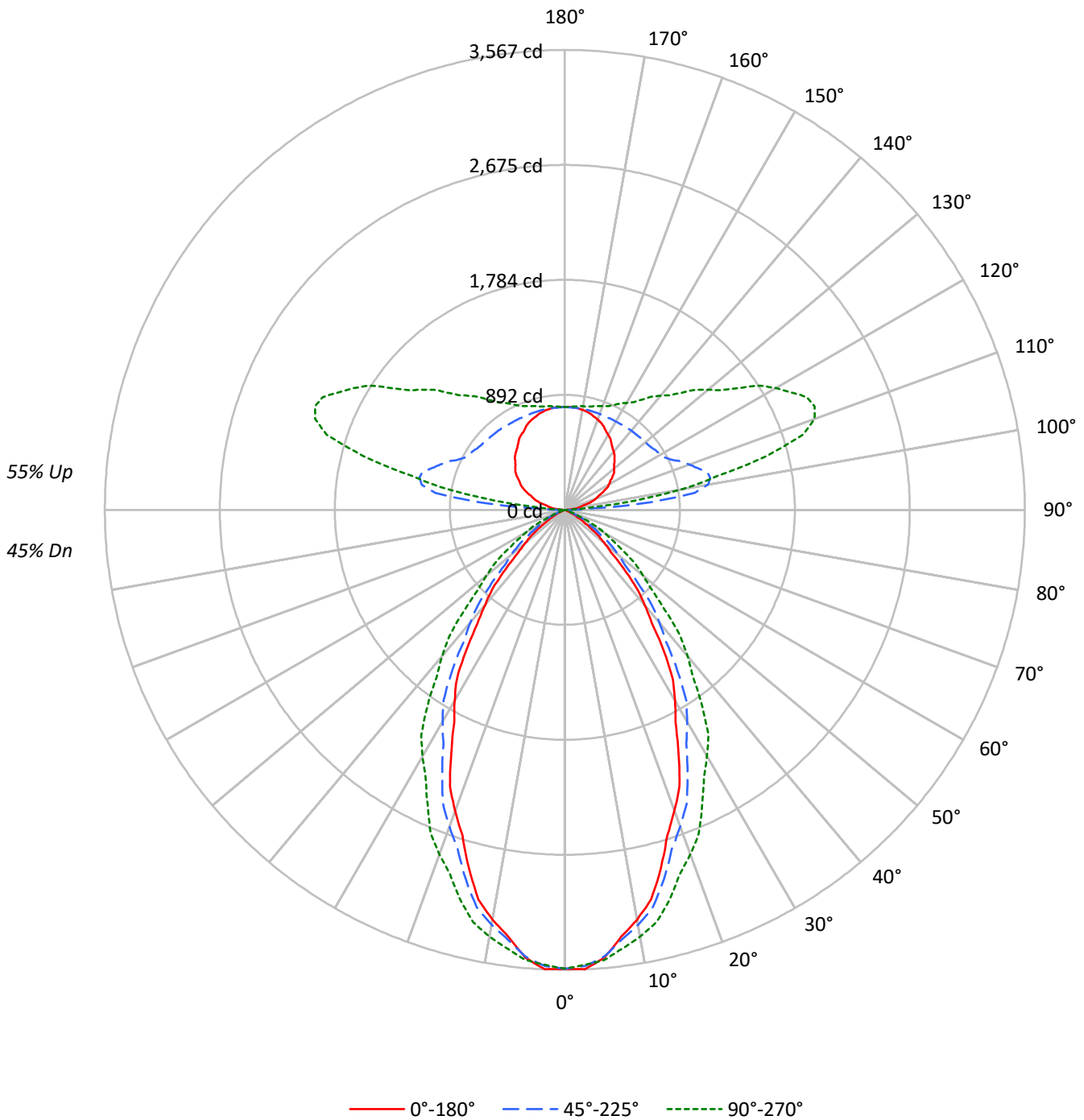
Lumens per Lamp: N/A
Luminaire Lumens: 9449.8 lumens
Efficiency: N/A
Efficacy: 87.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 108.3
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	53	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°	16417	16417	16417
5°	16152	16113	16232
10°	15113	15315	15742
15°	13740	14175	14965
20°	12196	12830	13954
25°	10621	11462	12821
30°	9098	10097	11748
35°	7543	8571	10452
40°	5796	6853	8906
45°	4190	5189	7166
50°	2854	3868	5684
55°	1855	2797	4417
60°	1065	1970	3193
65°	282	1203	1617
70°	139	371	464
75°	61	30	0
80°	45	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	324.8	3.4
10°-20°	830.5	8.8
20°-30°	1039.7	11.0
30°-40°	960.4	10.2
40°-50°	645.3	6.8
50°-60°	333.3	3.5
60°-70°	104.4	1.1
70°-80°	6.6	0.1
80°-90°	2.2	0.0
90°-100°	376.7	4.0
100°-110°	1036.3	11.0
110°-120°	1069.6	11.3
120°-130°	857.0	9.1
130°-140°	673.1	7.1
140°-150°	515.8	5.5
150°-160°	370.9	3.9
160°-170°	226.8	2.4
170°-180°	76.4	0.8
0°-30°	2195.0	23.2
0°-40°	3155.4	33.4
0°-60°	4134.1	43.7
0°-90°	4247.2	44.9
90°-120°	2482.6	26.3
90°-150°	4528.5	47.9
90°-180°	5203.0	55.1
0°-180°	9449.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3559	3559	3559	3559	3559	
5°	3488	3453	3480	3492	3505	323
15°	2877	2867	2968	3068	3133	801
25°	2087	2104	2252	2406	2519	957
35°	1339	1373	1522	1701	1856	830
45°	642	681	795	950	1098	504
55°	231	269	348	446	549	215
65°	26	49	110	133	148	44
75°	3	3	2	0	0	5
85°	0	0	0	0	0	0
90°	2	7	12	15	15	4
95°	56	206	666	285	182	59
105°	185	285	1142	1739	1623	195
115°	328	399	916	1824	2070	324
125°	452	515	831	1406	1646	403
135°	545	605	807	1137	1286	421
145°	630	674	795	968	1043	395
155°	714	737	790	870	896	328
165°	771	781	794	826	831	217
175°	799	800	795	805	804	76
180°	799	799	799	799	799	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3558.7	3558.7	3558.7	3558.7	3558.7
2.5°	3566.9	3533.3	3542.1	3541.9	3532.5
5°	3488.1	3452.7	3479.5	3491.8	3505.3
7.5°	3340.7	3313.1	3364.5	3403.0	3430.9
10°	3226.4	3202.8	3269.4	3322.0	3360.7
12.5°	3094.2	3076.0	3156.5	3228.5	3278.0
15°	2876.9	2866.8	2968.1	3067.8	3133.4
17.5°	2644.1	2643.8	2759.5	2883.2	2962.3
20°	2484.4	2489.4	2613.5	2749.9	2842.5
22.5°	2324.6	2336.4	2468.9	2611.1	2717.1
25°	2086.6	2103.5	2251.9	2406.0	2518.8
