

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: P518516

Luminaire Tested: **SQ4-BB-075U-075D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518516
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-075D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

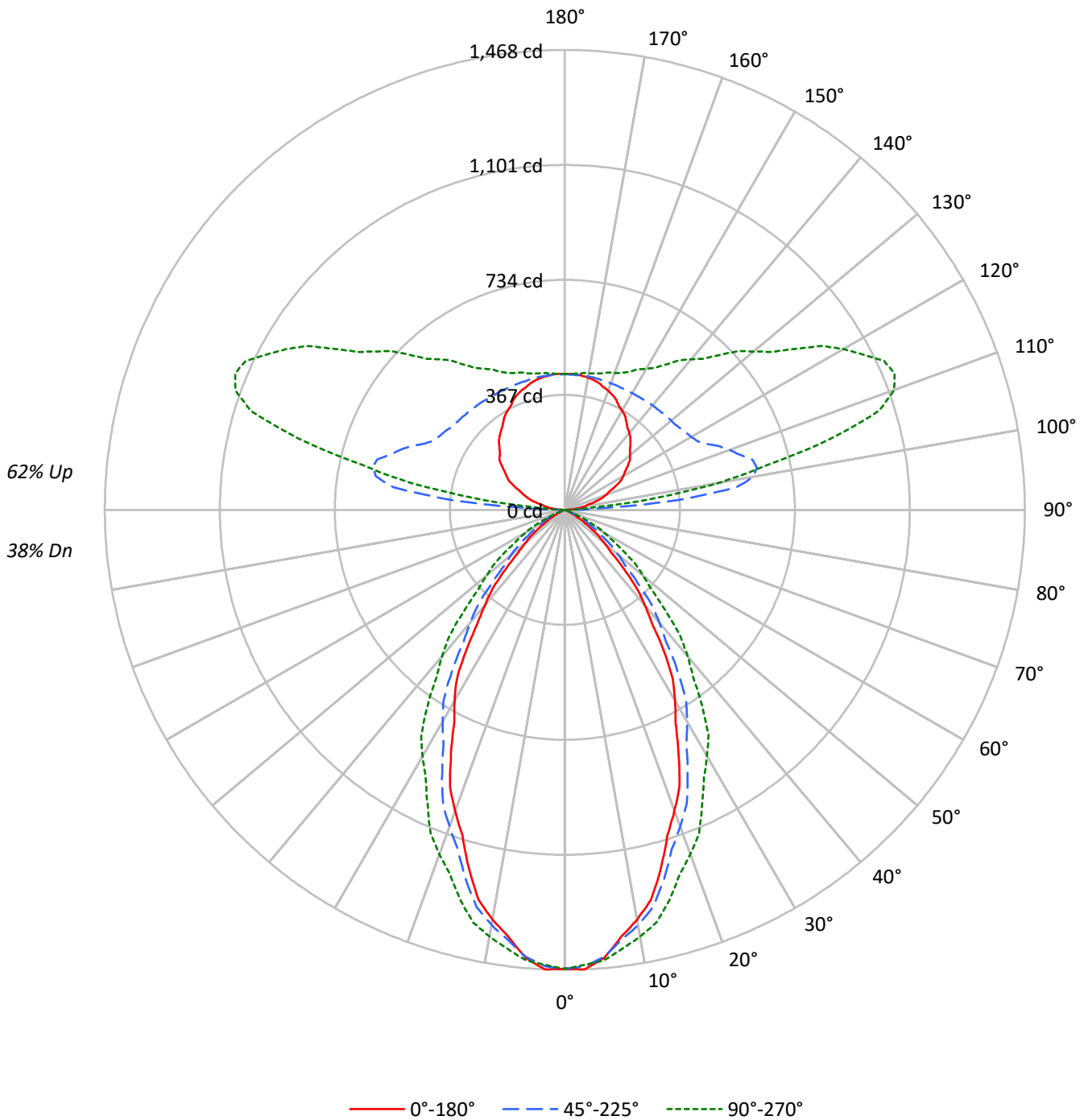
Lumens per Lamp: N/A
Luminaire Lumens: 4574.2 lumens
Efficiency: N/A
Efficacy: 107.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 42.5
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: P518516
CATALOG NUMBER: SQ4-BB-075U-075D-830-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P518516

