

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: P520320

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520320
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-100D-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

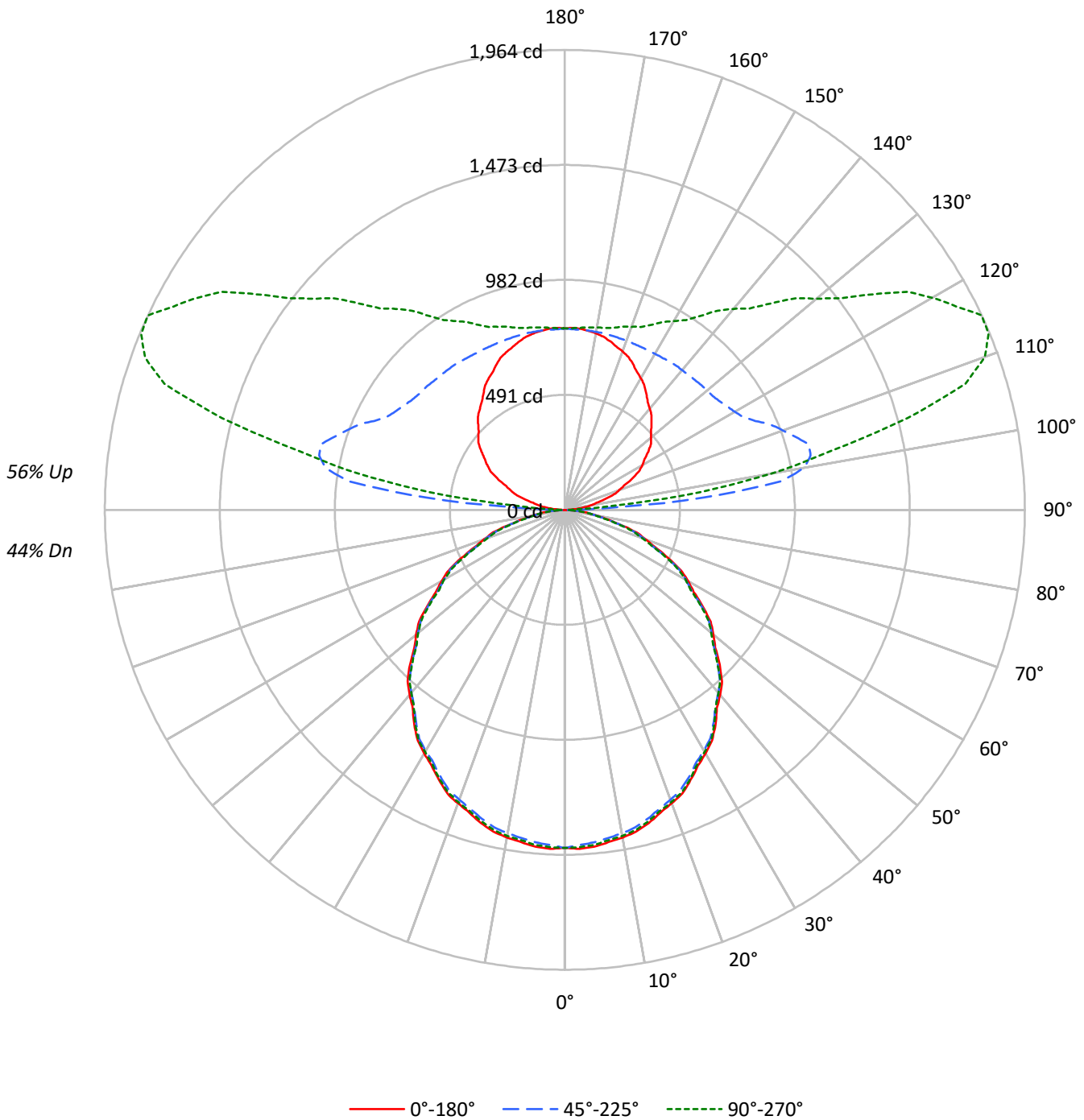
Lumens per Lamp: N/A
Luminaire Lumens: 8938.5 lumens
Efficiency: N/A
Efficacy: 138.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 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



