

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: P520032

Luminaire Tested: **SQ4-F-075U-100D-835-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520032
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-075U-100D-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

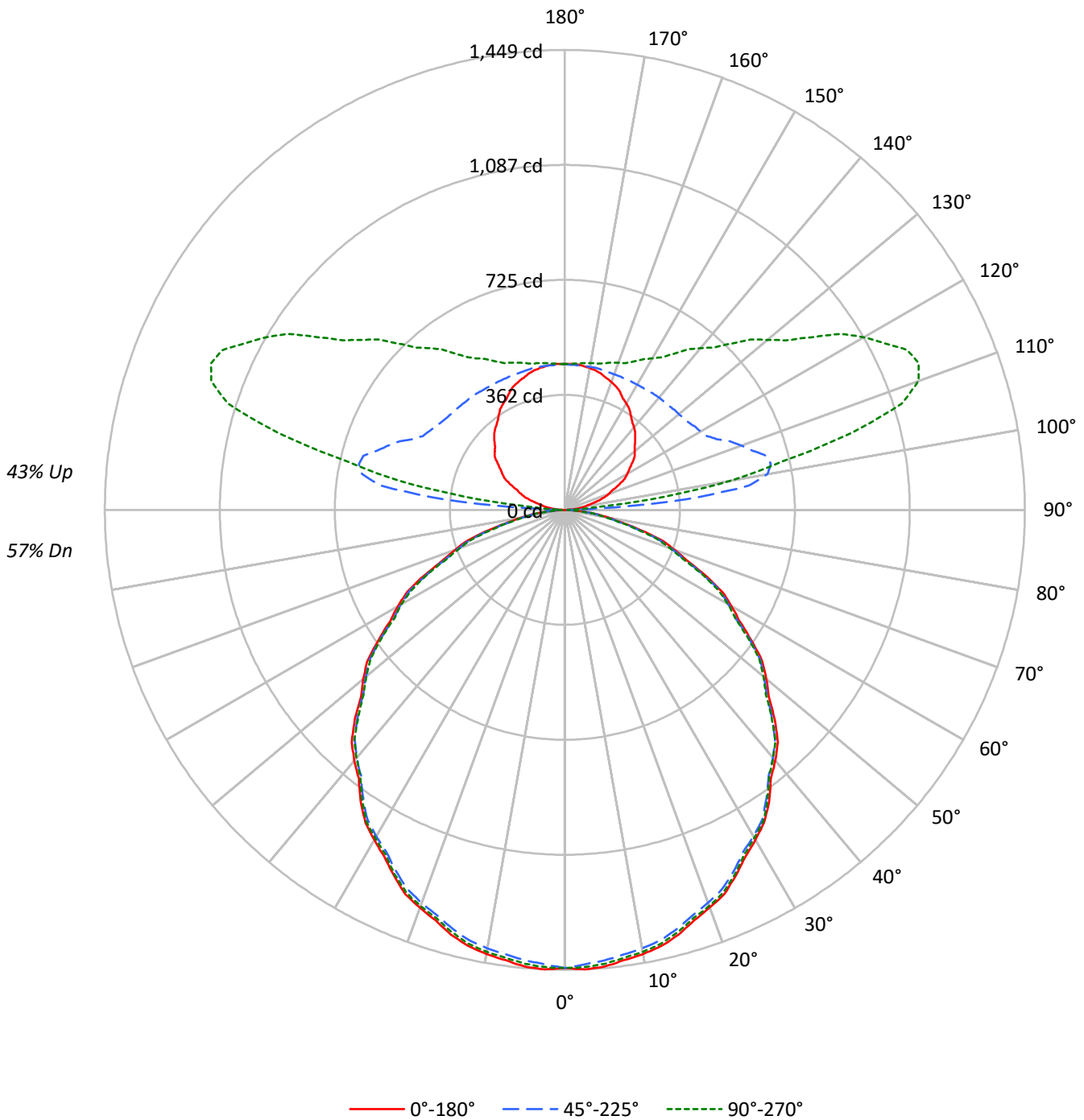
Lumens per Lamp: N/A
Luminaire Lumens: 6932.4 lumens
Efficiency: N/A
Efficacy: 135.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 51.3
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	50	30	10	0	
RCR																						
0	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	57				57
1	99	95	91	87	92	88	85	82	76	74	72	65	64	62	55	54	53				48	
2	90	83	77	71	84	77	72	67	67	63	59	57	54	52	48	46	44				40	
3	82	73	65	59	76	68	61	56	59	54	50	51	47	43	43	40	38				34	
4	75	64	56	50	70	60	53	47	52	47	42	45	41	37	38	35	32				29	
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	31	28				25	
6	64	51	43	37	59	48	41	35	42	36	32	36	32	28	31	27	25				22	
7	59	46	38	33	55	44	36	31	38	32	28	33	28	25	28	25	22				19	
8	55	42	34	29	51	40	32	27	35	29	25	30	26	22	26	22	20				17	
9	51	38	31	26	47	36	29	24	32	26	22	28	23	20	24	20	18				15	
10	48	35	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16				14	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13319	13319	13319
5°	13379	13196	13297
10°	13311	13144	13246
15°	13231	13050	13155
20°	13094	12939	13046
25°	12951	12800	12901
30°	12794	12656	12719
35°	12633	12476	12544
40°	12422	12280	12291
45°	12204	12037	11997
50°	11889	11747	11718
55°	11540	11411	11332
60°	11190	10988	10952
65°	10643	10405	10317
70°	9889	9649	9463
75°	8830	8548	8370
80°	7263	7003	6684
85°	4298	4721	4827