CATALOG NUMBER: SQ4-BB-075U-075D-830-1D-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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	93	89	86	88	85	82	79	69	67	66	55	54	53	42	41	41	35
2	89	83	77	73	81	76	71	67	62	59	57	50	48	46	39	38	37	32
3	82	74	68	62	75	68	62	58	56	52	49	46	43	41	36	34	33	28
4	76	66	59	54	69	61	55	50	51	47	43	42	39	36	33	31	30	26
5	70	60	53	47	64	55	49	44	46	42	38	38	35	32	30	28	27	23
6	65	54	47	42	59	50	44	39	42	38	34	35	32	29	28	26	24	21
7	60	49	42	37	55	46	39	35	39	34	31	32	29	26	26	24	22	20
8	56	45	38	33	52	42	36	31	36	31	28	30	26	24	24	22	20	18
9	53	42	35	30	48	39	33	28	33	28	25	28	24	22	23	20	19	17
10	49	38	32	27	45	36	30	26	31	26	23	26	23	20	21	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13514	13514	13514
5°	13297	13263	13362
10°	12441	12607	12959
15°	11310	11669	12319
20°	10040	10562	11486
25°	8744	9436	10554
30°	7489	8312	9671
35°	6209	7055	8604
40°	4771	5641	7331
45°	3449	4272	5899
50°	2350	3184	4679
55°	1528	2302	3637
60°	876	1622	2628
65°	231	991	1330
70°	116	305	383
75°	50	25	0
80°	37	0	0
85°	0	0	0



TEST NUMBER: P518516

CATALOG NUMBER: SQ4-BB-075U-075D-830-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.7	2.9
10°-20°	341.8	7.5
20°-30°	428.0	9.4
30°-40°	395.3	8.6
40°-50°	265.6	5.8
50°-60°	137.2	3.0
60°-70°	43.0	0.9
70°-80°	2.7	0.1
80°-90°	1.2	0.0
90°-100°	204.6	4.5
100°-110°	562.9	12.3
110°-120°	581.0	12.7
120°-130°	465.5	10.2
130°-140°	365.6	8.0
140°-150°	280.2	6.1
150°-160°	201.4	4.4
160°-170°	123.2	2.7
170°-180°	41.5	0.9
0°-30°	903.5	19.8
0°-40°	1298.8	28.4
0°-60°	1701.6	37.2
0°-90°	1748.4	38.2
90°-120°	1348.4	29.5
90°-150°	2459.7	53.8
90°-180°	2826.0	61.8
0°-180°	4574.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1465	1465	1465	1465	1465	
5°	1436	1421	1432	1437	1443	133
15°	1184	1180	1222	1263	1290	330
25°	859	866	927	990	1037	394
35°	551	565	626	700	764	342
45°	264	280	327	391	452	208
55°	95	111	143	184	226	89
65°	11	20	45	55	61	18
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	1	4	6	8	8	2
95°	30	112	362	155	99	32
105°	101	155	620	944	881	106
115°	178	217	497	990	1124	176
125°	246	280	451	763	894	219
135°	296	329	438	617	699	229
145°	342	366	432	526	567	215
155°	388	400	429	473	486	178
165°	419	424	431	449	451	118
175°	434	435	432	437	436	41
180°	434	434	434	434	434	