27.5°	1858.0	1882.6	2038.8	2198.9	2336.3
30°	1707.9	1736.5	1895.5	2064.0	2205.4
32.5°	1560.5	1594.5	1749.5	1927.7	2071.8
35°	1339.4	1373.1	1521.9	1701.1	1855.9
37.5°	1111.2	1144.2	1289.5	1465.8	1633.2
40°	962.4	999.4	1138.0	1308.9	1478.9
42.5°	827.4	864.5	994.8	1162.7	1323.3
45°	642.2	680.9	795.4	950.3	1098.4
47.5°	488.6	530.7	631.2	771.3	906.3
50°	397.7	439.8	538.9	662.3	792.0
52.5°	324.7	365.4	454.9	571.2	690.0
55°	230.7	269.4	347.8	446.5	549.2
57.5°	159.4	192.8	263.1	345.5	425.9
60°	115.4	147.3	213.5	280.4	346.1
62.5°	76.8	106.1	170.8	222.1	266.2
65°	25.8	49.4	110.2	132.9	148.1
67.5°	13.1	15.8	57.8	61.1	66.1
70°	10.3	10.3	27.5	29.4	34.4
72.5°	7.6	7.6	11.0	14.1	15.2
75°	3.4	3.4	1.7	0.0	0.0
77.5°	1.7	1.7	1.4	0.0	0.0
80°	1.7	1.7	0.0	0.0	0.0
82.5°	0.3	0.3	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	1.3	2.4	3.1	3.1
90°	1.7	6.7	11.9	15.3	15.3
92.5°	23.4	100.2	173.7	66.7	54.7
95°	56.1	205.6	666.1	284.8	181.8
97.5°	91.4	228.0	1016.4	783.2	552.6
100°	117.2	241.8	1126.5	1137.1	927.7
102.5°	141.7	258.3	1155.1	1410.7	1218.6
105°	185.2	284.9	1141.8	1739.0	1622.7
107.5°	226.7	317.7	1076.9	1899.8	1934.3
110°	256.6	339.6	1028.0	1939.7	2059.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	283.8	364.2	979.0	1914.0	2096.1
115°	327.9	399.4	915.8	1823.7	2069.6
117.5°	370.1	435.9	875.7	1697.0	1975.1
120°	395.9	459.0	858.1	1602.0	1889.5
122.5°	419.0	482.1	845.8	1518.8	1791.6
125°	452.0	515.1	830.9	1405.6	1646.5
127.5°	483.2	543.4	821.0	1311.1	1522.4
130°	499.5	561.0	815.6	1255.0	1447.7
132.5°	518.6	580.1	811.5	1205.6	1379.7
135°	545.4	605.2	807.1	1136.7	1286.3
137.5°	570.6	626.1	803.4	1081.1	1204.4
140°	589.6	641.1	802.0	1044.1	1155.4
142.5°	605.9	653.4	799.3	1011.1	1106.5
145°	630.4	673.6	795.2	968.5	1043.3
147.5°	656.6	693.8	793.2	930.8	990.6
150°	672.9	706.1	791.8	910.1	956.6
152.5°	687.8	718.4	790.4	892.2	930.8
155°	713.6	736.9	790.1	870.5	895.5
157.5°	732.3	751.3	790.1	852.7	870.0
160°	745.9	760.9	790.1	843.1	856.4
162.5°	756.8	769.1	791.5	834.9	845.5
165°	771.4	781.4	793.5	825.9	830.9
167.5°	781.6	789.2	795.2	818.3	819.7
170°	788.4	793.4	795.2	815.6	815.6
172.5°	793.8	796.2	795.2	811.5	810.2
175°	798.6	800.3	795.2	805.4	803.7
177.5°	800.0	800.0	794.5	802.6	800.0
180°	798.6	798.6	798.6	798.6	798.6

(END OF REPORT)