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.3	2.0
10°-20°	388.0	5.6
20°-30°	582.7	8.4
30°-40°	695.4	10.0
40°-50°	712.8	10.3
50°-60°	634.7	9.2
60°-70°	473.1	6.8
70°-80°	256.2	3.7
80°-90°	59.5	0.9
90°-100°	216.8	3.1
100°-110°	596.3	8.6
110°-120°	615.5	8.9
120°-130°	493.1	7.1
130°-140°	387.3	5.6
140°-150°	296.8	4.3
150°-160°	213.4	3.1
160°-170°	130.5	1.9
170°-180°	44.0	0.6
0°-30°	1106.9	16.0
0°-40°	1802.3	26.0
0°-60°	3149.8	45.4
0°-90°	3938.6	56.8
90°-120°	1428.6	20.6
90°-150°	2605.9	37.6
90°-180°	2994.0	43.2
0°-180°	6932.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1444	1444	1444	1444	1444	
5°	1445	1442	1425	1438	1436	137
15°	1385	1380	1366	1377	1377	390
25°	1272	1269	1257	1264	1267	586
35°	1122	1117	1108	1110	1114	700
45°	935	930	922	918	920	720
55°	717	718	709	702	704	642
65°	488	486	477	472	473	482
75°	248	245	240	235	235	264
85°	41	44	45	46	46	57
90°	1	4	7	9	9	3
95°	32	118	383	164	105	34
105°	107	164	657	1001	934	112
115°	189	230	527	1049	1191	186
125°	260	296	478	809	948	232
135°	314	348	464	654	740	242
145°	363	388	458	557	600	227
155°	411	424	455	501	515	189
165°	444	450	457	475	478	125
175°	460	460	458	463	462	44
180°	460	460	460	460	460	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1443.6	1443.6	1443.6	1443.6	1443.6
2.5°	1449.2	1446.1	1433.3	1443.6	1442.0
5°	1444.6	1441.7	1424.8	1437.7	1435.7
7.5°	1431.1	1428.3	1413.3	1425.2	1423.4
10°	1420.8	1418.0	1403.0	1414.9	1413.9
12.5°	1407.4	1404.5	1389.5	1401.4	1400.4
15°	1385.2	1380.3	1366.3	1377.2	1377.2
17.5°	1355.8	1352.2	1339.2	1348.3	1348.5
20°	1333.6	1330.8	1317.8	1327.7	1328.7
22.5°	1311.5	1308.6	1294.0	1303.1	1304.9
25°	1272.2	1269.3	1257.4	1264.4	1267.3
27.5°	1231.8	1227.5	1215.7	1221.9	1224.1
30°	1200.9	1198.9	1188.0	1191.1	1193.9
32.5°	1168.4	1166.4	1157.1	1158.6	1163.8
35°	1121.6	1116.8	1107.7	1109.8	1113.7
37.5°	1066.3	1064.0	1055.2	1054.1	1057.8
40°	1031.4	1027.6	1019.6	1017.7	1020.5
42.5°	993.4	989.5	979.9	978.0	981.7
45°	935.3	930.5	922.5	917.5	919.5