TEST NUMBER: P518516

CATALOG NUMBER: SQ4-BB-075U-075D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1464.7	1464.7	1464.7	1464.7	1464.7
2.5°	1468.1	1454.3	1457.9	1457.8	1454.0
5°	1435.7	1421.1	1432.1	1437.2	1442.8
7.5°	1375.0	1363.7	1384.8	1400.7	1412.2
10°	1328.0	1318.3	1345.7	1367.3	1383.2
12.5°	1273.5	1266.1	1299.2	1328.9	1349.2
15°	1184.1	1180.0	1221.7	1262.7	1289.7
17.5°	1088.3	1088.2	1135.8	1186.7	1219.3
20°	1022.6	1024.6	1075.7	1131.8	1169.9
22.5°	956.8	961.6	1016.2	1074.7	1118.4
25°	858.9	865.8	926.9	990.3	1036.7
27.5°	764.8	774.9	839.2	905.1	961.6
30°	703.0	714.7	780.2	849.6	907.8
32.5°	642.3	656.3	720.1	793.5	852.8
35°	551.3	565.2	626.4	700.2	763.9
37.5°	457.3	470.9	530.8	603.3	672.2
40°	396.1	411.4	468.4	538.7	608.7
42.5°	340.6	355.8	409.4	478.6	544.7
45°	264.3	280.3	327.4	391.1	452.1
47.5°	201.1	218.4	259.8	317.5	373.0
50°	163.7	181.0	221.8	272.6	326.0
52.5°	133.6	150.4	187.2	235.1	284.0
55°	95.0	110.9	143.1	183.8	226.1
57.5°	65.6	79.3	108.3	142.2	175.3
60°	47.5	60.6	87.9	115.4	142.4
62.5°	31.6	43.7	70.3	91.4	109.6
65°	10.6	20.3	45.4	54.7	60.9
67.5°	5.4	6.5	23.8	25.1	27.2
70°	4.3	4.3	11.3	12.1	14.2
72.5°	3.1	3.1	4.5	5.8	6.2
75°	1.4	1.4	0.7	0.0	0.0
77.5°	0.7	0.7	0.6	0.0	0.0
80°	0.7	0.7	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.2	0.7	1.3	1.7	1.7
90°	0.9	3.6	6.5	8.3	8.3
92.5°	12.7	54.4	94.3	36.2	29.7
95°	30.5	111.7	361.8	154.7	98.8
97.5°	49.7	123.8	552.1	425.4	300.1
100°	63.7	131.4	611.9	617.6	503.9
102.5°	77.0	140.3	627.4	766.2	661.9
105°	100.6	154.7	620.2	944.5	881.4
107.5°	123.1	172.6	584.9	1031.9	1050.6
110°	139.4	184.5	558.4	1053.6	1118.6

TEST NUMBER: P518516

CATALOG NUMBER: SQ4-BB-075U-075D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	154.1	197.8	531.8	1039.6	1138.5
115°	178.1	216.9	497.4	990.5	1124.1
117.5°	201.0	236.7	475.7	921.7	1072.8
120°	215.0	249.3	466.1	870.2	1026.3
122.5°	227.6	261.9	459.4	824.9	973.1
125°	245.5	279.8	451.3	763.4	894.3
127.5°	262.5	295.1	445.9	712.1	826.9
130°	271.3	304.7	443.0	681.6	786.3
132.5°	281.7	315.1	440.8	654.8	749.4
135°	296.3	328.7	438.4	617.4	698.6
137.5°	309.9	340.1	436.3	587.2	654.2
140°	320.2	348.2	435.6	567.1	627.6
142.5°	329.1	354.9	434.1	549.2	601.0
145°	342.4	365.9	431.9	526.1	566.7
147.5°	356.6	376.8	430.8	505.6	538.1
150°	365.5	383.5	430.1	494.3	519.6
152.5°	373.6	390.2	429.3	484.6	505.6
155°	387.6	400.3	429.2	472.8	486.4
157.5°	397.8	408.1	429.2	463.1	472.5
160°	405.2	413.3	429.2	457.9	465.1
162.5°	411.1	417.7	429.9	453.5	459.2
165°	419.0	424.4	431.0	448.6	451.3
167.5°	424.5	428.7	431.9	444.5	445.2
170°	428.2	430.9	431.9	443.0	443.0
172.5°	431.2	432.4	431.9	440.8	440.0
175°	433.8	434.7	431.9	437.4	436.5
177.5°	434.5	434.5	431.6	435.9	434.5
180°	433.8	433.8	433.8	433.8	433.8

(END OF REPORT)