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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	80	80	80	65	65	65	51	51	51	44
1	96	92	88	85	88	84	81	78	70	68	66	57	55	54	45	44	43	37
2	88	80	74	69	80	74	69	64	61	58	54	50	47	45	39	38	36	31
3	80	71	63	57	73	65	59	53	54	49	45	44	41	38	35	32	30	26
4	73	62	54	48	67	57	50	45	48	43	39	39	35	32	31	28	26	22
5	67	55	47	41	61	51	44	39	43	37	33	35	31	28	28	25	23	19
6	62	50	42	36	56	46	39	33	38	33	29	32	28	24	25	22	20	17
7	57	45	37	31	52	41	34	29	35	29	25	29	25	21	23	20	18	15
8	53	41	33	28	48	38	31	26	32	26	22	26	22	19	21	18	16	13
9	49	37	30	24	45	34	28	23	29	24	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	21	27	22	18	22	18	15	18	15	13	11

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	1.5
10°-20°	388.0	4.3
20°-30°	582.7	6.5
30°-40°	695.4	7.8
40°-50°	712.8	8.0
50°-60°	634.7	7.1
60°-70°	473.1	5.3
70°-80°	256.2	2.9
80°-90°	60.1	0.7
90°-100°	362.3	4.1
100°-110°	975.9	10.9
110°-120°	1024.1	11.5
120°-130°	831.1	9.3
130°-140°	651.8	7.3
140°-150°	500.4	5.6
150°-160°	359.8	4.0
160°-170°	219.8	2.5
170°-180°	74.1	0.8
0°-30°	1106.9	12.4
0°-40°	1802.3	20.2
0°-60°	3149.8	35.2
0°-90°	3939.2	44.1
90°-120°	2362.3	26.4
90°-150°	4345.5	48.6
90°-180°	4999.0	55.9
0°-180°	8938.5	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°	2	6	12	13	13	5
95°	55	197	594	304	210	58
105°	181	281	1079	1615	1515	190
115°	319	390	899	1736	1964	314
125°	435	500	807	1364	1605	388
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	771	782	780	74
180°	774	774	774	774	774	

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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°	7.5	13.0	13.5	12.1	12.1
90°	2.0	5.8	11.8	12.8	12.8
92.5°	24.1	85.1	168.1	80.9	56.2
95°	55.3	197.0	593.9	303.7	210.2
97.5°	88.2	225.6	931.5	778.1	586.8
100°	113.5	236.9	1038.8	1086.9	901.7
102.5°	137.9	252.9	1074.3	1318.1	1166.1
105°	180.6	280.8	1079.3	1614.7	1515.3
107.5°	220.8	310.3	1033.3	1767.0	1792.7
110°	247.7	332.5	991.5	1814.4	1907.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	276.0	354.7	951.2	1803.9	1957.6
115°	318.6	390.0	898.7	1736.5	1964.2
117.5°	357.5	424.5	858.0	1629.0	1882.5
120°	382.7	447.4	837.5	1551.8	1812.2
122.5°	404.8	468.7	822.5	1472.9	1732.6
125°	435.0	499.7	806.9	1363.9	1605.1
127.5°	464.1	527.7	797.1	1267.8	1483.1
130°	481.4	545.1	793.1	1212.8	1401.8
132.5°	498.8	561.6	789.2	1164.3	1337.9
135°	523.8	584.6	784.2	1100.3	1245.9
137.5°	547.7	605.9	781.7	1046.0	1165.7
140°	564.3	620.2	779.3	1012.7	1120.7
142.5°	581.7	633.8	777.7	981.5	1072.6
145°	605.7	653.0	774.4	940.7	1010.2
147.5°	631.8	672.8	771.0	906.5	961.1
150°	649.2	684.8	769.4	885.0	930.3
152.5°	664.9	695.9	768.7	867.4	904.2
155°	687.6	712.7	767.5	844.1	871.1
157.5°	707.6	727.0	767.7	827.8	845.8
160°	720.2	736.6	768.5	818.1	831.6
162.5°	731.3	744.5	769.2	810.2	819.8
165°	745.8	754.4	770.4	801.1	805.0
167.5°	757.6	762.6	771.4	794.2	795.7
170°	765.5	767.5	771.4	790.2	790.2
172.5°	770.2	770.6	772.2	786.2	786.2
175°	775.4	774.5	771.4	782.3	780.3
177.5°	777.5	776.1	772.0	778.3	776.7
180°	774.4	774.4	774.4	774.4	774.4

(END OF REPORT)