47.5°	870.3	870.3	862.0	856.4	859.2
50°	828.3	828.3	818.4	813.6	816.4
52.5°	784.7	785.5	774.8	772.2	771.3
55°	717.4	718.3	709.4	702.5	704.5
57.5°	652.4	650.2	639.9	635.3	636.3
60°	606.4	603.5	595.5	588.6	593.5
62.5°	559.6	558.2	550.3	542.6	542.0
65°	487.5	485.5	476.6	471.6	472.6
67.5°	415.7	413.5	405.2	398.2	400.7
70°	366.6	366.6	357.7	353.6	350.8
72.5°	321.4	317.6	310.9	305.4	303.2
75°	247.7	244.8	239.8	234.8	234.8
77.5°	180.3	177.9	174.6	171.2	170.2
80°	136.7	135.7	131.8	130.7	125.8
82.5°	96.3	96.1	93.7	91.2	91.0
85°	40.6	44.5	44.6	45.6	45.6
87.5°	7.3	12.6	12.5	11.3	11.3
90°	1.0	3.8	6.8	8.8	8.8
92.5°	13.5	57.7	100.0	38.3	31.5
95°	32.3	118.4	383.3	163.9	104.7
97.5°	52.6	131.2	584.9	450.6	318.0
100°	67.5	139.2	648.3	654.4	533.9
102.5°	81.6	148.7	664.7	811.7	701.2
105°	106.6	163.9	657.1	1000.7	933.8
107.5°	130.5	182.8	619.7	1093.2	1113.1
110°	147.6	195.4	591.6	1116.2	1185.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	163.2	209.5	563.4	1101.4	1206.2
115°	188.7	229.9	527.0	1049.4	1191.0
117.5°	212.9	250.8	503.9	976.6	1136.6
120°	227.8	264.2	493.8	921.9	1087.3
122.5°	241.1	277.5	486.7	873.9	1030.9
125°	260.1	296.4	478.1	808.8	947.5
127.5°	278.1	312.7	472.4	754.4	876.1
130°	287.5	322.9	469.3	722.1	833.1
132.5°	298.4	333.8	467.0	693.8	793.9
135°	313.9	348.3	464.4	654.2	740.1
137.5°	328.4	360.2	462.3	622.1	693.0
140°	339.3	368.9	461.5	600.9	664.9
142.5°	348.7	376.0	459.9	581.9	636.8
145°	362.8	387.6	457.6	557.3	600.4
147.5°	377.8	399.3	456.4	535.6	570.0
150°	387.2	406.3	455.6	523.7	550.5
152.5°	395.8	413.4	454.8	513.4	535.6
155°	410.6	424.0	454.6	500.9	515.3
157.5°	421.4	432.3	454.6	490.6	500.6
160°	429.2	437.8	454.6	485.1	492.8
162.5°	435.5	442.6	455.4	480.5	486.5
165°	443.9	449.6	456.6	475.3	478.1
167.5°	449.7	454.1	457.6	470.9	471.6
170°	453.7	456.6	457.6	469.3	469.3
172.5°	456.8	458.2	457.6	467.0	466.2
175°	459.5	460.5	457.6	463.4	462.5
177.5°	460.3	460.3	457.2	461.9	460.3
180°	459.5	459.5	459.5	459.5	459.5

(END OF REPORT)